

**VESSEL**®



# GENERAL CATALOGUE 2013-2014

<http://www.vessel.co.jp/english/>

# Hand Tools

Human beings created "tools that were useful," and these tools have greatly contributed to the development of civilization. Tools that fit easily into the hand and are a pleasure to use bring out the very best of one's abilities. Whether using simple, everyday tools or tools to improve and enhance productivity, we live in an age that demands "functionality that fits in the hand." In cultivating a tradition of technology for more than 90 years, VESSEL has always sought to create the most suitable, useful, and efficient tools possible, challenging the very limits of human engineering.



|         |         |         |         |         |         |     |                                                  |
|---------|---------|---------|---------|---------|---------|-----|--------------------------------------------------|
| 005/007 | 005/007 | 007     |         | 006     |         | 007 | MEGADORA Screwdrivers                            |
| 009~011 | 009~011 |         |         |         |         |     | Cushon Grip Screwdrivers                         |
| 013~016 | 013~016 |         | 015     | 016     | 016     | 016 | Plastic Grip Screwdrivers                        |
| 018     | 018     |         | 018     |         |         |     | Wooden Handle Screwdrivers                       |
| 020~022 | 020~022 | 020/022 | 020/022 | 020     |         |     | Precision Screwdrivers                           |
| 024~025 | 024~025 | 024~025 |         | 024     |         |     | Ratchet Screwdrivers                             |
| 027~028 | 027~028 |         | 027     |         |         |     | Electric Detection Screwdrivers & Impact Drivers |
| 031~032 | 031~032 | 030~031 |         | 030/032 |         |     | Hex Key Wrenches<br>Offset Screwdrivers          |
| 035     |         | 035     |         | 034~035 | 034~035 |     | Torque Drivers                                   |



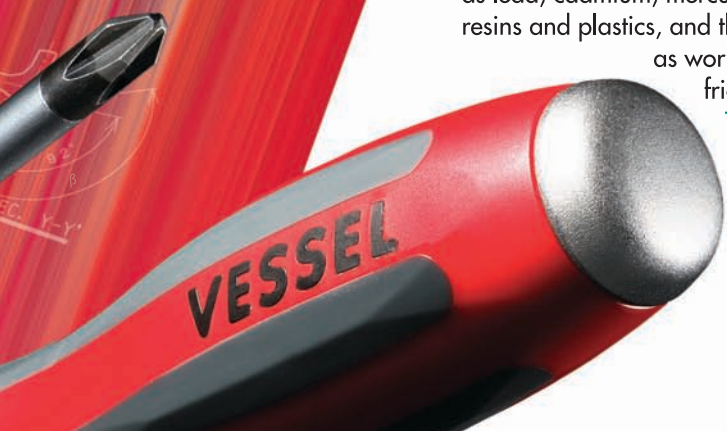
## Eco-friendly

The creation of environmentally-friendly products is a natural, yet serious mission for any company in this day and age.

In addition to reducing the hazardous materials specified under the RoHS directive, such as lead, cadmium, mercury, VESSEL is promoting measures such as the use of recycled resins and plastics, and the reduction of waste during the manufacturing process, as well as working on the development and improvement of environmentally-friendly products.

The VESSEL products marked in the catalog with the "Eco-friendly" mark have cleared both the RoHS directive standards and VESSEL's environmental standards.

We are working daily on improving our products, and invite inquiries concerning any products which do not yet have the "Eco-friendly" mark displayed in the catalog.



004

008

012

017

019

023

026

029

033



Hammers

036



Wire Strippers  
& Electric Cable Knives

038



042

## About ISO

### ISO 9001

All manufacturing divisions have begun the process of earning certification under the ISO 9000 series of quality management system standards.



### ISO 14001

We obtained ISO 14001 in July 2010. VESSEL will further strive to offer eco-friendly products, aiming at minimizing the environmental burden as a manufacturing group.



SINCE 1971

## MEGADORA Series

Equipped with a flat-surface grip and cushions on the corners of the hexagonal cross section.

The inner core is a triple-layered construction using recycled resin, designed with recycling in mind.

### MEGADORA IMPACTA Patent Pending

Our proprietary Tang-thru nut incorporates cam rotation mechanism, which turns the driving tip counter-clockwise by 12 degrees when the handle is hit with a hammer.

IMPACTA leverages impact acceleration to remove stuck screws.

Forced into the head  
by a hammer blow.

Loosened by 12°

Knurled shank for fast turning.  
The corners of the hexagonal cross-section are molded with elastomer or a soft fit and high torque transmission.

### Non-Slip

Three of the grip surfaces have a non-slip finish that cannot be created through simple resin construction.



## No. 980 MEGADORA IMPACTA

Patent Pending



**MG** Magnetized **Eco-friendly**

- Tang-Thru nut with cam rotation mechanism.
- Non-slip surface secures a firm grip even when your hands are covered with oil.
- Fully hardened chrome vanadium steel shank.
- High precision black point tip.

| Size      |         | mm  | mm  | mm | mm  | mm | Inner Ctn. | Outer Ctn. |
|-----------|---------|-----|-----|----|-----|----|------------|------------|
| ⊕ 2 × 100 | ⊕ No. 2 | 100 | 6.4 | 34 | 213 | 6  | 60         |            |
| ⊕ 2 × 150 | ⊕ No. 2 | 150 | 6.4 | 34 | 263 | 6  | 60         |            |
| ⊕ 3 × 150 | ⊕ No. 3 | 150 | 8.0 | 36 | 278 | 6  | 60         |            |

## No. 900 MEGADORA Standard Screwdriver

Patented

**JAWSFIT®**



**MG** Magnetized **Eco-friendly**

- Philips JAWSFIT tip that grips the screw and doesn't cause CAM-OUT.
- A knurled shank keeps hands from slipping in fast turning.
- Fully hardened chrome vanadium steel.

| Size       |         | mm  | mm  | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|------------|---------|-----|-----|-----|-----|----|-----|------------|------------|
| ⊖ 5.5 × 75 |         | 5.5 | 0.8 | 75  | 5.5 | 34 | 185 | 6          | 60         |
| ⊖ 6 × 100  |         | 6.0 | 0.9 | 100 | 6.4 | 34 | 210 | 6          | 60         |
| ⊖ 6 × 150  |         | 6.0 | 0.9 | 150 | 6.4 | 34 | 260 | 6          | 60         |
| ⊖ 8 × 150  |         | 8.0 | 1.1 | 150 | 8.0 | 36 | 275 | 6          | 60         |
| ⊕ 1 × 75   | ⊕ No. 1 | 75  | 5.5 | 30  | 175 | 6  | 60  |            |            |
| ⊕ 2 × 100  | ⊕ No. 2 | 100 | 6.4 | 34  | 210 | 6  | 60  |            |            |
| ⊕ 2 × 150  | ⊕ No. 2 | 150 | 6.4 | 34  | 260 | 6  | 60  |            |            |
| ⊕ 3 × 150  | ⊕ No. 3 | 150 | 8.0 | 36  | 275 | 6  | 60  |            |            |

## No. 910 MEGADORA Thin Shank Screwdriver

Patented



**MG** Magnetized **Eco-friendly**

- Precision type with 4 mm or smaller diameter shank.
- High precision black point tip.

| Size      |          | mm  | mm  | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|-----------|----------|-----|-----|-----|-----|----|-----|------------|------------|
| ⊖ 3 × 75  |          | 3.0 | 0.4 | 75  | 3.0 | 21 | 153 | 12         | 120        |
| ⊖ 3 × 100 |          | 3.0 | 0.4 | 100 | 3.0 | 21 | 178 | 12         | 120        |
| ⊖ 4 × 75  |          | 4.0 | 0.5 | 75  | 4.0 | 21 | 153 | 12         | 120        |
| ⊖ 4 × 100 |          | 4.0 | 0.5 | 100 | 4.0 | 21 | 178 | 12         | 120        |
| ⊖ 4 × 150 |          | 4.0 | 0.5 | 150 | 4.0 | 21 | 228 | 12         | 120        |
| ⊖ 4 × 200 |          | 4.0 | 0.5 | 200 | 4.0 | 21 | 278 | 12         | 120        |
| ⊕ 00 × 75 | ⊕ No. 00 | 75  | 3.0 | 21  | 153 | 12 | 120 |            |            |
| ⊕ 0 × 75  | ⊕ No. 0  | 75  | 3.0 | 21  | 153 | 12 | 120 |            |            |
| ⊕ 0 × 100 | ⊕ No. 0  | 100 | 3.0 | 21  | 178 | 12 | 120 |            |            |
| ⊕ 1 × 75  | ⊕ No. 1  | 75  | 4.0 | 21  | 153 | 12 | 120 |            |            |
| ⊕ 1 × 100 | ⊕ No. 1  | 100 | 4.0 | 21  | 178 | 12 | 120 |            |            |

## No. 900 MEGADORA Standard Screwdriver Extra Long Type

Patented

**JAWSFIT®**



**MG** Magnetized **Eco-friendly**

- Junk (turning) grip minimizes shaking originating in the long shank, to ensure stable tightening.
- Fully hardened chrome vanadium steel.

| Size      |         | mm  | mm  | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|-----------|---------|-----|-----|-----|-----|----|-----|------------|------------|
| ⊖ 6 × 400 |         | 6.0 | 0.9 | 400 | 6.4 | 34 | 510 | 6          | 60         |
| ⊕ 2 × 400 | ⊕ No. 2 | 400 | 6.4 | 34  | 510 | 6  | 60  |            |            |

## No. 920 MEGADORA Stubby Screwdriver

**JAWSFIT®**



**MG** Magnetized **Eco-friendly**

- 25 mm-long shank. Ideal for working in cramped places.

| Size     |         | mm  | mm  | mm | mm  | mm | mm | Inner Ctn. | Outer Ctn. |
|----------|---------|-----|-----|----|-----|----|----|------------|------------|
| ⊖ 6 × 25 |         | 6.4 | 0.9 | 25 | 6.4 | 36 | 75 | 6          | 60         |
| ⊕ 1 × 25 | ⊕ No. 1 | 25  | 6.4 | 36 | 75  | 6  | 60 |            |            |
| ⊕ 2 × 25 | ⊕ No. 2 | 25  | 6.4 | 36 | 75  | 6  | 60 |            |            |

## No. 930 MEGADORA Tang-Thru Screwdriver

Patented

**JAWSFIT®**



**MG** Magnetized **Eco-friendly**

- Philips JAWSFIT tip that grips the screw and doesn't cause CAM-OUT.
- Tang-Thru shank with large end cap. ● Fully hardened chrome vanadium steel.

| Size       |         | mm  | mm  | mm  | mm  | mm | mm  | mm | Inner Ctn. | Outer Ctn. |
|------------|---------|-----|-----|-----|-----|----|-----|----|------------|------------|
| ⊖ 5.5 × 75 |         | 5.5 | 0.8 | 75  | 5.5 | 30 | 175 | 8  | 6          | 60         |
| ⊖ 6 × 100  |         | 6.0 | 0.9 | 100 | 6.4 | 34 | 213 | 10 | 6          | 60         |
| ⊖ 6 × 150  |         | 6.0 | 0.9 | 150 | 6.4 | 34 | 263 | 10 | 6          | 60         |
| ⊖ 8 × 150  |         | 8.0 | 1.1 | 150 | 8.0 | 36 | 278 | 12 | 6          | 60         |
| ⊕ 1 × 75   | ⊕ No. 1 | 75  | 5.5 | 30  | 176 | 8  | 6   | 60 |            |            |
| ⊕ 2 × 100  | ⊕ No. 2 | 100 | 6.4 | 34  | 213 | 10 | 6   | 60 |            |            |
| ⊕ 2 × 150  | ⊕ No. 2 | 150 | 6.4 | 34  | 263 | 10 | 6   | 60 |            |            |
| ⊕ 3 × 150  | ⊕ No. 3 | 150 | 8.0 | 36  | 278 | 12 | 6   | 60 |            |            |

### MEGADORA Tang-Thru Screwdriver Short Type

|          |         |     |     |     |     |     |   |    |    |
|----------|---------|-----|-----|-----|-----|-----|---|----|----|
| ⊖ 6 × 38 | 6.0     | 0.9 | 38  | 6.4 | 34  | 151 | — | 6  | 60 |
| ⊕ 2 × 38 | ⊕ No. 2 | 38  | 6.4 | 34  | 151 | 10  | 6 | 60 |    |

# MEGADORA Series

## No. 970 MEGADORA Clip Remover

Patented



### Eco-friendly

- Available with large or small tip.
- Suited for many clips used with automobiles.
- Fully hardened chrome vanadium steel.
- Optimally angled for working in cramped places.

| Size   | 12mm/7mm | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|--------|----------|-----|-----|----|-----|------------|------------|
| CR×120 | 12mm/7mm | 120 | 7.0 | 34 | 230 | 6          | 60         |

## No. 970 MEGADORA Chisel-Type Screwdriver

Patented



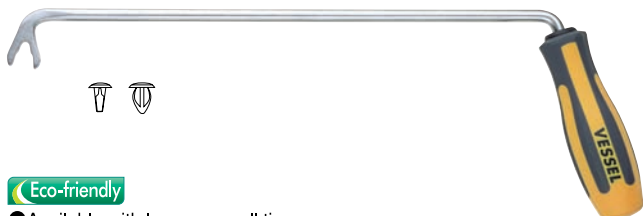
### Eco-friendly

- Made of high grade chisel steel.
- Tang-Thru shank with large end cap.
- For spot welding stripping, deburring, and tile and brick chipping.
- Metal end cap for hammering.

| Size      | mm  | mm  | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|-----------|-----|-----|-----|-----|----|-----|------------|------------|
| 7 × 100   | 7.0 | 1.5 | 100 | 7   | 34 | 213 | 6          | 60         |
| 9.5 × 120 | 9.5 | 1.7 | 120 | 9.5 | 36 | 248 | 6          | 60         |

## No. 970 MEGADORA Clip Remover Long type

Patented



### Eco-friendly

- Available with large or small tip.
- Suited for many clips used with automobiles.
- Fully hardened chrome vanadium steel.
- Can fit into tiny openings (7mm). Reduces damage to clips and materials.

| Size   | 12mm/7mm | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|--------|----------|-----|-----|----|-----|------------|------------|
| CR×300 | 12mm/7mm | 300 | 7.0 | 34 | 352 | 6          | 60         |

## No. 944TX 8-Piece MEGADORA FOD TORX Screwdriver Set

Patented



- Applicable for Automotive after market.

| Package content                                    | Tray size    | Inner Ctn. | Outer Ctn. |
|----------------------------------------------------|--------------|------------|------------|
| No.940TX: T20H×120, T25H×120<br>T30H×120, T40H×120 | 280×135×35mm | 1          | 20         |

## ONE POINT

Requires less pressing force.  
Reduces stripping  
and driver tip damage.

## JAWSFIT®

MEGADORA Screwdriver Tips  
coated in high strength  
metallic granules.

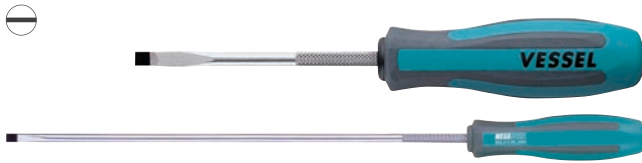
File-like projections bite the  
screw hole whereby preventing  
CAM-OUT (phenomenon peculiar to  
cross recessed screws).





# MEGADORA EU Spec. Screwdriver

## No. 902E/901E MEGADORA EU Spec. Standard Screwdriver



**MG** Magnetized **Eco-friendly**

- High precision black point tip.
- Fully hardened chrome vanadium steel. ● ISO standard tip.

| Model No.        | mm   | mm  | mm  | mm  | mm | mm  | Outer Ctn. |
|------------------|------|-----|-----|-----|----|-----|------------|
| 902E 0.4×2.5×50  | 2.5  | 0.4 | 50  | 3.0 | 21 | 128 | 360        |
| 902E 0.5×3×75    | 3.0  | 0.5 | 75  | 3.0 | 21 | 153 | 360        |
| 902E 0.5×3×100   | 3.0  | 0.5 | 100 | 3.0 | 21 | 178 | 300        |
| 902E 0.5×3×150   | 3.0  | 0.5 | 100 | 3.0 | 21 | 228 | 240        |
| 902E 0.6×3.5×75  | 3.5  | 0.6 | 75  | 3.5 | 21 | 153 | 360        |
| 902E 0.6×3.5×100 | 3.5  | 0.6 | 100 | 3.5 | 21 | 178 | 300        |
| 902E 0.8×4×100   | 4.0  | 0.8 | 100 | 4.0 | 21 | 178 | 300        |
| 902E 0.8×4×150   | 4.0  | 0.8 | 150 | 4.0 | 21 | 228 | 240        |
| 902E 1×5.5×100   | 5.5  | 1.0 | 100 | 5.5 | 30 | 200 | 90         |
| 902E 1×5.5×150   | 5.5  | 1.0 | 150 | 5.5 | 30 | 250 | 60         |
| 902E 1×5.5×200   | 5.5  | 1.0 | 200 | 5.5 | 30 | 300 | 60         |
| 902E 1.2×6.5×200 | 6.5  | 1.2 | 200 | 6.4 | 34 | 310 | 60         |
| 902E 1.2×6.5×250 | 6.5  | 1.2 | 250 | 6.4 | 34 | 360 | 60         |
| 901E 1×5.5×100   | 5.5  | 1.0 | 100 | 5.5 | 30 | 200 | 90         |
| 901E 1.2×6.5×150 | 6.5  | 1.2 | 150 | 6.4 | 34 | 260 | 60         |
| 901E 1.2×8×150   | 8.0  | 1.2 | 150 | 8.0 | 36 | 275 | 60         |
| 901E 1.2×8×200   | 8.0  | 1.2 | 200 | 8.0 | 36 | 325 | 60         |
| 901E 1.6×10×250  | 10.0 | 1.6 | 250 | 9.0 | 36 | 375 | 60         |
| 901E 1.2×6.5×400 | 6.5  | 1.2 | 400 | 6.4 | 32 | 510 | 60         |

## No. 920E MEGADORA EU Spec. Stubby Screwdriver



**MG** Magnetized **Eco-friendly**

- 30 mm-long shank. Ideal for working in cramped places.

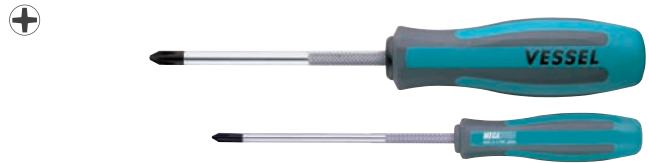
| Model No.       | mm     | mm  | mm  | mm  | mm | mm  | Outer Ctn. |
|-----------------|--------|-----|-----|-----|----|-----|------------|
| 920E 1.2×6.5×30 | 6.5    | 1.2 | 30  | 6.4 | 36 | 80  | 216        |
| 920E P1×30      | ⊕ No.1 | 30  | 6.4 | 36  | 80 | 216 |            |
| 920E P2×30      | ⊕ No.2 | 30  | 6.4 | 36  | 80 | 216 |            |

## No. 935ISP 5-Piece MEGADORA EU Spec. Screwdriver Set



| Model No. | Set content                                                                 | Package size (mm) | Inner Ctn. |
|-----------|-----------------------------------------------------------------------------|-------------------|------------|
| 935ISP    | No. 931E: ⊖1×5.5×100,<br>⊖1.2×6.5×150<br>No. 930E: ⊕1×75, ⊕2×100,<br>⊕3×150 | 300×170×45        | 10         |

## No. 910E/900E MEGADORA EU Spec. Standard Screwdriver



**MG** Magnetized **Eco-friendly**

- High precision black point tip.
- Fully hardened chrome vanadium steel.

| Model No.   | mm     | mm  | mm  | mm | mm  | Outer Ctn. |
|-------------|--------|-----|-----|----|-----|------------|
| 910E P0×75  | ⊕ No.0 | 75  | 4.0 | 21 | 153 | 360        |
| 900E P1×75  | ⊕ No.1 | 75  | 5.5 | 30 | 175 | 120        |
| 900E P2×100 | ⊕ No.2 | 100 | 6.4 | 34 | 210 | 90         |
| 900E P3×150 | ⊕ No.3 | 150 | 8.0 | 36 | 275 | 60         |

## No. 903E MEGADORA EU Spec. POZIDRIV Screwdriver



**MG** Magnetized **Eco-friendly**

- High precision black point tip.
- Fully hardened chrome vanadium steel.

| Model No.     | mm      | mm  | mm  | mm | mm  | Outer Ctn. |
|---------------|---------|-----|-----|----|-----|------------|
| 903E PZD0×75  | PZ No.0 | 75  | 4.0 | 21 | 153 | 360        |
| 903E PZD1×75  | PZ No.1 | 75  | 5.5 | 30 | 175 | 120        |
| 903E PZD2×100 | PZ No.2 | 100 | 6.4 | 34 | 210 | 90         |
| 903E PZD3×150 | PZ No.3 | 150 | 8.0 | 36 | 275 | 60         |

## No. 905E MEGADORA EU Spec. HEX. Screwdriver



**MG** Magnetized **Eco-friendly**

- High precision black point tip.
- Fully hardened chrome vanadium steel.

| Model No.     | mm | mm  | mm  | mm | mm  | Outer Ctn. |
|---------------|----|-----|-----|----|-----|------------|
| 905E A/F3×100 | 3  | 100 | 4.0 | 21 | 178 | 360        |
| 905E A/F4×100 | 4  | 100 | 5.5 | 30 | 200 | 120        |
| 905E A/F5×125 | 5  | 125 | 6.4 | 34 | 235 | 60         |
| 905E A/F6×125 | 6  | 125 | 7.0 | 34 | 235 | 60         |
| 905E A/F8×150 | 8  | 150 | 9.2 | 36 | 275 | 60         |

## No. 931E/930E/933E MEGADORA EU Spec. Tang-Thru Screwdriver



**MG** Magnetized **Eco-friendly**

- High precision black point tip.
- Tang-Thru shank with large end cap. ● Fully hardened chrome vanadium steel.

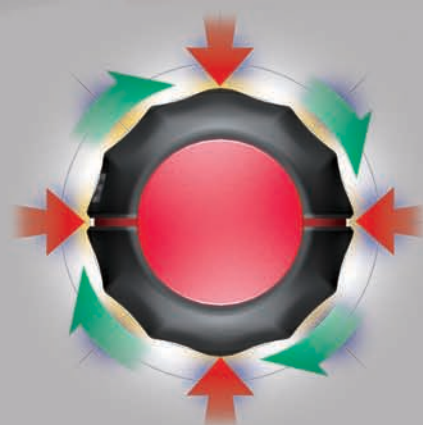
| Model No.      | mm      | mm  | mm  | mm  | mm  | mm  | Outer Ctn. |
|----------------|---------|-----|-----|-----|-----|-----|------------|
| 931E ⊖2×12×250 | 12      | 2   | 250 | 9.0 | 36  | 378 | 60         |
| 930E P1×75     | ⊕ No.1  | 75  | 5.5 | 30  | 175 | 120 |            |
| 930E P2×100    | ⊕ No.2  | 100 | 6.4 | 34  | 213 | 90  |            |
| 930E P3×150    | ⊕ No.3  | 150 | 8.0 | 36  | 278 | 60  |            |
| 933E PZD1×75   | PZ No.1 | 75  | 5.5 | 30  | 176 | 120 |            |
| 933E PZD2×100  | PZ No.2 | 100 | 6.4 | 34  | 213 | 90  |            |
| 933E PZD3×150  | PZ No.3 | 150 | 8.0 | 36  | 278 | 60  |            |

## Cushion Grip Screwdrivers

The grip of VESSEL Cushion Grip Screwdrivers provides a soft and comfortable grip while it guarantees efficient torque transmission.

### *Cushion Grip Screwdriver*

The streamlined design makes it easy to insert it into screwdriver holders.



Highly elastic cushion grip.  
Fits the palm of the hand. No slipping.  
Transmits high torque to the tip.



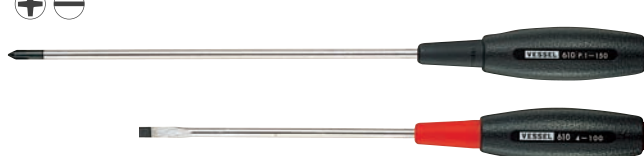
**No. 700 Super Cushion Screwdriver**

Patented


**MG** Magnetized **Eco-friendly**

- "Super Cushion" grip fits your hand perfectly.
- High toughness shank made of fully hardened chrome vanadium steel.
- Black chrome plating.

| Size      | mm    | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|-----------|-------|-----|-----|-----|-----|-----|------------|------------|
| ⊖5.5 × 75 | 5.5   | 0.8 | 75  | 5.5 | 29  | 182 | 6          | 120        |
| ⊖6 × 100  | 6.0   | 0.9 | 100 | 6.4 | 32  | 215 | 6          | 120        |
| ⊖6 × 150  | 6.0   | 0.9 | 150 | 6.4 | 32  | 265 | 6          | 120        |
| ⊖8 × 150  | 8.0   | 1.1 | 150 | 8.0 | 34  | 275 | 6          | 120        |
| ⊕1 × 75   | ⊕No.1 | 75  | 5.5 | 29  | 182 | 6   | 120        |            |
| ⊕2 × 100  | ⊕No.2 | 100 | 6.4 | 32  | 215 | 6   | 120        |            |
| ⊕2 × 150  | ⊕No.2 | 150 | 6.4 | 32  | 265 | 6   | 120        |            |
| ⊕3 × 150  | ⊕No.3 | 150 | 8.0 | 34  | 275 | 6   | 120        |            |

**No. 610 Cushion Grip Screwdriver (Thin Shank Type)**
**Eco-friendly**

- Thin shank screwdriver. Ideal for screw tightening in precision fields.
- Hand-friendly cushion grip. Color-coded for ⊕ ⊖.
- Fully hardened chrome vanadium steel. ● High precision black point tip.

| Size      | mm     | mm  | mm  | mm   | mm   | mm  | Inner Ctn. | Outer Ctn. |
|-----------|--------|-----|-----|------|------|-----|------------|------------|
| ⊖4 × 50   | 4.0    | 0.5 | 50  | 4.0  | 20.5 | 137 | 12         | 120        |
| ⊖4 × 75   | 4.0    | 0.5 | 75  | 4.0  | 20.5 | 162 | 12         | 120        |
| ⊖4 × 100  | 4.0    | 0.5 | 100 | 4.0  | 20.5 | 187 | 12         | 120        |
| ⊖4 × 125  | 4.0    | 0.5 | 125 | 4.0  | 20.5 | 212 | 12         | 120        |
| ⊖4 × 150  | 4.0    | 0.5 | 150 | 4.0  | 20.5 | 237 | 12         | 120        |
| ⊖4 × 200  | 4.0    | 0.5 | 200 | 4.0  | 20.5 | 287 | 12         | 120        |
| ⊕00 × 75  | ⊕No.00 | 75  | 4.0 | 20.5 | 162  | 12  | 120        |            |
| ⊕00 × 100 | ⊕No.00 | 100 | 4.0 | 20.5 | 187  | 12  | 120        |            |
| ⊕0 × 75   | ⊕No. 0 | 75  | 4.0 | 20.5 | 162  | 12  | 120        |            |
| ⊕0 × 100  | ⊕No. 0 | 100 | 4.0 | 20.5 | 187  | 12  | 120        |            |
| ⊕1 × 75   | ⊕No. 1 | 75  | 4.0 | 20.5 | 162  | 12  | 120        |            |
| ⊕1 × 100  | ⊕No. 1 | 100 | 4.0 | 20.5 | 187  | 12  | 120        |            |
| ⊕1 × 150  | ⊕No. 1 | 150 | 4.0 | 20.5 | 237  | 12  | 120        |            |

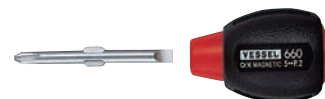
**No. 720 Super Cushion Screwdriver (Stubby Type)**

Patented


**MG** Magnetized **Eco-friendly**

- "Super Cushion" grip fits your hand perfectly.
- High toughness shank made of fully hardened chrome vanadium steel.
- Black chrome plating. ● Ideal for working in cramped places.

| Size    | mm    | mm  | mm  | mm  | mm | mm | Inner Ctn. | Outer Ctn. |
|---------|-------|-----|-----|-----|----|----|------------|------------|
| ⊖6 × 15 | 6.0   | 0.9 | 15  | 6.0 | 35 | 68 | 6          | 120        |
| ⊕1 × 15 | ⊕No.1 | 15  | 6.0 | 35  | 68 | 6  | 120        |            |
| ⊕2 × 15 | ⊕No.2 | 15  | 6.0 | 35  | 68 | 6  | 120        |            |

**No. 660 Cushion Grip Screwdriver (Stubby Type)**
**MG** Magnetized


- Fully hardened chrome vanadium steel.
- With reversible blade (⊖5, ⊕2).

| Grip Dia.<br>(mm) | Overall Length<br>with tip (mm) | Reversible blade |           | Inner Ctn. | Outer Ctn. |
|-------------------|---------------------------------|------------------|-----------|------------|------------|
|                   |                                 | Ends             | Length mm |            |            |
| 35                | 78                              | ⊖5/⊕2            | 60        | 10         | 60         |

**No. 730 Super Cushion Tang-Thru Screwdriver**

Patented


**MG** Magnetized **Eco-friendly**

- "Super Cushion" grip fits your hand perfectly.
- Tang-thru type features a star-shaped end cap for hammering.
- High toughness shank made of fully hardened chrome vanadium steel.
- Black chrome plating.

| Size      | mm    | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|-----------|-------|-----|-----|-----|-----|-----|------------|------------|
| ⊖5.5 × 75 | 5.5   | 0.8 | 75  | 5.5 | 29  | 182 | 6          | 120        |
| ⊖6 × 100  | 6.0   | 0.9 | 100 | 6.4 | 32  | 215 | 6          | 120        |
| ⊖6 × 150  | 6.0   | 0.9 | 150 | 6.4 | 32  | 265 | 6          | 120        |
| ⊖8 × 150  | 8.0   | 1.1 | 150 | 8.0 | 34  | 276 | 6          | 60         |
| ⊕1 × 75   | ⊕No.1 | 75  | 5.5 | 29  | 182 | 6   | 120        |            |
| ⊕2 × 100  | ⊕No.2 | 100 | 6.4 | 32  | 215 | 6   | 120        |            |
| ⊕2 × 150  | ⊕No.2 | 150 | 6.4 | 32  | 265 | 6   | 120        |            |
| ⊕3 × 150  | ⊕No.3 | 150 | 8.0 | 34  | 276 | 6   | 60         |            |

# Cushion Grip Screwdrivers

## No. 220 Ball-Grip Screwdriver



**MG** Magnetized **Eco-friendly**

- Transmits ample tightening force to screw. ● Cushion grip color-coded by  $\oplus$   $\ominus$ .
- Fully hardened chrome vanadium steel. ● High precision black point tip.

| Size                | mm            | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|---------------------|---------------|-----|-----|-----|-----|-----|------------|------------|
| $\ominus$ 5.5 × 75  | 5.5           | 0.8 | 75  | 5.5 | 32  | 156 | 6          | 60         |
| $\ominus$ 5.5 × 100 | 5.5           | 0.8 | 100 | 5.5 | 32  | 181 | 6          | 60         |
| $\ominus$ 5.5 × 150 | 5.5           | 0.8 | 150 | 5.5 | 32  | 231 | 6          | 60         |
| $\ominus$ 6 × 100   | 6.0           | 0.9 | 100 | 6.4 | 41  | 200 | 6          | 60         |
| $\ominus$ 6 × 150   | 6.0           | 0.9 | 150 | 6.4 | 41  | 250 | 6          | 60         |
| $\ominus$ 6 × 200   | 6.0           | 0.9 | 200 | 6.4 | 41  | 300 | 6          | 60         |
| $\oplus$ 1 × 75     | $\oplus$ No.1 | 75  | 5.5 | 32  | 156 | 6   | 60         |            |
| $\oplus$ 1 × 100    | $\oplus$ No.1 | 100 | 5.5 | 32  | 181 | 6   | 60         |            |
| $\oplus$ 1 × 150    | $\oplus$ No.1 | 150 | 5.5 | 32  | 231 | 6   | 60         |            |
| $\oplus$ 2 × 100    | $\oplus$ No.2 | 100 | 6.4 | 41  | 200 | 6   | 60         |            |
| $\oplus$ 2 × 150    | $\oplus$ No.2 | 150 | 6.4 | 41  | 250 | 6   | 60         |            |
| $\oplus$ 2 × 200    | $\oplus$ No.2 | 200 | 6.4 | 41  | 300 | 6   | 60         |            |

## No. 230 Ball-Grip Tang-Thru Screwdriver



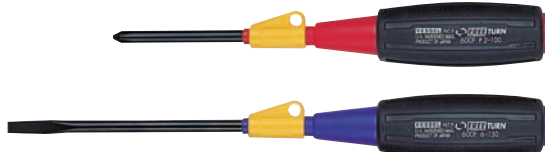
**MG** Magnetized **Eco-friendly**

- Tang-Thru shank with star end cap.
- Transmits ample tightening force to screw.
- Cushion grip color-coded by  $\oplus$   $\ominus$ .
- High precision black point tip.
- Fully hardened chrome vanadium steel.



| Size               | mm            | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|--------------------|---------------|-----|-----|-----|-----|-----|------------|------------|
| $\ominus$ 5.5 × 75 | 5.5           | 0.8 | 75  | 5.5 | 32  | 156 | 6          | 60         |
| $\ominus$ 6 × 100  | 6.0           | 0.9 | 100 | 6.4 | 41  | 200 | 6          | 60         |
| $\ominus$ 6 × 150  | 6.0           | 0.9 | 150 | 6.4 | 41  | 250 | 6          | 60         |
| $\oplus$ 1 × 75    | $\oplus$ No.1 | 75  | 5.5 | 32  | 156 | 6   | 60         |            |
| $\oplus$ 2 × 100   | $\oplus$ No.2 | 100 | 6.4 | 41  | 200 | 6   | 60         |            |
| $\oplus$ 2 × 150   | $\oplus$ No.2 | 150 | 6.4 | 41  | 250 | 6   | 60         |            |

## No. 600F Free-Turning Cushion Grip Screwdriver (Screwdriver only) Patented



**MG** Magnetized **Eco-friendly**

- Free-turning hanger enables fast turning.
- Elastomer resin for an excellent fit whichever way held in the hand.

| Size              | mm            | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|-------------------|---------------|-----|-----|-----|-----|-----|------------|------------|
| $\ominus$ 6 × 100 | 6.0           | 0.9 | 100 | 6.4 | 32  | 215 | 6          | 60         |
| $\ominus$ 6 × 150 | 6.0           | 0.9 | 150 | 6.4 | 32  | 265 | 6          | 60         |
| $\oplus$ 2 × 100  | $\oplus$ No.2 | 100 | 6.4 | 32  | 215 | 6   | 60         |            |
| $\oplus$ 2 × 150  | $\oplus$ No.2 | 150 | 6.4 | 32  | 265 | 6   | 60         |            |

## No. 220F Free-Turning Ball Grip Screwdriver (Screwdriver only) Patented

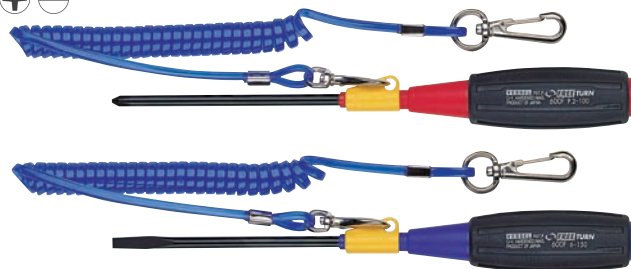


**MG** Magnetized **Eco-friendly**

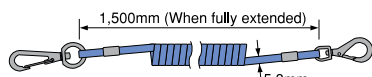
- Free-turning hanger enables fast turning.
- Elastomer resin for an excellent fit whichever way held in the hand.

| Size              | mm            | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|-------------------|---------------|-----|-----|-----|-----|-----|------------|------------|
| $\ominus$ 6 × 100 | 6.0           | 0.9 | 100 | 6.4 | 41  | 200 | 6          | 60         |
| $\ominus$ 6 × 150 | 6.0           | 0.9 | 150 | 6.4 | 41  | 250 | 6          | 60         |
| $\oplus$ 2 × 100  | $\oplus$ No.2 | 100 | 6.4 | 41  | 200 | 6   | 60         |            |
| $\oplus$ 2 × 150  | $\oplus$ No.2 | 150 | 6.4 | 41  | 250 | 6   | 60         |            |

## No. 600FW Free-Turning Cushion Grip Screwdriver (With cord) Patented



**MG** Magnetized



- Lightweight holder is designed for safety with a stopper to prevent dropping.
- Philips JAWSFIT tip grips the screw.
- Slotted tip is cut straight to keep it from being stuck.

| Size              | mm            | mm  | mm  | mm  | mm  | mm  | Inner Ctn. |
|-------------------|---------------|-----|-----|-----|-----|-----|------------|
| $\ominus$ 6 × 150 | 6.0           | 0.9 | 150 | 6.4 | 32  | 265 | 10         |
| $\oplus$ 2 × 150  | $\oplus$ No.2 | 150 | 6.4 | 32  | 265 | 10  |            |

## No. 600JF Cushion Grip Screwdriver (JAWSFIT type)



**MG** Magnetized

- JAWSFIT tip that grips the screw and doesn't let go. ● Lightweight grip made of polyolefin resin. Elastomer resin for an excellent fit whichever way held in the hand. ● Fully hardened chrome vanadium steel.

| Size             | mm            | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|------------------|---------------|-----|-----|----|-----|------------|------------|
| $\oplus$ 2 × 100 | $\oplus$ No.2 | 100 | 6.4 | 32 | 215 | 6          | 60         |
| $\oplus$ 2 × 150 | $\oplus$ No.2 | 150 | 6.4 | 32 | 265 | 6          | 60         |



## No. 600JFH/600H Cushion Grip Screwdriver (With holder)

+ JAWSFIT®



MG Magnetized

- Lightweight holder is designed for safety† with a stopper to prevent dropping.
- Philips JAWSFIT tip grips the screw.
- Slotted tip is cut straight to keep it from being stuck.

| Model No. | Size    | Content (Each comes with screwdriver holder) |         | Overall Length mm | Inner Ctn. | Outer Ctn. |
|-----------|---------|----------------------------------------------|---------|-------------------|------------|------------|
| 600JFH    | ⊕ 2×150 | No.600JF                                     | ⊕ 2×150 | 323               | 6          | 60         |
| 600H      | ⊖ 6×150 | No.600                                       | ⊖ 6×150 | 323               | 6          | 60         |

## No. 220JFH/220H Ball-Grip Screwdriver (With holder)

+ JAWSFIT®



MG Magnetized

- Lightweight holder is designed for safety† with a stopper to prevent dropping.
- Philips JAWSFIT tip grips the screw.
- Slotted tip is cut straight to keep it from being stuck.

| Model No. | Size    | Content (Each comes with screwdriver holder) |         | Overall Length mm | Inner Ctn. | Outer Ctn. |
|-----------|---------|----------------------------------------------|---------|-------------------|------------|------------|
| 220JFH    | ⊕ 2×100 | No.220JF                                     | ⊕ 2×100 | 275               | 6          | 60         |
|           | ⊕ 2×150 | No.220JF                                     | ⊕ 2×150 | 325               | 6          | 60         |
| 220H      | ⊖ 6×100 | No.220                                       | ⊖ 6×100 | 275               | 6          | 60         |
|           | ⊖ 6×150 | No.220                                       | ⊖ 6×150 | 325               | 6          | 60         |

## No. 225 Ball-Grip Screwdriver (With covered shank)



MG Magnetized Eco-friendly

- Resin-covered shank.
- Transmits ample tightening force to screw.
- Cushion grip is marked ⊕ ⊖ for quick identification.
- Fully hardened chrome vanadium steel.

| Size    |  |  |  |  |  |  |    |    | Inner Ctn. | Outer Ctn. |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----|----|------------|------------|
|         | mm                                                                                  | mm                                                                                  | mm                                                                                  | mm                                                                                  | mm                                                                                  | a                                                                                   | b  | c  |            |            |
| ⊖ 6×100 | 6.0                                                                                 | 0.9                                                                                 | 100                                                                                 | 41                                                                                  | 200                                                                                 | 14                                                                                  | 8  | 10 | 6          | 60         |
| ⊖ 6×150 | 6.0                                                                                 | 0.9                                                                                 | 150                                                                                 | 41                                                                                  | 250                                                                                 | 14                                                                                  | 8  | 10 | 6          | 60         |
| ⊕ 2×100 | ⊕ No.2                                                                              | 100                                                                                 | 41                                                                                  | 200                                                                                 | 14                                                                                  | 8                                                                                   | 10 | 6  | 60         |            |
| ⊕ 2×150 | ⊕ No.2                                                                              | 150                                                                                 | 41                                                                                  | 250                                                                                 | 14                                                                                  | 8                                                                                   | 10 | 6  | 60         |            |

- ⚠ Electric insulation is not guaranteed.  
For safety purposes, shut off power before use.  
The covered shaft protects against unexpected shorts.  
Should it become scratched, damaged or deteriorated, do not use the screwdriver.

## No. DH-2R/DH-2K Screwdriver holder (for 2 pieces)

No. DH-2R



No. DH-2K

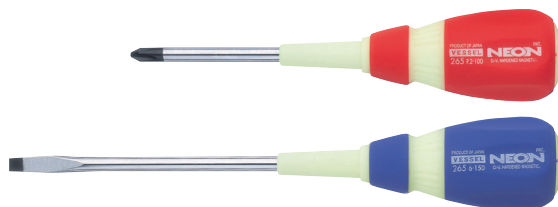


- Made of high-quality genuine rawhide leather. Light and tough.
- The holder does not become bulky even when 2 pieces of screwdrivers are stored as they are inserted in different angles.
- With ⊕/⊖ indications.

| Model No. | Color | Size           | Package size   | Inner Ctn. |
|-----------|-------|----------------|----------------|------------|
| No.DH-2R  | Red   | W60×L275×H55mm | W95×L370×H60mm | 6          |
| No.DH-2K  | Black | W60×L275×H55mm | W95×L370×H60mm | 6          |

## No. 265 "NEON" Screwdriver

Patented



MG Magnetized Eco-friendly

- Glow-in-the-dark type.
- Fully hardened chrome vanadium steel.
- High precision black point tip.

| Size    |  |  |  |  |  |  | Inner Ctn. | Outer Ctn. |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------|------------|
|         | mm                                                                                  | mm                                                                                  | mm                                                                                   | mm                                                                                    | mm                                                                                    | mm                                                                                    |            |            |
| ⊖ 6×100 | 6.0                                                                                 | 0.9                                                                                 | 100                                                                                  | 6.4                                                                                   | 40                                                                                    | 186                                                                                   | 6          | 60         |
| ⊖ 6×150 | 6.0                                                                                 | 0.9                                                                                 | 150                                                                                  | 6.4                                                                                   | 40                                                                                    | 236                                                                                   | 6          | 60         |
| ⊕ 2×100 | ⊕ No.2                                                                              |                                                                                     | 100                                                                                  | 6.4                                                                                   | 40                                                                                    | 186                                                                                   | 6          | 60         |
| ⊕ 2×150 | ⊕ No.2                                                                              |                                                                                     | 150                                                                                  | 6.4                                                                                   | 40                                                                                    | 236                                                                                   | 6          | 60         |

## ONE POINT

NEON alerts users that a tool is missing in the dark such as roof-space.

NEON

Large diameter grip and elastomer resin for an excellent fit. Polyolefin resin doesn't generate dioxin during combustion.

## Light accumulation

Absorbs sunlight or fluorescent light and emits automatically. (12-hour emission by 20-minute irradiation)

## Reflection characteristic

Reflects the lamp light.

Prevent to forget the tool at site.

# Injection Handle Screwdrivers

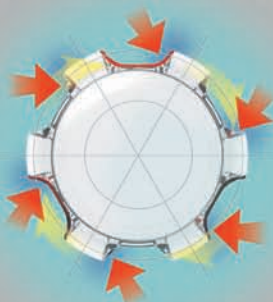
A plastic screwdriver series that enables efficient screw tightening without problems of over-tightening due to excessive torque.

A full lineup of shank sizes for those narrow, deeply recessed problem areas, with grip sizes to handle any screw diameter.

## "CRYSTALINE" Screwdriver

An extruded warp-resistant, hexagonal cross section grip

By combining clear resin with colored resin we have created a colorful grip with a crystal sparkle.

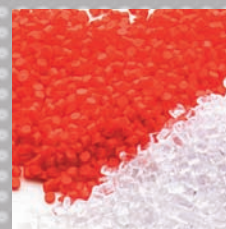


A hexagonal cross-section accurately transmits torque to the screw.

## ECO Eco-friendly product

An ecologically friendly grip made from plant-based ingredients

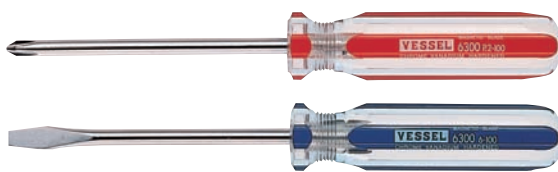
Cellulose acetate resin, used in many plastic screwdrivers, is once again in the spotlight as an ecologically friendly plant-based polyester resin. Cellulose acetate resin is an outstanding material that is resistant to oil, chemicals, and shock.



As the word cellulose implies, the grip is made from wood pulp and cotton. This resin grip is ecologically friendly with a low environment load, and does not upset the CO<sub>2</sub> balance when burned.



## No. 6300 "CRYSTALINE" Screwdriver



**MG** Magnetized **Eco-friendly**

- Bright quartz "CRYSTALINE" handle. Marked for  $\oplus$   $\ominus$ .
- Fully hardened chrome vanadium steel.

| Size                    | mm            | mm  | mm  | mm   | mm   | mm  | Inner Ctn. | Outer Ctn. |
|-------------------------|---------------|-----|-----|------|------|-----|------------|------------|
| $\ominus 4.5 \times 50$ | 4.5           | 0.6 | 50  | 5.0  | 22.0 | 138 | 12         | 240        |
| $\ominus 5.5 \times 75$ | 5.5           | 0.8 | 75  | 5.5  | 22.0 | 163 | 12         | 240        |
| $\ominus 6 \times 100$  | 6.0           | 0.9 | 100 | 6.0  | 25.0 | 198 | 12         | 240        |
| $\ominus 8 \times 150$  | 8.0           | 1.1 | 150 | 8.0  | 28.5 | 263 | 12         | 120        |
| $\ominus 9 \times 200$  | 9.0           | 1.2 | 200 | 9.0  | 30.0 | 320 | 6          | 60         |
| $\ominus 10 \times 250$ | 10.0          | 1.2 | 250 | 9.0  | 30.0 | 370 | 6          | 60         |
| $\ominus 10 \times 300$ | 10.0          | 1.2 | 300 | 9.0  | 30.0 | 420 | 6          | 60         |
| $\oplus 1 \times 75$    | $\oplus$ No.1 | 75  | 5.0 | 22.0 | 163  | 12  | 240        |            |
| $\oplus 2 \times 100$   | $\oplus$ No.2 | 100 | 6.0 | 25.0 | 198  | 12  | 240        |            |
| $\oplus 3 \times 150$   | $\oplus$ No.3 | 150 | 8.0 | 28.5 | 263  | 12  | 120        |            |
| $\oplus 4 \times 200$   | $\oplus$ No.4 | 200 | 9.0 | 30.0 | 320  | 6   | 60         |            |

## No. 6100 "CRYSTALINE" Screwdriver (Thin Shank Type)



**MG** Magnetized **Eco-friendly**

- Bright quartz "CRYSTALINE" handle. Marked for  $\oplus$   $\ominus$ .
- Thin shank screwdriver. Ideal for working in cramped places.
- Fully hardened chrome vanadium steel.

| Size                   | mm             | mm   | mm  | mm | mm  | mm  | Inner Ctn. | Outer Ctn. |
|------------------------|----------------|------|-----|----|-----|-----|------------|------------|
| $\ominus 4 \times 50$  | 4.0            | 0.45 | 50  | 4  | 16  | 123 | 12         | 240        |
| $\ominus 4 \times 75$  | 4.0            | 0.45 | 75  | 4  | 16  | 148 | 12         | 240        |
| $\ominus 4 \times 100$ | 4.0            | 0.45 | 100 | 4  | 16  | 173 | 12         | 240        |
| $\ominus 4 \times 150$ | 4.0            | 0.45 | 150 | 4  | 16  | 223 | 12         | 120        |
| $\ominus 4 \times 200$ | 4.0            | 0.45 | 200 | 4  | 16  | 273 | 12         | 120        |
| $\oplus 00 \times 75$  | $\oplus$ No.00 | 75   | 4   | 16 | 148 | 12  | 240        |            |
| $\oplus 0 \times 75$   | $\oplus$ No. 0 | 75   | 4   | 16 | 148 | 12  | 240        |            |
| $\oplus 0 \times 100$  | $\oplus$ No. 0 | 100  | 4   | 16 | 173 | 12  | 240        |            |
| $\oplus 0 \times 150$  | $\oplus$ No. 0 | 150  | 4   | 16 | 223 | 12  | 120        |            |
| $\oplus 0 \times 200$  | $\oplus$ No. 0 | 200  | 4   | 16 | 273 | 12  | 120        |            |
| $\oplus 1 \times 75$   | $\oplus$ No. 1 | 75   | 4   | 16 | 148 | 12  | 240        |            |
| $\oplus 1 \times 100$  | $\oplus$ No. 1 | 100  | 4   | 16 | 173 | 12  | 240        |            |
| $\oplus 1 \times 150$  | $\oplus$ No. 1 | 150  | 4   | 16 | 223 | 12  | 120        |            |
| $\oplus 1 \times 200$  | $\oplus$ No. 1 | 200  | 4   | 16 | 273 | 12  | 120        |            |
| $\oplus 2 \times 200$  | $\oplus$ No. 2 | 200  | 4   | 16 | 273 | 12  | 120        |            |
| $\oplus 2 \times 250$  | $\oplus$ No. 2 | 250  | 4   | 16 | 323 | 12  | 120        |            |

## No. 6300 "CRYSTALINE" Screwdriver (Long Shank Type)

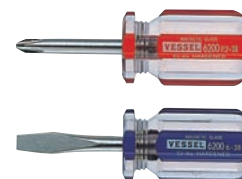


**MG** Magnetized **Eco-friendly**

- Bright quartz "CRYSTALINE" handle. Marked for  $\oplus$   $\ominus$ .
- Long shank for hard-to-reach fasteners.
- Fully hardened chrome vanadium steel.

| Size                   | mm            | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|------------------------|---------------|-----|-----|-----|-----|-----|------------|------------|
| $\ominus 5 \times 150$ | 5.0           | 0.7 | 150 | 4.8 | 25  | 248 | 12         | 120        |
| $\ominus 5 \times 200$ | 5.0           | 0.7 | 200 | 4.8 | 25  | 298 | 12         | 120        |
| $\ominus 5 \times 250$ | 5.0           | 0.7 | 250 | 4.8 | 25  | 348 | 12         | 120        |
| $\oplus 1 \times 150$  | $\oplus$ No.1 | 150 | 4.8 | 25  | 248 | 12  | 120        |            |
| $\oplus 1 \times 200$  | $\oplus$ No.1 | 200 | 4.8 | 25  | 298 | 12  | 120        |            |
| $\oplus 1 \times 250$  | $\oplus$ No.1 | 250 | 4.8 | 25  | 348 | 12  | 120        |            |
| $\oplus 2 \times 150$  | $\oplus$ No.2 | 150 | 6.0 | 25  | 248 | 12  | 120        |            |
| $\oplus 2 \times 200$  | $\oplus$ No.2 | 200 | 6.0 | 25  | 298 | 12  | 120        |            |
| $\oplus 2 \times 250$  | $\oplus$ No.2 | 250 | 6.0 | 25  | 348 | 12  | 120        |            |

## No. 6200 "CRYSTALINE" Screwdriver (Stubby Type)

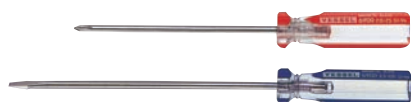


**MG** Magnetized **Eco-friendly**

- Bright quartz "CRYSTALINE" handle. Marked for  $\oplus$   $\ominus$ .
- Ideal for working in cramped places.
- Fully hardened chrome vanadium steel.

| Size                  | mm            | mm  | mm | mm   | mm   | mm | Inner Ctn. | Outer Ctn. |
|-----------------------|---------------|-----|----|------|------|----|------------|------------|
| $\ominus 6 \times 38$ | 6.0           | 0.9 | 38 | 6    | 28.5 | 86 | 12         | 240        |
| $\oplus 1 \times 38$  | $\oplus$ No.1 | 38  | 6  | 28.5 | 86   | 12 | 240        |            |
| $\oplus 2 \times 38$  | $\oplus$ No.2 | 38  | 6  | 28.5 | 86   | 12 | 240        |            |

## No. 6900 "CRYSTALINE" Screwdriver (Precision Type)



**MG** Magnetized **Eco-friendly**

- Bright quartz "CRYSTALINE" handle. Marked for  $\oplus$   $\ominus$ .
- For intense precision work.
- Handle butt is recessed to allow pressing with fingertips.
- Fully hardened chrome vanadium steel.

| Size                     | mm            | mm   | mm  | mm | mm  | mm  | Inner Ctn. | Outer Ctn. |
|--------------------------|---------------|------|-----|----|-----|-----|------------|------------|
| $\ominus 2.5 \times 50$  | 2.5           | 0.35 | 50  | 3  | 14  | 100 | 24         | 240        |
| $\ominus 2.5 \times 75$  | 2.5           | 0.35 | 75  | 3  | 14  | 125 | 24         | 240        |
| $\ominus 2.5 \times 100$ | 2.5           | 0.35 | 100 | 3  | 14  | 150 | 24         | 240        |
| $\oplus 0 \times 75$     | $\oplus$ No.0 | 75   | 3   | 14 | 125 | 24  | 240        |            |

## No. 6200W-62 "CRYSTALINE" Screwdriver (Stubby Type)



**MG** Magnetized **Eco-friendly**

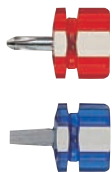
- Colorful crystalline handle.
- With reversible blade ( $\ominus 6$ ,  $\oplus 2$ ).
- Ideal for working in cramped places.

| mm   | mm | with tip | Reversible blades                   | Outer Ctn. |
|------|----|----------|-------------------------------------|------------|
| 28.5 | 78 |          | $\ominus 6 / \oplus 2$ Length 70 mm | 10         |

# Injection Handle Screwdrivers

## No. 6250 Mini Stubby Screwdriver

(Product code for barcode labeled type is No. B-6250.)



**Eco-friendly**

- Handy screwdriver for small tightening jobs.
- Ideal for working in very cramped places.

| Size                  | mm            | mm  | mm | mm | mm | mm | Inner Ctn. | Outer Ctn. |
|-----------------------|---------------|-----|----|----|----|----|------------|------------|
| $\ominus 5 \times 15$ | 5.0           | 0.6 | 15 | 5  | 24 | 34 | 12         | 120        |
| $\oplus 2 \times 15$  | $\oplus$ No.2 | 15  | 5  | 24 | 34 |    | 12         | 120        |

Min. q'ty for barcode labeled type: 60 pcs.

## No. 2100 Pair Line Interchangeable Screwdriver



- For a wide range of applications from DIY to precision assembly work.
- The interchangeable blades of most frequently used sizes.
- Handy vinyl† pouch.

| mm       | mm  | Set content                                                                                                    | Inner Ctn. | Outer Ctn. |
|----------|-----|----------------------------------------------------------------------------------------------------------------|------------|------------|
| with tip |     |                                                                                                                |            |            |
| 25       | 188 | Slotted $\ominus 4 \times 125$ , $\ominus 6 \times 125$ Phillips $\oplus 1 \times 125$ , $\oplus 2 \times 125$ | 10         | 40         |

## No. 6603 Long Square Shank Screwdriver



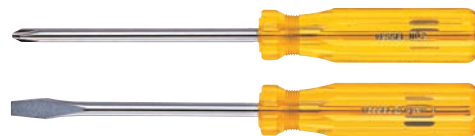
**MG Magnetized**

**Eco-friendly**

- 450 mm-long square shank. ● Fully hardened toughened steel.
- Double-grip handle for two-fisted turning. Effective with high strength tightening.
- For fastening screws of sanitary appliances, etc.

| Size                   | mm            | mm  | mm  | mm  | mm   | mm   | mm  | Outer Ctn. |
|------------------------|---------------|-----|-----|-----|------|------|-----|------------|
| $\ominus 9 \times 450$ | 9.0           | 1.2 | 450 | 8   | 160  | 28.5 | 610 | 6          |
| $\oplus 2 \times 450$  | $\oplus$ No.2 | 450 | 6   | 160 | 28.5 | 610  | 6   |            |
| $\oplus 3 \times 450$  | $\oplus$ No.3 | 450 | 8   | 160 | 28.5 | 610  | 6   |            |

## No. 1300 Plastic Grip Screwdriver



**Eco-friendly**

- Widely-used standard model. ● Clear candy-colored plastic handle.

| Size                    | mm            | mm  | mm  | mm | mm  | mm  | Inner Ctn. | Outer Ctn. |
|-------------------------|---------------|-----|-----|----|-----|-----|------------|------------|
| $\ominus 5.5 \times 75$ | 5.5           | 0.8 | 75  | 5  | 20  | 154 | 12         | 240        |
| $\ominus 6 \times 100$  | 6.0           | 0.9 | 100 | 6  | 23  | 191 | 12         | 240        |
| $\ominus 8 \times 150$  | 8.0           | 1.1 | 150 | 7  | 26  | 251 | 12         | —          |
| $\oplus 1 \times 75$    | $\oplus$ No.1 | 75  | 5   | 20 | 154 | 12  | 240        |            |
| $\oplus 2 \times 100$   | $\oplus$ No.2 | 100 | 6   | 23 | 191 | 12  | 240        |            |
| $\oplus 3 \times 150$   | $\oplus$ No.3 | 150 | 7   | 26 | 251 | 12  | —          |            |

## No. 6603A 3 PC. Set of Long Square Shank Screwdrivers



**MG Magnetized**

**Eco-friendly**

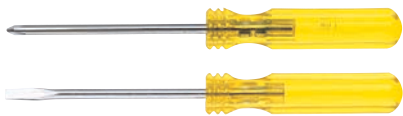
- 3-piece set in vinyl package.

| mm   | mm  | mm  | Set content                                                                           | Outer Ctn. |
|------|-----|-----|---------------------------------------------------------------------------------------|------------|
| 28.5 | 160 | 610 | Slotted $\ominus 9 \times 450$ Phillips $\oplus 2 \times 450$ , $\oplus 3 \times 450$ | 10         |



## No. 1000 Plastic Handle Screwdriver (Thin Shank Type)

(Product code for barcode labeled type is No. B-1000.)



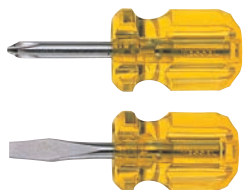
**Eco-friendly**

- Widely-used standard model.
- Thin shank screwdriver. Ideal for working in cramped place.
- Clear candy-colored plastic handle.

| Size      | mm      | mm   | mm  | mm   | mm   | mm  | Inner Ctn. | Outer Ctn. |
|-----------|---------|------|-----|------|------|-----|------------|------------|
| ⊖ 4 × 50  | 4.0     | 0.45 | 50  | 4    | 15.3 | 124 | 12         | 240        |
| ⊖ 4 × 75  | 4.0     | 0.45 | 75  | 4    | 15.3 | 149 | 12         | 240        |
| ⊖ 4 × 100 | 4.0     | 0.45 | 100 | 4    | 15.3 | 174 | 12         | 240        |
| ⊖ 4 × 150 | 4.0     | 0.45 | 150 | 4    | 15.3 | 224 | 12         | 120        |
| ⊖ 4 × 200 | 4.0     | 0.45 | 200 | 4    | 15.3 | 274 | 12         | 120        |
| ⊕ 00 × 75 | ⊕ No.00 | 75   | 3   | 15.3 | 149  | 12  | 240        |            |
| ⊕ 0 × 75  | ⊕ No. 0 | 75   | 4   | 15.3 | 149  | 12  | 240        |            |
| ⊕ 1 × 75  | ⊕ No. 1 | 75   | 4   | 15.3 | 149  | 12  | 240        |            |

Min. q'ty for barcode labeled type: 60 pcs.

## No. 1200 Plastic Handle Screwdriver (Stubby Type)



**Eco-friendly**

- Ideal for working in cramped places.
- Clear candy-colored plastic handle.

| Size     | mm     | mm  | mm  | mm   | mm   | mm | Inner Ctn. | Outer Ctn. |
|----------|--------|-----|-----|------|------|----|------------|------------|
| ⊖ 6 × 38 | 6.0    | 0.8 | 38  | 6.3  | 31.5 | 85 | 12         | 240        |
| ⊕ 1 × 38 | ⊕ No.1 | 38  | 6.3 | 31.5 | 85   | 12 | 240        |            |
| ⊕ 2 × 38 | ⊕ No.2 | 38  | 6.3 | 31.5 | 85   | 12 | 240        |            |

## No. 1900 Plastic Handle Screwdriver (Precision Type)



**Eco-friendly**

- For precision work.
- 50 screwdrivers per set.
- Bulk case packaged.

| Size       | mm     | mm   | mm | mm | mm  | mm  | Inner Ctn. |
|------------|--------|------|----|----|-----|-----|------------|
| ⊖ 2.5 × 50 | 2.5    | 0.35 | 50 | 3  | 11  | 95  | 1          |
| ⊖ 2.5 × 65 | 2.5    | 0.35 | 65 | 3  | 11  | 110 | 1          |
| ⊖ 2.5 × 90 | 2.5    | 0.35 | 90 | 3  | 11  | 135 | 1          |
| ⊕ 0 × 65   | ⊕ No.0 | 65   | 3  | 11 | 110 |     | 1          |

## No. 4500 Power Grip Screwdriver

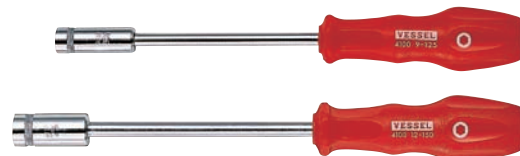


**MG Magnetized**

- Plastic handle and Tang-Thru shank stand up to heavy-duty work.
- Hexagon bolster for wrench gripping.
- Fully hardened chrome vanadium steel.

| Size       | mm     | mm  | mm  | mm   | mm   | mm  | mm | Inner Ctn. | Outer Ctn. |
|------------|--------|-----|-----|------|------|-----|----|------------|------------|
| ⊖ 5.5 × 75 | 5.5    | 0.8 | 75  | 5.8  | 28.0 | 172 | 8  | 6          | 240        |
| ⊖ 6 × 100  | 6.0    | 0.9 | 100 | 6.4  | 31.8 | 204 | 10 | 6          | 120        |
| ⊖ 8 × 150  | 8.0    | 1.1 | 150 | 8.0  | 35.6 | 265 | 12 | 6          | 120        |
| ⊖ 9 × 200  | 9.0    | 1.2 | 200 | 9.0  | 37.0 | 320 | 12 | 6          | 60         |
| ⊕ 1 × 75   | ⊕ No.1 | 75  | 5.8 | 28.0 | 172  | 8   | 6  | 240        |            |
| ⊕ 2 × 100  | ⊕ No.2 | 100 | 6.4 | 31.8 | 204  | 10  | 6  | 120        |            |
| ⊕ 3 × 150  | ⊕ No.3 | 150 | 8.0 | 35.6 | 265  | 12  | 6  | 120        |            |
| ⊕ 4 × 200  | ⊕ No.4 | 200 | 9.0 | 37.0 | 320  | 12  | 6  | 60         |            |

## No. 4100 Power Socket Screwdriver



**Eco-friendly**

- For fastening and unfastening hexagon bolts and nuts.
- Socket size is printed on the grip end for easy identification.

| Size         | mm   | mm   | mm | mm  | mm  | mm   | mm  | Inner Ctn. | Outer Ctn. |
|--------------|------|------|----|-----|-----|------|-----|------------|------------|
| A/ F 5 × 115 | 5.0  | 8.0  | 18 | 115 | 5.0 | 28.0 | 212 | 6          | 60         |
| 5.5 × 115    | 5.5  | 9.0  | 18 | 115 | 5.0 | 28.0 | 212 | 6          | 60         |
| 6 × 115      | 6.0  | 9.0  | 18 | 115 | 5.5 | 28.0 | 212 | 6          | 60         |
| 7 × 125      | 7.0  | 10.0 | 18 | 125 | 5.5 | 28.0 | 222 | 6          | 60         |
| 8 × 125      | 8.0  | 12.0 | 20 | 125 | 5.5 | 31.8 | 229 | 6          | 60         |
| 9 × 125      | 9.0  | 12.7 | 20 | 125 | 6.3 | 31.8 | 229 | 6          | 60         |
| 10 × 125     | 10.0 | 15.0 | 20 | 125 | 7.0 | 35.6 | 240 | 6          | 60         |
| 11 × 125     | 11.0 | 15.0 | 20 | 125 | 7.0 | 35.6 | 240 | 6          | 60         |
| 12 × 150     | 12.0 | 17.0 | 20 | 150 | 8.0 | 35.6 | 265 | 6          | 60         |
| 13 × 150     | 13.0 | 19.0 | 20 | 150 | 8.0 | 35.6 | 265 | 6          | 60         |

## No. 5700WP Water Faucet Screwdriver



**Eco-friendly**

- Its slot tip is 18mm wide.
- Compact and handy for narrow spaces.
- Handle color changes depending on viewing angle.
- Fully hardened chrome vanadium steel shank.
- For cleaning of strainer, maintenance of water faucet, adjustment of flow control valve and check valve.

| mm | mm  | mm | mm | mm   | mm  | Inner Ctn. |
|----|-----|----|----|------|-----|------------|
| 18 | 1.6 | 85 | 8  | 28.5 | 133 | 6          |

# Injection Handle Screwdrivers

## No. 5400TX Power Grip TORX Screwdriver



### Eco-friendly

- Fully hardened chrome vanadium steel. Champaign Gold plating to maintain tip precision.
- Acetate resin ergonomic handle.
- For working with tamper-proof screws (T5 and T6 excluded).

| Size       |      |     |     |      |     | Inner Ctn. | Outer Ctn. |
|------------|------|-----|-----|------|-----|------------|------------|
|            | mm   | mm  | mm  | mm   | mm  |            |            |
| T 5 × 80   | 1.37 | 80  | 2.5 | 17.0 | 155 | 12         | 60         |
| T 6 × 80   | 1.65 | 80  | 2.5 | 17.0 | 155 | 12         | 60         |
| T 7H × 80  | 1.97 | 80  | 2.5 | 17.0 | 155 | 12         | 60         |
| T 8H × 80  | 2.3  | 80  | 3.0 | 17.0 | 155 | 12         | 60         |
| T 9H × 80  | 2.48 | 80  | 3.0 | 17.0 | 155 | 12         | 60         |
| T10H × 80  | 2.72 | 80  | 3.0 | 17.0 | 155 | 12         | 60         |
| T15H × 80  | 3.26 | 80  | 3.5 | 28.0 | 177 | 6          | 60         |
| T20H × 120 | 3.84 | 120 | 4.0 | 28.0 | 217 | 6          | 60         |
| T25H × 120 | 4.4  | 120 | 5.0 | 31.8 | 224 | 6          | 60         |
| T27H × 120 | 4.96 | 120 | 5.0 | 31.8 | 224 | 6          | 60         |
| T30H × 120 | 5.49 | 120 | 6.0 | 35.6 | 235 | 6          | 60         |
| T40H × 120 | 6.6  | 120 | 7.0 | 35.6 | 235 | 6          | 60         |

※ TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA).  
VESSEL has a manufacturing license in Japan and selling same to the world.

## No. TX-10 TORX Screwdriver Set



- Fully hardened chrome vanadium steel bits. Storage holder included.
- Works with tamper-proof screws.
- New type of bit holder that assuredly holds bits. Internal magnet for attracting screws.

| Package content                                                        | Outer Ctn. |
|------------------------------------------------------------------------|------------|
| ● 6.35 mm bit: T10H, T15H, T20H, T25H, T27H, T30H, T40H, ⊕ 2, ⊕ 3, ⊖ 6 | 10         |
| ● Handle ● Bit belt holder                                             |            |

## No. 4200 SUPADRIV Screwdriver



### MG Magnetized

- Fully hardened chrome vanadium steel. ● High precision black point tip.

| Size     |  |  |  |  |  | Inner Ctn. |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|
|          |                                                                                     | mm                                                                                  | mm                                                                                  | mm                                                                                  | mm                                                                                  |            |
| SDV1× 75 | SDV No.1                                                                            | 75                                                                                  | 5                                                                                   | 28                                                                                  | 172                                                                                 | 6          |
| SDV2×100 | SDV No.2                                                                            | 100                                                                                 | 6                                                                                   | 31                                                                                  | 204                                                                                 | 6          |
| SDV3×150 | SDV No.3                                                                            | 150                                                                                 | 8                                                                                   | 35                                                                                  | 265                                                                                 | 6          |



The basic shape is a cross recess of 4 equally-thick blades. The drive faces that the screwdriver contacts inside the recess are almost perpendicular, which raises drive efficiency and minimizes slipping. Further enhances the torque transfer and anti-CAM-OUT properties of the POZIDRIV to deliver a higher tightening effect.

● Various bits are available in addition to screwdrivers.

## No. 4600 POZIDRIV Screwdriver



### MG Magnetized

- Fully hardened chrome vanadium steel. ● High precision black point tip.

| Size    |  |  |  |  |  | Inner Ctn. |
|---------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------|
|         |                                                                                     | mm                                                                                    | mm                                                                                    | mm                                                                                    | mm                                                                                    |            |
| PZ1×75  | PZ No.1                                                                             | 75                                                                                    | 5                                                                                     | 28                                                                                    | 172                                                                                   | 6          |
| PZ2×100 | PZ No.2                                                                             | 100                                                                                   | 6                                                                                     | 31                                                                                    | 204                                                                                   | 6          |
| PZ3×150 | PZ No.3                                                                             | 150                                                                                   | 8                                                                                     | 35                                                                                    | 265                                                                                   | 6          |



Same as the SUPADRIV, the basic shape is a cross recess of 4 equally-thick blades. This prevents annoying CAM-OUT and transmits strong torque to the screw.

● Various bits are available in addition to screwdrivers.

※ POZIDRIV and SUPADRIV are patented by and registered trademarks of EIS Corp. in the UK. Vessel is licensed by EIS Corp. to use the technology.



# Wooden Handle Screwdrivers

The more they're used, the more they fit comfortably in the hand. These screwdrivers provide a feel that is unobtainable with plastic, and which is appreciated by many of our professional users.

## *Powerful Tang-Thru Screwdriver*

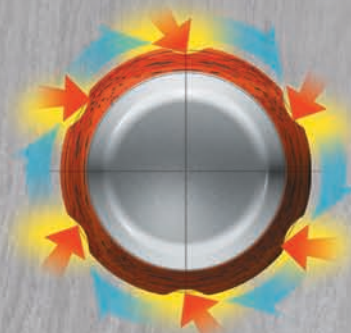
**Furniture-quality grip...**

These grips are one size larger than the usual, and have been given a furniture type finish for an especially high-quality feel.

**Especially large, heavy-duty end cap.**

An especially large end cap efficiently delivers the shock of the hammer blow.

When tapped with a hammer, and adjusting the force of the tapping to the condition of the material concerned, this screwdriver can be used effectively to loosen stripped or rusted screws.



Grip improves the longer the tool is used. The basic round form is beveled with 6 flutes to efficiently transmit torque to the screw.

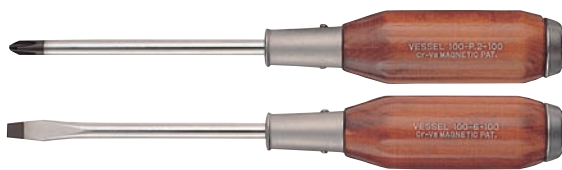


Our dedication to our tang-thru screwdrivers can be seen in the numerous end cap designs we've developed.



# Wooden Handle Screwdrivers

## No. 100 Powerful Tang-Thru Screwdriver



**MG** Magnetized

- Wooden handle and Tang-Thru shank with thick end cap.
- Fully hardened chrome vanadium steel. ● Black point tip.

| Size       | mm     | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|------------|--------|-----|-----|-----|-----|-----|------------|------------|
| ⊖ 5.5 × 75 | 5.5    | 0.8 | 75  | 5.8 | 27  | 182 | 6          | 120        |
| ⊖ 6 × 100  | 6.0    | 0.9 | 100 | 6.4 | 30  | 223 | 6          | 120        |
| ⊖ 6 × 300  | 6.0    | 0.9 | 300 | 6.4 | 30  | 423 | 6          | 60         |
| ⊖ 8 × 150  | 8.0    | 1.1 | 150 | 8.0 | 34  | 294 | 6          | 120        |
| ⊕ 1 × 75   | ⊕ No.1 | 75  | 5.8 | 27  | 182 | 6   | 120        |            |
| ⊕ 2 × 100  | ⊕ No.2 | 100 | 6.4 | 30  | 223 | 6   | 120        |            |
| ⊕ 2 × 300  | ⊕ No.2 | 300 | 6.4 | 30  | 423 | 6   | 60         |            |
| ⊕ 3 × 150  | ⊕ No.3 | 150 | 8.0 | 34  | 294 | 6   | 120        |            |

## No. 350 Wooden Handle Tang-Thru Screwdriver



**Eco-friendly**

- Wooden handle and Tang-Thru shank with large end cap. ● Shot blasting tip.

| Size       | mm     | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|------------|--------|-----|-----|-----|-----|-----|------------|------------|
| ⊖ 4.5 × 50 | 4.5    | 0.6 | 50  | 5.0 | 25  | 153 | 12         | 120        |
| ⊖ 5.5 × 75 | 5.5    | 0.8 | 75  | 5.5 | 25  | 178 | 12         | 120        |
| ⊖ 6 × 100  | 6.0    | 0.9 | 100 | 6.3 | 28  | 218 | 12         | 240        |
| ⊖ 7 × 125  | 7.0    | 0.9 | 125 | 7.0 | 33  | 258 | 6          | 120        |
| ⊖ 8 × 150  | 8.0    | 1.1 | 150 | 8.0 | 33  | 283 | 6          | 120        |
| ⊖ 9 × 200  | 9.0    | 1.2 | 200 | 9.0 | 36  | 355 | 6          | 60         |
| ⊖ 10 × 250 | 10.0   | 1.2 | 250 | 9.0 | 36  | 405 | 6          | 60         |
| ⊖ 10 × 300 | 10.0   | 1.2 | 300 | 9.0 | 36  | 455 | 6          | 60         |
| ⊕ 0 × 75   | ⊕ No.0 | 75  | 5.0 | 25  | 178 | 12  | 120        |            |
| ⊕ 1 × 75   | ⊕ No.1 | 75  | 5.0 | 25  | 178 | 12  | 120        |            |
| ⊕ 2 × 100  | ⊕ No.2 | 100 | 6.3 | 28  | 218 | 12  | 240        |            |
| ⊕ 3 × 150  | ⊕ No.3 | 150 | 8.0 | 33  | 283 | 6   | 120        |            |
| ⊕ 4 × 200  | ⊕ No.4 | 200 | 9.0 | 36  | 355 | 6   | 60         |            |

## No. 110 Wooden Handle Socket Driver



**Eco-friendly**

- For fastening and unfastening hexagon bolts and nuts.
- Tip is made of specially treated steel to enhance wear resistance.
- Wide variations available.

| Size           | mm   | mm   | mm | mm  | mm  | mm | mm  | Inner Ctn. | Outer Ctn. |
|----------------|------|------|----|-----|-----|----|-----|------------|------------|
| A/ F 4 × 75    | 4.0  | 6.3  | 12 | 75  | 6.3 | 23 | 170 | 12         | —          |
| A/ F 5 × 115   | 5.0  | 8.0  | 18 | 115 | 5.0 | 23 | 210 | 12         | 120        |
| A/ F 5.5 × 115 | 5.5  | 9.0  | 18 | 115 | 5.0 | 23 | 210 | 12         | 120        |
| A/ F 6 × 115   | 6.0  | 9.0  | 18 | 115 | 5.5 | 25 | 220 | 12         | 240        |
| A/ F 7 × 125   | 7.0  | 10.0 | 18 | 125 | 5.5 | 25 | 230 | 12         | 120        |
| A/ F 8 × 125   | 8.0  | 12.0 | 20 | 125 | 5.5 | 25 | 230 | 12         | 120        |
| A/ F 9 × 125   | 9.0  | 12.7 | 20 | 125 | 6.3 | 28 | 250 | 12         | 120        |
| A/ F 10 × 125  | 10.0 | 15.0 | 20 | 125 | 6.3 | 28 | 250 | 12         | 120        |
| A/ F 11 × 125  | 11.0 | 15.0 | 20 | 125 | 6.3 | 28 | 250 | 12         | 120        |
| A/ F 12 × 150  | 12.0 | 17.0 | 20 | 150 | 8.0 | 33 | 292 | 6          | —          |
| A/ F 13 × 150  | 13.0 | 19.0 | 22 | 150 | 8.0 | 33 | 292 | 6          | —          |
| A/ F 14 × 150  | 14.0 | 19.0 | 22 | 150 | 8.0 | 33 | 292 | 6          | —          |
| A/ F 17 × 150  | 17.0 | 23.0 | 22 | 150 | 9.0 | 35 | 313 | 6          | —          |

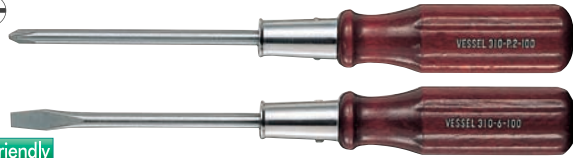
## No. 350 Wooden Handle Tang-Thru Screwdriver (Long Shank Type)



- Wooden Handle and Tang-Thru shank.
- Long shank for hard-to-reach fasteners. ● Red mark on handle butt.

| Size      | mm     | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|-----------|--------|-----|-----|-----|-----|-----|------------|------------|
| ⊖ 6 × 200 | 6.0    | 0.9 | 200 | 6.3 | 28  | 320 | 12         | 120        |
| ⊖ 6 × 250 | 6.0    | 0.9 | 250 | 6.3 | 28  | 370 | 12         | 120        |
| ⊖ 6 × 300 | 6.0    | 0.9 | 300 | 6.3 | 28  | 420 | 12         | 120        |
| ⊕ 2 × 200 | ⊕ No.2 | 200 | 6.3 | 28  | 320 | 12  | 120        |            |
| ⊕ 2 × 250 | ⊕ No.2 | 250 | 6.3 | 28  | 370 | 12  | 120        |            |
| ⊕ 2 × 300 | ⊕ No.2 | 300 | 6.3 | 28  | 420 | 12  | 120        |            |

## No. 310 Wooden Handle standard Shank Screwdriver

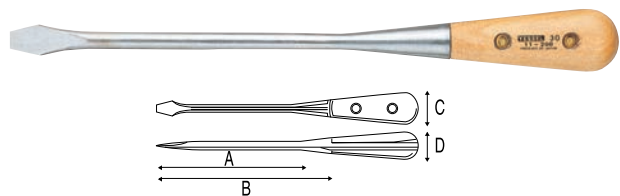


**Eco-friendly**

- Widely-used standard wooden handle screwdriver.
- Mahogany colored handle. Easy-to-grip texture and shape. ● Shot blasting tip.

| Size       | mm     | mm  | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|------------|--------|-----|-----|-----|-----|-----|------------|------------|
| ⊖ 5.5 × 75 | 5.5    | 0.8 | 75  | 5.5 | 25  | 181 | 12         | 120        |
| ⊖ 6 × 100  | 6.0    | 0.9 | 100 | 6.3 | 28  | 225 | 12         | 240        |
| ⊖ 8 × 150  | 8.0    | 1.1 | 150 | 8.0 | 33  | 292 | 6          | 120        |
| ⊕ 1 × 75   | ⊕ No.1 | 75  | 5.0 | 23  | 170 | 12  | 120        |            |
| ⊕ 2 × 100  | ⊕ No.2 | 100 | 6.3 | 28  | 225 | 12  | 240        |            |
| ⊕ 3 × 150  | ⊕ No.3 | 150 | 8.0 | 33  | 292 | 6   | 120        |            |

## No. 30 "SPLIT" Handle Screwdriver



- Joined Tang-Thru shank and handle. Super strong type.
- Defense Agency Standard-compliant product.

| Size        | mm  | mm  | mm  | A   | B   | C  | D  | mm  | Inner Ctn. | Outer Ctn. |
|-------------|-----|-----|-----|-----|-----|----|----|-----|------------|------------|
| ⊖ 9.5 × 150 | 9.5 | 1.2 | 9.5 | 145 | 190 | 35 | 29 | 285 | 6          | 120        |
| ⊖ 11 × 200  | 11  | 1.2 | 11  | 195 | 255 | 38 | 32 | 360 | 6          | 120        |

This precision screwdriver is perfect for the delicate screw tightening operations of precision work. Our high-precision, tip process conforms to JIS and JICA standards. The ergonomic grips employed enable a smoother torque transfer.



## ***G-grip Screwdriver***

Quick-turning screwdriver, taking advantage of the gravity force.

The perfect shape for high-precision work

The weight of the internal steel ball freely rotates the cap in the palm of the hand to provide the optimum grip position.



A finely crafted screwdriver is necessary for delicate work.

In addition to maintaining a stable grip, the palm of the hand plays an important role by feeling the weight of the ball of the G-grip, which enables the use of delicate movements of the fingertips.



## Precision Screwdrivers

## No. 990 G-grip Screwdriver

Patented



- The weight of the steel ball keeps the end cap in an optimum position for a grip.
- Slotted tip is cut straight to avoid getting stuck on the screw.
- High-precision black point tip.

| Size         |         |      |     |     |    |     |     | Inner Ctn. | Outer Ctn. |
|--------------|---------|------|-----|-----|----|-----|-----|------------|------------|
|              | mm      | mm   | mm  | mm  | mm | mm  | mm  |            |            |
| ⊖ 1.8 × 50   | 1.8     | 0.25 | 50  | 2.5 | 16 | 21  | 148 | 12         | 240        |
| ※ ⊖ 2.5 × 75 | 2.5     | 0.3  | 75  | 2.5 | 16 | 21  | 173 | 12         | 240        |
| ※ ⊖ 3 × 100  | 3       | 0.5  | 100 | 3.0 | 16 | 21  | 198 | 12         | 240        |
| ※ ⊖ 4 × 100  | 4       | 0.6  | 100 | 4.0 | 16 | 21  | 198 | 12         | 240        |
| ⊖ 5 × 100    | 5       | 0.8  | 100 | 5.0 | 30 | 38  | 215 | 6          | 60         |
| ⊕ 00 × 75    | ⊕ No.00 | 75   | 2.5 | 16  | 21 | 173 | 12  | 240        |            |
| ⊕ 0 × 100    | ⊕ No.0  | 100  | 3.0 | 16  | 21 | 198 | 12  | 240        |            |
| ⊕ 1 × 100    | ⊕ No.1  | 100  | 3.0 | 30  | 38 | 215 | 6   | 60         |            |
| ⊕ 2 × 100    | ⊕ No.2  | 100  | 5.0 | 30  | 38 | 215 | 6   | 60         |            |

※JIS B4609

## No. 990TX G-grip Screwdriver

Patented



- The weight of the steel ball keeps the end cap in an optimum position for a grip.
- Black point tip that is unaffected by plating thickness.

| Size |     |  |  |  |  |  |  | Inner Ctn. | Outer Ctn. |
|------|-----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|------------|
|      |     | mm                                                                                  | mm                                                                                  | mm                                                                                  | mm                                                                                  | mm                                                                                  | mm                                                                                  |            |            |
| T3   | ×40 | 1.12                                                                                | 40                                                                                  | 2.5                                                                                 | 16                                                                                  | 21                                                                                  | 138                                                                                 | 12         | 240        |
| T4   | ×40 | 1.3                                                                                 | 40                                                                                  | 2.5                                                                                 | 16                                                                                  | 21                                                                                  | 138                                                                                 | 12         | 240        |
| T5   | ×40 | 1.37                                                                                | 40                                                                                  | 2.5                                                                                 | 16                                                                                  | 21                                                                                  | 138                                                                                 | 12         | 240        |

TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA).

## No. TD-51 Precision Micro Screwdriver

Patented



- Soft touch Finger Turn controls accurate fastenning turn and micro adjustable driving.
- Slide "Cushion Grip" for right position accodding to your finger control.
- For assembly and repair of precision devices, cameras, watches and glasses.

| Size  |  |  |  |  |  | Cushion Grip color | Inner Ctn. | Outer Ctn. |
|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|------------|------------|
|       | mm                                                                                | mm                                                                                 | mm                                                                                  | mm                                                                                  | mm                                                                                  |                    |            |            |
| ⊖ 0.7 | 0.7                                                                               | 0.15                                                                               | 15                                                                                  | 0.7                                                                                 | 95                                                                                  | Purple             | 10         | 100        |
| ⊖ 0.9 | 0.9                                                                               | 0.2                                                                                | 15                                                                                  | 0.9                                                                                 | 95                                                                                  | Green              | 10         | 100        |
| ⊖ 1.2 | 1.2                                                                               | 0.25                                                                               | 18                                                                                  | 1.2                                                                                 | 98                                                                                  | Blue               | 10         | 100        |
| ⊖ 1.8 | 1.8                                                                               | 0.3                                                                                | 20                                                                                  | 1.8                                                                                 | 100                                                                                 | Black              | 10         | 100        |
| ⊖ 2.3 | 2.3                                                                               | 0.35                                                                               | 22                                                                                  | 2.3                                                                                 | 102                                                                                 | Purple             | 10         | 100        |
| ⊖ 3.0 | 3.0                                                                               | 0.4                                                                                | 26                                                                                  | 3.0                                                                                 | 106                                                                                 | Red                | 10         | 100        |
| ⊖ 3.5 | 3.5                                                                               | 0.5                                                                                | 28                                                                                  | 3.5                                                                                 | 108                                                                                 | Yellow             | 10         | 100        |
| ⊕ 00  | ⊕ No.00                                                                           |                                                                                    | 24                                                                                  | 2.4                                                                                 | 104                                                                                 | Red                | 10         | 100        |
| ⊕ 0   | ⊕ No.0                                                                            |                                                                                    | 26                                                                                  | 3.0                                                                                 | 106                                                                                 | Yellow             | 10         | 100        |
| ⊕ 1   | ⊕ No.1                                                                            |                                                                                    | 26                                                                                  | 3.0                                                                                 | 106                                                                                 | Green              | 10         | 100        |

## No. TD-52 Precision Nutdriver

Patented



- Soft touch Finger Turn controls accurate fastening turn and micro adjustable driving.
- Slide "Cushion Grip" for right position according to your finger control.
- For various precision equipment.

| Size     |  |  |  |  |  |  | Cushion Grip color | Inner Ctn. | Outer Ctn. |
|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------|------------|------------|
|          | mm                                                                                  | mm                                                                                   | mm                                                                                    | mm                                                                                    | mm                                                                                    | mm                                                                                    |                    |            |            |
| 2.2      | —                                                                                   | 4.0                                                                                  | 12                                                                                    | 25                                                                                    | 3.0                                                                                   | 105                                                                                   | Green              | 10         | 100        |
| A/ F 3.0 | 3.0                                                                                 | 5.0                                                                                  | 7                                                                                     | 25                                                                                    | 3.0                                                                                   | 105                                                                                   | Blue               | 10         | 100        |
| A/ F 4.0 | 4.0                                                                                 | 6.0                                                                                  | 9                                                                                     | 25                                                                                    | 3.0                                                                                   | 105                                                                                   | Black              | 10         | 100        |
| A/ F 4.5 | 4.5                                                                                 | 6.5                                                                                  | 10                                                                                    | 25                                                                                    | 3.0                                                                                   | 105                                                                                   | Purple             | 10         | 100        |
| A/ F 5.0 | 5.0                                                                                 | 7.0                                                                                  | 11                                                                                    | 25                                                                                    | 3.0                                                                                   | 105                                                                                   | Red                | 10         | 100        |
| A/ F 5.5 | 5.5                                                                                 | 8.0                                                                                  | 10                                                                                    | 25                                                                                    | 3.0                                                                                   | 105                                                                                   | Yellow             | 10         | 100        |

## No. TD-53 Precision Hex. Driver

Patented



- Soft touch Finger Turn controls accurate fastening turn and micro adjustable driving.
- Slide "Cushion Grip" for right position according to your finger control.
- For various precision equipment.

| Size      | <br>mm | <br>mm | <br>mm | Cushion<br>Grip<br>color | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------|---------------|---------------|
| A/ F 0.89 | 0.89                                                                                      | 18                                                                                         | 98                                                                                          | Green                    | 10            | 100           |
| A/ F 1.27 | 1.27                                                                                      | 18                                                                                         | 98                                                                                          | Blue                     | 10            | 100           |
| A/ F 1.5  | 1.5                                                                                       | 18                                                                                         | 98                                                                                          | Black                    | 10            | 100           |
| A/ F 2.0  | 2.0                                                                                       | 24                                                                                         | 104                                                                                         | Purple                   | 10            | 100           |
| A/ F 2.5  | 2.5                                                                                       | 24                                                                                         | 104                                                                                         | Yellow                   | 10            | 100           |



## No. 9900 Micro Screwdriver



### Eco-friendly

- Handle is fitted with turning cap for fast turning.
- Fully hardened chrome vanadium steel.

| Size     | mm      | mm   | mm  | mm  | mm  | mm  | Inner Ctn. | Outer Ctn. |
|----------|---------|------|-----|-----|-----|-----|------------|------------|
| ⊖ 1.8×50 | 1.8     | 0.25 | 50  | 2.5 | 10  | 145 | 10         | 120        |
| ⊖ 2.5×75 | 2.5     | 0.35 | 75  | 2.5 | 10  | 170 | 10         | 120        |
| ⊖ 3×100  | 3       | 0.45 | 100 | 3   | 10  | 195 | 10         | 120        |
| ⊖ 3×150  | 3       | 0.45 | 150 | 3   | 10  | 245 | 10         | 120        |
| ⊕ 00×75  | ⊕ No.00 | 75   | 2.5 | 10  | 170 | 10  | 120        | 120        |
| ⊕ 0×100  | ⊕ No.0  | 100  | 3   | 10  | 195 | 10  | 120        | 120        |
| ⊕ 0×150  | ⊕ No.0  | 150  | 3   | 10  | 245 | 10  | 120        | 120        |

## No. 9902/9903 3-Piece Micro Screwdriver Set



- 2 types for screw tightening in precision fields.
- Set of often used sizes.
- For adjustment and repair of precision equipment, electric equipment, glasses, watches, etc.
- PET blister package doubles as storage case.

### No. 9902 3-Piece Micro Screwdriver Set

| Set contents                       | Case size mm | Inner Ctn. | Outer Ctn. |
|------------------------------------|--------------|------------|------------|
| No.9900 ⊕ 00×75, ⊕ 0×100, ⊖ 1.8×50 | 235×70       | 5          | 30         |

### No. 9903 3-Piece Micro Screwdriver Set

| Set contents                       | Case size mm | Inner Ctn. | Outer Ctn. |
|------------------------------------|--------------|------------|------------|
| No.9900 ⊕ 00×75, ⊖ 2.5×75, ⊖ 3×100 | 235×70       | 5          | 30         |

## No. TD-54 Watch Band Pin Punch



- For adjustment of the watch band.

| Size  | Tip width | mm | mm  | mm | Inner Ctn. | Outer Ctn. |
|-------|-----------|----|-----|----|------------|------------|
| ● 0.7 | ● 0.7     | 10 | 0.7 | 90 | 10         | 100        |

## No. 207 6-Piece Precision Screwdriver Set



- Metallic handle can be freely turned from the butt end, therefore finger pressure is sufficient for maintaining the position while turning.
- For repair and assembly of watches, cassettes, radios, glasses, precision equipment, plastic models, etc.
- Comes with plastic case.

### No. 207 6-Piece Precision Screwdriver Set

| Set contents                    | Case size mm | Inner Ctn. | Outer Ctn. |
|---------------------------------|--------------|------------|------------|
| ⊖ 0.9, 1.2, 1.8, 2.3, ⊕ 00, ⊕ 0 | 133×90mm     | 10         | 100        |

# Precision Screwdrivers

No. TD-55/56/57/58 Precision Screwdriver Set Patented



**Eco-friendly**  
(TD-56 only)

- Soft touch Finger Turn controls accurate fastening turn and micro adjustable driving.
- Plastic casing makes it easy to carry it around.

| Model No. | Model Name                | Set content                                                                                   | Case Size mm | Inner Ctn. |
|-----------|---------------------------|-----------------------------------------------------------------------------------------------|--------------|------------|
| TD-55     | Precision Screwdriver Set | $\ominus 0.9$ , $\ominus 1.2$ , $\ominus 1.8$ , $\ominus 2.3$ , $\ominus 3.0$ , $\ominus 3.5$ | 86×140×20    | 10         |
| TD-56     | Precision Screwdriver Set | $\ominus 0.9$ , $\ominus 1.2$ , $\ominus 1.8$ , $\ominus 2.3$ , $\oplus 0.0$ , $\oplus 0$     | 86×140×20    | 10         |
| TD-57     | Precision Nut driver Set  | 2.2, $\oslash 3.0$ , $\oslash 4.0$ , $\oslash 4.5$ , $\oslash 5.0$ , $\oslash 5.5$            | 86×140×20    | 10         |
| TD-58     | Precision Hex.driver Set  | $\bullet 0.89$ , $\bullet 1.27$ , $\bullet 1.5$ , $\bullet 2.0$ , $\bullet 2.5$ , $\oplus 00$ | 86×140×20    | 10         |

## No. 9000 Ceramic Adjusters

For adjustment of electronic components



For the adjustment of electronic parts  
Ideal for adjusting the components of audio instruments, computers, telecommunication devices and electronics components.

**Eco-friendly**

- Zirconia ceramic tip.
- Non-conductive, non-magnetic. Ideal for high frequency band.
- Smooth turning.

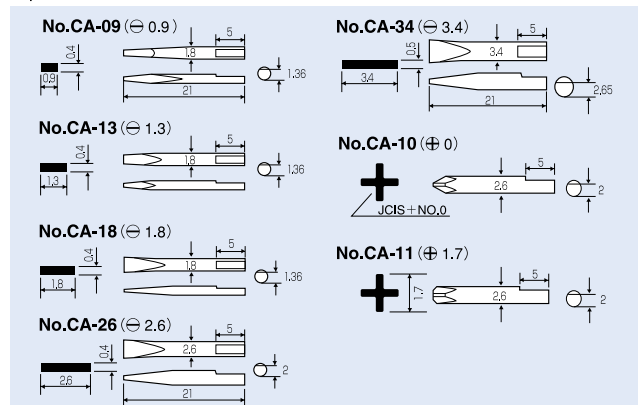
| Size                    | mm                 | mm  | mm | mm  | mm | mm  | End cap color | Inner Ctn. | Outer Ctn. |
|-------------------------|--------------------|-----|----|-----|----|-----|---------------|------------|------------|
| $\ominus 0.9 \times 30$ | 0.9                | 0.4 | 30 | 1.8 | 10 | 125 | Green         | 10         | 60         |
| $\ominus 1.3 \times 30$ | 1.3                | 0.4 | 30 | 1.8 | 10 | 125 | White         | 10         | 60         |
| $\ominus 1.8 \times 30$ | 1.8                | 0.4 | 30 | 1.8 | 10 | 125 | Yellow        | 10         | 60         |
| $\ominus 2.6 \times 30$ | 2.6                | 0.4 | 30 | 2.6 | 10 | 125 | Red           | 10         | 60         |
| $\ominus 3.4 \times 15$ | 3.4                | 0.5 | 15 | 3.4 | 10 | 115 | Black         | 10         | 60         |
| $\oplus 0 \times 30$    | $\oplus$ No.0      |     | 30 | 2.6 | 10 | 125 | Navy blue     | 10         | 60         |
| $\oplus 1.7 \times 30$  | $\oplus$ Width 1.7 |     | 30 | 2.6 | 10 | 125 | Lilac         | 10         | 60         |

## No. CA Individual Ceramic Blades

For automatic adjuster



- Blades for automatic adjuster.
- Adjacent No. CT blades may interfere with one another when installation pitch is narrow.



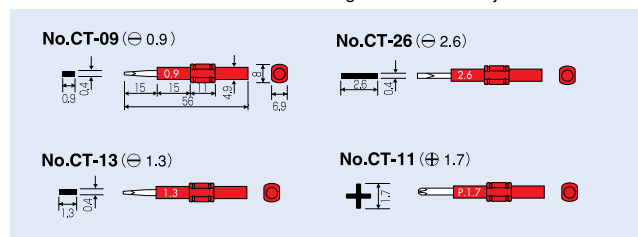
10 per carton

## No. CT Ceramic Blade Adapters

For automatic adjuster



- Reversible blades for No. 9002/9003-9001.
- Uniform size is convenient for mounting on automatic adjuster.



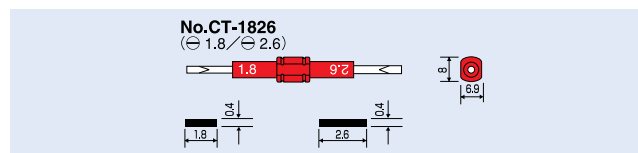
10 per carton ... 60 per box

## No. CT Ceramic Blade Adapters

For 4-way reversible blades screwdriver

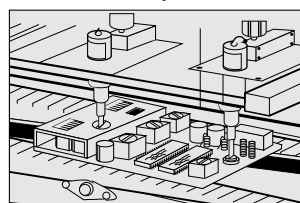


- Reversible blades for No. 9001. 2-headed ceramic blades on each end.

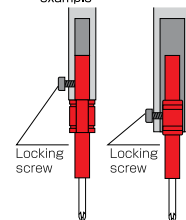


10 per carton ... 60 per box [Blister package]

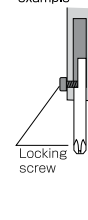
## Automatic adjuster



No. CT installation example



No. CA installation example



Automatic adjusters are used widely throughout industry to boost efficiency and reduce the costs of adjustment work. Vessel makes a wide range of products as attachments for automatic adjuster. Before mounting, check the jig outer diameter and total length. Use the above installation example as reference.

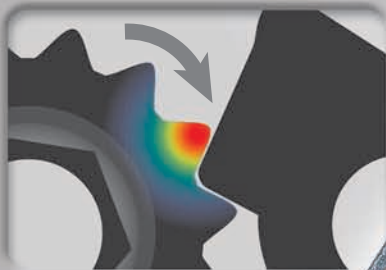
This functionally enhanced screwdriver enables screw tightening by simple repeated wrist movements.

Improved gear strength combined with our unique ratchet design makes these screwdrivers suitable for the most strenuous tightening jobs.



## **"PETA-RACHE"** Patent Pending **Flat-shaped Ratchet Screwdriver**

The use of high-precision gears has greatly increased the strength of the ratchet. Despite the compact body, these high-powered ratchet screwdrivers can be used for heavy-duty tightening work.



### **Magnetic screw catcher**

When a screw comes close to the tip...

The sleeve automatically slides forward to catch the screw!





# Ratchet Screwdrivers

## No. 830-MG4 METAL LINE Ratchet Driver



**MG** Magnetized

- Bits can be stored within the handle.
- Magnet type top holds the bit securely. Easy bit on-off.

| Grip Dia.<br>mm | Body length<br>mm | Bits                    | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------------|-------------------|-------------------------|---------------|---------------|
| 28.5            | 167               | ⊕ 1, ⊕ 2, ⊕ 3, ⊖ 6×25.4 | 5             | 30            |

## No. 820W-23 METAL LINE Stubby Ratchet Screwdriver



**MG** Magnetized

- Ideal for working in limited place.
- For tightening in cramped places.

| Grip Dia.<br>mm | Body length<br>mm | Bits                                    | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------------|-------------------|-----------------------------------------|---------------|---------------|
| 28.5            | 77                | Double End Bits ⊕ 2 / ⊕ 3, Length 32 mm | 10            | 60            |

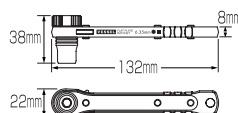
## No. 820FX-4 METL LINE Ratchet Stribby Screwdriver (With Flexible shaft)



- With a flexible shaft.
- For tightening in cramped places.

| Grip Dia.<br>mm | Body length<br>mm | Bits                                                                    | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------------|-------------------|-------------------------------------------------------------------------|---------------|---------------|
| 28.5            | 77                | ● Flexible shaft ● Bit belt holder<br>● Bits ⊕ 1, ⊕ 2, ⊖ 4, ⊖ 6×33.3 mm | 5             | 30            |

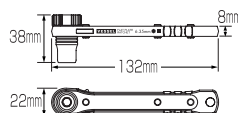
## No. TD-73MC Plate Ratchet Screw Catcher



- Super magnet catches screw firmly. Single hand operation.
- Comes with HEX and PH bits.

| Package content                                                                                                                | Inner Ctn. |
|--------------------------------------------------------------------------------------------------------------------------------|------------|
| ● Plate Ratchet ● Bits: ⊕ 1, ⊕ 2, ⊕ 3, ⊖ 4, ⊖ 6,<br>A / F 2.5, 3, 4, 5, 6×25.4 mm<br>● Magnetic Screw Holder ● Bit belt holder | 40         |

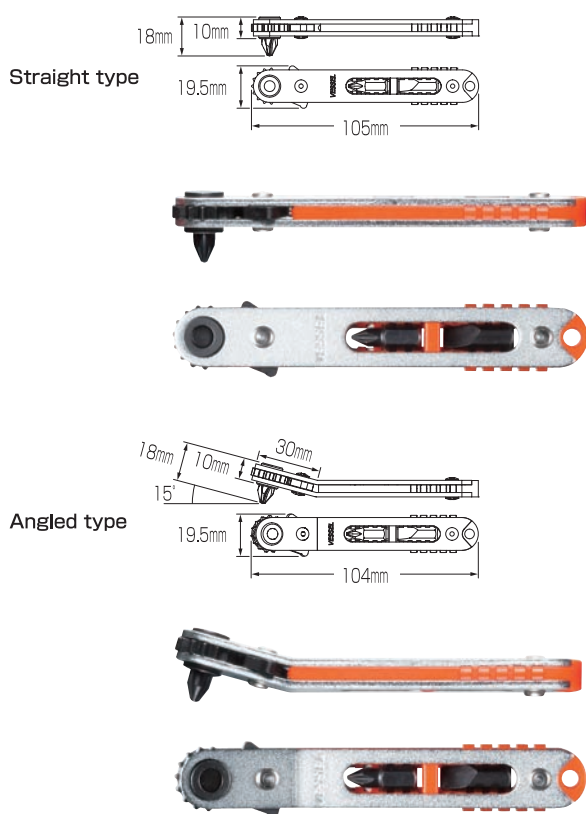
## No. TX-12MC Plate Ratchet/Magnetic Screw Catcher (TORX)



- Super magnet catches screw firmly. Single hand operation.
- Comes with Tamper-proof TORX bits.

| Package content                                                                                                                         | Inner Ctn. |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------|
| ● Plate Ratchet ● Bits: T8H, T10H, T15H, T20H, T25H, T27H,<br>T30H, T40H, ⊕ 2, ⊖ 6×25.4 mm<br>● Magnetic Screw Holder ● Bit belt holder | 10         |

## "PETA-RACHE" Flat-shaped Ratchet Screwdriver Patent Pending



**MG** Magnetized

- The head part is as thin as 18mm. Handy with its compact body.
- High-precision ratchet system realizes ideal fastening.
- Two types (straight-type and angled-type) are available in accordance with your application.
- Bits can be stored within the handle.
- Magnetized bits (Overall length: 18mm) included.

| Model No.    | Package content                                                                                                                                                                   | Inner Ctn. |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>TD-74</b> | ● Flat-shaped Ratchet Screwdriver (Straight type)<br>● Bit $\oplus 1$ , $\oplus 2$ , $\ominus 6 \times 18$ mm                                                                     | 10         |
| <b>TD-75</b> | ● Flat-shaped Ratchet Screwdriver (Straight type)<br>● Bit holder ● Bit $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6 \times 18$ mm                             | 10         |
| <b>TD-76</b> | ● Flat-shaped Ratchet Screwdriver (Straight type)<br>● Bit holder ● Bit $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6$ ,<br>H2.5, H3, H4, H5, H6 $\times 18$ mm | 10         |
| <b>TD-77</b> | ● Flat-shaped Ratchet Screwdriver (Angled type)<br>● Bit $\oplus 1$ , $\oplus 2$ , $\ominus 6 \times 18$ mm                                                                       | 10         |
| <b>TD-78</b> | ● Flat-shaped Ratchet Screwdriver (Angled type)<br>● Bit holder ● Bit $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6 \times 18$ mm                               | 10         |
| <b>TD-79</b> | ● Flat-shaped Ratchet Screwdriver (Angled type)<br>● Bit holder ● Bit $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6$ ,<br>H2.5, H3, H4, H5, H6 $\times 18$ mm   | 10         |

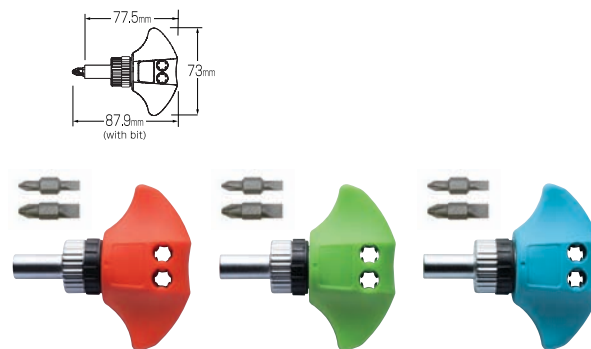
## "PETA-RACHE" 18mm replacement bits



**MG** Magnetized

| Model No.     | Package content                                                                              | Inner Ctn. |
|---------------|----------------------------------------------------------------------------------------------|------------|
| <b>TD-BS5</b> | ● $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6 \times 18$ mm ● Bit holder | 10         |
| <b>TD-BS6</b> | ● H2.5, H3, H4, H5, H6 $\times 18$ mm ● Bit holder                                           | 10         |

## No. TD-81R/81G/81B Power Ratchet Screwdriver



**MG** Magnetized

- Its ratchet gear makes fine 18° fastening possible.
- Ideal ratchet mechanism for powerful driving.
- Bits can be stored within the handle.
- 2 double-end bits are included for 4 different sizes.

| Model No.     | Color | Bits                                                        | Body length mm | Inner Ctn. |
|---------------|-------|-------------------------------------------------------------|----------------|------------|
| <b>TD-81R</b> | Red   | $\oplus 1 / \ominus 4$ , $\oplus 2 / \ominus 6 \times 25.4$ | 77.5           | 10         |
| <b>TD-81G</b> | Green | $\oplus 1 / \ominus 4$ , $\oplus 2 / \ominus 6 \times 25.4$ | 77.5           | 10         |
| <b>TD-81B</b> | Blue  | $\oplus 1 / \ominus 4$ , $\oplus 2 / \ominus 6 \times 25.4$ | 77.5           | 10         |

## Electric Detection Screwdrivers/Impact Screwdrivers

Impact screwdrivers for loosening rusted screws and screwdrivers housing an electroscope for testing electrical conductivity.

A functionally enhanced screwdriver was added for screw tightening operations.

### ***LED Voltage Detection Screwdriver*** 〈Low Voltage Type〉

This picket screwdriver can be used to carry out live-wire checks, negative/positive discrimination, and conductivity tests.

The end cap is fitted with a clip, so that it can easily be carried in a shirt pocket.

The batteries can also be replaced.

Tapered grip design.

Clear and transparent, the LED provides quick and easy discrimination.

A neon lamp type featuring long operation lifespan and low maintenance is also available.



## No. 80L Voltage Detection Screwdriver (Low Voltage Type)



- Pencil-type voltage detection screwdriver.
- Can be used for continuity tests on lights and electrical wires, as well as oscillation tests for TVs, radios and wireless transmitters, etc. Voltage detection range.

| Voltage EDP No.<br>detection range | mm | mm  | mm   | mm   | mm  | Inner<br>Ctn. | Outer<br>Ctn. |
|------------------------------------|----|-----|------|------|-----|---------------|---------------|
| 100 to 220 V AC<br>100 to 350 V DC | 50 | 4.0 | 0.45 | 13.9 | 128 | 10            | 60            |

## No. 82L Voltage Detection Screwdriver



- Handy for conduction/ continuity test. ●Neon-bulb type, which doesn't need batteries. ●Pencil-type voltage detecting screwdriver.

| Voltage EDP No.<br>detection range | mm | mm  | mm   | mm   | mm  | Inner<br>Ctn. |
|------------------------------------|----|-----|------|------|-----|---------------|
| 100 to 250 V AC                    | 20 | 4.0 | 0.45 | 17.5 | 130 | 10            |

## No. 1300L/1300H 6-Piece Voltage Detection Screwdriver Set



(For low voltage)



(For high voltage)

- Easy bit on-off chuck handle
- Can perform continuity tests using the internal neon light.
- Handy vinyl carrying and storage pouch
- Low voltage type (100 to 220V AC, 100 to 350V DC)
- High voltage type (Allowed voltage: 2500 to 15,000 V.  
Only secondary high voltage of internal combustion engine.)

### No. 1300L Voltage Detection Screwdriver Set (For low voltage)

| Grip Dia. | Body length | Interchangeable blades |                |          |     | Inner<br>Ctn. |
|-----------|-------------|------------------------|----------------|----------|-----|---------------|
| mm        | with tip mm | Slotted                | Phillips       | Socket   | Awl |               |
| 25        | 225         | ⌀4×125, ⌀6×125         | ⌀1×125, ⌀2×125 | ⌀5.5×125 | 125 | 40            |

### No. 1300H Voltage Detection Screwdriver Set (For high voltage)

| Grip Dia. | Body length | Interchangeable blades |                |     |    | Inner<br>Ctn. |
|-----------|-------------|------------------------|----------------|-----|----|---------------|
| mm        | with tip mm | Slotted                | Phillips       | Awl |    |               |
| 25        | 225         | ⌀3×125, ⌀4×125, ⌀6×125 | ⌀1×125, ⌀2×125 | 125 | 40 |               |

Some screwdrivers support hanger hooks. (P.52)

### ⚠ Warnings concerning Voltage Detection Screwdrivers

- Check the screwdriver lights before use.
- Be careful of shorts and electrical shock.
- Use screwdrivers within voltage detection ranges.
- Do not use screwdrivers when wet with water, oil, etc.

## No. 83L LED Voltage Detection Screwdriver



- Handy for conduction/ continuity test. ●Batteries can be easily replaced.
- Long-life LED lights brightly. ●Pencil-type voltage detection screwdriver.

| Voltage EDP No.<br>detection range | mm | mm  | mm   | mm   | mm  | Inner<br>Ctn. |
|------------------------------------|----|-----|------|------|-----|---------------|
| 2 to 250 V DC<br>100 to 250 V AC   | 20 | 4.0 | 0.45 | 17.5 | 130 | 10            |

# ONE POINT

Neon-bulb type, which doesn't need batteries.

## Voltage Detection Screwdriver

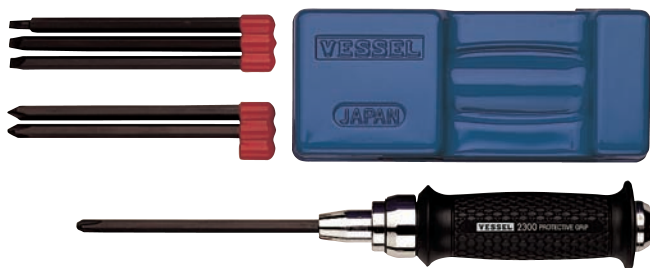
〈Low Voltage Type〉 **No. 82L**

For checking live wires and receptacles.  
Also for testing polarity of AC power outlets.

# Impact Screwdrivers

## No. 2300 Impact Driver (Compact type)

Patented



- Fastening/ loosening can be easily switched.
- Soft non-slip cushion handle makes it easy to grip.
- Long shank bit. Ideal for hard-to-reach fasteners.
- 6.35mm hexagon bit chuck. Easy bit replacement.

| Grip Dia.<br>mm | Tread diameter<br>mm | Overall length<br>mm | Slotted                   | Philips                   | Outer<br>Ctn. |
|-----------------|----------------------|----------------------|---------------------------|---------------------------|---------------|
| 32              | 42                   | 266                  | ⌀5×125, ⌀6×125,<br>⌀7×125 | ⌀1×125, ⌀2×125,<br>⌀3×125 | 5             |

Please see P. 52 for hanger-hook type.

For replacement bits &gt;&gt;&gt; 082 page

## No. 2500 Impact Driver



- Effective for tight fastening and loosening rusted screws.
- Suited for automobile servicing, and assembly and disassembly of machinery and equipment. ●For heavy-duty use.
- If the bit adapter is detached, a 12.7 mm socket can be attached.

| Grip Dia.<br>mm | Tread diameter<br>mm | Slotted | Philips                   | Outer<br>Ctn. | Standard bits<br>(excluding attached ones)                                   |
|-----------------|----------------------|---------|---------------------------|---------------|------------------------------------------------------------------------------|
| 32              | 190                  | ⌀10×36  | ⌀2×36,<br>⌀3×36,<br>⌀4×36 | 10            | ⌀8, ⌀12 (Length: 36 mm)<br>⌀8, ⌀10 (Length: 80 mm)<br>⌀2, ⌀3 (Length: 80 mm) |

Please see P. 52 for hanger-hook type.

For replacement bits &gt;&gt;&gt; 082 page

## No. 2400 Impact Driver



- One-touch reverse switching
- Soft no-slip resin handle that is easy to grip. Designed for firm gripping.
- For heavy-duty use
- If the bit adapter is detached, a 12.7 mm socket can be attached.

| Grip Dia.<br>mm | Tread diameter<br>mm | Overall length<br>with tip (36 mm)<br>mm | Slotted | Philips                                 | Outer<br>Ctn. | Standard bits<br>(excluding attached ones)       |
|-----------------|----------------------|------------------------------------------|---------|-----------------------------------------|---------------|--------------------------------------------------|
| 37.5            | 55                   | 197                                      | ⌀10×36  | ⌀2×36, ⌀3×36,<br>⌀4×36,<br>⌀2×80, ⌀3×80 | 5             | ⌀8, ⌀12 (Length: 36mm)<br>⌀8, ⌀10 (Length: 80mm) |

Please see P. 52 for hanger-hook type.

For replacement bits &gt;&gt;&gt; 082 page

## No. 2600A Impact Uni Driver

Patented



- Thin handle. Can be used as normal screwdriver.
- Long shank bit. Ideal for hard-to-reach fasteners.
- 6.35 mm bit hexagon socket, hexagon-type. ●Easy bit changing.

| Grip Dia.<br>mm | Overall length<br>with tip mm | Slotted                   | Philips                   | Outer<br>Ctn. |
|-----------------|-------------------------------|---------------------------|---------------------------|---------------|
| 26              | 240                           | ⌀5×125, ⌀6×125,<br>⌀7×125 | ⌀1×125, ⌀2×125,<br>⌀3×125 | 20            |

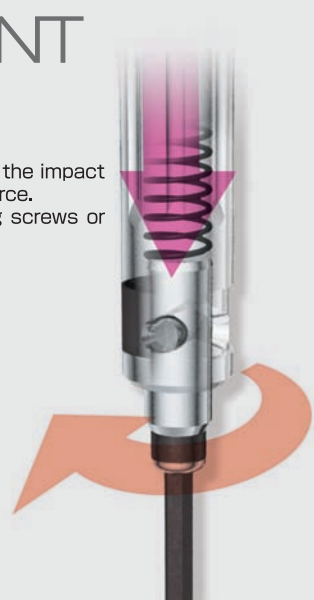
Please see P. 52 for hanger-hook type.

For replacement bits &gt;&gt;&gt; 082 page

## ONE POINT

Converts impact  
into rotational force.

When tapped with a hammer, the impact is converted into rotational force. Effective for tightly fastening screws or loosening rusted screws.





# Hex Wrenches

Hand Tools

Faster and easier

These are the optimal, most efficient tools available for wrench work. Ultraball & Ultrahex boasting the fastest tightening speed in the industry.

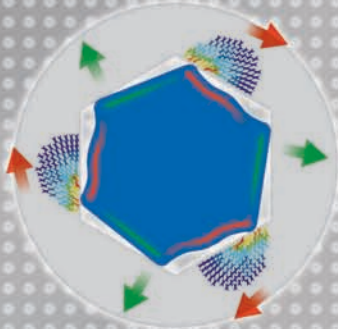
## ***“RAINBALL” L-Wrenches***

Fulcrum movement is efficiently used by the Ultraball construction to enable fast rotations to be transmitted to the screw at up to 35°. Furthermore, at angles greater than 35°, the tip slips out of the hexagonal hole to prevent damage to the screw head.

## **UltraHex®**

### **Longer tool life**

The flat faces prevent deformation in the hexagon hole. Causes minimal damage to screws and tools.



## **UltraBall®**

### **High speed turning**

Tapered to 35°, the ball tip is always at the center of rotation, hence ensuring smooth turning.





# Hex Key Wrenches / TORX Key Wrenches

## No. 8800BP "RAINBALL" L-Wrenches

Patented


**MG** Magnetized

- Fully hardened chrome molybdenum steel+vanadium.
- Long-sized for high-leverage wrenching.
- 95° Short-hand for wrenching in tight spaces.

| Size    |  |  |  | Inner Ctn. |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|
|         | mm                                                                                | mm                                                                                | mm                                                                                |            |
| A/F 1.5 | 1.5                                                                               | 7.5                                                                               | 77                                                                                | 10         |
| A/F 2   | 2                                                                                 | 9                                                                                 | 83                                                                                | 10         |
| A/F 2.5 | 2.5                                                                               | 10.5                                                                              | 93                                                                                | 10         |
| A/F 3   | 3                                                                                 | 12                                                                                | 104                                                                               | 10         |
| A/F 4   | 4                                                                                 | 16                                                                                | 115                                                                               | 10         |
| A/F 5   | 5                                                                                 | 20                                                                                | 136                                                                               | 10         |
| A/F 6   | 6                                                                                 | 23                                                                                | 157                                                                               | 10         |
| A/F 8   | 8                                                                                 | 31                                                                                | 179                                                                               | 5          |
| A/F 10  | 10                                                                                | 39                                                                                | 200                                                                               | 5          |

## No. 8806BP / 8809BP "RAINBALL" L-Wrenches

Patented


**MG** Magnetized

- Fully hardened chrome molybdenum steel+vanadium.
- These key wrench sets come with a handy holder.
- 9-piece set comes with open-folded holder.

### No. 8806BP (6-piece set)

| Set content                                          | Inner Ctn. |
|------------------------------------------------------|------------|
| No. 8800BP With holder<br>A/F 1.5, 2, 2.5, 3, 4, 5mm | 5          |

### No. 8809BP (9-piece set)

| Set content                                                     | Inner Ctn. |
|-----------------------------------------------------------------|------------|
| No. 8800BP With holder<br>A/F 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm | 5          |

## No. 8500TX TORX Key Wrench


**Eco-friendly**

- Fully hardened chrome vanadium steel. Non-magnetic.
- Champaign Gold plating to maintain tip precision.
- Knurled shank for fast turning.

| Size |  |  |  | Inner Ctn. |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|
|      | mm                                                                                  | mm                                                                                  | mm                                                                                  |            |
| T6   | 1.65                                                                                | 2.5                                                                                 | 15                                                                                  | 10         |
| T7   | 1.97                                                                                | 2.5                                                                                 | 15                                                                                  | 10         |
| T8   | 2.3                                                                                 | 3                                                                                   | 17                                                                                  | 10         |
| T9   | 2.48                                                                                | 3                                                                                   | 17                                                                                  | 10         |
| T10  | 2.72                                                                                | 3                                                                                   | 17                                                                                  | 10         |
| T15  | 3.26                                                                                | 3.5                                                                                 | 19                                                                                  | 10         |
| T20  | 3.84                                                                                | 4                                                                                   | 21                                                                                  | 10         |
| T25  | 4.4                                                                                 | 5                                                                                   | 23                                                                                  | 10         |
| T27  | 4.96                                                                                | 5                                                                                   | 23                                                                                  | 10         |
| T30  | 5.49                                                                                | 6                                                                                   | 25                                                                                  | 10         |
| T40  | 6.6                                                                                 | 7                                                                                   | 27                                                                                  | 10         |

## No. 8507TX TORX 7-Piece Key Wrench Set

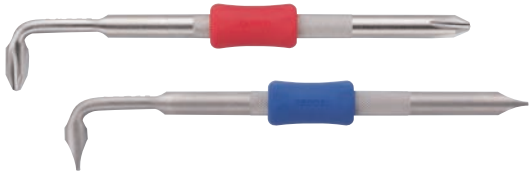


- Fully hardened chrome vanadium steel. Non-magnetic.
- Champaign Gold plating to maintain tip precision.
- Handy vinyl carrying and storage case.

| Package content                                                                  | Outer Ctn. |
|----------------------------------------------------------------------------------|------------|
| ● No. 8500TX: T10, T15, T20, T25, T27, T30, T40<br>● Vinyl package: 65×135×17 mm | 10         |

# Offset Screwdrivers

## No. TD-61 "PETADORA" L-shaped Offset Screwdriver



**MG** Magnetized **Eco-friendly**

- Handy for working in tight spaces. ● Fully hardened chrome vanadium steel.
- Special plating to keep its precision tip.

| Size | mm     | mm   | mm | mm  | mm  | Cushion Grip Color | Inner Ctn. | Outer Ctn. |
|------|--------|------|----|-----|-----|--------------------|------------|------------|
| ⊖ 6  | 6      | 0.9  | 18 | 6   | 117 | Blue               | 10         | 100        |
| ⊕ 1  | ⊕ No.1 | 16.5 | 5  | 105 |     | Green              | 10         | 100        |
| ⊕ 2  | ⊕ No.2 | 18   | 6  | 117 |     | Red                | 10         | 100        |

## No. TD-63 "PETADORA" L-shaped Offset Screwdriver

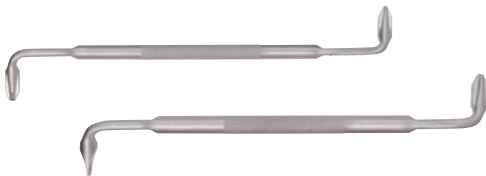


**MG** Magnetized **Eco-friendly**

- Handy for working in tight spaces. ● Fully hardened chrome vanadium steel.
- Special plating to keep its precision tip.

| Size     | mm  | mm   | mm | mm  | Cushion Grip Color | Inner Ctn. | Outer Ctn. |
|----------|-----|------|----|-----|--------------------|------------|------------|
| A/ F 2.5 | 2.5 | 16.5 | 5  | 105 | Orange             | 10         | 100        |
| A/ F 3   | 3   | 16.5 | 5  | 105 | Purple             | 10         | 100        |
| A/ F 4   | 4   | 16.5 | 5  | 105 | Black              | 10         | 100        |
| A/ F 5   | 5   | 18   | 6  | 117 | Blue               | 10         | 100        |

## No. TD-64 "PETADORA" Z-shaped Offset Screwdriver



**Eco-friendly**

- Handy for working in tight spaces. ● Fully hardened chrome vanadium steel.
- Special plating to keep its precision tip.

| Size      | mm          | mm | mm  | mm   | mm | mm  | Inner Ctn. | Outer Ctn. |
|-----------|-------------|----|-----|------|----|-----|------------|------------|
| ⊕ 1 / ⊕ 2 | No.1 / No.2 | —  | —   | 16.5 | 5  | 126 | 10         | 100        |
| ⊕ 2 / ⊖ 6 | No.2 /      | 6  | 0.9 | 18   | 6  | 129 | 10         | 100        |

## No. 25 Offset Screwdriver



**Eco-friendly**

- Useful S-shaped screwdriver for working in cramped places
- Different size tips. Can be switched according to purpose.

| Size      | Shank length mm | Shank Dia. mm | Overall length mm | Inner Ctn. |
|-----------|-----------------|---------------|-------------------|------------|
| ⊕ 1 / ⊖ 5 | 25              | 5             | 125               | 12         |
| ⊕ 2 / ⊖ 6 | 26              | 6             | 125               | 12         |
| ⊕ 3 / ⊖ 8 | 33              | 8             | 150               | 12         |

Some screwdrivers support hanger hooks. (P.54)

# TORX

## No. TX-11 TORX Plate Ratchet and Bit Set



- Fully hardened chrome vanadium steel bits. Storage holder included. For working with tamper-proof screws.
- Thin ratchet handle for working in cramped places. Ball locking system. Can be used with 6.35 mm across flats short bits and 6.35 mm square hole sockets.

| Package content                                                                                                                                                                                                                | Outer Ctn. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <ul style="list-style-type: none"> <li>● 6.35 mm Bits: T8H, T10H, T15H, T20H, T25H, T27H, T30H, T40H, <math>\oplus 2</math>, <math>\ominus 6</math></li> <li>● Plate ratchet screwdriver</li> <li>● Bit belt holder</li> </ul> | 10         |

## No. TX-15 TORX Tool Set



- 15-piece set including work sockets, ratchet wrench and adapters. T-sockets (■ 6.35 mm) for tamper-proof TORX.

| Package content                                                                                                                                                                                                                                                                                                                                                         | Outer Ctn. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <ul style="list-style-type: none"> <li>● T-sockets ■ 6.35 mm (T10H, T15H, T20H, T25H, T27H)</li> <li>● T-sockets ■ 9.5 mm (T30, T40, T45, T50)</li> <li>● E-sockets ■ 9.5 mm (E8, E10, E12)</li> <li>● Socket adapters ■ 6.35 mm / ■ 9.5 mm</li> <li>● Extension bar 125 mm ■ 9.5 mm</li> <li>● Ratchet handle ■ 9.5 mm</li> <li>● Steel case: 244×104×33 mm</li> </ul> | 1          |

## No. TX-12MC Plate Ratchet/Magnetic Screw Catcher (TORX)



- Super magnet catches screw firmly. Single hand operation.
- Comes with Tamper-proof TORX bits.

| Package content                                                                                                                                                                                                                                                   | Inner Ctn. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <ul style="list-style-type: none"> <li>● Plate ratchet screwdriver</li> <li>● Bits: T8H, T10H, T15H, T20H, T25H, T27H, T30H, T40H, <math>\oplus 2</math>, <math>\ominus 6</math> × 25.4 mm</li> <li>● Magnetic Screw Holder</li> <li>● Bit belt holder</li> </ul> | 10         |

# TORX®

TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA). VESSEL has a manufacturing license in Japan and selling same to the world.



# Torque Screwdrivers

Hand Tools

Made in Germany, these torque screwdrivers feature our patented double clutch mechanism for outstanding torque precision. High precision torque screwdrivers designed not merely for testing, but for serious, full-scale assembly operations.

## Torque Screwdriver

High precision torque screwdrivers with a torque accuracy of  $\pm 6\%$  as specified by ISO 6789 (Model TRD-15 is  $\pm 10\%$ )



### A torque accuracy of $\pm 6\%$

Parts abrasion has been reduced by 50% by our patented double clutch mechanism. These screwdrivers have an extremely long lifespan, with torque accuracy guaranteed to a minimum of 40,000 turns.

Torque  
↑  
2.00 Nm

$\pm 6\%$

40000 screws

➔ Number of screws

**TORX**® TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA). VESSEL has a manufacturing license in Japan and selling same to the world.

# Torque Screwdrivers

## No. TRD-15IP Torque Screwdriver Set



●With TORX PLUS blades.

| Set content                                                                                                       | Torque range (N·m) | Outer Ctn. |
|-------------------------------------------------------------------------------------------------------------------|--------------------|------------|
| TRD-15 Torque Screwdriver (Torque precision $\pm 10\%$ ), 6IP, 7IP, 8IP, 9IP blades and HEX key wrench (A/F 6 mm) | 0.6~1.5            | 10         |

## No. TRD-54TP Torque Screwdriver Set



●With TORX/ TORX PLUS blades.

| Set content                                                                                                  | Torque range (N·m) | Outer Ctn. |
|--------------------------------------------------------------------------------------------------------------|--------------------|------------|
| TRD-54 Torque Screwdriver (Torque precision $\pm 6\%$ ), T15, T20, 15IP blades and HEX key wrench (A/F 6 mm) | 3.0~5.4            | 10         |

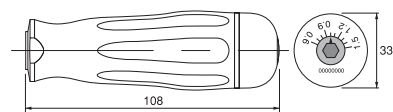
## No. TRD-15TX Torque Screwdriver Set



●With TORX blades.

| Set content                                                                                               | Torque range (N·m) | Outer Ctn. |
|-----------------------------------------------------------------------------------------------------------|--------------------|------------|
| TRD-15 Torque Screwdriver (Torque precision $\pm 10\%$ ), T6, T7, T8 blades and HEX key wrench (A/F 6 mm) | 0.6~1.5            | 10         |

## Torque Screwdriver Handle



## No. TRD-30TP Torque Screwdriver Set



●With TORX/ TORX PLUS blades.

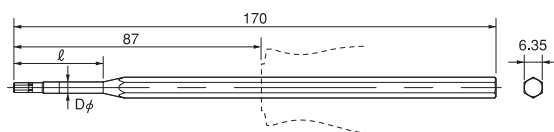
| Set content                                                                                                        | Torque range (N·m) | Outer Ctn. |
|--------------------------------------------------------------------------------------------------------------------|--------------------|------------|
| TRD-30 Torque Screwdriver (Torque precision $\pm 6\%$ ), T10, T15, 10IP, 15IP blades and HEX key wrench (A/F 6 mm) | 1.5~3.0            | 10         |



●Our standard blades should be used. ●HEX key wrench (A/F 6mm) is included.

| Model No. | Torque range (N·m) | One scale (N·m) | Precision (%) | Outer Ctn. |
|-----------|--------------------|-----------------|---------------|------------|
| TRD-15    | 0.6~1.5            | 0.1             | $\pm 10$      | 10         |
| TRD-30    | 1.5~3.0            | 0.1             | $\pm 6$       | 10         |
| TRD-54    | 3.0~5.4            | 0.2             | $\pm 6$       | 10         |

## Blades for Torque Screwdrivers



●Our standard handles should be used.

| Model No.    | Size |  mm | ℓ mm | Dφ mm | Outer Ctn. |
|--------------|------|--------------------------------------------------------------------------------------|------|-------|------------|
| <b>BTX06</b> | T6   | 1.65                                                                                 | 30   | 3.5   | 10         |
| <b>BTX07</b> | T7   | 1.97                                                                                 | 30   | 3.5   | 10         |
| <b>BTX08</b> | T8   | 2.3                                                                                  | 30   | 3.5   | 10         |
| <b>BTX10</b> | T10  | 2.72                                                                                 | 30   | 3.5   | 10         |
| <b>BTX15</b> | T15  | 3.26                                                                                 | 32   | 4.5   | 10         |
| <b>BTX20</b> | T20  | 3.84                                                                                 | 34   | 5     | 10         |



●Our standard handles should be used.

| Model No.    | Size | ℓ mm | Dφ mm | Outer Ctn. |
|--------------|------|------|-------|------------|
| <b>BPH01</b> | ⊕1   | 35   | 5     | 10         |
| <b>BPH02</b> | ⊕2   | 35   | 6     | 10         |
| <b>BPH03</b> | ⊕3   | —    | —     | 10         |



●Our standard handles should be used.

| Model No.    | Size |  mm | ℓ mm | Dφ mm | Outer Ctn. |
|--------------|------|----------------------------------------------------------------------------------------|------|-------|------------|
| <b>B06IP</b> | 6IP  | 1.69                                                                                   | 30   | 3.5   | 10         |
| <b>B07IP</b> | 7IP  | 1.97                                                                                   | 30   | 3.5   | 10         |
| <b>B08IP</b> | 8IP  | 2.29                                                                                   | 30   | 3.5   | 10         |
| <b>B09IP</b> | 9IP  | 2.48                                                                                   | 30   | 3.5   | 10         |
| <b>B10IP</b> | 10IP | 2.72                                                                                   | 30   | 3.5   | 10         |
| <b>B15IP</b> | 15IP | 3.25                                                                                   | 30   | 4.5   | 10         |



●Our standard handles should be used.

| Model No.    | Size |  mm | ℓ mm | Dφ mm | Outer Ctn. |
|--------------|------|------------------------------------------------------------------------------------------|------|-------|------------|
| <b>BHX15</b> | H1.5 | 1.5                                                                                      | 29.5 | 3     | 10         |
| <b>BHX20</b> | H2   | 2                                                                                        | 29.5 | 3     | 10         |
| <b>BHX25</b> | H2.5 | 2.5                                                                                      | 29.5 | 3     | 10         |
| <b>BHX30</b> | H3   | 3                                                                                        | 32   | 4     | 10         |
| <b>BHX40</b> | H4   | 4                                                                                        | 34   | 5     | 10         |
| <b>BHX50</b> | H5   | 5                                                                                        | 36   | 6     | 10         |



# Hammers

A new hammer series featuring a versatile plastic head construction.

Diverting from the mainstream cast metal head, this new highly advanced hammer design features a metal protector constructed in the plastic head as an imbedded metal weight.

## NEW Hammers

We have a complete lineup of items to cover an broad range of needs from hard work, such as the manufacturing of metalwork products, automobile maintenance and servicing, gas fitting, ironwork, interior finishing, tile work, and block laying, to light work, such as furniture assembly, carpentry, hobbies, and carpet laying.



The fish scale design of the handle ensures a secure, non-slip grip.

These hammers can be gripped by the head, using the butt end as the striking surface.



## No. 71 Plastic Head Hammer

Patent Pending



To replace the hammer head

● Hammer head can be readily replaced. (Tail hammer is not replaceable)

| Model No. | Size  | Length<br>mm | Head           |              | Weight<br>g | Inner<br>Ctn. | Outer<br>Ctn. | Replacement<br>head | Outer<br>Ctn. |
|-----------|-------|--------------|----------------|--------------|-------------|---------------|---------------|---------------------|---------------|
|           |       |              | Diameter<br>mm | Length<br>mm |             |               |               |                     |               |
| 71-05     | 1/2   | 297          | 30.6           | 80.4         | 236         | 6             | 60            | 1/2 1-Piece         | 20            |
| 71-10     | 1     | 303          | 34.7           | 124          | 364         | 6             | 60            | 1 1-Piece           | 20            |
| 71-15     | 1 1/2 | 349          | 44             | 127          | 589         | 4             | 24            | 1 1/2 1-Piece       | 10            |
| 71-20     | 2     | 389          | 54.6           | 146          | 950         | 4             | 24            | 2 1-Piece           | 10            |

Handles are not separately sold.

## No. 72 Rubber/ Plastic Head Hammer

Patent Pending



To replace the hammer head

● Hammer head can be readily replaced. (Tail hammer is not replaceable)

| Model No. | Size  | Length<br>mm | Head           |              | Weight<br>g | Inner<br>Ctn. | Outer<br>Ctn. | Replacement<br>head | Outer<br>Ctn. |
|-----------|-------|--------------|----------------|--------------|-------------|---------------|---------------|---------------------|---------------|
|           |       |              | Diameter<br>mm | Length<br>mm |             |               |               |                     |               |
| 72-05     | 1/2   | 297          | 30.6           | 80.4         | 237         | 6             | 60            | 1/2 1-Piece         | 20            |
| 72-10     | 1     | 303          | 34.7           | 124          | 364         | 6             | 60            | 1 1-Piece           | 20            |
| 72-15     | 1 1/2 | 349          | 44             | 127          | 591         | 4             | 24            | 1 1/2 1-Piece       | 10            |
| 72-20     | 2     | 389          | 54.6           | 146          | 961         | 4             | 24            | 2 1-Piece           | 10            |

Handles are not separately sold.

## No. 73 Copper Head Hammer



● Polished hammer head is smooth and beautiful.

| Model No. | Size  | Length<br>mm | Head           |              | Weight<br>g | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------|-------|--------------|----------------|--------------|-------------|---------------|---------------|
|           |       |              | Diameter<br>mm | Length<br>mm |             |               |               |
| 73-10     | 1     | 270          | 32             | 70           | 537         | 6             | 24            |
| 73-15     | 1 1/2 | 309          | 36             | 88           | 676         | 4             | 24            |
| 73-20     | 2     | 309          | 38             | 98           | 851         | 4             | 24            |

## No. 74 Steel/ Plastic Head Hammer



● Only the plastic head is replaceable.

● Steel hammer head hardness rating: HRC55

| Model No. | Size | Length<br>mm | Head           |              | Weight<br>g | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------|------|--------------|----------------|--------------|-------------|---------------|---------------|
|           |      |              | Diameter<br>mm | Length<br>mm |             |               |               |
| 74-10     | 1    | 274          | 32             | 92           | 472         | 6             | 24            |

To replace the hammer head of No. 74:

Please use the replacement head for No. 70X1.

## No. 70 Plastic Head Hammer



To replace the hammer head

● Soft durable plastic head. Does not damage workpieces.

● Interchangeable head. Head sold separately.

● Heads available in 1/2, 1 and 1 1/2 sizes. 2 per package. Pre-Carded Products.

| Size  | Length<br>mm | Head           |              | Inner<br>Ctn. | Outer<br>Ctn. | Replacement<br>head | Inner<br>Ctn. | Outer<br>Ctn. |
|-------|--------------|----------------|--------------|---------------|---------------|---------------------|---------------|---------------|
|       |              | Diameter<br>mm | Length<br>mm |               |               |                     |               |               |
| 1/4   | 280          | 19.5           | 66.5         | 6             | 60            | 1/4                 | 20            | —             |
| 1/2   | 280          | 25             | 82           | 6             | 60            | 1/2                 | 20            | 400           |
| 1     | 295          | 31             | 108          | 6             | 60            | 1                   | 20            | 400           |
| 1 1/2 | 325          | 38             | 125.5        | 6             | 36            | 1 1/2               | 10            | 200           |
| 2     | 350          | 46             | 139          | 6             | 24            | 2                   | 10            | 200           |

Handles are not separately sold.

⚠ WARNING concerning Hammers

● Strike target directly. Do not hit at an angle, etc.

● Do not strike anywhere but the target area.



## Wire Strippers

Pioneering "Two-step stripping" has been thoroughly redesigned as the first in the market of VA cut/ strip field. Palm-sized grip makes it easy to hold and improves your work efficiency. The metal injection molded cutting blade can cut hard PE sheathed cables sharply and instantly. Combined with its proprietary two-step stripping action, perfect cutting is secured.

### ***Double Action Stripping VA cable stripper*** Patent Pending

The grip span is kept up to 100mm and ergonomically designed to fit in your palm.

Conventional cable strippers could not process so-called "Eco-friendly PE cables," as their sheath is made of tough polyethylene.

Our proprietary Double Action cable stripping system can carry out the task perfectly.

### **Easy blade adjustment and replacement**

Our "Double Action Stripping" mechanism has also made it easy to replace the blades.



## No. 3100VA-1 Double Action VA cable stripper Patent Pending



### Eco-friendly

- Even PE sheath cables can be stripped beautifully.
- Smallest grip span in the industry. Improves work efficiency.
- Ergonomic handle fits in the palm and reduces fatigue.

| Model No. | Overall length<br>mm | Weight<br>g | Wire size                                                                                                                           | Outer<br>Ctn. |
|-----------|----------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 3100VA-1  | 185                  | 370         | PVC cables (VVF/ VA cables)<br>PE cables (EM-EEF/ Eco cables)<br>φ 1.6mm duplex/ φ 2.0mm duplex<br>φ 1.6mm triplex/ φ 2.0mm triplex | 5             |

## No. 3500E-1/3500E-2 Wire Stripper



### Eco-friendly

- Lightweight (100g), compact handy type.
- Diamond polished blade for precision stripping.
- AWG-mm-mm2 conversion table on grip.

| Model No. | Overall length<br>mm | Weight<br>g | Wire diameter and<br>nominal sectional area | Handle<br>color | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------|----------------------|-------------|---------------------------------------------|-----------------|---------------|---------------|
| 3500E-1   | 155                  | 100         | AWG 24/22/20/18/16/14/12                    | Red             | 5             | 30            |
| 3500E-2   | 155                  | 100         | AWG 30/28/26/24/22/20/18                    | Yellow          | 5             | 30            |

## No. 3000 Wire Stripper



### Eco-friendly

- Nimble and cleanly strips off sheathing in a single operation.
- Resin grip comfortably fits in the palm and reduces fatigue.
- Available in 6 types according to target wire.
- Can be used with wiring for TV, radio, home appliances, electrical work, automotive circuits, telephones, etc.

| Model No. | Overall length<br>mm | Weight<br>g | Wire diameter and nominal sectional area                                         | Handle<br>color | Outer<br>Ctn. |
|-----------|----------------------|-------------|----------------------------------------------------------------------------------|-----------------|---------------|
| 3000A     | 170                  | 350         | 0.5/ 1.2/ 1.6/ 2.0 mm (For solid wire)                                           | Green           | 20            |
| 3000B     | 170                  | 350         | 1.0/ 1.6/ 2.0/ 2.6/ 3.2 mm (For solid wire)                                      | Red             | 20            |
| 3000C     | 170                  | 350         | 0.9/ 1.25/ 2.0/ 3.5/ 5.5 mm <sup>2</sup> (For strand wire)                       | Black           | 20            |
| 3000D     | 170                  | 350         | 0.75 mm <sup>2</sup> ×2-wire/ 1.25 mm <sup>2</sup> ×2-wire (For flat vinyl wire) | Orange          | 20            |
| 3000G     | 170                  | 350         | 3.8 mm/ 5.6 mm/ core wire (For 3C2V, 5C2V coaxial cable)                         | Dark blue       | 20            |
| 3000VA    | 170                  | 350         | 1.6 mm×2-wire/ 2.0 mm×2-wire (For VA, IV wire)                                   | Blue            | 20            |

Strip gauge provided only on 3000A, B, C and D.

## No. 3700KR Cable Stripper



- Wide stripping range applicable with most cables.
- Simply turn a dial to set strip depth.
- Lightweight, compact and easy to carry.

| Overall length<br>mm | Weight<br>g | Strip Capacity       | Inner<br>Ctn. | Optional         |             |
|----------------------|-------------|----------------------|---------------|------------------|-------------|
| 122                  | 60          | Seath O/ D 4.5~26mmφ | 1             | Blade            | No.3700KR-1 |
|                      |             |                      |               | Blade holder set | No.3700KR-2 |



- Strips cable sheathing of 4.5~26 mmφ OD.
- Can smoothly make longitudinal cuts by pressing a button.

## No. WB Wire Stripper Blade for No. 3000



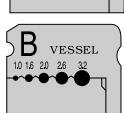
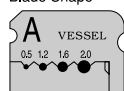
| Model No. | Applicable wire stripper |
|-----------|--------------------------|
| WB-001    | 3000 A                   |
| WB-002    | 3000 B                   |
| WB-003    | 3000 C                   |
| WB-004    | 3000 D                   |
| WB-008    | 3000 G                   |
| WB-007    | 3000 VA                  |

- Replaceable blade of No. 3000 stripper.

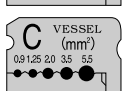
NO.3000

Blade Shape

- For solid wire



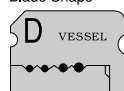
- For strand wire



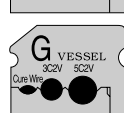
NO.3000

Blade Shape

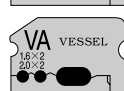
- For flat vinyl wire



- For 3C2V, 5C2V coaxial cable



- For VA, IV wire



### WARNING Concerning Wire Strippers

- Do not use on live wires.
- Cut sheathing can fly about, therefore be careful of surrounding area when working.
- Check product capacity and specifications before use. Use products of a suitable size.

# Electric Cable Knives/Other Tools

## No. VDK-1 Electrician Knife (Electrician)

Patented



- Standard type. Thick blade specification for wood trimming and cutting work (i.e., for opening utility outlets in walls, etc.).
- Knife for electrical and service work.
- Made with special high grade steel for smooth cutting.

| Blade construction | Overall knife length mm | Blade length mm | Weight g | Knife Holder | Accessories                       | Outer Ctn. |
|--------------------|-------------------------|-----------------|----------|--------------|-----------------------------------|------------|
| Alloy Steel        | 215                     | 80              | 140      | 50           | No-drop holder/ ceramic sharpener | 10         |

## No. ZW-3/ZW-4 Thread Thru Stud Wrench

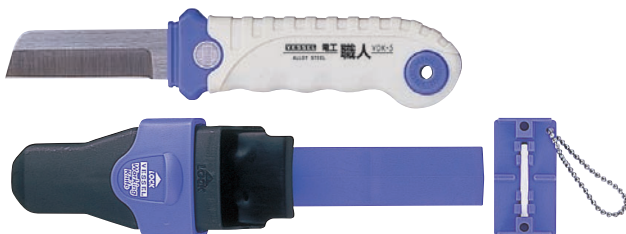


- Works with continuous thread studs, cut bolts and hanger bolts.
- Can be used 2 ways: Straight for tightening, or bent for fast turning.
- Can be used from halfway point with long hanger bolts.
- Lightweight, compact and easy to carry.

| Model No. | Applicable screw diameter | mm | mm | mm  | Weight g | Outer Ctn. |
|-----------|---------------------------|----|----|-----|----------|------------|
| ZW-3      | Thread part. 3/8          | 32 | 21 | 150 | 224      | 10         |
| ZW-4      | Thread part. 1/2          | 32 | 21 | 150 | 222      | 10         |

## No. VDK-5 Electrician Knife (Electrician)

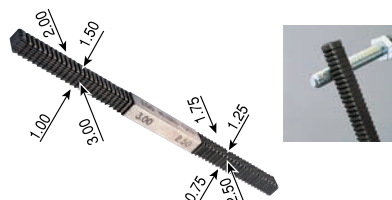
Patented



- Glow-in-the-Dark type.
- Standard type. Thick blade specification for wood trimming and cutting work (i.e., for opening utility outlets in walls, etc.).
- Knife for electrical and service work.
- Made with special high grade steel for smooth cutting.

| Blade construction | Overall knife length mm | Blade length mm | Weight g | Knife Holder | Accessories                       | Outer Ctn. |
|--------------------|-------------------------|-----------------|----------|--------------|-----------------------------------|------------|
| Alloy Steel        | 215                     | 80              | 140      | 50           | No-drop holder/ ceramic sharpener | 10         |

## No. 8 Thread File



| Pitch | Metal coarse thread | Metal fine thread |
|-------|---------------------|-------------------|
| 0.75  | M4.5                | M6 × 7            |
| 1.00  | M6 × 7              | M8 × 9            |
| 1.25  | M8 × 9              | M10-12            |
| 1.50  | M10-11              | M14-16            |
| 1.75  | M12                 | 18-20-22          |
| 2.00  | M14-16              | M24-27            |
| 2.50  | M18-20              | 30-33             |
| 3.00  | M24-27              | M36-39            |

- Quickly restores threads of tooling machines, automobiles, etc.
- 1 tool can be used with 8 different thread pitches.

| Pitch mm                                       | Outer Ctn. |
|------------------------------------------------|------------|
| 0.75/ 1.00/ 1.25/ 1.50/ 1.75/ 2.00/ 2.50/ 3.00 | 10         |

## No. RG-95 Ratchet Rivet Gun



- Manual riveter made with Vessel's original new mechanism.
- Calk blind rivets easily with one hand.
- Easily calks 4.8 mm steel rivets that were difficult to use with earlier manual riveters.

| Overall length mm | Weight g | Nose piece            | Accessories                 | Outer Ctn. |
|-------------------|----------|-----------------------|-----------------------------|------------|
| 230               | 570      | 2.4, 3.2, 4.0, 4.8 mm | Nose piece wrench A/F 10 mm | 5          |

## No. 5700BD Car Battery Screwdriver



Eco-friendly

- Special coin-shaped drive tip with A/F 10mm hexagonal opening.
- Handle color changes depending on viewing angle.
- Fully hardened chrome vanadium steel shank.

| mm | mm | mm  | mm | mm | mm   | mm  | Inner Ctn. |
|----|----|-----|----|----|------|-----|------------|
| 18 | 10 | 1.6 | 85 | 8  | 28.5 | 133 | 6          |

# Driver, Bit and Screw Cross-Reference



| JIS B 1101<br>JIS B 1135 | Slotted (Reference) |                   |
|--------------------------|---------------------|-------------------|
|                          | Small screw         | Wood screw        |
|                          | mm                  | mm                |
| 1.8                      | 1.2*                | —                 |
| 2.5                      | 1.6                 | 1.6<br>1.8        |
| 3                        | 2                   | 1.8<br>2.1        |
| 4                        | 2.2*<br>2.5         | 2.4               |
| 4.5                      | 2.5*<br>3           | 2.7               |
| 5                        | 3<br>(3.5)          | 3.1<br>3.5        |
| 5.5                      | (3.5)               | 3.5<br>3.8        |
| 6                        | (3.5)<br>4          | 3.8<br>4.1        |
| 7                        | 4                   | 4.5<br>4.8        |
| 8                        | 4.5*<br>5           | 5.1<br>5.5        |
| 9                        | 6<br>8*             | 5.8<br>6.2<br>6.8 |
| 10                       | 6<br>8*             | 7.5<br>8          |

| JIS B 1111<br>JIS B 1122<br>JIS B 1112<br>JIS 10-70 | Phillips<br>Pozidriv<br>Supadriv |                                        |
|-----------------------------------------------------|----------------------------------|----------------------------------------|
|                                                     | Small screw                      | Tapping screw                          |
|                                                     | mm                               | mm                                     |
| No.0                                                | No.0                             | —                                      |
| No.1                                                | No.1                             | 2.1<br>2.4<br>2.7                      |
| No.2                                                | No.2                             | 3.1<br>3.5<br>3.8<br>4.1<br>4.5<br>4.8 |
| No.3                                                | No.3                             | 5.1<br>5.5<br>5.8<br>6.2<br>6.8        |
| No.4                                                | No.4                             | 7.5<br>8<br>9.5                        |

| JIS B 1176<br>JIS B 1177 | Hex<br>Ball point   |                              |
|--------------------------|---------------------|------------------------------|
|                          | Hexagon recess bolt | Hexagon recess locking screw |
|                          | mm                  | mm                           |
| H1.5                     | 1.6<br>2            | 3                            |
| H2                       | 2.5                 | 4                            |
| H2.5                     | 3                   | 5                            |
| H3                       | 4                   | 6                            |
| H4                       | 5                   | 8                            |
| H5                       | 6                   | 10                           |
| H6                       | 8                   | 12                           |
| H8                       | 10                  | 16                           |
| H10                      | 12                  | 20                           |
| H12                      | 14                  | 24                           |

| JIS B 1180<br>JIS B 1181<br>JIS B 1123 | Socket            |              |
|----------------------------------------|-------------------|--------------|
|                                        | Hexagon head bolt | Hexagon nut  |
|                                        | mm                | mm           |
| H4                                     | 2                 | 2            |
| H4.5*                                  | —                 | 2.2*         |
| H5                                     | 2.5               | 2.5          |
| H5.5                                   | 3                 | 3            |
| H6                                     | 3.5               | 3.5          |
| H7                                     | 4                 | 4            |
| H8                                     | 5                 | 5            |
| H10                                    | 6<br>W 1/4        | 6<br>W 1/4   |
| H11*                                   | 7*                | 7*           |
| H12*                                   | 8*<br>W 5/16      | 8*<br>W 5/16 |
| H13                                    | 8                 | 8            |
| H14*                                   | 10*<br>W 3/8      | 10*<br>W 3/8 |
| H16                                    | 10                | 10           |
| H17*                                   | 10*<br>W 3/8      | 10*<br>W 3/8 |
| H18                                    | 12                | 12           |
| H19*                                   | 12*<br>W 1/2      | 12*<br>W 1/2 |
| H21                                    | 14<br>W 1/2       | 14<br>W 1/2  |
| H22*                                   | 14*               | 14*          |
| H24                                    | 16<br>18*         | 16<br>18*    |

| JIS B 1107<br>JIS B 1128<br>JIS B 1136<br>JASO F1 16-89 | Truss (Reference) |                    |
|---------------------------------------------------------|-------------------|--------------------|
|                                                         | Small screw       | TORX locking screw |
|                                                         | mm                | mm                 |
| T1                                                      | 0.84              | 1                  |
| T2                                                      | 0.94              | 1.2                |
| T3                                                      | 1.12              | 1.4                |
| T4                                                      | 1.3               | 1.6                |
| T5                                                      | 1.37              | 2                  |
| T6                                                      | 1.65              | 2                  |
| T7                                                      | 1.97              | —                  |
| T8                                                      | 2.3               | 2.5                |
| T9                                                      | 2.48              | —                  |
| T10                                                     | 2.72              | 3                  |
| T15                                                     | 3.26              | (3.5)              |
| T20                                                     | 3.84              | 4                  |
| T25                                                     | 4.4               | 5                  |
| T27                                                     | 4.96              | —                  |
| T30                                                     | 5.49              | 6                  |
| T40                                                     | 6.6               | 8                  |
| T45                                                     | 7.77              | 8                  |
| T50                                                     | 8.79              | 10                 |

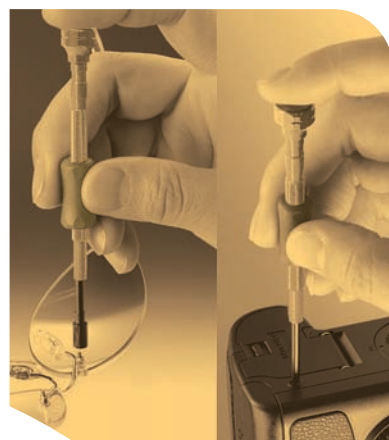
(\*) marked figures are in accordance with old JIS standards. W: Refer to the old JIS standards for Whitworth screws. ☆Refer to No. 1 for Truss screws.



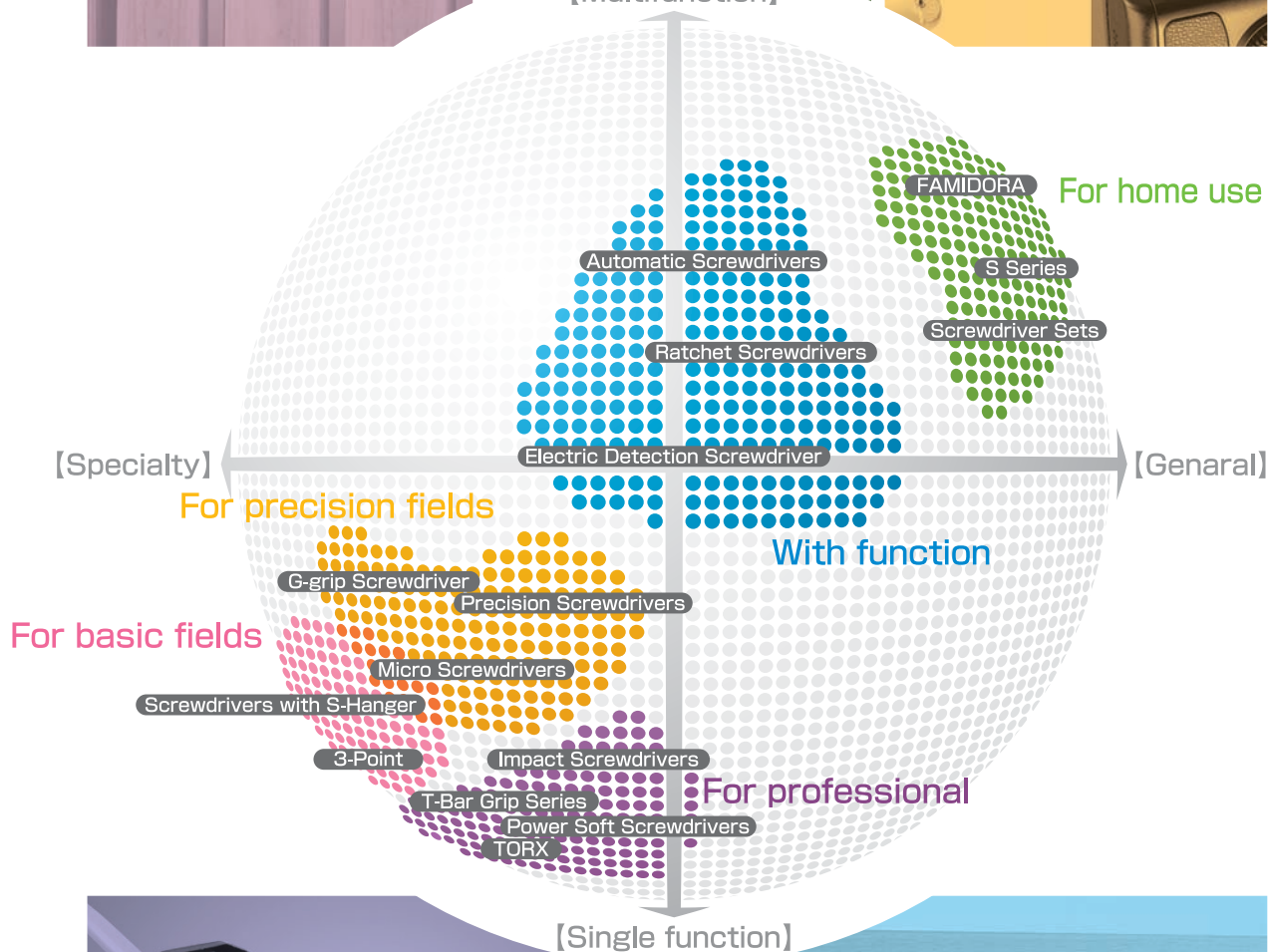
# Pre-Carded Products

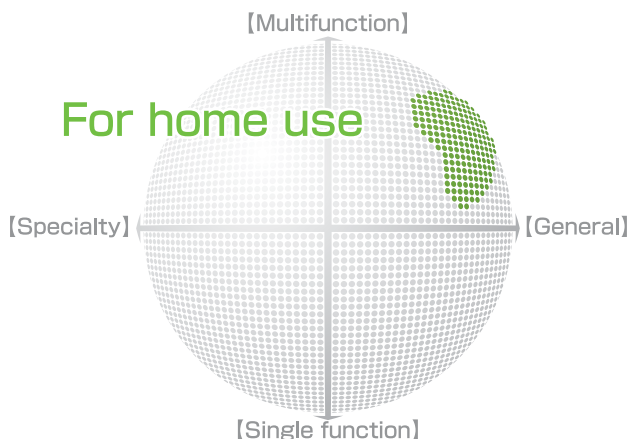
## "TRY IT!" series

With a catch phrase of "Try professional tools," we have been releasing a wide range of products in hanger hook packaging for DIY, hardware shops, and chain stores. Colorful and friendly designs.



【Multifunction】





## No. TD-800 "FAMIDORA 8" Screwdriver 8-Piece Set Patented



MG Magnetized

⊕ ⊖ only

- Ergonomic handle that fits in the palm of the hand.
- Fully hardened chrome vanadium steel, high toughness blades.
- Color-coded interchangeable driver blades. Easy to use. Horizontally stored.

| Package content                                                          | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|--------------------------------------------------------------------------|-------------------|--------------------|------------|------------|
| ● Handle<br>● Driver blades ⊕0, ⊕1, ⊕2, ⊖2.5, ⊖4, ⊖6, Awl, Pin extractor | 160×150×35        | 061300             | 10         | 60         |

## No. TD-410 "FAMIDORA" Reversible Blade Screwdriver Patented



- Ergonomic handle that fits in the palm of the hand. Eye-catching orange color.
- Fully hardened shank, tough magnetic tip. ● 1 blade 2 sizes.

| Package content                   | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------------------------------|-------------------|--------------------|------------|------------|
| ● Handle ● Reversible blade ⊕2/⊖6 | 185×75×31         | 061515             | 10         | 60         |

## No. TD-808 "FAMIDORA W8" Screwdriver Set Patented



MG Magnetized

⊕ ⊖ only

- Ergonomic handle that fits in the palm of the hand.
- Reversible blades. Each blade has 2-sized ends. Fully hardened alloy steel.

| Package content                                                           | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|---------------------------------------------------------------------------|-------------------|--------------------|------------|------------|
| ● Handle<br>● Reversible blades ⊕0/⊖2.5, ⊕1/⊖4, ⊕2/⊖6, Awl/ Pin extractor | 126×64×35         | 061652             | 10         | 60         |

## No. TD-110 Cushion 4-Way Stubby ScrewDriver



- Handle stores 2 reversible bits. Can be used for 4 different sizes.
- Soft cushion handle.

| Package content                                                                | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|--------------------------------------------------------------------------------|-------------------|--------------------|------------|------------|
| ● Cushion grip stubby screwdriver ● Holder<br>● Reversible Bits ⊕1/ ⊕2, ⊖5/ ⊖6 | 135×85×35         | 061263             | 10         | 60         |

## No. TD-812 "FAMIDORA W12" Hex Wrench & Screwdriver Set Patented



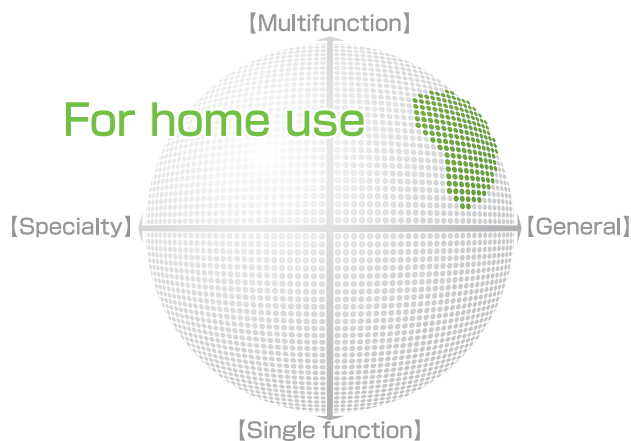
MG Magnetized

⊕ ⊖ only

- Ergonomic handle that fits in the palm of the hand.
- Reversible blades. Each blade has 2-sized ends. Fully hardened alloy steel.
- Transparent case for easy identification from outside.

| Package content                                                                          | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|------------------------------------------------------------------------------------------|-------------------|--------------------|------------|------------|
| ● Handle ● Reversible blades ⊕0/⊖2.5, ⊕1/⊖4, ⊕2/⊖6, H2/ H2.5, H3/ H4, Awl/ Pin extractor | 126×90×35         | 061669             | 10         | 60         |

# Pre-Carded Products



## No. S-12/S-13 S Series



No. S-12



No. S-13

- Easy-to-use tool sets for fastening jobs around the house.

### No. S-12 Mighty Tool Set

- T-bar ratchet screwdriver ● Magnetic Bit holder
- Short Bits  $\Phi 1$ ,  $\Phi 2$ ,  $\Phi 3$ ,  $\Theta 4$ ,  $\Theta 5$ ,  $\Theta 6$ , H2, H2.5, H3, H4, H5, H6
- Sockets H5, H5.5, H6, H7, H8, H9, H10, H12, H13

240×143×45 010629 10

### No. S-13 Handy Tool Set

- T-bar ratchet screwdriver ● Magnetic Bit holder
- Flexible shank
- Short Bits  $\Phi 1$ ,  $\Phi 2$ ,  $\Phi 3$ ,  $\Theta 4$ ,  $\Theta 6$ , H2, H2.5, H3, H4, H5, H6

240×143×45 010636 10

## Other Screwdrivers



No. 660



No. 625001



No. 6200W-62



No. 2100

| Model No. | Package content                                    | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|----------------------------------------------------|-------------------|--------------------|------------|------------|
| 660       | $\Theta 5$ / $\Phi 2$                              | 136×75×36         | 010162             | 10         | 60         |
| 625001    | No. 6250 $\Phi 2 \times 15$ , $\Theta 5 \times 15$ | 100×75×24         | 061171             | —          | 10         |
| 2100      | $\Theta 4$ , $\Theta 6$ , $\Phi 1$ , $\Phi 2$      | 180×70×26         | 010131             | 10         | 40         |
| 6200W-62  | $\Theta 6$ / $\Phi 2$                              | 135×75×29         | 060716             | —          | 10         |

## No. TD-912 Pro W12 Screwdriver Set



MG Magnetized

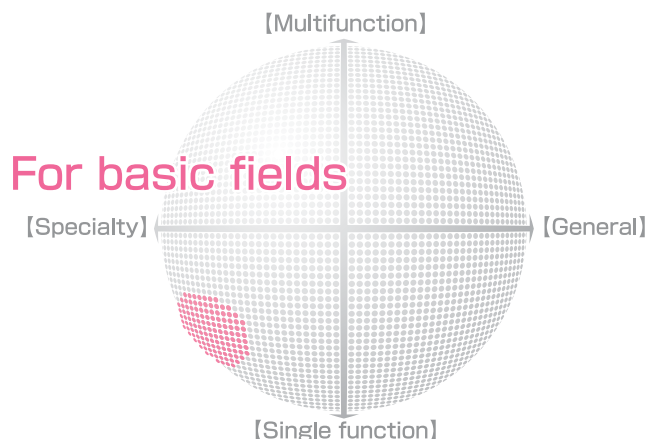
+ - ● only

- Ergonomic handle that fits in the palm of the hand.
- Reversible blades. Each blade has 2-sized ends.

Fully hardened alloy steel blades.

| Package content                                                                                                                                                              | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------|------------|
| ● Cushion Handle ● Driver blades $\Phi 0$ / $\Theta 2.5$ , $\Phi 1$ / $\Theta 4$ , $\Phi 2$ ( $\phi 6$ )/ $\Theta 6$ , $\Phi 2$ ( $\phi 5$ )/ H5, H3/ H4, Awl/ Pin extractor | 130×95×43         | 061850             | 30         |



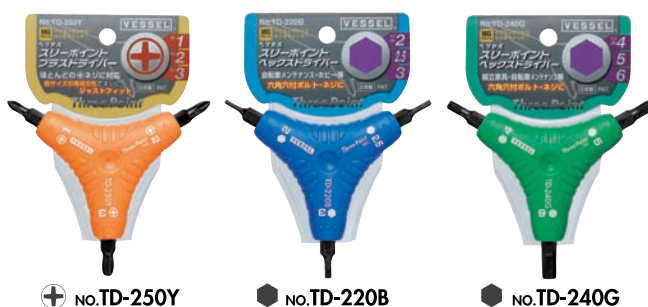


## Screwdriver with S-Hanger

| Model Name                                 | Model No. | Size      | JAN code (4907587) | Outer Ctn. |
|--------------------------------------------|-----------|-----------|--------------------|------------|
| "MEGADORA" Standard Screwdriver            | S-900     | ⌀ 5.5×75  | 088055             | 60         |
|                                            |           | ⌀ 6×100   | 088062             | 60         |
|                                            |           | ⌀ 6×150   | 088079             | 60         |
|                                            |           | ⌀ 8×150   | 088086             | 60         |
|                                            |           | ⌀ 1×75    | 088017             | 60         |
|                                            |           | ⌀ 2×100   | 088024             | 60         |
|                                            |           | ⌀ 2×150   | 088031             | 60         |
|                                            |           | ⌀ 3×150   | 088048             | 60         |
|                                            |           | ⌀ 6×400   | 088109             | 60         |
|                                            |           | ⌀ 2×400   | 088093             | 60         |
| "MEGADORA" Stubby Screwdriver              | S-920     | ⌀ 6×25    | 088321             | 30         |
|                                            |           | ⌀ 1×25    | 088338             | 30         |
|                                            |           | ⌀ 2×25    | 088345             | 30         |
| "MEGADORA" Thin Shank Screwdriver          | S-910     | ⌀ 3×75    | 088260             | 30         |
|                                            |           | ⌀ 3×100   | 088277             | 30         |
|                                            |           | ⌀ 4×75    | 088284             | 30         |
|                                            |           | ⌀ 4×100   | 088291             | 30         |
|                                            |           | ⌀ 4×150   | 088307             | 30         |
|                                            |           | ⌀ 4×200   | 088314             | 30         |
|                                            |           | ⌀ 00×75   | 088215             | 30         |
|                                            |           | ⌀ 0×75    | 088222             | 30         |
|                                            |           | ⌀ 0×100   | 088239             | 30         |
|                                            |           | ⌀ 1×75    | 088246             | 30         |
|                                            |           | ⌀ 1×100   | 088253             | 30         |
| "MEGADORA" Tang-Thru Screwdriver           | S-930     | ⌀ 5.5×75  | 088154             | 60         |
|                                            |           | ⌀ 6×100   | 088161             | 60         |
|                                            |           | ⌀ 6×150   | 088178             | 60         |
|                                            |           | ⌀ 8×150   | 088185             | 60         |
|                                            |           | ⌀ 1×75    | 088116             | 60         |
|                                            |           | ⌀ 2×100   | 088123             | 60         |
|                                            |           | ⌀ 2×150   | 088130             | 60         |
|                                            |           | ⌀ 3×150   | 088147             | 60         |
|                                            |           | ⌀ 6×38    | 088208             | 60         |
|                                            |           | ⌀ 2×38    | 088192             | 60         |
| Ball-Grip Screwdriver                      | S-220     | ⌀ 5.5×75  | 085702             | 60         |
|                                            |           | ⌀ 5.5×100 | 085665             | 60         |
|                                            |           | ⌀ 6×100   | 085726             | 60         |
|                                            |           | ⌀ 6×150   | 085733             | 60         |
|                                            |           | ⌀ 6×200   | 085740             | 60         |
|                                            |           | ⌀ 1×75    | 085719             | 60         |
|                                            |           | ⌀ 1×100   | 085689             | 60         |
|                                            |           | ⌀ 2×100   | 085757             | 60         |
|                                            |           | ⌀ 2×150   | 085764             | 60         |
|                                            |           | ⌀ 2×200   | 085771             | 60         |
| "CRYSTALINE" Screwdriver                   | S-6300    | ⌀ 5.5×75  | 082206             | 60         |
|                                            |           | ⌀ 6×100   | 082213             | 60         |
|                                            |           | ⌀ 8×150   | 082237             | 60         |
|                                            |           | ⌀ 1×75    | 082275             | 60         |
|                                            |           | ⌀ 2×100   | 082282             | 60         |
| "CRYSTALINE" Screwdriver (Long Shank Type) | S-6300    | ⌀ 3×150   | 082299             | 60         |
|                                            |           | ⌀ 5×150   | 082312             | 30         |
|                                            |           | ⌀ 5×200   | 082329             | 30         |
|                                            |           | ⌀ 5×250   | 082336             | 30         |
|                                            |           | ⌀ 1×150   | 082343             | 30         |
| "CRYSTALINE" Screwdriver (Thin Shank Type) | S-6100    | ⌀ 2×150   | 082374             | 30         |
|                                            |           | ⌀ 2×200   | 082381             | 30         |
|                                            |           | ⌀ 2×250   | 082398             | 30         |
|                                            |           | ⌀ 4×75    | 082015             | 30         |
|                                            |           | ⌀ 4×100   | 082022             | 30         |
| "CRYSTALINE" Screwdriver (Precision Type)  | S-6900    | ⌀ 4×150   | 082046             | 30         |
|                                            |           | ⌀ 0×75    | 082060             | 30         |
|                                            |           | ⌀ 0×100   | 082077             | 30         |
|                                            |           | ⌀ 1×75    | 082107             | 30         |
|                                            |           | ⌀ 1×100   | 082114             | 30         |
| "CRYSTALINE" Screwdriver (Stubby Type)     | S-6200    | ⌀ 2.5×75  | 082411             | 60         |
|                                            |           | ⌀ 2.5×100 | 082428             | 60         |
|                                            |           | ⌀ 0×75    | 082435             | 60         |
|                                            |           | ⌀ 6×38    | 082169             | 30         |
|                                            |           | ⌀ 1×38    | 082176             | 30         |
|                                            |           | ⌀ 2×38    | 082183             | 30         |

## 3-Point Screwdriver

Patented



### MG Magnetized

- 1 tool, 3 sizes in a compact handy form.
- Compact for working in cramped places.
- Y-handle fits in the palm of the hand. Delivers powerful fastening strength.
- Fully hardened chrome vanadium steel bits.

### No. TD-250Y 3-Point Cross Screwdriver

| Package content | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------------|-------------------|--------------------|------------|------------|
| ⊕ 1/ ⊕ 2/ ⊕ 3   | 120×95×18         | 009272             | 10         | —          |

### No. TD-220B 3-Point Hex Screwdriver

|              |           |        |    |   |
|--------------|-----------|--------|----|---|
| H2/ H2.5/ H3 | 120×95×18 | 009258 | 10 | — |
|--------------|-----------|--------|----|---|

### No. TD-240G 3-Point Hex Screwdriver

|            |           |        |    |   |
|------------|-----------|--------|----|---|
| H4/ H5/ H6 | 120×95×18 | 009265 | 10 | — |
|------------|-----------|--------|----|---|

### No. TD-210 3-Point Screwdriver

|               |            |        |    |    |
|---------------|------------|--------|----|----|
| ⊕ 1/ ⊕ 2/ ⊕ 6 | 135×120×20 | 061348 | 10 | 60 |
|---------------|------------|--------|----|----|

### No. TD-230 2-Piece Screwdriver Set of 3 Point TORX

|                                    |            |        |    |    |
|------------------------------------|------------|--------|----|----|
| T10H/ T15H/ T20H, T25H/ T30H/ T40H | 135×140×38 | 061362 | 10 | 60 |
|------------------------------------|------------|--------|----|----|

## Pre-Carded Products

## MEGADORA IMPACTA

Patent Pending



Φ2×100

Φ2×150

Φ3×150

see  
P. 005

For further details

| Model No. | Size    | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|---------|-------------------|--------------------|------------|------------|
| 980       | Φ 2×100 | 258×40×34         | 107916             | 6          | 60         |
|           | Φ 2×150 | 303×40×34         | 107923             | 6          | 60         |
|           | Φ 3×150 | 323×40×36         | 107930             | 6          | 60         |

## Cushion Grip Screwdriver (JAWSFIT type)

No. 600JF  
Φ2×100No. 600JF  
Φ2×150

| Model No. | Size    | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|---------|-------------------|--------------------|------------|------------|
| 600JF     | Φ 2×100 | 235×39×32         | 105936             | 6          | 60         |
|           | Φ 2×150 | 285×39×32         | 105943             | 6          | 60         |

## MEGADORA Chisel-Type Screwdriver / Clip Remover Patented



7×100

9.5×120

CR×120

CR×300

## No. 970

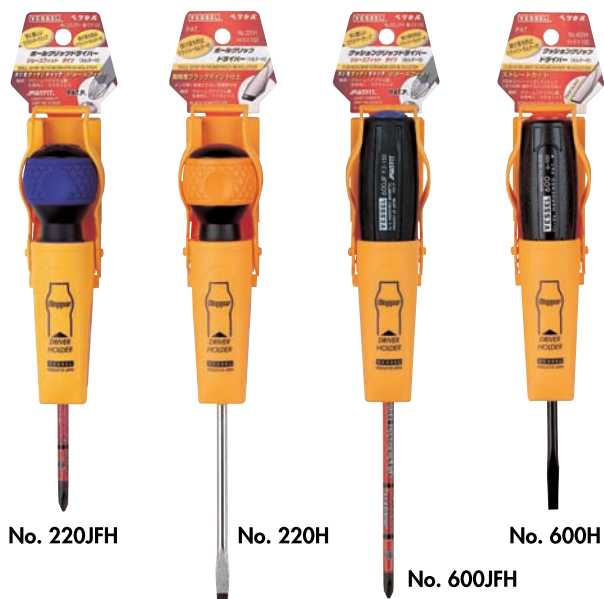
| Model No.                        | Size    | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|----------------------------------|---------|-------------------|--------------------|------------|------------|
| MEGADORA Chisel-Type Screwdriver | 7×100   | 250×36×34         | 108227             | 6          | 60         |
|                                  | 9.5×120 | 275×36×36         | 108234             | 6          | 60         |
| MEGADORA Clip Remover            | CR×120  | 260×36×34         | 108210             | 6          | 60         |
|                                  | CR×300  | 360×140×34        | 108784             | 6          | 60         |

## 5-Piece MEGADORA EU Spec. Screwdriver Set



| Model No. | Set content                           | Package size (mm) | EDP No. | Inner Ctn. |
|-----------|---------------------------------------|-------------------|---------|------------|
| 935ISP    | No. 931E: Φ1×5.5×100,<br>Φ1.2×6.5×150 | 300×170×45        | 150122  | 10         |
|           | No. 930E: Φ1×75, Φ2×100,<br>Φ3×150    |                   |         |            |

## Ball-Grip Screwdriver (With holder) Cushion Grip Screwdriver (With holder)



| Model No. | Size   | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|--------|-------------------|--------------------|------------|------------|
| 220JFH    | ⌀2×100 | 275×59×52         | 105950             | 6          | 60         |
|           | ⌀2×150 | 325×59×52         | 105967             | 6          | 60         |
| 220H      | ⌀6×100 | 275×59×52         | 105974             | 6          | 60         |
|           | ⌀6×150 | 325×59×52         | 105981             | 6          | 60         |
| 600JFH    | ⌀2×150 | 323×59×50         | 105639             | 6          | 60         |
|           | ⌀6×150 | 323×59×50         | 105653             | 6          | 60         |

※JAWSFIT tip is used only for Philips screwdrivers.

## "NEON" Screwdriver

Patented



| Model No. | Size   | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|--------|-------------------|--------------------|------------|------------|
| 265       | ⌀2×100 | 230×40×40         | 106728             | 6          | 60         |
|           | ⌀2×150 | 285×40×40         | 106735             | 6          | 60         |
|           | ⌀6×100 | 230×40×40         | 106704             | 6          | 60         |
|           | ⌀6×150 | 285×40×40         | 106711             | 6          | 60         |
|           |        |                   |                    |            |            |

## Free-Turning Cushion Grip Screwdriver

Patented



| Model No. | Size   | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|--------|-------------------|--------------------|------------|------------|
| 600FW     | ⌀2×150 | 315×80×45         | 105554             | 10         |            |
|           | ⌀6×150 | 315×80×45         | 105578             | 10         |            |

## Free-Turning Ball Grip Screwdriver/ Free-Turning Cushion Grip Screwdriver

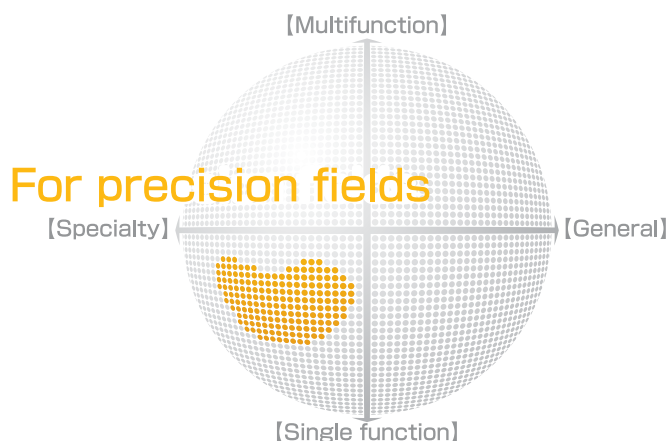
Patented



| Model No. | Size   | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|--------|-------------------|--------------------|------------|------------|
| 220F      | ⌀2×100 | 215×41×39         | 105400             | 6          | 60         |
|           | ⌀2×150 | 265×41×39         | 105417             | 6          | 60         |
|           | ⌀6×100 | 215×41×39         | 105424             | 6          | 60         |
|           | ⌀6×150 | 265×41×39         | 105431             | 6          | 60         |
|           |        |                   |                    |            |            |
| 600F      | ⌀2×100 | 230×39×32         | 105448             | 6          | 60         |
|           | ⌀2×150 | 280×39×32         | 105455             | 6          | 60         |
|           | ⌀6×100 | 230×39×32         | 105462             | 6          | 60         |
|           | ⌀6×150 | 280×39×32         | 105479             | 6          | 60         |
|           |        |                   |                    |            |            |



# Pre-Carded Products



## Ceramic Adjusters



| Model No. | Size    | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|---------|-------------------|--------------------|------------|------------|
| 9000      | ⌀0.9×30 | 190×45×14         | 006745             | 10         | 60         |
|           | ⌀1.3×30 | 190×45×14         | 006707             | 10         | 60         |
|           | ⌀1.8×30 | 190×45×14         | 006714             | 10         | 60         |
|           | ⌀2.6×30 | 190×45×14         | 006721             | 10         | 60         |
|           | ⌀3.4×15 | 190×45×14         | 006769             | 10         | 60         |
|           | ⌀0×30   | 190×45×14         | 006738             | 10         | 60         |
|           | ⌀1.7×30 | 190×45×14         | 006752             | 10         | 60         |

## Precision Micro Screwdriver

Patented



No. TD-51

No. TD-52

No. TD-53

No. TD-54

see  
P. 020  
For further details

### No. TD-51 Precision Micro Screwdriver

| Size | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|------|-------------------|--------------------|------------|------------|
| ⌀0.7 | 160×35×14         | 009289             | 10         | 100        |
| ⌀0.9 | 160×35×14         | 009012             | 10         | 100        |
| ⌀1.2 | 160×35×14         | 009029             | 10         | 100        |
| ⌀1.8 | 160×35×14         | 009036             | 10         | 100        |
| ⌀2.3 | 160×35×14         | 009043             | 10         | 100        |
| ⌀3.0 | 160×35×14         | 009050             | 10         | 100        |
| ⌀3.5 | 160×35×14         | 009067             | 10         | 100        |
| ⌀00  | 160×35×14         | 009074             | 10         | 100        |
| ⌀0   | 160×35×14         | 009081             | 10         | 100        |
| ⌀1   | 160×35×14         | 009296             | 10         | 100        |

### No. TD-52 Precision Nutdriver

|         |           |        |    |     |
|---------|-----------|--------|----|-----|
| 2.2     | 160×35×14 | 009098 | 10 | 100 |
| A/F 3.0 | 160×35×14 | 009104 | 10 | 100 |
| A/F 4.0 | 160×35×14 | 009111 | 10 | 100 |
| A/F 4.5 | 160×35×14 | 009128 | 10 | 100 |
| A/F 5.0 | 160×35×14 | 009135 | 10 | 100 |
| A/F 5.5 | 160×35×14 | 009142 | 10 | 100 |

### No. TD-53 Precision Hex. Driver

|          |           |        |    |     |
|----------|-----------|--------|----|-----|
| A/F 0.89 | 160×35×14 | 009159 | 10 | 100 |
| A/F 1.27 | 160×35×14 | 009166 | 10 | 100 |
| A/F 1.5  | 160×35×14 | 009173 | 10 | 100 |
| A/F 2.0  | 160×35×14 | 009180 | 10 | 100 |
| A/F 2.5  | 160×35×14 | 009197 | 10 | 100 |

### No. TD-54 Watch Band Pin Punch

|       |           |        |    |     |
|-------|-----------|--------|----|-----|
| ● 0.7 | 160×35×14 | 009302 | 10 | 100 |
|-------|-----------|--------|----|-----|

## Precision Screwdriver Set

Patented

see  
P. 022  
For further details

No. TD-55



No. TD-56



No. TD-57



No. TD-58

- Soft-touch cushion grip controls accurate fastening.
- Plastic casing makes it easy to carry it around.

| Model No. | Model Name                | Set content                                   | Package size (mm) | JAN code (4907587) | Inner Ctn. |
|-----------|---------------------------|-----------------------------------------------|-------------------|--------------------|------------|
| TD-55     | Precision Screwdriver Set | ⌀0.9, ⌀1.2, ⌀1.8, ⌀2.3, ⌀3.0, ⌀3.5            | 140×86×20         | 009210             | 10         |
| TD-56     | Precision Screwdriver Set | ⌀0.9, ⌀1.2, ⌀1.8, ⌀2.3, ⌀00, ⌀0               | 140×86×20         | 009227             | 10         |
| TD-57     | Precision Nut driver Set  | 2.2, A/F3.0, A/F4.0, A/F4.5, A/F5.0, A/F5.5   | 140×86×20         | 009234             | 10         |
| TD-58     | Precision Hex. driver Set | A/F0.89, A/F1.27, A/F1.5, A/F2.0, A/F2.5, ⌀00 | 140×86×20         | 009241             | 10         |

## G-grip Screwdriver

Patented



see  
**P. 020**  
For further details

| Model No. | Size      | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|-----------|-------------------|--------------------|------------|------------|
| 990       | ⌀00 × 75  | 188×37×21         | 008060             | 12         | 240        |
|           | ⌀0 × 100  | 213×37×21         | 008077             | 12         | 240        |
|           | ⌀1 × 100  | 230×46×38         | 008084             | 6          | 60         |
|           | ⌀2 × 100  | 230×46×38         | 008091             | 6          | 60         |
|           | ⌀1.8 × 50 | 163×37×21         | 008015             | 12         | 240        |
|           | ⌀2.5 × 75 | 188×37×21         | 008022             | 12         | 240        |
|           | ⌀3 × 100  | 213×37×21         | 008039             | 12         | 240        |
|           | ⌀4 × 100  | 213×37×21         | 008046             | 12         | 240        |
|           | ⌀5 × 100  | 230×46×38         | 008053             | 6          | 60         |
| 990TX     | T3 × 40   | 153×37×21         | 008107             | 12         | 240        |
|           | T4 × 40   | 153×37×21         | 008114             | 12         | 240        |
|           | T5 × 40   | 153×37×21         | 008121             | 12         | 240        |

## Micro Screwdriver



### No. 9900

| Size      | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|-------------------|--------------------|------------|------------|
| ⌀00 × 75  | 185×27×13         | 006530             | 10         | 120        |
| ⌀0 × 100  | 210×27×13         | 006547             | 10         | 120        |
| ⌀0 × 150  | 260×27×13         | 006554             | 10         | 120        |
| ⌀1.8 × 50 | 160×27×13         | 006561             | 10         | 120        |
| ⌀2.5 × 75 | 185×27×13         | 006509             | 10         | 120        |
| ⌀3 × 100  | 210×27×13         | 006516             | 10         | 120        |
| ⌀3 × 150  | 260×27×13         | 006523             | 10         | 120        |

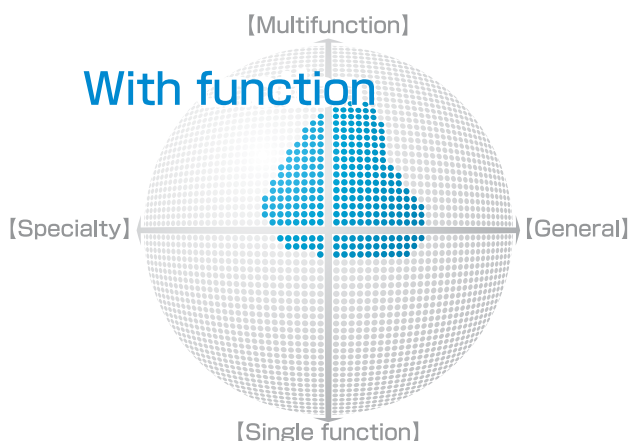


## 3-Piece Micro Screwdriver Set



| Model No. | Set content             | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|-------------------------|-------------------|--------------------|------------|------------|
| 9902      | ⌀00×75, ⌀0×100, ⌀1.8×50 | 235×70×15         | 010322             | 5          | 30         |
| 9903      | ⌀00×75, ⌀2.5×75, ⌀3×100 | 235×70×15         | 010315             | 5          | 30         |

# Pre-Carded Products



With function

## No. TD-80 T-Bar Ratchet Screwdriver



- Ratchet driving mechanism allows you to turn a screw without having to adjust your grip.

| Set content                                                                                                                 | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------|------------|
| ● T-bar ratchet screwdriver<br>● Bit belt holder<br>● Bits $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6$ | 170×105×28        | 061232             | 40         |

## No. TD-81 Power Ratchet Screwdriver



No. TD-81R

No. TD-81G

No. TD-81B

see  
P. 025  
For further details

| Model No. | Set content                                               | Package size (mm) | JAN code (4907587) | Inner Ctn. |
|-----------|-----------------------------------------------------------|-------------------|--------------------|------------|
| TD-81R    | $\oplus 1$ / $\ominus 4$ , $\oplus 2$ / $\ominus 6$ ×25.4 | 115×73×34         | 008213             | 10         |
| TD-81G    | $\oplus 1$ / $\ominus 4$ , $\oplus 2$ / $\ominus 6$ ×25.4 | 115×73×34         | 008220             | 10         |
| TD-81B    | $\oplus 1$ / $\ominus 4$ , $\oplus 2$ / $\ominus 6$ ×25.4 | 115×73×34         | 008237             | 10         |

## Ratchet Screwdriver



No. 820W-23



No. 830-MG4



No. 820FX-4

| Model No. | Set content                                         | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|-----------------------------------------------------|-------------------|--------------------|------------|------------|
| 820FX-4   | $\oplus 1$ , $\oplus 2$ , $\ominus 4$ , $\ominus 6$ | 235×80×28         | 073518             | 5          | 30         |
| 820W-23   | $\oplus 2$ / $\oplus 3$                             | 135×70×28         | 073501             | 10         | 60         |
| 830-MG4   | $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 6$  | 235×70×28         | 073600             | 5          | 30         |

## Car Battery Screwdriver / Water Faucet Screwdriver



No. 5700BD

No. 5700WP

see  
P. 040  
For further details

see  
P. 015  
For further details

| Model No. | Model Name               | Package size (mm) | Weight (g) | JAN code (4907587) | Inner Ctn. |
|-----------|--------------------------|-------------------|------------|--------------------|------------|
| 5700BD    | Car Battery Screwdriver  | 182×40×30         | 76         | 073655             | 6          |
| 5700WP    | Water Faucet Screwdriver | 182×40×30         | 78         | 073662             | 6          |



## "PETA-RACHE" Flat-shaped Ratchet Screwdriver Patent Pending



No. TD-74 No. TD-75 No. TD-76 No. TD-77 No. TD-78 No. TD-79

see  
P. 025

For further details

- The head part is as thin as 18mm. Handy with its compact body.

### No. TD-74 Flat-shaped Ratchet Screwdriver

| Set content                                                                       | Package size<br>(mm) | Weight<br>(g) | JAN code<br>(4907587) | Inner<br>Ctn. |
|-----------------------------------------------------------------------------------|----------------------|---------------|-----------------------|---------------|
| ●Straight type<br>●Bits: $\oplus 1$ , $\oplus 2$ , $\ominus 6 \times 18\text{mm}$ | 160×35×21            | 62            | 008275                | 10            |

### No. TD-75 Flat-shaped Ratchet Screwdriver

|                                                                                                                             |           |    |        |    |
|-----------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|
| ●Straight type<br>●Bits: $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6 \times 18\text{mm}$<br>●Bit holder | 160×50×21 | 76 | 008282 | 10 |
|-----------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|

### No. TD-76 Flat-shaped Ratchet Screwdriver

|                                                                                                                                         |           |    |        |    |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|
| ●Straight type<br>●Bits: $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6$ ,<br>H2.5, H3, H4, H5, H6×18mm<br>●Bit holder | 160×50×21 | 98 | 008299 | 10 |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|

### No. TD-77 Flat-shaped Ratchet Screwdriver

|                                                                                 |           |    |        |    |
|---------------------------------------------------------------------------------|-----------|----|--------|----|
| ●Angled type<br>●Bits: $\oplus 1$ , $\oplus 2$ , $\ominus 6 \times 18\text{mm}$ | 160×35×21 | 62 | 008305 | 10 |
|---------------------------------------------------------------------------------|-----------|----|--------|----|

### No. TD-78 Flat-shaped Ratchet Screwdriver

|                                                                                                                           |           |    |        |    |
|---------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|
| ●Angled type<br>●Bits: $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6 \times 18\text{mm}$<br>●Bit holder | 160×50×21 | 76 | 008312 | 10 |
|---------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|

### No. TD-79 Flat-shaped Ratchet Screwdriver

|                                                                                                                                       |           |    |        |    |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|
| ●Angled type<br>●Bits: $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6$ ,<br>H2.5, H3, H4, H5, H6×18mm<br>●Bit holder | 160×50×21 | 98 | 008329 | 10 |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------|----|--------|----|

## "PETA-RACHE" 18mm Replacement Bits



No. TD-B55

No. TD-B56

### No. TD-B55

| Set content                                                                                      | Package size<br>(mm) | Weight<br>(g) | JAN code<br>(4907587) | Inner<br>Ctn. |
|--------------------------------------------------------------------------------------------------|----------------------|---------------|-----------------------|---------------|
| $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6 \times 18\text{mm}$ , Bit holder | 120×45×23            | 13            | 061911                | 10            |

### No. TD-B56

|                                       |           |    |        |    |
|---------------------------------------|-----------|----|--------|----|
| H2.5, H3, H4, H5, H6×18mm, Bit holder | 120×45×23 | 13 | 061928 | 10 |
|---------------------------------------|-----------|----|--------|----|

## Flat Plate Ratchet Screwdriver



No. TD-73MC No. TX-12MC No. TD-70 No. TD-71 No. TD-72

- Thin ratchet handle for working in cramped places.

### No. TD-73MC Plate Ratchet Screw Catcher

| Set content                                                                                                                                                             | Package size<br>(mm) | JAN code<br>(4907587) | Outer<br>Ctn. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|---------------|
| ●Plate ratchet screwdriver ●Bit belt holder<br>●Magnetic Screw Holder ●Bits: $\oplus 1$ , $\oplus 2$ ,<br>$\oplus 3$ , $\ominus 4$ , $\ominus 6$ , H2.5, H3, H4, H5, H6 | 190×85×27            | 061799                | 40            |

### No. TX-12MC Plate Ratchet/Magnetic Screw Catcher (TORX)

|                                                                                                         |        |    |
|---------------------------------------------------------------------------------------------------------|--------|----|
| ●Plate ratchet screwdriver ●Bit belt holder<br>●Magnetic Screw Holder ●Bits: T8H, T10H, T15H, 190×85×27 | 061997 | 10 |
|---------------------------------------------------------------------------------------------------------|--------|----|

### No. TD-70 Flat Plate Ratchet Screwdriver Set

|                                                                                                                                                  |           |        |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|----|
| ●Plate ratchet screwdriver ●Bit belt holder<br>●Bits: $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6$ ,<br>H2.5, H3, H4, H5, H6 | 190×85×27 | 061225 | 40 |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|----|

### No. TD-71 Flat Plate Ratchet Screwdriver

|                                              |           |        |    |
|----------------------------------------------|-----------|--------|----|
| ●Plate ratchet screwdriver ●Bits: $\oplus 2$ | 190×85×27 | 061775 | 40 |
|----------------------------------------------|-----------|--------|----|

### No. TD-72 Flat Plate Ratchet Screwdriver Set

|                                                                                            |           |        |    |
|--------------------------------------------------------------------------------------------|-----------|--------|----|
| ●Plate ratchet screwdriver ●Bits: $\oplus 2$<br>●Sockets: A/F 5.5, 7, 8, 10 ●Socket holder | 190×85×27 | 061744 | 40 |
|--------------------------------------------------------------------------------------------|-----------|--------|----|

## No. TD-BS Spare Bit Set



No. TD-BS1

(Cross/Plain)

No. TD-BS2

(Hex)

No. TD-BS3

(Torx)

No. TD-BS4

(Socket)

Applicable models  
TD-70/ TD-71/ TD-72/ TD-73MC/ TD-80/ TD-150/ TD-160  
S-12/ S-13/ TX-10/ TX-11/ TX-12MC  
830MG-4/ 840/ 840L

Applicable models  
TD-70/ TD-71/ TD-72  
TD-70  
TX-11/ TD-73MC  
TX-12MC

### No. TD-BS1 Spare Bit Set (Cross/Plain)

| Set content                                                                                              | Package size<br>(mm) | JAN code<br>(4907587) | Inner<br>Ctn. |
|----------------------------------------------------------------------------------------------------------|----------------------|-----------------------|---------------|
| $\oplus 1$ , $\oplus 2$ , $\oplus 3$ , $\ominus 4$ , $\ominus 6 \times 25.4\text{mm}$<br>Bit belt holder | 120×45×23            | 061805                | 10            |

### No. TD-BS2 Spare Bit Set (Hex)

|                                               |           |        |    |
|-----------------------------------------------|-----------|--------|----|
| A/F 2.5, 3, 4, 5, 6×25.4mm<br>Bit belt holder | 120×45×23 | 061812 | 10 |
|-----------------------------------------------|-----------|--------|----|

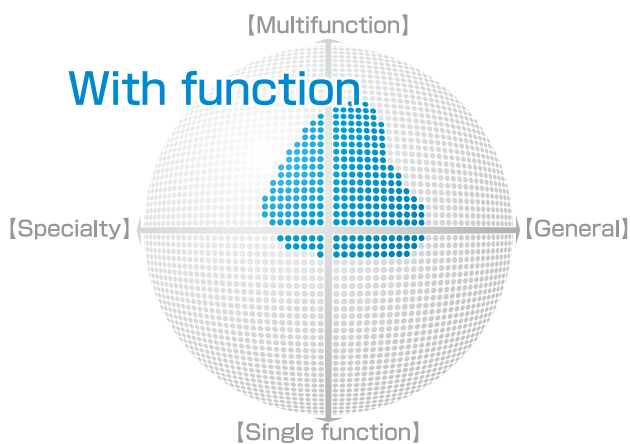
### No. TD-BS3 Spare Bit Set (Torx)

|                                                        |           |        |    |
|--------------------------------------------------------|-----------|--------|----|
| T10H, T15H, T20H, T25H, T30H×25.4mm<br>Bit belt holder | 120×45×23 | 061829 | 10 |
|--------------------------------------------------------|-----------|--------|----|

### No. TD-BS4 Spare Socket Set (Socket)

|                                   |           |        |    |
|-----------------------------------|-----------|--------|----|
| A/F 5.5, 7, 8, 10 Bit belt holder | 120×45×23 | 061836 | 10 |
|-----------------------------------|-----------|--------|----|

## Pre-Carded Products



## Voltage Detection Screwdriver



No. 130005



No. 130006



No. 83L



No. 82L



No. 80L

see  
P. 027  
For further details



| Model No. | Set content               | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|---------------------------|-------------------|--------------------|------------|------------|
| 130005    | ⊖4, ⊖6, ⊕1, ⊕2, H5.5, Awl | 185×105×32        | 060600             | —          | 10         |
| 130006    | ⊖3, ⊖4, ⊖6, ⊕1, ⊕2, Awl   | 185×105×32        | 060617             | —          | 10         |
| 83L       | —                         | 185× 70×16        | 013033             | 10         | —          |
| 82L       | —                         | 185× 70×16        | 013026             | 10         | —          |
| 80L       | —                         | 146× 40×14        | 013101             | 10         | 60         |

## Impact Screwdriver



No. 230001



No. 240001



No. 260002



No. 250001

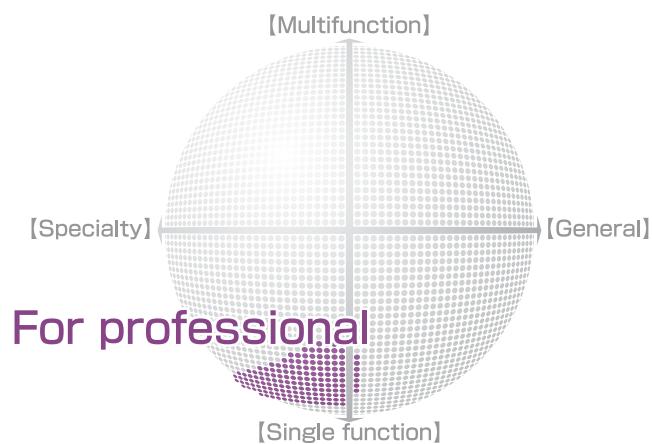
| Model No. | Set content                         | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|-----------|-------------------------------------|-------------------|--------------------|------------|
| 230001    | ⊕1, ⊕2, ⊕3, ⊖5, ⊖6, ⊖7              | 225×110×45        | 061164             | 5          |
| 240001    | ⊕2×36/80, ⊕3×36/80<br>⊕4×36, ⊖10×36 | 205× 60×60        | 061126             | 5          |
| 260002    | ⊖5, ⊖6, ⊖7, ⊕1, ⊕2, ⊕3              | 225×110×33        | 061188             | 5          |
| 250001    | ⊖10, ⊕2, ⊕3, ⊕4                     | 325× 80×38        | 060921             | 5          |

## Impact Screwdriver Bit



Mounting quantity: 1

| Model No. | Set content | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|-----------|-------------|-------------------|--------------------|------------|
| C502125   | ⊕2×125      | 170×42            | 345653             | 10         |
| C503125   | ⊕3×125      | 170×42            | 345660             | 10         |
| C506125   | ⊖6×125      | 170×42            | 345677             | 10         |
| C512036   | ⊕2× 36      | 170×42            | 345172             | 10         |
| C513036   | ⊕3× 36      | 170×42            | 345189             | 10         |
| C518036   | ⊖8× 36      | 170×42            | 345196             | 10         |
| C553125   | ⊕3×125      | 170×42            | 345219             | 10         |
| C556125   | ⊖6×125      | 170×42            | 345226             | 10         |



For professional

## T-Bar Grip Series



No. TD-150



No. TD-160



No. TD-170

## Screwdriver holder (for 2 pieces)



No. DH-2R



No. DH-2K

| Model No. | Color | Package size (mm) | JAN code (4907587) | Inner Ctn. |
|-----------|-------|-------------------|--------------------|------------|
| DH-2R     | Red   | 95×370×60         | 077431             | 6          |
| DH-2K     | Black | 95×370×60         | 077455             | 6          |

●T-bar handle for powerful fastening

### No. TD-150 T-Bar Screwdriver Set

| Set content                                                                            | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|----------------------------------------------------------------------------------------|-------------------|--------------------|------------|------------|
| ●T-Bar Screwdriver ●Bit belt holder<br>●Bits: ⊕1, ⊕2, ⊕3, ⊖4, ⊖6, H2.5, H3, H4, H5, H6 | 235×115×27        | 061317             | 5          | 30         |

### No. TD-160 T-Bar TORX Screwdriver Set

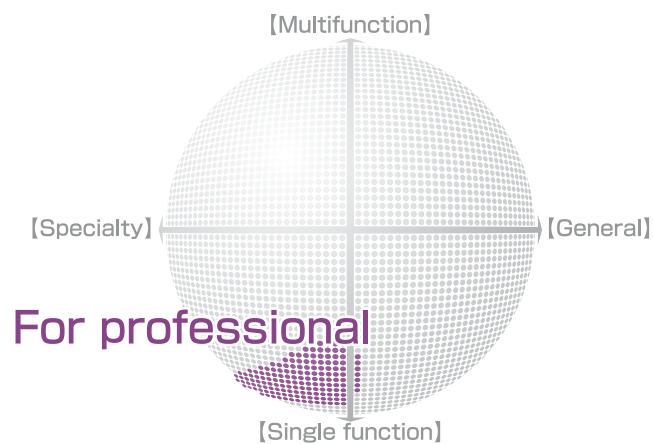
|                                                                                                                |            |        |   |    |
|----------------------------------------------------------------------------------------------------------------|------------|--------|---|----|
| ●T-Bar Screwdriver ●Bit belt holder<br>●TORX Bits: T8H, T10H, T15H, T20H, T25H, T27H, T30H, T40H ●Bits: ⊕2, ⊖6 | 235×115×27 | 061324 | 5 | 30 |
|----------------------------------------------------------------------------------------------------------------|------------|--------|---|----|

### No. TD-170 T-Bar Socket Screwdriver Set

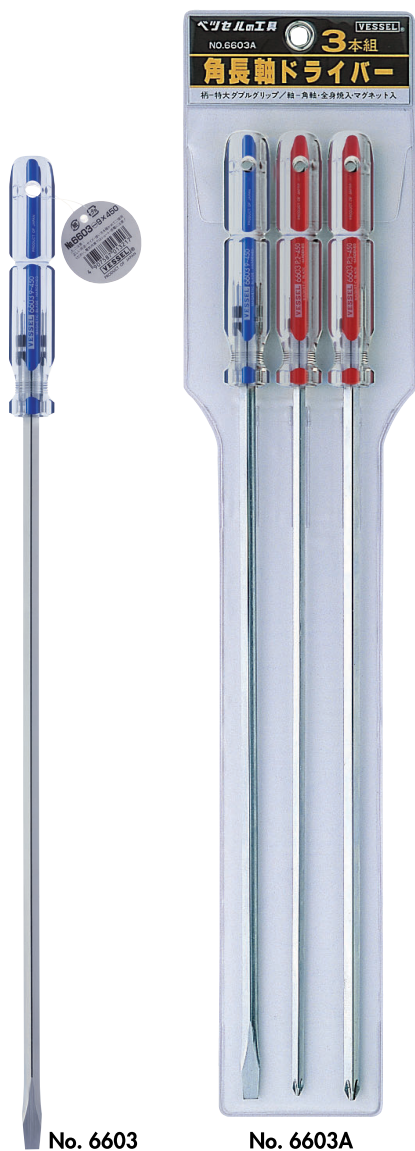
|                                                                                        |            |        |   |    |
|----------------------------------------------------------------------------------------|------------|--------|---|----|
| ●T-Bar Screwdriver ●Socket holder<br>●Sockets: H5, H5.5, H6, H7, H8, H9, H10, H12, H13 | 235×115×27 | 061331 | 5 | 30 |
|----------------------------------------------------------------------------------------|------------|--------|---|----|



# Pre-Carded Products



## Long Square Shank Screwdriver



| Model No.    | Size                | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|--------------|---------------------|-------------------|--------------------|------------|
| <b>6603</b>  | ⊖ 9×450             | 610×28.5×28.5     | 013217             | 6          |
|              | ⊕ 2×450             | 610×28.5×28.5     | 013224             | 6          |
|              | ⊕ 3×450             | 610×28.5×28.5     | 013231             | 6          |
| <b>6603A</b> | No.6603 ⊖ 9、⊕ 2、⊕ 3 | 710×150×29        | 013200             | 10         |

## Torque Screwdriver



No. TRD-15IP

No. BTX-20

see  
**P. 034**  
For further details

### Torque Screwdriver Set

| Model No.       | Set content                            | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|-----------------|----------------------------------------|-------------------|--------------------|------------|
| <b>TRD-15IP</b> | TRD-15, 6IP, 7IP, 8IP, 9IP, L-Wrench   | 215×40×40         | 030016             | 10         |
| <b>TRD-15TX</b> | TRD-15, T6, T7, T8, L-Wrench           | 215×40×40         | 030023             | 10         |
| <b>TRD-30TP</b> | TRD-30, T10, T15, 10IP, 15IP, L-Wrench | 215×40×40         | 030115             | 10         |
| <b>TRD-54TP</b> | TRD-54, T15, T20, 15IP, L-Wrench       | 215×40×40         | 030214             | 10         |

### Torque Screwdriver Handle

| Model No.     | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|---------------|-------------------|--------------------|------------|
| <b>TRD-15</b> | 215×40×40         | 030313             | 10         |
| <b>TRD-30</b> | 215×40×40         | 030320             | 10         |
| <b>TRD-54</b> | 215×40×40         | 030337             | 10         |

### Blades for Torque Screwdrivers



| Model No.    | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|--------------|-------------------|--------------------|------------|
| <b>BTX06</b> | 205×35×17         | 031068             | 10         |
| <b>BTX07</b> | 205×35×17         | 031075             | 10         |
| <b>BTX08</b> | 205×35×17         | 031082             | 10         |
| <b>BTX10</b> | 205×35×17         | 031105             | 10         |
| <b>BTX15</b> | 205×35×17         | 031112             | 10         |
| <b>BTX20</b> | 205×35×17         | 031129             | 10         |



| <b>TORX</b>  |                   |                    |            |
|--------------|-------------------|--------------------|------------|
| Model No.    | Package size (mm) | JAN code (4907587) | Outer Ctn. |
| <b>B06IP</b> | 205×35×17         | 030566             | 10         |
| <b>B07IP</b> | 205×35×17         | 030573             | 10         |
| <b>B08IP</b> | 205×35×17         | 030580             | 10         |
| <b>B09IP</b> | 205×35×17         | 030597             | 10         |
| <b>B10IP</b> | 205×35×17         | 030603             | 10         |
| <b>B15IP</b> | 205×35×17         | 030610             | 10         |



| Model No.    | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|--------------|-------------------|--------------------|------------|
| <b>BPH01</b> | 205×35×17         | 031310             | 10         |
| <b>BPH02</b> | 205×35×17         | 031327             | 10         |
| <b>BPH03</b> | 205×35×17         | 031334             | 10         |



| Model No.    | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|--------------|-------------------|--------------------|------------|
| <b>BHX15</b> | 205×35×17         | 031211             | 10         |
| <b>BHX20</b> | 205×35×17         | 031228             | 10         |
| <b>BHX25</b> | 205×35×17         | 031235             | 10         |
| <b>BHX30</b> | 205×35×17         | 031242             | 10         |
| <b>BHX40</b> | 205×35×17         | 031259             | 10         |
| <b>BHX50</b> | 205×35×17         | 031266             | 10         |

# TORX Screwdriver



No. TX-10



No. TX-11



No. TX-12MC



No. 8500TX  
T6~T20



No. 8500TX  
T25~T40



No. 8507TX

| Model No.      | Set content                                                                                                                                 | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------|------------|
| <b>TX-10</b>   | ●Handle ●Bit belt holder ●Bit: T10H, T15H, T20H, T25H, T27H, T30H, T40H, $\Phi 2$ , $\Phi 3$ , $\Phi 6$                                     | 235×100×31        | 062000             | 10         |
| <b>TX-11</b>   | ●Plate ratchet screwdriver ●Bit belt holder ●Bit: T8H, T10H, T15H, T20H, T25H, T27H, T30H, T40H, $\Phi 2$ , $\Phi 6$                        | 190×85×27         | 062017             | 10         |
| <b>TX-12MC</b> | ●Plate ratchet screwdriver ●Magnetic Screw Holder ●Bit belt holder ●Bit: T8H, T10H, T15H, T20H, T25H, T27H, T30H, T40H, $\Phi 2$ , $\Phi 6$ | 190×85×27         | 061997             | 10         |

| Model No.     | Set content                       | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|---------------|-----------------------------------|-------------------|--------------------|------------|
| <b>8500TX</b> | T6                                | 110×45×5          | 062161             | 10         |
|               | T7                                | 110×45×5          | 062178             | 10         |
|               | T8                                | 110×45×5          | 062185             | 10         |
|               | T9                                | 110×45×5          | 062192             | 10         |
|               | T10                               | 110×45×5          | 062208             | 10         |
|               | T15                               | 110×45×5          | 062215             | 10         |
|               | T20                               | 110×45×5          | 062222             | 10         |
|               | T25                               | 145×55×8          | 062239             | 10         |
|               | T27                               | 145×55×8          | 062246             | 10         |
|               | T30                               | 145×55×8          | 062253             | 10         |
| <b>8507TX</b> | T40                               | 145×55×8          | 062260             | 10         |
|               | T10, T15, T20, T25, T27, T30, T40 | 135×65×17         | 062277             | 10         |

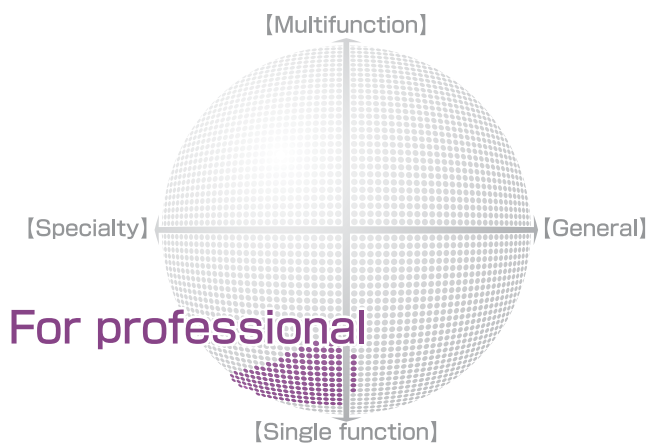
## ONE POINT TORX®



The basic shape is a 6-pointed star formed with ear-lobular shaped curves. Compared to recessed hexagon heads, drive efficiency is higher as torque is smoothly and assuredly transmitted to the screw while "CAM-OUT" is eliminated.

TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA).  
VESSEL has a manufacturing license in Japan and selling same to the world.

## Pre-Carded Products



see  
P. 030  
For further details

## "RAINBALL" L-wrenches

Patented



## No. 8800BP

| Size    | Package size (mm) | JAN code (4907587) | Inner Ctn. |
|---------|-------------------|--------------------|------------|
| A/F 1.5 | 160×45× 5         | 014719             | 10         |
| A/F 2   | 160×45× 5         | 014726             | 10         |
| A/F 2.5 | 160×45× 5         | 014733             | 10         |
| A/F 3   | 160×45× 5         | 014740             | 10         |
| A/F 4   | 160×45× 5         | 014757             | 10         |
| A/F 5   | 200×60× 8         | 014764             | 10         |
| A/F 6   | 200×60× 8         | 014771             | 10         |
| A/F 8   | 235×75×14         | 014788             | 5          |
| A/F 10  | 235×75×14         | 014795             | 5          |

| Model No. | Set content                                   | Package size (mm) | JAN code (4907587) | Inner Ctn. |
|-----------|-----------------------------------------------|-------------------|--------------------|------------|
| 8806BP    | No. 8800BP A/F 1.5, 2, 2.5, 3, 4, 5           | 200× 80×16        | 014801             | 5          |
| 8809BP    | No. 8800BP A/F 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 | 245×105×27        | 014818             | 5          |

## Thread Thru Stud Wrench/ Tapered file



No. ZW-3  
No. ZW-4



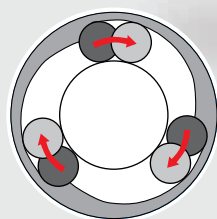
No. 8

| Model No. | Size             | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|-----------|------------------|-------------------|--------------------|------------|
| 8         | —                | 270× 75×12        | 017208             | 10         |
| ZW-3      | Thread part: 3/8 | 202× 64×27        | 017116             | 10         |
| ZW-4      | Thread part: 1/2 | 202× 64×27        | 017123             | 10         |

## ONE POINT

Quickly tightens  
continuous thread studs!

Powerfully tightens  
when in the straight position.



Fast turning  
when in the bent position.

## Patented 3-roller structure

Ratchet wrench that repeatedly tightens  
in 1 direction.

3 rollers tighten screws assuredly without causing damage.



## "PETADORA" L-shaped Offset Screwdriver



No. TD-61

No. TD-63

see  
P. 031  
For further details

### No. TD-61

| Size | Package size (mm) | Weight (g) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|------|-------------------|------------|--------------------|------------|------------|
| ⊖ 6  | 160×35×14         | 38         | 008381             | 10         | 100        |
| ⊕ 1  | 160×35×14         | 27         | 008350             | 10         | 100        |
| ⊕ 2  | 160×35×14         | 36         | 008367             | 10         | 100        |

### No. TD-63

|         |           |    |        |    |     |
|---------|-----------|----|--------|----|-----|
| A/F 2.5 | 160×35×14 | 27 | 008398 | 10 | 100 |
| A/F 3   | 160×35×14 | 27 | 008404 | 10 | 100 |
| A/F 4   | 160×35×14 | 28 | 008411 | 10 | 100 |
| A/F 5   | 160×35×14 | 37 | 008428 | 10 | 100 |

## Offset Screwdriver



| Model No.     | Set content          | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|---------------|----------------------|-------------------|--------------------|------------|
| <b>251526</b> | No.25 ⊖6/ ⊕2, ⊕5/ ⊕1 | 210×70×10         | 061157             | 20         |

## "PETADORA" Z-shaped Offset Screwdriver

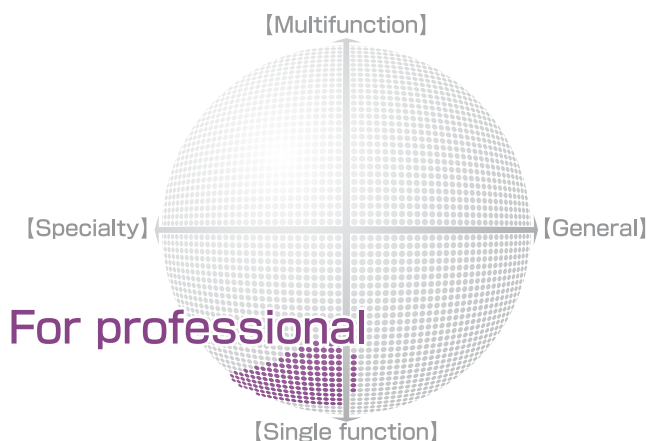


see  
P. 031  
For further details

### No. TD-64

| Size     | Package size (mm) | Weight (g) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|----------|-------------------|------------|--------------------|------------|------------|
| ⊕ 1/ ⊕ 2 | 160×35×12         | 26         | 008435             | 10         | 100        |
| ⊕ 2/ ⊖ 6 | 160×35×12         | 36         | 008442             | 10         | 100        |

# Pre-Carded Products



## Double Action VA cable stripper

Patent Pending



see  
**P. 039**  
For further details

| Model No.       | Wire size                                                                                                                        | Package size (mm) | JAN code Outer (4907587) Ctn. |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------|
| <b>3100VA-1</b> | PVC cables (VVF/ VA cables) PE cables (EM-EFF/ Eco cables)<br>φ 1.6mm duplex/ φ 2.0mm duplex<br>φ 1.6mm triplex/ φ 2.0mm triplex | 250×130×63        | 014122 5                      |

## Wire Stripper



No. 300001



No. 300002



No. 300005



No. 300007



No. 300008

| Model No.     | Wire diameter and nominal sectional area              | Package size (mm) | JAN code Outer (4907587) Ctn. |
|---------------|-------------------------------------------------------|-------------------|-------------------------------|
| <b>300001</b> | 0.5/1.2/1.6/2.0mm (For solid wire)                    | 250×110×38        | 060761 5                      |
| <b>300002</b> | 1.0/1.6/2.0/2.6/3.2mm (For solid wire)                | 250×110×38        | 060778 5                      |
| <b>300005</b> | 0.9/1.25/2.0/3.5/5.5mm <sup>2</sup> (For strand wire) | 250×110×38        | 060792 5                      |
| <b>300007</b> | 1.6mm×2-wire/2.0mm×2-wire (For VA, IV wire)           | 250×110×38        | 061133 5                      |
| <b>300008</b> | 3.8/5.6mm/ core wire (For 3C2V, 5C2V coaxial cable)   | 250×110×38        | 061140 5                      |

## Wire Stripper



No. 3500E-1



No. 3500E-2



No. 3700KR

| Model No.      | Strip Capacity           | Package size (mm) | JAN code Outer (4907587) Ctn. | Inner Ctn. |
|----------------|--------------------------|-------------------|-------------------------------|------------|
| <b>3500E-1</b> | AWG 24/22/20/18/16/14/12 | 220×75×13         | 014108                        | 5 30       |
| <b>3500E-2</b> | AWG 30/28/26/24/22/20/18 | 220×75×13         | 014115                        | 5 30       |
| <b>3700KR</b>  | Seath O/ D 4.5~26mmφ     | 180×75×31         | 014627                        | 1 —        |

## Electrician Knife

Patented



No. VDK-1



No. VDK-5

| Model No.    | Package size (mm) | JAN code Outer (4907587) Ctn. |
|--------------|-------------------|-------------------------------|
| <b>VDK-1</b> | 270×70×60         | 017154 10                     |
| <b>VDK-5</b> | 270×70×60         | 017093 10                     |

# Bits & Sockets

After starting out as a manufacturer specializing in screwdrivers, VESSEL began developing industrial bits in 1954, and also established itself as specializing in the manufacture of bits. With more than 50 years of experience in this field, we have a full range of products and the know-how to meet even the most demanding needs of our professional users. In addition, we are dedicated to the further evolution of screw tightening technology and increased reliability as we continue to develop original "conception products" through technological innovation.



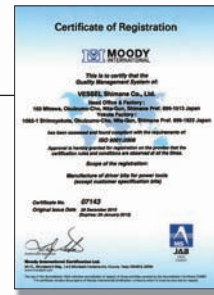
|                |                     |                    |                          |                |                   |     |  |                                                                                      |                                                                            |
|----------------|---------------------|--------------------|--------------------------|----------------|-------------------|-----|--|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 064~066<br>067 | 064~065<br>067      | 064~065<br>067     | 064/066                  | 064~065<br>067 |                   |     |  |   | Precision Bits                                                             |
|                |                     |                    | 067                      |                |                   |     |  |  | Bit Holders                                                                |
| 070~073<br>075 | 072                 | 072/075            |                          | 073/075        | 072               | 071 |  |  | Type A Industrial Bits                                                     |
|                |                     |                    | 073~074                  |                |                   |     |  |  | Type A Industrial Sockets                                                  |
| 078~080        | 079                 | 078~079            |                          | 078~080        | 080               | 080 |  |  | Type B Industrial Bits                                                     |
|                |                     |                    | 080~081                  |                |                   |     |  |  | Type B Industrial Sockets                                                  |
| 082~083        | 082~083             |                    |                          | 083            |                   |     |  |  | Impact Driver Bits/<br>Automatic Spiral Ratchet Driver Bits/<br>Short Bits |
| 086~097        | 088~091<br>095/ 097 | 090~091<br>094~095 | 089<br>092<br>094<br>096 | 090~091        | 088<br>091<br>094 |     |  |  | Construction Bits<br>Problem Solver                                        |



## About ISO

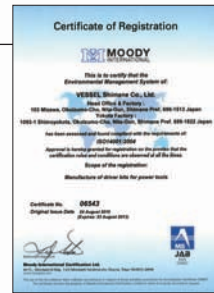
### ISO 9001

All manufacturing divisions have begun the process of earning certification under the ISO 9000 series of quality management system standards.



### ISO 14001

We obtained ISO 14001 in August 2010. VESSEL will further strive to offer eco-friendly products, aiming at minimizing the environmental burden as a manufacturing group.



062

067

068

073

076

080

082

084

|                                                                                     |                                       |     |
|-------------------------------------------------------------------------------------|---------------------------------------|-----|
|   | Construction Sockets<br>GO-TAN Series | 098 |
|  | Drills & Drill Chucks                 | 106 |

## Selection of the Proper Heat Treatment

VESSEL industrial bits are classified according to five main heat treatment classes based on our long-time research data.

The selection of the proper heat treatment is important in securing the longest life for bits, but it may require some trial and error to select the proper heat treatment for a particular application.

### Selection of the Proper Heat Treatment

In general, if your bits tend to get broken or chip-off, a bit with less hardness such as "G" will be selected. If your bits wear quickly, choose a harder bit such as "H" or "X".



| HEAT TREATMENT CLASS       | SCREWS TO BE FASTENED                                                  | TYPE OF FIELD                                                                                    |
|----------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>X</b> HIGHEST HARDNESS  | PRECISION SCREWS, AUTOMATIC MOUNTING SCREWS, CONNECTING SCREWS         | ASSEMBLY OF PRECISE EQUIPMENT, AUTOMATIC MACHINE SCREWING OF LIGHT ELECTRICAL APPLIANCE, HOUSING |
| <b>H</b> HIGH HARDNESS     | WOOD SCREWS, MACHINE SCREWS, SELF-TAPPING SCREWS, SELF-DRILLING SCREWS | ASSEMBLY OF LIGHT ELECTRICAL APPLIANCE & AUDIO EQUIPMENT, BUILDING & WOODWORKING                 |
| <b>G</b> STANDARD HARDNESS | TAPPING SCREWS, MACHINE SCREWS                                         | ASSEMBLY OF CAR, MACHINE PARTS & WINDOW DOOR SASHES                                              |

VESSEL supplies "E" and "S"-type bits with low hardness for heavy works.

They are ideal for the tools with high impact.

※ The price may differ if the hardness is different.

# Precision Bits

High precision bits for precision fields such as computers, OA equipment, HDDs, acoustic equipment VTRs, and optical equipment. High precision axial runout tolerance suitable for automated screw-tightening robots working in  $\mu$  units.

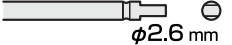


## High Precision Bit Tips

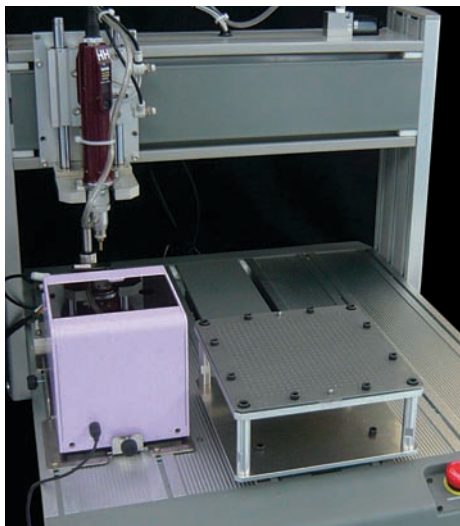
Bits with 4mm and 5mm shafts for use with a wide variety of small, electric drivers. Our strong, durable bits undergo actual work tests, damage tests, and repeated fatigue tests during the manufacturing process. In our quest for ever-greater reliability, we employ torque analysis and screw-engagement checks that result in ultra high precision bit tips.





| Shape                                                                                          | Model NO.  | Page       | Applicable models                                                                                                                                                                                                  |                                                                                                                 |
|------------------------------------------------------------------------------------------------|------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
|                                                                                                |            |            |  Torque Control Screwdriver                                                                                                       |  Electric S/D (Precision type) |
| <br>H 5 mm    | <b>B34</b> | <b>065</b> | <b>Hios</b><br>VZ-1812·1812PS·1820·1820PS·3007·3007PS·3012·3012PS·3012·3012PS                                                                                                                                      |                                                                                                                 |
|                                                                                                | <b>N</b>   |            | <b>Delvo</b><br>DLV-3121·3131·3141·3151·7120·7130·7140·7220·7231·7241·8120·8130·8140·8220·8231·8241·7122·7132·7142·7222·7232·7242·8122·8132·8142·8222·8232·8242·30LL·30SL·30HL                                     |                                                                                                                 |
|                                                                                                | <b>B44</b> | <b>066</b> | <b>Panasonic</b><br>FE-A310S·A310MH·A310L·A111L·A111MH·A111M·A710AXN·A710MHN                                                                                                                                       |                                                                                                                 |
| <br>φ4 mm     | <b>D71</b> | <b>064</b> | <b>Delvo</b><br>DLV-3321·3331·5820·5840·7020·7030·7031·7313·7319·7321·7323·7325·7329·7331·7333·7335·7339·7349·7410·7419·7420·7429·7810·7820·8020·8030·8031                                                         |                                                                                                                 |
|                                                                                                | <b>D72</b> |            |                                                                                                                                                                                                                    |                                                                                                                 |
| <br>φ4 mm    | <b>D73</b> | <b>064</b> | <b>Hios</b><br>BL-3000·5000<br>CL-2000·3000·3000PS·4000·4000PS<br>CLF-3000·4000<br>α-4500·4500PS·5000·5000PS<br>αF-4500·5000<br>SS-2000·3000·3000PS·4000·4000PS<br>VZ-1510·1510PS<br>CD-4000·4000PS·5000·5000PS    |                                                                                                                 |
|                                                                                                |            |            | <b>Kanon</b><br>3K-110L·110P, 2KD-100·200·300                                                                                                                                                                      |                                                                                                                 |
| <br>φ5 mm   | <b>D76</b> | <b>065</b> | <b>Hios</b><br>BL-7000<br>CL-6000·6000PS·6500·6500PS·7000·7000PS<br>CLF-6000·6500·7000<br>α-6500·6500PS, αF-6500, SS-6500·7000<br>VZ-1812·1812PS·1820·1820PS·3007·3007PS·3012·3012PS<br>CD-6000·6000PS·7000·7000PS |                                                                                                                 |
|                                                                                                |            |            | <b>BL-7000</b><br>VZ-1812·1812PS·1820·1820PS·3007·3007PS·3012·3012PS, CL-6000·6000PS·6500·6500PS, α-6500·6500PS are 5mm dual-HEX type.<br>B34, B44, and N type bits can be used.                                   |                                                                                                                 |
| <br>φ2.6 mm | <b>D82</b> | <b>065</b> | <b>Panasonic</b><br>NM-101·101L                                                                                                                                                                                    |                                                                                                                 |

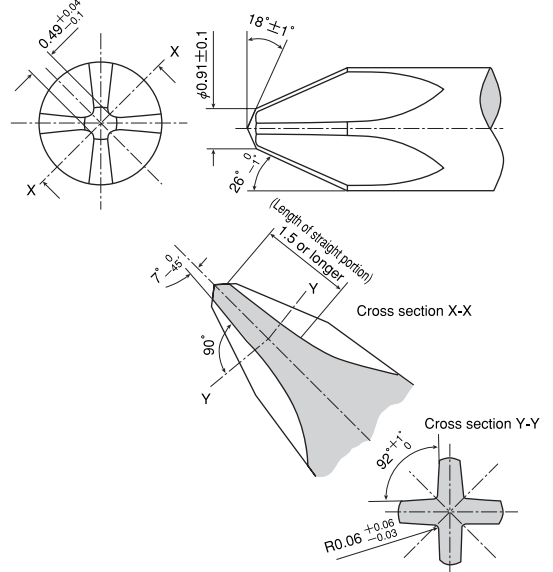
We have given extra care to the axial runout of the shafts to ensure they are suitable for automatic screw tightening work. We have achieved a low axial runout of within 0.3mm for standard products up to 60mm in length, and can meet demands for even lower axial runout.



## Types of screw drive and the standards

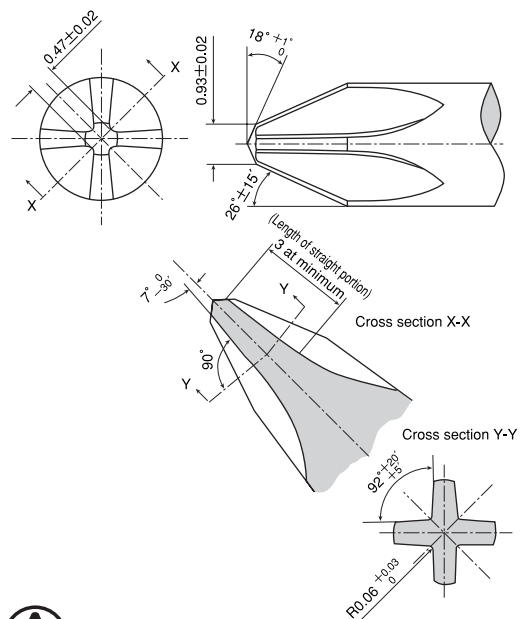
### JIS No. 0

### Japanese Industrial Standards (JISB4633)



### JCIS No. 0

### Japan International Cooperation System (JCIS9-70)



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TORX plus is a registered trademark of Acument TM Intellectual Properties, LLC (USA). VESSEL has a manufacturing license in Japan and selling same to the world.



SUPADRIV system is patented and registered as the trademark of EIS corp. in U.K. We at VESSEL CO., INC. has a manufacturing license in Japan and selling same to the world.

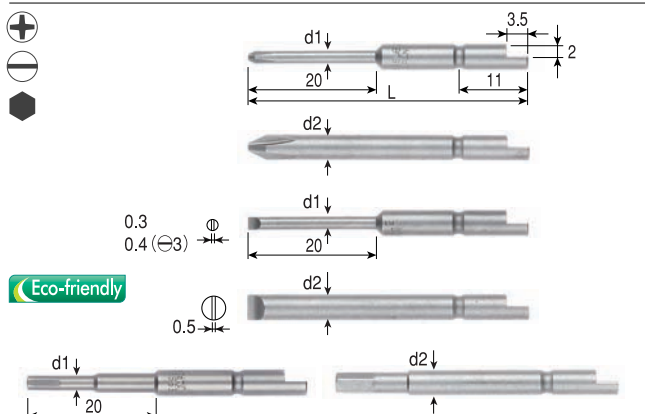


POZIDRIV system is patented and registered as the trademark of EIS corp. in U.K. We at VESSEL CO., INC. has a manufacturing license in Japan and selling same to the world.



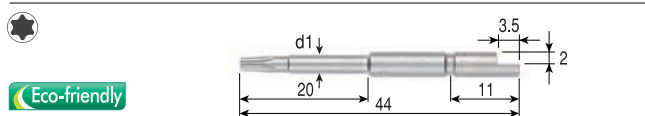
# Precision Bits

## No. D71 Bit



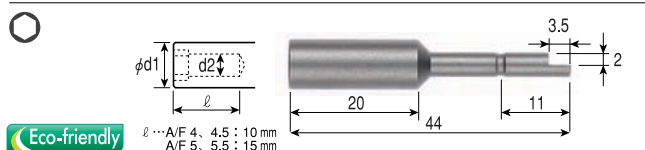
| Size<br>Tip×Overall Length (mm) | d1<br>(mm) | d2<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|------------|------------|---------------|---------------|
| ⊕ 00 ×1.5×44                    | 1.5        | —          | 10            | 200           |
| 64                              | 1.5        | —          | 10            | 200           |
| ⊕ 0 ×2 ×44                      | 2.0        | —          | 10            | 200           |
| 64                              | 2.0        | —          | 10            | 200           |
| ⊕ 0 ×2.5×44                     | 2.5        | —          | 10            | 200           |
| 64                              | 2.5        | —          | 10            | 200           |
| ⊕ 1 ×3 ×44                      | 3.0        | —          | 10            | 200           |
| 64                              | 3.0        | —          | 10            | 200           |
| ⊕ 1 ×4 ×44                      | —          | 4.0        | 10            | 200           |
| 64                              | —          | 4.0        | 10            | 200           |
| ⊕ 2 ×4 ×44                      | —          | 4.0        | 10            | 200           |
| 64                              | —          | 4.0        | 10            | 200           |
| ⊖ 2 ×0.3×44                     | 2.0        | —          | 10            | 200           |
| ⊖ 2.5×0.3×44                    | 2.5        | —          | 10            | 200           |
| ⊖ 3 ×0.4×44                     | 3.0        | —          | 10            | 200           |
| ⊖ 4 ×0.5×44                     | —          | 4.0        | 10            | 200           |
| A/F 1.5×2 ×44                   | 2.0        | —          | 10            | 200           |
| A/F 2 ×3 ×44                    | 3.0        | —          | 10            | 200           |
| A/F 2.5×3 ×44                   | 3.0        | —          | 10            | 200           |
| A/F 3 ×4 ×44                    | —          | 4.0        | 10            | 200           |

## No. D71 TORX Bit



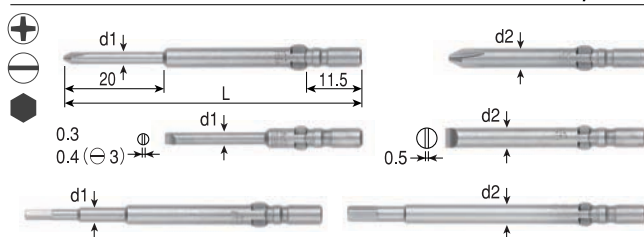
| Size<br>Tip×Overall Length (mm) | mm   | d1<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|------|------------|---------------|---------------|
| T1 ×44                          | 0.84 | 1.5        | 10            | 200           |
| T2 ×44                          | 0.94 | 1.5        | 10            | 200           |
| T3 ×44                          | 1.12 | 1.7        | 10            | 200           |
| T4 ×44                          | 1.3  | 1.8        | 10            | 200           |
| T5 ×44                          | 1.37 | 2.0        | 10            | 200           |
| T6 ×44                          | 1.65 | 2.5        | 10            | 200           |
| T7 ×44                          | 1.97 | 2.5        | 10            | 200           |
| T8 ×44                          | 2.3  | 3.0        | 10            | 200           |
| T9 ×44                          | 2.48 | 3.0        | 10            | 200           |
| T10×44                          | 2.72 | 3.0        | 10            | 200           |

## No. D72 Socket Bit



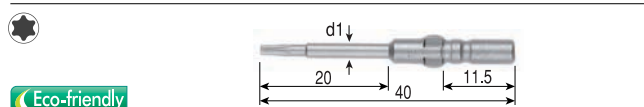
| Size<br>Tip×Overall Length (mm) | d1<br>(mm) | d2<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|------------|------------|---------------|---------------|
| A/F 4 ×44                       | 7          | 3          | 10            | 100           |
| A/F 4.5×44                      | 7          | 3          | 10            | 100           |
| A/F 5 ×44                       | 8          | 4          | 10            | 100           |
| A/F 5.5×44                      | 8          | 4          | 10            | 100           |

## No. D73 Bit



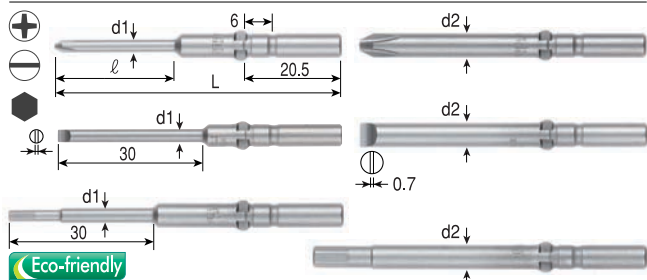
| Size<br>Tip×Overall Length (mm) | d1<br>(mm) | d2<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|------------|------------|---------------|---------------|
| ⊕ 00 ×1.2×40                    | 1.2        | —          | 10            | 100           |
| ⊕ 00 ×1.5×40                    | 1.5        | —          | 10            | 100           |
| 60                              | 1.5        | —          | 10            | 100           |
| ⊕ 00 ×2 ×40                     | 2.0        | —          | 10            | 100           |
| 60                              | 2.0        | —          | 10            | 100           |
| ⊕ 0 ×1.4×40                     | 1.4        | —          | 10            | 100           |
| 60                              | 1.4        | —          | 10            | 100           |
| ⊕ 0 ×1.7×40                     | 1.7        | —          | 10            | 100           |
| 60                              | 1.7        | —          | 10            | 100           |
| ⊕ 0 ×2 ×40                      | 2.0        | —          | 10            | 100           |
| 60                              | 2.0        | —          | 10            | 100           |
| 80                              | 2.0        | —          | 10            | 100           |
| 100                             | 2.0        | —          | 10            | 100           |
| ⊕ 0 ×2.5×40                     | 2.5        | —          | 10            | 100           |
| 60                              | 2.5        | —          | 10            | 100           |
| 80                              | 2.5        | —          | 10            | 100           |
| 100                             | 2.5        | —          | 10            | 100           |
| ⊕ 1 ×3 ×40                      | 3.0        | —          | 10            | 100           |
| ⊕ 1×3×20×60                     | 3.0        | —          | 10            | 100           |
| 80                              | 3.0        | —          | 10            | 100           |
| 100                             | 3.0        | —          | 10            | 100           |
| 120                             | 3.0        | —          | 10            | 100           |
| ⊕ 1 ×4 ×40                      | —          | 4.0        | 10            | 100           |
| 60                              | —          | 4.0        | 10            | 100           |
| ⊕ 2 ×4 ×40                      | —          | 4.0        | 10            | 100           |
| 60                              | —          | 4.0        | 10            | 100           |
| 80                              | —          | 4.0        | 10            | 100           |
| 100                             | —          | 4.0        | 10            | 100           |
| 120                             | —          | 4.0        | 10            | 100           |
| ⊖ 2 ×0.3×40                     | 2.0        | —          | 10            | 100           |
| ⊖ 2.5×0.3×40                    | 2.5        | —          | 10            | 100           |
| ⊖ 3 ×0.4×40                     | 3.0        | —          | 10            | 100           |
| ⊖ 4 ×0.5×40                     | —          | 4.0        | 10            | 100           |
| A/F 1.5×2 ×60                   | 2.0        | —          | 10            | 100           |
| A/F 2 ×3 ×60                    | 3.0        | —          | 10            | 100           |
| A/F 2.5×3 ×60                   | 3.0        | —          | 10            | 100           |
| A/F 3 ×4 ×60                    | —          | 4.0        | 10            | 100           |

## No. D73 TORX Bit



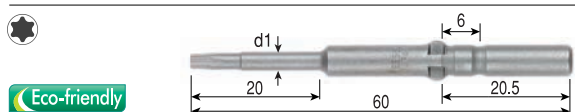
| Size<br>Tip×Overall Length (mm) | mm   | d1<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|------|------------|---------------|---------------|
| T1 ×40                          | 0.84 | 1.5        | 10            | 100           |
| T2 ×40                          | 0.94 | 1.5        | 10            | 100           |
| T3 ×40                          | 1.12 | 1.7        | 10            | 100           |
| T4 ×40                          | 1.3  | 1.8        | 10            | 100           |
| T5 ×40                          | 1.37 | 2.0        | 10            | 100           |
| 60                              | 1.37 | 2.0        | 10            | 100           |
| T6 ×40                          | 1.65 | 2.5        | 10            | 100           |
| 60                              | 1.65 | 2.0        | 10            | 100           |
| T7 ×40                          | 1.97 | 2.5        | 10            | 100           |
| T8 ×40                          | 2.3  | 3.0        | 10            | 100           |
| T9 ×40                          | 2.48 | 3.0        | 10            | 100           |
| T10×40                          | 2.72 | 3.0        | 10            | 100           |

## No. D76 Bit



| Size                    | ℓ (mm) | d1 (mm) | d2 (mm) | Inner Ctn. | Outer Ctn. |
|-------------------------|--------|---------|---------|------------|------------|
| Tip×Overall Length (mm) |        |         |         |            |            |
| ⊕ 00 × 2 × 60           | 20     | 1.5     | —       | 10         | 100        |
| ⊕ 0 × 2.5 × 60          | 25     | 2.5     | —       | 10         | 100        |
| ⊕ 1 × 3 × 60            | 30     | 3.0     | —       | 10         | 100        |
| ⊕ 1 × 3 × 30 × 80       | 30     | 3.0     | —       | 10         | 100        |
| ⊕ 1 × 5 × 60            | 30     | 5.0     | —       | 10         | 100        |
| ⊕ 2 × 5 × 60            | —      | —       | 5.0     | 10         | 100        |
| 80                      | —      | —       | 5.0     | 10         | 100        |
| 100                     | —      | —       | 5.0     | 10         | 100        |
| 120                     | —      | —       | 5.0     | 10         | 100        |
| 150                     | —      | —       | 5.0     | 10         | 100        |
| ⊖ 3 × 0.4 × 60          | —      | 3.0     | —       | 10         | 100        |
| ⊖ 4 × 0.6 × 60          | —      | 4.0     | —       | 10         | 100        |
| ⊖ 5 × 0.7 × 60          | —      | —       | 5.0     | 10         | 100        |
| A/F 2 × 3 × 70          | —      | 3.0     | —       | 10         | 100        |
| A/F 2.5 × 3 × 70        | —      | 3.0     | —       | 10         | 100        |
| A/F 3 × 4 × 70          | —      | 4.0     | —       | 10         | 100        |
| A/F 4 × 5 × 70          | —      | —       | 5.0     | 10         | 100        |

## No. D76 TORX Bit



| Size                    | mm   | d1 (mm) | Inner Ctn. | Outer Ctn. |
|-------------------------|------|---------|------------|------------|
| Tip×Overall Length (mm) |      |         |            |            |
| T5 × 60                 | 1.37 | 2.0     | 10         | 100        |
| T6 × 60                 | 1.65 | 2.5     | 10         | 100        |
| T7 × 60 ▲               | 1.97 | 2.5     | 10         | 100        |
| T8 × 60                 | 2.3  | 3.0     | 10         | 100        |
| T9 × 60                 | 2.48 | 3.0     | 10         | 100        |
| T10 × 60                | 2.72 | 3.0     | 10         | 100        |
| T15 × 60                | 3.26 | 4.0     | 10         | 100        |
| T20 × 60                | 3.84 | —       | 10         | 100        |
| T25 × 60                | 4.4  | —       | 10         | 100        |

▲For the date of delivery, consult Vessel.

## No. D82



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 1 × 31                | H                             | 10         | 100        |

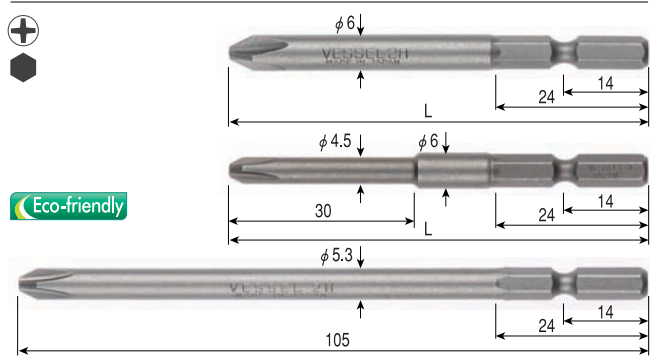
# ONE POINT TORX®



The basic shape is a 6-pointed star formed with ear-lobular shaped curves. Compared to recessed hexagon heads, drive efficiency is higher as torque is smoothly and assuredly transmitted to the screw while "CAM-OUT" is eliminated.

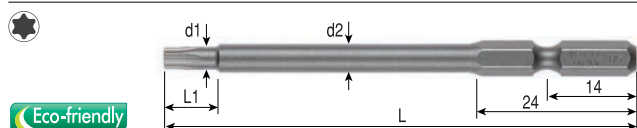
TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA). VESSEL has a manufacturing license in Japan and selling same to the world.

## No. B34 Bit



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 1 × 70                | X.H                           | 10         | 100        |
| 100                     | X.H                           | 10         | 100        |
| 150                     | H                             | 10         | 100        |
| ⊕ 1 × 4 × 70            | H                             | 10         | 100        |
| ⊕ 1 × 5.3 × 105         | H                             | 10         | 100        |
| 120                     | X.H                           | 10         | 100        |
| 125                     | X                             | 10         | 100        |
| ⊕ 2 × 70                | X.H                           | 10         | 100        |
| 100                     | X.H                           | 10         | 100        |
| 150                     | H                             | 10         | 100        |
| 200                     | H                             | 10         | 100        |
| ⊕ 2 × 4.5 × 70          | H                             | 10         | 100        |
| ⊕ 2 × 5.3 × 105         | H                             | 10         | 100        |
| 120                     | H                             | 10         | 100        |
| A/F 2 × 70              | H                             | 10         | 100        |
| 2.5 × 70                | H                             | 10         | 100        |
| 3 × 70                  | H                             | 10         | 100        |
| 4 × 70                  | H                             | 10         | 100        |
| 5 × 70                  | H                             | 10         | 100        |

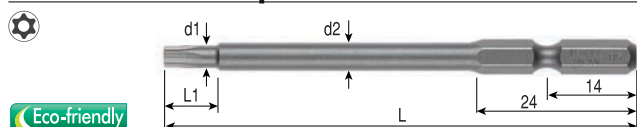
## No. N TORX Bit



| Size                    | mm   | d1 (mm) | L1 (mm) | d2 (mm) | Inner Ctn. |
|-------------------------|------|---------|---------|---------|------------|
| Tip×Overall Length (mm) |      |         |         |         |            |
| T5 × 75                 | 1.37 | 1.67    | 6.5     | 4.0     | 10         |
| 100 ▲                   | 1.37 | 1.67    | 6.5     | 4.0     | 10         |
| T6 × 75                 | 1.65 | 1.95    | 6.5     | 4.0     | 10         |
| 100                     | 1.65 | 1.95    | 6.5     | 4.0     | 10         |
| T8 × 75                 | 2.3  | 2.60    | 7.0     | 4.5     | 10         |
| 100                     | 2.3  | 2.60    | 7.0     | 4.5     | 10         |
| T10 × 75                | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| 100                     | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| T15 × 75                | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| 100                     | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| T20 × 75                | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| 100                     | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| T25 × 75                | 4.4  | 4.70    | 8.0     | 5.0     | 10         |
| 100                     | 4.4  | 4.70    | 8.0     | 5.0     | 10         |
| T27 × 75                | 4.96 | 5.26    | 8.0     | 5.5     | 10         |
| 100                     | 4.96 | 5.26    | 8.0     | 5.5     | 10         |

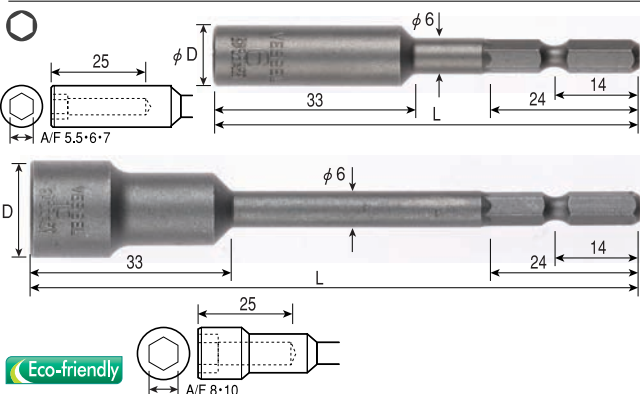
▲For the date of delivery, consult Vessel.

## No. N TORX Bit (Tamper-Proof)



| Size                    | mm   | d1 (mm) | L1 (mm) | d2 (mm) | Inner Ctn. |
|-------------------------|------|---------|---------|---------|------------|
| Tip×Overall Length (mm) |      |         |         |         |            |
| T10H × 75               | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| 100                     | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| T15H × 75               | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| 100                     | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| T20H × 75               | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| 100                     | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| T25H × 75               | 4.4  | 4.70    | 8.0     | 5.0     | 10         |
| 100                     | 4.4  | 4.70    | 8.0     | 5.0     | 10         |

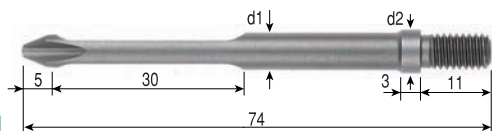
## No. B44 Socket Bit



| Size                    | D $\phi$ | Inner | Outer |
|-------------------------|----------|-------|-------|
| Tip×Overall Length (mm) | (mm)     | Ctn.  | Ctn.  |
| A/F 5.5× 70             | 9        | 10    | 250   |
| 100                     | 9        | 10    | 250   |
| 6× 70                   | 10       | 10    | 200   |
| 100                     | 10       | 10    | 200   |
| 7× 70                   | 11       | 10    | 200   |
| 100                     | 11       | 10    | 150   |
| 8× 70                   | 13       | 10    | 200   |
| 100                     | 13       | 10    | 150   |
| 10×100                  | 16       | 10    | 100   |



### No. D61 Bits for screw fastening robots (Semi-standardized items)



| Size<br>Tip×Overall Length (mm) | d1<br>(mm) | d2<br>(mm) |
|---------------------------------|------------|------------|
| ⊕ 2×74—M5 P0.8                  | 5.0        | 6.0        |
| ⊕ 2×74—M6 P1.0                  | 6.0        | 7.0        |



| Size<br>Tip×Overall Length (mm) | d1<br>(mm) | d2<br>(mm) |
|---------------------------------|------------|------------|
| ⌀2×100—M6 P1.0                  | 6.0        | —          |

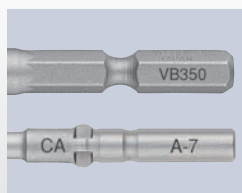
If you cannot find an appropriate bit among our standard line-up, VESSEL can also produce specially designed bits for your application.



High-precision processing is required for bits to be installed in automatic assembly machines, which operate in micro-level accuracy. VESSEL has technology and know-how for such precision bits as one of the biggest bit manufacturers in the world.



We choose most suitable materials and surface treatment methods for each different application, for example, high-endurance bits made of corrosion-resistant stainless steel and high-speed steel, etc.

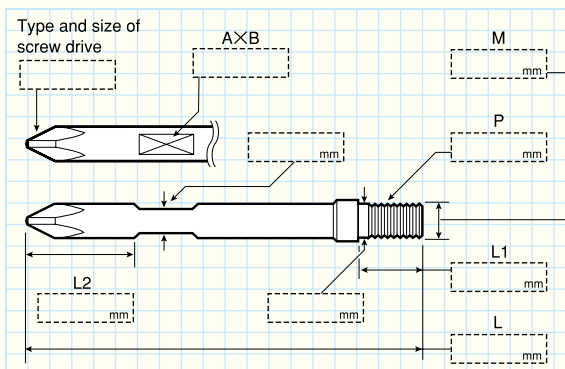


Necessary information can be directly laser-marked on bits, which brings further efficiency to your inventory management.



All the previous orders are recorded and organized by computer system.

## Type of screw drive



## Sample screw Available/ Not available

## Official drawing Available/ Not available

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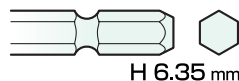
Quantity:

## Quantity

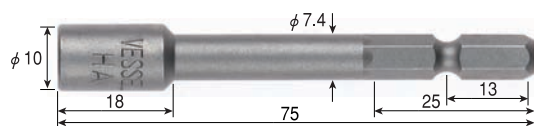
Black oxide finish/ Shot blasting



## No. HA Bit Holder



H 6.35 mm



● Keeps bit with C-pin.

| Size                    | Inner Ctn. | Outer Ctn. |
|-------------------------|------------|------------|
| Tip×Overall Length (mm) |            |            |
| A/F 6.3×75              | 10         | 100        |

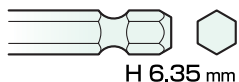
## No. HAM Bit Holder



● Bit holder with magnet.

| Size                    | Inner Ctn. | Outer Ctn. |
|-------------------------|------------|------------|
| Tip×Overall Length (mm) |            |            |
| A/F 6.3×75              | 10         | 100        |

## No. HB Bit Holder



H 6.35 mm



● Keeps bit with C-pin.

| Size                    | Inner Ctn. | Outer Ctn. |
|-------------------------|------------|------------|
| Tip×Overall Length (mm) |            |            |
| A/F 6.3×75              | 10         | 100        |

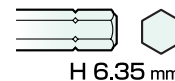
## No. HBM Bit Holder



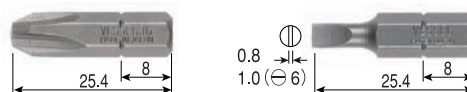
● Bit holder with magnet.

| Size                    | Inner Ctn. | Outer Ctn. |
|-------------------------|------------|------------|
| Tip×Overall Length (mm) |            |            |
| A/F 6.3×75              | 10         | 100        |

## No. B33 Short Bit (For Bit Holder)



H 6.35 mm



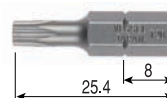
Eco-friendly



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 1×25.4                | H                             | 10         | 100        |
| ⊕ 2×25.4                | H                             | 10         | 100        |
| ⊕ 3×25.4                | G                             | 10         | 100        |
| ⊖ 4×25.4                | G                             | 10         | 100        |
| ⊖ 6×25.4                | G                             | 10         | 100        |
| A/F 2×25.4              | H                             | 10         | 100        |
| 2.5×25.4                | H                             | 10         | 100        |
| 3×25.4                  | H                             | 10         | 100        |
| 4×33.3                  | H                             | 10         | 100        |
| 5×33.3                  | H                             | 10         | 100        |
| 6×33.3                  | H                             | 10         | 100        |

| Model No.                 | Set content                                                | Inner Ctn. | Outer Ctn. |
|---------------------------|------------------------------------------------------------|------------|------------|
| <b>B33 Driver Bit Set</b> | 1 for each ⊕1, ⊕2, ⊕3, ⊖4, ⊖6×25.4 with holder             | 1          | 10         |
| <b>B33 Hex. Bit Set</b>   | 1 for each A/F 2, 2.5, 3×25.4 A/F 4, 5, 6×33.3 with holder | 1          | 10         |

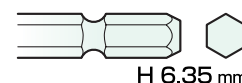
## No. A4 TORX Bit



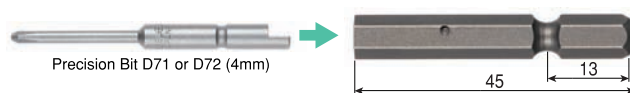
Eco-friendly

| Size | mm   | Overall Length (mm) | Inner Ctn. |
|------|------|---------------------|------------|
| T6   | 1.65 | 25.4                | 10         |
| T8   | 2.3  | 25.4                | 10         |
| T10  | 2.72 | 25.4                | 10         |
| T15  | 3.26 | 25.4                | 10         |
| T20  | 3.84 | 25.4                | 10         |
| T25  | 4.4  | 25.4                | 10         |
| T27  | 4.96 | 25.4                | 10         |
| T30  | 5.49 | 25.4                | 10         |
| T40  | 6.6  | 25.4                | 10         |

## No. HD-71×45 Bit Holder



H 6.35 mm



| Overall Length (mm) | Inner Ctn. | Outer Ctn. |
|---------------------|------------|------------|
| 45                  | 10         | 100        |

※ Bit is not included.

# ONE POINT

Precision bits can be installed to electric screwdrivers.

D71/ D72 (4mm) bits can be inserted.

(6.35mm)



No. HD-71×45 Bit Holder

## Type A Industrial Bits

We have achieved a compilation of 55 years of industrial bit manufacturing, and produce high-precision, highly stable bits with low deviation and axial runout. Our unique metal alloy and heat treatment technology has produced truly specialized bits for assembly.

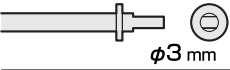
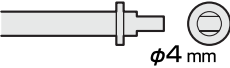
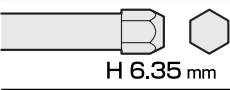
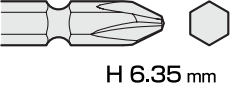
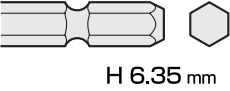
High precision bit tips...

We pursue an aggressive licensing agreement policy to ensure the manufacture of bit tips with specifications that allow for the most appropriate fit to screw heads.

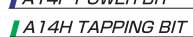
Furthermore, technological exchange with screw punch manufacturers has enabled us to provide bits that support the continual changes in screw recess.



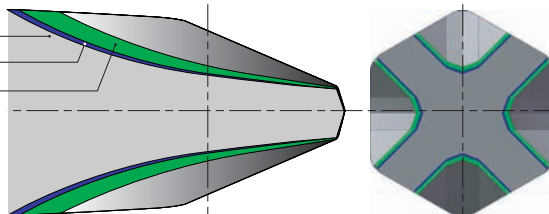
The Type A entry is designed to VESSEL's special insertion dimensions, developed when we first started manufacturing air drivers. The majority of electric drivers on the market can use our ubiquitous Type A bits.

| Shape                                                                               | Model No.       | Page | Applicable models                                                                                                                                                                                       |                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|-----------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                 |      | Air Screwdriver                                                                                                                                                                                         | Electric Screwdriver Torque Control Screwdriver                                                                                                                  |
|    | <b>A7</b>       | 070  | VESSEL<br>GT-H2                                                                                                                                                                                         |                                                                                                                                                                  |
|    | <b>A9</b>       |      | VESSEL<br>GT-H3P                                                                                                                                                                                        |                                                                                                                                                                  |
|    | <b>A11</b>      |      | Uryu<br>US-3·US-3W                                                                                                                                                                                      |                                                                                                                                                                  |
|    | <b>A14</b>      | 070  | VESSEL<br>GT-H4R·H4PR·H4.5·H5R·H5P·PH4·PH5·S4.5DR·PLR·PLZ·PLP·PLHII·S6MLR·S6HS·S6.5D·P4.5D·P4.5DR·P5LS·P6EXD·P6LSIII·P6HS·P6.5D·S4TR·S4TS·S4TG·S5TR·S5TB·S5TG·S5TS·S4.5XD·P4.5XD·PLXD·P60XD·P6LXD·S6LXD | Toshiba CIBL-144VA                                                                                                                                               |
|                                                                                     | <b>A14P</b>     |      |                                                                                                                                                                                                         | Hitachi Koki<br>WH-6DC·8DYA·9DM·9DM2·10DL·10DCL·10VA2·12DAF2·12DMR2·12DM·12DMR·12DM2·12VB·12DK·12VA·12VC·12VD·14DML·14DMRL·14DMR·14DSL·14DM·14VA·14DH·18DL       |
|                                                                                     | <b>M-A14</b>    |      |                                                                                                                                                                                                         | DB-3DL·12DM2·10DL                                                                                                                                                |
|                                                                                     | <b>A14H</b>     |      | Hitachi Koki WH-10AC·12AB·12H·12H2·WP-10A                                                                                                                                                               | WP-12DM                                                                                                                                                          |
|                                                                                     | <b>A14B</b>     |      |                                                                                                                                                                                                         | W-6M·6MV·5VC·5VD·6VC·6VH·6VJ·8V·W4SA·W5VE·6MV2                                                                                                                   |
|                                                                                     | <b>AL14</b>     | 071  | NPK (Except A20 and MA20 sockets)<br>SD-4, ND-5LPY·6LFAY·6HSY·6HPAY·6SDY·6PDY<br>NPW-450A-DYO·550A-DYO·450EA-DYO·450A-TDY·550A-TDY                                                                      | Makita<br>TD-124D·130D·131D·061D·020D·090D<br>6990D, 6960D, 6919ND, 6955, 6940D, 6963SPK, 6700N, TS130D, DF010D, DF030D, TL060D, TP131D<br>6814SP, 6815SP, 6801N |
|                                                                                     | <b>AT14</b>     |      |                                                                                                                                                                                                         | Panasonic<br>EZ-7200·6507·7201·6506·6502·6605·6582·6404·6120·6121·6780·7301·7270·7202·7203·7205·7410·7411·7540·7542·7543·7544                                    |
|                                                                                     | <b>AT14P</b>    |      |                                                                                                                                                                                                         | Ryobi<br>ID-121·140<br>IDS-135<br>CID-800<br>BDX-1<br>BID-140·142·1410·1226·1227·1240·1255·1220·1230·1440·122·123·124·143                                        |
|                                                                                     | <b>ST14</b>     |      | Fuji Kuki<br>FPW-330SD-10·440D-20·550D-20·660D-30·770D-20·400SD-10·440SD-10·550SD-10·660SD-10                                                                                                           | Tonichi AUR5N                                                                                                                                                    |
|                                                                                     | <b>AS14</b>     |      | FET-44D-20·55D-20·66D-20                                                                                                                                                                                |                                                                                                                                                                  |
|                                                                                     | <b>AZ14</b>     |      | FW-5SXD-70·80, 6SXD-60, 5PXD-60, 6PXD-60, 6PMD-10, 44SD-10, 66SD-10, 44PD-10, 66PD-10, 44SAD-10, 66SAD-10, 44PAD-10, 66PAD-10                                                                           |                                                                                                                                                                  |
|                                                                                     | <b>A14R</b>     | 072  | FPT-440D-10·10L, 550D-10·10L, 660D-10·10L, 440SD-10, 550SD-10, 660SD-10                                                                                                                                 |                                                                                                                                                                  |
|                                                                                     | <b>A16</b>      | 072  |                                                                                                                                                                                                         |                                                                                                                                                                  |
|                                                                                     | <b>M-A16</b>    | 073  | Makita AD604·AD605H                                                                                                                                                                                     |                                                                                                                                                                  |
|                                                                                     | <b>D81</b>      |      | Yokota<br>YLa-70B·80B, YX-180SB·280SB·380SB·500SB·80B·180B·280B·380B·500B                                                                                                                               |                                                                                                                                                                  |
|                                                                                     | <b>V</b>        |      | YD-400SCB·4.5PBZK·65PBZ·65PTBZ·600PBZ·650PBZ·40PBZ·4.5LBZ·6WBZK·600SBZ·670B·670B-F·670B-R·670B-RF, Y-40SB·41B·46B                                                                                       |                                                                                                                                                                  |
|                                                                                     | <b>A20</b>      |      |                                                                                                                                                                                                         |                                                                                                                                                                  |
|                                                                                     | <b>A20-5</b>    |      |                                                                                                                                                                                                         |                                                                                                                                                                  |
|  | <b>MA20S</b>    | 074  | Ryobi AID-10                                                                                                                                                                                            |                                                                                                                                                                  |
|                                                                                     | <b>MA20</b>     |      |                                                                                                                                                                                                         |                                                                                                                                                                  |
|                                                                                     | <b>SB</b>       |      |                                                                                                                                                                                                         |                                                                                                                                                                  |
|                                                                                     | <b>HA</b>       |      | Yutani<br>D-6SSAEL·5WPEA·6SPAL·6SPALE·600SHEA·6WSHPEA·602A·6WSHSA                                                                                                                                       |                                                                                                                                                                  |
|                                                                                     | <b>HAM</b>      |      | DH-4.5PEA·4.5SA·6SELA                                                                                                                                                                                   |                                                                                                                                                                  |
|                                                                                     | <b>HD-71×45</b> | 067  | MAX AT-ID6P1·HF-ID7P1                                                                                                                                                                                   |                                                                                                                                                                  |
|  | <b>D830082</b>  | 090  |                                                                                                                                                                                                         | Panasonic<br>EZ-6220·6225·6420·7410·7411                                                                                                                         |
|                                                                                     | <b>D831045</b>  |      |                                                                                                                                                                                                         | Ryobi<br>D-500                                                                                                                                                   |
|                                                                                     | <b>D831075</b>  |      |                                                                                                                                                                                                         |                                                                                                                                                                  |
|                                                                                     | <b>D832075</b>  |      |                                                                                                                                                                                                         |                                                                                                                                                                  |
|                                                                                     | <b>D832100</b>  |      |                                                                                                                                                                                                         |                                                                                                                                                                  |
|  | <b>A15</b>      | 075  | VESSEL<br>GT-P8D·P10SII                                                                                                                                                                                 | Hitachi Koki<br>WH-14DA                                                                                                                                          |
|                                                                                     | <b>A19</b>      | 075  |                                                                                                                                                                                                         | Panasonic<br>EZ-6680                                                                                                                                             |
|                                                                                     | <b>V5</b>       |      |                                                                                                                                                                                                         |                                                                                                                                                                  |

We also provide "Power" (P) and "High Power" (H) bit tips for heavy industrial use.

 A14 STANDARD BIT  
 A14P POWER BIT  
 A14H TAPPING BIT

The degree of angle used in the rising cuts of the flutes between the four wings has been slightly changed for the Power (P) and High Power (H) bits. This increases the surface area of the cross section of the bit tips for additional strength and durability.

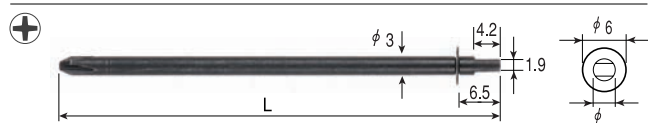


| Model No.        | Cross-sectional area of the tip | Application                                                   | Fitness to the screw drive |
|------------------|---------------------------------|---------------------------------------------------------------|----------------------------|
| STANDARD A14     | Small                           | All-round                                                     | ○                          |
| POWER BIT A14P   | Medium                          | For high-impact tools                                         | ○                          |
| TAPPING BIT A14H | Large                           | For screws with big cross recess (like pan head screws, etc.) | △                          |



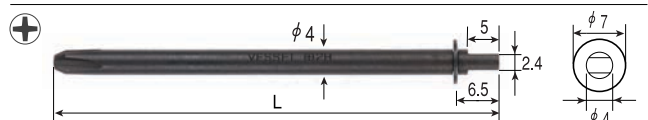
# Type A Industrial Bits

## No. A7



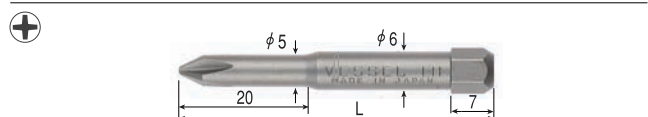
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 0× 36                         | H                                | 10            | 100           |
| 70                              | H                                | 10            | 100           |
| 100                             | H                                | 10            | 100           |
| ⊕ 1× 36                         | H                                | 10            | 100           |
| 70                              | H                                | 10            | 100           |
| 100                             | H                                | 10            | 100           |

## No. A9



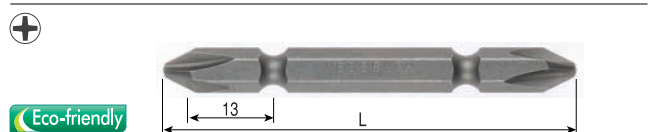
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1× 40                         | H                                | 10            | 100           |
| 70                              | H                                | 10            | 100           |
| ⊕ 2× 40                         | H                                | 10            | 100           |
| 70                              | H                                | 10            | 100           |

## No. A11



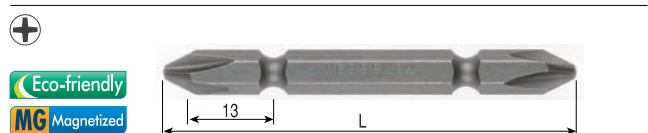
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1× 75                         | H                                | 10            | 100           |

## No. A14 Double End Bit



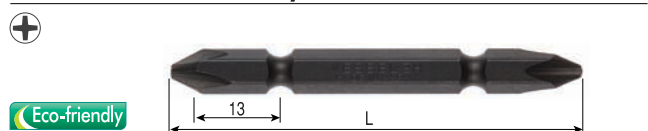
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1× 45                         | H                                | 10            | 100           |
| 65                              | H.G                              | 10            | 100           |
| 110                             | H.G                              | 10            | 100           |
| ⊕ 2× 45                         | X.H.G                            | 10            | 100           |
| 65                              | X.H.G.E                          | 10            | 100           |
| 110                             | X.H.G.E                          | 10            | 100           |
| 150                             | X.H.G.E                          | 10            | 100           |
| 200                             | X.H.G.E                          | 10            | 150           |
| 300                             | G                                | 10            | 100           |
| ⊕ 3× 45                         | X.H.E                            | 10            | 100           |
| 65                              | X.H.E                            | 10            | 100           |
| 110                             | H.E                              | 10            | 100           |

## No. M-A14 Double End Bit



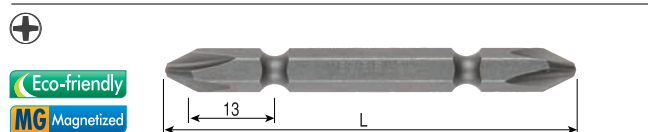
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1× 45                         | H                                | 10            | 100           |
| 65                              | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| ⊕ 2× 45                         | H.G                              | 10            | 100           |
| 65                              | H.G                              | 10            | 100           |
| 110                             | H.G                              | 10            | 100           |
| 150                             | H                                | 10            | 100           |

## No. A14H TAPPING BIT/ A14B



| Model No. | Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------|---------------------------------|----------------------------------|---------------|---------------|
| A14H      | ⊕ 2× 65                         | H                                | 10            | 100           |
| A14H      | 110                             | H                                | 10            | 100           |
| A14H      | 150                             | H                                | 10            | 100           |
| A14B      | ⊕ 2× 50                         | S                                | 10            | 100           |
| A14B      | 75                              | S                                | 10            | 100           |
| A14B      | 100                             | S                                | 10            | 100           |
| A14B      | 150                             | S                                | 10            | 100           |

## No. A14P Double End Bit



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 2× 65                         | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 150                             | H                                | 10            | 100           |

## No. AL14 ALFA BIT



H 6.35 mm



Eco-friendly  
MG Magnetized

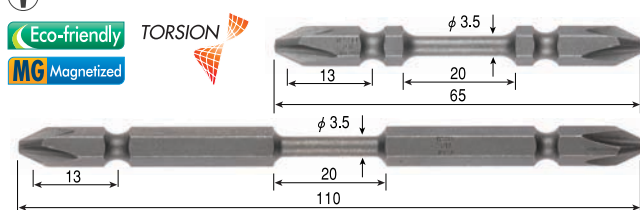


| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 2× 65                 | H                             | 10         | 100        |
| 110                     | H                             | 10         | 100        |

## No. AT14 TORSION BIT



Eco-friendly TORSION  
MG Magnetized

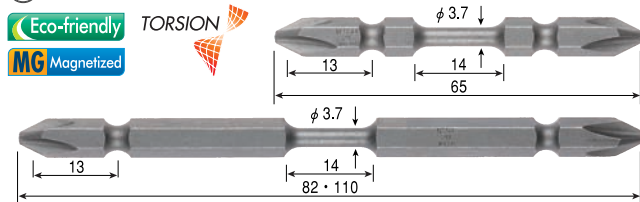


| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 2× 3.5×65             | H                             | 10         | 100        |
| 110                     | H                             | 10         | 100        |

## No. AT14P TORSION BIT



Eco-friendly TORSION  
MG Magnetized



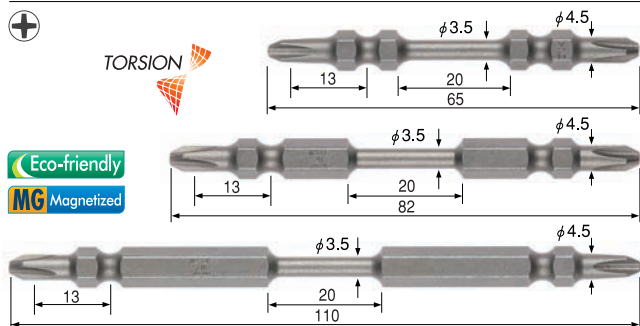
| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 2× 3.7×65             | X                             | 10         | 100        |
| 82                      | X                             | 10         | 100        |
| 110                     | X                             | 10         | 100        |

## No. ST14 SLENDER TORSION BIT

Patented



Eco-friendly TORSION  
MG Magnetized



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 1× 3.5×65             | H                             | 10         | 100        |
| ⊕ 2× 3.5×65             | H                             | 10         | 100        |
| 82                      | H                             | 10         | 100        |
| 110                     | H                             | 10         | 100        |

## No. AS14 SLENDER BIT



H 6.35 mm



Eco-friendly  
MG Magnetized



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 1× 65                 | H                             | 10         | 100        |
| ⊕ 2× 45                 | H                             | 10         | 100        |
| 65                      | H                             | 10         | 100        |
| 110                     | H                             | 10         | 100        |

## No. AZ14 GIZA BIT

Patented



Eco-friendly



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 2× 65                 | H                             | 10         | 100        |
| 110                     | H                             | 10         | 100        |
| 150                     | H                             | 10         | 100        |
| 200                     | H                             | 10         | 100        |

## No. A14 SUPADRIV® BIT



Eco-friendly

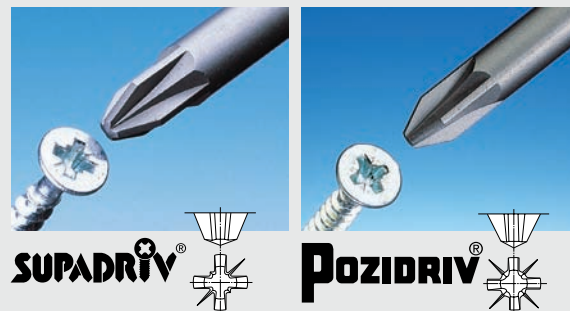


| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| SDV1× 65                | H                             | 10         | 100        |
| SDV2× 45                | H                             | 10         | 100        |
| 65                      | H                             | 10         | 100        |
| 110                     | H                             | 10         | 100        |
| SDV3× 65                | H                             | 10         | 100        |

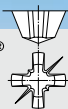
**SUPADRIV®** systems are patented and registered as the trademark of EIS corp. in U.K.  
We at VESSEL CO., INC. has a manufacturing license in Japan and selling same to the world.

## ONE POINT

The thickness of the four blades is equal and their drive surfaces are almost perpendicular, resulting in efficient torque transmission. They grip the screw head better than Philips tip and prevent harmful CAM-OUT.



**SUPADRIV®**



**POZIDRIV®**



SUPADRIV and POZIDRIV systems are patented and registered as the trademark of EIS corp. in U.K.  
We at VESSEL CO., INC. has a manufacturing license in Japan and selling same to the world.

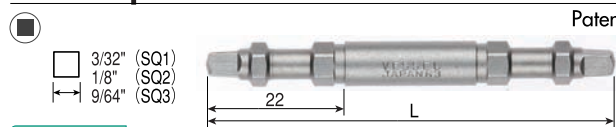
# Type A Industrial Bits

## No. A14 Square Double End Bit



H 6.35 mm

Patented



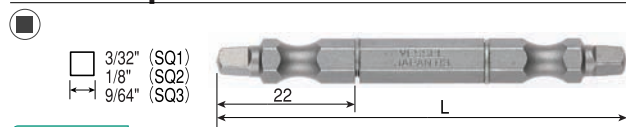
Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| SQ No.1× 65                     | H                                | 10            | 100           |
| SQ No.2× 65                     | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 150                             | H                                | 10            | 100           |
| SQ No.3× 65                     | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 150                             | H                                | 10            | 100           |

## No. A14R Square Double End Bit



H 6.35 mm



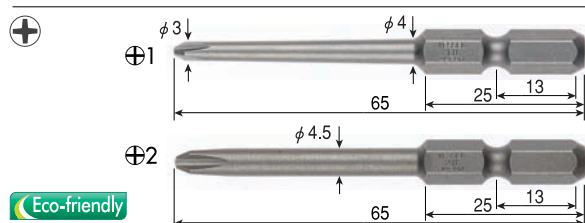
Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| SQ No.1× 65                     | H                                | 10            | 100           |
| SQ No.2× 65                     | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 150                             | H                                | 10            | 100           |
| SQ No.3× 65                     | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 150                             | H                                | 10            | 100           |

## No. A16 Bit



H 6.35 mm



Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| 1/8" × 65                       | H                                | 10            | 100           |
| 1/4" × 65                       | H                                | 10            | 100           |

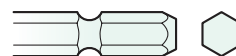
## No. A16 Hex Bit



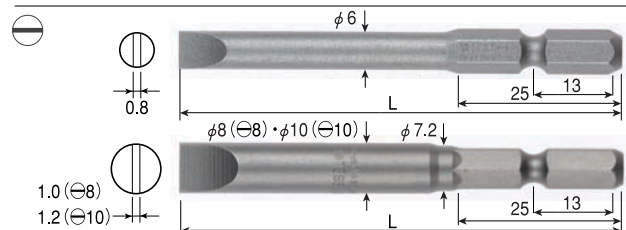
Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| A/F 2×65                        | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 2.5×65                          | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 3×65                            | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 4×65                            | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 5×65                            | G                                | 10            | 100           |
| 110                             | G                                | 10            | 100           |
| 6×65                            | G                                | 10            | 100           |
| 110                             | G                                | 10            | 100           |

## No. A16 Bit



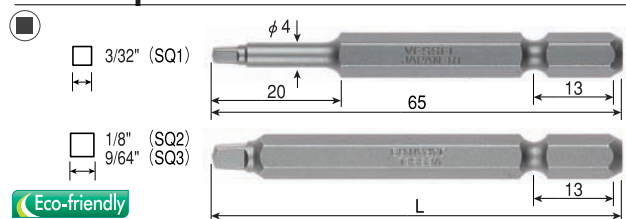
H 6.35 mm



Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| 1/8" × 45                       | G                                | 10            | 100           |
| 70                              | G                                | 10            | 100           |
| 1/4" × 45                       | G                                | 10            | 300           |
| 70                              | G                                | 10            | 250           |
| 1/2" × 52                       | G                                | 10            | 200           |
| 70                              | G                                | 10            | 200           |

## No. A16 Square Bit



Eco-friendly

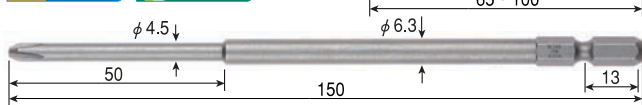
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| SQ No.1×4× 65                   | H                                | 10            | 100           |
| SQ No.2× 65                     | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 150                             | H                                | 10            | 100           |
| SQ No.3× 65                     | H                                | 10            | 100           |
| 110                             | H                                | 10            | 100           |
| 150                             | H                                | 10            | 100           |



## No. M-A16 Bit



MG Magnetized Eco-friendly



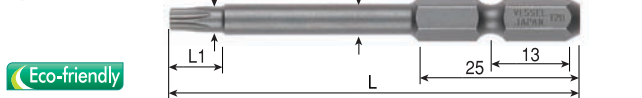
| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 2×4.5×65              | H                             | 10         | 100        |
| 100                     | H                             | 10         | 100        |
| 150                     | H                             | 10         | 100        |

## No. D81 Bit



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 2×82                  | X.H.E                         | 10         | 100        |

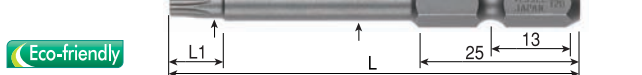
## No. V TORX Bit



| Size                    | mm   | d1 (mm) | L1 (mm) | d2 (mm) | Inner Ctn. |
|-------------------------|------|---------|---------|---------|------------|
| Tip×Overall Length (mm) |      |         |         |         |            |
| T6 × 65▲                | 1.65 | 1.95    | 6.5     | 4.0     | 10         |
| 110▲                    | 1.65 | 1.95    | 6.5     | 4.0     | 10         |
| T8 × 65▲                | 2.3  | 2.60    | 7.0     | 4.5     | 10         |
| 110▲                    | 2.3  | 2.60    | 7.0     | 4.5     | 10         |
| T10× 65                 | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| 110                     | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| T15× 65                 | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| 110                     | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| T20× 65                 | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| 110                     | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| T25× 65                 | 4.4  | 4.70    | 8.0     | 5.0     | 10         |
| 110                     | 4.4  | 4.70    | 8.0     | 5.0     | 10         |
| T27× 65                 | 4.96 | 5.26    | 8.0     | 5.5     | 10         |
| 110                     | 4.96 | 5.26    | 8.0     | 5.5     | 10         |
| T30× 65                 | 5.49 | 5.79    | 8.5     | 6.0     | 10         |
| 110                     | 5.49 | 5.79    | 8.5     | 6.0     | 10         |
| T40× 65                 | 6.6  | H6.35   | —       | H6.35   | 10         |
| 110                     | 6.6  | H6.35   | —       | H6.35   | 10         |

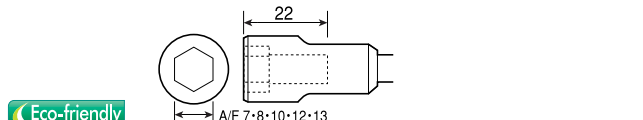
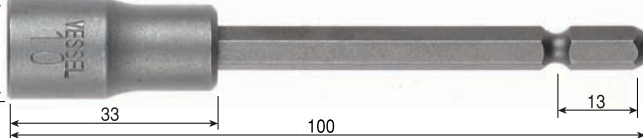
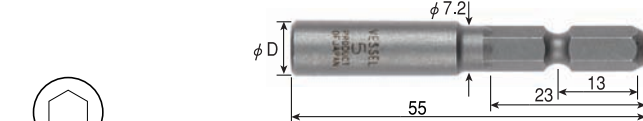
▲For the date of delivery, consult Vessel.

## No. V TORX Bit (Tamper-Proof)



| Size                    | mm   | d1 (mm) | L1 (mm) | d2 (mm) | Inner Ctn. |
|-------------------------|------|---------|---------|---------|------------|
| Tip×Overall Length (mm) |      |         |         |         |            |
| T8H × 65                | 2.3  | 2.60    | 7.0     | 4.5     | 10         |
| 110                     | 2.3  | 2.60    | 7.0     | 4.5     | 10         |
| T10H× 65                | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| 110                     | 2.72 | 3.02    | 7.5     | 4.5     | 10         |
| T15H× 65                | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| 110                     | 3.26 | 3.56    | 7.5     | 4.5     | 10         |
| T20H× 65                | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| 110                     | 3.84 | 4.14    | 7.5     | 5.0     | 10         |
| T25H× 65                | 4.4  | 4.70    | 8.0     | 5.0     | 10         |
| 110                     | 4.4  | 4.70    | 8.0     | 5.0     | 10         |
| T27H× 65                | 4.96 | 5.26    | 8.0     | 5.5     | 10         |
| 110                     | 4.96 | 5.26    | 8.0     | 5.5     | 10         |
| T30H× 65                | 5.49 | 5.79    | 8.5     | 6.0     | 10         |
| 110                     | 5.49 | 5.79    | 8.5     | 6.0     | 10         |
| T40H× 65                | 6.6  | H6.35   | —       | H6.35   | 10         |
| 110                     | 6.6  | H6.35   | —       | H6.35   | 10         |

## No. A20 Socket Bit



☆...Adopts a patented axial press-fit shank technique

| Size                    | D φ (mm) | Inner Ctn. | Outer Ctn. |
|-------------------------|----------|------------|------------|
| Tip×Overall Length (mm) |          |            |            |
| A/F 4.5× 55             | 7.5      | 10         | 250        |
| 5 × 55                  | 8.5      | 10         | 250        |
| 5.5× 55                 | 9        | 10         | 250        |
| 100                     | 9        | 10         | 250        |
| 6 × 55                  | 10       | 10         | 200        |
| 100                     | 10       | 10         | 200        |
| 7×11× 55                | 11       | 10         | 200        |
| 100                     | 11       | 10         | 150        |
| 7 × 60 ☆                | 13.5     | 10         | 200        |
| 100 ☆                   | 13.5     | 10         | 150        |
| 8 × 60 ☆                | 13.5     | 10         | 200        |
| 100 ☆                   | 13.5     | 10         | 150        |
| 9 × 60 ☆                | 15       | 10         | 150        |
| 9.6× 60 ☆               | 15       | 10         | 150        |
| 10 × 60 ☆               | 16       | 10         | 150        |
| 100 ☆                   | 16       | 10         | 100        |
| 11 × 60 ☆               | 17       | 10         | 150        |
| 12 × 60 ☆               | 18       | 10         | 100        |
| 100 ☆                   | 18       | 10         | 100        |
| 13 × 60 ☆               | 19       | 10         | 100        |
| 100 ☆                   | 19       | 10         | 50         |
| 14 × 60 ☆               | 20       | 10         | 100        |
| 15 × 60 ☆               | 21       | 10         | 50         |
| 17 × 60 ☆               | 23       | 10         | 50         |

## ONE POINT

### Prevents shank break

The shank and socket have been heat-treated to the best hardness and press-fit together. The socket part is strong against wear and shank against twisting, resulting in higher durability.

Normal type

Press-fit type

75 N·m

Comparison in breaking torque

107 N·m

# Type A Industrial Bits

## No. A20-5 Socket Bit

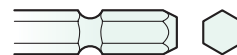


H 6.35 mm

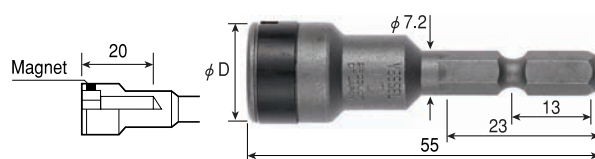


| Size                    | D $\phi$ | Inner Ctn. | Outer Ctn. |
|-------------------------|----------|------------|------------|
| Tip×Overall Length (mm) | (mm)     |            |            |
| A/F 10×50               | 16       | 10         | 150        |

## No. MA20S Socket Bit (Side Magnet)

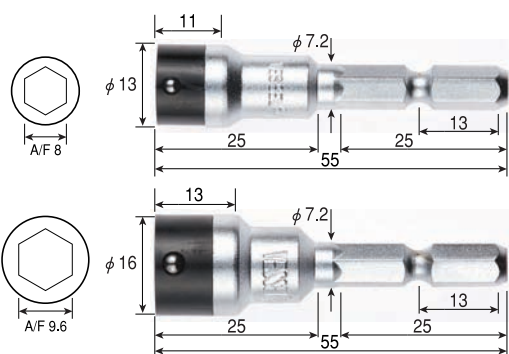


H 6.35 mm



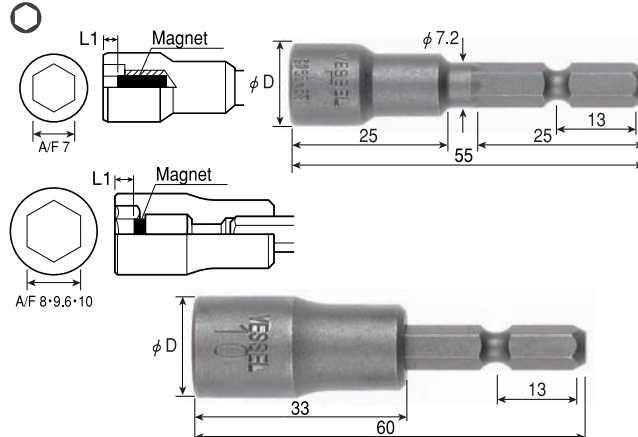
| Size                                          | D $\phi$ | Inner Ctn. | Outer Ctn. |
|-----------------------------------------------|----------|------------|------------|
| Tip×Overall Length (mm)                       | (mm)     |            |            |
| A/F 5/16"×55<br>(For screw diameter of 8 mm)  | 13       | 10         | 100        |
| A/F 3/8"×55<br>(For screw diameter of 9.6 mm) | 16       | 10         | 100        |
| A/F 10mm×55                                   | 16       | 10         | 100        |

## No. SB Nut Setter (Ball Lock)



| Size                                      | Inner Ctn. | Outer Ctn. |
|-------------------------------------------|------------|------------|
| Tip×Overall Length (mm)                   |            |            |
| A/F 5/16"×55 (For screw diameter of 5 mm) | 5          | 50         |
| A/F 3/8"×55 (For screw diameter of 6 mm)  | 5          | 50         |

## No. MA20 Socket Bit (Press-Fit Magnet)



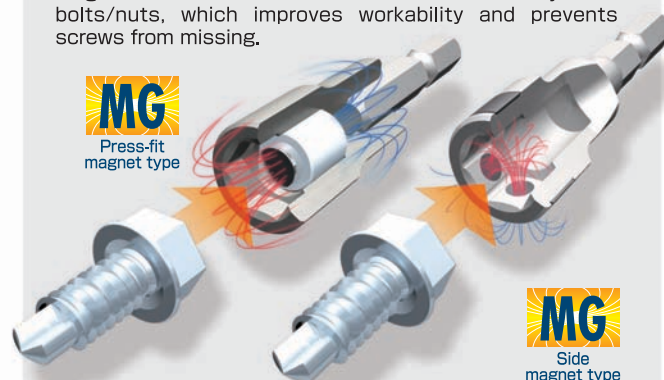
☆...Adopts a patented axial press-fit shank technique

| Size                                     | D $\phi$ | L1 (mm) | Inner Ctn. | Outer Ctn. |
|------------------------------------------|----------|---------|------------|------------|
| Tip×Overall Length (mm)                  | (mm)     |         |            |            |
| A/F 7 ×55 (For screw diameter of 4mm)    | 13       | 2.5     | 10         | 200        |
| A/F 8 ×60 (For screw diameter of 5mm) ☆  | 13.5     | 3.17    | 10         | 150        |
| A/F 9.6×60 (For screw diameter of 6mm) ☆ | 15       | 3.96    | 10         | 150        |
| A/F 10 ×60 (For screw diameter of 6mm) ☆ | 16       | 3.96    | 10         | 150        |

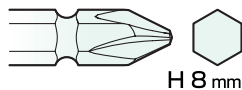
## ONE POINT

### Magnet holds the bolts/nuts

Magnet settled on the inside of the socket securely holds bolts/nuts, which improves workability and prevents screws from missing.



## No. A15 Double End Bit



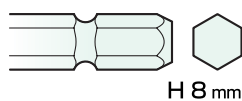
H 8 mm



Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 2× 65                         | G                                | 10            | 250           |
| 110                             | G                                | 10            | 150           |
| ⊕ 3× 65                         | E                                | 10            | 250           |
| 110                             | E                                | 10            | 150           |

## No. A19 Hex Bit



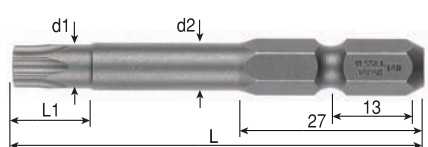
H 8 mm



Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| A/F 5×65                        | G                                | 10            | 250           |
| 6×65                            | G                                | 10            | 250           |
| 130                             | G                                | 10            | 100           |
| 8×65                            | G                                | 10            | 250           |
| 130                             | G                                | 10            | 100           |
| 10×65                           | S                                | 10            | 200           |
| 130                             | S                                | 10            | 100           |

## No. V5 TORX Bit



Eco-friendly

| Size<br>Tip×Overall Length (mm) |  mm | d1<br>(mm) | L1<br>(mm) | d2<br>(mm) | Inner<br>Ctn. |
|---------------------------------|----------------------------------------------------------------------------------------|------------|------------|------------|---------------|
| T25× 65                         | 4.4                                                                                    | 4.70       | 10.0       | 6.0        | 10            |
| 110                             | 4.4                                                                                    | 4.70       | 10.0       | 6.0        | 10            |
| T27× 65                         | 4.96                                                                                   | 5.26       | 11.5       | 6.5        | 10            |
| 110                             | 4.96                                                                                   | 5.26       | 11.5       | 6.5        | 10            |
| T30× 65                         | 5.49                                                                                   | 5.79       | 11.5       | 6.5        | 10            |
| 110                             | 5.49                                                                                   | 5.79       | 11.5       | 6.5        | 10            |
| T40× 65                         | 6.6                                                                                    | 6.90       | 11.5       | 7.5        | 10            |
| 110                             | 6.6                                                                                    | 6.90       | 11.5       | 7.5        | 10            |
| T45× 65                         | 7.77                                                                                   | 8.0        | —          | 8.0        | 10            |
| 110                             | 7.77                                                                                   | 8.0        | —          | 8.0        | 10            |
| T50× 65                         | 8.79                                                                                   | H8         | —          | H8         | 10            |
| 110                             | 8.79                                                                                   | H8         | —          | H8         | 10            |

# Order-Made Sockets

If you cannot find an appropriate socket bit among our standard line-up, VESSEL can also produce specially designed models for your application.

## How to request for customized socket bits

### Shape of the socket drive



HEX  
(6 point)

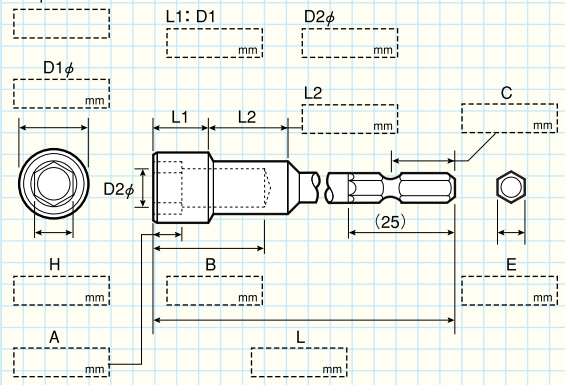


HEX  
(12 point)



HEX  
(Surface contact type)

### Shape of the socket drive



### Hardness

Sample screw Available/ Not available

### Tolerance

Official drawing Available/ Not available

### Surface treatment

Black oxide finish/ Shot blasting

### Quantity



## Type B Industrial Bits

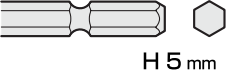
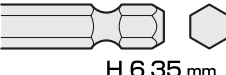
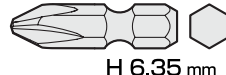
We have achieved a compilation of 55 years of industrial bit manufacturing, and produce high-precision, highly stable bits with low deviation and axial runout. Our unique metal alloy and heat treatment technology has produced truly specialized bits for assembly.

High precision bit tips...

We pursue an aggressive licensing agreement policy to ensure the manufacture of bit tips with specifications that allow for the most appropriate fit to screw heads. Furthermore, technological exchange with screw punch manufacturers has enabled us to provide bits that support the continual changes in screw recess.



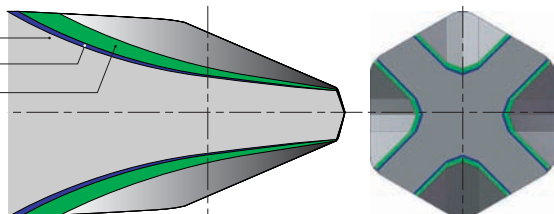
The Type B insertion entry is designed to work with the dimensions most commonly used by air tool manufacturers. There are some models that will not accept insertion of the double-head types, depending on the shape of the insertion chuck. Please make your selections while referring to the specifications table.

| Shape                                                                                            | Model No.    | Page | Applicable models                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------|--------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                  |              |      | Air Screwdriver                                                                                                                                                                                                                                                                                            | Electric Screwdriver Torque Control Screwdriver                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <br>H 5 mm      | <b>B36</b>   | 078  | <b>VESSEL</b><br>GT-S5TFR·S5TFB·S5TFG·S4TFR·S4TFS·S4TFG<br><br><b>Uryu</b><br>US-40·3.5A·4·4PB, US-LT20A series·LT30A series·LT30AL series·LT40A series·LT40AL series<br><br><b>Yokota</b> YD-3·4·400SC                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <br>H 5 mm      | <b>B34</b>   | 078  | <b>VESSEL</b><br>GT-S4TFR·S4TFS·S4TFG·S5TFR·S5TFB·5TFG<br><br><b>Uryu</b><br>US-40·3.5A·4·4PB<br>(Except B44 Socket Bit Overall Length: 70 mm)<br>US-LT20A series·LT30A series·LT30AL series·LT40A series·LT40AL series<br><br><b>Yokota</b><br>YD-3·4·400SC                                               | <b>Hios</b><br>VZ-1812·1812PS·1820·1820PS·3007·3007PS·3012·3012PS·3012·3012PS<br><br><b>Delvo</b><br>DLV-3121·3131·3141·3151·7120·7130·7140·7220·7231·7241·8120·8130·8140·8220·8231·8241·7122·7132·7142·7222·7232·7242·8122·8132·8142·8222·8232·8242·30LL·30SL·30HL<br><br><b>Panasonic</b><br>FE-A310S·A310MH·A310L·A111L·A111MH·A111M·A710AXN·A710MHN<br><br><b>Kanon</b><br>9K-130P·140P·130PF·131L·131LF·131P·131PF·3K-120L·180L·180LF·120P·180P·180PF·5KD-200·300 |
|                                                                                                  | <b>N</b>     |      |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>B44</b>   | 080  |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <br>H 6.35 mm  | <b>B43</b>   | 078  | <b>Uryu</b><br>UX·U·UW·ALPHA·UBP·UL·ULT·UEP Screwdrivers.<br>US-350W·45W·450WB·5W·50W·6W·350PW·450PW·5PW·6PW·652PW·50·5PB·5<br>US-LT60P·LT31PB·LT41PB·LT51PB·LT20B·LT50B·LT30BL·LT40BL·LT30B·LT40B·LT10B                                                                                                   | ●Following Tool models are applicable only for the single end bits.<br><br><b>Hios</b><br>CL-9000, VZ-4504·4504PS·4506·4506PS<br><br><b>Delvo</b><br>DLV-8150·7251·8251·8152·7252·8252<br><br><b>Kanon</b><br>N6·N12·N20·N30·N50·N100STDK<br>N6·N12·N20·N30·N50·N100LTDK<br>N10·N20·N50DPSK<br>N10·N20·N50DPSK II<br>9K-150P                                                                                                                                           |
|                                                                                                  | <b>B43P</b>  |      |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>B43H</b>  | 079  | <b>NPK</b><br>ND-5LPX·6LFAX·6HPAX·6HSX<br>NPW-450A·DXO·550A·DXO·450EA·DXO·450A·TDX·550A·TDX                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>B43B</b>  |      |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>BT43</b>  | 078  | <b>Fuji Kuki</b><br>FPW-330SD-1·440D-2·550D-2·660D-3·770D-2·400SD-1·440SD-1·550SD-1·660SD-1<br>FET-44D-2·55D-2·66D-2                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>BT43P</b> | 079  | FW-44SD-1·66SD-1·44SAD-1·66SAD-1·44PD-1·66PD-1·44PAD-1·66PAD-1·5SXD-7·5SXD-8·6SXD-6·5PXD-6·6PLD-1·6PXD-6·6PHD-1·6PMD-1·FD-4·5·4P·5P·4PH-1<br>FPT-440D-1·440D-1L·550D-1·550D-1L·660D-1·660D-1L·440SD-1·550SD-1·660SD-1                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <br>H 6.35 mm | <b>B35</b>   | 079  |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>B39</b>   | 080  |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>J</b>     | 079  | <b>Yutani</b><br>DH-6PL·6PLE·4.5PEB·4.5SB·6SELB<br>D-600SHEB·6SPBLE·6WSHPEB·8WPE·5WPEB·6SSBEL·602B·6WSHSEB·6SPBL                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>B45</b>   | 081  |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>MB45</b>  | 081  | <b>Yokota</b><br>TKa70A·80A·YLa70A·80A·Y-41A·46A<br>YX-180SA·280SA·380SA·500SA·180A·280A·280CA·380A·500A·80A·500CA<br>YEX-150A·501A·150SA·300SA·500SA·100SA·120A·120SA<br>YD-400SCA·500SCA·5PHCA·3A·4A·5A·6WAZK·65PZ·65PTZ·650PZ·40PZ·4.5PZK·600PZ·4.5SZ·4.5LAZ·600SZ·670A·670A-F·670A-R·670A-RF<br>Y-40SA |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>MB45S</b> |      |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>MB45D</b> |      |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>HB</b>    | 067  |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                  | <b>HBM</b>   |      | <b>Atlas-Copco</b><br>LUM series·LUF series·TWIST series·ELI series·ETB series·COMBI series·EP series                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <br>H 6.35 mm | <b>B39</b>   | 080  | <b>VESSEL</b><br>GT·H4RC·H5RC·S6CD·PLRC<br><br><b>Uryu</b><br>US-3.5ACB·4CA·5CA·LT30B-11C·17C, LT40B-08C·05C·15C<br><br><b>Yutani</b> D-6WHCL<br><br><b>Yokota</b><br>YD-6AL<br>YX-280CA·500CA                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

We also provide "Power" (P) and "High Power" (H) bit tips for heavy industrial use.

B14 STANDARD BIT  
 B14P POWER BIT  
 B14H TAPPING BIT

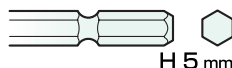
The degree of angle used in the rising cuts of the flutes between the four wings has been slightly changed for the Power (P) and High Power (H) bits. This increases the surface area of the cross section of the bit tips for additional strength and durability.



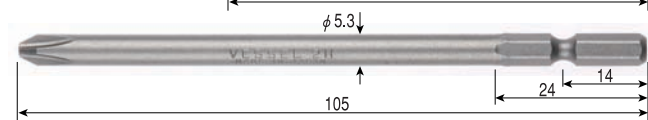
| Model No.        | Cross-sectional area of the tip | Application                                                   | Fitness to the screw drive |
|------------------|---------------------------------|---------------------------------------------------------------|----------------------------|
| STANDARD B43     | Small                           | All-round                                                     | ◎                          |
| POWER BIT B43P   | Medium                          | For high-impact tools                                         | ○                          |
| TAPPING BIT B43H | Large                           | For screws with big cross recess (like pan head screws, etc.) | △                          |

# Type B Industrial Bits

## No. B34 Bit



Eco-friendly

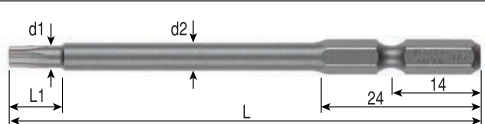


| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1 × 70                        | X.H                              | 10            | 100           |
| 100                             | X.H                              | 10            | 100           |
| 150                             | H                                | 10            | 100           |
| ⊕ 1×4 × 70                      | H                                | 10            | 100           |
| ⊕ 1×5.3×105                     | H                                | 10            | 100           |
| 120                             | X.H                              | 10            | 100           |
| 125                             | X                                | 10            | 100           |
| ⊕ 2 × 70                        | X.H                              | 10            | 100           |
| 100                             | X.H                              | 10            | 100           |
| 150                             | H                                | 10            | 100           |
| 200                             | H                                | 10            | 100           |
| ⊕ 2×4.5× 70                     | H                                | 10            | 100           |
| ⊕ 2×5.3×105                     | H                                | 10            | 100           |
| 120                             | H                                | 10            | 100           |
| A/F 2 × 70                      | H                                | 10            | 100           |
| 2.5× 70                         | H                                | 10            | 100           |
| 3 × 70                          | H                                | 10            | 100           |
| 4 × 70                          | H                                | 10            | 100           |
| 5 × 70                          | H                                | 10            | 100           |

## No. N TORX Bit



Eco-friendly



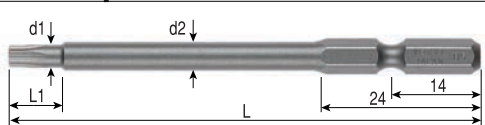
| Size<br>Tip×Overall Length (mm) | mm   | d1<br>(mm) | L1<br>(mm) | d2<br>(mm) | Inner<br>Ctn. |
|---------------------------------|------|------------|------------|------------|---------------|
| T5 × 75                         | 1.37 | 1.67       | 6.5        | 4.0        | 10            |
| 100                             | 1.37 | 1.67       | 6.5        | 4.0        | 10            |
| T6 × 75                         | 1.65 | 1.95       | 6.5        | 4.0        | 10            |
| 100                             | 1.65 | 1.95       | 6.5        | 4.0        | 10            |
| T8 × 75                         | 2.3  | 2.60       | 7.0        | 4.5        | 10            |
| 100                             | 2.3  | 2.60       | 7.0        | 4.5        | 10            |
| T10× 75                         | 2.72 | 3.02       | 7.5        | 4.5        | 10            |
| 100                             | 2.72 | 3.02       | 7.5        | 4.5        | 10            |
| T15× 75                         | 3.26 | 3.56       | 7.5        | 4.5        | 10            |
| 100                             | 3.26 | 3.56       | 7.5        | 4.5        | 10            |
| T20× 75                         | 3.84 | 4.14       | 7.5        | 5.0        | 10            |
| 100                             | 3.84 | 4.14       | 7.5        | 5.0        | 10            |
| T25× 75                         | 4.4  | 4.70       | 8.0        | 5.0        | 10            |
| 100                             | 4.4  | 4.70       | 8.0        | 5.0        | 10            |
| T27× 75                         | 4.96 | 5.26       | 8.0        | 5.5        | 10            |
| 100                             | 4.96 | 5.26       | 8.0        | 5.5        | 10            |

▲For the date of delivery, consult Vessel.

## No. N TORX Bit (Tamper-Proof)



Eco-friendly

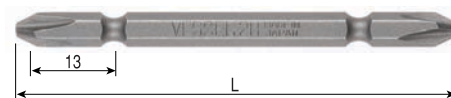


| Size<br>Tip×Overall Length (mm) | mm   | d1<br>(mm) | L1<br>(mm) | d2<br>(mm) | Inner<br>Ctn. |
|---------------------------------|------|------------|------------|------------|---------------|
| T10H× 75                        | 2.72 | 3.02       | 7.5        | 4.5        | 10            |
| 100                             | 2.72 | 3.02       | 7.5        | 4.5        | 10            |
| T15H× 75                        | 3.26 | 3.56       | 7.5        | 4.5        | 10            |
| 100                             | 3.26 | 3.56       | 7.5        | 4.5        | 10            |
| T20H× 75                        | 3.84 | 4.14       | 7.5        | 5.0        | 10            |
| 100                             | 3.84 | 4.14       | 7.5        | 5.0        | 10            |
| T25H× 75                        | 4.4  | 4.70       | 8.0        | 5.0        | 10            |
| 100                             | 4.4  | 4.70       | 8.0        | 5.0        | 10            |

## No. B36 Double End Bit



Eco-friendly



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1 × 70                        | X.H                              | 10            | 100           |
| 100                             | X.H                              | 10            | 100           |
| ⊕ 2 × 70                        | H                                | 10            | 100           |
| 100                             | H                                | 10            | 100           |
| 150                             | X.H                              | 10            | 100           |
| 200                             | H                                | 10            | 100           |

## No. B43 Double End Bit



Eco-friendly



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1 × 75                        | H                                | 10            | 100           |
| ⊕ 2 × 50                        | X.H.E                            | 10            | 100           |
| 75                              | X.H.G.E                          | 10            | 100           |
| 100                             | X.H.G.E                          | 10            | 100           |
| 150                             | X.H.G                            | 10            | 100           |
| 200                             | G                                | 10            | 100           |
| ⊕ 3 × 75                        | H.E                              | 10            | 100           |
| 100                             | H.E                              | 10            | 100           |

## No. B43P Double End Bit

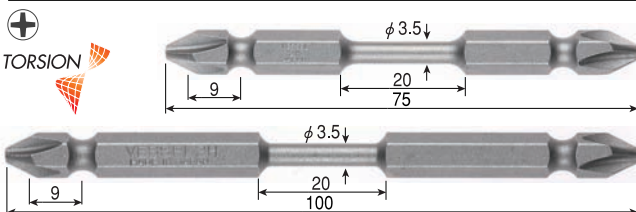


Eco-friendly



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 2 × 75                        | H                                | 10            | 100           |
| 100                             | H                                | 10            | 100           |

## No. BT43 TORSION Bit

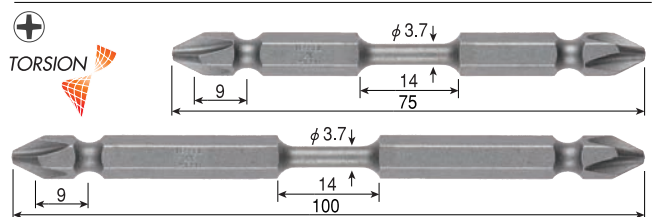


Eco-friendly

| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 2×3.5× 75                     | H                                | 10            | 100           |
| 100                             | H                                | 10            | 100           |



## No. BT43P TORSION Bit



Eco-friendly

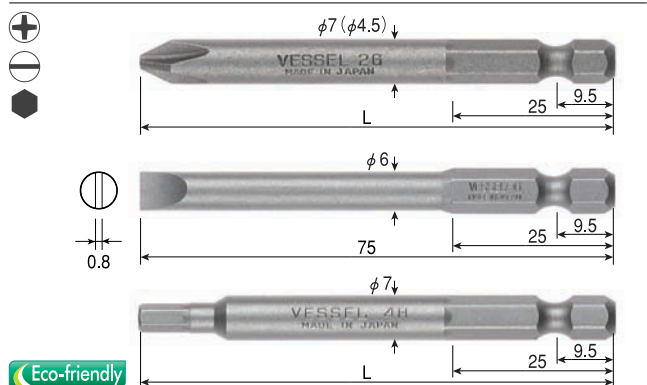
| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 2×3.7× 75             | X                             | 10         | 100        |
| 100                     | X                             | 10         | 100        |

## No. B43H TAPPING Bit B43B



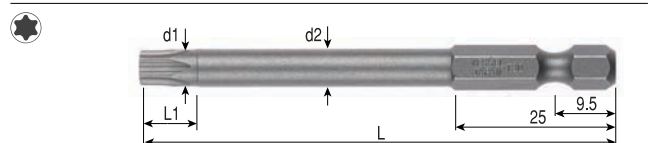
| Model No. | Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-----------|-------------------------|-------------------------------|------------|------------|
|           | Tip×Overall Length (mm) |                               |            |            |
| B43H      | ⊕ 2× 75                 | H                             | 10         | 100        |
|           | 100                     | H                             | 10         | 100        |
|           | 150                     | H                             | 10         | 100        |
| B43B      | ⊕ 2× 50                 | S                             | 10         | 100        |
|           | 75                      | S                             | 10         | 100        |
|           | 100                     | S                             | 10         | 100        |
|           | 150                     | S                             | 10         | 100        |

## No. B35 Bit



| Size                    | Heat treatment classification | Inner Ctn. | Outer Ctn. |
|-------------------------|-------------------------------|------------|------------|
| Tip×Overall Length (mm) |                               |            |            |
| ⊕ 1 × 50                | X.H                           | 10         | 100        |
| 75                      | X.H                           | 10         | 100        |
| ⊕ 1×4.5×100             | H                             | 10         | 100        |
| ⊕ 2 × 50                | X.G                           | 10         | 100        |
| 75                      | X.H.G.E                       | 10         | 100        |
| 100                     | H.G.E                         | 10         | 100        |
| 150                     | H.G.E                         | 10         | 100        |
| ⊕ 2×4.5×100             | H                             | 10         | 100        |
| ⊕ 3 × 75                | H.E                           | 10         | 100        |
| 100                     | H.E                           | 10         | 100        |
| 150                     | G                             | 10         | 100        |
| ⊖ 6 × 75                | E                             | 10         | 100        |
| A/F 2 × 75              | H                             | 10         | 100        |
| 100                     | H                             | 10         | 100        |
| 2.5× 75                 | H                             | 10         | 100        |
| 100                     | H                             | 10         | 100        |
| 3 × 75                  | H                             | 10         | 100        |
| 100                     | H                             | 10         | 100        |
| 4 × 75                  | H                             | 10         | 100        |
| 100                     | H                             | 10         | 100        |
| 5 × 75                  | G                             | 10         | 100        |
| 100                     | G                             | 10         | 100        |
| 6 × 75                  | G                             | 10         | 100        |
| 100                     | G                             | 10         | 100        |

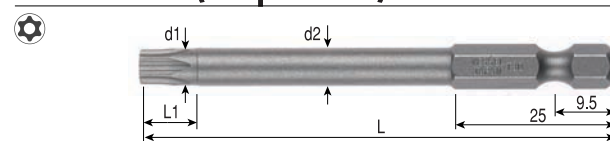
## No. J TORX Bit



Eco-friendly

| Size                    | d1 (mm) | L1 (mm) | d2 (mm) | Inner Ctn. |
|-------------------------|---------|---------|---------|------------|
| Tip×Overall Length (mm) |         |         |         |            |
| T6 × 75                 | 1.65    | 1.95    | 6.5     | 4.0        |
| 100                     | 1.65    | 1.95    | 6.5     | 4.0        |
| T8 × 75                 | 2.3     | 2.60    | 7.0     | 4.5        |
| 100                     | 2.3     | 2.60    | 7.0     | 4.5        |
| T10× 75                 | 2.72    | 3.02    | 7.5     | 4.5        |
| 100                     | 2.72    | 3.02    | 7.5     | 4.5        |
| T15× 75                 | 3.26    | 3.56    | 7.5     | 4.5        |
| 100                     | 3.26    | 3.56    | 7.5     | 4.5        |
| T20× 75                 | 3.84    | 4.14    | 7.5     | 5.0        |
| 100                     | 3.84    | 4.14    | 7.5     | 5.0        |
| T25× 75                 | 4.4     | 4.70    | 8.0     | 5.0        |
| 100                     | 4.4     | 4.70    | 8.0     | 5.0        |
| T27× 75                 | 4.96    | 5.26    | 8.0     | 5.5        |
| 100                     | 4.96    | 5.26    | 8.0     | 5.5        |
| T30× 75                 | 5.49    | 5.79    | 8.5     | 6.0        |
| 100                     | 5.49    | 5.79    | 8.5     | 6.0        |
| T40× 75                 | 6.6     | —       | 7.0     | 10         |
| 100                     | 6.6     | —       | 7.0     | 10         |
| T45× 75                 | 7.77    | —       | 8.0     | 10         |
| 100                     | 7.77    | —       | 8.0     | 10         |

## No. J TORX Bit (Tamper-Proof)

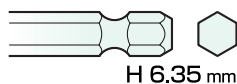


Eco-friendly

| Size                    | d1 (mm) | L1 (mm) | d2 (mm) | Inner Ctn. |
|-------------------------|---------|---------|---------|------------|
| Tip×Overall Length (mm) |         |         |         |            |
| T6H × 75                | 1.65    | 1.95    | 6.5     | 4.0        |
| 100                     | 1.65    | 1.95    | 6.5     | 4.0        |
| T8H × 75                | 2.3     | 2.60    | 7.0     | 4.5        |
| 100                     | 2.3     | 2.60    | 7.0     | 4.5        |
| T10H× 75                | 2.72    | 3.02    | 7.5     | 4.5        |
| 100                     | 2.72    | 3.02    | 7.5     | 4.5        |
| T15H× 75                | 3.26    | 3.56    | 7.5     | 4.5        |
| 100                     | 3.26    | 3.56    | 7.5     | 4.5        |
| T20H× 75                | 3.84    | 4.14    | 7.5     | 5.0        |
| 100                     | 3.84    | 4.14    | 7.5     | 5.0        |
| T25H× 75                | 4.4     | 4.70    | 8.0     | 5.0        |
| 100                     | 4.4     | 4.70    | 8.0     | 5.0        |
| T27H× 75                | 4.96    | 5.26    | 8.0     | 5.5        |
| 100                     | 4.96    | 5.26    | 8.0     | 5.5        |
| T30H× 75                | 5.49    | 5.79    | 8.5     | 6.0        |
| 100                     | 5.49    | 5.79    | 8.5     | 6.0        |
| T40H× 75                | 6.6     | —       | 7.0     | 10         |
| 100                     | 6.6     | —       | 7.0     | 10         |

# Type B Industrial Bits

## No. B35 SUPADRIV Bit



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| SDV1× 75                        | H                                | 10            | 100           |
| SDV2× 75                        | H                                | 10            | 100           |
| 100                             | H                                | 10            | 100           |
| SDV3× 75                        | H                                | 10            | 100           |

## No. B35 POZIDRIV Bit



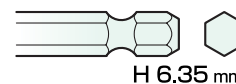
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| PZ1×50                          | H                                | 10            | 100           |
| PZ2×50                          | H                                | 10            | 100           |
| PZ3×50                          | H                                | 10            | 100           |

## No. B39 Bit



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1×23                          | H                                | 10            | 100           |
| ⊕ 2×23                          | H                                | 10            | 100           |
| 40                              | H                                | 10            | 100           |
| 100                             | H                                | 10            | 100           |

## No. B39 3-Flute Fastening Bit



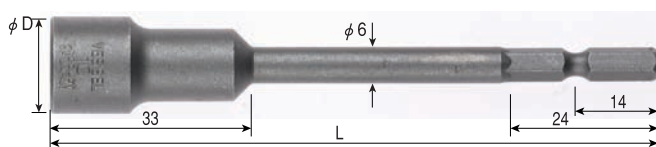
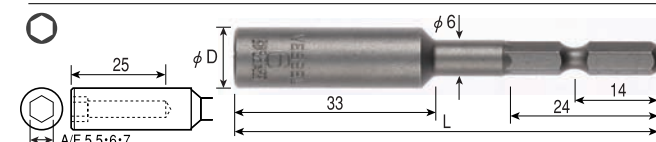
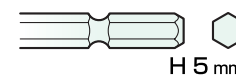
### 3-Flute Fastening Bit

For fastening screws used with aircraft, special vehicles, etc.



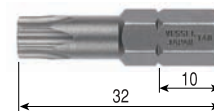
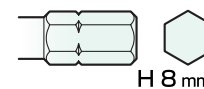
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| TW1×40                          | —                                | 10            | 100           |
| TW2×40                          | —                                | 10            | 100           |
| TW3×40                          | —                                | 10            | 100           |
| TW4×40                          | —                                | 10            | 100           |
| TW5×40                          | —                                | 10            | 100           |

## No. B44 Socket Bit



| Size<br>Tip×Overall Length (mm) | D φ<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|-------------|---------------|---------------|
| A/F 5.5× 70                     | 9           | 10            | 250           |
| 100                             | 9           | 10            | 250           |
| 6× 70                           | 10          | 10            | 200           |
| 100                             | 10          | 10            | 200           |
| 7× 70                           | 11          | 10            | 200           |
| 100                             | 11          | 10            | 150           |
| 8× 70                           | 13          | 10            | 200           |
| 100                             | 13          | 10            | 150           |
| 10×100                          | 16          | 10            | 100           |

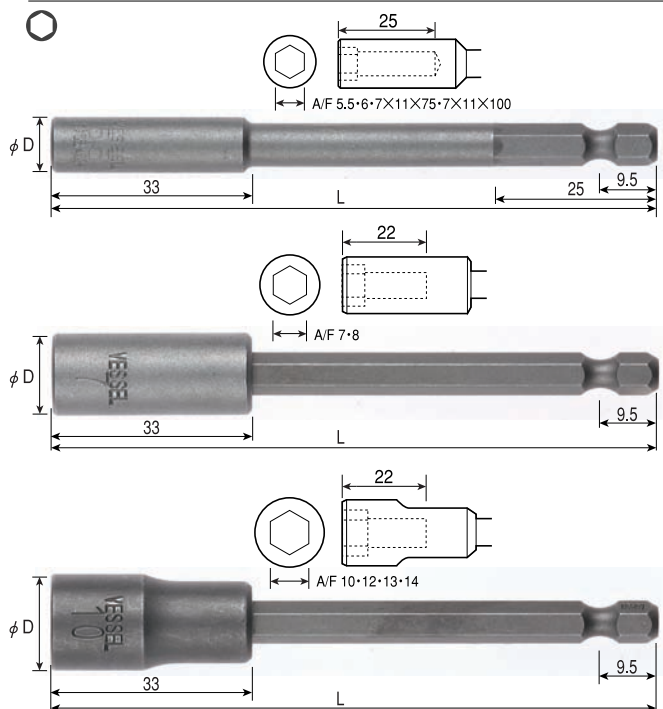
## No. A5 TORX Bit



| Size | mm   | Overall Length<br>(mm) | Inner<br>Ctn. |
|------|------|------------------------|---------------|
| T30  | 5.49 | 32                     | 10            |
| T40  | 6.6  | 32                     | 10            |
| T45  | 7.77 | 32                     | 10            |
| T50  | 8.79 | 32                     | 10            |

## No. B45 Socket Bit

H 6.35 mm

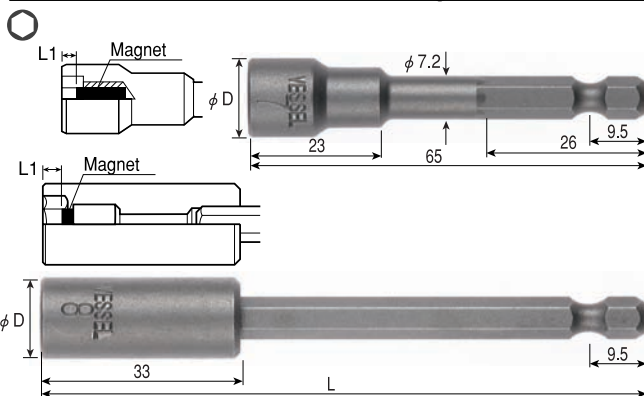


Eco-friendly

☆...Adopts a patented axial press-fit shank technique

| Size<br>Tip×Overall Length (mm) | D φ<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|-------------|---------------|---------------|
| A/F 5.5× 75                     | 9           | 10            | 250           |
| 100                             | 9           | 10            | 250           |
| 6×100                           | 10          | 10            | 200           |
| 7×11× 75                        | 11          | 10            | 200           |
| 100                             | 11          | 10            | 150           |
| 7× 75 ☆                         | 13.5        | 10            | 200           |
| 100 ☆                           | 13.5        | 10            | 150           |
| 8× 75 ☆                         | 13.5        | 10            | 200           |
| 100 ☆                           | 13.5        | 10            | 100           |
| 150 ☆                           | 13.5        | 10            | 100           |
| 10× 75 ☆                        | 16          | 10            | 150           |
| 100 ☆                           | 16          | 10            | 100           |
| 150 ☆                           | 16          | 10            | 100           |
| 12×100 ☆                        | 18          | 10            | 100           |
| 13× 75 ☆                        | 19          | 10            | 100           |
| 100 ☆                           | 19          | 10            | 100           |
| 14×100 ☆                        | 20          | 10            | 100           |

## No. MB45 Socket Bit (Press-Fit Magnet)

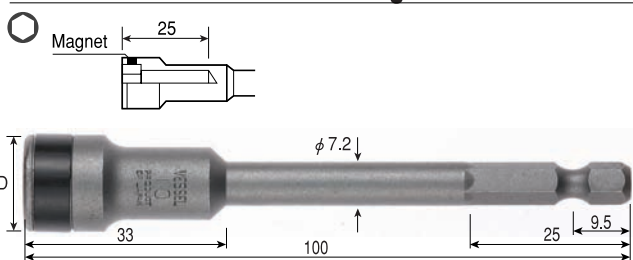


☆...Adopts a patented axial press-fit shank technique

| Size<br>Tip×Overall Length (mm) | D φ<br>(mm) | L1<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|-------------|------------|---------------|---------------|
| A/F 7× 65                       | 13          | 2.5        | 10            | 200           |
| A/F 8× 65 ☆                     | 13.5        | 3.17       | 10            | 150           |
| 75 ☆                            | 13.5        | 3.17       | 10            | 100           |
| 100 ☆                           | 13.5        | 3.17       | 10            | 100           |
| A/F 9.6× 65 ☆                   | 15          | 3.96       | 10            | 150           |
| A/F 10× 75 ☆                    | 16          | 3.96       | 10            | 100           |
| 100 ☆                           | 16          | 3.96       | 10            | 100           |

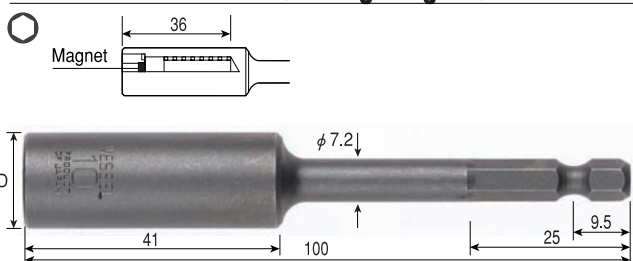
## No. MB45S Socket Bit (Side Magnet)

H 6.35 mm



| Size<br>Tip×Overall Length (mm) | D φ<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|-------------|---------------|---------------|
| A/F 8×100                       | 13          | 10            | 100           |
| A/F 10×100                      | 16          | 10            | 100           |

## No. MB45D Socket Bit (Sliding Magnet)



| Size<br>Tip×Overall Length (mm) | D φ<br>(mm) | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|-------------|---------------|---------------|
| A/F 8×100                       | 13          | 10            | 100           |
| A/F 10×100                      | 16          | 10            | 100           |

## ONE POINT

### Prevents shank break

The shank and socket have been heat-treated to the best hardness and press-fit together. The socket part is strong against wear and shank against twisting, resulting in higher durability.

Normal type

75 N·m

Press-fit type

Comparison in  
breaking torque

107 N·m



# Impact Driver Bits/Automatic Spiral Ratchet Driver Bits

## No. C50 Impact Driver Bit



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. |
|---------------------------------|----------------------------------|---------------|
| ⊕ 1×125                         | G                                | 10            |
| ⊕ 2×125                         | G                                | 10            |
| ⊕ 3×125                         | G                                | 10            |
| ⊖ 5×125                         | G                                | 10            |
| ⊖ 6×125                         | G                                | 10            |
| ⊖ 7×125                         | G                                | 10            |

Applicable models

VESSEL  
No.2300  
No.2600A

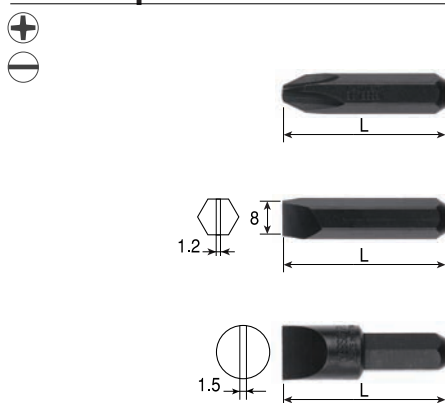
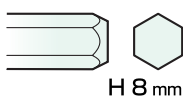


No.2300



No.2600A

## No. C51 Impact Driver Bit



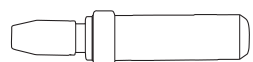
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 2×36                          | G                                | 10            | 250           |
| 80                              | G                                | 10            | 250           |
| ⊕ 3×36                          | E                                | 10            | 250           |
| 80                              | E                                | 10            | 250           |
| ⊕ 4×36                          | E                                | 10            | 250           |
| ⊖ 8×36                          | E                                | 10            | 250           |
| 80                              | E                                | 10            | 250           |
| ⊖ 10×36                         | E                                | 10            | 250           |
| 80                              | E                                | 10            | 200           |
| ⊖ 12×36                         | E                                | 10            | 200           |

Applicable models

VESSEL  
No.2400  
No.2500

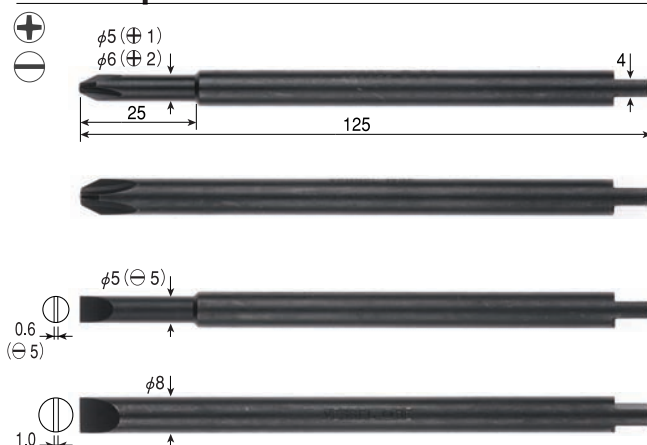
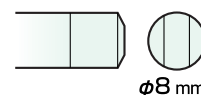


No.2400



No.2500

## No. C55 Impact Driver Bit



| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1×125                         | G                                | 10            | 100           |
| ⊕ 2×125                         | G                                | 10            | 100           |
| ⊕ 3×125                         | E                                | 10            | 100           |
| ⊖ 5×125                         | E                                | 10            | 100           |
| ⊖ 8×125                         | E                                | 10            | 100           |

Applicable models

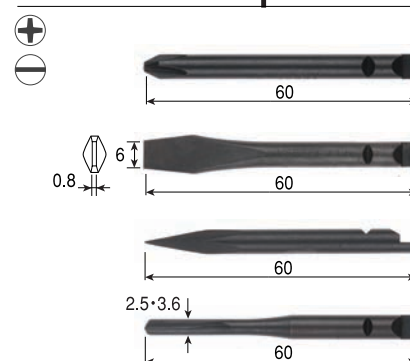
VESSEL  
No.2600



No.2600

| Model No.          | of items   | Set content               | Inner<br>Ctn. | Outer<br>Ctn. |
|--------------------|------------|---------------------------|---------------|---------------|
| 2500 bit set       | 1 for each | C51 ⊕2 ⊕3 ⊕4 ⊖10×36       | 1             | 50            |
| 2600 bit set       | 1 for each | C55 ⊕1 ⊕2 ⊕3 ⊖5 ⊖6 ⊖8×125 | 1             | 10            |
| 2300·2600A bit set | 1 for each | C50 ⊕1 ⊕2 ⊕3 ⊖5 ⊖6 ⊖7×125 | 1             | —             |

## No. C61 Automatic Spiral Ratchet Driver Bit ø5.5 mm



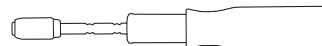
| Size<br>Tip×Overall Length (mm) | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------|----------------------------------|---------------|---------------|
| ⊕ 1×60                          | H                                | 10            | 100           |
| ⊕ 2×60                          | H                                | 10            | 100           |
| ⊖ 6×60                          | E                                | 10            | 100           |
| Awl×60                          | G                                | 10            | 100           |
| 2.5mm×60                        | wood drill                       | 10            | 100           |
| 3.6mm×60                        | wood drill                       | 10            | 100           |

Applicable models

VESSEL No.1500-240·300mm  
No.151230·No.153230  
Genkotsu #135·#155  
Tool Mate 1300·1400  
Rubycon No.124·No.135



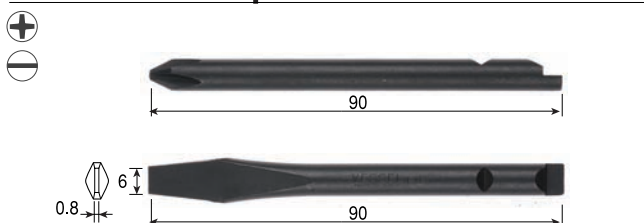
No.1500-300mm



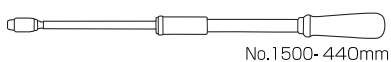
No.153230

# Automatic Spiral Ratchet Driver Bits/Short Bits

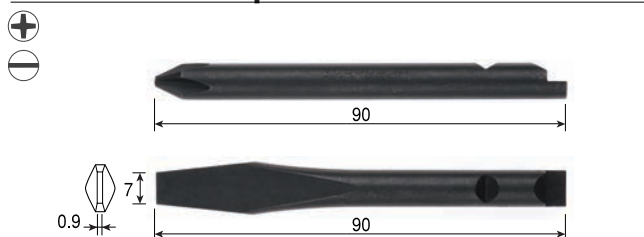
## No. C62 Automatic Spiral Ratchet Driver Bit $\phi 7$ mm



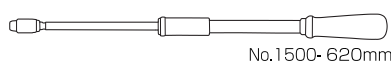
| Size<br>Tip×Overall Length (mm)                                           | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|---------------------------------------------------------------------------|----------------------------------|---------------|---------------|
| $\oplus 1 \times 90$                                                      | H                                | 10            | 300           |
| $\oplus 2 \times 90$                                                      | H                                | 10            | 300           |
| $\oplus 3 \times 90$                                                      | G                                | 10            | 300           |
| $\ominus 6 \times 90$                                                     | E                                | 10            | 250           |
| Applicable models                                                         |                                  |               |               |
| <b>VESSEL</b> No.1500-440mm<br><b>Genkotsu</b> #130<br><b>Rubycon</b> 144 |                                  |               |               |



## No. C63 Automatic Spiral Ratchet Driver Bit $\phi 8$ mm

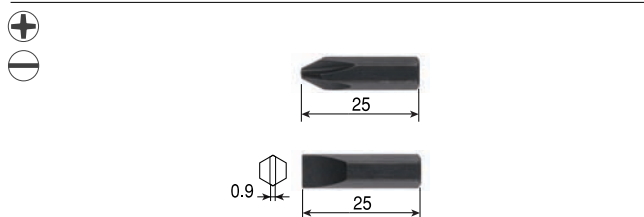


| Size<br>Tip×Overall Length (mm)                     | Heat treatment<br>classification | Inner<br>Ctn. | Outer<br>Ctn. |
|-----------------------------------------------------|----------------------------------|---------------|---------------|
| $\oplus 2 \times 90$                                | H                                | 10            | 250           |
| $\oplus 3 \times 90$                                | G                                | 10            | 250           |
| $\ominus 7 \times 90$                               | E                                | 10            | 200           |
| Applicable models                                   |                                  |               |               |
| <b>VESSEL</b> No.1500-620mm<br><b>Genkotsu</b> #131 |                                  |               |               |

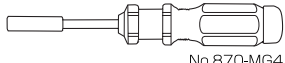


| Model No.            | of items   | Set content                                     | Inner<br>Ctn. | Outer<br>Ctn. |
|----------------------|------------|-------------------------------------------------|---------------|---------------|
| <b>C61-4 bit set</b> | 1 for each | C61 $\oplus 1$ $\oplus 2$ $\ominus 6$ Awl×60    | 1             | 100           |
| <b>C62-3 bit set</b> | 1 for each | C62 $\oplus 1$ $\oplus 2$ $\ominus 6 \times 90$ | 1             | 50            |
| <b>C63-3 bit set</b> | 1 for each | C63 $\oplus 2$ $\oplus 3$ $\ominus 7 \times 90$ | 1             | 50            |

## No. C91 Short Bit (For hand drivers) H 6.35 mm

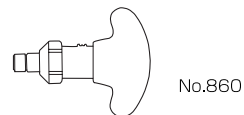


| Size<br>Tip×Overall Length (mm)                                                                                                     | Inner<br>Ctn. | Outer<br>Ctn. |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| $\oplus 2 \times 25$                                                                                                                | 10            | 100           |
| $\ominus 7 \times 25$                                                                                                               | 10            | 100           |
| Applicable models                                                                                                                   |               |               |
| <b>VESSEL</b> No. 870-MG4 · 6800-MG4<br><b>Shinki</b> No.1800 · 1600 · 1920 · 1930<br>6.35mm ● Available on all drivers with holder |               |               |



## No. C93 Short Bit (For hand drivers)

| Size<br>Tip×Overall Length (mm)                                                  | Inner<br>Ctn. | Outer<br>Ctn. |
|----------------------------------------------------------------------------------|---------------|---------------|
| $\ominus 6/ \oplus 2 \times 32$                                                  | 10            | 100           |
| Applicable models                                                                |               |               |
| <b>VESSEL</b> No. 860<br><b>Shinki</b> No.192 · 193 · 193FB · FB-19 · 777 · 6200 |               |               |



## Attachment for Impact Driver

### No. S6 TORX Socket

| Size<br>Tip×Overall Length (mm) | mm   | d1<br>(mm) |
|---------------------------------|------|------------|
| T30×75 ▲                        | 5.49 | 5.79       |
| T40×75 ▲                        | 6.6  | 6.9        |
| T45×75 ▲                        | 7.77 | 8.0        |
| T50×75 ▲                        | 8.79 | 10.0       |

▲For the date of delivery, consult Vessel.

### No. S8 TORX Socket

| Size<br>Tip×Overall Length (mm) | mm   | d1<br>(mm) |
|---------------------------------|------|------------|
| T40×75 ▲                        | 6.6  | 6.9        |
| T45×75 ▲                        | 7.77 | 8.0        |
| T50×75 ▲                        | 8.79 | 9.09       |

▲For the date of delivery, consult Vessel.

## Extension Bar

| Model No.    | SQ<br>(mm) | S<br>(mm) | Overall Length<br>(mm) |
|--------------|------------|-----------|------------------------|
| <b>A24-2</b> | 12.7       | 12.7      | 100                    |
| <b>A25-2</b> | 19.0       | 19.0      | 150                    |
| <b>A26-2</b> | 25.4       | 25.4      | 160                    |
|              | 25.4       | 25.4      | 200                    |

# Construction Bits

## Problem solving bits

These are evolutionary-type bits developed as "problem solvers."

With the advent of torsion bits, excessive load work and high impact, high torque operations can now be carried out easily and comfortably. Torsion bits for mega-torsion work.

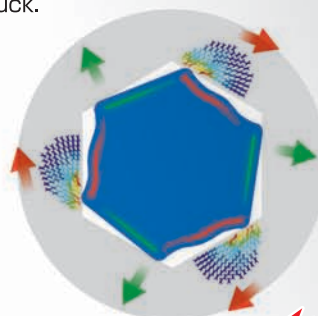
The quest for true ease-of-use has resulted in a true torsion bit...

## "Super" Torsion Bit <sup>Patented</sup>

Real torsion for those heavy jobs.

We have designed a torsion zone of  $3.7\phi \times 14\text{mm}$  for heavy work such as drill screws and tapping screws.

Our torsion bits feature easy-to-see tapered tips and ultra hex cross sections which prevent damage to the chuck.

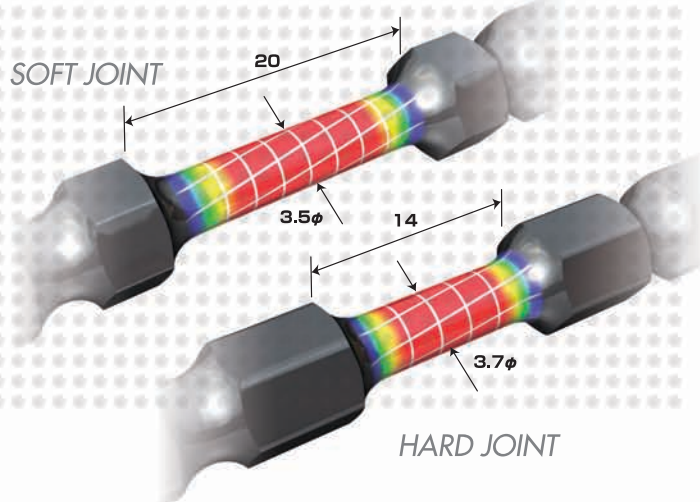


**UltraHex**®

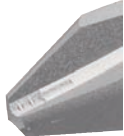
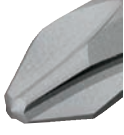
**18v**

Designed for use with high-power tools.

The high-torque technology used in our torsion bits will continue to meet the changing needs of the electric impact driver industry as it moves from 14.4V to 18V.





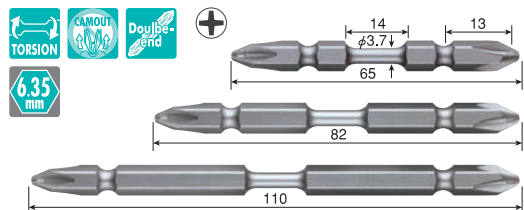
| Model                                     | Tip                                                                                 | Shape                                                                               | Feature                                                                                                                                                                                                                                                             | Application  |                      |                        |                  |
|-------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|------------------------|------------------|
|                                           |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                     | Wood working | Interior finish work | Equipment installation | Sheet-metal work |
| <b>GIZA</b><br><br>Patented               |    |    | The jagged tip of our GIZA BIT prevents cam-out of cross-head screws. Just as the bit starts to cam-out, the jagged edges bite into the internal wall of the recess of the screw.                                                                                   | ★★★          | ★★★★                 | ★★★                    | ★★★              |
| <b>JAWS</b><br><br>Patent Pending         |    |    | Our JAWS BITS are perfect for working wood screws. From start to finish, these bits bite into the screw holes, allowing for increased work efficiency without fallen screws.                                                                                        | ★★★★         | ★★★                  | ★★★                    | ★★★              |
| <b>MEGA TORSION</b><br><br>Patent Pending |    |    | Our MEGA TORSION BITS are perfect for working with drill screws. From start to finish, these bits bite into the screw holes allowing for increased work efficiency without fallen screws.                                                                           | ★★★          | ★★★                  | ★★★                    | ★★★★             |
| <b>EXTRA HARD</b>                         |    |    | Our EXTRA HARD BITS have been hardened to a maximum hardness of 63 HRC. They are ideal for relatively hard screws such as stainless steel screws and board screws.                                                                                                  | ★★★          | ★★★                  | ★★★                    | ★★★              |
| <b>SLENDER</b><br><br>Patented            |  |  | The tips of our SLENDER BIT series have been worked to a fine point, making it easy to see the heads of the screws. These bits are designed for soft joint work such as wood screws and resin tapping screws.                                                       | ★★★          | ★★★                  | ★★★                    | ★★★              |
| <b>SLENDER TORSION</b><br><br>Patented    |  |  | The highly resilient torsion effect of our SLENDER TORSION BITS greatly improves their durability. They are ideal for long coarse thread screws and other wood screw work.                                                                                          | ★★★★         | ★★★                  | ★★★                    | ★★★              |
| <b>TAPPING</b>                            |  |  | Our TAPPING BITS are designed with thick wings and short flutes for extra strength, making them ideal for heavy-duty work such as driving sash screws of greater than 4mm in diameter.                                                                              | ★★★          | ★★★                  | ★★★                    | ★★★★             |
| <b>CUSHION</b><br><br>Patented            |  |  | The cushion rings of our CUSHION BIT series suppress the vibrations of the bit, achieving high precision screw tightening performance. The UltraHex shank does not damage the chuck.                                                                                | ★★★          | ★★★                  | ★★★★                   | ★★★              |
| <b>ALPHA</b>                              |  |  | The bits of our ALPHA BIT series are designed to absorb impact shock in 2 stages by ball flute torsion and shank cushioning.                                                                                                                                        | ★★★          | ★★★                  | ★★★                    | ★★★              |
| <b>TORSION</b>                            |  |  | The central torsion shank absorbs the various impact shocks incurred during screw tightening work, which prevents tip damage and improves torque precision. The torsion shank measures 3.5φ x 20mm for use soft joint work.                                         | ★★★★         | ★★★                  | ★★★                    | ★★★              |
| <b>"SUPER" TORSION</b><br><br>Patented    |  |  | Our "SUPER" TORSION BITS feature optimal shock adsorbing torsion and tips that have been finished to a taper for better tip visibility. The cross-section of the UltraHex shank utilizes the drive theory of the hexagonal wrench, which prevents damage the chuck. | ★★★          | ★★★                  | ★★★                    | ★★★★             |

## Problem Solving Bit



### MEGA TORSION BIT

Patent Pending



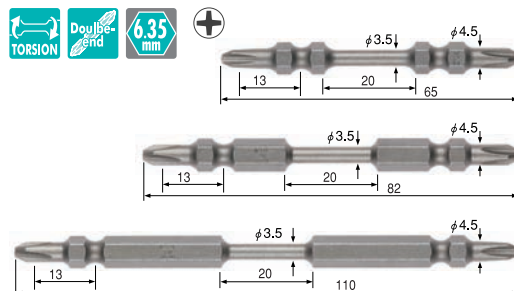
MG Magnetized Eco-friendly Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------|-------------------------------|----------------|--------------------|
| MT142065  | ⊕ 2×3.7×65  | X                             | 160×35         | 357304             |
| MT142082  | ⊕ 2×3.7×82  | X                             | 160×35         | 357311             |
| MT142110  | ⊕ 2×3.7×110 | X                             | 160×35         | 357328             |



### SLENDER TORSION BIT

Patented



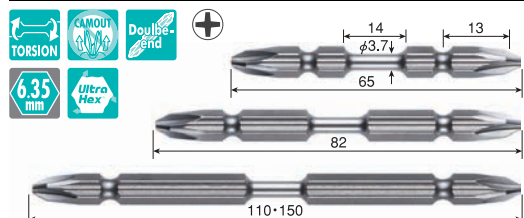
MG Magnetized Eco-friendly Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------|-------------------------------|----------------|--------------------|
| ST141065  | ⊕ 1×3.5×65  | H                             | 160×35         | 357847             |
| ST142065  | ⊕ 2×3.5×65  | H                             | 160×35         | 357762             |
| ST142082  | ⊕ 2×3.5×82  | H                             | 160×35         | 357854             |
| ST142110  | ⊕ 2×3.5×110 | H                             | 160×35         | 357779             |



### "SUPER" TORSION BIT

Patented



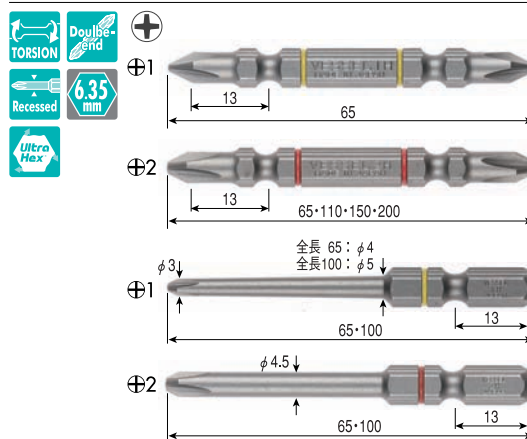
MG Magnetized Eco-friendly Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------|-------------------------------|----------------|--------------------|
| RT142065  | ⊕ 2×3.7×65  | X                             | 160×35         | 348142             |
| RT142082  | ⊕ 2×3.7×82  | X                             | 160×35         | 348159             |
| RT142110  | ⊕ 2×3.7×110 | X                             | 160×35         | 348166             |
| RT142150  | ⊕ 2×3.7×150 | X                             | 210×35         | 348173             |



### CUSHION BIT

Patented

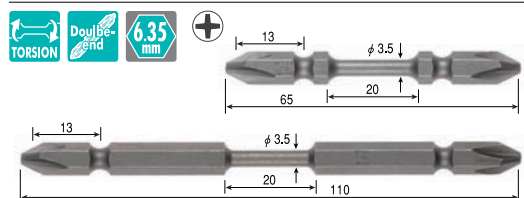


MG Magnetized Eco-friendly Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------|-------------------------------|----------------|--------------------|
| AC141065  | ⊕ 1×65   | H                             | 160×35         | 357519             |
| AC142065  | ⊕ 2×65   | H                             | 160×35         | 357526             |
| AC142110  | ⊕ 2×110  | H                             | 160×35         | 357533             |
| AC142150  | ⊕ 2×150  | H                             | 210×35         | 357540             |
| AC142200  | ⊕ 2×200  | H                             | 260×35         | 357557             |
| AC161065  | ⊕ 1×65   | H                             | 160×35         | 357564             |
| AC161100  | ⊕ 1×100  | H                             | 160×35         | 357571             |
| AC162065  | ⊕ 2×65   | H                             | 160×35         | 357588             |
| AC162100  | ⊕ 2×100  | H                             | 160×35         | 357595             |



### TORSION BIT



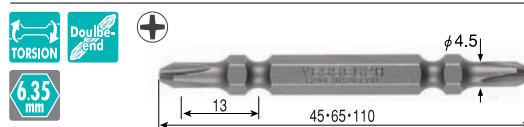
MG Magnetized Eco-friendly Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------|-------------------------------|----------------|--------------------|
| AT142065  | ⊕ 2×3.5×65  | H                             | 160×35         | 347039             |
| AT142110  | ⊕ 2×3.5×110 | H                             | 160×35         | 347046             |



### SLENDER BIT

Patented



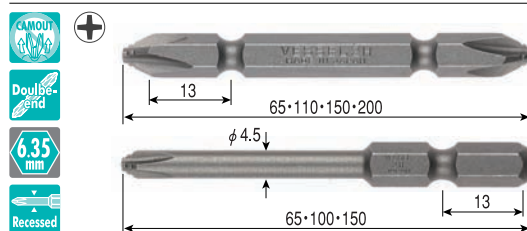
MG Magnetized Eco-friendly Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------|-------------------------------|----------------|--------------------|
| AS141065  | ⊕ 1×65   | H                             | 160×35         | 354303             |
| AS142045  | ⊕ 2×45   | H                             | 160×35         | 354297             |
| AS142065  | ⊕ 2×65   | H                             | 160×35         | 353900             |
| AS142110  | ⊕ 2×110  | H                             | 160×35         | 353917             |



### GIZA BIT

Patented



MG Magnetized Eco-friendly Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------|-------------------------------|----------------|--------------------|
| AZ142065  | ⊕ 2×65      | H                             | 160×35         | 353122             |
| AZ142110  | ⊕ 2×110     | H                             | 160×35         | 353139             |
| AZ142150  | ⊕ 2×150     | H                             | 210×35         | 353146             |
| AZ142200  | ⊕ 2×200     | H                             | 260×35         | 353153             |
| AZ162065  | ⊕ 2×4.5×65  | H                             | 160×35         | 353160             |
| AZ162100  | ⊕ 2×4.5×100 | H                             | 160×35         | 353177             |
| AZ162150  | ⊕ 2×4.5×150 | H                             | 210×35         | 353184             |





Economical double end bit



For limited area



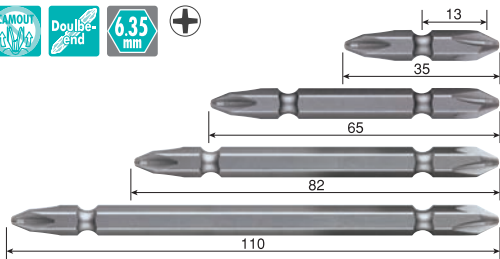
For impact drivers



Minimal damage to the chuck

## JAWS BIT

Patent Pending



Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------|-------------------------------|----------------|--------------------|
| JA142035  | ⊕ 2× 35  | H                             | 160×35         | 357380             |
| JA142065  | ⊕ 2× 65  | H                             | 160×35         | 357397             |
| JA142082  | ⊕ 2× 82  | H                             | 160×35         | 357403             |
| JA142110  | ⊕ 2× 110 | H                             | 160×35         | 357410             |



## ALFA BIT

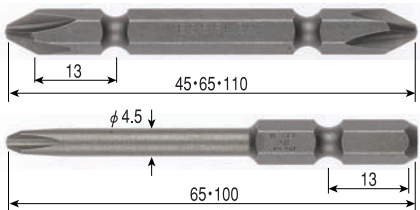


Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------|-------------------------------|----------------|--------------------|
| AL142065  | ⊕ 2× 65  | H                             | 160×35         | 355485             |
| AL142110  | ⊕ 2× 110 | H                             | 160×35         | 355492             |



## EXTRA HARD BIT

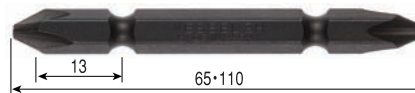


Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------|-------------------------------|----------------|--------------------|
| AX142045  | ⊕ 2× 45  | X                             | 160×35         | 354808             |
| AX142065  | ⊕ 2× 65  | X                             | 160×35         | 354815             |
| AX142110  | ⊕ 2× 110 | X                             | 160×35         | 354822             |
| AX162065  | ⊕ 2× 65  | X                             | 160×35         | 354839             |
| AX162100  | ⊕ 2× 100 | X                             | 160×35         | 354846             |



## TAPPING BIT



Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Card size (mm) | JAN code (4907587) |
|-----------|----------|----------------|--------------------|
| A14H2065  | ⊕ 2× 65  | 160×35         | 354310             |
| A14H2110  | ⊕ 2× 110 | 160×35         | 354327             |

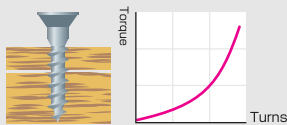


# ONE POINT

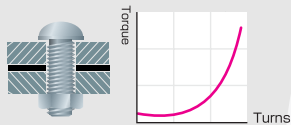
## SOFT JOINT

Wood screw fastening

Flexible jointing (packing inserted) and resin tapping and fastening



- At first, resistance is low, but then it increases as the screw penetrates.
- Requires a comparatively long time to fasten.

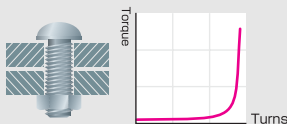


- Resistance increases with every turn of the screw. Resistance increases even after seating.
- Requires a comparatively little time to fasten.

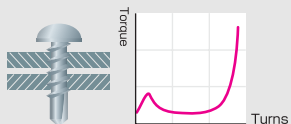
## HARD JOINT

Rigid jointing and fastening of small screws

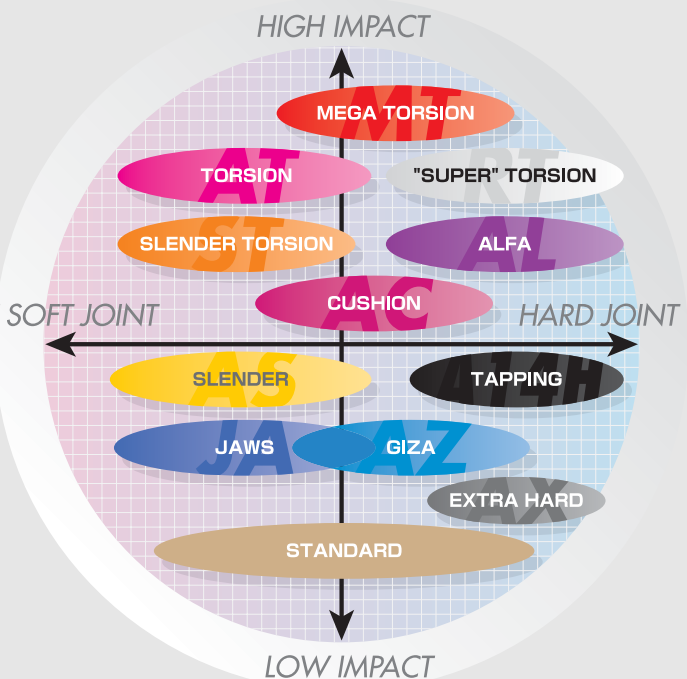
Fastening of drill screws and tapping screws



- Resistance is low at first but increases rapidly as the screw head sits.
- Requires a comparatively little time to fasten.



- Resistance is felt as the screw penetrates. Resistance lessens momentarily only to increase after seating.
- Requires a comparatively long time to fasten.



H 6.35 mm



# Construction Bits

## Problem Solving Bit



### "SUPER" TORSION BIT 5-Piece/10-Piece Set Patented



RT5P2065 RT5P2082 RT5P2110



Inner Ctn.: 10 sets

| Model No. | Contents           | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|--------------------|-------------------------------|----------------|--------------------|
| RT5P2065  | ⊕ 2×φ3.7× 65 5pcs. | X                             | 160×70         | 348180             |
| RT5P2082  | ⊕ 2×φ3.7× 82 5pcs. | X                             | 160×70         | 348197             |
| RT5P2110  | ⊕ 2×φ3.7×110 5pcs. | X                             | 160×70         | 348203             |

Card size: (H×W) mm; (Thickness): 8 mm



RT10P2065F RT10P2082F

RT10P2110F



Inner Ctn.: 10 sets

| Model No.  | Contents            | Heat treatment classification | Package size (mm) | JAN code (4907587) |
|------------|---------------------|-------------------------------|-------------------|--------------------|
| RT10P2065F | ⊕ 2×φ3.7× 65 10pcs. | X                             | 150×87            | 320469             |
| RT10P2082F | ⊕ 2×φ3.7× 82 10pcs. | X                             | 150×87            | 320476             |
| RT10P2110F | ⊕ 2×φ3.7×110 10pcs. | X                             | 162×87            | 320483             |

### MEGA TORSION BIT 5-Piece Set

Patent Pending



MT5P2065 MT5P2082 MT5P2110



Inner Ctn.: 10 sets

| Model No. | Contents           | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|--------------------|-------------------------------|----------------|--------------------|
| MT5P2065  | ⊕ 2×φ3.7× 65 5pcs. | X                             | 160×70         | 357335             |
| MT5P2082  | ⊕ 2×φ3.7× 82 5pcs. | X                             | 160×70         | 357342             |
| MT5P2110  | ⊕ 2×φ3.7×110 5pcs. | X                             | 160×70         | 357359             |

Card size: (H×W) mm; (Thickness): 8 mm

### JAWS BIT 5-Piece Set

Patent Pending



JA5P2065 JA5P2082 JA5P2110



Inner Ctn.: 10 sets

| Model No. | Contents      | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|---------------|-------------------------------|----------------|--------------------|
| JA5P2065  | ⊕ 2× 65 5pcs. | H                             | 160×70         | 357458             |
| JA5P2082  | ⊕ 2× 82 5pcs. | H                             | 160×70         | 357465             |
| JA5P2110  | ⊕ 2×110 5pcs. | H                             | 160×70         | 357472             |

Card size: (H×W) mm; (Thickness): 8 mm

### TORSION BIT 5-Piece Set



BW-163

BW-164

BW-165



Outer Ctn.: 10, with one holder case

| Model No. | Contents                                 | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|------------------------------------------|-------------------------------|----------------|--------------------|
| BW-163    | ⊕ 2×φ3.5× 65 5pcs.                       | H                             | 140×70         | 353405             |
| BW-164    | ⊕ 2×φ3.5×110 5pcs.                       | H                             | 140×70         | 353412             |
| BW-165    | ⊕ 2×φ3.5× 65 3pcs.<br>⊕ 2×φ3.5×110 2pcs. | H                             | 140×70         | 353429             |

Card size: (H×W) mm; (Thickness): 23 mm

### SLENDER BIT 5-Piece/20-Piece Set

Patented



BW-180

BW-181

BW-182



Outer Ctn.: 10, with one holder case

| Model No. | Contents                       | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|--------------------------------|-------------------------------|----------------|--------------------|
| BW-180    | ⊕ 2× 65 5pcs.                  | H                             | 140×70         | 353924             |
| BW-181    | ⊕ 2×110 5pcs.                  | H                             | 140×70         | 353931             |
| BW-182    | ⊕ 2× 65 3pcs.<br>⊕ 2×110 2pcs. | H                             | 140×70         | 353948             |

Card size: (H×W) mm; (Thickness): 23 mm



AS20P2065F

AS20P2110F



Inner Ctn.: 5 sets

| Model No.  | Contents       | Heat treatment classification | Package size (mm) | JAN code (4907587) |
|------------|----------------|-------------------------------|-------------------|--------------------|
| AS20P2065F | ⊕ 2× 65 20pcs. | H                             | 150×87            | 320513             |
| AS20P2110F | ⊕ 2×110 20pcs. | H                             | 162×87            | 320520             |



Economical  
double  
end bit



For limited  
area



For impact  
drivers



Minimal damage  
to the chuck

Problem Solving Bit/ Standard Bit

Bits & sockets

## SLENDER TORSION BIT 5-Piece Set

Patented



BW-301



BW-302



BW-303



BW-305



Outer Ctn. : 10, with one holder case

| Model No. | Contents           | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|--------------------|-------------------------------|----------------|--------------------|
| BW-301    | ⊕ 2×φ3.5×65 5pcs.  | H                             | 140×70         | 357786             |
| BW-302    | ⊕ 2×φ3.5×110 5pcs. | H                             | 140×70         | 357793             |
| BW-303    | ⊕ 2×φ3.5×65 3pcs.  | H                             | 140×70         | 357809             |
| BW-305    | ⊕ 2×φ3.5×110 2pcs. | H                             | 140×70         | 357861             |

Card size: (H×W) mm; (Thickness): 23 mm

## GIZA BIT 5-Piece Set

Patented



BW-170



BW-171



BW-172



BW-173



BW-174



BW-175



Outer Ctn. : 10, with one holder case

| Model No. | Contents                              | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|---------------------------------------|-------------------------------|----------------|--------------------|
| BW-170    | ⊕ 2×65 5pcs.                          | H                             | 140×70         | 353191             |
| BW-171    | ⊕ 2×110 5pcs.                         | H                             | 140×70         | 353207             |
| BW-172    | ⊕ 2×65 2pcs.<br>⊕ 2×110 3pcs.         | H                             | 140×70         | 353214             |
| BW-173    | ⊕ 2×4.5×65 5pcs.                      | H                             | 140×70         | 353221             |
| BW-174    | ⊕ 2×4.5×100 5pcs.                     | H                             | 140×70         | 353238             |
| BW-175    | ⊕ 2×4.5×65 2pcs.<br>⊕ 2×4.5×100 3pcs. | H                             | 140×70         | 353245             |

Card size: (H×W) mm; (Thickness): 23 mm

## EXTRA HARD BIT 5-Piece Set



BW-36



BW-37



BW-38



BW-39

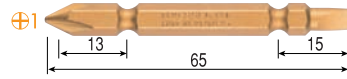
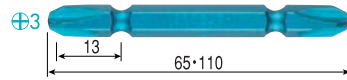


Outer Ctn. : 10, with one holder case

| Model No. | Contents      | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|---------------|-------------------------------|----------------|--------------------|
| BW-36     | ⊕ 2×65 5pcs.  | X                             | 140×70         | 356581             |
| BW-37     | ⊕ 2×110 5pcs. | X                             | 140×70         | 356598             |
| BW-38     | ⊕ 2×65 5pcs.  | X                             | 140×70         | 356604             |
| BW-39     | ⊕ 2×100 5pcs. | X                             | 140×70         | 356611             |

Card size: (H×W) mm; (Thickness): 23 mm

## IRO BIT (Color-coded Bit) 2-Piece/5-Piece Set



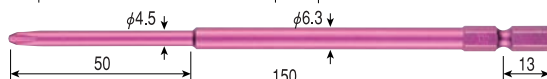
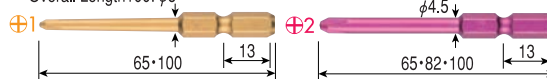
Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------|-------------------------------|----------------|--------------------|
| IR141065  | ⊕ 1×65      | H                             | 160×35         | 348609             |
| IR141110  | ⊕ 1×110     | H                             | 160×35         | 348616             |
| IR142045  | ⊕ 2×45      | H                             | 160×35         | 348623             |
| IR142065  | ⊕ 2×65      | H                             | 160×35         | 348630             |
| IR142110  | ⊕ 2×110     | H                             | 160×35         | 348647             |
| IR142150  | ⊕ 2×150     | H                             | 210×35         | 348654             |
| IR143065  | ⊕ 3×65      | H                             | 160×35         | 348685             |
| IR143110  | ⊕ 3×110     | H                             | 160×35         | 348692             |
| IR141565  | ⊕ 1/⊖ 5×65  | H                             | 160×35         | 348708             |
| IR142665  | ⊕ 2/⊖ 6×65  | H                             | 160×35         | 348715             |
| IR142611  | ⊕ 2/⊖ 6×110 | H                             | 160×35         | 348722             |



Overall Length 65: φ4

Overall Length 100: φ5



Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------|-------------------------------|----------------|--------------------|
| IR161065  | ⊕ 1×65   | H                             | 160×35         | 348746             |
| IR161100  | ⊕ 1×100  | H                             | 160×35         | 348753             |
| IR162065  | ⊕ 2×65   | H                             | 160×35         | 348760             |
| IR162082  | ⊕ 2×82   | H                             | 160×35         | 348777             |
| IR162100  | ⊕ 2×100  | H                             | 160×35         | 348784             |
| IR162150  | ⊕ 2×150  | H                             | 210×35         | 348791             |
| IR166070  | ⊖ 6×70   | H                             | 160×35         | 348739             |



IR5P01

IR5P02

Inner Ctn. : 10 sets

| Model No. | Contents                                                 | Heat treatment classification | Package size (mm) | JAN code (4907587) |
|-----------|----------------------------------------------------------|-------------------------------|-------------------|--------------------|
| IR5P01    | ⊕ 1×φ4.0×65, ⊕ 2×φ4.5×100<br>⊕ 2/⊕ 1×65, ⊕ 2×110, ⊕ 3×65 | H                             | 160×70            | 349514             |
| IR5P02    | ⊕ 1×65, ⊕ 2×65, ⊕ 3×65<br>⊕ 2×110 (2 for each)           | H                             | 160×70            | 349521             |



H 6.35 mm



# Construction Bits

## Standard Bit

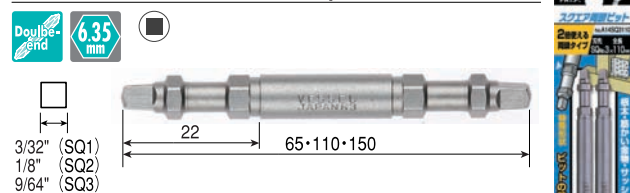


Economical  
double  
end bit



For limited  
area

### SQUARE DOUBLE END BIT 2-Piece/5-Piece Set Patented



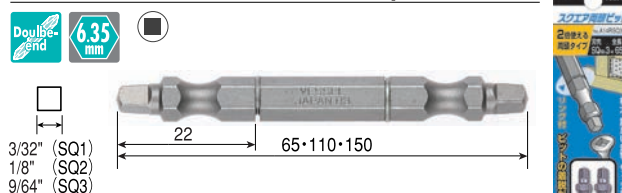
環境対策

Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------|-------------------------------|----------------|--------------------|
| A14SQ1065 | SQ No.1× 65 | H                             | 160×35         | 355508             |
| A14SQ2065 | SQ No.2× 65 | H                             | 160×35         | 355379             |
| A14SQ2110 | SQ No.2×110 | H                             | 160×35         | 355393             |
| A14SQ2150 | SQ No.2×150 | H                             | 210×35         | 355515             |
| A14SQ3065 | SQ No.3× 65 | H                             | 160×35         | 355386             |
| A14SQ3110 | SQ No.3×110 | H                             | 160×35         | 355409             |
| A14SQ3150 | SQ No.3×150 | H                             | 210×35         | 355522             |



### SQUARE DOUBLE END BIT 2-Piece/5-Piece Set



環境対策

Mounting quantity: 2 Inner Ctn.: 10 sets

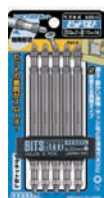
| Model No.  | Contents    | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|------------|-------------|-------------------------------|----------------|--------------------|
| A14RSQ1065 | SQ No.1× 65 | H                             | 160×35         | 355584             |
| A14RSQ2110 | SQ No.2×110 | H                             | 160×35         | 355607             |
| A14RSQ2150 | SQ No.2×150 | H                             | 210×35         | 355614             |
| A14RSQ3065 | SQ No.3× 65 | H                             | 160×35         | 355621             |
| A14RSQ3110 | SQ No.3×110 | H                             | 160×35         | 355638             |



BW-41



BW-42



BW-43



BW-44



BW-45



BW-46



BW-47



BW-401



BW-403



BW-405



BW-407

Eco-friendly

Outer Ctn. : 10, with one holder case

| Model No. | Contents          | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|-------------------|-------------------------------|----------------|--------------------|
| BW-401    | SQ No.2× 65 5pcs. | H                             | 140×70         | 355652             |
| BW-403    | SQ No.2×110 5pcs. | H                             | 140×70         | 355676             |
| BW-405    | SQ No.2× 65 3pcs. | H                             | 140×70         | 355690             |
|           | SQ No.2×110 2pcs. |                               |                |                    |
| BW-407    | SQ No.2× 65 1pc.  | H                             | 140×70         | 355713             |
|           | SQ No.3× 65 2pcs. |                               |                |                    |
|           | SQ No.2×110 1pc.  |                               |                |                    |
|           | SQ No.3×110 1pc.  |                               |                |                    |

Card size: (H×W) mm; (Thickness): 23 mm

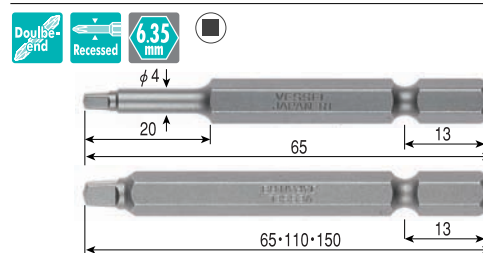
Eco-friendly

Outer Ctn. : 10, with one holder case

| Outer Dim. : 10, with one holder case |             |       |                               |                |                    |
|---------------------------------------|-------------|-------|-------------------------------|----------------|--------------------|
| Model No.                             | Contents    |       | Heat treatment classification | Card size (mm) | JAN code (4907587) |
| BW-41                                 | SQ No.2× 65 | 5pcs. | H                             | 140×70         | 355416             |
| BW-42                                 | SQ No.3× 65 | 5pcs. | H                             | 140×70         | 355423             |
| BW-43                                 | SQ No.2×110 | 5pcs. | H                             | 140×70         | 355430             |
| BW-44                                 | SQ No.3×110 | 5pcs. | H                             | 140×70         | 355447             |
| BW-45                                 | SQ No.2× 65 | 3pcs. | H                             | 140×70         | 355454             |
|                                       | SQ No.2×110 | 2pcs. |                               |                |                    |
| BW-46                                 | SQ No.3× 65 | 3pcs. | H                             | 140×70         | 355461             |
|                                       | SQ No.3×110 | 2pcs. |                               |                |                    |
| BW-47                                 | SQ No.2× 65 | 1pc.  | H                             | 140×70         | 355478             |
|                                       | SQ No.3× 65 | 2pcs. |                               |                |                    |
|                                       | SQ No.2×110 | 1pc.  |                               |                |                    |
|                                       | SQ No.3×110 | 1pc.  |                               |                |                    |

Card size: (H×W) mm; (Thickness): 23 mm

### SQUARE BIT



Magnetized

Eco-friendly

Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Card size (mm) | JAN code (4907587) |
|-----------|-------------|----------------|--------------------|
| M16SQ1065 | SQ No.1× 65 | 160×35         | 355348             |
| M16SQ2065 | SQ No.2× 65 | 160×35         | 355355             |
| M16SQ3065 | SQ No.3× 65 | 160×35         | 355362             |
| M16SQ2110 | SQ No.2×110 | 160×35         | 355164             |
| M16SQ3110 | SQ No.3×110 | 160×35         | 355089             |
| M16SQ2150 | SQ No.2×150 | 210×35         | 354617             |
| M16SQ3150 | SQ No.3×150 | 210×35         | 354624             |







## Hex Bit 1-Piece/5-Piece Set



**MG** Magnetized **Eco-friendly** Mounting quantity: 1 Inner Ctn.: 10 sets

| Model No. | Contents     | Card size (mm) | JAN code (4907587) |
|-----------|--------------|----------------|--------------------|
| SM16H020  | A/F 2 × 65   | 135×35         | 356352             |
| SM16H025  | A/F 2.5 × 65 | 135×35         | 356369             |
| SM16H030  | A/F 3 × 65   | 135×35         | 356376             |
| SM16H040  | A/F 4 × 65   | 135×35         | 356383             |
| SM16H050  | A/F 5 × 65   | 135×35         | 356390             |
| SM16H060  | A/F 6 × 65   | 135×35         | 356406             |
| SM16H080  | A/F 8 × 65   | 135×35         | 358479             |



BW-31

**MG** Magnetized **Eco-friendly**

Outer Ctn. : 10, with one holder case

| Model No. | Contents               | Card size (mm) | JAN code (4907587) |
|-----------|------------------------|----------------|--------------------|
| BW-31     | A/F 2.5, 3, 4, 5, 6×65 | 140×70         | 356574             |

Card size: (H×W) mm; (Thickness): 23 mm

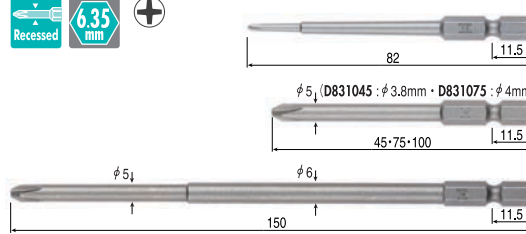
## Ball Point Bit



**MG** Magnetized **Eco-friendly** Mounting quantity: 1 Inner Ctn.: 10 sets

| Model No. | Contents   | Card size (mm) | JAN code (4907587) |
|-----------|------------|----------------|--------------------|
| SM16BP40  | A/F 4 × 82 | 160×35         | 358806             |
| SM16BP50  | A/F 5 × 82 | 160×35         | 358813             |
| SM16BP60  | A/F 6 × 82 | 160×35         | 358820             |

## Bit



**MG** Magnetized **Eco-friendly** Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents    | Card size (mm) | JAN code (4907587) |
|-----------|-------------|----------------|--------------------|
| D830082   | ⊕ 0×82      | 160×35         | 358462             |
| D831045   | ⊕ 1×3.8× 45 | 160×35         | 356680             |
| D831075   | ⊕ 1×4 × 75  | 160×35         | 356697             |
| D832075   | ⊕ 2×5 × 75  | 160×35         | 356703             |
| D832100   | ⊕ 2×5 ×100  | 160×35         | 356710             |
| D832150   | ⊕ 2×5×6×150 | 210×35         | 356727             |

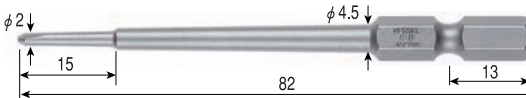
## TORX Bit (Tamper-Proof)



**MG** Magnetized **Eco-friendly** Mounting quantity: 1 Inner Ctn.: 10 sets

| Model No. | Contents  | Card size (mm) | JAN code (4907587) |
|-----------|-----------|----------------|--------------------|
| SMVT08H   | VT 8H× 65 | 135×35         | 356413             |
| SMVT10H   | VT10H× 65 | 135×35         | 356420             |
| SMVT15H   | VT15H× 65 | 135×35         | 356437             |
| SMVT20H   | VT20H× 65 | 135×35         | 356444             |
| SMVT25H   | VT25H× 65 | 135×35         | 356451             |
| SMVT27H   | VT27H× 65 | 135×35         | 356468             |
| SMVT30H   | VT30H× 65 | 135×35         | 356475             |
| SMVT40H   | VT40H× 65 | 135×35         | 356482             |

## Bit for small precision screws



**MG** Magnetized **Eco-friendly** Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Card size (mm) | JAN code (4907587) |
|-----------|----------|----------------|--------------------|
| M160082   | ⊕ 0× 82  | 160×35         | 358455             |

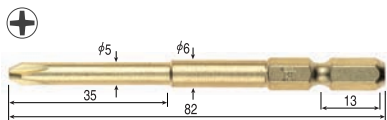


H 6.35 mm





## Gold Color Bit

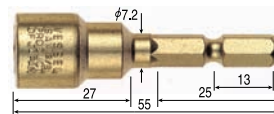
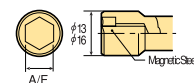


Eco-friendly

Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Content | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|---------|-------------------------------|----------------|--------------------|
| GD812082  | 2 × 82  | H                             | 160 × 35       | 346254             |

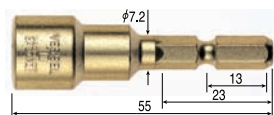
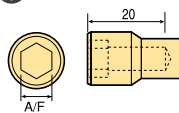
## Gold Color Nut Setter (Magnetic)



Mounting quantity: 1 Inner Ctn.: 10 sets

| Model No. | Content                   | Card size (mm) | JAN code (4907587) |
|-----------|---------------------------|----------------|--------------------|
| GSAM8055  | A/F 5/16" × 55 (for 5 mm) | 135 × 35       | 346902             |
| GSAM9655  | A/F 3/8" × 55 (for 6 mm)  | 135 × 35       | 346919             |

## Gold Color Socket Bit

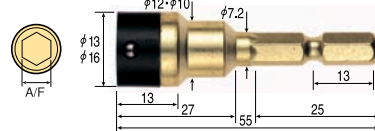


Eco-friendly

Mounting quantity: 1 Inner Ctn.: 5 sets

| Model No. | Content      | Card size (mm) | JAN code (4907587) |
|-----------|--------------|----------------|--------------------|
| GA205555  | A/F 5.5 × 55 | 135 × 35       | 346506             |
| GA201255  | A/F 12 × 55  | 135 × 35       | 346551             |
| GA201355  | A/F 13 × 55  | 135 × 35       | 346568             |
| GA201455  | A/F 14 × 55  | 135 × 35       | 346575             |

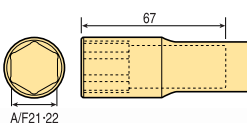
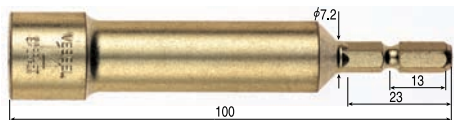
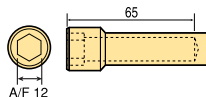
## Gold Color Nut Setter (Locked with ball)



Mounting quantity: 1 Inner Ctn.: 5 sets

| Model No. | Content                   | Card size (mm) | JAN code (4907587) |
|-----------|---------------------------|----------------|--------------------|
| GSB8055   | A/F 5/16" × 55 (for 5 mm) | 135 × 35       | 346964             |
| GSB9655   | A/F 3/8" × 55 (for 6 mm)  | 135 × 35       | 346971             |

## Deep Hole Socket Bit



Eco-friendly

Mounting quantity: 1 Inner Ctn.: 5 sets

| Model No. | Content                  | Card size (mm) | JAN code (4907587) |
|-----------|--------------------------|----------------|--------------------|
| GA203121  | A/F 12 × Depth: 65 × 100 | 160 × 55       | 346612             |
| GA203211  | A/F 21 × Depth: 65 × 110 | 185 × 55       | 346667             |
| GA203221  | A/F 22 × Depth: 65 × 110 | 185 × 55       | 346674             |

## Gold Color Socket Adapter



Eco-friendly

Mounting quantity: 1 Inner Ctn.: 5 sets

| Model No. | Content                                | Card size (mm) | JAN code (4907587) |
|-----------|----------------------------------------|----------------|--------------------|
| GA20B5Q2  | Socket mounting angle 6.35 (1/4") × 45 | 135 × 35       | 346803             |



H 6.35 mm



# Construction Bits

## Gold Bit



Economical  
double  
end bit



For limited  
area

## Gold Color Bit 5-Piece Set



BW-51



BW-52



BW-53



BW-54



BW-55



Outer Ctn. : 10, with one holder case

| Model No. | Contents                                                                                                                                                                                                                                                          | Card size (mm) | JAN code (4907587) |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------|
| BW-51     | Double End Gold Color Bit $\Phi 2 \times 45 \dots 5$ pcs.                                                                                                                                                                                                         | 95×70          | 350510             |
| BW-52     | Double End Gold Color Bit $\Phi 2 \times 65 \dots 5$ pcs.                                                                                                                                                                                                         | 95×70          | 350527             |
| BW-53     | Double End Gold Color Bit $\Phi 2 \times 110 \dots 5$ pcs.                                                                                                                                                                                                        | 140×70         | 350534             |
| BW-54     | Double End Gold Color Bit $\Phi 2 \times 45 \dots 1$ pc.<br>$\Phi 2 \times 65 \dots 2$ pcs. $\Phi 2 \times 110 \dots 2$ pcs.                                                                                                                                      | 140×70         | 350541             |
| BW-55     | Double End Gold Color Bit $\Phi 2 \times 65 \dots 1$ pc. $\Phi 2 \times 110 \dots 1$ pc.<br>$\Phi \ominus$ Double End Gold Color Bit $\Phi 2 / \ominus 6 \times 65 \dots 1$ pc.<br>Gold Color Bit $\Phi 1 \times 100 \dots 1$ pc. $\Phi 2 \times 100 \dots 1$ pc. | 140×70         | 350558             |

Card size: (H×W) mm; (Thickness): 23 mm

## Gold Color Bit 10-Piece Set



BW-10



BW-11



BW-12



BW-13



BW-14



BW-15



Except BW-10

Outer Ctn. : 10, with one holder case

| Model No. | Contents                                                                                                                                                                                                                                                                                                                                                                    | Card size (mm) | JAN code (4907587) |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------|
| BW-10     | Gold Color Short Bit $\dots 10$ pcs.<br>$\Phi 1, \Phi 2, \Phi 3, \ominus 4, \ominus 6$ A/F2.5, 3, 4, 5, 6<br>Bit holder with magnet $\dots 1$ pc.                                                                                                                                                                                                                           | 120× 85        | 350206             |
| BW-11     | Double End Gold Color Bit $\Phi 2 \times 45 \dots 10$ pcs.                                                                                                                                                                                                                                                                                                                  | 120× 85        | 350213             |
| BW-12     | Double End Gold Color Bit $\Phi 2 \times 65 \dots 10$ pcs.                                                                                                                                                                                                                                                                                                                  | 120× 85        | 350220             |
| BW-13     | Double End Gold Color Bit $\Phi 2 \times 110 \dots 10$ pcs.                                                                                                                                                                                                                                                                                                                 | 150×100        | 350237             |
| BW-14     | Double End Gold Color Bit $\Phi 2 \times 45 \dots 2$ pcs.<br>$\Phi 2 \times 65 \dots 6$ pcs. $\Phi 2 \times 110 \dots 2$ pcs.                                                                                                                                                                                                                                               | 150×100        | 350244             |
| BW-15     | Double End Gold Color Bit $\Phi 1 \times 65 \dots 1$ pc.<br>$\Phi 2 \times 110 \dots 1$ pc. $\Phi 2 \times 45 \dots 2$ pcs. $\Phi 3 \times 65 \dots 1$ pc.<br>$\Phi 2 \times 65 \dots 2$ pcs.<br>$\Phi \ominus$ Double End Gold Color Bit $\Phi 2 / \ominus 6 \times 65 \dots 1$ pc.<br>Step Gold Color Bit $\Phi 1 \times 100 \dots 1$ pc. $\Phi 2 \times 100 \dots 1$ pc. | 150×100        | 350251             |

Card size: (H×W) mm; (Thickness): 23 mm

## Gold Color Bit 5-Piece Set



BW-66



BW-67



Outer Ctn. : 10, with one holder case

| Model No. | Contents                                        | Card size (mm) | JAN code (4907587) |
|-----------|-------------------------------------------------|----------------|--------------------|
| BW-66     | Gold Color Bit $\Phi 2 \times 65 \dots 5$ pcs.  | 140×70         | 353955             |
| BW-67     | Gold Color Bit $\Phi 2 \times 100 \dots 5$ pcs. | 140×70         | 353962             |



Standard Bit



## Double End Bit



**MG Magnetized** **Eco-friendly** Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------|-------------------------------|----------------|--------------------|
| M141065   | ⊕ 1 × 65 | H                             | 170 × 42       | 345554             |
| M142045   | ⊕ 2 × 45 | H                             | 170 × 42       | 345462             |

## Bit



**MG Magnetized** **Eco-friendly** Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents                   | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------------------------|-------------------------------|----------------|--------------------|
| M160026   | ⊕ 2 × 4.5 × 65<br>⊖ 6 × 45 | H                             | 170 × 42       | 345585             |

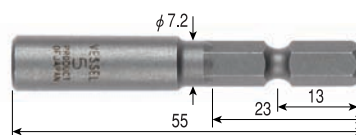
## Double End Bit



**MG Magnetized** **Eco-friendly** Mounting quantity: 2 Inner Ctn.: 10 sets

| Model No. | Contents       | Heat treatment classification | Card size (mm) | JAN code (4907587) |
|-----------|----------------|-------------------------------|----------------|--------------------|
| M141565   | ⊕ 1 / ⊖ 5 × 65 | H                             | 170 × 42       | 345639             |

## Socket Bit



**Eco-friendly** Mounting quantity: 1 Inner Ctn.: 5 sets

| Model No. | Contents     | Card size (mm) | JAN code (4907587) |
|-----------|--------------|----------------|--------------------|
| A205555   | A/F 5.5 × 55 | 170 × 42       | 345080             |
| A201055   | A/F 10 × 55  | 170 × 42       | 345127             |
| A201255   | A/F 12 × 55  | 170 × 42       | 345134             |

## Double End Bit 5-Piece/10-Piece Set



BW-114



BW-151

**MG Magnetized** **Eco-friendly**

Outer Ctn.: 10, with one holder case

| Model No. | Contents                          | Card size (mm) | JAN code (4907587) |
|-----------|-----------------------------------|----------------|--------------------|
| BW-114    | ⊕ 2 × 45...2pcs. ⊕ 2 × 65...6pcs. | 150 × 100      | 350442             |
| BW-151    | ⊕ 2 × 45...5pcs.                  | 95 × 70        | 350619             |

Card size: (H×W) mm; (Thickness): 23 mm



H 6.35 mm

095

# Construction Bits

## Others

### Socket Bit Belt



**BW-70**

Outer Ctn. : 10, with one holder case

| Model No.    | Contents            | Card size (mm) | JAN code (4907587) |
|--------------|---------------------|----------------|--------------------|
| <b>BW-70</b> | A/F 8×60 A/F 10×60  | 140×80         | 357755             |
|              | A/F 12×60 A/F 13×60 |                |                    |
|              | A/F 14×60...        |                |                    |
|              | 1pc. each           |                |                    |

Card size: (H×W) mm; (Thickness): 23 mm

### Refill Bits (For power tools)

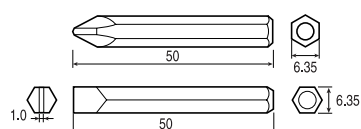


**SB**

| Model No.             | Contents                          | Card size (mm) | JAN code (4907587) |
|-----------------------|-----------------------------------|----------------|--------------------|
| <b>SB</b> A/F 5/16×55 | Nut Setter SB A/F 5/16×55...5pcs. | 127×87         | 350176             |
| <b>SB</b> A/F 3/8 ×55 | Nut Setter SB A/F 3/8 ×55...5pcs. | 127×87         | 350183             |

Card size: (H×W) mm; (Thickness): 15 mm

### No. D80 Cordless Screwdriver Bit



Inner Ctn.: 1 set, Outer Ctn. : 50 sets

| Model No.  | Contents                    | Card size (mm) | JAN code (4907587) |
|------------|-----------------------------|----------------|--------------------|
| <b>D80</b> | ⊕1, ⊕2, ⊖6.3×50...1pc. each | 125×55×8       | 345516             |

### Gold Bits (in zip pack)



Packaged in a plastic pack with zipper, handy for storage.



Inner Ctn.: 10 sets

| Model No.     | Contents                                     | Package size (mm) | JAN code (4907587) |
|---------------|----------------------------------------------|-------------------|--------------------|
| <b>GM-A14</b> | Double End Gold Color Bit ⊕ 2×45H...10pcs.   | 145×80            | 335104             |
|               | Double End Gold Color Bit 65H...10pcs.       | 145×80            | 335111             |
|               | Double End Gold Color Bit 110H...10pcs.      | 190×80            | 335128             |
| <b>GM-A16</b> | Standard Gold Color Bit ⊕ 1×3×65H...10pcs.   | 145×80            | 335135             |
|               | Standard Gold Color Bit 100H...10pcs.        | 190×80            | 335142             |
|               | Standard Gold Color Bit ⊕ 2×4.5×65H...10pcs. | 145×80            | 335159             |
|               | Standard Gold Color Bit 100H...10pcs.        | 190×80            | 335166             |



## No. BWS series

Patented



BWS-52

BWS-54

BWS-55

MG Magnetized

Inner Ctn.: 10 sets

| Model No. | Contents                                                                                                                                                           | Card size (mm) | JAN code (4907587) |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------|
| BWS-52    | Double End Cushion Bit $\Phi 2 \times 65 \dots 5$ pcs.                                                                                                             | 180×100×38     | 356857             |
| BWS-54    | Double End Cushion Bit $\Phi 2 \times 65 \dots 3$ pcs. $\Phi 2 \times 110 \dots 2$ pcs.                                                                            | 180×100×38     | 356871             |
| BWS-55    | Double End Cushion Bit $\Phi 2 \times 65 \dots 2$ pcs. $\Phi 2 \times 110 \dots 1$ pc. Cushion Bit $\Phi 1 \times 100 \dots 1$ pc. $\Phi 2 \times 100 \dots 1$ pc. | 180×100×38     | 356888             |

## No. BWL series

Patented



BWL-52

BWL-53

BWL-54

MG Magnetized

Inner Ctn.: 10 sets

| Model No. | Contents                                                                                                | Card size (mm) | JAN code (4907587) |
|-----------|---------------------------------------------------------------------------------------------------------|----------------|--------------------|
| BWL-52    | LED Flashlight, Double End Cushion Bit $\Phi 2 \times 65 \dots 4$ pcs.                                  | 180×100×38     | 356895             |
| BWL-53    | LED Flashlight, Double End Cushion Bit $\Phi 2 \times 110 \dots 4$ pcs.                                 | 180×100×38     | 356901             |
| BWL-54    | LED Flashlight, Double End Cushion Bit $\Phi 2 \times 65 \dots 2$ pcs. $\Phi 2 \times 110 \dots 2$ pcs. | 180×100×38     | 356918             |

## No. BWH

Patented



BWH-55

MG Magnetized

Inner Ctn.: 10 sets

| Model No. | Contents                                                                                         | Card size (mm) | JAN code (4907587) |
|-----------|--------------------------------------------------------------------------------------------------|----------------|--------------------|
| BWH-55    | Screw catcher, Inch bit $\Phi 1$ , $\Phi 2$ , $\Phi 3$ , $\Theta 4$ , $\Theta 6$ , SQ1, SQ2, SQ3 | 180×100×38     | 356925             |

## Bit Belt Holder

Patented



BBR-5



BB-5

BB-10

Inner carton quantity: 5pcs (10pcs for BB-5 / BB-10)

| Model No. | Contents                      | Package size (mm) | JAN code (4907587) |
|-----------|-------------------------------|-------------------|--------------------|
| BBR-5     | Bit belt holder (red)         | 175×130×30        | 358660             |
| BBY-5     | Bit belt holder (yellow)      | 175×130×30        | 358677             |
| BB-5      | Bit belt holder (for 5 pcs.)  | —                 | 358684             |
| BB-10     | Bit belt holder (for 10 pcs.) | —                 | 358691             |



### BWS series

The expandable belt and buckle allow attachment to batteries and electric impact drivers, as well as wrist and hip belts.

### BWL series

Attachment to whatever tool you're using enables quick bit changes thanks to the miniature spotlight feature. The bright, white LED spotlight illuminates darkened work areas.

### BWH series

The bit tip is automatically fitted into the screw head simply by moving it close to the screw. The strong magnetic tip allows for secure positioning of even long screws, and the elimination of falling screws means that screw tightening operations can be carried out with one hand.



H 6.35 mm

# Construction Sockets

## GO-TAN Series

A combination of technologies has achieved a socket bit series for high impact work that boasts outstanding durability with a rust-resistant mirror finish that makes this series the perfect solution for the rigors and problems of construction and installation sites.

We support our professional users with new, innovative ideas.

Patent Pending

## ***GO-TAN Mirror Socket***

These sockets have been polished to a mirror finish, and with their streamlined design fit snugly in the hand.



An axial press-fit system and versatile high torque technology has produced a socket that is durable enough for 18V high impact drivers.

The sockets, tempered to optimum hardness, are bonded to the shank, and boast features which include a shock dispersal zone that disperses stress concentrations.



| Model                                   | Shape                                                                               | Feature                                                                                                                                                                                                                                                                         | Application       |          |              |                      |               |                        |
|-----------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|--------------|----------------------|---------------|------------------------|
|                                         |                                                                                     |                                                                                                                                                                                                                                                                                 | Temporary housing | Formwork | Wood working | Interior finish work | Exterior wall | Equipment installation |
| DEEP HOLE<br><br>Patented               |    | Our DEEP HOLE SOCKETS are among our most popular items. Strong, light, and rust-resistant with a mirror finish. 12-point sockets easily engage nuts and bolts.                                                                                                                  | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| TILT<br><br>Patented                    |    | This is an exceptionally excellent socket. Ordinarily it can be used as a long socket, but quickly converts to a tilt socket for those hard-to-reach corner and edge jobs.                                                                                                      | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| SUPER LONG<br><br>Patented              |    | At 110mm long, our super long sockets are convenient for tightening bolts, and are particularly convenient for tightening protruding bolts.                                                                                                                                     | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| "GO-TAN" MIRROR<br><br>Patent Pending   |   | Our GO-TAN Mirror Sockets have been designed with streamlined shape to enable them to fit snugly in the hand. A shock absorbing part in the shaft provides maximum absorption of the shocks from the impact driver, resulting in 4 times the durability of conventional models. | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| SCAFFOLDING WORKER'S                    |  | Our scaffolding worker's socket is a semi-long type socket designed especially for construction scaffolding. Light and easy to carry, these sockets feature a press-fit design for improved durability.                                                                         | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| "KUROTAN"<br><br>Patent Pending         |  | Our KUROTAN socket series feature an all-black design favored by professionals. A shock absorbing part results in twice the durability of conventional models.                                                                                                                  | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| RUBBLE-REMOVING SOCKET for PLASTIC CONE |  | Super hard steel is used for the tip. Quickly grinds away troublesome rubble (concrete) so plastic cones can be set and pulled more rapidly.                                                                                                                                    | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| FULLY THREADED SOCKET                   |  | 3 rollers securely hold the bolt without damaging threads.                                                                                                                                                                                                                      | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |
| RING NUT SETTER                         |  | The spring-loaded ring of our ring nut setters securely grips flanged screws, solving the problem of iron dust attracted by the magnets of conventional models, making these ring nut setters ideal for siding work.                                                            | ★★★               | ★★★      | ★★★          | ★★★                  | ★★★           | ★★★                    |



# Construction Sockets

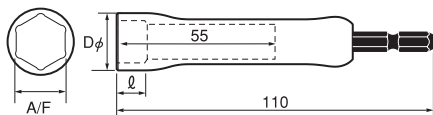
## GO-TAN Series

### "GO-TAN" (Hard Forged) Mirror Socket Patent Pending



The shank with molded resin part has been press-fit into the socket. By dispersing the excessive stress to the shank, its durability has become four times higher than conventional models.

※Based on our own tests. ※Except TA200811 and TA201011.



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

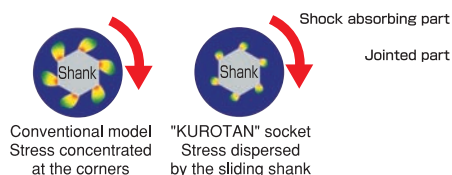
| Model No. | A/F | Dφ (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| TA200811  | 8   | 14      | 6.5    | 110                 | 165×35         | 358356             |
| TA201011  | 10  | 16      | 6.5    | 110                 | 165×35         | 358363             |
| TA201211  | 12  | 18      | 7.5    | 110                 | 165×35         | 358370             |
| TA201311  | 13  | 19      | 8      | 110                 | 165×35         | 358387             |
| TA201411  | 14  | 20      | 8      | 110                 | 165×35         | 358394             |
| TA201711  | 17  | 23      | 9      | 110                 | 165×35         | 358400             |
| TA201911  | 19  | 25      | 10     | 110                 | 165×35         | 358417             |
| TA202111  | 21  | 28      | 11     | 110                 | 165×35         | 358424             |
| TA202211  | 22  | 29      | 13     | 110                 | 165×35         | 358431             |
| TA202411  | 24  | 32      | 13     | 110                 | 165×35         | 358448             |

※The colors of the A/F column in the table indicate the seal colors.

### "KUROTAN" Socket Patent Pending



Our proprietary press-fit technology prevents shank breakage. Outstanding durability.



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

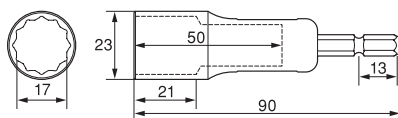
| Model No. | A/F | Dφ (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| HA201711  | 17  | 23      | 9      | 110                 | 160×35         | 357724             |
| HA201911  | 19  | 25      | 10     | 110                 | 160×35         | 357731             |
| HA202111  | 21  | 28      | 11     | 110                 | 160×35         | 357748             |

※The colors of the A/F column in the table indicate the seal colors.

### Scaffolding Worker's Socket



For fastening 17mm bolts and dual-purpose clamps commonly used for the scaffoldings.



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | Dφ (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| LAS20179  | 17  | 23      | 21     | 90                  | 146×35         | 345998             |

※The colors of the A/F column in the table indicate the seal colors.

### Tilt Socket

Patented



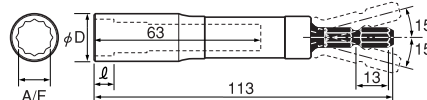
Pull to Bend, push to Lock. You can use the both features.

If not obstructed by anything, pushing locks the neck enabling use as a deep socket. When tightening in cor-



Tightening of duct coupling

Tightening of strap bolts



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | Dφ (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| WA201011  | 10  | 16      | 6.5    | 113                 | 165×35         | 356017             |
| WA201211  | 12  | 18      | 7.5    | 113                 | 165×35         | 355843             |
| WA201311  | 13  | 19      | 8      | 113                 | 165×35         | 355850             |
| WA201411  | 14  | 20      | 8      | 113                 | 165×35         | 355867             |
| WA201711  | 17  | 23      | 9      | 113                 | 165×35         | 355874             |
| WA201911  | 19  | 25      | 10     | 113                 | 165×35         | 355881             |
| WA202111  | 21  | 28      | 11     | 113                 | 165×35         | 355898             |
| WA202211  | 22  | 29      | 13     | 113                 | 165×35         | 357663             |
| WA202411  | 24  | 32      | 13     | 113                 | 165×35         | 357670             |

※The colors of the A/F column in the table indicate the seal colors.

### Tilt Bit Holder

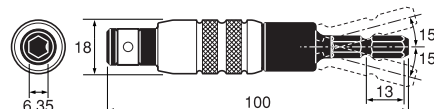
Patented



Thanks to a hand-turned grip, users can work in a stable posture.



Installing tension and angle brackets



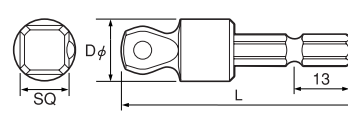
Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | Bit mounting angle (mm) | Outer diameter φ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-------------------------|-----------------------|---------------------|----------------|--------------------|
| WBJ100    | 6.35                    | 18                    | 100                 | 160×35         | 355959             |

### Tilt Socket Adapter Patent Pending



High hardness HRC60 to prevent wear on corners



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | Socket mounting SQ (mm) | Dφ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-------------------------|---------|---------------------|----------------|--------------------|
| A20WSQ3   | 9.5                     | 13      | 56                  | 114×35         | 355935             |
| A20WSQ4   | 12.7                    | 16      | 60                  | 117×35         | 355942             |



Pull to bend,  
push to lock



Color-  
coded  
by size



For impact  
drivers



Long sized  
for deep  
spots



Easy  
insertion  
to chuck



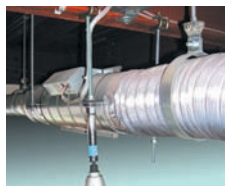
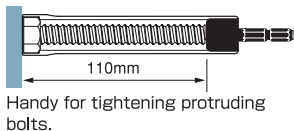
Turning  
grip



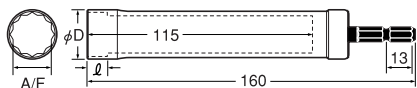
Keep the nut  
at the tip

## Super Long Socket

Patentec



For anchor bolts, form ties,  
hanger bolts, overhead cement  
hangers, etc.



Inner Ctn.: 5 sets, Outer Ctn.: 50 sets

| Model No. | A/F | Dφ<br>(mm) | ℓ<br>(mm) | Overall Length<br>(mm) | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|-----|------------|-----------|------------------------|-------------------|-----------------------|
| XA201715  | 17  | 23         | 9         | 160                    | 217×35            | 345936                |
| XA201915  | 19  | 25         | 10        | 160                    | 217×35            | 345943                |
| XA202115  | 21  | 28         | 11        | 160                    | 217×35            | 345950                |
| XA202415  | 24  | 32         | 13        | 160                    | 217×35            | 357694                |

※The colors of the A/F column in the table indicate the seal colors.

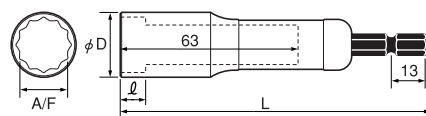


## Deep Hole Socket

Patented



Tightening of step clamp



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets (LA202411 only has inner ctn.)

| Model No. | A/F | Dφ<br>(mm) | ℓ<br>(mm) | Overall Length<br>(mm) | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|-----|------------|-----------|------------------------|-------------------|-----------------------|
| LA200811  | 8   | 14         | 6.5       | 110                    | 160×35            | 345684                |
| LA201011  | 10  | 16         | 6.5       | 110                    | 160×35            | 345691                |
| LA201211  | 12  | 18         | 7.5       | 110                    | 160×35            | 345707                |
| LA201311  | 13  | 19         | 8         | 110                    | 160×35            | 345714                |
| LA201411  | 14  | 20         | 8         | 110                    | 160×35            | 345721                |
| LA201711  | 17  | 23         | 9         | 110                    | 160×35            | 345738                |
| LA201911  | 19  | 25         | 10        | 110                    | 160×35            | 345745                |
| LA202111  | 21  | 28         | 11        | 110                    | 160×35            | 345752                |
| LA202211  | 22  | 29         | 13        | 110                    | 160×35            | 357687                |
| LA202411  | 24  | 32         | 13        | 110                    | 160×35            | 345769                |

※The colors of the A/F column in the table indicate the seal colors.



## Drop-ceiling Socket

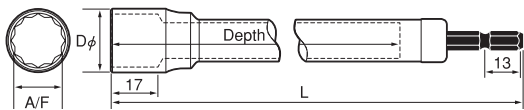
Patented



For drop-ceiling work and adjusting & dismantling  
operation of pipe and duct.



Its lightness enhances  
workability.  
The press-fit shank is strong  
against breakage.



Inner Ctn.: 5 sets

| Model No. | A/F | Dφ<br>(mm) | Depth<br>(mm) | Overall Length<br>(mm) | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|-----|------------|---------------|------------------------|-------------------|-----------------------|
| KA201730  | 17  | 23         | 255           | 300                    | 355×35            | 357229                |
| KA201750  | 17  | 23         | 455           | 500                    | 555×35            | 357236                |
| KA201770  | 17  | 23         | 655           | 700                    | 755×35            | 357243                |

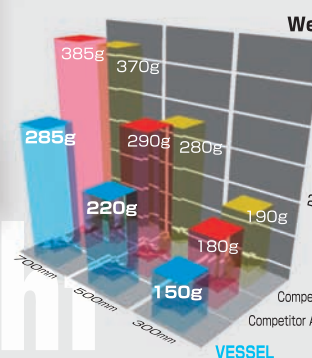
※The colors of the A/F column in the table indicate the seal colors.



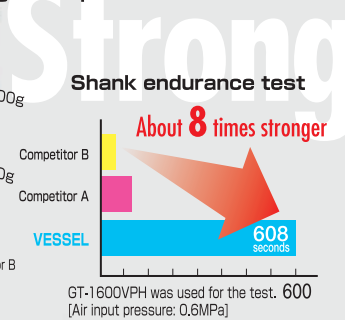
## ONE POINT

The **lightest** and **strongest**  
in the industry.

Drop-ceiling work is characterized by the repeated  
raising and lowering of tools over the worker's head.  
The key to reducing worker fatigue and  
increasing work efficiency is "lightness."  
In addition, the press-fit design of these  
sockets make them No. 1 in terms of "strength" as well.



Weight comparison



H 6.35 mm

# Construction Sockets

## GO-TAN Series

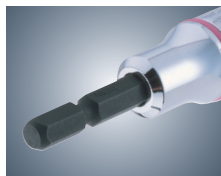


Surface  
contact in  
12 corners



Press-fit shank  
prevents breaking  
and twisting

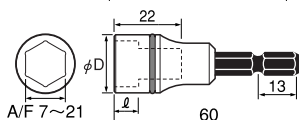
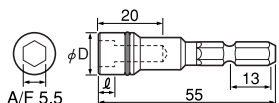
### Socket



Axial Press-fitting is  
strong against twisting



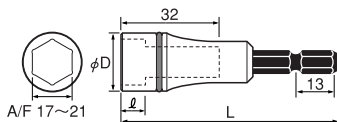
Installing piping or wiring supports



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | φD (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| SA205555  | 5.5 | 10      | 3.5    | 55                  | 110×35         | 345806             |
| SA200755  | 7   | 13      | 5      | 60                  | 115×35         | 345813             |
| SA200860  | 8   | 13.5    | 6.5    | 60                  | 115×35         | 345820             |
| SA209660  | 9.6 | 16      | 6.5    | 60                  | 115×35         | 345837             |
| SA201060  | 10  | 16      | 6.5    | 60                  | 115×35         | 345844             |
| SA201260  | 12  | 18      | 8      | 60                  | 115×35         | 345851             |
| SA201360  | 13  | 19      | 8      | 60                  | 115×35         | 345868             |
| SA201460  | 14  | 20      | 8      | 60                  | 115×35         | 345875             |
| SA201760  | 17  | 23      | 9      | 60                  | 115×35         | 345882             |

※The colors of the A/F column in the table indicate the seal colors.



### Semi-Long Type

Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | φD (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| SA201770  | 17  | 23      | 9      | 70                  | 125×35         | 345967             |
| SA201970  | 19  | 25      | 10     | 70                  | 125×35         | 345899             |
| SA202170  | 21  | 28      | 11     | 70                  | 125×35         | 345905             |

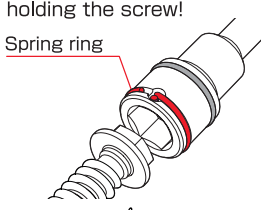
※The colors of the A/F column in the table indicate the seal colors.

### Ring Nut Setter

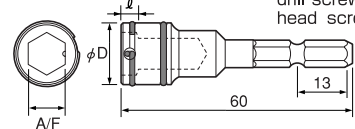


Magnets attract iron dust. Ball locks lose the ball. The spring ring solves those problems by securely holding the screw!

Spring ring



A ring nut setter is the best choice for securely fastening drill screws or flanged hexagon head screws with in high places as when anchoring angled plates in the middle.



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | φD (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| SAR0860   | 8   | 13      | 3      | 60                  | 115×35         | 355980             |
| SAR9660   | 9.6 | 16      | 4      | 60                  | 115×35         | 355997             |
| SAR1060   | 10  | 16      | 5      | 60                  | 115×35         | 356000             |

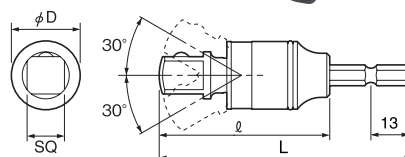
※The colors of the A/F column in the table indicate the seal colors.

### Universal Socket Adapter

Patented



Simply mount your sockets  
and go right to work.  
(Check square drive size.)



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

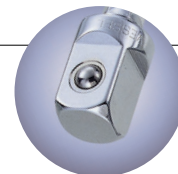
| Model No. | Square drive size A/F (mm) | φD (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|----------------------------|---------|--------|---------------------|----------------|--------------------|
| A20USQ3   | 9.5                        | 20      | 49     | 77                  | 35×133         | 357205             |
| A20USQ4   | 12.7                       | 23      | 56     | 84                  | 35×140         | 357212             |

※The colors of the A/F column in the table indicate the seal colors.

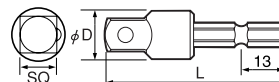
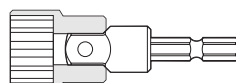
### Socket Adapter



Simply mount your sockets  
and go right to work.  
(Check square drive size.)



High hardness HRC60  
to prevent wear on corner:



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | Square drive size A/F (mm) | φD (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|----------------------------|---------|---------------------|----------------|--------------------|
| A20BSQ2   | 6.35                       | 8       | 45                  | 105×35         | 355904             |
| A20BSQ3   | 9.5                        | 13      | 54                  | 112×35         | 355911             |
| A20BSQ4   | 12.7                       | 16      | 59                  | 117×35         | 355928             |

### Long Bit Holder



Problems are quickly solved with a 6.35 mm hexagon bit or long type bit. Thanks to a hand-turned grip, users can work in a stable posture.



Tightening screws in high places  
or when nearby obstructions make  
work difficult.



Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | Chuck anvil size A/F (mm) | Outer diameter φ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|---------------------------|-----------------------|---------------------|----------------|--------------------|
| EXJ150    | 6.35                      | 12                    | 150                 | 205×35         | 355966             |
| EXJ300    | 6.35                      | 12                    | 300                 | 355×35         | 355973             |





Pull to bend,  
push to lock



Color-  
coded  
by size



For impact  
drivers



Long sized  
for deep  
spots



Easy  
insertion  
to chuck



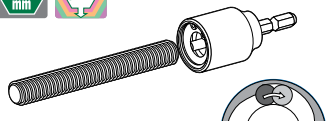
Turning  
grip



Keep the nut  
at the tip

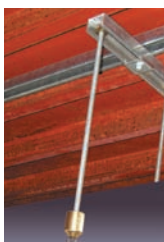


## Fully Threaded Socket

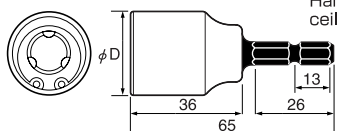


### 3-roller structure

3 rollers securely hold  
the bolt without damaging threads.



Hanger bolt for drop  
ceiling



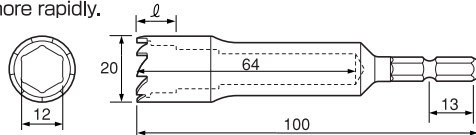
Inner Ctn.: 5 sets

| Model No. | Screw size | φD (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|------------|---------|---------------------|----------------|--------------------|
| GA20ZW25  | 5/16       | 23      | 65                  | 125×35         | 346759             |
| GA20ZW30  | 3/8        | 28      | 65                  | 125×35         | 346766             |
| GA20ZW40  | 1/2        | 28      | 65                  | 125×35         | 346773             |

## Rubble-removing Socket for Plastic Cone



Super hard steel is used for the tip. Quickly grinds away trouble-some rubble (concrete) so plastic cones can be set and pulled more rapidly.



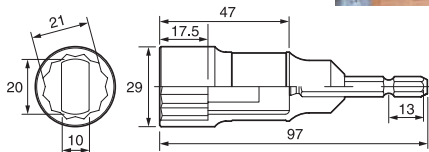
Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | φD (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| A201210G  | 12  | 20      | 11     | 100                 | 155×35         | 345929             |

## Form Tie Socket (For Ivy Form Ties) Patented



Removes the ivy form tie and nut at  
the same time.



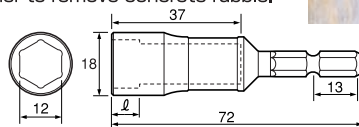
Inner Ctn.: 5 sets

| Model No. | A/F | φD (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|---------------------|----------------|--------------------|
| A202110F  | 21  | 29      | 97                  | 160×35         | 358349             |

## Socket for Plastic Cone



Cost-efficient specification  
The shaft can be hit with a hammer  
to remove concrete rubble.



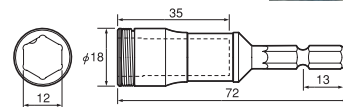
Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | φD (mm) | ℓ (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|--------|---------------------|----------------|--------------------|
| A201275   | 12  | 18      | 8      | 72                  | 120×35         | 345912             |

## Plastic Cone Catcher



Holds a plastic cone with a  
spring and a ball to prevent it  
from dropping.



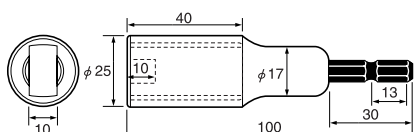
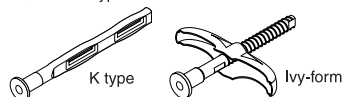
Inner Ctn.: 5 sets, Outer Ctn.: 100 sets

| Model No. | A/F | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------------------|----------------|--------------------|
| A201275C  | 12  | 72                  | 130×35         | 358622             |

## Form Tie Socket Patented



Use for setting and striking Ivy-form  
or K type form tie.



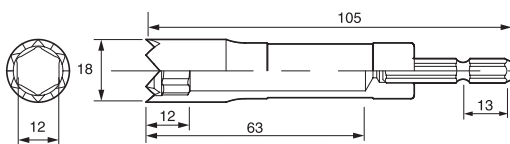
Inner Ctn.: 5 sets

| Model No. | A/F | φD (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|---------------------|----------------|--------------------|
| GA20F101  | 10  | 25      | 100                 | 160×35         | 346704             |

## Rubble-removing Socket for Plastic Cones (Carbide tipped)



The hardness of the tip has been in-  
creased (HRC51) for higher wear-resis-  
tance.



Inner Ctn.: 5 sets

| Model No. | A/F | φD (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
|-----------|-----|---------|---------------------|----------------|--------------------|
| A201210B  | 12  | 18      | 105                 | 160×35         | 358332             |



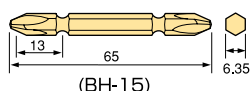
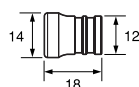
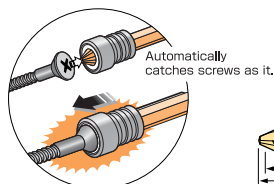
H 6.35 mm

# Construction Sockets

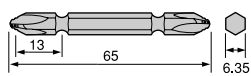
## Magnetic Screw Catcher/ Others

### No. BH-15/BH-16/BH-17 Magnetic Screw Catcher

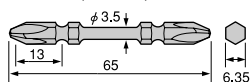
For sinking screws in construction and civil engineering work (i.e., joists and planks, interiors, etc.). A strong magnet assuredly holds screws, therefore can be used with long screws.



(BH-15)



(BH-16)



(BH-17)



#### No. BH-15

Inner Ctn.: 10 sets

| Contents                                                                                     | Card size (mm) | JAN code (4907587) |
|----------------------------------------------------------------------------------------------|----------------|--------------------|
| Magnetic Screw Catch: 1 pc.<br>Double End Gold Color Bit $\oplus 2 \times 65\text{mm}$ 1 pc. | 135×45         | 354884             |

#### No. BH-16

Inner Ctn.: 10 sets

| Contents                                                                      | Card size (mm) | JAN code (4907587) |
|-------------------------------------------------------------------------------|----------------|--------------------|
| Magnetic Screw Catch: 1 pc.<br>"GIZA" bit $\oplus 2 \times 65\text{mm}$ 1 pc. | 135×45         | 354891             |

#### No. BH-17

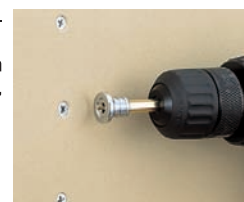
Inner Ctn.: 10 sets

| Contents                                                                       | Card size (mm) | JAN code (4907587) |
|--------------------------------------------------------------------------------|----------------|--------------------|
| Magnetic Screw Catch: 1 pc.<br>Torsion bit $\oplus 2 \times 65\text{mm}$ 1 pc. | 135×45         | 354907             |

### No. BH-13 Screw Adjuster

Patented

For construction and civil engineering work. Prevents over-tightening in sheetrock, particle board, etc.

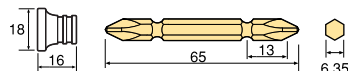


8~9.5mm



Can be used with bell-shaped screws.

Easily straightens the screw head. Users work assuredly without damaging walls, etc.



Outer Ctn.: 10 sets

| Contents                                                                              | Card size (mm) | JAN code (4907587) |
|---------------------------------------------------------------------------------------|----------------|--------------------|
| Screw Adjuster 1 pc.<br>Double End Gold Color Bit $\oplus 2 \times 65\text{mm}$ 1 pc. | 135×45         | 353269             |

### No. BH-11 Screw Catch and Adjuster

Patented

For construction and civil engineering work. Ideal for sinking screws in sheetrock, particle board, etc.



8~9.5mm

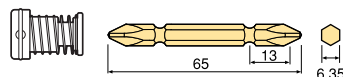
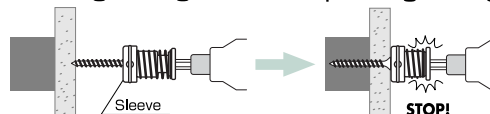


Can be used with bell-shaped screws.

Built in steel ball strongly holds even long screw, makes single hand operation possible.

Start tightening

Complete tightening!



Outer Ctn.: 10 sets

| Contents                                                                                        | Card size (mm) | JAN code (4907587) |
|-------------------------------------------------------------------------------------------------|----------------|--------------------|
| Screw Catch and Adjuster 1 pc.<br>Double End Gold Color Bit $\oplus 2 \times 65\text{mm}$ 1 pc. | 135×45         | 347053             |

## No. BH-14 Torsion Bit Holder

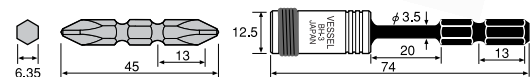
Gains a torsion effect by simply mounting on a rechargeable or pneumatic driver. Coupled with a high hardness bit, work proceeds smoothly without breaks or wear.



- Greatly enhanced durability
- Increased precision of fastening torque
- Reduced stripping of screw head



**MG Magnetized**

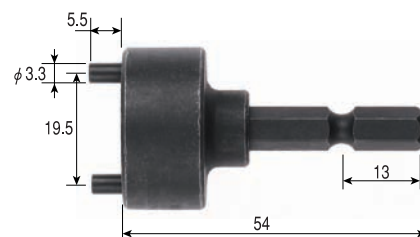


Inner Ctn.: 10 sets

| Contents                                                 | Card size (mm) | JAN code (4907587) |
|----------------------------------------------------------|----------------|--------------------|
| Torsion Bit Holder 1pc.<br>High Hardness Bit 2×45mm 1pc. | 160×45         | 354792             |

## Pin Wrench for Disk Nut

To loosen the disk nut of the disk grinder. For 100mm-diameter wheel.



Inner Ctn.: 5 sets

| Model No.       | Pitch of nut holes (mm) | Pin diameter $\phi$ (mm) | Card size (mm) | JAN code (4907587) |
|-----------------|-------------------------|--------------------------|----------------|--------------------|
| <b>A202050P</b> | 19.5                    | 3.3                      | 107×35         | 358653             |

## Socket Anvil

Converts 12.7mm squared anvil to 6.35mm hex chuck.

**BH-30**



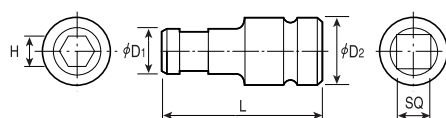
**BHC-30**



■ 12.7mm

| Model No.     | (SQ)×A/F (H) | Card size (mm) | JAN code (4907587) |
|---------------|--------------|----------------|--------------------|
| <b>BH-30</b>  | 12.7×6.35    | 135×60         | 355249             |
| <b>BHC-30</b> | 12.7×6.35    | 135×60         | 358639             |

Inner Ctn.: 5 sets



■ 9.5mm  
■ 12.7mm

| Model No.  | (SQ)×A/F (H) | Dimensions |    |      |         |
|------------|--------------|------------|----|------|---------|
|            |              | D1         | D2 | L    |         |
| <b>A30</b> | 9.5×6.35     | 13         | 20 | 45   | A14·A16 |
|            | 9.5×8.0      | 16         | 20 | 47.5 | A15·A19 |
|            | 12.7×6.35    | 13         | 25 | 49   | A14·A16 |
|            | 12.7×8.0     | 16         | 25 | 51   | A15·A19 |

● For the order, specify the product no., size, heat treatment class and quantity.  
Ex.) A30 9.5×6.351 pc.

## ONE POINT

### For simple loosening of disk nuts...

An opposite side 6.35mm pin wrench with hexagonal shaft for disk nuts that can be attached to an impact driver. Disk nuts which cannot be removed by the drill wrench that came with the impact driver can be easily loosened and removed with this unit.



H 6.35 mm



## Drill Bits & Drill Chucks

VESSEL CO., LTD. has entered a new generation of bit manufacturing, with cushion drills that minimize axial runout and drill chucks of maximum hardness, manufactured in collaboration with LFA Co. in France.



### *Cap Drill* Patented

Our cap drills are designed to be placed over the tips of double-end bits mounted in electric impact drivers, enabling efficient drilling and screw tightening work. The cap is designed to be held between the fingers for safe, secure use.

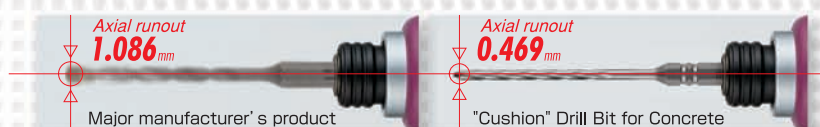


### *"Cushion" Drill Bit* Patented

Cushion ring provides for a sharp decrease in axial runout



Axial runout has been suppressed to a minimum by a cushion ring around the shank. For example, the 1.1mm runout of a conventional concrete drill would be reduced to 0.5mm with our cushion drill bit.



Our runout-measuring instrument was used.



**Cushion**  
Cushion ring reduces axial  
runout.



**Press-fit**  
Drill tip won't be  
removed.



**Color-coded**  
O-rings are color-coded  
by size.



**For impact drivers**  
Usable with power  
impact drivers.



**Bevel angle**  
Smoothly fits into the anvil.



**X thinning**  
No center punch  
needed.



**Asymmetry tip**  
Asymmetry carbide tip  
for quick drilling.



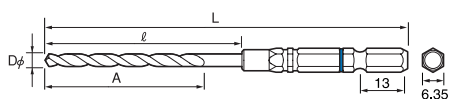
**Long sized**  
Handy for deep or  
tight spots.

## "Cushion" Drill Bit for steel

Patented



Drilling holes on steel, lightweight metal,  
synthetic resin, and wood. High-hardness  
HSS steel blade is very durable.



Inner Ctn.: 10 sets, Outer Ctn.: 200 sets

| Model No. | Dφ<br>(mm) | ℓ<br>(mm) | A<br>(mm) | Overall Length<br>(mm) | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|------------|-----------|-----------|------------------------|-------------------|-----------------------|
| AMD-2.0   | 2.0        | 32        | 24        | 82                     | 165×35            | 600011                |
| AMD-2.5   | 2.5        | 40        | 30        | 90                     | 165×35            | 600028                |
| AMD-2.8   | 2.8        | 44        | 33        | 94                     | 165×35            | 600035                |
| AMD-3.0   | 3.0        | 44        | 33        | 94                     | 165×35            | 600042                |
| AMD-3.2   | 3.2        | 48        | 36        | 98                     | 165×35            | 600059                |
| AMD-3.3   | 3.3        | 48        | 36        | 98                     | 165×35            | 600066                |
| AMD-3.4   | 3.4        | 53        | 39        | 103                    | 165×35            | 600172                |
| AMD-3.5   | 3.5        | 53        | 39        | 103                    | 165×35            | 600073                |
| AMD-3.6   | 3.6        | 53        | 39        | 103                    | 165×35            | 600189                |
| AMD-3.7   | 3.7        | 53        | 39        | 103                    | 165×35            | 600080                |
| AMD-3.8   | 3.8        | 58        | 43        | 108                    | 165×35            | 600097                |
| AMD-4.0   | 4.0        | 58        | 43        | 108                    | 165×35            | 600103                |
| AMD-4.2   | 4.2        | 58        | 43        | 108                    | 165×35            | 600110                |
| AMD-4.3   | 4.3        | 58        | 47        | 108                    | 165×35            | 600196                |
| AMD-4.5   | 4.5        | 63        | 47        | 114                    | 165×35            | 600127                |
| AMD-4.8   | 4.8        | 69        | 52        | 120                    | 165×35            | 600134                |
| AMD-5.0   | 5.0        | 69        | 52        | 120                    | 165×35            | 600141                |
| AMD-5.2   | 5.2        | 69        | 52        | 120                    | 165×35            | 600202                |
| AMD-5.5   | 5.5        | 76        | 57        | 127                    | 165×35            | 600158                |
| AMD-6.0   | 6.0        | 76        | 57        | 127                    | 165×35            | 600165                |

※The colors in the column in the table indicate the ring colors.

## "Cushion" Drill Bit for steel 3-Piece Set

Inner Ctn.: 10 sets

| Model No. | Contents          | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|-------------------|-------------------|-----------------------|
| AMD3S-1   | 2.0 / 2.5 / 3.0mm | 165×50            | 602305                |
| AMD3S-2   | 3.0 / 3.5 / 4.0mm | 165×50            | 602312                |

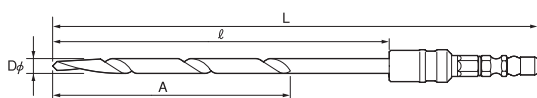


## "Cushion" Drill Bit for Awl

Patented



Drilling holes on steel, wood, bamboo,  
plaster, and resin boards. Also for drilling  
a pilot hole on other brittle materials.  
Durable straight shank can drill a hole  
on hard wood.



Inner Ctn.: 10 sets, Outer Ctn.: 200 sets

| Model No. | Dφ<br>(mm) | ℓ<br>(mm) | A<br>(mm) | Overall Length<br>(mm) | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|------------|-----------|-----------|------------------------|-------------------|-----------------------|
| ATD-4     | 3.0        | 93        | 62        | 143                    | 200×35            | 602015                |
| ATD-5     | 4.0        | 103       | 76        | 153                    | 200×35            | 602022                |
| ATD-6     | 5.0        | 113       | 80        | 163                    | 200×35            | 602039                |

※The colors in the column in the table indicate the ring colors.



## "Cushion" Drill Bit for Concrete

Patented



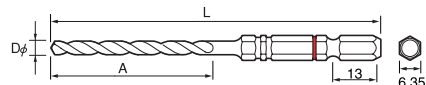
**Carbide tip**  
**Asymmetry shape**



This asymmetry  
shaped tip reduces the cutting resistance,  
making it possible to drill at a relatively  
low torque.



Drilling holes on mortar, block, brick, ALC, plaster boards.



Inner Ctn.: 10 sets, Outer Ctn.: 200 sets

| Model No. | Dφ<br>(mm) | A<br>(mm) | Overall Length<br>(mm) | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|------------|-----------|------------------------|-------------------|-----------------------|
| ACD-3.0   | 3.0        | 45        | 102                    | 165×35            | 601018                |
| ACD-3.2   | 3.2        | 45        | 102                    | 165×35            | 601025                |
| ACD-3.4   | 3.4        | 45        | 102                    | 165×35            | 601032                |
| ACD-3.5   | 3.5        | 45        | 102                    | 165×35            | 601049                |
| ACD-3.8   | 3.8        | 50        | 107                    | 165×35            | 601056                |
| ACD-4.0   | 4.0        | 50        | 107                    | 165×35            | 601063                |
| ACD-4.3   | 4.3        | 50        | 107                    | 165×35            | 601070                |
| ACD-4.5   | 4.5        | 50        | 107                    | 165×35            | 601087                |
| ACD-4.8   | 4.8        | 50        | 107                    | 165×35            | 601094                |
| ACD-5.0   | 5.0        | 50        | 107                    | 165×35            | 601100                |
| ACD-5.3   | 5.3        | 65        | 122                    | 165×35            | 601155                |
| ACD-5.5   | 5.5        | 65        | 122                    | 165×35            | 601117                |
| ACD-6.0   | 6.0        | 65        | 122                    | 165×35            | 601124                |
| ACD-6.4   | 6.4        | 65        | 122                    | 165×35            | 601131                |
| ACD-6.5   | 6.5        | 65        | 122                    | 165×35            | 601148                |

※The colors in the column in the table indicate the ring colors.



## Long Type

Inner Ctn.: 10 sets, Outer Ctn.: 200 sets

| Model No. | Dφ<br>(mm) | A<br>(mm) | Overall Length<br>(mm) | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|------------|-----------|------------------------|-------------------|-----------------------|
| ACD-3.4L  | 3.4        | 95        | 152                    | 200×35            | 601346                |
| ACD-3.5L  | 3.5        | 95        | 152                    | 200×35            | 601353                |
| ACD-4.3L  | 4.3        | 100       | 157                    | 200×35            | 601315                |
| ACD-4.8L  | 4.8        | 100       | 157                    | 200×35            | 601322                |
| ACD-5.0L  | 5.0        | 100       | 157                    | 200×35            | 601339                |
| ACD-6.4L  | 6.4        | 115       | 172                    | 200×35            | 601360                |

※The colors in the column in the table indicate the ring colors.



## "Cushion" Drill Bit for concrete 3-Piece Set

Inner Ctn.: 10 sets

| Model No. | Contents    | Card size<br>(mm) | JAN code<br>(4907587) |
|-----------|-------------|-------------------|-----------------------|
| ACD3S-3.4 | 3.4mm 3pcs. | 165×50            | 602503                |
| ACD3S-3.5 | 3.5mm 3pcs. | 165×50            | 602510                |
| ACD3S-4.3 | 4.3mm 3pcs. | 165×50            | 602527                |



H 6.35 mm



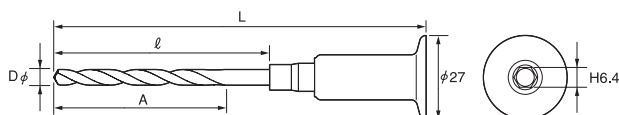
# Drill Bits & Drill Chucks

## Cap Drill

Patented



For drilling a pilot hole on sheet steel / wooden board. Our "Cap Drills" allow you to mount a drill directly onto the bit, speeding up the task of pilot hole drilling.

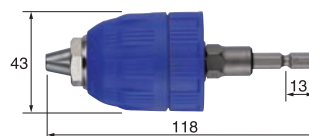


| Inner Ctn.: 10 sets |         |        |        |                     |                |                    |
|---------------------|---------|--------|--------|---------------------|----------------|--------------------|
| Model No.           | Dφ (mm) | l (mm) | A (mm) | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
| CMD-2               | 2.0     | 32.8   | 24     | 84                  | 165×45×29      | 602602             |
| CMD-3               | 3.0     | 45     | 33     | 96                  | 165×45×29      | 602619             |
| CMD-3.5             | 3.5     | 54     | 39     | 105                 | 165×45×29      | 602626             |
| CMD-4               | 4.0     | 59     | 43     | 110.5               | 165×45×29      | 602633             |
| CMD-5               | 5.0     | 69     | 52     | 121                 | 165×45×29      | 602640             |

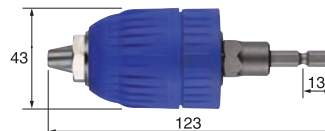
※ The colors in the column in the table indicate the ring colors.

## Drill Chuck Keyless Type (For power tools)

BH-261



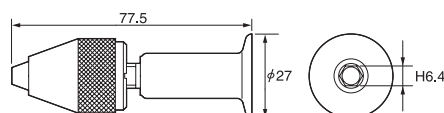
BH-271



| Inner Ctn.: 5 sets |             |              |        |        |
|--------------------|-------------|--------------|--------|--------|
| BH-261             | Drill Chuck | Dia.: 0.5~10 | 140×80 | 356994 |
| BH-271             | Drill Chuck | Dia.: 1.5~13 | 140×80 | 357700 |

## Cap Drill Chuck

Patented



BH-9

| Inner Ctn.: 10 sets |              |                     |                |                    |
|---------------------|--------------|---------------------|----------------|--------------------|
| Model No.           | A (mm)       | Overall Length (mm) | Card size (mm) | JAN code (4907587) |
| BH-9                | Dia: 1.5~6.5 | 77.5                | 140×50×29      | 359001             |

## ONE POINT

### For high impact work.

A twin-ratchet mechanism has been employed to firmly grip the bits. Furthermore, this high-class chuck features the use of saw tooth screws to ensure a minimum of bite in during high impact work.



The chuck section was developed in collaboration with LFA Co. in France.

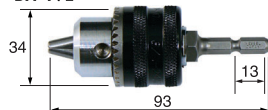


## Drill Chuck (For power tools)

Mount a bit and perform all kinds of work from drilling to grinding and fastening.

- Fantastic grip. High precision.
- High durability shank.
- Key type: Attach and detach tools with the included key.
- Hybrid type: Works with or without a key.

**BH-19E**



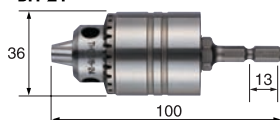
**BH-20**



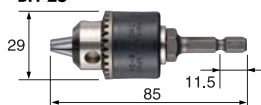
**BH-23**



**BH-21**



**BH-25**



| Inner Ctn.: 5 sets |                           |                     |                |                    |
|--------------------|---------------------------|---------------------|----------------|--------------------|
| Model No.          | Contents                  | Tip grip range (mm) | Card size (mm) | JAN code (4907587) |
| <b>BH-19E</b>      | Drill Chuck (keyed) • Key | Dia.: 1.0~10        | 140×80         | 359049             |
| <b>BH-20</b>       | Drill Chuck (keyed) • Key | Dia.: 0.8~6.5       | 140×80         | 355324             |
| <b>BH-21</b>       | Drill Chuck (keyed) • Key | Dia.: 1.5~10        | 140×80         | 355331             |
| <b>BH-23</b>       | Drill Chuck (keyed) • Key | Dia.: 1.5~13        | 140×80         | 355836             |
| <b>BH-25</b>       | Drill Chuck (keyed) • Key | Dia.: 0.8~6.5       | 140×80         | 356734             |

For the BH-25 applicable models, see the D83 type on page 63.

## Drill Chuck For Rotary Hammer and Hammer Drills

**SDS plus**

**No.BH-28**



Inner Ctn.: 5 sets

| Contents                     | Tip grip range (mm) | Card size (mm) | JAN code (4907587) |
|------------------------------|---------------------|----------------|--------------------|
| Drill Chuck SDS Plus (keyed) | Dia.: 1.5~13        | 185×100        | 356970             |

**SDS plus**

**No.BH-22**



Inner Ctn.: 5 sets

| Contents                     | Tip grip range (mm) | Card size (mm) | JAN code (4907587) |
|------------------------------|---------------------|----------------|--------------------|
| Drill Chuck SDS Plus (keyed) | Dia.: 2~13          | 185×100        | 355539             |

## Spare Shaft for Drill Chucks

**BH-24**



**BH-29**



Applicable Models: BH-19/ 20/ 21/ 23/ 26/ 19E

Applicable Models: BH-271



Inner Ctn.: 5 sets

| Model No.    | Contents                      | Screw size | Card size (mm) | JAN code (4907587) |
|--------------|-------------------------------|------------|----------------|--------------------|
| <b>BH-24</b> | Spare shank • Reversing screw | 3/8-24UNF  | 135×35         | 356062             |
| <b>BH-29</b> | Spare shank • Reversing screw | 1/2-20UNF  | 135×35         | 356987             |

# Air Tools

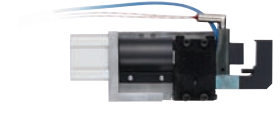
VESSEL considers that the tools used during work must not only be convenient, but also people friendly.

VESSEL's philosophy of tools approaches air tools based on this concept, and its products are designed to thoroughly satisfy people from the aspects of performance, durability, and safety.

|     | 3       | 5       | 6.35 | 8   | 8       | 9.5     | 12.7    | 19  | 25.4 |                                                                                                                                                                    |
|-----|---------|---------|------|-----|---------|---------|---------|-----|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |         |         | 114  |     |         |         |         |     |      |  Air Screwdrivers<br>Oil Xtra Series                                           |
| 115 |         | 115     |      |     |         |         |         |     |      |  Air Screwdrivers<br>Clutch Type                                               |
|     |         | 116~117 | 117  |     |         |         |         |     |      |  Air Screwdrivers<br>Impact Type                                               |
|     | 118~119 | 118~119 |      |     |         |         |         |     |      |  Air Screwdrivers<br>Torque Control                                            |
|     |         |         |      |     |         |         | 122     |     | 122  |  Air Impact Wrenches<br>Super Light V-Hammer                                   |
|     |         |         |      |     |         |         |         | 123 | 123  |  Air Impact Wrenches<br>Lightweight F-Hammer                                   |
|     |         |         |      |     |         | 124~125 | 124     | 125 | 125  |  Air Impact Wrenches<br>Single Hammer<br>Air Ratchet Wrench                    |
|     |         |         |      | 126 | 126~127 | 126~127 | 126~127 | 127 |      |  Air Impact Wrenches<br>Double Hammer<br>Torque Control<br>Air Impact Wrenches |





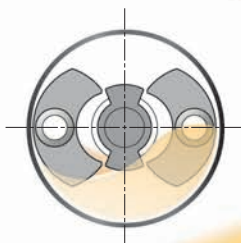
|     |                                                                                                                                                |     |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 114 |  <p>Air Belt Sanders<br/>Air Grinders</p>                   | 128 |
| 115 |  <p>Air Micro Grinders</p>                                  | 132 |
| 116 |  <p>Air Drills</p>                                          | 135 |
| 118 |  <p>Air Saws<br/>Air Scrapers</p>                           | 137 |
| 120 |  <p>Air Nippers<br/>For Resin Gate</p>                      | 140 |
| 123 |  <p>Heat Air Nippers</p>                                    | 148 |
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| 126 |  <p>Air Dusters<br/>Air Couplings<br/>Air Tool Supplies</p> | 160 |

# CONTENTS



## Air Screwdrivers

Reduced noise at installation sites!  
Low noise, low vibration specifications.  
The "OIL Xtra" series changes vibration noise to a soft sound by circulating oil in the impact section of the unit.



### ***Oil Xtra Series***

#### Oil Circulating System

The impact mechanism is filled with lubricating oil. In addition to changing the impact noise to a softer, smoother sound, the oil prevents part damage due to friction.

# Oil Xtra



CE Approved  
VESSEL's Oil Xtra series is manufactured in accordance with European Standards (EN792), and labeled in accordance with the basic rules of EN ISO vibration and noise standards.



※Only for referential purposes.

|  Small screw |  Phillips | Applicable Models                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>M1.6</b>                                                                                   | <b>0</b>                                                                                   | H2                                                                                                                                                                     |
| <b>M1.7</b>                                                                                   | <b>0</b>                                                                                   | H2                                                                                                                                                                     |
| <b>M2</b>                                                                                     | <b>0 (Old JIS 1)</b>                                                                       | H2, S4TFG, S4TG                                                                                                                                                        |
| <b>M2.2</b>                                                                                   | <b>1</b>                                                                                   | H2                                                                                                                                                                     |
| <b>M2.3</b>                                                                                   | <b>0 (Old JIS 1)</b>                                                                       | H2, S4TFG, S4TFS, S4TG, S4TS                                                                                                                                           |
| <b>M2.5</b>                                                                                   | <b>1</b>                                                                                   | S4TFG, S4TFS, S4TG, S4TS, S5TFG, S5TG                                                                                                                                  |
| <b>M2.6</b>                                                                                   | <b>0 (Old JIS 1)</b>                                                                       | H4RC, S4TFS, S4TS, S5TFG, S5TG                                                                                                                                         |
| <b>M3</b>                                                                                     | <b>1 (Old JIS 2)</b>                                                                       | H4R, H4PR, PH4, H4RC, S4TFS, S4TFR, S4TS, S4TR, S5TFG, S5TFB, S5TG, S5TB                                                                                               |
| <b>M3.5</b>                                                                                   | <b>2</b>                                                                                   | H4R, H4PR, PH4, H4RC, H5RC, S4TR, S4TFR, S5TFB, S5TB                                                                                                                   |
| <b>M4</b>                                                                                     | <b>2</b>                                                                                   | H4R, H4PR, PH4, H5R, H5P, PH5, H5RC, S4.5DR, P4.5DR, PLR, PLP, PLZ, PLRC, P5LS, S4TFR, S4TR, S5TFB, S5TFR, S5TB, S5TR, PLXD, S4.5XD, P4.5XD                            |
| <b>M4.5</b>                                                                                   | <b>2</b>                                                                                   | H5R, H5P, PH5, H5RC, S4.5DR, P4.5DR, PLR, PLP, PLZ, PLRC, P5LS, S5TFR, S5TR, S5TS, PLXD, S4.5XD, P4.5XD                                                                |
| <b>M5</b>                                                                                     | <b>2</b>                                                                                   | H5R, H5P, PH5, S4.5DR, P4.5DR, PLR, PLP, PLZ, PLRC, P5LS, P6LSIII, P6HS, PLHII, P6OXD, S6MLR, S6HS, S6CD, S5TFR, S5TR, S5TS, PLXD, S4.5XD, P4.5XD, P6EXD, S6LXD, P6LXD |
| <b>M6</b>                                                                                     | <b>3</b>                                                                                   | P6LSIII, P6HS, PLHII, S6MLR, S6HS, S5TS, S6.5D, P6.5D, S6CD, P6EXD, S6LXD, P6LXD, P6OXD                                                                                |
| <b>M8</b>                                                                                     | <b>4 (Old JIS 3)</b>                                                                       | S6.5D, P6.5D, P8D, P10SII, P60XW                                                                                                                                       |
| <b>M10</b>                                                                                    | <b>4</b>                                                                                   | P8D, P10SII                                                                                                                                                            |

|  Wood screw |  Phillips | Applicable Models                                                                                                                             |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1.8</b>                                                                                   | <b>—</b>                                                                                   | H4R, H4PR, PH4                                                                                                                                |
| <b>2.1</b>                                                                                   | <b>1</b>                                                                                   | H4R, H4PR, PH4                                                                                                                                |
| <b>2.4</b>                                                                                   | <b>1</b>                                                                                   | H4R, H4PR, PH4                                                                                                                                |
| <b>2.7</b>                                                                                   | <b>1</b>                                                                                   | H5R, H5P, PH5, S4.5DR, P4.5DR, PLR, PLP, PLZ, P5LS, S4.5XD, P4.5XD                                                                            |
| <b>3.1</b>                                                                                   | <b>2</b>                                                                                   | H5R, H5P, PH5, S4.5DR, P4.5DR, PLR, PLP, PLZ, P5LS, S4.5XD, P4.5XD                                                                            |
| <b>3.5</b>                                                                                   | <b>2</b>                                                                                   | H5R, H5P, PH5, S4.5DR, P4.5DR, PLR, PLP, PLZ, P5LS, P6LSIII, P6HS, PLHII, S6MLR, S6HS, S6CD, PLXD, S4.5XD, P4.5XD, P6EXD, S6LXD, P6LXD, P6OXD |
| <b>3.8</b>                                                                                   | <b>2</b>                                                                                   | PLHII, P6LSIII, S6MLR, S6HS, P6HS, S6CD, S6.5D, P6.5D, PLXD, P6EXD, S6LXD, P6LXD, P6OXD                                                       |
| <b>4.1</b>                                                                                   | <b>2</b>                                                                                   | PLHII, P6LSIII, S6MLR, S6HS, P6HS, S6CD, S6.5D, P6.5D, P6EXD, S6LXD, P6LXD, P6OXD                                                             |
| <b>4.5</b>                                                                                   | <b>2</b>                                                                                   | S6.5D, P6.5D, P6EXD, P6OXD, P8D, P10SII                                                                                                       |
| <b>4.8</b>                                                                                   | <b>2</b>                                                                                   | P8D, P10SII, P6EXD                                                                                                                            |
| <b>5.1</b>                                                                                   | <b>3</b>                                                                                   | P8D, P10SII                                                                                                                                   |
| <b>5.5</b>                                                                                   | <b>3</b>                                                                                   | P8D, P10SII                                                                                                                                   |
| <b>5.8</b>                                                                                   | <b>3</b>                                                                                   | P8D, P10SII                                                                                                                                   |
| <b>6.2</b>                                                                                   | <b>3</b>                                                                                   | P8D, P10SII                                                                                                                                   |

|  Tapping screw |  Phillips | Applicable Models                                                                                                                                           |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>3.5</b>                                                                                        | <b>2</b>                                                                                     | H5R, H5P, PH5, S4.5DR, P4.5DR, PLR, PLP, PLZ, P5LS, S4.5XD, P4.5XD                                                                                          |
| <b>4</b>                                                                                          | <b>2</b>                                                                                     | H5R, H5P, PH5, S4.5DR, P4.5DR, PLR, PLP, PLZ, P5LS, P6LSIII, P6HS, PLHII, S6MLR, S6HS, S6.5D, P6.5D, S6CD, PLXD, S4.5XD, P4.5XD, P6EXD, S6LXD, P6LXD, P6OXD |
| <b>4.2</b>                                                                                        | <b>2</b>                                                                                     | P6LSIII, P6HS, PLHII, S6MLR, S6HS, S6.5D, P6.5D, S6CD, PLXD, P6EXD, S6LXD, P6LXD, P6OXD                                                                     |
| <b>4.5</b>                                                                                        | <b>2</b>                                                                                     | P6LSIII, P6HS, PLHII, S6MLR, S6HS, S6.5D, P6.5D, S6CD, P6EXD, S6LXD, P6LXD, P6OXD                                                                           |
| <b>4.8</b>                                                                                        | <b>2</b>                                                                                     | P6.5D, P6OXD                                                                                                                                                |
| <b>5</b>                                                                                          | <b>2</b>                                                                                     | P6.5D, P8D, P10SII, P6OXD                                                                                                                                   |
| <b>5.5</b>                                                                                        | <b>3</b>                                                                                     | P8D, P10SII                                                                                                                                                 |
| <b>6</b>                                                                                          | <b>3</b>                                                                                     | P8D, P10SII                                                                                                                                                 |

|  Hexagonal recess bolt |  Hexagonal head bolt |  H (mm) |  H (mm) | Applicable Models                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>M2.5</b>                                                                                               | <b>2.0</b>                                                                                              | <b>5.0</b>                                                                                 |                                                                                            | H4RC                                                                                                                                          |
| <b>M3</b>                                                                                                 | <b>2.5</b>                                                                                              | <b>5.5</b>                                                                                 |                                                                                            | H4R, H4PR, PH4, H4RC                                                                                                                          |
| <b>M3.5</b>                                                                                               | <b>—</b>                                                                                                | <b>6.0</b>                                                                                 |                                                                                            | H4R, H4PR, PH4, H4RC, H5RC                                                                                                                    |
| <b>M4</b>                                                                                                 | <b>3.0</b>                                                                                              | <b>7.0</b>                                                                                 |                                                                                            | H4R, H4PR, PH4, H5R, H5P, PH5, H5RC, S4.5DR, P4.5DR, PLR, PLP, PLZ, P5LS, PLRC, PLXD, S4.5XD, P4.5XD                                          |
| <b>M5</b>                                                                                                 | <b>4.0</b>                                                                                              | <b>8.0</b>                                                                                 |                                                                                            | H5R, H5P, PH5, S4.5DR, P4.5DR, PLR, PLP, PLZ, P5LS, P6LSIII, P6HS, PLHII, S6MLR, S6HS, S6CD, PLXD, S4.5XD, P4.5XD, P6EXD, S6LXD, P6LXD, P6OXD |
| <b>M6</b>                                                                                                 | <b>5.0</b>                                                                                              | <b>10.0</b>                                                                                |                                                                                            | P6LSIII, P6HS, PLHII, S6MLR, S6HS, S6.5D, P6.5D, S6CD, P6EXD, S6LXD, P6LXD, P6OXD                                                             |
| <b>M7</b>                                                                                                 | <b>—</b>                                                                                                | <b>11.0</b>                                                                                |                                                                                            | S6.5D, P6.5D, P6OXD                                                                                                                           |
| <b>M8</b>                                                                                                 | <b>6.0</b>                                                                                              | <b>13.0</b>                                                                                |                                                                                            | S6.5D, P6.5D, P8D, P10SII, P6OXD                                                                                                              |
|                                                                                                           |                                                                                                         | <b>(Small bolt 12.0)</b>                                                                   |                                                                                            |                                                                                                                                               |
| <b>M10</b>                                                                                                | <b>8.0</b>                                                                                              | <b>16.0</b>                                                                                |                                                                                            |                                                                                                                                               |
|                                                                                                           |                                                                                                         | <b>(Old JIS 17.0)</b>                                                                      |                                                                                            | P8D, P10SII                                                                                                                                   |
|                                                                                                           |                                                                                                         | <b>(Small bolt 14.0)</b>                                                                   |                                                                                            |                                                                                                                                               |

# Air Screwdrivers Oil Xtra Series



Standard screw >> **4~5mm**



**No. GT-S4.5XD** 6.35

- Bit-sleeve retainer
- Noise reducer

Accessories

Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.



**No. GT-P4.5XD** 6.35

- Bit-sleeve retainer
- Noise reducer
- Rear exhaust

Accessories

Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.



**No. GT-PLXD** 6.35

- Bit-sleeve retainer
- Noise reducer

Accessories

Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.



Standard screw >> **5~6mm**



**No. GT-P6EXD** 6.35

- Bit-sleeve retainer
- Noise reducer
- Rear exhaust

Accessories

Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.

Air Impact Screwdriver  
for House Building

**No. GT-P6EXD (A)**



Consisting of:

- GT-P6EXD ...1 pc.
- Magnetic double end bit
  - M-A14  $\Phi 2 \times 65H$  ...5 pcs.
  - $\Phi 2 \times 110H$  ...3 pcs.
  - $\Phi 2 \times 150H$  ...2 pcs.
- Bit holder ...1 pc.
- Plug BPB-2 ...1 pc.
- Impact parts oil: VG-32 (Green) ...1 pc.
- Rotary parts oil: VG-10 (White) ...1 pc.
- Carrying case (355×355×100mm)



**No. GT-S6LXD** 6.35

- Bit-sleeve retainer
- Noise reducer

Accessories

Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.



Standard screw >> **6~8mm**



**No. GT-P6LXD** 6.35

- Bit-sleeve retainer
- Noise reducer
- Rear exhaust

Accessories

Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.



**No. GT-P60XD** 6.35

- Bit-sleeve retainer
- Noise reducer
- Rear exhaust

Accessories

Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.

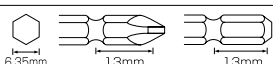
| Model No. | Capacity (mm)  |               |            |         | No Load Speed<br>(rpm) | Air Consumption<br>(m <sup>3</sup> /min) | Hose Coupling | Overall Length<br>(mm) | Weight<br>(g) | Accessories                               |        |
|-----------|----------------|---------------|------------|---------|------------------------|------------------------------------------|---------------|------------------------|---------------|-------------------------------------------|--------|
|           | Standard Screw | Tapping Screw | Wood Screw | Bolt    |                        |                                          |               |                        |               | Bit                                       | Plug   |
| GT-S4.5XD | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 14,500                 | 0.2                                      | G 1/4         | 188                    | 585           | A14 $\Phi 2 \times 65G$                   | BPN-2F |
| GT-P4.5XD | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 14,000                 | 0.2                                      | Rc 1/4        | 170                    | 735           | A14 $\Phi 2 \times 65G$                   | BPB-2  |
| GT-PLXD   | 4.0~5.0        | 3.8~4.2       | 3.3~3.8    | 4.0~5.0 | 11,000                 | 0.35                                     | G 1/4         | 198.5                  | 670           | A14 $\Phi 2 \times 65G$                   | BPN-2F |
| GT-S6LXD  | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0 | 12,000                 | 0.4                                      | G 1/4         | 212                    | 815           | A14 $\Phi 2 \times 65G$                   | BPN-2F |
| GT-P6LXD  | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0 | 12,500                 | 0.45                                     | Rc 1/4        | 184                    | 876           | A14 $\Phi 2 \times 65G$                   | BPB-2  |
| GT-P6EXD  | 5.0~6.0        | 4.0~4.5       | 3.6~4.8    | 5.0~6.0 | 9,300                  | 0.55                                     | Rc 1/4        | 155                    | 1,085         | A14 $\Phi 2 \times 65G$                   | BPB-2  |
| GT-P60XD  | 6.0~8.0        | 4.0~5.0       | 3.8~4.5    | 6.0~8.0 | 7,500                  | 0.38                                     | Rc 1/4        | 176                    | 1,130         | A14 $\Phi 2 \times 65E/\Phi 3 \times 65E$ | BPB-2  |

• Air pressure: 0.6 MPa • Air hose diameter: 6.35 mm • Overall length and Weight...Accessories and hanger parts not included.  
• Capacity is listed as instant reference and depends on operation conditions.

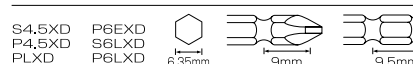
## Bit installation anvil application

Unless otherwise, following bit specification should be standardized.

## Standard type in Japan



※Option: Following retainer anvil is available.





# Air Screwdrivers Clutch Type

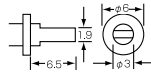


Standard screw >> **1.6~2.3mm**



**No. GT-H2** 3

- Guide spring retainer
- Push startup type
- Rear exhaust

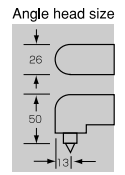


Standard screw >> **2.6~3.5mm**



**No. GT-H4RC** 6.35

- Ball spring retainer
- Noise reducer



Standard screw >> **3~4mm**



**No. GT-H4R** 6.35

- Ball spring retainer
- Lever push starting
- Noise reducer



**No. GT-H4PR** 6.35

- Ball spring retainer
- Push startup type
- Rear exhaust



**No. GT-PH4** 6.35

- Ball spring retainer
- Lever push starting
- Noise reducer
- Rear exhaust

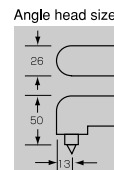


Standard screw >> **3.5~4.5mm**



**No. GT-H5RC** 6.35

- Ball spring retainer



Standard screw >> **4~5mm**



**No. GT-H5R** 6.35

- Ball spring retainer
- Lever push starting



**No. GT-H5P** 6.35

- Ball spring retainer
- Push startup type
- Rear exhaust



**No. GT-PH5** 6.35

- Ball spring retainer
- Lever push starting
- Noise reducer
- Rear exhaust

| Model No. | Capacity (mm)  |               |            |         | No Load Speed (rpm) | Air Consumption (m <sup>3</sup> /min) | Hose Coupling | Overall Length (mm) | Weight (g) | Accessories       |        |
|-----------|----------------|---------------|------------|---------|---------------------|---------------------------------------|---------------|---------------------|------------|-------------------|--------|
|           | Standard Screw | Tapping Screw | Wood Screw | Bolt    |                     |                                       |               |                     |            | Bit               | Plug   |
| GT-H2     | 1.6~2.3        | —             | —          | —       | 3,200               | 0.16                                  | G 1/4         | 164                 | 267        | A7 Φ0×36H/ Φ1×36H | BPN-2F |
| GT-H4R    | 3~4            | —             | 1.8~2.4    | 3~4     | 1,500               | 0.2                                   | G 1/4         | 190                 | 590        | A14 Φ2×65G        | BPN-2F |
| GT-H4PR   | 3~4            | —             | 1.8~2.4    | 3~4     | 1,500               | 0.19                                  | G 1/4         | 213                 | 610        | A14 Φ2×65G        | BPN-2F |
| GT-PH4    | 3~4            | —             | 1.8~2.4    | 3~4     | 1,500               | 0.19                                  | Rc 1/4        | 180                 | 770        | A14 Φ2×65G        | BPB-2  |
| GT-H4RC   | 2.6~3.5        | —             | —          | 2.6~3.5 | 1,500               | 0.2                                   | G 1/4         | 216                 | 735        | B39 Φ2×23H        | BPN-2F |
| GT-H5R    | 4~5            | 3.5~4         | 2.7~3.5    | 4~5     | 1,500               | 0.25                                  | G 1/4         | 225                 | 880        | A14 Φ2×65G        | BPN-2F |
| GT-H5P    | 4~5            | 3.5~4         | 2.7~3.5    | 4~5     | 1,500               | 0.25                                  | G 1/4         | 235                 | 880        | A14 Φ2×65G        | BPN-2F |
| GT-PH5    | 4~5            | 3.5~4         | 2.7~3.5    | 4~5     | 1,500               | 0.25                                  | Rc 1/4        | 200                 | 1,070      | A14 Φ2×65G        | BPB-2  |
| GT-H5RC   | 3.5~4.5        | —             | —          | 3.5~4.5 | 1,500               | 0.25                                  | G 1/4         | 248                 | 1,047      | B39 Φ2×23H        | BPN-2F |

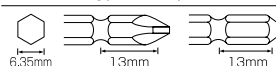
• Air pressure: 0.6 MPa • Air hose diameter: 6.35 mm • Overall length and Weight...Accessories and hanger parts not included.

• Capacity is listed as instant reference and depends on operation conditions.

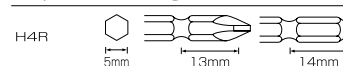
## Bit installation anvil application

Unless otherwise, following bit specification should be standardized.

## Standard type in Japan



※Option: Following retainer anvil is available.



# Air Screwdrivers Impact Type



Standard screw >> **4~5mm**



No. **GT-S4.5DR** 6.35

- Bit-sleeve retainer
- Noise reducer



No. **GT-PLR** 6.35

- Ball spring retainer



No. **GT-PLZ** 6.35

- Bit-sleeve retainer
- Noise reducer



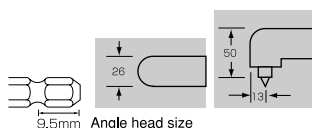
No. **GT-PLP** 6.35

- Ball spring retainer
- Push startup type
- Rear exhaust



No. **GT-PLRC** 6.35

- Ball spring retainer



No. **GT-P4.5DR** 6.35

- Bit-sleeve retainer
- Noise reducer
- Rear exhaust



No. **GT-P5LS** 6.35

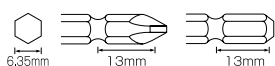
- Bit-sleeve retainer
- Noise reducer
- Rear exhaust

| Model No.        | Capacity (mm)  |               |            |         | No Load Speed<br>(rpm) | Air Consumption<br>(m <sup>3</sup> /min) | Hose Coupling | Overall Length<br>(mm) | Weight<br>(g) | Accessories |                     |
|------------------|----------------|---------------|------------|---------|------------------------|------------------------------------------|---------------|------------------------|---------------|-------------|---------------------|
|                  | Standard Screw | Tapping Screw | Wood Screw | Bolt    |                        |                                          |               |                        |               | Bit         | Plug                |
| <b>GT-S4.5DR</b> | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 14,000                 | 0.2                                      | G 1/4         | 180                    | 585           | A14 Φ2×65G  | BPN-2F              |
| <b>GT-P4.5DR</b> | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 14,000                 | 0.2                                      | Rc 1/4        | 160                    | 715           | A14 Φ2×65G  | BPB-2               |
| <b>GT-PLP</b>    | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 9,000                  | 0.2                                      | G 1/4         | 197                    | 750           | A14 Φ2×65G  | BPN-2F              |
| <b>GT-PLR</b>    | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 9,000                  | 0.2                                      | G 1/4         | 187                    | 830           | A14 Φ2×65G  | BPN-2F              |
| <b>GT-PLRC</b>   | 4.0~5.0        | —             | —          | 4.0~5.0 | 9,000                  | 0.2                                      | G 1/4         | 228                    | 1,100         | B39 Φ2×23H  | BPN-2F              |
| <b>GT-PLZ</b>    | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 9,000                  | 0.2                                      | G 1/4         | 205                    | 950           | A14 Φ2×65G  | BPN-2F              |
| <b>GT-P5LS</b>   | 4.0~5.0        | 3.5~4.0       | 2.7~3.5    | 4.0~5.0 | 9,000                  | 0.2                                      | Rc 1/4        | 165                    | 980           | A14 Φ2×65G  | BPB-2 Air regulator |

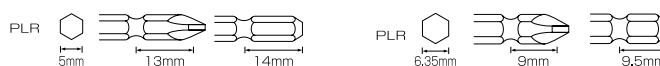
• Air pressure: 0.6 MPa • Air hose diameter: 6.35 mm • Overall length and Weight...Accessories and hanger parts not included.  
• Capacity is listed as instant reference and depends on operation conditions.

Bit installation anvil application  
Unless otherwise, following bit specification should be standardized.

Standard type in Japan



※Option: Following retainer anvil is available.





## Standard screw &gt;&gt; 5~6mm

## No. GT-P6LSⅢ 6.35

- Bit-sleeve retainer (Pull type)
- Noise reducer
- Rear exhaust

OP

Anvil (Bit sleeve, push type)  
Rubber grip



All optional products come with a rubber grip.

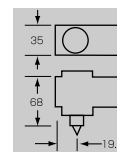
## No. GT-P6HS 6.35

- Bit-sleeve retainer
- Noise reducer
- Rear exhaust



## No. GT-S6CD 6.35

- Ball spring retainer



Angle head size



## No. GT-PLHⅡ 6.35

- Bit-sleeve retainer (Pull type)

OP

Anvil (Bit sleeve, push type)



## No. GT-S6MLR 6.35

- Bit-sleeve retainer (Pull type)



## No. GT-S6HS 6.35

- Bit-sleeve retainer



## Standard screw &gt;&gt; 6~8mm



## No. GT-S6.5D 6.35

- Bit-sleeve retainer



## No. GT-P6.5D 6.35

- Bit-sleeve retainer



## Standard screw &gt;&gt; 8~10mm



## No. GT-P8D 8

- Bit-sleeve retainer



## No. GT-P10SⅡ 8

- Bit-sleeve retainer (Pull type)

| Model No. | Capacity (mm)  |               |            |          | No Load Speed (rpm) | Air Consumption (m <sup>3</sup> /min) | Hose Coupling | Overall Length (mm) | Weight (g) | Accessories       |        |
|-----------|----------------|---------------|------------|----------|---------------------|---------------------------------------|---------------|---------------------|------------|-------------------|--------|
|           | Standard Screw | Tapping Screw | Wood Screw | Bolt     |                     |                                       |               |                     |            | Bit               | Plug   |
| GT-PLHⅡ   | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0  | 8,500               | 0.3                                   | Rc 1/4        | 213                 | 925        | A14 Φ2×65G        | BPB-2  |
| GT-P6LSⅢ  | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0  | 9,000               | 0.3                                   | Rc 1/4        | 177                 | 955        | A14 Φ2×65G        | BPB-2  |
| GT-S6MLR  | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0  | 8,500               | 0.25                                  | G 1/4         | 215                 | 1,120      | A14 Φ2×65G        | BPN-2F |
| GT-S6HS   | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0  | 10,000              | 0.3                                   | G 1/4         | 220                 | 1,100      | A14 Φ2×65G        | BPN-2F |
| GT-P6HS   | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0  | 10,000              | 0.3                                   | Rc 1/4        | 180                 | 1,170      | A14 Φ2×65G        | BPB-2  |
| GT-S6CD   | 5.0~6.0        | 4.0~4.5       | 3.6~4.1    | 5.0~6.0  | 7,300               | 0.35                                  | Rc 1/4        | 255                 | 1,870      | B39 Φ2×23H        | BPB-2  |
| GT-S6.5D  | 6.0~8.0        | 4.0~4.5       | 3.8~4.5    | 6.0~8.0  | 7,500               | 0.35                                  | Rc 1/4        | 217                 | 1,300      | A14 Φ2×65E/Φ3×65E | BPB-2  |
| GT-P6.5D  | 6.0~8.0        | 4.0~5.0       | 3.8~4.5    | 6.0~8.0  | 8,500               | 0.38                                  | Rc 1/4        | 152                 | 1,450      | A14 Φ2×65E/Φ3×65E | BPB-2  |
| GT-P8D    | 8.0~10.0       | 5.0~6.0       | 4.5~6.2    | 8.0~10.0 | 7,500               | 0.4                                   | Rc 1/4        | 172                 | 1,930      | A15 Φ2×65G/Φ3×65E | BPB-2  |
| GT-P10SⅡ  | 8.0~10.0       | 5.0~6.0       | 4.5~6.2    | 8.0~10.0 | 6,200               | 0.39                                  | Rc 1/4        | 208                 | 2,460      | A15 Φ2×65G/Φ3×65E | BPB-2  |

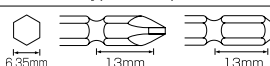
• Air pressure: 0.6 MPa • Air hose diameter: 6.35 mm • Overall length and Weight: Accessories and hanger parts not included.

• Capacity is listed as instant reference and depends on operation conditions.

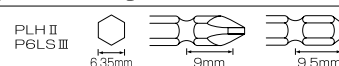
## Bit installation anvil application

Unless otherwise, following bit specification should be standardized.

## Standard type in Japan



## ※Option: Following retainer anvil is available.





# Air Screwdrivers Torque Control

## Torque Control Air Screwdriver, Reduced Type



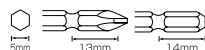
Standard screw >> **2~2.5mm**



No. **GT-S4TFG** 5

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring



No. **GT-S4TG** 6.35

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring  
Hose Coupling (1/8")



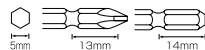
Standard screw >> **2.2~3mm**



No. **GT-S4TFS** 5

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring



No. **GT-S4TS** 6.35

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring  
Hose Coupling (1/8")



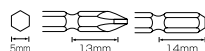
Standard screw >> **3~4mm**



No. **GT-S4TFR** 5

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring



No. **GT-S4TR** 6.35

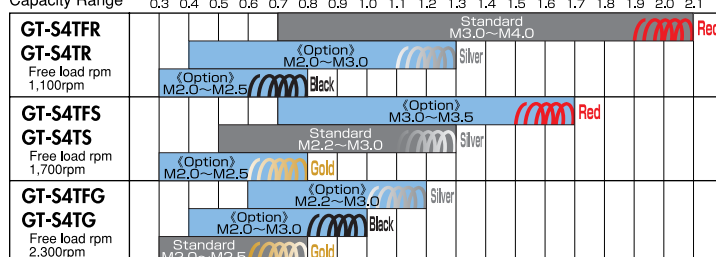
- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring  
Hose Coupling (1/8")

| Model No. | Capacity<br>Standard Screw (mm) | Torque Range<br>(N·m) | No Load Speed<br>(rpm) | Air Consumption<br>(m <sup>3</sup> /min) | Hose Coupling | Overall Length<br>(mm) | Weight<br>(g) | Accessories |       |
|-----------|---------------------------------|-----------------------|------------------------|------------------------------------------|---------------|------------------------|---------------|-------------|-------|
|           |                                 |                       |                        |                                          |               |                        |               | Bit         | Plug  |
| GT-S4TFG  | 2.0~2.5                         | 0.3~0.8               | 2,300                  | 0.28                                     | Rc 1/8        | 215                    | 565           | B36 Φ2×70H  | —     |
| GT-S4TFS  | 2.2~3.0                         | 0.5~1.3               | 1,700                  | 0.28                                     | Rc 1/8        | 215                    | 555           | B36 Φ2×70H  | —     |
| GT-S4TFR  | 3.0~4.0                         | 0.7~2.1               | 1,100                  | 0.28                                     | Rc 1/8        | 215                    | 565           | B36 Φ2×70H  | —     |
| GT-S4TG   | 2.0~2.5                         | 0.3~0.8               | 2,300                  | 0.28                                     | Rc 1/4        | 215                    | 650           | A14 Φ2×65G  | BPB-2 |
| GT-S4TS   | 2.2~3.0                         | 0.5~1.3               | 1,700                  | 0.28                                     | Rc 1/4        | 215                    | 640           | A14 Φ2×65G  | BPB-2 |
| GT-S4TR   | 3.0~4.0                         | 0.7~2.1               | 1,100                  | 0.28                                     | Rc 1/4        | 215                    | 650           | A14 Φ2×65G  | BPB-2 |

• Air pressure: 0.6 MPa • Air hose diameter: 6.35 mm • Overall length and Weight...Accessories and hanger parts not included.  
• Capacity is listed as instant reference and depends on operation conditions.

Capacity Range 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 Unit: N · m



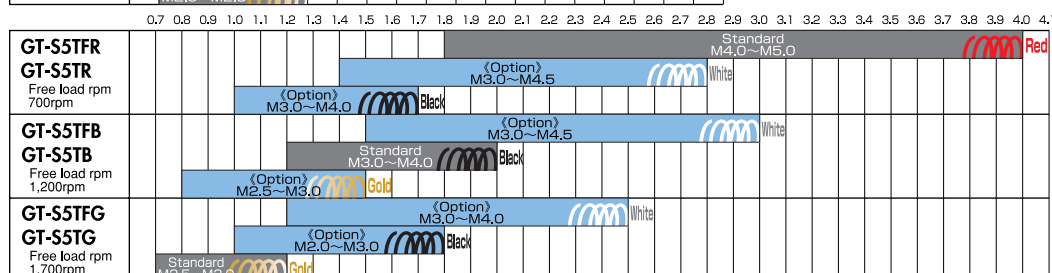
GT-S4T/ S5T series

Torque Spring Change

GT-S4T/ S5T series are easy to adjust torque range only by replacing optional torque spring.

Torque value of screw fastening should be in the center of the torque range when adjusted.

Also we will recommend you to choose larger No Load Speed when faster fastening is necessary.

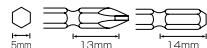


## Torque Control Air Screwdriver, Reduced Type

Standard screw >> **2.5~3mm**No. **GT-S5TFG** 5

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring

No. **GT-S5TG** 6.35

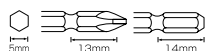
- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring

Standard screw >> **3~4mm**No. **GT-S5TFB** 5

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring

No. **GT-S5TB** 6.35

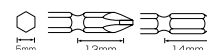
- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring

Standard screw >> **4~5mm**No. **GT-S5TFR** 5

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring

No. **GT-S5TR** 6.35

- Ball spring retainer
- Push startup type
- Noise reducer
- Rear exhaust

[OP] Torque Spring

## Torque Control Air Screwdriver, Impact Type

Standard screw >> **4.5~6mm**No. **GT-S5TS** 6.35

- Bit-sleeve retainer (Pull type)



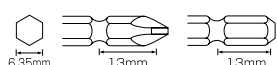
| Model No.       | Capacity<br>Standard Screw (mm) | Torque Range<br>(N·m) | No Load Speed<br>(rpm) | Air Consumption<br>(m <sup>3</sup> /min) | Hose Coupling | Overall Length<br>(mm) | Weight<br>(g) | Accessories |       |           |
|-----------------|---------------------------------|-----------------------|------------------------|------------------------------------------|---------------|------------------------|---------------|-------------|-------|-----------|
|                 |                                 |                       |                        |                                          |               |                        |               | Bit         | Plug  | L- wrench |
| <b>GT-S5TFG</b> | 2.5~3.0                         | 0.7~1.2               | 1,700                  | 0.35                                     | Rc 1/8        | 243                    | 860           | B36 Φ2×70H  | —     | —         |
| <b>GT-S5TFB</b> | 3.0~4.0                         | 1.2~2.0               | 1,200                  | 0.35                                     | Rc 1/8        | 243                    | 830           | B36 Φ2×70H  | —     | —         |
| <b>GT-S5TFR</b> | 4.0~5.0                         | 1.8~4.0               | 700                    | 0.35                                     | Rc 1/8        | 243                    | 850           | B36 Φ2×70H  | —     | —         |
| <b>GT-S5TG</b>  | 2.5~3.0                         | 0.7~1.2               | 1,700                  | 0.35                                     | Rc 1/4        | 260                    | 920           | A14 Φ2×65G  | BPB-2 | —         |
| <b>GT-S5TB</b>  | 3.0~4.0                         | 1.2~2.0               | 1,200                  | 0.35                                     | Rc 1/4        | 260                    | 910           | A14 Φ2×65G  | BPB-2 | —         |
| <b>GT-S5TR</b>  | 4.0~5.0                         | 1.8~4.0               | 700                    | 0.35                                     | Rc 1/4        | 260                    | 930           | A14 Φ2×65G  | BPB-2 | —         |
| <b>GT-S5TS</b>  | 4.5~6.0                         | 3.9~9.8               | 6,500                  | 0.25                                     | Rc 1/4        | 292                    | 1,310         | A14 Φ2×65G  | BPB-2 | H3        |

• Air pressure: 0.6 MPa • Air hose diameter: 6.35 mm • Overall length and Weight...Accessories and hanger parts not included.

• Capacity is listed as instant reference and depends on operation conditions.

**Bit installation  
anvil application**  
Unless otherwise,  
following bit specification  
should be standardized.

Standard type in Japan



※Option: Following retainer anvil is available.



## Air Impact Wrenches

Compact and lightweight, these impact wrenches have been designed to achieve the best possible balance in the hand, ensuring a secure hold for optimum nut/bolt work.

### *Air Impact Wrench Light F-Hammer*

#### New Ergonomic Handles

These units boast a tail handle that has been designed so that the units naturally position themselves horizontally when held with both hands. Workers will actually feel the reduction in leg and lower back fatigue during long work hours.



The air inlet is attached horizontally to the unit, the air hose will not get in the way of operations.



The load on the wrists has been reduced by positioning the grip near the hammer mechanism, where the strike recoil occurs.



# Air Impact Wrenches Model Selection Chart

※Fastening torque is based on JIS B1083. (Metric coarse screw, friction coefficient  $\mu$ : 0.15) The following selection chart is for referential purposes only.

| JISB1051 Strength Category |              |                  |              |                  |              |                      |              |                  |              |                      |              |                      |              |                      |              |                      |              |                      |
|----------------------------|--------------|------------------|--------------|------------------|--------------|----------------------|--------------|------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|
| 3.6                        |              |                  | 4.6          |                  | 4.8          |                      | 5.6          |                  | 5.8          |                      | 6.8          |                      | 8.8          |                      | 10.9         |                      | 12.9         |                      |
| Screw diameter             | Torque (N·m) | Applicabl Models | Torque (N·m) | Applicabl Models | Torque (N·m) | Applicabl Models     | Torque (N·m) | Applicabl Models | Torque (N·m) | Applicabl Models     | Torque (N·m) | Applicabl Models     | Torque (N·m) | Applicabl Models     | Torque (N·m) | Applicabl Models     | Torque (N·m) | Applicabl Models     |
| M8                         | 8.7          | 800              | 11.0         | 800              | 15.6         | 800                  | 13.7         | 800<br>1000      | 19.2         | 800<br>1000          | 22.0         | 800<br>1000          | 29.3         | 1000                 | 43.0         | 1000<br>1400         | 50.4         | 1000<br>1400         |
| M10                        | 17.1         | 800<br>1000      | 21.6         | 1000             | 30.6         | 1000                 | 27.0         | 1000             | 37.8         | 1000<br>1400         | 43.2         | 1000<br>1400         | 57.6         | 1000<br>1400         | 84.7         | 1000<br>1400         | 99.1         | 1400<br>1600         |
| M12                        | 29.4         | 1000<br>1400     | 37.2         | 1000<br>1400     | 52.7         | 1400<br>1600         | 46.5         | 1400<br>1600     | 65.1         | 1400<br>1600         | 74.4         | 1400<br>1600         | 99.1         | 1400<br>1600         | 145.6        | 1600<br>2000         | 170.4        | 1600<br>2000         |
| M14                        | 46.9         | 1400             | 59.3         | 1400<br>1600     | 84.0         | 1600<br>2000         | 74.1         | 1400<br>1600     | 103.8        | 1400<br>1600         | 118.6        | 1600                 | 158.1        | 1600<br>2000         | 232.2        | 2000                 | 271.7        | 2000                 |
| M16                        | 73.0         | 1600             | 92.2         | 1600             | 130.6        | 1600<br>2000         | 115.3        | 1600<br>2000     | 161.4        | 1600<br>2000         | 184.4        | 1600<br>2000         | 245.9        | 2000<br>2500         | 361.2        | 2000<br>2500         | 422.7        | 2000<br>2500         |
| M18                        | 100.8        | 1600<br>2000     | 127.3        | 1600<br>2000     | 180.4        | 2000                 | 159.2        | 2000             | 222.8        | 2000                 | 254.7        | 2000<br>2500         | 350.2        | 2000<br>2500         | 498.8        | 2500                 | 583.6        | 2500                 |
| M20                        | 142.7        | 2000             | 180.3        | 2000             | 255.4        | 2000                 | 225.4        | 2000             | 315.5        | 2000<br>2500         | 360.6        | 2000<br>2500         | 495.9        | 2500                 | 706.2        | 2500                 | 826.4        | 2500<br>3800         |
| M22                        | 196.6        | 2000             | 284.4        | 2500             | 351.9        | 2500                 | 310.5        | 2500             | 434.7        | 2500                 | 496.7        | 2500<br>3800         | 683.0        | 2500<br>3800         | 972.8        | 3800                 | 1138.4       | 3800<br>4200<br>4800 |
| M24                        | 245.9        | 3800             | 310.7        | 3800             | 440.1        | 3800                 | 388.3        | 3800             | 543.7        | 3800                 | 621.3        | 3800                 | 854.3        | 3800                 | 1216.8       | 3800<br>4200<br>4800 | 1423.9       | 3800<br>4200<br>4800 |
| M27                        | 365.0        | 3800             | 461.0        | 3800             | 653.1        | 3800                 | 576.2        | 3800             | 806.7        | 3800                 | 922.0        | 3800                 | 1267.7       | 3800<br>4200         | 1805.6       | S55R                 | 2112.9       | S55R                 |
| M30                        | 494.6        | 3800             | 624.8        | 3800             | 885.2        | 3800                 | 781.0        | 3800             | 1093.4       | 3800<br>4200<br>4800 | 1249.6       | 3800<br>4200<br>4800 | 1718.2       | 4200<br>4800<br>S55R | 2447.2       | S55R                 | 2863.7       |                      |
| M33                        | 666.7        | 3800             | 842.1        | 3800             | 1193.0       | 3800                 | 1052.6       | 3800             | 1473.7       | 4200<br>4800         | 1684.2       | S55R                 | 2315.8       | S55R                 | 3298.2       |                      | 3859.6       |                      |
| M36                        | 862.5        | 3800             | 1089.5       | 4200<br>4800     | 1543.4       | 4200<br>4800<br>S55R | 1767.8       | 4200<br>4800     | 1906.6       | S55R                 | 2178.9       | S55R                 | 2996.0       |                      | 4267.1       |                      | 4993.4       |                      |
| M39                        | 1119.6       | 4200<br>4800     | 1414.2       | 4200<br>4800     | 2003.5       | S55R                 | 1767.8       | S55R             | 2474.9       |                      | 2828.5       |                      | 3889.2       |                      | 5539.1       |                      | 6482.0       |                      |
| M42                        | 1385.0       | 4200<br>4800     | 1749.4       | S55R             | 2478.3       | S55R                 | 2186.8       | S55R             | 3061.5       |                      | 3498.8       |                      | 4810.9       |                      | 6851.9       |                      | 8018.2       |                      |
| M45                        | 1733.0       | S55R             | 2189.0       | S55R             | 3101.1       |                      | 2736.3       |                  | 3830.8       |                      | 4378.0       |                      | 6019.8       |                      | 8573.6       |                      | 10033.0      |                      |
| M48                        | 2092.1       | S55R             | 2642.6       |                  | 3743.7       |                      | 3303.3       |                  | 4624.6       |                      | 5285.3       |                      | 7267.3       |                      | 10350.3      |                      | 12112.1      |                      |
| M52                        | 2692.9       | S55R             | 3401.6       |                  | 4818.9       |                      | 4252.0       |                  | 5953.8       |                      | 6803.2       |                      | 9354.4       |                      | 13322.9      |                      | 15590.6      |                      |

800 : GT-P6II / S650 / S65W / P65W / S70WK / P60XW

1000 : GT-P8II / P80W / W100PII

1400 : GT-1400P / P12

1600 : GT-1600VPX / 1600VPH(L) / 1600VP(L) / P14J(L) / 1600P(L) / P14W/ 1700BX

2000 : GT-2000PF / P18J(L) / 2000P(L) / S20RW

2500 : GT-2500LF / 2500PF / S220W

3800 : GT-3900VL / 3900VP / 3900V / 3800LX / S32RW/ P32J/ 3800PX

4200 : GT-4200LF / 4200PF / 4200L / 4200

4800 : GT-4800VL S55R: GT-S55R

# Air Impact Wrenches Super Light V-Hammer



Machine Bolt Dia. >> **16mm**



No. GT-1600VPX 12.7

- Retainer ring
- Rear exhaust



No. GT-1600VP 12.7

- Retainer ring
- Rear exhaust



No. GT-1600VPL 12.7

- Retainer ring
- Rear exhaust



No. GT-1600VPH 12.7

- Retainer ring
- Rear exhaust
- Oil-less type



No. GT-1600VPHL 12.7

- Retainer ring
- Rear exhaust
- Oil-less type

※Oil-less type: Can be used without lubrication.  
Does not generate oil mist.

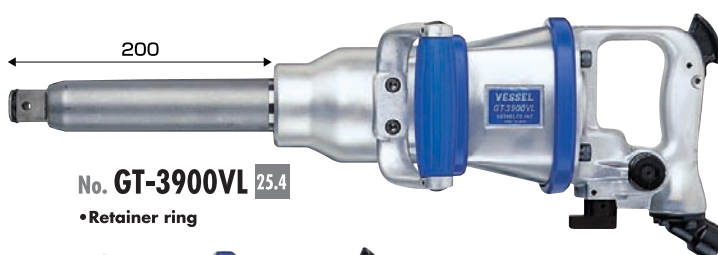


Machine Bolt Dia. >> **39mm**



No. GT-3900VP 25.4

- Retainer ring
- Rear exhaust



No. GT-3900VL 25.4

- Retainer ring

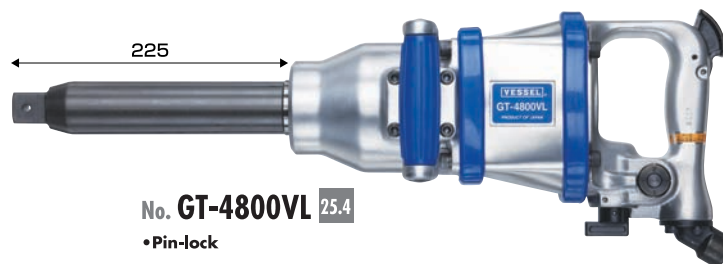


No. GT-3900V 25.4

- Retainer ring



Machine Bolt Dia. >> **48mm**



No. GT-4800VL 25.4

- Pin-lock

| Model No.   | Capacity Ordinary Bolt Dia. (mm) | Torque Range Reference (N·m) | No Load Speed (rpm) | Air Consumption (m <sup>3</sup> /min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories             |           |
|-------------|----------------------------------|------------------------------|---------------------|---------------------------------------|---------------|--------------------------|---------------------|------------|-------------------------|-----------|
| GT-1600VPX  | 16                               | 49~294.2                     | 8,200               | 0.4                                   | Rc1/4         | 6.35                     | 169                 | 1.48       | Plug                    | L- wrench |
| GT-1600VP   | 16                               | 49~304.0                     | 8,500               | 0.4                                   | Rc1/4         | 6.35                     | 171                 | 1.91       | BPB-2                   | H4        |
| GT-1600VPL  | 16                               | 49~304.0                     | 8,500               | 0.4                                   | Rc1/4         | 6.35                     | 199                 | 1.95       | BPB-2                   | H4        |
| GT-1600VPH  | 16                               | 49~284.3                     | 8,200               | 0.4                                   | Rc1/4         | 6.35                     | 174.5               | 1.75       | BPB-2                   | H4        |
| GT-1600VPHL | 16                               | 49~284.3                     | 8,200               | 0.4                                   | Rc1/4         | 6.35                     | 202.5               | 1.8        | BPB-2                   | H4        |
| GT-3900V    | 39                               | 490~1716                     | 4,200               | 0.7                                   | Rc1/2         | 12.7                     | 358.6               | 8.2        | BPB-4                   | H5,H6     |
| GT-3900VP   | 39                               | 490~1716                     | 4,200               | 0.7                                   | Rc3/8         | 12.7                     | 268                 | 7.95       | BPB-3                   | H5,H6     |
| GT-3900VL   | 39                               | 490~1716                     | 4,200               | 0.7                                   | Rc1/2         | 12.7                     | 524                 | 8.95       | BPB-4                   | H5,H6     |
| GT-4800VL   | 48                               | 343~2010                     | 3,200               | 1.0                                   | Rc1/2         | 12.7                     | 559                 | 12.8       | 1/2"×1/2" (hose nipple) | H6        |

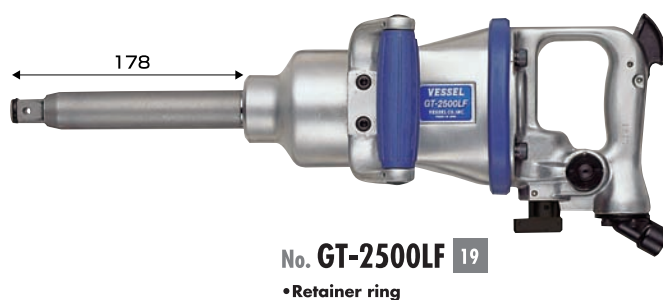
• Air pressure: 0.6 MPa • Overall length and Weight...Accessories and hanger parts not included. • Capacity is listed as instant reference and depends on operation conditions.

# Air Impact Wrenches Lightweight F-Hammer

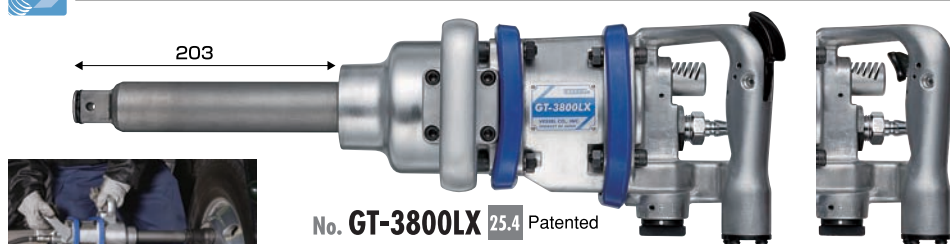
Machine Bolt Dia. >> **20mm**



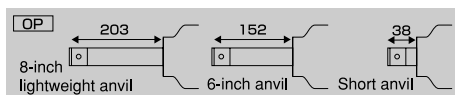
Machine Bolt Dia. >> **25mm**



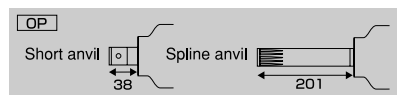
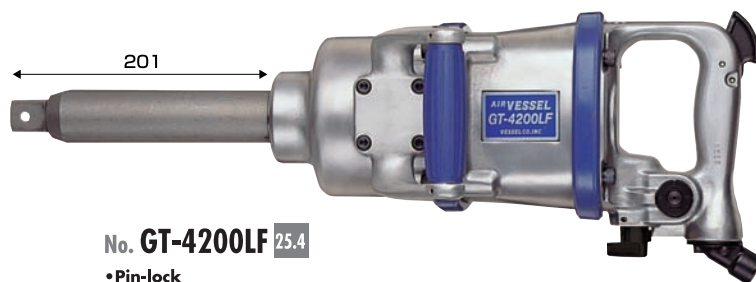
Machine Bolt Dia. >> **39mm**



Tilt-angled handle and its body balance reduces burden on the user.



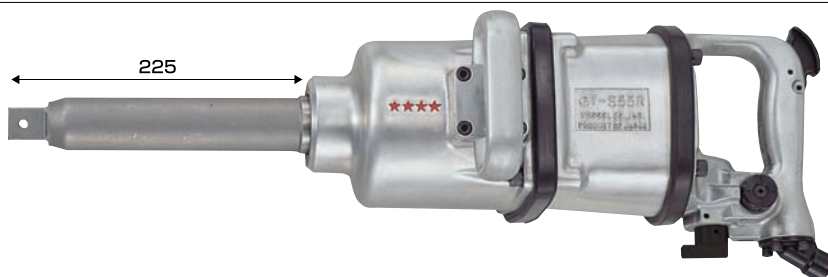
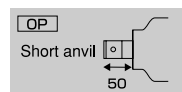
Machine Bolt Dia. >> **42mm**



Machine Bolt Dia. >> **52mm**

No. **GT-S55R** 25.4

- Pin-lock
- Noise reducer



| Model No. | Capacity Ordinary Bolt Dia. (mm) | Torque Range Reference (N·m) | No Load Speed (rpm) | Air Consumption (m <sup>3</sup> /min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories             |           |
|-----------|----------------------------------|------------------------------|---------------------|---------------------------------------|---------------|--------------------------|---------------------|------------|-------------------------|-----------|
| GT-2000PF | 20                               | 98~460.9                     | 5,500               | 0.43                                  | Rc1/4         | 9.5                      | 210                 | 3.5        | Plug                    | L- wrench |
| GT-2500PF | 25                               | 147~961                      | 3,200               | 0.6                                   | Rc3/8         | 9.5                      | 242                 | 6.2        | BPB-2                   | H5        |
| GT-2500LF | 25                               | 245~961                      | 4,400               | 0.7                                   | Rc3/8         | 9.5                      | 478                 | 7.3        | BPB-3                   | H5,H6     |
| GT-3800LX | 39                               | 490~1607                     | 4,100               | 0.7                                   | Rc1/2         | 12.7                     | 520                 | 10.8       | BPB-4                   | H5        |
| GT-3800PX | 39                               | 490~1607                     | 4,100               | 0.7                                   | Rc1/2         | 12.7                     | 270                 | 8.9        | BPB-4                   | H5        |
| GT-4200PF | 42                               | 343~1863                     | 2,500               | 1.0                                   | Rc3/8         | 12.7                     | 297                 | 11.5       | BPB-3                   | H6        |
| GT-4200LF | 42                               | 343~1863                     | 3,200               | 1.0                                   | Rc1/2         | 12.7                     | 547                 | 13.3       | BPB-4                   | H6        |
| GT-S55R   | 52                               | 343~2450                     | 2,800               | 1.2                                   | Rc1/2         | 12.7                     | 610                 | 17.0       | 1/2"×1/2" (hose nipple) | H6        |

• Air pressure: 0.6 MPa • Overall length and Weight: Accessories and hanger parts not included. • Capacity is listed as instant reference and depends on operation conditions.



# Air Impact Wrenches Single Hammer

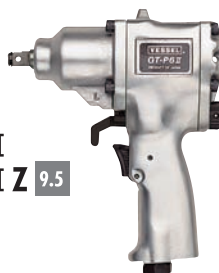


Machine Bolt Dia. >> **6~8mm**



No. **GT-S650** 9.5

• Retainer ring



No. **GT-P6 II**

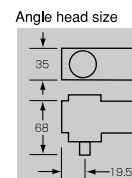
No. **GT-P6 II Z** 9.5

• Retainer ring  
• Noise reducer



No. **GT-S600C** 9.5

• Pin-lock



Machine Bolt Dia. >> **8~10mm**



No. **GT-P8 II**

No. **GT-P8 II Z** 12.7

• Retainer ring  
• Noise reducer



Machine Bolt Dia. >> **14mm**



No. **GT-P12**

No. **GT-P12Z** 12.7

• Retainer ring  
• Noise reducer



No. **GT-1400P** 12.7

• Retainer ring



Machine Bolt Dia. >> **16mm**



No. **GT-P14J**

No. **GT-P14JZ** 12.7

• Retainer ring  
• Noise reducer



No. **GT-P14JL** 12.7

• Retainer ring



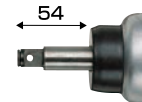
No. **GT-1700BX** 12.7

• Retainer ring  
• Rear exhaust  
• Noise reducer  
• Twin hammer type



No. **GT-1600P** 12.7

• Retainer ring



No. **GT-1600PL** 12.7

• Retainer ring

| Model No.           | Capacity Ordinary Bolt Dia. (mm) | Torque Range Reference (N·m)   | No Load Speed (rpm)          | Air Consumption (m³/min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories |           |
|---------------------|----------------------------------|--------------------------------|------------------------------|--------------------------|---------------|--------------------------|---------------------|------------|-------------|-----------|
|                     |                                  |                                |                              |                          |               |                          |                     |            | Plug        | L- wrench |
| <b>GT-S650</b>      | 6~8                              | 49~121.6                       | 7,500                        | 0.35                     | Rc1/4         | 6.35                     | 210                 | 1.3        | BPB-2       | H4        |
| <b>GT-P6 II (Z)</b> | 6~8                              | 49~121.6                       | 8,500<br>(Z) 7,500           | 0.38                     | Rc1/4         | 6.35                     | 146                 | 1.43       | BPB-2       | H4        |
| <b>GT-S600C</b>     | 6~8                              | 25~47                          | 7,300                        | 0.35                     | Rc1/4         | 6.35                     | 255                 | 1.87       | BPB-2       | H4        |
| <b>GT-P8 II (Z)</b> | 8~10                             | 49~259.8                       | 7,500<br>(Z) 7,200           | 0.4                      | Rc1/4         | 6.35                     | 166                 | 1.89       | BPB-2       | H4        |
| <b>GT-P12 (Z)</b>   | 12~14                            | 49~294.1                       | 7,500<br>(Z) 7,300           | 0.4                      | Rc1/4         | 6.35                     | 185                 | 2.3        | BPB-2       | H4        |
| <b>GT-1400P</b>     | 12~14                            | 49~294.1                       | 7,000                        | 0.35                     | Rc1/4         | 6.35                     | 182                 | 2.25       | BPB-2       | H4        |
| <b>GT-P14J (Z)</b>  | 14~16                            | 75~323.6                       | 6,500<br>(Z) 6,300           | 0.42                     | Rc1/4         | 6.35                     | 197                 | 2.95       | BPB-2       | H5        |
| <b>GT-P14JL</b>     | 14~16                            | 75~323.6                       | 6,500                        | 0.42                     | Rc1/4         | 6.35                     | 226                 | 3.0        | BPB-2       | H5        |
| <b>GT-1600P</b>     | 14~16                            | 75~308.9                       | 6,700                        | 0.36                     | Rc1/4         | 6.35                     | 196                 | 2.7        | BPB-2       | H5        |
| <b>GT-1600PL</b>    | 14~16                            | 75~308.9                       | 6,700                        | 0.36                     | Rc1/4         | 6.35                     | 224                 | 2.8        | BPB-2       | H5        |
| <b>GT-1700BX</b>    | 16                               | Forward 49~480/ Reverse 75~540 | Forward 7,000/ Reverse 8,000 | 0.9                      | Rc1/4         | 6.35                     | 192                 | 2.2        | BPB-2       | —         |

• Air pressure: 0.6 MPa • Overall length and Weight...Accessories and hanger parts not included. • Capacity is listed as instant reference and depends on operation conditions.

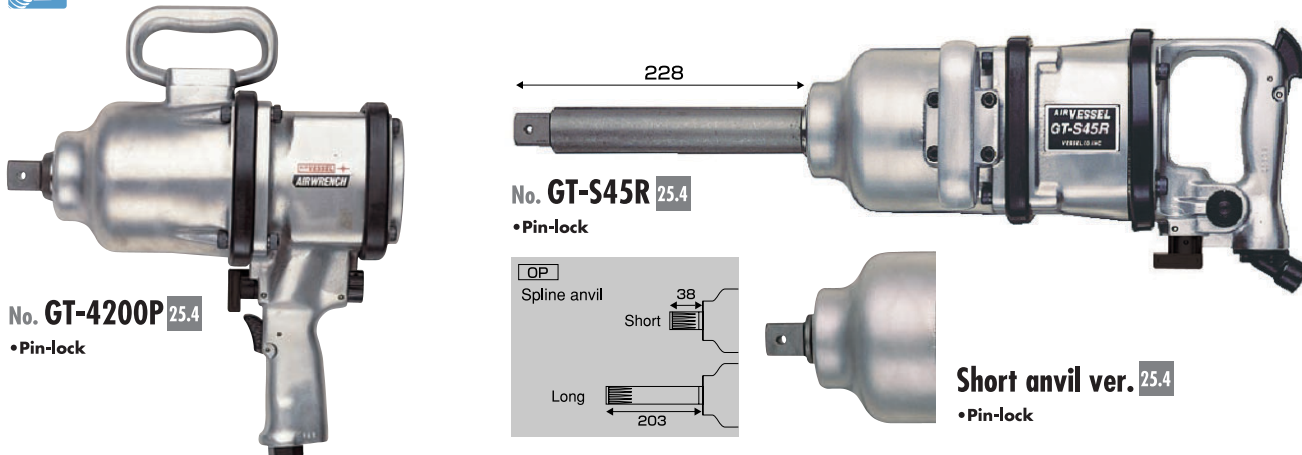
# Air Impact Wrenches Single Hammer/ Air Ratchet Wrenches

Machine Bolt Dia. >> **20mm**

Machine Bolt Dia. >> **20mm**



Machine Bolt Dia. >> **42mm**



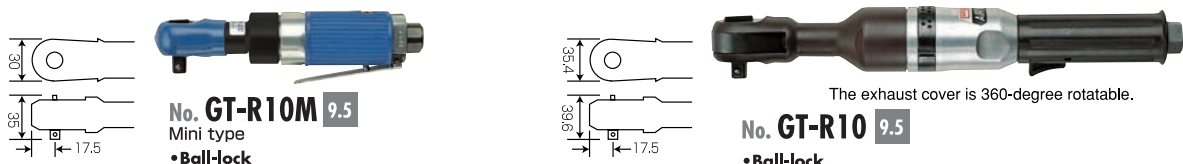
| Model No.                         | Capacity Ordinary Bolt Dia. (mm) | Torque Range Reference (N·m) | No Load Speed (rpm) | Air Consumption (m³/min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories |           |
|-----------------------------------|----------------------------------|------------------------------|---------------------|--------------------------|---------------|--------------------------|---------------------|------------|-------------|-----------|
|                                   |                                  |                              |                     |                          |               |                          |                     |            | Plug        | L- wrench |
| <b>GT-P18J (Z)</b>                | 16~20                            | 98~470.7                     | 5,000               | 0.52                     | Rc1/4         | 9.5                      | 240                 | 4.2        | BPB-2       | H5        |
| <b>GT-P18JL</b>                   | 16~20                            | 98~441.3                     | 5,000               | 0.52                     | Rc1/4         | 9.5                      | 353                 | 4.7        | BPB-2       | H5        |
| <b>GT-2000P</b>                   | 16~20                            | 98~470.7                     | 5,000               | 0.45                     | Rc1/4         | 9.5                      | 241                 | 4.3        | BPB-2       | H5        |
| <b>GT-2000PL</b>                  | 16~20                            | 98~441.3                     | 5,000               | 0.45                     | Rc1/4         | 9.5                      | 354                 | 4.7        | BPB-2       | H5        |
| <b>GT-P32J</b>                    | 33                               | 343~1569                     | 3,700               | 0.8                      | Rc3/8         | 12.7                     | 264                 | 11.2       | BPB-3       | H6        |
| <b>GT-4200P</b>                   | 27~42                            | 490~1863                     | 2,500               | 1.0                      | Rc3/8         | 12.7                     | 315                 | 14.2       | BPB-3       | H6        |
| <b>GT-S45R</b>                    | 27~42                            | 490~1863                     | 3,200               | 1.0                      | Rc1/2         | 12.7                     | 593                 | 15.9       | BPB-4       | H6        |
| <b>GT-S45R (Short anvil Ver.)</b> | 27~42                            | 490~1863                     | 3,200               | 1.0                      | Rc1/2         | 12.7                     | 403                 | 14.9       | BPB-4       | H6        |

• Air pressure: 0.6 MPa • Overall length and Weight...Accessories and hanger parts not included. • Capacity is listed as instant reference and depends on operation conditions.

## Air Ratchet Wrenches

This ratchet tightening system makes it possible to fine-tune the wrenching torque.

Machine Bolt Dia. >> **10mm**



| Model No.      | Capacity Ordinary Bolt Dia. (mm) | No Load Speed (rpm) | Air Consumption (m³/min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories |  |
|----------------|----------------------------------|---------------------|--------------------------|---------------|--------------------------|---------------------|------------|-------------|--|
|                |                                  |                     |                          |               |                          |                     |            | Plug        |  |
| <b>GT-R10M</b> | 10                               | 250                 | 0.3                      | Rc1/4         | 6.35                     | 170                 | 500        | BPB-2       |  |
| <b>GT-R10</b>  | 10                               | 160                 | 0.4                      | Rc1/4         | 6.35                     | 297                 | 1,090      | BPB-2       |  |

• Air pressure: 0.6 MPa • Overall length and Weight...Accessories and hanger parts not included.

# Air Impact Wrenches Double Hammer



Machine Bolt Dia. >> **4~5mm**



No. **GT-PLRB 8**

• Pin-lock



Machine Bolt Dia. >> **5~6mm**



No. **GT-S6MLRB 9.5**

• Pin-lock



Machine Bolt Dia. >> **6~8mm**



No. **GT-P60XW 9.5**

• Pin-lock  
• Rear exhaust  
• Noise reducer

Accessories  
Impact parts oil: VG-32 (Green) ...1 pc.  
Rotary parts oil: VG-10 (White) ...1 pc.



Machine Bolt Dia. >> **6~8mm**



No. **GT-S65W 9.5**

• Pin-lock



No. **GT-P65W 9.5**

• Pin-lock



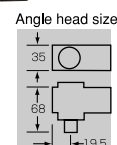
No. **GT-S70WK 9.5**

• Pin-lock  
• Rear exhaust  
• Noise reducer



No. **GT-S60CW 9.5**

• Pin-lock



Machine Bolt Dia. >> **8~10mm**



No. **GT-P80W 12.7**

• Pin-lock



Machine Bolt Dia. >> **10~12mm**



No. **GT-W100P II 12.7**

• Pin-lock



Machine Bolt Dia. >> **12~16mm**



No. **GT-P14W 12.7**

• Pin-lock



Machine Bolt Dia. >> **20mm**



No. **GT-S20RW 19**

• Pin-lock

| Model No.   | Capacity Ordinary Bolt Dia. (mm) | Torque Range Reference (N·m) | No Load Speed (rpm) | Air Consumption (m³/min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories             |           |
|-------------|----------------------------------|------------------------------|---------------------|--------------------------|---------------|--------------------------|---------------------|------------|-------------------------|-----------|
| GT-PLRB     | 4~5                              | 5~14                         | 9,000               | 0.2                      | G1/4          | 6.35                     | 180                 | 0.83       | Plug                    | L- wrench |
| GT-S6MLRB   | 5~6                              | 10~39                        | 8,500               | 0.25                     | G1/4          | 6.35                     | 200                 | 1.1        | BPN-2F                  | —         |
| GT-P60XW    | 6~8                              | 49~116.8                     | 7,500               | 0.38                     | Rc1/4         | 6.35                     | 169.4               | 1.1        | BPB-2                   | —         |
| GT-P65W     | 6~8                              | 49~121.6                     | 8,500               | 0.38                     | Rc1/4         | 6.35                     | 146                 | 1.43       | BPB-2                   | H4        |
| GT-S65W     | 6~8                              | 49~121.6                     | 7,500               | 0.35                     | Rc1/4         | 6.35                     | 210                 | 1.3        | BPB-2                   | H4        |
| GT-S70WK    | 6~8                              | 85~176.5                     | 7,000               | 0.39                     | Rc1/4         | 6.35                     | 231                 | 1.3        | BPB-2                   | H4        |
| GT-S60CW    | 6~8                              | 25~47                        | 7,300               | 0.35                     | Rc1/4         | 6.35                     | 255                 | 1.87       | BPB-2                   | H4        |
| GT-P80W     | 8~10                             | 49~259.8                     | 7,500               | 0.4                      | Rc1/4         | 6.35                     | 164                 | 1.89       | BPB-2                   | H4        |
| GT-W100P II | 10~12                            | 49~323.6                     | 6,200               | 0.39                     | Rc1/4         | 6.35                     | 196                 | 2.42       | BPB-2                   | H4        |
| GT-P14W     | 12~16                            | 49~421.6                     | 6,400               | 0.47                     | Rc1/4         | 9.5                      | 200                 | 3.2        | BPB-2                   | H5        |
| GT-S20RW    | 20                               | 75~610                       | 4,800               | 0.9                      | Rc3/8         | 9.5                      | 300                 | 5.4        | 3/8"×1/2" (hose nipple) | H5        |

• Air pressure: 0.6 MPa • Overall length and Weight...Accessories and hanger parts not included. • Capacity is listed as instant reference and depends on operation conditions.



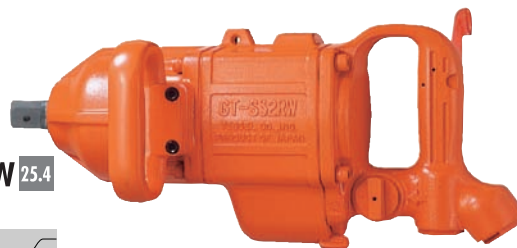
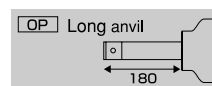
# Air Impact Wrenches Double Hammer/ Torque Control Torque Testers

Machine Bolt Dia. >> **22mm**No. **GT-S220W** 19

• Retainer ring

Machine Bolt Dia. >> **33mm**No. **GT-S32RW** 25.4

• Pin-lock



| Model No. | Capacity Ordinary Bolt Dia. (mm) | Torque Range Reference (N·m) | No Load Speed (rpm) | Air Consumption (m³/min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories                    |
|-----------|----------------------------------|------------------------------|---------------------|--------------------------|---------------|--------------------------|---------------------|------------|--------------------------------|
| GT-S220W  | 22                               | 147~843.4                    | 4,400               | 0.7                      | Rc3/8         | 9.5                      | 334                 | 6.85       | Plug BPB-3, L-wrench H5, H6    |
| GT-S32RW  | 33                               | 343~1,569                    | 3,600               | 1.0                      | Rc1/2         | 12.7                     | 380                 | 12.2       | 1/2"X1/2" (hose nipple) H5, H6 |

• Air pressure: 0.6 MPa • Overall length and Weight...Accessories and hanger parts not included. • Capacity is listed as instant reference and depends on operation conditions.

## Air Impact Wrenches, Torque Control Type

Machine Bolt Dia. >> **6~8mm**No. **GT-P6T** 9.5

• Pin-lock

Machine Bolt Dia. >> **8~10mm**No. **GT-P8T** 12.7

• Pin-lock



| Model No. | Capacity Ordinary Bolt Dia. (mm) | Torque Range Reference (N·m) | No Load Speed (rpm) | Air Consumption (m³/min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Accessories                 |
|-----------|----------------------------------|------------------------------|---------------------|--------------------------|---------------|--------------------------|---------------------|------------|-----------------------------|
| GT-P6T    | 6~8                              | 7.8~17.6                     | 3,000               | 0.27                     | Rc1/4         | 6.35                     | 246                 | 1.5        | Plug BPB-2, L-wrench H3, H4 |
| GT-P8T    | 8~10                             | 17.6~31.4                    | 2,500               | 0.31                     | Rc1/4         | 6.35                     | 266                 | 2.2        | BPB-2 H3, H4                |

• Air pressure: 0.6 MPa • Overall length and Weight...Accessories and hanger parts not included. • Capacity is listed as instant reference and depends on operation conditions.

## Digital Torque Tester



For controlling the output of fastening tools and checking the accuracy of torque wrenches.

- Large digital display. Settable time-out timer (0.1 ~ 9.9 sec).
- Separate pickup and amp, therefore instrument deterioration is minimized.
- Can measure both clockwise and counterclockwise rotation. Accurate to  $\pm 0.5\%$  (Static load).
- Can measure the working torque of pneumatic drivers, impact wrenches, oil pulse wrenches, torque wrenches, etc.
- Use when the working torque of the tool is within 70% of the appropriate measurement range.

| Model No. | Appropriate Measurement Range (N·m) | Smallest Scale Increment (N·cm) | Static Load Accuracy: Within $\pm 0.5\%$ Nm | Power Supply                            | Standard Accessories                                                   |
|-----------|-------------------------------------|---------------------------------|---------------------------------------------|-----------------------------------------|------------------------------------------------------------------------|
| TA-500    | 4.9~49                              | 1.96                            | 4.9~49 $\pm 2.6$                            | AC100V~240V $\pm 10\%$<br>50/60Hz · 15W | Pickup cable ...1                                                      |
| TA-1000   | 19.6~98                             | 9.8                             | 9.8~98 $\pm 5$                              |                                         | Pickup cable ...1 3/8sqX1/2 sq adapter ...1                            |
| TA-2000   | 49~196                              | 9.8                             | 19.6~196 $\pm 10$                           |                                         | Pickup cable ...1 3/8sqX1/2 sq adapter ...1                            |
| TA-5000   | 98~490                              | 18.6                            | 49~490 $\pm 26$                             |                                         | Pickup cable ...1 1/2sqX3/4 sq adapter ...1<br>5/8X3/4 sq adapter ...1 |

Options: Printer parallel output (Centronics compliant), analog output (waveform monitoring terminal), pulse counter.

## Air Sanders/ Air Grinders

The more you use our air belt sanders the more you will understand how efficient and well balanced they are. They boast an easy-to-use, one-touch system for paper and disk replacement, and their delicate balance achieves a major reduction in fatigue.



### *Air Belt Sander* Patented

The center of the arm becomes the center of gravity. This belt has been designed in an offset position so that it becomes aligned with the center of the arm when the unit is taken up. This slight difference in balance makes a big difference in reducing fatigue, a major ergonomic achievement.



Belt Width >> **12/10mm**

Patented

Ceramic Endless Belt (For GT-BS12)



**No. GT-BS12**  
•Noise reducer

Accessories  
Sand belt #60...2 pcs.  
#80...1 pc.



**No. CB12**

Belt Width >> **20mm**

Patented

Zirconia Endless Belt (For GT-BS20)



**No. GT-BS20 (Aluminum roller head)**  
•Noise reducer

**No. GT-BS20W (Urethane roller head)**  
•Noise reducer

Accessories  
Sand belt #60...2 pcs.  
#80...1 pc.



**No. ZB20**

Belt Width >> **30mm**

Patented

Zirconia Endless Belt (For GT-BS30)



**No. GT-BS30 (Aluminum roller head)**  
•Noise reducer

**No. GT-BS30W (Urethane roller head)**  
•Noise reducer

Accessories  
Bar grip (Auxiliary handle)...1 pc.  
Sand belt #60...2 pcs.  
#80...1 pc.



**No. ZB30**

| Model No.          | Applicable Belt Size (mm) | Belt Circumferential Speed (m/min) | Working Air Pressure (MPa) | No Load Speed (rpm) | Air Consumption (m³/min) | Hose Coupling | Overall Length (mm) | Weight (g) | Accessories |
|--------------------|---------------------------|------------------------------------|----------------------------|---------------------|--------------------------|---------------|---------------------|------------|-------------|
| <b>GT-BS12</b>     | 12/10×330                 | 1,100                              | 0.6                        | 17,000              | 0.52                     | Rc1/4         | 311                 | 840        | BPB-2 H1.5  |
| <b>GT-BS20 (W)</b> | 20×520                    | 2,500                              | 0.6                        | 16,000              | 0.6                      | Rc1/4         | 398                 | 1,300      | BPB-2 H2    |
| <b>GT-BS30 (W)</b> | 30×540                    | 2,040                              | 0.6                        | 13,000              | 0.72                     | Rc1/4         | 374                 | 1,930      | BPB-2 H2.5  |

\*Total length: When mounted with belt.

## Roller Heads



**Aluminum**  
(GT-BS20/ BS30)  
For heavy-duty sanding.



**Urethane**  
(GT-BS20W/ BS30W)  
For undulated and curved surfaces.

| Quantity: 50    |            |          |
|-----------------|------------|----------|
| Model No.       | Size       | Grit No. |
| <b>CB12-60</b>  | 12mm×330mm | # 60     |
| <b>CB12-80</b>  | 12mm×330mm | # 80     |
| <b>CB12-120</b> | 12mm×330mm | # 120    |
| Quantity: 20    |            |          |
| <b>ZB20-40</b>  | 20mm×520mm | # 40     |
| <b>ZB20-60</b>  | 20mm×520mm | # 60     |
| <b>ZB20-80</b>  | 20mm×520mm | # 80     |
| Quantity: 10    |            |          |
| <b>ZB30-40</b>  | 30mm×540mm | # 40     |
| <b>ZB30-60</b>  | 30mm×540mm | # 60     |



# Air Disk Sanders

Pad Dia. >> **50mm**

Collet chuck  
φ6mm



## No. GT-DS50A

•Noise reducer

Accessories  
Flap wheel #60...1 pc.  
Fiber wheel #600...1 pc.  
Pitatto holder...1 pc.  
Pitatto disk paper #60...3 pcs.

OP

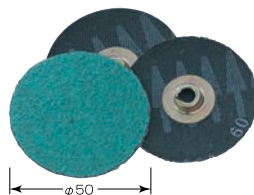
Disk bolt

Collet chuck (φ3mm, φ1/4", φ1/8")

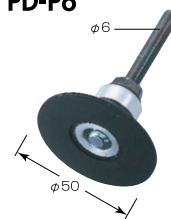


## Air Disk Sander Wheels (For DS50A)

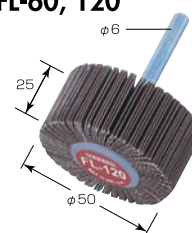
Pitatto Disk Paper  
No. PD-P60



Pitatto Holder  
No. PD-P6



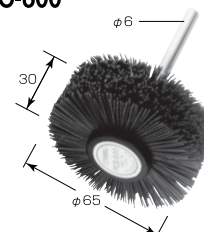
Flap Wheel  
No. FL-60, 120



Fiber Wheel  
No. FB-400, 600, 1000



Precoat Grit  
No. PCG-600



| Model No. | Grit No. | Max. Circumferential Speed (rpm) | Material             | Use                                                                                  | Quantity |
|-----------|----------|----------------------------------|----------------------|--------------------------------------------------------------------------------------|----------|
| PD-P60    | Z60      | 20,000                           | Zirconia             | Thin pressed plate deburring, surfacing, etc.                                        | 50       |
| PD-P6     | —        | —                                | Rubber (Pad)         | For Pitatto disk paper                                                               | 1        |
| FL-60     | A60      | 20,000                           | Alumina              | Deburring, spatter removal Cylinder lining polishing, surfacing, etc.                | 5        |
| FL-120    | A120     | 20,000                           | Alumina              | Deburring, spatter removal Cylinder lining polishing, surfacing, etc.                | 5        |
| FB-400    | 400      | 10,000                           | Unwoven cloth        | Dirt removal, cleaning prior to welding or plating, burn removal after welding, etc. | 5        |
| FB-600    | 600      | 10,000                           | Unwoven cloth        | Dirt removal, cleaning prior to welding or plating, burn removal after welding, etc. | 5        |
| FB-1000   | 1000     | 10,000                           | Unwoven cloth        | Dirt removal, cleaning prior to welding or plating, burn removal after welding, etc. | 5        |
| PCG-600   | 400~600  | 6,000                            | Abrasive grain nylon | Peeling lacquered topcoats, etc.                                                     | 1        |

Pad Dia. >> **100mm**

M10 disk nut



## No. GT-DS50B

•Noise reducer

Accessories  
Protective cover  
Disk nut  
Pin wrench

## Wheels to Remove Rust / Stains (For DS50B)

Hammer Wheel

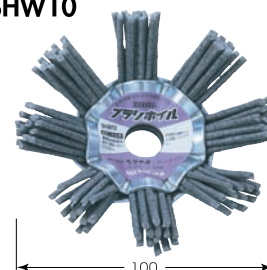
No. HMW10

Patent Pending



Brush Wheel

No. BHW10



| Model No. | Max. Circumferential Speed (rpm) | Material             | Use                                                     | Quantity |
|-----------|----------------------------------|----------------------|---------------------------------------------------------|----------|
| HMW10     | 5,000                            | SUS                  | Slag and spatter removal after welding, etc.            | 1        |
| BHW10     | 5,000                            | Abrasive grain nylon | Steel plate rust removal, aluminum cast finishing, etc. | 1        |

| Model No. | Disk Dia. (mm) | No Load Speed (rpm) | Air Consumption (N l /min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Tip Tool Installation Part | Accessories |          |
|-----------|----------------|---------------------|----------------------------|---------------|--------------------------|---------------------|------------|----------------------------|-------------|----------|
| GT-DS50A  | 50             | 5,000               | 650                        | Rc1/4         | 6.35                     | 211                 | 935        | Collet chuck φ6mm          | BPB-2       | H11, H15 |
| GT-DS50B  | 100            | 5,000               | 650                        | Rc1/4         | 6.35                     | 211                 | 1,150      | Disk nut M10               | BPB-2       | H11, H15 |

\* Air pressure: 0.6 MPa

Disk Dia. >> **100mm**

No. **GT-DG100**



Ideal for grinding / polishing metal, base finishing, removing beads, burrs, rust and paint, cutting metal rods and thin panels, finish-polishing, etc.

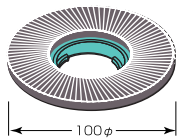
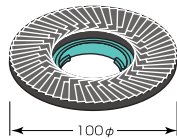
| Model No.       | Grindstone Size<br>Outer Dia. X Thickness X Hole Dia. (mm) | Belt Circumferential<br>Speed (m/min) | No Load<br>Speed (rpm) | Air Consumption<br>(m <sup>3</sup> /min) | Hose Coupling | Overall Length<br>(mm) | Height<br>(mm) | Weight<br>(g) | Accessories   |                 |
|-----------------|------------------------------------------------------------|---------------------------------------|------------------------|------------------------------------------|---------------|------------------------|----------------|---------------|---------------|-----------------|
|                 |                                                            |                                       |                        |                                          |               |                        |                |               | Plug<br>BPB-2 | L- wrench<br>H6 |
| <b>GT-DG100</b> | 100X6X15                                                   | 4,300                                 | 13,500                 | 0.7                                      | Rc1/4         | 205                    | 92             | 1,390         |               |                 |

• Air pressure: 0.6 MPa • Air hose diameter: 6.35 mm

## Air Disk Grinder Wheel (For GT-DG100)

**Quick Lock Disk System** - Disk can be easily replaced without fastening tools, by attaching a purpose-specific adapter. Ordinary grindstones (Hole diameter 15 X Thickness 3~6 mm) can be attached by detaching the adapter.

### Paper wheel



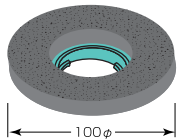
Inner Dia. : 15mm

| Model No.     | Grit #       | Use      |
|---------------|--------------|----------|
| <b>CL-P36</b> | 36Z          | Roughing |
| Inner Ctn.    | 5 per carton |          |

Inner Dia. : 15mm

| Model No.     | Grit #       | Use      |
|---------------|--------------|----------|
| <b>CL-P60</b> | 60A          | Grinding |
| <b>CL-P80</b> | 80A          | Grinding |
| Inner Ctn.    | 5 per carton |          |

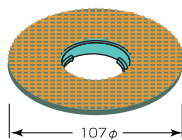
### Nylon wheel



Inner Dia. : 15mm

| Model No.    | Grit #       | Use          |
|--------------|--------------|--------------|
| <b>CL-NW</b> | —            | Rust removal |
| Inner Ctn.   | 5 per carton |              |

### Cutter wheel



Inner Dia. : 15mm

| Model No.    | Grit #       | Use     |
|--------------|--------------|---------|
| <b>CL-CW</b> | —            | Cutting |
| Inner Ctn.   | 5 per carton |         |

1 Quick Lock Adapter per box

## ONE POINT

### A disk swapping system that doesn't disrupt operations

Securely tightened nuts are extremely time consuming to loosen and remove using normal tools. Our quick-lock system allows for disks to be secured simply by snapping them into place and turning them by hand. Disk replacement is just as easy, as the disks can be removed by hand. We recommend this new system as an excellent means for shortening disruption time during



**Click-Lock**



operations and reducing industrial waste.

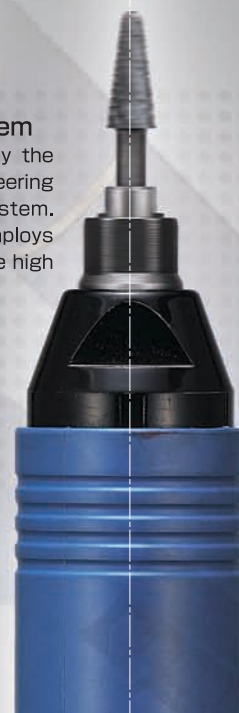
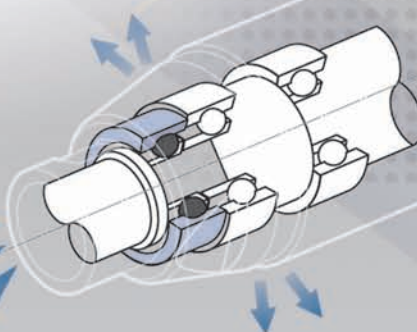
## Air Micro Grinders

There is a glaring difference in axial runout. Our Air Micro Grinders feature optimum rotation speeds to match the specific bits being used, leading to more efficient grinding and cutting work marked by secure, almost suction-like bit-to-surface contact and less jumping.



### A Double-Bearing System

Axial runout is suppressed by the use of precision motor engineering and our double-bearing system. Moreover, the SAR type employs angular bearings to handle the high loads of heavy work.





## Air Micro Grinders (For Precision Grinding)

Collet chuck:  $\phi 3$ mm



No. GT-MG75S

Collet chuck:  $\phi 3$ mm



No. GT-MG75SAR (Soft Grip)

[OP] Collet chuck ( $\phi 2.35$ mm,  $\phi 1/8$ ")



Collet chuck:  $\phi 3$ mm



No. GT-MG55SR (Ergo Grip)

Collet chuck:  $\phi 3$ mm



No. GT-MG55SAR (Soft Grip)

[OP] Collet chuck ( $\phi 2.35$ mm,  $\phi 1/8$ ")



Collet chuck:  $\phi 3$ mm



No. GT-MG55S/MG55SB (Reverse turning type)

Collet chuck:  $\phi 6$ mm



No. GT-MG35SAR (Soft Grip)

[OP] Collet chuck ( $\phi 3$ mm,  $\phi 1/4$ ",  $\phi 1/8$ ")



Collet chuck:  $\phi 6$ mm



No. GT-MG25S

[OP] Collet chuck ( $\phi 3$ mm,  $\phi 1/4$ ",  $\phi 1/8$ ")

Collet chuck:  $\phi 3$ mm



No. GT-MG35-12CC (Soft Grip)

[OP] Collet chuck ( $\phi 2.35$ mm,  $\phi 1/8$ ")



[OP] Corner attachment

No. GT-MG25-12CF (Smooth grinding / polishing at 25,000 rpm)

No. GT-MG25-12CC (Precision grinding at 25,000 rpm)

| Model No.    | No Load Speed (rpm) | Air Consumption (m <sup>3</sup> /min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Frame Dia. (mm) | Weight (g) | Collet Chuck ( $\phi$ mm) | Accessories  |         |     |
|--------------|---------------------|---------------------------------------|---------------|--------------------------|---------------------|-----------------|------------|---------------------------|--------------|---------|-----|
|              |                     |                                       |               |                          |                     |                 |            |                           | Chuck handle | Spanner | Oil |
| GT-MG75S     | 75,000              | 0.16                                  | Rc1/4         | 6.35                     | 170                 | 18.5            | 190        | 3                         | ●            | H9      | ●   |
| GT-MG75SAR   | 75,000              | 0.16                                  | Rc1/4         | 6.35                     | 156                 | 20.9            | 180        | 3                         | —            | H5,H9   | ●   |
| GT-MG55S     | 55,000              | 0.16                                  | Rc1/4         | 6.35                     | 163                 | 17.5            | 180        | 3                         | ●            | H9      | ●   |
| GT-MG55SB    | 55,000              | 0.16                                  | Rc1/4         | 6.35                     | 163                 | 17.5            | 180        | 3                         | ●            | H9      | ●   |
| GT-MG55SR    | 55,000              | 0.16                                  | Rc1/4         | 6.35                     | 180                 | 20.0            | 220        | 3                         | ●            | H9      | ●   |
| GT-MG55SAR   | 55,000              | 0.245                                 | Rc1/4         | 6.35                     | 178                 | 24.5            | 260        | 3                         | —            | H5,H9   | ●   |
| GT-MG35SAR   | 35,000              | 0.285                                 | Rc1/4         | 6.35                     | 182                 | 29.5            | 435        | 6                         | —            | H11,H13 | ●   |
| GT-MG25S     | 25,000              | 0.175                                 | Rc1/4         | 6.35                     | 198                 | 30.0            | 600        | 6                         | —            | H11,H13 | ●   |
| GT-MG35-12CC | 35,000              | 0.25                                  | Rc1/4         | 6.35                     | 183                 | 24.5            | 305        | 3                         | —            | H5,H9   | ●   |
| GT-MG35-12CR | 35,000              | 0.16                                  | Rc1/4         | 6.35                     | 151                 | 20.0            | 160        | 3                         | —            | H5,H9   | ●   |

\*Working air pressure: 0.6MPa \*Overall length: Accessories and exhaust hose parts not included. \*Weight: Accessories not included.

\*In the main body, a 1.5m air intake hose, exhaust hose and a hose joint are attached.

\*With regard to GT-MG55S, MG55SR, MG75S and a 2.35 mm collet chuck is also prepared.

[OP] Can be replaced by user.

[OP] Should be replaced at our factory.

# Air Micro Grinders

## Air Micro Grinders (Surface Grinding/ Polishing)



**No. GT-MG25-12CF (Soft Grip)**

**CP** Corner attachment

No. **GT-MG35-12CC** (Precision grinding at 35,000 rpm)

No. **GT-MG25-12CC** (Precision grinding at 25,000 rpm)



**No. GT-MG25-9CF (Soft Grip)**

**OP** Corner attachment

No. **GT-MG25-9CC** (Precision grinding at 25,000 rpm)

No. **GT-MG35-9CC** (Precision grinding at 35,000 rpm)

| Model No.           | No Load Speed (rpm) | Air Consumption (m <sup>3</sup> /min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Frame Dia. (mm) | Weight (g) | Tip tool Installation Part | Accessories                                |
|---------------------|---------------------|---------------------------------------|---------------|--------------------------|---------------------|-----------------|------------|----------------------------|--------------------------------------------|
| <b>GT-MG25-12CF</b> | 25,000              | 0.25                                  | Rc1/4         | 6.35                     | 181                 | 24.5            | 315        | M7                         | • Chuck handle • Oil • Rubber holder       |
| <b>GT-MG25-9CF</b>  | 25,000              | 0.25                                  | Rc1/4         | 6.35                     | 173                 | 24.5            | 310        | M7                         | • PO-ring (#60•100•150•240 ...3 pcs. each) |
| <b>GT-MG25-12CR</b> | 25,000              | 0.16                                  | Rc1/4         | 6.35                     | 160                 | 20.0            | 200        | M7                         | #400•600 ...1 pc. each)                    |
| <b>GT-MG25-9CR</b>  | 25,000              | 0.16                                  | Rc1/4         | 6.35                     | 143                 | 20.0            | 200        | M7                         | • Lap ring (#600) • Headcup (#80)          |

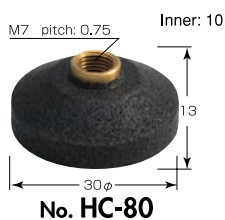
•Working air pressure...0.6MPa •Overall length...Accessories and exhaust hose parts not included. •Weight...Accessories not included.

•In the main body, a 1.5m air intake hose, exhaust hose and a hose joint are attached.

## Tip Tools for Smooth Surface Grinding and Polishing (For GT-MG25-12CF, 9CF, 12CR, 9CR)

To meet work objectives from the removal of cutter marks in the manufacture of metal molding to the finishing of mirror surfaces.

Headcup Grit #80



Rubber Holder



PO-Ring



| Model No.     | Grit # |
|---------------|--------|
| <b>PR-60</b>  | 60     |
| <b>PR-100</b> | 100    |
| <b>PR-150</b> | 150    |
| <b>PR-240</b> | 240    |
| <b>PR-400</b> | 400    |
| <b>PR-600</b> | 600    |

Lap Ring



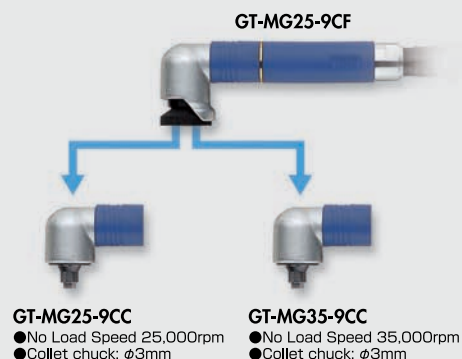
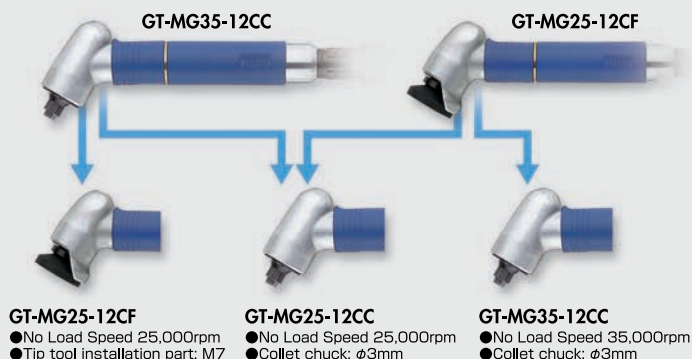
| Model No.     | Grit # |
|---------------|--------|
| <b>LP-320</b> | 320    |
| <b>LP-400</b> | 400    |
| <b>LP-600</b> | 600    |
| <b>LP-800</b> | 800    |

Color identification

## ONE POINT

### Corner Attachment Replacement Heads

A selection of corner attachments with differing head shapes and gear ratios is available. VESSEL will replace the micro grinder heads in accordance with your needs.





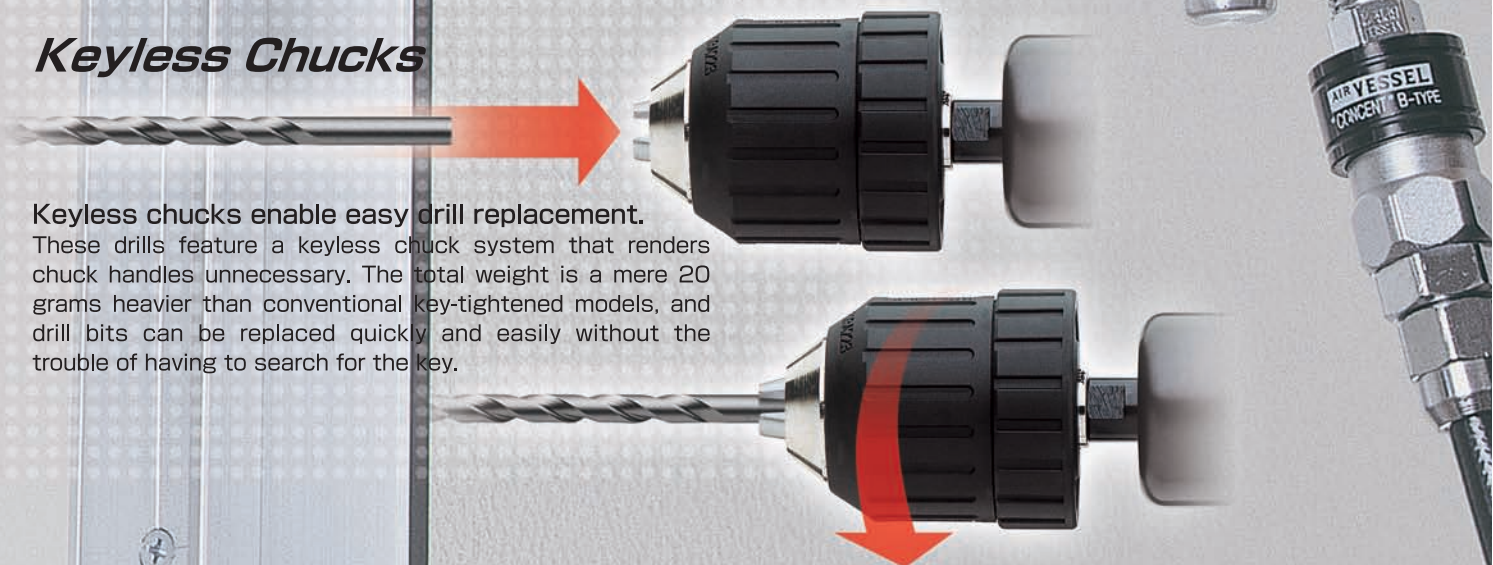
Handy, adaptable drills that can handle the precision drilling for a wide variety of applications including sash work, sheet metal work, and automobile assembly, these units boast precision motors for optimum revolution speed and minimum axial runout for both bits and shank to ensure accurate drilling without mistakes.



## Keyless Chucks

Keyless chucks enable easy drill replacement.

These drills feature a keyless chuck system that renders chuck handles unnecessary. The total weight is a mere 20 grams heavier than conventional key-tightened models, and drill bits can be replaced quickly and easily without the trouble of having to search for the key.





# Air Drills

## Air Drills

The VESSEL Air Drill speedily drills holes of every small bore. Compact and lightweight, it is provided with functions, such as adjust-valve and silencer, which adds comfort to the workplace.

Drill Hole >>  $\phi 6\text{mm}$

### No. GT-D60-26

- Rear exhaust
- Noise reducer



Drill Hole >>  $\phi 8\text{mm}$

### No. GT-D80-20

- Rear exhaust
- Noise reducer



### No. GT-D80-20K

- Rear exhaust
- Noise reducer
- Keyless chuck



Drill Hole >>  $\phi 10\text{mm}$

### No. GT-D100-15

- Rear exhaust
- Noise reducer



### No. GT-D100-15K

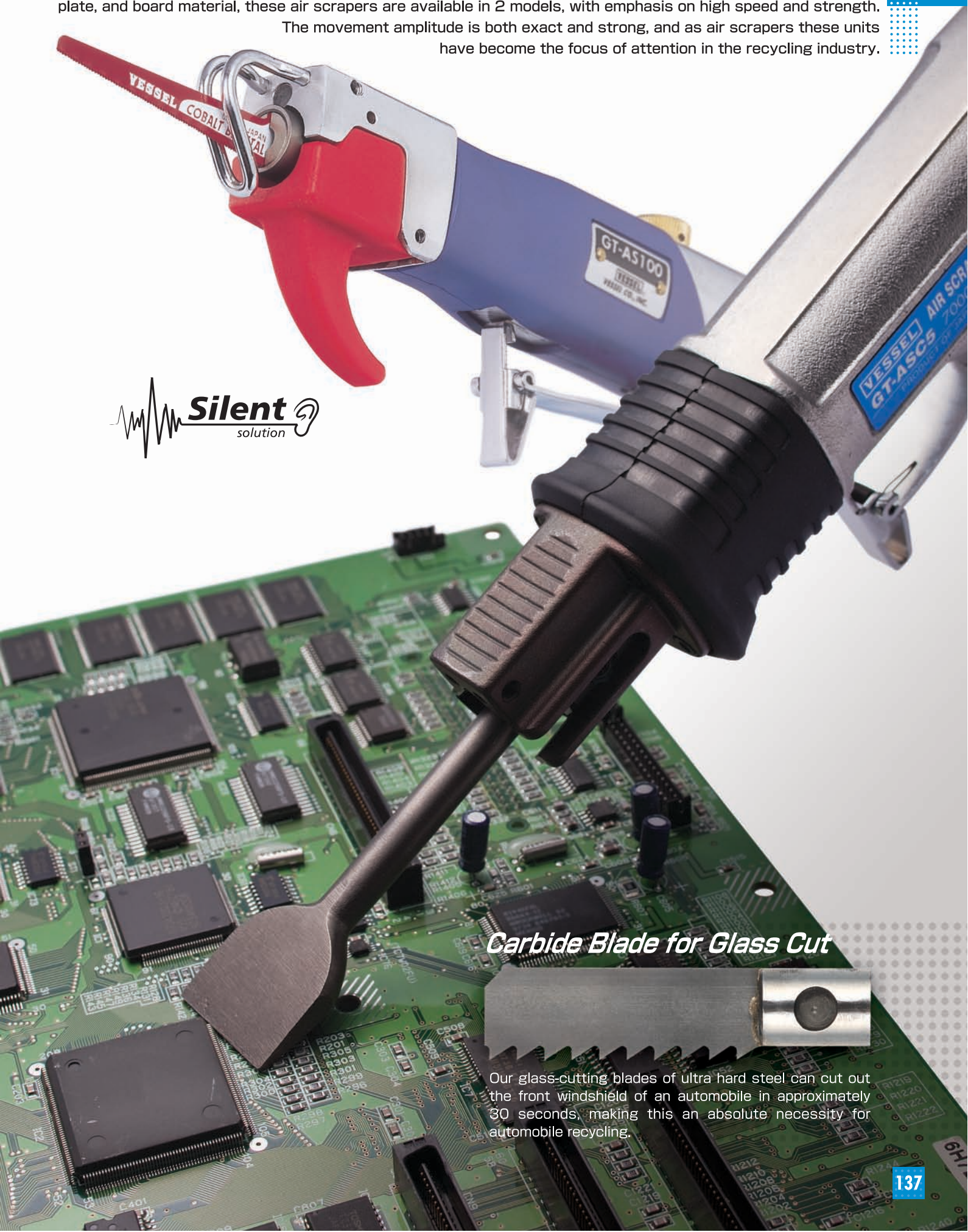
- Rear exhaust
- Noise reducer
- Keyless chuck



| Model No.   | Steel Plate Drilling Capacity $\phi$ (mm) | No Load Speed (rpm) | Air Consumption (m <sup>3</sup> /min) | Hose Coupling | Air Hose Inner Dia. (mm) | Overall Length (mm) | Weight (g) | Chuck Size (mm) | Accessories |              |
|-------------|-------------------------------------------|---------------------|---------------------------------------|---------------|--------------------------|---------------------|------------|-----------------|-------------|--------------|
|             |                                           |                     |                                       |               |                          |                     |            |                 | Plug        | Chuck handle |
| GT-D60-26   | 6                                         | 2,600               | 0.2                                   | Rc1/4         | 6.35                     | 163                 | 830        | 6.0             | BPB-2       | ●            |
| GT-D80-20   | 8                                         | 2,000               | 0.35                                  | Rc1/4         | 6.35                     | 165                 | 940        | 8.0             | BPB-2       | ●            |
| GT-D80-20K  | 8                                         | 2,000               | 0.35                                  | Rc1/4         | 6.35                     | 171                 | 960        | 8.0             | BPB-2       | —            |
| GT-D100-15  | 10                                        | 1,500               | 0.54                                  | Rc1/4         | 6.35                     | 189                 | 1,280      | 10.0            | BPB-2       | ●            |
| GT-D100-15K | 10                                        | 1,500               | 0.54                                  | Rc1/4         | 6.35                     | 195                 | 1,300      | 10.0            | BPB-2       | —            |

•Working air pressure···0.6MPa •Overall length···Accessories and exhaust hose parts not included. •Weight···Accessories not included.

Featuring superior speed, operating efficiency, and durability, our air grinders are designed for cutting sheet, plate, and board material, these air scrapers are available in 2 models, with emphasis on high speed and strength. The movement amplitude is both exact and strong, and as air scrapers these units have become the focus of attention in the recycling industry.



## *Carbide Blade for Glass Cut*

Our glass-cutting blades of ultra hard steel can cut out the front windshield of an automobile in approximately 30 seconds, making this an absolute necessity for automobile recycling.



# Air Saws

Cutting Capacity >> Metal Sheet **4mm** Patented



No. GT-AS10

•Noise reducer

Accessories

Blade: 32-tooth thin blade ... ASB-32T...1pc.  
32-tooth thick blade ... ASB-32H...1pc.  
24-tooth thick blade ... ASB-24H...1pc.

Cutting Capacity >> Metal Sheet **1.6mm** Patented



No. GT-AS100

Accessories

Blade: 32-tooth standard blade ... ASB-32 2 pcs.

| Model No. | Cutting Capacity         | Working Air Pressure (MPa) | Stroke Speed (c.p.m.) | Air Consumption (m³/min) | Stroke (mm) | Hose Coupling | Overall Length (mm) | Weight (g) | Accessories |          |
|-----------|--------------------------|----------------------------|-----------------------|--------------------------|-------------|---------------|---------------------|------------|-------------|----------|
| GT-AS10   | Steel...4mm              | 0.6                        | 5,000                 | 0.28                     | 10          | Rc1/4         | 195.5               | 870        | Plug        | L-wrench |
| GT-AS100  | Steel...1.6/ Wood...55mm | 0.6                        | 10,000                | 0.34                     | 10          | Rc1/4         | 170                 | 570        | BPB-2       | H3       |
|           |                          |                            |                       |                          |             |               |                     |            | BPB-2       | H2,H4    |

Cutting capacity: GT-AS10: When used with a No. ASB-32H blade GT-AS100: When used with a No. ASB-32 blade Overall Length, Weight: Accessories not included.

## ONE POINT

Easy recovery by the restart button.



When the air motor accidentally stalls, the unit can be easily restarted by pushing the restart button.

## Air Saw Blades (For GT-AS10/AS100)

Attach to air saw tips for cutting.



<For steel>



<Scraper>



Flat type



Round type



Triangular type

<File>

| Model No. | Specifications                                    | Use                                     | Quantity |
|-----------|---------------------------------------------------|-----------------------------------------|----------|
| ASB-32    | For steel Cobalt mix, standard blade, 32 teeth    | Cutting steel                           | 10       |
| ASB-32T   | For steel Thin blade, 32 teeth                    | Cutting sheet metal, etc.               | 10       |
| ASB-32H   | For steel Cobalt mix, super thick blade, 32 teeth | Cutting plain and stainless steel sheet | 10       |
| ASB-24H   | For steel Cobalt mix, super thick blade, 24 teeth | Cutting aluminum, soft steel and resin  | 10       |
| ASC-25-5  | Scraper 25 mm wide blade                          | Scraping, peeling, etc.                 | 1        |
| ASF-F-5   | File Flat                                         | File                                    | 5        |
| ASF-R-5   | File Round                                        | File                                    | 5        |
| ASF-T-5   | File Triangular                                   | File                                    | 5        |

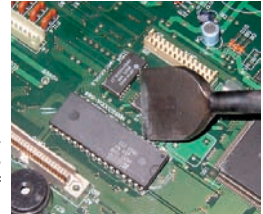


## No. GT-ASC5 Air Scraper



•Noise reducer  
※Scraper sold separately

Use to detach IC chips from circuit boards when recycling PCs, faxes and copiers, or to scrape mortar or paint from external walls of structures.



| Working Air Pressure (MPa) | Stroke Speed (c.p.m.) | Air Consumption (m <sup>3</sup> /min) | Stroke (mm) | Hose Coupling | Overall Length (mm) | Weight (g) | Accessories   |                |
|----------------------------|-----------------------|---------------------------------------|-------------|---------------|---------------------|------------|---------------|----------------|
| 0.6                        | 7,000                 | 0.28                                  | 5           | Rc1/4         | 195.5               | 810        | Plug<br>BPB-2 | L-wrench<br>H3 |

## No. GT-AS10G Glass Cut Air Saw

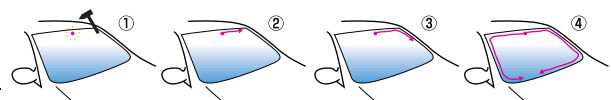


•Noise reducer  
※Scraper sold separately



For windshield recycling.

It only takes 30 seconds to cut out one windshield.



| Working Air Pressure (MPa) | Stroke Speed (c.p.m.) | Air Consumption (m <sup>3</sup> /min) | Stroke (mm) | Hose Coupling | Overall Length (mm) | Weight (g) | Accessories   |               |
|----------------------------|-----------------------|---------------------------------------|-------------|---------------|---------------------|------------|---------------|---------------|
| 0.6                        | 5,000                 | 0.28                                  | 10          | Rc1/4         | 195.5               | 810        | Plug<br>BPB-2 | Spanner<br>H3 |

For the date of delivery, consult Vessel.

## Scraper (For GT-ASC5)



No. ASC-25-8



No. ASC-50-8

| Model No. | Blade Width (mm) | Axis Dia. $\phi$ (mm) | Use               |
|-----------|------------------|-----------------------|-------------------|
| ASC-25-8  | 25               | 8                     | for IC chip       |
| ASC-50-8  | 50               | 8                     | for IC chip, wall |

## Carbide Blade for Glass Cut (For GT-AS10G)



| Model No. | Specifications         | Use                  |
|-----------|------------------------|----------------------|
| ASB-10G   | Thickness 3mm, 10teeth | for windshield glass |

※Not compatible with GT-AS10, AS100.

## Air Nippers For Resin Gate

These are high-class air nippers that can be mounted on gate cutting equipment and standby jigs for accurate, speedy cutting of resin products. VESSEL has a wide selection of items to meet a variety of needs, from around-the-clock operations to high cutting precision.

### Blades

Manufactured by our unique heat process technology using high-class materials such as alloy tool steel and high-speed steel, these air nippers boast stable and sharp blade formation through the use of precision machining processes and extremely sharp cutting performance developed in accordance with our extensive knowledge of cutting technology.

## 1

### Cutting material

What is the material to be cut?

Plastic

Soft Plastic

PP, etc.

Hard Plastic

ABS, etc.

Metal

Copper wire

Steel wire

Non-heat treated

## 2

### Select diameter

What is the size of the material?

Calculate "W×H" to obtain the cross-sectional area and select a corresponding diameter.

Select the diameter.

※Sprues cannot be trimmed properly if they are bigger than the blade length or if they are too thin.

## 3

### Select nipper body

To select a nipper body, please refer to the cutting capacity on the specification chart.

| Capacity φ (mm) | Material |        |       | Model No.  | Size (mm) |      |      |    |    |    |      |   |    |   |    | Air Consumption (cm³/sir.) |    |
|-----------------|----------|--------|-------|------------|-----------|------|------|----|----|----|------|---|----|---|----|----------------------------|----|
|                 | Plastic  | Copper | Steel |            | A         | B    | C    | D  | E  | F  | G    | H | I  | J | K  |                            |    |
| 2.0             | 1.6      | 1.0    |       | GT-NY05    |           |      |      |    |    |    |      |   |    |   |    |                            | 48 |
| 2.0             | 1.6      | 1.0    |       | GT-NY05R   |           |      |      |    |    |    |      |   |    |   |    |                            | 48 |
| 2.0             | 1.6      | 1.0    |       | GT-NY05-4  | 8.6       | 75.9 | 40.9 | 25 | 15 | 23 | 47.6 | 4 | M4 | 3 | 22 | 48                         |    |
| 2.0             | 1.6      | 1.0    |       | GT-NY05R-4 |           |      |      |    |    |    |      |   |    |   |    | 48                         |    |
| 2.3             |          |        |       | GT-NY10    |           |      |      |    |    |    |      |   |    |   |    | 68                         |    |
| 2.3             |          |        |       | GT-NY10R   |           |      |      |    |    |    |      |   |    |   |    | 68                         |    |
| 2.3             |          |        |       | GT-NY10-4  | 8.8       | 82.1 | 42.1 | 30 | 20 | 28 | 51.6 | 6 | M4 | 5 | 24 | 68                         |    |
| 2.3             |          |        |       | GT-NY10R-4 |           |      |      |    |    |    |      |   |    |   |    | 68                         |    |
| 2.6             |          |        |       | GT-NY15    |           |      |      |    |    |    |      |   |    |   |    | 110                        |    |
| 2.6             |          |        |       | GT-NY15R   |           |      |      |    |    |    |      |   |    |   |    | 110                        |    |
| 2.6             |          |        |       | GT-NY15-4  | 10.2      | 93   | 48   | 35 | 25 | 33 | 58   | 8 | M4 | 5 | 27 | 110                        |    |
| 2.6             |          |        |       | GT-NY15R-4 |           |      |      |    |    |    |      |   |    |   |    | 110                        |    |
| 3.4             |          |        |       | GT-NY25    |           |      |      |    |    |    |      |   |    |   |    | 180                        |    |

Select the item.

## 4

### Select blades

Please select blades compatible with the chosen nipper body.

| Applicable Nippers |       | Model No.              |          | Size (mm) |      |      |     |
|--------------------|-------|------------------------|----------|-----------|------|------|-----|
| Copper             | Steel | Body                   | Shape    | a         | b    | d    | e   |
|                    |       | GT-NY03G(-4)           | NY03 AJ  | 21.0      | 7.0  | 10.5 | 3.0 |
|                    |       |                        | NY03 AJL | 27.0      | 7.0  | 10.5 | 4.0 |
|                    |       |                        | NY03 AJT | 21.0      | 7.0  | 10.5 | 3.0 |
|                    |       | GT-NY03GR(-4)          | NY03 RAJ | 21.0      | 7.0  | 10.5 | 3.0 |
| 1.6                | 1.0   |                        | NY05 BJ  | 22.0      | 7.0  | 9.0  | 3.5 |
|                    |       | GT-NY05(-4)<br>GT-NF05 | NY05 AJ  | 22.0      | 7.0  | 10.5 | 4.0 |
|                    |       |                        | NY05 AJL | 31.0      | 7.0  | 10.5 | 5.0 |
|                    |       |                        | NY05 AJB | 22.0      | 7.0  | 10.5 | 4.0 |
|                    |       |                        | NY05 AJT | 22.0      | 7.0  | 10.5 | 4.0 |
|                    |       |                        | NY05 AH  | 31.0      | 19.0 | 10.5 | 5.0 |
| 1.6                | 1.0   |                        | NY05 BBI | 22.0      | 7.0  | 9.0  | 3.5 |

Select the item. (Please refer to P. 146)

\*The cutting capacity may differ depending on the temperature of material.



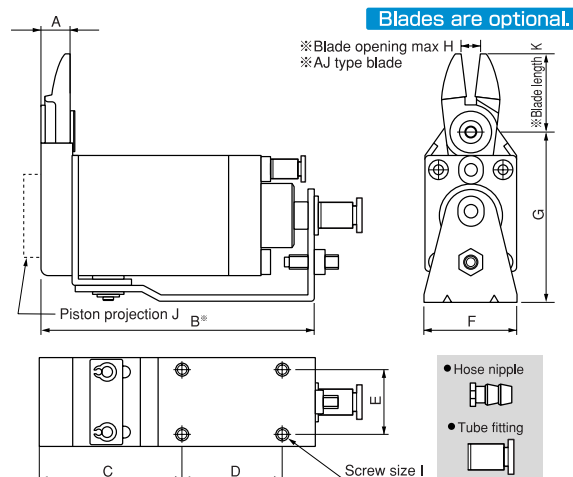
# Air Nippers For Resin Gate

## GT-NY05/10/15/25 Sliding Air Nippers Horizontal-Type

# NY



The horizontal slide enables space to be used effectively.  
The low profile of the main unit allows work to be removed without obstructing the operations of the chuck plate.



| Capacity $\phi$ (mm) |              |        |       | Model No.  | Size (mm) |       |      |    |    |    |      |   |    |   |    | Air Consumption<br>(cm <sup>3</sup> /str.) | Weight<br>(g) | Slide Distance<br>(mm) | Hose Port                            |
|----------------------|--------------|--------|-------|------------|-----------|-------|------|----|----|----|------|---|----|---|----|--------------------------------------------|---------------|------------------------|--------------------------------------|
| Soft Plastic         | Hard Plastic | Copper | Steel |            | A         | B     | C    | D  | E  | F  | G    | H | I  | J | K  |                                            |               |                        |                                      |
| 3.0                  | 2.0          | 1.6    | 1.0   | GT-NY05    | 8.6       | 75.9  | 40.9 | 25 | 15 | 23 | 47.6 | 4 | M4 | 3 | 22 | 48                                         | 155           | Pull 0~3               | W/hose nipple                        |
| 3.0                  | 2.0          | 1.6    | 1.0   | GT-NY05R   |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5mm               |
| 3.0                  | 2.0          | 1.6    | 1.0   | GT-NY05-4  |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | W/tube fitting                       |
| 3.0                  | 2.0          | 1.6    | 1.0   | GT-NY05R-4 |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |
| 3.5                  | 2.3          |        |       | GT-NY10    | 8.8       | 82.1  | 42.1 | 30 | 20 | 28 | 51.6 | 6 | M4 | 5 | 24 | 68                                         | 210           | Pull 0~3               | W/hose nipple                        |
| 3.5                  | 2.3          |        |       | GT-NY10R   |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5mm               |
| 3.5                  | 2.3          |        |       | GT-NY10-4  |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | W/tube fitting                       |
| 3.5                  | 2.3          |        |       | GT-NY10R-4 |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |
| 4.0                  | 2.6          |        |       | GT-NY15    | 10.2      | 93    | 48   | 35 | 25 | 33 | 58   | 8 | M4 | 5 | 27 | 136                                        | 319           | Pull 0~3               | W/hose nipple                        |
| 4.0                  | 2.6          |        |       | GT-NY15R   |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5mm               |
| 4.0                  | 2.6          |        |       | GT-NY15-4  |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | W/tube fitting                       |
| 4.0                  | 2.6          |        |       | GT-NY15R-4 |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |
| 5.0                  | 3.4          |        |       | GT-NY25    | 12.5      | 108.5 | 54.5 | 40 | 30 | 42 | 69   | 9 | M5 | 2 | 31 | 184                                        | 580           | Pull 0~5               | W/hose nipple                        |
| 5.0                  | 3.4          |        |       | GT-NY25R   |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 4mm                 |
| 5.0                  | 3.4          |        |       | GT-NY25-6  |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | W/tube fitting                       |
| 5.0                  | 3.4          |        |       | GT-NY25R-6 |           |       |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 4XO.D. $\phi$ 6mm   |

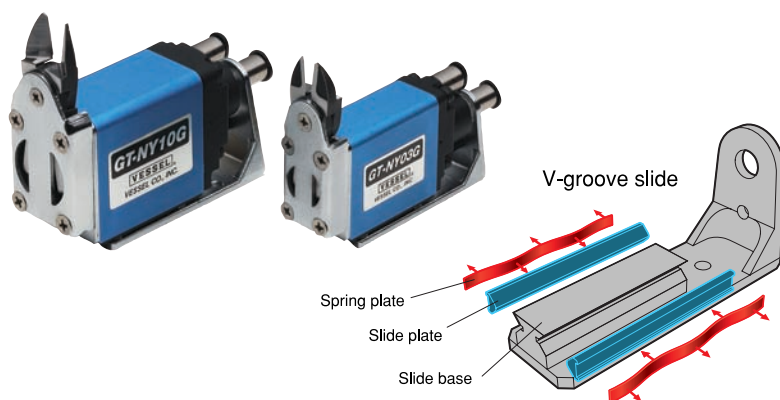
※ Air Pressure...0.4~0.5 MPa (NY25 type: 0.5~0.6)

※ B refers to the distance from the cut position for PUSH style models, and the distance from the start position for PULL style models.

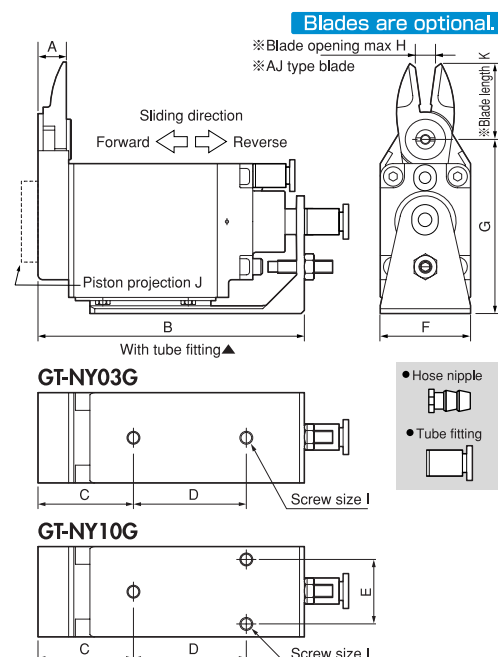
## GT-NY03G/10G Sliding Air Nippers Horizontal-Type

Patented

# NY-G



VESSEL's patented, V-groove slide base ensures constant, stable positioning. The unit is not subject to inclined loads, and has achieved high precision gate cutting performance.



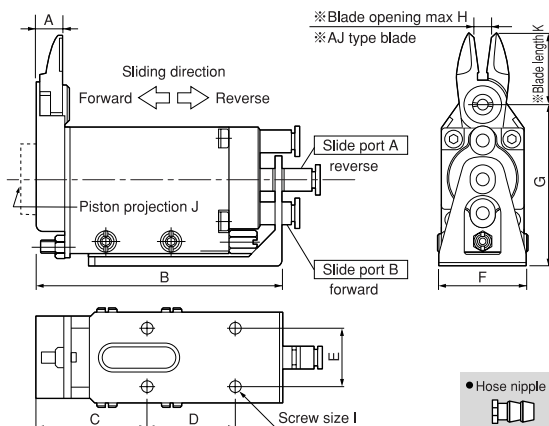
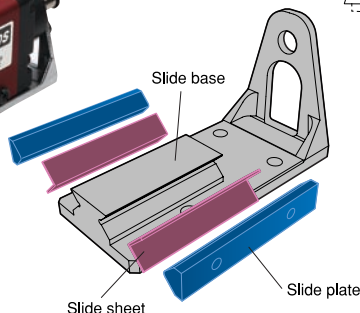
| Capacity $\phi$ (mm) |              |  |  | Model No.   | Size (mm) |      |      |    |    |    |      |   |    |   |    | Air Consumption<br>(cm <sup>3</sup> /str.) | Weight<br>(g) | Slide Distance<br>(mm) | Hose Port                            |
|----------------------|--------------|--|--|-------------|-----------|------|------|----|----|----|------|---|----|---|----|--------------------------------------------|---------------|------------------------|--------------------------------------|
| Soft Plastic         | Hard Plastic |  |  |             | A         | B    | C    | D  | E  | F  | G    | H | I  | J | K  |                                            |               |                        |                                      |
| 2.0                  | 1.3          |  |  | GT-NY03G    | 8.6       | 74.5 | 29.5 | 30 | -  | 19 | 46.5 | 3 | M4 | 0 | 21 | 37                                         | 160           | Pull 0~3               | W/hose nipple                        |
| 2.0                  | 1.3          |  |  | GT-NY03GR   |           |      |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5mm               |
| 2.0                  | 1.3          |  |  | GT-NY03G-4  |           |      |      |    |    |    |      |   |    |   |    |                                            |               |                        | W/tube fitting                       |
| 2.0                  | 1.3          |  |  | GT-NY03GR-4 |           |      |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |
| 3.5                  | 2.3          |  |  | GT-NY10G    | 8.8       | 82.6 | 29.6 | 35 | 20 | 28 | 54   | 6 | M4 | 5 | 24 | 68                                         | 275           | Pull 0~3               | W/hose nipple                        |
| 3.5                  | 2.3          |  |  | GT-NY10GR   |           |      |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5mm               |
| 3.5                  | 2.3          |  |  | GT-NY10G-4  |           |      |      |    |    |    |      |   |    |   |    |                                            |               |                        | W/tube fitting                       |
| 3.5                  | 2.3          |  |  | GT-NY10GR-4 |           |      |      |    |    |    |      |   |    |   |    |                                            |               |                        | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |

※ Air Pressure...0.4~0.5 MPa

## GT-NY10S/25S Double Action Sliding Air Nippers

Blades are optional.

# NY-S



The springless slide construction of the main unit ensures smooth movement, and a V-groove slide base has been employed for high precision positioning.

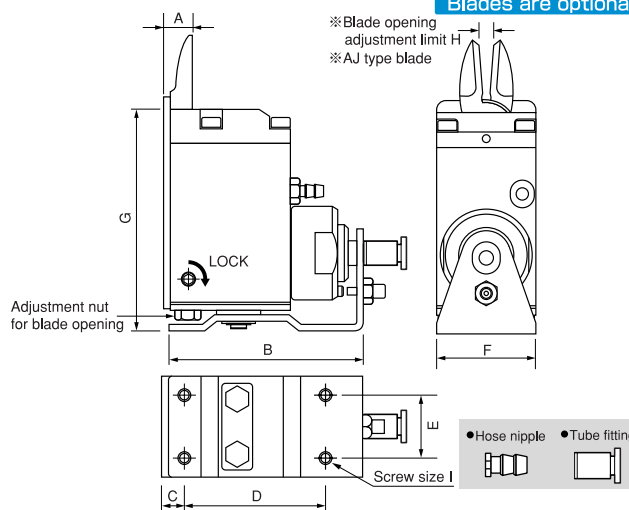
| Capacity $\phi$ (mm)<br>Soft Plastic Hard Plastic | Model No. | A    | B     | C  | Size (mm) | D  | E  | F  | G | H    | I | J  | K   | Air Consumption<br>(cm <sup>3</sup> /str.) | Weight<br>(g) | Slide Distance<br>(mm) | Hose Port                            |
|---------------------------------------------------|-----------|------|-------|----|-----------|----|----|----|---|------|---|----|-----|--------------------------------------------|---------------|------------------------|--------------------------------------|
| 3.5 2.3                                           | GT-NY10S  | 8.8  | 84.5  | 38 | 30        | 20 | 32 | 55 | 6 | 4-M4 | 5 | 24 | 68  | 300                                        | 0~3.5         | W/tube fitting         | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |
| 5.0 3.4                                           | GT-NY25S  | 12.5 | 106.5 | 47 | 40        | 30 | 47 | 72 | 9 | 4-M5 | 2 | 31 | 184 | 695                                        | 0~5.0         | W/tube fitting         | Hose I.D. $\phi$ 4XO.D. $\phi$ 6mm   |

※Air Pressure: NY10S : 0.4~0.5 MPa / NY25S : 0.5~0.6 MPa

## GT-NT03/05/10/20 Sliding Air Nippers Vertical-type

Blades are optional.

# NT



Blade opening is adjustable, and fine adjustments are easy to make after mounting the nippers, ensuring clean, unblemished cut surfaces.

| Capacity $\phi$ (mm) |              | Model No.  | Size (mm) |     |    |    |    |    |       |       |    | Air Consumption<br>(cm <sup>3</sup> /str.) | Weight<br>(g) | Slide Distance<br>(mm) | Hose Port      |                                      |
|----------------------|--------------|------------|-----------|-----|----|----|----|----|-------|-------|----|--------------------------------------------|---------------|------------------------|----------------|--------------------------------------|
| Soft Plastic         | Hard Plastic |            | A         | B   | C  | D  | E  | F  | G     | H     | I  |                                            |               |                        |                |                                      |
| 1.5                  | 1.0          | GT-NT03    | 9         | 62  | 7  | 43 | 14 | 19 | 68.1  | 1.5~3 | M3 | 0.4~0.5                                    | 178           | Pull 0~3               | W/hose nipple  | Hose I.D. $\phi$ 2.5mm               |
| 1.5                  | 1.0          | GT-NT03R   |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 178           | Push 0~3               |                |                                      |
| 1.5                  | 1.0          | GT-NT03-4  |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 178           | Pull 0~3               | W/tube fitting | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |
| 1.5                  | 1.0          | GT-NT03R-4 |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 178           | Push 0~3               |                |                                      |
| 2.5                  | 1.5          | GT-NT05    | 9         | 64  | 7  | 45 | 20 | 32 | 71.1  | 3~6   | M4 | 0.4~0.5                                    | 325           | Pull 0~3               | W/hose nipple  | Hose I.D. $\phi$ 2.5mm               |
| 2.5                  | 1.5          | GT-NT05R   |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 325           | Push 0~3               |                |                                      |
| 2.5                  | 1.5          | GT-NT05-4  |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 325           | Pull 0~3               | W/tube fitting | Hose I.D. $\phi$ 2.5XO.D. $\phi$ 4mm |
| 2.5                  | 1.5          | GT-NT05R-4 |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 325           | Push 0~3               |                |                                      |
| 3.5                  | 2.3          | GT-NT10    | 11        | 73  | 8  | 53 | 24 | 38 | 88.1  | 4~7   | M4 | 0.4~0.5                                    | 515           | Pull 0~3               | W/hose nipple  | Hose I.D. $\phi$ 2.5mm               |
| 3.5                  | 2.3          | GT-NT10R   |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 515           | Push 0~3               |                |                                      |
| 3.5                  | 2.3          | GT-NT10-6  |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 515           | Pull 0~3               | W/tube fitting | Hose I.D. $\phi$ 4XO.D. $\phi$ 6mm   |
| 3.5                  | 2.3          | GT-NT10R-6 |           |     |    |    |    |    |       |       |    | 0.4~0.5                                    | 515           | Push 0~3               |                |                                      |
| 5.0                  | 3.4          | GT-NT20    | 14        | 103 | 10 | 80 | 28 | 44 | 102.1 | 4.5~9 | M5 | 0.5~0.6                                    | 930           | Pull 0~8               | W/hose nipple  | Hose I.D. $\phi$ 4mm                 |
| 5.0                  | 3.4          | GT-NT20R   |           |     |    |    |    |    |       |       |    | 0.5~0.6                                    | 930           | Push 0~8               |                |                                      |
| 5.0                  | 3.4          | GT-NT20-6  |           |     |    |    |    |    |       |       |    | 0.5~0.6                                    | 930           | Pull 0~8               | W/tube fitting | Hose I.D. $\phi$ 4XO.D. $\phi$ 6mm   |
| 5.0                  | 3.4          | GT-NT20R-6 |           |     |    |    |    |    |       |       |    | 0.5~0.6                                    | 930           | Push 0~8               |                |                                      |

※Air Pressure: 0.4~0.5 MPa

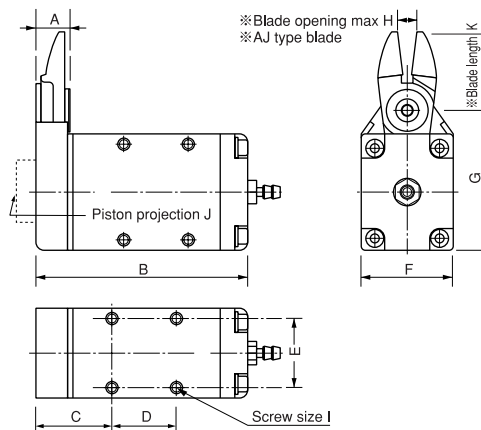
# Air Nippers For Resin Gate

## GT-NF05/10/15 Type-F Air Nippers

NF



Blades are optional.



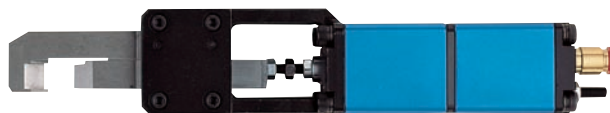
These compact, lightweight nippers have been designed for easy mounting inside equipment and to enable secure mounting under high-density mounting conditions.

| Capacity $\phi$ (mm) |              |        |       | Model No. | Size (mm) |      |      |    |    |    |      |   |      |   |    |     | Air Consumption<br>(cm <sup>3</sup> /str.) | Weight<br>(g) | Spec. & Size of the Hose Port |
|----------------------|--------------|--------|-------|-----------|-----------|------|------|----|----|----|------|---|------|---|----|-----|--------------------------------------------|---------------|-------------------------------|
| Soft Plastic         | Hard Plastic | Copper | Steel |           | A         | B    | C    | D  | E  | F  | G    | H | I    | J | K  |     |                                            |               |                               |
| 3.0                  | 2.0          | 1.6    | 1.0   | GT-NF05   | 8.6       | 59.9 | 21.9 | 17 | 18 | 23 | 39.5 | 4 | M3   | 3 | 22 | 43  | 101                                        |               |                               |
| 3.5                  | 2.3          | 1.7    | 1.1   | GT-NF10   | 8.8       | 65.1 | 23.1 | 20 | 22 | 28 | 43.5 | 6 | M3.5 | 5 | 24 | 63  | 143                                        |               |                               |
| 4.0                  | 2.6          | 1.8    | 1.2   | GT-NF15   | 10.2      | 73   | 25   | 25 | 26 | 33 | 48.5 | 8 | M4   | 5 | 27 | 128 | 219                                        |               |                               |

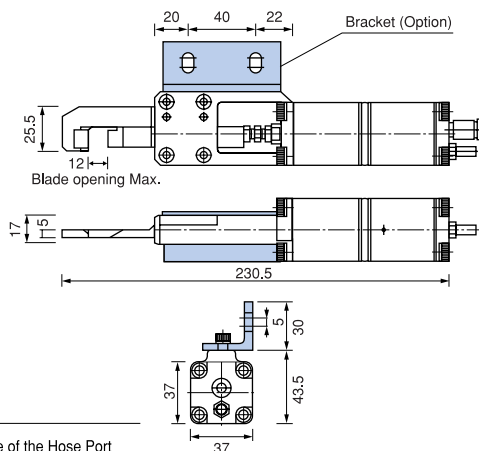
※Mounting screw for NF10 (M3.5) is regarded as spare part. ※Air Pressure...0.4~0.5 MPa

## GT-NK10 Thrust-Cut Air Nipper

NK



Blades are optional.



These nippers are equipped with a foot switch and are linked to high precision drivers, enabling the cutting of film-shaped gates from the thin end, preventing wrinkles around the cut.

| Capacity $\phi$ (mm) | Model No. | Air Consumption<br>(cm <sup>3</sup> /str.) | Air Pressure<br>(MPa) | Weight<br>(g) | Applied Pressure<br>(N) | Spec. & Size of the Hose Port                 |
|----------------------|-----------|--------------------------------------------|-----------------------|---------------|-------------------------|-----------------------------------------------|
| 5                    | GT-NK10   | 110                                        | 0.4~0.5               | 800           | 735                     | Hose I.D. $\phi$ 2.5 $\times$ O.D. $\phi$ 4mm |

•Hose Coupling: I.D.  $\phi$ 4  $\times$  O.D.  $\phi$ 6 mm •Piston stroke...Max.12 mm



## GT-TC-02 Timing Controller

# TC

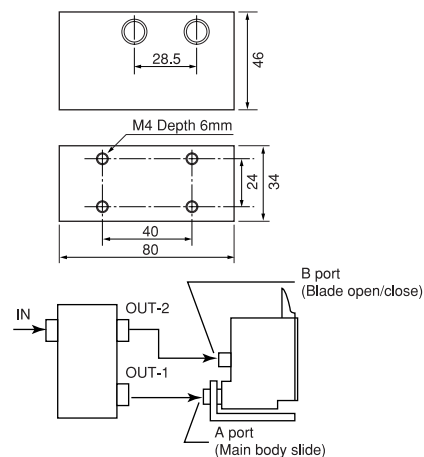
Adjusting Screw  
(0.5~1.5 sec.)



Connected between the compressor and the air nippers, the timing controller enables adjustments to the slide and cutting timing. (Approximately 0.5 seconds to 1.5 seconds)

Connectable nippers (Reference)

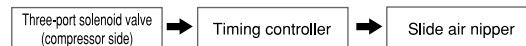
| No. GT-                  | NY05 | NY10 | NY15 | NY25 | NT03 | NT05 | NT10 | NT20 | NB20 | NB30 | NB20LW | NB30LW |
|--------------------------|------|------|------|------|------|------|------|------|------|------|--------|--------|
| Connectable unit numbers | 4    | 3    | 1    | 1    | 6    | 4    | 2    | 1    | 2    | 1    | 2      | 1      |



Working air pressure ... 0.6MPa

Size ... Height 46 × Length 80 × thickness 34 (mm)

Weight ... 275 g With tube joint: I.D.  $\phi 4$  × O.D.  $\phi 6$  mm



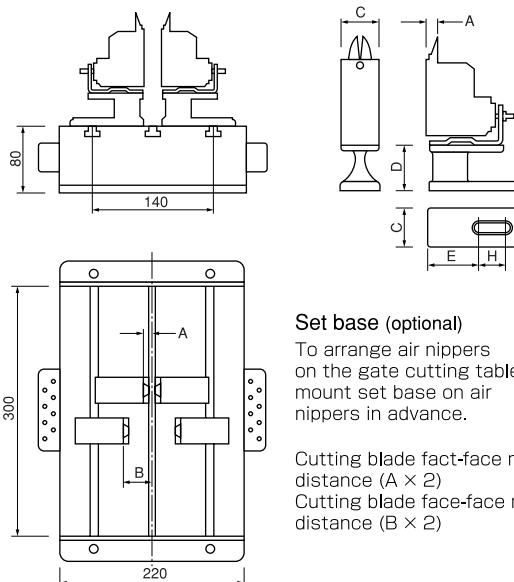
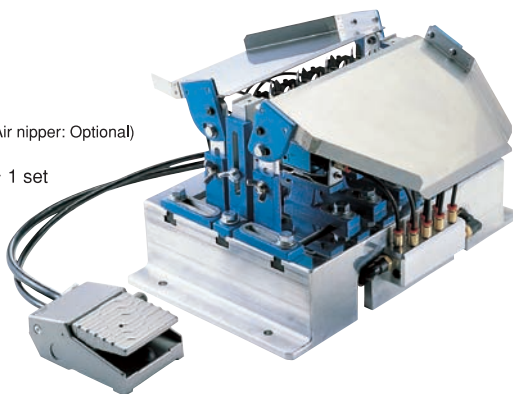
## ATC-30 Gate Cutting Table

# ATC

Our gate cut table eliminates the trouble of manufacturing a jig. Air nipper position can be changed in accordance with changes in work requirements.

Standard set detail (Air nipper: Optional)

- Table ... 1 unit
- Gate receiving base ... 1 set
- Foot switch ... 1 unit
- Chuter ... 1 set
- TC-02 ... 1 unit
- Accessories ... 1 set



Set base (optional)

To arrange air nippers on the gate cutting table, mount set base on air nippers in advance.

Cutting blade fact-face min. distance (A × 2)  
Cutting blade face-face max. distance (B × 2)

We quote, according to your molded sample, complete gate cut table.

| Capacity $\phi$ (mm) | Model No.                       | Max. Arrangement on Table | Dimensions (mm) |    |    |    |    |    |
|----------------------|---------------------------------|---------------------------|-----------------|----|----|----|----|----|
| ABS Plastics         |                                 |                           | A               | B  | C  | D  | E  | H  |
| 3.0                  | GT-NY05, NY05R, NY05-4, NY05R-4 | 8 units                   | 8.6             | 27 | 23 | 50 | 40 | 15 |
| 1.5                  | GT-NT03, NT03R, NT03-4, NT03R-4 | 8 units                   | 9               | 29 | 19 | 36 | 50 | 20 |
| 2.5                  | GT-NT05, NT05R, NT05-4, NT05R-4 | 8 units                   | 10              | 30 | 32 | 40 | 49 | 20 |

Note: By extended piping, max. 20 pcs of NT03 max. 16 pcs of NY05, max. 12 pcs of NT05 can be installed.

# Standard Blades For Sliding Air Nipper

## Blade Type

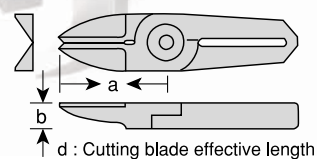


No. **NY10 A J**

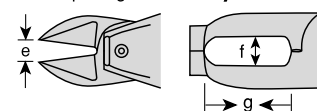
Air Nipper  
Applicable model

### Blade shape

**AJ** : Plastic, Straight ————— **RAJ** : Plastic, Straight Reversed  
**AJL** : Plastic, Straight long  
**AJT** : Plastic, Straight thin  
**AE** : Plastic, Cutting off  
**AJY** : Plastic, Recessed straight  
**AD** : Plastic, Over-ride  
**AH** : Plastic, Crank ————— **RAH** : Plastic, Crank Reversed  
**AJB** : Plastic, Straight (Sintered Alloy)  
**AJV** : Plastic, Straight V-shaped  
**AJH** : Plastic, Straight (High Speed Steel)  
**BJ** : Metal, Straight ————— **RBJ** : Metal, Straight Reversed



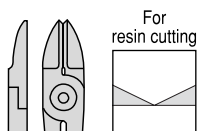
### Blade opening



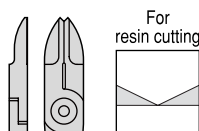
### AE / AD

■ ...Sintered Alloy ■ ...High Speed Steel

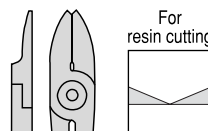
**AJ** Vertical blades whose cutting edges are not angled.



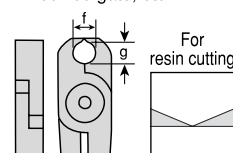
**AJL** In case there is a long distance between nipper body and gate.



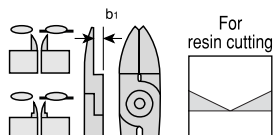
**AJT** Blade section is thin, enabling beautiful finish of surface.



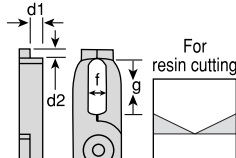
**AE** For many gate treatments such as over-fit gate, modified gate, etc.



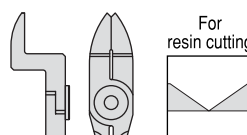
**AJY** In case the required gate width is small and ordinary blade is thick excessively.



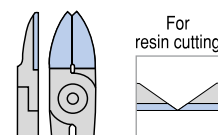
**AD** In case multi-dimensional de-gating is required.



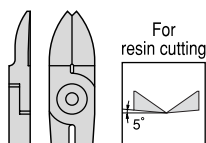
**AH** Cramped blades for resin cutting.



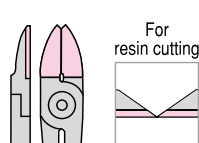
**AJB** Carbide tipped blades for cutting hard resin.



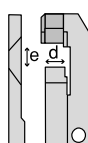
**AJV** In case cutting surface is curve and cutting face should be smooth.



**AJH** HSS tipped blades suitable for cutting hard resin works.



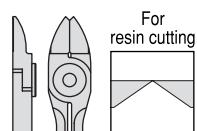
## NK10AJ



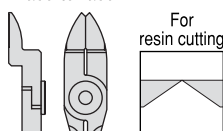
d: Cutting blade effective length ... 10.3 mm  
 e: Max. blade opening ... 12 mm

| Material            | Shape                          | Weight (g) |
|---------------------|--------------------------------|------------|
| Special alloy steel | For metal cutting (Knife type) | 96         |

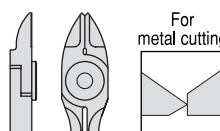
**RAJ** Reversed AJ blades



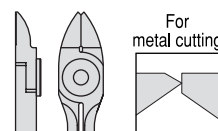
**RAH** Reversed AH blades to be employed when a pair of nipper bodies is installed face-to-face.



**BJ** Only one blade is edged for cutting metal wires.



**RBJ** Reversed BJ blades.



# Specification chart for standard blades

Sliding nippers Horizontal type (Forward / backward)

| Capacity     |              |        |       | Applicable Nippers                                 | Model No. |       | a    | b    | Size (mm)                                |      | f × g | Weight (g) |
|--------------|--------------|--------|-------|----------------------------------------------------|-----------|-------|------|------|------------------------------------------|------|-------|------------|
| Soft Plastic | Hard Plastic | Copper | Steel |                                                    | Body      | Shape |      |      | d                                        | e    |       |            |
| 2.0          | 1.3          |        |       | GT-NY03G(-4)                                       | NY03      | AJ    | 21.0 | 7.0  | 10.5                                     | 3.0  |       | 17         |
| 1.6          | 1.1          |        |       |                                                    | NY03      | AJL   | 27.0 | 7.0  | 10.5                                     | 4.0  |       | 21         |
| 2.0          | 1.3          |        |       |                                                    | NY03      | AJT   | 21.0 | 7.0  | 10.5                                     | 3.0  |       | 17         |
| 2.0          | 1.3          |        |       | GT-NY03GR(-4)                                      | NY03      | RAJ   | 21.0 | 7.0  | 10.5                                     | 3.0  |       | 17         |
|              | 2.0          | 1.6    | 1.0   | GT-NY05(-4)<br>GT-NF05                             | NY05      | BJ    | 22.0 | 7.0  | 9.0                                      | 3.5  |       | 22         |
| 3.0          | 2.0          |        |       |                                                    | NY05      | AJ    | 22.0 | 7.0  | 10.5                                     | 4.0  |       | 22         |
| 2.8          | 1.6          |        |       |                                                    | NY05      | AJL   | 31.0 | 7.0  | 10.5                                     | 5.5  |       | 29         |
| 3.0          | 2.0          |        |       |                                                    | NY05      | AJB   | 22.0 | 7.0  | 10.5                                     | 4.0  |       | 22         |
| 3.0          | 2.0          |        |       |                                                    | NY05      | AJT   | 22.0 | 7.0  | 10.5                                     | 4.0  |       | 21         |
| 3.0          | 2.0          |        |       |                                                    | NY05      | AH    | 31.0 | 19.0 | 10.5                                     | 5.5  |       | 37         |
|              | 2.0          | 1.6    | 1.0   | GT-NY05R(-4)<br>GT-NF05                            | NY05      | RBJ   | 22.0 | 7.0  | 9.0                                      | 3.5  |       | 22         |
| 3.0          | 2.0          |        |       |                                                    | NY05      | RAJ   | 22.0 | 7.0  | 10.5                                     | 4.0  |       | 22         |
| 3.0          | 2.0          |        |       |                                                    | NY05      | RAH   | 30.0 | 12.0 | 10.5                                     | 5.0  |       | 31         |
| 3.5          | 2.3          |        |       | GT-NY10(-4)<br>GT-NY10G(-4)<br>GT-NF10<br>GT-NY10S | NY10      | AJ    | 24.0 | 7.2  | 12.0                                     | 6.0  |       | 28         |
| 3.2          | 2.1          |        |       |                                                    | NY10      | AJL   | 33.0 | 7.2  | 12.0                                     | 8.0  |       | 37         |
| 2.3          | 1.6          |        |       |                                                    | NY10      | AD    | 26.5 | 7.2  | d <sub>1</sub> 4.2<br>d <sub>2</sub> 2.5 | 6.0  | 6×13  | 31         |
| 3.5          | 2.3          |        |       |                                                    | NY10      | AJB   | 24.0 | 7.2  | 12.0                                     | 6.0  |       | 28         |
| 3.5          | 2.3          |        |       |                                                    | NY10      | AJT   | 24.0 | 7.2  | 12.0                                     | 6.0  |       | 26         |
| 3.5          | 2.3          |        |       |                                                    | NY10      | AH    | 33.0 | 20.0 | 12.0                                     | 8.0  |       | 43         |
| 3.5          | 2.3          |        |       | GT-NY10R(-4)<br>GT-NY10GR(-4)<br>GT-NF10/GT-NY10S  | NY10      | RAJ   | 24.0 | 7.2  | 12.0                                     | 6.0  |       | 28         |
| 3.5          | 2.3          |        |       |                                                    | NY10      | RAH   | 32.0 | 12.2 | 12.0                                     | 7.0  |       | 36         |
| 4.0          | 2.6          |        |       | GT-NY15(-4)<br>GT-NF15                             | NY15      | AJ    | 27.0 | 8.2  | 13.0                                     | 8.0  |       | 41         |
| 3.7          | 2.3          |        |       |                                                    | NY15      | AJL   | 38.0 | 8.2  | 13.0                                     | 11.0 |       | 50         |
| 2.6          | 2.2          |        |       |                                                    | NY15      | AD    | 30.0 | 8.2  | d <sub>1</sub> 4.7<br>d <sub>2</sub> 3   | 8.0  | 7×4   | 45         |
| 4.0          | 2.6          |        |       |                                                    | NY15      | AJB   | 27.0 | 8.2  | 13.0                                     | 8.0  |       | 41         |
| 4.0          | 2.6          |        |       |                                                    | NY15      | AJT   | 27.0 | 8.2  | 13.0                                     | 8.0  |       | 38         |
| 4.0          | 2.6          |        |       |                                                    | NY15      | AH    | 38.0 | 21.5 | 13.0                                     | 11.0 |       | 63         |
| 4.0          | 2.6          |        |       | GT-NY15R(-4)<br>GT-NF15                            | NY15      | RAJ   | 27.0 | 8.2  | 13.0                                     | 8.0  |       | 41         |
| 4.0          | 2.6          |        |       |                                                    | NY15      | RAH   | 35.0 | 13.2 | 13.0                                     | 9.0  |       | 52         |
| 5.0          | 3.4          |        |       | GT-NY25(-6)<br>GT-NY25S                            | NY25      | AJ    | 31.0 | 10.0 | 16.0                                     | 9.0  |       | 65         |
| 4.7          | 3.0          |        |       |                                                    | NY25      | AJL   | 46.0 | 10.0 | 16.0                                     | 13.0 |       | 88         |
| 3.3          | 2.0          |        |       |                                                    | NY25      | AD    | 35.0 | 10.0 | d <sub>1</sub> 6<br>d <sub>2</sub> 4     | 9.0  | 8×17  | 75         |
| 5.0          | 3.4          |        |       |                                                    | NY25      | AJB   | 31.0 | 10.0 | 16.0                                     | 9.0  |       | 65         |
| 5.0          | 3.4          |        |       |                                                    | NY25      | AH    | 46.0 | 24.0 | 17.0                                     | 13.0 |       | 110        |
| 5.0          | 3.4          |        |       |                                                    | NY25      | RAJ   | 31.0 | 10.0 | 16.0                                     | 9.0  |       | 65         |
| 5.0          | 3.4          |        |       | GT-NY25R(-6)<br>GT-NY25S                           | NY25      | RAH   | 42.0 | 16.0 | 16.0                                     | 12.0 |       | 89         |

Sliding nippers Vertical type (Forward / backward)

| Capacity     |              |        |       | Applicable Nippers | Model No. |       | a    | b                                        | Size (mm)                                |      | f × g  | Weight (g) |
|--------------|--------------|--------|-------|--------------------|-----------|-------|------|------------------------------------------|------------------------------------------|------|--------|------------|
| Soft Plastic | Hard Plastic | Copper | Steel |                    | Body      | Shape |      |                                          | d                                        | e    |        |            |
| 1.5          | 1.0          |        |       | GT-NT03            | NT03      | AJ    | 24.0 | 7.0                                      | 11.0                                     | 3.0  |        | 20         |
| 1.5          | 1.0          |        |       |                    | NT03      | AJT   | 24.0 | 7.0                                      | 11.0                                     | 3.0  |        | 19         |
| 1.5          | 1.0          |        |       |                    | NT03      | AJY   | 24.0 | b <sub>1</sub> 7.0<br>b <sub>2</sub> 4.5 | 11.0                                     | 3.0  |        | 19         |
| 2.5          | 1.5          |        |       | GT-NT05            | NE5       | AJ    | 24.0 | 7.0                                      | 12.0                                     | 6.0  |        | 35         |
| 2.5          | 1.5          |        |       |                    | NT05      | AJ    | 29.0 | 7.0                                      | 15.0                                     | 6.0  |        | 30         |
| 2.0          | 1.3          |        |       |                    | NT05      | AJL   | 36.0 | 7.0                                      | 15.0                                     | 7.0  |        | 39         |
| 2.5          | 1.5          |        |       |                    | NT05      | AJB   | 29.0 | 7.0                                      | 15.0                                     | 6.0  |        | 30         |
| 2.5          | 1.5          |        |       |                    | NT05      | AJT   | 29.0 | 7.0                                      | 15.0                                     | 6.0  |        | 29         |
| 2.5          | 1.5          |        |       |                    | NT05      | AJY   | 29.0 | b <sub>1</sub> 7.0<br>b <sub>2</sub> 4.0 | 15.0                                     | 6.0  |        | 29         |
| 2.5          | 1.2          |        |       |                    | NT05      | AD    | 31.5 | 7.0                                      | d <sub>1</sub> 3.5<br>d <sub>2</sub> 2.5 | 6.0  | 6×18   | 37         |
| 2.5          | 1.5          |        |       |                    | NT05      | AJH   | 29.0 | 7.0                                      | 15.0                                     | 6.0  |        | 30         |
| 2.5          | 1.5          |        |       |                    | NT05      | AJV   | 29.0 | 7.0                                      | 15.0                                     | 6.0  |        | 29         |
| 2.0          | 1.3          |        |       |                    | NT05      | AE    | 29.0 | 7.0                                      | 7.0                                      | 6.0  | 6×18   | 36         |
| 3.5          | 2.3          |        |       | GT-NT10            | NE10      | AJ    | 27.0 | 9.0                                      | 12.0                                     | 7.0  |        | 70         |
| 3.5          | 2.3          |        |       |                    | NT10      | AJ    | 35.0 | 9.0                                      | 17.0                                     | 7.0  |        | 62         |
| 3.0          | 2.0          |        |       |                    | NT10      | AJL   | 47.0 | 9.0                                      | 17.0                                     | 9.0  |        | 62         |
| 3.5          | 2.3          |        |       |                    | NT10      | AJB   | 35.0 | 9.0                                      | 17.0                                     | 7.0  |        | 76         |
| 3.5          | 2.3          |        |       |                    | NT10      | AJT   | 35.0 | 9.0                                      | 17.0                                     | 7.0  |        | 65         |
| 3.5          | 2.3          |        |       |                    | NT10      | AJY   | 35.0 | b <sub>1</sub> 9.0<br>b <sub>2</sub> 5.0 | 17.0                                     | 7.0  |        | 82         |
| 3.5          | 2.1          |        |       |                    | NT10      | AD    | 39.0 | 9.0                                      | d <sub>1</sub> 5.0<br>d <sub>2</sub> 4.0 | 7.0  | 8×21.5 | 65         |
| 3.5          | 2.3          |        |       |                    | NT10      | AJH   | 35.0 | 9.0                                      | 17.0                                     | 7.0  |        | 65         |
| 3.5          | 2.3          |        |       |                    | NT10      | AJV   | 35.0 | 9.0                                      | 17.0                                     | 7.0  |        | 63         |
| 3.5          | 2.1          |        |       |                    | NT10      | AE    | 35.0 | 9.0                                      | 9.0                                      | 7.0  | 8×21.5 | 75         |
| 5.0          | 3.4          |        |       | GT-NT20            | NT20      | AJ    | 40.0 | 12.0                                     | 20.0                                     | 9.0  |        | 120        |
| 4.5          | 3.2          |        |       |                    | NT20      | AJL   | 57.0 | 12.0                                     | 20.0                                     | 12.0 |        | 156        |
| 5.0          | 2.0          |        |       |                    | NT20      | AD    | 46.0 | 12.0                                     | d <sub>1</sub> 7.0<br>d <sub>2</sub> 6.0 | 9.0  | 9×24.5 | 141        |
| 5.0          | 3.4          |        |       |                    | NT20      | AJB   | 40.0 | 12.0                                     | 20.0                                     | 9.0  |        | 120        |
| 5.0          | 3.4          |        |       |                    | NT20      | AJH   | 40.0 | 12.0                                     | 20.0                                     | 9.0  |        | 120        |

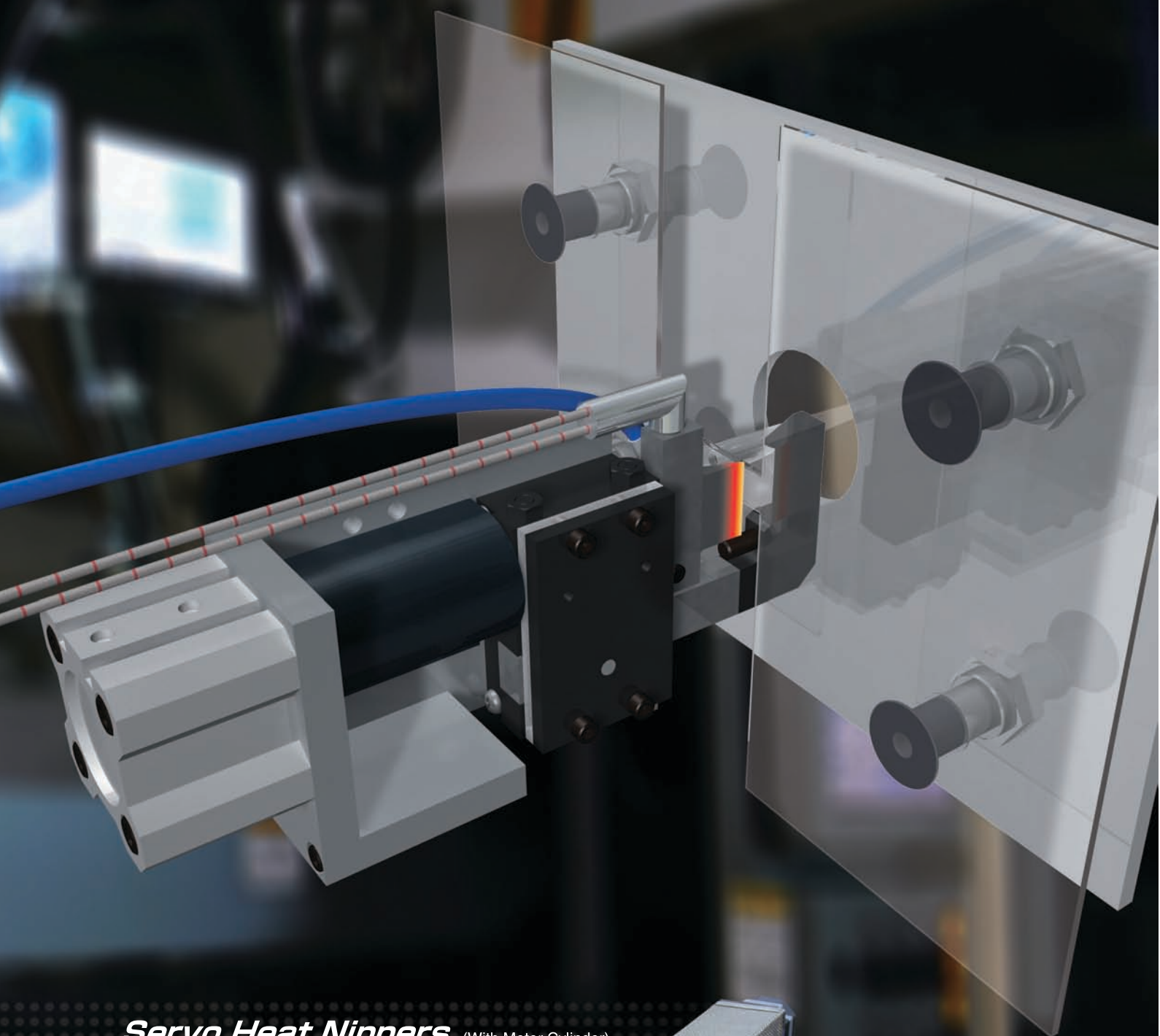
Capacity is listed as instant reference and depends on operation conditions.



## Heat Air Nippers

These air nippers are connected to a heater to suppress cracks and whitening of clear materials such as acrylic.

The gate is slowly melted as it's cut, resulting in a clean, unblemished cut surface.



## *Servo Heat Nippers* (With Motor Cylinder)

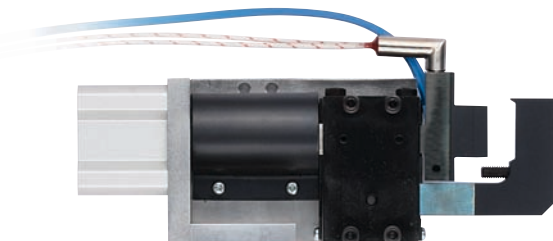
Outstanding positioning control by sequencer control and light movement by electromotive servo cylinder has achieved high precision lens cuts.



## GT-NKH20A/20AR Heat Air Nippers (Air Hydro Type)

# NKH

Air-hydro cylinders produce high power from air and oil. These units are ideal for high precision cuts required for products such as optical resin lenses.



- Requires separately sold Hydro Controller.
- Custom-made blade lengths and cylinder capacities available.

| Model No.                   | Cutting Capacity<br>width × thickness<br>(mm) Acril | Blade Edge<br>Temp.<br>(MAX °C) | Cutting<br>Cycle<br>(sec/cut) | Air<br>Consumption<br>(cm³/str.) | Piston Stroke<br>(mm) | Weight<br>(g) |
|-----------------------------|-----------------------------------------------------|---------------------------------|-------------------------------|----------------------------------|-----------------------|---------------|
| <b>GT-NKH20A-25/20AR-25</b> | 10 × 1.5                                            | 180                             | 4~5                           | 60                               | 10                    | 720           |

• Included heater  
• Included temperature sensor  
• Air Pressure: 0.6MPa • Working air hose inner diameter: 4mm  
※200V/240V heaters are also available to order.

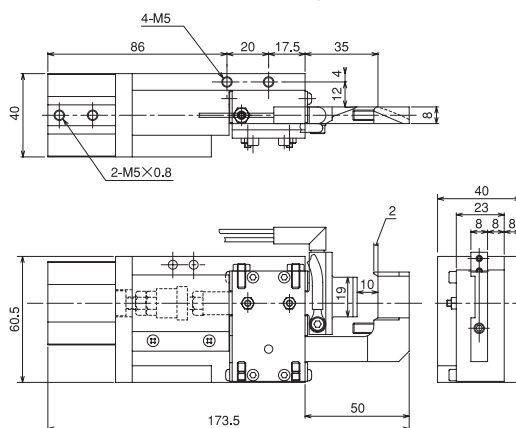
### Blades Specifications

| Material           | Blade Shape               | Blade Opening<br>(mm) | Cutting blade effective<br>(mm) | Weight<br>(g) |
|--------------------|---------------------------|-----------------------|---------------------------------|---------------|
| <b>Alloy Steel</b> | <b>Knife type (resin)</b> | 10                    | 19                              | 125           |

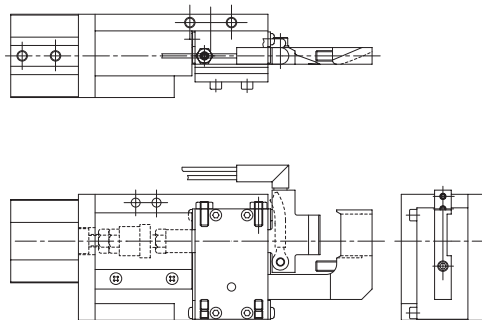
#### Option Parts

- Hydro-converter (Recommended: KOGANEI AHC 32×50)  
Working fluid: Petroleum hydraulic fluid or turbine oil with antifoaming agent additive (VG22~100)
- Temperature controller (DTC-001)

### GT-NKH20A-25 (Forward-facing blades)



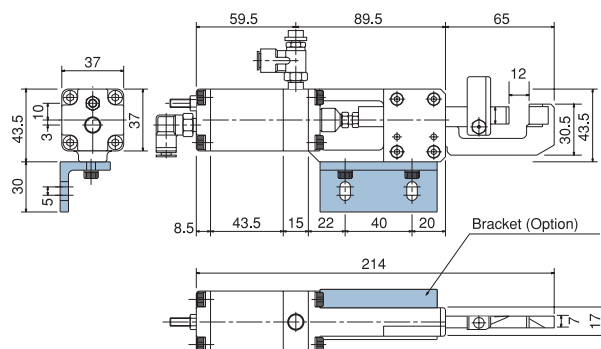
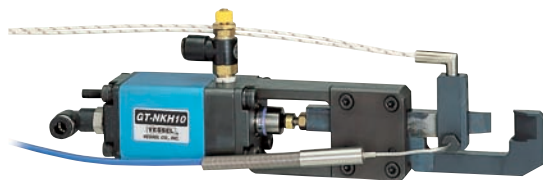
### GT-NKH20AR-25 (Backward-facing blades)



## GT-NKH10 Heat Air Nippers

# NKH

Speed control of cut speed and heater temperature allows for variable cutting surface solutions for extremely high precision cutting demands.



| Model No.       | Cutting Capacity<br>width × thickness<br>(mm) Acril | Blade Edge<br>Temp.<br>(MAX °C) | Cutting<br>Cycle<br>(sec/cut) | Air<br>Consumption<br>(cm³/str.) | Piston Stroke<br>(mm) | Weight<br>(g) |
|-----------------|-----------------------------------------------------|---------------------------------|-------------------------------|----------------------------------|-----------------------|---------------|
| <b>GT-NKH10</b> | 7 × 1.5                                             | 200                             | 4~5                           | 73                               | 12                    | 715           |

• Included heater  
• Included temperature sensor  
• Air Pressure: 0.4~0.5MPa

### Blades Specifications

| Model No.               | Material           | Blade Shape               | Blade Opening<br>(mm) | Cutting blade effective<br>(mm) | Weight<br>(g) |
|-------------------------|--------------------|---------------------------|-----------------------|---------------------------------|---------------|
| <b>NKH10AJ/NKH10RAJ</b> | <b>Alloy Steel</b> | <b>Knife type (resin)</b> | 12                    | 10                              | 137           |

#### Option Parts

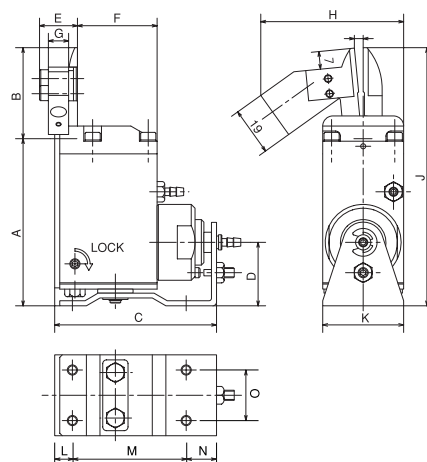
- Temperature controller (DTC-001)

# Heat Air Nippers

## GT-NTH05/10 Heat Air Nippers (Sliding, Vertical-Type)

# NTH

One blade is fixed in position, facilitating easy gate alignment.  
In addition, a slide function presses the product into position.



| Model No. | Cutting Capacity<br>φ (mm)<br>Acrl | Blade Edge<br>Temp.<br>(MAX °C) | Cutting<br>Cycle<br>(sec/cut) | Air<br>Consumption<br>(cm³/str.) | Slide<br>Distance<br>(mm) | Weight<br>(g) | Dimensions (mm) |    |    |      |      |      |   |      |     |       |    |   |    |    |    |    |
|-----------|------------------------------------|---------------------------------|-------------------------------|----------------------------------|---------------------------|---------------|-----------------|----|----|------|------|------|---|------|-----|-------|----|---|----|----|----|----|
|           |                                    |                                 |                               |                                  |                           |               | A               | B  | C  | D    | E    | F    | G | H    | I   | J     | K  | L | M  | N  | O  | P  |
| GT-NTH05  | 2.5                                | 200                             | 4~5                           | 47                               | 0~3                       | 325           | 66.1            | 36 | 64 | 25.1 | 15   | 31.5 | 8 | 56.5 | 3.5 | 102.1 | 32 | 7 | 45 | 12 | 20 | M4 |
| GT-NTH10  | 3.5                                | 200                             | 4~5                           | 82                               | 0~3                       | 515           | 83              | 47 | 73 | 29   | 16.2 | 37.5 | 8 | 63   | 4.5 | 130   | 38 | 8 | 53 | 12 | 24 | M4 |

• Included heater  
• Included temperature sensor  
• Air Pressure: 0.4~0.5MPa

### Blades Specifications

| Model No. | Material            | Blade Shape         | Blade Opening<br>(mm) | Cutting blade effective<br>(mm) | Weight<br>(g) |
|-----------|---------------------|---------------------|-----------------------|---------------------------------|---------------|
| NTH05AJ   | Special Alloy Steel | Nipper type (resin) | 3.5                   | 15                              | 40            |
| NTH10AJ   | Special Alloy Steel | Nipper type (resin) | 4.5                   | 17                              | 88            |

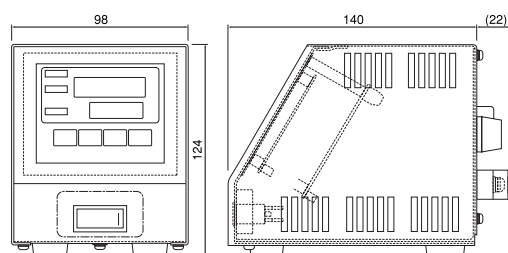
HTH type blade weight does not include heater and sensor.

Option Parts • Temperature controller (DTC-001)

## DTC-001 Benchtop Temperature Controller

# DTC

The heating element can be connected directly to the main unit, a useful feature that saves labor during wiring installation.  
Compact construction enables the unit to be easily carried, allowing for changing the work site at any time.



Please inform us of the product number of the heat nipper when placing an order.

| Model No. | Temperature range<br>Thermocouple K<br>(°C) | Power supply<br>(V) | Power consumption<br>(with 100 VAC input)  | Ambient temperature<br>and humidity<br>(°C) | Protection fuse                   | Weight<br>(g) |
|-----------|---------------------------------------------|---------------------|--------------------------------------------|---------------------------------------------|-----------------------------------|---------------|
| DTC-001   | 0~200                                       | AC100~240           | Approx. 3W (Approx. 5VA)<br>(With no load) | 0~40 RH35~85%<br>(No condensing )           | One 1.5A fuse is<br>incorporated. | 900           |

※ Please ensure the input voltage in prior to operation as it is directly connected to the heater.  
※ Two types of heaters are available for 100V and 240V.

Option Parts • Power supply cable : Model No. DTC-001-□-□

□: Cable for connection to the terminal block is necessary to be included.  
□: (N/ A) Cable not necessary.

□: 2m power cable w/ Japanese type plug (A-type)  
□: 2m power cable w/ European type plug (C-type)  
□: (N/ A) Cable not necessary.



## GT-NKHD20A/45 Servo Heat Nippers (With Motor Cylinder)

# NKHD

Blade travel distance and speed can be easily programmed.  
Servo motor control enables delicate blade feeds  
and quiet gate cutting work.

### Accessories

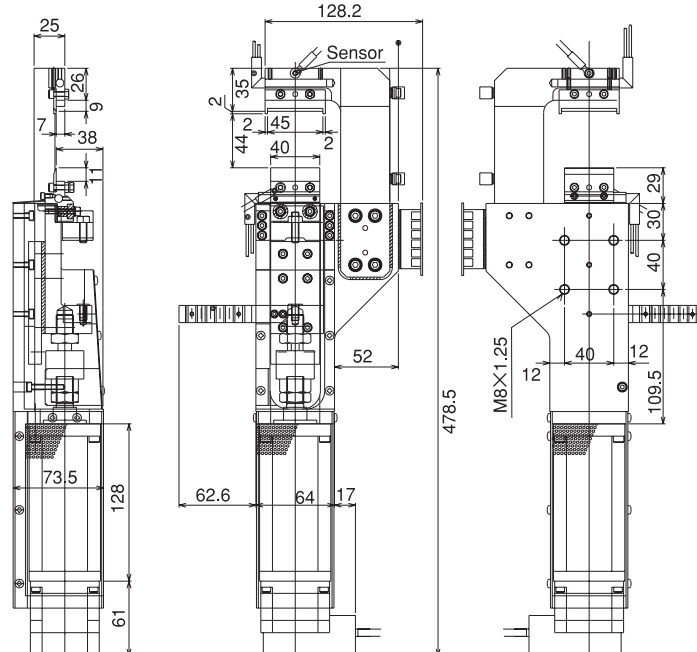
- Temp. controller (DTC-001)
- Power supply
- Heater code
- Parallel cable
- ADP cable
- Controller (CTC-33)
- Power cord
- Sensor cord



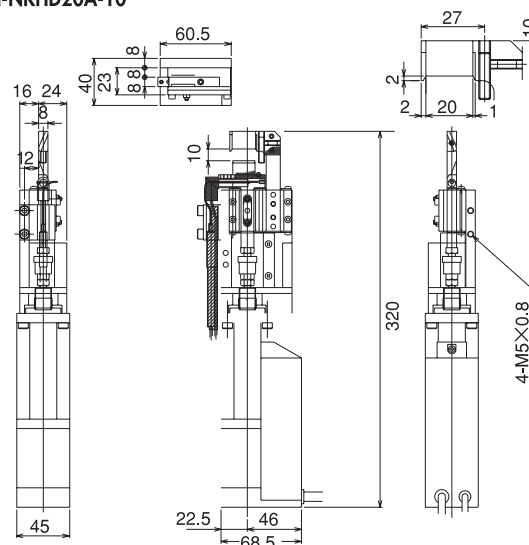
Controller  
CTC-33

**GT-NKHD45-50**  
(Forward-facing blades)  
**GT-NKHD45R-50**  
(Backward-facing blades)

**GT-NKHD45-50**



**GT-NKHD20A-10**



Small type for lens cutting

**GT-NKHD20A-10**  
(Forward-facing blades)  
**GT-NKHD20AR-10**  
(Backward-facing blades)

| Model No.               | Cutting Capacity<br>width × thickness (mm)<br>Acrl | Blade Edge<br>Temp.<br>(MAX °C) | Cutting<br>Cycle<br>(sec/cut) | Blade<br>Opening<br>(mm) | Position<br>Accuracy | Max.<br>Thrust<br>(N) | Max.<br>Speed<br>(mm/s) | Positioning<br>Points<br>(pts) | Power Supply<br>Voltage | Current<br>Consumption<br>Power Control circuit | Weight<br>(kg) |
|-------------------------|----------------------------------------------------|---------------------------------|-------------------------------|--------------------------|----------------------|-----------------------|-------------------------|--------------------------------|-------------------------|-------------------------------------------------|----------------|
| <b>GT-NKHD45(R)-50</b>  | 24 × 1.2                                           | 180                             | 10                            | 43                       | ±0.1mm or less       | 500                   | 100                     | 16                             | DC24V±10%               | 3.0A                                            | 0.2A           |
| <b>GT-NKHD20A(R)-10</b> | 10 × 1.5                                           | 180                             | 10                            | 10                       | ±0.1mm or less       | 100                   | 400                     | 16                             | DC24V±10%               | 2.0A                                            | 1.6            |

Option Parts •Temp. controller (DTC-001) •Power supply •Heater code •Parallel cable •ADP cable •Controller (CTC-33) •Power cord •Sensor cord

### Features

#### Freely Settable Blade Travel Distance and Speed

Heating nippers that optimally uses the prime control features of the servomotor.

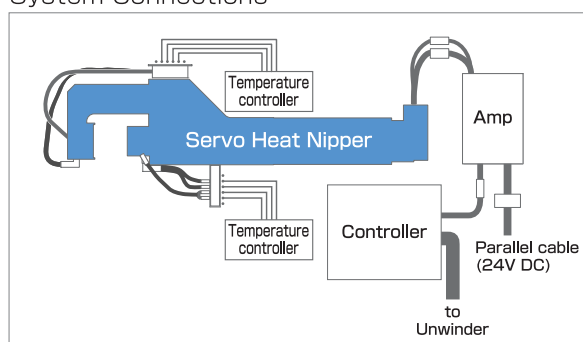
#### Reduces Fusing, Cracking and Bad Cuts

Fine pitch feeding is possible, therefore cutting can be performed at low temperature and low speed.

#### Stable Cutting

The blades are fed by servomotor control, therefore cutting quality is stable.

### System Connections



## Air Nippers For Cutting and Crimping

A tough body for hard jobs.

Our air nippers are available in a frame diameter range of 23mm to 75mm and suitable for a broad spectrum of cutting and crimping work.



### ***NM Blades***

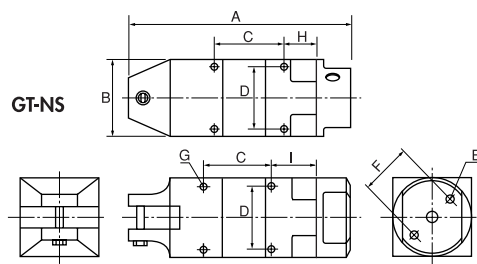
These springless nipper blades utilize magnetic repulsion to open the blades, enabling around-the-clock operations. This innovative solution eliminates the trouble of defective gate cuts.

## GT-NS2/3/5/7/10L/20/30 Square Air Nippers

# NS

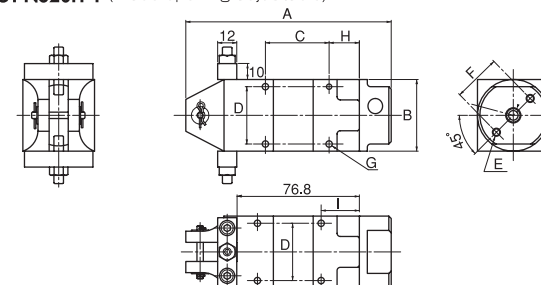
VESSEL provides a generous selection of blades for all wire cutting needs, including resin product gate cuts and automatic welding equipment.

Blades are optional.



Customization

GT-NS20H-1 (Blade opening adjustable)



- The position of air intake port is 180-degree rotatable.
- Two air intake ports are provided, so they can be switched depending on the mounting place.

| Capacity $\phi$ (mm) |              |        |       | Model No.  | Size (mm) |    |    |    |            |    |             | Air Consumption<br>(cm <sup>3</sup> /str.) | Air Pressure<br>(MPa) | Weight<br>(g) | Hose coupling |     |       |
|----------------------|--------------|--------|-------|------------|-----------|----|----|----|------------|----|-------------|--------------------------------------------|-----------------------|---------------|---------------|-----|-------|
| Soft Plastic         | Hard Plastic | Copper | Steel |            | A         | B  | C  | D  | E          | F  | G           |                                            |                       |               |               | H   | I     |
|                      |              | 1.0    | 0.5   | GT-NS2     | 109       | 20 | 40 | 16 | —          | —  | M3 Depth4   | 19                                         | 24                    | 35            | 0.4~0.5       | 85  | Rc1/8 |
| 2.0                  |              | 1.0    | 0.5   | GT-NS3     | 110       | 23 | 40 | 19 | M3 Depth8  | 17 | M3 Depth3.5 | 19                                         | 24                    | 45            | 0.4~0.5       | 95  |       |
| 2.0                  |              | 1.0    | 0.5   | GT-NS5     | 94        | 30 | 30 | 24 | M4 Depth10 | 20 | M3 Depth5   | 14                                         | 19                    | 64            | 0.4~0.5       | 135 |       |
| 3.0                  | 2.0          | 1.6    | 1.0   | GT-NS7     | 113       | 36 | 30 | 28 | M4 Depth10 | 24 | M4 Depth5.5 | 18                                         | 23                    | 116           | 0.4~0.5       | 215 |       |
| 4.0                  | 2.6          | 1.8    | 1.2   | GT-NS10L   | 113       | 36 | 30 | 28 | M4 Depth10 | 24 | M4 Depth5.5 | 18                                         | 23                    | 116           | 0.4~0.6       | 215 |       |
| 7.0                  | 5.0          | 2.6    | 2.0   | GT-NS20    | 129       | 45 | 40 | 36 | M5 Depth12 | 30 | M4 Depth7   | 19                                         | 24                    | 230           | 0.5~0.6       | 370 |       |
| 10.0                 | 6.5          | 3.3    | 2.8   | GT-NS30    | 170       | 56 | 60 | 46 | M6 Depth12 | 40 | M5 Depth10  | 20                                         | 30                    | 584           | 0.5~0.6       | 685 |       |
| 7.0                  | 5.0          | 2.6    | 2.0   | GT-NS20H-1 | 129       | 45 | 40 | 36 | M5 Depth12 | 30 | M4 Depth7   | 19                                         | 24                    | 230           | 0.5~0.6       | 455 |       |

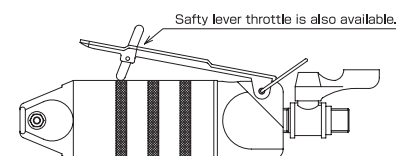
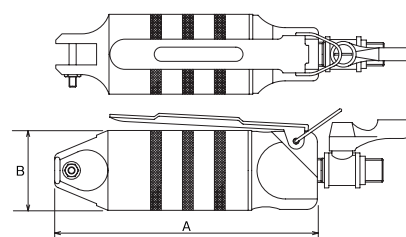
• Air hose inner dia. : 5mm • Overall length/Weight: Accessories not included.

## GT-N3/5/7/10/12/20/30/50 Hand Held Air Nippers

# N

Blades are optional.

VESSEL's special order blades provide solutions for a virtually unlimited range of needs, leading to safer, and more efficient work with less fatigue.



- N20, N30 and N50 have the air cock.

| Capacity $\phi$ (mm) |              |        |       | Model No. | Size (mm) |    | Air Consumption<br>(cm <sup>3</sup> /str.) | Air Pressure<br>(MPa) | Weight<br>(g) | Body  | Hose coupling |
|----------------------|--------------|--------|-------|-----------|-----------|----|--------------------------------------------|-----------------------|---------------|-------|---------------|
| Soft Plastic         | Hard Plastic | Copper | Steel |           | A         | B  |                                            |                       |               |       |               |
| 2.0                  |              | 1.0    | 0.5   | GT-N3     | 112       | 23 | 45                                         | 0.4~0.5               | 95            | Rc1/8 | R1/4          |
| 2.0                  |              | 1.0    | 0.5   | GT-N5     | 103       | 30 | 64                                         | 0.4~0.5               | 135           | Rc1/8 |               |
| 3.0                  | 2.0          | 1.6    | 1.0   | GT-N7     | 123       | 34 | 116                                        | 0.4~0.5               | 180           | Rc1/4 |               |
| 4.0                  | 2.6          | 1.8    | 1.2   | GT-N10    | 132       | 34 | 116                                        | 0.4~0.5               | 185           | Rc1/4 |               |
| 4.5                  | 4.0          | 2.3    | 1.7   | GT-N12    | 142       | 36 | 116                                        | 0.5~0.6               | 210           | Rc1/4 |               |
| 7.0                  | 5.0          | 2.6    | 2.0   | GT-N20    | 156       | 45 | 230                                        | 0.5~0.6               | 375           | Rc1/4 |               |
| 10.0                 | 6.5          | 3.3    | 2.8   | GT-N30    | 193       | 56 | 584                                        | 0.5~0.6               | 625           | Rc1/4 |               |
|                      |              | 5.5    | 4.5   | GT-N50    | 237       | 75 | 1,170                                      | 0.5~0.6               | 1,220         | Rc1/4 |               |

• Hose coupling: R 1/4 • Air hose inner dia. : 5mm • Overall length: Accessories, Hunger not included. • Weight: Accessories not included.



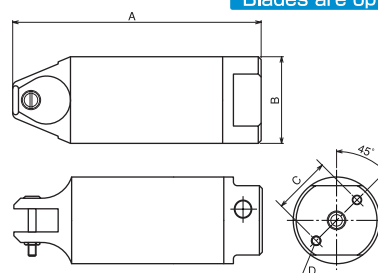
# Air Nippers

## GT-NR3/5/7/10L/20/30/50 Air Nipper Round-Type without Lever

NR



Blades are optional.



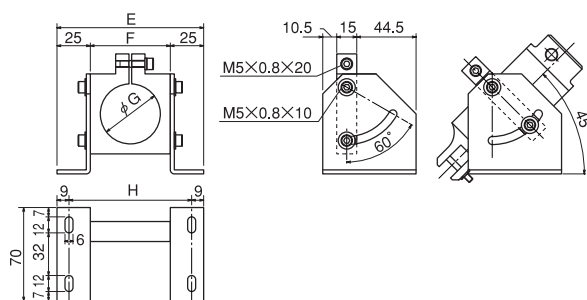
- The position of air intake port is 180-degree rotatable.
- Two air intake ports are provided, so they can be switched depending on the mounting place.

| Soft Plastic | Hard Plastic | Copper | Steel | Model No. | Size (mm) |    |    |            | Air Consumption<br>(cm <sup>3</sup> /str.) | Air Pressure<br>(MPa) | Weight<br>(g) | Hose coupling |
|--------------|--------------|--------|-------|-----------|-----------|----|----|------------|--------------------------------------------|-----------------------|---------------|---------------|
|              |              |        |       |           | A         | B  | C  | D          |                                            |                       |               |               |
| 2.0          |              | 1.0    | 0.5   | GT-NR3    | 110       | 23 | 17 | M3 Depth8  | 45                                         | 0.4~0.5               | 70            | Rc1/8         |
| 2.0          |              | 1.0    | 0.5   | GT-NR5    | 94        | 30 | 20 | M4 Depth10 | 64                                         | 0.4~0.5               | 110           |               |
| 3.0          | 2.0          | 1.6    | 1.0   | GT-NR7    | 113       | 34 | 22 | M4 Depth10 | 116                                        | 0.4~0.5               | 150           |               |
| 4.0          | 2.6          | 1.8    | 1.2   | GT-NR10L  | 113       | 36 | 24 | M4 Depth10 | 116                                        | 0.4~0.6               | 215           |               |
| 7.0          | 5.0          | 2.6    | 2.0   | GT-NR20   | 129       | 45 | 30 | M5 Depth12 | 230                                        | 0.5~0.6               | 280           |               |
| 10.0         | 6.5          | 3.3    | 2.8   | GT-NR30   | 165       | 56 | 40 | M6 Depth12 | 584                                        | 0.5~0.6               | 505           |               |
| 12.0         | 6.5          | 5.5    | 4.5   | GT-NR50   | 222       | 75 | 50 | M8 Depth12 | 1,170                                      | 0.5~0.6               | 1,190         |               |

• Air hose inner dia. : 5mm • Overall length/Weight: Accessories not included.

### Stand

| Model No.     | E   | Size (mm) |    |     | Weight<br>(g) |
|---------------|-----|-----------|----|-----|---------------|
|               |     | F         | G  | H   |               |
| NR10LST       | 102 | 52        | 36 | 84  | 335           |
| NR20ST        | 110 | 60        | 45 | 92  | 385           |
| NR30ST        | 130 | 80        | 56 | 112 | 535           |
| NR50ST Option | 150 | 100       | 75 | 132 | 835           |



## P-10L/20/30/50 Extra Pressure Boosters

P

This unit is to be used in case the originally required pressure is not obtainable by the limit of space and air pressure.



| Capacity φ (mm) |              |        |       | Applicable Model  | Model No. | Size (mm) |    | Air Consumption<br>(cm <sup>3</sup> /str.) | Air Pressure<br>(MPa) | Weight<br>(g) |
|-----------------|--------------|--------|-------|-------------------|-----------|-----------|----|--------------------------------------------|-----------------------|---------------|
| Soft Plastic    | Hard Plastic | Copper | Steel |                   |           | A         | B  |                                            |                       |               |
| 5.0             | 4.0          | 2.6    | 1.6   | NS10L, NR10L, N12 | P-10L     | 71        | 36 | 223                                        | Up to 0.4MPa          | 115           |
| 8.0             | 6.0          | 3.0    | 2.2   | N20, NS20, NR20   | P-20      | 87        | 45 | 508                                        | Up to 0.5MPa          | 215           |
| 13.0            | 7.0          | 4.8    | 4.0   | N30, NS30, NR30   | P-30      | 92        | 56 | 956                                        | Up to 0.5MPa          | 330           |
|                 |              | 6.5    | 5.5   | N50, NR50         | P-50      | 133       | 75 | 2,670                                      | Up to 0.5MPa          | 840           |

• Above figures of overall length and the weight are defined for the extra booster specs only. And these figures in the installation.

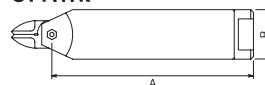
## GT-NWR1/10/20/30 GT-NWS1/10/20 Double Action Air Nippers

Patented

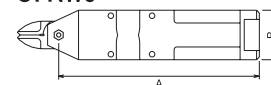
NWR • NWS

Blades are optional.

GT-NWR



GT-NWS



Blade opening and closing is air piston driven.  
Having no spring mechanism in the main unit facilitates maintenance operations.



| Model No.                                             | Capacity $\phi$ (mm) |       |             | Air Consumption<br>(cm <sup>3</sup> /str.) | Applied Pressure<br>(N) | Air Pressure<br>(MPa) | Size (mm) |           | Weight<br>(g) |
|-------------------------------------------------------|----------------------|-------|-------------|--------------------------------------------|-------------------------|-----------------------|-----------|-----------|---------------|
|                                                       | Copper               | Steel | ABS Plastic |                                            |                         |                       | A         | B         |               |
| Double Action Air Scissors (Round Type without Lever) |                      |       |             |                                            |                         |                       |           |           |               |
| GT-NWR1                                               | 1.0                  | 0.5   | 2.0         | 45                                         | 294                     | 0.4~0.5               | 95        | $\phi$ 20 | 116           |
| GT-NWR10                                              | 1.8                  | 1.2   | 4.0         | 116                                        | 588                     | 0.4~0.5               | 146       | $\phi$ 36 | 280           |
| GT-NWR20                                              | 2.6                  | 2.0   | 6.5         | 230                                        | 1,372                   | 0.5~0.6               | 165       | $\phi$ 45 | 523           |
| GT-NWR30                                              | 3.3                  | 2.8   | 9.5         | 584                                        | 2,744                   | 0.5~0.6               | 216       | $\phi$ 56 | 980           |
| Double Action Air Scissors (Square Type)              |                      |       |             |                                            |                         |                       |           |           |               |
| GT-NWS1                                               | 1.0                  | 0.5   | 2.0         | 45                                         | 294                     | 0.4~0.5               | 95        | 23×20     | 116           |
| GT-NWS10                                              | 1.8                  | 1.2   | 4.0         | 116                                        | 588                     | 0.4~0.5               | 146       | 36×36     | 356           |
| GT-NWS20                                              | 2.6                  | 2.0   | 6.5         | 230                                        | 1,372                   | 0.5~0.6               | 165       | 45×45     | 610           |

## GT-NB20/30/20LW/30LW Slide-Off Air Nipper Bracket-Type

# NB

VESSEL has achieved smooth, continuous slide movement even for large diameter gate cuts, which produce a large shock at each cut.



GT-NB20LW-10TM

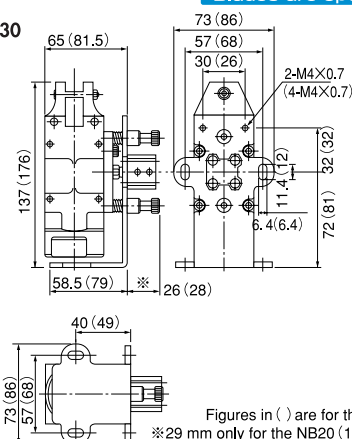


GT-NB20

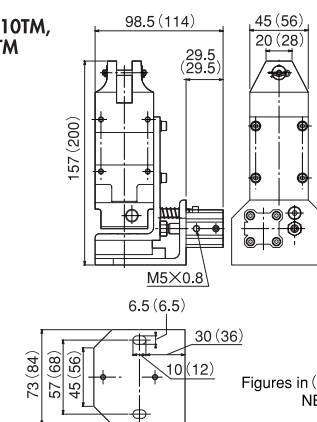
| Model No.         | Slide Direction/<br>Distance (mm) | Weight<br>(g) |
|-------------------|-----------------------------------|---------------|
| GT-NB20 (5-OSHI)  | Push 0~ 5                         | 755           |
| GT-NB20 (5-HIKU)  | Pull 0~ 5                         | 755           |
| GT-NB20 (10-OSHI) | Push 0~10                         | 755           |
| GT-NB20 (10-HIKU) | Pull 0~10                         | 755           |
| GT-NB30 (10-HIKU) | Pull 0~10                         | 1,435         |
| GT-NB20LW-10TM    | Pull 0~10                         | 785           |
| GT-NB30LW-10TM    | Pull 0~10                         | 1,315         |
| GT-NB20LW-10SM    | Push 0~10                         | 785           |
| GT-NB30LW-10SM    | Push 0~10                         | 1,315         |

Blades are optional.

GT-NB20,NB30



Figures in ( ) are for the NB30.  
※29 mm only for the NB20 (10-HIKU)

GT-NB20LW-10TM,  
NB30LW-10TM

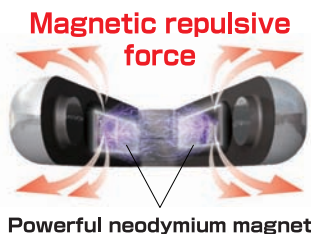
Figures in ( ) are for the  
NB30LW-10TM.  
Unit : mm

## NM Blades

Patented

# NM

NM blades eliminate trouble caused by Spring breakage. Compliant with your VESSEL current air nippers. Spring replacement is no longer required as the neodymium magnet works semi-permanently.



**CAUTION**

Powerful magnet is used.

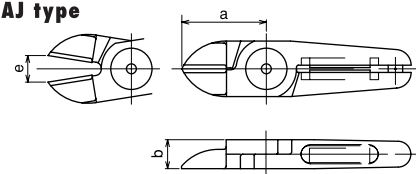
| Capacity $\phi$ (mm) | Soft Plastic | Hard Plastic | Applicable Nippers | Model No. | Size (mm) |    |       |      |      | Weight (g) |
|----------------------|--------------|--------------|--------------------|-----------|-----------|----|-------|------|------|------------|
|                      |              |              |                    |           | a         | b  | c (1) | d    | e    |            |
| 7.0                  | 5.0          |              | GT-N20             | NM20AJ    | 35        | 12 |       | 18.0 | 11.0 | 116        |
| 7.0                  | 5.0          |              | GT-NS20            | NM20AP    | 35        | 12 | 15    | 16.0 | 11.0 | 124        |
| 7.0                  | 5.0          |              | GT-NR20            | NM20AE    | 28        | 12 |       | 12.0 | 8.0  | 129        |
| 10.0                 | 6.5          |              | GT-N30             | NM30AJ    | 52        | 17 |       | 28.0 | 11.0 | 360        |
| 10.0                 | 6.5          |              | GT-NS30            | NM30AP    | 66        | 17 | 15    | 38.0 | 16.0 | 380        |
| 10.0                 | 6.5          |              | GT-NR30            | NM30AE    | 45        | 17 |       | 17.0 | 12.0 | 358        |

※Customization also available upon request.

### Specifications

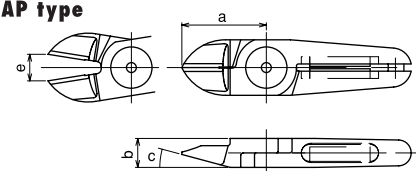
#### Straight and Thin / For plastic parts

##### AJ type



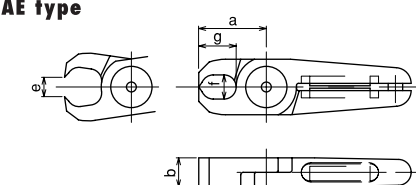
#### Angled / For plastic parts

##### AP type



#### Cutting-off / For plastic parts

##### AE type



# Blades For Air Nipper

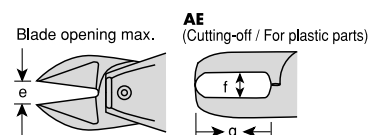
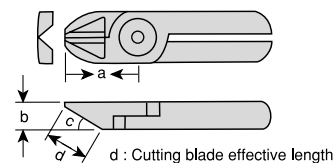
## Blade Type

No. **N10L A S**

Air Nipper  
Applicable model

Blade shape

- AS** : Standard
- HS** : Standard (High Speed Steel)
- AG** : Strong Cutting
- ACD** : Crimping
- BJ** : Straight
- BFB** : Clipper (Sinterd Alloy)
- BBB** : Strong Cutting (Sinterd Alloy)
- AP** : Plastic, Standard
- AJ** : Plastic, Straight Thin
- PF** : Plastic, Flat Cutting
- AJL** : Plastic, Straight Long
- AE** : Plastic, Cutting-off
- AJB** : Plastic, Straight (Sinterd Alloy)
- AH** : Plastic, Crank
- AML** : Plastic, Leftward cutting
- AMR** : Plastic, Rightward cutting



※Material (Cutting Blade)

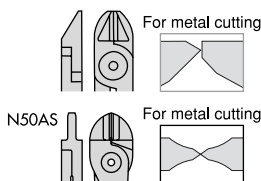
---Sintered Alloy

Hardest, most durable material.  
For cutting hard steel wire, glass  
fiber-reinforced resin, etc.

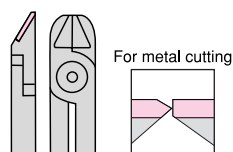
---High Speed Steel

When more durability than special  
steel alloy is needed, such  
as to cut piano wire.

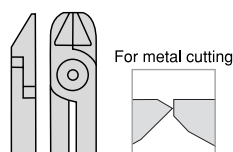
**AS** Standard type Ordinary blades for cutting copper wire and steel wire.



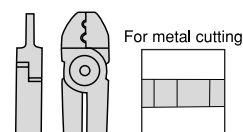
**HS** High speed steel brazed for durability.



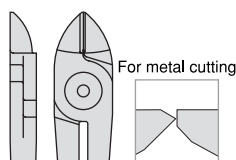
**AG** Shorter than the standard type for greater strength.



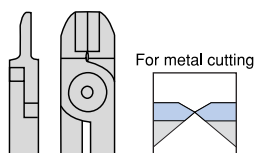
**ACD** For crimping.



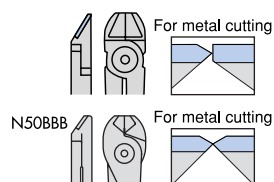
**BJ** Only one blade is edged for cutting metal wires.



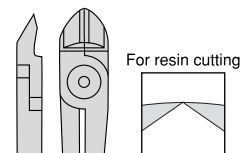
**BFB** Clipper type blades with ultra hard carbide tips.



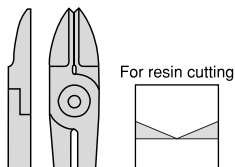
**BBB** These blades have ultra hard carbide tips.



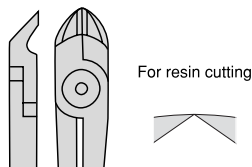
**AP** Standard blades used for cutting resin.



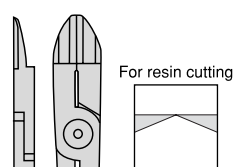
**AJ** Vertical blades whose cutting edges are not angled.



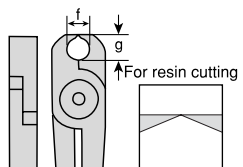
**PF** These blades produce a flat cut, and are used for cutting resin.



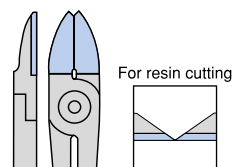
**AJL** In case there is a long distance between nipper body and gate.



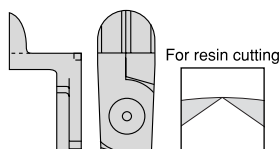
**AE** For many gate treatments such as over-fit gate, modified gate, etc.



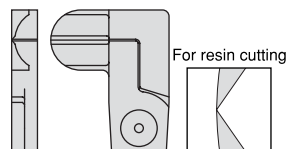
**AJB** Carbide tipped blades suitable for cutting hard resin.



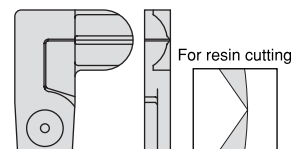
**AH** Cramped blades for resin cutting.



**AML** These blades have a 90° angle to the left and are used for cutting resin.



**AMR** These blades have a 90° angle to the right and are used for cutting resin.





# Specification chart for standard blades



| Capacity                                               |              |        |       |            | Applicable Nippers                       | Model No. |       | a  | b  | c (°) | Size (mm) |      | f × g   | Weight (g) |
|--------------------------------------------------------|--------------|--------|-------|------------|------------------------------------------|-----------|-------|----|----|-------|-----------|------|---------|------------|
| Soft Plastic                                           | Hard Plastic | Copper | Steel | Piano Wire |                                          | Body      | Shape |    |    |       | d         | e    |         |            |
|                                                        |              | 1.0    | 0.5   |            | GT-N3, NS3, NR3<br>GT-NS2<br>(N3BJ only) | N3        | AS    | 24 | 7  | 25    | 12.0      | 4.0  | 6×6.6   | 35         |
|                                                        |              | 1.0    | 0.5   | 0.2        |                                          | N3        | HS    | 24 | 7  | 25    | 12.0      | 4.0  |         | 35         |
| 2.0                                                    |              |        |       |            |                                          | N3        | AP    | 24 | 7  | 15    | 11.5      | 4.0  |         | 35         |
| 2.0                                                    |              |        |       |            |                                          | N3        | AE    | 20 | 7  |       | 7.0       | 3.5  |         | 35         |
|                                                        |              | 1.0    | 0.5   |            |                                          | N3        | BJ    | 24 | 7  |       | 13.0      | 5.0  |         | 35         |
|                                                        |              | 1.0    | 0.5   |            | GT-N5<br>GT-NS5<br>GT-NR5                | N5        | AS    | 24 | 7  | 25    | 12.0      | 4.0  | 6×6.6   | 40         |
|                                                        |              | 1.0    | 0.5   | 0.3        |                                          | N5        | HS    | 24 | 7  | 25    | 12.0      | 4.0  |         | 40         |
| 2.0                                                    |              |        |       |            |                                          | N5        | AP    | 24 | 7  | 15    | 11.5      | 4.0  |         | 40         |
| 2.0                                                    |              |        |       |            |                                          | N5        | AE    | 20 | 7  |       | 7.0       | 3.5  |         | 40         |
|                                                        |              | 1.0    | 0.5   |            |                                          | N5        | BJ    | 24 | 7  |       | 13.0      | 4.0  |         | 40         |
|                                                        |              | 1.6    | 1.0   |            | GT-N7<br>GT-NS7<br>GT-NR7                | N7        | AS    | 27 | 9  | 30    | 13.5      | 4.0  | 8×8.8   | 80         |
|                                                        |              | 1.6    | 1.0   | 0.5        |                                          | N7        | HS    | 27 | 9  | 30    | 13.5      | 4.0  |         | 80         |
| 3.0                                                    | 2.0          |        |       |            |                                          | N7        | AP    | 27 | 9  | 30    | 13.0      | 4.0  |         | 80         |
| 3.0                                                    | 2.0          |        |       |            |                                          | N7        | PF    | 27 | 9  | 40    | 10.5      | 4.0  |         | 80         |
| 3.0                                                    | 2.0          |        |       |            |                                          | N7        | AE    | 26 | 9  |       | 9.0       | 4.0  |         | 85         |
|                                                        |              | 1.6    | 1.0   |            | GT-N10                                   | N7        | BJ    | 27 | 9  |       | 13.0      | 5.0  |         | 75         |
|                                                        |              | 1.8    | 1.2   |            |                                          | N10       | AS    | 27 | 9  | 30    | 13.5      | 5.0  |         | 85         |
|                                                        |              | 1.8    | 1.2   | 0.5        |                                          | N10       | HS    | 27 | 9  | 30    | 13.5      | 5.0  |         | 85         |
| 4.0                                                    | 2.6          |        |       |            |                                          | N10       | AP    | 27 | 9  | 30    | 11.5      | 5.0  |         | 85         |
|                                                        |              | 1.8    | 1.2   |            | GT-NS10L<br>GT-NR10L                     | N10L      | AS    | 35 | 12 | 30    | 20.0      | 5.0  |         | 120        |
| 4.0                                                    | 2.6          |        |       |            |                                          | N10L      | AP    | 35 | 12 | 15    | 16.0      | 5.0  |         | 120        |
| 4.0                                                    | 2.6          |        |       |            |                                          | N10L      | PF    | 35 | 12 | 40    | 13.5      | 5.0  |         | 120        |
|                                                        |              | 2.3    | 1.7   |            | GT-N12                                   | N12       | AS    | 35 | 12 | 30    | 20.0      | 5.0  |         | 135        |
|                                                        |              | 2.3    | 1.7   | 0.6        |                                          | N12       | HS    | 35 | 12 | 30    | 20.0      | 5.0  |         | 135        |
| 4.5                                                    | 4.0          |        |       |            |                                          | N12       | AP    | 35 | 12 | 15    | 16.0      | 5.0  |         | 135        |
|                                                        |              | 2.6    | 2.0   |            | GT-NS20<br>GT-NR20<br>GT-N20             | N20       | AS    | 35 | 12 | 30    | 20.0      | 9.0  | 10×15.5 | 140        |
|                                                        |              | 2.6    | 2.0   | 1.0        |                                          | N20       | HS    | 26 | 12 | 40    | 10.0      | 7.0  |         | 135        |
|                                                        |              | 2.6    | 2.0   |            |                                          | N20       | AG    | 28 | 12 | 40    | 12.0      | 7.0  |         | 135        |
| 7.0                                                    | 5.0          |        |       |            |                                          | N20       | AP    | 35 | 12 | 15    | 16.0      | 11.0 |         | 125        |
| 7.0                                                    | 5.0          |        |       |            |                                          | N20       | AJ    | 35 | 12 |       | 18.0      | 11.0 |         | 125        |
| 6.0                                                    | 4.0          |        |       |            |                                          | N20       | AJL   | 65 | 12 |       | 20.0      | 16.0 |         | 230        |
|                                                        | 5.0          |        |       |            |                                          | N20       | AJB   | 35 | 12 |       | 18.0      | 11.0 |         | 125        |
| 7.0                                                    | 5.0          |        |       |            |                                          | N20       | PF    | 35 | 12 | 40    | 13.5      | 11.0 |         | 130        |
| 7.0                                                    | 5.0          |        |       |            |                                          | N20       | AE    | 28 | 12 |       | 12.0      | 8.0  |         | 135        |
|                                                        |              | 2.6    | 2.0   | 1.2        |                                          | N20       | BFB   | 35 | 12 |       | 17.0      | 8.0  |         | 150        |
| 6.0                                                    |              |        |       |            |                                          | N20       | AH    | 60 | 12 |       | 23.0      | 16.0 |         | 240        |
| 10×1.5                                                 | 8×1          |        |       |            |                                          | N20       | AML   | 55 | 12 |       | 26.0      | 9.5  |         | 270        |
| 10×1.5                                                 | 8×1          |        |       |            |                                          | N20       | AMR   | 55 | 12 |       | 26.0      | 9.5  |         | 270        |
|                                                        |              | 3.3    | 2.8   |            | GT-NS30<br>GT-NR30<br>GT-N30             | N30       | AS    | 43 | 17 | 30    | 25.0      | 9.0  | 13×28   | 370        |
|                                                        |              | 3.3    | 2.8   | 1.2        |                                          | N30       | BBB   | 36 | 17 | 40    | 18.0      | 7.0  |         | 365        |
| 10.0                                                   | 6.5          |        |       |            |                                          | N30       | AP    | 66 | 17 | 15    | 38.0      | 16.0 |         | 380        |
| 10.0                                                   | 6.5          |        |       |            |                                          | N30       | AJ    | 52 | 17 |       | 28.0      | 11.0 |         | 370        |
| 8.0                                                    | 5.0          |        |       |            |                                          | N30       | AJL   | 75 | 17 |       | 25.0      | 19.0 |         | 470        |
| 10.0                                                   | 6.5          |        |       |            |                                          | N30       | PF    | 58 | 17 | 30    | 25.0      | 15.0 |         | 390        |
| 10.0                                                   | 6.5          |        |       |            |                                          | N30       | AE    | 45 | 17 |       | 17.0      | 12.0 |         | 395        |
| ( <sup>1.25sq</sup><br><sup>2.0sq</sup> Bare Terminal) |              |        |       |            | N30                                      | ACD       | 40    | 17 |    |       |           |      | 335     |            |
|                                                        |              | 5.5    | 4.5   |            | GT-NR50/GT-N50                           | N50       | AS    | 60 | 25 |       | 30.0      | 11.0 |         | 950        |
|                                                        |              | 5.5    | 4.5   | 2.0        |                                          | N50       | BBB   | 46 | 25 | 35    | 19.0      | 9.0  |         | 955        |

For Double Action Air Nipper

|     |     |     |  |                 |      |    |    |  |      |      |     |
|-----|-----|-----|--|-----------------|------|----|----|--|------|------|-----|
|     | 1.0 | 0.5 |  | GT-NWR1/GT-NWS1 | NW1  | BJ | 20 |  | 10.5 | 3.5  | 16  |
| 4.0 |     |     |  | GT-NWR10/NWS10  | NW10 | AJ | 30 |  | 14.0 | 5.0  | 76  |
|     | 1.8 | 1.2 |  |                 | NW10 | BJ | 30 |  | 14.0 | 5.0  | 76  |
| 6.5 |     |     |  | GT-NWR20/NWS20  | NW20 | AJ | 40 |  | 21.5 | 8.0  | 142 |
|     | 2.6 | 2.0 |  |                 | NW20 | BJ | 40 |  | 21.5 | 8.0  | 142 |
| 9.5 |     |     |  | GT-NWR30        | NW30 | AJ | 55 |  | 29.5 | 11.0 | 368 |
|     | 3.3 | 2.8 |  |                 | NW30 | BJ | 55 |  | 29.5 | 11.0 | 368 |

•Capacity is listed as instant reference and depends on operation conditions. •Weight includes the blade spring. •Steel wires: Not heat treated. •Piano wires: Hardness lower than HV320  
 •The cutting capacity of N20AML and N20AMR is thickness.

# Air Scissors

## GT-H12K/H30/H120K/HS30 Air Scissors



Two types of blades, standard and micro-edge, are available for use in accordance with the demands of each specific job.



Serrated micro edge



**GT-H12K** Small lightweight type  
with one fixed blade



GT-H30



GT-HS30



**GT-H120K** With one fixed blade

| Model No. | Capacity (max)<br>(mm) | Air Consumption<br>(cm <sup>3</sup> /str.) | Applied Pressure<br>(MPa) | Overall Length (with Blade)<br>(mm) | Weight (with Blade)<br>(g) |
|-----------|------------------------|--------------------------------------------|---------------------------|-------------------------------------|----------------------------|
| GT-H30    | Kevlar t=1             | 584                                        | 0.3                       | 280                                 | 1,030                      |
| GT-H12K   | Kevlar t=0.3           | 116                                        | 0.2                       | 186.2                               | 290                        |
| GT-H120K  | Band steel 1.5×0.5t    | 116                                        | 0.5~0.6                   | 211                                 | 340                        |
| GT-H530   | Kevlar t=1             | 584                                        | 0.3                       | 260                                 | 970                        |

•Hose coupling: R 1/4(Body Rc 1/8) •Air hose inner dia. : 5mm

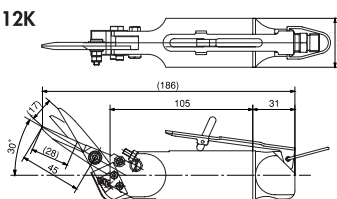
- Overall length/Weight: Accessories not included.

• Total length and weight of the GT-HS30 and HS30 are given with the H30ME blade mounted.

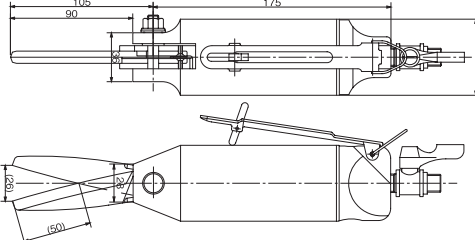
## Blades specifications

| Model No.       | Applicable Nippers | Blade Shape         | Blade Aperture (mm) | Effective Blade Cutting Length (mm) | Weight (g) |
|-----------------|--------------------|---------------------|---------------------|-------------------------------------|------------|
| <b>H30ME</b>    | H30,               | Scissors type       | 26                  | 50                                  | 280        |
| <b>H30MEL</b>   | HS30               | Serrated micro edge | 34                  | 67                                  | 285        |
| <b>H12ME30K</b> | HT2K               |                     | 17                  | 28                                  | 56         |
| <b>H120SK</b>   | H120K              | Scissors type       | 15                  | 38                                  | 115        |

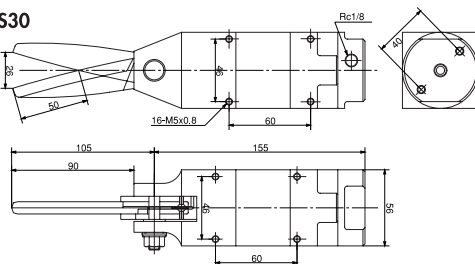
GT-H12K



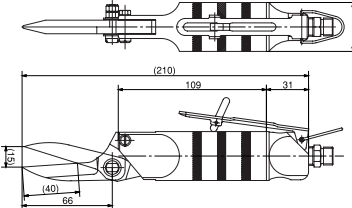
GT-H30



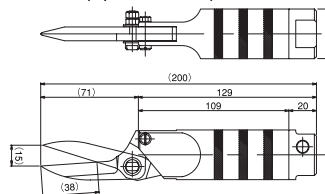
GT-HS30



GT-H120K



GT-HR120K (Special Order)



## GT-HWR1/10 GT-HWS1/10 Double Action Air Scissors

Patented

**Blades are optional.**



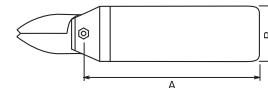
Blade opening and closing is air piston driven.  
Having no spring mechanism in the main unit facilitates maintenance operations.



GT-HWR



GT-HWS



| Model No.                                             | Capacity $\phi$ (mm) |       | Air Consumption        | Applied Pressure | Air Pressure | A    | B     | Weight |
|-------------------------------------------------------|----------------------|-------|------------------------|------------------|--------------|------|-------|--------|
|                                                       | Copper               | Steel | (cm <sup>3</sup> /s·r) | (N)              | (MPa)        | (mm) | (mm)  | (g)    |
| Double Action Air Scissors (Round Type without Lever) |                      |       |                        |                  |              |      |       |        |
| GT-HWR1                                               | 1.0                  | 0.5   | 45                     | 294              | 0.4~0.5      | 95   | 20    | 84     |
| GT-HWR10                                              | 1.8                  | 1.2   | 116                    | 588              | 0.4~0.5      | 146  | 36    | 295    |
| Double Action Air Scissors (Square Type)              |                      |       |                        |                  |              |      |       |        |
| GT-HW51                                               | 1.0                  | 0.5   | 45                     | 294              | 0.4~0.5      | 95   | 23×20 | 116    |
| GT-HW510                                              | 1.8                  | 1.2   | 116                    | 588              | 0.4~0.5      | 146  | 36    | 356    |

### Applicable Blade Specifications

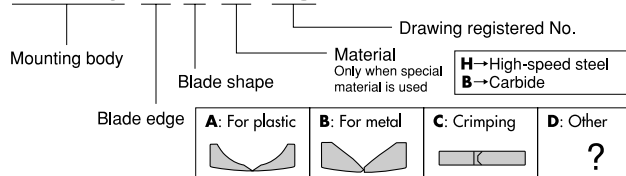
|  | Model No.        | Blade Opening<br>(mm) | Cutting blade effective<br>length (mm) | A<br>(mm) | Weight<br>(g) |
|--|------------------|-----------------------|----------------------------------------|-----------|---------------|
|  | For GT-HWR1/HWS1 |                       |                                        |           |               |
|  | <b>HW1J</b>      | 3.0                   | 10                                     | 25        | 16            |
|  | For GT-HWS10     |                       |                                        |           |               |
|  | <b>HW10J</b>     | 5.0                   | 28                                     | 40        | 76            |

## Blade Type

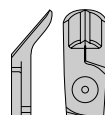
Vessel customizes blades for a wide variety of uses.

Custom-made blades are available at low cost, speedy delivery and guaranteed flexible adaptation to a wide range of work. See the examples below. We accept orders for small quantity as well.

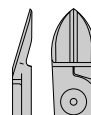
No. **NY10 A E H 15**



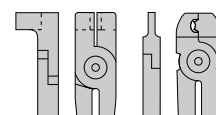
**A** Angled



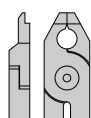
**B** Angled



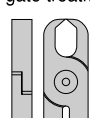
**C** Crimping



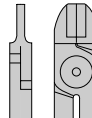
**D** Mounted gate



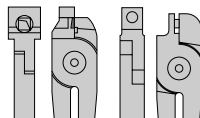
**E** Disposable gate treatment



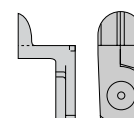
**F** Power cutting



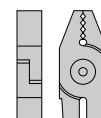
**G** Punching



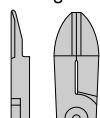
**H** Crankshaft



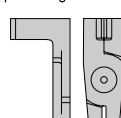
**I** Pilers type



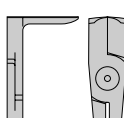
**J(JL)** Long blade for plastic  
Straight Long blade



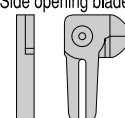
**K** L-shaped  
(disposable gate treatment)



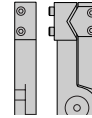
**L** L-shaped



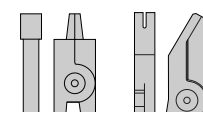
**M/XL/XR**  
Side opening blades



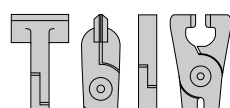
**TN** Tube cutting



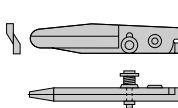
**VO** Nail pulling



**DI** Bending



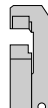
**VHA** Scissors



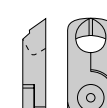
Cutting of  
stranded wire



Film gate

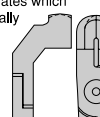


Direct gate

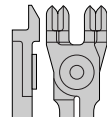


**AHE** Pin gate treatment

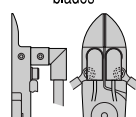
...Treatment of small gates which should be automatically cut at de-gating.



**AHW** Double blades



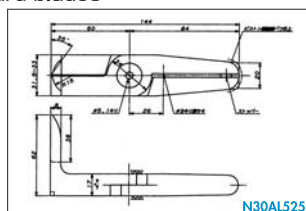
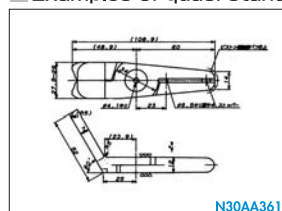
**NH** Double heating blades



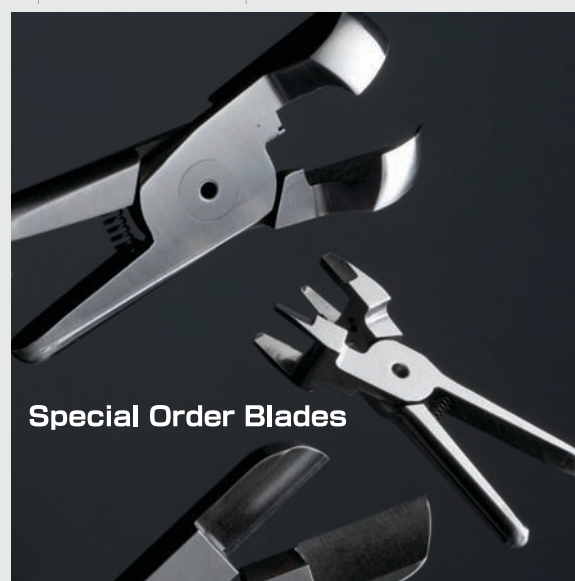
A portion of our specially shaped blades normally manufactured as special-order items are kept available as quasi-standard items. Please refer to our home page for dimensional diagrams.

<http://www.vessel.co.jp/english/airnipper/>

### Examples of quasi-standard blades



## ONE POINT



Special Order Blades

With as many as 30 separate production processes, VESSEL painstakingly manufactures each and every blade in accordance with the needs of our customers. VESSEL blades are based on a philosophy of manufacturing that can be summed up as "Specialization is our specialty."



## Air Dusters/ Air Tool Supplies

Three types of bodies are available to meet the needs of a variety of uses. The amalgamation of materials with ergonomic design has resulted in easy-to-use products for all types of blowing and drying work.

### ***Air Duster AD-4*** Patented

VESSEL's air dusters boast aluminum die-cast bodies that are light and strong, a wide selection of replaceable nozzles such as extra-long nozzles, flexible nozzles, nozzles with flanges, and a protector to prevent loosening of the handle lever.

**"The Penguin"** A superior, straight body that is ideal for line work.

The ABS resin body is highly resistant to oil, chemical, and shock. With no need to change hands, work can begin immediately after taking up the unit.

Fine control of air volume is possible with a pistol design. **Extremely light body**

The large operating lever enables 4-finger control for the fine strokes needed for delicate blowing and drying work.



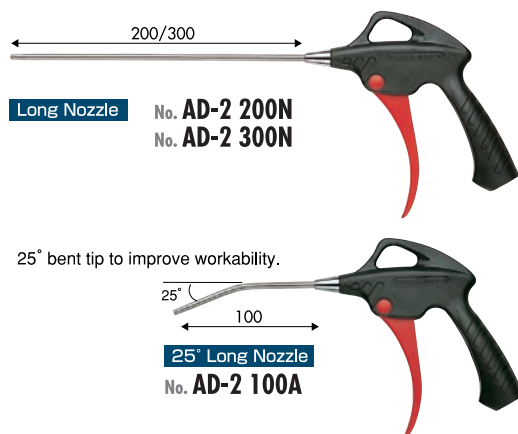


# Air Dusters



## No. AD-2 Air Blow Gun

For Dusting and Drying Wet Paint



Soft Rubber Adapter

Used to blow dust and dirt from fragile molds, coated surfaces, inside pipes, etc.



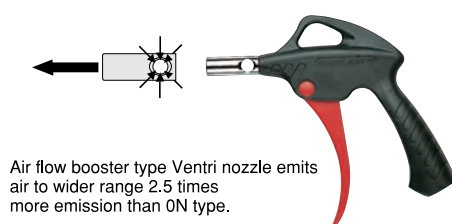
Safe & Soft Blowing

Widely spreads air safe and quiet.



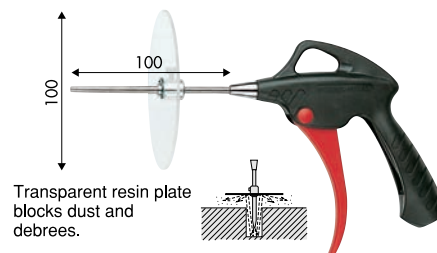
Low Pressured but for Large Air flow

No. AD-2 0M High Volume Nozzle

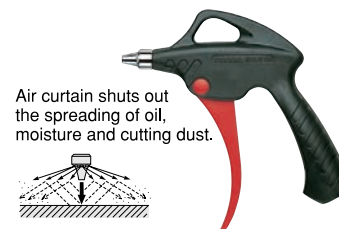


Prevents Dust and Articles Reflected

No. AD-2 100P Chip Shield Long Nozzle



No. AD-2 0C Air Screen Nozzle



| Model No.    | Nozzle Shape                | Nozzle Length (mm) | Nozzle Inner Dia. (mm) | Air Consumption (ℓ/min) | Overall Length (mm) | Weight (g) | Card/ Box Size (mm)  | JAN code (4907587) | Outer Ctn. |
|--------------|-----------------------------|--------------------|------------------------|-------------------------|---------------------|------------|----------------------|--------------------|------------|
| AD-2 0N      | Standard Nozzle             | 0                  | 2.1                    | 135                     | 145                 | 122        | 152×232              | 017604             | 10         |
| AD-2 0N-PB   | Standard Nozzle (with plug) | 0                  | 2.1                    | 135                     | 155                 | 146        | 152×232              | 017680             | 10         |
| AD-2 100N    | Long Nozzle                 | 100                | 2.1                    | 135                     | 242                 | 131        | 182×232              | 017611             | 10         |
| AD-2 100N-PB | Long Nozzle (with plug)     | 100                | 2.1                    | 135                     | 252                 | 157        | 182×232              | 017697             | 10         |
| AD-2 200N    | Long Nozzle                 | 200                | 2.1                    | 135                     | 342                 | 141        | in paper box 140×445 | 017673             | 1          |
| AD-2 300N    | Long Nozzle                 | 300                | 2.1                    | 135                     | 442                 | 150        | in paper box 140×455 | 017628             | 1          |
| AD-2 100A    | 25° Long Nozzle             | 100                | 2.1                    | 135                     | 242                 | 131        | 182×232              | 017635             | 10         |
| AD-2 0R      | Rubber Tip Nozzle           | 0                  | 2.1                    | 115                     | 155.5               | 123        | 152×232              | 017659             | 10         |
| AD-2 100R    | Rubber Tip Long Nozzle      | 100                | 2.1                    | 115                     | 227                 | 147        | 182×232              | 017666             | 10         |
| AD-2 0S      | Safety Bypass nozzle        | 0                  | 2.1                    | 105                     | 155.5               | 131        | 152×232              | 017727             | 10         |
| AD-2 100S    | Safety Bypass long nozzle   | 100                | 2.1                    | 105                     | 239.5               | 151        | 182×232              | 017734             | 10         |
| AD-2 100P    | Chip Shield Long Nozzle     | 100                | 2.1                    | 135                     | 242                 | 157        | 182×232              | 017642             | 10         |
| AD-2 0M      | High Volume Nozzle          | 0                  | 10                     | 185                     | 160                 | 126        | 152×232              | 017703             | 10         |
| AD-2 0C      | Air Screen Nozzle           | 0                  | 2.8                    | 260                     | 145                 | 127        | 152×232              | 017710             | 10         |

•Power source: compressed air •Max. working pressure: 0.97 MPa •Working temperature range: 0-60°C (32-140°F)

•Air inlet screw diameter: Rc 1/4 •Working air hose I.D. : more than φ4 mm •Air pressure when air consumption is measured: 0.49 MPa

•Pre-packed (200N, 300N in paper box)

※Nozzle can not be replaced.



Easy contact by just plug in with lock up function. Large influx type for max. performance of air tools.  
New concept couplings for efficiency and safety.

## One-Touch Lock Concent B Type

Patented

※Minimal cross-sectional area: Smallest cross-sectional area in the connected medium route.



### Socket

Inner Ctn.: 5 Outer Ctn.: 50

| For female screw connection (tapered screw)                                  | Model No.       | Overall Length (mm) | A (mm) | ℓ (mm) | Minimal Cross-sectional Area (mm <sup>2</sup> ) | Weight (g) | Application                      |
|------------------------------------------------------------------------------|-----------------|---------------------|--------|--------|-------------------------------------------------|------------|----------------------------------|
|                                                                              | <b>BLSB-3</b>   | 66                  | 21     | 14     | 44                                              | 93         | Rc3/8                            |
| For male screw connection (tapered screw)                                    | Model No.       | Overall Length (mm) | A (mm) | ℓ (mm) | Minimal Cross-sectional Area (mm <sup>2</sup> ) | Weight (g) | Application                      |
|                                                                              | <b>BLSN-3</b>   | 61                  | 21     | 9.7    | 44                                              | 90         | R3/8                             |
|                                                                              | <b>BLSN-4</b>   | 65.5                | 26     | 12.7   | 44                                              | 120        | R1/2                             |
| For Urethane hose connection                                                 | Model No.       | Overall Length (mm) | A (mm) | B (mm) | Minimal Cross-sectional Area (mm <sup>2</sup> ) | Weight (g) | Application Hose I.D × O.D. (mm) |
|                                                                              | <b>BLSH-5</b>   | 68                  | 14     | 21     | 16                                              | 92         | 5.0 × 8.0                        |
|                                                                              | <b>BLSH-8</b>   | 72                  | 19     | 21     | 42                                              | 108        | 8.0 × 12.0                       |
| For Urethane hose connection<br>Rotary concent prevents warping of air hose. | Model No.       | Overall Length (mm) | A (mm) | B (mm) | Minimal Cross-sectional Area (mm <sup>2</sup> ) | Weight (g) | Application Hose I.D × O.D. (mm) |
|                                                                              | <b>BLSF-6.5</b> | 80                  | 17     | 19     | 28                                              | 131        | 6.5 × 10.0                       |
|                                                                              | <b>BLSF-8.5</b> | 83                  | 19     | 21     | 44                                              | 151        | 8.5 × 12.5                       |

All types of plugs for concent B type and nut concent B type are interchangeable.

## Concent B Type

Paired as follows (example)



### Socket

Inner Ctn.: 5 Outer Ctn.: 50

| For female screw connection (tapered screw) | Model No.    | Overall Length (mm) | A (mm) | Application |
|---------------------------------------------|--------------|---------------------|--------|-------------|
|                                             | <b>BSB-2</b> | 51                  | 19     | Rc1/4       |
| For male screw connection (tapered screw)   | Model No.    | Overall Length (mm) | A (mm) | Application |
|                                             | <b>BSN-3</b> | 47                  | 21     | R3/8        |

### Plug

Inner Ctn.: 10 Outer Ctn.: 100  
(BPT-4, BPB-4, BPN-4... Inner Ctn.: 5 Outer Ctn.: 50)

| For hose connection                         | Model No.    | Overall Length (mm) | A (mm) | Application  |
|---------------------------------------------|--------------|---------------------|--------|--------------|
|                                             | <b>BPT-2</b> | 50                  | 15     | For 1/4 hose |
|                                             | <b>BPT-3</b> | 53                  | 15     | For 3/8 hose |
|                                             | <b>BPT-4</b> | 56                  | 20     | For 1/2 hose |
| For female screw connection (tapered screw) | Model No.    | Overall Length (mm) | A (mm) | Application  |
|                                             | <b>BPB-2</b> | 40                  | 14     | Rc 1/4       |
|                                             | <b>BPB-4</b> | 46                  | 23     | Rc 1/2       |

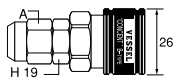
# Air Couplings

## Nut Concent B Type



### Socket

For Urethane hose connection



| Model No.      | Overall Length<br>(mm) | A<br>(mm) | Application Hose I.D. X O.D.<br>(mm) |
|----------------|------------------------|-----------|--------------------------------------|
| <b>BSH-8</b>   | 58                     | 19        | 8.0×12.0                             |
| <b>BSH-8.5</b> | 58                     | 19        | 8.5×12.5                             |

Inner Ctn.: 5 Outer Ctn.: 50

### Plug

For Urethane hose connection



| Model No.    | Overall Length<br>(mm) | A<br>(mm) | Application Hose I.D. X O.D.<br>(mm) |
|--------------|------------------------|-----------|--------------------------------------|
| <b>BPH-5</b> | 43                     | 14        | 5.0× 8.0                             |
| <b>BPH-6</b> | 45.5                   | 17        | 6.0× 9.0                             |

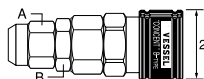
Inner Ctn.: 10 Outer Ctn.: 100

## Rotary Concent B Type



### Socket

For Urethane hose connection



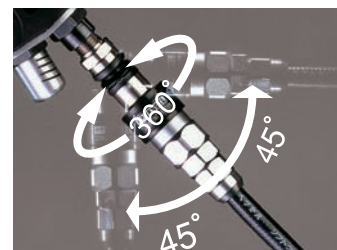
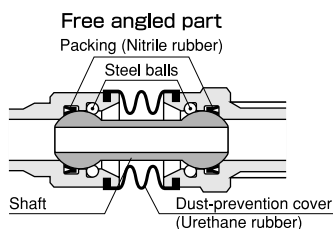
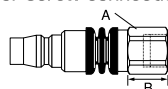
| Model No.      | Overall Length<br>(mm) | A<br>(mm) | B<br>(mm) | Application Hose I.D. X O.D.<br>(mm) |
|----------------|------------------------|-----------|-----------|--------------------------------------|
| <b>BSF-6.5</b> | 70.5                   | 17        | 19        | 6.5×10.0                             |

Inner Ctn.: 5 Outer Ctn.: 50

## Free Angle Concent B Type



For screw connection



### Plug

Inner Ctn.: 5

| Model No.     | Overall Length<br>(mm) | A<br>(mm) | B<br>(mm) | Application      |
|---------------|------------------------|-----------|-----------|------------------|
| <b>FPN-2F</b> | 61.7                   | 17        | 15.5      | G 1/4 male screw |

## Air Couplings carded type

No. FPN02F



Outer Ctn.: 10

| Model No.     | Application | Card Size<br>(mm) | JAN code<br>(4907587) |
|---------------|-------------|-------------------|-----------------------|
| <b>FPN02F</b> | G1/4        | 150×67×30         | 366788                |

## Air Couplings carded type

No. BPN003



### One-Touch Lock Concent B Type

Outer Ctn.: 10

| Model No.     | Application                                            | Card Size<br>(mm) | JAN code<br>(4907587) |
|---------------|--------------------------------------------------------|-------------------|-----------------------|
| <b>BLST03</b> | For hose connection For 3/8 hose                       | 125×65×32         | 365439                |
| <b>BLSH05</b> | For Urethane hose connection hose I.D. 5.0×O.D. 8.0mm  | 125×65×32         | 365750                |
| <b>BLSH08</b> | For Urethane hose connection hose I.D. 8.0×O.D. 12.0mm | 125×65×32         | 365781                |
| <b>BLSH85</b> | For Urethane hose connection hose I.D. 8.5×O.D. 12.5mm | 125×65×32         | 365798                |
| <b>BLSF85</b> | For Urethane hose connection hose I.D. 8.5×O.D. 12.5mm | 125×65×32         | 365989                |

### Concent B Type

Outer Ctn.: 10

| Model No.     | Application                        | Card Size<br>(mm) | JAN code<br>(4907587) |
|---------------|------------------------------------|-------------------|-----------------------|
| <b>BPT002</b> | For hose connection For 1/4 hose   | 105×60×32         | 366023                |
| <b>BPT003</b> | For hose connection For 3/8 hose   | 105×60×32         | 366030                |
| <b>BPB002</b> | For female screw connection Rc 1/4 | 105×60×32         | 366122                |
| <b>BPN003</b> | For male screw connection R 3/8    | 105×60×32         | 366238                |
| <b>BPN02F</b> | For male screw connection G1/4     | 105×60×32         | 366429                |
| <b>BPH005</b> | Hose I.D. 5.0×O.D. 8.0mm           | 105×60×32         | 366351                |
| <b>BPH006</b> | Hose I.D. 6.0×O.D. 9.0mm           | 105×60×32         | 366368                |
| <b>BPH008</b> | Hose I.D. 8.0×O.D. 12.0mm          | 105×60×32         | 366382                |

## ONE POINT

### Types of pipe thread

| Parallel thread | Tapered male screw | Tapered female screw | Pitch<br>(Threads per inch) | O.D. of male thread | I.D. of female thread |
|-----------------|--------------------|----------------------|-----------------------------|---------------------|-----------------------|
| G1/8(PF1/8)     | R1/8(PT1/8)        | Rc1/8(PT1/8)         | 28                          | 9.728               | 8.566                 |
| G1/4(PF1/4)     | R1/4(PT1/4)        | Rc1/4(PT1/4)         | 19                          | 13.157              | 11.445                |
| G3/8(PF3/8)     | R3/8(PT3/8)        | Rc3/8(PT3/8)         | 49                          | 16.662              | 14.950                |
| G1/2(PF1/2)     | R1/2(PT1/2)        | Rc1/2(PT1/2)         | 14                          | 20.955              | 18.631mm              |

## Air Regulator

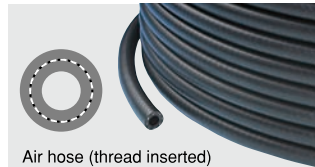


No. AR-2

| Model No.   | Overall Length (mm) | Weight (g) | Max. Working Pressure (MPa) | Screw size (female screw) × (male screw) |
|-------------|---------------------|------------|-----------------------------|------------------------------------------|
| <b>AR-2</b> | 50                  | 90         | 0.59                        | Rc1/4×R1/4                               |

Applicable Models: VESSEL's P6LS, P5S, P5LS, P6MS, P4.5D, P6GD, P6HS, etc.

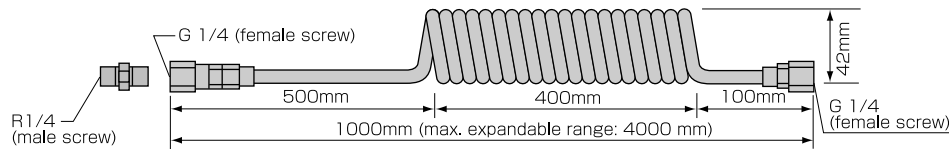
## Air Hose



Air hose (thread inserted)

| Outer Ctn.: 100m |                         |                             |
|------------------|-------------------------|-----------------------------|
| Model No.        | Hose I.D. × O.D. (φ mm) | Max. Working Pressure (MPa) |
| <b>Air hose</b>  | 6.5×12                  | 0.98                        |
| Model No.        | Weight (g/m)            |                             |
| <b>Air hose</b>  | 100                     |                             |

## Air Hose Set



No. AUC-40



## Coil Urethane Hose

| Outer Ctn.: 1 |                         |                             |                                                                                                      |            |
|---------------|-------------------------|-----------------------------|------------------------------------------------------------------------------------------------------|------------|
| Model No.     | Hose I.D. × O.D. (φ mm) | Max. Working Pressure (MPa) | Set                                                                                                  | Pack Size  |
| <b>AUC-40</b> | 5×8                     | 0.69                        | Coil urethane hose ... 4 m Connect G 1/4 female screw ... 2 pcs. R1/4 male screw for joint ... 1 pc. | 300×200×45 |

No. AUA-820



Ultra-thin  
Ultra-lightweight

## Blue Eight Hose Set

| Model No.      | Hose I.D. × O.D. (φ mm) | Max. Working Pressure (MPa) | Weight (g/m) | Set                                                                                 |
|----------------|-------------------------|-----------------------------|--------------|-------------------------------------------------------------------------------------|
| <b>AUD-805</b> | 8×10.5                  | 1.47                        | 42           | 0.5m, Rc1/4 female screw for joint ... 1 pc. Plug (BPH-8 × 10.5) ... 1 pc.          |
| <b>AUA-820</b> | 8×10.5                  | 1.47                        | 42           | 20m, Plug (BPH-8 × 10.5) ... 1 pc. One-touch lock concent (BLSH-8 × 10.5) ... 1 pc. |
| <b>AUB-20</b>  | 8×10.5                  | 1.47                        | 42           | 20m, G1/4 female screw for joint, R1/4 male screw for nipple                        |
| <b>AUB-30</b>  | 8×10.5                  | 1.47                        | 42           | 30m, G1/4 female screw for joint, R1/4 male screw for nipple                        |



## Hammer

see  
P. 037  
For further details



No. 71-10 Plastic Head Hammer



No. 72-10 Rubber/ Plastic Head Hammer



No. 73-10 Copper Head Hammer



No. 74-10 Steel/ Plastic Head Hammer

| Model No. | Size  | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-----------|-------|-------------------|--------------------|------------|------------|
| 71-05     | 1/2   | 297×30.6× 80.4    | 015129             | 6          | 60         |
| 71-10     | 1     | 303×34.7×124      | 015136             | 6          | 60         |
| 71-15     | 1 1/2 | 349×44 ×127       | 015143             | 4          | 24         |
| 71-20     | 2     | 389×54.6×146      | 015150             | 4          | 24         |
| 72-05     | 1/2   | 297×30.6× 80.4    | 015174             | 6          | 60         |
| 72-10     | 1     | 303×34.7×124      | 015181             | 6          | 60         |
| 72-15     | 1 1/2 | 349×44 ×127       | 015198             | 4          | 24         |
| 72-20     | 2     | 389×54.6×146      | 015204             | 4          | 24         |
| 73-10     | 1     | 270×32 × 70       | 015310             | 6          | 60         |
| 73-15     | 1 1/2 | 309×36 × 88       | 015327             | 4          | 24         |
| 73-20     | 2     | 309×38 × 98       | 015334             | 4          | 24         |
| 74-10     | 1     | 274×32 × 92       | 015341             | 6          | 24         |



No. 70

### No. 70 Plastic Head Hammer

| Size  | Package size (mm) | JAN code (4907587) | Inner Ctn. | Outer Ctn. |
|-------|-------------------|--------------------|------------|------------|
| 1/4   | 280×19.5× 66.5    | 015006             | 6          | 60         |
| 1/2   | 280×25 × 82       | 015013             | 6          | 60         |
| 1     | 295×31 ×108       | 015020             | 6          | 60         |
| 1 1/2 | 325×38 ×125.5     | 015037             | 6          | 36         |
| 2     | 350×46 ×139       | 015044             | 6          | 24         |

## Other tools



No. 070110  
No. 070105

No. 070115

### Replacement head

| Model No. | Size    | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|-----------|---------|-------------------|--------------------|------------|
| 71-05H    | 1/2     | 120× 53×24        | 015228             | 20         |
| 71-10H    | 1       | 120× 75×35        | 015235             | 20         |
| 71-15H    | 1 1/2   | 125× 80×35        | 015242             | 10         |
| 71-20H    | 2       | 145× 93×42        | 015259             | 10         |
| 72-05H    | 1/2     | 120× 53×24        | 015273             | 20         |
| 72-10H    | 1       | 120× 75×35        | 015280             | 20         |
| 72-15H    | 1 1/2   | 125× 80×35        | 015297             | 10         |
| 72-20H    | 2       | 145× 93×42        | 015303             | 10         |
| 070115    | 1 1/2×2 | 210× 75×41        | 061027             | 5          |
| 070110    | 1×2     | 170× 60×35        | 061010             | 5          |
| 070105    | 1/2×2   | 170× 60×26        | 061003             | 5          |



No. RG-95

| Model No. | Set content                  | Package size (mm) | JAN code (4907587) | Outer Ctn. |
|-----------|------------------------------|-------------------|--------------------|------------|
| RG-95     | Nose piece 2.4,3.2,4.0,4.8mm | 350×140×30        | 017109             | 5          |

### Hammer Display Stand

