



# AIR TOOLS

**VESSEL** always  
strives for customer  
satisfaction.



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.

# Air Screwdrivers



## Clutch Type Air Screwdriver

The speed of rotor rotation is reduced by planetary gears, the rotational torque is raised, and a construction able to obtain a stable tightening is produced via engagement of the clutch.

- Dispersion in tightening torque is small, and a reliably stable tightening can be conducted.
- Since percussion action is small, noise and vibration are minimized contribution is made to an improved work environment.
- Since component abrasion is minor, it has superior durability.

## Impact type Air Screwdriver

The hammer which is rotated by the rotor makes use of the impact of the striking the anvil, and a construction is obtained which generates a powerful tightening force.

- Compact and lightweight; able to obtain a powerful tightening force.
- Tightening speed is fast, and performance is superior.
- Since this is a double hammer type (1 rotation, 2 percussions), a stable tightening can be conducted.

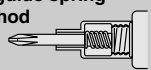
## Torque Control Type Air Screwdriver

A driver with a construction whereby when the pre-set torque is reached, the air is automatically cut off, and stoppage at a fixed torque occurs.

- Clutch type... A construction whereby when the tightening torque is reached, the air is cut off by the movement of the cam shaft, and operation is suspended.
- Impact type... As the bolt or nut is tightened, its resistance value increases, and the percussion part and rotary part are greatly inverted. This angle of inversion is caught by the clutch, transmitted to the stop valve, and the air is cut off. Furthermore, for purposes of transmission of a stable torque, a torsion bar anvil has been built-in.

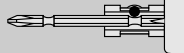
### Bit Installation Methods

#### Bit-guide spring method



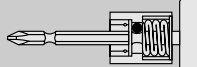
When the guide cover (left screw) is loosened, the bit guide spring can be taken out. Installation is conducted by inserting the guide spring into the bit, and fastening it with the guide bar.

#### Ball retainer method



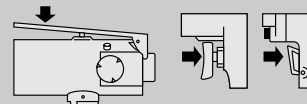
When the bit is strongly pressed in, the ball fits into the groove of the bit, fixing it in place.

#### Bit Sleeve System (Push ⇄ Pull Type)



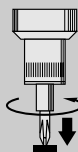
The bit is locked in place by moving the bit sleeve so that the bit inserts until stopping and then releasing the sleeve. There are two types: one with which the user pulls the sleeve towards the tool body to mount the bit and the other with which the user pushes the sleeve away from the tool body to mount the bit.

### Startup



#### Starting lever method

When the starting lever is pushed, air passes through the inserted part, and the motor part rotates.



#### Push start method

When the bit is pushed against the vise, the throttle push rod pushes up the valve ball, air flows in, and operation commences. Since the operation is commenced merely by pushing the bit against the vise, there is no burden of pushing a lever.



#### Lever push starting

By pushing throttle lever, installed bit applies into the screw for the air flow to turn.

# Air Screwdrivers Clutch Type

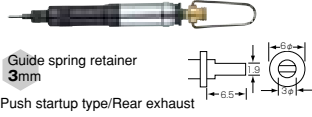
## Clutch Type Air Screwdrivers

Capacity is listed as instant reference and depends on operation conditions.

For High Performance Fastening

Machine Screw Dia. 1.6~2.3mm

GT-H2



Guide spring retainer  
3mm  
Push startup type/Rear exhaust

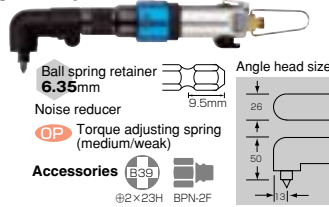
Accessories



⌀2×36H / ⌀1×36H BPN-2F

Machine Screw Dia. 2.6~3.5mm

GT-H4RC



Ball spring retainer  
6.35mm  
Noise reducer  
OP Torque adjusting spring  
(medium/weak)

Accessories



⌀2×23H BPN-2F

Machine Screw Dia. 3~4mm

GT-H4R



Ball spring retainer  
6.35mm

Lever push starting/Noise reducer

OP Anvil for A/F 5 mm bit  
Torque adjusting spring (medium/weak)

Accessories



⌀2×65G BPN-2F

GT-H4PR



Ball spring retainer  
6.35mm

Push startup type/Rear exhaust

OP Torque adjusting spring (medium/weak)

Accessories



⌀2×65G BPN-2F

GT-PH4



Ball spring retainer  
6.35mm

Lever push starting  
Noise reducer/Rear exhaust

OP Torque adjusting spring  
(medium/weak)

Accessories



⌀2×65G BPF-2

Machine Screw Dia. 3.5~4.5mm

GT-H5RC



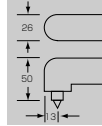
Ball spring retainer  
6.35mm

Accessories



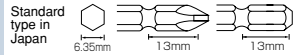
⌀2×23H BPN-2F

Angle head size

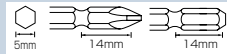


Bit installation anvil application

Unless otherwise, following bit specification should be standardized.



※Option:  
Following retainer anvil is available.



Machine Screw Dia. 4~5mm

GT-H5R



Ball spring retainer  
6.35mm

Lever push starting

Accessories



⌀2×65G BPN-2F

GT-H5P



Ball spring retainer  
6.35mm

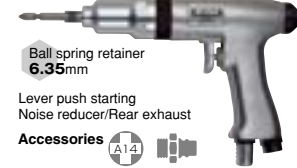
Push startup type/Rear exhaust

Accessories



⌀2×65G BPN-2F

GT-PH5



Ball spring retainer  
6.35mm

Lever push starting  
Noise reducer/Rear exhaust

Accessories



⌀2×65G BPF-2

Model No.	Capacity mm				No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Hose Coupling	Overall Length mm	Weight g
	Standard screw	Tapping screw	Wooden screw	Bolt					
GT-H2	1.6~2.3	—	—	—	3,200	0.16	G 1/4	164	267
GT-H4R	3~4	—	1.8~2.4	3~4	1,500	0.2	G 1/4	190	590
GT-H4PR	3~4	—	1.8~2.4	3~4	1,500	0.19	G 1/4	213	610
GT-PH4	3~4	—	1.8~2.4	3~4	1,500	0.19	Rc 1/4	180	770
GT-H4RC	2.6~3.5	—	—	2.6~3.5	1,500	0.2	G 1/4	216	735
GT-H5R	4~5	3.5~4	2.7~3.5	4~5	1,500	0.25	G 1/4	225	880
GT-H5P	4~5	3.5~4	2.7~3.5	4~5	1,500	0.25	G 1/4	235	880
GT-PH5	4~5	3.5~4	2.7~3.5	4~5	1,500	0.25	Rc 1/4	200	1,070
GT-H5RC	3.5~4.5	—	—	3.5~4.5	1,500	0.25	G 1/4	248	1,047

• Air pressure...0.6 MPa • Air hose bore diameter...6.35 mm • Overall length...Accessory, hanger part not included. • Weight...Accessories not included.

# Air Screwdrivers Impact type

Capacity is listed as instant reference and depends on operation conditions.

## Air Screwdriver, Impact Type

For High Performance Fastening

### Machine Screw Dia. 4~5mm

#### GT-S4.5DR



Bit sleeve retainer  
6.35mm

Noise reducer

Accessories



#### GT-PLR



Ball spring retainer  
6.35mm

Accessories



#### GT-PLP



Ball spring retainer  
6.35mm

Push startup type/Rear exhaust

Accessories



#### GT-PLZ



Bit sleeve retainer  
(Pull type) 6.35mm

Noise reducer

Accessories



#### GT-P4.5D

GT-P4.5DR (Powerful for reverse turn)



Bit sleeve retainer  
6.35mm

Noise reducer/Rear exhaust

Accessories



#### GT-P5LS



Bit sleeve retainer  
(Pull type) 6.35mm

Noise reducer/Rear exhaust

Accessories

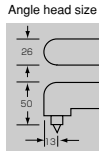


#### GT-PLRC



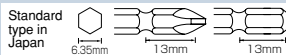
Ball spring retainer  
6.35mm

Accessories



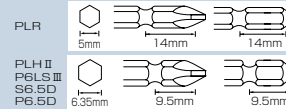
#### Bit installation anvil application

Unless otherwise, following bit specification should be standardized.



\*Option:

PLR/PLH II/P6LS III/S6.5D/P6.5D take the below anvils as bit shanks.



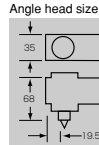
### Machine Screw Dia. 5~6mm

#### GT-S6CD



Ball spring retainer  
6.35mm

Accessories



#### GT-PLH II



Bit sleeve retainer (Pull type)  
6.35mm

CP Anvil (Bit insertion, push type)  
(Bit insertion length 9 mm)

Accessories



#### GT-S6MLR



Bit sleeve retainer (Pull type)  
6.35mm

Accessories



#### GT-S6HS



Bit sleeve retainer  
6.35mm

Accessories



Model No.	Capacity mm				No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Hose Coupling	Overall Length mm	Weight g
	Standard screw	Tapping screw	Wooden screw	Bolt					
GT-S4.5DR	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
GT-PLR	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
GT-PLP	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
GT-PLZ	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
GT-P4.5D (R)	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
GT-P5LS	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
GT-PLRC	4.0~5.0	—	—	4.0~5.0	9,000	0.2	G 1/4	228	1,100
GT-S6CD	5.0~6.0	4.0~4.5	3.6~4.1	5.0~6.0	5,600	0.3	Rc 1/4	250	1,870
GT-PLH II	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
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
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

• Air pressure...0.6 MPa • Air hose bore diameter...6.35 mm • Overall length...Accessories and hanger parts not included. • Weight...Accessories not included.



# Air Screwdrivers Impact type

Capacity is listed as instant reference and depends on operation conditions.

## Air Screwdriver, Impact Type

For High Performance Fastening

Machine Screw Dia. 5~6mm

### GT-P6LSⅢ

Bit sleeve retainer  
(Pull type) 6.35mm

Noise reducer/Rear exhaust

OP Anvil (Bit insertion length 9.5mm)  
(Bit insertion, push type)  
Rubber grip

Accessories



φ2×65G BPB-2



All optional products come with a rubber grip.



### GT-P6HS

Bit sleeve retainer  
6.35mm

Noise reducer/Rear exhaust

Accessories



φ2×65G BPB-2  
· Air regulator



### GT-P6XD

Bit sleeve retainer  
6.35mm

Noise reducer/Rear exhaust

OP Anvil  
(Bit insertion length 9.5mm)

Accessories



φ2×65G BPB-2

Impact parts oil: (VG-32 Green)  
Rotary parts oil: (VG-10 White)



### Air Impact Screwdriver for House Building GT-P6XD(A)

Consisting of:

- Air impact screwdriver  
GT-P6XD ...1 pc.
- Bit assortment (BW-116)
  - Magnetic double end bit  
M-A14 φ2×65H...5 pcs.  
φ2×110H...3 pcs.  
φ2×150H...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)

Ideal for easy carry with extra space for bits and screws.



Machine Screw Dia. 6~8mm

### GT-S6.5D

Bit sleeve retainer  
6.35mm

OP Anvil (Bit insertion length 9.5mm)

Accessories



φ2×65E/φ3×65E BPB-2



### GT-P6.5D

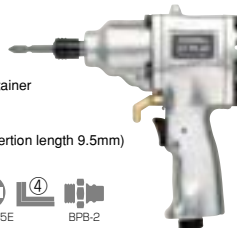
Bit sleeve retainer  
6.35mm

OP Anvil  
(bit insertion length 9.5mm)

Accessories



φ2×65E/φ3×65E BPB-2



Machine Screw Dia. 8~10mm

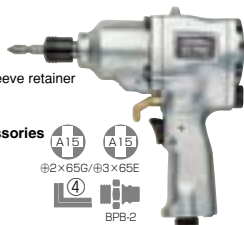
### GT-P8D

Bit sleeve retainer  
8mm

Accessories



φ2×65G/φ3×65E BPB-2



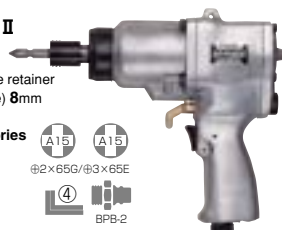
### GT-P10SⅡ

Bit sleeve retainer  
(Pull type) 8mm

Accessories



φ2×65G/φ3×65E BPB-2



Model No.	Capacity mm				No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Hose Coupling	Overall Length mm	Weight g
	Standard screw	Tapping screw	Wooden screw	Bolt					
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
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
GT-P6XD	5.0~6.0	4.0~4.5	3.6~4.8	5.0~6.0	8,500	0.49	Rc 1/4	153	940
GT-S6.5D	6.0~8.0	4.0~4.5	3.8~4.5	6.0~8.0	7,500	0.34	Rc 1/4	217	1,400
GT-P6.5D	6.0~8.0	4.0~5.0	3.5~4.5	6.0~8.0	7,800	0.38	Rc 1/4	152	1,450
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
GT-P10SⅡ	8.0~10.0	5.0~6.0	4.5~6.2	8.0~10.0	6,500	0.39	Rc 1/4	206	2,460

· Air pressure...0.6 MPa · Air hose bore diameter...6.35 mm · Overall length...Accessories and hanger parts not included. · Weight...Accessories not included.

# Torque Control Air Screwdrivers

Capacity and working torque are listed as instant reference and depends of operation conditions.

## Torque Control Air Screwdriver, Reduced Type

### Automatic Suspensions By Torque Set Up

Machine Screw Dia. **2~2.5mm**

#### GT-S4TFG



Ball spring retainer  
**5mm**

Push startup/Noise reducer/Rear exhaust

**OP** Torque Spring  
Anvil for A/F 6.35 mm bit

Accessories  $\phi 2 \times 70H$

#### GT-S4TG



Ball spring retainer  
**6.35mm**

Push startup/Noise reducer/Rear exhaust

**OP** Anvil (Bit insertion length 9.5 mm)  
Anvil for A/F 5 mm bit  
Hose Coupling (1/8"), Torque spring

Accessories  $\phi 2 \times 65G$  BPB-2

Machine Screw Dia. **2.2~3mm**

#### GT-S4TFS



Ball spring retainer  
**5mm**

Push startup/Noise reducer/Rear exhaust

**OP** Torque Spring  
Anvil for A/F 6.35 mm bit

Accessories  $\phi 2 \times 70H$

#### GT-S4TS



Ball spring retainer  
**6.35mm**

Push startup/Noise reducer/Rear exhaust

**OP** Anvil (Bit insertion length 9.5 mm)  
Anvil for A/F 5 mm bit  
Hose Coupling (1/8"), Torque spring

Accessories  $\phi 2 \times 65G$  BPB-2

Machine Screw Dia. **3~4mm**

#### GT-S4TFR



Ball spring retainer  
**5mm**

Push startup/Noise reducer/Rear exhaust

**OP** Torque Spring  
Anvil for A/F 6.35 mm bit

Accessories  $\phi 2 \times 70H$

#### GT-S4TR



Ball spring retainer  
**6.35mm**

Push startup/Noise reducer/Rear exhaust

**OP** Anvil (Bit insertion length 9.5 mm)  
Anvil for A/F 5 mm bit  
Hose Coupling (1/8"), Torque spring

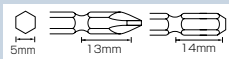
Accessories  $\phi 2 \times 65G$  BPB-2

### How to Set Torque

- **S4TF Series:** Detach the ratchet cover and turn the adjusting nut. Prevents the set torque from changing by accident upon impact, etc.
- **S4T Series:** Can be speedily adjusted from the adjusting dial. Makes work efficient when changing workpieces, etc.

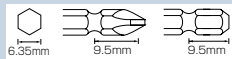
#### Bit shank

S4TFG  
S4TFS  
S4TFR

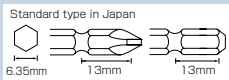


※Option

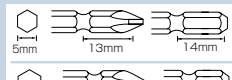
S4TFG  
S4TFS  
S4TFR



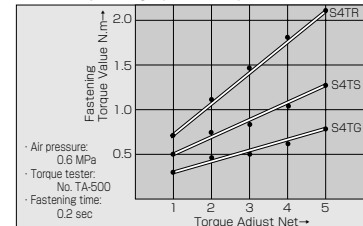
S4TG  
S4TS  
S4TR



S4TG  
S4TS  
S4TR



#### Actual torque range (Reference)



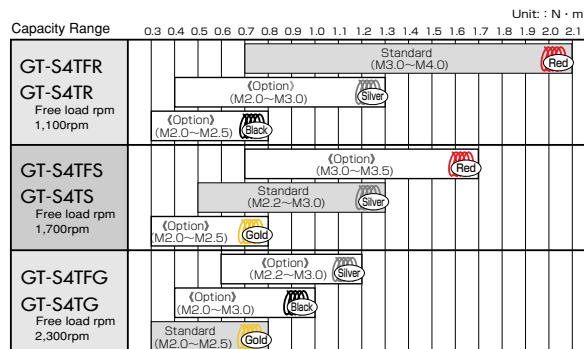
※ The figure showed in the right box is upon our standard torque tester. It is depending upon screws, bolts, nuts and material differences.

Model No.	Capacity mm Standard screw	Torque Range N·m	No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Hose Coupling	Overall Length mm	Weight g
<b>GT-S4TFG</b>	2.0~2.5	0.3~0.8	2,300	0.28	Rc 1/8	215	565
<b>GT-S4TFS</b>	2.2~3.0	0.5~1.3	1,700	0.28	Rc 1/8	215	555
<b>GT-S4TFR</b>	3.0~4.0	0.7~2.0	1,100	0.28	Rc 1/8	215	565
<b>GT-S4TG</b>	2.0~2.5	0.3~0.8	2,300	0.28	Rc 1/4	215	650
<b>GT-S4TS</b>	2.2~3.0	0.5~1.3	1,700	0.28	Rc 1/4	215	640
<b>GT-S4TR</b>	3.0~4.0	0.7~2.0	1,100	0.28	Rc 1/4	215	650

• Air pressure...0.6 MPa • Air hose bore diameter...6.35 mm • Overall length...Accessories and hanger parts not included. • Weight...Accessories not included.

### GT-S4T series Torque Spring Change

GT-S4T 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. (see right) Also we will recommend you to choose larger No Load Speed when faster fastening is necessary.



# Torque Control Air Screwdrivers

Capacity and working torque are listed as instant reference and depends of operation conditions.

## Torque Control Air Screwdriver, Reduced Type

### Automatic Suspensions By Torque Set Up

Machine Screw Dia. **2.5~3mm**

#### GT-S5TFG



Ball spring retainer  
**5mm**

Push startup/Noise reducer/Rear exhaust

OP Anvil for A/F 6.35 mm bit  
Torque Spring

Accessories



#### GT-S5TG



Ball spring retainer  
**6.35mm**

Push startup/Noise reducer/Rear exhaust

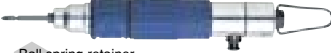
OP Anvil (Bit insertion length 9.5 mm)  
Torque spring

Accessories



Machine Screw Dia. **3~4mm**

#### GT-S5TFB



Ball spring retainer  
**5mm**

Push startup/Noise reducer/Rear exhaust

OP Anvil for A/F 6.35 mm bit  
Torque Spring

Accessories



#### GT-S5TB



Ball spring retainer  
**6.35mm**

Push startup/Noise reducer/Rear exhaust

OP Anvil (Bit insertion length 9.5 mm)  
Torque spring

Accessories



Machine Screw Dia. **4~5mm**

#### GT-S5TFR



Ball spring retainer  
**5mm**

Push startup/Noise reducer/Rear exhaust

OP Anvil for A/F 6.35 mm bit  
Torque Spring

Accessories



#### GT-S5TR



Ball spring retainer  
**6.35mm**

Push startup/Noise reducer/Rear exhaust

OP Anvil (Bit insertion length 9.5 mm)  
Torque spring

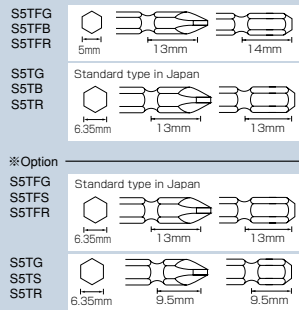
Accessories



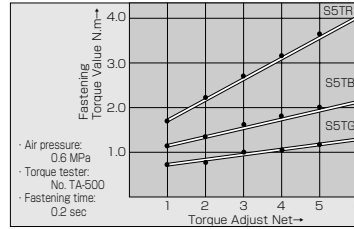
### How to Set Torque

- **S5TF Series:** Detach the ratchet cover and turn the adjusting nut. Prevents the set torque from changing by accident upon impact, etc.
- **S5T Series:** Can be speedily adjusted from the adjusting dial. Makes work efficient when changing workpieces, etc.

#### Bit shank



#### Actual torque range (Reference)



※ The figure showed in the right box is upon our standard torque tester. It is depending upon screws, bolts, nuts and material differences.

## Torque Control Air Screwdriver, Impact Type

Machine Screw Dia. **4.5~6mm**

#### GT-S5TS



Bit sleeve retainer  
(Pull type)**6.35mm**

Accessories

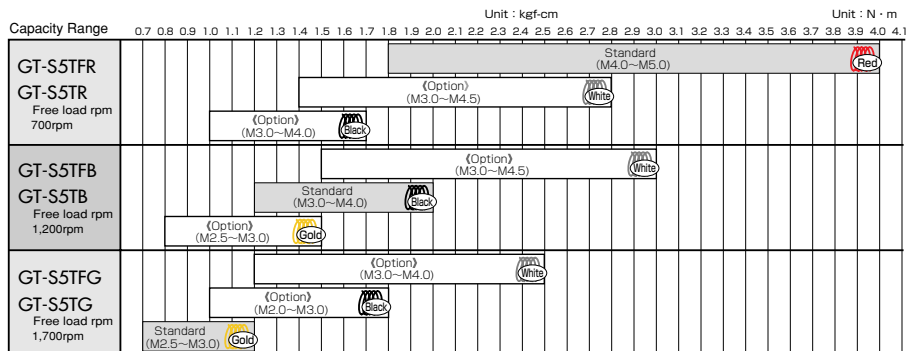


Model No.	Capacity mm Standard screw	Torque Range N·m	No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Hose Coupling	Overall Length mm	Weight g
GT-S5TFG	2.5~3.0	0.7~1.1	1,700	0.35	Rc 1/8	243	860
GT-S5TFB	3.0~4.0	1.2~1.9	1,200	0.35	Rc 1/8	243	830
GT-S5TFR	4.0~5.0	1.8~3.9	700	0.35	Rc 1/8	243	850
GT-S5TG	2.5~3.0	0.7~1.1	1,700	0.35	Rc 1/4	260	920
GT-S5TB	3.0~4.0	1.2~1.9	1,200	0.35	Rc 1/4	260	910
GT-S5TR	4.0~5.0	1.8~3.9	700	0.35	Rc 1/4	260	930
GT-S5TS	4.5~6.0	4.0~9.8	6,500	0.25	Rc 1/4	292	1,280

• Air pressure...0.6 MPa • Air hose bore diameter...6.35 mm • Overall length...Accessories and hanger parts not included. • Weight...Accessories not included.

### GT-S5T series Torque Spring Change

GT-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. (See right) Also we will recommend you to choose larger No Load Speed when faster fastening is necessary.



# Torque Control Air Impact Wrenches and Torque Testers

Capacity and working torque are listed as instant reference and depends of operation conditions.

## Air Impact Wrenches, Torque Control Type

### Automatic Suspensions By Torque Set Up

Machine Bolt Dia. **6~8mm**

**GT-P6T**



Square drive size  
**9.5mm**  
(Pin-lock)

Accessories ③ ④  
BPB-2

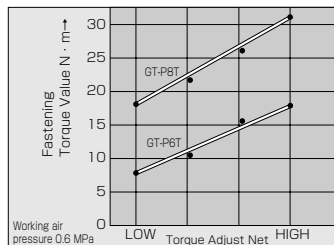
Machine Bolt Dia. **8~10mm**

**GT-P8T**



Square drive size  
**12.7mm**  
(Pin-lock)

Accessories ③ ④  
BPB-2



※The figure showed in the right box is upon our standard torque tester. It is depending upon screws, bolts, nuts, material differences.

Model No.	Capacity mm Standard screw	Torque Range N·m	No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Hose Coupling	Air Hose Inner Diameter mm	Overall Length mm	Weight kg
<b>GT-P6T</b>	6~8	7.8~17.6	3,000	0.27	Rc 1/4	6.35	246	1.5
<b>GT-P8T</b>	8~10	17.6~31.4	2,500	0.31	Rc 1/4	6.35	264	2.2

• Air pressure...0.6MPa • Overall length...Accessories not included. • Weight...Accessories not included.

## Digital Torque Tester

### Torque control for fastening tools

Effective for controlling fastening tool output and checking torque wrench accuracy. Use when impact tool measurement is within 70% of appropriate measurement range.



- 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 be used with pneumatic drivers, impact wrenches, oil pulse wrenches, torque wrenches, etc

Model No.	Appropriate Measurement Range N·m	Smallest Scale Increment N·cm	Static Load Accuracy: Within $\pm 0.5\%$ Nm	Power Supply	Standard Accessories
<b>TA-500</b>	4.9~ 49	1.96	4.9~ 49 $\pm 2.6$	AC100V~240V $\pm 10\%$ 50/60 Hz · 1.5W	Pickup cable ... 1
<b>TA-1000</b>	19.6~ 98	9.8	9.8~ 98 $\pm 5$		Pickup cable ... 1 3/8 sq x 1/2 sq adapter ... 1
<b>TA-2000</b>	49~ 196	9.8	19.6~ 196 $\pm 10$		Pickup cable ... 1 3/8 sq x 1/2 sq adapter ... 1
<b>TA-5000</b>	98~ 490	18.6	49~ 490 $\pm 26$		Pickup cable ... 1 1/2 sq x 3/4 sq adapter ... 1 5/8 x 3/4 sq adapter ... 1

Options: Printer parallel output (Centronics compliant), analog output (waveform monitoring terminal), pulse counter





# Air Impact Wrenches



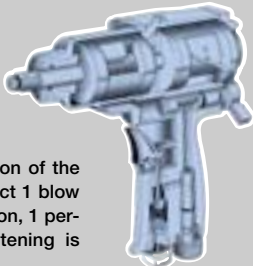
## Impact Type Innovative "V" Hammer

Made powerful fastening possible with this power-thrust mechanism. Compact sized motor transmits High Torque to the anvil. Each part newly designed contributes to the total lighter weight for less fatigue of the operation.



## Impact Type Single Hammer

A construction whereby 1 rotation of the rotor causes the hammer to inflict 1 blow on the anvil. Due to this 1 rotation, 1 percussion system, a strong tightening is obtainable.

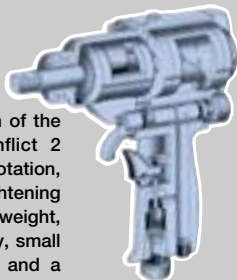


## Pin Clutch Hammer

A mechanism whereby 2-pin-clutch hammers simultaneously strike the anvil. Vibration is small, and a powerful tightening force is obtainable. A built-in twin adjustment mechanism is provided, changeover to crosswise rotation is simple and the labor of power adjustment can be omitted.

## Impact Type Double Hammer

A construction whereby 1 rotation of the rotor causes the hammer to inflict 2 blows on the anvil. Due to this 1 rotation, 2 percussions system, a stable tightening is obtainable. Compact and lightweight, this model exhibits great durability, small reaction in proportion to output, and a fast tightening speed. It is also a low vibration low noise type.



## Torque Control Type

An impact wrench with a construction whereby when the preset torque is reached, the air is automatically cut off, and stoppage at a fixed torque occurs. As the bolt or nut is tightened, its resistance value increases, and the percussion part and rotary part are greatly inverted. This angle of inversion is caught by the clutch, transmitted to the stop valve, and the air is cut off. Furthermore, for purposes of transmission of a stable torque, a torsion bar anvil has been built-in.

Air Impact Wrenches Model Selection Chart (For reference)

Screw diameter Strength category	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52
3.6	800	800 1000	1000 1400	1400	1600	1600 2000	2000	2000	3800	3800	3800	3800	3800	4200 4800	4200 4800	S55R	S55R	S55R
4.6	800	1000	1000 1400	1400 1600	1600	1600 2000	2000	2500	3800	3800	3800	3800	4200 4800	4200 4800	S55R	S55R		
4.8	800	1000	1400 1600	1400 1600	1600 2000	2000	2000	2500	3800	3800	3800	3800	4200 4800 S55R	S55R	S55R			
5.6	800 1000	1000	1400 1600	1400 1600	1600 2000	2000	2000	2500	3800	3800	3800	3800	4200 4800	S55R	S55R			
5.8	800 1000	1000 1400	1400 1600	1400 1600	1600 2000	2000	2000 2500	2500	3800	3800	3800 4200 4800	4200 4800	S55R					
6.8	800 1000	1000 1400	1400 1600	1600	1600 2000	2000 2500	2000 2500	2500 3800	3800	3800	3800 4200 4800	S55R	S55R					
8.8	1000 1400	1000 1400	1400 1600	1600 2000	2000 2500	2000 2500	2500	2500 3800	3800	3800 4200	S55R	S55R						
10.9	1000 1400	1400 1600	1600 2000	2000	2000 2500	2500	2500	3800 4200 4800	S55R	S55R								
12.9	1000 1400	1400 1600	1600 2000	2000	2000 2500	2500	2500 3800	3800 4200 4800	S55R									

**800** GT-800P / S650 / P6II / S600C

**1000** GT-1000P / P8II

**1400** GT-1400P / P12

**1600** GT-1600VPX / 1600VPH / 1600VPHL / 1600VP / 1600VPL / 1600P / P14J

**2000** GT-2000PF / 2000P / P18J

**2500** GT-2500LF / 2500PF

**3800** GT-3800VP / 3800V / 3800VL / 3800LF / 3800L / 3900VL

**4200** GT-4200PF / 4200LF / 4200 / 4200L

**4800** GT-4800VL

**S55R** GT-S55R

# Super Light V-Hammers

Capacity and working torque are listed as instant reference and depends on operation conditions.

## Air Impact Wrenches, Super Lightweight Series

Lightweight Working, Priority No.1

### Compact and Super Lightweight for Easy/Thrifty Maintenance

This unique "V" mechanism produces high efficiency of Torque increase and made each part lighter and compact possible. Ideal or easy operating with less fatigue and even saves storage space. Have tackled the tough problem of this maintenance and successfully designed mechanism unit and also each part to be replaced as in the same manner to regular impact wrench model.

#### Machine Bolt Dia. 16mm

##### GT-1600VPX



Square drive size  
**12.7mm**  
(Retainer ring)  
Rear exhaust  
**Accessories**



##### GT-1600VP



Square drive size  
**12.7mm**  
(Retainer ring)  
Rear exhaust  
**Accessories**



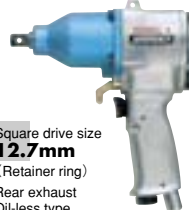
##### GT-1600VPL



Square drive size  
**12.7mm**  
(Retainer ring)  
Rear exhaust  
**Accessories**



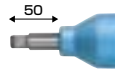
##### GT-1600VPH



Square drive size  
**12.7mm**  
(Retainer ring)  
Rear exhaust  
Oil-less type  
**Accessories**



##### GT-1600VPHL



Square drive size  
**12.7mm**  
(Retainer ring)  
Rear exhaust  
Oil-less type  
**Accessories**



\*Oil-less type: Can be used without lubrication. Does not generate oil mist.

#### Machine Bolt Dia. 39mm

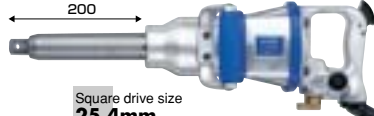
##### GT-3800VP



Square drive size  
**25.4mm**  
(Pin-lock)  
Rear exhaust  
**Accessories**



##### GT-3900VL



Square drive size  
**25.4mm**  
(Pin-lock)  
**Accessories**



##### GT-3900V

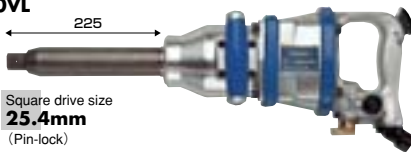


Square drive size  
**25.4mm**  
(Pin-lock)  
**Accessories**



#### Machine Bolt Dia. 48mm

##### GT-4800VL



Square drive size  
**25.4mm**  
(Pin-lock)  
**Accessories**



Model No.	Capacity mm Ordinary bolt diameter	Actual 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 kg
GT-1600VPX	16	49~245	8,200	0.4	Rc 1/4	6.35	169	1.48
GT-1600VP	16	49~245.2	8,500	0.4	Rc 1/4	6.35	171	1.91
GT-1600VPL	16	49~245.2	8,500	0.4	Rc 1/4	6.35	199	1.95
GT-1600VPH	16	49~245	8,200	0.4	Rc 1/4	6.35	174.5	1.75
GT-1600VPHL	16	49~245	8,200	0.4	Rc 1/4	6.35	202.5	1.8
GT-3800VP	39	343~1569	3,000	0.6	Rc 3/8	9.5	264	6.9
GT-3900V	39	343~1680	4,200	0.7	Rc 1/2	12.7	360.6	8.2
GT-3900VL	39	343~1680	4,200	0.7	Rc 1/2	12.7	524	8.95
GT-4800VL	48	490~2010	3,200	1.0	Rc 1/2	12.7	559	12.8

· Air pressure···0.6-0.8 MPa · Overall length···Accessories not included. · Weight···Accessories not included.

# Lightweight F Hammers

## Air Impact Wrenches, Lightweight Series

Capacity and working torque are listed as instant reference and depends on operation conditions.

**Well Balanced for Power Wrenching**

### Machine Bolt Dia. 20mm

#### GT-2000PF

Square drive size  
**19mm**  
(Retainer ring)  
Rear exhaust/Noise reducer

#### Accessories



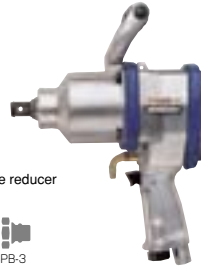
### Machine Bolt Dia. 25mm

#### GT-2500PF

Square drive size  
**19mm**  
(Retainer ring)

Rear exhaust/Noise reducer

#### Accessories

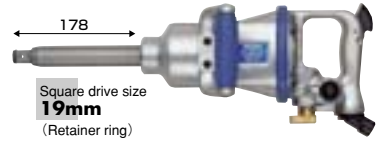


#### GT-2500LF

178

Square drive size  
**19mm**  
(Retainer ring)

#### Accessories

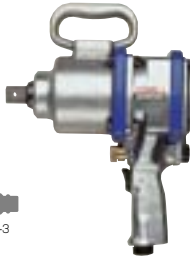


### Machine Bolt Dia. 39mm

#### GT-3800PF

Square drive size  
**25.4mm**  
(Pin-lock)

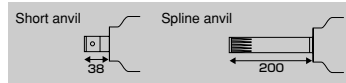
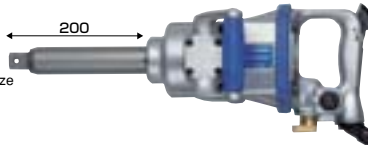
#### Accessories



#### GT-3800LF

Square drive size  
**25.4mm**  
(Pin-lock)

#### Accessories



### Machine Bolt Dia. 42mm

#### GT-4200PF

Square drive size  
**25.4mm**  
(Pin-lock)

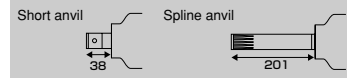
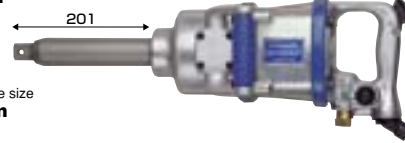
#### Accessories



#### GT-4200LF

Square drive size  
**25.4mm**  
(Pin-lock)

#### Accessories



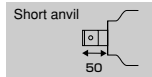
### Machine Bolt Dia. 52mm

#### GT-555R

Square drive size  
**25.4mm**  
(Pin-lock)

Noise reducer

#### Accessories



**Most Powerful.  
Ideal for Construction.**

Model No.	Capacity mm Ordinary bolt diameter	Actual 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 kg
GT-2000PF	20	147~ 460.9	5,500	0.43	Rc 1/4	9.5	210	3.5
GT-2500PF	25	245~ 961	3,200	0.6	Rc 3/8	9.5	242	6.2
GT-2500LF	25	245~ 961	4,400	0.7	Rc 3/8	9.5	478	7.3
GT-3800PF	39	343~1569	3,500	0.8	Rc 3/8	12.7	254	9.2
GT-3800LF	39	343~1569	4,000	0.8	Rc 1/2	12.7	504	10.5
GT-4200PF	42	490~1765	2,500	1.0	Rc 3/8	12.7	297	11.5
GT-4200LF	42	490~1765	3,200	1.0	Rc 3/8	12.7	547	13.3
GT-555R	52	490~2450	2,800	1.2	Rc 1/2	12.7	610	17.0

• Air pressure···0.6 MPa • Overall length···Accessories not included. • Weight···Accessories not included.

# Basic Single Hammers

Capacity and working torque are listed as instant reference and depends on operation conditions.

## Air Impact Wrenches/Impact Type:Single Hammer (Basic Series) Long Time Best-Seller. Stable Feel.

### Machine Bolt Dia. 6~8mm

#### GT-S650

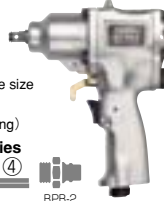


Square drive size  
**9.5mm**  
(Retainer ring)

#### Accessories



#### GT-P6 II / GT-P6 II Z (with noise reducer) GT-S600C



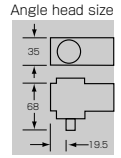
Square drive size  
**9.5mm**  
(Retainer ring)

#### Accessories



Square drive size  
**9.5mm**  
(Pin-lock)

#### Accessories



### Machine Bolt Dia. 8~10mm

#### GT-P8 II / GT-P8 II Z (with noise reducer)



Square drive size  
**12.7mm**  
(Retainer ring)

#### Accessories



### Machine Bolt Dia. 14mm

#### GT-P12 / GT-P12Z (with noise reducer)



Square drive size  
**12.7mm**  
(Retainer ring)

#### Accessories



### Machine Bolt Dia. 16mm

#### GT-P14J / GT-P14JZ (with noise reducer)



Square drive size  
**12.7mm**  
(Retainer ring)

#### Accessories



#### GT-P14JL



Square drive size  
**12.7mm**  
(Retainer ring)

#### Accessories



### Machine Bolt Dia. 20mm

#### GT-P18J/GT-P18JZ (with noise reducer)

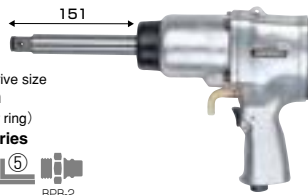


Square drive size  
**19mm**  
(Retainer ring)

#### Accessories



#### GT-P18JL



Square drive size  
**19mm**  
(Retainer ring)

#### Accessories



Model No.	Capacity mm Ordinary bolt diameter	Actual 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 kg
GT-S650	6~8	4.9~68.6	7,500	0.35	Rc 1/4	6.35	210	1.3
GT-P6 II (Z)	6~8	4.9~68.6	8,500 (Z) 7,500	0.38	Rc 1/4	6.35	146	1.43
GT-S600C	6~8	2.94~39.2	7,300	0.35	Rc 1/4	6.35	255	1.87
GT-P8 II (Z)	8~10	14.7~137.3	7,500 (Z) 7,200	0.4	Rc 1/4	6.35	166	1.89
GT-P12(Z)	12~14	39.2~225.6	7,500 (Z) 7,300	0.4	Rc 1/4	6.35	185	2.3
GT-P14J(Z)	14~16	49~274.6	6,500 (Z) 6,300	0.42	Rc 1/4	6.35	197	2.95
GT-P14JL	14~16	49~274.6	6,500	0.42	Rc 1/4	6.35	226	3.0
GT-P18J(Z)	16~20	147~460.9	5,000 (Z) 4,800	0.52	Rc 1/4	9.5	240	4.2
GT-P18JL	16~20	147~441.3	4,700	0.52	Rc 1/4	9.5	353	4.7

• Air pressure...0.6 MPa • Overall length...Accessories not included. • Weight...Accessories not included.

# Economy Single Hammers

Capacity and working torque are listed as instant reference and depends on operation conditions.

## Air Impact Wrenches, Single Hammer (Economy Series)

Simple Structure. Affordable Prices.

Machine Bolt Dia. **8mm**

**GT-800P**

Square drive size  
**9.5mm**  
(Retainer ring)

Accessories



Machine Bolt Dia. **10mm**

**GT-1000P**

Square drive size  
**12.7mm**  
(Retainer ring)

Accessories



Machine Bolt Dia. **14mm**

**GT-1400P**

Square drive size  
**12.7mm**  
(Retainer ring)

Accessories



Machine Bolt Dia. **16mm**

**GT-1600P**

Square drive size  
**12.7mm**  
(Retainer ring)

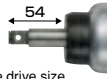
Accessories



**GT-1600PL**

Square drive size  
**12.7mm**  
(Retainer ring)

Accessories



Machine Bolt Dia. **20mm**

**GT-2000P**

Square drive size  
**19mm**  
(Retainer ring)

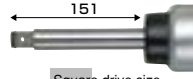
Accessories



**GT-2000PL**

Square drive size  
**19mm**  
(Retainer ring)

Accessories

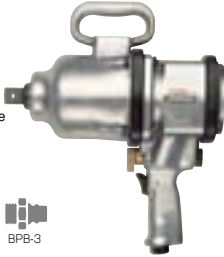


Machine Bolt Dia. **42mm**

**GT-4200P**

Square drive size  
**25.4mm**  
(Pin-lock)

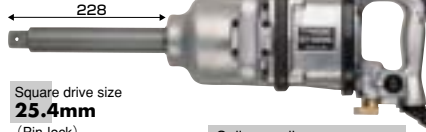
Accessories



**GT-4200L**

Square drive size  
**25.4mm**  
(Pin-lock)

Accessories



**GT-4200**

Square drive size  
**25.4mm**  
(Pin-lock)

Accessories



## Air Impact Wrenches/Pin Clutch Hammer

Machine Bolt Dia. **16mm**

**GT-1600EP II**

Square drive size  
**12.7mm**  
(Retainer ring)

Rear exhaust

Accessories



Model No.	Capacity mm Ordinary bolt diameter	Actual 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 kg
GT-800P	6~8	4.9~68.6	7,500	0.34	Rc 1/4	6.35	148	1.5
GT-1000P	8~10	14.7~137.3	7,200	0.35	Rc 1/4	6.35	167	1.9
GT-1400P	12~14	39.2~225.6	7,000	0.35	Rc 1/4	6.35	182	2.25
GT-1600P	14~16	49~264.8	6,700	0.36	Rc 1/4	6.35	196	2.7
GT-1600PL	14~16	49~264.8	6,700	0.36	Rc 1/4	6.35	224	2.8
GT-2000P	16~20	147~460.9	5,000	0.45	Rc 1/4	9.5	241	4.3
GT-2000PL	16~20	147~441.3	4,700	0.45	Rc 1/4	9.5	354	4.7
GT-4200P	27~42	490~1765	2,500	1.0	Rc 3/8	12.7	316	14.2
GT-4200L	27~42	490~1765	3,200	1.0	Rc 3/8	12.7	597	15.9
GT-4200	27~42	490~1765	3,200	1.0	Rc 3/8	12.7	409	14.9
GT-1600EP II	16	147~245	6,300	0.45	Rc 1/4	6.35	197	2.7

• Air pressure...0.6 MPa • Overall length...Accessories not included. • Weight...Accessories not included.



## Air Impact Wrenches: Double Hammer

Capacity and working torque are listed as instant reference and depends on operation conditions.

**For Stable Industrial Fastening**

### Machine Bolt Dia. 4~5mm

#### GT-PLRB



Square drive size  
**8mm**  
(Pin-lock)

Accessories BPN-2F

### Machine Bolt Dia. 5~6mm

#### GT-S6MLRB



Square drive size  
**9.5mm**  
(Pin-lock)

Accessories BPN-2F

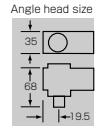
### Machine Bolt Dia. 6~8mm

#### GT-S60CW



Square drive size  
**9.5mm**  
(Pin-lock)

Accessories BPB-2



### Machine Bolt Dia. 6~8mm

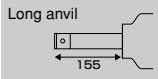
#### GT-S65W



Square drive size  
**9.5mm**  
(Pin-lock)

Accessories BPB-2

Available for both GT-S65W and GT-P65W



#### GT-P65W



Square drive size  
**9.5mm**  
(Pin-lock)

Accessories BPB-2

#### GT-S70WK



Square drive size  
**9.5mm**  
(Pin-lock)

Accessories BPB-2

Rear exhaust/Noise reducer

### Machine Bolt Dia. 8~10mm

#### GT-P80W



Square drive size  
**12.7mm**  
(Pin-lock)

Accessories BPB-2

### Machine Bolt Dia. 10~12mm

#### GT-W100P II



Square drive size  
**12.7mm**  
(Pin-lock)

Accessories BPB-2

### Machine Bolt Dia. 12~16mm

#### GT-P14W



Square drive size  
**12.7mm**  
(Pin-lock)

Accessories BPB-2

### Machine Bolt Dia. 20mm

#### GT-S20RW

**NEW**

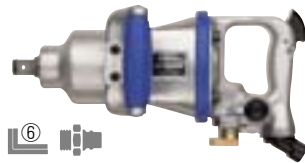


Square drive size  
**19mm**  
(Pin-lock)

Accessories BPB-3

### Machine Bolt Dia. 22mm

#### GT-S220W



Square drive size  
**19mm**  
(Retainer ring)

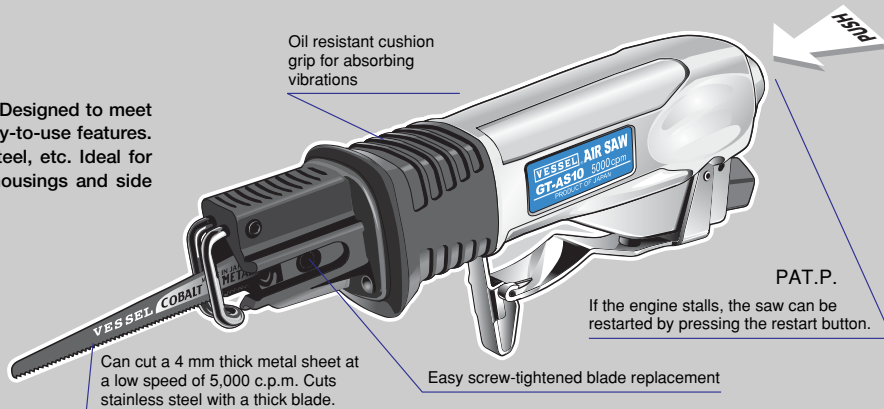
Accessories BPB-3

Model No.	Capacity mm Ordinary bolt diameter	Actual 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 kg
GT-PLRB	4~5	5~14	9,000	0.2	G 1/4	6.35	180	0.83
GT-S6MLRB	5~6	10~39	8,500	0.25	G 1/4	6.35	200	1.1
GT-S65W	6~8	4.9~68.6	7,500	0.3	Rc 1/4	6.35	210	1.33
GT-S70WK	6~8	9.8~98	7,000	0.39	Rc 1/4	6.35	219	1.3
GT-P65W	6~8	4.9~68.6	7,800	0.38	Rc 1/4	6.35	146	1.43
GT-S60CW	6~8	2.94~39.2	5,600	0.3	Rc 1/4	6.35	250	1.87
GT-P80W	8~10	14.7~137.3	7,500	0.4	Rc 1/4	6.35	163	1.89
GT-W100P II	10~12	29.4~166.7	6,500	0.39	Rc 1/4	6.35	194	2.42
GT-P14W	12~16	98~382.5	6,000	0.47	Rc 1/4	9.5	200	3.2
GT-S20RW	20	230~610	4,800	0.9	Rc 3/8	9.5	300	5.4
GT-S220W	22	196~843.4	3,200	0.7	Rc 3/8	9.5	334	6.85

• Air pressure: 0.6 MPa • Overall length: Accessories not included. • Weight: Accessories not included.

## Air Saw

High powered for strong cutting. Designed to meet site demands. Equipped with easy-to-use features. Cuts FRP, aluminum, stainless steel, etc. Ideal for automobile repairs, cutting tire housings and side steps, trimming burrs, etc.



Oil resistant cushion grip for absorbing vibrations

HSPD

PAT.P.

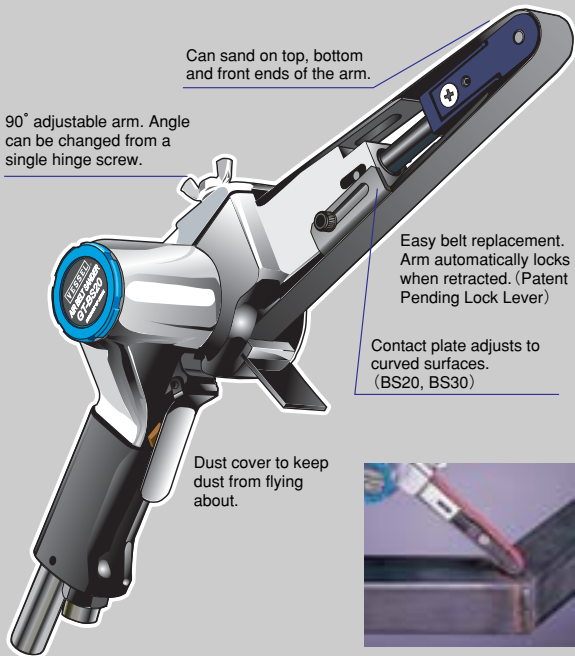
If the engine stalls, the saw can be restarted by pressing the restart button.

Can cut a 4 mm thick metal sheet at a low speed of 5,000 c.p.m. Cuts stainless steel with a thick blade.

Easy screw-tightened blade replacement

## Air Belt Sander

Designed for fieldwork: easy-to-manage, simple belt replacement, etc. User workload is reduced to improve workability. Ideal for deburring aluminum die-cast and forged parts, sanding down automobile sheets and removing rust, solder splatter, etc.



Can sand on top, bottom and front ends of the arm.

90° adjustable arm. Angle can be changed from a single hinge screw.

Easy belt replacement. Arm automatically locks when retracted. (Patent Pending Lock Lever)

Contact plate adjusts to curved surfaces. (BS20, BS30)

Dust cover to keep dust from flying about.



## Air Disk Grinder

Handy, powerful grinder designed for safety and ease of use. Spindle lock for facilitating disk replacement. Ideal for grinding/polishing metal, base finishing, removing beads, burrs, rust and paint, cutting metal rods and thin panels, finish-polishing, etc.



Equipped with a spindle lock button. Wrenches are not necessary to lock the spindle before disk replacement.

Safety throttle to protect against careless operation.

Built-in governor speed control. Increased/Decreased rotation under load and no load is stably controlled.

Exhaust port is located where exhaust does not blow on workpieces or no dust flying.

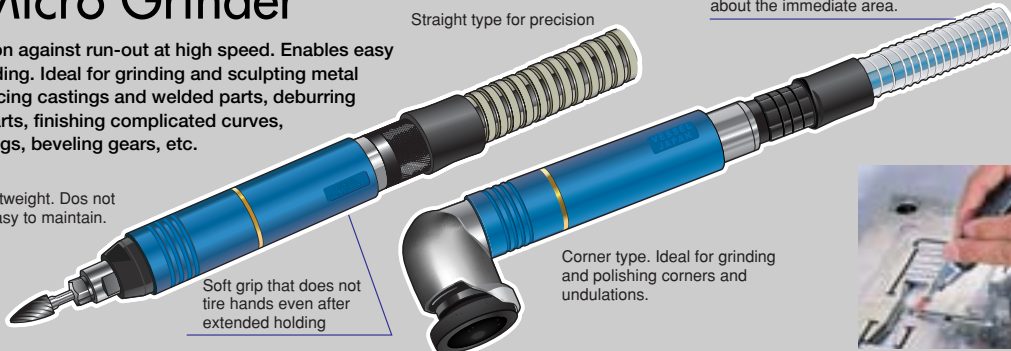
(Quick Lock Disk System.) Disk can be easily replaced without fastening tools, by attaching a purpose-specific adapter.



## Air Micro Grinder

High precision against run-out at high speed. Enables easy smooth grinding. Ideal for grinding and sculpting metal molds, surfacing castings and welded parts, deburring machined parts, finishing complicated curves, grinding linings, beveling gears, etc.

Small and lightweight. Does not retain heat. Easy to maintain.



Straight type for precision

Quiet type. Exhaust hose keeps oil and other matter from scattering about the immediate area.

Soft grip that does not tire hands even after extended holding

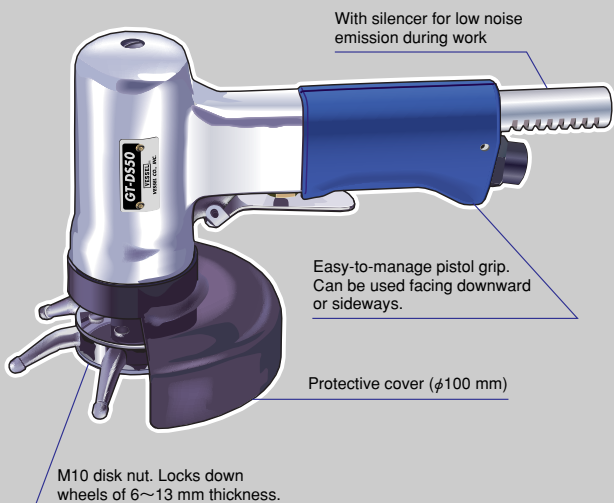
Corner type. Ideal for grinding and polishing corners and undulations.



# Air Disk Sander

Low 5,000 rpm speed ideal for sanding and polishing. High torque prevents stopping and heating even under load. Choose tool mounting between 6 mm collet and M10 disk nut. Both can be used with separately sold attachments.

Welding pre/after-processing...M10 disk nut system GT-DS50B



For deburring and polishing...φ6 mm collet chuck system GT-DS50A



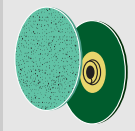
●Hammer Wheel PAT.P. Hammers away slag and spatter after welding. Special rubber for absorbing impact and kick. Does not stress the hand.



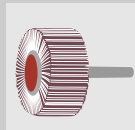
●Brush Wheel Rust-removing wheel made with 3 mm-thick abrasive grain nylon wire. Does not damage workpiece or lose wires.



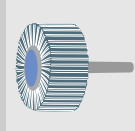
●Pitatto Holder Made of rubber. Can be used to polish curved surfaces. For Pittatto disks.



●Pitatto Disk Paper Paper is easily changed by bending.



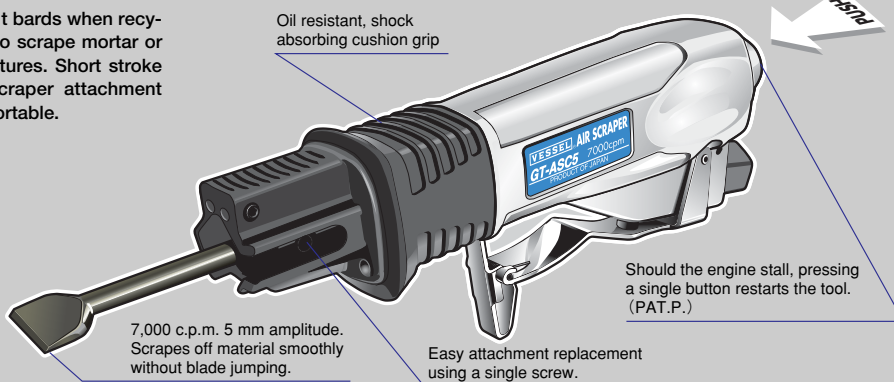
●Flap Wheel Polishes curved and flat surfaces. Follows workpiece closely to deliver even finish without clogging.



●Fiber Wheel Flexible for fitting into curved surfaces. Ideal for polishing work when over-polishing is a concern.

# Air Scraper

Use to detach IC chips from circuit boards when recycling PCs, faxes and copiers, or to scrape mortar and paint from external walls of structures. Short stroke pitch reduces jumping of the scraper attachment whereby making work more comfortable.

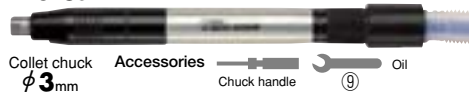


# Air Micro Die Grinders

**Air Micro Die Grinders** Capacity is listed as instant reference and depends on operation conditions. **Lightweight and Compact. Pen Holding Touch**

## For Precision Grinding

### GT-MG75S



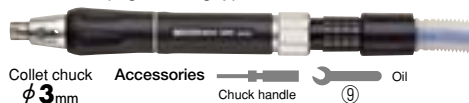
Collet chuck  $\phi$  3mm Accessories Chuck handle ⑨ Oil

### GT-MG555AR (Soft grip)



Collet chuck  $\phi$  3mm Accessories ⑤ ⑨ Oil  
OP Collet chuck ( $\phi$ 2.35mm,  $\phi$ 1/8")

### GT-MG555R (Ergonomic grip)



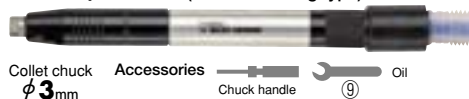
Collet chuck  $\phi$  3mm Accessories Chuck handle ⑨ Oil

### GT-MG355AR (Soft grip)



Collet chuck  $\phi$  6mm Accessories ⑪ ⑬ Oil  
OP Collet chuck ( $\phi$ 3mm,  $\phi$ 1/4",  $\phi$ 1/8")

### GT-MG555/MG555B (Reverse turning type)



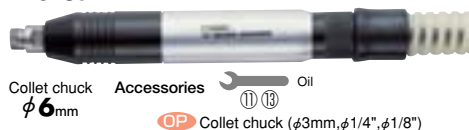
Collet chuck  $\phi$  3mm Accessories Chuck handle ⑨ Oil

### GT-MG35-12CC (Soft grip)



Collet chuck  $\phi$  3mm Accessories ⑤ ⑨ Oil

### GT-MG25S



Collet chuck  $\phi$  6mm Accessories ⑪ ⑬ Oil  
OP Collet chuck ( $\phi$ 3mm,  $\phi$ 1/4",  $\phi$ 1/8")

OP Collet chuck ( $\phi$ 2.35mm,  $\phi$ 1/8")

OP Corner attachment

**GT-MG25-12CF** (Smooth grinding/polishing at 25,000 rpm)  
**GT-MG25-12CC** (Precision grinding at 25,000 rpm)

## Flat Surface Grinding/Polishing

### GT-MG25-12CF (Soft grip)



#### Accessories

·Lap ring #60 ·Rubber holder  
Chuck handle ·Headcup #80 ·PO-ring #60 #100 #150 #240...3 pcs. each  
Oil #400 #600...1 pc. each

#### OP Corner attachments

**GT-MG35-12CC** (Precision grinding at 35,000 rpm)  
**GT-MG25-12CC** (Precision grinding at 25,000 rpm)

### GT-MG25-9CF (Soft grip)



#### Accessories

·Lap ring #60 ·Rubber holder  
Chuck handle ·Headcup #80 ·PO-ring #60 #100 #150 #240...3 pcs. each  
Oil #400 #600...1 pc. each

#### OP Corner attachments

**GT-MG25-9CC** (Precision grinding at 25,000 rpm)  
**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	Collet Chuck $\phi$ mm	
GT-MG75S	75,000	0.16	Rc 1/4	6.35	170	18.5	190	3	
GT-MG555	55,000	0.16	Rc 1/4	6.35	163	17.5	180	3	
GT-MG555SB	55,000	0.16	Rc 1/4	6.35	163	17.5	180	3	
GT-MG555R	55,000	0.16	Rc 1/4	6.35	180	20.0	220	3	
GT-MG555AR	55,000	0.245	Rc 1/4	6.35	178	24.5	260	3	
GT-MG355AR	35,000	0.285	Rc 1/4	6.35	182	29.5	435	6	
GT-MG25S	25,000	0.175	Rc 1/4	6.35	198	30.0	600	6	
GT-MG35-12CC	35,000	0.25	Rc 1/4	6.35	183	24.5	305	3	
GT-MG35-12CR	35,000	0.16	Rc 1/4	6.35	151	20.0	160	3	
GT-MG25-12CF	25,000	0.25	Rc 1/4	6.35	181	24.5	315		Tip tool installation part: M7
GT-MG25-9CF	25,000	0.25	Rc 1/4	6.35	173	24.5	310		Tip tool installation part: M7
GT-MG25-12CR	25,000	0.16	Rc 1/4	6.35	160	20.0	200		Tip tool installation part: M7
GT-MG25-9CR	25,000	0.16	Rc 1/4	6.35	143	20.0	200		Tip tool installation part: M7

·Working air pressure...0.6MPa ·Overall length...Accessories and exhaust hose parts not included. ·Weight...Accessories not included.

·With regard to GT-MG555, MG555R, MG75S and a 2.35 mm collet chuck is also prepared.

·In the main body, a 1.5m air intake hose, exhaust hose and a hose joint are attached.

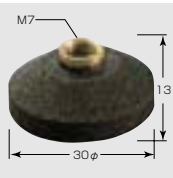
OP...Can be replaced by user. OP...Factory attached.

# Micro Air Grinder / Air Disk Grinders

## Micro Air Grinder Tip Tools for Smooth Surface Grinding and Polishing (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



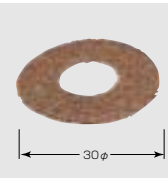
Model No.	Grit #	
<b>HC-80</b>	80	
Inner Ctn.	10 per carton	

### Rubber Holder



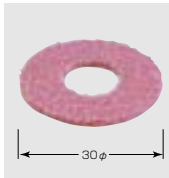
Model No.		
<b>RH-30</b>		
Inner Ctn.	10 per carton	

### PO-Ring



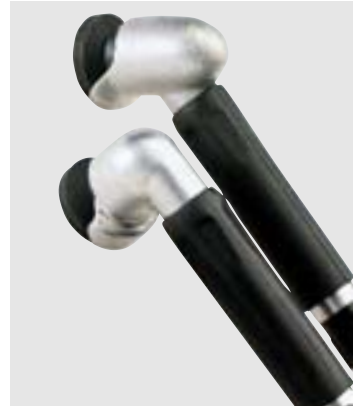
Model No.	Grit #	
<b>PR-60</b>	60	
<b>PR-100</b>	100	
<b>PR-150</b>	150	
<b>PR-240</b>	240	
<b>PR-400</b>	400	
<b>PR-600</b>	600	
Inner Ctn.	10 per carton	

### 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	
<b>LP-1000</b>	1000	
Inner Ctn.	30 per carton	

Color identification



## Air Disk Grinder

Handy and Powerful Grinding

Disk Dia. 100mm

### GT-DG100



OP Bar grip (Auxiliary handle)



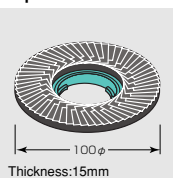
Accessories BPB-2 Quick lock adapter

Model No.	Grindstone size Outer dia. × Thickness × Hole dia. mm	Max. Circumferential Speed m/min	Working Air Pressure MPa	No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Overall Length mm	Height mm	Weight g
<b>GT-DG100</b>	100×6×15	4,300	0.6	13,500	0.7	205	92	1,390

## Air Disk Grinder Wheel (for GT-DG100)

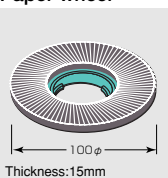
Quick Lock Disk System...Disk can be easily replaced without fastening tools, by attaching a purpose-specific adapter. Ordinary grindstones (Hole diameter 15 × Thickness 3~6 mm) can be attached by detaching the adapter.

### Paper wheel



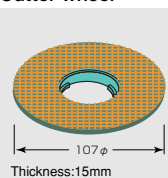
Model No.	Grit #	Use
<b>CL-P36</b>	36Z	Roughing
Inner Ctn.	5 per carton	

### Paper wheel



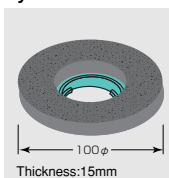
Model No.	Grit #	Use
<b>CL-P60</b>	60A	Grinding
<b>CL-P80</b>	80A	Grinding
Inner Ctn.	5 per carton	

### Cutter wheel



Model No.	Grit #	Use
<b>CL-CW</b>	—	Cutting
Inner Ctn.	5 per carton	

### Nylon wheel



Model No.	Grit #	Use
<b>CL-NW</b>	—	Rust removal
Inner Ctn.	5 per carton	



1 Quick Lock Adapter per box



# Air Disk Sanders

## Air Disk Sanders NEW

Low speed of 5000 rpm & High torque

### Pad Dia. 50mm

#### GT-DS50A

collet chuck  
φ6mm



With 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" and φ1/8")

### Disk Dia. 100mm

#### GT-DS50B

M10 disk nut



With noise reducer

#### Accessories



Protective cover  
Disk nut  
Pin wrench

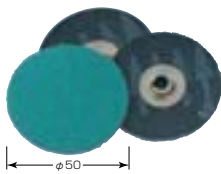
Model No.	Disk Dia. mm	No Load Speed rpm	Air Consumption N l/min.	Air Hose Joint	Air Hose Inner Dia. mm	Overall Length mm	Weight g	Tip Tool Installation Part
<b>GT-DS50A</b>	Pad dia. 50	5,000	650	Rc 1/4	6.35	211	935	Collet chuck φ6 mm
<b>GT-DS50B</b>	Disk dia. 100	5,000	650	Rc 1/4	6.35	211	1,150	Disk nut M10

•Working air pressure...0.6 MPa

## Air Disk Sander Wheels NEW

### DS50A

#### Pitatto Disk Paper (PD-P60)



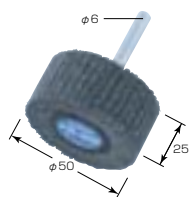
#### Pitatto Holder (PD-P6)



#### Flap Wheel (FL-60/120)



#### Fiber Wheel (FB-400/600/1000)

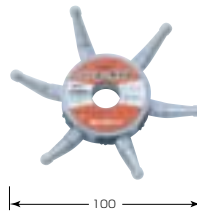


## Wheels to Remove Rust/Stains

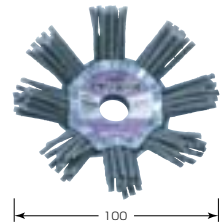
### DS50B

#### Hammer Wheel (HMW10)

PAT.P.



#### Brush Wheel (BHW10)



Model No.	Max. Circumferential Speed rpm	Material	Use	Quantity
<b>HMW10</b>	5,000	Stainless steel	Slag and spatter removal after welding, etc.	1
<b>BHW10</b>	5,000	Abrasive grain nylon	Steel plate rust removal, aluminum cast finishing, etc.	1

Model No.	Grit No.	Max. Circumferential Speed rpm	Material	Use	Quantity
<b>PD-P60</b>	Z60	20,000	Zirconia	Thin pressed plate deburring, surfacing, etc.	50
<b>PD-P6</b>	—	—	Rubber (Pad)	For Pitatto disk paper	1
<b>FL-60</b>	A60	20,000	Alumina	Deburring, spatter removal	5
<b>FL-120</b>	A120	20,000	Alumina	Cylinder lining polishing, surfacing, etc.	5
<b>FB-400</b>	400	10,000	Unwoven cloth	Dirt removal, cleaning prior to welding or plating, burn removal after welding, etc.	5
<b>FB-600</b>	600	10,000	Unwoven cloth		5
<b>FB-1000</b>	1000	10,000	Unwoven cloth		5

## Precoat Grit Wheel to remove surface for painting.

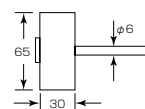
Tool for Precoat Sander

Attach to purpose-specific air sander or electric drill to use.

Mixed threadlike abrasive material inside of highly flexible nylon base, formed into a brush wheel. Beautifully sands surfaces in a short amount of time with only a little pressure applied.



**PCG-600**



Model No.	Shaft Dia.	Working Rotational Speed rpm	Comparative Sandpaper Grain	Use
<b>PCG-600</b>	φ6mm	1,000~6,000	#400~#500	Peeling lacquered topcoats, etc.

## Air Belt Sanders

For Deburring Automotive Sheet and Cans

Belt Width **12/10mm**

### GT-BS12



With noise reducer

**Accessories** BPB-2  
Sand belt #60...2 pcs  
#80...1 pc.

Belt Width **20mm**

### GT-BS20 (Aluminum roller head) GT-BS20W (Urethane roller head)



OP

Bar grip (Auxiliary handle)

With noise reducer

**Accessories** BPB-2  
Sand belt #60...2 pcs  
#80...1 pc.

Belt Width **30mm**

### GT-BS30 (Aluminum roller head) GT-BS30W (Urethane roller head)

NEW



With noise reducer

**Accessories** BPB-2  
Bar grip ...1 pc. Sand belt #60...2 pcs  
#80...1 pc.

### Roller Heads



**Aluminum**  
(GT-BS20/BS30)  
For heavy-duty sanding.



**Urethane.**  
(GT-BS20W/30W)  
For undulated and curved surfaces.

Model No.	Applicable Belt Size	Belt Circumferential Speed m/min	Working Air Pressure MPa	No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Air Hose Joint	Overall Length mm	Weight g
GT-BS12	12/10mm×330mm	1,100	0.6	17,000	0.52	Rc 1/4	311	840
GT-BS20 (W)	20mm×520mm	2,500	0.6	16,000	0.6	Rc 1/4	398	1,300
GT-BS30 (W)	30mm×540mm	2,040	0.6	13,000	0.72	Rc 1/4	374	1,930

Total length: When mounted with belt.

### Ceramic Endless Belt (For GT-BS12)

Attach to air belt sander to use. Made with ceramic grain. High grinding power and long lasting.



Quantity: 50

Model No.	Size	Grit No.
CB12-60	12mm×330mm	# 60
CB12-80	12mm×330mm	# 80
CB12-120	12mm×330mm	# 120

### Zirconia Endless Belt (For GT-BS20)

Attach to air belt sander to use. Tough abrasive grain produces a good sanding effect. Improves sanding performance



Quantity: 20

Model No.	Size	Grit No.
ZB20-40	20mm×520mm	# 40
ZB20-60	20mm×520mm	# 60
ZB20-80	20mm×520mm	# 80

### Zirconia Endless Belt (For GT-BS30)

NEW

Attach to air belt sander to use. Tough abrasive grain produces a good sanding effect. Improves sanding performance.



Quantity: 10

Model No.	Size	Grit No.
ZB30-40	30mm×540mm	# 40
ZB30-60	30mm×540mm	# 60
ZB30-80	30mm×540mm	# 80

## Air Scraper

NEW

For Scraping Off Various Materials

### GT-ASC5

With noise reducer  
※ Scraper sold separately



**Accessories**



Model No.	Working Air Pressure MPa	Stroke Speed c.p.m.	Air Consumption m <sup>3</sup> /min	Stroke mm	Air Hose Joint	Overall Length mm	Weight g
GT-ASC5	0.6	7,000	0.28	5	Rc 1/4	195.5	810

### Scrapers (For GT-ASC5)

NEW

#### ASC-25-8



#### ASC-50-8



Model No.	Blade Width	Shank Dia.	Use
ASC-25-8	25mm	φ8mm	for IC chip
ASC-50-8	50mm	φ8mm	for IC chip, out wall

# Air Saws

## Air Saws

PAT.P. For Metal working and Cutting

### Cutting Capacity 4mm Metal Sheet

#### GT-AS10



With noise reducer

#### Accessories



Blade 32-tooth thin blade ... ASB-32T  
32-tooth thick blade ... ASB-32H  
24-tooth thick blade ... ASB-24H  
(1pc. each)

### Cutting Capacity 1.6mm Metal Sheet

#### GT-AS100

NEW



#### Accessories



32-tooth standard blade ... ASB-32 2 pcs

Model No.	Cutting Capacity	Working Air Pressure MPa	Stroke speed cpm	Air Consumption m <sup>3</sup> /min	Stroke mm	Air Hose Joint	Overall Length mm	Weight g
GT-AS10	Steel...4mm	0.6	5,000	0.28	10	Rc 1/4	195.5	870
GT-AS100	Steel...1.6/Wood...55mm	0.6	10,000	0.34	10	Rc 1/4	170	570

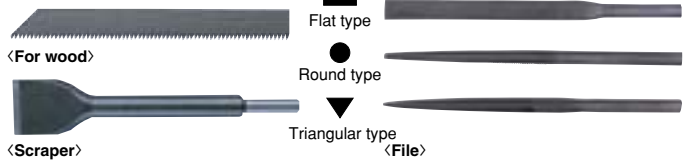
Cutting capacity: GT-AS10: When used with a No. ASB-32H blade GT-AS100: When used with a No. ASB-32 blade Overall Length, Weight: Accessories not included.

## Air Saw Blades (For GT-AS10/AS100) NEW

Attach to air saw tips for cutting.



<For steel>



<For wood>

<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
ASB-17	For wood 17 teeth	Cutting resin and wood	5
ASB-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

## Air Saw & Scraper Building Renovation Set NEW

### AS100KK



Handy storage and carrying case



#### Set Content

- Air Saw ... GT-AS100 ... 1 pc.
- Steel blade ... ASB-32 ... 2 pcs
- Wood blade ... ASB-17 ... 3 pcs
- Scraper ... ASC-25-5 ... 1 pc.
- Air Coupling (Concent) ... BPB-2 ... 1 pc.
- Hex key wrench ... 2, 4 mm A/F ... 1 pc. each



#### Uses

Cutting mud wall, corner operation such as cutting copper edge, cutting wall, floor, vinyl chloride pipe and iron door, chipping cement mortar, etc.

# Air Ratchet Wrenches/Air Drills

## Air Ratchet Wrenches

Capacity is listed as instant reference and depends on operation conditions. **For Limited Space Fastening**

The VESSEL Air Ratchet Wrench efficiently conducts fastening work in narrow place. Since this is a tightening method which makes use of a ratchet, fine adjustments in power can be made.

### Features

- Compact, lightweight and heavy duty strong type
- Reverse turn can be easily conducted merely by turning the reverse lever or dial in the head.
- As for the handle, it is furnished with a rubber grip, fits well in the hand, and is comfortable.

### Applications

Ideals for attachment/removal work on automobile spark plugs, water pumps, oil pans, radiators, motors, and air conditioners, as well as for other automotive sheeting work.



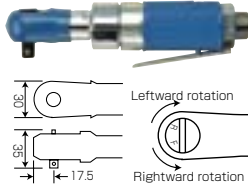
### Machine Bolt Dia. 10mm

#### GT-R10M

Mini type

Square drive size  
**9.5mm**  
(Ball-lock)

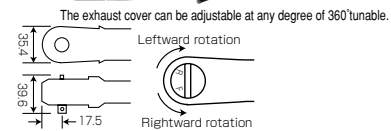
Accessories



#### GT-R10

Square drive size  
**9.5mm**  
(Ball-lock)

Accessories



Model No.	Capacity mm Ordinary Bolt Dia.	No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Air Hose Joint	Air Hose Inner Dia. mm	Overall Length mm	Weight g
GT-R10M	10	250	0.3	Rc 1/4	6.35	170	500
GT-R10	10	160	0.4	Rc 1/4	6.35	297	1,090

• Working air pressure ... 0.6 MPa • Air hose inner dia. ... 6.35 mm • Overall length ... Accessories not included. • Weight ... Accessories not included.

## Air Drills

Capacity is listed as instant reference and depends on operation conditions. **For Small Hole Drilling**

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.

### Features

- Compact, lightweight, and strong; a design which adequately handles continuous operation.
- Since this uses a rear exhaust system, there is no dispersion of dust.
- With attachment of a muffling device and a quiet exhaust noise, contribution is made to an improved work environment.
- GT-D80-20K and GT-D100-15K have keyless chucks that enable drill replacement without a chuck handle.

### Applications

Suitable for drilling holes of every small bore, and in such uses as sash processing, automobile assembly and equipping, setting, piping work, assembly of light electric appliances, carpentry, construction related work and etc.



### Drill Hole $\phi$ 6mm

#### GT-D60-26



### Drill Hole $\phi$ 8mm

#### GT-D80-20K Keyless chuck

#### GT-D80-20



### Drill Hole $\phi$ 10mm

#### GT-D100-15K Keyless chuck

#### GT-D100-15



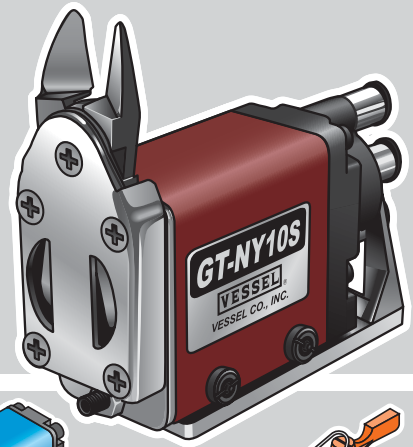
Model No.	Steel Plate Drilling Capacity $\phi$ mm	No Load Speed rpm	Air Consumption m <sup>3</sup> /min	Air Hose Joint	Air Hose Inner Dia. mm	Overall Length mm	Weight g	Chuck Size mm
GT-D60-26	6	2,600	0.2	Rc 1/4	6.35	163	830	6.0
GT-D80-20	8	2,000	0.35	Rc 1/4	6.35	165	940	8.0
GT-D80-20K	8	2,000	0.35	Rc 1/4	6.35	171	960	8.0
GT-D100-15	10	1,500	0.54	Rc 1/4	6.35	189	1,280	10.0
GT-D100-15K	10	1,500	0.54	Rc 1/4	6.35	195	1,300	10.0

• Working air pressure ... 0.6 MPa • Air hose inner dia. ... 6.35 mm • Overall length ... Accessories not included. • Weight ... Accessories not included.

# Air Nippers

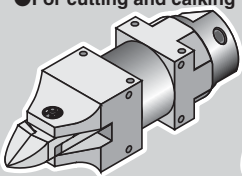
**Cut, Crimp, Calk, Grab, Crush, Bend, Punch, Expand ...**

And, that is not all you can do with pneumatic nippers. There are many, many more uses you cannot even imagine. Vessel offers a wide lineup of pneumatic nippers and matching blades including custom-made blades in lot orders of 1 up. Vessel has the nippers, blades and perfect combinations for all kinds of jobs.



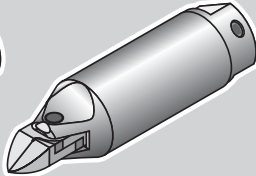
## ■ Nippers

### ● For cutting and calking



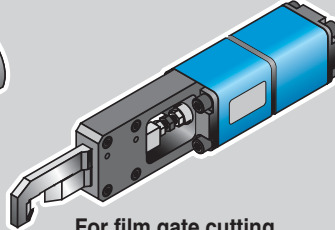
With screw holes on 5 faces for machine mounting

Square Air Nippers  
NS Series P.111



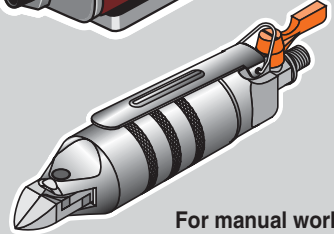
Can be carefully angled when mounting on machine

Air Nippers without Round Lever  
NR Series P.112



For film gate cutting

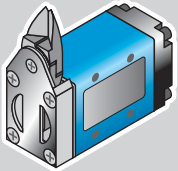
Thrust-Cut Air Nipper  
NK10 P.117



For manual work

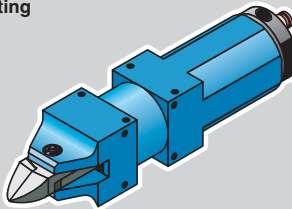
Air Nippers  
N Series P.113

### ● For resin gate cutting



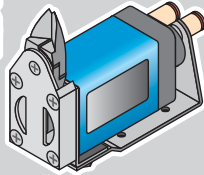
Compact body for machine jig mounting

F-Type Air Nippers  
NF Series P.115



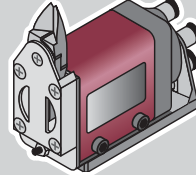
Ideal for continuous work

Double Action Air Nippers & Air Scissors  
NW/HW Series P.115



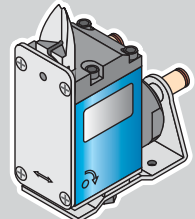
Horizontal type with sliding mechanism

Horizontal Sliding Air Nippers  
NY Series P.116



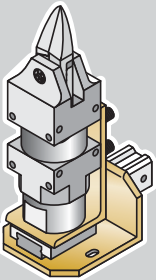
Double action with sliding mechanism

Sliding Double Action Air Nippers  
NY10S P.117



Vertical type with sliding mechanism

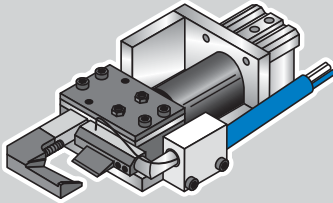
Vertical Sliding Air Nippers  
NT Series P.118



For large workpieces. With sliding mechanism.

Bracket-Type Sliding Air Nippers  
NB Series P.120

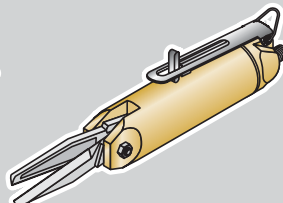
### ● Heat Air Nippers



Cuts glass fiber-reinforced resin and hard resin without stretching or cracking.

Heat Air Nippers  
NTH/NKH Series P.121

### ● Air Scissors



For difficult-to-cut textiles

Air Scissors  
H/HS Series P.113

## ■ Peripherals

● Cuts multiple workpieces at a time.

Gate Cutting Table ACT-30  
P.123

● For adjusting sliding and cutting timing

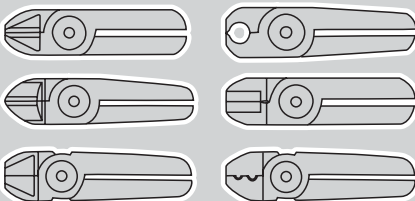
Timing Controller TC-02  
P.123

● Increased pressure

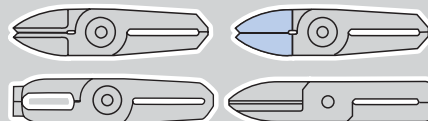
Booster Unit P Series  
P.113

## ■ Blade

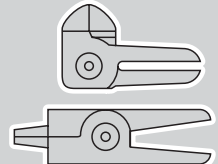
### ● For cutting and calking P.114



### ● For resin gate cutting P.119



### ● Custom-Made Blades P.124



Orders for 1 up accepted!



# Air Nippers For Cutting And Calking

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

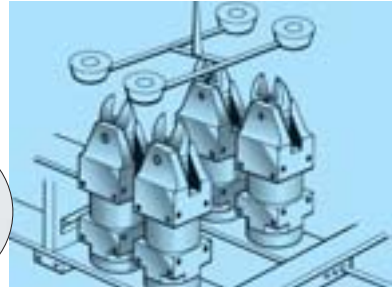
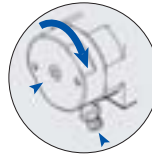
Solution from Wider Selection

### Square Air Nippers

NS Series

### Optimum for mounting to automatic machine and jig

- The screw holes are provided on five surfaces; therefore, mounting to the machine is easy.
- Lightweight and compact type enabling easy-handling and simple setting is possible to nip many pieces (quantity) at a time.  
Also applicable with complicated degating machine.
- Further, together with cutting of plastic moldings, the wire cutting with winding machine, etc. and other working in wide range using special blade can be taken.
- The main body end is 180°- turned. Further, two suction (intake) ports are provided, and so the suction position can be optionally changed depending on the mounting place.
- Can be customized for blade aperture adjustment or single stationary blade specifications.



#### GT-NS3



#### GT-NS5



#### GT-NS20

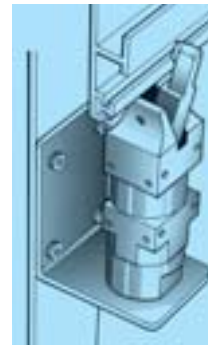
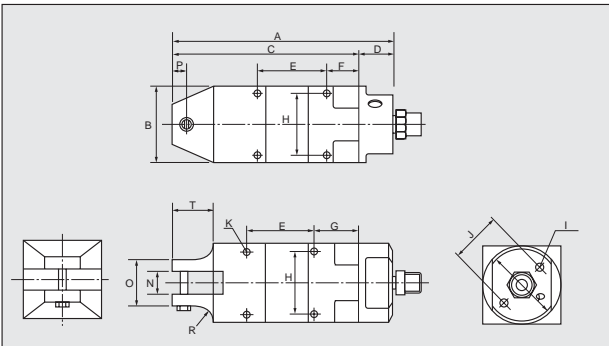


Blade is optional. See p. 114. Use three-port solenoid valve and air foot valve (three-way).

Model No.	Capacity $\phi$ mm					Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Air Pressure MPa	Overall Length mm	Frame Dia. mm	Weight g
	Copper	Steel	Piano Wire	Plastics	Hard Plastics						
GT-NS2	1.0	0.5				35	264.6	0.4~0.5	109	20	85
GT-NS3	1.0	0.5	0.2	2.0		45	294	0.4~0.5	110	23	95
GT-NS5	1.0	0.5	0.3	2.0		64	392	0.4~0.5	94	30	135
GT-NS7	1.6	1.0	0.5	3.0	2.0	116	490	0.4~0.5	113	36	215
GT-NS10L	1.8	1.2		4.0	2.6	116	588	0.4~0.6	113	36	215
GT-NS20	2.6	2.0	1.0	7.0	5.0	230	1372	0.5~0.6	129	45	370
GT-NS30	3.3	2.8	1.2	10.0	6.5	<sup>1.25/</sup> <sub>2mm<sup>2</sup></sub> 584	2744	0.5~0.6	170	56	685

\*Air hose joint: R 1/4 (Body Rc 1/8) Air intake port screw diameter of NS2: Rc 1/8. \*Air hose bore diameter: 5mm \*Overall length/Weight: Accessories not included.

Before mounting of exclusive/automatic machines, check the following product dimensions.  
(Frame O.D., screw dia. (screw to screw) dimensions, etc.)



(mm)

Model No.	A	B	C	D	E	F	G	H	I	J	K	N	O	P	Q	R	T
GT-NS2	109	20	88	21	40	19	24	16	—	—	M3 Depth4	7	20	6	20	—	—
GT-NS3	110	23	89	21	40	19	24	19	M3 Depth8	17	M3 Depth3.5	7	23	7	23	—	—
GT-NS5	94	30	74	20	30	14	19	24	M4 Depth10	20	M3 Depth5	7	23	7	30	14	18
GT-NS7	113	36	93	20	30	18	23	28	M4 Depth10	24	M4 Depth5.5	9	23	7	36	14	23
GT-NS10L	113	36	93	20	30	18	23	28	M4 Depth10	24	M4 Depth5.5	12	26	7	36	14	23
GT-NS20	129	45	109	20	40	19	24	36	M5 Depth12	30	M4 Depth7	12	26	9	45	14	24
GT-NS30	170	56	150	20	60	20	30	46	M6 Depth12	40	M5 Depth10	17	36	15	56	14	35

# Air Nippers For Cutting And Caulking

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

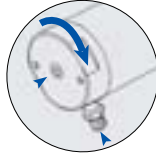
Solution from Wider Selection

### Air Nipper Round-Type without Lever

NR Series

#### Mounting at any angle

- Because the main body is round, the turning angle can be finely adjusted when mounted.
  - Ideal for cutting the sprue gate after mounted on the take-out arm or the holder on the chucking plate.
  - The main body end is 180°-turned.
- Further, because two suction (intake) ports are provided, the suction position can be optionally changed depending on the mounting plate.



OP

- Slide  
NR10LST (For GT-NR10L)  
NR20ST (For GT-NR20)  
NR30ST (For GT-NR30)



Mounted on slide

GT-NR5

GT-NR20

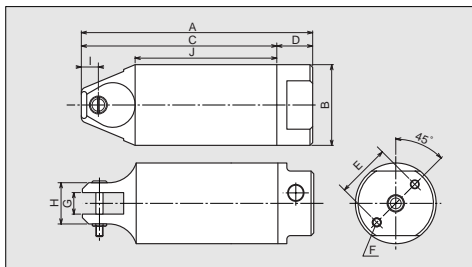
GT-NR30



Blade is optional. See p. 114. Use three-port solenoid valve and air foot valve (three-way).

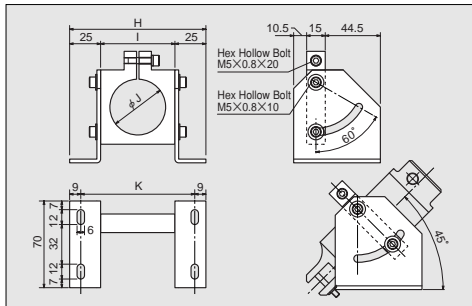
Model No.	Capacity $\phi$ mm					Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Air Pressure MPa	Overall Length mm	Frame Dia. mm	Weight g
	Copper	Steel	Plano Wire	Plastics	Hard Plastics Bare Terminal						
GT-NR3	1.0	0.5	0.2	2.0		45	294	0.4~0.5	110	23	70
GT-NR5	1.0	0.5	0.3	2.0		64	392	0.4~0.5	94	30	110
GT-NR7	1.6	1.0	0.5	3.0	2.0	116	490	0.4~0.5	113	34	150
GT-NR10L	1.8	1.2		4.0	2.6	116	588	0.4~0.6	113	36	215
GT-NR20	2.6	2.0	1.0	7.0	5.0	230	1372	0.5~0.6	129	45	280
GT-NR30	3.3	2.8	1.2	10.0	6.5	584	2744	0.5~0.6	165	56	505
GT-NR50	5.5	4.5	1.6	12.0	6.5	1,170	4704	0.5~0.6	222	75	1,190

• Hose coupling: R 1/4 (Body Rc 1/8) • Air hose inner dia.: 5mm • Overall length/Weight: Accessories not included.



Model No.	A	B	C	D	E	F	G	H	I	J
GT-NR3	110	23	89	21	17	M3 Depth8	7	14	7	68
GT-NR5	94	30	74	20	20	M4 Depth10	7	17	7	46
GT-NR7	113	34	93	20	22	M4 Depth10	9	17	7	62
GT-NR10L	113	36	93	20	24	M4 Depth10	12	20	7	62
GT-NR20	129	45	109	20	30	M5 Depth12	12	23	9.5	79
GT-NR30	165	56	145	20	40	M6 Depth12	17	30	10.5	106
GT-NR50	222	75	200	22	50	M8 Depth12	25	43	15	130

#### Dimensions of Free Angle Rack



Model No.	H	I	J	K	Weight g
NR10LST	102	52	36	84	335
NR20ST	110	60	45	92	385
NR30ST	130	80	56	112	535

# Air Nippers For Cutting And Caulking

## Hand Held Air Nippers

## N Series

For every working such as punching, crimping, bending, cutting, etc. Also, it is effective for labor reduction. Together with effective working using a manual nipper.

- Lever system operation. Knurling main body is safety design for preventing from slip.
- N20, N30 and N50 have the air cock.
- Wide variation from N3 to N50 available. Combination with various blades allows wide range use.



GT-N5



GT-N10



GT-N20



Blade is optional. See p. 114.

Model No.	Capacity φ mm					Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Air Pressure MPa	Overall Length mm	Frame Dia. mm	Weight g
	Copper	Steel	Piano Wire	Plastics	Hard Plastics Bare Terminal						
GT-N3	1.0	0.5	0.2	2.0		45	294	0.4~0.5	112	23	95
GT-N5	1.0	0.5	0.3	2.0		64	392	0.4~0.5	103	30	135
GT-N7	1.6	1.0	0.5	3.0	2.0	116	490	0.4~0.5	123	34	180
GT-N10	1.8	1.2	0.5	4.0	2.6	116	588	0.4~0.5	132	34	185
GT-N12	2.3	1.7	0.6	4.5	4.0	116	735	0.5~0.6	142	36	210
GT-N20	2.6	2.0	1.0	7.0	5.0	230	1372	0.5~0.6	156	45	375
GT-N30	3.3	2.8	1.2	10.0	6.5	584	2744	0.5~0.6	193	56	625
GT-N50	5.5	4.5	1.6			1,170	4704	0.5~0.6	237	75	1,220

• Hose coupling: R 1/4 • Air hose inner dia.: 5mm • Overall length: Accessories, Hunger not included. • Weight: Accessories not included.

## Powerful Intensifiers (With Extra pressure Booster)

## P Series

This unit is to be used in case the originally required pressure is not obtainable by the limit of space and air pressure.

In following cases, the intensifier (Booster) can be attached to increase the pressure.

- In case the pressure is lack with specified air pressure.
- In case originally required pressure is not available due to the use of below specified air pressure.
- In case originally required pressure is not obtainable because cutting position is apart from blade supporting point (special blade, etc.).
- In case the model with large outside dia. (main body) is not used because of space problem.

Example of attaching **GT-NR10L+P10L**



P-10L

Example of attaching **GT-N20+P20**



P-20

Example of attaching **GT-NS30+P30**



P-30

Model No.	Applicable for	Capacity φ mm				Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Overall Length mm	Frame Dia. mm	Weight g
		Copper	Steel	Piano Wire	Plastics Hard Plastics					
P-10L	NS10L/NR10L/N12	2.6	1.6	5.0	4.0	223	980	71	36	115
P-20	N20/NS20/NR20	3.0	2.2	8.0	6.0	508	2254	87	45	215
P-30	N30/NS30/NR30	4.8	4.0	13.0	7.0	956	4410	92	56	330
P-50	N50/NR50	6.5	5.5	2.0		2670	7742	133	75	840

•Above figures of overall length and the weight are defined for the extra booster specs only. And these figures in the installation.

## Air Scissors

## H Series

Assured cutting even with difficult-to-cut textiles

- Cuts difficult-to-cut textiles including carbon fiber, glass fiber, aramid fiber, fiber-reinforced rubber, soft plastic panel, fishing gut, optical fiber sheathing, etc.
- Micro-corrugated edge blade (GT-H120K excluded). Cuts assuredly in the targeted point without slipping or sliding. Made of hard steel alloy for outstanding durability.

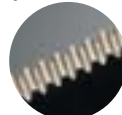
GT-H30 Double round movable blades



GT-HS30 Double square movable blades



Enlarged view of blade edge



GT-H120K Single round stationary blade specification



GT-H12K Small lightweight type with single round stationary blade



Model No.	Capacity (max) mm	Air Consumption cm <sup>3</sup> /str.	Air Pressure MPa	Overall Length (with Blade) mm	Weight (with Blade) 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 15X0.5t	116	0.5~0.6	211	340
GT-HS30	Kevlar t=1	584	0.3	260	970

### Blades specifications

Model No.	Applicable Nippers	Blade Shape	Blade Aperture mm	Effective Blade Cutting Length mm	Weight g
H30ME	H30/HS30	Scissors type	26	50	280
H30MEL			34	67	285
H12ME30K	H12K	Serrated micro edge	17	28	56
H120SK			H120K	Scissors type	15

•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.



CAUTION...Please be sure to read through "For the safety use of the tools" on page 135-136 of this catalog.



# Air Nippers For Resin Gate

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

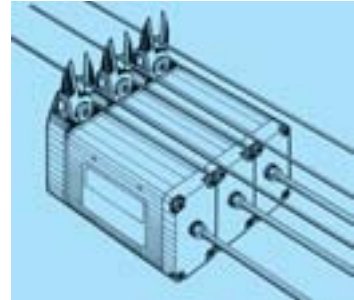
Solution from Wider Selection

### Type-F Air Nippers

NF Series

#### Mounting to gate cutting device/automatic machine

- Lightweight and compact size enabling easy setting at small space.
- Three surfaces have screw holes provided, thereby allowing simple mounting to automatic machine and others.
- When the hose nipple is detached, M5 tube couplings can be attached.



Blade is optional. Note that forward and backward-facing blades are available. For details, see p. 119. Use three-port solenoid valve and air foot valve (three-way).

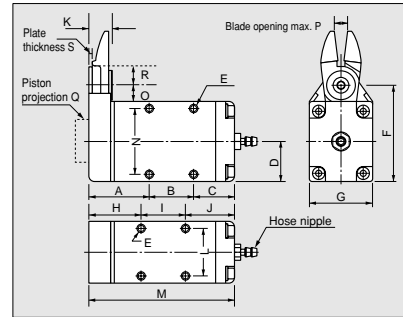
Model No.	Capacity $\phi$ mm			Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Air Pressure MPa	Weight g
	ABS Plastics	Copper	Steel				
GT-NF05	3.0	1.6	1.0	43	343	0.4~0.5	101
GT-NF10	3.5	1.7	1.1	63	490	0.4~0.5	143
GT-NF15	4.0	1.8	1.2	128	784	0.4~0.5	219

\* Air hose inner dia. ...  $\phi$  2 mm

For mounting of exclusive/automatic machines, check the product dimensions.

Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
GT-NF05	25.9	17	17	15.5	M3	39.5	23	21.9	17	21	8.6	18	59.9	26	8.5	4	3	8	1.6
GT-NF10	27.1	20	18	18	M3.5	43.5	28	23.1	20	22	8.8	22	65.1	30	7.6	6	5	8	1.6
GT-NF15	29	25	19	20.5	M4	48.5	33	25	25	23	10.2	26	73	34	7.5	8	5	9	2

※ Blade opening max. P is the dimension adjusted for standard blade (AJ type). Mounting screw for NF10 (M3.5) is regarded as spare part.



### Double Action air Nippers/Air Scissors

Patented

NW/HW Series

- Optimum for mounting to automatic machine.
- There is no return spring or blade spring on the body, so spring replacement is unnecessary. Work proceeds uninterrupted and more efficiently.
- Free changeable shot speed

#### GT-NWR20

Double action air nipper (Round type, w/o lever)



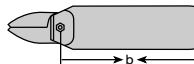
#### GT-HWR1

Double action air scissors (Round type, w/o lever)



#### GT-HWS1

Double action air scissors (Square type)



Blades are optional.

Use four port solenoid valve and air foot valve (4-way)

Model No.	Capacity $\phi$ mm			Air Consumption cm <sup>3</sup> /Str.	Applied Pressure N	Air Pressure MPa	b mm	Body Diameter mm	Weight g
	Copper	Steel	ABS Plastics						
<b>Double Action Air Nipper (Round Type without Lever)</b>									
GT-NWR10	1.8	1.2	4.0	116	588	0.4~0.5	146	36	280
GT-NWR20	2.6	2.0	6.5	230	1372	0.5~0.6	165	45	523
GT-NWR30	3.3	2.8	9.5	584	2744	0.5~0.6	216	56	980
<b>Double Action Air Nipper (Square Type)</b>									
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	356
GT-NWS20	2.6	2.0	6.5	230	1372	0.5~0.6	165	45	610
<b>Double Action Air Scissors (Round Type without Lever)</b>									
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
<b>Double Action Air Scissors (Square Type)</b>									
GT-HWS1	1.0	0.5	—	45	294	0.4~0.5	95	23×20	116
GT-HWS10	1.8	1.2	—	116	588	0.4~0.5	146	36	356

※ For installation dimensions of the GT-NWR10, 20 and 30, and NWS10 and 20, contact Vessel.

#### GT-NWS20

Double action air nipper (Square type)



#### Applicable Blade Specifications

Model No.	Blade opening mm	Cutting blade effective length mm	A mm	Weight g
<b>For Double Action Air Nipper</b>				
<b>For GT-NWS1</b>				
NW1BJ	3.5	10.5	20	16
<b>For GT-NWR10/NWS10</b>				
NW10AJ	5.0	14	30	76
NW10BJ	5.0	14	30	76
<b>For GT-NWR20/NWS20</b>				
NW20AJ	8.0	21.5	40	142
NW20BJ	8.0	21.5	40	142
NW20BA	8.0	21.5	35	142
<b>For GT-NWR30</b>				
NW30AJ	11.0	29.5	55	368
NW30BJ	11.0	29.5	55	368
<b>For Double Action Air Scissors</b>				
<b>For GT-HWR1/HWS1</b>				
HW1J	3.0	10	25	16
<b>For GT-HWS10</b>				
HW10J	5.0	28	40	76



# Air Nippers For Resin Degating

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

Solution from Wider Selection

Slide-Off Air Nipper Horizontal-Type Patented

NY Series

### Horizontal slide type enabling effective use of space Convenient for mounting to chuck plate

- Small and Lightweight type. It is suitable for mounting of automatic machine, because main body height is low. Operation of chuck panel is not interrupted even when work is taken out.
- Slide stroke can be adjusted. (0-3 mm)
- Slide part has no looseness, and has good durability.
- External surface of main body is beautiful and excellent in rust prevention (Blue alumite finish).
- Tube fitting and hose nipple types available, enabling one-touch connection of air hose.
- Blade opening control function is to be provided by special order.

With hose nipple



With tube fitting



GT-NY05



GT-NY10



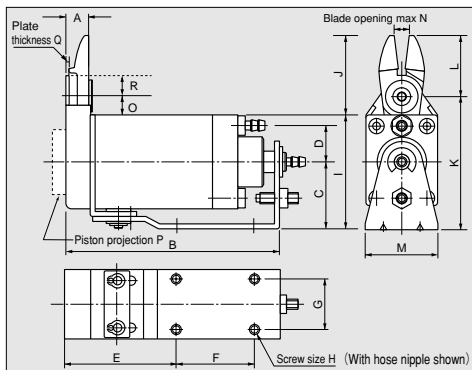
GT-NY15



GT-NY25

Blade is optional. Note that forward and backward-facing blades are available. For details, see p. 119. Use with a three-port solenoid valve or timing controller.

Model No.	Capacity $\phi$ mm ABS Plastics	Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Air Pressure MPa	Weight g	Slide Direction/ Distance mm	Spec. & Size of the Hose Port
GT-NY05	3.0	48	343	0.4~0.5	155	Pull 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NY05R	3.0	48	343	0.4~0.5	155	Push 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NY05-4	3.0	48	343	0.4~0.5	155	Pull 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NY05R-4	3.0	48	343	0.4~0.5	155	Push 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NY10	3.5	68	490	0.4~0.5	210	Pull 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NY10R	3.5	68	490	0.4~0.5	210	Push 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NY10-4	3.5	68	490	0.4~0.5	210	Pull 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NY10R-4	3.5	68	490	0.4~0.5	210	Push 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NY15	4.0	136	784	0.4~0.5	319	Pull 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NY15R	4.0	136	784	0.4~0.5	319	Push 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NY15-4	4.0	136	784	0.4~0.5	319	Pull 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NY15R-4	4.0	136	784	0.4~0.5	319	Push 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NY25	5.0	184	980	0.5~0.6	580	Pull 0~5	W/hose nipple Hose I.D. $\phi$ 4 mm
GT-NY25R	5.0	184	980	0.5~0.6	580	Push 0~5	W/hose nipple Hose I.D. $\phi$ 4 mm
GT-NY25-6	5.0	184	980	0.5~0.6	580	Pull 0~5	W/tube fitting Hose I.D. $\phi$ 4 mm $\times$ O.D. $\phi$ 6 mm
GT-NY25R-6	5.0	184	980	0.5~0.6	580	Push 0~5	W/tube fitting Hose I.D. $\phi$ 4 mm $\times$ O.D. $\phi$ 6 mm



For mounting of exclusive, automatic machines, check the product dimensions. (mm)

Model No.	A	B	C	D	E	F	G	H	I	J
GT-NY05	8.6	75.9	21.6	13.3	40.9	25	15	M4	39.1	30.5
GT-NY10	8.8	82.1	26.1	13.8	42.1	30	20	M4	44	31.6
GT-NY15	10.2	93	30	16	48	35	25	M4	50.5	34.5
GT-NY25	12.5	108.5	35	18.5	54.5	40	30	M5	58.5	41.5

Model No.	K	L	M	N	O	P	Q	R
GT-NY05	47.6	22	23	4	8.5	3	1.6	8
GT-NY10	51.6	24	28	6	7.6	5	1.6	8
GT-NY15	58	27	33	8	7.5	5	2	9
GT-NY25	69	31	42	9	10.5	2	2.5	10

※ Blade length L and opening Ma. N are the dimension adjusted for standard blade (AJ type).

# Air Nippers For Resin Degating

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

Solution from Wider Selection

### Double Action Sliding Air Nipper

NY10S

### Gate Cutting at Accurate Timing, Precise Positioning and Stable Cuts Every Time

- 2-port double action slide. Assured smooth operation.
- Can get close to workpieces to cut.
- Precise positioning for gate cuts owing to a V-groove slide.
- Slide stroke can be freely set. (0~3.5 mm)



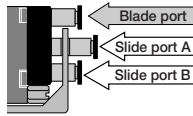
GT-NY10S

With tube fitting



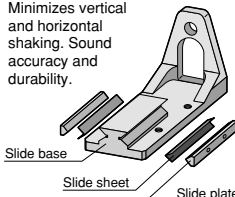
#### 2-Port Double Action Slide

With 2 independent ports for forward and reverse sliding, operation is smooth every time.



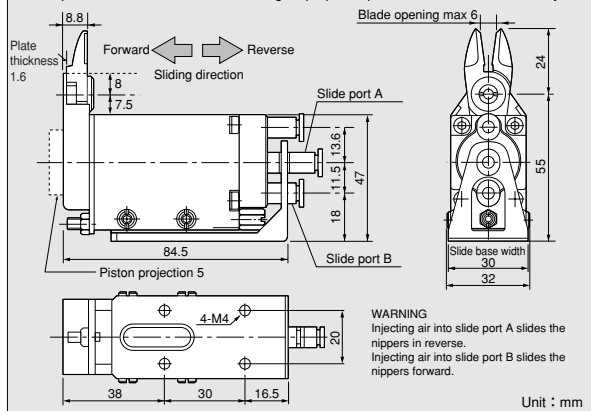
#### V-Groove Slide

Minimizes vertical and horizontal shaking. Sound accuracy and durability.



PAT.P

Check product dimensions before installing on purpose-specific or automated machinery.



Blade is optional. Note that forward and backward-facing blades are available. For details, see p. 119. Use with a four-port solenoid valve.

Model No.	Capacity φ mm ABS Plastics	Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Air Pressure MPa	Weight g	Slide Distance mm	Spec. & Size of the Hose Port
GT-NY10S	3.5	68	500	0.4~0.5	300	0~3.5	W/tube fitting Hose I.D. φ 2 mm × O.D. φ 4 mm

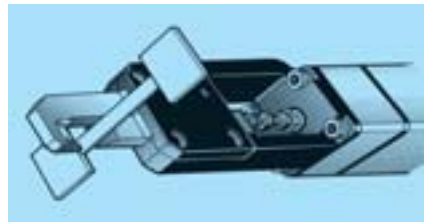
### Thrust-Cut Air Nipper

Patented

NK10

### Ideal for cutting (fixed dimensions) of film gate/coil wire

- Cutting edge (surface) is clean and not irregular, because the cutting can be made from thin side of film gate.
- Blade opening can be adjusted from 0 to 12 mm
- Bracket (optional) mounting helps for easy machine mounting.



Use three port solenoid valve and air foot valve (three way).

#### GT-NK10



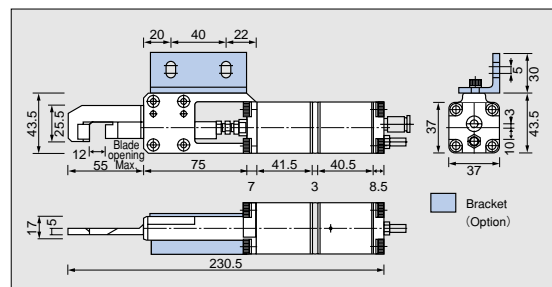
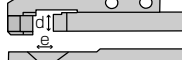
Model No.	Cutting Capacity (ABS) φmm	Air Consumption cm <sup>3</sup> /str.	Air Pressure MPa	Weight g	Applied Pressure N
GT-NK10	5	110	0.4~0.5	800	735

- Hose Coupling: I.D. φ 4 × O.D. φ 6 mm
- Piston stroke...Max.12 mm

#### Blade (Attached to main body)

Model No.	Material	Blade Shape	Weight g
NK10AJ	Special alloy steel	For plastic (knife type)	96

- d: Cutting blade effective length 10.3 mm
- e: Blade opening Max. 12mm



# Air Nippers For Resin Degating

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

Solution from Wider Selection

Slide-Off Air Nipper Vertical-type Patented

NT Series

Gate cutting work by mounting to gate cutting robot  
Excellent finish accuracy by cutting closer to work

- Blade opening can be adjusted optionally.
- Compact size. Especially, NT03 has 19 mm width (Industry's smallest size). It meets fully even if gate pitch is 20 mm.
- Slide stroke can be adjusted (0-3 mm, 0-8 mm for NT20). Slide part has no looseness, and has good durability.
- External surface of main body is beautiful and excellent in rust prevention (Blue alumite finish).
- Tube fitting and Hose nipple types available, enabling one-touch connection of air hose.
- Blade opening is adjustable.



GT-NT03



GT-NT05



GT-NT10



GT-NT20

With hose nipple

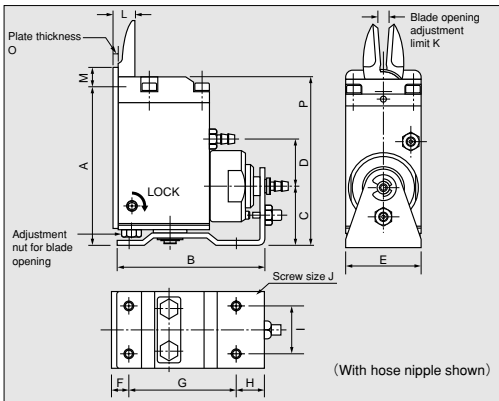


With tube fitting



Blade is optional. Note that forward and backward-facing blades are available. For details, see p. 111. Use with a three-port solenoid valve or timing controller.

Model No.	Capacity $\phi$ mm ABS Plastics	Air Consumption cm <sup>3</sup> /str.	Applied Pressure N	Air Pressure MPa	Weight g	Slide Direction/ Distance mm	Spec. & Size of the Hose Port
GT-NT03	1.5	27	147	0.4~0.5	178	Pull 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NT03R	1.5	27	147	0.4~0.5	178	Push 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NT03-4	1.5	27	147	0.4~0.5	178	Pull 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NT03R-4	1.5	27	147	0.4~0.5	178	Push 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NT05	2.5	47	196	0.4~0.5	325	Pull 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NT05R	2.5	47	196	0.4~0.5	325	Push 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NT05-4	2.5	47	196	0.4~0.5	325	Pull 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NT05R-4	2.5	47	196	0.4~0.5	325	Push 0~3	W/tube fitting Hose I.D. $\phi$ 2 mm $\times$ O.D. $\phi$ 4 mm
GT-NT10	3.5	82	441	0.4~0.5	515	Pull 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NT10R	3.5	82	441	0.4~0.5	515	Push 0~3	W/hose nipple Hose I.D. $\phi$ 2 mm
GT-NT10-6	3.5	82	441	0.4~0.5	515	Pull 0~3	W/tube fitting Hose I.D. $\phi$ 4 mm $\times$ O.D. $\phi$ 6 mm
GT-NT10R-6	3.5	82	441	0.4~0.5	515	Push 0~3	W/tube fitting Hose I.D. $\phi$ 4 mm $\times$ O.D. $\phi$ 6 mm
GT-NT20	5.0	237	931	0.5~0.6	930	Pull 0~8	W/hose nipple Hose I.D. $\phi$ 4 mm
GT-NT20R	5.0	237	931	0.5~0.6	930	Push 0~8	W/hose nipple Hose I.D. $\phi$ 4 mm
GT-NT20-6	5.0	237	931	0.5~0.6	930	Pull 0~8	W/tube fitting Hose I.D. $\phi$ 4 mm $\times$ O.D. $\phi$ 6 mm
GT-NT20R-6	5.0	237	931	0.5~0.6	930	Push 0~8	W/tube fitting Hose I.D. $\phi$ 4 mm $\times$ O.D. $\phi$ 6 mm



For mounting of exclusive, automatic machines, check the product dimensions.  
(mm)

Model No.	A	B	C	D	E	F	G	H	I
GT-NT03	63.1	62	23.1	15	19	7	43	12	14
GT-NT05	66.1	64	25.1	20	32	7	45	12	20
GT-NT10	83.1	73	29.1	21	38	8	53	12	24
GT-NT20	96.1	103	33.1	21.9	44	10	80	13	28

Model No.	J	K	L	M	O	P
GT-NT03	M3	1.5~3	9	8	2	68.1
GT-NT05	M4	3~6	9	9	2	71.1
GT-NT10	M4	4~7	11	9	2	88.1
GT-NT20	M5	4.5~9	14	12.5	2	102.1

※Blade opening adjustment limit (K) is subject to mounting standard blade (AJ type)

# Air Nippers For Resin Degating

## Air Nipper Blades

Capacity is listed as instant reference and depends on operation conditions.

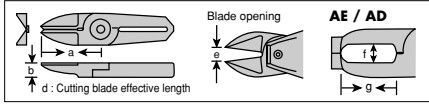
Wide lineup of standard blades for diverse applications

### Standard Blades

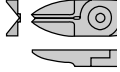
Blade part number should be referred to left page.

The joint has been precision machined and offers outstanding durability. The blades have been heat-treated and machined to a sectional angle suited for workpieces, therefore cutting is ensured from all parts of the blade.

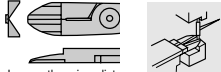
- Blades shown on this page are made of special alloy steel. They are suited for cutting, calking and working with general steel wire and resin.
- High speed steel and super hard tips are brazed onto blades.



#### J : Straight

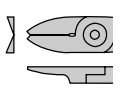


#### JL : Straight Long



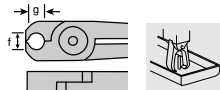
In case there is a distance between nipper body and gate

#### JT : Straight Thin



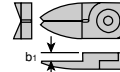
Blade section is thin, enabling beautiful finish of surface

#### E : Plastic, Cutting-off



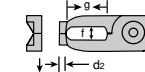
For many gate treatments such as over-fit gate, modified gate, etc.

#### JY : Straight Recessed

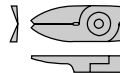


In case the required gate width is small and ordinary blade is thick excessively.

#### D : Over-ride

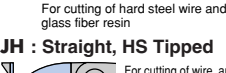


#### JV : Straight V-shaped



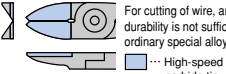
In case cutting surface is curve and cutting edge (face) should be smooth (not irregular).

#### JB : Straight, Carbide Tipped



For cutting of hard steel wire and glass fiber resin

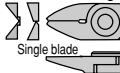
#### JH : Straight, HS Tipped



For cutting of wire, and in case durability is not sufficient with ordinary special alloy steel.  
 ... High-speed steel tip, carbide tip

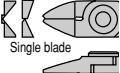
#### Normal

#### NY05/10/15AJ NY05BJ (Single blade)



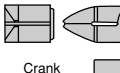
#### Reversed

#### NY05/10/15RAJ NY05RBJ (Single blade)

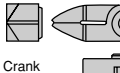


※ Note that forward and backward-facing blades are available.  
 Forward and backward-facing blades cannot be combined use.

#### Normal NY05/10/15AH



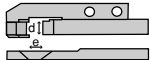
#### Reversed NY05/10/15RAH



※ Note that forward and backward-facing blades are available.  
 Forward and backward-facing blades cannot be combined use.

#### K : For thrust-cut

Optimum for cutting of film gate, etc.



#### Detail of VESSEL Blade No. symbols

No. **NY10 A J**

Air Nipper applicable model

Material  
**A** : Double blades  
**B** : Single blade

#### Blade shape

- J** : Straight
- JL** : Straight Long
- JT** : Straight Thin
- E** : Plastic, Cutting-off
- JY** : Straight Recessed
- D** : Over-ride
- JV** : Straight V-shaped
- JB** : Straight, Carbide Tipped
- JH** : Straight, HS Tipped

Applicable Models	Model No.	Blade type	Dimension (mm)					Cutting Capacity		
			a	b	d	e	f×g	Soft Plastic	Hard Plastic	Weight g
GT-NT03	NT03AJ	Straight	24.0	7.0	11.0	3.0	1.5	1.0	20	
	NT03AJT	Straight Thin	24.0	7.0	11.0	3.0	1.5	1.0	19	
	NT03AJY	Straight Recessed	24.0	<sup>7.0</sup> <sub>b1 4.5</sub>	11.0	3.0	1.5	1.0	19	
GT-NT05	NE5AJ	Straight	24.0	7.0	12.0	6.0	2.5	1.5	35	
	NT05AJ	Straight	29.0	7.0	15.0	6.0	2.5	1.5	30	
	NT05AJL	Straight Long	36.0	7.0	15.0	7.0	2.0	1.3	39	
	NT05AJB	Straight, Carbide Tipped	29.0	7.0	15.0	6.0	2.5	1.5	30	
	NT05AJT	Straight Thin	29.0	7.0	15.0	6.0	2.5	1.5	29	
	NT05AJY	Straight Recessed	29.0	<sup>7.0</sup> <sub>b1 4.5</sub>	15.0	6.0	2.5	1.5	29	
	NT05AD	Over-ride	31.5	7.0	<sup>d1 3.5</sup> <sub>d2 2.5</sub>	6.0	6X18	2.5	1.2	37
	NT05AJH	Straight, HS Tipped	29.0	7.0	15.0	6.0	2.5	1.5	30	
GT-NT10	NT05AJV	Straight V-shaped	29.0	7.0	15.0	6.0	2.5	1.5	29	
	NT05AE	Plastic, Cutting-off	29.0	7.0	7.0	6.0	6X18	2.0	1.3	36
	NE10AJ	Straight	27.0	9.0	12.0	7.0	3.5	2.3	70	
	NT10AJ	Straight	35.0	9.0	17.0	7.0	3.5	2.3	62	
	NT10AJL	Straight Long	47.0	9.0	17.0	9.0	3.0	2.0	62	
	NT10AJB	Straight, Carbide Tipped	35.0	9.0	17.0	7.0	3.5	2.3	76	
	NT10AJT	Straight Thin	35.0	9.0	17.0	7.0	3.5	2.3	65	
	NT10AJY	Straight Recessed	35.0	<sup>9.0</sup> <sub>b1 6.0</sub>	17.0	7.0	3.5	2.3	82	
	NT10AD	Over-ride	39.0	9.0	<sup>d1 5.0</sup> <sub>d2 4.0</sub>	7.0	8X21.5	3.5	2.1	65
	NT10AJH	Straight, HS Tipped	35.0	9.0	17.0	7.0	3.5	2.3	65	
GT-NT20	NT10AJV	Straight V-shaped	35.0	9.0	17.0	7.0	3.5	2.3	63	
	NT10AE	Plastic, Cutting-off	35.0	9.0	9.0	7.0	8X21.5	3.5	2.1	75
	NT20AJ	Straight	40.0	12.0	20.0	9.0	5.0	3.4	120	
	NT20AJL	Straight Long	57.0	12.0	20.0	12.0	4.5	3.2	156	
	NT20AD	Over-ride	46.0	12.0	<sup>d1 7.0</sup> <sub>d2 6.0</sub>	9.0	9X24.5	5.0	2.0	141
	NT20AJB	Straight, Carbide Tipped	40.0	12.0	20.0	9.0	5.0	3.4	120	
	NT20AJH	Straight, HS Tipped	40.0	12.0	20.0	9.0	5.0	3.4	120	
	NY05BJ	Straight Single Blade	22.0	7.0	9.0	3.5	Copper wire 1.5 / Steel wire 1.0	2.0	22	
	NY05AJ	Straight	22.0	7.0	10.5	4.0	3.0	2.0	22	
	NY05AJL	Straight Long	31.0	7.0	10.5	5.5	2.8	1.6	29	
NF05	NY05AJB	Straight, Carbide Tipped	22.0	7.0	10.5	4.0	3.0	2.0	22	
	NY05AJT	Straight Thin	22.0	7.0	10.5	4.0	3.0	2.0	21	
	NY05AH	Crank	31.0	19.0	10.5	5.5	3.0	2.0	37	
	NY05RBJ	Straight Single Blade	22.0	7.0	9.0	3.5	Copper wire 1.5 / Steel wire 1.0	2.0	22	
NF05R(-4)	NY05RAJ	Straight	22.0	7.0	10.5	4.0	3.0	2.0	22	
	NY05RAH	Crank	30.0	12.0	10.5	5.0	3.0	2.0	31	
	NY10AJ	Straight	24.0	7.2	12.0	6.0	3.5	2.3	28	
	NY10AJL	Straight Long	33.0	7.2	12.0	8.0	3.2	2.1	37	
NF10 / NY10S	NY10AD	Over-ride	26.5	7.2	<sup>d1 4.2</sup> <sub>d2 2.5</sub>	6.0	6X13	2.3	1.6	31
	NY10AJB	Straight, Carbide Tipped	24.0	7.2	12.0	6.0	3.5	2.3	28	
	NY10AJT	Straight Thin	24.0	7.2	12.0	6.0	3.5	2.3	26	
	NY10AH	Crank	33.0	20.0	12.0	8.0	3.5	2.3	43	
NF10R(-4)	NY10RAJ	Straight	24.0	7.2	12.0	6.0	3.5	2.3	28	
	NY10RAH	Crank	32.0	12.2	12.0	7.0	3.5	2.3	36	
	NY15AJ	Straight	27.0	8.2	13.0	8.0	4.0	2.6	41	
	NY15AJL	Straight Long	38.0	8.2	13.0	11.0	3.7	2.3	50	
NF15(-4)	NY15AD	Over-ride	30.0	8.2	<sup>d1 4.7</sup> <sub>d2 3</sub>	8.0	7X4	2.6	2.2	45
	NY15AJB	Straight, Carbide Tipped	27.0	8.2	13.0	8.0	4.0	2.6	41	
	NY15AJT	Straight Thin	27.0	8.2	13.0	8.0	4.0	2.6	38	
	NY15AH	Crank	38.0	21.5	13.0	11.0	4.0	2.6	63	
NF15R(-4)	NY15RAJ	Straight	27.0	8.2	13.0	8.0	4.0	2.6	41	
	NY15RAH	Crank	35.0	13.2	13.0	9.0	4.0	2.6	52	
	NY25AJ	Straight	31.0	10.0	16.0	9.0	5.0	3.4	65	
	NY25AJL	Straight Long	46.0	10.0	16.0	13.0	4.7	3.0	88	
NF25(-6)	NY25AD	Over-ride	35.0	10.0	<sup>d1 6</sup> <sub>d2 4</sub>	9.0	8X17	3.3	2.0	75
	NY25AJB	Straight, Carbide Tipped	31.0	10.0	9.0	9.0	5.0	3.4	65	
	NY25AH	Crank	46.0	24.0	17.0	13.0	5.0	3.4	110	
	NY25RAJ	Straight	31.0	10.0	16.0	9.0	5.0	3.4	65	
NF25R(-6)	NY25RAH	Crank	42.0	16.0	16.0	12.0	5.0	3.4	89	
	NK10AJ	Plastic			10.3	12.0	5.0	3.0	96	

#### Replaceable Parts Blade spring specification

	NT03	NT05	NT10	NT20	NY05	NY10	NY15	NY25
Outer Diameter mm	3.8	3.8	5.2	5.5	3.8	3.8	3.8	5.2
Free Length mm	14	14	17	23	11	14	14	15

# Heat Air Nippers

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

**Solution from Wider Selection**

### Slide-Off Air Nipper Bracket-Type

### NB Series

#### Slide-off Type (Large)

- It can be attached to the plastic molding take-out machine or used for the gate cutting device, thereby enabling labor-saving.
- Suited for cutting comparatively large workpieces. (Roughly the same capacity as the GT-NS20 and NS30 [see pg.103].)



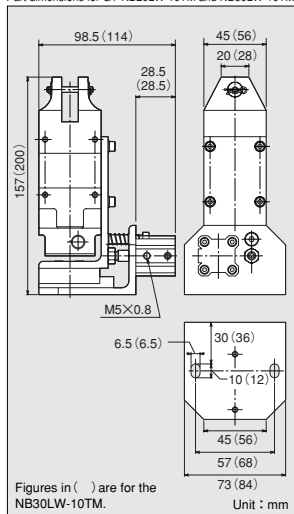
**GT-NB20LW-10TM**  
Accurate slide function with slide stroke



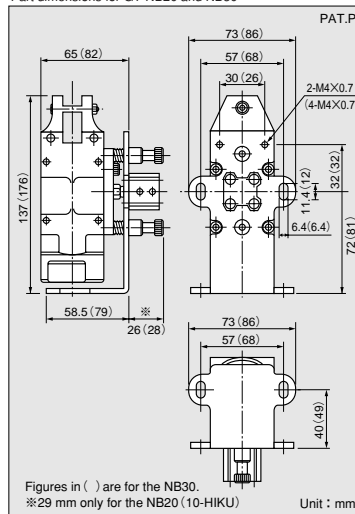
**GT-NB20**

Model No.	Sliding direction and range mm	Weight g
<b>GT-NB20(5-OSHI)</b>	Push 0 ~ 5	755
<b>GT-NB20(5-HIKU)</b>	Pull 0 ~ 5	755
<b>GT-NB20(10-HIKU)</b>	Pull 0 ~ 10	755
<b>GT-NB30(10-HIKU)</b>	Pull 0 ~ 16	1,435
<b>GT-NB20LW-10TM</b>	Pull 0 ~ 10	785
<b>GT-NB30LW-10TM</b>	Pull 0 ~ 10	1,315

Part dimensions for GT-NB20LW-10TM and NB30LW-10TM



Part dimensions for GT-NB20 and NB30



### Heat Air Nippers

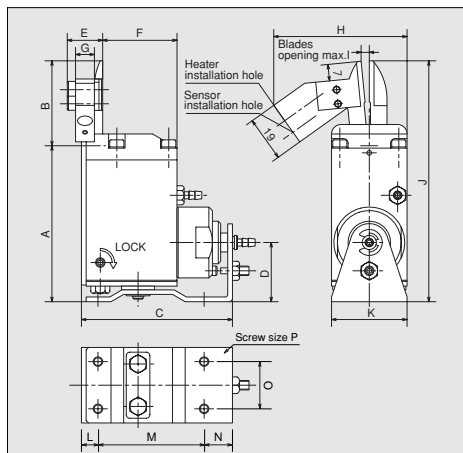
### NTH Series

#### Gate cutting of glass fiber plastic and hard plastic without whitening/crack

- Sliding heating nippers. Can be used in the same way as the GT-NT Series.
- Uses a single stationary blade, so workpieces are easily positioned.
- Blade opening/closing speed can be changed.
- Ideal for cutting of small diameter gates including plastic lenses.
- Blade is Teflon coated, allowing easy removal of works.



**GT-NTH10**  
Vertical sliding type



Model No.	Cutting Capacity φ mm Acril	Blade Edge Temp. MAX °C	Cutting Cycle φ mm (sec/cut)	Air Pressure MPa	Air Consumption cm <sup>3</sup> /str.	Slide Stroke mm	Weight g
<b>GT-NTH05</b>	2.5	200	4~5	0.4~0.5	47	0~3	325
<b>GT-NTH10</b>	3.5	200	4~5	0.4~0.5	82	0~3	515

- Working air hose inner diameter: NTH05 ... 2 mm / NTH10 ... 4 mm
- Included heater: 80W/120V Cord length: 300mm
- Included temperature sensor: Thermal couple type K (Nickel-Chromium / Nickel-Aluminum) Cord length: 1,000 mm

Model No.	A	B	C	D	E	F	G	H	I
<b>GT-NTH05</b>	66.1	36	64	25.1	15	31.5	8	56.5	3.5
<b>GT-NTH10</b>	83	47	73	29	16.2	37.5	8	63	4.5

Model No.	J	K	L	M	N	O	P
<b>GT-NTH05</b>	102.1	32	7	45	12	20	M4
<b>GT-NTH10</b>	130	38	8	53	12	24	M4

#### Blades Specifications

Model No.	Material	Blade Shape	Blade Opening mm	Cutting blade effective mm	Weight g
<b>NTH05AJ</b>	Special Alloy Steel	Nipper type (resin)	3.5	15	40
<b>NTH10AJ</b>	Special Alloy Steel	Nipper type (resin)	4.5	17	88

HTH type blade weight does not include heater and sensor.

**OP**

Option Parts  
• Temperature controller



## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

Solution from Wider Selection

### Heat Air Nippers

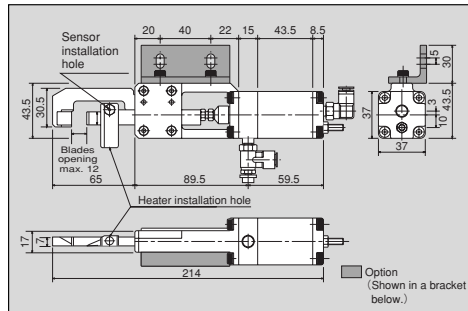
NKH Series

#### Cuts Acrylic and Other Transparent Products without Stretching or Cracking!

- Thrust-cut type heat nippers
- Stationary blade for easy workpiece positioning. Moreover, the nippers are insulated to protect workpieces against thermal deformation.
- Blade opening/closing speed can be changed.
- Ideal for cutting film and small diameter gates
- Blades are Teflon-coated to facilitate gate removal.



GT-NKH10



OP Option Parts  
• Temperature controller

Model No.	Cutting Capacity φ mm Acрил	Blade Edge Temp. MAX °C	Cutting Cycle φmm (sec/cut)	Air Consumption cm <sup>3</sup> /str.	Piston Stroke mm	Weight g
GT-NKH10	Thickness 1.5 Width 7	200	4~5	73	12	715

- Working air hose inner diameter: ∅ 4 mm • Air Pressure ∼ 0.5~0.6MPa
- Included heater: 80W/120V Cord length: 300mm
- Included temperature sensor: Thermal couple type K (Nickel-Chromium/Nickel-Aluminum) Cord length: 1,000 mm

#### Blades Specifications

Model No.	Material	Blade Shape	Blade Opening mm	Cutting blade effective mm	Weight g
NKH10AJ	Special Alloy Steel	Knife type (resin)	12	10	137
NKH10RAJ	Special Alloy Steel	Knife type (resin)	12	10	137

### Heat Air Nippers (Air Hydro Type)

NKH Series

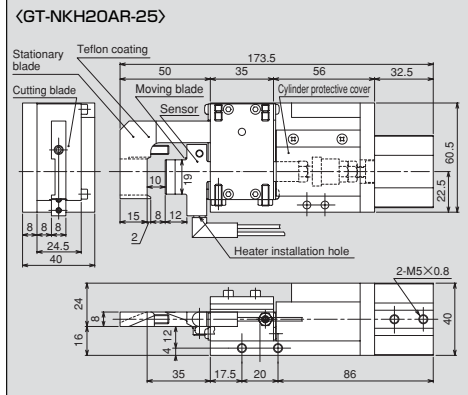
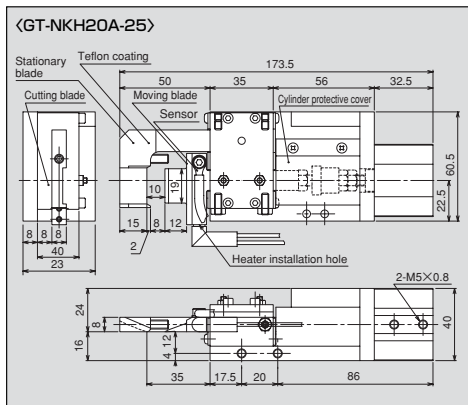
- Thrust-cut type heat nippers
- Air hydro type. Enables a constant blade speed that produces clean cuts.
- Stationary blade for easy workpiece positioning. Moreover, the nippers are insulated to protect workpieces against thermal deformation.
- Minimizes blade shaking to ensure precision gate cuts.
- Blades are Teflon-coated to facilitate workpiece removal.

NOTE Requires separately sold Hydro Controller.



GT-NKH20AR-25

GT-NKH20A-25



※ Custom-made blade lengths and cylinder capacities available.

Model No.	Cutting Capacity φ mm Acрил	Blade Edge Temp. MAX °C	Cutting Cycle φmm (sec/cut)	Air Consumption cm <sup>3</sup> /str.	Piston Stroke mm	Weight g
GT-NKH20A-25/20AR-25	Thickness 1.5 Width 10	180	4~5	60	10	720

- Working air hose inner diameter: ∅ 4 mm • Air Pressure ∼ 0.6MPa
- Included heater: 80W/120V Cord length: 300mm
- Included temperature sensor: Thermal couple type K (Nickel-Chromium/Nickel-Aluminum) Cord length: 1,000mm

#### Blades Specifications

Material	Blade Shape	Blade Opening mm	Cutting blade effective mm	Weight g
Special Alloy Steel	Knife type (resin)	10	19	125

OP Option Parts  
• Hydro-converter (NKH20)  
Working fluid: Petroleum hydraulic fluid or turbine oil with antifoaming agent additive (VG22-100)  
• Temperature controller

# Servo Heat Nippers

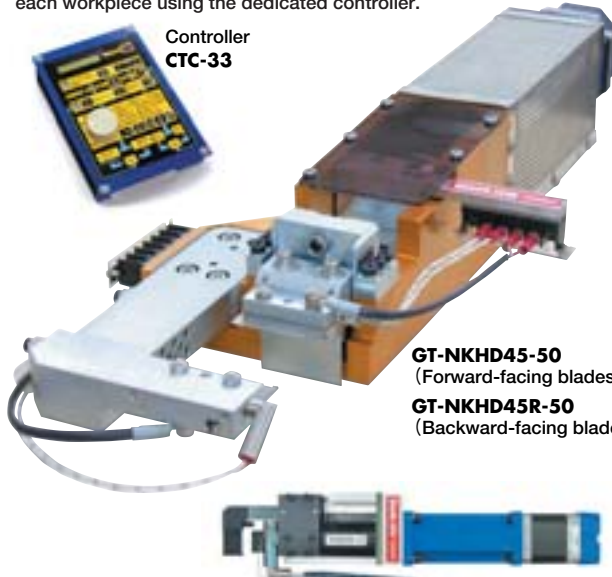
Air Nippers **NEW**

For Gate-cutting of Transparent Lenses and Optical

## Servo Heat Nippers (With Motor Cylinder)

### High Thrust Servomotor

- Starts with just the start signal from the unwinder.
- Performs all steps from gate-cutting start to end. Outputs end signal at the end of cutting. No need to reprogram operation command ladder program.
- Complicated cutting conditions can be easily programmed for each workpiece using the dedicated controller.

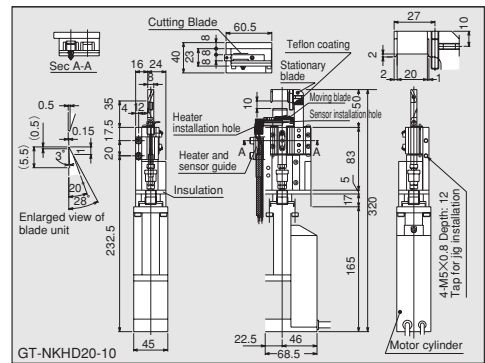
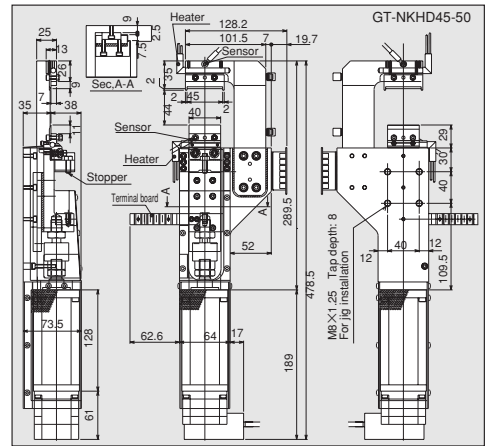


Controller  
**CTC-33**

**GT-NKHD45-50**  
(Forward-facing blades)

**GT-NKHD45R-50**  
(Backward-facing blades)

Small type for lens cutting  
**GT-NKHD20-10** (Forward-facing blades)  
**GT-NKHD20R-10** (Backward-facing blades)



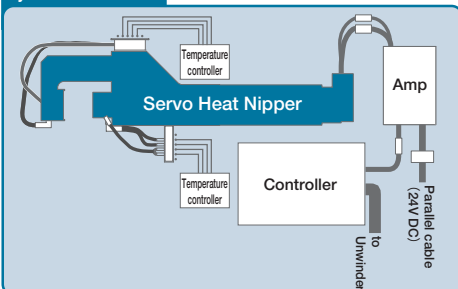
Model No.	Cutting Capacity φ mm (Acryl)	Blade Edge Temp. MAX °C	Cutting Cycle (sec/cut)	Blade Opening mm	Position Accuracy	Max.Thrust N	Max.Speed mm/s	Positioning Points pts	Power Supply Voltage	Current Consumption Power Control circuit	Weight kg
<b>GT-NKHD45(R)-50</b>	width24×thickness1.2	180	10	43	±0.1mm or less	500	100	16	DC24V±10%	3.0A 0.2A	5
<b>GT-NKHD20(R)-10</b>	width10×thickness1.5	180	10	50	±0.1mm or less	100	400	16	DC24V±10%	2.0A	1.6

Accessories Temp. Controller, Parallel Cable, Power Supply, Power Code, ADP Cable, Heater Code, Sensor Cord.

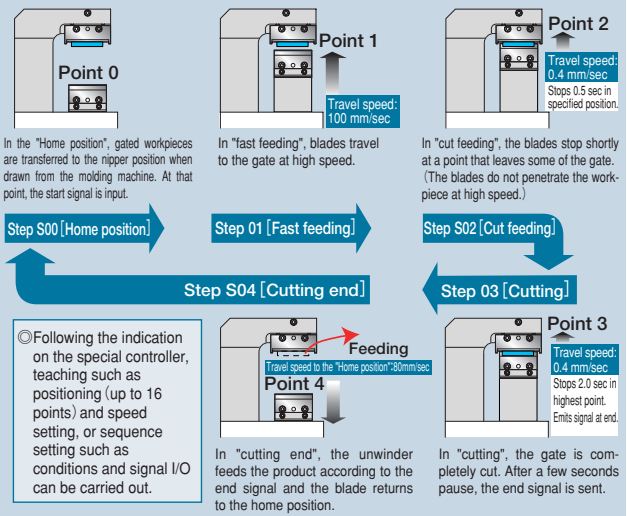
### Features

- **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



### Gate-Cutting Example



# Gate Cutting Tables / Timing Controllers

## Air Nippers

Capacity is listed as instant reference and depends on operation conditions.

Solution from Wider Selection

### Gate Cutting Table

ACT-30

#### Gate cutting (at a time) for many quantity molded products.

- Max. 8-20 pcs. of molded products can be gate cutting at a time.
- Everyone can change the air nipper position on the table easily (due to change of moldings).
- Chute position can be adjusted optionally. Together with up-down travel, the angle can be changed up to 45° from horizontal level. In addition, special chute also can be manufactured.

Standard set detail (Air nipper: Optional)

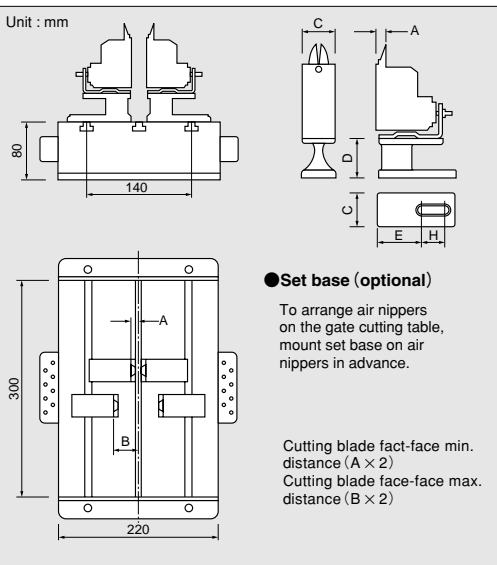
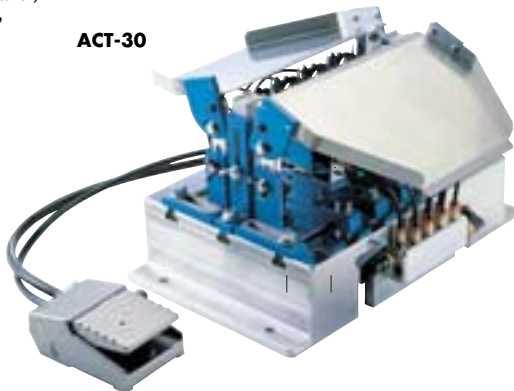
- Table ... 1 unit • Gate receiving base ... 1 set • Foot switch ... 1 unit
- Chuter ... 1 set • TC-02 ... 1 unit • Accessories ... 1 set

Capacity $\phi$ mm (ABS resin)	Applicable Model No.	Max. Arrangement on Table
3.0	GT-NY05/NY05R/NY05-4/NY05R-4	8 units
3.5	GT-NY10/NY10R/NY10-4/NY10R-4	—
4.0	GT-NY15/NY15R/NY15-4/NY15R-4	—
1.5	GT-NT03/NT03R/NT03-4/NT03R-4	8 units
2.5	GT-NT05/NT05R/NT05-4/NT05R-4	8 units
3.5	GT-NT10/NT10R/NT10-6/NT10R-6	—

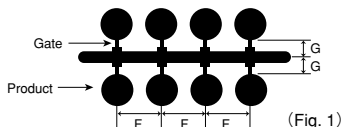
Note: By extended piping, max. 20 pcs of NT03 max. 16 pcs of NY05, max. 12 pcs of NT05 can be installed. Please consult with us on NY10, NY20, NT10, and NT20.

We quote, according to your molded sample, complete gate cut table.

ACT-30



#### How to Select Air Nipper



- ① Measure the gate thickness, and select the model of air nipper from the cutting capacity as below.
- ② If G (Fig.1) is larger than a (of the model selected in ①), and if F is larger than C or the same each other, that model should be decided. (However, unless G is larger than a by 1-2 mm, there is a difficulty when putting the product in the blade.)
- ③ If G is smaller than A, the separate (special) blade is needed.
- ④ If F is smaller than C, it should be arranged every other product, and cutting twice is required. Or, the spec blade should be used.

Applicable Model No.	Dimensions (mm)					
	A	B	C	D	E	H
GT-NY05/NY05R/NY05-4/NY05R-4	8.6	27	23	50	40	15
GT-NY10/NY10R/NY10-4/NY10R-4	8.8	26	28	45	40	20
GT-NY15/NY15R/NY15-4/NY15R-4	10.2	22	33	40	45	25
GT-NT03/NT03R/NT03-4/NT03R-4	9	29	19	36	50	20
GT-NT05/NT05R/NT05-4/NT05R-4	10	30	32	40	49	20
GT-NT10/NT10R/NT10-6/NT10R-6	12	30	38	35	49	20

### Timing Controller

TC-02

- Connected between the compressor and the slide-off air nipper and to adjust the slide and cutting.
- Its control range is wide, and also timing control is easy.

Adjusting Screw (0.5~1.5 sec.)

(Connectable nippers (Reference))  
GT-NT05: 4 units

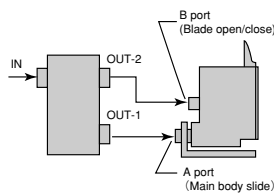


TC-02

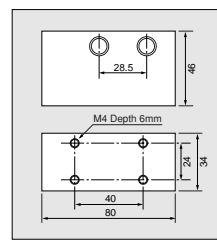
Three-port solenoid valve (compressor side)

Timing controller

Slide air nipper



Working air pressure ... 0.6MPa  
Size ... Height 46  $\times$  Length 80  $\times$  thickness 34 (mm)  
Weight ... 275 g  
• With tube joint: I.D.  $\phi$  4  $\times$  O.D.  $\phi$  6 mm



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

# Custom-Made Blades

## Air Nipper Blades

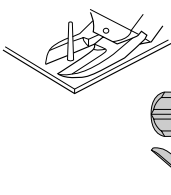
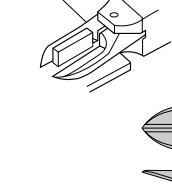
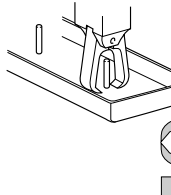
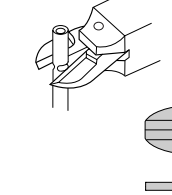
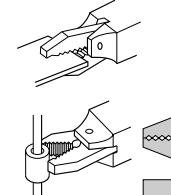
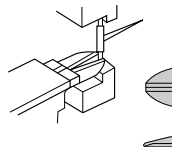
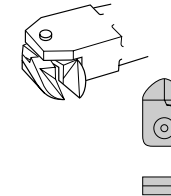
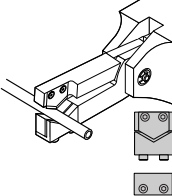
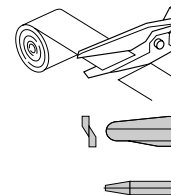
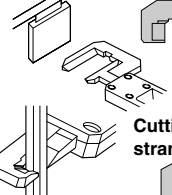
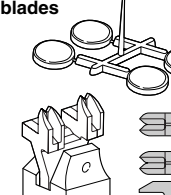
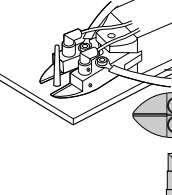
Custom-made blades make work go better when standard blades cannot do the job.

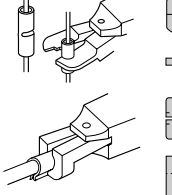
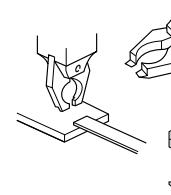
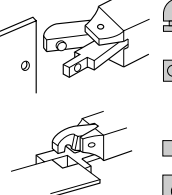
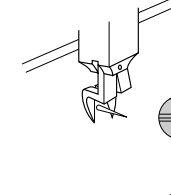
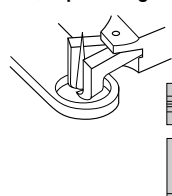
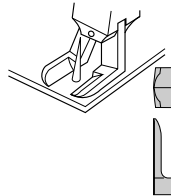
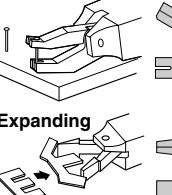
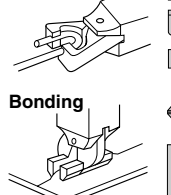
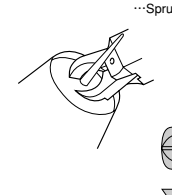
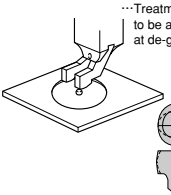
### Spec Blade

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 below examples. Orders are accepted from 1 up.

? Shapes are categorized by alphabet.

Mounting body symbol	A: For plastic (Both blades)	B: Standard (One blade)	C: Crimping	D: Other
<b>NY10</b>	<b>A</b>	<b>E</b>	<b>H</b>	<b>15</b>
	Blade edge	Outside view	Material	Drawing registered No.
		From following pattern		Special material only to be entered H→High-speed steel B→Carbide

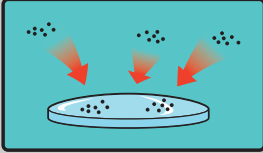
<b>A Angled</b> 	<b>B Angled</b> 
<b>E Disposable gate treatment</b> 	<b>F Power cutting</b> 
<b>I Pliers type</b> 	<b>J (JL) Long blade for plastic Straight Long blade</b> Product is vertically long, and if nipper does not reach gate with ordinary blades, long 
<b>M Side opening blades</b> 	<b>TN Tube cutting</b> 
<b>VHA Scissors</b> 	<b>Film gate</b> 
<b>Double blades</b> 	<b>Double heating blades</b> 

**C Crimping**  

**D Mounted gate**  

**G Punching**  

**H Crankshaft**  

**K L-shaped (disposable gate treatment)**  

**L L-shaped**  

**VO Nail pulling**  

**DI Bending**  

**Direct gate**  
 ...Sprue is gate as it is.  

**Pin gate treatment**  
 ...Treatment of small gate to be automatically cut at de-gating.  


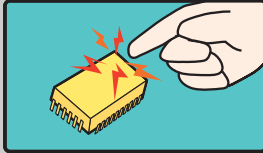
## Example Troubles Caused by Static Electricity

VESSEL STAT BUSTER Series solves these troubles.  
 \*These are only a few examples. STAT BUSTER is effective in many other situations where static electricity is a problem.

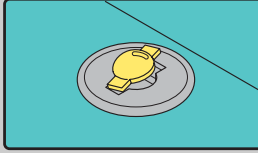
Dust sticking to lens and optical plates



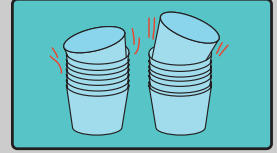
Electrostatic breakdown of electronic components



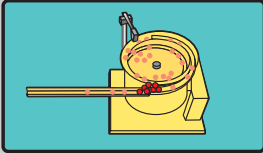
Improper positioning of small parts



Improper stacking of cups



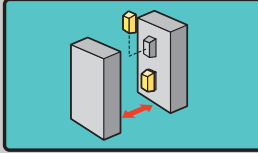
Parts clogging in parts feeder



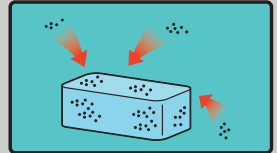
Ink flashing and running in printing



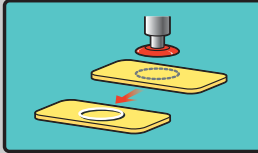
Incomplete extraction of products from molds



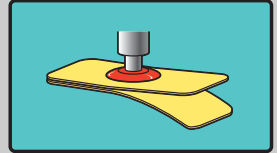
Painting defects caused by adhering dust



Uneven coating caused by charging of product pickup



Improper film pickup



## VESSEL STAT BUSTER Solves the Problem!

Resolves static electricity trouble in diverse situations.



**Super compact, lightweight design. Installable on molds and chucks.**

Antistatic Unit SDJ-02 P.126



**Instant static removal. Powerful dust removal gun type.**

Antistatic Airblow Gun SDJ-06 P.126



**Installable on benchtops, conveyors and stockers. For windless environments.**

Antistatic Fan SDJ-05 P.127



**With easy-to-use clip for installation. Built-in high power fan.**

Miniature Antistatic Fan SDJ-08 P.127

**Flared nozzle for wide ion blow. Installable on hoppers and feeders.**

Antistatic Unit SDJ-03 P.126





Compressed Air type **NEW**

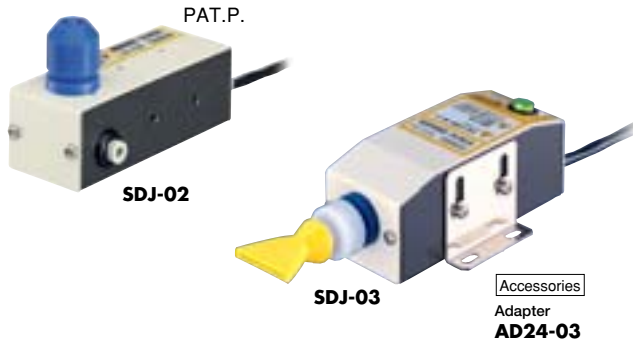
Quick Static Removal. Powerful Dust Removal.

This AC-type antistatic air blower offers excellent ionic balance. Simultaneously removes static electricity and dust.

### Uses

Countermeasure for static electricity trouble in industrial fields including dust removal from molds and products, static removal of pellets, dust removal from lens and circuit boards, etc.

## Antistatic Unit AC discharge



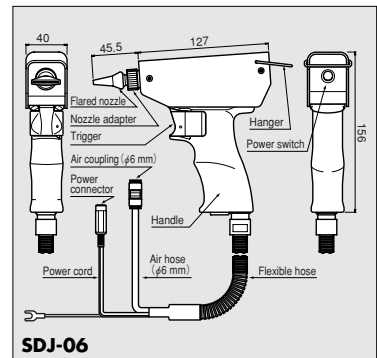
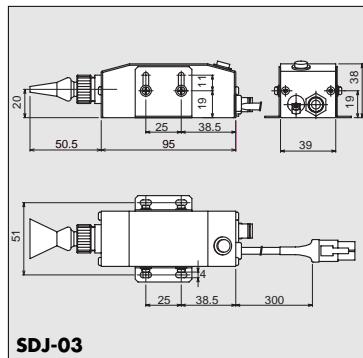
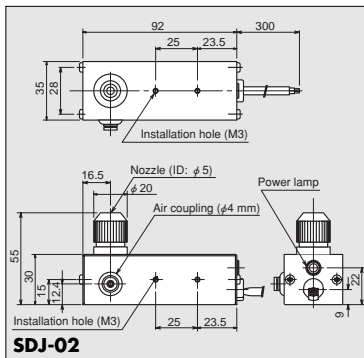
## Antistatic Air Blow Gun AC discharge



Provide a mist separator (capable of trapping 0.3 μm and larger matter recommended/and air trap for the air supply line.)

Model No.	Weight g	Ion generation	Applied pressure	Rating		Environmental resistance		Working air pressure
				Power supply voltage	Current consumption	Working temperature range	Working humidity range	
<b>SDJ-02</b>	160	AC corona discharge	AC±3000V	DC24V±10%	70mA or less	0~+50°C	35~65%RH	0.6MPa or less
<b>SDJ-03</b>	230	AC corona discharge	AC±3000V	DC24V±10%	70mA or less	0~+50°C	35~65%RH	0.6MPa or less
<b>SDJ-06</b>	490	AC corona discharge	AC±4000V	DC24V±10%	200mA or less	0~+50°C	20~80%RH	0.1~0.6MPa

\* SDJ-06 weight includes the hose.



### Accessory Specifications

<b>SDJ-03</b>	Adapter	<b>AD24-03</b> Rating: Input ... 100V AC (50/60 Hz) 8.5 VA Output ... 24V DC, 200 mA Cord length: 1.5 m
<b>SDJ-06</b>	Adapter	<b>AD24-06</b> Rating: Input ... 100V AC (50/60 Hz) 19 VA Output ... 24V DC, 300 mA Cord length: 1.8 m

### Replacement Parts

<b>SDJ-02</b>	Electrode	<b>SDJ-02H</b>
<b>SDJ-03</b>		
<b>SDJ-06</b>	Electrode	<b>SDJ-06H</b>

Fan Blow Type **NEW**

Fan Type Static Electricity Erasers

**Removes static electricity at long distances by blowing ions generated by corona discharge.**

**Uses**

Countermeasure for static electricity trouble in industrial fields including static removal from molded parts, static removal on electronic component assembly lines, etc.

**Antistatic Fan AC discharge**



**SDJ-05**

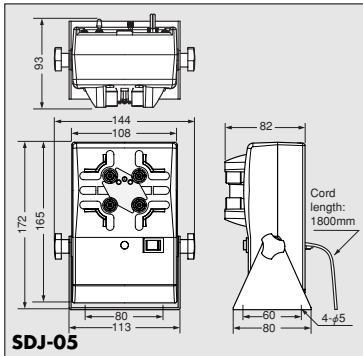
**Miniature Antistatic Fan DC discharge**



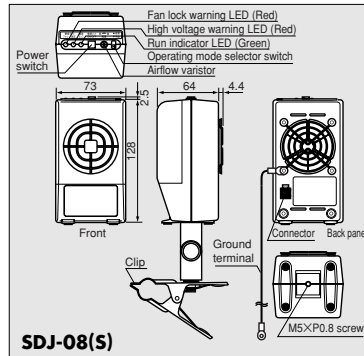
**SDJ-08  
SDJ-08S  
(With dedicated adapter)**

Model No.	Weight g	Ion generation	Applied pressure	Input voltage	Current consumption	Environmental resistance	
						Working temperature range	Working humidity range
<b>SDJ-05</b>	920	AC corona discharge	DC±6.5KV	AC100V±10%(50/60Hz)	0.11A(50Hz),0.13A(60Hz)	0~50°C	35~65%RH
<b>SDJ-08(S)</b>	300	DC corona discharge	AC2.5KV	DC24V±5%	350mA (At max. air flow)	0~40°C	20~80%RH

• SDJ-08 weight includes the clip.



**SDJ-05**



**SDJ-08(S)**

**Accessory Specifications**

Model	Accessory	Specification
<b>SDJ-08</b>	Wiring connector	Length: 1.5 m
	Warning output lead	Length: 1.5 (X 2)
	Clip	—
	Screwdriver for adjustment	#0 tip
<b>SDJ-08S</b>	Wiring connector	Length: 1.5 m
	Warning output lead	Length: 1.5 (X 2)
	Clip	—
	Screwdriver for adjustment	#0 tip
	Adapter	<b>AD24-08</b> Rating: Input ... 100V AC (50/60 Hz), 40 VA, Output ... 24V DC, 0.65 A Cord length: Approx. 1.8 m

**Replacement Parts**

Model	Part	Replacement Part
<b>SDJ-05</b>	Electrode	<b>SDJ-05H</b>
	Protective cap	<b>SDJ-05C</b>

# Air Blow Guns

## Air Blow Guns

Ideal for Blowing Dusts and Dry It Out

### Features

- Large enough holder for easy hanging
- Wide lineup of 16 models including special nozzle types
- For finger throttle lever for less fatigue. And easy grip and non-slip with ergonomic handle for efficient operation.
- Lightweight body made of polyacetal resin. Excellent oil, wear, shock and heat resistance.

Patented

### Uses

Dust removal and drying of sheet metal, coated materials, automotive parts, molds, metal working



※Nozzle cannot be changed during use so as to prevent unexpected detaching. Nozzles not sold separately.

### Applicable for Dusting Metal, Wood Cut-off Articles and Drying Wet Paint

#### Standard Nozzle

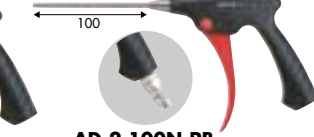
AD-2 0N



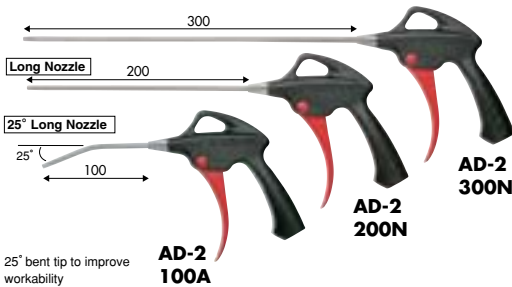
AD-2 0N-PB  
AD-2 0N-C-PB

#### Long Nozzle

AD-2 100N



AD-2 100N-PB  
AD-2 100N-C-PB



25° bent tip to improve workability

AD-2 100A

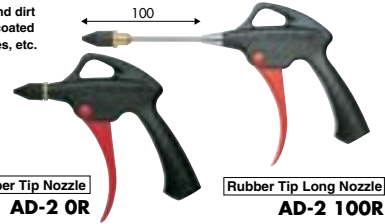
AD-2 200N

AD-2 300N

### Soft Rubber Adapter

Used to blow dust and dirt from fragile molds, coated surfaces, inside pipes, etc.

Nozzle with soft rubber tip



Rubber Tip Nozzle  
AD-2 OR

Rubber Tip Long Nozzle  
AD-2 100R

### Safety, Calm and Soft Blowing

Widely spreads air safe and quiet



Safety By-Pass Nozzle  
AD-2 OS

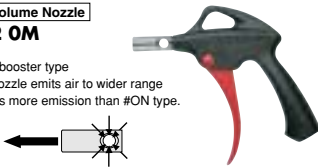
Safety By-Pass Long Nozzle  
AD-2 100S

### Low Pressured but for Large Air flow

#### High Volume Nozzle

AD-2 0M

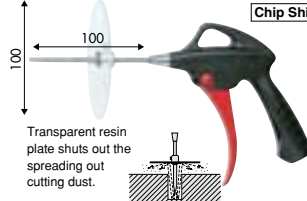
Air flow booster type  
Venturi nozzle emits air to wider range 2.5 times more emission than #0N type.



### Prevents Dust and Articles Reflected.

#### Chip Shield Long Nozzle

AD-2 100P



Transparent resin plate shuts out the spreading out cutting dust.

#### Air Screen Nozzle

AD-2 0C



Air curtain shuts out the spreading of oil, moisture and cutting dust.

Model No.	Nozzle Shape	Nozzle Length mm	Air Consumption $\ell$ /min	Overall Length mm	Weight g	Card / Box Size mm	JAN code	Outer Ctn.
AD-2 0N	Standard nozzle	0	135	145	116	152×232×30	017604	10
AD-2 0N-PB	Standard nozzle (with plug)	0	135	155	128	152×232×30	017680	10
AD-2 0N-C-PB	Standard nozzle (with plug)	0	135	155	128	in paper box 110×174×24	017741	10
AD-2 100N	Long nozzle	100	135	242	124	182×232×30	017611	10
AD-2 100N-PB	Long nozzle (with plug)	100	135	252	136	182×232×30	017697	10
AD-2 100N-C-PB	Long nozzle (with plug)	100	135	252	136	in paper box 130×277×24	017758	10
AD-2 200N	Long nozzle	200	135	342	132	in paper box 140×445×30	017673	1
AD-2 300N	Long nozzle	300	135	442	140	in paper box 140×455×30	017628	1
AD-2 100A	25° long nozzle	100	135	242	124	182×232×30	017635	10
AD-2 0R	Rubber tip nozzle	0	115	155.5	118	152×232×30	017659	10
AD-2 100R	Rubber tip long nozzle	100	115	227	141	182×232×30	017666	10
AD-2 0S	Safety by-pass nozzle	0	105	155.5	124	152×232×30	017727	10
AD-2 100S	Safety by-pass long nozzle	100	105	239.5	130	182×232×30	017734	10
AD-2 100P	Chip shield long nozzle	100	135	242	149	182×232×30	017642	10
AD-2 0M	High volume nozzle	0	185	160	121	152×232×30	017703	10
AD-2 0C	Air screen nozzle	0	260	145	117	152×232×30	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  $\phi$ 4 mm •Air pressure when air consumption is measured ... 0.49 MPa  
•Pre-packed (200N, 300N, 0N-C-PB, 100N-C-PB in paper box)

# One-Touch Lock Air Couplings

## Air Couplings

Capacity is listed as instant reference and depends on operation conditions. **Efficient Rapid Air Flow**

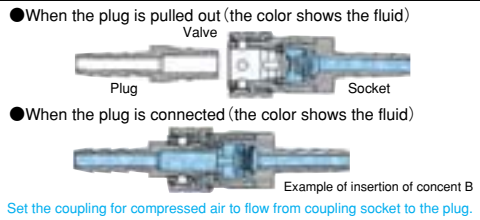
The VESSEL coupling, "Concent" is used in air tool hose connection, and as an air piping/hose to hose relay in factories. Attachment and removal is by a one-touch joint (ball-lock method), and air flow is efficient and rapid.

- ① Compact, and with a lightweight design eliminating any sense of heaviness.
- ② Attachment and removal is one-touch process with the ball-lock method, and there are no air leaks.
- ③ Connection can be made even with different hose diameter, and tightening tools are unnecessary.

**Interchangeability** All types of plugs for concent B type and nut concent B type can be interchangeable.

### Uses

Can be used as an intermediate relay for air drivers, air impact wrenches, grinders, paint appliances, compressors, atomizers, automobile air pressure meters, air vises, automatic equipment, and other various air tools, air output ports for air piping inside factories, and hoses.



### Specifications

- Application fluid ... compressed air
- Constant working pressure ... 1.47 MPa
- Maximum pressure ... 1.96 MPa
- Working temperature range ... -20~+80°C

## One-Touch Lock Concent B Type Patented

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.

### Features

#### One-touch connection

Easily connect or disconnect with one hand.



#### Includes safety lock mechanism

Prevents unintended disconnection.



#### With dust-resistant ring

Dust-resistant ring prevents entry and sticking of dust and debris into the gap between sleeve and body.

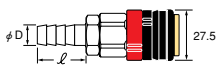
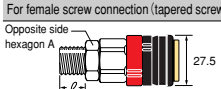
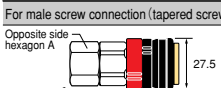
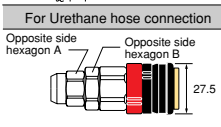
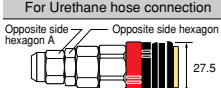
#### Large influx

Increases working efficiency of air tool. Solves power shortage problem due to branch air piping.



### Socket

※ Minimal cross-sectional area: Smallest cross-sectional area in the connected medium route.

For hose connection	Model No.	Overall Length mm	φ D mm	ℓ mm	Minimal cross-sectional area mm <sup>2</sup>	Weight g	Application
	<b>BLST-2</b>	75	9	23	28	85	For 1/4 hose
	<b>BLST-3</b>	78	11.5	26	44	88	For 3/8 hose
	<b>BLST-4</b>	81	15	29	44	101	For 1/2 hose
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-2</b>	65	21	13	44	86	Rc 1/4
	<b>BLSB-3</b>	66	21	14	44	93	Rc 3/8
	<b>BLSB-4</b>	69	23	16	44	105	Rc 1/2
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-2</b>	59	21	9.4	44	92	R 1/4
	<b>BLSN-3</b>	61	21	9.7	44	90	R 3/8
	<b>BLSN-4</b>	65.5	26	12.7	44	120	R 1/2
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-6.5</b>	70.5	17	21	28	102	6.5×10.0
	<b>BLSH-8</b>	72	19	21	42	108	8.0×12.0
	<b>BLSH-8.5</b>	72	19	21	44	109	8.5×12.5
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>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

Inner Carton: 5 items, Outer Carton: 50 items  
Hanger hook items are available, see page 133.

# Air Couplings

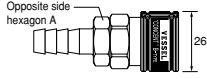
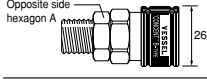
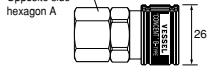
## Air Couplings

Capacity is listed as instant reference and depends on operation conditions. **Efficient Rapid Air Flow**

### Concent B Type

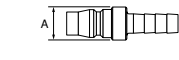
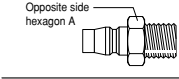
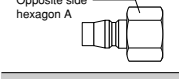
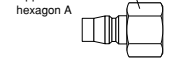


#### Socket

For hose connection	Model No.	Overall Length mm	A mm	Application
 Opposite side hexagon A	<b>BST-2</b>	61	19	For 1/4 hose
	<b>BST-3</b>	64	19	For 3/8 hose
	<b>BST-4</b>	68	21	For 1/2 hose
For female screw connection (tapered screw)	Model No.	Overall Length mm	A mm	Application
 Opposite side hexagon A	<b>BSB-2</b>	51	19	Rc 1/4
	<b>BSB-3</b>	52	19	Rc 3/8
	<b>BSB-4</b>	56	23	Rc 1/2
For female screw connection (tapered screw)	Model No.	Overall Length mm	A mm	Application
 Opposite side hexagon A	<b>BSN-2</b>	46	19	R 1/4
	<b>BSN-3</b>	47	21	R 3/8
	<b>BSN-4</b>	49	26	R 1/2

Inner carton: 5 items, Outer carton: 50 items

#### Plug

For hose connection	Model No.	Overall Length mm	A mm	Application
 Opposite side hexagon A	<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
 Opposite side hexagon A	<b>BPB-2</b>	40	14	Rc 1/4
	<b>BPB-3</b>	41	19	Rc 3/8
	<b>BPB-4</b>	46	23	Rc 1/2
For male screw connection (tapered screw)	Model No.	Overall Length mm	A mm	Application
 Opposite side hexagon A	<b>BPN-2</b>	36	17	R 1/4
	<b>BPN-3</b>	37	21	R 3/8
	<b>BPN-4</b>	38	26	R 1/2
For male screw connection (parallel screw)	Model No.	Overall Length mm	A mm	Application
 Opposite side hexagon A	<b>BPN-2F</b>	36	17	G 1/4

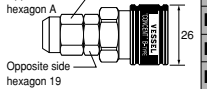
Inner carton: 10 items, outer carton: 100 items

(BPT-4, BPB-4, BPN-4 ... Inner carton: 5 items, outer carton: 50 items)  
Hanger hook items are available, see page 133.

### Nut Concent B Type

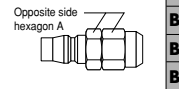


#### Socket

For Urethane hose connection	Model No.	Overall Length mm	A mm	Application hose I.D. × O.D. mm
 Opposite side hexagon A Opposite side hexagon 19	<b>BSH-5</b>	53.5	14	5.0 × 8.0
	<b>BSH-6.5</b>	55.5	17	6.5 × 10.0
	<b>BSH-8</b>	58	19	8.0 × 12.0
	<b>BSH-8.5</b>	58	19	8.5 × 12.5

Inner carton: 5 items, outer carton: 50 items

#### Plug

For Urethane hose connection	Model No.	Overall Length mm	A mm	Application hose I.D. × O.D. mm
 Opposite side hexagon A	<b>BPH-5</b>	43	14	5.0 × 8.0
	<b>BPH-6</b>	45.5	17	6.0 × 9.0
	<b>BPH-6.5</b>	45.5	17	6.5 × 10.0
	<b>BPH-8</b>	47.5	19	8.0 × 12.0
	<b>BPH-8.5</b>	47.5	19	8.5 × 12.5

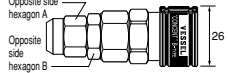
Inner carton: 10 items, outer carton: 100 items

Hanger hook items are available, see page 133.

### Rotary Concent B Type



**Socket** All types of plugs for concent B type and nut concent B type can be used.

For Urethane hose connection	Model No.	Overall Length mm	A mm	B mm	Application hose I.D. × O.D. mm
 Opposite side hexagon A Opposite side hexagon B	<b>BSF-6.5</b>	70.5	17	19	6.5 × 10.0

Inner carton: 5 items Outer carton: 50 items



## Air Couplings

Capacity is listed as instant reference and depends on operation conditions. **Efficient Rapid Air Flow**

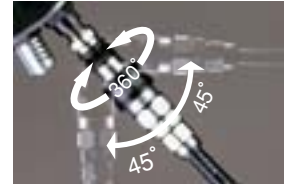
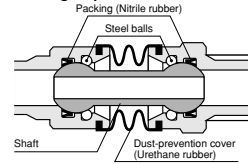
### Free Angle Concent B Type

Our air couplings help easily eliminate troublesome torsion, kink or bent of air hoses that occurs when connecting the hoses to the air tools. They also facilitate the handling of air hoses so dramatically that your arm and wrist fatigue and damage to the hoses can be alleviated.

#### Specifications

- Application fluid ... Compressed air
- Maximum pressure ... 0.98 MPa
- Working temperature range ... +0~60°C

#### Free angled part



**Interchangeability** All types of plugs for concent B type and nut concent B type can be interchangeable.

Air hoses for use with general air tools for construction work, carpentry, interior finish work, steel work, car repair work, assembly lines, and painting and coating works. Other applications include air screwdrivers, air impact wrenches, air sanders, spray guns, air tuckers and robot hands.



#### Socket

For Urethane hose connection	Model No.	Overall Length mm	A mm	B mm	Application hose I.D.×O.D. mm
	<b>FSH-6.5</b>	120	16	19	6.5×10

Inner carton: 5 items



#### Plug

For screw connection	Model No.	Overall Length mm	A mm	B mm	Application
	<b>FPB-2</b>	62.2	17	—	Rc 1/4 male screw
	<b>FPN-2F</b>	61.7	17	15.5	G 1/4 female screw

Inner carton: 5 items

Hanger hook items are available, see page 133.

### Joint Concent B Type

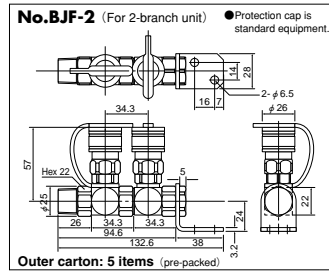
An air output port can be easily added on. Since the socket part rotates freely vertically and horizontally, the hose cannot become twisted.



**BJF-2**  
(For 2-branch piping, PT 1/2)

#### Specifications

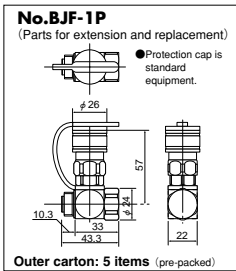
- Application fluid ... Compressed air
- Maximum pressure ... 1.96 MPa
- Working temperature range ... -20~+80°C



Outer carton: 5 items (pre-packed)



**BJF-1P**  
(For extension or replacement of BJF-2)  
※ Since this article is for extension or replacement of BJF-2, exercise due care.



Outer carton: 5 items (pre-packed)

### Concent A Type



#### Specifications

- Application fluid ... Compressed air
- Maximum pressure ... 1.96 MPa
- Constant working pressure ... ~1.47 MPa
- Working temperature range ... -20~+80°C

**Interchangeability** A type couplings are interchangeable only with A type couplings.

#### Socket

For hose connection	Model No.	Overall Length mm	A mm	Application
	<b>AST-1</b>	64.5	—	For 1/8 hose
	<b>AST-2</b>	64.5	—	For 1/4 hose
	<b>AST-3</b>	64.5	—	For 3/8 hose
For female screw connection (tapered screw)	Model No.	Overall Length mm	A mm	Application
	<b>ASB-2</b>	50	16	Rc 1/4
	<b>ASB-3</b>	50	16	Rc 3/8
	For male screw connection (parallel screw)	Model No.	Overall Length mm	A mm
	<b>ASN-2</b>	51	16	G 1/4
	<b>ASN-3</b>	51	19	G 3/8

Inner carton: 5 items (10 items for AST-1, and ASN-3)

#### Plug

For hose connection	Model No.	Overall Length mm	A mm	Application
	<b>APT-2</b>	56.5	16	For 1/4 hose
	<b>APT-3</b>	56.5	16	For 3/8 hose
	For female screw connection (tapered screw)	Model No.	Overall Length mm	A mm
	<b>APB-2</b>	38.5	17	Rc 1/4
	<b>APB-3</b>	38.5	19	Rc 3/8
	For male screw connection (parallel screw)	Model No.	Overall Length mm	A mm
	<b>APN-2</b>	30.5	17	G 1/4
	<b>APN-3</b>	36.5	19	G 3/8

Inner carton: 10 items

# Air Tool Supplies

## Air Tool Oil Spray

Helps air tools last longer.



**G-10**  
(with nozzle)

Air tool oil of additive blend on a good oil base. Use everyday as lubricant and rust-proofing.

- Blended with water replacing agent to drain moisture inside pneumatic tools to the outside
- Low viscosity suited for high speed rotary and high precision tools
- Spray type to prevent hands from getting dirty

Model No.	Volume ml	JAN code	Inner Ctn.	Outer Ctn.	Used for
<b>G-10</b>	220	4907587 310149	10	60	Air tools of all kinds including drivers, impact wrenches, micro grinders, rippers, drills, tackers and hammers

## Air Regulator

Capacity is listed as instant reference and depends on operation conditions. **Efficient Rapid Air Flow**



**AR-2**

- When attached to the air tool body (PT 1/4), the air flow rate can be simply adjusted near to hand, which is very convenient.
- Dial operation is in the 3 stages of scale 1 (maximum) → 3 (minimum). To be used in accordance with the contents of work.

Overall Length mm	Weight g	Working air pressure MPa	Screw size (female screw) × (male screw)	Applicable Models
50	90	0.59	Rc1/4×Rc1/4	Made by VESSEL·P6LS III·P5S·P5LS·P6MS·P4.5D·P6GD·P6HS, and other Air Tools

## Air Hoses

Elastic and high resistance to flexibility fatigue and oil

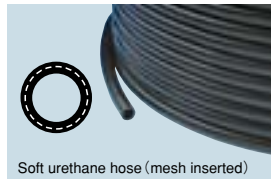
For Plant Piping, Air Tools and Air High Pressure Equipment

Model No.	Hose I.D. × O.D. φ mm	Max. working pressure MPa
Soft Urethane hose	6.5 × 10	1.47
Air hose	6.5 × 12	0.98

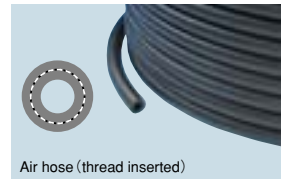
  

Model No.	Weight g/m
Soft Urethane hose	55.3
Air hose	100

(Outer carton: 100m)



Soft urethane hose (mesh inserted)

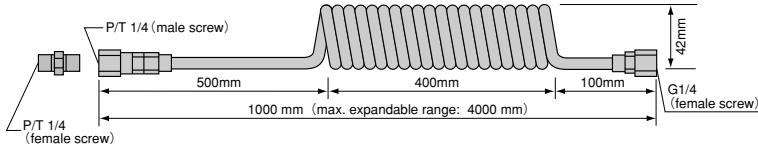


Air hose (thread inserted)

## Air Hose Set

### Coil Urethane Hose

Made of polyurethane resin, this hose is lightweight and provides superb flexibility and wear resistance. Its coil diameter is so small that it does not get entangled, thereby allowing multiple pieces of it to be used at the same time. Its long straight area eliminates the need to use a local hose.



**AUC-40**



Model No.	Hose I.D. × O.D. φ mm	Max. working pressure MPa	Weight g/m	Set
<b>AUC-40</b>	5 × 8	0.69	—	Coil urethane hose ... 4 m Connect G 1/4 female screw ... 2 pcs PT1/4 male screw for joint ... 1 pc.

### Blue Eight Hose Set

This hose is ultra-lightweight, and provides excellent flexibility and twice as much resistance to pressure as conventional hoses. Easy to handle and carry, it dramatically reduces your physical fatigue when you have to work in high places with a hose.



**AUD-813**



**Ultra-thin  
Ultra-lightweight**

**AUA-815**

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	Blue eight hose ... 0.5m, Rc1/4 female screw for joint ... 1 pc. Plug (BPH-8 × 10.5) ... 1 pc.
<b>AUD-813</b>	8 × 10.5	1.47	42	Blue eight hose ... 1.3m, Rc1/4 female screw for free moving angle ... 1 pc. Concent (BPH-8 × 10.5) ... 1 pc.
<b>AUA-815</b>	8 × 10.5	1.47	42	Blue eight hose ... 15m, Plug (BPH-8 × 10.5) ... 1 pc. One-touch lock concent (BLSH-8 × 10.5) ... 1 pc.
<b>AUA-820</b>	8 × 10.5	1.47	42	Blue eight hose ... 20m, Plug (BPH-8 × 10.5) ... 1 pc. One-touch lock concent (BLSH-8 × 10.5) ... 1 pc.
<b>AUA-1015</b>	10 × 12.5	1.47	56	Blue eight hose ... 15m, Plug (BPH-10 × 12.5) ... 1 pc. One-touch lock concent (BLSH-10 × 12.5) ... 1 pc.
<b>AUB-20</b>	8 × 10.5	1.47	42	Blue eight hose ... 20m, Rc1/4 female screw for joint, R1/4 male screw for nipple
<b>AUB-30</b>	8 × 10.5	1.47	42	Blue eight hose ... 30m, Rc1/4 female screw for joint, R1/4 male screw for nipple

# Hanger Hook Products

Essential supplies for pneumatic tools that require couplings, air hoses, etc. Help make work proceed more safely and comfortably.

**1:5 Scale**

Pre-Carded products shown on this page are 1/5 the size of the actual product. Make enlarged copies when preparing shelf labels.

## Air Couplings

Vessel's B type couplings are interchangeable with couplers of other manufacture.



One-Touch Lock Concent B Type

**BLST02**  
**BLST03**  
**BLSB02**  
**BLSB03**  
**BLSN02**



One-Touch Lock Concent B Type

**BLSH05**  
**BLSH65**  
**BLSH08**  
**BLSH85**  
**BLSF65**  
**BLSF85**



Free Angle Concent B Type

**FPB002**  
**FPN02F**



Concent B Type

**BPT002**  
**BPT003**  
**BPB002**  
**BPB003**  
**BPN002**  
**BPN003**  
**BPN02F**



Nut Concent B Type

**BPH005**  
**BPH006**  
**BPH065**  
**BPH008**  
**BPH085**



Joint Concent B Type

**BJF-2**



Joint Concent B Type

**BJF-1P**

Model No.	Application	Pre-Carded (size)	JAN code	Outer Ctn.
BLST02	For hose connection For 1/4 hose	125×65×32	365422	10
BLST03	For hose connection For 3/8 hose	125×65×32	365439	10
BLSB02	For female screw connection For Rc 1/4 female screw	125×65×32	365521	10
BLSB03	For female screw connection For Rc 3/8 female screw	125×65×32	365538	10
BLSN02	For male screw connection For Rc 1/4 male screw	125×65×32	365620	10
BLSH05	For Urethane hose connection hose I.D. 5.0×O.D. 8.0mm	125×65×32	365750	10
BLSH65	For Urethane hose connection hose I.D. 6.5×O.D. 10.0mm	125×65×32	365774	10
BLSH08	For Urethane hose connection hose I.D. 8.0×O.D. 12.0mm	125×65×32	365781	10
BLSH85	For Urethane hose connection hose I.D. 8.5×O.D. 12.5mm	125×65×32	365798	10
BLSF65	For Urethane hose connection hose I.D. 6.5×O.D. 10.0mm	125×65×32	365972	10
BLSF85	For Urethane hose connection hose I.D. 8.5×O.D. 12.5mm	125×65×32	365989	10
FPB002	Rc1/4	150×67×30	366641	10
FPN02F	G1/4	150×67×30	366788	10
BPT002	For hose connection For 1/4 hose	105×60×32	366023	10
BPT003	For hose connection For 3/8 hose	105×60×32	366030	10
BPB002	For female screw connection Rc 1/4	105×60×32	366122	10
BPB003	For female screw connection Rc 3/8	105×60×32	366139	10
BPN002	For male screw connection Rc 1/4	105×60×32	366221	10
BPN003	For male screw connection Rc 3/8	105×60×32	366238	10
BPN02F	For male screw connection G1/4	105×60×32	366429	10
BPH005	Hose I.D. 5.0×O.D. 8.0mm	105×60×32	366351	10
BPH006	Hose I.D. 6.0×O.D. 9.0mm	105×60×32	366368	10
BPH065	Hose I.D. 6.5×O.D. 10.0mm	105×60×32	366375	10
BPH008	Hose I.D. 8.0×O.D. 12.0mm	105×60×32	366382	10
BPH085	Hose I.D. 8.5×O.D. 12.5mm	105×60×32	366399	10
BJF-2	For 2-pipe branch hole, for female thread, Rc 1/2	170×120×30	367020	5
BJF-1P	For BJF-2 expansion or replacement	170×80×28	367013	5

Pre-Carded size: H × W × D mm

## Air Blow Guns



**AD-2 0N**  
**AD-2 0N-PB**  
**AD-2 0R**



**AD-2 0S**  
**AD-2 0M**  
**AD-2 0C**



**AD-2 100N**  
**AD-2 100N-PB**  
**AD-2 100A**

**AD-2 100R**  
**AD-2 100S**  
**AD-2 100P**

Model No.	Application	Card size	JAN code	Outer Ctn.
AD-2 0N	Standard nozzle	232×152×30	017604	10
AD-2 0N-PB	Standard nozzle (with plug)	232×152×30	017680	10
AD-2 0R	Rubber tip nozzle	232×152×30	017659	10
AD-2 0S	Safety by-pass nozzle	232×152×30	017727	10
AD-2 0M	High volume nozzle	232×152×30	017703	10
AD-2 0C	Air screen nozzle	232×152×30	017710	10
AD-2 100N	Long nozzle	232×182×30	017611	10
AD-2 100N-PB	Long nozzle (with plug)	232×182×30	017697	10
AD-2 100A	25" long nozzle	232×182×30	017635	10
AD-2 100R	Rubber tip long nozzle	232×182×30	017666	10
AD-2 100S	Safety by-pass long nozzle	232×182×30	017734	10
AD-2 100P	Chip shield long nozzle	232×182×30	017642	10

Pre-Carded (size) : H × W × D mm

## Coil Urethane Hose



**AUC-40**

Model No.	Application	Pack Size	JAN code	Outer Ctn.
AUC-40	Nipple (with R 1/4 male screw)	300×200×45	310026	1

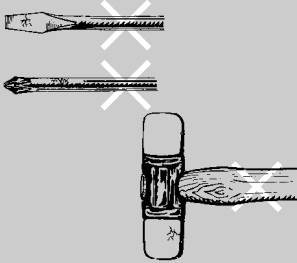
Pack Size : H × W × D mm



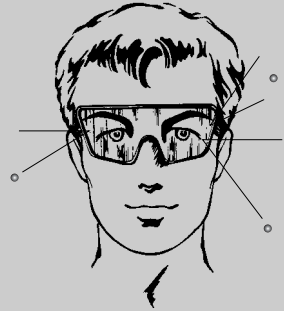
# For Safety Use of Air Tools

Read the following warnings before use in order to prevent harm to you and others in the surrounding area.

## For All Tools

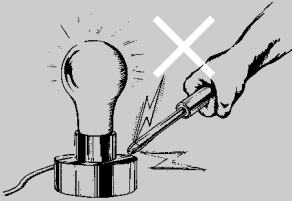


- Do not use any tool if cracked, chipped, worn, deformed or otherwise not in perfect working order.
- Do not use any tool for anything other than its specified inherent purpose.
- Do not work in stressful postures. Always plant feet assuredly and maintain your balance.
- Do not remodel tools. Heating, machining or other tampering can seriously deteriorate quality.
- Wear protective goggles when working.

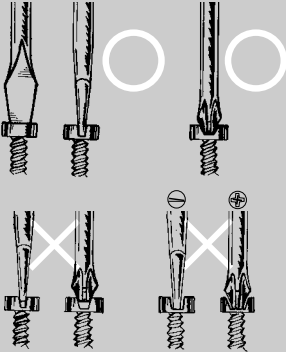


## All Types of Drivers

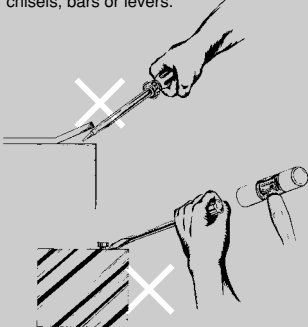
- Do not use drivers on live current.



- Use a driver that fits the screw size.



- Do not use drivers as a substitute for chisels, bars or levers.



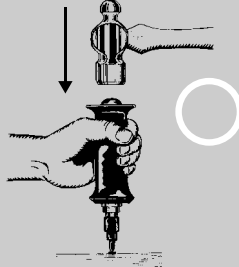
- Do not apply excessive force to drivers.

### Automatic Drivers

- Read the instruction manual carefully before use or replacing bits.
- The blade can jettison. Release the retainer lock carefully.

### Impact Drivers

- Wear protective goggles when working.
- When hammering, strike the center of the driver end cap vertically. Do not strike the end cap from an angle.



### Voltage Detecting Drivers

- Check the driver lights before use.
- Be careful of short-circuits and electrical shock.
- Use within the specified voltage range of the product.
- Do not use drivers when wet with water, oil, etc.

### Interchangeable blade Drivers

- Insert the blade into the driver and check it is assuredly held before use.
- The blade tip is sharp, therefore be careful when changing the blade.
- Interchangeable blade are for hand tools. Do not use them with power tools.

## Ratchet Rivet Guns

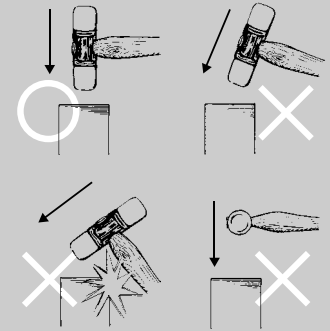
- Do not pinch hands or other objects in the trigger.
- Do not subject to force such as by tapping with a hammer.
- Do not use pipes as extension bars.

## Wire Strippers, Long Nose Pliers and Nippers

- Do not use on live current.
- Cuttings can fly about, therefore be careful of the surrounding area when cutting.
- Do not use as a substitute for a hammer.
- Do not subject to force such as by tapping with a hammer.
- Check product capacity and specifications before use, and use a tool of the required size.

## Hammers

- Wear protective goggles when working.
- Hammer vertically and not from an angle.
- Do not strike areas other than the impact surface.



## Bits and Sockets

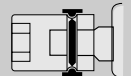
- Use bits and sockets of the required size for the target screws, bolts and nuts.
- Do not apply more force than is necessary.
- Never drive power tools idly with bits or sockets attached.

### Bits

- Shut off power before mounting or replacing bits.
- Do not use hand tool bits with power tools.

### Impact Sockets and Attachments

- Shut off power before mounting or replacing sockets and attachments. Careless handling during bit replacement or abandoning tools during work is very dangerous and can lead to accident. Use only Vessel specified O-rings and socket pins with Vessel power tools. (The retainer ring is insufficient for holding sockets and attachments on its own.)





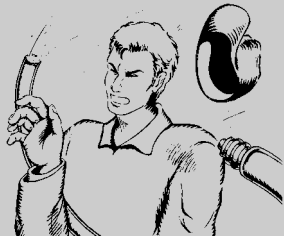
# For Safety Use of Air Tools

Read the following warnings before use in order to prevent harm to you and others in the surrounding area.

## ■ AIR TOOLS

### ● Before operation

Be sure to connect the air joints and hose securely to the tool!  
Otherwise, accidental disconnection of the hose or air leakage may result, causing serious accidents.



Check your tool carefully before in use!  
Should the tool itself or its accessories be found defective, stop using the tool immediately for check-up.

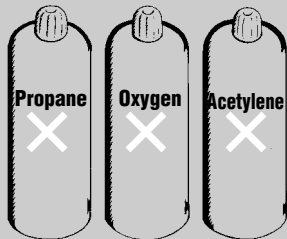


Made sure the tools applicable for the working purpose!  
Contact your agent or manufacturer directly when the details found not cleared even after checked in attached instruction manuals.

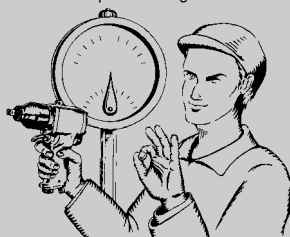


### ● Work Environment

Do not use anything other than plain air as the drive medium!  
Air tools are driven by compressed air. Use of high pressure gases (oxygen, acetylene, propane, etc.) other than air is dangerous and can lead to explosion.



Use tools at an appropriate air pressure!  
Inappropriate pressures not only cause early wear and damage to tools but can also lead to accident.  
Use clean, dry compressed air!  
Dust and drainage can lead to clogging and accident. Install a pressure regulator.

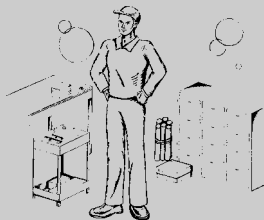


Oil your tools!  
Failure to oil tools not only causes rust, wear and breakdown but can also lead to accident. Replenish oil from the oil supply port and rotate the tool for about 3 sec. under no load 2 or 3 times, before and after use.



### ● Work Environment and Dress

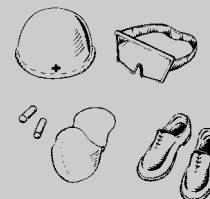
Keep the work area clean and brightly lit!  
Dark or disorderly work environments can lead to accident. Provide proper lighting and keep the area clean and tidy.



Dress for work!  
Do not wear baggy clothes, necklaces, etc. Wear only attire suited for working. Tuck long hair up under a hat or take other measures to prevent entangling in tools.



Wear protective gear!  
Wear protective gear suited for the work including a helmet, protective goggles, ear-plugs, dust mask, safety shoes, etc.



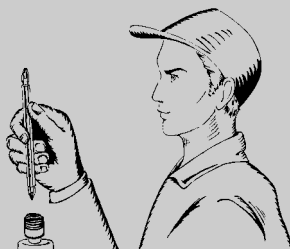
### ● Precautions in Use

Shut off air whenever stopping work!  
Should the tool operate unexpectedly, it could lead to accident. Also, if trouble occurs, shut off air supply instantly and stop working.



Stop the tool before mounting or replacing bits!  
Stop the tool and shut off air supply before mounting bits or changing the direction of rotation. Also, before starting the tool, check the direction of rotation.

Do not use hand tool application tools!  
It easily causes the damage of tip tools and serious accident. Be sure to choose the proper bits and adapters for air tool.



Keep hands away from rotating parts!  
Contact with rotating parts is very dangerous and can lead to accident. Also, the bit and screw can become hot during tool use; therefore do not touch either immediately after use.



Avoid the exhausts!  
Avoid the exhausts from your eyes and ears either directly or indirectly.





# For Safety Use of Air Tools

Read the following warnings before use in order to prevent harm to you and others in the surrounding area.

## ● Installing the tip tools

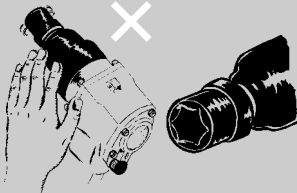
- Before tools put on services for installing or replacing the tip tools (bits, sockets drills, grindstones with shanks, headcups, blades, etc.), be sure to disconnect the air hose from the tools; otherwise, these tools may operate accidentally during their replacement or come off during operation, resulting in accidents. This is very dangerous. Never try to run the motor free loaded before use.
- Be sure to remove the tools used for replacing the tip tools.

### □ Air screwdriver

- Use bits and sockets for power tool application.

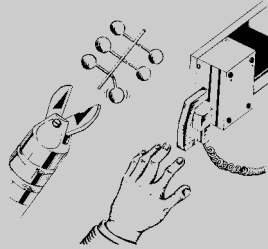
### □ Air impact wrench

- Use bits and sockets for power tool applications.
- To install the sockets, be sure to use our specified O-ring and socket pins. (Use of only retainer rings is not sufficient enough to hold the socket.)
- Do not drive power tools idly with sockets attached.



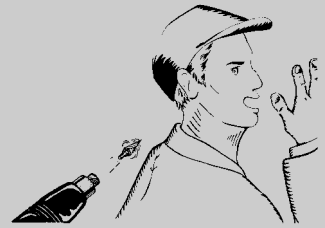
### □ Air nipper and blade

- Continuous use of broken blades may result in serious damage to the tools or accidents, therefore replace the blades when they are broken.
- Replace the blade of the heat nippers after it gets cool. Be aware that they retain heat even after the power is turned off.



### □ Air micro grinder

- Choose the proper tip tools to meet the right application, by referring to catalogs from the reliable manufactures of these tools.
- Do not use broken grindstones; otherwise, chips may scatter, causing injury.
- Do not use grindstones with different shank diameter. It may result in damage to the tool or work pieces.
- Avoid over-tightening and tightening the collet without inserting shank of the tip tools or installing it to the extent to which it exceeds the specified overhang; otherwise, damage to the machine or accident may result.



## ● Storage

- Store tools in a safe place where not exposed to dust, moisture, dewing or freezing.

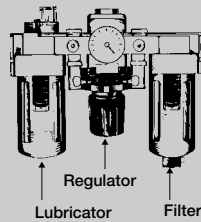
## ● Repair

- Do not disassemble or reassemble the machine unnecessarily, otherwise machine failure or damage to the tool may result.
- For servicing, contact the place of purchase.

## ■ Air Tool Peripherals

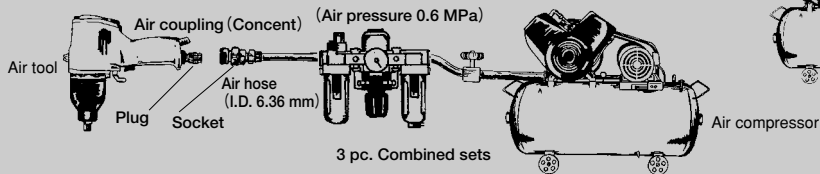
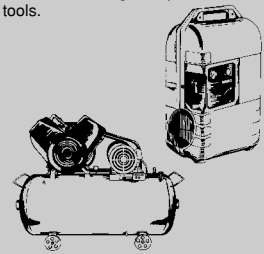
### Air Regulators

Use a 3-piece (filter, regulator and lubricator) air regulator set. The filter removes moisture and dust in the hose and prevents foreign matter from infiltrating the tool. Drain the water collected in the filter periodically. Set the regulator so that air from the compressor is delivered to the tool at an appropriate pressure. The lubricator supplies oil to the tool. Use oil such as ISO-VG10.



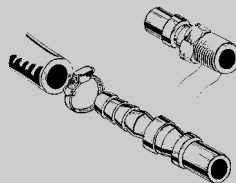
### ● Air compressor

Choose the air compressor to supply enough air pressure and flow consumption volume. Check periodically to remove the drain water to be free from rusting and possible troubles of air tools.



### ● Air couplings

A coupling is used to connect an air hose to the tool or to connect two hoses. Select couplings that ensure good airflow without pressure drops or flow rate loss. Use a hose band or nut to complete connections and prevent loosening between hoses and couplings. Wrap threads with sealing tape. A coupler is a snap-on coupling that allows air passage when the socket and plug are connected. When disconnected, the valve automatically closes whereby stopping airflow.



### ● Air hose

Air supply hoses are made of rubber, urethane, nylon and so on. Choose the proper one by pressure resistance, length, and diameter size. Use the regulator to adjust the air pressure for tools.

