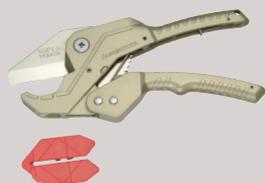


PIPING TOOLS



Tube cutters
P.84 ▶



Other cutters
P.85 ▶



Pipe scrapers, super torque wrenches
P.87 ▶



Flaring tools
P.88 ▶



Flanging tools for flexible tube
P.93 ▶



Benders
P.94 ▶



Chain pipe wrenches
P.96 ▶



Pipe wrenches, belt wrenches
P.97 ▶



Motor wrenches, other wrenches
P.99 ▶



Water pump pliers
P.102 ▶



Super pilers, threaded rod cutters
P.103 ▶



Plumbing tool set
P.104 ▶



TCB104



TCB105



TCB502(quick action mechanism)



■ Spare blade (equipped with bearings)

▶ Example of use



TCB

■ TUBE CUTTER WITH BEARINGS (For stainless steel, steel, copper, aluminum, brass and PVC pipes)

▶ Features

- Suitable for cutting stainless steel and copper.
- Body and knob made of aluminum enables light weight. Easy to use with compact design.
- The rollers and the cutter wheel are equipped with bearings.

Item No.	Applicable pipes(mm)		Full length (mm)	N.W. (g)	Spare blade
	External diameter	Max. thickness			
TCB104	4~28	3	78	140	TCBC105
TCB105	4~32		137	300	
TCB107	6~50		181	420	
TCB502	16~60		230	990	



TC104N

Even with a small body, use range is wide and optimal for work in confined space.



TC205 (knife for surface treatment and spare blade included)



▶ Example of use



TC103E



TC105E

▶ Example of use



TC-E

■ TUBE CUTTER (For thin stainless steel [max. 1mm thick], steel, copper, aluminum, brass and PVC pipes)

▶ Features

- Suitable for cutting thin stainless pipe (max. 1mm thick).
- No swarf from cutting, super sharp cut and smooth cut-end-surface.

TC-N・TC205

■ TUBE CUTTER (For copper, aluminum, brass and PVC pipes)

▶ Features

- Best suitable for cutting copper pipe.
- Superior sharpness and durability for cutting realized by cutter wheel made of special alloy steel with heat treatment.
- No swarf from cutting, super sharp cut and smooth cut-end-surface.

Item No.	Applicable pipes(mm)		Full length (mm)	N.W. (g)	Spare blade
	External dia.	Max. thickness			
TC103N	3~16	3	48	120	TCC105
TC104N	5~28		80	200	
TC105N	3~32		126.5	230	
TC107N	5~45		163	400	
TC205	6~60		193	750	TCC205

Item No.	Applicable pipes(mm)		Full length (mm)	N.W. (g)	Spare blade
	External dia.	Max. thickness			
TC103E	3~16	3	48	120	TCC105E
TC104E	5~28		80	200	
TC105E	3~32		126.5	230	
TC107E	5~45		163	400	



▶ Example of use



TC105R

■ TUBE CUTTER WITH REAMER (For copper, aluminum, brass, PVC [cutting only] pipes)

▶ Features

- Cutting + chamfering, much convenient 2 in 1 feature.
- Superior sharpness and durability for cutting realized by cutter wheel made of special alloy steel with heat treatment.
- No swarf from cutting, super sharp cut and smooth cut-end-surface.
- Reamer with 11 blades enables very smooth chamfering work.

Item No.	Applicable pipes(mm) for cutting		Internal surface chamfering ability (mm)	Full length (mm)	N.W. (g)	Spare blade
	External dia.	Max. thickness				
TC105R	3~32	3	3~13 (external diameter)	154.5	300	TCC105



TC104NP

Even with a small body, use range is wide and optimal for work in confined space.



TC105NP

▶ Example of use



TC-NP

COATED COPPER PIPE CUTTER (For coated copper, copper, aluminum, brass and PVC pipes)

▶ Features

- Suitable for cutting coated copper pipe.
- No swarf from cutting, super sharp cut and smooth cut-end-surface.

Item No.	Applicable pipes (mm)		Full length (mm)	N.W. (g)	Spare blade
	External dia.	Max. thickness			
TC104NP	5~32	5	86.5	200	TCC107P
TC105NP	5~30		126.5	240	
TC107NP	5~42		163	400	



TC105NF

Support rollers on both upper and lower side enable clean and complete cut.

▶ Example of use


 TC107F
(spare blade included)

TC105NF • TC107F

FLEXIBLE STAINLESS STEEL PIPE CUTTER (For single-rigged corrugate pipe)

▶ Features

- The long type roller inside the body and the rollers at both sides of the cutter wheel enable clean and complete cut of the flexible pipe.
- No swarf from cutting, super sharp cut.

Item No.	Applicable pipes (mm)		Full length (mm)	N.W. (g)	Spare blade
	External dia. (size name)	Max. thickness			
TC105NF	8~32 (8A~25A)	5	126.5	240	TCC105F
TC107F	8~42 (8A~32A)		165	450	TCC107P



Spare roller included



TCB502MR

PIPE GROOVING TOOL WITH BEARINGS (For stainless steel pipes) Quick Action Type

▶ Features

- Special pipe grooving tool for pipe connection.
- The rollers are equipped with bearings.

Item No.	Applicable pipes (mm)		Full length (mm)	N.W. (g)	Spare roller
	External dia. (size name)	Max. thickness			
TCB502MR	15.88~60.5 (13~60su)	1.5	230	1,030	TCR502H

TCBC • TCC-(E • P • F • H) • TCR502H

SPARE BLADES

▶ Feature

- Superior sharpness and durability for cutting realized by cutter wheel made of special alloy steel with heat treatment.



TCBC105

Blades come in 1 pce per pack.

Item No.	Spare blade diameter (mm)	Applicable cutter
* TCBC105	22	TCB104~107
* TCBC502	27.5	TCB502
TCC105E	18.7	TC103E~107E
TCR502H	18.7	TCB502MR

* TCBC type is equipped with bearings.



Blades come in 10 pcs per pack.

Item No.	Spare blade diameter (mm)	Applicable cutter
TCC1050	18.7	TC103~107, TC103N~107N
TCC2050	18.7	TC205
TCC1070H	18.7	TC104H~107H
TCC2060H	25.7	TC206H, TC502H
TCC1070P	23.7	TC104NP~107NP, TC107F
TCC1050F	18.7	TC105F, TC105NF



VK34N



VK42N



VK63N

VK-N

■ PVC PIPE CUTTER (Ratchet Mechanism Type)

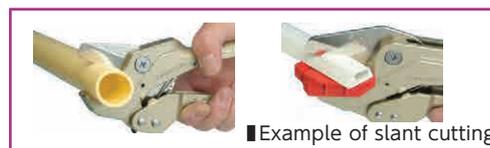
▶ Feature

- One-action release mechanism (VK-N) (When you full open the handle, the blade automatically opens at maximum).

▶ Accessories

- Attachment (VK4200NP) for PVC wire protector included. (VK42N only)

▶ Example of use



■ Example of slant cutting

Item No.	Applicable pipes			Full length (mm)	N.W. (g)	Spare blade
	External dia.	Size (VP)	Material			
VK34N	Under 34mm	13~25	Rigid PVC pipe	183	290	VKS34N
VK42N	Under 42mm	13~30	Polyethylene pipe, polybutene pipe	235	420	VKS42N
VK63N	Under 63mm	13~50	Polyethylene pipe	298	680	VKS63N

* You can find on our website, at the footer of the top page, the method to replace a spare blade.

Tube cutters

Other cutters

Pipe scrapers, super torque wrenches

Flaring tools

Flanging tools for flexible tube

Benders

Chain pipe wrenches

Pipe wrenches, belt wrenches

Motor wrenches, other wrenches

Water pump pliers

Super pilers, threaded rod cutters

Plumbing tool set



▶ Example of use



PC38

■ FLEXIBLE AND PE PIPE CUTTER

▶ Features

- Super clean cut for soft resin pipes such as polyester resin flexible tube, sheath tube, polybutene tube, etc.
- By flipping the blade backward, it can be used twice.

⚠ Not for PVC pipe.

Item No.	Cutting ability (mm)	Full length (mm)	N.W. (g)	Spare blade
PC38	External dia. under 38	218	155	PCS38



TR322



TR835S



TR1254S

▶ Example of use



VKS-N • VKS50 • PCS38 ■ SPARE BLADE FOR PVC PIPE CUTTER

Item No.	Applicable cutter
VKS34N	VK34N
VKS42N	VK42N
VKS63N	VK63N
VKS50	VK50 (discontinued model)
PCS38	PC38

* The method to replace a VKS-N spare blade can be found on our website.

TR322 • TR-S

■ TUBE REAMER (Tube Chamfering)

▶ Features

- **TR322:** for copper pipe (internal surface chamfering)
 - Best suitable for copper, aluminum, brass and rigid PVC pipes.
 - The 11 blades enables very smooth chamfering work.
- **TR-S:** for stainless steel pipe (both internal and external surface chamfering)
 - Best suitable for stainless steel, copper, aluminum, brass and rigid PVC pipes.
 - The cutting ability of the 40 blades offers ultra clean chamfering.

Item No.	Size (mm)			N.W. (g)
	Chamfering capacity for external and internal dia.	Full length	Diameter	
TR322	3~22 (external)	60.5	43	170
TR835S	8~35 (external)	60	48.5	200
TR1254S	12~54 (external)	84	67	450

● For all the appendix of the piping tools, please refer to P.283

■ Please refer to the pipe size name and diameter table.

PS100

PIPE SCRAPER



► Features

- Easy pipe deburring.
- Robust yet light-weighted, with hand-fit grip.
- Blade change is easy (one spare blade included inside the body).

Item No.	Applicable metals	Full length (mm)	N.W. (g)
PS100	Stainless steel, steel, copper, aluminum, plastic	121.5	48



PSS100

SPARE BLADE FOR PIPE SCRAPER (2pcs set)

► Features

Material : HSS (High Speed Steel), blade tip angle : 40° , length : 12mm

Item No.	Set details
PSS100	Inner=2, Outer=2



STW17H

STW22H

► Example of use



STW-H

SUPER TORQUE WRENCH (Calibration Certificate Included)

► Features

- For tightening flare nut of new cooling media with adequate torque value.
- The tightening torque settings are adapted to new cooling media.
- When reaching the set torque value, to indicate that the tightening is complete you will hear a click sound and feel a light “shock” in your hand.

Item No.	Mouth width (mm)	Flare nut size	Torque setting	Full length (mm)	N.W. (g)
STW17H	17	1/4inch	16N·m	220	365
STW22H	22	3/8inch	38N·m	230	410

●For all the appendix of the piping tools, please refer to P.283

CB46

COPPER PIPE BRUSH



► Features

- Suitable to remove dirt, inner and outer oxidized surface of pipe before blaze processing.
- The body is made of two resin pieces fixed by pins, so it is easy to change the brushes.
- High carbon steel (S45C) brushes are robust and both inner and outer pipe surface can be cleaned by this single tool.

Item No.	Applicable pipes (inch)	Full length (mm)	N.W. (g)
CB46	1/2, 3/4(inner and outer)	129	54



CBB46

SPARE BRUSH

Item No.	Set details
CBB46	Inner=2, Outer=2



STW2HS

SUPER TORQUE WRENCH 2PCS-SET (Calibration Certificate Included)

► Feature

- Fabric resin holder as standard acc.

Item No.	Set details	Full length (mm)	Set N.W. (g)
STW2HS	STW17H-STW22H	250	800

⚠ After an absence of use for a long time, use a few times on preliminary operation with an adequate bolt size before using for actual work.

Tube cutters

Other cutters

Pipe scrapers, super torque wrenches

Flaring tools

Flanging tools for flexible tube

Benders

Chain pipe wrenches

Pipe wrenches, belt wrenches

Motor wrenches, other wrenches

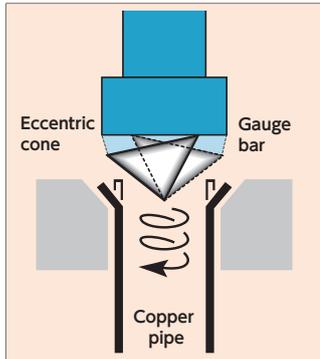
Water pump pliers

Super pilers, threaded rod cutters

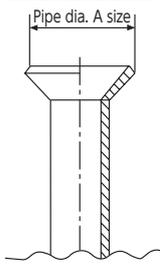
Plumbing tool set

Eccentric Cone Type Flare Flaring cone

The precision finished flaring cone, using eccentric rotation, assures an equal flaring by the cone side, allowing an evenly neat flaring even with low force.



For new cooling media



Flaring process dimension standard

Size name	Diameter name	Pipe dia. A size (±0.4)	
		For 1 st category	For 2 nd category
1/4"	6.35	9	9.1
3/8"	9.52	13	13.2
1/2"	12.70	16.2	16.6
5/8"	15.88	19.4	19.7
3/4"	19.05	23.3	24.0

* 1st category : R407C(E), R404A, R507A, HFC134a and conventional cooling media
 * 2nd category : R410A



TF456WQH

FLARING TOOL WITH QUICK HANDLE (Eccentric Cone Type) PAT.

Adapted to new standard / new cooling media

Features

- Adapted to annealed copper pipe 3/4", thickness 1.2mm.
- With the quick handle, no need to change the handle hold, the hands don't get tired and continuous rotation is easy.
- You can change the rotation direction quickly by sliding the handle up and down.
- As there is no switch knob at the center of the handle, the handle just fits the hand with no discomfort.
- No backlash thanks to special bearing used in the rotating part of the handle.
- Clutch mechanism used in the center of the body enables high precision flaring.

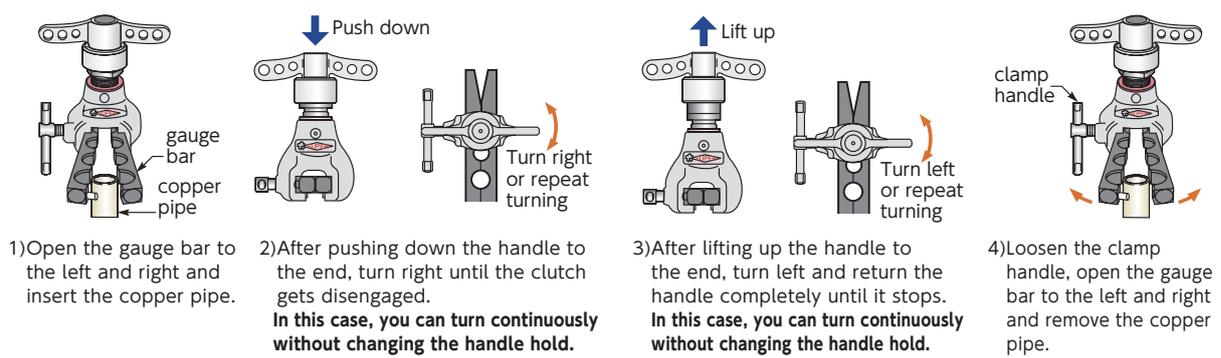
Example of use



◀ To switch the rotation direction, just slide the handle up and down.

Item No.	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	N.W. (kg)
TF456WQH	1/4 · 5/16 · 3/8 · 1/2 · 5/8 · 3/4	1.7

Operation procedure



* The operation procedure above is an excerpt from the operation manual. Always read the operation manual and follow the instructions before use.



TFA455WH

FLARING TOOL WITH FEED HANDLE (Eccentric Cone Type) Aluminum Alloy Body

Adapted to new standard / new cooling media

► Features

- Adapted to annealed copper pipe 3/4", thickness 1.2mm.
- Body and gauge are in aluminum, allowing super light weight.
- Clutch mechanism to prevent overload.

Item No.	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	N.W. (kg)
TFA455WH	1/4 · 3/8 · 1/2 · 5/8 · 3/4	0.75



TF456WH

FLARING TOOL WITH FEED HANDLE (Eccentric Cone Type)

Adapted to new standard / new cooling media

► Features

- Adapted to annealed copper pipe 3/4", thickness 1.2mm.
- Clutch mechanism to prevent overload.

Item No.	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	N.W. (kg)
TF456WH	1/4 · 5/16 · 3/8 · 1/2 · 5/8 · 3/4	1.6



TF456WGH

RATCHET TYPE FLARING TOOL (Eccentric Cone Type)

Adapted to new standard / new cooling media

► Features

- Adapted to annealed copper pipe 3/4", thickness 1.2mm.
- The ratchet type feed-handle allows continuous turning.
- To switch the rotation direction, you just need to turn the knob.
- Clutch mechanism to prevent overload.

Item No.	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	N.W. (kg)
TF456WGH	1/4 · 5/16 · 3/8 · 1/2 · 5/8 · 3/4	1.7



TF456WRH

FLARING TOOL WITH RATCHET HANDLE (Eccentric Cone Type)

Adapted to new standard / new cooling media

► **Features**

- Adapted to annealed copper pipe 3/4", thickness 1.2mm.
- Special ratchet handle included.
- The ratchet mechanism enables a quick and easy finish.
- Clutch mechanism to prevent overload.

Item No.	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	N.W. (kg)
TF456WRH	1/4 · 5/16 · 3/8 · 1/2 · 5/8 · 3/4	1.8

Tube cutters

Other cutters

Pipe scrapers, super torque wrenches

Flaring tools

Flanging tools for flexible tube

Benders

Chain pipe wrenches

Pipe wrenches, belt wrenches

Motor wrenches, other wrenches

Water pump pliers

Super pilers, threaded rod cutters

Plumbing tool set



► **Example of use**



TF456WDH

MANUAL / ELECTRIC FLARING TOOL (Eccentric Cone Type)

Adapted to new standard / new cooling media

► **Features**

- Adapted to annealed copper pipe 3/4", thickness 1.2mm.
- Clutch mechanism to prevent overload.
- The built-in clutch mechanism allows safe and quick operation even in electric mode.
- Electric driver bit included (3/8" square, 8mm).

Item No.	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	N.W. (kg)
TF456WDH	1/4 · 5/16 · 3/8 · 1/2 · 5/8 · 3/4	1.6



TF459W

TF459W · TF459M

FLARING TOOL WITH FEED HANDLE (Eccentric Cone Type)

► **Features**

- Feed handle type.
- Clutch mechanism to prevent overload.

Item No.	Tube applicable diameter (size name) (mild copper, aluminum pipe)	N.W. (kg)
TF459W	1/8 · 3/16 · 1/4 · 5/16 · 3/8 · 7/16 · 1/2 · 5/8 · 3/4	1.7
TF459M	4 · 5 · 6 · 8 · 10 · 12 · 14 · 15 · 16	1.7

TS456(WQH · WH · WRH · WDH)

TUBING TOOL SET (Eccentric Cone Type)

Adapted to new standard / new cooling media

Features

- Set for cutting, chamfering and flaring.
- Adapted to annealed copper pipe 3/4", thickness 1.2mm.
- Steel case as standard acc.



TS456WQH
(quick handle type) PAT.



TS456WH
(feed handle type)



TS456WRH
(ratchet handle type)



TS456WDH
(manual / electric type)

Item No.	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	Set details	Set N.W. (kg)
TS456WQH	1/4 · 5/16 · 3/8 · 1/2 · 5/8 · 3/4	TF456WQH·TC105·TR322	4
TS456WH		TF456WH·TC105·TR322	3.8
TS456WRH		TF456WRH·TC105·TR322	4.1
TS456WDH		TF456WDH·TC105·TR322	3.9

TFG-N

GAUGE BAR

Adapted to new cooling media

Applicable models

Eccentric Cone Type Flaring Tools all models
(except TFA455WH, TF459W, TF459M).



TFG456N

Item No.	Number of holes	Copper pipe applicable diameter (size name) (copper pipe for general cooling media piping)	N.W. (g)
TFG455N	5	1/4 · 3/8 · 1/2 · 5/8 · 3/4	530
TFG456N	6	1/4 · 5/16 · 3/8 · 1/2 · 5/8 · 3/4	570

TFAG455N

GAUGE BAR Aluminum Alloy Body

Applicable model

Aluminum Flaring Tool (TFA455WH).



Item No.	Number of holes	Tube applicable diameter (size name)	N.W. (g)
TFAG455N	5	1/4 · 3/8 · 1/2 · 5/8 · 3/4	190



TSC420M-W

TSC457M-W

TSC-M • TSC-W

TUBING TOOL SET (Standard Type)

- **Feature**
- Steel case as standard acc.

Item No.	Gauge bar	Tube applicable diameter (size name) (mild copper, aluminum pipe)	Set N.W. (kg)
TSC420M	TFG53M-56M	4·5·6·8·10·12·14·16·20	2.2
TSC420W	TFG53W-56W	1/8·3/16·1/4·5/16·3/8·7/16·1/2·5/8·3/4	2.2
TSC457M	TFG57M	4·6·8·10·12·14·16	1.9
TSC457W	TFG57W	3/16·1/4·5/16·3/8·7/16·1/2·5/8	1.9



TFY50

YOKE (For TFG-M • W)

- **Features**
- Special yoke for gauge bar (TFG-M • W).
 - Strong and sturdy drop forged body.

Item No.	N.W. (g)
TFY50	370

TFG-M • TFG-W

GAUGE BAR (Standard Type)

- **Features**
- Special gauge bar for TSC420M~TSC457W.
 - Models adapted to each usage.

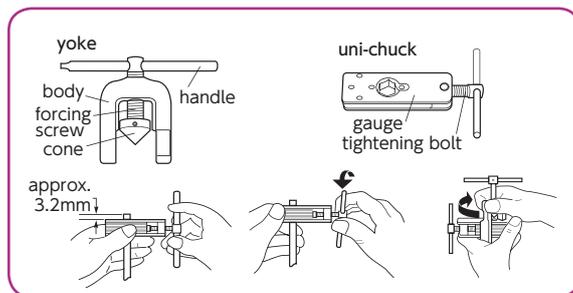


Item No.	Tube applicable diameter (size name)	N.W. (g)
TFG56M	4·5·6·8·10·12	520
TFG56W	1/8·3/16·1/4·5/16·3/8·7/16	520
TFG53M	14·16·20	470
TFG53W	1/2·5/8·3/4	470
TFG57M	4·6·8·10·12·14·16	650
TFG57W	3/16·1/4·5/16·3/8·7/16·1/2·5/8	650

TF416

UNI-CHUCK FLARING TOOL SET Free Expansion Type

- **Features**
- During the flaring process, the line contact by the dodecagon (12) shaped cone enables clean finish.
 - Optimal for flaring tubes of air conditioning system, hydraulic equipment, central heating system, etc.



Item No.	Tube applicable diameter (size name) (mild copper, aluminum pipe)	Set N.W. (g)
TF416	4~16mm(3/16~5/8)	960

TFG416

UNI-CHUCK GAUGE Free Expansion Type

- **Feature**
- You can fix the tube with no step, just by turning the handle.



Item No.	Tube fixing capacity (no step)	N.W. (g)
TFG416	4~16(mm)3/16~5/8(inch)	520

TFY416

UNI-CHUCK YOKE

- **Features**
- Special yoke for uni-chuck gauge.
 - Strong and sturdy drop forged body.



Item No.	N.W. (g)
TFY416	370

TH406R • TH1320(R • G)

FLANGING TOOL FOR FLEXIBLE TUBE

▶ Feature

- Can flange with 2 or 3 ridges.

▶ Example of use



Rotation direction switch plate



TH406R (ratchet handle type) PAT.



TH1320R (ratchet type)



TH1320 (feed handle type)



TH1320G (gear wrench type)

■ Operation procedure (THS406R, TH406R)

- 1) Cut the flexible tube at the required length.
- 2) Adjust the holes of both side of the tool to the size of the flexible tube.
- 3) Set the flexible tube to the tool.
- 4) Flange.
- 5) Flanging complete.
- 6) Remove.

Item No.	Applicable tube material and size	N.W. (kg)
TH406R	Stainless steel flexible water tube (single corrugate tube) Size : 1/2(13)、3/4(20)(external : 16mm, 20mm)	1.5
TH1320R		1.1
TH1320		1
TH1320G		1



THS406R

FLANGING TOOL FOR FLEXIBLE TUBE AND CUTTING TOOL SET

▶ Feature

- Plastic case as standard acc.



TH406R



TC105NF

Item No.	Applicable tube material and size	Set N.W. (kg)
THS406R	Stainless steel flexible water tube (single corrugate tube) Size : 1/2(13)、3/4(20)(external : 16mm, 20mm)	2.2



TB396M

▶ Example of use


TB-M•TB-W

■ TUBE BENDER (Standard Type)

▶ Features

- Bending angle : 0~180°
- Optimal for bending copper tube, and can also be used for annealed stainless steel pipe and OST copper pipe. (cannot be used for cooling media, coated copper pipe, gas pipe and aluminum pipe)

⚠ Only for tubes with exactly specified outer diameter.

Item No.	Size(mm)			N.W. (kg)
	Full length	Applicable tube external diameter	Bending radius(R)	
TB394M	220	6	14.3	0.45
TB395M	224	8	17.5	0.55
TB396M	335	10	23.8	1
TB398M	462	12	38	1.8
* TB3910M	735	16	57.2	2.7
TB394W	220	1/4(6.35)	14.3	0.45
TB395W	224	5/16(7.94)	17.5	0.55
TB396W	335	3/8(9.52)	23.8	1
TB398W	462	1/2(12.70)	38	1.8
* TB3910W	735	5/8(15.88)	57.2	2.7
* TB3912W	830	3/4(19.05)	76.2	4

For items with full length over 700m (* marked items), the handles are hollow pipes to reduce the net weight.

TB5681

■ 4-HEAD TUBE BENDER

▶ Features

- Made in reinforced glass fiber plastic.
- Bending angle : 0~180°
- Can bend 4 different sizes with 1 tool.

⚠ Only for tubes with exactly specified outer diameter.

Item No.	Applicable tube		Size(mm)		N.W. (g)
	External diameter(mm)	Material	Bending radius(R)	Full length	
TB5681	5·6	Soft copper, aluminum	16	265	400
	8·10		23.5		



TB368

■ 3-HEAD TUBE BENDER

▶ Features

- Made in die-cast aluminum alloy.
- Bending angle : 0~90°
- Can bend 5 different sizes (inches : 3 sizes ; mm : 2 sizes) with 1 tool.

⚠ Only for tubes with exactly specified outer diameter.

Item No.	Applicable tube		Size(mm)		N.W. (g)
	External diameter	Material	Bending radius(R)	Full length	
TB368	1/4·5/16·3/8(6·8mm)	Soft copper, aluminum brass	23.8	224	400





SPB-NPS

HYDRAULIC PIPE BENDER PUMP SET (Manual Type)

► Features

- For bending (up to 90°) thick (JIS standards) stainless steel pipe, gas pipe, water pipe.
- The attachment bendshoe ensures accurate bending without damaging the pipe.

► Accessories

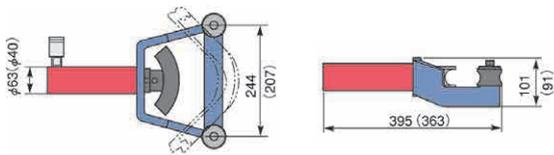
- Attachment bendshoe 3 pcs.

■ Applicable pipe thickness

10A=min. 2.3mm / 15A·20A=min. 2.8mm / 25A=min. 3.2mm

⚠ Can be used only for tubes of exact outer diameter. Depending on the pipe material or thickness, the bending may not be accurate.

Set Item No.	Set details			Applicable pipe size name	Bending capacity (kN)	Max. allowable pressure	Set N.W. (kg)
	Bender	Pump, hose	Attachment bendshoe.				
SPB520NPS	SPB520N	HP900N·HH2N(see p.177)	SPB10AN·15AN·20AN	10A·15A·20A	50	70MPa	18
SPB1025NPS	SPB1025N	HP900N·HH2N(see p.177)	SPB15AN·20AN·25AN	15A·20A·25A	100	70MPa	23



Note : () sizes are for SPB520N

SPB-N

PIPE BENDER (Hydraulic Type)

► Features

- For bending (up to 90°) thick (JIS standards) stainless steel pipe, gas pipe, water pipe.
- 3 types of attachment bendshoes adapted to bending process included.
- Adapted to our hand-operated hydraulic pump and hose (see p.177).

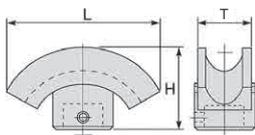
► Accessories

- Attachment bendshoes : SPB520N : 10AN, 15AN, 20AN ; SPB1025N : 15AN, 20AN, 25AN.
- Hex key wrench for attachment fixing (4mm).

⚠ Can be used only for tubes of exact outer diameter. Depending on the pipe material or thickness, the bending may not be accurate.

Item No.	Applicable pipe size name	Bending capacity (kN)	Max. allowable pressure	Cylinder stroke (mm)	Bending radius, pipe thickness(mm)				N.W. (kg)
					10A	15A	20A	25A	
SPB520N	10A·15A·20A	50	70MPa	127	R50	R50	R50	-	7.5
					Min.2.3	Min.2.8		-	
SPB1025N	15A·20A·25A	100	70MPa	150	-	R50	R50	R70	12
					-	Min.2.8		Min.3.2	

* N.W. includes SPB20AN or SPB25AN on each bender.



SPB-AN

TUBE ATTACHMENT BENDSHOE

► Feature

- Different attachments adapted to the bending radius.

Item No.	Size(mm)				Bending radius	N.W. (kg)
	L	H	T			
SPB10AN	106	57	28		R50	0.65
SPB15AN	110	59	33		R50	0.74
SPB20AN	115	62	40		R50	0.88
SPB25AN	155	67	48		R70	1.28

● For all the appendix of the piping tools, please refer to P.283



ST2P

ST-P • STT-P

■ SUPER TONG, Chain Pipe Wrench Replaceable Heel Jaw Type (Heavy Duty Type for Professional Use)

► Features

- As a replaceable heel jaw teeth type, when the jaw teeth get worn, it can be replaced, so the tool can be used for a long time.
- Optimal for work in narrow places where pipe wrench cannot be used.
- Can work repeatedly with one-time setting (not for coated steel pipe).

Item No.	Applicable pipe		Body full length (mm)	N.W. (kg)
	Size name	External dia. (mm)		
ST1.5P	10A~100A	17~120	425	1.8
ST2P	20A~150A	25~170	510	2.6
ST2.5P	25A~200A	34~230	695	5.3

Stopper to prevent the chain from coming off included.
Chain links can be added up to twice the original chain length.



■ Heel Jaw Teeth (hex. socket head screw included)

Item No.	Applicable item
STT1.5P	ST1.5P
STT2P	ST2P
STT2.5P	ST2.5P



ST2

ST • ST-L

■ SUPER TONG, Chain Pipe Wrench (Heavy Duty Type for Professional Use)

► Features

- Optimal for work in narrow places where pipe wrench cannot be used.
- Can work repeatedly with one-time setting (not for coated steel pipe).
- For ST3, 3L and 4 it is possible to add pipes (sold separately) to the handle.

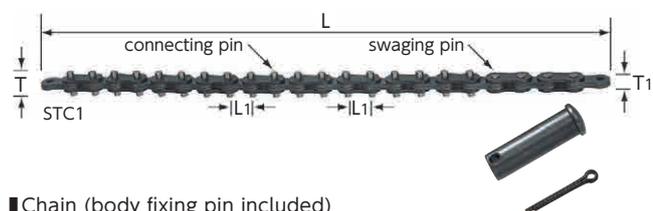
Item No.	Applicable pipe		Body full length (mm)	N.W. (kg)
	Size name	External dia. (mm)		
ST0	8A~40A	12~50	230	0.3
ST1	8A~80A	14~89	305	0.8
ST1L	8A~150A	14~170	305	1.1
ST1.5	10A~100A	17~120	425	1.8
ST2	20A~150A	25~170	510	2.6
ST2L	20A~200A	25~230	510	3.1
ST2.5	25A~200A	34~230	695	5.3
ST3	25A~250A	35~270	745	6.3
ST3L	25A~300A	35~320	745	6.6
ST4	50A~500A	60~510	745	10.5

For ST1.5 and above, stopper to prevent the chain from coming off included.

Chain links can be added up to twice the original chain length (except for ST1L, 2L and 3L).

STC • STC-L • STP • STH

■ SUPER TONG Parts



■ Chain (body fixing pin included)

Item No.	L (mm)	L1 (mm)	Total number of links	Number of swaging pins	Number of links linked to swaging pins	T (mm)	T1 (mm)
STC0	243	14.3(⅝)	17	4	5	14	7.2
STC1	438	19(¾)	23	4	5	20	9.6
STC1L	667	19(¾)	35	4	5	20	9.6
STC1.5	514	19(¾)	27	4	5	20	9.6
STC2	685	25.4(1)	27	6	7	28	12.8
STC2L	838	25.4(1)	33	6	7	28	12.8
STC2.5	857	31.8(1¼)	27	6	7	40	16
STC3	984	31.8(1¼)	31	6	7	40	16
STC3L	1,111	31.8(1¼)	35	6	7	40	16
STC4	1,867	38.1(1½)	49	6	7	50	19.2

■ Pin

Item No.	Applicable item
STP0	ST0
STP1	ST1•1L
STP1.5	ST1.5•1.5P
STP2	ST2•2L•2P
STP2.5	ST2.5•2.5P
STP3	ST3•3L
STP4	ST4



STP2



STH3

* Only for ST3, 3L and 4.

■ Pipe (to connect to the body)

Item No.	Applicable item	Size (mm)			N.W. (kg)
		Full length	External dia.	Pipe thickness	
STH3	ST3•3L	1,000	43	5	4.5
STH4	ST4	1,500	45	5	7.5



BW2



BWP2

BWS2450

Material : special processed nylon

BW • BW-L

■ BELT WRENCH, Aluminum Alloy Body (Non-scratching Type)

► Features

- High strength aluminum alloy allows light body.
- Special processed nylon belt ensures outstanding non-scratch durability.

Item No.	Applicable pipe		Body full length (mm)	N.W. (g)
	Size name	External dia.(mm)		
BW2	10A~65A	15~80	300	320
BW2L	10A~250A	15~280	300	380
BW5	25A~150A	30~175	450	800
BW5L	25A~300A	30~320	450	880

BWS • BWP

■ BELT WRENCH Parts

■ Spare belt

Item No.	Applicable item	Size (mm)	
		Applicable pipe external dia.	Belt width x length
BWS2450	Standard for BW2	15~80	32×450
BWS21000	Standard for BW2L	15~280	32×1,000
BWS21500	Long type for BW2.2L	15~420	32×1,500
BWS5800	Standard for BW5	30~175	45×800
BWS51250	Standard for BW5L	30~320	45×1,250
BWS51650	Long type for BW5.5L	30~450	45×1,650

■ Pin (assembling pin for belt replacement)

Item No.	Applicable item
BWP2	BW2.2L
BWP5	BW5.5L



CPA350 (standard type)

CPA

■ CORNER PIPE WRENCH, Aluminum Alloy Body (Standard Type)

► Features

- The drop-forged aluminum body is light and sturdy.
- Optimal for piping work in narrow places such as ground contact areas, near wall areas, inside grooves.

Item No.	Applicable pipe		Full length (mm)	N.W. (kg)
	Size name	External dia.(mm)		
CPA250	8A~25A	13~40	251	0.4
CPA300	10A~32A	15~46	301	0.6
CPA350	15A~40A	20~54	351	0.7
CPA450	25A~50A	30~65	451	1.2
CPA600	40A~80A	48~90	604	3



CPA350M (white gas pipe and coated pipe type)

CPA-M

■ CORNER PIPE WRENCH, Aluminum Alloy Body (White Gas Pipe and Coated Pipe Type)

► Features

- The drop-forged aluminum body is light and sturdy.
- The middle size of the teeth range allows the wrench to fit with both white gas pipe and coated pipe, for a large variety of use.

Item No.	Applicable pipe		Full length (mm)	N.W. (kg)
	Size name	External dia.(mm)		
CPA250M	8A~25A	13~40	251	0.4
CPA300M	10A~32A	15~46	301	0.6
CPA350M	15A~40A	20~54	351	0.7
CPA450M	25A~50A	30~65	451	1.2
CPA600M	40A~80A	48~90	604	3



DT350E

DT-E • DT900

PIPE WRENCH, Deluxe Forged Body

► Features

- Forged body.
- The quality is equivalent to JIS strong class.
- Optimal for gas and water pipes.
- Outstanding durability with tooth hardness of 52~58HRC.

Item No.	Applicable pipe		Full length (mm)	N.W. (kg)
	Size name	External dia.(mm)		
DT200E	6A~25A	6~34	161	0.4
DT250E	6A~32A	6~45	204	0.6
DT300E	6A~40A	10~55	245	1
DT350E	6A~50A	10~65	288	1.3
DT450E	8A~65A	13~80	372	2.1
DT600E	20A~80A	26~90	498	3
DT900	25A~100A	38~125	750	6.5



DTA350E

DTA-E

PIPE WRENCH, Aluminum Alloy Body

► Features

- The drop-forged aluminum body is more than 30% lighter than the deluxe pipe wrench.
- The quality is equivalent to JIS strong class.

Item No.	Applicable pipe		Full length (mm)	N.W. (kg)
	Size name	External dia.(mm)		
DTA250E	6A~32A	6~45	204	0.45
DTA300E	6A~40A	10~55	245	0.65
DTA350E	6A~50A	10~65	288	0.9
DTA450E	8A~65A	13~80	372	1.5
DTA600E	20A~80A	26~90	498	2.4



AP350E

AP-E

STRAIGHT PIPE WRENCH, Aluminum Alloy Body

► Features

- The high strength aluminum alloy body is very light and brings improved durability.
- The quality is equivalent to JIS strong class.

Item No.	Applicable pipe		Full length (mm)	N.W. (kg)
	Size name	External dia.(mm)		
AP250E	6A~32A	6~45	210	0.5
AP300E	6A~40A	8~55	245	0.7
AP350E	6A~50A	10~65	290	1.1
AP450E	8A~65A	15~80	370	1.7
AP600E	15A~80A	20~90	500	2.7
AP900E	25A~100A	38~125	725	4.9



AP350N
(coated pipe type)

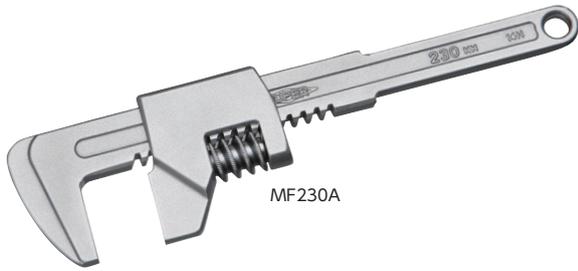
AP-N

STRAIGHT PIPE WRENCH, Aluminum Alloy Body (Coated Pipe Type)

► Feature

- Specially designed for poly pipe and PVC coated pipe. Scratch resistant thanks to small tooth pitch.

Item No.	Applicable pipe		Full length (mm)	N.W. (kg)
	Size name	External dia.(mm)		
AP250N	15A~32A	6~45	210	0.5
AP300N	15A~40A	8~55	245	0.7
AP350N	15A~50A	10~65	290	1.1
AP450N	15A~65A	15~80	370	1.7
AP600N	15A~80A	20~90	500	2.7
AP900N	25A~100A	38~125	725	4.9



MF230A

MF-A

■ MOTOR WRENCH, Aluminum Alloy Body

▶ Features

- Body and jaw are made of aluminum.
- Wide jaw opening allows wider use application compared to standard adjustable wrench.
- Optimal for plated nut and soft nut materials like copper, brass, gunmetal.

⚠ Avoid tightening work exceeding 200N·m torque.

Item No.	Size(mm)				N.W. (g)
	Jaw width	Jaw depth	Jaw thickness	Full length	
MF230A	0~60	34	8.4	235	190
MF280A	0~75	40	9.5	285	280



MFW280SA

■ WIDE MOTOR WRENCH, Quick Adjusting Type, Aluminum Alloy Body PAT.

▶ Features

- Body is made of aluminum.
- One push quick slide mechanism enables quick jaw adjusting.
- Optimal for plated nut and soft nut materials like copper, brass, gunmetal.

⚠ Avoid tightening work exceeding 200N·m torque.

Item No.	Size(mm)				N.W. (g)
	Jaw width	Jaw depth	Jaw thickness	Full length	
MFW280SA	0~80	48	8.5	284	360



▶ Example of use



MFW280S

■ WIDE MOTOR WRENCH, Quick Adjusting Type PAT.

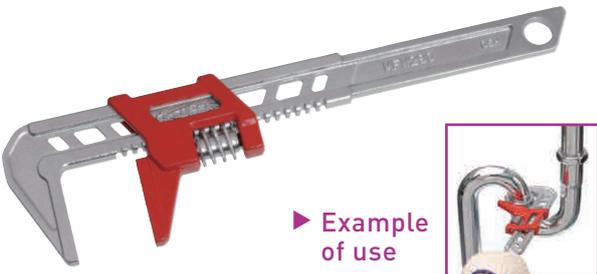
MOVIE ▶



▶ Features

- One push quick slide mechanism enables quick jaw adjusting.
- Wide jaw opening allows wider use application compared to standard adjustable wrench.
- Optimal for plated nut and soft nut materials like copper, brass, gunmetal.

Item No.	Size(mm)				N.W. (g)
	Jaw width	Jaw depth	Jaw thickness	Full length	
MFW280S	0~80	48	8.5	284	490



▶ Example of use



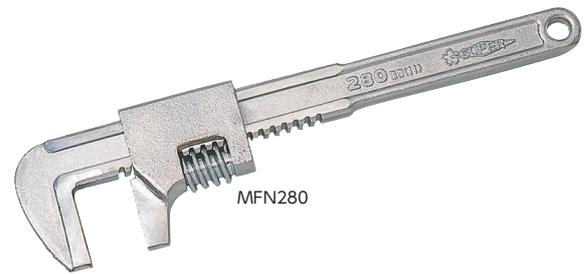
MFW280

■ WIDE MOTOR WRENCH, Thin and Light Type

▶ Features

- Wide jaw opening allows wider use application compared to standard adjustable wrench.
- Optimal for plated nut and soft nut materials like copper, brass, gunmetal.

Item No.	Size(mm)				N.W. (g)
	Jaw width	Jaw depth	Jaw thickness	Full length	
MFW280	0~80	48	8.5	284	450



MFN280

MF230 • MFN280

■ MOTOR WRENCH

▶ Features

- Wide jaw opening allows wider use application compared to standard adjustable wrench.
- Optimal for plated nut and soft nut materials like copper, brass, gunmetal.

Item No.	Size(mm)				N.W. (g)
	Jaw width	Jaw depth	Jaw thickness	Full length	
MF230	0~60	34	8.4	235	430
MFN280	0~75	42	9.5	285	650



MFTN68A

VERTICAL MOTOR WRENCH, Aluminum Alloy Body

Features

- The aluminum alloy body prevents damage on sanitary pipe nut.
- With wide jaw opening and compact and light-weighted body, optimal for use in confined space.

Example of use



⚠ Avoid tightening work exceeding 100N·m torque.

Item No.	Size(mm)				N.W. (g)
	Jaw width	Jaw depth	Jaw thickness	Full length	
MFTN68A	16~68	60	9.5	205	210

MOVIE ▶



MFTR68A • A68A

VERTICAL MOTOR WRENCH, Aluminum Alloy Body, Ratchet Type

Features

- The aluminum alloy body prevents damage on sanitary pipe nut.
- With wide jaw opening and compact and light-weighted body, optimal for use in confined space.

Example of use



attachment
(for nut holding)

⚠ Avoid tightening work exceeding 100N·m torque.

Attachment (a pair)

Item No.
A68A

Wide type with ratchet mechanism

Item No.	Size(mm)				N.W. (g)
	Jaw width	Jaw depth	Jaw thickness	Full length	
MFTR68A	16~68	60	9.5	210	250

* Mouth width when attachment (A68A) is put on : 12~64mm.

MOVIE ▶

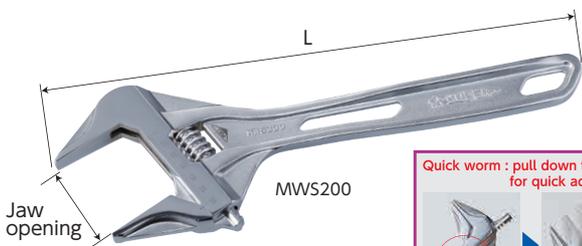


MWS

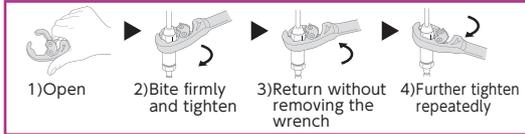
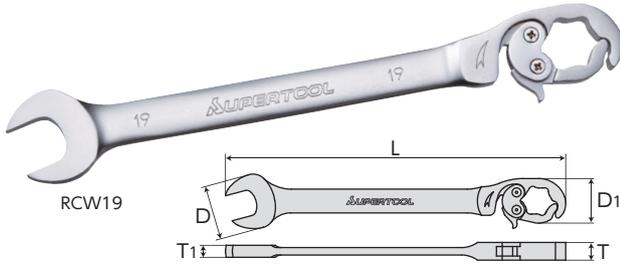
SUPER WIDE ADJUSTABLE ANGLE WRENCH (Quick Adjusting Type)

Features

- Quick worm slide, super wide jaw opening, light-weighted thin type.
- The quick worm sliding mechanism allows very fast size adjustment.
- The push spring worm mechanism avoids looseness.
- The grip part is designed to be firmly grasped easily.



Item No.	Size name (mm)	Size(mm)					N.W. (g)	Guaranteed load(N·m)
		Jaw opening	L	T	T1	T2		
MWS200	200	0~38	210	13.5	6.7	10.5	270	294.2
MWS250	250	0~50	260	16	7.5	12	480	480.5
MWS300	300	0~60	320	18.5	8.3	13	810	882.6



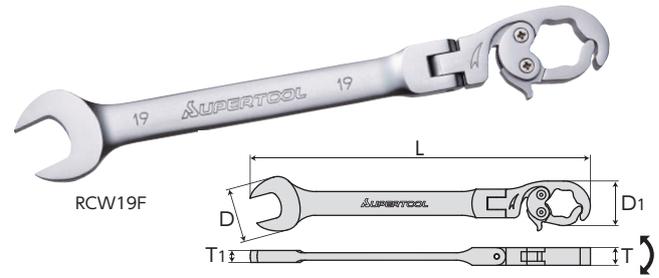
RCW

OPEN RATCHET WRENCH (Straight Type)

► Features

- Optimal for tightening or removing flange nut of various pipe joints.
- Open and bite at the box wrench side.
- Use for final tightening.
- Ratchet mechanism included.

Item No.	Size (mm)						N.W. (g)
	Size name	L	D	D1	T	T1	
RCW10	10	154	21.0	17.0	10.0	5.5	55
RCW12	12	170	25.4	21.0	11.0	6.3	90
RCW13	13	177	27.5	23.0	11.0	6.7	110
RCW14	14	186	29.3	24.5	12.0	7.3	125
RCW17	17	223	36.2	29.5	12.5	8.2	210
RCW19	19	248	40.0	33.0	13.0	8.8	280
RCW22	22	298	45.7	37.5		9.5	390
RCW24	24	333	51.8	42.0	15.0	10.3	570
RCW27	27	343	56.5	47.0	15.5	10.7	700



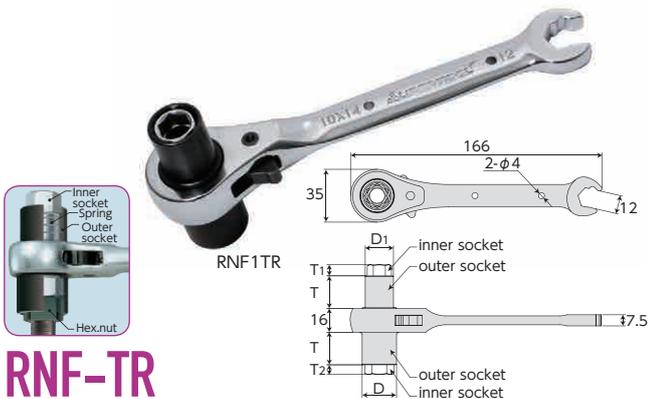
RCW-F

OPEN RATCHET WRENCH (Flex Type)

► Features

- Optimal for tightening or removing flange nut of various pipe joints.
- Open and bite at the box wrench side.
- Use for final tightening.
- Ratchet mechanism included.

Item No.	Size (mm)						N.W. (g)
	Size name	L	D	D1	T	T1	
RCW10F	10	154	21.0	17.0	10.0	5.5	55
RCW12F	12	170	25.4	21.0	11.0	6.3	90
RCW13F	13	177	27.5	23.0	11.0	6.7	120
RCW14F	14	186	29.3	24.5	12.0	7.3	125
RCW17F	17	223	36.2	29.5	12.5	8.2	230
RCW19F	19	248	40.0	33.0	13.0	8.8	310
RCW22F	22	298	45.7	37.5		9.5	430
RCW24F	24	333	51.8	42.0	15.0	10.3	620
RCW27F	27	343	56.5	47.0	15.5	10.7	780



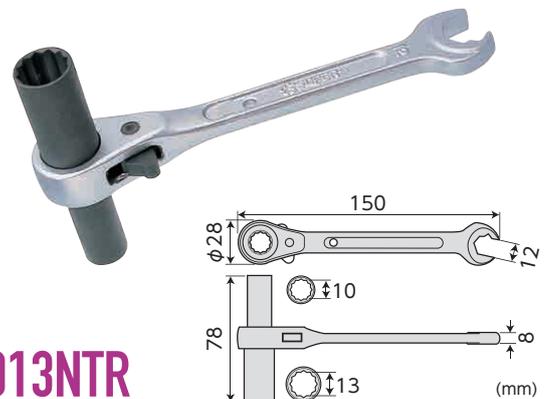
RNF-TR

5 SIZE RATCHET WRENCH PAT.

► Features

- When outer socket is used, inner socket is pushed up easily, and after the use, the inner socket returns to the original position by spring.
- The spanner end (12mm) also comes with a ratchet mechanism.
- Suitable for plumbing work, duct work, electric facility work, building construction and work on any kind of facilities.

Item No.	Size name (mm)		Size (mm)					N.W. (g)
	Inner socket	Outer socket	D	D1	T	T1	T2	
RNF0TR	8 10	13 14	18.9	18.2	19.5	7	6	250
RNF1TR	10 13	14 17	23	18.9	22	7.5	6.5	270

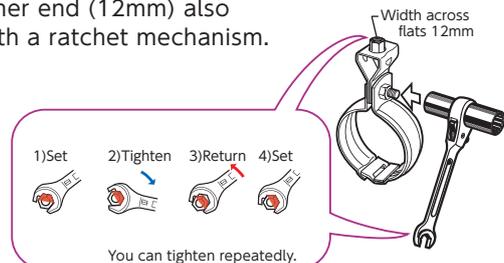


RN1013NTR

QUICK TURN WRENCH FOR PIPE SUSPENDER

► Features

- Long sockets with ratchet mechanism.
- The spanner end (12mm) also comes with a ratchet mechanism.



Item No.	10	13	N.W. (g)
RN1013NTR	M6·1/4	M8	200

Tube cutters

Other cutters

Pipe scrapers, super torque wrenches

Flaring tools

Flanging tools for flexible tube

Benders

Chain pipe wrenches

Pipe wrenches, belt wrenches

Motor wrenches, other wrenches

Water pump pliers

Super pliers, threaded rod cutters

Plumbing tool set

WATER PUMP PLIERS

Features

- Firm biting on pipe, round bar, hex nut, flat board, and all kind of materials enabled by ideal jaw shape.
- 5~9 positions of jaw opening to adjust to the work size.



GW250H

GWZ250H

GW250H • GWZ250H

Standard Type (GWZ is Vinyl Grip Type)

Item No.	Size (mm)			No. of jaw position	N.W. (g)
	Full length	Jaw opening	Tip side width		
GW250H	254	0~47	10	5 adjustable type	325
GWZ250H	253	0~47	10	5 adjustable type	350

GW250M

Three-layered Structure Type

Features

- The three-layered structure makes it very robust. No protruding fixing pin.
- The handle tip is equipped with a function to remove pan head screw (applicable pan head screw head external dia. : $\Phi 3 \sim \Phi 6.5$ mm).
- Including rubber pad to prevent scratch.



Item No.	Size (mm)			No. of jaw position	N.W. (g)
	Full length	Jaw opening	Tip side width		
GW250M	250	0~52	7	9 adjustable type	290

GWP-H

Strong Type with Pitch Ⓜ

Item No.	Size (mm)			No. of jaw position	N.W. (g)
	Full length	Jaw opening	Tip side width		
GWP250H	255	0~43	9.5	5 adjustable type	375
GWP300H	305	0~58	11.5	6 adjustable type	685

GWS250H

Spring Type

Item No.	Size (mm)			No. of jaw position	N.W. (g)
	Full length	Jaw opening	Tip side width		
GWS250H	252	0~46	10	8 adjustable type	330

* Spring equipped inside, optimal for continuous work.

Tube cutters

Other cutters

Pipe scrapers, super torque wrenches

Flaring tools

Flanging tools for flexible tube

Benders

Chain pipe wrenches

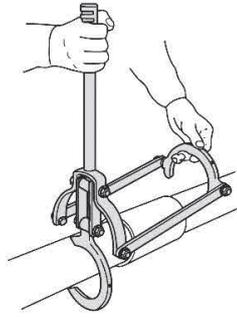
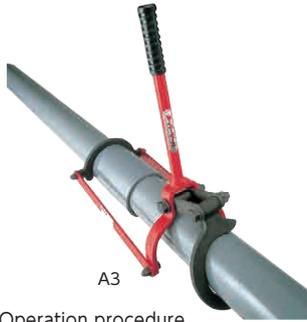
Pipe wrenches, belt wrenches

Motor wrenches, other wrenches

Water pump pliers

Super pilers, threaded rod cutters

Plumbing tool set

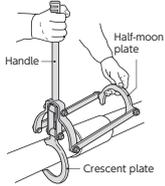


A SUPER PILER (PVC Pipe Joiner)

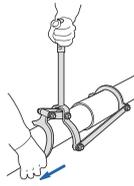
► Features

- Most convenient for inserting, holding or removing all kinds of PVC pipe and pipe fitting in easy manner.
- Optimal in narrow places and inside grooves.

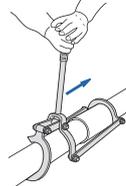
■ Operation procedure



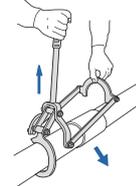
1) Lift the handle and the half-moon plate up and set the crescent plate from the side of the pipe as shown in the drawing.



2) Hold the handle as shown in the drawing, seize the crescent plate lower side with the other hand and pull it completely in the direction of the arrow. (If the crescent plate is not pulled enough, the pipe cannot be inserted correctly).



3) After having set and pressure inserted the pipe, keep pulling with force the handle in the direction of the arrow until the pipes are completely fixed by the adhesive.



4) Lift the handle and the crescent plate up and push slightly in the direction of the arrow to remove the piler, as shown in the drawing.

Item No.	Applicable pipe(mm)		N.W. (kg)
	Size name	External diameter	
A3	75	89	2.7
A4	100	114	3.7
A5	125	140	6
A6	150	165	7
A8	200	216	9



NK3W THREADED ROD CUTTER

► Features

- As the cutter is designed to disperse the load, rods can be cut with very low force in 2 actions.
- Optimal for HVAC (Heating, Ventilation, Air Conditioning), electric pipes, mechanical installations (water and gas pipe fittings, sprinkler installations), any duct fittings.
- Light-weighted and easy to carry.



► Example of use



Clean cut with no damage on the screw thread.
Can cut with no burr, so the nut can be smoothly inserted.

Item No.	Cutting ability		Full length (mm)	N.W. (g)
	Screw size name	Material		
NK3W	W3/8"	Mild steel	765	4,100



Blade fixing bolt

NKS3W SPARE BLADE

► Feature

- Easy to replace and outstanding durability.

Item No.	Applicable item	N.W.(g)
NKS3W	NK3W	30

H4000S

PLUMBING TOOL SET FOR PROFESSIONAL (Standard Type)

Features

- Suitable for any kind of piping works like gas pipe, water pipe, etc.
- Composed of 2 trays (upper and lower tray).



Tube cutters
Other cutters
Pipe scrapers, super torque wrenches
Flaring tools
Flanging tools for flexible tube
Benders
Chain pipe wrenches

Set details

Item name	Item No.	Size	Q'ty
Adjustable angle wrench	MAN250	250	1
	MAN300	300	1
Pipe wrench, aluminum alloy body	DTA300E	300	1
	DTA350E	350	1
Corner pipe wrench, aluminum alloy body	CPA300	300	1
	CPA350	350	1
PVC pipe cutter	VK42N	VP13~VP30	1
Water pump pliers	GW250H	250	1
Combination pliers	CPZ200	200	1
Vertical motor wrench, aluminum alloy body	MFTN68A	Jaw width: 16~68mm	1
Wide motor wrench	MFW280	Jaw width:0~80mm	1

Item name	Item No.	Size	Q'ty
Pipe scraper	PS100	Blade length: 12mm	1
Tube cutter with bearings	TCB105	φ4~φ32mm	1
Side cutting pliers	SZ175S	175	1
Long nose pliers	SL150S	150	1
Super saw (replaceable blade type)	S6010	Full length: 370mm	1
Cushion screwdriver	KD610	⊖6mm×100	1
	KD815	⊖8mm×150	1
	KD210	⊕No.2×100	1
	KD315	⊕No.3×150	1
Tool case (plastic)	SR450S	455×240×206mm	1

Item No.	Total Q'ty (pcs)	Set N.W.(kg)
H4000S	21	9