CONVENTIONAL TOOLS

SOCKETS A	AND DRIVE TO	OLS 208

IMPACT SOCKETS AND ACCESSORIES 268

HEXAGONAL WRENCHES 284

TORX WRENCHES 309

BOX END WRENCHES 323

RATCHET BOX END WRENCHES 331

OPEN END WRENCHES AND COMBINATION WRENCHES 337

PROFIT TOOLS 345

HANDLE WRENCHES 348

ADJUSTABLE WRENCHES 351

SCREWDRIVERS 354

PLIERS 368

LOCKING PLIERS 379

HAMMERS, CHISELS, AND PUNCHES 384

SCRAPERS, FILES, AND BRUSHES 390

CONVENTIONAL TOOLS

SOCKETS AND DRIVE TOOLS



- Use a socket that matches the size of the bolt/nut. Insert the socket until the nut is
- completely held.
- $\boldsymbol{\cdot}$ Do not use power tools such as impact wrenches.
- \cdot Operate the ratchet handle slowly and surely with the left/right switch lever.
- · Insert the square drive completely up to the root.
- \cdot Do not use as a hammer.
- $\boldsymbol{\cdot}$ Do not hit by a hammer.
- $\boldsymbol{\cdot}$ Use a handle adapter that matches the size of the socket.
- Do not add a pipe to the handle or hit it with a hammer.



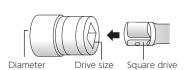
 $\boldsymbol{\cdot}$ In carrying the tool set, be sure to hang the clamp for the securely.





Sockets and drive tools

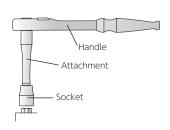
Socket wrenches are tools used for tightening and loosening hexagonal bolts, nuts and hexagon socket head bolts. It consists of a socket (socket for socket wrench) and a drive tool (handle and various attachments), which are used together. Sockets are box-shaped and, but not like wrenches and Adjustable wrenches, are used holding a bolt or nut. So they do not slip or come off easily and they are suitable for applying large torques. Combining sockets with drive tools makes it easy to work in tight or deep spaces that are difficult to approach.



* The square drive is sometimes called as square plug.

How to combine sockets and drive tools

Insert the Square drive (convex side) into the square plug (concave side)



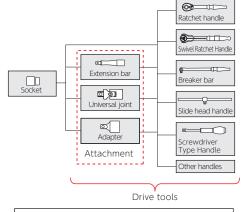
Sockets are used in combination with drive tools (handles and attachments)

The setting range of the outside diameter differs for

each socket square plug. The selection of the socket square plug is determined by the size of the bolt or nut to be worked on. If the size of the bolt or nut is close

to the upper limit of the setting range, it is safer to use

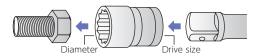
a one-size larger square plug. For example, 3/8" sq. sockets are available up to 24 mm, but when turning a 22 mm or 24 mm bolt or nut, it is recommended to use



Example of combination of sockets and drive tools



Sockets for socket wrenches



The socket is used with the bolt/nut completely held in by the boxed diameter. The opposite square plug is used to insert a ratchet handle or various other drive tools.

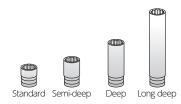
There are various types of sockets depending on the type of bolt/nut, square plug and size.

Classification of sockets by square plug and size

The socket wrench slot is called "square plug" and is available in five sizes: 1/4"sq., 3/8"sq., 1/2"sq., 3/4"sq. and 1"sq.

sq. is an abbreviation for square, the unit of measurement for the socket wrench insert angle. For example, the square plug of 3/8"sq. is 9.5mm (3/8 inch) on width across flat.

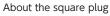
Classification of sockets by length



Socket shape according to bolt type



More special sockets to change oil filters and spark plugs.









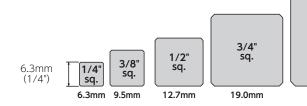


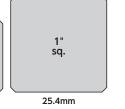


Drive size Square drive

Comparison of square plug size (full size)

a 1/2" sq. socket, one size larger.





Features of KTC sockets*

*Excluding 3/4"sq. and 1"sq.

Sockets with a shape and total length designed for tight working environments. Standard sockets are shorter and more compact. The deep sockets are longer in total length, making it easier to work in deep places. Furthermore, a new semi-deep type has been added, and three different lengths are available. (Semi-deep type is only available in 3/8"sq.) 6pt. and 12pt. boxed diameter sizes are set for each square plug from 1/4"sq. to 1/2"sq. Furthermore, the "Power Fit Shape" utilizing nepros' technology is newly adopted for both the boxed diameter and square plug. This shape is gentler on bolts and nuts than the conventional Power Fit shape, and the strength of the wrench has been improved. A wide variety of sizes are available, with millimeter sizes available in 1mm increments. The number of inch sizes has also been greatly increased by approximately 5 times compared to the conventional product. We have achieved a full lineup of products.



	1// 50	1/4" sq.		3/s	8″ q.		1// 5	2″ q.
	Standard	Deep	Standard	Semi-deep	Deep	Long deep	Standard	Deep
					_	/7		
	00 6pt.12pt.	00	00	00	00	00	00	00
mm 3.2	Фр. 12рг.	6pt.12pt.	6pt.12pt.	6pt.12pt.	6pt.12pt.	6pt.12pt.	6pt.12pt.	орг. 12р
4		•						
4.5	•	•						
5								
5.5								
6 7								
8								
9	• •	• •		• •	• •		• •	• •
10	• •	•	•	•	•		•	00
11	••	•	•	•	•		•	•
12	•							
13								
14 15								
16								
17				• •	• •		• •	• •
18			•	•	•		• •	•
19			•	•	•		•	•
20								
21								
22 23								
24								
25							• •	• •
26							• •	•
27							•	•
28								
29 30								
30								
32							• •	00
33							•	•
34							•	•
35							•	•
36								

	Standard	Deep	Standard
			Q
	00	00	00
mm 17	6pt.12pt.	6pt.12pt.	6pt.12pt.
18			
19			
20			
21		•	
22			
23			
24			
25			
26			
27			
28			
29	•	•	•
30			
31			
32			
33			•
34			
35			
36		•	
37	•		
38			
39	•		
40			
41	•		
42		•	
43 44			
45 46			
47			
48			
50		•	
52			
53			
54			
55			•
56			
57			
58			
60			
63			
65			•
67			
68			
70			
71			
75	•		
77			•
80			
83			•
85			
90			•
95			
100			

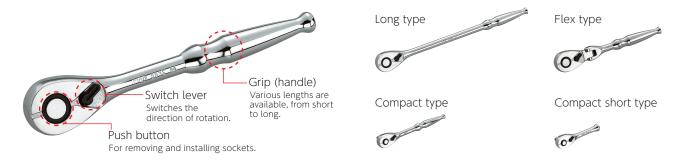
O 6pt. O 12pt.

Socket list (in)			inch		0	6pt. () 12pt.
	1/4	4"	3/8	8″ q.	1// 5	2" q.	3/4" sq.
	Standard	Deep	Standard	Deep	Standard	Deep	Standard
	8		8		8		8
in	OO 6pt.12pt.	OO 6pt.12pt.	OO 6pt. 12pt.	OO 6pt. 12pt.	OO 6pt. 12pt.	O O 6pt. 12pt.	OO 6pt.12pt.
1/8	•						
5/32							
3/16	•	•					
7/32							
1/4	• •		• •				
9/32							
5/16	• •	•					
11/32	• •						
3/8							
7/16							
1/2							
17/32							
9/16							
19/32							
5/8							
21/32							
11/16							
3/4							
25/32							
13/16							
7/8							
15/16							
31/32							
1							
1- 1/16							
1- 1/8							
1- 3/16							
1- 1/4							
1- 5/16 1- 3/8							
1- 3/8							
1- 1/16							
1- 1/2							
1- 3/4							
1- 3/4							
1-13/16							
2							
							_

	3/ s	8″ q.
	Crowfoot	Magnet Deep
	9	
mm	OO 6pt.12pt.	OO 6pt.12pt.
8	•	
10		
11		
12		
13		
14		
17		
19		

O 6pt. O 12pt.

Ratchet handle



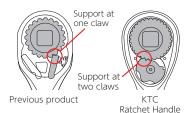
Features of KTC Ratchet Handles*

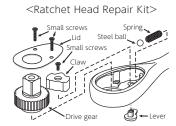
In addition, the design is based on an arched shape from the head to the grip, which makes it easy to apply force no matter which part of the body is gripped.

The total shape is based on a slim form, and in particular, the head section has been downsized by 20% in thickness compared to conventional models by adopting an integrated claw. 36 gears are used to achieve fine feed angles, and the gears are supported by two claws to increase strength by 30% compared to conventional models.

A union mechanism that prevents the socket from unexpectedly coming off the ratchet unless the push button is pressed is adopted as standard. (Except some models) Enables smooth release and reduces rattling when the socket is installed.







We offer a repair kit that allows customers to perform maintenance.



Ratchet handle union mechanism

The union mechanism is used in KTC's ratchet handles to attach and detach the sockets by push-button operation easily, while at the same time to hold the socket preventing from accidentally coming off during operation.

General push-button mechanism

Normal push-button mechanism designed to easily remove a socket and the ball that holds the socket is supported by the tapered face of the push pin. (Fig. 1-A) The spring force to the push pin make the ball outward through the tapered face to hold the socket. When the push button is released, the ball is free and the socket can be easily detached. Under this mechanism, if you try to remove the socket without pushing the button, the ball will be pushed inside easily. Therefore, if the socket is tried to be detached, the socket may come off from the ratchet handle accidentally. (Fig. 1-B)

Figure 1-A Figure 1-B Push button Push pin Tapered surface Socket

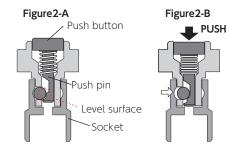
The spring force to push up the pin is transmitted to the ball through the tapered surface to hold the socket.

If you try to remove the socket without pushing the push button, the ball will be pushed in and the socket will be detached.

KTC's union mechanism

KTC's union mechanism holds the ball in a flat surface instead of a tapered surface, so if you try to remove the socket without pressing the push button, the ball will not be pushed in and the socket will not come off. (Fig. 2-A) When the push button is pressed, the push pin is lowered and the ball drops into the step, allowing the socket to be easily removed. (Fig. 2-B) With this mechanism, the socket will not come off the ratchet handle unless the push button is pressed for the stable operation. It is also effective in preventing the socket from falling when working in high places.

- * The union mechanism requires the button to be pressed even when the socket is to be inserted.
- * The union mechanism is designed for use with current KTC products. It may not work properly with discontinued products or products of other manufacturers.
- * Sockets without a ball groove in the square plug cannot be fixed.



The ball is held in place by the flat surface of the push pin, so the ball cannot be pushed in and the socket cannot be removed.

When the push button is pressed, the ball falls into the step of the push pin and the socket can be removed.

Swivel Ratchet Handle



Features of KTC Swivel Ratchet Handle



The smallest head size among 3/8"sq. swivel ratchet handles provides high workability in narrow spaces. The three-way lever makes it easy to switch ratchet directions even when swiveling.

Features of KTC Slide Head Handle*

The handle rotates smoothly

and steplessly through 180° or

more around the head. Simple mechanism and lightweight

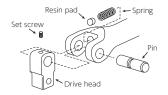
around the head. Can be used

like a ratchet screwdriver.

A thicker round grip is adopted for easy gripping and force application. The new product is 20% stronger than previous model after design review of materials and an optimized design. The joint part is made of resin pad to maintain smooth movement. In addition, the head diameter is designed smaller with the new joint mechanism. This improves workability in

<Breaker bar head repair kit>

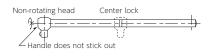
Features of KTC Breaker Bar*



Repair kit is available for the head for long term use.

The grooves on the bar prevent the head from rotating, making it easier to work with extension bars, etc.

The head can be locked in the center position. Furthermore, stoppers are provided at both ends of the bar so that when the head is pulled to the end of the bar, the head is almost flat with the bar, allowing the length of the bar to be used effectively to apply force. It also makes it easier to work in narrow spaces.



Head and bar almost flat.

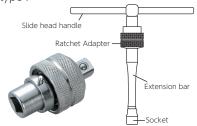
Attachment

narrow spaces.



Extension bar

This attachment is used to extend the socket when working in deep and narrow places. There are two types: the "standard type" and the "swivel type".



Ratchet Adapter

Adapter to add ratchet mechanism to drive tools. When installed between the sliding head handle and the extension bar, it becomes a T-shaped handle with ratchet function.





12pt. ball joint

In addition to the standard type shown in the photo, a ball joint type with smooth rotation is also available.

Universal joint

This attachment connects between the socket and handle to enable angled work up to about 45°.

Convert drive head 3/8"sq. to 1/2"sq. which are only one size. (When using the small drive for larger drive, please be very careful not to apply too much force.)

Socket Adapter

Attachment to connect a handle to a socket with a different square plug. There are two types: one for turning a large socket with a small handle and vice versa.

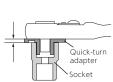




Quick Spinna

By attaching between the ratchet handle and the socket, the socket can be turned quickly for speedy and comfortable work. It can be used for both tightening and loosening operations.





Quick-turn adapter

This adapter combines the functions of a socket adapter and a quick spinner. Since the concavities and convexities are aligned in the same position, the total height is lower than that of a regular socket adapter.

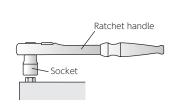
How to use a socket wrench

By combining a socket wrench with a handle that drives the socket and an attachment that connects the socket to the handle, you can choose the best way to use a socket wrench depending on the work environment, such as a location that is too deep or where the socket cannot be inserted straight through the handle.

Ratchet handle

+Socket

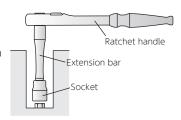
The most standard use of a socket and ratchet handle. Insert the socket into the drive angle, switch the direction of rotation of the gear, and turn the bolt/nut.



Ratchet handle

- +Extension bar
- +Socket

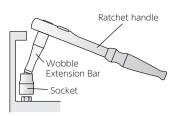
Use the extension bar when tightening and loosening bolts and nuts in narrow or deep locations.



Ratchet handle

- + Wobble Extension Bar
- + Socket

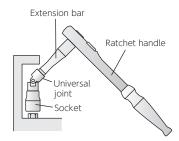
If the ratchet handle cannot be used straight against the bolt or nut to be worked on, the wobble extension bar can be used to work from an angle of about 7°.



Ratchet handle

- +Extension bar
- +Universal joint
- +Socket

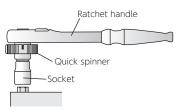
If the ratchet handle cannot be used straight against the bolt or nut you want to work on, the universal joint allows you to work from an angle of up to 45°.



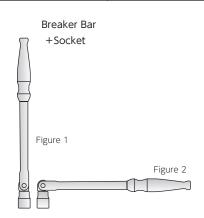
Ratchet handle

- +Quick Spinner
- + Socket





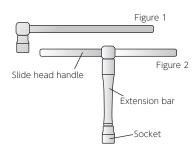
By turning the grip of the quick spinner, the socket can be turned quickly without swinging the ratchet handle. This is useful when the ratchet mechanism idles by handle operation alone (under light loads).



Since the total length of the Breaker Bar is longer than that of a standard ratchet handle, it is often used when a large amount of torque is required. When turning quickly for temporary tightening, the handle is held upright like a screwdriver (Fig. 1), and when tightening firmly, the handle is turned sideways (Fig. 2) to generate strong force.

Slide head handle

- +Extension bar
- +Socket



The slide head handle allows the head (drive angle) to be moved to any position on the handle. If the head is moved to the end of the handle, it can be used as an L-shaped handle that can apply large torque (Fig. 1). It can also be used as a "T-shape handle" by setting the head in the center of the handle and using it in combination with an extension bar. (Fig. 2)

1/4"sq. BIT SOCKET WRENCH SET [9pcs.]











No.		Weight(g)	Ó	
TB209TQ		800	1	
Set contents				
TORQULE 10N·m	GNA010-02			
1/4"sq. ratchet handle	BR2E			
1/4"sq. slide head handle	внм2			
1/4"sq. hexagon bit socket	BT2-03, 04, 05, 06			
1/4"sq.T-type Torx bit socket	BT2-T25			
1/4"sq. extension bar	BE2-075			
Toolbag	MCKB-B (260×125	×70 mm v	vher	n folded)

- $\boldsymbol{\cdot}$ Includes a roll-type tool bag for storing additional tools.
- Interlocking with the dedicated application (free of charge), torque management can be performed by simply attaching it to your tools.
- TORQULE is shown on P.032
- Tool bag is shown on P.202.

1/4"sq. SOCKET WRENCH SET [6pcs.]













No.		Weight(g)	6	
TB206WG1		950	1	
Set contents				
Digital ratchet	GEK030-R2-L			
Sockets (12pt.)	B2-07W, 08W, 10W, 12	W, 14W		
Socket holder for 5 sockets	EHB205			

^{· &}quot;Digital ratchet" ♦ Set of P.416 and 1/4"sq. socket (12pt.).

1/4"sq. SOCKET WRENCH SET [13pcs.]











No.	Weight(g)	5
TB210	400	1
Set contents		
Sockets (6pt.)	B2-05, 055, 06, 07, 08, 10, 11, 12, 13	3, 14
Ratchet handle	BR2E	
Extension bar 50	BE2-050	
Extension bar 100	BE2-100	

 $[\]cdot$ Includes resin molded tray (W264×D82×H30)

1/4"sq. SOCKET WRENCH SET [13pcs.]











No.		Weight(g)	6		
TB210B		400	1		
Set contents					
Sockets (6pt.)	B2-3/16, 7/32, 1/4, 7/16, 1/2, 9/16	9/32, 5/16, 1	1/32	, 3/8,	
Ratchet handle	BR2E				
Extension bar 50	BE2-050				
Extension bar 100	BE2-100				

[·] Includes resin molded tray (W264×D82×H30)

1/4"sq. SOCKET WRENCH SET [17pcs.]









No.		Weight(g)	6		
TB214		440	1		
Set contents					
Sockets (6pt.)	B2-032, 04, 045, 05, 055, 06, 07, 08, 09, 10, 11 12, 13, 14				
Ratchet handle	BR2E				
Extension bar 50	BE2-050				
Extension bar 100	BE2-100				

[•] Includes resin molded tray (W264×D82×H30) POWERFIT (except for apertures less than 5 mm)

POWERFIT (excluding 5 mm for the bore)

POWERFIT (Excluding 3/16in bore)

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/4"sq. SOCKET WRENCH SET [25pcs.]











No.		Weight(kg)	6		
TB2X20B		1.3	1		
Set contents					
Sockets (6pt.)	B2-05, 055, 0	6, 07, 08, 10, 11, 1	2, 13, 14		
Sockets (6pt.)		B2-3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8 7/16, 1/2, 9/16			
Ratchet handle	BR2E				
Breaker bar	BS2E				
Extension bar 50	BE2-050				
Extension bar 100	BE2-100				
Swivel extension bar 30	BE2-030JW				
Single door metal case	EKB-3 (W275	×D150×H35)			
Includes resin molded tray (W264)	×D144×H30)	POWERFIT (excluding 5 mi	m and 3/16 in bore		

case is shown on P.198.

1/4"sq. SOCKET WRENCH SET [25pcs.]











No.		Weight(kg)	Ú				
TB2X20		1.3	1				
Set contents							
Sockets (6pt.)	B2-05, 055, 06, 07, 0	8, 10, 11, 1	2, 1	3, 14			
Deep sockets (6pt.)	B2L-05, 055, 06, 07,	08, 10, 11,	12, 1	13, 14			
Ratchet handle	BR2E						
Breaker bar	BS2E						
Extension bar 50	BE2-050						
Extension bar 100	BE2-100						
Swivel extension bar 30	BE2-030JW						
Single door metal case	EKB-3 (W275×D150	×H35)					

[•] Includes resin molded tray (W264×D144×H30)

1/4"sq. DEEP SOCKET WRENCH SET [15pcs.]











No.		Weight(kg)	Ó				
TB2L10		1.3	1				
Set contents							
Deep sockets (6pt.)	B2L-05, 055, 06, 07,	08, 10, 11,	12,	13, 14			
Ratchet handle	BR2E						
Breaker bar	BS2E						
Extension bar 50	BE2-050						
Extension bar 100	BE2-100						
Swivel extension bar 30	BE2-030JW						
Single door metal case	EKB-3 (W275×D150	×H35)					

[·] Includes resin molded tray (W264×D144×H30) case is shown on P.198.

1/4"sq. SOCKET SET [5pcs.]











No.		Weight(g)	\subseteq	
TB205E		120	1	
Set contents				
Sockets (6pt.)	B2-06, 07, 08, 10, 12			
Socket holder for 5 sockets	EHB205			
	*			

1/4"sq. SOCKET SET [10pcs.]











No.		Weight(g)		
TB210E		430	1	
Set contents				
Sockets (6pt.)	B2-05, 055, 06, 07, 08, 10	0, 11, 12, 1	3, 14	1
Socket holder for 10 sockets	EHB210			
	_			

POWERFIT (excluding 5 mm for the bore)















POWERFIT (excluding 5 mm for the bore)

case is shown on P.198.

POWERFIT (excluding 5 mm for the bore)

[•] Function mark is indicated under the product name. For the details, please refer to \$\infty\$ P.004-005.

[•] Products marked with ② should be ordered after checking stock.

1/4"sq. SOCKET

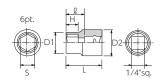












No.	S	D1	D2	Н	L	Q	Weight(g)		
B2-032	3.2	6.5	12	2.5	16	8	9	5	
B2-04	4	7	12	3	16	8	9	5	
B2-045	4.5	7.5	12	3	16	8	9	5	
B2-05	5	8.5	12	3	16	8	9	5	
B2-055	5.5	9	12	5	18	10	9	5	
B2-06	6	10	12	5	18	10	10	5	
B2-07	7	11	12	5	18	10	10	5	
B2-08	8	12	13	5.5	18.5	10.5	12	5	
B2-09	9	13.5	13	5.5	18.5	10.5	13	5	
B2-10	10	14.5	13.5	5.5	18.5	10.5	13	5	
B2-11	11	16	14.5	6	19	11	16	5	
B2-12	12	17	15	6.5	20.5	12.5	19	5	
B2-13	13	18.5	16.5	6.5	20.5	12.5	22	5	
B2-14	14	20	17.5	7	21.5	13.5	27	5	

1/4"sq. SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	6	
B2-055W	5.5	9	12	5	18	10	9	5	
B2-06W	6	10	12	5	18	10	10	5	
B2-07W	7	11	12	5	18	10	10	5	
B2-08W	8	12	13	5.5	18.5	10.5	12	5	
B2-09W	9	13.5	13	5.5	18.5	10.5	13	5	
B2-10W	10	14.5	13.5	5.5	18.5	10.5	13	5	
B2-11W	11	16	14.5	6	19	11	16	5	
B2-12W	12	17	15	6.5	20.5	12.5	19	5	
B2-13W	13	18.5	16.5	6.5	20.5	12.5	22	5	
B2-14W	14	20	17.5	7	21.5	13.5	27	5	

1/4"sq. SOCKET



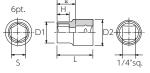












No.	S (in)	D1	D2	Н	L	Q	Weight(g)	6	
B2-1/8	1/8	6.5	12	2.5	16	8	9	5	
B2-5/32	5/32	7	12	3	16	8	9	5	
B2-3/16	3/16	8.5	12	3	16	8	9	5	
B2-7/32	7/32	9	12	5	18	10	9	5	
B2-1/4	1/4	10	12	5	18	10	10	5	
B2-9/32	9/32	11	12	5	18	10	10	5	
B2-5/16	5/16	12	13	5.5	18.5	10.5	12	5	
B2-11/32	11/32	13.5	13	5.5	18.5	10.5	13	5	
B2-3/8	3/8	14.5	13.5	5.5	18.5	10.5	13	5	
B2-7/16	7/16	16	14.5	6	19	11	16	5	
B2-1/2	1/2	18.5	16.5	6.5	20.5	12.5	24	5	
B2-17/32	17/32	20	17.5	7	21.5	13.5	28	5	
B2-9/16	9/16	20	17.5	8	22.5	14.5	29	5	

1/4"sq. SOCKET













12pt.	PH P	D2-
5		1/4"sq.

No.	S (in)	D1	D2	Н	L	Q	Weight(g)		
B2-7/32W	7/32	9	12	5	18	10	9	5	
B2-1/4W	1/4	10	12	5	18	10	10	5	
B2-9/32W	9/32	11	12	5	18	10	10	5	
B2-5/16W	5/16	12	13	5.5	18.5	10.5	12	5	
B2-11/32W	11/32	13.5	13	5.5	18.5	10.5	13	5	
B2-3/8W	3/8	14.5	13.5	5.5	18.5	10.5	13	5	
B2-7/16W	7/16	16	14.5	6	19	11	16	5	
B2-1/2W	1/2	18.5	16.5	6.5	20.5	12.5	24	5	
B2-17/32W	17/32	20	17.5	7	21.5	13.5	28	5	
B2-9/16W	9/16	20	17.5	8	22.5	14.5	29	5	

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/4"sq. DEEP SOCKET SET [5pcs.]









No.	0.						
TB2L05		270	1				
Set contents							
Deep sockets (6pt.)	B2L-07, 08, 10, 1	B2L-07, 08, 10, 12, 14					
Socket holder for 5 sockets	EHB205						

1/4"sq. DEEP SOCKET SET [10pcs.]











No.		Weight(g)	白				
TB2L10E		450	1				
Set contents							
Deep sockets (6pt.) B2L-05, 055, 06, 07, 08, 10, 11, 12, 13, 14							
Socket holder for 10 sockets	EHB210						

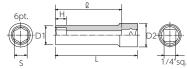
1/4"sq. DEEP SOCKET





PWERFIT.





No.	S	D1	D2	Н	L	Q	Weight(g)		
B2L-032	3.2	6.5	12	5	50	42	17	5	
B2L-04	4	7	12	5	50	42	19	5	
B2L-045	4.5	7.5	12	5	50	42	18	5	
B2L-05	5	8.5	12	5	50	42	20	5	
B2L-055	5.5	9	12	6	50	42	24	5	
B2L-06	6	10	12	6	50	42	28	5	
B2L-07	7	11	12	8	50	42	27	5	
B2L-08	8	12	13	9	50	42	33	5	
B2L-09	9	13.5	13	10	50	42	41	5	
B2L-10	10	14.5	13.5	11	50	42	36	5	
B2L-11	11	16	14.5	12	50	42	46	5	
B2L-12	12	17	15	14	50	42	52	5	
B2L-13	13	18.5	16.5	14	50	42	59	5	
B2L-14	14	20	17.5	17	50	42	67	5	

1/4"sq. DEEP SOCKET









No.	S	D1	D2	Н	L	Q	Weight(g)	\Box	
B2L-055W	5.5	9	12	6	50	42	24	5	
B2L-06W	6	10	12	6	50	42	28	5	
B2L-07W	7	11	12	8	50	42	27	5	
B2L-08W	8	12	13	9	50	42	33	5	
B2L-09W	9	13.5	13	10	50	42	41	5	
B2L-10W	10	14.5	13.5	11	50	42	36	5	
B2L-11W	11	16	14.5	12	50	42	46	5	
B2L-12W	12	17	15	14	50	42	52	5	
B2L-13W	13	18.5	16.5	14	50	42	59	5	
B2L-14W	14	20	17.5	17	50	42	67	5	















[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

1/4"sq. DEEP SOCKET



No.	S(in)	D1	D2	Н	L	Q	Weight(g)	Ó	
B2L-1/8	1/8	6.5	12	5	50	42	17	5	
B2L-5/32	5/32	7	12	5	50	42	19	5	
B2L-3/16	3/16	8.5	12	5	50	42	21	5	
B2L-7/32	7/32	9	12	6	50	42	24	5	
B2L-1/4	1/4	10	12	6	50	42	28	5	
B2L-9/32	9/32	11	12	8	50	42	27	5	
B2L-5/16	5/16	12	13	9	50	42	33	5	
B2L-11/32	11/32	13.5	13	10	50	42	41	5	
B2L-3/8	3/8	14.5	13.5	11	50	42	39	5	
B2L-7/16	7/16	16	14.5	12	50	42	46	5	
B2L-1/2	1/2	18.5	16.5	14	50	42	66	5	
B2L-17/32	17/32	20	17.5	17	50	42	71	5	
B2L-9/16	9/16	20	17.5	17	50	42	66	5	

1/4"sq. DEEP SOCKET



No.	S(in)	D1	D2	Н	L	Q	Weight(g)	\subseteq	
B2L-7/32W	7/32	9	12	6	50	42	24	5	
B2L-1/4W	1/4	10	12	6	50	42	28	5	
B2L-9/32W	9/32	11	12	8	50	42	27	5	
B2L-5/16W	5/16	12	13	9	50	42	33	5	
B2L-11/32W	11/32	13.5	13	10	50	42	41	5	
B2L-3/8W	3/8	14.5	13.5	11	50	42	39	5	
B2L-7/16W	7/16	16	14.5	12	50	42	46	5	
B2L-1/2W	1/2	18.5	16.5	14	50	42	66	5	
B2L-17/32W	17/32	20	17.5	17	50	42	71	5	
B2L-9/16W	9/16	20	17.5	17	50	42	66	5	

1/4"sq. RATCHET HANDLE









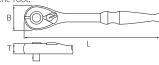


No.	Туре	Feed angle	В	Т	L	Weight(g)	6	
BR2E	Oval	10°	22	10	125	100	5	

- * Repair kit (BR2E-K) is available. 🗘 P.219
- * Repair parts are set. Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the square drive completely up to the root



1/4"sq. RATCHET HANDLE (LONG)





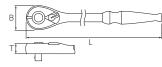


No.	Type	Feed angle	В	Т	L	Weight(g)	6	
BR2L	Oval	10°	22	10	190	125	5	

- * Repair kit (BR2E-K) is available. P.219
- * Repair parts are set. 🔘 Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- $\boldsymbol{\cdot}$ Be careful of overtorque because of its long length and tendency to carry an excessive load.
- · Insert the square drive completely up to



1/4"sq. RATCHET HANDLE (SHORT)











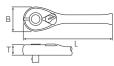
No.	Туре	Feed angle	В	Т	L	Weight(g)	6	
BR2S	Oval	10°	22	10	80	90	5	

- * Repair kit (BR2E-K) is available. 🕞 P.219
- * Repair parts are set. Refer to "Repairable List" from P.625.



- \cdot Ensure that the left and right switching levers are operated securely, as this may
- cause breakage or idling.

 Insert the square drive completely up to the root.



[·] Do not use hand tools with an impact wrench.

1/4"sq. RATCHET HANDLE (FLEX)









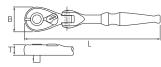


No.	Type	Feed angle	В	Т	L	Weight(g)	6	
BR2F	Oval	10°	22	10	125	140	5	

- * Repair kit (BR2E-K) is available. 🗘 P.219
- * Repair parts are set. 🕒 Refer to "Repairable List" from P.625.



- · Be careful not to apply too much force to the flex section, as it will make the work unstable
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the square drive completely up to the root.



1/4"sq. RATCHET HANDLE (FLEX HEAD LONG)

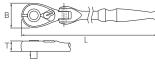


No.	Туре	Feed angle	В	Т	L	Weight(g)		
BR2FL	Oval	10°	22	10	190	170	5	

- * Repair kit (BR2E-K) is available. 🗘 P.219
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.



- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- · Insert the square drive completely up to



1/4"sq. RATCHET HANDLE (FLEX HEAD SHORT)











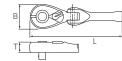
No.	Type	Feed angle	В	Т	1	Weight(g)	4	
	.,,,,,	. cca angle			_	110.6.10(6)		
BR2FS	Oval	10°	22	10	80	90	5	

- * Repair kit (BR2E-K) is available. 🗘 P.219
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.



· Be careful not to apply too much force to the flex section, as it will make the work unstable.

· Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



REPAIR KIT FOR 1/4"sq. RATCHET HANDLE

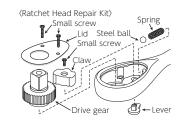






No.	Drive size	Contents	Weight(g)	
BR2E-K	1/4"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw×2	25	

• Repair kit for 1/4"sq. ratchet handles (BR2E, BR2L, BR2S, BR2F, BR2FL, BR2FS).



1/4"sq. BREAKER BAR







No.	D	Grip diameter (φ)	L	Weight(g)	6	
BS2E	12	12	150	90	5	

- * Repair kit (BS2E-K) is set. 🗘 P.220
- * Repair parts are set. Refer to "Repairable List" from P.625.



Hold the center of the grip to prevent the drive unit from pinching your hand. \cdot Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



• Products marked with 🕖 should be ordered after checking stock.













[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

1/4"sq. BREAKER BAR (LONG)







No.	D	Grip diameter (φ)	L	Weight(g)	6	
BS2L	12	12	200	110	5	

- * Repair kit (BS2E-K) is set. 🗘 P.220
- * Repair parts are set. Refer to "Repairable List" from P.625.



Hold the center of the grip to prevent the drive unit from pinching your hand.
Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



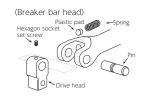
REPAIR KIT FOR 1/4"sq. BREAKER BAR





No.	Drive size	Contents	Weight(g)	
BS2E-K	1/4"sq.	1 each of drive head, pin, plastic pad, spring and hexagon socket set screw	12	

- · Repair kit for 1/4"sq. breaker bar (BS2E, BS2L).
- * A 1.5mm hexagonal wrench is required for replacement.



1/4"sq. SCREWDRIVER TYPE HANDLE



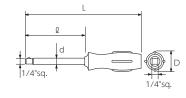


No.	D	d	L	Q	Weight(g)	6	
BD10	26	8.2	150	77	90	5	

 \cdot The grip ends are angled so that they can be used as extension bars.



- · Do not use more than two connected wires.
- · Insert the square drive completely up to the root.



1/4"sq. SLIDE HEAD HANDLE



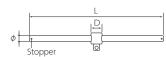


No.	D	Handle diameter (ϕ)	L	Weight(g)	6	
BHM2	13	7	120	70	5	

- \cdot The handle is grooved so that the head does not rotate.



 \cdot Insert the square drive completely up to the root.



1/4"sq. GRIP TYPE HANDLE







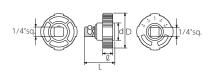


No.	D	d	L	Q	Weight(g)		
BE2-Q	28	12	19	8	25	10	

- This is a special driving tool for quick turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).
- The grip has a shape and groove that allows the user to easily identify the angle of rotation in 90° by feel, and angle display every 30° is provided on the surface.
- The grip is resin and lightweight.



 Insert the square drive completely up to the root.



 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/4"sq. EXTENSION BAR



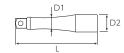




No.	D1	D2	L	Weight(g)	6	
BE2-030	9	12	30	17	5	
BE2-050	9	12	50	27	5	
BE2-075	8	12	75	38	5	
BE2-100	8	12	100	48	5	
BE2-150	8	12	150	70	5	
BE2-200	8	12	200	90	5	
BE2-270	8	12	270	118	5	
BE2-600	9	12	600	300	5	



· Do not use more than two connected wires. Insert the square drive all the way to the base.



1/4"sq. WOBBLE EXTENSION BAR





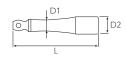




No.	D1	D2	L	Weight(g)	6	
BE2-030JW	9	12	30	17	5	
BE2-050JW	9	12	50	27	5	
BE2-075JW	8	12	75	38	5	
BE2-100JW	8	12	100	48	5	
BE2-150JW	8	12	150	70	5	
BE2-200JW	8	12	200	90	5	
BE2-270JW	8	12	270	118	5	



- $\boldsymbol{\cdot}$ Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.
- · Do not use more than two connected wires.
- · Insert the square drive all the way to the base.



1/4"sq. UNIVERSAL JOINT







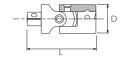
No.	D	L	Weight(g)	6	
BJ2	13	33	20	5	
_		•			



· The joint part is vulnerable to impact and pry, so be careful not to exert excessive force

Insert the square drive all the way to the base.





1/4"sq. SOCKET ADAPTER







No.	S	٦.	D	-	\Moight(g)	_	
	Concave	Convex	D	L	Weight(g)		
BA23	1/4"	3/8"	13	22	15	10	



- $\boldsymbol{\cdot}$ The limiting torque of the adapter is based on the smaller drive size. Be careful not to apply too much force
- Insert the square drive completely up to the root.







1/4"sq. QUICK ADAPTER



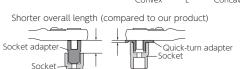


No.	S	q.			0	\Moight(g)	4	
INO.	Concave	Convex	D		L L	Weight(g)		
BAE23	1/4"	3/8"	28	13	2.5	20	10	

- · Unlike a socket adapter, the product can be turned quickly by itself.
- $\boldsymbol{\cdot}$ The concavity and convexity are aligned in the same position so that the overall length can be shortened compared to a socket adapter. (Figure below)
- · The magnet makes it easy to hold and remove the socket
- $\boldsymbol{\cdot}$ The grip section is non-slip and easy to turn quickly.



Insert the square drive completely up to the root.





For "fast-turn conversion adapter"











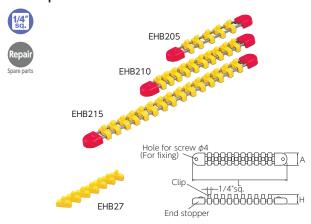




[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

1/4"sq. SOCKET HOLDER



No.	Number of clips	Н	Α	L	Weight(g)	白	
EHB205	5	19	25	165	55	10	
EHB210	10	19	25	215	60	10	
EHB215	15	19	25	315	80	10	

· Different holder colors for different drive size allow easy identification of sockets.



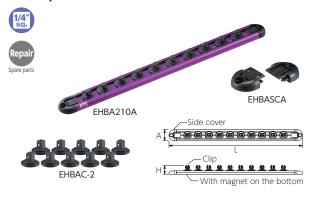
 \cdot Be careful with the socket holder, as the socket may fall out if it is turned upside down.

Spare parts

No.	Description	
EHB27	1/4"sq. clip set [7pcs.]	

- · Spare clip for EHB205, 210, 215.
- · EHB305~315(3/8"sq.) ♠ P.241 EHB405~410(1/2"sq.) ♠ P.255 can also be used.

1/4"sq. SOCKET HOLDER (ALUMINIUM)



No.	Number of clips	Н	Α	L	Weight(g)	6	
EHBA210A	10	17	28.4	338.5	183	1	

- · Socket holders with plastic clips to hold sockets in place.
- · Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



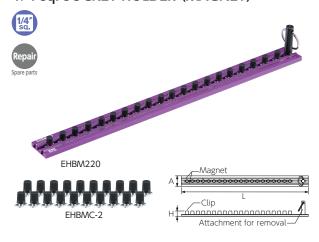
- Be careful with the socket holder, as the socket may fall out if it is turned upside down.
- · Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-2	1/4"sq. clip set [10pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

 * Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.

1/4"sq. SOCKET HOLDER (MAGNET)



No.	Number of clips	Н	Α	L	Weight(g)	白	
EHBM220	20	12.5	25.4	304	135	1	

- $\boldsymbol{\cdot}$ Socket holders that hold sockets in place with magnetic force.
- The strong magnets hold the rail firmly in place, so the socket can be removed with one hand without supporting the rail.
- The case can be fixed perpendicularly to the ground, such as on the side of the case.
- \cdot Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.
- The clip can be removed and used as a holder for wrenches.



- Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.
- \cdot The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers.

(With attachments for rail removal)

Spare parts

No.	Description	
EHBMC-2	1/4"sq. clip set [20pcs.]	

* Clips can be used for EHBM220, EHBM315, and EHBM412 in common.

1/4"sq. SOCKET HOLDER (MAGNET VARIABLE ANGLE TYPE)



No.	Number of clips	Н	D	L1	L2	Weight(g)	6	
EHBF210	10	40	68	253	229	460	1	

- · Socket holder that can be attached to a case, etc. with a magnet.
- \cdot The angle of the holder can be changed to four positions 0°, 30°, 60°, and 90°.
- $\boldsymbol{\cdot}$ Strong magnets securely fasten the case to the side of the case, etc.
- $\boldsymbol{\cdot}$ Different colors on the side of the body for different drive size allow easy identification.
- · Attach to the back of drawer or chest lids to improve ease of use and storage capacity.
- Sockets with different drive size can be managed by replacing clips on the same rail size.
- * Clips are for exclusive use only. Clips from other socket holders cannot be used.



- Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.
- The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers.

Load capacity: 3kg

Spare parts

No.	Name of product	
EHBF210-C	1/4"sq. clip set [10pcs.]	

[·] Do not use hand tools with an impact wrench.

3/8"sq. SOCKET WRENCH SET (TORQULE) [12pcs.]











No.		vveignt(kg)		
TB312TQ		3	1	
Set contents				
TORQULE 80N·m	GNA080-03			
3/8"sq. ratchet handle	BR3E			
3/8"sq. breaker bar	BS3E			
3/8"sq. slide head handle	BHM3			
3/8"sq. extension bar	BE3-075, 150			
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13,	14, 17		
Single door metal case	EKB-2 (W455×D1	90×H60)		

- Single door metal case · Includes metal case and dedicated storage tray for convenient tool management
- · Interlocking with the dedicated application (free of charge), torque management can be performed by simply attaching it to your tools.
- TORQULE is shown on P.032.
- Cases are shown on P.198.

3/8"sq. SOCKET WRENCH SET (DIGITAL RATCHET) [6pcs.]









デジラチェ



No.		Weight(kg)	6	
TB306WG1		1.2	1	
Set contents				
Digital ratchet GEK060-R3-L				
Sockets (12pt.)	B3-08W, 10W, 12	W, 14W, 1	7W	
Socket holder for 5 sockets	EHB305			

^{• &}quot;Digital ratchet" 🗘 Set of P.416 and 3/8"sq. socket (12pt.).

3/8"sq. SOCKET WRENCH SET (DIGITAL RATCHET) [6pcs.]









デジラチェ



No.		Weight(kg)	Ó		
TB306WG2		1.3	1		
Set contents					
Digital ratchet	GEK085-R3-L				
Sockets (12pt.) B3-10W, 12W, 14W, 17W, 19W					

EHB305

Socket holder for 5 sockets

3/8"sq. SOCKET WRENCH SET (DIGITAL RATCHET) [6pcs.]













No.		Weight(kg)		
TB306WG3		1.1	1	
Set contents				
Digital ratchet GEK030-C3-L				
Sockets (12pt.)	B3-07W, 08W, 10W, 12W, 14W			
Socket holder for 5 sockets	EHB305			

^{· &}quot;Digital ratchet" ♦ Set of P.416 and 3/8"sq. socket (12pt.).

3/8"sq. SOCKET WRENCH SET [12pcs.]











No.		Weight(kg)	白	
TB308		1.7	1	
Set contents				
Sockets (6pt.)	B3-07, 08, 10, 12,	13, 14, 17,	19	
Ratchet handle BR3E				
Extension bar 50 BE3-050				
Extension bar 100 BE3-100				
Universal joint	ВЈ3			
Socket holder for 5 sockets	EHB305			
Single door metal case	EKB-1 (W275×D1	50×H50)		

[·] Includes resin molded tray (W265 \times D145 \times H38)















^{· &}quot;Digital ratchet" ♦ Set of P.416 and 3/8"sq. socket (12pt.).

Cases are shown on P.198.

[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with 🕖 should be ordered after checking stock.

3/8"sq. SOCKET WRENCH SET [12pcs.]











No.		Weight(kg)	6	
TB308X		1.7	1	
Set contents				
Sockets (6pt.)	B3-07, 08, 10, 12			
Sockets (12pt.) B3-13W, 14W, 17W,		19W		
Ratchet handle BR3E				
Extension bar 50	BE3-050			
Extension bar 100	BE3-100			
Universal joint BJ3				
Socket holder for 5 sockets	EHB305			
Single door metal case	EKB-1 (W275×D150	×H50)		

 $[\]cdot$ Includes resin molded tray (W265×D145×H38)

3/8"sq. SOCKET WRENCH SET [12pcs.]















No.		Weight(kg)	\subseteq		
TB308BX		1.7	1		
Set contents					
Sockets (6pt.)	B3-3/8, 7/16				
Sockets (12pt.)	B3-1/2W, 9/16W, 19/32W, 5/8W, 11/16W, 3/4W				
Ratchet handle	BR3E				
Extension bar 50	BE3-050				
Extension bar 100	BE3-100				
Universal joint	ВЈ3				
Socket holder for 5 sockets	EHB305				
Single door metal case	EKB-1 (W275×D150	×H50)			

[•] Includes resin molded tray (W265×D145×H38)

3/8"sq. SOCKET WRENCH SET [19pcs.]











No.		Weight(kg)	\Box	
TB312X		3.8	1	
Set contents				
Sockets (6pt.)	B3-055, 07, 08, 10, 1	2		
Sockets (12pt.)	B3-13W, 14W, 15W,	17W, 19W,	21W	, 22W
Ratchet handle	BR3E			
Breaker bar	BS3E			
Extension bar 75	BE3-075			
Extension bar 150	BE3-150			
Extension bar 270	BE3-270			
Swivel extension bar 50	BE3-050JW			
Universal joint	ВЈЗ			
Socket holder for 10 sockets	EHB310			
Single door metal case	EKB-2 (W455×D190	×H60)		

[·] Includes resin molded tray (W445×D185×H52)

3/8"sq. SOCKET WRENCH SET [21pcs.]











No.		Weight(kg)	6	
TB314	3.8	1		
Set contents				
Sockets (6pt.)	B3-055, 07, 08, 09, 1 19, 21, 22	0, 11, 12, 1	3, 1	4, 15, 17,
Ratchet handle	BR3E			
Breaker bar	BS3E			
Extension bar 75	BE3-075			
Extension bar 150	BE3-150			
Extension bar 270	BE3-270			
Swivel extension bar 50	BE3-050JW			
Universal joint	BJ3			
Socket holder for 10 sockets	EHB310			
Single door metal case	EKB-2 (W455×D190	×H60)		

[·] Includes resin molded tray (W445×D185×H52)

Cases are shown on P.198.

[·] Do not use hand tools with an impact wrench.

3/8"sq. SOCKET WRENCH SET [25pcs.]











No.		Weight(kg)	6	
TB317X		3.9	1	
Set contents				
Sockets (6pt.)	B3-055, 06, 07, 08, 09,	10, 11, 12		
Sockets (12pt.)	B3-13W, 14W, 15W, 16W,	17W, 19W, 2	20W,	21W, 22W
Ratchet handle	BR3E			
Breaker bar	BS3E			
Extension bar 30	BE3-030			
Extension bar 75	BE3-075			
Extension bar 150	BE3-150			
Extension bar 270	BE3-270			
Swivel extension bar 50	BE3-050JW			
Universal joint	BJ3			
Socket holder for 10 sockets	EHB310			
Single door metal case	EKB-2 (W455×D190×H	60)		
Includes resin molded tray (M/A/5	XD185 XH52)			

 $[\]cdot$ Includes resin molded tray (W445×D185×H52)

3/8"sq. SOCKET WRENCH SET [26pcs.]











No.	Weight(kg)	6		
TB318	4	1		
Set contents				
Sockets (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12,	13, 14, 15, 16, 1	7, 18,	19, 20, 21, 22
Ratchet handle	BR3E			
Breaker bar	BS3E			
Extension bar 30	BE3-030			
Extension bar 75	BE3-075			
Extension bar 150	BE3-150			
Extension bar 270	BE3-270			
Swivel extension bar 50	BE3-050JW			
Universal joint	ВЈ3			
Socket holder for 10 sockets	EHB310			
Single door metal case	EKB-2 (W455×D190×H	60)		

 $[\]cdot$ Includes resin molded tray (W445×D185×H52)

3/8"sq. DEEP SOCKET WRENCH SET [17pcs.]











No.		vveignt(kg)				
TB3L11X	4	1				
Set contents						
Deep sockets (6pt.)	B3L-06, 08, 10, 11, 12					
Deep socket (12pt.)	B3L-13W, 14W, 15W, 17W, 19W, 22W					
Ratchet handle	BR3E					
Breaker bar	BS3E					
Extension bar 30	BE3-030					
Extension bar 75	BE3-075					
Swivel extension bar 50	BE3-050JW					
Universal joint	BJ3					
Socket holder for 5 sockets	EHB305					
Single door metal case	EKB-2 (W455×D190×H60)					
Includes regio melded tray (MAAE V.D.19E V.I.E.2)						

 $[\]cdot$ Includes resin molded tray (W445×D185×H52)

3/8"sq. SOCKET WRENCH SET [26pcs.]











No.		Weight(kg)				
TB3X20	4.3	1				
Set contents						
Sockets (6pt.)	B3-055, 07, 08, 10, 12					
Sockets (12pt.)	B3-13W, 14W, 15W, 17	W, 19W				
Deep sockets (6pt.)	B3L-07, 08, 10, 12					
Deep socket (12pt.) B3L-13W, 14W, 15W, 17W, 19W, 22V						
Ratchet handle	BR3E					
Breaker bar	BS3E					
Extension bar 30	BE3-030					
Extension bar 75	BE3-075					
Swivel extension bar 50	BE3-050JW					
Universal joint	BJ3					
Socket holder for 10 sockets	EHB310					
Single door metal case EKB-2 (W455×D190×H60)						

 $[\]cdot$ Includes resin molded tray (W445×D185×H52)















Cases are shown on P.198.

[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

3/8"sq. SOCKET SET [5pcs.]











No.		Weight(g)	6	
TB305E		300	1	
Set contents				
Sockets (6pt.)	B3-08, 10, 12, 14, 17			
Sacket holder for 5 sackets	EHB30E			

3/8"sq. SOCKET SET [10pcs.]











No.		Weight(g)				
TB310		500	1			
Set contents						
Sockets (6pt.) B3-07, 08, 10, 11, 12, 13, 14, 17, 19, 22						
Socket holder for 10 sockets	EHB310					

3/8"sq. SOCKET

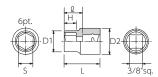












No.	S	D1	D2	Н	L	Q	Weight(g)		
B3-055	5.5	9	17	5	22	10.5	19	5	
B3-06	6	10	17	5	22	10.5	20	5	
B3-07	7	11	17	5	22	10.5	20	5	
B3-08	8	12	17	5.5	22	10.5	20	5	
B3-09	9	13.5	17	5.5	22	10.5	21	5	
B3-10	10	14.5	17	5.5	22	10.5	20	5	
B3-11	11	16	17	6	23	11.5	23	5	
B3-12	12	17	18	7.5	24	12.5	26	5	
B3-13	13	18.5	18	7.5	24	12.5	28	5	
B3-14	14	20	19	8.5	25	13.5	34	5	
B3-15	15	21	20	8.5	26	14.5	35	5	
B3-16	16	22	21	9	26	14.5	41	5	
B3-17	17	24	22	10	27	15.5	51	5	
B3-18	18	25	23	10	27	15.5	58	5	
B3-19	19	26	24	10.5	27	15.5	62	5	
B3-20	20	27.5	25	11	28	16.5	71	5	
B3-21	21	28.5	26	11.5	28	16.5	81	5	
B3-22	22	30	27	11.5	28	16.5	86	5	
B3-23	23	31	27.5	12	29	17.5	94	5	
B3-24	24	32.5	28.5	12	29	17.5	115	5	

3/8"sq. SOCKET

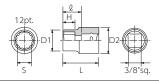












No.	S	D1	D2	Н	L	Q	Weight(g)	Ó	
B3-055W	5.5	9	17	5	22	10.5	19	5	
B3-06W	6	10	17	5	22	10.5	20	5	
B3-07W	7	11	17	5	22	10.5	20	5	
B3-08W	8	12	17	5.5	22	10.5	20	5	
B3-09W	9	13.5	17	5.5	22	10.5	21	5	
B3-10W	10	14.5	17	5.5	22	10.5	20	5	
B3-11W	11	16	17	6	23	11.5	23	5	
B3-12W	12	17	18	7.5	24	12.5	26	5	
B3-13W	13	18.5	18	7.5	24	12.5	28	5	
B3-14W	14	20	19	8.5	25	13.5	34	5	
B3-15W	15	21	20	8.5	26	14.5	35	5	
B3-16W	16	22	21	9	26	14.5	41	5	
B3-17W	17	24	22	10	27	15.5	51	5	
B3-18W	18	25	23	10	27	15.5	58	5	
B3-19W	19	26	24	10.5	27	15.5	62	5	
B3-20W	20	27.5	25	11	28	16.5	71	5	
B3-21W	21	28.5	26	11.5	28	16.5	81	5	
B3-22W	22	30	27	11.5	28	16.5	86	5	
B3-23W	23	31	27.5	12	29	17.5	94	5	
B3-24W	24	32.5	28.5	12	29	17.5	115	5	

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

3/8"sq. SOCKET

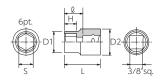












No.	S(in)	D1	D2	Н	L	Q	Weight(g)		
B3-1/4	1/4	10	17	5	22	10.5	20	5	
B3-9/32	9/32	11	17	5	22	10.5	20	5	
B3-5/16	5/16	12	17	5.5	22	10.5	20	5	
B3-11/32	11/32	13.5	17	5.5	22	10.5	21	5	
B3-3/8	3/8	14	17	5.5	22	10.5	21	5	
B3-7/16	7/16	16	17	6	23	11.5	23	5	
B3-1/2	1/2	18.5	18	7.5	24	12.5	28	5	
B3-17/32	17/32	20	19	7.5	24	12.5	35	5	
B3-9/16	9/16	20	19	8.5	25	13.5	34	5	
B3-19/32	19/32	21	20	8.5	26	14.5	35	5	
B3-5/8	5/8	22	21	9	26	14.5	42	5	
B3-21/32	21/32	24	22	10	27	15.5	51	5	
B3-11/16	11/16	24	22	10	27	15.5	51	5	
B3-3/4	3/4	26	24	10.5	27	15.5	62	5	
B3-25/32	25/32	27.5	25	11	28	16.5	73	5	
B3-13/16	13/16	28.5	26	11.5	28	16.5	80	5	
B3-7/8	7/8	30	27	11.5	28	16.5	84	5	

3/8"sq. SOCKET



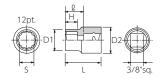












No.	S (in)	D1	D2	Н	L	Q	Weight(g)	6	
B3-1/4W	1/4	10	17	5	22	10.5	20	5	
B3-9/32W	9/32	11	17	5	22	10.5	20	5	
B3-5/16W	5/16	12	17	5.5	22	10.5	20	5	
B3-11/32W	11/32	13.5	17	5.5	22	10.5	21	5	
B3-3/8W	3/8	14	17	5.5	22	10.5	21	5	
B3-7/16W	7/16	16	17	6	23	11.5	23	5	
B3-1/2W	1/2	18.5	18	7.5	24	12.5	28	5	
B3-17/32W	17/32	20	19	7.5	24	12.5	35	5	
B3-9/16W	9/16	20	19	8.5	25	13.5	34	5	
B3-19/32W	19/32	21	20	8.5	26	14.5	35	5	
B3-5/8W	5/8	22	21	9	26	14.5	42	5	
B3-21/32W	21/32	24	22	10	27	15.5	51	5	
B3-11/16W	11/16	24	22	10	27	15.5	51	5	
B3-3/4W	3/4	26	24	10.5	27	15.5	62	5	
B3-25/32W	25/32	27.5	25	11	28	16.5	73	5	
B3-13/16W	13/16	28.5	26	11.5	28	16.5	80	5	
B3-7/8W	7/8	30	27	11.5	28	16.5	84	5	

3/8"sq. SEMI DEEP SOCKET SET [5pcs.]



No.		Weight(g)		
TB3M05		400	1	
Set contents				
Semi-deep sockets (6pt.)	B3M-08, 10, 12, 14, 17			
Socket holder for 5 sockets	EHB305			















[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

 $[\]cdot$ Products marked with ${\it \textcircled{0}}$ should be ordered after checking stock.

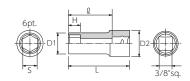
3/8"sq. SEMI DEEP SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	白	
B3M-055	5.5	9	17	6	40	28.5	29	5	
B3M-06	6	10	17	6	40	28.8	31	5	
B3M-07	7	11	17	8	40	28.5	30	5	
B3M-08	8	12	17	9	40	28.5	33	5	
B3M-09	9	13.5	17	10	40	28.5	37	5	
B3M-10	10	14.5	17	11	40	28.5	34	5	
B3M-11	11	16	17	12	40	28.5	39	5	
B3M-12	12	17	18	14	40	28.5	45	5	
B3M-13	13	18.5	18	14	50	38.5	61	5	
B3M-14	14	20	19	17	50	38.5	71	5	
B3M-15	15	21	20	17	50	38.5	74	5	
B3M-16	16	22	21	17	50	38.5	79	5	
B3M-17	17	24	22	17	50	38.5	95	5	
B3M-18	18	25	23	21	50	38.5	108	5	
B3M-19	19	26	24	21	50	38.5	111	5	
B3M-20	20	27.5	25	21	50	38.5	124	5	
B3M-21	21	28.5	26.5	21	50	38.5	141	5	
B3M-22	22	30	27.5	21	50	38.5	151	5	
B3M-23	23	31	28.5	21	50	38.5	155	5	
B3M-24	24	32.5	30	21	50	38.5	176	5	

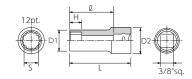
3/8"sq. SEMI DEEP SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	△	
B3M-055W	5.5	9	17	6	40	28.5	29	5	
B3M-06W	6	10	17	6	40	28.8	31	5	
B3M-07W	7	11	17	8	40	28.5	30	5	
B3M-08W	8	12	17	9	40	28.5	33	5	
B3M-09W	9	13.5	17	10	40	28.5	37	5	
B3M-10W	10	14.5	17	11	40	28.5	34	5	
B3M-11W	11	16	17	12	40	28.5	39	5	
B3M-12W	12	17	18	14	40	28.5	45	5	
B3M-13W	13	18.5	18	14	50	38.5	61	5	
B3M-14W	14	20	19	17	50	38.5	71	5	
B3M-15W	15	21	20	17	50	38.5	74	5	
B3M-16W	16	22	21	17	50	38.5	79	5	
B3M-17W	17	24	22	17	50	38.5	95	5	
B3M-18W	18	25	23	21	50	38.5	108	5	
B3M-19W	19	26	24	21	50	38.5	111	5	
B3M-20W	20	27.5	25	21	50	38.5	124	5	
B3M-21W	21	28.5	26.5	21	50	38.5	141	5	
B3M-22W	22	30	27.5	21	50	38.5	151	5	
B3M-23W	23	31	28.5	21	50	38.5	155	5	
B3M-24W	24	32.5	30	21	50	38.5	176	5	

3/8"sq. DEEP SOCKET SET [5pcs.]











No.		Weight(kg)		
TB3L05		0.5	1	
Set contents				
Deep sockets (6pt.)	B3I-08 10 12 14 17	7		

Socket holder for 5 sockets

3/8"sq. DEEP SOCKET SET [10pcs.]











No.		Weight(kg)	Ó	
TB3L10		1.2	1	
Set contents				
Deep sockets (6pt.)	B3L-07, 08, 10, 12, 13	3, 14, 15, 17	7, 19	, 22
Socket holder for 10 sockets	EHB310			

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

3/8"sq. DEEP SOCKET









No.	S	D1	D2	Н	L	Q	Weight(g)		
B3L-055	5.5	9	17	6	60	48.5	40	5	
B3L-06	6	10	17	6	60	48.5	44	5	
B3L-07	7	11	17	8	60	48.5	44	5	
B3L-08	8	12	17	9	60	48.5	49	5	
B3L-09	9	13.5	17	10	60	48.5	57	5	
B3L-10	10	14.5	17	11	65	53.5	56	5	
B3L-11	11	16	17	12	65	53.5	67	5	
B3L-12	12	17	18	14	65	53.5	78	5	
B3L-13	13	18.5	18	14	70	58.5	87	5	
B3L-14	14	20	19	17	70	58.5	92	5	
B3L-15	15	21	20	17	70	58.5	95	5	
B3L-16	16	22	21	17	70	58.5	102	5	
B3L-17	17	24	22	17	70	58.5	130	5	
B3L-18	18	25	23	21	70	58.5	147	5	
B3L-19	19	26	24	21	70	58.5	150	5	
B3L-20	20	27.5	25	23	70	58.5	165	5	
B3L-21	21	28.5	26.5	23	70	58.5	188	5	
B3L-22	22	30	27.5	23	70	58.5	203	5	
B3L-23	23	31	28.5	27	70	58.5	200	5	
B3L-24	24	32.5	30	27	70	58.5	229	5	

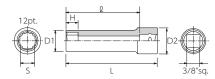
3/8"sq. DEEP SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	\subseteq	
B3L-055W	5.5	9	17	6	60	48.5	40	5	
B3L-06W	6	10	17	6	60	48.5	44	5	
B3L-07W	7	11	17	8	60	48.5	44	5	
B3L-08W	8	12	17	9	60	48.5	49	5	
B3L-09W	9	13.5	17	10	60	48.5	57	5	
B3L-10W	10	14.5	17	11	65	53.5	56	5	
B3L-11W	11	16	17	12	65	53.5	67	5	
B3L-12W	12	17	18	14	65	53.5	78	5	
B3L-13W	13	18.5	18	14	70	58.5	87	5	
B3L-14W	14	20	19	17	70	58.5	92	5	
B3L-15W	15	21	20	17	70	58.5	95	5	
B3L-16W	16	22	21	17	70	58.5	102	5	
B3L-17W	17	24	22	17	70	58.5	130	5	
B3L-18W	18	25	23	21	70	58.5	147	5	
B3L-19W	19	26	24	21	70	58.5	150	5	
B3L-20W	20	27.5	25	23	70	58.5	165	5	
B3L-21W	21	28.5	26.5	23	70	58.5	188	5	
B3L-22W	22	30	27.5	23	70	58.5	203	5	
B3L-23W	23	31	28.5	27	70	58.5	200	5	
B3L-24W	24	32.5	30	27	70	58.5	229	5	

3/8"sq. DEEP SOCKET











No.	S (in)	D1	D2	Н	L	Q	Weight(g)	\leq	
B3L-1/4	1/4	10	17	6	60	48.5	42	5	
B3L-9/32	9/32	11	17	8	60	48.5	44	5	
B3L-5/16	5/16	12	17	9	60	48.5	45	5	
B3L-11/32	11/32	13.5	17	10	60	48.5	50	5	
B3L-3/8	3/8	14	17	11	65	53.5	55	5	
B3L-7/16	7/16	16	17	12	65	53.5	61	5	
B3L-1/2	1/2	18.5	18	14	70	58.5	80	5	
B3L-17/32	17/32	20	19	14	70	58.5	92	5	
B3L-9/16	9/16	20	19	17	70	58.5	92	5	
B3L-19/32	19/32	21	20	17	70	58.5	95	5	
B3L-5/8	5/8	22	21	17	70	58.5	102	5	
B3L-21/32	21/32	24	22	17	70	58.5	123	5	
B3L-11/16	11/16	24	22	17	70	58.5	123	5	
B3L-3/4	3/4	26	24	21	70	58.5	142	5	
B3L-25/32	25/32	27.5	25	23	70	58.5	165	5	
B3L-13/16	13/16	28.5	26.5	23	70	58.5	180	5	
B3L-7/8	7/8	30	27.5	23	70	58.5	186	5	

[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.















[•] Products marked with ② should be ordered after checking stock.

3/8"sq. DEEP SOCKET











							1		
No.	S(in)	D1	D2	Н	L	Q	Weight(g)		
B3L-1/4W	1/4	10	17	6	60	48.5	42	5	
B3L-9/32W	9/32	11	17	8	60	48.5	44	5	
B3L-5/16W	5/16	12	17	9	60	48.5	45	5	
B3L-11/32W	11/32	13.5	17	10	60	48.5	50	5	
B3L-3/8W	3/8	14	17	11	65	53.5	55	5	
B3L-7/16W	7/16	16	17	12	65	53.5	61	5	
B3L-1/2W	1/2	18.5	18	14	70	58.5	80	5	
B3L-17/32W	17/32	20	19	14	70	58.5	92	5	
B3L-9/16W	9/16	20	19	17	70	58.5	92	5	
B3L-19/32W	19/32	21	20	17	70	58.5	95	5	
B3L-5/8W	5/8	22	21	17	70	58.5	102	5	
B3L-21/32W	21/32	24	22	17	70	58.5	123	5	
B3L-11/16W	11/16	24	22	17	70	58.5	123	5	
B3L-3/4W	3/4	26	24	21	70	58.5	142	5	
B3L-25/32W	25/32	27.5	25	23	70	58.5	165	5	
B3L-13/16W	13/16	28.5	26.5	23	70	58.5	180	5	
B3L-7/8W	7/8	30	27.5	23	70	58.5	186	5	

3/8"sq. LONG DEEP SOCKET SET [2pcs.]

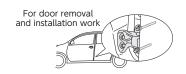






No.	Weight(g)	台	
B3TLL2	255	1	
Set contents			

- Long Deep Socket (6pt.) · Tightening and loosening of nuts on deep or long protruding bolts.
- · The bolts for mounting the rear bumper cover, inside door knobs, door hinges, and side louvers of automobiles.
- $\boldsymbol{\cdot}$ Automobile bumper lean hosement mounting bolts, airbag adjusting bolts, tension pulley adjusting bolts.
- · Bolts and nuts for automobile undercarriage.
- For other deep spaces where it is difficult to work with an open end wrench or deep socket.





3/8"sq. LONG DEEP SOCKET

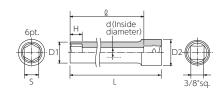








No.	S	D1	D2	d	Н	L	Q	Weight(g)	6	
B3LL-10	10	14.5	18	8	11	130	113	115	5	
B3LL-12	12	17.7	18	9	12	130	113	140	5	



3/8"sq. DEEP MAGNETIC SOCKET SET [5pcs.]



No.		Weight(g)	白	
TB3L05MGA		480	1	
Set contents				
Magnetic Deep Socket	B3L-08MGA, 10MGA, 12/	MGA, 13M	GA,	14MGA
Socket holder for 5 sockets	EHB305			

- The magnet built into the bore prevents bolts and nuts from falling off.
- $\boldsymbol{\cdot}$ Since the magnetic part slides, it can also be used with bolts with washers, thin nuts, and stud bolts.
- $\boldsymbol{\cdot}$ Strong magnetic force neodymium magnets are used.

3/8"sq. DEEP MAGNETIC SOCKET



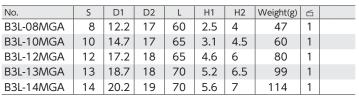




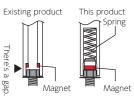


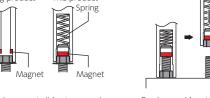






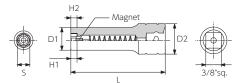
- · The magnet built into the bore prevents bolts and nuts from falling off.
- · Since the magnetic part slides, it can also be used with bolts with washers, thin nuts, and stud
- Strong magnetic force neodymium magnets are used.





Built-in magnet slides to securely hold bolts with washers

Can be used for stud bolts and other protruding bolts.



3/8"sq. CROWFOOT WRENCH SET [5pcs.]







No.	Weight(g)	6	
TBNS305W	490	1	
Catalantanta			

Set contents

BNS3-10W, 12W, 14W, 17W, 19W Crowfoot wrench

EHB310 Socket holder for 10 sockets

- For tightening and loosening of flare nuts used in hydraulic piping for automobiles and general
- · The distance from the bore to the center of the drive has been standardized to 30 mm, so the conversion when using a torque wrench does not change depending on the size.

3/8"sq. CROWFOOT WRENCH



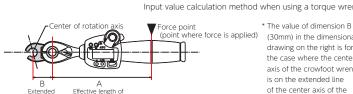








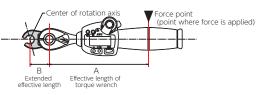


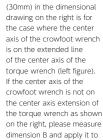


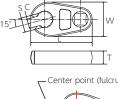
Required × torque value = Input torque value conversion formula (A+B)

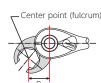
- No. W В Weight(g) BNS3-08W 8 22 30 5 49 95 48 1 10 49 **BNS3-10W** 6 22 9.5 30 46 1 22 9.5 BNS3-11W 49 11 7 30 44 1 30 BNS3-12W 12 1 8 52 29 11 71 **BNS3-13W** 13 9 52 29 11 30 69 1 **BNS3-14W** 14 10 52 29 11 30 67 1 **BNS3-17W** 17 12 55.5 35 13 30 94 1 BNS3-19W 19 13 55.5 35 13 30 89
- \cdot For tightening and loosening of flare nuts used in hydraulic piping for automobiles and general
- · The distance from the bore to the center of the drive has been standardized to 30 mm, so the conversion when using a torque wrench does not change depending on the size.

Input value calculation method when using a torque wrench (Details are shown in 🔊 P.399)









- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 🕖 should be ordered after checking stock.







the conversion formula.

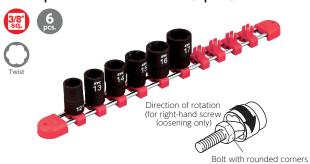








3/8"sq. TWIST SOCKET SET [6pcs.]



No.		Weight(g)	6	
TB3TW06		430	1	
Set contents				
Twist socket	B3TW-12,13,14,15,16,1	7		
Socket holder for 10 sockets	EHB310			

- $\boldsymbol{\cdot}$ This tool is used to loosen rounded bolts, stud bolts, etc. that have had their corners
- $\boldsymbol{\cdot}$ Twist-shaped teeth engage damaged bolts and nuts for easy removal.
- * Removed bolts and nuts cannot be reused.
- * The size to be used will vary depending on the damage to the bolts and nuts. Please confirm the size selection with the actual product.



· Do not use power tools (air and electric impact wrenches, etc.).

3/8"sq. TWIST SOCKET SET [10pcs.]



No.		Weight(g)	白	
TB3TW10		590	1	
Set contents				
Twist socket	B3TW-08, 09, 10, 11, 1	2, 13, 14, 1	15, 1	6, 17
Socket holder for 10 sockets	EHB310			

- · This tool is used to loosen rounded bolts, stud bolts, etc. that have had their corners removed.
- Twist-shaped teeth engage damaged bolts and nuts for easy removal.
- * Removed bolts and nuts cannot be reused.
- st The size to be used will vary depending on the damage to the bolts and nuts. Please confirm the size selection with the actual product.



· Do not use power tools (air and electric impact wrenches, etc.).

3/8"sq. TWIST SOCKET



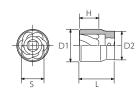




No.	S	D1	D2	Н	L	Weight(g)	\Box	
B3TW-08	8	13	19	8	32	40	5	
B3TW-09	9	14.5	19	8	32	45	5	
B3TW-10	10	15.8	19	10	32	47	5	
B3TW-11	11	17.2	19	10	32	49	5	
B3TW-12	12	18.5	19	12	32	50	5	
B3TW-13	13	19.7	19	12	32	51	5	
B3TW-14	14	21	19	14	32	53	5	
B3TW-15	15	22.5	19	14	32	55	5	
B3TW-16	16	24	22	14	32	65	5	
B3TW-17	17	25.8	22	16	35	70	5	



· Do not use power tools (air and electric impact wrenches, etc.).



3/8"sq. SOCKET FOR ELBOW CONNECTOR













No.	sq.	S	D1	D2	Н	L	Α	В	Weight(g)	6	
ABX6-12	3/8"	12	18.5	18	14	50	14	12	60	5	
ABX6-14	3/8"	14	22	20	17	50	17	14	80	5	
ABX6-17	3/8"	17	24	22	17	50	17	17	98	5	
ABX6-19	3/8"	19	26	24	21	50	21	19	110	5	
ABX6-22	3/8"	22	30	27.5	21	50	21	22	153	5	

 $\mbox{Usage} \cdot \mbox{Tool for tightening and loosening one-touch elbow connectors used on trucks 4t or } \\$

 $\boldsymbol{\cdot}$ It can also be used to tighten and loosen elbow connectors (L-type pipe fittings) used



Elbow Connectors

in general maintenance machinery.

[·] Do not use hand tools with an impact wrench.

3/8"sq. RATCHET HANDLE







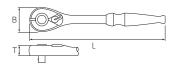


No.	Type	Feed angle	В	Т	L	Weight(g)		
BR3E	Oval	10°	33	13.7	180	260	5	

- * Repair kit (BR3E-K) is available. 🗘 P.235
- * Repair parts are set. 🕒 Refer to "Repairable List" from P.625.



Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (NON UNION MECHANISM)









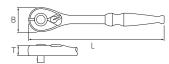


No.	Type	Feed angle	В	Т	L	Weight(g)	б	
BR3A	Oval	10°	33	13.7	180	260	5	

- * Repair kit (BR3A-K) is available. 🗘 P.235
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.
- $\boldsymbol{\cdot}$ The ratchet can be operated while holding down the non-slip surface in the center of the head to prevent it from rotating together



· Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (LONG)





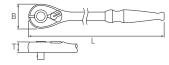






No.	Type	Feed angle	В	Т	L	Weight(g)	Ó	
BR3L	Oval	10°	33	13.7	275	320	5	

- * Repair kit (BR3E-K) is available. 🗘 P.235
- Repair parts are set. Refer to "Repairable List" from P.625.
- CAUTION
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
 - Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



3/8"sq. RATCHET HANDLE (FLEX)











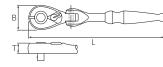


No.	Туре	Feed angle	В	Т	L	Weight(g)	6	
BR3F	Oval	10°	33	13.7	180	280	5	

- * Repair kit (BR3E-K) is available. 🖒 P.235
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.



- Be careful not to apply too much force to the flex section, as it will make the
- · Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (FLEX HEAD LONG)









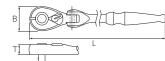


No.	Туре	Feed angle	В	Т	L	Weight(g)	6	
BR3FL	Oval	10°	33	13.7	275	360	5	

- * Repair kit (BR3E-K) is available. 🖒 P.235
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.



- Be careful not to apply too much force to the flex section, as it will make the work
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- \cdot Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



• Products marked with 🕖 should be ordered after checking stock.















[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

3/8"sq. RATCHET HANDLE (COMPACT)











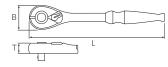


No.	Type	Feed angle	В	Т	L	Weight(g)	6	
BRC3E	Oval	10°	22	10	125	100	5	

- * Repair kit (BRC3-K) is set. 🗘 P.235
- * Repair parts are set. Refer to "Repairable List" from P.625.



Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (COMPACT SHORT)

000

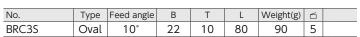








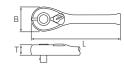




- * Repair kit (BRC3-K) is set. P.235
- * Repair parts are set. Refer to "Repairable List" from P.625.



• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (COMPACT FLEX)













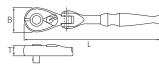
No.	Type	Feed angle	В	Т	L	Weight(g)	\Box	
BRC3F	Oval	10°	22	10	125	140	5	

- * Repair kit (BRC3-K) is set. 🗘 P.235
- * Repair parts are set. Refer to "Repairable List" from P.625.



 $\boldsymbol{\cdot}$ Be careful not to apply too much force to the flex section, as it will make the work unstable.

Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (COMPACT FLEX SHORT)













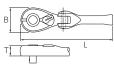
No.	Туре	Feed angle	В	Т	L	Weight(g)		
BRC3FS	Oval	10°	22	10	80	90	5	

- * Repair kit (BRC3-K) is set. P.235
- * Repair parts are set. 🔘 Refer to "Repairable List" from P.625.



• Be careful not to apply too much force to the flex section, as it will make the work unstable.

 Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

REPAIR KIT FOR 3/8"sq. RATCHET HANDLE



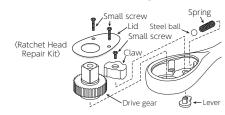






No.	Drive size	Contents	Weight(g)	
BR3E-K	3/8"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw×2	71	

- · Repair kit for 3/8"sq. ratchet handles (BR3E, BR3L, BR3F, BR3FL).
- * The repair kit for the type without union mechanism (BR3A) is BR3A-K (\bigcirc P.235).
- * Repair kit for compact type (BRC3E, BRC3S, BRC3F, BRC3FS) is BRC3-K (🗘 P.235).



REPAIR KIT FOR 3/8"sq. RATCHET HANDLE (NON UNION MECHANISM)

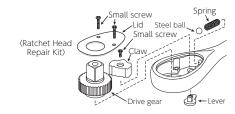






No.	Drive size	Contents	Weight(g)	
BR3A-K	3/8"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw×2	71	

- \cdot Repair kit for 3/8"sq. ratchet handle (without union mechanism) (BR3A).
- * The repair kit for the union mechanism type (BR3E, BR3L, BR3F, BR3FL) is BR3E-K (🔘 P.235).
- * Repair kit for compact type (BRC3E, BRC3S, BRC3F, BRC3FS) is BRC3-K (P.235).



REPAIR KIT FOR 3/8"sq. RATCHET HANDLE (COMPACT)



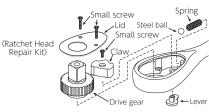






No.	Drive size	Contents	Weight(g)	
BRC3-K	3/8"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw×2	31	

- · Repair kit for 3/8"sq. compact ratchet handles (BRC3E, BRC3S, BRC3F, BRC3FS).
- * The repair kit for the union mechanism type (BR3E, BR3L, BR3F, BR3FL) is BR3E-K (🗘 P.235).
- * The repair kit for the type without union mechanism (BR3A) is BR3A-K (P.235).



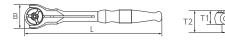
3/8"sq. ROUND SWIVEL HEAD RATCHET











No.	Feed angle	В	T1	T2	L	Weight(g)	Ó	
BRSW3	5°	32	16.5	27	180	260	5	

- Used for tightening and loosening hexagon bolts, nuts, etc. by combining sockets.
- Feature Smallest head size among 3/8"sq. swivel ratchet handles. High workability in narrow spaces.
 - The gear has 72 teeth. Feed angle is 5°
 - · The handle can rotate more than 180° around the head and can be used like a ratchet screwdriver.
 - $\boldsymbol{\cdot}$ The handle is made of metal instead of resin. Knurling is applied to a portion of the handle to achieve both moderate slipping and a gripping feel, enabling smooth and rapid turning
 - $\boldsymbol{\cdot}$ Non-step oscillation (no fixed angle function) allows smooth turning.
 - $\boldsymbol{\cdot}$ Pivoting firmness can be adjusted with a hexagon socket bolt (2.5 mm hexagonal
 - · Socket can be attached and detached even when swiveling.
 - The lever for switching the direction of rotation has a three-way shape. Smooth switching even when swinging
 - \cdot The rigidity of the neck circumference has been increased to provide strength that allows for full tightening.
- * Repair kit (BRSW3-K) is available. P.236
- * Repair parts are set. Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the drive angle completely to the base.
- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 🕖 should be ordered after checking stock.













3/8"sq. ROUND SWIVEL HEAD RATCHET (SHORT)

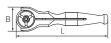


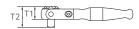












No.	Feed angle	В	T1	T2	L	Weight(g)	白	
BRSW3S	5°	32	16.5	27	120	195	5	

Usage · Used for tightening and loosening hexagon bolts, nuts, etc. by combining sockets. Feature \cdot Smallest head size among 3/8"sq. swivel ratchet handles. High workability in narrow spaces.

- The gear has 72 teeth. Feed angle is 5°.
 The handle can rotate more than 180° around the head and can be used like a ratchet screwdriver.
- $\boldsymbol{\cdot}$ The handle is made of metal instead of resin. Knurling is applied to a portion of the handle to achieve both moderate slipping and a gripping feel, enabling smooth and rapid turning.
- · Non-step oscillation (no fixed angle function) allows smooth turning
- · Pivoting firmness can be adjusted with a hexagon socket bolt (2.5 mm hexagonal biside width).
- · Socket can be attached and detached even when swiveling.
- The lever for switching the direction of rotation has a three-way shape. Smooth switching even when swinging.
- $\boldsymbol{\cdot}$ The rigidity of the neck circumference has been increased to provide strength that allows for full tightening.
- * Repair kit (BRSW3-K) is available. © P.236 * Repair parts are set. © Refer to "Repairable List" from P.625.



- · Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the drive angle completely to the base.

3/8"sq. ROUND SWIVEL HEAD RATCHET (LONG)



No.	Feed angle	В	T1	T2	L	Weight(g)	6	
BRSW3L	5°	32	16.5	27	300	375	5	

Usage $\,\,\cdot$ Used for tightening and loosening hexagon bolts, nuts, etc. by combining sockets. Feature \cdot Smallest head size among 3/8"sq. swivel ratchet handles. High workability in narrow spaces.

- The gear has 72 teeth. Feed angle is 5°.
- \cdot The handle can rotate more than 180° around the head and can be used like a ratchet screwdriver.
- · The handle is made of metal instead of resin. Knurling is applied to a portion of the handle to achieve both moderate slipping and a gripping feel, enabling smooth and $\,$ rapid turning.
- Non-step oscillation (no fixed angle function) allows smooth turning.
- · Pivoting firmness can be adjusted with a hexagon socket bolt (2.5 mm hexagonal
- $\boldsymbol{\cdot}$ Socket can be attached and detached even when swiveling.
- \cdot The lever for switching the direction of rotation has a three-way shape. Smooth switching even when swinging.
- · The rigidity of the neck circumference has been increased to provide strength that allows for full tightening.
- * Repair kit (BRSW3-K) is available. 🗘 P.236
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.



- \cdot Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the drive angle completely to the base.
- Be careful of overtorque because of its long length and tendency to carry an

REPAIR KIT FOR 3/8"sq. ROUND SWIVEL HEAD RATCHET







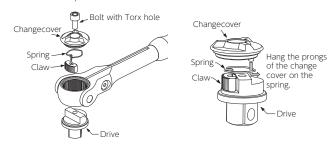






No.	Angle of insertion	Contents	Weight(g)	
BRSW3-K		Drive, claw, spring, change cover, bolt with torx hole	34	

- Repair kit for 3/8"sq. swivel ratchet handle (BRSW3, BRSW3S, BRSW3L).
- · A T25 Torx wrench is required to remove and install bolts with Torx holes.



3/8"sq RATCHET HANDLE (GRIP TYPE)







No.	Type	Feed angle	В	L	Weight(g)		
BRG3	Grip type	5°	55	27.5	170	10	

The feed angle is 5°.



Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

· Insert the drive angle completely to the root.



[·] Do not use hand tools with an impact wrench.

3/8"sq. RATCHET ADAPTER





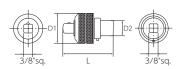


No.	Feed angle	D1	D2	L	Weight(g)	ń	
BRA21	6°	31	17.7	51	140	10	

- \cdot The feed angle is $6^{\circ}.$
- · Can be used as a ratchet handle when combined with a breaker bar.
- * Repair parts are available. Please contact our distributors for details.



- · Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the square drive all the way to the base.



3/8"sq. BREAKER BAR





No.	D	Grip diameter (ϕ)	L	Weight(g)		
BS3E	18	21	300	410	5	

- * Repair kit (BS3E-K) is set. 🗘 P.237
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.



- Hold the center of the grip to prevent the drive unit from pinching your hand. Be careful of overtorque due to the long overall length and the tendency to
- apply excessive load.
- · Insert the square drive all the way to the base.



3/8"sq. BREAKER BAR (LONG)







No.	D	Grip diameter (φ)	L	Weight(g)	6	
BS3L	18	21	400	510	5	

- * Repair kit (BS3E-K) is set. 🗘 P.237
- * Repair parts are set. Refer to "Repairable List" from P.625.



- \cdot Hold the center of the grip to prevent the drive unit from pinching your hand. \cdot Be careful of overtorque due to the long overall length and the tendency to apply
- excessive load.
- · Insert the square drive all the way to the base.



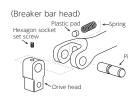
REPAIR KIT FOR 3/8"sq. BREAKER BAR





No.	Drive size	Contents	Weight(g)	
BS3E-K	3/8"sq.	1 each of drive head, pin, hexagon socket set screw, 2 each of plastic pad and spring	35	

- · Repair kit for 3/8"sq. breaker bar (BS3E, BS3L).
- * Two types of pads and springs, old and new, are included in the package, but only one of each is used.
- (Please refer to the instruction manual for details.)
- * A 1.5mm hexagonal wrench is required for replacement.



3/8"sq. SLIDE HEAD HANDLE



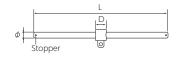


No.	D	Handle diameter (ϕ)	L	Weight(g)	6	
ВНМ3	17	9	200	120	5	

- Depending on the work area, the process can range from quick-turn tightening and loosening ∍, We pursued a function that allows quicker work than a ratchet handle
- · The handle is grooved so that the head does not rotate.



Insert the square drive completely up to the root.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ② should be ordered after checking stock.

















3/8"sq. T-SHAPED HANDLE

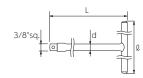


No.	Q	L	d	Weight(g)		
TH20	200	255	10	275	10	

 \cdot Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.



· Insert the square drive completely up to the root.



3/8"sq. T-SHAPED WRENCH (FLEX LONG)

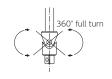


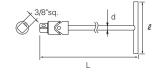
No.	Q	L	d	Weight(g)	6	
THF20-700	180	698	11	700	10	

 \cdot Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.



- \cdot The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- · Insert the square drive completely up to the root.





3/8"sq. HANDLE





No.	Н	W	L	Weight(g)	白	
ABX101	140	28	110	250	10	

- · Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.
- The shape is easy to push around and is especially effective for cross bit sockets (P.291).



 $\boldsymbol{\cdot}$ Insert the square drive completely up to the root.



3/8"sq. HANDLE



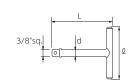


No.	Q	L	d	Weight(g)	白	
AB-53	100	115	8	90	1	

· Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.



· Insert the square drive completely up to the root.



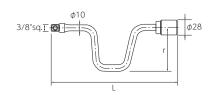
3/8"sq. SPEEDER HANDLE



No.	r(Turning radius)	L	Weight(g)	6	
BSD20	105	350	400	1	



 $\boldsymbol{\cdot}$ Insert the square drive completely up to the root.



 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

3/8"sq. SCREWDRIVER TYPE HANDLE

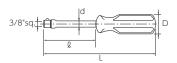




No.	D	d	L	Q	Weight(g)	6	
BD20	22.5	8	150	63	115	5	



· Insert the square drive completely up to the root.



3/8"sq. GRIP TYPE HANDLE







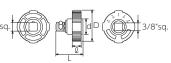


No.	D	d	L	Q	Weight(g)		
BE3-Q	36	17	29.7	10	40	10	

- This is a special driving tool for fast turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).
- The grip has a shape and groove that allows the user to easily identify the angle of rotation in 90° by feel, and angle display every 30° is provided on the surface.
- \cdot The grip is resin and lightweight.



- Do not use more than two connected wires.
- Insert the square drive completely up to the root.



3/8"sq. FLEXIBLE EXTENSION BAR



No.	D1	D2	L	Allowable torque (N·m)	Weight(g)	白	
BES21-200	13	17	200	20	110	10	

• The work angle can be changed to transmit rotation, which is useful for tightening bolts and nuts in narrow spaces.

(Mounting bolts, etc. on the inside of the dash)



- Be careful not to apply too much force since this is for temporary tightening only.
 Do not use more than two connected wires.
- Do not use more than two connected wires.
 Insert the square drive completely up to the root







3/8"sq. EXTENSION BAR



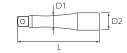




No.	D1	D2	L	Weight(g)		
BE3-030	13	17	30	30	5	
BE3-050	13	17	50	50	5	
BE3-075	12	17	75	70	5	
BE3-100	12	17	100	95	5	
BE3-150	12	17	150	140	5	
BE3-200	12	17	200	190	5	
BE3-270	12	17	270	250	5	
BE3-600	13	17	600	530	1	
BE3-1000	13	17	990	900	1	



- \cdot Do not use more than two connected wires.
- · Insert the square drive completely up to the root.



3/8"sq. WOBBLE EXTENSION BAR



P WERFIT

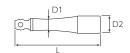




No.	D1	D2	L	Weight(g)	6	
BE3-030JW	13	17	30	30	5	
BE3-050JW	13	17	50	50	5	
BE3-075JW	12	17	75	70	5	
BE3-100JW	12	17	100	95	5	
BE3-150JW	12	17	150	140	5	
BE3-200JW	12	17	200	190	5	
BE3-270JW	12	17	270	250	5	
BE3-600JW	13	17	600	530	1	
BE3-1000JW	13	17	990	900	1	



- Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.
- · Do not use more than two connected wires.
- $\boldsymbol{\cdot}$ Insert the square drive completely up to the root.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.















3/8"sq. UNIVERSAL JOINT

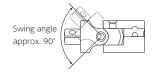


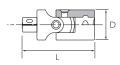


No.	D	L	Weight(g)	Ó	
BJ3	18	46	50	5	



· The joint part is vulnerable to impact and pry, so be careful not to exert excessive force · Insert the square drive completely up to the root.





3/8"sq. FLEXIBLE BALL JOINT





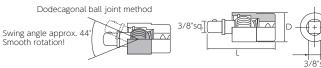
No.	D	L	Weight(g)	6	
BJF20	22	50	86	5	

 \cdot The dodecagonal ball joint system ensures smooth rotation of 44° around the entire



· The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.





3/8"sq. SOCKET ADAPTER

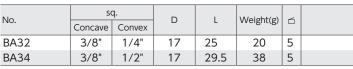








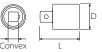






 \cdot The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.

· Insert the square drive completely up to the root





1/4"sq. & 3/8"sq. QUICK ADAPTER SET [2pcs.]















BAE34

No.	Weight(g)	6	
BAE234	50	1	

Set contents

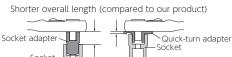
1/4"sq. fast-turn conversion adapter BAE23

3/8"sq. fast-turn conversion adapter BAE34

- $\boldsymbol{\cdot}$ Unlike a socket adapter, the product can be turned quickly by itself.
- $\boldsymbol{\cdot}$ The overall height is lower than that of a standard socket adapter because the concavities and convexities are aligned in the same position. (see figure below).
- · The magnet makes it easy to hold and remove the socket.
- The grip section is non-slip and easy to turn quickly.



· Insert the square drive completely up to the root.



For "Socket Adapter"

For "fast-turn conversion adapter"

3/8"sq. QUICK ADAPTER ext. 1/2"sq.





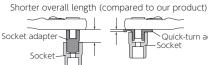


No.	sq.		D		0	\Moight(g)	_	
	Concave	Convex	D		L.	Weight(g)		
BAE34	3/8"	1/2"	37	17	3	30	10	

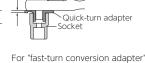
- · Unlike a socket adapter, the product can be turned quickly by itself.
- $\boldsymbol{\cdot}$ The overall height is lower than that of a standard socket adapter because the concavities and convexities are aligned in the same position. (see figure below).
- · The magnet makes it easy to hold and remove the socket.
- · The grip section is non-slip and easy to turn quickly.



 $\boldsymbol{\cdot}$ Insert the square drive completely up to the root.

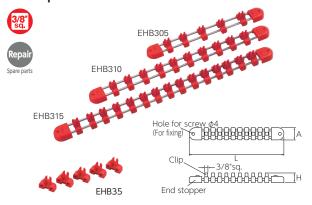


For "Socket Adapter"



[·] Do not use hand tools with an impact wrench.

3/8"sq. SOCKET HOLDER



No.	Number of clips	Н	Α	L	Weight(g)	白	
EHB305	5	23	25	215	80	10	
EHB310	10	23	25	315	120	10	
EHB315	15	23	25	365	140	10	

- · Different holder colors for different drive size allow easy identification of sockets.
- · The socket for impact wrenches can be attached and detached with the pin ring attached.



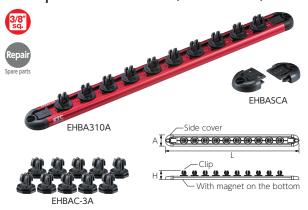
Be careful with the socket holder, as the socket may fall out if it is turned upside down.

Spare parts

No.	Description	
EHB35	3/8"sq. clip set [5pcs.]	

- · Spare clip for EHB305, 310, 315.
- EHB205~215(1/4"sq.) ♠ P.222 EHB405~410(1/2"sq.) ♠ Can also be used for P.255.

3/8"sq. SOCKET HOLDER (ALUMINIUM)



No.	Number of clips	Н	Α	L	Weight(g)	6	
EHBA310A	10	22.5	28.4	338.5	193	1	

- · Socket holders with plastic clips to hold sockets in place.
- \cdot The socket for impact wrenches can be attached and detached with the pin and ring installed.
- · Different rail colors for different drive size allow easy identification of sockets.
- · Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



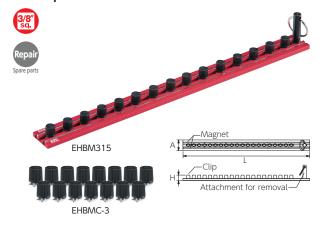
- Be careful with the socket holder, as the socket may fall out if it is turned upside down.
- · Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No. Description		
EHBAC-3A	3/8"sq. clip set [10pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	
	17 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	

Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.

3/8"sq. SOCKET HOLDER (MAGNET)



No.	Number of clips	Н	Α	L	Weight(g)	Ó	
EHBM315	15	14.5	25.4	304	140	1	

- · Socket holders that hold sockets in place with magnetic force.
- · The round shape of the clip makes it easy to secure the socket without worrying about the direction of the drive size.
- · The strong magnets hold the rail firmly in place, so the socket can be removed with one hand without supporting the rail.
- The case can be fixed perpendicularly to the ground, such as on the side of the case.
 Different rail colors for different drive size allow easy identification of sockets.
- · Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.
- · The clip can be removed and used as a holder for wrenches.



- Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.
- $\boldsymbol{\cdot}$ The rails are adsorbed with extremely strong force, so be careful not to pinch your

(With attachments for rail removal)

Spare parts

No.	Description	
EHBMC-3	3/8"sq. clip set [15pcs.]	

^{*} Clips can be used for EHBM220, EHBM315, and EHBM412 in common.

3/8"Sq. SOCKET HOLDER (MAGNET VARIABLE ANGLE TYPE)



No.	Number of clips	Н	D	L1	L2	Weight(g)	白	
EHBF310	10	40	68	253	229	470	1	

- · Socket holder that can be attached to a case, etc. with a magnet.
- The angle of the holder can be changed to four positions 0°, 30°, 60°, and 90°.
- $\boldsymbol{\cdot}$ Strong magnets securely fasten the case to the side of the case, etc.
- \cdot Different colors on the side of the body for different drive size allow easy identification.
- · Attach to the back of drawer or chest lids to improve ease of use and storage capacity.
- · Sockets with different drive size can be managed by replacing clips on the same rail size.
- * Clips are for exclusive use only. Clips from other socket holders cannot be used.
- · Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.

The rails are adsorbed with extremely strong force, so be careful not to pinch

Spare parts

CAUTION

spare parts		
No.	Description	
EHBF310-C	3/8"sq. clip set [10pcs.]	

[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.













Load capacity: 3kg

[•] Products marked with 🕖 should be ordered after checking stock.

1/2"sq. SOCKET WRENCH SET [17pcs.]











No.	Weight(kg) ≤
TB417TQ	4.4 1
Set contents	
TORQULE 200N·m	GNA200-04
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	BS4E
1/2"sq. extension bar	BE4-075
1/2"sq. hex. bit socket	BT4-08, 10, 12, 14
1/2"sq. socket (6pt.)	B4-10, 12, 13, 14, 17, 19, 21, 22, 24

EKB-2 (W455×D190×H60mm)

- $\boldsymbol{\cdot}$ Includes metal case and dedicated storage tray for convenient tool management
- · Interlocking with the dedicated application (free of charge), torque management can be performed by simply attaching it to your tools.
- TORQULE is shown on P.032
- Cases are shown on P.198.

Single door metal case

1/2"sq. SOCKET WRENCH SET [6pcs.]









デジラチェ。



No.		Weight(kg)	6		
TB406WG1		1.4	1		
Set contents					
Digital ratchet	GEK085-R4-L				
Sockets (12pt.)	B4-10W, 12W, 14W,	17W, 19W			
Socket holder for 5 sockets	EHB405				

• Digital ratchet P.417 and 1/2"sq. socket (12pt.)set.

1/2"sq. SOCKET WRENCH SET [14pcs.]











No.		Weight(kg)	6	
TB410		3.4	1	
Set contents				
Sockets (6pt.)	B4-08, 10, 12, 13, 14,	, 17, 19, 21,	22,	24
Ratchet handle	BR4E			
Extension bar 75	BE4-075			
Extension bar 150	BE4-150			
Universal joint	BJ4			
Socket holder for 5 sockets	EHB405			
Single door metal case	EKB-2 (W455×D190)	×H60)		

- Includes resin molded tray (W445 \times D185 \times H52)
- Cases are shown on P.198.

1/2"sq. SOCKET WRENCH SET [13pcs.]













Laser engraving allows storage locations to be identified at a glance.

No.	Weight(kg) ☐	
TB410W	3.5 1	
Set contents		
Sockets (12pt.)	B4-08W, 10W, 11W, 12W, 13W, 14W, 17 19W, 22W, 24W	7W,
Ratchet handle	BR4E	
Slide head handle	BHM4	
Extension bar 150	BE4-150	
Single door metal case	EKB-2 (W455×D190×H60)	

- \cdot Includes tray (W447×D185×H30). Foamed polyethylene storage tray is two-layered in black and pink, making it easy to identify the presence or absence of tools.
- This product is equivalent to All Japan Machine Tool Standard Model No. 415-ISO. (The contents of the assembly may vary slightly depending on the frequency of use, etc.)
- Cases are shown on P.198.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/2"sq. SOCKET WRENCH SET [14pcs.]











No.		Weight(kg)	6	
TB410X		3.5	1	
Set contents				
Sockets (6pt.)	B4-08, 10, 12			
Sockets (12pt.)	B4-13W, 14W, 17W, 19	9W, 21W, 2	2W,	24W
Ratchet handle	BR4E			
Extension bar 75	BE4-075			
Extension bar 150	BE4-150			
Universal joint	BJ4			
Socket holder for 5 sockets	EHB405			
Single door metal case	EKB-2 (W455×D190×F	160)		

[·] Includes resin molded tray (W445×D185×H52)

1/2"sq. SOCKET WRENCH SET [19pcs.]











No.		Weight(kg)	6
TB413		4.9	1
Set contents			
Sockets (6pt.)	B4-08, 10, 11, 12, 13, 1 27	4, 17, 19, 2	1, 22, 24, 26,
Ratchet handle	BR4E		
Breaker bar	BS4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Pivoting Extension Bar	BE4-100JW		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×F	160)	

[·] Includes resin molded tray (W445×D185×H52)

1/2"sq. SOCKET WRENCH SET [19pcs.]











No.		Weight(kg)	6	
TB413X		4.9	1	
Set contents				
Sockets (6pt.)	B4-08, 10, 11, 12			
Sockets (12pt.)	B4-13W, 14W, 17W, 19 26W, 27W	9W, 21W, 2	2W,	24W,
Ratchet handle	BR4E			
Breaker bar	BS4E			
Extension bar 75	BE4-075			
Extension bar 150	BE4-150			
Pivoting Extension Bar	BE4-100JW			
Universal joint	BJ4			
Socket holder for 5 sockets	EHB405			
Single door metal case	EKB-2 (W455×D190×F	160)		
In alcohol and the second AVA	EVD10EV(UE2)			

[·] Includes resin molded tray (W445×D185×H52)

1/2"sq. SOCKET WRENCH SET [19pcs.]













Laser engraving allows storage
locations to be identified at a glance.

No.		Weight(kg)	\subseteq	
TB415W		5.1	1	
Set contents				
Sockets (12pt.)	B4-08W, 10W, 11W, 12 19W, 21W, 22W, 24			
Ratchet handle	BR4E			
Breaker bar	BS4E			
Slide head handle	BHM4			
Extension bar 150	BE4-150			
Single door metal case	EKB-2 (W455×D190×F	160)		

- \cdot Includes tray (W447×D185×H30). Foamed polyethylene storage tray is two-layered in black and pink, making it easy to identify the presence or absence of tools.
- This product is equivalent to All Japan Machine Tool Standard Model No. 415-ISO.
 (The contents of the assembly may vary slightly depending on the frequency of use, etc.)
- Cases are shown on P.198.















Cases are shown on P.198.

Cases are shown on P.198.

Cases are shown on P.198.

[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

1/2"sq. SOCKET WRENCH SET [21pcs.]











No.		Weight(kg)	6	
TB415X		5.4	1	
Set contents				
Sockets (6pt.)	B4-08, 10, 11, 12			
Sockets (12pt.)	B4-13W, 14W, 17W, 19 26W, 27W, 30W, 33		22W	, 24W,
Ratchet handle	BR4E			
Breaker bar	BS4E			
Extension bar 75	BE4-075			
Extension bar 150	BE4-150			
Pivoting Extension Bar	BE4-100JW			
Universal joint	BJ4			
Socket holder for 5 sockets	EHB405			

EKB-2 (W455×D190×H60)

Single door metal case

1/2"sq. SOCKET WRENCH SET [26pcs.]











No.		Weight(kg)	6	
TB420X		5.8	1	
Set contents				
Sockets (6pt.)	B4-08, 10, 11, 12			
Sockets (12pt.)	B4-13W, 14W, 15W, 16 21W, 22W, 23W, 24 30W, 32W			, - ,
Ratchet handle	BR4E			
Breaker bar	BS4E			
Extension bar 75	BE4-075			
Extension bar 150	BE4-150			
Pivoting Extension Bar	BE4-100JW			
Universal joint	BJ4			
Socket holder for 5 sockets	EHB405			
Single door metal case	EKB-2 (W455×D190×F	H60)		

 $[\]cdot$ Includes resin molded tray (W445×D185×H52)

1/2"sq. SOCKET WRENCH SET [21pcs.]















No.		Weight(kg)	6	
TB415BX		5.4	1	
Set contents				
Sockets (6pt.)	B4-7/16			
Sockets (12pt.)	B4-1/2W, 9/16W, 19/3 3/4W, 25/32W, 13/ 1W, 1-1/16W, 1-1/8	16W, 7/8V	V, 15	
Ratchet handle	BR4E			
Breaker bar	BS4E			
Extension bar 75	BE4-075			
Extension bar 150	BE4-150			
Pivoting Extension Bar	BE4-100JW			
Universal joint	BJ4			
Socket holder for 5 sockets	EHB405			
Single door metal case	EKB-2 (W455×D190×F	H60)		

[·] Includes resin molded tray (W445×D185×H52)

1/2"sq. DEEP SOCKET WRENCH SET [15pcs.]











No.		Weight(kg)	б	
TB4L10X		5	1	
Set contents				
Deep sockets (6pt.)	B4L-08, 10, 12			
Deep socket (12pt.)	B4L-13W, 14W, 17W, 1	19W, 21W,	22V	V, 24W
Ratchet handle	BR4E			
Extension bar 75	BE4-075			
Extension bar 150	BE4-150			
Pivoting Extension Bar	BE4-100JW			
Universal joint	BJ4			
Socket holder for 5 sockets	EHB405			
Single door metal case	EKB-2 (W455×D190×F	H60)		

 $[\]cdot$ Includes resin molded tray (W445×D185×H52)

[·] Includes resin molded tray (W445×D185×H52)

Cases are shown on P.198.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/2"sq. SOCKET SET [5pcs.]



No.		Weight(g)	白	
TB405		500	1	
Set contents				
Sockets (6pt.)	B4-10, 12, 14, 17, 19			
Socket holder for 5 sockets	EHB405			

1/2"sq SOCKET SET [10pcs.]



No.		Weight(kg)		
TB410E		1	1	
Set contents				
Sockets (6pt.)	B4-08, 10, 12, 13, 14,	17, 19, 21,	22, 2	24
Socket holder for 10 sockets	EHB410			

1/2"sq. SOCKET SET [10pcs.]



NO.		vveignt(kg)		
TB410XE		1	1	
Set contents				
Sockets (6pt.)	B4-08, 10, 12			
Sockets (12pt.)	B4-13W, 14W, 17W, 1	19W, 21W,	22W	, 24W
Socket holder for 10 sockets	EHB410			

1/2"sq. SOCKET

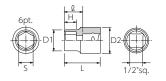












No.	S	D1	D2	Н	L	Q	Weight(g)	6	
B4-08	8	12	22	5.5	28.5	12.5	29	5	
B4-09	9	13.5	22	5.5	28.5	12.5	30	5	
B4-10	10	14.5	22	5.5	28.5	12.5	38	5	
B4-11	11	16	22	6	29	13	41	5	
B4-12	12	17	22	7.5	30.5	14.5	44	5	
B4-13	13	18.5	22	7.5	30.5	14.5	45	5	
B4-14	14	20	22	8.5	31.5	15.5	49	5	
B4-15	15	21	22	8.5	31.5	15.5	50	5	
B4-16	16	22.5	22	9	33	17	55	5	
B4-17	17	24	22	10	34	18	61	5	
B4-18	18	25	23	10	34	18	69	5	
B4-19	19	26	24	10.5	34.5	18.5	75	5	
B4-20	20	27.5	25	11	35	19	83	5	
B4-21	21	28.5	26	11.5	35.5	19.5	91	5	
B4-22	22	30	27	11.5	35.5	19.5	104	5	
B4-23	23	31	27.5	12	36	20	108	5	
B4-24	24	32.5	28.5	12	36	20	117	5	
B4-25	25	34	30.5	13	37	21	145	5	
B4-26	26	35	31.5	14	38	22	154	5	
B4-27	27	36.5	33	15	39	23	176	5	
B4-28	28	38	34.5	16	40	24	190	5	
B4-29	29	39	35.5	17	41	25	206	5	
B4-30	30	40	36	17	42	26	214	5	
B4-31	31	42	37.5	18	43	27	248	5	
B4-32	32	43	38.5	18	43	27	256	5	
B4-33	33	44	40	19	44	28	278	5	
B4-34	34	45	41	19	44	28	286	5	
B4-35	35	46	41.5	19	44	28	297	5	
B4-36	36	47	42.5	19	44	28	305	5	

[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.















 $[\]cdot$ Products marked with ${\it \textcircled{0}}$ should be ordered after checking stock.

1/2"sq. SOCKET

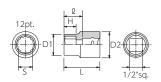












No.	S	D1	D2	Н	L	Q	Weight(g)		
B4-08W	8	12	22	5.5	28.5	12.5	29	5	
B4-09W	9	13.5	22	5.5	28.5	12.5	30	5	
B4-10W	10	14.5	22	5.5	28.5	12.5	38	5	
B4-11W	11	16	22	6	29	13	41	5	
B4-12W	12	17	22	7.5	30.5	14.5	44	5	
B4-13W	13	18.5	22	7.5	30.5	14.5	45	5	
B4-14W	14	20	22	8.5	31.5	15.5	49	5	
B4-15W	15	21	22	8.5	31.5	15.5	50	5	
B4-16W	16	22.5	22	9	33	17	55	5	
B4-17W	17	24	22	10	34	18	61	5	
B4-18W	18	25	23	10	34	18	69	5	
B4-19W	19	26	24	10.5	34.5	18.5	75	5	
B4-20W	20	27.5	25	11	35	19	83	5	
B4-21W	21	28.5	26	11.5	35.5	19.5	91	5	
B4-22W	22	30	27	11.5	35.5	19.5	104	5	
B4-23W	23	31	27.5	12	36	20	108	5	
B4-24W	24	32.5	28.5	12	36	20	117	5	
B4-25W	25	34	30.5	13	37	21	145	5	
B4-26W	26	35	31.5	14	38	22	157	5	
B4-27W	27	36.5	33	15	39	23	176	5	
B4-28W	28	38	34.5	16	40	24	190	5	
B4-29W	29	39	35.5	17	41	25	206	5	
B4-30W	30	40	36	17	42	26	214	5	
B4-31W	31	42	37.5	18	43	27	248	5	
B4-32W	32	43	38.5	18	43	27	256	5	
B4-33W	33	44	40	19	44	28	278	5	
B4-34W	34	45	41	19	44	28	286	5	
B4-35W	35	46	41.5	19	44	28	297	5	
B4-36W	36	47	42.5	19	44	28	305	5	

1/2"sq. SOCKET



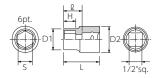












No.	S (in)	D1	D2	Н	L	Q	Weight(g)		
B4-3/8	3/8	14.5	22	5.5	28.5	12.5	38	5	
B4-7/16	7/16	16	22	6	29	13	41	5	
B4-1/2	1/2	18.5	22	7.5	30.5	14.5	46	5	
B4-17/32	17/32	20	22	8.5	31.5	15.5	50	5	
B4-9/16	9/16	20	22	8.5	31.5	15.5	49	5	
B4-19/32	19/32	21	22	8.5	31.5	15.5	50	5	
B4-5/8	5/8	22.5	22	9	33	17	56	5	
B4-21/32	21/32	24	22	10	34	18	61	5	
B4-11/16	11/16	24	22	10	34	18	62	5	
B4-3/4	3/4	26	24	10.5	34.5	18.5	75	5	
B4-25/32	25/32	27.5	25	11	35	19	86	5	
B4-13/16	13/16	28.5	26	11.5	35.5	19.5	94	5	
B4-7/8	7/8	30	27	11.5	35.5	19.5	107	5	
B4-15/16	15/16	32.5	28.5	12	36	20	131	5	
B4-31/32	31/32	34	30.5	13	37	21	144	5	
B4-1	1	35	31.5	14	38	22	157	5	
B4-1-1/16	1- 1/16	36.5	33	15	39	23	176	5	
B4-1-1/8	1- 1/8	39	35.5	17	41	25	204	5	
B4-1-3/16	1- 3/16	40	36	17	42	26	214	5	
B4-1-1/4	1- 1/4	43	38.5	18	43	27	262	5	
B4-1-5/16	1- 5/16	44	40	19	44	28	282	5	
B4-1-3/8	1- 3/8	46	41.5	19	44	28	297	5	

 $[\]cdot$ Do not use hand tools with an impact wrench.

1/2"sq. SOCKET



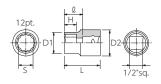












		1			1				
No.	S(in)	D1	D2	Н	L	Q	Weight(g)		
B4-3/8W	3/8	14.5	22	5.5	28.5	12.5	38	5	
B4-7/16W	7/16	16	22	6	29	13	41	5	
B4-1/2W	1/2	18.5	22	7.5	30.5	14.5	46	5	
B4-17/32W	17/32	20	22	8.5	31.5	15.5	50	5	
B4-9/16W	9/16	20	22	8.5	31.5	15.5	49	5	
B4-19/32W	19/32	21	22	8.5	31.5	15.5	50	5	
B4-5/8W	5/8	22.5	22	9	33	17	56	5	
B4-21/32W	21/32	24	22	10	34	18	61	5	
B4-11/16W	11/16	24	22	10	34	18	62	5	
B4-3/4W	3/4	26	24	10.5	34.5	18.5	75	5	
B4-25/32W	25/32	27.5	25	11	35	19	86	5	
B4-13/16W	13/16	28.5	26	11.5	35.5	19.5	94	5	
B4-7/8W	7/8	30	27	11.5	35.5	19.5	107	5	
B4-15/16W	15/16	32.5	28.5	12	36	20	131	5	
B4-31/32W	31/32	34	30.5	13	37	21	144	5	
B4-1W	1	35	31.5	14	38	22	157	5	
B4-1-1/16W	1- 1/16	36.5	33	15	39	23	176	5	
B4-1-1/8W	1- 1/8	39	35.5	17	41	25	204	5	
B4-1-3/16W	1- 3/16	40	36	17	42	26	214	5	
B4-1-1/4W	1- 1/4	43	38.5	18	43	27	262	5	
B4-1-5/16W	1- 5/16	44	40	19	44	28	282	5	
B4-1-3/8W	1- 3/8	46	41.5	19	44	28	297	5	

1/2"sq. DEEP SOCKET SET [5pcs.]







No.		Weight(g)	6	
TB4L05		820	1	
Set contents				
Deep sockets (6pt.)	B4L-10, 12, 14, 17, 19			
Socket holder for 5 sockets	EHB405			

1/2"sq. DEEP SOCKET SET [10pcs.]



No.		Weight(kg)	白	
TB4L10E		1.8	1	
Set contents				
Deep sockets (6pt.)	B4L-08, 10, 12, 13, 14,	17, 19, 21,	22,	24
Socket holder for 10 sockets	EHB410			













[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

 $[\]cdot$ Products marked with ${\it \textcircled{0}}$ should be ordered after checking stock.

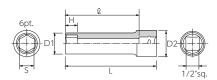
1/2"sq. DEEP SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	6	
B4L-08	8	12	22	9	90	74	81	5	
B4L-09	9	13.5	22	10	90	74	97	5	
B4L-10	10	14.5	22	11	90	74	90	5	
B4L-11	11	16	22	12	90	74	107	5	
B4L-12	12	17	22	13	90	74	120	5	
B4L-13	13	18.5	22	14	90	74	126	5	
B4L-14	14	20	22	17	90	74	138	5	
B4L-15	15	21	22	17	90	74	144	5	
B4L-16	16	22.5	22	17	90	74	160	5	
B4L-17	17	24	22	17	100	84	195	5	
B4L-18	18	25	23	21	100	84	216	5	
B4L-19	19	26	24	21	100	84	218	5	
B4L-20	20	27.5	25	22	100	84	230	5	
B4L-21	21	28.5	26.5	23	100	84	259	5	
B4L-22	22	30	27.5	23	100	84	302	5	
B4L-23	23	31	28.5	24	100	84	301	5	
B4L-24	24	32.5	30	27	100	84	316	5	
B4L-25	25	34	30.5	27	100	84	370	5	
B4L-26	26	35	31.5	30	100	84	366	5	
B4L-27	27	36.5	33	30	100	84	419	5	
B4L-28	28	38	34.5	30	100	84	431	5	
B4L-29	29	39	35.5	30	100	84	466	5	
B4L-30	30	40	36	30	100	84	460	5	
B4L-31	31	42	37.5	30	100	84	541	5	
B4L-32	32	43	38.5	32	100	84	538	5	
B4L-33	33	44	40	32	100	84	595	5	
B4L-34	34	45	41	32	100	84	634	5	
B4L-35	35	46	41.5	32	100	84	669	5	
B4L-36	36	47	42.5	32	100	84	710	5	

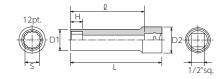
1/2"sq. DEEP SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	6	
B4L-08W	8	12	22	9	90	74	81	5	
B4L-09W	9	13.5	22	10	90	74	97	5	
B4L-10W	10	14.5	22	11	90	74	90	5	
B4L-11W	11	16	22	12	90	74	107	5	
B4L-12W	12	17	22	13	90	74	120	5	
B4L-13W	13	18.5	22	14	90	74	126	5	
B4L-14W	14	20	22	17	90	74	138	5	
B4L-15W	15	21	22	17	90	74	144	5	
B4L-16W	16	22.5	22	17	90	74	160	5	
B4L-17W	17	24	22	17	100	84	195	5	
B4L-18W	18	25	23	21	100	84	216	5	
B4L-19W	19	26	24	21	100	84	218	5	
B4L-20W	20	27.5	25	22	100	84	230	5	
B4L-21W	21	28.5	26.5	23	100	84	259	5	
B4L-22W	22	30	27.5	23	100	84	302	5	
B4L-23W	23	31	28.5	24	100	84	301	5	
B4L-24W	24	32.5	30	27	100	84	316	5	
B4L-25W	25	34	30.5	27	100	84	370	5	
B4L-26W	26	35	31.5	30	100	84	366	5	
B4L-27W	27	36.5	33	30	100	84	419	5	
B4L-28W	28	38	34.5	30	100	84	431	5	
B4L-29W	29	39	35.5	30	100	84	466	5	
B4L-30W	30	40	36	30	100	84	460	5	
B4L-31W	31	42	37.5	30	100	84	541	5	
B4L-32W	32	43	38.5	32	100	84	538	5	
B4L-33W	33	44	40	32	100	84	595	5	
B4L-34W	34	45	41	32	100	84	634	5	
B4L-35W	35	46	41.5	32	100	84	669	5	
B4L-36W	36	47	42.5	32	100	84	710	5	

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/2"sq. DEEP SOCKET



6pt.	H 2	D2-

N.1	c/: \	D4	D0			•	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	_	
No.	S(in)	D1	D2	Н	L	Q	Weight(g)		
B4L-3/8	3/8	14.5	22	11	90	74	93	5	
B4L-7/16	7/16	16	22	12	90	74	107	5	
B4L-1/2	1/2	18.5	22	14	90	74	136	5	
B4L-17/32	17/32	20	22	17	90	74	146	5	
B4L-9/16	9/16	20	22	17	90	74	138	5	
B4L-19/32	19/32	21	22	17	90	74	144	5	
B4L-5/8	5/8	22.5	22	17	90	74	170	5	
B4L-21/32	21/32	24	22	17	100	84	195	5	
B4L-11/16	11/16	24	22	17	100	84	195	5	
B4L-3/4	3/4	26	24	21	100	84	218	5	
B4L-25/32	25/32	27.5	25	22	100	84	243	5	
B4L-13/16	13/16	28.5	26.5	23	100	84	245	5	
B4L-7/8	7/8	30	27.5	23	100	84	273	5	
B4L-15/16	15/16	32.5	30	27	100	84	330	5	
B4L-31/32	31/32	34	30.5	27	100	84	354	5	
B4L-1	1	35	31.5	30	100	84	381	5	
B4L-1-1/16	1- 1/16	36.5	33	30	100	84	419	5	
B4L-1-1/8	1- 1/8	39	35.5	30	100	84	448	5	
B4L-1-3/16	1- 3/16	40	36	30	100	84	460	5	
B4L-1-1/4	1- 1/4	43	38.5	32	100	84	556	5	
B4L-1-5/16	1- 5/16	44	40	32	100	84	593	5	
B4L-1-3/8	1- 3/8	46	41.5	32	100	84	669	5	

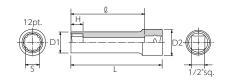
1/2"sq. DEEP SOCKET











No.	S(in)	D1	D2	Н	L	Q	Weight(g)	\Box	
B4L-3/8W	3/8	14.5	22	11	90	74	93	5	
B4L-7/16W	7/16	16	22	12	90	74	107	5	
B4L-1/2W	1/2	18.5	22	14	90	74	136	5	
B4L-17/32W	17/32	20	22	17	90	74	146	5	
B4L-9/16W	9/16	20	22	17	90	74	138	5	
B4L-19/32W	19/32	21	22	17	90	74	144	5	
B4L-5/8W	5/8	22.5	22	17	90	74	170	5	
B4L-21/32W	21/32	24	22	17	100	84	195	5	
B4L-11/16W	11/16	24	22	17	100	84	195	5	
B4L-3/4W	3/4	26	24	21	100	84	218	5	
B4L-25/32W	25/32	27.5	25	22	100	84	243	5	
B4L-13/16W	13/16	28.5	26.5	23	100	84	245	5	
B4L-7/8W	7/8	30	27.5	23	100	84	273	5	
B4L-15/16W	15/16	32.5	30	27	100	84	330	5	
B4L-31/32W	31/32	34	30.5	27	100	84	354	5	
B4L-1W	1	35	31.5	30	100	84	381	5	
B4L-1-1/16W	1- 1/16	36.5	33	30	100	84	419	5	
B4L-1-1/8W	1- 1/8	39	35.5	30	100	84	448	5	
B4L-1-3/16W	1- 3/16	40	36	30	100	84	460	5	
B4L-1-1/4W	1- 1/4	43	38.5	32	100	84	556	5	
B4L-1-5/16W	1- 5/16	44	40	32	100	84	593	5	
B4L-1-3/8W	1- 3/8	46	41.5	32	100	84	669	5	

1/2"sq. TWIST SOCKET SET [5pcs.]



No.			Weight(g)		
TB4TW05			930	1	
Set contents					
To determine the te	D4T)4/17 10	21 22 2	i		

Socket holder for 5 sockets

EHB405

- \cdot This tool is used to loosen rounded bolts, stud bolts, etc. that have had their corners removed.
- Twist-shaped teeth engage damaged bolts and nuts for easy removal.
 Removed bolts and nuts cannot be reused.
- * The size to be used will vary depending on the damage to the bolt/nut. Please confirm the size selection with the actual product.



 $\boldsymbol{\cdot}$ Do not use power tools (air and electric impact wrenches, etc.).















Bolt with rounded corners

[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

1/2"sq. TWIST SOCKET





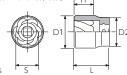


No.	S	D1	D2	Н	L	Weight(g)	6	
B4TW-17	17	25.8	30	16	42	135	5	
B4TW-19	19	28.4	30	16	42	140	5	
B4TW-21	21	31	30	17	42	150	5	
B4TW-22	22	32	30	17	42	155	5	
B4TW-24	24	35	30	18	42	175	5	



· Do not use power tools (air and electric impact wrenches, etc.).

Direction of rotation (for right-hand screw loosening only)



Bolt with rounded corne

1/2"sq. SOCKET FOR ELBOW CONNECTOR



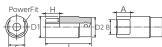




No.	sq.	S	D1	D2	Н	L	Α	В	Weight(g)		
ABX6-34	1/2"	34	45	41	20	44	19.5	27	300	5	

Usage \cdot For tightening and loosening connectors for check valves used on Isuzu trucks.

• It can also be used to tighten and loosen elbow connectors (L-type pipe fittings) used in general maintenance machinery.



1/2"sq. STUD BOLT REMOVER SET [4pcs.]







No.	Weight(kg)		
BSR354	1.1	1	
Set contents			

 Stud bolt remover
 BSR35-6, 8, 10, 12

 Metal case
 W215×D82×H50

Usage · Stud bolt removal. (Can also be used for round bars)

Feature $\boldsymbol{\cdot}$ Can be used for both tightening and loosening.

- \cdot Three rollers grip stud bolts from three directions for stable operation.
- The center is through hole, so it can be used for stud bolts longer than the wrench body. (When using Box end wrench, etc.)
- * Do not use stud bolts with a gripping allowance of 20 mm or less.
- * Threads of stud bolts may be damaged.



 $\boldsymbol{\cdot}$ Make sure the tool is firmly held on the bolt before applying force.

1/2"sq. STUD BOLT REMOVER





* S is a hexagon on which a wrench can be applied

No.	D	L	S	Applicable diameter	Weight(g)		
BSR35-6	24	65	21	M 6	150	1	
BSR35-8	24	65	21	M 8	150	1	
BSR35-10	28	75	21	M10	220	1	
BSR35-12	28	75	21	M12	220	1	

Usage · Stud bolt removal. (Can also be used for round bars)

Feature $\boldsymbol{\cdot}$ Can be used for both tightening and loosening.

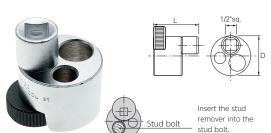
- $\boldsymbol{\cdot}$ Three rollers grip stud bolts from three directions for stable operation.
- The center is through hole, so it can be used for stud bolts longer than the wrench body. (When using Box end wrench, etc.)
- * Do not use stud bolts with a gripping allowance of 20 mm or less.
- * Threads of stud bolts may be damaged.



 $\boldsymbol{\cdot}$ Make sure the tool is firmly held on the bolt before applying force.

1/2"sq. STUD REMOVER





No.	Applicable bolt diameter				Weight(g)	4	
INO.	Max	Smallest	_		vveignt(g)		
BSR30	φ19	φ6	56	48	400	1	
•							

- · Used to remove and install stud bolts.
- * Repair parts are available. Please contact our distributors for details.
- * Threads of stud bolts may be damaged.



· Make sure the tool is firmly held on the bolt before applying force.



Insert the wrench into the drive size of the stud remover and rotate it in the direction of removal. (The teeth of the stud remover will bite into the bolt.)



Turn the wrench further and the bolt begins to detach.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/2"sq. RATCHET HANDLE

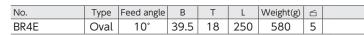








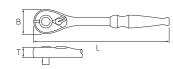




- * Repair kit (BR4E-K) is available. 🜓 P.251
- * Repair parts are set. Refer to "Repairable List" from P.625.



- · Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the square drive completely up to the root.



1/2"sq. RATCHET HANDLE (LONG)









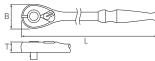


No.	Type	Feed angle	В	Т	L	Weight(g)	Ó	
BR4L	Oval	10°	39.5	18	375	730	5	

- * Repair kit (BR4E-K) is available. 🗘 P.251
- * Repair parts are set. 🗘 Refer to "Repairable List" from P.625.



- · Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- · Insert the square drive completely up to the root.



1/2"sq. RATCHET HANDLE (FLEX)











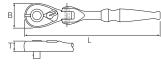


No.	Туре	Feed angle	В	Т	L	Weight(g)	6	
BR4F	Oval	10°	39.5	18	250	700	5	

- * Repair kit (BR4E-K) is available. 🗘 P.251
- * Repair parts are set. 🝙 Refer to "Repairable List" from P.625.



- $\boldsymbol{\cdot}$ Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the square drive completely up to the root.



1/2"sq. RATCHET HANDLE (FLEX HEAD LONG)









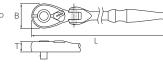


No.	Type	Feed angle	В	Т	L	Weight(g)		
BR4FL	Oval	10°	39.5	18	375	870	5	

- * Repair kit (BR4E-K) is available. 🖒 P.251
- * Repair parts are set. 🔷 Refer to "Repairable List" from P.625.



- · Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- · Insert the square drive completely up to the root.



REPAIR KIT FOR 1/2"sq. RATCHET HANDLE

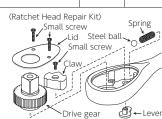






No.	Drive size	Contents	Weight(g)	
BR4E-K	1/2"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw×2	144	

· Repair kit for 1/2"sq. ratchet handles (BR4E, BR4L, BR4F, BR4FL).



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 🕖 should be ordered after checking stock.

















1/2"sq. BREAKER BAR







No.	D	Grip diameter (φ)	L	Weight(g)		
BS4E	22	21	400	700	5	

- * Repair kit (BS4E-K) is set. 🗘 P.252
- * Repair parts are set. Refer to "Repairable List" from P.625.



Hold the center of the grip as the drive may pinch your hand.
Be careful of overtorque due to the long overall length and the tendency to apply

 \cdot Insert the square drive completely up to the root.



1/2"sq. BREAKER BAR (LONG)



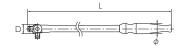
No.	D	Grip diameter (φ)	L	Weight(kg)	6	
BS4L	22	21	598.8	1.1	1	

- * Repair kit (BS4E-K) is set. 🗘 P.252
- * Repair parts are set. 🔘 Refer to "Repairable List" from P.625.



· Hold the center of the grip as the drive may pinch your hand. Be careful of overtorque due to the long overall length and the tendency to apply

 \cdot Insert the square drive completely up to the root.



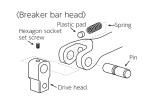
REPAIR KIT FOR 1/2"sq. BREAKER BAR





No.	Drive size	Contents	Weight(g)	
BS4E-K	1/2"sq.	1 each of drive head, pin, plastic pad, spring and hexagon socket set screw	70	

- · Repair kit for 1/2"sq. breaker bar (BS4E, BS4L).
- * A 2.5mm hexagonal wrench is required for replacement.



1/2"sq. BREAKER BAR (EXTRA LONG)

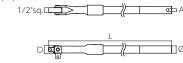


No.	D	Grip diameter (ϕ)	L	Α	Weight(kg)		
BS4-780	20	23.5	785.8	10	1.5	1	

- · Ideal for work requiring excessive torque, such as automotive crank pulley bolts, hub lock
- \cdot Knurled grip to prevent hand-slip, hollow handle and light weight.
- * Repair kit (BS4-780-K) is set. P.252
- * Repair parts are set. Refer to "Repairable List" from P.625.



- · Hold the center of the grip as the drive may pinch your hand.
- $\boldsymbol{\cdot}$ Be careful of overtorque due to the long overall length and the tendency to
- apply excessive load.
- · Insert the square drive completely up to the root.



REPAIR KIT FOR 1/2"sq. BREAKER BAR (EXTRA LONG)



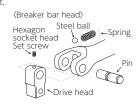


No.	Drive size	Contents	Weight(g)	
BS4-780-K	1/2"sq.	1 each of drive head, pin, spring, steel ball, and hexagon socket set screw	70	

- · Repair kit for 1/2"sq. breaker bar (BS4-780).
- * A 2.5mm hexagonal wrench is required for replacement.



Insert the square drive completely up to the root.



[·] Do not use hand tools with an impact wrench.

1/2"sq. SLIDE HEAD HANDLE



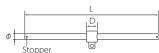


No.	D	Handle diameter (φ)	L	Weight(g)	6	
BHM4	22	12	250	275	5	

 \cdot Depending on the work area, the new model offers functions that enable quicker work than a ratchet handle, from quick turning to tightening and loosening • The handle is grooved so that the head does not rotate.



Insert the square drive completely up to the root.



1/2"sq. SPEEDING CROSS WRENCH



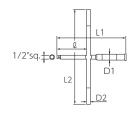


No.	D1	D2	Q	L1	L2	Weight(kg)	\subseteq	
XH30	22	16	122	285	400	1.5	5	

 \cdot The rotating grip allows fast turning of bolts and nuts.



Insert the square drive completely up to the root.



1/2"sq. SPEEDER HANDLE

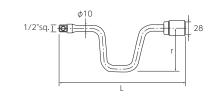




No.	r(Turning radius)	L	Weight(g)	6	
BSD30	115	350	590	1	



Insert the square drive completely up to the root.



1/2"sq. L-SHAPED HANDLE



No.	D	L	Q	Weight(g)	6	
BHL4-280	16	288	58	500	2	



- Be careful of overtorque because of its long length and tendency to carry an excessive load.
- $\boldsymbol{\cdot}$ Insert the square drive completely up to the root.

-	L	
Q		ĪD
1/2"sq.		

1/2"sq. GRIP TYPE HANDLE







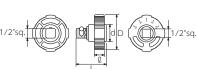


No.	D	d	L	Q	Weight(g)	6	
BE4-Q	46	24	34.5	11	100	10	

- \cdot This is a special driving tool for quick turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).
- \cdot The grip has a shape and groove that allows the user to easily identify the angle of rotation in $90^{\circ}\,\text{by feel}$, and angle display every 30° is provided on the surface.
- $\boldsymbol{\cdot}$ The grip is resin and lightweight.



Insert the square drive completely up to the root



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ② should be ordered after checking stock.















1/2"sq. EXTENSION BAR



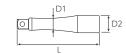




No.	D1	D2	L	Weight(g)	6	
BE4-050	17	22	50	90	5	
BE4-075	17	22	75	140	5	
BE4-100	17	22	100	170	5	
BE4-150	17	22	150	250	5	
BE4-200	17	22	200	330	5	
BE4-270	17	22	270	440	5	
BE4-600	17	22	600	1,050	1	
BE4-1000	17	22	990	1,800	1	



- $\boldsymbol{\cdot}$ Do not use more than two connected wires.
- · Insert the square drive completely up to the root.



1/2"sq. WOBBLE EXTENSION BAR

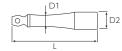




No.	D1	D2	L	Weight(g)	Ó	
BE4-050JW	17	22	50	90	5	
BE4-075JW	17	22	75	140	5	
BE4-100JW	17	22	100	170	5	
BE4-150JW	17	22	150	250	5	
BE4-200JW	17	22	200	330	5	
BE4-270JW	17	22	270	440	5	



- Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.
- $\boldsymbol{\cdot}$ Do not use more than two connected wires.
- \cdot Insert the square drive completely up to the root.



1/2"sq. UNIVERSAL JOINT



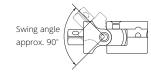


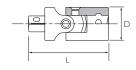


No.	D	L	Weight(g)		
BJ4	25	67	140	5	



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- $\boldsymbol{\cdot}$ Insert the square drive completely up to the root.





1/2"sq. FLEXIBLE BALL JOINT



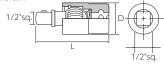


No.	D	L	Weight(g)	6	
BJF30	29	65	170	5	

- The dodecagonal ball joint system ensures smooth rotation of 44° around the entire circumference.
- · Short overall length and effective in tight spaces.



- \cdot The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- · Square drives should be fully inserted all the way to the base of the drive.





1/2"sq. SOCKET ADAPTER











No.	sq.		_		\A/aight(g)		
	Concave	Convex	D	L	Weight(g)		
BA43	1/2"	3/8"	22	35	45	5	
BA46	1/2"	3/4"	26	40	110	10	



- The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Insert the square drive completely up to the root.







 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

TORQUE MULTIPLIER

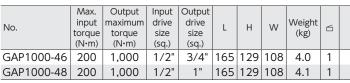










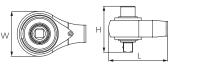


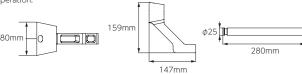
- Used for tightening and loosening of bolts and nuts at 300 to 1,000 N⋅m in industries such as railroads, ships, construction, and heavy-duty vehicles. The standard screw size is M18-36.
- A planetary gear doubling mechanism converts input torque to output by a factor of 5.
 Labor-saving and easy-to-handle full-length tools can be used.
- Hand tools save energy by eliminating the need for a power supply or compressor.

 Also, the machine does not generate noise or blow noises, allowing for quiet operation.
- · Suitable for both tightening and loosening operations.

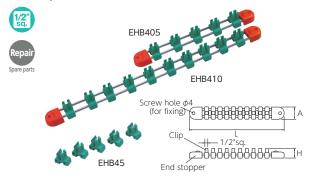


- · Use within the usable torque range.
- · Do not use power tools for input.
- $\boldsymbol{\cdot}$ Do not strike the input tool with a hammer or the like.
- · Do not suddenly remove your hand from the input tool while working.
- Keep fingers, hands, feet, and other objects away from the reaction receiver during operation





1/2"sq. SOCKET HOLDER



No.	Number of clips	Н	Α	L	Weight(g)	6	
EHB405	5	26.5	25	215	120	10	
EHB410	10	26.5	25	365	150	10	

- · Different holder colors for different drive size allow easy identification of sockets.
- · The socket for impact wrenches can be attached and detached with the pin ring attached.



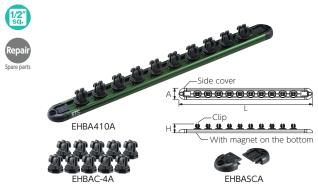
· Be careful with the socket holder, as the socket may fall out if it is turned upside down.

Spare parts

No.	Description	
EHB45	1/2"sq. clip set [5pcs.]	

- \cdot Spare clip for EHB405 and 410.
- \cdot EHB205 to 215(1/4"sq.) \bigcirc P.222 EHB305 to 315(3/8"sq.) \bigcirc P.241 can also be used.

1/2"sq. SOCKET HOLDER (ALUMINIUM)



No.	Number of clips	Н	Α	L	Weight(g)	6	
EHBA410A	10	24.7	28.4	338.5	198	1	

- · The socket for impact wrenches can be attached and detached with the pin and ring installed.
- $\boldsymbol{\cdot}$ Different rail colors for different drive size allow easy identification of sockets.
- · Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



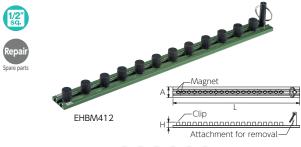
- $\boldsymbol{\cdot}$ Be careful with the socket holder, as the socket may fall out if it is turned upside down.
- · Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-4A	1/2"sq. clip set [10pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

^{*} Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.

1/2"sq. SOCKET HOLDER (MAGNET)





No.	Number of clips	Н	Α	L	Weight(g)		
EHBM412	12	17.5	25.4	304	145	1	

- The round shape of the clip makes it easy to secure the socket without worrying about the direction of the drive size.
- \cdot The strong magnets hold the rail firmly in place, so the socket can be removed with one hand without supporting the rail.
- The case can be fixed perpendicularly to the ground, such as on the side of the case.
- Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.
- · The clip can be removed and used as a holder for wrenches.



- Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.
- The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers. (With attachments for rail removal)

Spare parts

No.	Description	
EHBMC-4	1/2"sq. clip set [12pcs.]	
•		

^{*} Clips can be used for EHBM220, EHBM315, and EHBM412 in common.















[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

 $[\]cdot$ Products marked with $extbf{ extit{@}}$ should be ordered after checking stock.

3/4"sq. SOCKET WRENCH SET [10pcs.]









No.		Weight(kg)	白	
TB610B		9	1	
Set contents				
Sockets (12pt.)	B6-22W, 24W, 27W, 30 46W	W, 32W, 36	δW,	41W,
Ratchet handle	BR6A			
Extension bar 200	BE6-200			
Single door metal case	B4110-MA (W545×D18	5×H85)		

^{*} Equivalent to TB610A.

3/4"sq. SOCKET WRENCH SET [15pcs.]









No.		Weight(kg)	6	
TB615B		10.8	1	
Set contents				
Sockets (12pt.)	B6-22W, 24W, 27W, 30 ¹ 38W, 41W, 46W, 50 ¹		5W,	36W,
Head	BH40			
Bar for head	BL40-500			
Extension bar 125	BE6-125			
Extension bar 200	BE6-200			
Single door metal case	B4110-MA (W545×D18	5×H85)		

^{*} Equivalent to TB614A.

3/4"sq. SOCKET WRENCH SET [14pcs.]









No.		Weight(kg)	6				
TB614B	14.5	1					
Set contents							
Sockets (12pt.) B6-24W, 27W, 30W, 32W, 36W, 41W, 46 50W, 55W				46W,			
Ratchet handle	BR6A						
Head	BH40						
Bar for head	BL40-500						
Extension bar 200	BE6-200						
Extension bar 400	BE6-400						
Single door metal case	gle door metal case B4110-MA (W545×D185×H85)						
* Equivalent to TR615A							

Equivalent to TB615A.

3/4"sq. SOCKET WRENCH SET [19pcs.]









	Weight(kg)	6	
	14.1	1	
BR6A			
BE6-125			
BE6-200			
B4110-MA (W545×D185	5×H85)		
	32W, 35W, 36W, 38V 54W, 55W BR6A BE6-125 BE6-200	B6-22W, 23W, 24W, 26W, 27W, 29 32W, 35W, 36W, 38W, 41W, 46 54W, 55W BR6A BE6-125	B6-22W, 23W, 24W, 26W, 27W, 29W, 32W, 35W, 36W, 38W, 41W, 46W, 54W, 55W BR6A BE6-125 BE6-200

^{*} Equivalent to TB619A.

3/4"sq. SOCKET WRENCH SET [18pcs.]











No.		Weight(kg)	6				
TB618BB	16.7	1					
Set contents							
B6-1-1/16W, 1-1/8W, 1-3/16W, 1-1/4W, Sockets (12pt.) 1-5/16W, 1-3/8W, 1-7/16W, 1-1/2W, 1-5/8W, 1-3/4W, 1-13/16W, 1-7/8W,			v,				
Ratchet handle	BR6A						
Head	BH40						
Bar for head	BL40-500						
Extension bar 200	BE6-200						
Extension bar 400	BE6-400						
Single door metal case	B4110-MA (W545×D18	5×H85)					

^{*} Equivalent to TB618BA.

Cases are shown on P.198.

[·] Do not use hand tools with an impact wrench.

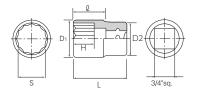
3/4"sq. SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	_	
B6-17W	17	26	33	12	46	25	160	5	
B6-17W	18	27	33	13	46	25	160	5	
B6-19W	19	27.5	33	14	46	25	160	5	
			33					5	
B6-20W	20	29.5		14	47	26	170		
B6-21W	21	30	33	15	47	26	170	5	
B6-22W	22	31	33	16	49	28	170	5	
B6-23W	23	32.5	33	16	49	28	170	5	
B6-24W	24	34	33	18	50	29	180	5	
B6-25W	25	35	34	19	51	30	200	5	
B6-26W	26	36.5	34	19	51	30	210	5	
B6-27W	27	38	34	19	51	30	220	5	
B6-28W	28	39	34	20	52	31	230	5	
B6-29W	29	40	34	21	53	32	240	5	
B6-30W	30	42	36	22	54	33	270	5	
B6-31W	31	43	38	23	55	34	300	5	
B6-32W	32	44	38	24	56	35	310	5	
B6-33W	33	46	38	24	57	36	340	5	
B6-34W	34	47	38	25	57	36	350	5	
B6-35W	35	48	38	26	59	38	370	5	
B6-36W	36	50	40	27	60	39	410	5	
B6-37W	37	51	40	28	61	40	430	5	
B6-38W	38	52	40	29	62	41	440	5	
B6-39W	39	54	40	30	63	42	470	5	
B6-40W	40	55	40	31	64	43	490	5	
B6-41W	41	56	40	32	65	44	500	5	
B6-42W	42	57.5	38	35	66	45	540	5	
B6-43W	43	59	40	36	67	46	590	5	
B6-44W	44	60	42	37	68	47	630	5	
B6-45W	45	62	44	37	69	48	710	5	
B6-46W	46	63	44	35	70	49	750	2	
B6-47W	47	64	44	39	71	50	780	2	
B6-48W	48	65.5	44.5	39	72	51	810	2	
B6-50W	50	68	46	42	74	53	880	2	
B6-52W	52	71	48	47	75	54	920	2	
B6-54W	54	73	48	48	76	55		2	
	55		48		_	58	950		
B6-55W		75	-	51	79		1,040	2	
B6-56W	56 57	76	48	52	80	59	1,060	2	
B6-57W		77	48	53	81	60	1,080	2	
B6-58W	58	79	48	53	82	61	1,180	2	
B6-60W	60	81	48	55	84	63	1,220	2	
B6-63W	63	83.5	58	53	84	63	1,390	2	
B6-65W	65	88	58	52	84	63	1,520	2	
B6-70W	70	92	58	52	84	63	1,580	2	
B6-75W	75	98.5	58	56	86	65	1,720	2	
B6-80W	80	104.5	63	59	90	69	2,040	2	
B6-85W	85	111	63	59	90	69	2,220	2	

^{*} Equivalent to B40-17 to 85. • P.260.

3/4"sq. SOCKET

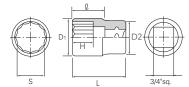












No.	S(in)	D1	D2	H	L	Q	Weight(g)		
B6-1-1/16W	1- 1/16	38	34	20	51	30	230	5	
B6-1-1/8W	1- 1/8	40	34	21	53	32	250	5	
B6-1-3/16W	1- 3/16	42	36	22	54	33	280	5	
B6-1-1/4W	1- 1/4	44	38	24	56	35	300	5	
B6-1-5/16W	1- 5/16	46.5	37	25	58	37	338	5	
B6-1-3/8W	1- 3/8	48	38	26	59	38	340	5	
B6-1-7/16W	1- 7/16	50	40	27	60	39	360	5	
B6-1-1/2W	1- 1/2	52	40	29	62	41	480	5	
B6-1-5/8W	1- 5/8	56	37	35	65	44	500	5	
B6-1-3/4W	1- 3/4	61	43	37	68	47	660	2	
B6-1-13/16W	1-13/16	63	44	38	70	49	740	2	
B6-1-7/8W	1- 7/8	65	44.5	39	71	50	780	2	
B6-2W	2	69.5	47	47	75	54	960	2	

^{*} Equivalent to BB40-1-1/16 to 2. • P.260.















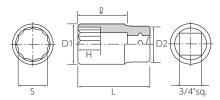
Function mark is indicated under the product name. For the details, please refer to ♠ P.004-005.
 Products marked with ♠ should be ordered after checking stock.

3/4"sq. DEEP SOCKET









No.	S	D1	D2	Н	L	Q	Weight(g)	6	
B6L-17W	17	26	33	18	90	69	280	5	
B6L-18W	18	27	33	19	90	69	290	5	
B6L-19W	19	27.5	33	20	90	69	300	5	
B6L-20W	20	29.5	33	21	90	69	330	5	
B6L-21W	21	30	33	22	90	69	330	5	
B6L-22W	22	31	33	23	90	69	310	5	
B6L-23W	23	32.5	33	24	90	69	330	5	
B6L-24W	24	34	33	25	90	69	360	5	
B6L-25W	25	35	34	26	90	69	390	5	
B6L-26W	26	36.5	34	27	90	69	410	5	
B6L-27W	27	38	34	28	90	69	410	5	
B6L-28W	28	39	34	29	90	69	430	5	
B6L-29W	29	40	34	30	90	69	440	5	
B6L-30W	30	42	36	31	90	69	470	5	
B6L-31W	31	43	38	32	90	69	510	5	
B6L-32W	32	44	38	33	90	69	520	5	
B6L-33W	33	46	38	34	90	69	550	5	
B6L-34W	34	47	38	35	90	69	570	5	
B6L-35W	35	48	38	36	90	69	580	5	
B6L-36W	36	50	40	37	90	69	630	5	
B6L-38W	38	52	40	39	90	69	650	5	
B6L-40W	40	55	40	41	90	69	690	5	
B6L-41W	41	56	40	42	90	69	700	5	
B6L-42W	42	57	40	43	90	69	700	5	
B6L-44W	44	59.5	40	45	90	69	790	5	
B6L-46W	46	63	44	47	90	69	910	2	
B6L-48W	48	64.5	44	49	90	69	960	2	
B6L-50W	50	68	46	51	90	69	1,010	2	
B6L-52W	52	69.5	46	64	100	79	1,090	2	
B6L-53W	53	71	48	64	100	79	1,180	2	
B6L-54W	54	73	48	63	100	79	1,270	2	
B6L-55W	55	75	48	63	100	79	1,350	2	
B6L-56W	56	76	48	63	100	79	1,340	2	
B6L-57W	57	77	48	62	100	79	1,360	2	
B6L-58W	58	79	48	62	100	79	1,450	2	
B6L-60W	60	81	48	61	100	79	1,460	2	

^{*} Equivalent to B45-17 to 63. • P.261.

63

3/4"sq. RATCHET HANDLE (LONG)











No.	Туре	Feed angle	В	Т	Grip diameter (φ)	L	Weight(kg)		
BR6AL	Oval	9°	70.6	35.5	31.8	1,000	5.4	1	

60

100

1,540

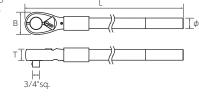
- · 3/4"sq. small size ratchet handle.
- The gear has 40 teeth. Feed angle is 9°.
- * Repair kit (BR6A-K) is available. P.261
- * Repair parts are set. Refer to "Repairable List" from P.625.

83.5



B6L-63W

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
 Be careful of overtorque due to
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely up to the root.



3/4"sq. RATCHET HANDLE (ROUND HEAD)



No.	Туре	Feed angle	В	Т	Grip diameter (φ)	L	Weight(kg)	6	
BRM6	Circular form	6°	67	36	32	500	2.4	1	

- · The head is round and compact.
- \cdot The gear has 60 teeth. Feed angle is $6^{\circ}.$
- * Repair parts are set. \bigcirc Refer to "Repairable List" from P.625.
- * Equivalent to BRM40. P.262.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive completely





 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

3/4"sq. BREAKER BAR



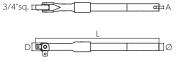




No.	D	Grip diameter (ϕ)	L	Α	Weight(kg)	6	
BS6-500	28	29.7	500	10	2.1	1	



- $\boldsymbol{\cdot}$ Hold the center of the grip as the drive may pinch your hand.
- · Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- · Insert the square drive completely
- Repair kit (BS6-K) is set. 🗘 P.262



3/4"sq. L-SHAPED HANDLE

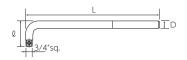




No.	D	L	Q	Weight(kg)		
BHL6-320	24	327	74	1.3	2	



- · Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely



3/4"sq. EXTENSION BAR

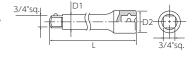




No.	D1	D2	L	Weight(g)		
BE6-075	25	35	75	340	1	
BE6-100	25	35	100	420	1	
BE6-125	25	35	125	550	1	
BE6-150	25	35	150	610	1	
BE6-200	25	35	200	820	1	
BE6-300	25	35	300	1,210	1	
BE6-400	25	35	400	1,590	1	



- \cdot Do not use more than two connected wires.
- · Insert the square drive completely



3/4"sq. SOCKET ADAPTER











No.	S	q.	D		\Moight(g)		
NO.	Concave	Convex	D	L	Weight(g)		
BA64	3/4"	1/2"	34	43	154	5	
BA68	3/4"	1"	34	56	270	1	



- $\boldsymbol{\cdot}$ The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.

 Insert the square drive completely







• Products marked with ② should be ordered after checking stock.













[•] Function mark is indicated under the product name. For the details, please refer to \$\infty\$ P.004-005.

3/4"sq. SOCKET

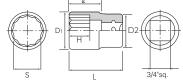








No.	S	D1	D2	Н	L	Q	Weight(g)	_	
₩ B40-17	17	26	33	12	46	25	160	5	
B40-17	18	27	33	13	46	25	160	5	
№ B40-19	19	27.5	33	14	46	25	160	5	
B40-20	20	29.5	33	14	47	26	170	5	
№ B40-21	21	30	33	15	47	26	170	5	
B40-21	23	32.5	33	16	49	28	170	5	
B40-25			34	19	51				
B40-25	25	35	34	19		30	200	5	
	26	36.5	-		51	30	210	5	
№ B40-27	27	38	34	19	51	30	220	5	
B 40-28	28	39	34	20	52	31	230	5	
B 40-29	29	40	34	21	53	32	240	5	
B 40-31	31	43	38	23	55	34	300	5	
B 40-33	33	46	38	24	57	36	340	5	
B 40-34	34	47	38	25	57	36	350	5	
B 40-35	35	48	38	26	59	38	370	5	
№ B40-37	37	51	40	28	61	40	430	5	
№ B40-39	39	54	40	30	63	42	470	5	
№ B40-40	40	55	40	31	64	43	490	5	
B 40-42	42	57.5	38	35	66	45	540	5	
B 40-43	43	59	40	36	67	46	590	5	
B 40-44	44	60	42	37	68	47	630	5	
B 40-45	45	62	44	37	69	48	710	5	
% B40-47	47	64	44	39	71	50	780	2	
⊘ B40-48	48	65.5	44.5	39	72	51	810	2	
% B40-50	50	68	46	42	74	53	880	2	
⊘ B40-52	52	71	48	47	75	54	920	2	
P B40-54	54	73	48	48	76	55	950	2	
⊘ B40-56	56	76	48	52	80	59	1,060	2	
⊘ B40-57	57	77	48	53	81	60	1,080	2	
⊘ B40-58	58	79	48	53	82	61	1,180	2	
B40-60	60	81	48	55	84	63	1,220	2	
B40-63	63	83.5	58	53	84	63	1,390	2	
B40-65	65	88	58	52	84	63	1,520	2	
B 40-70	70	92	58	52	84	63	1,580	2	
B40-75	75	98.5	58	56	86	65	1,720	2	
B40-80	80	104.5	63	59	90	69	2,040	2	
B 40-85	85	111	63	59	90	69	2,220	2	



3/4"sq. SOCKET



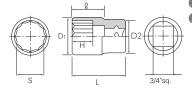












	No.	S(in)	D1	D2	Н	L	Q	Weight(g)		
()	BB40-1-1/16	1- 1/	′16	38	34	20	51	30	230	5	
()	BB40-1-1/8	1- 1/	/8	40	34	21	53	32	250	5	
()	BB40-1-3/16	1- 3/	′16	42	36	22	54	33	280	5	
()	BB40-1-1/4	1- 1/	4	44	38	24	56	35	300	5	
()	BB40-1-5/16	1- 5/	′16	46.5	37	25	58	37	338	5	
0	BB40-1-3/8	1- 3/	/8	48	38	26	59	38	340	5	
()	BB40-1-7/16	1- 7/	/16	50	40	27	60	39	360	5	
()	BB40-1-1/2	1- 1/	/2	52	40	29	62	41	480	5	
Q -	BB40-1-5/8	1- 5/	/8	56	37	35	65	44	500	5	
O	BB40-1-3/4	1- 3/	4	61	43	37	68	47	660	2	
0	BB40-1-13/16	1-13/	/16	63	44	38	70	49	740	2	
0	BB40-1-7/8	1- 7/	/8	65	44.5	39	71	50	780	2	
()	BB40-2	2		69.5	47	47	75	54	960	2	

 $[\]cdot$ Do not use hand tools with an impact wrench.

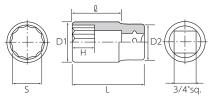
3/4"sq. DEEP SOCKET











No.	S	D1	D2	Н	L	Q	Weight(g)	6	
B 45-17	17	26	33	18	90	69	280	5	
B 45-18	18	27	33	19	90	69	290	5	
& B45-19	19	27.5	33	20	90	69	300	5	
B 45-20	20	29.5	33	21	90	69	330	5	
B 45-21	21	30	33	22	90	69	330	5	
⊘ B45-22	22	31	33	23	90	69	310	5	
B45-23	23	32.5	33	24	90	69	330	5	
⊘ B45-25	25	35	34	26	90	69	390	5	
B45-26	26	36.5	34	27	90	69	410	5	
⊘ B45-28	28	39	34	29	90	69	430	5	
B45-29	29	40	34	30	90	69	440	5	
⊘ B45-31	31	43	38	32	90	69	510	5	
B45-32	32	44	38	33	90	69	520	5	
⊘ B45-33	33	46	38	34	90	69	550	5	
B45-34	34	47	38	35	90	69	570	5	
⊘ B45-35	35	48	38	36	90	69	580	5	
B45-40	40	55	40	41	90	69	690	5	
B 45-42	42	57	40	43	90	69	700	5	
B 45-48	48	64.5	44	49	90	69	960	2	
B 45-50	50	68	46	51	90	69	1,010	2	
B45-52	52	69.5	46	64	100	79	1,090	2	
B 45-53	53	71	48	64	100	79	1,180	2	
B 45-54	54	73	48	63	100	79	1,270	2	
⊘ B45-55	55	75	48	63	100	79	1,350	2	
⊘ B45-56	56	76	48	63	100	79	1,340	2	
⊘ B45-57	57	77	48	62	100	79	1,360	2	
B45-60	60	81	48	61	100	79	1,460	2	
№ B45-63	63	83.5	53	60	100	79	1,540	2	

3/4"sq. RATCHET HANDLE









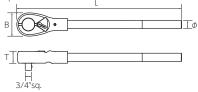


No.	Туре	Feed angle	В	Т	Grip diameter (ϕ)	L	Weight(kg)	6	
BR6A	Oval	9°	71	36	25	505	2.5	1	

- · Standard 3/4"sq. small-sized ratchet handle.
- \cdot The gear has 40 teeth. Feed angle is 9° .
- * Repair kit (BR6A-K) is available. 🗘 P.261
- * Repair parts are set. Refer to "Repairable List" from P.625.



- \cdot Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the square drive completely



REPAIR KIT FOR 3/4"sq. RATCHET HANDLE

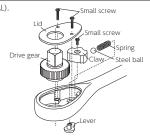






No.	Drive size	Contents	Weight(g)	
BR6A-K	3/4"sq.	Drive Gear, Claw, Steel ball, spring, 1 each of lever, small screw and lid, small screw×2	680	

· Repair kit for 3/4"sq. ratchet handles (BR6A, BR6AL).

















[•] Function mark is indicated under the product name. For the details, please refer to O P.004-005.

Products marked with should be ordered after checking stock.

3/4"sq. RATCHET HANDLE (ROUND HEAD)









	No.	Туре	Feed angle	В	Т	Grip diameter (φ)	L	Weight(kg)	d	
0	BRM40	Circular form	6°	67	36	32	500	2.4	1	

- · The head is round and compact.
- \cdot The gear has 60 teeth. Feed angle is 6°.
- * Repair parts are available. Please contact our distributors for details.



- $\boldsymbol{\cdot}$ Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- · Insert the square drive completely





3/4"sq. BREAKER BAR





	No.	D	Grip diameter (ϕ)	L	Α	Weight(kg)		
0	BS40-500	28	28	500	14.5	1.9	1	



- · Hold the center of the grip as the drive may pinch your hand.
- $\boldsymbol{\cdot}$ Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- $\boldsymbol{\cdot}$ Insert the square drive completely 3/4"sq.**I**



3/4"sq. BREAKER BAR (EXTRA LONG)





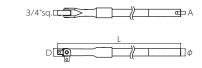


No.	D	Grip diameter (φ)	L	А	Weight(kg)	6	
BS6-1050	28	29.7	1049.5	10	3.7	1	

 $\boldsymbol{\cdot}$ Suitable for high-torque work on construction machinery and large vehicles.



- $\boldsymbol{\cdot}$ Hold the center of the grip as the drive may pinch your hand. $\boldsymbol{\cdot}$ Be careful of overtorque due to the long overall length and the tendency to apply
- excessive load. · Insert the square drive completely



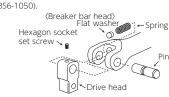
REPAIR KIT FOR 3/4"sq. BREAKER BAR (EXTRA LONG)





No.	Drive size	Contents	Weight(g)	
BS6-K	3/4"sq.	Drive head, pin, flat washer, spring, hexagon socket set screw, replacement jig, replacement hexagonal wrench 1 each	295	

- · Repair kit for 3/4"sq. breaker bar (BS6-500, BS6-1050).
- * Not available for BS40-500.



3/4"sq. HEAD

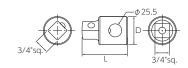




No.	D	L	Weight(g)	白	
BH40	40	71	350	1	



- \cdot Be sure to use the head bar BL40-500 (\bigcirc P.263).
- Insert the square drive completely



[·] Do not use hand tools with an impact wrench.



No.	L	φ	Weight(kg)	6	
BL40-500	500	25	1.9	1	

• This is a handle for BH40 (P.262).

ϕ		
$\overline{}$		
	l	

3/4"sq. EXTENSION BAR

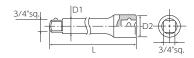




No.	D1	D2	L	Weight(g)	6	
№ BE40-130	25	34	130	552	1	



Do not use more than two connected wires Insert the square drive completely



TORQUE MULTIPLIER

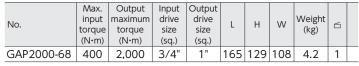




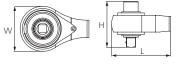


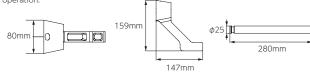


With special resin case

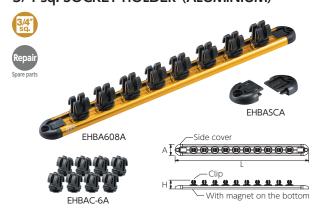


- · Used for tightening and loosening of bolts and nuts at 300 to 2,000 N⋅m in industries such as railroads, ships, construction, and heavy-duty vehicles. The standard screw size is M18-36.
- \cdot A planetary gear doubling mechanism converts input torque to output by a factor of 5. Labor-saving and easy-to-handle full-length tools can be used.
- · Hand tools save energy by eliminating the need for a power supply or compressor. Also, the machine does not generate noise or blow noises, allowing for quiet operation.
- · Suitable for both tightening and loosening operations. Use within the usable torque range.
- $\boldsymbol{\cdot}$ Do not use power tools for input. WARNING
 - $\boldsymbol{\cdot}$ Do not strike the input tool with a hammer or the like.
 - $\boldsymbol{\cdot}$ Do not suddenly remove your hand from the input tool while working.
 - \cdot Keep fingers, hands, feet, and other objects away from the reaction receiver during





3/4"sq. SOCKET HOLDER (ALUMINIUM)



No.	Number of clips	Н	Α	L	Weight(g)	△	
EHBA608A	8	31.8	28.4	338.5	305	1	

- · Socket holders with plastic clips to hold sockets in place.
- · The socket for impact wrenches can be attached and detached with the pin and ring installed
- · Different rail colors for different drive size allow easy identification of sockets.
- \cdot Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



The socket holder may fall out if the socket holder is turned upside down. Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-6A	3/4"sq. clip set [8pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

^{*} Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.

1"sq. SOCKET WRENCH SET [12pcs.]









No.		Weight(kg)	\subseteq	
TB812		15.6	1	
Set contents				
Sockets (12pt.)	B8-30W, 32W, 33W, 36W, 38W, 4 55W, 58W	11W, 46W,	50V	V,
Extension bar 200	BE8-200			
Extension bar 400	BE8-400			
Single door metal case	B4110-MA (W545×D185×H85)			

Cases are shown on P.198.

• Products marked with 🕖 should be ordered after checking stock.















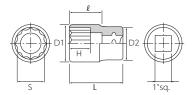
[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

1"sq. SOCKET









No.	S	D1	D2	Н	L	Q	Weight(g)	白	
B8-27W	27	40.5	44	19	60	31	370	1	
B8-30W	30	44	44	21	65	36	410	1	
B8-32W	32	46.5	44	23	65	36	430	1	
B8-33W	33	48	48	23.5	65	36	510	1	
B8-35W	35	50.5	48	24.5	65	36	530	1	
B8-36W	36	54	52	30	72	43	720	1	
B8-38W	38	54	52	32	74	45	710	1	
B8-40W	40	56.5	52	33	76	47	750	1	
B8-41W	41	60	52	34	77	48	850	1	
B8-42W	42	59	52	35	79	50	810	1	
B8-46W	46	66	52	40	82	53	980	1	
B8-50W	50	71	56	43	86	57	1,200	1	
B8-54W	54	74	56	46	90	61	1,270	1	
B8-55W	55	78	56	48	92	63	1,430	1	
B8-58W	58	79	56	50	94	65	1,370	1	
B8-60W	60	84	56	52	98	69	1,660	1	
B8-63W	63	88	60	56	103	74	1,980	1	
B8-65W	65	91	60	58	103	74	2,170	1	
B8-67W	67	94	60	59	108	79	2,360	1	
B8-68W	68	94	60	59	109	80	2,410	1	
B8-70W	70	97	60	60	111	82	2,480	1	
B8-71W	71	97	65	63	113	84	2,500	1	
B8-75W	75	104	65	66	118	89	3,050	1	
B8-77W	77	107	65	67	120	91	3,260	1	
B8-80W	80	110	65	70	124	95	3,450	1	
B8-83W	83	110.5	65	72	127	98	3,610	1	
B8-85W	85	117	70	75	130	101	4,170	1	
B8-90W	90	119	75	78	130	101	4,370	1	
B8-95W	95	125.5	85	76	130	101	4,800	1	
B8-100W	100	131.5	85	75	130	101	5,200	1	

^{*} Equivalent to B50-27 to 100. • P.266.

1"sq. RATCHET HANDLE (LONG)











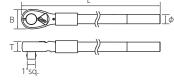
No.	Туре	Feed angle	В	Т	Grip diameter (φ)	L	Weight(kg)	6	
BR8AL	Oval	9°	70.6	35.5	31.8	1,400	7.2	1	

- · 1"sq. small size ratchet handle.
- \cdot The gear has 40 teeth. Feed angle is $9^{\circ}.$
- * Repair kit (BR8A-K) is available. P.267
- * Repair parts are set. 🔘 Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- \cdot Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

 Insert the square drive completely



1"sq. BREAKER BAR





No.	D	Grip diameter (φ)	L	Weight(kg)	6	
BS8-1000	42	32.2	1000	4.3	1	

* Repair kit (BS8-K) is set. 🗘 P.265



- \cdot Hold the center of the grip as the drive may pinch your hand.
- · Be careful of overtorque due to the long overall length and the tendency to apply
- · Insert the square drive completely



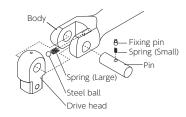
[·] Do not use hand tools with an impact wrench.

PEPAIR KIT FOR 1"sq. BREAKER BAR



No.	Drive size	Contents	Weight(g)	
BS8-K	1"sq.	Drive Head, Pin, Fixing Pin, Steel Ball, Spring (Large), Spring (Small)	465	

· Repair kit for 1"sq. breaker bar (BS8-1000).



1"sq. L-SHAPED HANDLE

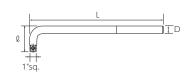




No.	D	L	Q	Weight(kg)	6	
BHL8-600	26	613	113	3.2	1	



- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- · Insert the square drive completely



1"sq. EXTENSION BAR



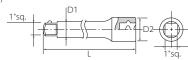


No.	D1	D2	L	Weight(kg)	6	
BE8-200	32	44	200	1.3	1	
BE8-400	32	44	400	2.6	1	

- Two sizes are available: 200 mm and 400 mm in overall length, allowing selection according to the work environment.
- This is ideal for hub nut tightening work on large trucks because it avoids the offset of the wheel nut and allows tightening work with a torque wrench.
- * Equivalent to *BE50-200,400.



- · Do not use more than two connected wires.
- · Insert the square drive completely



1"sq. SOCKET ADAPTER



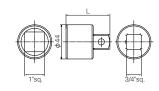


No.	sq.		D	1	\Moight(g)	_	
INO.	Concave	Convex	D	L	Weight(g)		
BA86	1"	3/4"	44	56.5	310	1	

· 1"sq. to 3/4"sq. size conversion adapter.



- \cdot The limiting torque of the adapter is based on the smaller drive size. Be careful not to apply too much force.
- · Insert the square drive completely

















[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

[•] Products marked with ② should be ordered after checking stock.

1"sq. SLIDE HEAD HANDLE

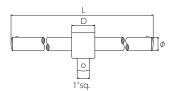


No.	D	Handle diameter (ϕ)	L	Weight(kg)	6	
внм8	48	28	700	4.1	1	

· Depending on the work area, the new model offers functions that enable quicker work than a ratchet handle, from quick turning to tightening and loosening



 $\boldsymbol{\cdot}$ Insert the square drive completely



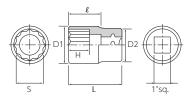
1"sq. SOCKET











	No.	S	D1	D2	Н	L	Q	Weight(g)	6	
()	B50-27	27	40.5	44	19	60	31	370	1	
()	B50-30	30	44	44	21	65	36	410	1	
()	B50-32	32	46.5	44	23	65	36	430	1	
0	B50-35	35	50.5	48	24.5	65	36	530	1	
0	B50-36	36	54	52	30	72	43	720	1	
()	B50-38	38	54	52	32	74	45	710	1	
0	B50-40	40	56.5	52	33	76	47	750	1	
0	B50-41	41	60	52	34	77	48	850	1	
0	B50-42	42	59	52	35	79	50	810	1	
0	B50-46	46	66	52	40	82	53	980	1	
()	B50-50	50	71	56	43	86	57	1,200	1	
()	B50-54	54	74	56	46	90	61	1,270	1	
0	B50-55	55	78	56	48	92	63	1,430	1	
()	B50-58	58	79	56	50	94	65	1,370	1	
()	B50-60	60	84	56	52	98	69	1,660	1	
()	B50-65	65	91	60	58	103	74	2,170	1	
0	B50-67	67	94	60	59	108	79	2,360	1	
0	B50-68	68	94	60	59	109	80	2,410	1	
()	B50-70	70	97	60	60	111	82	2,480	1	
()	B50-71	71	97	65	63	113	84	2,500	1	
0	B50-75	75	104	65	66	118	89	3,050	1	
0	B50-77	77	107	65	67	120	91	3,260	1	
•	B50-80	80	110	65	70	124	95	3,450	1	
()	B50-85	85	117	70	75	130	101	4,170	1	
0	B50-90	90	119	75	78	130	101	4,370	1	
()	B50-100	100	131.5	85	75	130	101	5,200	1	

1"sq. RATCHET HANDLE









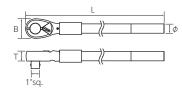
No.		Туре	Feed angle	В	Т	Grip diameter (φ)	L	Weight(kg)	6	
BR8	Α	Oval	9°	70.6	35.5	31.8	720	4.3	1	

- \cdot Standard 1"sq. small-sized ratchet handle.
- The gear has 40 teeth. Feed angle is 9°.
- * Repair kit (BR8A-K) is available. 💍 P.267
- * Repair parts are set. Refer to "Repairable List" from P.625.



- \cdot Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

 Insert the square drive completely



[·] Do not use hand tools with an impact wrench.

REPAIR KIT FOR 1"sq. RATCHET HANDLE

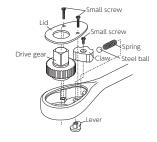






No.	Drive size	Contents	Weight(g)	
BR8A-K	1"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and countersunk small screw×2	680	

[·] Repair kit for 1"sq. ratchet handle (BR8A, BR8AL).



1"sq. L-SHAPED HANDLE

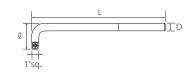




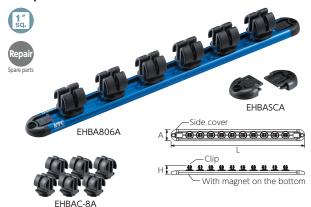
No.	D	L	Q	Weight(kg)	6	
B O50-600	26	613	113	3.2	1	



- \cdot Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- · Insert the square drive completely



1"sq. SOCKET HOLDER (ALUMINIUM)



No.	Number of clips	Н	Α	L	Weight(g)		
EHBA806A	6	35.7	28.4	338.5	321	1	

- · Socket holders with plastic clips to hold sockets in place.
- The socket for impact wrenches can be attached and detached with the pin and ring installed
- $\boldsymbol{\cdot}$ Different rail colors for different drive size allow easy identification of sockets.
- · Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



• The socket holder may fall out if the socket holder is turned upside down.
• Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-8A	1"sq. clip set [6pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

^{*} Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.



Products marked with should be ordered after checking stock.















CONVENTIONAL TOOLS

IMPACT SOCKETS AND ACCESSORIES



- For safety, wear protective goggles, earplugs, safety hat, dust mask, and safety shoes while working.
- Sockets and attachments should be securely fastened with the applicable pins and rings.
- Pins and rings are consumables. If any abnormality such as cracks, deformation, wear, or deterioration is found, do not use them.
- Never use pins and rings that are not applicable because they may cause the pins to pop out during rotation.



- $\boldsymbol{\cdot}$ Use a socket that matches the size of the bolt/nut.
- $\boldsymbol{\cdot}$ Insert the socket until the nut is completely held.
- Do not apply the impact wrench to the nut while it is rotating.
 - · Do not touch the socket or attachment while it is rotating.
 - Do not turn the wrench while the socket or attachment is in place.
 - Do not connect two or more attachments.
 - · Check the direction of rotation before use.
 - Always disconnect the air hose before replacing the socket.
 - $\boldsymbol{\cdot}$ Make sure that the socket is properly installed.
 - · Never touch the socket during operation as it is dangerous.

Basic structure of sockets for impact wrenches

Sockets for impact wrenches are used for power tools such as air and electric impact wrenches. Power tools generate more torque than manual tools, so the sockets used need to be compatible

To make them stronger than sockets for manual tools, the outer diameter is thicker and the surface is treated with a phosphate coating to prevent the plating from peeling off and scattering. Also, to prevent the tool itself from coming off, it can be secured to the anvil (drive angle) of the wrench with



One side of the

Centrifugal

pin hole is the wall

Centrifuga

force

Vibration of rotation shakes

the pin and shifts the pin's

center of gravity.

Comparison with

conventional products

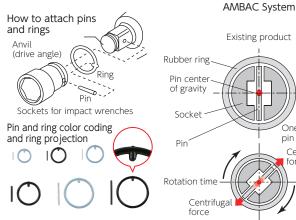
AMBAC System

AMBAC system, a mechanism to prevent pin removal

The AMBAC system prevents pin ejection when using impact wrenches.

The AMBAC system is prevention mechanism of pin ejection developed by KTC for impact wrench sockets and accessories. Previous design of pin and ring were a possible to be ejected due to the centrifugal force generated when the socket rotates.

KTC's AMBAC system is a practical application of the reversed idea of using the centrifugal force that has been the cause of pin ejection to prevent ejection. By shifting the center of gravity of the pin from the axis of rotation of the socket to the wall, the centrifugal force generated during rotation always acts on the wall side and prevent the pin from ejecting for the centrifugal force.



The pin and ring for the AMBAC system are available in two colors, gray (silver) and black, to prevent accidents caused by incorrect installation of the ring and pin combination. Since the ring is not subjected to the centrifugal force of the pin, the diameter of the ring can be smaller and make it easier

to install. In addition, a protrusion is added on the outside of the ring so that the position of the hole can be seen even when the ring is installed.



If centrifugal force is increased, the pin may About AMBAG be popped out. System

Centrifugal

force

At high speed

of the pin is pulled toward the wall. Centrifuga Centrifugal force acts

The center of gravity

on the wall side, so the pin does not pop out.



Products using the AMBAC system have this mark.

AMBAC stands for Anti-disconnect Mechanism By Availing of Centrifugal force.

Variation of sockets for impact wrenches



Aluminum socket for polished nut Socket exclusively for aluminum wheels and decorative nuts of automobiles. Made of aluminum alloy and will not damage the nut.

P 548



Wheel nut socket set Socket exclusively for wheel nuts of automobiles. Long type.

P.549-550



Impact combination socket for wheel nut Special sockets for wheel nuts of heavy duty trucks.

Labor-saving design that can be used for both outer (6pt.) and inner (square) nuts.

P.551-554

Socket size list for impact wrenches (mm)

JOCKEL	size tist for impact	VVICTICI	163		_	_		_		_		_	_	_	_	_	_	_	_	_	_	_			_	_	_		_		_	_
		n	nm	6	7	8	9 1	10	11 ′	12	13	14	15 1	6 1	7 1	8 1	9 2	0 2	21 2	2 2.	3 24	25	26	27	28	29	30	31	32 :	33 3	4 3	5 36
	Impact socket (semi deep / thin)				•	•	•	•	1	•	•	•						•														
3/8" sq.	Impact socket (deep / thin)			•	•	•	•	•	•	•	•	•																				
	Impact socket (long) with pin & ring (thin)						•	•		•	•	•																				
	Impact socket					•	•	•	•	•	•	•	•	•				•	•		•		•	•	•	•	•		•			
1/2"	Impact socket (semi deep / thin)					•	•	•	•	•	•	•	•	•					•		•	•	•	•	•	•	•	•	•	•		•
1/2" sq.	Impact socket (deep / thin)						•	•		•	•	•						•	•		•		•	•			•		•			
	Impact socket (long) with pin & ring (thin)		-01							•	•	•						•														
		n	nm	17	19	21	22	2 2	3 ′	24	26	27	28	20	3 31	0 3	32	33	34	3 =	36	38	41	1 4	16	50	54	55	58	60	65	70
2/4"	Impact socket			•	•	•	•			•	•	•	•	•			•	<u> </u>	34	•	•	•	•		•	<u> </u>	J-1	33	30	- 00	03	7 0
3/4" sq.	Impact socket (deep / thin)				•	•	•			•	•	•		•	•		•	•	•	•	•	•	•	•	•							
1"	Impact socket					•	•			•	•	•	•	•	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
1" sq.	Impact socket						•)		•		•		•			•	•		•	•	•	•			•		•		•	•	•

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 🕖 should be ordered after checking stock.











3/8"sq. IMPACT SOCKET(SEMI DEEP) WITH PIN & RING











No.	S	D1	D2	Н	L	Q	Weight(g)	6	
BP3M-07TP	7	11.5	22	6	34	21	47	5	
BP3M-08TP	8	13	22	7	34	21	50	5	
BP3M-09TP	9	14	22	8	34	21	52	5	
BP3M-10TP	10	15.5	22	8	34	21	52	5	
BP3M-12TP	12	18	22	9	34	21	58	5	
BP3M-13TP	13	19	22	9	34	21	58	5	
BP3M-14TP	14	20.5	22	9	36	23	64	5	
BP3M-17TP	17	25	22.5	12	36	23	80	5	
BP3M-19TP	19	27.5	25	12	39	26	108	5	
BP3M-21TP	21	29	25	14	39	26	108	5	
BP3M-22TP	22	31	25	14	41	28	130	5	

^{*} Includes pin and ring.



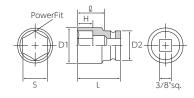
· Black rings should be paired with black pins and gray rings with silver pins.





PR-1519 is for BP3M-07TP to 17TP and PR-1822 is for BP3M-19TP to 22TP.

P.283.



3/8"sq. IMPACT SOCKET (SEMI DEEP)











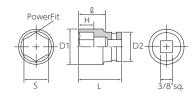
No.	S	D1	D2	Н	L	Q	Weight(g)	\Box	
BP3M-07T	7	11.5	22	6	34	21	47	5	
BP3M-08T	8	13	22	7	34	21	50	5	
BP3M-09T	9	14	22	8	34	21	52	5	
BP3M-10T	10	15.5	22	8	34	21	52	5	
BP3M-12T	12	18	22	9	34	21	58	5	
BP3M-13T	13	19	22	9	34	21	58	5	
BP3M-14T	14	20.5	22	9	36	23	64	5	
BP3M-17T	17	25	22.5	12	36	23	80	5	
BP3M-19T	19	27.5	25	12	39	26	108	5	
BP3M-21T	21	29	25	14	39	26	108	5	
BP3M-22T	22	31	25	14	41	28	130	5	

 $[\]ensuremath{^{*}}$ Pins and rings are sold separately.



PR-1519 is for BP3M-07T to 17T and PR-1822 is for BP3M-19T to 22T.

P.283.



3/8"sq. IMPACT SOCKET(DEEP) WITH PIN & RING











No.	S	D1	D2	Н	L	Q	Weight(g)	\Box	
BP3L-06TP	6	10	22	5	55	42	57	5	
BP3L-07TP	7	11.5	22	6	55	42	60	5	
BP3L-08TP	8	13	22	7	55	42	68	5	
BP3L-09TP	9	14	22	8	55	42	73	5	
BP3L-10TP	10	15.5	22	10	55	42	73	5	
BP3L-11TP	11	17	22	12	55	42	82	5	
BP3L-12TP	12	18	22	12	55	42	88	5	
BP3L-13TP	13	19	22	12	55	42	88	5	
BP3L-14TP	14	20.5	22	12	80	67	137	5	
BP3L-17TP	17	25	22.5	14	80	67	195	5	
BP3L-19TP	19	27.5	25	14	80	67	233	5	
BP3L-21TP	21	29	25	15	80	67	237	5	
BP3L-22TP	22	31	25	16	80	67	281	5	

^{*} Includes pin and ring.



 $\boldsymbol{\cdot}$ Black rings should be paired with black pins and gray rings with silver pins.





PowerFit

[·] Use pins and rings to prevent dropout.

3/8"sq. IMPACT SOCKET (DEEP)











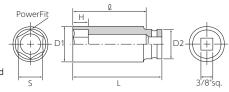
No.	S	D1	D2	Н	L	Q	Weight(g)		
BP3L-06T	6	10	22	5	55	42	57	5	
BP3L-07T	7	11.5	22	6	55	42	60	5	
BP3L-08T	8	13	22	7	55	42	68	5	
BP3L-09T	9	14	22	8	55	42	73	5	
BP3L-10T	10	15.5	22	10	55	42	73	5	
BP3L-11T	11	17	22	12	55	42	82	5	
BP3L-12T	12	18	22	12	55	42	88	5	
BP3L-13T	13	19	22	12	55	42	88	5	
BP3L-14T	14	20.5	22	12	80	67	137	5	
BP3L-17T	17	25	22.5	14	80	67	195	5	
BP3L-19T	19	27.5	25	14	80	67	233	5	
BP3L-21T	21	29	25	15	80	67	237	5	
BP3L-22T	22	31	25	16	80	67	281	5	

^{*} Pins and rings are sold separately.



PR-1519 is for BP3L-06T to 17T and PR-1822 is for BP3L-19T to 22T.





3/8"sq. IMPACT SOCKET(LONG) WITH PIN & RING







No.	S	D1	D2	d	Н	L	Q	Weight(g)	Ó	
◆ BP3LL-10TP	10	15.5	22	9	10	130	115	170	5	
◆ BP3LL-12TP	12	18	22	9	12	130	115	220	5	
◆ BP3LL-13TP	13	19	22	11	12	130	115	225	5	
◆ BP3LL-14TP	14	20.5	22	12	12	130	115	250	5	
◆ BP3LL-17TP	17	25	22.5	14	14	130	115	360	5	
◆ BP3LL-19TP	19	27.5	25	16	14	130	115	440	5	

^{*} Includes pin and ring.

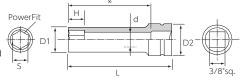


 $\boldsymbol{\cdot}$ Black rings should be paired with black pins and gray rings with silver pins.



PR-1519 is for BP3LL-10TP to 17TP and PR-1822 is for BP3LL-19TP.

P.283.



3/8"sq. IMPACT EXTENSION BAR WITH PIN & RING







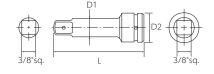
No.	D1	D2	L	Weight(g)	6	
BEP3-075	12.7	22	75	100	5	
BEP3-100	12.7	22	100	120	5	

^{*} Includes pin and ring.



- $\boldsymbol{\cdot}$ Do not use more than two wires connected together.
- · Black rings should be paired with black pins and gray rings with silver pins.





3/8"sq. IMPACT ADAPTER WITH PIN & RING









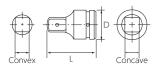
No.	SC	q.	D	1	\Moight(g)	_	
NO.	Concave	Convex	D		Weight(g)		
BAP34	3/8"	1/2"	22	42	70	5	

^{*} Includes pin and ring.



 \cdot Black rings should be paired with black pins and gray rings with silver pins.

















[•] Function mark is indicated under the product name. For the details, please refer to
P.004-005.

[•] Products marked with ② should be ordered after checking stock.

1/2"sq. IMPACT SOCKET SET [14pcs.]



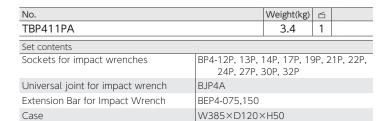












^{*} Includes pin and ring.

1/2"sq. IMPACT SOCKET SET(SEMI DEEP) [14pcs.]











No.		vveignt(kg)		
TBP4M11TPA		3.6	1	
Set contents				
Sockets for impact wrenches	BP4M-12TP, 13 21TP, 22 32TP	3TP, 14TP, 1 2TP, 24TP, 2		, - ,
Universal joint for impact wrench	BJP4A			
Extension Bar for Impact Wrench	BEP4-075, 150			
Case	W385×D1203	× H50		

^{*} Includes pin and ring.

1/2"sq. IMPACT SOCKET WITH PIN & RING











No.	S	D1	D2	Н	L	Q	Weight(g)	\Box	
BP4-08P	8	15	25	6	33	15	65	5	
BP4-09P	9	16	25	6.5	33.5	15.5	68	5	
BP4-10P	10	17	25	7	34	16	68	5	
BP4-11P	11	18.5	25	7.5	34.5	16.5	72	5	
BP4-12P	12	20	25	8	35	17	77	5	
BP4-13P	13	21.5	25	9	36	18	81	5	
BP4-14P	14	22.5	25	9.5	36.5	18.5	83	5	
BP4-15P	15	24	25	10.5	37.5	19.5	89	5	
BP4-16P	16	26	25	11	39	21	103	5	
BP4-17P	17	27.5	25	12	39	21	110	5	
BP4-19P	19	30	25	13	40	22	123	5	
BP4-21P	21	32.5	25	14	41	23	135	5	
BP4-22P	22	34	29	15	42	24	173	5	
BP4-23P	23	35	29	16	43	25	178	5	
BP4-24P	24	36.5	29	16.5	43.5	25.5	186	5	
BP4-26P	26	38	29	18	45	27	193	5	
BP4-27P	27	40	29	18.5	45	27	212	5	
BP4-28P	28	42	29	19	46	28	233	5	
BP4-29P	29	43	29	19.5	46.5	28.5	243	5	
BP4-30P	30	44	29	20	47	29	246	5	
BP4-32P	32	46	29	21	48	30	261	5	
* Includes pin and	ring.								

^{*} Includes pin and ring

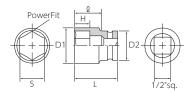


 $\boldsymbol{\cdot}$ Black rings should be paired with black pins and gray rings with silver pins.



PR-1822 is for BP4-08P to 21P and PR-2026 is for BP4-22P to 32P.

P.283.



 $[\]boldsymbol{\cdot}$ Use pins and rings to prevent dropout.

1/2"sq. IMPACT SOCKET











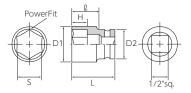
No.	S	D1	D2	Н	L	Q	Weight(g)		
BP4-08	8	15	25	6	33	15	65	5	
BP4-09	9	16	25	6.5	33.5	15.5	68	5	
BP4-10	10	17	25	7	34	16	68	5	
BP4-11	11	18.5	25	7.5	34.5	16.5	72	5	
BP4-12	12	20	25	8	35	17	77	5	
BP4-13	13	21.5	25	9	36	18	81	5	
BP4-14	14	22.5	25	9.5	36.5	18.5	83	5	
BP4-15	15	24	25	10.5	37.5	19.5	89	5	
BP4-16	16	26	25	11	39	21	103	5	
BP4-17	17	27.5	25	12	39	21	110	5	
BP4-19	19	30	25	13	40	22	123	5	
BP4-21	21	32.5	25	14	41	23	135	5	
BP4-22	22	34	29	15	42	24	173	5	
BP4-23	23	35	29	16	43	25	178	5	
BP4-24	24	36.5	29	16.5	43.5	25.5	186	5	
BP4-26	26	38	29	18	45	27	193	5	
BP4-27	27	40	29	18.5	45	27	212	5	
BP4-28	28	42	29	19	46	28	233	5	
BP4-29	29	43	29	19.5	46.5	28.5	243	5	
BP4-30	30	44	29	20	47	29	246	5	
BP4-32	32	46	29	21	48	30	261	5	

^{*} Pins and rings are sold separately.





PR-1822 is for BP4-08 to 21, PR-2026 is for BP4-22 to 32. P.283.



1/2"sq. IMPACT SOCKET (SEMI DEEP) WITH PIN & RING







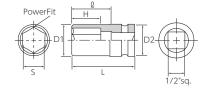






PR-1822 is for BP4M-08TP to 21TP and PR-2026 is for BP4M-22TP to 36TP.

P.283.



No.	S	D1	D2	Н	L	Q	Weight(g)	\subseteq	
BP4M-08TP	8	13.5	25	16	52	34	77	5	
BP4M-09TP	9	14.5	25	16	52	34	81	5	
BP4M-10TP	10	15.5	25	20	52	34	79	5	
BP4M-11TP	11	17	25	20	52	34	86	5	
BP4M-12TP	12	18	25	20	52	34	89	5	
BP4M-13TP	13	19	25	20	52	34	90	5	
BP4M-14TP	14	20.5	25	20	52	34	96	5	
BP4M-15TP	15	22	25	20	52	34	102	5	
BP4M-16TP	16	23	25	20	52	34	105	5	
BP4M-17TP	17	25	25	26.5	52	34	116	5	
BP4M-18TP	18	26	25	24	52	34	120	5	
BP4M-19TP	19	27.5	25	26.5	52	34	127	5	
BP4M-20TP	20	28	25	24	52	34	119	5	
BP4M-21TP	21	29	25	26	52	34	124	5	
BP4M-22TP	22	31	29	25	52	34	166	5	
BP4M-23TP	23	32.5	29	25	52	34	173	5	
BP4M-24TP	24	34	29	25	52	34	179	5	
BP4M-25TP	25	35	29	25	52	34	184	5	
BP4M-26TP	26	36.5	29	25	75	57	285	5	
BP4M-27TP	27	38	29	25	75	57	307	5	
BP4M-28TP	28	40	29	25	75	57	336	5	
BP4M-29TP	29	41	29	25	75	57	346	5	
BP4M-30TP	30	42	29	25	75	57	349	5	
BP4M-31TP	31	43	29	25	75	57	359	5	
BP4M-32TP	32	44	29	25	75	57	362	5	
BP4M-33TP	33	45	29	28	75	57	377	5	
BP4M-34TP	34	46	29	28	75	57	396	5	
BP4M-35TP	35	47	29	28	75	57	414	5	
BP4M-36TP	36	48	29	28	75	57	433	5	

^{*} Includes pin and ring.



 $\boldsymbol{\cdot}$ Black rings should be paired with black pins and gray rings with silver pins.











[•] Function mark is indicated under the product name. For the details, please refer to O P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

1/2"sq. IMPACT SOCKET (SEMI DEEP)











No.	S	D1	D2	Н	L	Q	Weight(g)	6	
BP4M-08T	8	13.5	25	16	52	34	77	5	
BP4M-09T	9	14.5	25	16	52	34	81	5	
BP4M-10T	10	15.5	25	20	52	34	79	5	
BP4M-11T	11	17	25	20	52	34	86	5	
BP4M-12T	12	18	25	20	52	34	89	5	
BP4M-13T	13	19	25	20	52	34	90	5	
BP4M-14T	14	20.5	25	20	52	34	96	5	
BP4M-15T	15	22	25	20	52	34	102	5	
BP4M-16T	16	23	25	20	52	34	105	5	
BP4M-17T	17	25	25	26.5	52	34	116	5	
BP4M-18T	18	26	25	24	52	34	120	5	
BP4M-19T	19	27.5	25	26.5	52	34	127	5	
BP4M-20T	20	28	25	24	52	34	119	5	
BP4M-21T	21	29	25	26	52	34	124	5	
BP4M-22T	22	31	29	25	52	34	166	5	
BP4M-23T	23	32.5	29	25	52	34	173	5	
BP4M-24T	24	34	29	25	52	34	179	5	
BP4M-25T	25	35	29	25	52	34	184	5	
BP4M-26T	26	36.5	29	25	75	57	285	5	
BP4M-27T	27	38	29	25	75	57	307	5	
BP4M-28T	28	40	29	25	75	57	336	5	
BP4M-29T	29	41	29	25	75	57	346	5	
BP4M-30T	30	42	29	25	75	57	349	5	
BP4M-31T	31	43	29	25	75	57	359	5	
BP4M-32T	32	44	29	25	75	57	362	5	
BP4M-33T	33	45	29	28	75	57	377	5	
BP4M-34T	34	46	29	28	75	57	396	5	
BP4M-35T	35	47	29	28	75	57	414	5	
BP4M-36T	36	48	29	28	75	57	433	5	

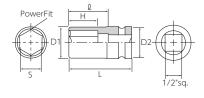
^{*} Pins and rings are sold separately.

Applicable pins and rings PR-1822 PR-2026



PR-1822 is for BP4M-08T to 21T and PR-2026 is for BP4M-22T to 36T.

P.283.



1/2"sq. IMPACT SOCKET (DEEP) WITH PIN & RING











No.	S	D1	D2	Н	L	Q	Weight(g)	6	
BP4L-10TP	10	15.5	25	20	75	57	101	5	
BP4L-12TP	12	18	25	20	75	57	124	5	
BP4L-13TP	13	19	25	20	75	57	124	5	
BP4L-14TP	14	20.5	25	20	80	62	144	5	
BP4L-17TP	17	25	24.5	24	80	62	187	5	
BP4L-19TP	19	27.5	25	24	80	62	195	5	
BP4L-21TP	21	29	25	24	80	62	193	5	
BP4L-22TP	22	31	29	25	80	62	250	5	
BP4L-23TP	23	32.5	29	25	80	62	264	5	
BP4L-24TP	24	34	29	25	80	62	280	5	
BP4L-26TP	26	36.5	29	25	100	82	391	5	
BP4L-27TP	27	38	29	25	100	82	424	5	
BP4L-30TP	30	42	29	25	100	82	487	5	
BP4L-32TP	32	44	29	25	100	82	508	5	

^{*} Includes pin and ring

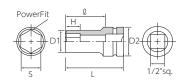


 $\boldsymbol{\cdot}$ Black rings should be paired with black pins and gray rings with silver pins.



PR-1822 is for BP4L-10TP to 21TP and PR-2026 is for BP4L-22TP to 32TP.

• P.283.



 $[\]cdot$ Use pins and rings to prevent dropout.

1/2"sq. IMPACT SOCKET (DEEP)











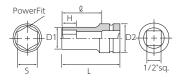
No.	S	D1	D2	Н	L	Q	Weight(g)		
BP4L-10T	10	15.5	25	20	75	57	101	5	
BP4L-12T	12	18	25	20	75	57	124	5	
BP4L-13T	13	19	25	20	75	57	124	5	
BP4L-14T	14	20.5	25	20	80	62	144	5	
BP4L-17T	17	25	24.5	24	80	62	187	5	
BP4L-19T	19	27.5	25	24	80	62	195	5	
BP4L-21T	21	29	25	24	80	62	193	5	
BP4L-22T	22	31	29	25	80	62	250	5	
BP4L-23T	23	32.5	29	25	80	62	264	5	
BP4L-24T	24	34	29	25	80	62	280	5	
BP4L-26T	26	36.5	29	25	100	82	391	5	
BP4L-27T	27	38	29	25	100	82	424	5	
BP4L-30T	30	42	29	25	100	82	487	5	
BP4L-32T	32	44	29	25	100	82	508	5	

^{*} Pins and rings are sold separately.



PR-1822 is for BP4L-10T to 21T and PR-2026 is for BP4L-22T to 32T.

P.283.



1/2"sq. IMPACT SOCKET (LONG) WITH PIN & RING





	No.	S	D1	D2	d	Н	Q	L	Weight(g)	\Box	
()	BP4LL-12TP	12	18	25	10	20	132	150	230	5	
0	BP4LL-13TP	13	19	25	11.5	20	132	150	240	5	
	BP4LL-14TP	14	20.5	25	12	20	132	150	260	5	
	BP4LL-17TP	17	25	25	14	24	132	150	380	5	
	BP4LL-19TP	19	27.5	25	17	24	132	150	410	5	
	BP4LL-21TP	21	29	25	19	24	132	150	420	5	
()	BP4LL-22TP	22	31	29	20	25	132	150	500	5	

^{*} Includes pin and ring.

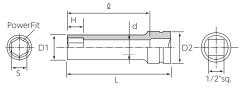


· Black rings should be paired with black pins and gray rings with silver pins.



PR-1822 is for BP4LL-12TP to 21TP and PR-2026 is for BP4LL-22TP.

P.283.



1/2"sq. IMPACT EXTENSION BAR WITH PIN & RING







No.	D1	D2	L	Weight(g)	6	
BEP4-075	18	29	75	180	1	
BEP4-100	18	29	100	230	1	
BEP4-150	18	29	150	300	1	

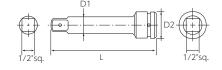
^{*} Includes pin and ring.



· Do not use more than two wires connected together.

Black rings should be paired with black pins and gray rings with silver pins.

















[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

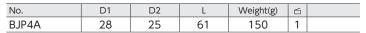
[•] Products marked with ② should be ordered after checking stock.

1/2"sq. IMPACT UNIVERSAL JOINT WITH PIN & RING









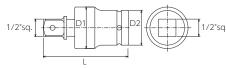
^{*} Includes pin and ring.

· The joint part is vulnerable to impact and pry, so be careful not to exert excessive

 \cdot Black rings should be paired with black pins and gray rings with silver pins. CAUTION







1/2"sq. IMPACT ADAPTER WITH PIN & RING



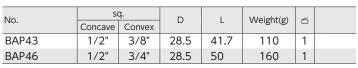












^{*} Includes pin and ring.

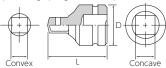


· The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.

· Black rings should be paired with black pins and gray rings with silver pins. CAUTION



P.283.



1/2"sq. IMPACT UNIVERSAL JOINT SOCKET WITH PIN & RING









ا د	D1	D2	Н	L	Weight(g)		
17	27	29	18	194	470	5	
19	28.5	29	18	194	470	5	
24	36.5	29	18	194	510	5	
	19	19 28.5	19 28.5 29	19 28.5 29 18	19 28.5 29 18 194	19 28.5 29 18 194 470	19 28.5 29 18 194 470 5

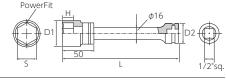
- * Includes pin and ring.
- Repair parts are available. Please contact our distributors for details.

CAUTION

The joint part is vulnerable to impact and pry, so be careful not to exert excessive

· Black rings should be paired with black pins and gray rings with silver pins.





1/2"sq. IMPACT SOCKET SET (SHORT) [7pcs.]











No.	Weight(g)	6	
TBP4S07SP	500	1	
Set contents			
Short Socket for Impact Wrench	9,22,24		
Trav			

- ·Combined with a flat nose impact wrench (JAP418), it is effective for working in a smaller space.
- Sockets are not sold separately.
- Pins and rings are sold separately.



PR-1822 is for 10-19 PR-2026 is for 22,24 P.283.



3/4"sq. IMPACT SOCKET SET [14pcs.]















No. Weight(kg) TBP614TP 9.9

Set contents								
3/4"sq. impact socket	BP6-21P, 22P, 24P, 26P, 27P, 30P, 32P, 35P, 36P, 41P, 46P							
3/4"sq. impact extension bar	BEP6-150							
1/2"sq. impact adapter (1/2"sq. → 3/4"sq.)	BAP46							
Adapter for 1"sq. impact wrench (1"sq. → 3/4"sq.)	BAP86							
Case	TBP614TP-M (W545×D160×H85)							

- · Ideal for medium to large vehicle maintenance, machinery equipment, construction machinery, agricultural machinery, and other work requiring large torque.
- · Drive and power tools with 1/2"sq., 3/4"sq. and 1"sq. drive size can be used.
- · Carefully select incoming pairs in accordance with bolt standards and work standards.
- The case is shown on P.198.

[·] Use pins and rings to prevent dropout.

3/4"sq. IMPACT SOCKET WITH PIN & RING











Attache	d pin/ring	
PR-2833	PR-4045	
	for BP6-17P t for BP6-35P t	
P.283		

PowerFit + D1	L H D2	2
		 3/4"sq.

No.	S	D1	D2	Н	L	Q	Weight(g)		
BP6-17P	17	28.5	38	12	51	26	251	5	
BP6-19P	19	31	38	13	51	26	259	5	
BP6-21P	21	34	38	14	51	26	270	5	
BP6-22P	22	35	38	15	51	26	274	5	
BP6-23P	23	36.5	38	16	51	26	277	5	
BP6-24P	24	38	38	16	51.5	26.5	284	5	
BP6-26P	26	40	38	18	53	28	299	5	
BP6-27P	27	42	38	18.5	53.5	28.5	322	5	
BP6-28P	28	43	38	19	54	29	328	5	
BP6-29P	29	44	38	19	54	29	336	5	
BP6-30P	30	46	38	20	55	30	361	5	
BP6-32P	32	48	38	21	56	31	369	5	
BP6-35P	35	52	50	24	60.5	35.5	633	5	
BP6-36P	36	54	50	24	61	36	672	5	
BP6-38P	38	56	50	25	62	37	704	5	
BP6-41P	41	60	50	26	63	38	764	2	
BP6-46P	46	67	50	28	65	40	875	2	

^{*} Includes pin and ring.



Black rings should be paired with black pins and gray rings with silver pins.

3/4"sq. IMPACT SOCKET (DEEP) WITH PIN & RING



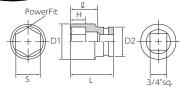












No.	S	D1	D2	Н	L	Q	\\\\aight(g)	_	
	-				_		Weight(g)		
BP6L-19TP	19	29	38	24	100	75	410	5	
BP6L-21TP	21	32	38	24	100	75	455	5	
BP6L-22TP	22	33	38	25	100	75	474	5	
BP6L-23TP	23	35	38	25	100	75	502	5	
BP6L-24TP	24	36	38	25	100	75	479	5	
BP6L-26TP	26	38	38	25	100	75	496	5	
BP6L-27TP	27	40	38	25	100	75	546	5	
BP6L-29TP	29	43	38	25	100	75	609	5	
BP6L-30TP	30	44	38	25	100	75	617	5	
BP6L-32TP	32	46	38	28	100	75	638	5	
BP6L-33TP	33	48	38	28	100	75	693	5	
BP6L-34TP	34	49	38	28	100	75	714	5	
BP6L-35TP	35	50	50	28	100	75	901	5	
BP6L-36TP	36	52	50	28	100	75	964	5	
BP6L-38TP	38	55	50	30	100	75	1,056	5	
BP6L-41TP	41	58	50	32	100	75	1,092	2	
BP6L-46TP	46	65	50	38	100	75	1,399	2	

* Includes pin and ring.



Black rings should be paired with black pins and gray rings with silver pins.

3/4"sq. IMPACT EXTENSION BAR WITH PIN & RING







No.	D1	D2	L	Weight(g)	6	
BEP6-100	25	38	100	490	1	
BEP6-150	25	38	150	680	1	
BEP6-250	25	38	250	1,070	1	

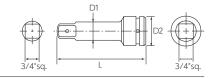
* Includes pin and ring.



Do not use more than two wires connected together.

· Black rings should be paired with black pins and gray rings with silver pins.





3/4"sq. IMPACT UNIVERSAL JOINT WITH PIN & RING







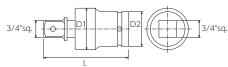
No.	D1	D2	L	Weight(g)	6	
BJP6A	45.5	38	93	550	1	

^{*} Includes pin and ring.



- $\boldsymbol{\cdot}$ The joint part is vulnerable to impact and pry, so be careful not to exert excessive
- · Black rings should be paired with black pins and gray rings with silver pins. CAUTION





[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.













[•] Products marked with ② should be ordered after checking stock.

IMPACT SOCKETS AND ACCESSORIES

3/4"sq. IMPACT ADAPTER WITH PIN & RING





BAP64-150

BAP68

No.	sq. Concave Convex		<u> </u>		D	L	Weight(g)	6	
BAP64	3/4"	1/2"	38	60	270	1			
BAP64-150	3/4"	1/2"	38	150	500	1			
BAP68	3/4"	1"	38	68	480	1			

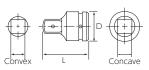
- * The shaft diameter of BAP64-150 (long) is ϕ 20.
- * Includes pin and ring.



- $\boldsymbol{\cdot}$ The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Black rings should be paired with black pins and gray rings with silver pins.







IMPACT UNIVERSAL JOINT ADAPTER WITH PIN & RING





BAP64





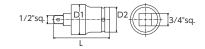
No.	D1	D2	L	Weight(g)	白	
BJAP64	45.5	38	85	500	1	

- $\mbox{Usage} \cdot \mbox{Universal joint adapter to enable use of 1/2"sq. sockets for impact wrenches with } \\$ 3/4"sq. impact wrenches.
 - $\boldsymbol{\cdot}$ Rattling is less than using a universal joint in combination with an adapter.
 - Less weight, and improved workability.
- * Includes pin and ring.



- $\boldsymbol{\cdot}$ The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- · Black rings should be paired with black pins and gray rings with silver pins.





1"sq. IMPACT SOCKET WITH PIN & RING







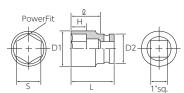






PR-4045 is for BP8-21P to 35P and PR-4348 is for BP8-36P to 70P.

P.283.



	_								
No.	S	D1	D2	Н	L	Q	Weight(g)		
BP8-21P	21	36	50	16	58	28	483	2	
BP8-22P	22	38	50	16	58	28	490	2	
BP8-23P	23	38.5	50	16	58	28	496	2	
BP8-24P	24	40	50	16.5	58	28	502	2	
BP8-26P	26	42.5	50	18	60	30	525	2	
BP8-27P	27	44	50	18.5	60	30	538	2	
BP8-28P	28	45	50	19	60	30	535	2	
BP8-29P	29	46.5	50	19	60	30	549	2	
BP8-30P	30	48	49.5	22	70	40	633	2	
BP8-32P	32	50	49.5	25	70	40	641	2	
BP8-33P	33	52	50	25	70	40	686	2	
BP8-35P	35	54	50	25	70	40	701	2	
BP8-36P	36	56	53	25	70	40	790	2	
BP8-38P	38	58	53	30	80	50	939	2	
BP8-41P	41	63	53	35	80	50	1,045	2	
BP8-46P	46	70	53	41.2	80	50	1,130	1	
BP8-50P	50	76	53	37.4	80	50	1,273	1	
BP8-54P	54	81	53	35.2	82	52	1,434	1	
BP8-55P	55	82.5	53	35.2	82	52	1,481	1	
BP8-58P	58	86	53	35.2	82	52	1,569	1	
BP8-60P	60	88	53	35.2	82	52	1,604	1	
BP8-65P	65	94	53	37.4	87	57	1,926	1	
BP8-70P	70	101	53	35.4	87	57	2,235	1	
* Includes nin and ring									



Black rings should be paired with black pins and gray rings with silver pins.

[·] Use pins and rings to prevent dropout.

1"sq. IMPACT SOCKET (DEEP) WITH PIN & RING





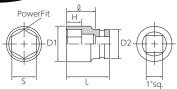








PR-4045 is for BP8L-22TP to 35TP and PR-4348 is for BP8L-36TP to 70TP. P.283.



No.	S	D1	D2	Н	L	Q	Weight(g)	Ó	
BP8L-22TP	22	35	50	25	100	70	696	2	
BP8L-24TP	24	38	50	25	100	70	723	2	
BP8L-27TP	27	42	50	25	100	70	794	2	
BP8L-29TP	29	44.5	49.5	25	100	70	822	2	
BP8L-30TP	30	46	49.5	25	100	70	836	2	
BP8L-32TP	32	48	49.5	25	100	70	858	2	
BP8L-33TP	33	48	49.5	25	100	70	832	2	
BP8L-35TP	35	52	50	25	100	70	924	2	
BP8L-36TP	36	54	53	30	100	70	1,034	2	
BP8L-38TP	38	56	53.5	30	100	70	1,080	2	
BP8L-41TP	41	60	53	35	100	70	1,170	2	
BP8L-46TP	46	68	53	35	100	70	1,534	1	
BP8L-50TP	50	74	53	37.2	100	70	1,636	1	
BP8L-55TP	55	79	53	51.4	110	80	1,866	1	
BP8L-60TP	60	85.5	53	51.4	110	80	2,135	1	
BP8L-65TP	65	92	53	65.4	120	90	2,630	1	
BP8L-70TP	70	99	53	65.4	120	90	3,073	1	

^{*} Includes pin and ring.



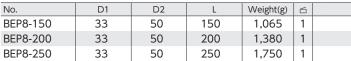
Black rings should be paired with black pins and gray rings with silver pins.

1"sq. IMPACT EXTENSION BAR WITH PIN & RING









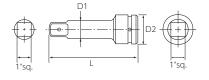
^{*} Includes pin and ring.



Do not use more than two wires connected together.

· Black rings should be paired with black pins and gray rings with silver pins.





1"sq. IMPACT ADAPTER WITH PIN & RING







No.	S	q.	_		\\(\lambda\)		
NO.	Concave	Convex	D	L	Weight(g)		
BAP86	1"	3/4"	50	75	510	1	
BAP86-150	1"	3/4"	50	150	900	1	

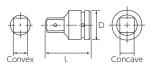
- * The shaft diameter of BAP86-150 (long) is ϕ 28.
- * Includes pin and ring.



- · The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.

 Black rings should be paired with black pins and gray rings with silver pins.





3/8"sq. IMPACT T-TYPE **TORX WRENCH SET [5pcs.]**









No.	Weight(g)	台	
TBTP305T	395	1	
Set contents			

T-type Impact Torx Wrench

* Includes pin and ring.

Attached pin/ring PR-1519

P.283.









BTP3-T20P, T25P, T30P, T40P, T45P





[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

3/8"sq. IMPACT T-TYPE TORX WRENCH WITH PIN & RING





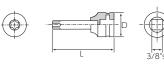




No.	Size	D	L	Weight(g)	白	
BTP3-T20P	T20	22	75	77	1	
BTP3-T25P	T25	22	75	78	1	
BTP3-T30P	T30	22	75	79	1	
BTP3-T40P	T40	22	75	80	1	
BTP3-T45P	T45	22	75	81	1	

* Includes pin and ring.





3/8"sq. IMPACT HEX. WRENCH SET [6pcs.]











TRTP306P 432 1	No.	Weight(g)	6	
1511 5001	TRTP306P	432	1	

	Set contents	
0	Hexagonal wrench for 3/8"sq. impact	BTP3-04P, 05P, 06P, 08P, 10P, 12P
	Socket holder for 6 sockets	EHB306

^{*} The socket holder EHB306 is for 6 sockets of EHB305 (P.241) Not sold individually.

^{*} Includes pin and ring.



P.283.

3/8"sq. IMPACT HEX. WRENCH WITH PIN&RING







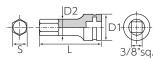




No.	S	L	D1	D2	Weight(g)	6	
BTP3-04AP	4	45	22	5.8	57	5	
BTP3-05AP	5	45	22	6.9	59	5	
BTP3-06AP	6	45	22	8.1	61	5	
BTP3-07AP	7	45	22	9.5	63	5	
BTP3-08AP	8	45	22	10.5	66	5	
BTP3-10AP	10	52	22	13.0	80	5	
BTP3-12AP	12	52	22	15.0	90	5	

^{*} Includes pin and ring.





3/8"sq. IMPACT HEX. WRENCH WITH PIN & RING











No.	S	D	L	Weight(g)	6
	4	22	45	51	10
Ø BTP3-05P	5	22	45	53	10
	6	22	45	55	10
● BTP3-08P	8	22	45	60	10
	10	22	52	74	10
	12	22	52	84	10

^{*} Includes pin and ring.









[·] Use pins and rings to prevent dropout.

3/8"sq. IMPACT HEX. WRENCH (SEMI LONG) WITH PIN & RING









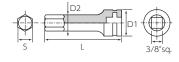


No.	S	L	D1	D2	Weight(g)	6	
BTP3M-04P	4	70	22	8.1	71	5	
BTP3M-05P	5	70	22	8.1	72	5	
BTP3M-06P	6	70	22	8.1	72	5	
BTP3M-07P	7	70	22	11.7	82	5	
BTP3M-08P	8	75	22	11.7	96	5	
BTP3M-10P	10	75	22	13.0	107	5	
BTP3M-12P	12	75	22	16.0	132	5	

* Includes pin and ring.

PR-1519

• P.283.



3/8"sq. IMPACT HEX. WRENCH (LONG) WITH PIN & RING







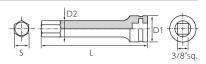




No.	S	L	D1	D2	Weight(g)	6	
BTP3L-04P	4	110	22	8.1	87	5	
BTP3L-05P	5	110	22	8.1	88	5	
BTP3L-06P	6	110	22	8.1	88	5	
BTP3L-07P	7	110	22	11.7	106	5	
BTP3L-08P	8	110	22	11.7	125	5	
BTP3L-10P	10	110	22	13.0	143	5	
BTP3L-12P	12	110	22	16.0	187	5	

^{*} Includes pin and ring.





1/2"sq. IMPACT HEX. WRENCH SET [6pcs.]











	No.	Weight(g)	白	
()	TBTP406P	768	1	
	Set contents			

Set contents	
Hexagonal wrench for impact wrench	BTP4-06P, 08P, 10P, 12P, 14P, 17P
Socket holder for 10 sockets	EHB410

^{*} Includes pin and ring.

Attached pin/ring



1/2"sq. IMPACT HEX. WRENCH WITH PIN & RING











No.	S	L	D1	D2	Weight(g)		
BTP4-05AP	5	60	25	6.9	86	5	
BTP4-06AP	6	60	25	8.1	91	5	
BTP4-07AP	7	60	25	9.3	96	5	
BTP4-08AP	8	60	25	10.5	101	5	
BTP4-10AP	10	60	25	13.0	111	5	
BTP4-12AP	12	60	25	15.0	120	5	
BTP4-14AP	14	60	25	17.5	137	5	
BTP4-17AP	17	60	25	21.0	158	5	
BTP4-19AP	19	60	29	25.0	210	5	
BTP4-22AP	22	60	29	27.0	237	5	

^{*} Includes pin and ring.



PR-1822 is for BTP4-05AP to 17AP, PR-2026 is for BTP4-19AP to 22AP. P.283.













D2 D1 D1 1/2°sc

[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

1/2"sq. IMPACT HEX. WRENCH WITH PIN & RING







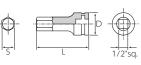




	No.	S	D	L	Weight(g)	6	
O -	BTP4-06P	6	25	60	78	10	
0	BTP4-08P	8	25	60	87	10	
0	BTP4-10P	10	25	60	97	10	
0	BTP4-12P	12	25	60	109	10	
0	BTP4-14P	14	25	60	124	10	
0	BTP4-17P	17	25	60	149	10	

^{*} Includes pin and ring.





1/2"sq. IMPACT HEX. WRENCH (SEMI LONG) WITH PIN & RING









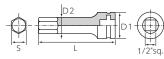


No.	S	L	D1	D2	Weight(g)	6	
BTP4M-05P	5	100	25	6.9	106	5	
BTP4M-06P	6	100	25	8.1	107	5	
BTP4M-07P	7	100	25	9.3	118	5	
BTP4M-08P	8	100	25	10.5	131	5	
BTP4M-10P	10	100	25	13	152	5	
BTP4M-12P	12	100	25	15	187	5	
BTP4M-14P	14	100	25	17.5	216	5	
BTP4M-17P	17	100	25	20	266	5	
BTP4M-19P	19	100	29	24	371	5	
BTP4M-22P	22	100	29	27	416	5	

^{*} Includes pin and ring.

Attached pin/ring PR-1822





PR-1822 is for BTP4M-05P to 17P and PR-2026 is for BTP4M-19P to 22P.

O P.283.

1/2"sq. IMPACT HEX. WRENCH (LONG) WITH PIN & RING







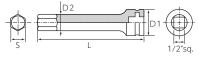




No.	S	L	D1	D2	Weight(g)	6	
BTP4L-05P	5	155	25	6.9	126	5	
BTP4L-06P	6	155	25	8.1	128	5	
BTP4L-07P	7	155	25	9.3	148	5	
BTP4L-08P	8	155	25	10.5	172	5	
BTP4L-10P	10	155	25	13	209	5	
BTP4L-12P	12	155	25	15	273	5	
BTP4L-14P	14	155	25	17.5	326	5	
BTP4L-17P	17	155	25	20	415	5	
BTP4L-19P	19	155	29	24	579	5	
BTP4L-22P	22	155	29	27	661	5	

* Includes pin and ring.

Attached pin/ring R-1822 PR-2026 PR-1822



PR-1822 is for BTP4L-05P to 17P and PR-2026 is for BTP4L-19P to 22P.

P.283.

3/4"sq. IMPACT HEX. WRENCH WITH PIN & RING









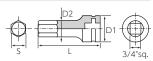


No.	S	L	D1	D2	Weight(g)		
BTP6-14P	14	75	38	17.5	270	5	
BTP6-17P	17	75	38	21.0	299	5	
BTP6-19P	19	75	38	23.0	312	5	
BTP6-22P	22	85	38	26.5	392	5	
BTP6-24P	24	85	38	29.0	424	5	
BTP6-27P	27	85	38	32.5	478	5	
BTP6-32P	32	85	38	36.5	579	5	

^{*} Includes pin and ring.

PR-2833

O P.283.



[·] Use pins and rings to prevent dropout.

PIN & RING SET





PR-2833







PR-4045



No.	Size	Color	Pin/ring set product number	
PR-1519	Pin: ϕ 2.5×Total length15	Pin: Silver	Pin:5	
	Ring: Outer diameter26	Ring: Gray	Ring: 5	
PR-1822	Pin: ϕ 2.5×Total length18	Pin: Black	Pin:5	
	Ring: Outer diameter29	Ring: Black	Ring: 5	
PR-2026	Pin: φ2.5×Total length20	Pin: Silver	Pin:5	
	Ring: Outer diameter33	Ring: Gray	Ring: 5	
PR-2833	Pin: φ4×Total length28	Pin: Black	Pin:5	
	Ring: Outer diameter43	Ring: Black	Ring: 5	
PR-4045	Pin: φ4×Total length40	Pin: Silver	Pin:5	
	Ring: Outer diameter54	Ring: Gray	Ring: 5	
PR-4348	Pin: φ4×Total length43	Pin: Black	Pin:5	
	Ring: Outer diameter57	Ring: Black	Ring: 5	

List of applicable pin and ring sets for impact sockets (Pin and ring sets include 5 each of pins and rings.)



Applies to impact sockets employing the AMBAC system with this mark. (For details on the AMBAC system, please refer to 2 P.269)

Pin and ri	ng set			Appli	icable products			
No.		Socket (Semi-deep)	Socket (Deep)	Long socket	Extension bar	Adapter	Hex. wrench	T Type Torx Wrench
PR-1519					BEP3-075~100		BTP3-04P~12P BTP3-04AP~12AP BTP3M-04P~12P BTP3L-04P~12P	BTP3-T20P~T45P
PR-1822		BP3M-19TP~22TP BP3M-19T~22T	BP3L-19TP~22TP BP3L-19T~22T	BP3LL-19TP				

Pin and ri	ng set				Applic	able produc	ts				
No.		Socket (Standard)	Socket (Semi-deep)	Socket (Deep)	Socket (Dedicated)	Long socket	Universal Joint Socket	Extension bar	Universal joint	Adapter	Hex. wrench
PR-1822				BP4L-10TP~21TP BP4L-10T~21T		BP4LL-12TP~21TP			BJP4A		BTP4-06P~17P BTP4-05AP~17AP BTP4M-05P~17P BTP4L-05P~17P
PR-2026				BP4L-22TP~32TP BP4L-22T~32T	AS308-24W~36W,E24 ABP4-17ALP~21ALP	BP4LL-22TP	BP4L-17JUP~24JUP	BEP4-075~150	BJP4	BAP43	BTP4-19AP~22AP BTP4M-19P~22P BTP4L-19P~22P

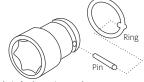
Pin and ri	ing set				Applicable produc	ots			
No.			Socket (Standard)	Socket (Deep)	Socket (Dedicated)	Extension bar	Universal joint	Adapter	Hex. wrench
PR-2833		3/4" sq.	BP6-17P~32P	BP6L-19TP~34TP	ABP6ZL-4121TP ABP6-14WP~22WP ABP6-17SQP~21SQP	BEP6-100~250	BJP6 BJP6A	BAP64, 64-150, 68 BJAP64	BTP6-14P-32P
PR-4045			BP6-35P~46P	BP6L-35TP~46TP	ABP6-3217TP~4121TP ABP6-4120HTP				

Pin and ri	ng set			Appli	cable products		
No.			Socket (Standard)	Socket (Deep)	Socket (Dedicated)	Extension bar	Adapter
PR-4045		1" sq.	BP8-21P~35P		ABP8-3517TP~4121TP ABP8-4120HTP ABP8-32TP~41TP ABP8ZL-4121TP ABP8-17SQP~21SQP	BEP8-150~250	BAP86, 86-150
PR-4348			BP8-36P~70P	BP8L-36TP~70TP			

· Black rings should be combined with black pins and gray rings should be combined with silver pins.

· Pins and rings are consumables. Replace them when cracks, deformation, wear, deterioration, or

· Use in other applications is dangerous. Never use it for other than the application.



Sockets for impact wrenches

How to attach pins and rings

Set the ring so that the protrusion on the inside of the ring enters the pin hole of the socket.

Protrusions are also provided on the outside of the ring so that the position of the hole can be seen even when the ring is set.

Wheel nut sockets for impact wrenches are listed under automotive-specific tools.



other abnormalities are observed.

Aluminium socket for polished nut

• P.548



Wheel nut socket (for Standard-sized vehicles)

• P.549-550



Impact socket for wheel nut (for large-sized vehicles)

• P.552-553



Impact combination socket for wheel nut (for large-sized vehicles)

• P.551-554



Impact inner socket (for large-sized vehicles) • P.552 • 554













[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

CONVENTIONAL TOOLS

HEXAGONAL WRENCHES



- $\boldsymbol{\cdot}$ The hexagon bolts have a smaller hexagonal hole than the bolt diameter, and be careful not to apply too much force.
- · Use a wrench that matches the size of the bolt.
- \cdot Insert a wrench completely into
- · Apply force in the direction of bolt rotation. If force is applied in the direction that the bolt shaft is
- tilted, the tip of the bolt may be damaged.
- · Do not use a wrench with a damage or cracks. · Do not hit the wrench with a hammer.
- $\boldsymbol{\cdot}$ Do not pry with the tip.
- $\boldsymbol{\cdot}$ Be careful not to apply the excessive force on the small size wrenches.
- · Do not give a strong shock or drop the wrench.
- · Do not use with additional pipes.
- $\boldsymbol{\cdot}$ Do not apply excessive force to the ball point, as it has a low torque limit.
- $\boldsymbol{\cdot}$ In carrying the tool set, be sure to hang the clamp for the
- · Insert bit sockets insert completely into the bolt.
- $\boldsymbol{\cdot}$ Use impact wrench sockets for power tools such as impact wrenches.



Main lineup of Hex. wrenches

Hex. wrenches are tools for tightening and loosening Hex. socket bolts. Various types are available, including socket type, L-shaped handle type, T-shaped handle type, and screwdriver type. Two tip shapes are available: a standard hexagonal shape and a ball point shape that allows access to the bolt from an angle.

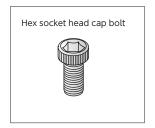


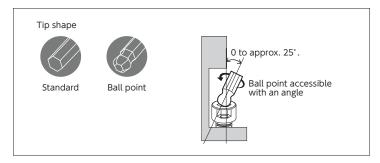












Hex. bit socket size list (mm)

		mm	3	4	5	6	7	8	9	10	12	14	17
	Hex. bit socket		•	•	•	•							
1/4" sq.	Hex. bit socket (long)		•	•	•	•							
	Ball point Hex. bit socket (long)		•	•	•	•							
	Hex. bit socket (stubby)		•	•	•	•	•	•	•	•	•		
	Hex. bit socket (short)		•	•	•	•	•	•	•	•	•		
3/8" sq.	Hex. bit socket		•	•	•	•	•	•	•	•	•		
	Hex. bit socket (long)		•	•	•	•	•	•	•	•	•		
	Ball point Hex. bit socket (long)		•	•	•	•	•	•					
	Hex. bit socket				•	•	•	•	•	•	•	•	•
1/2" sq.	Hex. bit socket (long)				•	•	•	•	•	•	•	•	•
	Ball point Hex. bit socket (long)				•	•	•	•					

Cross bit socket list

		No.1	No.2	No.3
1/4" sq.	Cross bit socket	•	•	
3/8" sq.	Cross bit socket	•	•	•
1/2" sq.	Cross bit socket		•	•

Flat bit socket list

		mm	6 (tip width)
1/4" sq.	Flat Bit Socket		•
3/8" sq.	Flat Bit Socket		•
1/2" sq.	Flat Bit Socket		•

[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.













[•] Products marked with ② should be ordered after checking stock.



Main lineup of Hex. wrenches

L-Shaped Hex. key wrench size list (mm)

	mm	1.5	2	2.5	3	4	5	6	7	8	9	10	11	12	13	14
L-shaped standard Hex. key wrench		•	•	•	•	•	•	•		•		•		•		•
L-shaped ball point Hex. key wrench		•	•	•	•	•	•	•		•		•				
L-shaped ball point Hex. key wrench		•	•	•	•	•	•	•		•		•				
L-shaped Hex. key wrench (long)		•	•	•	•	•	•	•		•		•		•		•
L-shaped ball point Hex. key wrench		•	•	•	•	•	•	•		•		•				
L-shaped ball point Hex. key wrench (short)		•	•	•	•	•	•	•		•		•				
L-shaped ball point Hex. Wrench (round shaft)		•	•	•	•	•	•	•		•		•				

T type Hex. key wrench size list (mm)

, ,												
	mm	1.5	2	2.5	3	4	5	6	7	8	9	10
T-shaped Hex. key wrench	 {}			•	•	•	•	•		•		•
T-shaped Hex. key wrench	-					•	•	•		•		

Hex. driver size list (mm)

	mm	1.5	2	2.5	3	4	5	6	7	8
Plastic grip Hex. driver		•	•	•	•	•	•	•		•
Plastic grip ball point Hex. driver		•	•	•	•	•	•	•		•

Hex. bit socket size list (in)



		in	1/16 5/64 3/32	//64	1/8 9	9/64	5/32	3/16	//32	1/4	5/16	3/8	//16	1/2	9/16	5/8
H	Hex. bit socket				•	•	•	•	•	•						
1/4" sq.	Hex. bit socket (long)				•	•	•	•	•	•						
1	Ball point Hex. bit socket (long)			(•	•	•	•	•	•						
I	Hex. bit socket (short)			(•	•	•	•	•	•	•	•	•			
3/8"	Hex. bit socket			(•	•	•	•	•	•	•	•	•			
sq.	Hex. bit socket (long)			(•	•	•	•	•	•	•	•	•			
[Ball point Hex. bit socket (long)				•	•	•	•	•	•	•					
	Hex. bit socket							•	•	•	•	•	•	•	•	•
1/2" sq.	Hex. bit socket (long)							•	•	•	•	•	•	•	•	•
[Ball point Hex. bit socket (long)							•	•	•	•					

L-shaped Hex. key wrench size list (in)



, , , , , , , , , , , , , , , , , , , ,																	
	in	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16 5	/8
L-shaped ball point Hex. key wrench		•	•	•	•	•	•	•	•	•	•	•	•				
L-shaped ball point Hex. key wrench (long)		•	•	•	•	•	•	•	•	•	•	•	•				

Hex. driver size list (in)



	in	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8
Plastic grip Hex. driver		•	•	•		•	•	•	•	•	•	•					
Plastic grip ball point Hex. driver		•	•	•		•	•	•	•	•	•	•					

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/4"sq. SET T-TYPE TORX BIT SOCKET, E-TYPE TORX WRENCH, & HEX. BIT SOCKET [26pcs.]

















No.		Weight(kg)	6	
TBT226TH		1.6	1	
Set contents				
T-type Torx Bit Socket	BT2-T8	, T10, T15, T	20, T	25, T27, T30
E-type Torx Wrench	B2-E4,	E5, E6, E7,	E8,	E10
Hex. bit socket	BT2-03	3, 04, 05, 06	6	
Cross and Flat bit sockets	BT2-1F	P, 2P, 6M		
Ratchet handle	BR2E			
Extension bar	BE2-07	75, 150		
Quick spinner	BE2-Q			
High Grade L-Shaped Standard Hex. key Wrench	HLD10	0-2, 2.5		
Case	EKB-1	(W275×D1	50×	(H50)

- \cdot The compact 1/4"sq. body further improves work efficiency in tight spaces.
- · A full complement of equipment for a wide range of tasks.
- · Special resin molded trays allow for batch management and convenient organization.

1/4"sq. T-TYPE·E-TYPE TORX·HEX. BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [26pcs.]

















00000

No.		Weight(kg)	白	
TBT226HTH		1.7	1	
Set contents				
T-type Tamper Resistant Torx Bit Socket		3H, T10H, T 25H, T27H,		, - ,
E-type Torx Wrench	B2-E4,	E5, E6, E7,	E8,	E10
Hex. bit socket	BT2-0	3, 04, 05, 0	6	
Cross and Flat bit sockets	BT2-11	P, 2P, 6M		
Flex Ratchet Handle	BR2F			
Pivoting Extension Bar	BE2-07	75JW, 150J	W	
Quick spinner	BE2-Q			
High Grade L-Shaped Standard Hex. key Wrench	HLD10	0-2, 2.5		
Case	EKB-1	(W275×D1	50×	(H50)

- The compact 1/4"sq. body further improves work efficiency in tight spaces.
- $\boldsymbol{\cdot}$ A full complement of equipment for a wide range of tasks.
- · Special resin molded trays allow for batch management and convenient organization.

1/4"sq. CROSS BIT SOCKET



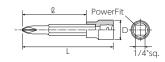








No.	Count	D	L	Q	Weight(g)	6	
BT2-1P	No.1	16	54.5	32	36	10	
BT2-2P	No.2	16	59.5	37	38	10	



1/4"sq. FLAT BIT SOCKET





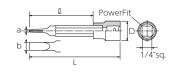






No.	а	b	D	L	Q	Weight(g)	6	
BT2-6M	1	6	16	59.5	37	38	10	

[•] Bits can be replaced. P.307.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- \cdot Products marked with ${\color{red} {\it O}}$ should be ordered after checking stock.















HEXAGONAL WRENCHES

1/4"sq. HEX. BIT SOCKET SET [5pcs.]















No.		Weight(g)	Ó	
TBT205H			1	
Set contents				
Hex. bit socket	BT2-03, 04, 05, 06			
Cross bit socket	BT2-2P			
Socket holder for 5 sockets	EHB205			

[•] Bits can be replaced. P.307 - 308.

1/4"sq. HEX. BIT SOCKET SET [6pcs.]















No.		Weight(g)	白	
TBT206BH		280	1	
Set contents				
Hex. bit socket BT2-1/8, 9/64, 5/32, 3/16, 7/32, 1/4				
Socket holder for 10 sockets	FHB210			

[•] Bits can be replaced. P.307 - 308.

1/4"sq. HEX. BIT SOCKET







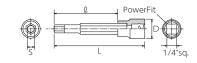






No.	S	D	L	Q	Weight(g)	6	
BT2-03	3	16	54.5	32	36	10	
BT2-04	4	16	54.5	32	36	10	
BT2-05	5	16	59.5	37	39	10	
BT2-06	6	16	59.5	37	39	10	

[•] Bits can be replaced. • P.307 - 308.



1/4"sq. HEX. BIT SOCKET









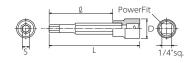






No.	S(in)	D	L	Q	Weight(g)	6	
BT2-1/8	1/8	16	54.5	32	36	10	
BT2-9/64	9/64	16	54.5	32	36	10	
BT2-5/32	5/32	16	54.5	32	36	10	
BT2-3/16	3/16	16	54.5	32	36	10	
BT2-7/32	7/32	16	59.5	37	39	10	
BT2-1/4	1/4	16	59.5	37	39	10	

[•] Bits can be replaced. P.307 - 308.



 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/4"sq. HEX. BIT SOCKET SET (LONG) [4pcs.]













No.		Weight(g)	白	
TBT2L04H		275	1	
Set contents				
Long Hex. Bit Socket	BT2-03L, 04L, 05L, 0	6L		
Socket holder for 5 sockets	EHB205			

[•] Bits can be replaced. P.307 - 308.

1/4"sq. HEX. BIT SOCKET SET (LONG) [6pcs.]















No.			Weight(g)	6	
TBT2L06BH			390	1	
Set contents					
Long Hey Rit Socket	RT2-1/8I	9/6/1 5/	321 3/161	7/32	1/41

Socket holder for 10 sockets

Bits can be replaced. P.307 - 308.

1/4"sq. HEX. BIT SOCKET (LONG)



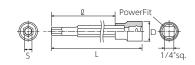






No.	S	D	L	Q	Weight(g)	6	
BT2-03L	3	16	121.5	99	54	10	
BT2-04L	4	16	121.5	99	54	10	
BT2-05L	5	16	121.5	99	55	10	
BT2-06L	6	16	121.5	99	56	10	

[•] Bits can be replaced. ♠ P.307 - 308.



1/4"sq. HEX. BIT SOCKET (LONG)









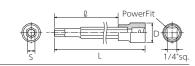






No.	S(in)	D	L	Q	Weight(g)	6	
BT2-1/8L	1/8	16	121.5	99	54	10	
BT2-9/64L	9/64	16	121.5	99	54	10	
BT2-5/32L	5/32	16	121.5	99	54	10	
BT2-3/16L	3/16	16	121.5	99	55	10	
BT2-7/32L	7/32	16	121.5	99	56	10	
BT2-1/4L	1/4	16	121.5	99	56	10	

[•] Bits can be replaced. P.307 - 308.



- Function mark is indicated under the product name. For the details, please refer to
 P.004-005.
- \cdot Products marked with ${\color{red} {\it O}}$ should be ordered after checking stock.















1/4"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [4pcs.]













No.		Weight(g)	白	
TBT2L04BPH		275	1	
Set contents				
Long ball point Hex. bit socket BT2-03BPL, 04BPL, 05BPL, 06BPL				
Caskat halder for E sackats	FLIDAGE			



Care should be taken not to force this piece as the torque limit of the

1/4"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [6pcs.]













No.		Weight(g)	6	
TBT2L06BPBH		390	1	
Set contents				
Long ball point Hex bit socket	BT2-1/8BPI	9/64BPI	5/3	32BPI

EHB210

Socket holder for 10 sockets Bits can be replaced. P.307 - 308.



Care should be taken not to force this piece as the torque limit of the ball point is low.

1/4"sq. BALL POINT HEX. BIT SOCKET (LONG)

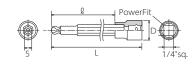


No.	S	D	L	Q	Weight(g)	6	
BT2-03BPL	3	16	121.5	99	54	10	
BT2-04BPL	4	16	121.5	99	54	10	
BT2-05BPL	5	16	121.5	99	55	10	
BT2-06BPL	6	16	121.5	99	56	10	

• Bits can be replaced. P.307 - 308.



Care should be taken not to force this piece as the torque limit of the ball point is low.



3/16BPL, 7/32BPL, 1/4BPL

1/4"sq. BALL POINT HEX. BIT SOCKET (LONG)



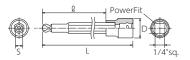


No.	S(in)	D	L	Q	Weight(g)	6	
BT2-1/8BPL	1/8	16	121.5	99	54	10	
BT2-9/64BPL	9/64	16	121.5	99	54	10	
BT2-5/32BPL	5/32	16	121.5	99	54	10	
BT2-3/16BPL	3/16	16	121.5	99	55	10	
BT2-7/32BPL	7/32	16	121.5	99	56	10	
BT2-1/4BPL	1/4	16	121.5	99	56	10	

• Bits can be replaced. P.307 - 308.



 $\boldsymbol{\cdot}$ Care should be taken not to force this piece as the torque limit of the ball point is low.



[·] Do not use hand tools with an impact wrench.

3/8"sq. HEX. BIT SOCKET WRENCH SET (SHORT) [17pcs.]













No.		Weight(kg)	白		
TBT3S17HX		1.6	1		
Set contents					
Short Hex. Bit Socket	BT3-04S, 0	5S, 06S, 07	S, 08	3S, 10S	, 12S
Cross bit socket	BT3-2P, 3P	1			
Flat Bit Socket	BT3-6M				
Compact Ratchet Handle	BRC3E				
Extension bar	BE3-030, C)50			
Quick spinner	BE3-Q				
High Grade Ball Point L-Shaped Standard Hex. key Wrench (Short type)	HLDS200-2	2, 2.5, 3			
Case	EKB-1 (W2	75×D150×	(H50))	

- · Short type hexagon set for narrow space work.
- $\boldsymbol{\cdot}$ Special resin molded trays allow for batch management and convenient organization.

3/8"sq. HEX. BIT SOCKET WRENCH SET [16pcs.]















No.		Weight(kg)	6	
TBT316HX		2.1	1	
Set contents				
Hex. bit socket	BT3-04, 05	, 06, 07, 08	3, 10	, 12
Cross bit socket	BT3-2P, 3P			
Flat Bit Socket	BT3-6M			
Ratchet handle	BR3E			
Extension bar	BE3-100			
Quick spinner	BE3-Q			
High Grade Ball Point L-Shaped Standard Hex. key Wrench	HLD200-2,	2.5, 3		
Case	EKB-1 (W2	75×D150×	(H50))

- $\boldsymbol{\cdot}$ A complete hexagon set for a wide range of work.
- $\boldsymbol{\cdot}$ Special resin molded trays allow for batch management and convenient organization.

3/8"sq. CROSS BIT SOCKET



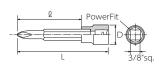








No.	Count	D	L	Q	Weight(g)	6	
BT3-1P	No.1	17	61	32	43	10	
BT3-2P	No.2	17	66	37	45	10	
BT3-3P	No.3	18.5	71	42	63	10	



3/8"sq. FLAT BIT SOCKET





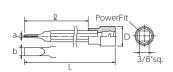






No.	а	b	D	L	Q	Weight(g)	6	
BT3-6M	1.0	6	17	66	37	45	10	

• Bits can be replaced. • P.307.















[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

3/8"sq. HEX. BIT SOCKET SET (STUBBY) [9pcs.]



No.	Weight(g)	6	
TBT3SS09H	562	1	

Set contents

Stubby Hex. Bit Socket

BT3-03SS, 04SS, 05SS, 06SS, 07SS, 08SS, 09SS,

10SS, 12SS

Socket holder for 10 sockets EHB3

3/8"sq. HEX. BIT SOCKET (STUBBY)











No.	S	D	L	Q	Weight(g)	6	
BT3-03SS	3	17	34	5	36	1	
BT3-04SS	4	17	34	5	36	1	
BT3-05SS	5	17	34	5	37	1	
BT3-06SS	6	17	35.5	6.5	37	1	
BT3-07SS	7	18.5	36	7	49	1	
BT3-08SS	8	18.5	37	8	49	1	
BT3-09SS	9	18.5	39.5	9.5	55	1	
BT3-10SS	10	18.5	39.5	9.5	56	1	
BT3-12SS	12	22	42	10	87	1	

[•] Bits can be replaced. P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET (SHORT) [9pcs.]



No.		Weight(g)	白	
TBT3S09H		620	1	
Set contents				
Short Hex. Bit Socket	BT3-03S, 04S, 05S, 0	06S, 07S, 0	8S, ()9S, 10S,
Sockat halder for 10 sockats	EHR310			

• Bits can be replaced. P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET (SHORT) [9pcs.]



No.		Weight(g)	Ó			
TBT3S09BH		580	1			
Set contents						
Short Hex. Bit Socket	32S, 3/169 16S	5, 7/	32S, 1/4S,			
Socket holder for 10 sockets	EHB310					

• Bits can be replaced. ♠ P.307 - 308.

3/8"sq. HEX. BIT SOCKET (SHORT)



parts	Reg			
			PowerFi	3/8"sq.

No.	S	D	L	Q	Weight(g)	6	
BT3-03S	3	17	48	19	40	10	
BT3-04S	4	17	48	19	40	10	
BT3-05S	5	17	50	21	41	10	
BT3-06S	6	17	50	21	42	10	
BT3-07S	7	18.5	50	21	56	10	
BT3-08S	8	18.5	50	21	56	10	
BT3-09S	9	18.5	52	22	62	10	
BT3-10S	10	18.5	52	22	62	10	
BT3-12S	12	22	54	22	99	10	

[•] Bits can be replaced. P.307 - 308.

[•] Bits can be replaced. P.307 - 308.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

3/8"sq. HEX. BIT SOCKET (SHORT)



No.	S(in)	D	L	Q	Weight(g)		
BT3-1/8S	1/8	17	48	19	40	10	
BT3-9/64S	9/64	17	48	19	40	10	
BT3-5/32S	5/32	17	48	19	40	10	
BT3-3/16S	3/16	17	48	19	40	10	
BT3-7/32S	7/32	17	50	21	42	10	
BT3-1/4S	1/4	17	50	21	42	10	
BT3-5/16S	5/16	18.5	50	21	56	10	
BT3-3/8S	3/8	18.5	52	22	62	10	
BT3-7/16S	7/16	22	54	22	99	10	

• Bits can be replaced. O P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET [6pcs.]



P WERFIT









No.		Weight(g)	6	
ТВТ306Н		405	1	
Set contents				
Hex. bit socket	BT3-04, 05, 06, 08,	10		
Cross bit socket	BT3-2P			
Socket holder for 6 sockets	EHB306			

- Bits can be replaced. P.307 308.
- * The socket holder EHB306 is for 6 sockets of EHB305 🗘 P.241.
- Not sold individually.

3/8"sq. HEX. BIT SOCKET SET [10pcs.]











No.		Weight(g)		
TBT310H		745	1	
Set contents				
Hex. bit socket	BT3-03, 04, 05, 06,	07, 08, 09,	10,	12
Cross bit socket	BT3-2P			
Socket holder for 10 sockets	EHB310			

· Bits can be replaced.
○ P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET [9pcs.]













No.		Weight(g)	6	
TBT309BH		645	1	
Set contents				
Hex. bit socket	BT3-1/8, 9/64, 5/32 3/8, 7/16	2, 3/16, 7/3	32, 1	/4, 5/16,
Socket holder for 10 sockets	EHB310			

• Bits can be replaced. • P.307 - 308.

3/8"sq. HEX. BIT SOCKET











No.	S	D	L	Q	Weight(g)	6	
BT3-03	3	17	61	32	43	10	
BT3-04	4	17	61	32	43	10	
BT3-05	5	17	66	37	46	10	
BT3-06	6	17	66	37	46	10	
BT3-07	7	18.5	71	42	65	10	
BT3-08	8	18.5	71	42	65	10	
BT3-09	9	18.5	73	43	76	10	
BT3-10	10	18.5	73	43	76	10	
BT3-12	12	22	76	44	121	10	

• Bits can be replaced. 🕞 P.307 - 308.













[•] Function mark is indicated under the product name. For the details, please refer to \$\infty\$ P.004-005.

[•] Products marked with ② should be ordered after checking stock.

3/8"sq. HEX. BIT SOCKET



No.	S(in)	D	L	Q	Weight(g)	6
BT3-1/8	1/8	17	61	32	43	10
BT3-9/64	9/64	17	61	32	43	10
BT3-5/32	5/32	17	61	32	43	10
BT3-3/16	3/16	17	61	32	43	10
BT3-7/32	7/32	17	66	37	46	10
BT3-1/4	1/4	17	66	37	46	10
BT3-5/16	5/16	18.5	71	42	65	10
BT3-3/8	3/8	18.5	73	43	76	10
BT3-7/16	7/16	22	76	44	121	10

[•] Bits can be replaced. P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET(LONG)[9pcs.]



No.		Weight(g)	б	
TBT3L09H		945	1	
Set contents				
Long Hex. Bit Socket	BT3-03L, 04L, 05L, 0	6L, 07L, 08	3L, 0	9L, 10L, 12L
Socket holder for 10 sockets	EHB310			
_				

[•] Bits can be replaced. • P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET(LONG)[9pcs.]



No.		Weight(g)	6	
TBT3L09BH		865	1	
Set contents				
Long Hex. Bit Socket	BT3-1/8L, 9/64L, 5/ 5/16L, 3/8L, 7/	- ,	, 7/3	32L, 1/4L,
Socket holder for 10 sockets	EHB310			

[•] Bits can be replaced. • P.307 - 308.

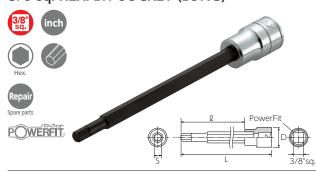
3/8"sq. HEX. BIT SOCKET (LONG)



No.	S	D	L	Q	Weight(g)	6	
BT3-03L	3	17	128	99	61	10	
BT3-04L	4	17	128	99	61	10	
BT3-05L	5	17	128	99	62	10	
BT3-06L	6	17	128	99	63	10	
BT3-07L	7	18.5	128	99	89	10	
BT3-08L	8	18.5	128	99	89	10	
BT3-09L	9	18.5	128	98	113	10	
BT3-10L	10	18.5	128	98	113	10	
BT3-12L	12	22	128	96	172	10	

[•] Bits can be replaced. • P.307 - 308.

3/8"sq. HEX. BIT SOCKET (LONG)



No.	S(in)	D	L	Q	Weight(g)	6	
BT3-1/8L	1/8	17	128	99	61	10	
BT3-9/64L	9/64	17	128	99	61	10	
BT3-5/32L	5/32	17	128	99	61	10	
BT3-3/16L	3/16	17	128	99	62	10	
BT3-7/32L	7/32	17	128	99	63	10	
BT3-1/4L	1/4	17	128	99	63	10	
BT3-5/16L	5/16	18.5	128	99	89	10	
BT3-3/8L	3/8	18.5	128	98	113	10	
BT3-7/16L	7/16	22	128	96	172	10	

[•] Bits can be replaced. • P.307 - 308.

[·] Do not use hand tools with an impact wrench.

3/8"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [6pcs.]













No.	Weight(g)	6	
TBT3L06BPH	510	1	

Set contents

Long ball point Hex. bit socket

Socket holder for 6 sockets

BT3-03BPL, 04BPL, 05BPL, 06BPL, 07BPL, 08BPL

EHB306

- Bits can be replaced. P.307 308.
- * The socket holder EHB306 is for 6 sockets of EHB305 P.241. Not sold individually.



· Be careful not to apply too much force to the ball point because of its low limiting torque

3/8"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [7pcs.]















No.	Weight(g)	Ó	,
TBT3L07BPBH	580	1	

Set contents

Long ball point Hex. bit socket BT3-1/8BPL, 9/64BPL, 5/32BPL,3/16BPL, 7/32BPL, 1/4BPL, 5/16BPL
Socket holder for 10 sockets EHB310

• Bits can be replaced. 🗘 P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.

3/8"sq. BALL POINT HEX. BIT SOCKET (LONG)







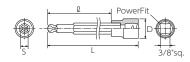


No.	S	D	L	Q	Weight(g)	6	
BT3-03BPL	3	17	128	99	61	10	
BT3-04BPL	4	17	128	99	61	10	
BT3-05BPL	5	17	128	99	62	10	
BT3-06BPL	6	17	128	99	63	10	
BT3-07BPL	7	18.5	128	99	89	10	
BT3-08BPL	8	18.5	128	99	89	10	

Bits can be replaced. P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.



3/8"sq. BALL POINT HEX. BIT SOCKET (LONG)

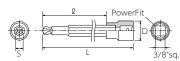


No.	S(in)	D	L	Q	Weight(g)	6	
BT3-1/8BPL	1/8	17	128	99	61	10	
BT3-9/64BPL	9/64	17	128	99	61	10	
BT3-5/32BPL	5/32	17	128	99	61	10	
BT3-3/16BPL	3/16	17	128	99	62	10	
BT3-7/32BPL	7/32	17	128	99	63	10	
BT3-1/4BPL	1/4	17	128	99	63	10	
BT3-5/16BPL	5/16	18.5	128	99	89	10	

• Bits can be replaced.
◆ P.307 - 308.



 $\boldsymbol{\cdot}$ Be careful not to apply too much force to the ball point because of its low limiting torque.



- Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.
- Products marked with ② should be ordered after checking stock.













1/2"sq. HEX. BIT SOCKET WRENCH SET [15pcs.]













No.		Weight(kg)	\Box	
TBT415HX		2.5	1	
Set contents				
Hex. bit socket	BT4-06, 07	7, 08, 10, 12	2, 14	, 17
Ratchet handle	BR4E			
Extension bar	BE4-075			
Quick spinner	BE4-Q			
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2,	2.5, 3, 4, 5		

- · Hexagonal wrenches and bits from 2mm to 17mm are set to cover a wide range of work.
- $\boldsymbol{\cdot}$ Special resin molded trays allow for batch management and convenient organization.

1/2"sq. CROSS BIT SOCKET







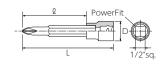




No.	Count	D	1	0.	Weight(g)	6	
BT4-2P	No.2	22	70	37	73	10	
BT4-3P	No.3	22	75	42	82	10	

• Bits can be replaced. P.307.

Case



EKB-1 (W275×D150×H50)

1/2"sq. FLAT BIT SOCKET





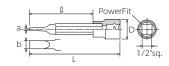






No.	а	b	D	L	Q	Weight(g)		
BT4-6M	1	6	22	70	37	73	10	

• Bits can be replaced. • P.307.



1/2"sq. HEX. BIT SOCKET SET [7pcs.]













No.		Weight(g)	6	
TBT407H	770	1		
Set contents				
Hex. bit socket	BT4-05, 06, 08, 10,	12, 14		
Cross bit socket				
Socket holder for 10 sockets	EHB410			

• Bits can be replaced. P.307 - 308.

1/2"sq. HEX. BIT SOCKET SET [10pcs.]



No.		Weight(kg)	6	
TBT410H		1.3	1	
Set contents				
Hex. bit socket	BT4-05, 06, 07, 08,	09, 10, 12,	14,	17
Cross bit socket	BT4-2P			
Socket holder for 10 sockets	EHB410			

• Bits can be replaced. 🗘 P.307 - 308.

[·] Do not use hand tools with an impact wrench.

1/2"sq. HEX. BIT SOCKET SET [9pcs.]



No.		Weight(kg)	台	
TBT409BH		1.3	1	
Set contents				
Hex. bit socket	BT4-3/16, 7/32, 1/	4, 5/16, 3/8	3, 7/	16, 1/2,

EHB410

1/2"sq. HEX. BIT SOCKET











No.	S	D	L	Q	Weight(g)		
BT4-05	5	22	70	37	74	10	
BT4-06	6	22	70	37	74	10	
BT4-07	7	22	75	42	84	10	
BT4-08	8	22	75	42	84	10	
BT4-09	9	22	77	43	98	10	
BT4-10	10	22	77	43	98	10	
BT4-12	12	24	79	44	123	10	
BT4-14	14	27	85	47	167	10	
BT4-17	17	31	90	49	222	10	

• Bits can be replaced. P.307 - 308.

1/2"sq. HEX. BIT SOCKET



No.	S(in)	D	L	Q	Weight(g)		
BT4-3/16	3/16	22	65	32	71	10	
BT4-7/32	7/32	22	70	37	74	10	
BT4-1/4	1/4	22	70	37	74	10	
BT4-5/16	5/16	22	75	42	84	10	
BT4-3/8	3/8	22	76	43	98	10	
BT4-7/16	7/16	24	80	44	121	10	
BT4-1/2	1/2	27	85	47	167	10	
BT4-9/16	9/16	31	90	49	222	10	
BT4-5/8	5/8	31	90	49	222	10	

• Bits can be replaced. P.307 - 308.

1/2"sq. HEX. BIT SOCKET SET (LONG) [9pcs.]



No.		Weight(kg)		
TBT4L09H		1.5	1	
Set contents				
Long Hex. Bit Socket	BT4-05L, 06L, 07L,	08L, 09L, 10)L, 1	2L, 14L, 17L
Socket holder for 10 sockets	EHB410			

· Bits can be replaced.

P.307 - 308.

1/2"sq. HEX. BIT SOCKET SET (LONG) [9pcs.]



	Weight(kg)	\Box		
	1.7	1		
Long Hex. Bit Socket BT4-3/16L, 7/32L, 1/4L, 5/16L, 3/8L, 7/				
EHB410				
	1/2L, 9/16L, 5	BT4-3/16L, 7/32L, 1/4L, 5/16L 1/2L, 9/16L, 5/8L	1.7 1 BT4-3/16L, 7/32L, 1/4L, 5/16L, 3/8 1/2L, 9/16L, 5/8L	

[·] Bits can be replaced.
○ P.307 - 308.













Socket holder for 10 sockets • Bits can be replaced.

• P.307 - 308.

[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

[•] Products marked with ② should be ordered after checking stock.

1/2"sq. HEX. BIT SOCKET (LONG)



No.	S	D	L	Q	Weight(g)	6
BT4-05L	5	22	132	99	90	10
BT4-06L	6	22	132	99	91	10
BT4-07L	7	22	132	99	108	10
BT4-08L	8	22	132	99	108	10
BT4-09L	9	22	132	98	135	10
BT4-10L	10	22	132	98	135	10
BT4-12L	12	24	132	96	174	10
BT4-14L	14	27	132	94	230	10
BT4-17L	17	31	132	91	304	10

[•] Bits can be replaced. P.307 - 308.

1/2"sq. HEX. BIT SOCKET (LONG)



No.	S(in)	D	L	Q	Weight(g)	6
BT4-3/16L	3/16	22	132	99	90	10
BT4-7/32L	7/32	22	132	99	91	10
BT4-1/4L	1/4	22	132	99	91	10
BT4-5/16L	5/16	22	132	99	108	10
BT4-3/8L	3/8	22	132	98	135	10
BT4-7/16L	7/16	24	132	96	174	10
BT4-1/2L	1/2	27	132	94	230	10
BT4-9/16L	9/16	31	132	91	304	10
BT4-5/8L	5/8	31	132	91	304	10

[•] Bits can be replaced. • P.307 - 308.

1/2"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [4pcs.]



No.		Weight(g)	6				
TBT4L04BPH		520	1				
Set contents							
Long ball point Hex. bit socket	BT4-05BPL, 06E	BT4-05BPL, 06BPL, 07BPL, 08BPL					
Socket holder for 5 sockets	EHB405						

[•] Bits can be replaced. P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting forque.

1/2"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [4pcs.]



No.		Weight(g)	6				
TBT4L04BPBH		500	1				
Set contents							
Long ball point Hex. bit socket	all point Hex. bit socket BT4-3/16BPL, 7/32BPL, 1/4BPL, 5/16BPL						
Socket holder for 5 sockets	EHB405						

[•] Bits can be replaced. P.307 - 308.



 $\boldsymbol{\cdot}$ Be careful not to apply too much force to the ball point because of its low limiting torque.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

1/2"sq. BALL POINT HEX. BIT SOCKET (LONG)







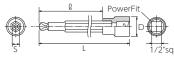


No.	S	D	L	Q	Weight(g)	6	
BT4-05BPL	5	22	132	99	90	10	
BT4-06BPL	6	22	132	99	91	10	
BT4-07BPL	7	22	132	99	108	10	
BT4-08BPL	8	22	132	99	108	10	

• Bits can be replaced. P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.



1/2"sq. BALL POINT HEX. BIT SOCKET (LONG)



P WERFIT



No.	S(in)	D	L	Q	Weight(g)	6	
BT4-3/16BPL	3/16	22	132	99	90	10	
BT4-7/32BPL	7/32	22	132	99	91	10	
BT4-1/4BPL	1/4	22	132	99	91	10	
BT4-5/16BPL	5/16	22	132	99	108	10	

• Bits can be replaced. P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.

	PowerFit	
		1/2"sq.
ی	L .	1/2 59.

L-SHAPED STANDARD HEX. KEY WRENCH SET [8pcs.]









No.	Weight(g)	白	
HLD1008	150	5	

Set contents

High Grade L-Shaped Standard Hex. key Wrench HLD100-1.5, 2, 2.5, 3, 4, 5, 6, 8 Holder

- $\boldsymbol{\cdot}$ High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- \cdot Made of special alloy steel for better wear-resistance & torque strength.
- Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- $\boldsymbol{\cdot}$ With original holder for carrying and tool management.
- * Holders are available as repair parts. Please contact our distributors for details.



 \cdot Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED STANDARD HEX. KEY WRENCH SET [9pcs.]









No.	Weight(g)	台	
HLD1009	260	5	

Set contents

High Grade L-Shaped Standard Hex. key Wrench HLD100-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 Holder

- · High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- $\boldsymbol{\cdot}$ Made of special alloy steel for better wear-resistance & torque strength.
- · Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- · With original holder for carrying and tool management.
- * Holders are available as repair parts. Please contact our distributors for details.

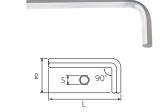


Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED STANDARD HEX. KEY WRENCH







No.	S	L	Q	Weight(g)	6	
HLD100-1.5	1.5	53	13	1	10	
HLD100-2	2	60	14	1	10	
HLD100-2.5	2.5	62	17	3	10	
HLD100-3	3	68	23	5	10	
HLD100-4	4	76	29	10	10	
HLD100-5	5	85	33	17	10	
HLD100-6	6	96	38	30	10	
HLD100-8	8	110	44	60	10	
HLD100-10	10	120	50	105	10	
HLD100-12	12	135	57	170	10	
HLD100-14	14	155	69	270	10	



 \cdot Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.













[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

 $[\]cdot$ Products marked with ${\color{red} {\it O}}$ should be ordered after checking stock.

L-SHAPED HEX. KEY WRENCH SET (LONG) [8pcs.]







No.		Weight(g)	6	
HLD1508		245	5	
Set contents				
High Grade L Long Hex. key Wrench	HLD150-1.5, 2, 2.5, 3, 4, 5, 6, 8			
Halalan				

- High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- · Made of special alloy steel for better wear-resistance & torque strength.
- Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- · With original holder for carrying and tool management.
- * Holders are available as repair parts. Please contact our distributors for details.



• Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED HEX. KEY WRENCH SET (LONG) [9pcs.]









No.		Weight(g)	6	
HLD1509		450	5	
Set contents				
High Grade L Long Hex. key Wrench	HLD150	0-1.5, 2, 2.5	5, 3, 4	4, 5, 6, 8, 10
Holder				

- $\boldsymbol{\cdot}$ High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- $\boldsymbol{\cdot}$ Made of special alloy steel for better wear-resistance & torque strength.
- Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- $\boldsymbol{\cdot}$ With original holder for carrying and tool management.
- * Holders are available as repair parts. Please contact our distributors for details.

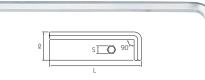


 Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED HEX. KEY WRENCH (LONG)









Apply force in the direction of the bolt rotation.

If you raise it or push it down, it may break at the bend.

No.	S	L	Q	Weight(g)	6
HLD150-1.5	1.5	81	17	1	10
HLD150-2	2	97	19	3	10
HLD150-2.5	2.5	115	20	5	10
HLD150-3	3	130	23	8	10
HLD150-4	4	145	29	18	10
HLD150-5	5	165	33	30	10
HLD150-6	6	185	38	50	10
HLD150-8	8	210	44	105	10
HLD150-10	10	235	50	185	10
HLD150-12	12	260	57	290	10
HLD150-14	14	295	69	460	10

L-SHAPED BALL POINT HEX. KEY WRENCH SET [9pcs.]



No.	Weight(g)	白	
HLD2009	250	5	
Set contents			

High grade ball point L type Standard Hex. key Wrench

HLD200-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

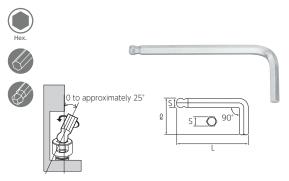
- · Made of special alloy steel for better wear-resistance & torque strength.
- $\boldsymbol{\cdot}$ With original holder for carrying and tool management.
- $\boldsymbol{\cdot}$ The hexagon ends fit into hexagon bolts more tightly for less wear & tear.
- * Holders are available as repair parts. Please contact our distributors for details.



Holder

- $\boldsymbol{\cdot}$ Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH



No.	S	L	Q	Weight(g)	6
HLD200-1.5	1.5	53.5	13.5	1	10
HLD200-2	2	58	14	1	10
HLD200-2.5	2.5	62.5	17.5	3	10
HLD200-3	3	68	23	5	10
HLD200-4	4	76	29	8	10
HLD200-5	5	85	33	18	10
HLD200-6	6	96	38	30	10
HLD200-8	8	108	44	60	10
HLD200-10	10	122	50	100	10



- $\boldsymbol{\cdot}$ Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

L-SHAPED BALL POINT HEX. KEY WRENCH SET [9pcs.]

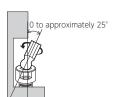












The bend angle of the under-neck part at 95° to provide space for fingertips.



No.	Weight(g)	白	
HLDS2009	220	5	

Set contents

High grade ball point L type Standard Hex. key wrenches

HLDS200-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

- $\boldsymbol{\cdot}$ Made of special alloy steel for better wear-resistance & torque strength.
- $\boldsymbol{\cdot}$ With original holder for carrying and tool management.
- $\boldsymbol{\cdot}$ The hexagon ends fit into hexagon bolts more tightly for less wear & tear.
- \cdot With about 1/2 the under-neck length of conventional products, it is effective for work in
- The bend angle of the under-neck part at 95° to provide space for fingertips.
- * Holders are available as repair parts. Please contact our distributors for details.



- · Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- · Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

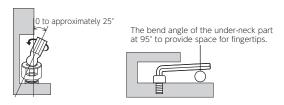
L-SHAPED BALL POINT HEX. KEY WRENCH







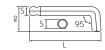




No.	S	L	Q	Weight(g)	白	
HLDS200-1.5	1.5	53.5	5.5	1	10	
HLDS200-2	2	58	7	1	10	
HLDS200-2.5	2.5	62.5	8.5	2.5	10	
HLDS200-3	3	68	11	4	10	
HLDS200-4	4	76	13	7	10	
HLDS200-5	5	85	16	16	10	
HLDS200-6	6	96	19	25	10	
HLDS200-8	8	108	24	55	10	
HLDS200-10	10	122	28	95	10	



- · Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
- · Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.



L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [8pcs.]



No.	Weight(g)	6	
HLD2508	245	5	
Set contents			

High Grade Ball Point L-Shaped Long HLD250-1.5, 2, 2.5, 3, 4, 5, 6, 8 Hex. key Wrench Holder

- \cdot Made of special alloy steel for better wear-resistance & torque strength.
- · With original holder for carrying and tool management
- \cdot The hexagon ends fit into hexagon bolts more tightly for less wear & tear.
- * Holders are available as repair parts. Please contact our distributors for details.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
- · Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]



No. Weight(g) △ HLD2509 445 5				
HI1)2509 445 5	No.	Weight(g)		
	HLD2509	445	١ ५	

Set contents

High Grade Ball Point L-Shaped Long Hex. key Wrench

HLD250-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

Holder

- · Made of special alloy steel for better wear-resistance & torque strength.
- $\boldsymbol{\cdot}$ With original holder for carrying and tool management.
- \cdot The hexagon ends fit into hexagon bolts more tightly for less wear & tear.
- * Holders are available as repair parts. Please contact our distributors for details.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
- $\boldsymbol{\cdot}$ Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.
- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 🕖 should be ordered after checking stock.







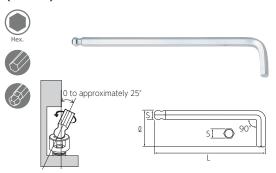








L-SHAPED BALL POINT HEX. KEY WRENCH (LONG)



No.	S	L	Q	Weight(g)	6
HLD250-1.5	1.5	81	18	1	10
HLD250-2	2	97	19	3	10
HLD250-2.5	2.5	113	21	5	10
HLD250-3	3	130	23	8	10
HLD250-4	4	145	29	17	10
HLD250-5	5	165	33	30	10
HLD250-6	6	185	38	50	10
HLD250-8	8	210	44	105	10
HLD250-10	10	235	50	180	10



- Care should be taken not to force this piece as the torque limit of the ball point is low.
 Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]



The bend angle of the under-neck part at 95° to provide space for fingertips.

 No.
 Weight(g)
 △

 HLDS2509
 400
 5

 Set contents

 High grade ball point L type
 HLDS250-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

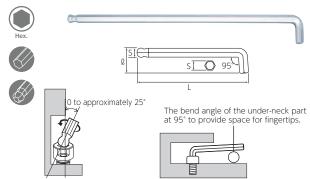
 Long Hex. key wrench
 HLDS250-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

- Holder
- $\boldsymbol{\cdot}$ Made of special alloy steel for better wear-resistance & torque strength.
- · Includes a plastic holder for convenient storage.
- The hexagon ends fit into hexagon bolts more tightly for less wear & tear.
- With about 1/2 the under-neck length of conventional products, it is effective for work in narrow spaces.
- \cdot The bend angle of the under-neck part at 95° to provide space for fingertips.
- * Holders are available as repair parts. Please contact our distributors for details.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH (LONG)

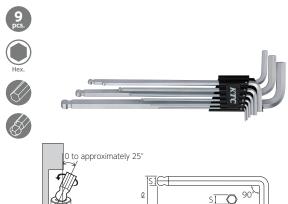


No.	S	L	Q	Weight(g)	6
HLDS250-1.5	1.5	80.5	5.5	1	10
HLDS250-2	2	97	7	2.5	10
HLDS250-2.5	2.5	112.5	8.5	4	10
HLDS250-3	3	129	11	7	10
HLDS250-4	4	146	13	15	10
HLDS250-5	5	165	16	28	10
HLDS250-6	6	186	19	45	10
HLDS250-8	8	208	24	100	10
HLDS250-10	10	234	28	165	10



- · Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
 - Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]



No.	Weight(g)	6	
HL259SP	420	10	

Set contents

Ball Point L-Shaped Long Hex. key Wrench (9pcs.) 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

Holder

notaer						
S	L	Q				
1.5	92	16				
2	102	18				
2.5	115	21				
3	128	23				
4	144	29				
5	165	33				
6	186	38				
8	208	44				
10	234	50				

- Convenient for removing and installing hexagon socket head cap screws installed in deep locations.
- · Diagonal rotation work is possible.
- Includes a plastic holder for convenient storage.
- * This product is not sold in single wrench units.



- \cdot Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

L-SHAPED BALL POINT HEX. KEY WRENCH SET [9pcs.]



No.	Weight(g)	6	
HLD2009B	235	5	

Set contents

High Grade Ball Point L-Shaped Standard HLD200-1/16, 5/64, 3/32, 1/8, 5/32, Hex. key Wrench 3/16, 1/4, 5/16, 3/8

Holdei

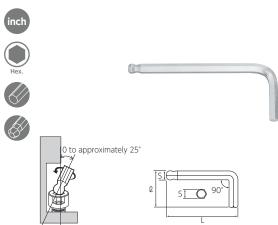
- The ability to rotate at an angle of up to approximately 25° facilitates tightening and loosening of screws in narrow and deep locations.
- · Unique new design that can be used for main tightening.
- $\boldsymbol{\cdot}$ The use of special alloy steel has improved resistance to torsion and wear.
- · The hard chrome-plated finish is pleasant to the touch, beautiful and rust-resistant.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.

 Apply force in the disastice of the half potential of the size of the
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH

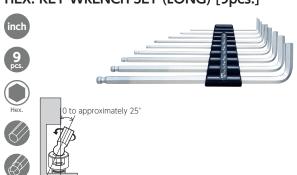


						_
No.	S (in)	L	Q	Weight(g)	6	
HLD200-1/16	1/16	48	15	1	10	
HLD200-5/64	5/64	52	16	1	10	
HLD200-3/32	3/32	58	19	1	10	
HLD200-7/64	7/64	61	21	3	10	
HLD200-1/8	1/8	63	23	3	10	
HLD200-9/64	9/64	69	26	5	10	
HLD200-5/32	5/32	72	28	10	10	
HLD200-3/16	3/16	80	30	15	10	
HLD200-7/32	7/32	87	33	20	10	
HLD200-1/4	1/4	94	36	30	10	
HLD200-5/16	5/16	106	42	60	10	
HLD200-3/8	3/8	120	47	105	10	



- \cdot Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]



No.	Weight(g)	6	
HLD2509B	400	5	

Set contents

High Grade Ball Point L-Shaped Long Hex. HLD250-1/16, 5/64, 3/32, 1/8, 5/32, key Wrench 3/16, 1/4, 5/16, 3/8

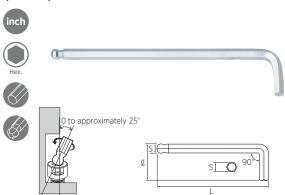
Holder

- \cdot The ability to rotate at an angle of up to approximately 25° facilitates tightening and loosening of screws in narrow and deep locations.
- · Unique new design that can be used for main tightening.
- · The use of special alloy steel has improved resistance to torsion and wear.
- $\boldsymbol{\cdot}$ The hard chrome-plated finish is pleasant to the touch, beautiful and rust-resistant.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- $\boldsymbol{\cdot}$ Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH (LONG)



No.	S (in)	L	Q	Weight(g)	6
HLD250-1/16	1/16	81	17	1	10
HLD250-5/64	5/64	95	19	3	10
HLD250-3/32	3/32	110	20	5	10
HLD250-7/64	7/64	119	21	7	10
HLD250-1/8	1/8	129	23	8	10
HLD250-9/64	9/64	134	27	15	10
HLD250-5/32	5/32	144	29	17	10
HLD250-3/16	3/16	163	33	30	10
HLD250-7/32	7/32	174	36	40	10
HLD250-1/4	1/4	184	38	50	10
HLD250-5/16	5/16	206	44	105	10
HLD250-3/8	3/8	232	50	180	10



- · Care should be taken not to force this piece as the torque limit of the ball point is low.
- · Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.
- Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.
- \cdot Products marked with $extbf{ extit{@}}$ should be ordered after checking stock.









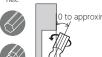


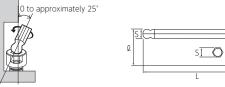




L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]









- Care should be taken not to force this piece as the torque limit of the
- Oscillation angle of ball point depends on the size of bolts.
- · Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

N/a imbt/m	
ino. vveignt(g) 🗂	
HL259BSP 420 10	

Set contents

Ball Point L-Shaped Long Hex. key Wrench

1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8

- · Convenient for removing and installing hexagon socket head cap screws installed in deep locations
- With original holder for carrying and tool management.
- * This product is not sold in single wrench units.

S(in)	L	Q
1/16	92	16
5/64	102	18
3/32	115	21
1/8	130	24
5/32	144	29
3/16	165	33
1/4	187	39
5/16	208	44
3/8	234	50

L-SHAPED BALL HEX. KEY WRENCH SET [7pcs.]





Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

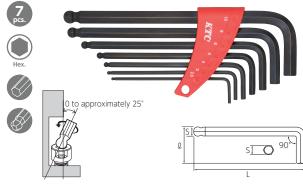
No.	Weight(g)	白	
HL107	250	12	

L-Shaped Ball Hex. key Wrench 2.5, 3, 4, 5, 6, 8, 10

This product is not sold in single wrench units.

S	L	Q
2.5	57	20
3	65	23
4	77	27
5	83	32
6	95	38
8	100	42
10	122	50

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [7pcs.]





- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- \cdot Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

No.	Weight(g)	6	
HL257	360	10	

Set contents

Ball Point L-Shaped Long Hex. key Wrench 2.5, 3, 4, 5, 6, 8, 10

- Convenient for removing and installing hexagon socket head cap screws installed in deep locations.
- · With original holder for carrying and tool management.
- * This product is not sold in single wrench units.

S	L	Q
2.5	89	20
3	98	23
4	110	27
5	125	32
6	140	38
8	160	42
10	180	50

Ball point Hex. key wrenches are listed in Cycle Tools.







L-Shaped ball point Hex. key wrench P.615

[·] Do not use hand tools with an impact wrench.

T-SHAPED HEX. KEY WRENCH

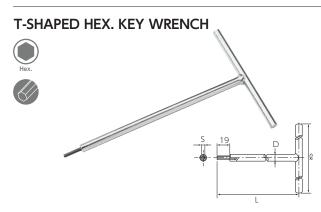


No.	S	L	Q 1	Q2	Weight(g)	6	
HT10-2.5	2.5	150	103	86	22	10	
HT10-3	3	150	103	86	25	10	
HT10-4	4	190	136	105	40	10	
HT10-5	5	190	136	105	50	10	
HT10-6	6	230	166	129.5	80	10	
HT10-8	8	230	166	129.5	115	10	
HT10-10	10	230	166	129.5	170	10	

- Convenient for removing and installing hexagon socket head cap screws installed in deep locations.
- $\boldsymbol{\cdot}$ T-shaped handle is suitable for quick-turn work.



 \cdot Apply force in the direction of bolt rotation. If force is applied in the direction of the shaft tilt, the tip of the bolt may be damaged.



No.	S	Q	L	D	Weight(g)	白	
HTH-4	4	130	225	9	160	10	
HTH-5	5	160	230	11	265	10	
HTH-6	6	180	230	11	280	10	
HTH-8	8	180	235	13	395	10	

- · T-shaped handle is suitable for quick-turn work.
- Convenient for removing and installing hexagon socket head cap screws installed in deep locations.



 \cdot Apply force in the direction of bolt rotation. If force is applied in the direction of the shaft tilt, the tip of the bolt may be damaged.

PLASTIC GRIP HEX. DRIVER SET [5pcs.]



No.		Weight(g)	6		
TD1H5		650	1		
Set contents					
Plastic grip Hex. driver	D1H-025, 03, 04, 05, 06				

 $\boldsymbol{\cdot}$ The tip shape can be distinguished by the size indication on the grip end.





tandard Ball po

PLASTIC GRIP HEX. DRIVER SET [8pcs.]



No.		Weight(kg)	6	
TD1H8		1.1	1	
Set contents				
Plastic grip Hey driver	D1H-015 02 025	03 04 05	06 08	

· The tip shape can be distinguished by the size indication on the grip end.





tandard Ball point



No.	S1	S2	D	L	Q	Weight(g)	\Box	
D1H-015	1.5	10	29.6	172	75	100	5	
D1H-02	2	10	29.6	172	75	100	5	
D1H-025	2.5	10	32	209	100	130	5	
D1H-03	3	10	32	209	100	130	5	
D1H-04	4	10	32	209	100	130	5	
D1H-05	5	10	32	209	100	130	5	
D1H-06	6	10	32	209	100	130	5	
D1H-08	8	12	33.8	282	150	190	5	

[·] Hexagonal bolster included.













[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

PLASTIC GRIP HEX. DRIVER SET [10pcs.]



No.		Weight(kg)	△					
TD1H10B		1.3	1					
Set contents								
D1H-1/16, 5/64, 3/32, 1/8, 9/64, 5/32, 3/16,								

7/32, 1/4, 5/16

 $\boldsymbol{\cdot}$ The tip shape can be distinguished by the size indication on the grip end.



Ball point

PLASTIC GRIP HEX. DRIVER



No.	S1 (in)	S2	D	L	Q	Weight(g)	\subseteq	
D1H-1/16	1/16	10	29.6	172	75	100	5	
D1H-5/64	5/64	10	29.6	172	75	100	5	
D1H-3/32	3/32	10	32	209	100	130	5	
D1H-1/8	1/8	10	32	209	100	130	5	
D1H-9/64	9/64	10	32	209	100	130	5	
D1H-5/32	5/32	10	32	209	100	130	5	
D1H-3/16	3/16	10	32	209	100	130	5	
D1H-7/32	7/32	10	32	209	100	130	5	
D1H-1/4	1/4	10	32	209	100	130	5	
D1H-5/16	5/16	12	33.8	282	150	190	5	

 $[\]cdot$ Hexagonal bolster included.

PLASTIC GRIP BALL POINT HEX. DRIVER SET [5pcs.]



No.		Weight(g)	6	
TD1HBP5		650	1	
Set contents				
Plastic grip hall point Hex driver	D1H-025BP 03	RP NARP ()5RP	06BP

 $[\]boldsymbol{\cdot}$ The tip shape can be distinguished by the size indication on the grip end.





Ball point



Care should be taken not to force this piece as the torque limit of the ball point is

PLASTIC GRIP BALL POINT HEX. DRIVER SET [8pcs.]



No.	Weight(kg)	6	
TD1HBP8	1.1	1	

Plastic grip ball point Hex. driver D1H-015BP, 02BP, 025BP, 03BP, 04BP, 05BP, 06BP, 08BP

The tip shape can be distinguished by the size indication on the grip end.





Standard Ball point



 $\boldsymbol{\cdot}$ Care should be taken not to force this piece as the torque limit of the ball point is

PLASTIC GRIP BALL POINT HEX. DRIVER



No.	S1	S2	D	L	Q	Weight(g)	6	
D1H-015BP	1.5	10	29.6	172	75	100	5	
D1H-02BP	2	10	29.6	172	75	100	5	
D1H-025BP	2.5	10	32	209	100	130	5	
D1H-03BP	3	10	32	209	100	130	5	
D1H-04BP	4	10	32	209	100	130	5	
D1H-05BP	5	10	32	209	100	130	5	
D1H-06BP	6	10	32	209	100	130	5	
D1H-08BP	8	12	33.8	282	150	190	5	

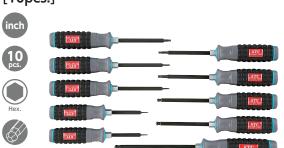
[·] Hexagonal bolster included.



 $\boldsymbol{\cdot}$ Care should be taken not to force this piece as the torque limit of the ball point is

[·] Do not use hand tools with an impact wrench.

PLASTIC GRIP BALL POINT HEX. DRIVER SET [10pcs.]



No.	Weight(kg)		
TD1HBP10B	1.3	1	

Set contents

Plastic grip ball point Hex. driver

D1H-1/16BP, 5/64BP, 3/32BP, 1/8BP, 9/64BP, 5/32BP, 3/16BP, 7/32BP, 1/4BP, 5/16BP

• The tip shape can be distinguished by the size indication on the grip end.





Standard

Ball point



 $\boldsymbol{\cdot}$ Care should be taken not to force this piece as the torque limit of the ball point is low.

PLASTIC GRIP BALL POINT HEX. DRIVER



No.	S1 (in)	S2	D	L	Q	Weight(g)	\subseteq	
D1H -1/16BP	1/16	10	29.6	172	75	100	5	
D1H -5/64BP	5/64	10	29.6	172	75	100	5	
D1H -3/32BP	3/32	10	32	209	100	130	5	
D1H -1/8BP	1/8	10	32	209	100	130	5	
D1H -9/64BP	9/64	10	32	209	100	130	5	
D1H -5/32BP	5/32	10	32	209	100	130	5	
D1H -3/16BP	3/16	10	32	209	100	130	5	
D1H -7/32BP	7/32	10	32	209	100	130	5	
D1H -1/4BP	1/4	10	32	209	100	130	5	
D1H -5/16BP	5/16	12	33.8	282	150	190	5	

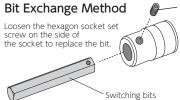
[·] Hexagonal bolster included.



Care should be taken not to force this piece as the torque limit of the ball point is low.

List of applicable replacement bits for Hex. bit sockets





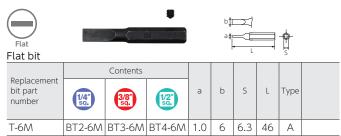
Hexagon socket set screw (one included with replacement bit)

*When replacing bits, a 2 mm hexagonal wrench is required for Type A and a 2.5 mm hexagonal wrench for Type B.



Replacement bits are a set of 1 bit and 1 set screw.





Products marked with should be ordered after checking stock.





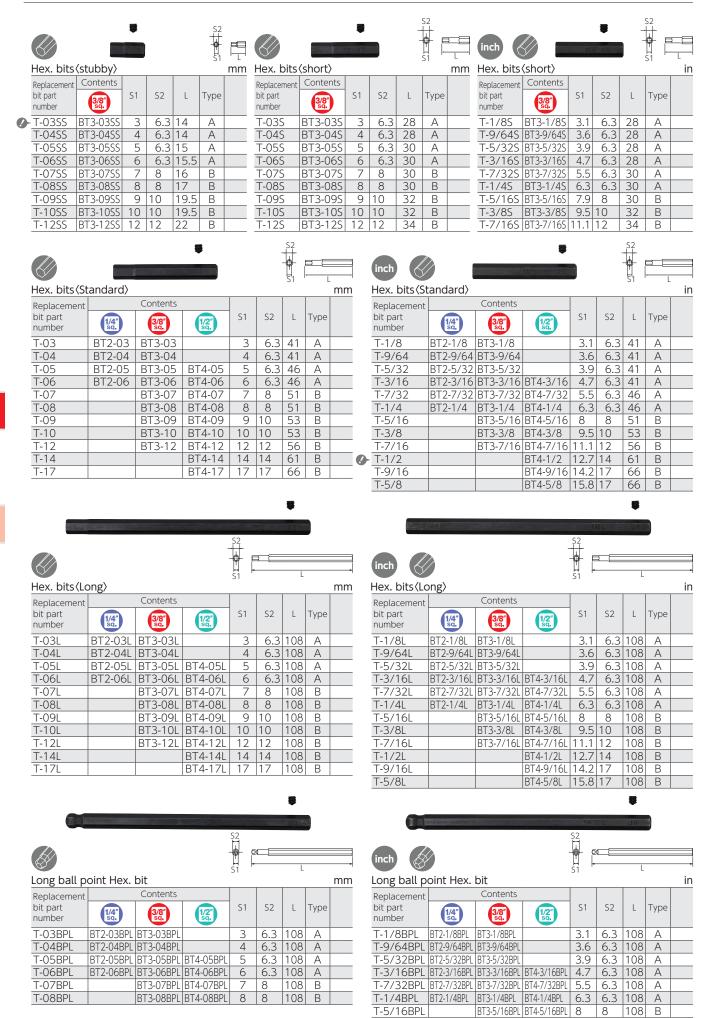








[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.



 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

CONVENTIONAL TOOLS

TORX WRENCHES



- $\boldsymbol{\cdot}$ Use a wrench that matches the size of the bolt.
- Use a wrench that matches the size of the bolt.
 Insert a wrench completely into the bolts.
 Apply force in the direction of bolt rotation. If force is applied in the direction that the bolt shaft is tilted, the tip of the bolt may be damaged.
 - $\boldsymbol{\cdot}$ Do not use a wrench with a damage or cracks.
 - \cdot Do not hit the wrench with a hammer.
 - · Do not pry with the tip.
 - $\boldsymbol{\cdot}$ Be careful not to apply the excessive force on the small size wrenches.
 - $\boldsymbol{\cdot}$ Do not give a strong shock or drop the wrench.
 - · Do not use with additional pipes.
 - · Insert drive tools into the base completely.
 - $\boldsymbol{\cdot}$ Use impact wrench sockets for power tools such as impact wrenches.

What is Torx?

TORX_® is a standard developed by Camcar Corporation in the United States. They have T-Type and E-Type and the contact surface between the bolt head and the tool is curved. Compared to conventional bolts and nuts, they are more efficient in transmitting torque and more durable because there is less concentration of stress, which can cause wear and cracking. Because of these features and workability, the TORX® standard is widely used in the automotive and other industrial machinery, and has become an standard tool for professionals.

The name "Torx®" is a registered trademark of Camcar and it is commonly called as a "hexlobe" (meaning "six earlobes"). KTC is officially licensed by Camcar to use the name "TORX®".





Previous bolt and





T-Type Torx Wrench

T-Type Torx E-Type Torx screw

E-Type Torx Wrench

Main lineup of Torx wrenches





T-Type Torx Wrench



T-Type torx I handle wrench OP.315

Size



Screw

T-type torx screwdriver O P.315



E-Type torx socket ○ P.316~317

T30

T40 T45

T50



E-Type torx flat type box end wrench (long) OP.317

T55

T60 T70

Torx Wrench Size List

- * The "Dimension A" and "Bolt diameter" in the table below are guidelines for determining the size of the Torx screw and corresponding Torx tool. When using a Torx tool, select one that fits the Torx screw completely.
- * "Dimension A" is a standard diameter on the tool announced by Camcar and does not exactly correspond to the actual dimensions of the product. Also, "Bolt Diameter" is an example of a typical Torx screw.

T10 T15 T20 T25 T27

Т8

T9

T6

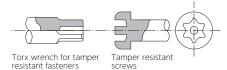
,		Dimension A	1.65	2.30	2.48	2.72	3.26	3.84	4.40	4.96	5.49	_	7.77	8 79	11 17		15.49
	Dimension A	Bolt diameter		M2.5	_	M3	M3.5		M5	M5	M6					1 M16	
1/4"	T-Type torx bit socket		•	•	•	•	•	•	•	•	•						
1/4" sq.	T-Type torx bit socket (long)		•	•	•	•	•	•	•	•	•						
	T-Type torx bit socket (short)							•	•	•	•	•	•	•	•		
3/8" sq.	T-Type torx bit socket							•	•	•	•	•	•	•	•		
	T-Type torx bit socket (long)							•	•	•	•	•	•	•	•		
1/2" sq.	T-Type torx bit socket										•	•	•	•	•	•	•
Sq.	T-Type torx bit socket (long)										•	•	•	•	•	•	•
	T-Type torx L handle wrench		•	•		•	•	•	•	•	•	•	•	•	•		
	Hard plastic grip t-type torx screwdriver		•	•	•	•	•	•	•	•	•	•	•	•			
E-Ty	pe Torx Wrench	Size	E4	E5	E6	; E	7	E8	E10	E11	E12	E14	E1	6 E	E18	E20	E24
•	Dimension A	Dimension A Bolt diameter	3.83	4.72	5.6 M	9 6.	.17	7.47 M6	9.37 M8	10.03			5 14.	71 1	6.64		22.10 M18
1/4" sq.	E-Type torx wrench		•	•	•		•	•	•								
3/8" sq.	E-Type torx wrench			•	•		•	•	•	•	•	•	•	•			
1/2" sq.	E-Type torx wrench							•	•	•	•	•	•		•	•	•
	E-Type torx • • • • • • • • • • • • • • • • • • •				•		•	•	•		•	•					

[·] Do not use hand tools with an impact wrench.

[·] The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

About Torx for tamper resistant

T-shaped Torx screw with a circular projection in the center is called a "tamper-resistant Torx screw. Tamper resistant Torx screws are used in places that should not be disassembled by the general public. In automobiles, they are used around airbags and seatbelts.





Tamper resistant









T-Type tory wrench for

	pe torx wrench for	Size	T8	T9	T10	T15	T20	T25	T27	T30	T40	T45	T50	T55	T60	T70
tamp	per resistant Dimension A	Dimension A	2.30	2.48	2.72	3.26	3.84	4.40	4.96	5.49	6.60	7.77	8.79	11.17	13.20	15.49
faste	eners	Bolt diameter	M2.5	_	МЗ	M3.5	M4	M5	M5	M6	M8	M8	M10	M12/14	M16	M18
1/4" sq.	T-Type torx bit socket for tamper resistant		•	•	•	•	•	•	•	•						
Sq.	T-Type torx bit socket (long) for tamper resistant		•	•	•	•	•	•	•	•						
	T-Type torx bit socket (short) for tamper resistant						•	•	•	•	•	•	•	•		
3/8″ sq.	T-Type torx bit socket for tamper resistant						•	•	•	•	•	•	•	•		
	T-Type torx bit socket (long) for tamper resistant						•	•	•	•	•	•	•	•		
1/2"	T-Type torx bit socket for tamper resistant									•	•	•	•	•	•	•
1/2" sq.	T-Type torx bit socket (long) for tamper resistant									•	•	•	•	•	•	•
	T-Type torx L handle wrench for tamper resistant		•		•	•	•	•	•	•	•	•	•	•		
	T-Type torx screwdriver for tamper resistant		•	•	•	•	•	•	•	•	•	•	•			

1/4"sq. SET T-TYPE TORX BIT SOCKET, E-TYPE TORX WRENCH, & HEX. BIT SOCKET [26pcs.]

















No.	Weight(kg)		
TBT226TH	1.6	1	
	•		

Set contents	
T-type Torx Bit Socket	BT2-T8, T10, T15, T20, T25, T27, T30
E-type Torx Wrench	B2-E4, E5, E6, E7, E8, E10
Hex. bit socket	BT2-03, 04, 05, 06
Cross and Flat bit sockets	BT2-1P, 2P, 6M
Ratchet handle	BR2E
Extension bar	BE2-075, 150
Quick spinner	BE2-Q
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2, 2.5
Case	EKB-1 (W275×D150×H50)

- \cdot The compact 1/4"sq. body further improves work efficiency in tight spaces.
- · A full complement of equipment for a wide range of tasks.
- · Special resin molded trays allow for batch management and convenient organization.

1/4"sq. T-TYPE TORX BIT SOCKET [9pcs.]













No.		Weight(g)	6					
TBT209T		390	1					
Set contents								
T-type Torx Bit Socket BT2-T6, T8, T9, T10, T15, T20, T25, T27, T3								

• Bits can be replaced. P.322.

Socket holder for 10 sockets EHB210

* Torx bit socket set with tamper-resistance is shown in 🕞 P.318.



[•] Products marked with ② should be ordered after checking stock.















1/4"sq. T-TYPE TORX BIT SOCKET











No.	Size	D	L	Q	Weight(g)	6
BT2-T6	T 6	16	54.5	32	35	10
BT2-T8	T 8	16	54.5	32	35	10
BT2-T9	T 9	16	54.5	32	35	10
BT2-T10	T10	16	54.5	32	36	10
BT2-T15	T15	16	59.5	37	37	10
BT2-T20	T20	16	59.5	37	37	10
BT2-T25	T25	16	59.5	37	37	10
BT2-T27	T27	16	59.5	37	38	10
BT2-T30	T30	16	59.5	37	38	10

- Bits can be replaced. P.322.
- * Torx bit sockets with tamper-resistance are shown in 🔾 P.318.

1/4"sq. T-TYPE TORX BIT SOCKET SET (LONG) [9pcs.]













No.	Weight(g)	6	
TBT2L09T	550	1	
Set contents			

- Long T-type Torx Bit Socket

BT2-T6L, T8L, T9L, T10L, T15L, T20L, T25L, T27L, T30L

Socket holder for 10 sockets EHB210

• Bits can be replaced. • P.322. * Torque-resistant long Torx bit socket set is shown in 🗘 P.318.

1/4"sq. T-TYPE TORX BIT SOCKET (LONG)



No.	Size	D	L	Q	Weight(g)	6
BT2-T6L	T 6	16	121.5	99	53	10
BT2-T8L	T 8	16	121.5	99	53	10
BT2-T9L	T 9	16	121.5	99	53	10
BT2-T10L	T10	16	121.5	99	54	10
BT2-T15L	T15	16	121.5	99	54	10
BT2-T20L	T20	16	121.5	99	54	10
BT2-T25L	T25	16	121.5	99	54	10
BT2-T27L	T27	16	121.5	99	55	10
BT2-T30L	T30	16	121.5	99	55	10

- Bits can be replaced. P.322.
- * Torque-resistant long Torx bit sockets are listed in P.318.

3/8"sq. T-TYPE TORX BIT SOCKET SET (SHORT) [8pcs.]











No.		Weight(g)	6	
TBT3S08T		610	1	
Set contents				
•	DT2 T20C T2FC	T276 T20	C T	10C T1FC

Short T-type Torx Bit Socket

BT3-T20S, T25S, T27S, T30S, T40S, T45S T50S, T55S

Socket holder for 10 sockets EHB310

• Bits can be replaced. • P.322. * Torque-resistant short Torx bit socket set is shown in 🔘 P.319.

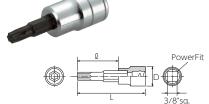
3/8"sq. T-TYPE TORX BIT SOCKET (SHORT)











No.	Size	D	L	Q	Weight(g)	6	
BT3-T20S	T20	17	50	21	44	10	
BT3-T25S	T25	17	50	21	44	10	
BT3-T27S	T27	17	50	21	45	10	
BT3-T30S	T30	17	50	21	45	10	
BT3-T40S	T40	18.5	52	23	63	10	
BT3-T45S	T45	18.5	52	23	65	10	
BT3-T50S	T50	18.5	52	23	65	10	
BT3-T55S	T55	22	58	26	119	10	

- Bits can be replaced. P.322.
- Torque-resistant short Torx bit sockets are listed in P.319.

[·] Do not use hand tools with an impact wrench.

[·] The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

3/8"sq. SET T-TYPE TORX BIT SOCKET & E-TYPE TORX WRENCH [19pcs.]













No.		Weight(kg)		
TBT319TX 1.7 1				
Set contents				
T-type Torx Bit Socket	BT3-T20, T	25, T27, T30	, T40	, T45, T50
E-type Torx Wrench B3-E5, E6, E7, E8, E10, E11, E				11, E12
Flex Ratchet Handle	BR3F			
Extension bar	BE3-075			
Quick spinner	BE3-Q			
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2	2, 2.5		
Case	EKB-1 (W	275×D150	×H5	50)

- $\boldsymbol{\cdot}$ Mixing set that can cover both T-type and E-type.
- · A full complement of equipment for a wide range of tasks.
- · Special resin molded trays allow for batch management and convenient organization.

3/8"sq. T-TYPE TORX BIT SOCKET SET [8pcs.]











No.		Weight(g)	6		
TBT308T		610	1		
Set contents					
T-type Torx Bit Socket	BT3-T20, T25, T27, T30, T40, T45, T50, T55				
Socket holder for 10 sockets	EHB310				

- Bits can be replaced. P.322.
- * Torx bit socket set with tamper-resistance is shown in P.319.

3/8"sq. T-TYPE TORX BIT SOCKET









No.	Size	D	L	Q	Weight(g)	Ó	
BT3-T20	T20	17	66	37	44	10	
BT3-T25	T25	17	66	37	44	10	
BT3-T27	T27	17	66	37	45	10	
BT3-T30	T30	17	66	37	45	10	
BT3-T40	T40	18.5	71	42	63	10	
BT3-T45	T45	18.5	71	42	65	10	
BT3-T50	T50	18.5	71	42	65	10	
BT3-T55	T55	22	76	44	119	10	

- * Torx bit sockets with tamper-resistance are shown in 🗘 P.319.

3/8"sq. T-TYPE TORX BIT SOCKET SET (LONG) [8pcs.]











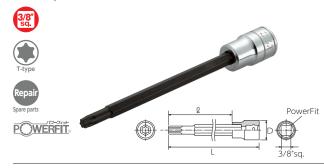
No.	Weight(g)	白	
TBT3L08T	800	1	

Set contents

Long T-type Torx Bit Socket	BT3-T20L, T25L, T27L, T30L, T40L, T45L, T50L, T55L
Socket holder for 10 sockets	EHB310

- Bits can be replaced. P.322.
- * Torque-resistant long Torx bit socket set is shown in 🖎 P.320.

3/8"sq. T-TYPE TORX BIT SOCKET (LONG)



No.	Size	D	L	Q	Weight(g)		
BT3-T20L	T20	17	128	99	61	10	
BT3-T25L	T25	17	128	99	61	10	
BT3-T27L	T27	17	128	99	62	10	
BT3-T30L	T30	17	128	99	62	10	
BT3-T40L	T40	18.5	128	99	87	10	
BT3-T45L	T45	18.5	128	99	89	10	
BT3-T50L	T50	18.5	128	99	89	10	
BT3-T55L	T55	22	128	96	170	10	

- Bits can be replaced. ♠ P.322.
- * Torque-resistant long Torx bit sockets are listed in 🗘 P.320.
- Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.
- Products marked with ② should be ordered after checking stock.















1/2"sq. T-TYPE TORX BIT SOCKET SET [7pcs.]











No.		Weight(g)	白		
TBT407T		965	1		
Set contents					
T-type Torx Bit Socket	BT4-T30, T40, T45, T50, T55, T60, T70				

EHB410

- Socket holder for 10 sockets

 Bits can be replaced.
 P.322.
- * Torx bit socket set with tamper-resistance is shown in P.320.

1/2"sq. T-TYPE TORX BIT SOCKET











No.	Size	D	L	Q	Weight(g)	6	
BT4-T30	T30	22	70	37	73	10	
BT4-T40	T40	22	75	42	82	10	
BT4-T45	T45	22	75	42	84	10	
BT4-T50	T50	22	75	42	84	10	
BT4-T55	T55	22	80	44	119	10	
BT4-T60	T60	24	85	47	161	10	
BT4-T70	T70	25	90	49	211	10	

- PowerFit Bits can be replaced. P.322.
 - * Torx bit sockets with tamper-resistance are shown in P.320.

1/2"sq. T-TYPE TORX BIT SOCKET SET (LONG) [7pcs.]











No.	Weight(kg)	\Box	
TBT4L07T	1.3	1	
Set contents			

BT4-T30L, T40L, T45L, T50L, T55L, T60L, T70L

- Long T-type Torx Bit Socket Socket holder for 10 sockets
- Bits can be replaced. P.322.
 Torque-resistant long Torx bit socket set is shown in P.320.

1/2"sq. T-TYPE TORX BIT SOCKET (LONG)



No.	Size	D	L	Q	Weight(g)	6	
BT4-T30L	T30	22	132	99	90	10	
BT4-T40L	T40	22	132	99	106	10	
BT4-T45L	T45	22	132	99	108	10	
BT4-T50L	T50	22	132	99	108	10	
BT4-T55L	T55	22	132	96	170	10	
BT4-T60L	T60	24	132	94	224	10	
BT4-T70L	T70	25	132	91	293	10	

- Bits can be replaced. ♠ P.322.
- * Torque-resistant long Torx bit sockets are listed in P.321.

Torx wrenches for impact wrenches are listed under Sockets and Accessories for Impact Wrenches.



- $\boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.
- The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

T-TYPE TORX L HANDLE WRENCH SET [12pcs.]







N	0.	Weight(g)	6	
L	TX12	350	1	

Set contents

T-type Torx L-Handle Wrench

LT6, T8, T10, T15, T20, T25, T27, T30, T40, T45, T50, T55

- · The pack can also be used as a management tray.
- * Torx L-handle wrench set with tamper-resistance is shown in 🕞 P.321.



Apply force in the direction of rotation of the bolt. Be careful not to pull the bolt up or push it down as it may break from the bending part.

T-TYPE TORX L HANDLE WRENCH



						_	
No.	Size	D	L	Н	Weight(g)	\Box	
LT6	T 6	3	50	17	3	10	
LT8	T 8	3	53	19	3.5	10	
LT10	T10	3	56	20	4	10	
LT15	T15	3.5	60	22	6	10	
LT20	T20	4	64	24	8	10	
LT25	T25	4.5	68	25	11	10	
LT27	T27	5	72	27	14	10	
LT30	T30	6	80	30	21	10	
LT40	T40	7	87	33	30	10	
LT45	T45	8	95	37	44	10	
LT50	T50	9	109	41	65	10	
LT55	T55	11.5	125	47	120	10	

^{*} Torx L-handle wrenches with tamper-resistance are shown on 🗪 P.321.



Apply force in the direction of rotation of the bolt. Be careful not to pull the bolt up or push it down as it may break from the bending part.

HARD PLASTIC GRIP T-TYPE TORX **SCREWDRIVER SET [5pcs.]**





No.	Weight(g)	白	
TD1T5	650	1	

Set contents

Hard plastic grip T-type torx screwdriver D1T-T10, T15, T20, T25, T30

• The size indicator on the grip end distinguishes between Torx drivers and tamper-resistant







fasteners set is shown in P.321.

* Torx screwdriver for tamper resistant

Torx screwdriver for tamper resistant

Torx screwdriver for tamper Screwdriver resistant fasteners

HARD PLASTIC GRIP T-TYPE TORX **SCREWDRIVER SET [12pcs.]**







No.	Weight(kg)	白	
TD1T12	1.7	1	

Set contents

D1T-T6, T8, T9, T10, T15, T20, T25, Hard plastic grip T-type torx screwdriver T27, T30, T40, T45, T50

 $\boldsymbol{\cdot}$ The size display of the grip end allows you to distinguish between a Torx screwdriver and a tampering Torx screwdriver



Screwdriver



fasteners set is shown in P.321.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER



No.	Size	S	D	L	Q	Weight(g)		
D1T-T6	T 6	10	29.6	172	75	100	5	
D1T-T8	T 8	10	29.6	172	75	100	5	
D1T-T9	T 9	10	32	209	100	130	5	
D1T-T10	T10	10	32	209	100	130	5	
D1T-T15	T15	10	32	209	100	130	5	
D1T-T20	T20	10	32	209	100	130	5	
D1T-T25	T25	10	32	209	100	130	5	
D1T-T27	T27	10	32	209	100	130	5	
D1T-T30	T30	10	32	209	100	130	5	
D1T-T40	T40	12	33.8	282	150	190	5	
D1T-T45	T45	12	33.8	282	150	190	5	
D1T-T50	T50	12	33.8	282	150	190	5	

- Hexagonal bolsters are included.
- * Torx screwdriver for tamper resistant fasteners is shown in 🗘 P.321.
- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 🕖 should be ordered after checking stock.















1/4"sq. E-TYPE TORX WRENCH SET [6pcs.]









No.		Weight(g)	6	
TB2E06		125	1	
Set contents				
E-type Torx Wrench	B2-E4, E5, E6, E7, E	8, E10		
Socket holder for 10 sockets	EHB210			

1/4"sq. E-TYPE TORX WRENCH



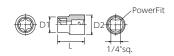








No.	Size	D1	D2	L	Weight(g)	白	
B2-E4	E 4	5.8	12	18	8	10	
B2-E5	E 5	7	12	18.5	9	10	
B2-E6	E 6	8	12	19	9	10	
B2-E7	E 7	9	12	20.5	10	10	
B2-E8	E 8	10	12	21	11	10	
B2-E10	E10	13	13.5	22	17	10	



3/8"sq. E-TYPE TORX WRENCH SET [9pcs.]



No.		Weight(g)		
TB3E09		355	1	
Set contents				
E-type Torx Wrench	B3-E5, E6, E7, E8, E	10, E11, E1	2, E	14, E16
Socket holder for 10 sockets	EHB310			

3/8"sq. E-TYPE TORX WRENCH

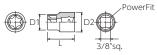












No.	Size	D1	D2	L	Weight(g)	6	
B3-E5	E 5	7	17	22.5	18	10	
B3-E6	E 6	8	17	23	18	10	
B3-E7	E 7	9	17	24	20	10	
B3-E8	E 8	10	17	25	20	10	
B3-E10	E10	13	17	26	24	10	
B3-E11	E11	14.5	17	26.5	27	10	
B3-E12	E12	15.5	17	27	28	10	
B3-E14	E14	18	17	28	34	10	
B3-E16	E16	20	19	30	47	10	

1/2"sq. E-TYPE TORX WRENCH SET [9pcs.]





No.		Weight(g)		
TB4E09		705	1	
Set contents				
E-type Torx Wrench	B4-E8, E10, E11, E12,	E14, E16, E	18, E	E20, E24
Socket holder for 10 sockets	EHB410			

[·] Do not use hand tools with an impact wrench.

 $[\]boldsymbol{\cdot}$ The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

1/2"sq. E-TYPE TORX WRENCH



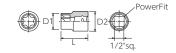








No.	Size	D1	D2	L	Weight(g)	6	
B4-E8	E 8	10	22	30	38	10	
B4-E10	E10	13	22	31	42	10	
B4-E11	E11	14.5	22	32	46	10	
B4-E12	E12	15.5	22	33	48	10	
B4-E14	E14	18	22	34.5	55	10	
B4-E16	E16	20	22	36	61	10	
B4-E18	E18	21	22	37	62	10	
B4-E20	E20	24	22	38.5	77	10	
B4-E24	E24	28.5	26.5	41	127	10	



E-TYPE TORX FLAT TYPE BOX END WRENCH SET (LONG) [3pcs.]





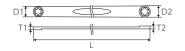
No.		Weight(g)	6	
TWEE3L		350	1	
Set contents				
E-type torx flat type box end wrench (long)	WEE6X7L, WEE8X10L	, WEE12X	14L	

E-TYPE TORX FLAT TYPE BOX END WRENCH (LONG)



No.	Size	D1	D2	T1	T2	L	Weight(g)	Ó	
WEE6X7L	E 6×E 7	9	9.5	5.5	6	240	50	10	
WEE8X10L	E 8×E10	10.5	12	6.5	7	300	100	10	
WEE12X14L	E12×E14	15	16.5	8	8.5	330	200	10	

 Box end wrench with long overall length and flange on one side for tightening/loosening E-type torques in places where it is difficult to work.



1/4"sq. T-type Torsion Torx, E-type Torx, and Hex. Bit Socket Wrench Sets are shown on P.287.











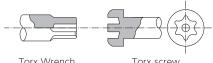




[•] Function mark is indicated under the product name. For the details, please refer to
P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.





Torx Wrench for tamper resistant



TORX WRENCHES FOR TAMPER RESISTANT FASTENERS

These are restricted tools and the sale of these wrenches is limited to proffessional mechanics and other authorized users.

Unauthorized use or illegal modification of this tool is prohibited.
"Tamper Resistant Fasteners" are used so the equipment may not be easily dissembled.

This tool tightens and loosens the Tamper Resistant Fasteners, but if the Tamper Resistant Fasteners is loosened, the Tamper Resistant Fasteners are instantly released, creating a dangerous situation.

As a rule, do not loosen the "Tamper resistant fasteners to ensure safety" with this tool.

Other, please take precautions in handling this tool.

When using this tool, please be sure to obtain permission from the manufacturer of the product that has been tampered with and work in the correct way.

In particular, when loosening "Tamper Resistant Fasteners for safety assurance" on safety devices, etc., please be sure to do so under the responsibility of the product manufacturer.

Please do not leave the tools unattended and do not allow unauthorized use to it.

1/4"sq. T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [8pcs.]









No.		Weight(g)			
TBT208TH		355	1		
Set contents					
T-type torx bit socket for tamper BT2-T8H, T9H, T10H, T15H, T20H, resistant fasteners T25H, T27H, T30H					
Socket holder for 10 sockets	EHB210				

Bits can be replaced. P.322.



· Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

1/4"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	Q	Weight(g)	台	
BT2-T8H	T 8	16	54.5	32	35	10	
BT2-T9H	T 9	16	54.5	32	35	10	
BT2-T10H	T10	16	54.5	32	36	10	
BT2-T15H	T15	16	59.5	37	37	10	
BT2-T20H	T20	16	59.5	37	37	10	
BT2-T25H	T25	16	59.5	37	37	10	
BT2-T27H	T27	16	59.5	37	38	10	
BT2-T30H	T30	16	59.5	37	38	10	

Bits can be replaced. P.322.



· Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

1/4"sq. LONG T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [8pcs.]











No.	Weight(g)	6	
TBT2L08TH	975	1	
Cot contents			

T-type torx bit socket for tamper resistant fasteners (long) Socket holder for 10 sockets

BT2-T8HL, T9HL, T10HL, T15HL, T20HL, T25HL, T27HL, T30HL EHB210

Bits can be replaced. P.322.



Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

1/4"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS (LONG)









No.	Size	D	L	Q	Weight(g)	6	
BT2-T8HL	T 8	16	121.5	99	53	10	
BT2-T9HL	T 9	16	121.5	99	53	10	
BT2-T10HL	T10	16	121.5	99	54	10	
BT2-T15HL	T15	16	121.5	99	54	10	
BT2-T20HL	T20	16	121.5	99	54	10	
BT2-T25HL	T25	16	121.5	99	54	10	
BT2-T27HL	T27	16	121.5	99	55	10	
BT2-T30HL	T30	16	121.5	99	55	10	

Bits can be replaced. P.322.



Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

[·] Do not use hand tools with an impact wrench.

[·] The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

3/8"sq. SET T-TYPE TORX BIT SOCKET FOR **TAMPER RESISTANT FASTENERS & E-TYPE** TORX WRENCH [19pcs.]















IVO.		vveignt(kg)		
TBT319HTX	1.6	1		
Set contents				
T-type torx bit socket for tamper resistant fasteners	BT3-T20H, T	25H,T27H,T30F	I,T40H	,T45H,T50H
E-type Torx Wrench	B3-E5, E6	, E7, E8, E1	0, E1	1, E12
Compact Flex Ratchet Handle	BRC3F			
Pivoting Extension Bar	BE3-075J	W		
Quick spinner	BE3-Q			
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2	2, 2.5		
Casa	EVD 1 (\A/	27E V D1E0	V П Е	0)

- $\boldsymbol{\cdot}$ Mixed set that can cover both T-type tinker and E-type tinker.
- · A set of anti-torque bits is included to cover a wide range of work.
- · Special resin molded trays allow for batch management and convenient organization.

3/8"sq. T-TYPE TORX BIT SOCKET SET (SHORT) FOR TAMPER RESISTANT FASTENERS [8pcs.]











No.	Weight(g)	\subseteq	
TBT3S08TH	610	1	

Set contents

T-type torx bit socket (short) for	BT3-T20HS, T25HS, T27HS, T30HS, T40HS,
tamper resistant fasteners	T45HS, T50HS, T55HS
Socket holder for 10 sockets	EHB310

Bits can be replaced. P.322.



·Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET (SHORT) FOR TAMPER RESISTANT FASTENERS





No.	Size	D	L	Q	Weight(g)		
BT3-T20HS	T20	17	50	21	44	10	
BT3-T25HS	T25	17	50	21	44	10	
BT3-T27HS	T27	17	50	21	45	10	
BT3-T30HS	T30	17	50	21	45	10	
BT3-T40HS	T40	18.5	52	23	63	10	
BT3-T45HS	T45	18.5	52	23	65	10	
BT3-T50HS	T50	18.5	52	23	65	10	
BT3-T55HS	T55	22	58	26	119	10	

Bits can be replaced. P.322.



·Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [8pcs.]











No.	Weight(g)	6	
TBT308TH	610	1	

Set contents	
T-type torx bit socket for tamper	BT3-T20H, T25H, T27H, T30H,T40H, T45H,
resistant fasteners	T50H, T55H
Socket holder for 10 sockets	EHB310

Bits can be replaced. P.322.



·Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS









No.	Size	D	L	Q	Weight(g)		
BT3-T20H	T20	17	66	37	44	10	
BT3-T25H	T25	17	66	37	44	10	
BT3-T27H	T27	17	66	37	45	10	
BT3-T30H	T30	17	66	37	45	10	
BT3-T40H	T40	18.5	71	42	63	10	
BT3-T45H	T45	18.5	71	42	65	10	
BT3-T50H	T50	18.5	71	42	65	10	
BT3-T55H	T55	22	76	44	119	10	

Bits can be replaced. P.322.



·Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.













[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with 🕖 should be ordered after checking stock.

3/8"sq. T-TYPE TORX BIT SOCKET SET (LONG) FOR TAMPER RESISTANT FASTENERS [8pcs.]











No.	Weight(g)	白	
TBT3L08TH	800	1	

Set contents

T-type torx bit socket (long) for tamper resistant fasteners Socket holder for 10 sockets BT3-T20HL, T25HL, T27HL, T30HL, T40HL, T45HL, T50HL, T55HL

EHB310

• Bits can be replaced. P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET (LONG) FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	Q	Weight(g)	6	
BT3-T20HL	T20	17	128	99	61	10	
BT3-T25HL	T25	17	128	99	61	10	
BT3-T27HL	T27	17	128	99	62	10	
BT3-T30HL	T30	17	128	99	62	10	
BT3-T40HL	T40	18.5	128	99	87	10	
BT3-T45HL	T45	18.5	128	99	89	10	
BT3-T50HL	T50	18.5	128	99	89	10	
BT3-T55HL	T55	22	128	96	170	10	

• Bits can be replaced. • P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

1/2"sq. T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [7pcs.]











No.	Weight(g)	6	
TBT407TH	965	1	

Set contents
T-type torx bit socket for tamper
resistant fasteners
Socket holder for 10 sockets

BT4-T30H, T40H, T45H, T50H, T55H, T60H, T70H

holder for 10 sockets EHB410



• Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

1/2"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	Q	Weight(g)	白	
BT4-T30H	T30	22	70	37	73	10	
BT4-T40H	T40	22	75	42	82	10	
BT4-T45H	T45	22	75	42	84	10	
BT4-T50H	T50	22	75	42	84	10	
BT4-T55H	T55	22	80	44	119	10	
BT4-T60H	T60	24	85	47	161	10	
BT4-T70H	T70	25	90	49	211	10	



 Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

1/2"sq. T-TYPE TORX BIT SOCKET SET (LONG) FOR TAMPER RESISTANT FASTENERS [7pcs.]











No.	Weight(kg)	6	
TBT4L07TH	1.1	1	

Set contents

T-type torx bit socket (long) for tamper resistant fasteners

Socket holder for 10 sockets

BT4-T30HL, T40HL, T45HL, T50HL, T55HL, T60HL, T70HL

EHB410

• Bits can be replaced. 🗘 P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

 $[\]boldsymbol{\cdot}$ Do not use hand tools with an impact wrench.

[•] The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

1/2"sq. T-TYPE TORX BIT SOCKET (LONG) FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	Q	Weight(g)	Ó	
BT4-T30HL	T30	22	132	99	90	10	
BT4-T40HL	T40	22	132	99	106	10	
BT4-T45HL	T45	22	132	99	108	10	
BT4-T50HL	T50	22	132	99	108	10	
BT4-T55HL	T55	22	132	96	170	10	
BT4-T60HL	T60	24	132	94	224	10	
BT4-T70HL	T70	25	132	91	293	10	

• Bits can be replaced. 🗘 P.322.



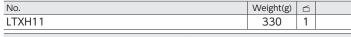
• Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

T-TYPE TORX L HANDLE WRENCH SET FOR TAMPER RESISTANT FASTENERS [11pcs.]









Set contents

T-type torx I handle wrench for tamper	LT8H, T10H, T15H, T20H, T25H,
resistant fasteners	T27H, T30H, T40H, T45H, T50H, T55H

 \cdot The pack can also be used as a management tray.



- Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.
- Apply force in the direction of rotation of the bolt. Pulling up or pushing down may cause damage from the bending part.

T-TYPE TORX L HANDLE WRENCH FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	Н	Weight(g)	6	
LT8H	T 8H	3	53	19	3.5	10	
LT10H	T10H	3	56	20	4	10	
LT15H	T15H	3.5	60	22	6	10	
LT20H	T20H	4	64	24	8	10	
LT25H	T25H	4.5	68	25	11	10	
LT27H	T27H	5	72	27	14	10	
LT30H	T30H	6	80	30	21	10	
LT40H	T40H	7	87	33	30	10	
LT45H	T45H	8	95	37	44	10	
LT50H	T50H	9	109	41	65	10	
LT55H	T55H	11.5	125	47	120	10	



- Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.
 Apply force in the direction of rotation of the bolt. Be careful not to pull the bolt
- Apply force in the direction of rotation of the bolt. Be careful not to pull the bolt up or push it down as it may break from the bending part.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER SET FOR TAMPER RESISTANT FASTENERS [11pcs.]





No.	vveignt(kg)		
TD1TH11	1.6	1	

Set contents

Hard plastic grip T-type torx screwdriver	D1T-T8H, T9H, T10H, T15H, T20H, T25H,
for tamper resistant fasteners	T27H, T30H, T40H, T45H, T50H

• The size indicator on the grip end distinguishes between Torx drivers and tamper-resistant Torx drivers.



Torx Screwdriver



Torx screwdriver for tamper resistant fasteners



Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER FOR TAMPER RESISTANT FASTENERS



No.	Size	S	D	L	Q	Weight(g)	6	
D1T-T8H	T 8	10	29.6	172	75	100	5	
D1T-T9H	T 9	10	32	209	100	130	5	
D1T-T10H	T10	10	32	209	100	130	5	
D1T-T15H	T15	10	32	209	100	130	5	
D1T-T20H	T20	10	32	209	100	130	5	
D1T-T25H	T25	10	32	209	100	130	5	
D1T-T27H	T27	10	32	209	100	130	5	
D1T-T30H	T30	10	32	209	100	130	5	
D1T-T40H	T40	12	33.8	282	150	190	5	
D1T-T45H	T45	12	33.8	282	150	190	5	
D1T-T50H	T50	12	33.8	282	150	190	5	

· Hexagonal bolsters are included.



• Since the Torx wrenches for temper resistant fasteners are structurally less loadbearing than normal Torx wrenches, be careful not to apply too much force.

- Function mark is indicated under the product name. For the details, please refer to

 P.004-005.
- \cdot Products marked with $\ensuremath{\textit{\textbf{0}}}$ should be ordered after checking stock.











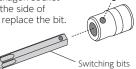




Application list of replacement bits for Torx bit sockets

T-type Torx Bits

Torx Bit Replacement Method Loosen the hexagon socket set screw on the side of the socket to replace the bit.



Hexagon socket set screw (one included with replacement bit)

*When replacing bits, a 2 mm hexagonal wrench is required for Type A and a 2.5 mm hexagonal wrench for Type B.







• Replacement bits are a set of 1 bit and 1 set screw.









T-type Torx Bit(short)

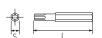
Replacement	Contents						
bit part number	1/4" sq.	1/2" sq.	Size	S	L	Туре	
T-T20S	BT3-T20S		T20	6.3	30	Α	
T-T25S	BT3-T25S		T25	6.3	30	Α	
T-T27S	BT3-T27S		T27	6.3	30	Α	
T-T30S	BT3-T30S		T30	6.3	30	Α	
T-T40S	BT3-T40S		T40	8	32	В	
T-T45S	BT3-T45S		T45	8	32	В	
T-T50S	BT3-T50S		T50	8	32	В	
T-T55S	BT3-T55S		T55	12	38	В	

1-type Tota	לווטונ/
Replacement	

Replacement	(Contents						
bit part number	1/4" sq.	3/8" sq.	1/2" sq.	Size	S	L	Type	
T-T20HS	ВТ	3-T20HS		T20	6.3	30	Α	
T-T25HS	BT	3-T25HS		T25	6.3	30	Α	
T-T27HS	BT	3-T27HS		T27	6.3	30	Α	
T-T30HS	ВТ	3-T30HS		T30	6.3	30	Α	
T-T40HS	ВТ	3-T40HS		T40	8	32	В	
T-T45HS	BT	3-T45HS		T45	8	32	В	
T-T50HS	ВТ	3-T50HS		T50	8	32	В	
T-T55HS	ВТ	3-T55HS		T55	12	38	В	













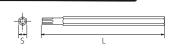
T-type Torx Bits (Standard)

Replacement		Contents						
bit part number	1/4" sq.	3/8" sq.	1/2" sq.	Size	S	L	Туре	
T-T6	BT2-T6			T 6	6.3	41	Α	
T-T8	BT2-T8			T 8	6.3	41	Α	
T-T9	BT2-T9			T 9	6.3	41	Α	
T-T10	BT2-T10			T10	6.3	41	Α	
T-T15	BT2-T15			T15	6.3	46	Α	
T-T20	BT2-T20	BT3-T20		T20	6.3	46	Α	
T-T25	BT2-T25	BT3-T25		T25	6.3	46	Α	
T-T27	BT2-T27	BT3-T27		T27	6.3	46	Α	
T-T30	BT2-T30	BT3-T30	BT4-T30	T30	6.3	46	Α	
T-T40		BT3-T40	BT4-T40	T40	8	51	В	
T-T45		BT3-T45	BT4-T45	T45	8	51	В	
T-T50		BT3-T50	BT4-T50	T50	8	51	В	
T-T55		BT3-T55	BT4-T55	T55	12	56	В	
T-T60			BT4-T60	T60	14	61	В	
T-T70			BT4-T70	T70	17	66	В	

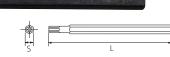
T-type Torx Bit(Standard)

Replacement		Contents						
bit part number	1/4" sq.	3/8" sq.	1/2" sq.	Size	S	L	Туре	
T-T8H	BT2-T8H			T 8	6.3	41	Α	
T-T9H	BT2-T9H			T 9	6.3	41	Α	
T-T10H	BT2-T10H			T10	6.3	41	Α	
T-T15H	BT2-T15H			T15	6.3	46	Α	
T-T20H	BT2-T20H	BT3-T20H		T20	6.3	46	Α	
T-T25H	BT2-T25H	BT3-T25H		T25	6.3	46	Α	
T-T27H	BT2-T27H	BT3-T27H		T27	6.3	46	Α	
T-T30H	BT2-T30H	BT3-T30H	BT4-T30H	T30	6.3	46	Α	
T-T40H		BT3-T40H	BT4-T40H	T40	8	51	В	
T-T45H		BT3-T45H	BT4-T45H	T45	8	51	В	
T-T50H		BT3-T50H	BT4-T50H	T50	8	51	В	
T-T55H		BT3-T55H	BT4-T55H	T55	12	56	В	
T-T60H			BT4-T60H	T60	14	61	В	
T-T70H			BT4-T70H	T70	17	66	В	









T-type Torx Bit (Long)

T type Toly	C DIC (LOTIE)							
Replacement		Contents						
bit part number	1/4" sq.	3/8" sq.	1/2" sq.	Size	S	L	Туре	
T-T6L	BT2-T6L			T 6	6.3	108	Α	
T-T8L	BT2-T8L			T 8	6.3	108	Α	
T-T9L	BT2-T9L			T 9	6.3	108	Α	
T-T10L	BT2-T10L			T10	6.3	108	Α	
T-T15L	BT2-T15L			T15	6.3	108	Α	
T-T20L	BT2-T20L	BT3-T20L		T20	6.3	108	Α	
T-T25L	BT2-T25L	BT3-T25L		T25	6.3	108	Α	
T-T27L	BT2-T27L	BT3-T27L		T27	6.3	108	Α	
T-T30L	BT2-T30L	BT3-T30L	BT4-T30L	T30	6.3	108	Α	
T-T40L		BT3-T40L	BT4-T40L	T40	8	108	В	
T-T45L		BT3-T45L	BT4-T45L	T45	8	108	В	
T-T50L		BT3-T50L	BT4-T50L	T50	8	108	В	
T-T55L		BT3-T55L	BT4-T55L	T55	12	108	В	
T-T60L			BT4-T60L	T60	14	108	В	
T-T70L			BT4-T70L	T70	17	108	В	

rx Bit (Long)

1-type Forx	(Bit (Long)							
Replacement		Contents						
bit part number	1/4" sq.	3/8" sq.	1/2" sq.	Size	S	L	Type	
T-T8HL	BT2-T8HL			T 8	6.3	108	Α	
T-T9HL	BT2-T9HL			T 9	6.3	108	Α	
T-T10HL	BT2-T10HL			T10	6.3	108	Α	
T-T15HL	BT2-T15HL			T15	6.3	108	Α	
T-T20HL	BT2-T20HL	BT3-T20HL		T20	6.3	108	Α	
T-T25HL	BT2-T25HL	BT3-T25HL		T25	6.3	108	Α	
T-T27HL	BT2-T27HL	BT3-T27HL		T27	6.3	108	Α	
T-T30HL	BT2-T30HL	BT3-T30HL	BT4-T30HL	T30	6.3	108	Α	
T-T40HL		BT3-T40HL	BT4-T40HL	T40	8	108	В	
T-T45HL		BT3-T45HL	BT4-T45HL	T45	8	108	В	
T-T50HL		BT3-T50HL	BT4-T50HL	T50	8	108	В	
T-T55HL		BT3-T55HL	BT4-T55HL	T55	12	108	В	
T-T60HL			BT4-T60HL	T60	14	108	В	
T-T70HL			BT4-T70HL	T70	17	108	В	

[·] Do not use hand tools with an impact wrench.

[·] The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

CONVENTIONAL TOOLS

BOX END WRENCHES



- \cdot Use a wrench with a outside diameter appropriate for the across flat of the bolt/nut. diameter appropriate for the width
 - · Box end wrench should be inserted firmly and deeply.
 - \cdot Do not hit the wrench with a hammer or the like to give impact.
 - · If the diameter of the wrench is too large and there is a gap, the hexagonal part of the bolt or nut will be damaged and easy to slip or come off.
 - · Do not use with additional pipes.
 - \cdot Do not use as a hammer.
 - $\boldsymbol{\cdot}$ In carrying the tool set, be sure to hang the clamp for the securely.











Open end wrench

Box end wrench is one of the tools for tightening and loosening bolts and nuts as well as other wrenches. While a wrench holds a bolt or nut at two points, a Box end wrench holds it at six points and can apply more force than a spanner. Moreover, the ring shape of the wrench prevents the head from coming off the bolt or nut and allowing an even load to be applied and stable work to be performed.

P.325-330

Variation of Box end wrench



Flare nut wrench

Box end wrench, also called a flare nut wrench, is used for flare nuts on brake pipes in automobiles. The open end of the head allows the nut on the pipe to

P.565-567



Offset part

Various angles are available according to the

working environment and purpose of use.

Grip (handle)

Box end (head)

Ratchet Box end wrench

This has a ratchet mechanism in the head. As with the ratchet handle, the wrench can be turned continuously without removing it from the bolt or nut.

P.331-336

How to select Box end wrench

Select the length and angle of the handle according to the work environment. Long handles are commonly used.

 $45^{\circ} / 45^{\circ} \times 6^{\circ}$ Long type



This is the most common and easy-to-use Box end wrench. The long type makes it easy to apply large torque, and the offset handle provides room for the hand when using on bolts/nuts located on flat surfaces. It can also be used for bolts/ nuts located in hollow places.

Straight type



It can be used with a ratchet handle and socket combination, or for bolts and nuts in narrow and deep spaces where an offset type Box end wrench cannot fit. Use the extralong type when particularly high torque is required.

Short type



Used in tight places where the long type cannot fit. The short handle makes it difficult to apply large torque, but it is easy to use for tightening and loosening small-diameter bolts and nuts that do not require large torque.

Features of KTC Box end wrench (M5/M5S)

KTC Box end wrench (M5, M5S) is designed for torque transmission and workability in narrow spaces. In order to efficiently transmit force to bolts and nuts, the height and length of the offset portion are reduced and the rise angle of the handle is lowered to 45° x 6°

The compact head is also designed to easily

apply force to bolts and nuts, and can be used even when the head is turned upside down.

The handle has a cross-sectional shape Previous product that is strong and lightweight. The size marking is indicated large by forging embossed.





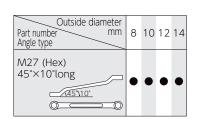
 $45^{\circ} \times 6^{\circ}$ Box end wrench (M5 · M5S)

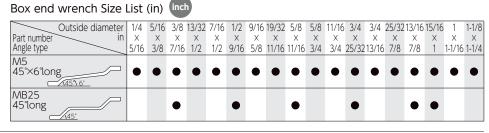


Forging embossed Cutting face

Box end wrench Size List (mm)

DOX CHA WICHCH SIZE LI.	אנ (1111	11/																																	
Outside diameter	5.5	6	6	7	8	8	10	10	10	10	11	12	13	13	14	16	17	17	19	19	20	21	21	22	23	24	25	26	27	27	29	30	32	35	36	41
Part number mm	×			×		×												×																		
Angle type	7	7	8	8	9	10	11	12	13	14	13	14	15	17	17	18	19	21	21	22	22	23	26	24	26	27	28	32	30	32	32	32	36	38	38	46
M100																																				
Straight short																																				
Straight shore								_				_			_		_							_												
M150																																				
Straight long											•						•																			
Straight tong						_		_				_			_		_							_												
M160																																				
Super long straight																	•																			
Super torig straight																																				
M151																																				
15°long																																				
13 10116 115								-				_																								
M5S 🗇																																				
45°×6° short											•				•		•		•																	
<u> </u>	-			_		_		-				_	-		-	_	-																			
M5																																				
45°×6°long		•					•				•						•		•												•			•		
45 × 6 tong /45°16°	-		1		_		-		-		-		_		_				_		_		1		Ī		Ĭ		ĺ		Ī		Ī		Ī	
M25																																				
45°long		•			•			•	•	•	•	•			•		•		•	•		•		•		•										
45 10116								Ė	-								_		_			Ī		_	ı -	Ī										





[·] Do not hit or extend it with a pipe or other tools.

CONVENTIONAL TOOLS

BOX END WRENCH SET [6pcs.]







No.		Weight(kg)	白	
TM506		1.3	1	
Set contents				
Box end wrench	M5-0810, 1012, 1113,	1417, 1921, 2224	4	

- · Includes plastic molded tray (W445×D185×H52).
- * Resin molded trays are set to fit into metal case EKB-2 (P.198).

BOX END WRENCH SET [8pcs.]









No.		Weight(kg)	\subseteq	
TM508		1.6	1	
Set contents				
Box end wrench	M5-0810, 1012, 1113, 1214, 2224	1417, 1719	9, 19	21,

- · Includes plastic molded tray (W445×D185×H52).
- * Resin molded trays are set to fit into metal case EKB-2 (🗘 P.198).

BOX END WRENCH SET [10pcs.]









No.		Weight(kg)	6
TM510		2.3	1
Set contents			
Box end wrench	M5-05507, 0810, 1012, 111	3, 1214, 14	17, 1719,

1921, 2224, 2427

- · Includes plastic molded tray (W445×D185×H52).
- * Resin molded trays are set to fit into metal case EKB-2 (
 P.198).

BOX END WRENCH SET [6pcs.]









No.		Weight(kg)	\Box	
TM506B		1.7	1	
Set contents				
Box and wranch	M5-3/8X7/16, 1/2X9/16, 5/8	3X11/16, 3/	4X2	5/32,

- 13/16X7/8, 15/16X1

 Includes plastic molded tray (W445×D185×H52).
- * Resin molded trays are set to fit into metal case EKB-2 (P.198).



[•] Products marked with 🕜 should be ordered after checking stock.





45° X 6° BOX END WRENCH (LONG)



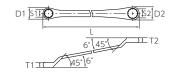
No.	S1×S2	D1	D2	T1	T2	L	Weight(g)		
M5-05507	5.5× 7	10	12	4.5	5	151	20	5	
M5-0607	6× 7	10.5	12	4.5	5	151	20	5	
M5-0608	6× 8	10.5	13	4.5	5.5	157	27	5	
M5-0708	7× 8	12	13	5	5.5	167	30	5	
M5-0809	8× 9	13	14.5	5.5	6	174	40	5	
M5-0810	8×10	13	16	5.5	6.5	179	45	5	
M5-1011	10×11	16	17.5	6.5	7	197	60	5	
M5-1012	10×12	16	18.5	6.5	7.5	207	70	5	
M5-1013	10×13	16	19.5	6.5	8.5	208	70	5	
M5-1014	10×14	16	21	6.5	9.5	218	82	5	
M5-1113	11×13	17.5	19.5	7	8.5	218	80	5	
M5-1214	12×14	18.5	21	7.5	9.5	226	100	5	
M5-1315	13×15	19.5	23	8.5	10	236	115	5	
M5-1317	13×17	19.5	25.5	8.5	10.5	252	135	5	
M5-1417	14×17	21	25.5	9.5	10.5	253	140	5	
M5-1618	16×18	24	27	10.5	11.5	265	180	5	
M5-1719	17×19	25.5	28	10.5	12	287	220	5	
M5-1721	17×21	25.5	31	10.5	13	308	250	5	
M5-1921	19×21	28	31	12	13	309	270	5	
M5-1922	19×22	28	32.5	12	13.5	320	280	5	
M5-2022	20×22	30	32.5	12	13.5	321	300	5	
M5-2123	21×23	31	34	13	14.5	322	335	5	
M5-2126	21×26	31	38	13	16	354	405	5	
M5-2224	22×24	32.5	35.5	13.5	15	334	380	5	
M5-2326	23×26	34	38	14.5	16	356	410	5	
M5-2427	24×27	35.5	39	15	16.5	367	440	5	
M5-2528	25×28	36.5	41	15.5	17	379	525	5	
M5-2632	26×32	38	47	16	18	412	630	5	
M5-2730	27×30	39.5	44	16.5	18	412	640	5	
M5-2732	27×32	39.5	47	16.5	18	413	675	5	
M5-2932	29×32	44	47	18	18	460	795	5	
M5-3032	30×32	44	47	18	18	460	795	5	
M5-3236	32×36	47	52.5	18	21	490	950	5	
M5-3538	35×38	52.5	55	21	22	519	1,150	5	
M5-3638	36×38	52.5	55	21	22	519	1,150	5	
M5-4146	41×46	59.5	66.5	24.5	26	593	1,760	2	



- The rising angle is $45^{\circ} \times 6^{\circ}$, which is easy to use even in narrow spaces. Reduced offset height and length make it easier to use in confined spaces while efficiently transferring force to bolts and nuts.
- $\boldsymbol{\cdot}$ The handle has a cross-sectional shape that is highly flexible and lightweight.
- The size indicator is a large, easy-to-read forged embossed engraving.

45° X 6° BOX END WRENCH (LONG)





No.	S1×S2(in)	D1	D2	T1	T2	L	Weight(g)	6	
M5-1/4X5/16	1/ 4× 5/16	10.5	13	4.5	5.5	157	27	5	
M5-5/16X3/8	5/16× 3/ 8	13	16	5.5	6.5	179	45	5	
M5-3/8X7/16	3/ 8× 7/16	16	17.5	6.5	7	197	60	5	
M5-13/32X1/2	13/32× 1/ 2	16	19.5	6.5	8.5	208	70	5	
M5-7/16X1/2	7/16× 1/ 2	17.5	19.5	7	8.5	218	80	5	
M5-1/2X9/16	1/ 2× 9/16	19.5	21	8.5	9.5	235	111	5	
M5-9/16X5/8	9/16× 5/ 8	21	24	9.5	10.5	252	139	5	
M5-19/32X11/16	19/32×11/16	23	25.5	10	10.5	254	146	5	
M5-5/8X11/16	5/ 8×11/16	24	25.5	10.5	10.5	265	171	5	
M5-5/8X3/4	5/ 8× 3/ 4	24	28	10.5	12	286	207	5	
M5-11/16X3/4	11/16× 3/ 4	25.5	28	10.5	12	287	220	5	
M5-3/4X25/32	3/ 4×25/32	28	30	12	12	309	263	5	
M5-3/4X13/16	3/ 4×13/16	28	31	12	13	309	270	5	
M5-25/32X7/8	25/32× 7/ 8	30	32.5	12	13.5	321	300	5	
M5-13/16X7/8	13/16× 7/ 8	31	32.5	13	13.5	322	324	5	
M5-15/16X1	15/16× 1	35.5	36.5	15	15.5	366	464	5	
M5-1X1-1/16	1×1-1/16	36.5	39	15.5	16.5	378	515	5	
M5-1-1/8X1-1/4	1-1/8×1-1/4	44	47	18	18	460	795	5	

- The rising angle is 45° ×6°, which is easy to use even in narrow spaces. Reduced offset height and length make it easier to use in confined spaces while efficiently transferring force to holts and puts
- The handle has a cross-sectional shape that is highly flexible and lightweight.
- $\boldsymbol{\cdot}$ The size indicator is a large, easy-to-read forged embossed engraving.

 $[\]cdot$ Do not hit or extend it with a pipe or other tools.

45° X 6° BOX END WRENCH SET (SHORT) [5pcs.]



No.		Weight(g)	白	
TM5S05		310	1	
Set contents				
45° ×6° box end wrench (short)	M5S-0810, 1012, 111	3, 1214, 14	17	

45° X 6° BOX END WRENCH (SHORT)



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	6	
M5S-05507	5.5× 7	9.8	11.8	4.3	4.8	96	15	5	
M5S-0708	7× 8	11.8	12.8	4.8	5.3	102	20	5	
M5S-0809	8× 9	12.8	14.3	5.3	5.8	104	25	5	
M5S-0810	8×10	12.8	15.8	5.3	6.3	109	30	5	
M5S-1012	10×12	15.8	18.3	6.3	7.3	127	50	5	
M5S-1113	11×13	17.3	19.3	6.8	8.3	138	55	5	
M5S-1214	12×14	18.3	20.8	7.3	9.3	145	70	5	
M5S-1315	13×15	19.3	22.8	8.3	9.8	156	85	5	
M5S-1417	14×17	20.8	25.3	9.3	10.3	168	105	5	
M5S-1618	16×18	23.8	26.8	10.3	11.3	170	130	5	
M5S-1719	17×19	25.3	27.8	10.3	11.8	177	160	5	
M5S-1921	19×21	27.8	30.8	11.8	12.8	179	185	5	

45° BOX END WRENCH SET (LONG) [6pcs.]





	No.		Weight(kg)		
0	M256		2.1	1	
	Set contents				
	45° box end wrench (long)	17X19, 19	X21,	23X26	
•	Metal case	M256-M(W385×D100×H4	15)		

45° BOX END WRENCH SET (LONG) [6pcs.]





	No.	Weight(kg)	6		
-	M2506		2.1	1	
	Set contents				
	45° box end wrench (long)	M25-8X10, 11X13, 12X14	, 17X19, 22	X24	24X27
	Metal case	M256-M(W385×D100×F	145)		

45° BOX END WRENCH SET (LONG) [8pcs.]







	No.			Weight(kg)		
()	M258			2.5	1	
	Set contents					
			M25-8X10, 10X12, 11X13	. 12X14. 14	X17	

45° box end wrench (long)	M25-8X10, 10X12, 11X13, 12X14, 14X17, 17X19, 19X21, 22X24
Metal case	M258-M(W370×D180×H55)





[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

[•] Products marked with ② should be ordered after checking stock.

45° BOX END WRENCH SET (LONG) [10pcs.]









]	No.	Weight(kg)	6	
	M2510	3	1	

Set contents

45° box end wrench (long)

M25-5.5X7, 8X10, 10X12, 11X13, 12X14, 14X17, 17X19, 19X21, 22X24, 24X27

Metal case

M258-M(W370×D180×H55)

BOX END WRENCH SET [14pcs.]











№ M215P 1.9 1		No.	Weight(kg)	6	
1.12.0.	0	M215P	1.9	1	

Set contents
Flat type ho

ox end wrench (short) Flat type box end wrench (long) 15° box end wrench (long) Box end wrench (hex.) Single Opening Plastic Hard Case M100-7X8, 10X12, 12X14, 14X17 M150-10X12, 12X14, 14X17 M151-10X12, 12X14, 14X17 M27-8H, 10H, 12H, 14H TCP1-1 (W385×D190×H65)

- This set contains a mixture of four types of wrenches: Flat type box end wrench (short) (M100), Flat type box end wrench (long) (M150), 15° box end wrench (long)(M151), and Box end wrench (hex) (M27).
- $\boldsymbol{\cdot}$ The case is made of lightweight and durable resin.
- Cases are shown on P.199.

45° BOX END WRENCH SET (LONG) [3pcs.]



	No.	Weight(g)	6	
()	M253	345	1	
	Set contents	`		

M25-10X12, 12X14, 14X17 45° box end wrench (long)

45° BOX END WRENCH (LONG)



POWERFIT.



	No.	S1×S2	D1	D2	T1	T2	L	Weight(g)		
0	M25-5.5X7	5.5× 7	9.5	12	4.5	5	150	26	10	
0	M25-6X7	6× 7	11	12	4.5	5	150	26	10	
O	M25-8X9	8× 9	14	15	5.5	6	175	50	10	
0	M25-8X10	8×10	14	17	5.5	6.5	175	50	10	
0	M25-10X12	10×12	17	19	6.5	7.5	200	70	10	
() -	M25-10X13	10×13	17	21	6.5	8.5	200	72	10	
()	M25-10X14	10×14	17	22	6.5	9	220	100	10	
(M25-11X13	11×13	18	21	7	8.5	200	74	10	
()	M25-12X14	12×14	19	22	7.5	9	220	110	10	
(M25-13X17	13×17	21	26	8.5	10.5	245	145	10	
()	M25-14X17	14×17	22	26	9	10.5	245	155	10	
()	M25-17X19	17×19	26	29	10.5	12	270	210	10	
O -	M25-17X21	17×21	26	31	10.5	13	310	270	10	
()	M25-19X21	19×21	29	31	12	13	310	275	10	
() -	M25-19X22	19×22	29	33	12	13.5	310	280	10	
()	M25-21X23	21×23	31	34	13	14.5	310	340	5	
(M25-22X24	22×24	33	35	13.5	15	315	350	5	
()	M25-23X26	23×26	34	38	14.5	16	355	410	5	
0	M25-24X27	24×27	35	39	15	16.5	360	460	5	

15° BOX END WRENCH SET (LONG) [3pcs.]



No.		Weight(g)	\subseteq					
M1513		340	10					
Set contents								
15° box end wrench (long)	K17							

[·] Do not hit or extend it with a pipe or other tools.

15° BOX END WRENCH (LONG)



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	白	
M151-10X12	10×12	17	19	6.5	7.5	200	50	10	
M151-12X14	12×14	19	22	7.5	9	220	100	10	
M151-14X17	14×17	22	26	9	10.5	245	140	10	

FLAT TYPE BOX END WRENCH SET (LONG) [5pcs.]



No.		Weight(g)							
M1505	380	10							
Set contents									
Flat type box end wrench (long)	M150-8X10, 10X12, 11X13, 12X14, 14X17								

FLAT TYPE BOX END WRENCH (LONG)



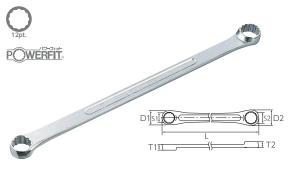
No.	S1×S2	D1	D2	T1	T2	L	Weight(g)		
M150-8X10	8×10	13	16	5.5	6.5	185	44	10	
M150-10X12	10×12	16	18	6.5	7.5	200	56	10	
M150-11X13	11×13	17	19	7	8	200	60	10	
M150-12X14	12×14	18	21	7.5	8	220	80	10	
M150-14X17	14×17	21	25	8	8.5	245	125	10	
M150-17X19	17×19	25	28	8.5	9	285	148	10	
M150-22X24	22×24	32	35	9.5	10	335	240	10	

FLAT TYPE BOX END WRENCH SET (EXTRA LONG) [3pcs.]



No.		Weight(g)		
M1603		545	1	
Set contents				
Flat type box end wrench (extra long)	M160-8X10, 12X14, 17X1	9		

FLAT TYPE BOX END WRENCH (EXTRA LONG)



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	6	
M160-8X10	8×10	14	17	7.3	7.6	235	60	5	
M160-10X12	10×12	17	19	8.2	8.8	292.7	84	5	
M160-12X14	12×14	19	22	9.4	10	330.5	120	5	
M160-13X15	13×15	21	24	9.9	10.5	356	197	5	
M160-14X17	14×17	22	26	10.6	11.5	370	240	5	
M160-16X18	16×18	25.2	27.6	12.3	12.9	406.4	340	5	
M160-17X19	17×19	26	29	12.3	12.9	407.2	365	5	
M160-19X21	19×21	28.5	31.2	12.9	14.4	410	410	5	
M160-22X24	22×24	33	35	15.2	15.8	433.7	540	5	
M160-27X30	27×30	39	44	19.8	20.7	549.2	1,118	5	

[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.



 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

FLAT TYPE BOX END WRENCH SET (SHORT)



No.	Weight(g)	6
M1004	170	1

Flat type box end wrench (short) M100-7X8, 10X12, 12X14, 14X17

4 pcs.	14 @ KYOTO TOOL 17
0	
12pt. PWERFIT	(12 @ K7670 799L 14
	(10 @ KY010 100L 12
	10 and the property of the pro
	O(1 29 110111011 3

FLAT TYPE BOX END WRENCH (SHORT)



							1		
No.	S1×S2	D1	D2	T1	T2	L	Weight(g)		
M100-7X8	7× 8	12	13	5	5.5	95	18	10	
M100-10X12	10×12	16	18	6.5	7.5	115	34	10	
M100-12X14	12×14	18	21	7.5	8	130	50	10	
M100-14X17	14×17	21	25	8	8.5	145	72	10	
M100-17X19	17×19	25	28	8.5	9	180	95	10	
M100-22X24	22×24	32	35	9.5	10	230	120	10	

BOX END WRENCH SET (HEX) [4pcs.]

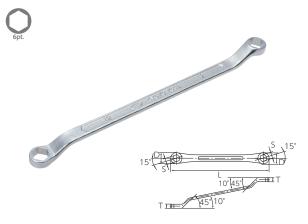






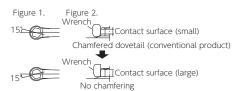
No.		Weight(g)		
M274		330	5	
Set contents				
Box end wrench (hex)	M27-8H, 10H, 12H, 14H			

BOX END WRENCH (HEX)



No.	S	D	Т	L	Weight(g)		
M27-8H	8	13	5	175	40	10	
M27-10H	10	16	6	195	57	10	
M27-12H	12	18	7	220	86	10	
M27-14H	14	21	8	240	120	10	

- \cdot The 6pt. part is symmetrically angled at 15° to allow work equivalent to that of a 12pt. Box end wrench (rotation at a swing angle of 30°). (Figure 1)
- The 6pt. bore is not chamfered to increase the contact area between the bore and the bolt/ nut. (Figure 2)
- \cdot The handle has a 45° $\times 10^{\circ}$ angle of rise, making it easy to exert force and providing a good grip that fits the hand.



[·] Do not hit or extend it with a pipe or other tools.

CONVENTIONAL TOOLS

RATCHET BOX END WRENCHES



- Use a wrench with a outside diameter appropriate for the width across flat of the bolt/ nut.
- Box end wrench should be inserted into the nut completely.
- Do not hit the wrench with a hammer.
- If the diameter of the Box end wrench is too large and there is a gap, the 6pt. part of the bolt/nut will be damaged and easy to slip or come off.
- · Do not use with additional pipes.
- · Do not use as a hammer.





CONVENTIONAL TOOLS





Box end wrench with a ratchet mechanism built into the head. As with the ratchet handle, the wrench can be turned continuously without removing it from the bolt or nut. Compared to a ratchet handle and socket combination, this wrench is very compact and can be used in narrow spaces where there are obstructions around the bolt or nut. Various variations are available, including a combination wrench type with one side in the shape of a wrench and a swiveling type that allows the angle of the head to be changed freely. The direction of rotation can be switched either by a lever like a ratchet handle or by turning the wrench over.



Ratchet Box end wrench Size List

Part number	mm	6 × 7	8 × 9		10 × 12	X		X	13 × 17	X	X			22 × 24
MR1A-0810F to 1719F	Double-head swivel type ©3-CO			•	•	•	•	•	•	•		•		
MR1-0607F to 2224F	Double-head swivel type ©3 CO	•		•	•	•	•	•		•	•	•	•	•
MR1S-0810F to 1719F	Short double-head swivel type ©D—G©			•	•	•	•	•		•	•	•		
RM-8X9 to 14X17	Ratchet box end wrench		•	•	•		•			•				

Size list of 4 size plate ratchet wrenches

Part number		mm	8 10 × × 1213	10 12 × × 13 14
MR-0813 to 1014	Standard	0:0	•	•
MR-0813L to 1014L	Long	0:0	•	•

Ratchet combination wrenches and Ratchet box end wrench (extra long flex) sizes

Part number		mm	8	9	10	11	12	13	14	15	16	17	18	19	21	22	23	24
MSR1A-08 to 24	Straight type	2-0	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
MSR2A-08 to 19	Offset type	Ð 0	•		•		•	•	•			•		•				
MSR1A-08F to 19F	Semi-short swivel type	2 3	•		•		•	•	•			•		•				
MSR2SA-08 to 17	Short offset type	ე — •	•		•		•	•	•			•						
MSR2S-08F to 19F	Short swivel type	D=10	•		•	•	•	•	•	•	•	•	•	•				
MR15L-10F to 19F	Super long glasses swivel type	O			•		•	•	•	•		•		•				

^{*}Ratchet box end wrenches are not eligible for repair.

RATCHET BOX END WRENCH (FLEX)



No.	S1×S2	D1	D2	T1	T2	Feed angle	L	Weight(g)	6	
MR1A-0810F	8×10	16.4	20	6.5	7.3	6°	151	70	5	
MR1A-1012F	10×12	20	23	7.3	8.2	5°	176	110	5	
MR1A-1113F	11×13	21.8	25.2	7.8	8.6	5°	188	120	5	
MR1A-1214F	12×14	23	27	8.2	9	5°	199	140	5	
MR1A-1315F	13×15	25	28.2	8.6	9.4	5°	226	180	5	
MR1A-1317F	13×17	25.2	31.8	8.6	10.3	5°	230	190	5	
MR1A-1417F	14×17	27	31.6	9	10.3	5°	230	190	5	
MR1A-1719F	17×19	31.6	33.7	10.3	11.2	5°	267	270	5	

- · Both heads can be tightened.
- \cdot The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.
- · The swivel angle is 180°.
- The grip design is non-slip.



The joint part is vulnerable to impact and pry, so be careful not to exert excessive

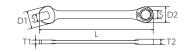
[·] Do not hit or extend it with a pipe or other tools.

RATCHET COMBINATION WRENCH









No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)	6	
MSR1A-08	8		16.4	4	6.5	6°	140	40	5	
MSR1A-09	9	_	18.3	4.4	6.9	6°	150	50	5	
MSR1A-10	10	20.5	20	4.8	7.3	5°	159	50	5	
MSR1A-11	11	22.6	21.4	5.2	7.7	5°	165	70	5	
MSR1A-12	12	24.6	22.6	5.5	8.2	5°	172	70	5	
MSR1A-13	13	26.7	24.5	5.8	8.6	5°	178	80	5	
MSR1A-14	14	28.8	27	6.2	9	5°	191	110	5	
MSR1A-15	15	30.8	28.2	6.5	9.4	5°	200	120	5	
MSR1A-16	16	33.2	30.3	6.8	9.9	5°	208	140	5	
MSR1A-17	17	35.1	31.6	7.2	10.3	5°	225	170	5	
MSR1A-18	18	37.2	32.3	7.7	10.7	5°	236	190	5	
MSR1A-19	19	39.3	33.7	8.2	11.2	5°	248	230	5	
MSR1A-21	21	46.2	40.1	9	13	4°	290	340	5	
MSR1A-22	22	46.2	40.1	9	13	4°	290	340	5	
MSR1A-24	24	51.5	46.5	10	14.5	4°	323	500	5	

- · The ratchet section can be tightened.
- \cdot The feed angle of 5° (6° for 9 mm and smaller, 4° for 21 mm and larger) enables smooth continuous work in tight spaces.
- · The arrow display shows the direction of work at a glance.
- · The grip design is non-slip.

RATCHET COMBINATION WRENCH



No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)		
MSR2A-08	8	16.2	16.4	4.6	6.5		140	40	5	
MSR2A-10	10	20.5	20	5.3	7.3	5°	159	50	5	
MSR2A-12	12	24.6	22.6	6	8.2	5°	172	80	5	
MSR2A-13	13	26.7	24.5	6.4	8.6	5°	178	90	5	
MSR2A-14	14	28.8	27	6.8	9	5°	191	110	5	
MSR2A-17	17	35.1	31.6	7.7	10.3	5°	226	170	5	
MSR2A-19	19	39.3	33.7	8.6	11.2	5°	248	220	5	

- · The ratchet section can be tightened.
- \cdot The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.
- $\boldsymbol{\cdot}$ Rotation direction can be switched by lever operation.



 \cdot To avoid damage or idling, be sure to operate the left and right switching levers

RATCHET COMBINATION WRENCH (SEMI SHORT FLEX)



No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)	6	
MSR1A-08F	8	16.2	16.4	4.3	6.5	6°	127	40	5	
MSR1A-10F	10	20.5	20	5	7.3	5°	136	60	5	
MSR1A-12F	12	24.6	23	5.8	8.2	5°	148	80	5	
MSR1A-13F	13	26.7	25	6.1	8.6	5°	155	100	5	
MSR1A-14F	14	28.8	27	6.4	9	5°	162	110	5	
MSR1A-17F	17	35.1	31.6	7.6	10.3	5°	191	170	5	
MSR1A-19F	19	39.3	33.7	8.6	11.2	5°	216	230	5	

- · Intermediate size between standard and short, designed for workability in tight spaces.
- · The ratchet section can be tightened.
- The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.
- $\boldsymbol{\cdot}$ The arrow display shows the direction of work at a glance.
- \cdot The pivot angle is set at 180°.
- \cdot The grip design is non-slip.



Be careful not to apply too much force because the joint is vulnerable to impact and

RATCHET COMBINATION WRENCH (SHORT)



No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)		
MSR2SA-08	8	16.2	16.4	3.8	6.4	6°	90	30	5	
MSR2SA-10	10	20.5	20	4.8	7.3	5°	95	40	5	
MSR2SA-12	12	24.6	22.6	5.5	8.2	5°	106	50	5	
MSR2SA-13	13	26.7	24.5	5.8	8.6	5°	108	60	5	
MSR2SA-14	14	28.8	27	6.2	9	5°	115	70	5	
MSR2SA-17	17	35.1	31.6	7	10.3	5°	127	110	5	

- · The ratchet section can be tightened.
- \cdot The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.
- $\boldsymbol{\cdot}$ Rotation direction can be switched by lever operation.
- \cdot The grip design is non-slip.



To avoid damage or idling, be sure to operate the left and right switching levers securely.







[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

[•] Products marked with ② should be ordered after checking stock.

RATCHET BOX END WRENCH SET (FLEX) [5pcs.]



	No.		Weight(g)		
•	TMR105		660	1	
	Set contents				
	Ratchet box end wrench (flex)	MR1-0810F, 1012F, 12	214F,1315	F, 14	17F

- · Both heads can be tightened.
- \cdot The span between the ratchet clasp and the hinge is shortened and the thickness is designed to be thin and flat, allowing smooth continuous operation in tight spaces.
- The 5° ratchet feed angle enables fine feed operation.
- $\boldsymbol{\cdot}$ The size is indicated at an easy-to-see position on the head. Arrows indicate the direction of work at a glance. · Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

RATCHET BOX END WRENCH (FLEX)



	No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	6	
0	MR1-0607F	6× 7	18	18	7.4	7.4	120	65	5	
O	MR1-0810F	8×10	18	21	7.4	8.4	150	75	5	
0	MR1-1012F	10×12	21	23.5	8.4	8.4	175	105	5	
O	MR1-1113F	11×13	22	25	8.4	8.4	185	120	5	
0	MR1-1214F	12×14	23.5	26.5	8.4	8.4	195	135	5	
0	MR1-1315F	13×15	25	28	8.4	8.4	205	155	5	
O	MR1-1417F	14×17	26.5	30.5	8.4	10	225	190	5	
0	MR1-1618F	16×18	29	32	10	11.4	250	270	5	
O -	MR1-1719F	17×19	30.5	34	10	11.4	260	285	5	
0	MR1-2123F	21×23	38	45	12.5	13.5	312	555	5	
O -	MR1-2224F	22×24	41	45	13.5	13.5	325	590	5	



Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

RATCHET BOX END WRENCH SET (SHORT FLEX) [5pcs.]









No.	Weight(g)		
TMR1S05	580	1	
Cat contants			

Box end wrench (short flex)

- · Both heads can be tightened. \cdot The span between the ratchet clasp and the hinge is shortened and the thickness is designed
- to be thin and flat, allowing smooth continuous operation in tight spaces. \cdot The number of teeth is 72 and the feed angle is 5° for fine feed operation.
- \cdot The size is indicated at an easy-to-see location on the head. The arrowhead display allows the user to determine the direction of work at a glance.



Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

MR1S-0810F, 1012F, 1214F, 1315F, 1417F

RATCHET BOX END WRENCH (SHORT FLEX)









No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	\Box	
MR1S-0810F	8×10	18	21	7.4	8.4	105	68	5	
MR1S-1012F	10×12	21	23.5	8.4	8.4	125	91	5	
	11×13	22	25	8.4	8.4	135	105	5	
MR1S-1214F	12×14	23.5	26.5	8.4	8.4	145	117	5	
	13×15	25	28	8.4	8.4	155	133	5	
MR1S-1417F	14×17	26.5	30.5	8.4	10	165	162	5	
MR1S-1618F	16×18	29	32	10	11.4	170	210	5	
MR1S-1719F	17×19	30.5	34	10	11.4	180	233	5	



· Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

RATCHET COMBINATION WRENCH SET (SHORT FLEX) [6pcs.]









No.	Weight(g)	6	
TMSR2S06	540	1	

Short ratchet combination wrench (swivel type)

MSR2S-08F, 10F, 12F, 13F, 14F 17F

- \cdot The ratchet section can be tightened.
- \cdot The span between the ratchet clasp and the hinge is shortened and the thickness is designed to be thin and flat, allowing smooth continuous operation in tight spaces.

CAUTION

- \cdot The number of teeth is 72 and the feed angle is 5° for fine feed operation.
- $\boldsymbol{\cdot}$ The size is indicated at an easy-to-see location on the head. The arrowhead display allows the user to determine the direction of work at a glance.
 - Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

[·] Do not hit or extend it with a pipe or other tools.

RATCHET COMBINATION WRENCH (SHORT FLEX)



	No.	S	D1	D2	T1	T2	L	Weight(g)	6	
(MSR2S-08F	8	17.3	18	4	7.4	90	39	5	
0	MSR2S-10F	10	21.5	21	4.5	8.4	110	58	5	
0	MSR2S-11F	11	23.5	22	5	8.4	115	67	5	
(MSR2S-12F	12	25.5	23.5	5.5	8.4	125	79	5	
	MSR2S-13F	13	27.5	25	6	8.4	135	94	5	
0	MSR2S-14F	14	29.5	26.5	6	8.4	140	104	5	
0	MSR2S-15F	15	31.4	28	7	8.4	145	119	5	
O	MSR2S-16F	16	33.4	29	7	10	155	144	5	
0	MSR2S-17F	17	36	30.5	7	10	165	163	5	
0	MSR2S-18F	18	38	32	8	11.4	175	201	5	
0	MSR2S-19F	19	40	34	8	11.4	185	221	5	



• Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

D1\S1\

RATCHET BOX END WRENCH (EXTRA LONG FLEX)



No.	S	D1	D2	T1	T2	L	Weight(g)		
	10	15.4	21	8.2	13.4	315	135	5	
	12	19	23.5	9.6	14.4	350	188	5	
	13	20.5	25	10.5	14.9	380	224	5	
✓ MR15L-14F	14	22	26.5	11	15.4	395	256	5	
	15	23.5	28	11.9	15.9	405	284	5	
	17	26	30.5	13.4	18.5	435	370	5	
MR15L-19F	19	28.5	34	14.4	20.9	460	451	5	

- The ratchet mechanism has a short span between the ratchet and the hinge, a thin, flat design, 72 teeth, and a 5° feed angle for smooth continuous operation in tight spaces.
- \cdot The size is displayed in an easy-to-see position on the head, and the direction of rotation can be switched by operating a lever on the side of the head.
- Both the ratchet side and Box end wrench side are offset on one side, so they can be used even when there is a seating around the bolt or nut.



- Be careful not to apply too much force because the joint is vulnerable to impact and twisting.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



RATCHET BOX END WRENCH SET [3pcs.]



	0	•		0 6	160	ANTENNA (9 12	•	(
		•	12	6	€ RM	-12X16 6) J2PSE	14	•	(D	
)	0		74.	0	6	AN-1449 AYOTO YOU		17		0	()

No.	Weight(g)	\Box	
RM03	640	10	
	· · · · · · · · · · · · · · · · · · ·		

Set contents

Ratchet box end wrench RM-10X12, 12X14, 14X17

- \cdot The head is thin and suitable for working in tight spaces. (For temporary tightening only: Do not use for tightening or rusted bolts/nuts.)
- \cdot Feed angle is 20°.
- * 6pt. for bore diameters 10-12 mm, 12pt. for diameters 14 mm and larger.



 $\boldsymbol{\cdot}$ The tightening is for temporary use only and is not to be performed.

RATCHET BOX END WRENCH

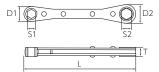


S1×S2	D1	D2	Т	L	Weight(g)		
8× 9	17	19	10	120	70	10	
8×10	17	22	10	120	70	10	
10×12	22	24	11	150	130	10	
12×14	24	29	14	165	230	10	
14×17	29	33	14	195	280	10	
	8× 9 8×10 10×12 12×14	8× 9 17 8×10 17 10×12 22 12×14 24	8× 9 17 19 8×10 17 22 10×12 22 24 12×14 24 29	8×9 17 19 10 8×10 17 22 10 10×12 22 24 11 12×14 24 29 14	8×9 17 19 10 120 8×10 17 22 10 120 10×12 22 24 11 150 12×14 24 29 14 165	8×9 17 19 10 120 70 8×10 17 22 10 120 70 10×12 22 24 11 150 130 12×14 24 29 14 165 230	8 × 9 17 19 10 120 70 10 8 × 10 17 22 10 120 70 10 10 × 12 22 24 11 150 130 10 12 × 14 24 29 14 165 230 10

- The head is thin and suitable for working in tight spaces. (For temporary tightening only: Do not use for tightening or rusted bolts/nuts.)
- Feed angle is 20°.
- * 6pt. for 8 to 12 mm bore, 12pt. for 14 mm and larger.



• The tightening is for temporary use only and is not to be performed.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 🕢 should be ordered after checking stock.









RATCHET BOX END WRENCH & SOCKET SET







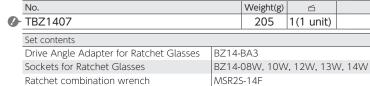












• Includes a plastic case (W186×D103×H34) for convenient and storage tray.



· Insert the square drive completely up to the root.



With resin case



Combination example (MSR2S-14F + BZ14-BA3)



Comparison with ratchet handle (BR3E)

RATCHET BOX END WRENCH & SOCKET SET













Set contents	
Sockets for Ratchet Glasses	BZ14-08W, 10W, 12W, 13W, 14W
Ratchet combination wrench	MSR2S-14F

 \cdot Includes a plastic case (W186×D103×H34) for convenient and storage tray.





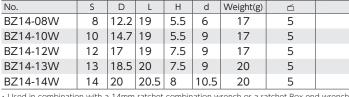
Combination example (MSR2S-14F + BZ14-12W)

SOCKET FOR RATCHET BOX END WRENCH

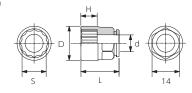








- $\boldsymbol{\cdot}$ Used in combination with a 14mm ratchet combination wrench or a ratchet Box end wrench, it is compact in both outer diameter and height, making it effective in locations where space
- · The socket has a through hole so that it can be used for long protruding bolts.



3/8"sq. DRIVE ADAPTER





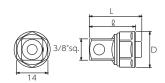


No.	D	L	Q	Weight(g)	6	
BZ14-BA3	16	23.4	20.5	20	5	

- \cdot Used in combination with a 14mm ratchet combination wrench or a ratchet Box end wrench, a variety of 3/8"sq. sockets and bit sockets can be used.
- · Union mechanism to prevent sockets from falling out.



Insert the square drive completely up to the root.



[·] Do not hit or extend it with a pipe or other tools.

CONVENTIONAL TOOLS

OPEN END WRENCHES AND COMBINATION WRENCHES



- · Do not use the wrench with an Do not use the wrench with angle to the bolt or nut.
 Do not use two wrenches
 - connected together.
 - \cdot Use a wrench that matches the size of the bolt/nut.
 - $\boldsymbol{\cdot}$ Do not add a pipe to use.
 - · Hold the bolt/nut tighten.
 - · Do not use too much force, otherwise the wrench may come off.
 - $\boldsymbol{\cdot}$ Do not hit the wrench with a hammer.
 - $\boldsymbol{\cdot}$ Do not use as a hammer.
 - · In carrying the tool set, be sure to hang the clamp for the securely.
 - $\boldsymbol{\cdot}$ Be careful not to get your hand caught in the tool when inserting or taking from the holder.







Spanner / Combination wrench

Spanner is one of the typical tools used to tighten or loosen a bolt or nut, and is used to turn a bolt or nut by holding the two faces (two parallel faces). The size of a wrench is shown by the two faces of boxed diameters. For example, a wrench for a bolt or nut with width across flat of 12 mm and 14 mm is shown as 12 x 14 wrench. Availability start from 5.5mm to 46mm.





Combination wrenches

Box-end head on one side and open-end head of the same size on the other, combining the functions of a wrench suitable for quick turning and a Box end wrench for applying strong force.

P.342-344.615

Flex socket spanner

One side is a swivel-type socket wrench shape, allowing fast turning with the wrench side and tightening with the socket shape side.

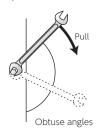
P.342

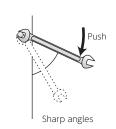


How to use spanner

Use returning a hand

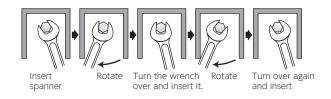
Safe to use by pulling it toward you when the angle of rotation is obtuse to the bolt/nut, and pushing it with the palm of your hand when the angle becomes acute.





How to use spanner in narrow space

The boxed end diameter has an angle of 15° to the handle. By using them back-to-back, the feed angle becomes 30°.



Features of KTC Spanner

The head of the KTC spanner is KTC's original "new spear head" with a smaller head and add volume at the part where force is applied. The head is one of the smallest in the world, and the corners of the open diameter are rounded to prevent the concentration of stress. The contrast between the satin finish and high polished provide tool beauty.

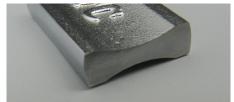




Features of KTC Combination Wrench

The KTC combination wrench has a simple form, but shows its ability even in a very narrow space.

The wrench side has the world's smallest class "new spear head" with the smallest head. The handle has a cross-sectional shape that is strong against bending and lightweight. The total length is longer than conventional products to make it easier to apply force. The size mark is shown large, easy-to-read, forging embossed.



Cross-sectional profile

Open end wrench and Flex head sockets Size list (mm)

•										•		•																								
Outside diameter																																				
Part Number mm	^																																			\times \times
Type	7	7	8	8	9	10	11	12 1	3 1	14 1	3 1	14	14	15	17	17	18	19	21	21	22	22	23	26	24	26	27	28	32	30	32	32	32	36	38	38 46
S2							П																													
Open end wrench		•	•	•	•	•	•	•		•		•		•	•	•		•	•			•	•	•		•		•	•	•	•	•	•	•	•	• •
D G	ľ	Ī	_	_	_	_		_		_		_		_		_		•	_	Ĭ	_	Ĭ	_	Ĭ	_	Ĭ	_	_	_	Ī	_	_	_	Ĭ		
S20																																				
Open end wrench (slim type)											-																									
5====																																				
FBH1																																				
Flex head socket						•					-	•																								

[·] Do not hit or extend it with a pipe or other tools.

Combination wrenches and flex-socket open end wrenches Size list (mm)

Outside diameter mm Part Number Type		4 4.5	5	5.5 6	7	8	9	10	11	12	13	14	15	16	17	18	19 :	20 2	21 2	22 2	3 2	4 2!	5 26	5 27	28	29	30	31	32	33	34	35	36	38 4	41 4	16
MS2 Combination wrenches	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MS3 Combination wrenches (slim type)						•		•					•																							
FBS Flex socket spanner								•		•	•	•			•		•																			

Open end wrench Size list (in) inch

Outside	diameter 1/	/4 5	5/16	3/8	13/32	7/16	1/2	9/16	19/32	5/8	5/8	11/16	3/4	3/4	25/32	13/16	15/16	1	1-1/8
Part Number	in >	×	×	×	×	×	×	×	×	×	\times	×	×	×	×	×	×	×	×
Туре	5/	/16 3	3/8	7/16	1/2	1/2	9/16	5/8	11/16	11/16	3/4	3/4	25/32	13/16	7/8	7/8	1	1-1/16	1-1/4
S2																			
Open end wrench										•		•						•	
2																			

Combination wrenches Size list (in) inch



Outside diameter in Part Number Type		5/32	3/16	13/64	7/32	15/64	1/4	9/32	5/16	11/32	3/8	7/16	1/2	9/16	19/32	5/8	11/16	3/4	25/32	13/16	7/8	15/16	1	1-1/16	1-1/8	1-3/16	1-1/4	1-5/16	1-3/8	1-7/16	1-1/2
MS2 Combination wrenches	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

OPEN END WRENCH SET [8pcs.]





No.	Weight(kg)		
TS208	1.1	1	

Set contents

S2-05507, 0810, 1012, 1113, 1214, 1417, Open end wrench 1921, 2224

- · Includes plastic molded tray (W445 \times D185 \times H52).
- * Resin molded trays are set to fit into metal case EKB-2 (🗘 P.198).

OPEN END WRENCH SET [10pcs.]





No.		Weight(kg)	\subseteq	
TS210		1.6	1	
Set contents				
Open end wrench	S2-05507, 0810, 10		1214	1, 1417,

- Includes plastic molded tray (W445×D185×H52).
- * Resin molded trays are set to fit into metal case EKB-2 (\bigcirc P.198).

OPEN END WRENCH SET [6pcs.]





No.		Weight(g)	\Box	
TS206		550	1	
Set contents				
Open end wrench	S2-0810, 1012, 11	13, 1214, 1	417,	1719
Open and wronch holder	EUC 1			

^{*} Spanner holders are set as a spare parts. 🗘 P.341





[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

OPEN END WRENCH SET [6pcs.]





No.	Weight(g)		
TS206A	655	1	
Set contents			

\$2-05507, 0810, 1113, 1214, 1719, 2224 Open end wrench Open end wrench holder EHS-1

OPEN END WRENCH SET [6pcs.]





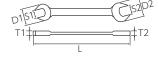
No.		Weight(g)			
TS206B		700	1		
Set contents					
Open end wrench S2-5/16X3/8, 13/32X1/2, 1/2X9/1 19/32X11/16, 5/8X3/4, 25/32X					
On an analysman ala la alalam	TUC 1				

^{*} Spanner holders are set as a spare parts. 🗘 P.341

OPEN END WRENCH



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	6	
S2-05507	5.5× 7	12.5	15.5	3.5	3.5	102	15	5	
S2-0607	6× 7	13	15.5	3.5	3.5	102	15	5	
S2-0608	6× 8	13	17.5	4	4	107	18	5	
S2-0708	7× 8	15.5	17.5	4	4	112	20	5	
S2-0809	8× 9	17.5	19.5	4.5	4.5	118	30	5	
S2-0810	8×10	17.5	21.5	4.5	4.5	122	40	5	
S2-1011	10×11	21.5	23.5	5	5	133	45	5	
S2-1012	10×12	21.5	25.5	5.5	5.5	138	60	5	
S2-1013	10×13	21.5	27.5	6	6	143	60	5	
S2-1014	10×14	21.5	29.5	6.5	6.5	148	65	5	
S2-1113	11×13	23.5	27.5	6	6	147	65	5	
S2-1214	12×14	25.5	29.5	6.5	6.5	157	75	5	
S2-1315	13×15	27.5	31.5	7	7	164	90	5	
S2-1317	13×17	27.5	36	7	7	168	100	5	
S2-1417	14×17	29.5	36	7	7	173	105	5	
S2-1618	16×18	33.5	38	8	8	188	135	5	
S2-1719	17×19	36	40	7.5	7.5	195	145	5	
S2-1721	17×21	36	44	8	8	203	170	5	
S2-1921	19×21	40	44	8	8	218	195	5	
S2-1922	19×22	40	46	8.5	8.5	223	205	5	
S2-2022	20×22	42	46	8.5	8.5	228	215	5	
S2-2123	21×23	44	48	8.5	8.5	233	240	5	
S2-2126	21×26	44	54	8.5	8.5	238	260	5	
S2-2224	22×24	46	50	9	9	244	260	5	
S2-2326	23×26	48	54	9	9	248	300	5	
S2-2427	24×27	50	55.5	9	9	253	320	5	
S2-2528	25×28	52	57.5	9.5	9.5	263	365	5	
S2-2632	26×32	54	65.5	10.5	10.5	273	460	5	
S2-2730	27×30	55.5	61.5	10	10	274	430	5	
S2-2732	27×32	55.5	65.5	10.5	10.5	284	480	5	
S2-2932	29×32	60	65.5	10.5	10.5	288	510	5	
S2-3032	30×32	61.5	65.5	10.5	10.5	294	525	5	
S2-3236	32×36	65.5	74	12	12	318	710	5	
S2-3538	35×38	72	78	13.5	13.5	334	905	5	
S2-3638	36×38	74	78	13.5	13.5	354	945	5	
S2-4146	41×46	84	94	14	14	399	1,315	5	



 $[\]cdot$ Do not hit or extend it with a pipe or other tools.

^{*} Spanner holders are set as a spare parts. 🔷 P.341

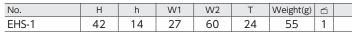
OPEN END WRENCH





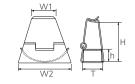
No.	S1×S2(in)	D1	D2	T1	T2	L	Weight(g)	\subseteq	
S2-1/4X5/16	1/4×5/16	13	17.5	4	4	107	18	5	
S2-5/16X3/8	5/16×3/8	17.5	21.5	4.5	4.5	122	40	5	
S2-3/8X7/16	3/8×7/16	21.5	23.5	5	5	133	45	5	
S2-13/32X1/2	13/32×1/2	21.5	27.5	6	6	143	60	5	
S2-7/16X1/2	7/16×1/2	23.5	27.5	6	6	147	65	5	
S2-1/2X9/16	1/2×9/16	27.5	29.5	6.5	6.5	160	74	5	
S2-9/16X5/8	9/16×5/8	29.5	33.5	7	7	169	97	5	
S2-19/32X11/16	19/32×11/16	31.5	36	7	7	175	106	5	
S2-5/8X11/16	5/8×11/16	33.5	36	7	7	177	110	5	
S2-5/8X3/4	5/8×3/4	33.5	40	7.5	7.5	192	133	5	
S2-11/16X3/4	11/16×3/4	36	40	7.5	7.5	195	145	5	
S2-3/4X25/32	3/4×25/32	40	42	8	8	216	177	5	
S2-3/4X13/16	3/4×13/16	40	44	8	8	218	195	5	
S2-25/32X7/8	25/32×7/8	42	46	8.5	8.5	228	215	5	
S2-13/16X7/8	13/16×7/8	44	46	8.5	8.5	231	224	5	
S2-15/16X1	15/16×1	50	52	9	9	249	300	5	
S2-1X1-1/16	1×1-1/16	52	55.5	9	9	256	327	5	
S2-1-1/8X1-1/4	1-1/8×1-1/4	60	65.5	10.5	10.5	288	510	5	

OPEN END WRENCH HOLDER



[•] This is a spare parts for open end wrench sets (TS206, TS206A, TS206B).





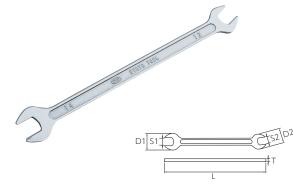
OPEN END WRENCH SET (SLIM TYPE) [6pcs.]



No.		Weight(g)		
S206		544	1	
Set contents				
Open end wrench (slim type)	S20-10X12, 12X10, 12X	<14, 14X12	, 17>	<19,

[·] The same combination of sizes and different angles are included in each package.

OPEN END WRENCH (SLIM TYPE)



No.	S1×S2	D1	D2	Т	L	Weight(g)	6	
S20-10X12	10×12	21	26	4	210	64	5	
S20-12X10	12×10	26	21	4	210	64	5	
S20-12X14	12×14	26	30	4	215	75	5	
S20-14X12	14×12	30	26	4	215	75	5	
S20-17X19	17×19	36	40	4.5	235	120	5	
S20-19X17	19×17	40	36	4.5	235	120	5	

[·] Suitable for tightening and loosening double nuts and working in confined spaces.









[•] Function mark is indicated under the product name. For the details, please refer to O P.004-005.

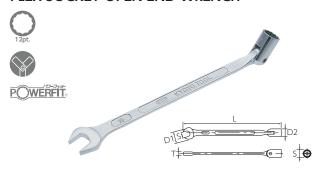
 $[\]cdot$ Products marked with ${\bf \emph{Q}}$ should be ordered after checking stock.

FLEX-SOCKET OPEN END WRENCH SET [6pcs.]



No.		Weight(g)	白	
FBS6		800	1	
Set contents				
Flex-socket open end wrench	FBS-10, 12, 13, 14	4, 17, 19		

FLEX-SOCKET OPEN END WRENCH



No.	S	D1	D2	Т	L	Weight(g)	6	
FBS-10	10	22	14	6	180	66	5	
FBS-12	12	26	17	6.5	205	100	5	
FBS-13	13	28	18	6.5	210	105	5	
FBS-14	14	29	19	6.5	230	140	5	
FBS-17	17	36	23	7	250	200	5	
FBS-19	19	40	26	7.5	265	230	5	

- \cdot The open end wrench can be used for fast turning, and the socket side can be used for tightening.
- \cdot The socket side has a pivoting mechanism that allows the handle to be bent into an L-shape to apply strong force, or stood up to be turned quickly like a screwdriver.



· The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

FLEX HEAD SOCKET



No.	S1×S2	D1	D2	Α	L	Weight(g)	白	
FBH1-8X10	8×10	12	14.5	5.5	200	90	10	
FBH1-10X12	10×12	14.5	17	5.5	215	120	10	
FBH1-12X14	12×14	17	20	6.5	230	160	10	
FBH1-13X14	13×14	18.5	20	6.5	230	170	10	
FBH1-14X17	14×17	20	23.5	7.5	245	220	10	
FBH1-17X19	17×19	23.5	26	7.5	250	250	10	

· The pivot mechanism allows the handle to be bent into an L-shape to exert a strong force, or stood up to be turned quickly like a screwdriver.



 $\boldsymbol{\cdot}$ The joint part is vulnerable to impact and pry, so be careful not to exert excessive

COMBINATION WRENCH SET [8pcs.]







No.		Weight(kg)	6	
TMS208		1	1	
Set contents				
Combination wrenches	MS2-07, 08, 10,	12. 13. 14. 1	17. 1	9

- · Includes plastic molded tray (W445×D185×H52).
- * Resin molded trays are set to fit into metal case EKB-2 (\bigcirc P.198).

COMBINATION WRENCH SET [10pcs.]







No.		Weight(kg)	6	
TMS210		1.1	1	
Set contents				
Combination wrenches	MS2-055, 07, 08,	10, 12, 13,	14,	15, 17, 19

· Includes plastic molded tray (W445×D185×H52).

* Resin molded trays are set to fit into metal case EKB-2 (P.198).

[·] Do not hit or extend it with a pipe or other tools.

COMBINATION WRENCH SET [12pcs.]









No.					V	Veig	ht(k	g)	6		
TMS212						1	.6		1		
Set contents											
Combination wrenches	MS2-055	07.0	3 10	12	13	1/	15	17	10	21	22

- \cdot Includes plastic molded tray (W445×D185×H52).
- * Resin molded trays are set to fit into metal case EKB-2 (P.198).

COMBINATION WRENCH SET [8pcs.]









No.		Weight(kg)	白	
TMS208B		1	1	
Set contents				
Combination wrenches	MS2-1/4, 3/8, 7/16, 1/2, 9	/16, 5/8,11	/16,	3/4

· Includes plastic molded tray (W445×D185×H52).

3.2 8

No.

MS2-032

* Resin molded trays are set to fit into metal case EKB-2 (P.198).

D2

7.5 3

Weight(g)

6 5

75

3

COMBINATION WRENCH







14132 032	٥.۷	U	7.5)		, ,	0		
MS2-04	4	9	8.3	3	4	80	8	5	
MS2-045	4.5	10	8.8	3	4	85	10	5	
MS2-05	5	11	9.3	3	4.5	90	11	5	
MS2-055	5.5	12.4	9.9	3	4.5	96	13	5	
MS2-06	6	13.2	10.4	3	4.5	96	14	5	
MS2-07	7	15.4	11.9	3.5	5	111	20	5	
MS2-08	8	17.3	12.9	4	5.5	126	28	5	
MS2-09	9	19.5	14.4	4.5	6	136	36	5	
MS2-10	10	21.5	16.1	4.5	6.5	151	42	5	
MS2-11	11	23.5	17.1	5	7	161	55	5	
MS2-12	12	25.5	18.1	5.5	7.5	170	65	5	
MS2-13	13	27.5	19.1	6	8.5	188	85	5	
MS2-14	14	29.5	20.6	6	9.5	190	98	5	
MS2-15	15	31.4	22.6	7	10	200	119	5	
MS2-16	16	33.4	23.6	7	10.5	215	134	5	
MS2-17	17	36	25.1	7	10.5	225	153	5	
MS2-18	18	38	26.6	8	11.5	241	184	5	
MS2-19	19	40	27.6	7.5	12	256	205	5	
MS2-20	20	42	29.6	8	12	271	234	5	
MS2-21	21	44	30.6	8	13	289	267	5	
MS2-22	22	46	32.1	8.5	13.5	304	305	5	
MS2-23	23	48	33.6	8.5	14.5	311	331	5	
MS2-24	24	50	35.1	9	15	337	380	5	
MS2-25	25	52	36.1	9	15.5	351	423	5	
MS2-26	26	54	37.6	9	16	371	466	5	
MS2-27	27	55.7	39.1	9	16.5	381	502	5	
MS2-28	28	57.7	40.6	9.5	17	401	561	5	
MS2-29	29	60	43.6	10	18	421	650	1	
MS2-30	30	61.7	43.6	10	18	446	687	1	
MS2-31	31	63.7	45.6	10.5	18	462	790	1	
MS2-32	32	65.7	46.6	10.5	18	471	836	1	
MS2-33	33	67.7	47.6	11	20	477	904	1	
MS2-34	34	69.7	52.1	11	21	480	1,030	1	
MS2-35	35	72	52.1	12	21	481	1,070	1	
MS2-36	36	74	52.1	12	21	501	1,155	1	
MS2-38	38	78	54.6	13.5	22	521	1,382	1	
MS2-41	41	84	59.1	14	24.5	542	1,680	1	
MS2-46	46	94	66.1	14	26	562	2,142	1	

D155 D2
T1 15' 172







^{* 5}mm or less on the eyeglass side is a hexagonal bore.

[•] Function mark is indicated under the product name. For the details, please refer to • P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

COMBINATION WRENCH









No.	S(in)	D1	D2	T1	T2	L	Weight(g)		
MS2-1/8	1/8	8	7.3	3	3	75	6	5	
MS2-5/32	5/32	9	8.3	3	4	80	8	5	
MS2-3/16	3/16	10	8.8	3	4	85	10	5	
MS2-13/64	13/64	11	9.3	3	4.5	90	11	5	
MS2-7/32	7/32	12.4	9.9	3	4.5	95.9	13	5	
MS2-15/64	15/64	13.2	10.4	3	4.5	95.8	14	5	
MS2-1/4	1/4	13.2	10.4	3	4.5	95.8	14	5	
MS2-9/32	9/32	15.4	11.9	3.5	5	111	20	5	
MS2-5/16	5/16	17.3	12.9	4	5.5	126.2	28	5	
MS2-11/32	11/32	19.5	14.4	4.5	6	136.1	36	5	
MS2-3/8	3/8	21.5	16.1	4.5	6.5	150.4	42	5	
MS2-7/16	7/16	23.5	17.1	5	7	161	55	5	
MS2-1/2	1/2	27.5	19.1	6	8.5	187.4	85	5	
MS2-9/16	9/16	29.5	20.6	6	9.5	190.2	98	5	
MS2-19/32	19/32	31.4	22.6	7	10	200.3	119	5	
MS2-5/8	5/8	33.4	23.6	7	10.5	215.3	134	5	
MS2-11/16	11/16	36	25.1	7	10.5	225.2	153	5	
MS2-3/4	3/4	40	27.6	7.5	12	255.3	205	5	
MS2-25/32	25/32	42	29.6	8	12	270.4	234	5	
MS2-13/16	13/16	44	30.6	8	13	288.4	267	5	
MS2-7/8	7/8	46	32.1	8.5	13.5	303.5	305	5	
MS2-15/16	15/16	50	35.1	9	15	336.5	380	5	
MS2-1	1	52	36.1	9	15.5	350.5	423	5	
MS2-1-1/16	1-1/16	55.7	39.1	9	16.5	380.7	502	5	
MS2-1-1/8	1-1/8	60	43.6	10	18	420.5	650	5	
MS2-1-3/16	1-3/16	61.7	43.6	10	18	445.8	687	5	
MS2-1-1/4	1-1/4	65.7	46.6	10.5	18	470.7	836	5	
MS2-1-5/16	1-5/16	67.7	47.6	11	20	476.6	904	5	
MS2-1-3/8	1-3/8	72	52.1	12	21	480.7	1,070	1	
MS2-1-7/16	1-7/16	74	52.1	12	21	500.9	1,155	1	
MS2-1-1/2	1-1/2	78	54.6	13.5	22	520.9	1,382	1	

^{*} The glasses side 13/64in and smaller are hexagonal bore.

Thin combination wrenches are listed in the Cycle Tool section.



 $[\]boldsymbol{\cdot}$ Do not hit or extend it with a pipe or other tools.

CONVENTIONAL TOOLS

PROFIT TOOLS



- $\boldsymbol{\cdot}$ Load capacity for thin type is lower than that of the CAUTION Load capacity for thin type is lower than the standard type. Be careful not to apply exce Use bolts and nuts of the appropriate size. standard type. Be careful not to apply excessive force.

 - $\boldsymbol{\cdot}$ Do not use additional pipes.
 - · Hold the bolt/nut tighten.
 - · Insert the bolt/nut completely. (Box end wrenches)
 - $\boldsymbol{\cdot}$ When using a spanner, do not give excessive force.
 - · Do not use additional pipes.
 - · Do not use as a hammer.
 - \cdot Do not hit the wrench with a hammer.



Profit

Professional mechanics are required to work reliably in a limited work space. To meet the needs of such mechanics, we have developed a slim body with the minimized strength and eliminate extra specifications.

PROFIT TOOL BOX END WRENCH & OPEN END WRENCH SET [6pcs.]









No.		Weight(g)	6		
SM306		320	5		
Set contents					
Profit Tool open end wrench	S30-10, 1	2, 14			
Profit Tool box end wrench	M30-10, 12, 14				
Resin Case	W187×D	190×H44			

- · Set of open end wrench and Box end wrench.
- $\boldsymbol{\cdot}$ Placed in the tray and housed in a transparent plastic case.

PROFIT TOOL OPEN END WRENCH SET [5pcs.]

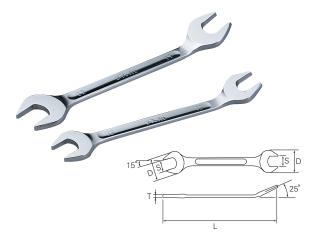




No.		Weight(g)	Ó			
TS305		380	1			
Set contents						
Profit Tool open end wrench S30-8, 10, 12, 13, 14						
Resin Case	W215×E	120×H45				

 $\boldsymbol{\cdot}$ Placed in the tray and housed in a transparent plastic case.

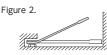
PROFIT TOOL OPEN END WRENCH



No.	S	D	Т	L	Weight(g)	Ó	
S30-8	8	19	3	120	30	5	
S30-10	10	22	3.5	130	35	5	
S30-12	12	27	4.3	140	53	5	
S30-13	13	29	4.5	150	60	5	
S30-14	14	30	4.6	160	68	5	
S30-15	15	33	4.7	170	80	5	
S30-17	17	36	4.8	185	105	5	
S30-19	19	40	5	200	125	5	

- Tapered tip and reduced thickness compared to conventional products. (Figure 1)
- \cdot The diameter is limited to one size and set with a 25 degree tilt angle on one end only.
- Convenient for use on double nuts on various machineries.
- Effective in places where it's difficult to use conventional wrenches, such as near surroundings of automobile carburetors and manifolds. Particularly effective in tight spaces or with thin bolts and nuts. (Figure 2)





 $[\]cdot$ Do not hit or extend it with a pipe or other tools.

PROFIT TOOL BOX END WRENCH SET [5pcs.]









No.	Weight(g)	6	
TM305	460	1	
6	· · · · · · · · · · · · · · · · · · ·		

Set contents

Profit Tool box end wrench M30-8, 10, 12, 13, 14 W187×D190×H44 Resin Case

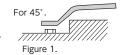
· Placed in the tray and housed in a transparent plastic case.

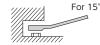
PROFIT TOOL BOX END WRENCH



No.	S	D	Т	L	Weight(g)	Ó	
M30-8	8	12	4.5	155	30	5	
M30-10	10	15	5.5	175	40	5	
M30-12	12	18	6.5	200	60	5	
M30-13	13	19	7	210	70	5	
M30-14	14	21	7.5	225	80	5	
M30-15	15	22	8	231	90	5	
M30-17	17	25	9	244	100	5	
M30-19	19	27	10	270	120	5	

- \cdot The aperture size is only one size, and two different rise angles, 45° \times 15° and 15°, can be
- · Convenient for use on bolts and nuts used in flange joints of industrial machineries or between narrow gaps.(Figure.1)
- $\cdot \ \mathsf{Effective} \ \mathsf{for} \ \mathsf{automobile} \ \mathsf{parts} \ \mathsf{including} \ \mathsf{differentials}, \mathsf{propeller} \ \mathsf{shafts}, \ \mathsf{joints} \ \mathsf{and} \ \mathsf{drive} \ \mathsf{shafts}$ of front-drive vehicles, as well as for clutch overhauling. Also convenient for attaching or removing carburetors and manifolds during engine overhauls.
- · It is also suitable for work in narrow and deep places such as bumpers and inside panels for vehicle body maintenance.





PROFIT TOOL COMBINATION WRENCH SET [5pcs.]









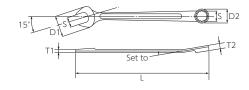
No.	Weight(g)	6	
TMS305	440	1	

Set contents	
Profit Tool Combination Wrench	MS30-8, 10, 12, 13, 14
Resin Case	W187×D190×H44

· Placed in the tray and housed in a transparent plastic case.

PROFIT TOOL COMBINATION WRENCH





No.	S	D1	D2	T1	T2	L	Set to	Weight(g)	6	
MS30-8	8	18	11.5	2.5	4.5	125	18°	20	5	
MS30-10	10	21.5	14.5	3	5.5	150	15°	30	5	
MS30-12	12	26	17.5	3.8	6.5	170	13°	50	5	
MS30-13	13	28.5	18.5	4	7	185	12°	60	5	
MS30-14	14	29.5	20	4.1	7.5	200	11°	80	5	
MS30-15	15	32	21	4.2	8	215	10°	90	5	
MS30-17	17	36	24	4.3	9	240	9°	125	5	
MS30-19	19	40	26.5	4.5	10	260	9°	155	5	

- · The slim form pursues "thinness and lightness".
- $\boldsymbol{\cdot}$ Tapered handle design for torque transmission and elasticity.
- $\boldsymbol{\cdot}$ The handle length is also set to the optimum length considering the tightening torque.

Closed spanner end

- The bore swing angle is set at 15° for a wide range of double-sided use.
- · Tapered tip to reduce shallow hooking.

(The wrench part hangs firmly on the bolt/nut.)



Closed box end

Bending angle of the handle is set for each size with emphasis on torque transmission and workability.

(Set at 35 mm as the height for hands.)



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ② should be ordered after checking stock.



CONVENTIONAL TOOLS

HANDLE WRENCHES



- $\boldsymbol{\cdot}$ Do not use pipes, etc. by splicing them together.
- · Insert bolts and nuts completely.
- Do not use pipes, etc. by
 Insert bolts and nuts com
 Do not hit by a hammer.
 - $\boldsymbol{\cdot}$ Do not use as a hammer.
 - $\boldsymbol{\cdot}$ Do not kick the wrench or put weight on it with your foot.

Types of Handle Wrenches

Handle Wrench Size List (mm)

Harrate VVI erreit Size zist (i									
	mm	8	10	12	13	14	17	19	21
T-shaped wrench		•	•	•	•	•	•	•	•
T-shaped wrench with short h	andle	•	•	•					
T-shaped wrench (flex)			•	•	•	•	•		
T-shaped wrench (long flex)			•	•	•	•	•		



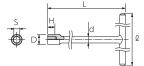
T-SHAPED WRENCH



No.	S(6pt.)	D	d	Н	Q	L	Weight(g)		
TH-8	8	12	8	9	200	254	180	10	
TH-10	10	14	9	11	200	254.5	230	10	
TH-12	12	17	10	13	250	255	320	10	
TH-13	13	18.5	10	14	250	255	320	10	
TH-14	14	19.5	11	15	250	255.5	390	10	
TH-17	17	24	12	17.5	300	306	540	10	
TH-19	19	28.5	14	20	300	307	680	10	
TH-21	21	30.5	14	23	300	307	700	10	

 \cdot The size is stamped on the top of the handle for easy identification when hung from a tool station or other location.





T-SHAPED WRENCH WITH SHORT HANDLE



No.	S(6pt.)	D	d	Н	Q	L	Weight(g)	6	
TH-8N	8	12	8	9	130	254	150	1	
TH-10N	10	14	9	11	130	254.5	200	1	
TH-12N	12	17	10	13	130	255	240	1	

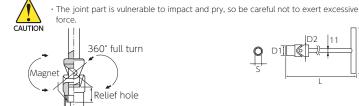
- The handle is shorter than that of the standard product, making it convenient for quick turning in tight spaces and for storing in a tool box.
- \cdot The size is stamped on the top of the handle for easy identification when hung from a tool station or other location.

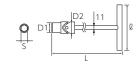
		L	
S D	H	d	Q

T-SHAPED WRENCH (FLEX)



No.	S(6pt.)	D1	D2	Q	L	Weight(g)		
THF2-10	10	14.5	20	180	330	400	10	
THF2-12	12	17	20	180	331.5	405	10	
THF2-13	13	18.5	20	180	331.5	410	10	
THF2-14	14	20	20	180	331.5	410	10	
THF2-17	17	24	20	180	331.5	430	10	





- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ② should be ordered after checking stock.



T-SHAPED WRENCH (LONG FLEX)

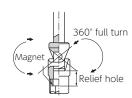


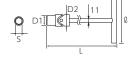


No.	S(6pt.)	D1	D2	Q	L	Weight(g)	白	
THF2-10L	10	14.5	20	180	700	680	10	
THF2-12L	12	17	20	180	701.5	680	10	
THF2-13L	13	18.5	20	180	701.5	690	10	
THF2-14L	14	20	20	180	701.5	690	10	
THF2-17L	17	24	20	180	701.5	700	10	



The joint part is vulnerable to impact and pry, so be careful not to exert excessive





T-shaped handles and quick-turn cross wrenches are listed under Sockets and Drive Tools.



Tire wrenches are listed in the Automotive Specialized Tools section.



[·] Do not hit or extend it with a pipe or other tools.

CONVENTIONAL TOOLS

ADJUSTABLE WRENCHES



Adjustable wrench

- The width of the end should be aligned tighten with the two sides of the bolt or nut.
- Be sure to turn it toward the lower jaw. Turning in the opposite direction may cause damage to the lower jaw due to excessive force.
- \cdot Do not hit by a hammer.







Pipe wrench

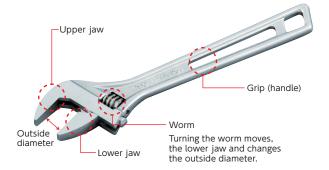
- $\dot{\cdot}$ Use within the applicable range.
- Use the wrench at a right angle to the pipe, with the pipe tighten wedged in the center of the teeth.
- $\boldsymbol{\cdot}$ Do not apply force laterally.
- · Do not use with the additional pipes.
- · Do not use as a hammer.
- $\boldsymbol{\cdot}$ Do not hit by a hammer.
- · Do not use if the teeth are damaged and or worn.



Adjustable wrench

It is a tool with a wide range of uses that can turn several types of bolts, nuts, pipes, etc.

There is a story that the name "monkey wrench" is derived from the name of Charles Monkey, who invented the tool or from the monkey-like shape of the head of the tool. The common name in English is "monkey wrench," but the correct term is adjustable wrench.



Main lineup and variations of adjustable wrenches



Adjustable wrench

Adjustable wrench is a tool with a wide range of use that can turn several types of bolts and nuts by adjusting the boxed diameter with a worm.

O P.353



Pipe wrench

This wrench can turn pipes such as water pipes and gas pipes by hooking the teeth of the upper and lower jaws.

P.469



Adjustable tie rod lock nut wrench

It holds the corner of the nut as if it were wrapped around the nut, enabling stable work. This wrench is designed for automotive tie rod lock nuts, but can also be used as an Adjustable wrench.

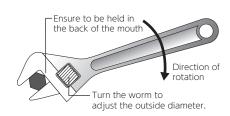
O P.527

How to use Adjustable wrench

To adjust the diameter of the Adjustable wrench, first grasp it near the base of the handle and turn the worm with your thumb until the bolt/nut enters the boxed diameter. Next, with the face of the upper jaw perfectly aligned with the bolt/nut, pull the lower jaw in until the worm no longer turns, check that there is no rattling, and then turn the bolt/nut. At this point, pay attention to the direction of rotation. Adjustable wrench must be turned toward the lower jaw.

Adjustable wrenches have a structure where the lower jaw is movable, so it is easy for rattling to occur in the diameter, and hard to apply excessive torque. In particular, when using a large size Adjustable wrench to turn a small bolt or nut, be careful because the rattling will be possible to be large. If a large torque is required, use a socket wrench or Box end wrench that can grip the bolt/nut at 6 points.







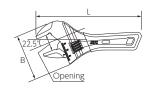
[·] Be sure to turn it toward the lower jaw. Do not strike with a hammer.

ADJUSTABLE WRENCH (SHORT)



No.	Adaptive two- face width	T1	T2	В	L	Weight(g)	6	
WMS-24	6~24mm	4.8	9.4	47	117	80	6	
WMS-30	8~30mm	6.1	11.7	59	138	150	6	
WMS-36	8~36mm	7.2	14	70	159	255	6	
WMS-46	12~46mm	7.5	16.5	93	188	460	6	

- $\boldsymbol{\cdot}$ The short body enables use in confined spaces.
- \cdot Large-diameter nuts, such as bag nuts for plumbing and water supply, can also be handled.
- $\boldsymbol{\cdot}$ The handle is dipped for a comfortable grip.
- · Conveniently calibrated.



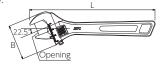


ADJUSTABLE WRENCH



No	0.	Size	Maximum aperture	T1	T2	В	L	Weight(g)	6	
V	VMA-150	150	24	4.8	9.4	46.5	149	95	10	
V	VMA-200	200	30	6.1	11.7	55.6	199	180	10	
V	VMA-250	250	36	7.2	14	66.2	244	315	10	
V	VMA-300	300	46	7.9	16.5	92.4	300	580	5	

• The worm section is indented to improve operability.

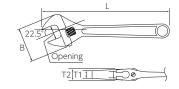


T2]T1II POS

ADJUSTABLE WRENCH



No.	Size	Maximum aperture	T1	T2	В	L	Weight(kg)	6	
MWA-375	375	44	13.4	23.5	104.3	375	1.3	1	
MWA-450	450	55	14	25.6	120	450	2.2	1	



[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

[•] Products marked with ② should be ordered after checking stock.

CONVENTIONAL TOOLS

SCREWDRIVERS



· Do not use on objects that have electricity flowing. The resin on the grip is not insulated.



- $\boldsymbol{\cdot}$ Do not work in an unstable condition such Do not work in an unstable as holding material in one screwdriver in the other. as holding material in one hand and a
 - · Do not use as a lever.
 - · Do not use as a hammer.
 - · Do not hit the screwdriver with a hammer.
 - $\boldsymbol{\cdot}$ Use a screwdriver that matches the size of the screw.
 - · Use protective goggles.
 - $\boldsymbol{\cdot}$ Do not use a screwdriver with a worn, damaged, or cracked tip.



Screwdriver Basic Structure

A screwdriver is a common tool often found in homes and other places and is used for tightening and loosening screws. The size of a cross head screwdriver (KTC calls a plus as cross screwdriver) is indicated by the number that comes from the size of the cross head screw (No.00, No.0, No.1, No.3, No.4). There are two ways to indicate the size of a flat screwdriver: by the total length and the width of the tip.



Lineups and variations



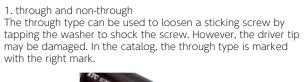
How to Select a Driver (1) Select by Grip

First of all, the grip is an important point in selecting a screwdriver. The material to be used should be determined based on the characteristics of each material and the purpose of the work. As for the shape, each screwdriver is designed to be easy to grip, but since the human hand varies from person, you will not know which grip is the best fit until you try it on. If possible, please visit a store to check the grip.



How to Select a Driver (2) Select by Axis

Along with the grip, the shaft is an important point. You should choose a shaft that suits you based on the following four points.







Round shaft () Common shape, easy to use when turning.

Hexagonal shaft (())
When high torque is required,
a wrench such as a spanner
can be used together.

3. Bolster By attaching a hexagon to the base of the shaft, a wrench can be applied when high torque is required.



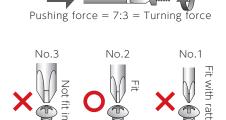
4. Magnet tip
The tip is magnetized and the screw
will not fall off even if it is turned upside
down. In the catalog, the right mark is
attached to the magnetized tip.



How to use

To use a screwdriver is to "push and turn," that is, to turn a screw while pushing it. Especially with cross screws, cam-out (a phenomenon in which the tip of the screwdriver tries to escape from the screw when turning a screw) occurs and the ratio of pushing force to turning force should be about 7:3 at the beginning of loosening and at the end of tightening. When loosening a screw that has been strongly tightened, the pushing force should be stronger. On the other hand, if the screw turns lightly, less pushing force is needed.

It is also important to select the correct screwdriver size for the screw number. Selecting the correct size is to find a screwdriver that is larger than the screw size. If the screwdriver is too large, it will not fit the screw, so try the next size down and make sure the tip of the screwdriver fits the screw perfectly before proceeding. If the screwdriver size is smaller than the screw number, the screw hole will be damaged.



HARD PLASTIC GRIP SCREWDRIVER SET [8pcs.]



No.		Weight(kg)	\Box	
TPMD18		1.2	1	
Set contents				
Plastic grip screwdriver piercing type	No.1	D1P2-1		
(cross)	No.2	D1P2-2		
	No.3	D1P2-3		
Plastic grip screwdriver piercing (flat)	75	D1M2-5		
	100	D1M2-6		
	150	D1M2-8		
Plastic grip stubby screwdriver (cross)		D1PS-2		
Plastic grip stubby screwdriver (flat)		D1MS-6		

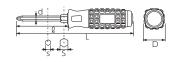
- \cdot With hexagonal bolster. (Excluding stubby screwdrivers)
- · The tip is magnetized.
- * The stubby screwdriver is non-through type shaft.

HARD PLASTIC GRIP SCREWDRIVER



No.	N-th in position	d	D	S	S	L	Q	Weight(g)	6	
D1P2-1	No.1	7.1	29.6	10	6.3	170	75	120	10	
D1P2-2	No.2	7.1	32	10	6.3	210	100	150	10	
D1P2-3	No.3	8.9	33.8	12	7.9	280	150	250	5	

- · Hexagonal bolsters are included.
- $\boldsymbol{\cdot}$ The tip is magnetized.

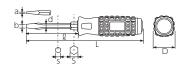


HARD PLASTIC GRIP SCREWDRIVER



No.	а	b	d	D	S	S	L	Q	Weight(g)		
D1M2-5	0.8	5.5	7.1	29.6	10	6.3	170	75	120	10	
D1M2-6	1	6.3	7.1	32	10	6.3	210	100	150	10	
D1M2-8	1.2	8	8.9	33.8	12	7.9	280	150	250	5	

- Hexagonal bolsters are included.
- The tip is magnetized.

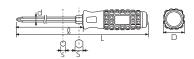


HARD PLASTIC GRIP SCREWDRIVER (LONG)



No.	N-th in position	d	D	S	S	L	Q	Weight(g)	6	
D1P2-130	No.1	7.1	29.6	10	6.3	400	300	180	5	
D1P2-230	No.2	7.1	32	10	6.3	410	300	200	5	
D1P2-330	No.3	8.9	33.8	12	7.9	430	300	310	5	

- The long type (shaft length 300 mm) is convenient for working in deep places around the engine.
- Hexagonal bolsters are included.
- The tip is magnetized.

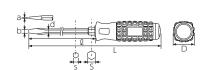


HARD PLASTIC GRIP SCREWDRIVER (LONG)



No.	а	b	d	D	S	S	L	Q	Weight(g)	6	
D1M2-530	0.8	5.5	7.1	29.6	10	6.3	400	300	180	5	
D1M2-630	1	6.3	7.1	32	10	6.3	410	300	200	5	
D1M2-830	1.2	8	8.9	33.8	12	7.9	430	300	310	5	

- The long type (shaft length 300 mm) is convenient for working in deep places around the engine.
- Hexagonal bolsters are included.
- · The tip is magnetized.



[·] Do not hit or pry.

SCREWDRIVERS

HARD PLASTIC GRIP STUBBY SCREWDRIVER (STUBBY)



No.	Туре	а	b	d	D	S	L	Q	Weight(g)	6	
D1PS-2	Cross No. 2	_	_	7.1	35.5	6.3	75	25	70	10	
D1MS-6	Flat	1	6.3	_	35.5	_	75	25	70	10	

[·] The tip is magnetized.

|--|--|--|

PLASTIC GRIP SCREWDRIVER SET [8pcs.]



No.			Weight(g)	\subseteq	
PMD18			910	1	
Set contents					
Plastic grip screwdriver (cross)	No.1	1-1			
	No.2	PDD	D1-2		
	No.3	PDD	1-3		
Plastic grip screwdriver (flat)	75	MDI	D1-75		
	100	MDI	D1-100		
	150	MDI	D1-150		
Plastic grip stubby screwdriver (cross)		SD1	-P		
Plastic grip stubby screwdriver (flat)		SD1	-M		

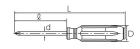
- · The tip is magnetized. (except SD1-M, P)
- * Stubby screwdrivers are non-through type.

PLASTIC GRIP SCREWDRIVER



No.	N-th in position	D	d	L	Q	Weight(g)	6	
PDD1-1	No.1	27	5	160	75	75	10	
PDD1-2	No.2	30	6.3	205	100	130	10	
PDD1-3	No.3	33	8	265	150	210	5	

[·] The tip has a magnet.

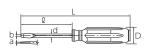


PLASTIC GRIP SCREWDRIVER



No.	а	b	d	D	L	Q	Weight(g)	6	
MDD1-75	0.7	5.5	5.5	27	160	75	75	10	
MDD1-100	0.8	6	6	30	205	100	130	10	
MDD1-150	1	8	8	33	265	150	210	5	

[·] The tip has a magnet.

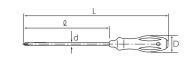


PLASTIC GRIP SCREWDRIVER (LONG)



No.	Type	d	D	L	Q	Weight(g)	6	
PDDZ-2	Cross No. 2	6	27	383	288	100	5	

 $[\]boldsymbol{\cdot}$ This is a long type with a thin shaft.

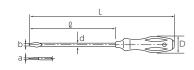


PLASTIC GRIP SCREWDRIVER (LONG)



No.	Туре	а	b	d	D	L	Q	Weight(g)		
MDDZ-400	Flat	0.7	5.5	5.5	27	383	288	90	5	

[·] This is a long type with a thin shaft.









[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

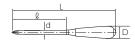
[•] Products marked with ② should be ordered after checking stock.

HEAVY DUTY SCREWDRIVER



No.	Туре	d	D	L	Q	Weight(g)	6	
FPD-250	Cross No.3	9	32	275	150	210	5	

 \cdot Compared to ordinary screwdrivers, this screwdriver has a thicker shaft and handle for greater strength.

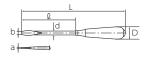


HEAVY DUTY SCREWDRIVER



No.	Туре	а	b	d	D	L	Q	Weight(g)		
FD-250	Flat	1.2	10	9	32	275	150	210	5	

 \cdot Compared to ordinary screwdrivers, this screwdriver has a thicker shaft and handle for greater strength.

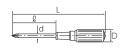


WOODEN GRIP SCREWDRIVER



No.	N-th in position	d	D	L	Q	Weight(g)		
PD-1	No.1	5	24	170	75	60	5	
PD-2	No.2	6	28	220	100	110	5	
PD-3	No.3	8	33	285	150	190	5	
PD-4	No.4	9	34	350	200	260	5	

 \cdot This is a traditional driver with a warm wood texture.

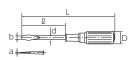


WOODEN GRIP SCREWDRIVER



No.	а	b	d	D	L	Q	Weight(g)	6	
MD-50	0.6	4.5	5	24	145	50	55	5	
MD-75	0.7	5.5	5	24	170	75	55	5	
MD-100	0.9	6	6	28	220	100	110	5	
MD-125	0.9	7	7	33	260	125	160	5	
MD-150	1	8	8	33	285	150	190	5	
MD-200	1.1	9	9	34	350	200	250	5	
MD-250	1.2	10	9	34	400	250	280	5	
MD-300	1.2	10	9	34	450	300	310	5	

· This is a traditional driver with a warm wood texture.



PLASTIC GRIP SCREWDRIVER (STUBBY)



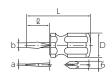






No.	Type	а	b	D	L	Q	Weight(g)	6	
SD1-P	Cross No. 2	_	_	32	72	26	40	10	
SD1-M	Flat	0.8	6	32	72	26	40	10	

Convenient for removing and installing screws in tight spaces.



 $[\]boldsymbol{\cdot}$ Do not hit or pry.

PLASTIC GRIP SCREWDRIVER (MINI STUBBY)

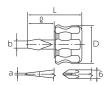






No.	Туре	а	b	D	L	Q	Weight(g)	6	
SD3-P	Cross No. 2	_	_	29	40	20	25	10	
SD3-M	Flat	0.7	6	29	40	20	25	10	

 $\boldsymbol{\cdot}$ This driver further emphasizes the functions of the stubby driver.



SHORT STUBBY SCREWDRIVER





No.	Type	D	L	Q	Weight(g)		
SD4-P	Cross No. 2	40	30	15	20	10	

- The 30mm length allows for use in tight spaces. (Mud guard, console box, instrument panel removal)
- \cdot ϕ 40 grips allow large force to be applied.



RATCHET SCREWDRIVER (STUBBY)



No.		Weight(g)		
DBRS06		150	1	
Set contents				
Main body	1			
Bit	Cross No.1×1, Cross No.2×1, Hexagon Hexagon 4mm×1, Hexagon 5mm×1, He		n×1	

- Feature \cdot Ratchet stubby screwdriver with interchangeable bit tips.
 - It is effective for work in places where standard drivers cannot be used because they
 are neither height nor depth, such as glove boxes and under the steering wheel, and
 engine rooms.
 - The 5 included bits can be stored in the grip end.
 - The ratchet operation can be used for tightening and loosening, and the ratchet can be fixed for use as a normal screwdriver.
- * Repair parts are available. Please contact our distributors for details.

RATCHET SCREWDRIVER



	stored on the grip
37.5 30 50 237	Hexagonal Hexagonal hole 6.3 \$\phi\$11 hole 6
6.3 mm shaft-to-side bit Cross No.2×flat 6mm Flat 8mm×Cr	
Axis can be used on both left and right	t side
∠ Car	n

6 bits with 6.3mm shaft vs. side are stored in the grip

- The ratchet mechanism allows fast turning in both tightening and loosening directions.
- $\boldsymbol{\cdot}$ By fixing the ratchet, it can also be used as a normal screwdriver.
- $\boldsymbol{\cdot}$ The shaft can hold 2 bits and the grip end can hold 6 bits, for a total of 8 bits.
- $\boldsymbol{\cdot}$ The included 14 types of bits are cross, flat, T-torx, and hexagonal bits.

Spare parts

Spare parts				
No.	Hypotenuse		Description	
DBR14-01	_	End cap	gray)	
DBR14-02	_	Axis	Hexagonal hole two-face width 6.3mm×8mm	
DBR14-03	6.3	Bit	Cross No.1×Flat 5.5mm	
DBR14-04	6.3	Bit	Cross No.2×Flat 6mm	
DBR14-05	6.3	Bit	Hexagon 2.5mm×Hexagon 3mm	
DBR14-06	6.3	Bit	Hexagon 4mm×Hexagon 5mm	
DBR14-07	6.3	Bit	Torx T15×Torx T20	
DBR14-08	6.3	Bit	Torx T25×Torx T30	
DBR14-09	8	Bit	Cross No.3×Flat 8mm	
Spare parts (not included in DBR14)				
DBR14-10	6.3	Bit	Torx T27×Torx T40	

- * Bits with a shaft size of 8 mm will be stored in the shaft.
- * Bits can be used for the DBR series in common. (except DBRS06)







[•] Function mark is indicated under the product name. For the details, please refer to

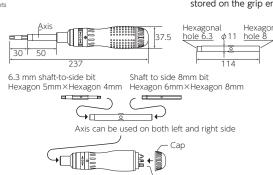
P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

RATCHET SCREWDRIVER



Condition of use Bit storage Two bits are stored on the shaft and six bits are stored on the grip end



 $\,$ 6 bits with 6.3mm shaft vs. side are stored in the grip

No. Weight(g) ☐				
DBR16 340 6				
Set contents				
Main body	1			
Axis	xis Hexagonal hole 2-face width 6.3mm×8mm 1 piece			
Bit	Cross No.2×Flat 6mm Hexagonal 1.5mm×2mm, 2.5mm×3mm, 4m 8mm Torx T15H×T20H, T25H×T30H, T27H×T40		6mm	ı×

- The ratchet mechanism allows fast turning in both tightening and loosening directions.
- · By fixing the ratchet, it can also be used as a normal screwdriver.
- $\boldsymbol{\cdot}$ The shaft can hold 2 bits and the grip end can hold 6 bits, for a total of 8 bits.

Spare parts

No.	Hypotenuse		Description
DBR16-01		End cap	(blue)
DBR14-02	_	Axis	Hexagonal hole two-face width 6.3mm×8mm
DBR14-04	6.3	Bit	Cross No.2×Flat 6mm
DBR14-14	6.3	Bit	Hexagon 1.5mm×2mm
DBR14-05	6.3	Bit	Hexagon 2.5mm×Hexagon 3mm
DBR14-06	6.3	Bit	Hexagon 4mm×Hexagon 5mm
DBR14-15	8	Bit	Hexagon 6mm×8mm
DBR14-11	6.3	Bit	Torx T15H×T20H
DBR14-12	6.3	Bit	Torx T25H×T30H
DBR14-13	6.3	Bit	Torx T27H×T40H

- * Bits with a shaft size of 8 mm will be stored in the shaft.
- * Bits can be used for the DBR series in common. (except DBRS06)



No.		Weight(g)	Ó			
DBR03	DBR03					
Set contents	Set contents					
Body	1					
Axis Hexagonal hole 2-face width 6.3mm×8mm 1 piece						
Bit	it 1/4"sq. drive					
Socket	1/4"sq. sockets 7mm, 8mm, 10mm					

- \cdot The ratchet mechanism allows fast turning in both tightening and loosening directions.
- \cdot By fixing the ratchet, it can also be used as a normal screwdriver.
- The socket can be stored in the grip. * 1/4"sq. drive cannot be stored in the grip.

Spare parts

No.	Hypotenuse		Description		
DBR03-01	_	End cap	End cap (yellow)		
DBR14-02	_	Axis	Hexagonal hole two-face width 6.3mm×8mm		
DBR14-BD2	6.3	Bit	1/4"sq. drive		
B2-07	6.3	Socket	1/4"sq. socket 7mm		
B2-08	6.3	Socket	1/4"sq. socket 8mm		
B2-10	6.3	Socket	1/4"sq. socket 10mm		

^{*} Bits (1/4"sq. drive) cannot be stored in the grip end.

INTERCHANGEABLE SCREWDRIVER SET



No.		Weight(g)		
DB4	180	1		
Set contents				
For	Cross bit (No.2×No.3)	DB4-P		
replacement	Flat bit (tip width 4×tip width 6)	DB4-M		
driver	Handle	DB4-H		

- · One bit can be used for two sizes. One-touch specification for easy insertion and removal.
- Soft grip to prevent slippage.
 Hexagonal shaft (6.3 mm shaft diagonal). It has a bolster (hexagonal two-sided width of 12 mm), so it can be tightened with an open end wrench or the like.
- · Commercially available driver bits can also be used. (Shaft side to side 6.3mm and total length 65mm or longer)

Spare parts

No.	Description	
DB4-P	Cross bit (No.2×No.3)	
DB4-M	Flat bit (tip width 4×tip width 6)	
DB4-H	Handle	

[·] Do not hit or pry.

SCREWDRIVERS

INTERCHANGEABLE FLAT RATCHET SCREWDRIVER SET











	Weight(g)	6	
	105	1	
RM2-110			
No.2 22mm, No.2 30mm, No.3 25mm			
4·5·6mm			
For 6 bottles EHDB06			
	No.2 22mm, No.2 30mm, No.3 25mm 4·5·6mm	RM2-110 No.2 22mm, No.2 30mm, No.3 25mm 4·5·6mm	RM2-110 No.2 22mm, No.2 30mm, No.3 25mm 4·5·6mm

EHDB06 Bit holder * We do not sell the main unit only.



No.

To avoid damage or idling, be sure to operate the left and right switching levers

Description

INTERCHANGEABLE FLAT RATCHET SCREWDRIVER (CROSS)









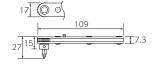


No.		Weight(g)	\Box	
RM22		60	10	
Set contents				
Main unit*.	RM2-110			
Rit	Cross No. 2 22mm in length 1 niece			

- · The ratchet can be operated in both right and left directions by using the switch lever.
- $\boldsymbol{\cdot}$ The gear can be turned quickly by turning it with a fingertip.
- · Bits with a 6.3 mm shaft to side can be used.
- * We do not sell the main unit only.



To avoid damage or idling, be sure to operate the left and right switching levers



INTERCHANGEABLE FLAT RATCHET SCREWDRIVER OFFSET TYPE (CROSS)











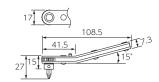
No.	Weight(g)	6	
RM32	60	10	
Cataontonto			

Set contents	
Main unit*.	RM3-110
Bit	Cross No.2, 22mm in length, 1 piece

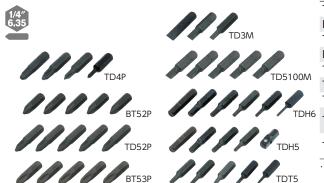
- \cdot The 15° offset type allows the user to avoid obstructions and to provide space for fingers.
- The ratchet can be operated in both right and left directions by using the switch lever.
- · The gear can be turned quickly by turning it with a fingertip.
- · Bits with a 6.3 mm shaft to side can be used.
- * We do not sell the main unit only.



To avoid damage or idling, be sure to operate the left and right switching levers securely.



BIT SET



NI-	Combonto		
No.	Contents		
TD4P	Cross bits No.0, No.1, No.2, No.3	10	
BT52P	Cross bit No.2 (total length 22mm)×5pcs	10	
TD52P	Cross bit No.2 (total length 30mm)×5pcs	10	
BT53P	Cross bit No.3 (total length 25mm)×5pcs	10	
TD3M	Flat bits 4, 5.5, 7	10	
TD5100M	Flat bit 5.5 (total length 30mm)×5pcs	10	
TDH6	Hex bits 2, 2.5, 3, 4, 5, 6 (total length 30mm)	10	
TDH5	Hex bits 3, 4, 5, 6 (total length 30mm) Adapter (convex 1/4"sq., total length 30mm)	10	
TDT5	T-type Torx bits T6,T8,T10,T15,T20 (total length 20mm)	10	

- $\boldsymbol{\cdot}$ This is a bit set with a 6.3 mm shaft vs. side for use with plate ratchet replacement drivers (TMDB8, RM22, RM32).
- Digital ratchet screwdriver type (GLK060~500) P.422 and torque driver (GDP-080~GDP-450) P.427 can also be used for







[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with should be ordered after checking stock.

IMPACT DRIVER SET

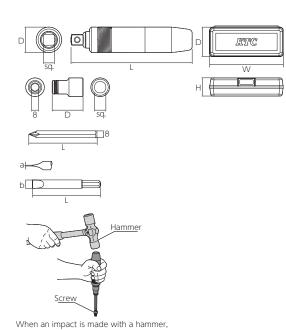












the force changes in the direction of rotation.

No.			Weight(g)		
SD6A			909	6	
Set contents					
Body		SD30)-B		
Bit holder	8mm on the opposite side	SD30)-8H		
Cross bit	No.1 No.2 No.3	SDP- SDP-	2		
Flat bit	Tip thickness 1.6	SDM	-1.6		
Cross bit short	No.2	SDP-			

 $\boldsymbol{\cdot}$ Lightweight and easy to use, it is effective for loosening screws that have been tightened too hard or rusted.

SD6A-P

Can be used in both tightening and loosening directions.
A 1/2*sq. socket can also be mounted and used.

W200×D84×H49

- - Quantification of the grip securely.
 Tap the grip end securely.
 Use special bits.
 Wear protective glasses.
- CAUTION

Blow case

Rody

Spare parts							
Body							
No.	sq.			L	Weight(g)	Ó	
SD30-B	1/2"	3	0	142.5	588	1	
Bit holder							
No.	sq.)	L	Weight(g)	Ó	
SD30-8H	1/2"	2	2	36	55	1	
Cross bit							
No.	count			L	Weight(g)	Ó	
SDP-1	No.1			80	31	5	
SDP-2	No.2			80	31	5	
SDP-3	No.3	80		80	31	5	
Cross bit short							
No.	count			L	Weight(g)	Ó	
SDP-1S	No.1		40		14	5	
SDP-2S	No.2			40	14	5	
SDP-3S	No.3			40	14	5	
Flat bit							
No.	а	k)	L	Weight(g)	Ó	
SDM-1.0	1	1	0	80	39	5	
SDM-1.6	1.6	1	0	80	39	5	
SDM-1.8	1.8	1	0	80	39	5	
Flat bit short							
No.	а	t)	L	Weight(g)	Ó	
SDM-1.0S	1	1	0	40	17	5	
SDM-1.6S	1.6	1	0	40	17	5	
SDM-1.8S	1.8	1	0	40	17	5	
Blow case							
No.	W)	Н	Weight(g)	6	
SD6A-P	200	8	4	49	103	1	

[·] Do not hit or pry.

PRECISION MICRO RATCHETING **SCREWDRIVER SET**



No.	Weight(g) ☐
TDBRP6	120 24
Set contents	
Body	Stepless ratchet, stepless bit length adjustment
Driver bit	Cross No.00 × Flat 1.5mm Cross No.0 × Flat 2mm Cross No.1 × Flat 2.5mm
Hexagon bit	Hexagon 0.7mm×0.9mm Hexagon 1.3mm×1.5mm
Toolbag	183×100

Body

Driver bits and hexagonal bits

130

- · The ratchet mechanism adopts a stepless type.
- · The direction of rotation can be switched between tightening, loosening, and fixing.
- The bit extension/retraction is infinitely adjustable.
 (Minimum length 25mm to maximum length 80mm)
- The bit shaft is 4 mm on the hexagonal side.
- * The set contents are not sold individually.



- Do not use on items with current flowing. The resin of the grip is not insulating.
- · The bit tip is sharp when handling,

be careful not to prick hands, fingers, or other parts of the human body. Also, be careful not to scratch or damage the object or its surroundings Do not use if there is a possibility of scratches or damage.

PRECISION MICRO RATCHETING **SCREWDRIVER TOOL SET**



|--|--|

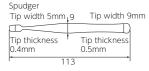
₊ 17	Hook Tool Straight
120	Hook Tool Round
	155
130	Hook Tool L-type

No.		Weight(g)			
TDBRPX7		120	24		
Set contents					
Body	Stepless ratchet, stepless bit length adjustmen				
Driver bit	Cross No.0 × Flat 2mm Cross No.1 × Flat 2.5mm				
Hook Tool	Straight, Round, L-shape				
Spudger	Tip width 5mm, 9mm				

- $\boldsymbol{\cdot}$ The ratchet mechanism adopts a stepless type.
- \cdot The direction of rotation can be switched between tightening, loosening, and fixing.
- $\boldsymbol{\cdot}$ The bit extension/retraction is infinitely adjustable. (Minimum length 25mm to maximum length 80mm)
- · The bit shaft is 4 mm on the hexagonal side.
- The hook tool has three different tip shapes to suit different applications.
- · The hook tool is knurled to prevent slipping.
- · Spudger can be used at both ends.
- * The set contents are not sold individually



- $\boldsymbol{\cdot}$ Do not use this product for objects with current flowing through them. The resin of the grip is not insulating.
- · The hook tool and bit tips are sharp, so be careful not to puncture hands, fingers, or other parts of the body when handling them. Also, be careful not to scratch or damage the object or surrounding area. Do not use if there is a possibility of







Hook Tool Tip Shape

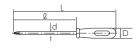
Spudger Tip Shape

BABY SCREWDRIVER



No.	Туре	d	D	L	Q	Weight(g)	6	
BAD-0	Cross No. 0	3	11	121	75	10	20	

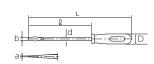
Convenient for adjustment of meters and precision instruments.





No.	Type	а	b	d	D	L	Q	Weight(g)	6	
BAD-50	Flat	0.4	2.5	3	11	96	50	10	20	
BAD-75	Flat	0.4	2.5	3	11	121	75	10	20	

Convenient for adjustment of meters and precision instruments.









[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

[•] Products marked with should be ordered after checking stock.

SOFT GRIP SCREWDRIVER GIFT SET [2pcs.]











No.		Weight(g)	6	
TD702		210	1	
Set contents				
Cross Soft Grip Driver	No.2	D7P-2		
Flat Soft Grip Driver	100	D7M-6		

 $[\]boldsymbol{\cdot}$ The shaft is non-through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER GIFT SET (STUBBY) [2pcs.]











No.		Weight(g)	Ó	
TD902		80	1	
Set contents				
Cross Soft Stubby Screwdriver	No.2	D9P-22	5	
Flat Soft Stubby Screwdriver	25	D9M-62	25	

 $[\]boldsymbol{\cdot}$ The shaft is non-through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER SET [8pcs.]











No.		Weight(kg)	6					
TD2798		1	10					
Set contents								
Cross Soft Grip Driver through type	No.1	D7P2-1						
	No.2	D7P2-2						
	No.3	D7P2-3						
Flat Soft Grip Driver, through-flow type	75	D7M2-5						
	100	D7M2-6						
	150	D7M2-8	3					
Cross Soft Stubby Screwdriver	No.2	D9P-22	5					
Flat Soft Stubby Screwdriver	25	D9M-62	25					

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The orange color of the grip indicates \oplus and the green color indicates $\ominus.$
- $\boldsymbol{\cdot}$ The shaft is a through type (except stubby driver) and has a magnet at the end.
- The package can be used as a tray.
- * Stubby screwdrivers are non-through type.

SOFT GRIP SCREWDRIVER SET [8pcs.]











No.	Weight(kg)	白		
TD798	1	10		
Set contents				
Cross Soft Grip Driver	No.1	D7P-1		
	No.2	D7P-2		
	No.3	D7P-3		
Flat Soft Grip Driver	75	D7M-5		
	100	D7M-6		
	150	D7M-8		
Cross Soft Stubby Screwdriver	No.2	D9P-22	5	
Flat Soft Stubby Screwdriver	25	D9M-62	25	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The orange color of the grip indicates \oplus and the green color indicates $\ominus.$
- The shaft is non-through type and the tip is magnetized.
- · The package can be used as a tray.

 $[\]boldsymbol{\cdot}$ Do not hit or pry.

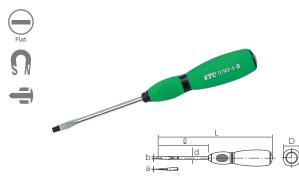
SOFT GRIP SCREWDRIVER



No.	count	d	D	L	Q	Weight(g)	6	
D7P2-1	No.1	5.5	29	195	75	90	10	
D7P2-110	No.1	5.5	29	220	100	95	10	
D7P2-2	No.2	6.3	31	225	100	110	10	
D7P2-215	No.2	6.3	31	275	150	120	10	
D7P2-3	No.3	8	33	280	150	170	10	

- · The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The orange color of the grip indicates \oplus .
- $\boldsymbol{\cdot}$ The shaft is a through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER



No.	а	b	d	D	L	Q	Weight(g)	6	
D7M2-5	0.75	5.5	5.5	29	195	75	90	10	
D7M2-510	0.75	5.5	5.5	29	220	100	95	10	
D7M2-6	0.95	6	6.3	31	225	100	110	10	
D7M2-615	0.95	6	6.3	31	275	150	120	10	
D7M2-8	1.1	8	8	33	280	150	170	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The green color of the grip indicates \ominus .
- $\boldsymbol{\cdot}$ The shaft is a through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER



No.	count	d	D	L	Q	Weight(g)	6	
D7P-1	No.1	5.5	29	200	75	80	10	
D7P-110	No.1	5.5	29	225	100	85	10	
D7P-115	No.1	5.5	29	275	150	95	10	
D7P-120	No.1	5.5	29	325	200	105	10	
D7P-2	No.2	6.3	31	230	100	105	10	
D7P-215	No.2	6.3	31	280	150	110	10	
D7P-220	No.2	6.3	31	330	200	130	10	
D7P-230	No.2	6.3	31	430	300	155	10	
D7P-3	No.3	8	33	285	150	160	10	

- $\boldsymbol{\cdot}$ The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The orange color of the grip indicates \oplus .
- The shaft is non-through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER



No.	а	b	d	D	L	Q	Weight(g)	6	
D7M-5	0.75	5.5	5.5	29	200	75	80	10	
D7M-510	0.75	5.5	5.5	29	225	100	85	10	
D7M-515	0.75	5.5	5.5	29	275	150	95	10	
D7M-520	0.75	5.5	5.5	29	325	200	105	10	
D7M-6	0.95	6	6.3	31	230	100	105	10	
D7M-615	0.95	6	6.3	31	280	150	115	10	
D7M-620	0.95	6	6.3	31	330	200	130	10	
D7M-630	0.95	6	6.3	31	430	300	155	10	
D7M-8	1.1	8	8	33	285	150	160	10	
D7M-615 D7M-620 D7M-630	0.95 0.95 0.95	6 6	6.3 6.3 6.3	31 31 31	280 330 430	150 200 300	115 130 155	10 10 10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The green color of the grip indicates \ominus .
- The shaft is non-through type and the tip is magnetized.







[•] Function mark is indicated under the product name. For the details, please refer to O P.004-005.

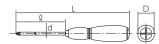
 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

SOFT GRIP SCREWDRIVER



No.	count	d	D	L	Q	Weight(g)	6	
D7SP-0075	No.00	4	20	165	75	35	10	
D7SP-0010	No.00	4	20	190	100	35	10	
D7SP-075	No.0	4	20	165	75	35	10	
D7SP-010	No.0	4	20	190	100	35	10	
D7SP-175	No.1	4	20	165	75	35	10	
D7SP-110	No.1	4	20	190	100	35	10	
D7SP-115	No.1	4	20	240	150	40	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates \oplus .
- The shaft is non-through type and the tip is magnetized.

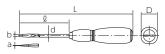


SOFT GRIP SCREWDRIVER



No.	а	b	d	D	L	Q	Weight(g)	6	
D7SM-450	0.5	4	4	20	140	50	30	10	
D7SM-475	0.5	4	4	20	165	75	35	10	
D7SM-410	0.5	4	4	20	190	100	35	10	
D7SM-412	0.5	4	4	20	215	125	40	10	
D7SM-415	0.5	4	4	20	240	150	40	10	
D7SM-420	0.5	4	4	20	290	200	45	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The green color of the grip indicates \ominus .
- $\boldsymbol{\cdot}$ The shaft is non-through type and the tip is magnetized.



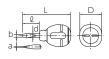
SOFT GRIP SCREWDRIVER (STUBBY)



No.	Type	а	b	d	D	L	Q	Weight(g)	6	
D9P-125	Cross No. 1	_	_	6.3	35	75	25	40	10	
D9P-225	Cross No. 2	_	_	6.3	35	75	25	40	10	
D9M-625	Flat	0.8	6	6	35	75	25	40	10	

- $\boldsymbol{\cdot}$ The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The orange color of the grip indicates $\oplus.$
- \cdot The green color of the grip indicates $\ominus.$
- The shaft is non-through type and the tip is magnetized.



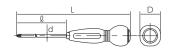


SOFT ROUND GRIP SCREWDRIVER



No.	count	d	D	L	Q	Weight(g)	6	
D8P2-1	No.1	5.5	32	170	75	65	10	
D8P2-2	No.2	6.3	40	215	100	120	10	
D8P2-215	No.2	6.3	40	265	150	130	10	

- Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The orange color of the grip indicates \oplus .
- · The shaft is a through type and the tip is magnetized.



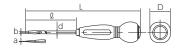
[·] Do not hit or pry.

SOFT ROUND GRIP SCREWDRIVER



No.	а	b	d	D	L	Q	Weight(g)	6	
D8M2-5	0.75	5.5	5.5	32	170	75	65	10	
D8M2-6	0.95	6	6.3	40	215	100	120	10	
D8M2-615	0.95	6	6.3	40	265	150	130	10	

- $\boldsymbol{\cdot}$ Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The green color of the grip indicates $\ominus.$
- The shaft is a through type and the tip is magnetized.

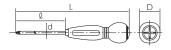


SOFT ROUND GRIP SCREWDRIVER



No.	count	d	D	L	Q	Weight(g)	6	
D8P-1	No.1	5.5	32	170	75	55	10	
D8P-110	No.1	5.5	32	195	100	60	10	
D8P-115	No.1	5.5	32	245	150	70	10	
D8P-2	No.2	6.3	40	215	100	100	10	
D8P-215	No.2	6.3	40	265	150	110	10	
D8P-220	No.2	6.3	40	315	200	125	10	

- $\boldsymbol{\cdot}$ Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The orange color of the grip indicates $\oplus.$
- The shaft is non-through type and the tip is magnetized.

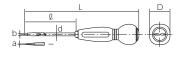


SOFT ROUND GRIP SCREWDRIVER



								_	
No.	а	b	d	D	L	Q	Weight(g)		
D8M-5	0.75	5.5	5.5	32	170	75	55	10	
D8M-510	0.75	5.5	5.5	32	195	100	60	10	
D8M-515	0.75	5.5	5.5	32	245	150	70	10	
D8M-6	0.95	6	6.3	40	215	100	100	10	
D8M-615	0.95	6	6.3	40	265	150	110	10	
D8M-620	0.95	6	6.3	40	315	200	125	10	

- $\boldsymbol{\cdot}$ Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- $\boldsymbol{\cdot}$ The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- \cdot The green color of the grip indicates $\ominus.$
- The shaft is non-through type and the tip is magnetized.

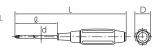


WOODEN GRIP SCREWDRIVER



No.	count	d	D	L	Q	Weight(g)	6	
D12P2-1	No.1	5.5	30	195	75	60	10	
D12P2-2	No.2	6.3	32	230	100	120	10	
D12P2-215	No.2	6.3	32	280	150	130	10	
D12P2-3	No.3	8	35	290	150	200	10	

- · Natural wood is used, which is easy on the hands.
- $\boldsymbol{\cdot}$ The shaft is a through type and the tip is magnetized.

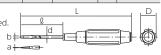


WOODEN GRIP SCREWDRIVER



No.	а	b	d	D	L	Q	Weight(g)	6	
D12M2-5	0.75	5.5	5.5	30	195	75	60	10	
D12M2-6	0.95	6	6.3	32	230	100	120	10	
D12M2-7	0.95	7	7	35	265	125	180	10	
D12M2-8	1.1	8	8	35	290	150	200	10	

- · Palm-friendly native wood is used for grip.
- \cdot The shaft is a through type and the tip is magnetized.



MAGNETIZER





Ī	No.	W	D	Н	
	AYG-1	52	30	52	

- · It can magnetize and demagnetize rod-shaped iron products such as driver shafts.
- Slide the shaft through the demagnetize (-) to magnetizer, and slide the shaft through the magnetizer (+) to magnetize.







[•] Function mark is indicated under the product name. For the details, please refer to
• P.004-005.

 $[\]cdot$ Products marked with ${\bf \emph{Q}}$ should be ordered after checking stock.

CONVENTIONAL TOOLS

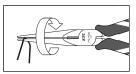
PLIERS



• The resin in the grips is not insulated and should not be used on items with electricity flowing.



- · Wear protective goggles when working.
- When storing pliers, nippers, scissors, bolt clippers, etc., close the blades.
- $\boldsymbol{\cdot}$ Do not pry or hit with the cutting edges.
- · Do not use them as a hammer.
- $\boldsymbol{\cdot}$ Do not hit them with a hammer.
- $\boldsymbol{\cdot}$ Do not pinch your hand or fingers with the grip.
- When adjusting the opening of the pliers, make sure that the pliers have been adjusted properly.
- \cdot When using the water pump pliers, hold the pliers to the pipe at the center of the teeth.
- Do not apply lateral force or twist the water pump pliers.
- When cutting with pliers or nippers, check the direction of the cut piece before use.
- $\boldsymbol{\cdot}$ Do not use snap ring pliers for anything other than snap rings.
- · Use snap ring pliers that match the size of the snap ring.
- Wipe off the oil in the hole of the snap ring and the tip of the pliers before use.
- · When using snap ring pliers, do not use too much force.
- \cdot If too much force is applied when using snap ring pliers, the snap ring may come off and fly off.
- When bending wire with needle nose pliers, bend in a clockwise direction with the pliers facing forward.



Features of pliers, pliers and scissors



Pliers are one of the most familiar tools that can be used for various purposes, such as grasping, turning pipes, and cutting wires. The word "pliers" usually refers to combination pliers, but there are many other types of pliers, such as snap ring pliers, cutting pliers, nippers, etc., depending on the purpose of use.

Combination pliers and water pump pliers can widen the opening of the mouth by shifting the joint part.

Features of KTC Combination Pliers

The tip of the jaw is divided into "three-stepped shape" teeth, making it easy to grip both thin and thick objects. Safety design prevents hands from being caught in the grip end even when switching to a wide mouth.



Three-stepped shape teeth

Features of KTC Needle Nose Pliers

Standard, long, slim and bent nose are available. KTC pliers have a safety design that prevents the grip end from closing and pinching the hand even when using a wide mouth.



Soft Grip

Features of KTC Cutting Pliers

The tip has a tooth shape suitable for cutting soft or thin wires, and the base has a tooth shape suitable for cutting hard wires such as piano wire. It comes with a soft grip to fit your hand.

Narrow mouth



Blade angle 75° at the tip, 90° at the base

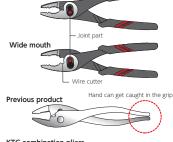


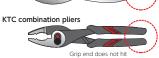
How to use

The combination pliers open the handle nearly 90° and adjust the mouth opening by shifting the joint, depending on the size of the object to be grasped. The tip of the jaw grips flat objects, while the center grips rounded objects. A wire cutter is attached at the back of the jaw.

KTC pliers have a safety design that prevents the grip end from closing and pinching the hand even when using a wide mouth.

Combination pliers are convenient tools that can be used for a variety of purposes, but it is important to use right tools for specific works for reliable operation. In particular, using combination pliers to turn a bolt or nut or to cut a large diameter hard wire may damage the bolt or nut or the pliers themselves. Use Box end wrenches or socket wrenches for turning bolts and nuts, and nippers or wire cutters for cutting hard wires.





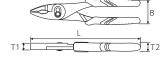
COMBINATION PLIERS (SOFT GRIP)



	No.	Max. cutting diameter (Steel wire)	L	В	T1	T2	Weight(g)		
	PJ-150	φ2	163	47	11	15	200	5	
	PJ-200	φ2.6	200	52	11	16	300	5	
)-	PJ-250	φ3.5	250	58	11	16	380	5	

- The grip end does not close completely even when used with a wide mouth, preventing hands from being caught in the grip.
- The tip of the jaw has a "three-stage shape" that makes it easy to grasp both fine and thick objects.





SCREW PLIERS

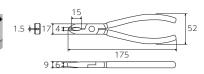


No.	Applicable screw size	Weight(g)	白	
PSN-175	M2~M6	160	6	
•				

- · Unlike conventional pliers, these pliers have teeth shaped to hold a small screw at the tip.
- Can be used in the vertical direction, which is difficult to use with ordinary pliers. Very useful for loosening crushed or rusted small screws or screws with special geometry.
- When turning a small screw using the tip of the pliers, it can be turned with more than four times the torque of conventional pliers (our product) because the pliers are less slippery.







- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- \cdot Products marked with $\ensuremath{\textit{Q}}$ should be ordered after checking stock.



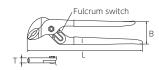




WATER PUMP PLIERS (HEAVY DUTY)



No.	Nominal	Applicable pipe diameter	L	Т	В	Weight(g)		
WPD1-250	250	φ6~32	257	9.5	39	360	10	
WPD1-300	300	φ6~50	307	11.5	45	690	5	

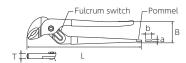


WATER PUMP PLIERS WITH SLOTTED HANDLE END



No.	Nominal	Applicable pipe diameter	L	Т	В	а	b	Weight(g)		
WPDA-250	250	φ6~32	260	9.5	40	1.1	9.5	330	10	

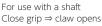
The handle end is shaped like a flathead screwdriver, so it can be used for tightening or prying flathead screws.



Types and applicable diameters of snap ring pliers

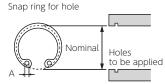
Snap ring pliers are available for holes, where the snap ring is shrunk and inserted into the hole, and for shafts, where the snap ring is expanded and inserted into the shaft. KTC's snap ring pliers have separate grip colors for holes and shafts.

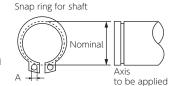
Close grip ⇒ Claw closes





The "A" dimensions determine the nominal diameter of the snap ring according to the JIS standards. KTC's snap ring pliers are applied to JIS standard C-type rings (for hole and shaft) with a claw that fits the snap ring hole exactly. The "nominal diameter" of the snap ring is defined as the "nominal diameter" of the snap ring.



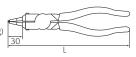


INTERNAL SNAP RING PLIERS



No.	Claw diameter	Nominal diameter of snap ring	L	Weight(g)	6	
SCP-171	φ2.0	19~30	185	200	10	
SCP-1715	φ1.5	12~13	185	200	10	

- \cdot The caulking part of the body has little rattling, and the opening and closing are springloaded.
- The claw can be replaced. (Claw set shown on P.373 can be used)
- * The number marked on the pliers is the product number (SCP-170), which indicates only the pliers themselves (without claws). (The pliers are not sold alone.)
- * The default claw setting for SCP-171 is straight type $\,\phi$ 2.0 (long) (SPC110L).
- * The default claw setting for SCP-1715 is straight ϕ 1.5 (long)
- * Repair parts are available for open/close springs and screws.
 Please contact our distributors for details.



INTERNAL SNAP RING PLIERS



No.	Claw diameter	Nominal diameter of snap ring	L	Weight(g)	6	
SCP-9S	φ2.3	40~100	235	300	1	

- · Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.
- The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.
- The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.
- The spring is built into the caulking part of the body to prevent the spring from scattering.







[·] Do not use it as a hammer.

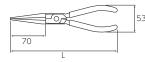
INTERNAL SNAP RING PLIERS (LONG)





\land	lo.	Claw Dia.	Applicable Dia.	L	Weight(g)	白	
S	CP-171LL	φ1	10~11	215	160	10	

- \cdot The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- · The long claw is effective in narrow and deep places.



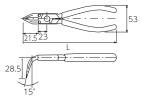
Repair parts are available for the open/close spring. Please contact our distributors for details.

INTERNAL SNAP RING PLIERS (BENT)



No.	Claw Dia.	Applicable Dia.	L	Weight(g)		
SCP-172L	φ1	10~11	167.5	200	10	

 \cdot The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.



Repair parts are available for the open/close spring. Please contact our distributors for details.

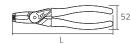
INTERNAL SNAP RING PLIERS (BENT)



No.	Claw diameter	Applicable Dia.	L	Weight(g)	白	
SCP-9B	φ2.3	40~100	215	300	1	

- · Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.
- · The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.
- · The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.
- \cdot The spring is built into the caulking part of the body to prevent the spring from scattering.





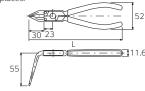


INTERNAL SNAP RING PLIERS (LONG BENT)



SCP-172LL φ1 10~11 175 200 10	No.	Claw Dia.	Applicable Dia.	L	Weight(g)		
	SCP-172LL	φ1	10~11	175	200	10	

- · The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- \cdot The 60 mm long claw is powerful in narrow and deep places



Repair parts are available for the open/close spring. Please contact our distributors for details.

EXTERNAL SNAP RING PLIERS





No.	Claw Dia.	Applicable Dia.	L	Weight(g)	\subseteq	
SOP-171	φ2.0	19~30	178	200	10	
SOP-1715	φ1.5	12~13	178	200	10	

- · The caulking part of the body has little rattling, and the opening and closing are springloaded.
- The claw can be replaced. (Claw set shown on P.373 can be used)
- * "SOP-170" is the part number for the main unit only (without claw). The main unit alone is not sold.
- * The initial claw setting for SOP-171 is Straight type ϕ 2.0 (long) (SPC110L). * The initial claw setting for SOP-1715 is Straight type $\,\phi$ 1.5 (long)
- (SPC0110L).
- * Repair parts are available for the open/close spring and screws.
 Please contact our distributors for details.
- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.







EXTERNAL SNAP RING PLIERS

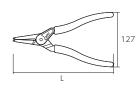




No.	Claw diameter	Applicable Dia.	L	Weight(g)	6	
SOP-9S	φ2.3	40~100	238	300	1	

- \cdot Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.
- The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.
- \cdot The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.
- \cdot The spring is built into the caulking part of the body to prevent the spring from scattering.





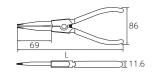


EXTERNAL SNAP RING PLIERS (LONG)



-	No. Claw Dia. Applicable Dia. L Weight(g)								
	SOP-171LL	φ1	10~11	215	200	10			
	The soullking part of the back, has a spring leaded expring and sleeping machanism to								

- $\boldsymbol{\cdot}$ The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- · The long claw is effective in narrow and deep places.



Repair parts are available for the open/close spring. Please contact our distributors for details

EXTERNAL SNAP RING PLIERS (BENT)



CONVENTIONAL TOOLS





No.	Claw Dia.	Applicable Dia.	L	Weight(g)	6	
SOP-172	φ2.0	19~30	168	195	10	

- · The caulking part of the body has little rattling, and the opening and closing are spring-
- The claw can be replaced. (Claw set shown on P.373 can be used)
- * I see "SOP-170" stamped on some of your products, SOP-170 is the part number for the main unit only (without claw). We do not sell the main unit only.
- * Default setting claw is curved ϕ 2.0 (SPC210).



* Repair parts are available for the open/close spring and screws. Please contact our distributors for details.

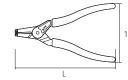
EXTERNAL SNAP RING PLIERS (BENT)



No.	Claw diameter	Applicable Dia.	L	Weight(g)	6	
SOP-9B	φ2.3	40~100	220	300	1	

- \cdot Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.
- \cdot The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.
- $\boldsymbol{\cdot}$ The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.
- · The spring is built into the caulking part of the body to prevent the spring from scattering.





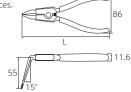


EXTERNAL SNAP RING PLIERS (LONG BENT)



No.	Claw Dia.	Applicable Dia.	L	Weight(g)	6	
SOP-172LL	φ1	10~11	170	200	10	

- · The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- \cdot The 60 mm long claw is powerful in narrow and deep places.



* Repair parts are available for the open/close spring. Please contact our distributors for details.

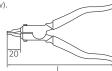
[·] Do not use it as a hammer.

EXTERNAL SNAP RING PLIERS (FLAT)



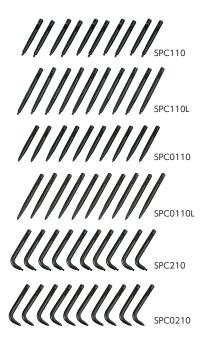
No.	Claw shape	L	Weight(g)	白	
SOP-173	Flat type	168	195	10	

- \cdot The caulking part of the body has little rattling, and the opening and closing are spring loaded.
- \cdot The claw can be replaced. (\bigcirc Claw set shown on P.373 can be used)
- * The number marked on the pliers is the product number (SOP-170). SOP-170 is the part number for the main unit only (without claw). We do not sell the main unit only.
- * Default claw setting is flat type (SPC310).



* Repair parts are available for the open/close spring and screws. Please contact our distributors for details.

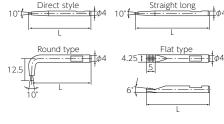
SPARE TIPS SET FOR SNAP RING PLIERS [10pcs.]



No.	Contents		L	Weight(g)	6	
SPC110	Straight type ϕ 2.0	10 pcs	36	40	10	
SPC110L	Straight type ϕ 2.0 (long)	10 pcs	46	40	10	
SPC0110	Straight type ϕ 1.5	10 pcs	36	40	10	
SPC0110L	Straight type ϕ 1.5 (long)	10 pcs	46	40	10	
SPC210	Round type $\phi 2.0$	10 pcs	34	40	10	
SPC0210	Round type ϕ 1.5	10 pcs	34	40	10	
SPC310	Flat type	10 pcs	36	40	10	
SPC5	Straight type ϕ 1.5 (long) ϕ 2.0 (long)	1 pair each	_	40	10	
	Flat type	Pair				
	Round type ϕ 1.5 ϕ 2.0	1 pair each				

- · Seven types of tip claws are available.
- The claw is made of a special steel material that has been uniquely heat-treated to make it strong, and its inverted tapered tip shape makes it difficult to drop the snap ring during work, making it suitable for work in confined spaces.
- * Applicable to snap ring pliers with [*] marks on P.369-373. (Cannot be used for SCP-171LL, SCP-172LL, SCP-172LL, SOP-171LL, SOP-172LL, SOP-17



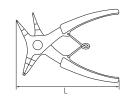


INTERNAL-EXTERNAL CONVERTIBLE SNAP RING PLIERS



No.	Claw diameter	Range of use	L	Weight(g)	\subseteq	
SOCP-130	φ1.2	For Internal & External 10~40	145	120	6	

· Improved workability because the shaft hole can be used for both.

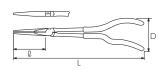


* Repair parts are available for the open/close spring. Please contact our distributors for details.

LONG PLIERS (STRAIGHT LONG NOSE)

No.	L	Q	D	Weight(g)	\Box	
PS6-302	295	72	73	300	5	









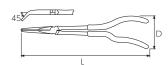
[•] Function mark is indicated under the product name. For the details, please refer to
• P.004-005.

 $[\]cdot$ Products marked with $\ensuremath{\textit{Q}}$ should be ordered after checking stock.

LONG PLIERS (ANGLED LONG NOSE)



No.	L	Angle	D	Weight(g)	б	
PS6-304	290	45°	73	300	5	

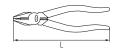


SIDE CUTTING PLIERS (COATED HANDLE)



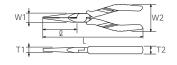
No.	Size	Cutting diameter	L	Weight(g)		
SPD-150C	150	Steel wire $\phi 2.15$	165	215	10	
SPD-175C	175	Steel wire $\phi 2.75$	190	275	10	
SPD-200C	200	Steel wire ϕ 3.4	215	375	10	

- The blade cuts copper wire and wire, and has the ability to grasp and bend wire, thin plates, and small parts.
- $\boldsymbol{\cdot}$ Popular tool for wire and sheet metal working.
- · The handles are coated with vinyl.





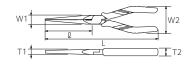
No.	Cutting	ability		Q	۱۸/1	W2	Т1	тэ	Weight(g)	ń	
INO.	Soft line	Hard line	_	L K	VVI	VVZ	' '	12	vveignt(g)	П	
PSL-150	φ2.0	φ1.6	160	50.5	17	55	10	14	130	5	
PSL-200	φ2.3	φ1.8	205	70	18	55	10	15.5	190	5	



NEEDLE NOSE PLIERS (LONG)



No	Cutting		0	۱۸/1	W2	Т1	TO	Weight(g)	_		
No.	Soft line	Hard line	_	Ł	VVI	VVZ	11	12	vveignt(g)		
PSL-200L	φ2.0	φ1.6	200	89	16	54	10	14	130	5	

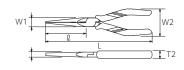


NEEDLE NOSE PLIERS (SLIM)



No.	L	Q	W1	W2	T1	T2	Weight(g)	6	
PSL-175N	175	54	13.5	55	9	14.5	130	5	

^{*} Cutting blade is not included.

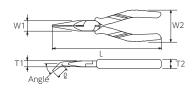


 $[\]boldsymbol{\cdot}$ Do not use it as a hammer.



No.	Cutting	ability		Q.	Angle	۱۸/1	14/2	Т1	T2	Weight	_	
NO.	Soft line	Hard line	_	L L	Angle	VVI	VVZ		12	(g)		
PSL- 150BN	φ2.0	φ1.6	156	15	45°	17	55	10	14	130	5	
PSL- 200BN	φ2.3	φ1.8	199	25	45°	18	55	10	15.5	190	5	

• The tip is cross-grooved to prevent slipping even when gripping an object.

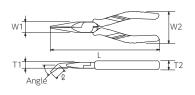


NEEDLE NOSE PLIERS (BENT NOSE)



No.	L	Q	Angle	W1	W2	T1	T2	Weight(g)	6	
PSL-200BN1	181	50	60°	18	55	10	15.5	190	5	

- $\boldsymbol{\cdot}$ The tip is cross-grooved to prevent slipping even when gripping an object.
- * Cutting blade is not included.

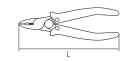


MULTIPLICATIVE SIDE CUTTING PLIERS



No.	Size	Cutting diameter	L	Weight(g)		
SPP-175	175	Hard wire ϕ 1.8 Soft wire ϕ 2.3	178	200	10	

- \cdot Double power mechanism for easy cutting.
- $\boldsymbol{\cdot}$ Soft grip that does not put any strain on the hand.
- $\boldsymbol{\cdot}$ The grip end has a ball chain to prevent it from opening.



DIAGONAL CUTTING PLIERS



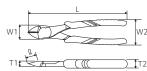
No.	Cu	tting abi	lity		Q.	۱۸/1	W2	Т1	ТЭ	Weight	6	
NO.	Soft line	Hard line	Piano wire	L	L L	VVI	VVZ	11	12	(g)		
PN1-125	φ2.3	φ1.6	φ1.2	134	15.5	17	49	10	15	95	5	
PN1-150	φ2.6	φ2.0	φ1.8	159	17.5	22	52	11	15	172	5	
PN1-175	φ2.6	φ2.0	φ1.8	179	19.6	25	51	12	16	220	5	
PN1-200	φ2.9	φ2.3	φ2.0	204	21.6	28	52	12	16	265	5	
. The tip is	cuitable	or cutting	r coft and	thin w	iroc cue	sh ac	conno	rvairo	whil	a tha bac	o ic	

• The tip is suitable for cutting soft and thin wires such as copper wire, while the base is suitable for cutting hard wires such as piano wire.

· Skin peeler attached



The angle of the blade is changed to suit the object. (75° at the tip, 90° at the base)



BAND HOLD CUTTING PLIERS



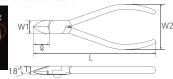
No.	L	Q	W1	W2	Т	Weight(g)		
PNC-125	130	16.5	14	48	8.5	90	6	

- \cdot Tool for cutting plastic bundling bands (width: 2.2 to 4.8 mm, thickness: 1.0 to 1.5 mm, length: 300 mm or less).
- The hold parts prevent banding band ends from scattering, ensuring safe operation.
 Because of the resin-specific blade, there are no protrusions on the cutting surface of the bundling band and the cutting surface does not stick out compared to ordinary nippers for steel wire preventing injury during operation.
- steel wire, preventing injury during operation.

 * Repair parts are available. Please contact our distributors for details







- Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.
- \cdot Products marked with ${\color{red} {\it O}}$ should be ordered after checking stock.



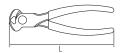


END CUTTING PLIERS



No.	Size	Cutting diameter	L	Weight(g)	6	
EP-160	160	Hard wire ϕ 2 Soft wire ϕ 2.6	160	220	10	

- · Suitable for cutting tools for wire rod.
- · It can also be used to cut protruding nails.

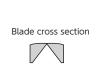


ANGLE CUTTING PLIERS (TRUE FLUSH CUT)



No.	Size	L	В	С	D	Т	Cutting diameter	Weight (g)	6	
EN-21S	125	130	13.8	12.8	50	6.5	Copper wire ϕ 2.0	75	5	

- · Suitable for cutting printed circuit board leads.
- · Sharp cutting edges enable smooth cutting of wire materials.





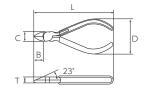


PLATE TYPE CUTTING PLIERS

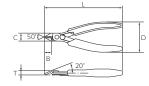


No.	Size	L	В	С	D	Т	Cutting diameter	Weight (g)	6	
EN-30S	130	130	11	13	48	7	Copper wire ϕ 0.9	50	5	

- \cdot Suitable for cutting printed circuit board leads.
- The blade is flush cut for sharpness and the body is made of stainless steel for durability.
- The stopper is attached to stop the opening, making it easy to change the handle.
 With a chip scattering prevention function, it is difficult for chips to scatter when cutting.



Chip scattering prevention function part

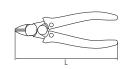


MULTIPLICATIVE CUTTING PLIERS



No.	Size	Cutting diameter	L	Weight(g)	6	
DPP-165	165	Hard wire ϕ 1.8 Soft wire ϕ 2.3	165	180	10	

- $\boldsymbol{\cdot}$ Double power mechanism for easy cutting.
- $\boldsymbol{\cdot}$ Soft grip that does not put any strain on the hand.
- \cdot The blade is high-frequency heat-treated for excellent cutting performance and durability.
- $\boldsymbol{\cdot}$ The grip end has a ball chain to prevent it from opening.



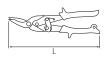
SNIP (STRAIGHT LEFT CURVE)



No.	L	Cutting capacity mm	Weight(g)	6	
101	250	1.25	420	5	

- · Stainless steel plate can be cut up to 0.8 mm.
- Easy to cut in a straight line and to the left.





Prosnip* and Prosnip are registered trademarks of IRWIN Industrial Tools Company.

[·] Do not use it as a hammer.

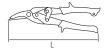
SNIP (STRAIGHT RIGHT CURVE)



Ī	No.	L	Cutting capacity mm	Weight(g)	白	
	102	250	1.25	410	5	

- $\boldsymbol{\cdot}$ Stainless steel plate can be cut up to 0.8 mm.
- Easy to cut in a straight line and to the right.





 $\textbf{Prosnip}^* \text{ and Prosnip are registered trademarks of IRWIN Industrial Tools Company}.$

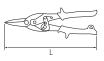
SNIP (STRAIGHT & CURVE CUTTING)



No.	L	Cutting capacity mm	Weight(g)		
103	250	1.25	420	5	

- · Stainless steel plate can be cut up to 0.8 mm.
- · Easy to cut in any direction, straight or left/right.





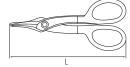
Prosnip[®] and Prosnip are registered trademarks of IRWIN Industrial Tools Company.

ALL PURPOSE SHEARS



No.	Size	L	Weight(g)	6	
AP-175	175	180	200	10	

- Special steel is subjected to high-frequency heat treatment for superior cutting performance and durability.
- The back of the blade is specially shaped to prevent distortion and bending of the cut surface.
- The bolt at the fulcrum has a special washer to prevent loosening and automatically obtain optimum cutting performance.



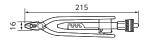
WIRE TWISTER



No.	Applicable wire diameter	L	В	Т	Weight(g)	6	
WTP-215	φ1	215	16.3	10.8	290	1	

- · Tool for wiring of bolts and nuts.
- It can also be used for fixing with wire when producing rebar in concrete foundations.
- · Compatible with wires up to ϕ 1.
- $\boldsymbol{\cdot}$ Stainless steel and brass are both available.
- $\boldsymbol{\cdot}$ The lock mechanism has a perforated non-slip surface for easy application of force.
- * The direction of rotation is clockwise.





Condition of use





[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

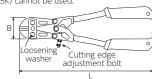
BOLT CLIPPER



No.	Size	Max. cutting diameter	L	В	Weight (kg)	6	
BP7-300	300 (12")	φ5	320	54	0.8	1	
BP7-350	350 (14")	φ6	370	60	1	1	
BP7-450	450 (18")	φ7	465	69	1.5	1	
BP7-600	600 (24")	φ9	620	84	2.6	1	
BP7-750	750 (30")	φ12	770	96	3.9	1	
BP7-900	900 (36")	φ15	920	108	5.9	1	

[•] Forged from optimum materials containing chromium and vanadium, the entire blade is made tenacious by heat treatment, and the blade is secondarily hardened by high frequency.

^{*} Replacement blades of previous models (BP2K, BP5K) cannot be used.



SPARE BLADE FOR BOLT CLIPPER



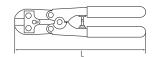
No.	Applicable nominal size	Weight(kg)	6	
BP7-300-K	For 300(12")	0.3	1	
BP7-350-K	For 350(14")	0.4	1	
BP7-450-K	For 450(18")	0.6	1	
BP7-600-K	For 600(24")	1.0	1	
BP7-750-K	For 750(30")	1.4	1	
BP7-900-K	For 900(36")	2.1	1	

- · This is a replacement blade for BP7.
- * Cannot be used with older model main units (BP2, BP5).

MINI CLIPPER



No.	Size	Cutting diameter	L	Weight(g)	ń	
BPZ2-215C	215	Hard wires ϕ 2.9	215	355	10	



CONVENTIONAL TOOLS

LOCKING PLIERS



 \cdot Do not use on items that have electricity flowing through

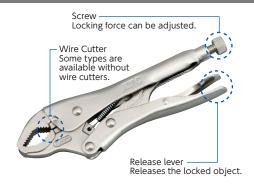


- $\boldsymbol{\cdot}$ Do not use as a substitute for a hammer.
- Do not use as a substitute for a hamm Do not apply impact by hitting with a Wear protective goggles when using. · Do not apply impact by hitting with a hammer, etc.

 - \cdot Be careful not to get your hand caught in the handle or lock release lever.
 - $\boldsymbol{\cdot}$ Use the appropriate type for the intended use.
 - $\boldsymbol{\cdot}$ Make sure that the object being held is securely locked before use.
 - · Do not suspend held objects.
 - $\boldsymbol{\cdot}$ When un-holding, hold the locking pliers with one hand in case of react.

Basic structure of locking pliers

Locking pliers can be locked with the object held in the pliers. Since there is no need to keep a grip on the object to keep it from releasing, turning, bending, and twisting can be done with ease. They are also very convenient tools that can be used like a vise to hold an object in place. In addition to the general pliers type, there are various types for sheet metal work, holding tools for welding, and other applications.



How to use

Adjust the mouth opening with the screw and grip it tightly to lock the object. To ensure secure locking, adjust the screw in the following manner.

From the original condition (shown in Photo 1 with the grip closed and locked), (1) Move the release lever in the open direction to unlock it. (Photo 2)

- (2) Turn the screw (adjusting screw) 2-3 turns in the loosening direction, and then close the grip. (The grip is not locked.)
- (3) Turn the screw in the loosening direction to make the mouth opening larger than the object. (Loosen the screw from the state shown in Photo 3 and open the mouth just enough to hold the object in its aperture.)
- (4) Place the opened aperture against the object and tighten the screw to close the mouth.
- (5) After tightening the screw until the object is in your mouth, move the release lever in the open direction to open the grip.
- (6) Tighten the screw about 1/2 turn. (The amount of tightening at this point is used to adjust the lock strength.)
- (7) Squeeze the grip lightly, and then squeeze it tighter while holding the object in its aperture, The object is locked with an audible "click" sound. (Photo 4)







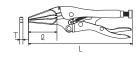


LOCKING PLIERS (LONG NOSE WITH WIRE CUTTER)



No.	Cutting capacity	Open width	L	Q	T (Tip width)	Weight (g)	б	Old model
100LN	φ1.2	0~45	135	38	5	108	5	4LN
150LN	φ1.2	0~51	165	46	5	192	5	6LN
225LN	φ2.3	0~71	220	56	5	375	5	9LN

- · Long nose type that's useful in tight workspace.
- $\boldsymbol{\cdot}$ It can hold and turn small screws,bolt,nut.
- · It can be used as a wire cutter.



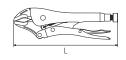


LOCKING PLIERS (CURVED JAW WITH WIRE CUTTER)



No.	Cutting capacity	Open width	L	Weight (g)	6	Old model
100WR	φ1.2	0~26	110	90	5	4WR
130WR	φ1.2	0~32	140	155	5	5WR
175WR	φ2.3	0~41	180	325	5	7WR
250WR	φ2.3	0~57	220	500	5	10WR

- · It can fix pipes and the like with the curved jaw with teeth.
- \cdot Can be used as a wire cutter.





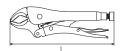
 $[\]cdot$ Do not use on anything that has electricity flowing.

LOCKING PLIERS (CURVED JAW)



No.	Open width	L	Weight(g)	6	Old model
175CR	0~40	180	330	5	7CR
250CR	0~51	225	538	5	10CR

- $\boldsymbol{\cdot}$ It can fix pipes and the like with the curved jaw with teeth.
- $\boldsymbol{\cdot}$ It can securely hold even small objects when grinding.



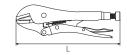


LOCKING PLIERS (STRAIGHT JAW)



No.	Open width	L	Weight(g)	6	Old model
175R	0~37	180	383	5	7R
250R	0~45	215	553	5	10R

- Straight jaws with teeth allow for secure fastening of boards, squared timbers, etc.
- $\boldsymbol{\cdot}$ It can securely hold even small objects when grinding.



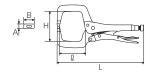


LOCKING PLIERS (C-CLAMP)



No.	Open width	L	Q	Н	Α	В	Weight (g)	Ó	Old model
150R	0~ 47	165	38	47	10	10	235	5	6R
280R	0~ 97	270	76	95	10	14	775	5	11R
460R	0~188	450	250	100	10	14	1,216	5	18R
610R	0~330	610	400	90	10	14	1,586	5	24R

• Useful for fixing and welding square steel materials and panels.



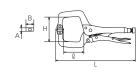


LOCKING PLIERS (C-CLAMP WITH SWIVEL PADS)



No.	Open width	L	Q	Н	А	В	Weight (g)	6	Old model
100SP	0~ 37	135	25	47	17	18	145	5	4SP
150SP	0~ 45	165	37	58	22	22	275	5	6SP
280SP	0~ 96	270	70	90	29	29	815	5	11SP
460SP	0~205	460	240	100	29	29	1,272	5	18SP
610SP	0~320	615	400	85	29	29	1,546	5	24SP

- · It can fix tilted objects since the swivel pads at the tips move according to the objects.
- · Useful for fixing panels and welding work.



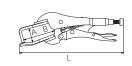


LOCKING PLIERS (PANEL CLAMP)



No.	Open width	L	А	В	Weight (g)	6	Old model
225R	0~41	230	25	76	666	5	9R

 $\boldsymbol{\cdot}$ It is convenient for fixing, welding and riveting of square iron materials and panels.







[•] Function mark is indicated under the product name. For the details, please refer to O P.004-005.

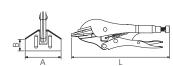
 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

LOCKING PLIERS FOR SHEET METAL



No.	L	А	В	Weight(g)	6	Old model
200R	200	79	25	509	5	8R

[·] It is convenient for bending and temporary locking.



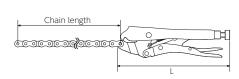


LOCKING PLIERS (CHAIN CLAMP TYPE)



No.	Chain length	L	Weight(g)	6	Old model
510R	450	210	757	5	20R

 $[\]boldsymbol{\cdot}$ Useful for turning and gripping circular and polygonal parts.

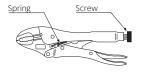




SPARE PARTS FOR LOCKING PLIERS

No.	Description	Contents	Quantity	
91A	Screw	100LN, 100SP, 100WR	1	
51A	Screw	130WR, 150LN, 150R, 150SP	1	
21A	Screw	175CR, 175R, 175WR, 200R, 225LN, 225R	1	
07A	Screw	250WR, 250CR, 250R, 280R, 280SP, 460R, 460SP, 510R, 610R, 610SP	1	

^{*} One bag contains one piece.





No.	Description	Contents	Quantity	
92A	Spring	100LN, 100SP, 100WR	1	
52A	Spring	130WR, 150LN, 150R, 150SP	1	
22A	Spring	175CR, 175R, 175WR, 200R, 225LN, 225R	1	
08A	Spring	250WR, 250CR, 250R, 280R, 280SP, 460R, 460SP, 510R, 610R, 610SP	1	

 $[\]ensuremath{^{*}}$ One bag contains one piece.



 $\ensuremath{^{*}}$ Be sure to use genuine KTC parts for replacement parts.

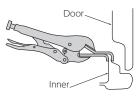
PANEL CLAMP VISE-GRIP



No.	Open		A	В		ш	Spare Part	s Part No.	Weight		
INO.	width	L L	^	D		П	Screw	Spring	(g)		
9AC	0~9.5	230	69	25	22	13	No.21	No.22	300	1	
				,							

 \cdot Lower jaw slides back and forth (aperture value 0-9.5mm) to clamp panels, etc. at 90°.

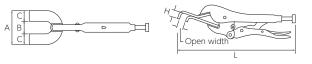




The door can be tightened to match the gap.



After tightening the door and matching the gap, it can be welded as it is.



VISE-GRIP and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.

[·] Do not use on anything that has electricity flowing.

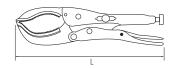
CONVENTIONAL TOOLS

LOCKING PLIERS (LARGE JAW) VISE-GRIP



No.	Open width		Spare Parts Part No.		Weight		
INO.	Open width	L	Screw	Spring	(g)		
12LC	0~79	265	No.07	No.08	650	5	

[·] Can be used to replace exhaust pipes, radiator hoses, etc.



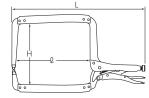
VISE-GRIP and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.

WIDE C-CLAMP VISE-GRIP



No.	Open		۰		Spare Part	ts Part No.	Weight		
INO.	width	L L	l k	П	Screw	Spring	(g)		
18DR	0~190	455	240	190	No.07	No.34	1,500	1	

 $[\]cdot$ Its effective when using fender clamps, lower panels, upper panel clamps, and back panel



VISE-GRIP and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.

Vice Grip Spare Parts

No.	Description	Contents	Quantity	
91	Screw	4BN, 4WR, 4LN, 4SP	5	
51	Screw	5WR, 6BN, 6LN, 6R, 6SP	5	
21	Screw	7WR, 7CR, 7R, 8R, 9R, 9BN, 9LN, 9AC	5	
07		10WR, 10CR, 10R, 20R, 11P, 11R, 11SP, 18R, 18SP, 18DR, 24R, 24SP, 24DR, 12LC	5	

^{* 5} pieces per bag.

Spare parts (chain)

No.	Applicable product number	Chain length	Weight (g)	6	
20EXT (for joints)		500	310	1	
20REP (replacement)	20R	500	310	1	

No. Description Quantity Contents 92 Spring 4BN, 4WR, 4LN, 4SP 5 52 Spring 5WR, 6BN, 6LN, 6R, 6SP 5 7WR, 7CR, 7R, 8R, 9R, 9BN, 22 5 Spring 9LN, 11P, 11R, 11SP, 9AC 80 Spring 5 10WR, 10CR, 10R, 20R, 12LC 34 Spring 18R, 18SP, 18DR 5 24R, 24SP, 24DR 5 137 Spring

^{*} The products listed under applicable part numbers other than 12LC, 18DR, and 9AC are discontinued products.



VISE-GRIP and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.



^{* 5} pieces per bag.

^{*} Cannot be used with locking pliers chain clamp (510R).

[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

CONVENTIONAL TOOLS

HAMMERS, CHISELS, AND PUNCHES



- Hit at the center of the striking surface, as the handle may swing horizontally or vertically due to imbalance, causing injury or chipping the striking surface.
- $\boldsymbol{\cdot}$ Always ensure the safety of your surroundings.
- · Wear protective glasses and protective gear.



- $\boldsymbol{\cdot}$ Do not use it on anything that has electricity flowing through it.
- Do not use hammers for purposes other than their intended use.
 - $\boldsymbol{\cdot}$ Use a hammer suitable for the intended use and size.
 - Do not use if cracks, chips, wear, deformation, or other abnormalities are found.
 - Hit perpendicularly to the striking surface.
 - $\boldsymbol{\cdot}$ Do not use a hammer with a rattling joint between the head and handle.
 - $\boldsymbol{\cdot}$ Do not use if the head and handle are rattled.
 - \cdot Do not use in flammable areas.
 - $\boldsymbol{\cdot}$ Wear protective goggles when working.
 - $\boldsymbol{\cdot}$ Do not hit hard objects, as it may cause chipping.

Hammer, chisel, and punch

A hammer is a tool that hits an object to drive or deform it. Typical applications are nail drive, but hammers are also used for a wide variety of other purposes, such as disassembly and assembly of machine parts and automotive sheet metal work. There are many variations in the material and shape of the head (head) depending on the purpose of use. The steel hammers are used for various types of hammering work, hammering in pins, etc. The resin and copper hammers are used for separating adhered parts, inserting oil seals and bushings, and pressfitting bearings, etc.

Although hammers are used in general-purpose applications, some are directed to specific uses, such as automotive sheet metal work and inspection work to determine whether parts are properly assembled by the sound of tapping.

Tools that work by striking with hammers include center punches for marking the position of holes to be drilled, pin punches for removing pins, and chisels for cutting and shaving metal.

Shaft Component types are also available. Grip Head There are two main types: iron, which is suitable for striking work, and resin, rubber, and copper, which are less damage to the obiect. Chisel Center

Lineup of KTC hammers

Part Number	Description	Head Material	Head exchange
PH45-323 PH68-344	Ball-peen hammer	Iron	
UD8-10	Plastic Hammer	Resin (Reinforced nylon)	•
UD3-10	Plastic Hammer	Resin	•
K9-6	Plastic Hammer	Resin	
UD2-10	Copper hammer	Copper	•
UD7-10	Combination hammer	Combination (iron, resin)	•
UD6-10	Combination hammer	Combination (iron, resin)	•

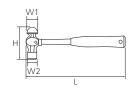
Part Number	Description	Head Material	Head exchange
UD1-10B	Shock-less hammer	Combination (iron, resin)	•
UD1-10	Component hammer	Resin	
UD4-10	Rubber hammer	Rubber	
TUD3L TUD3S	Mini hammer	Combination (Brass, iron, resin)	•
UDHT-2~ UDHT-49	Test hammer	Iron	
UD9-1 UD9-2	Double-head hammer for large vehicles	Iron	

BALL-PEEN HAMMER



No.	Size	L	W1	W2	Н	Weight(g)	б	
PH45-323	1 lb	320	26	30	105	720	5	
PH68-344	1.5 lb	340	28	35	117	950	5	

- · Specially heat treated head for preventing recess or chipping.
- · The head is pressed into the shank and a pin tang thru.
- $\boldsymbol{\cdot}$ Chrome plated shank is made of high class pipe steel so light and durable.
- · The grip is made of oil-resistant rubber and offer secure and comfortable gripping.



PLASTIC HAMMER



No.	Size	Head Material	L	W	Н	Weight (g)	6	
UD8-10	1 lb	Resin (reinforced nylon)	310	32	112	450	1	

- · The head is constructed from reinforced nylon which prevents cracking and chipping, also reducing the possibility of chipped materials entering the machine.
- · The wooden handle is slit to prevent slipping
- · Head can be replaced.

Replacement head (1 pcs.)

	` ' '			
No.	Material properties	Weight (g)		
UD8-10-1	Resin (reinforced nylon)	24	1	

· The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.



[•] Function mark is indicated under the product name. For the details, please refer to 🗘 P.004-005.

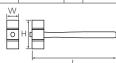
[•] Products marked with should be ordered after checking stock.

PLASTIC HAMMER



No.	Size	Head Material	L	W	Н	Weight(g)	6	
UD3-10	1 lb	Resin	330	35	116	500	1	

· Head can be replaced.



Replacement head (1 pcs.)

No.	Material	Weight(g)	△	
UD3-10-1	Resin	29	1	

 The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.

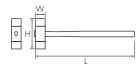


PLASTIC HAMMER



No.	Size	Head Material	L	W	Н	Weight(g)		
K9-6	1 lb	Resin	310	32	110	450	5	

- $\boldsymbol{\cdot}$ The head is a resin hammer.
- * The head part cannot be replaced.

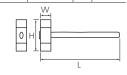


COPPER HAMMER



No.	Size	Head Material	L	W	Н	Weight(g)	Ó	
UD2-10	1 lb	Copper	330	30	88	450	1	

- · Head can be replaced. (Roll pin type)
- The main structure is made of cast iron.



Replacement head (1 pcs.)

No.	Material properties	Weight(g)	△	
UD2-10-1	Copper	120	1	

 $\boldsymbol{\cdot}$ The head is a roll pin fixed type.



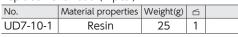
COMBINATION HAMMER



No.	Size	Head Material	L	W1	W2	Н	Weight(g)	6	
UD7-10	1 lb	Iron, resin	316	32	30	114.5	730	1	

- This is a combination hammer made of iron and resin that can perform two types of work with a single hammer.
- $\boldsymbol{\cdot}$ Specially heat treated head for preventing recess or chipping.
- $\boldsymbol{\cdot}$ The head is pressed into the shank and a pin tang thru.
- The handle is made of pipe steel, strong and lightweight, and the surface is chrome-plated.
- $\boldsymbol{\cdot}$ The grip is made of oil-resistant rubber and offer secure and comfortable gripping.
- Only the resin side head can be replaced.

Replacement head (1 pcs.)



• The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.



COMBINATION HAMMER



No.	Size	Head Material	L	W1	W2	Н	Weight(g)	\subseteq	
UD6-10	1 lb	Iron, resin	300	33	32	100	610	1	

- Tapered handle that fits easily in the hand and improves work efficiency.
- This is a combination hammer made of iron and resin that can perform two types of work with a single hammer.
- · Only the resin side head can be replaced.

W1

Replacement head (1 pcs.)

No. Material Weight(g) △ UD3-10-1 Resin 29 1	_	•				
UD3-10-1 Resin 29 1	1	No.	Material	Weight(g)		
		UD3-10-1	Resin	29	1	

• The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.



 $[\]cdot$ Use with protective equipment.

SHOCK-LESS HAMMER



No.		Size	Head Material	L	W	Н	Weight(g)	6	
UE	01-10B	1 lb	Iron, resin	366	36	119	450	1	

- \cdot This tool is a combined hammer made from steel and resin that allows two different uses. The head on the resin side can be replaced (roll pin type).
- $\boldsymbol{\cdot}$ The flat hitting side allows for the nailing in of decorative pins or for hitting in center punches.



Replacement head (1 pcs.)

No.		Material	Weight(g)	6	
UD1	I-10B-1	Resin	40	1	

· The head is a roll pin fixed type.



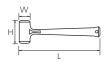
COMPONENT HAMMER



No.	Size	Material	L	W	Н	Weight(g)	6	
UD1-10	1 lb	Resin	310	46	98	610	1	

- · A singular structure with high standards of safety (urethane plastic). The tool is highly durable and produces no noise, allowing for quiet oeration.
- · Shockless construction reduces hand strain.



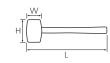


RUBBER HAMMER



No.	Size	Head Material	L	W	Н	Weight(g)	6	
UD4-10	1 lb	Rubber	330	60	100	450	1	

· High-quality rubber with excellent durability is used.



MINI HAMMER SET [2pcs.]



	No.		Weight(g)	\Box	
0	TUD6		190	1	
	Set contents				
	Mini hammer	TUD3S, TUD3L			

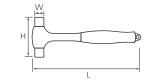
MINI HAMMER





No.	L	Н	Weight(g)	6	
⚠ TUD3S	180	56	70	1	
◆ TUD3L	245	65	120	1	

- · Interchangeable heads (iron, resin, and brass) enable use according to the application.
- · The head is a screw-in type.
- $\boldsymbol{\cdot}$ Most suitable for press fitting of oil-seals and small bearings, and installation/removal of split pins.
- \cdot Includes one resin head and one brass head.



Headsets (2 pcs.)

For TUD3S

	No.	W	Material	Weight(g)	
	UD1802C			20	
O	UD1802F	12	Iron	18	
0	UD1802P	12	Resin	4	







For TUD3L

	No.	W	Material	Weight(g)	
0	UD2502C	14	Brass	25	
0	UD2502F	14	Iron	24	
0	UD2502P	14	Resin	4	







UD2502F





[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

TEST HAMMER



No.	Size	L	W	Н	Weight(g)	Ó	
UDHT-2	1/4 lb	380	20	95	160	1	
UDHT-26	1/4 lb	600	20	95	250	1	
UDHT-4	1/2 lb	420	22	113	290	1	
UDHT-46	1/2 lb	600	22	113	350	1	
UDHT-49	1/2 lb	900	22	113	420	1	

^{*} The grip is available as a repair part. Check with your dealer for details.

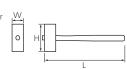


DOUBLE-HEAD HAMMER FOR LARGE VEHICLES



No.	Size	Head weight (kg)	Material	L	W	Н	Weight (kg)	б	
UD9-1	3 lb	1.3	Iron	360	44	118	1.5	1	
UD9-2	8 lb	3.6	Iron	900	58	163	4.1	1	

- · UD9-2 has a non-slip handle.
- * The grip is available as a repair part. Check with your dealer for details.



CHISEL



No.	Size	Weight(g)	6	
UDC-10	10×140	70	10	
UDC-13	13×160	150	10	
UDC-16	16×180	260	10	
UDC-19	19×190	290	10	
UDC-25	25×215	600	5	

- · Special alloy steel id friction-welded on the edge for more strength and durability.
- · Chrome plated surface for rust resistance.



- · Do not use as a substitute for a hammer.
- $\boldsymbol{\cdot}$ Wear protective goggles when using the tool.
- Do not use the tool with chipped or rounded edge.
 Do not twist the tool. CAUTION

CENTER PUNCH



No.	Size	Weight(g)	6	
UDP-10	10×125	65	10	
UDP-13	13×150	130	10	

- $\boldsymbol{\cdot}$ Special alloy steel is used to ensure durability and strength.
- Plating is applied to the surface to enhance the rust-preventive effect.
- The grip is knurled to prevent slipping.



- Wear protective goggles when using the tool.Do not use the tool with chipped or rounded edge.
- CAUTION Do not twist the tool.

[·] Use with protective equipment.

AUTO PUNCH

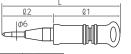


No.	L	Q1	Q2	D1	D2	Weight(g)	6	
UDP-4	160	90	70	28	34	160	5	

- · It can be used for marking when installing optional parts in automobiles, removing panel distortion in sheet metal work, etc.
- $\boldsymbol{\cdot}$ Can be used for marking mating marks on mating parts, etc.
- Punch tip is made of highly durable hard steel.
 The continuous use of the machine makes it easy to work with.
- Punch marks can be made quickly with one hand without using a hammer.
- · The strength of the striking force can be adjusted by simply turning the handle to the left or
- (If you hit hard, rotate right. If you hit weakly, rotate left)
- * Repair parts are available. Please contact our distributors for details.



· Wear protective goggles when using the tool.





* This product is not subject to repair.

Spare	parts

No.	Description	Quantity	
UDP-4-1	Replacement punch	1	



KNOCK PIN PUNCH SET [3pcs.]



No.	Weight(g)		
PK3	300	10	
Set contents			

- PK-4185,45185,5190 Knock pin punch
- · This is a convenient set that includes all major sizes in one set. \cdot The body is hexagonal in shape to prevent rolling.
- · Rubber for chucking is effective in improving workability.



- · Wear protective goggles when using the tool.
- · Use the correct size
- · Set the chucking rubber securely.

KNOCK PIN PUNCH SET [8pcs.]



No.	Weight(g)	\subseteq	
PK8	960	5	
Set contents			

PK-2125,3135,4185,45185,5190,6207,7212,8217 Knock pin punch

- $\boldsymbol{\cdot}$ The body is hexagonal in shape to prevent rolling. · Rubber for chucking is effective in improving workability.



- · Wear protective goggles when using the tool.
- \cdot Use the correct size $\boldsymbol{\cdot}$ Set the chucking rubber securely.

KNOCK PIN PUNCH







No.	Size	S	L	Q	Α	Weight(g)	\subseteq	
PK-2125	2	1.8	125	25	12	46	10	
PK-3135	3	2.8	135	35	12	46	10	
PK-4185	4	3.8	185	45	18	98	10	
PK-45185	4.5	4.3	185	45	18	100	10	
PK-5190	5	4.8	191	51	18	100	10	
PK-6207	6	5.8	207	67	22	150	10	
PK-7212	7	6.8	212	72	22	160	10	
PK-8217	8	7.8	217	77	22	170	10	

- · The body is hexagonal in shape to prevent
- \cdot Rubber for chucking is effective in improving workability.

+	A Q			E
		1		

Spare parts

spare parts	pare parts				
No.	Description	Quantity			
PK-2125-4	Chucking rubber	1			
PK-3135-4	Chucking rubber	1			
PK-4185-4	Chucking rubber	1			
PK-45185-4	Chucking rubber	1			
PK-5190-4	Chucking rubber	1			
PK-6207-4	Chucking rubber	1			
PK-7212-4	Chucking rubber	1			
PK-8217-4	Chucking rubber	1			



- · Wear protective goggles when using the tool.
- · Use the correct size.
- · Set the chucking rubber securely.



[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

CONVENTIONAL TOOLS

SCRAPERS, FILES, **AND BRUSHES**



- · Do not use it as a lever, or chisel.
- Do not use it as a lever, or chisel.
 Do not use as a hammer.
 Do not apply impact by hitting with a hammer, etc.
 - $\boldsymbol{\cdot}$ Do not use if cracks, chips, wear, deformation, or other abnormalities are found.
 - Do not use a replacement blade as a substitute for a razor blade.
 - \cdot When replacing the blade, be careful of the blade edge.

KTC

Scrapers, files, brushes

Scraper is a tool with a spatula-shaped blade. They are used to scrape off gaskets, sealant from automobile and industrial machinery engines, etc., to remove rust, and to remove burrs from cutting marks.

File is a stick-shaped tool used to sharpen and polish metal and wood. Depending on the fineness of the grain and the shape of the blade, they are divided into two types: those for ironworking and those for woodworking. Cloth-shaped ones are called sandpaper or sandpaper.

A typical brush used for industrial purposes is a wire brush made of wire. They are used for removing dirt and rust, polishing, etc.

Scraper File Wire brush

Scrapers

Scrapers		
Length of handle Blade Material	Short	Standard
Standard	KZ4S-18 8ac width	KZ4-12 KZ4-18 85de with 11.5mm
Carbide razor blade	KZ2S-18 Sade width	KZ2-18A Stoke width 18mm
Hard-edged blade	KZ3S-18 8se with	KZ3-18A
Stainless steel	KZ1S-15	KZ1-10 KZ1-15 KZ1-22 KZ1-30 KZ1-30 Side with 15mm
Hard steel blade (for stickers)		KZSS-25 Rode with 25mm KZS-40 Rode with 40mm

CERAMIC & STAINLESS SCRAPER SET [2pcs.]



No.	Weight(g)	\Box					
KZ142A	80	10					
Set contents	Set contents						
Ceramic Scraper	KZ4-12	Blade width 11.5mm					
Stainless Scraper	KZ1-10	Blade width 10mm					

• Use a stainless steel scraper for scraping and a ceramic scraper for finishing. Ceramic can be used as a finishing touch.

CERAMIC & STAINLESS SCRAPER SET [2pcs.]



No.		Weight(g)	6	
KZ142B	130	10		
Set contents				
Ceramic Scraper	KZ4-18	Blade wid	dth 1	8mm
Stainless Scraper	Blade wid	dth 1	5mm	

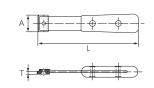
Use a stainless steel scraper for scraping and a ceramic scraper for finishing.
 Ceramic can be used as a finishing touch.

CERAMIC SCRAPER (SHORT)



No.	Α	Т	L	Weight(g)	6	
KZ4S-18	18	3	115	50	20	

- Superb wear resistance. *Ceramic tip with low rust and deformation.
- $\boldsymbol{\cdot}$ The blade does not adhere, allowing smooth cutting.
- $\boldsymbol{\cdot}$ Shavings and adhesive glue do not adhere to the blade.
- · Both sides of the blade can also be used.
- * Please handle with care as shocks (hitting or prying) or dropping may damage the chip.
- $\ensuremath{^{*}}$ We do not sell ceramic chips only.





[•] Function mark is indicated under the product name. For the details, please refer to
• P.004-005.

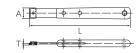
 $[\]boldsymbol{\cdot}$ Products marked with $\boldsymbol{\textit{Q}}$ should be ordered after checking stock.

CERAMIC SCRAPER



No.	А	Т	L	Weight(g)	白	
KZ4-12	11.5	3	145	30	20	
KZ4-18	18	3	175	52	20	

- $\boldsymbol{\cdot}$ Superb wear resistance. *Ceramic tip with low rust and deformation.
- · The blade does not adhere, allowing smooth cutting.
- $\boldsymbol{\cdot}$ Shavings and adhesive glue do not adhere to the blade.
- $\boldsymbol{\cdot}$ Both sides of the blade can also be used.
- $\ensuremath{^*}$ Please handle with care as shocks (hitting or prying) or dropping may damage the chip.
- * We do not sell ceramic chips only.



STAINLESS SCRAPER SET [2pcs.]





No.		Weight(g)	6	
KZ12A		130	10	
Set contents				
Chaiplace Cerapor	KZ1-10	Blade	widt	h 10mm
Stainless Scraper	KZ1-22	Blade	widt	h 22mm

[·] This is a set of stainless steel scrapers with different blade widths.



 \cdot Do not use it as a tagger, lever, knife substitute, etc.

STAINLESS SCRAPER SET [2pcs.]





No.		Weight(g)	6	
KZ12B		130	10	
Set contents				
Stainlass Ceranor	KZ1-15	Blade	widt	h 15mm
Stainless Scraper	KZ1-30	Blade	widt	h 30mm

 $[\]boldsymbol{\cdot}$ This is a set of stainless steel scrapers with different blade widths.



 $\boldsymbol{\cdot}$ Do not use it as a tagger, lever, knife substitute, etc.

STAINLESS SCRAPER SET [2pcs.]



No.		Weight(g)	6	
KZ12S		160	10	
Set contents				
Ctainlass Ceranor	KZ1-22	Blade	widt	h 22mm
Stainless Scraper	KZ1-30	Blade	widt	h 30mm

This is a set of stainless steel scrapers with different blade widths.



· Do not use it as a tagger, lever, knife substitute, etc.

STAINLESS SCRAPER (SHORT)



No.	А	Т	L	Weight(g)	台	
KZ1S-15	15	1.4	110	50	20	

- The handle is shorter than conventional products, making it easier to work in tight spaces.
- * Be careful not to set the edge too high because of the narrow width of the tip.



 $\boldsymbol{\cdot}$ Do not use it as a tagger, lever, knife substitute, etc.



[·] Use with protective equipment.

STAINLESS SCRAPER

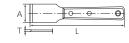


No.	А	T	L	Weight(g)	白	
KZ1-10	10	1.4	165	50	20	
KZ1-15	15	1.4	170	52	20	
KZ1-22	22	1.4	180	80	20	
KZ1-30	30	1.4	180	80	20	

* KZ1-10 and KZ1-15 have a narrow tip width, so be careful not to set the edge too high.



· Do not use it as a tagger, lever, knife substitute, etc.



HARD METAL & HARD STEEL SCRAPER SET [2pcs.]





No.		Weight(g)	白	
TKZ232A		110	10	
Set contents				
Carbide Blade Scraper	KZ2-18A	Blade	widt	h 18mm
Hard steel blade scraper	KZ3-18A	Blade	widt	h 18mm

 $[\]cdot$ Scraper set with carbide and hard steel blades.



Do not use it as a tagger, lever, knife substitute, etc.

HARD METAL SCRAPER (SHORT)

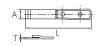
No.	А	Т	L	Weight(g)	白	
KZ2S-18	18	1	118	50	5	

- Carbide tips are used for cutting edges.
- \cdot The handle is shorter than conventional products, making it easier to work in tight spaces.



Do not use it as a tagger, lever, knife substitute, etc.





HARD METAL SCRAPER



No.	Α	Т	L	Weight(g)	6	
KZ2-18A	18	1	180	55	5	

· Carbide tips are used for cutting edges.



Do not use it as a tagger, lever, knife substitute, etc.





[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

[•] Products marked with ② should be ordered after checking stock.

HARD STEEL SCRAPER (SHORT)



No.	А	Т	L	Weight(g)	6	
KZ3S-18	18	1.4	118	50	5	

- $\boldsymbol{\cdot}$ Hard steel blades are used for less wear.
- The handle is shorter than conventional products, making it easier to work in tight spaces.



 $\boldsymbol{\cdot}$ Do not use it as a tagger, lever, knife substitute, etc.



HARD STEEL SCRAPER

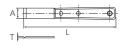


No.	А	Т	L	Weight(g)	6	
KZ3-18A	18	1.4	180	55	5	

· Hard steel blades are used for less wear.



Do not use it as a tagger, lever, knife substitute, etc.



STICKER SCRAPER DX





Includes 5 replacement blades

No.	Α	L	W	Н	Weight(g)	6	
KZSS-25	24.5	150	40	19	120	10	

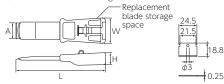
- \cdot This scraper is useful for removing stickers on glass surfaces, such as automobile inspection
- · The 25mm blade width and the round tip blade holder make it easy to apply force and provide excellent workability.
- \cdot The grip section has space for a set of 10 replacement blades (KZS-2510), sold separately.
- · Includes 5 replacement blades.

Spare parts (replacement blade)

	·			
No.	Contains	Weight(g)		
KZS-2510	10 pcs.	20	10	



- · Do not use a replacement blade as a substitute for a razor blade.
- When replacing the blade, be careful of the blade edge.



STICKER SCRAPER





No.	А	L	Weight(g)	白	
KZS-40	39.5	152	110	10	

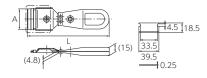
- $\boldsymbol{\cdot}$ This scraper is useful for removing stickers on glass surfaces, such as automobile inspection marks (stickers).
- · The blade width is 40 mm, which applies force evenly to the entire blade for efficient and speedy work.
- $\boldsymbol{\cdot}$ The cutting edge cuts well along the glass for a clean finish.
- $\boldsymbol{\cdot}$ The blade is fixed so that it will not shift.
- $\boldsymbol{\cdot}$ The grip shape makes it easy to hold and apply force, allowing you to work with light force.

Spare parts (replacement blade)

No.	Contains	Weight(g)	6	
KZS-4010	10 pcs.	15	10	



- Do not use a replacement blade as a substitute for a razor blade.
- · When replacing the blade, be careful of the blade edge.



[·] Use with protective equipment.

BRUSH



No.	Description	Material (Brush)	Over-all length	Wire diameter	Brush width	Shape (head)	Material (handle)	Shape (handle)	6	
YTBR-112	Three Row Wire Brush	Steel	270	0.3	85×15	Straight	Wood	Straight	10	
YTBR-132	Sword-Type wire brush	Steel	230	0.3	90×30	Straight	Wood	Straight	10	
YTBR-142	Oval Type Wire Brush	Steel	130	0.3	110×50		Wood		10	
YTBR-122	Gold Handle Wire Brush	Steel	260	0.25	67	Straight	Steel	Bent	10	
YTBR-1221	A-type Channel Brush	Steel	215	0.25	65	Straight	Steel	Bent	10	
YTBR-1222	J-Type Channel Brush	Steel	235	0.25	85	Bent	Steel	Bent	10	
YTBR-212	Brass Brush	Brass	240	0.14	75×17	Straight	Wood	Straight	10	
YTBR-311	Engine brush (small)	Pig hair	200		38× 9	Straight	Bamboo	Straight	10	
YTBR-312	Engine brush (large)	Pig hair	295		62×10	Straight	Bamboo	Straight	10	
YTBR-323	Angle brush	Pig hair	320		66×15	Straight	Bamboo	Bent	10	
YTBR-422	Palm brush	Palm	260		65	Straight	Steel	Bent	10	

Feature • Steel brushes are plated with brass for improved durability.(YTBR-112, 132, 142, 122, 1221, 1222)

[•] The wooden handle (palm) of the grip is made of timber from thinning that is used in consideration for preservation of natural environments.



· Wear protective goggles when working.

ABRASIVE PAPER



No.	Size	6	
YGJ-40	228×280	50	
YGJ-60	228×280	50	
YGJ-80	228×280	50	
YGJ-120	228×280	50	

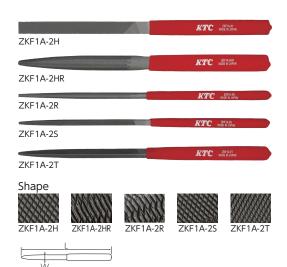
[•] Part Nos indicate the sizes of the abrasive grains on the papers.



 \cdot Wear protective goggles when working.

Supply will be in packing unit shown in the table.

SMALL FILE



ΗI	ιe	set	[5	pcs.]	

TZKF1A05		272	10	
Set contents				
Flat	ZKF1A-2H			
Half Round	ZKF1A-2HR			
Round	ZKF1A-2R			
Square	ZKF1A-2S			
Triangle	ZKF1A-2T			

Weight(g) ☐

- $\boldsymbol{\cdot}$ The file has a non-slip, easy to force foam dipping grip for metalworking.
- $\boldsymbol{\cdot}$ All coarseness is medium.

File

No.	Shape	L	W	Weight(g)	6	
ZKF1A-2H	Flat	220	11	57	5	
ZKF1A-2HR	Half Round	220	12	58	5	
ZKF1A-2R	Round	220	5.5	45	5	
ZKF1A-2S	Corner	220	5.5	52	5	
ZKF1A-2T	Triangle	220	9	60	5	



[•] Function mark is indicated under the product name. For the details, please refer to P.004-005.

 $[\]cdot$ Products marked with ${\bf \emph{Q}}$ should be ordered after checking stock.