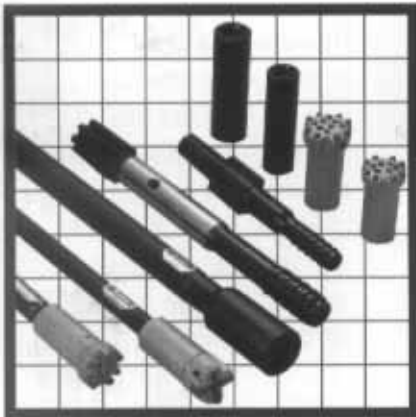


# *Rock Drilling Tools*



## Rock Drilling Tools (For Crawler Drill)

Button bit  
Cross bit  
Extension rod  
Sleeve  
Shank rod

## Grinding of bit

As drilling continues, the tips of bits are flattened. Then, not only the drilling speed is lower but also the bits are broken earlier than usual or can cause drifter malfunctions. To prevent these failure, it is necessary to grind the bits at a proper interval.

### ■ Time to grind the button bit

- (1) When the tips are worn to flat and its wear width are  $1/3 \sim 1/2$  of the tip diameter.
- (2) When the reaming clearance is extremely reduced to 0.5mm or less.
- (3) When a netlike crack (snakeskin) has occurred at the top of tip.

Before grinding



After grinding



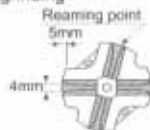
CAUTION

- (1) Use a cup grinder applicable to the tip size. As checking with a special template, grind the tips to their original shape.
- (2) Perform grinding in a wet process. Don't grind the base metal too much.
- (3) If snakeskin occurs, perform grinding until it disappears.

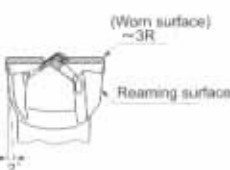
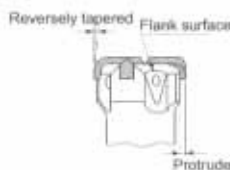
### ■ Time to grind the X bit (cross bit)

- (1) When the wear width reaches approx. 4mm at the 5mm inward, from the reaming point.
- (2) When the reaming surface is reversely tapered or when the tip is extremely protruded because the base metal is worn.

Before grinding



After grinding



CAUTION

- (1) The standard cutting angle is  $105^\circ$ .
- (2) The height of edge must be uniform.
- (3) The tip ends of reaming surface must be protruded uniformly.
- (4) Grinder should be GC. Its proper particle degree is 60 ~ 80, and the cohesion is H ~ J.
- (5) When grinding manually, you should use a both-head desk grinder of 0.75 ~ 1.5kW.
- (6) Perform grinding in a dry process. Even if the bit is heated, don't cool it rapidly with water, etc.

●The specifications in this catalogue are subject to change without notice.

## FURUKAWA MACHINERY SALES CO.,LTD.

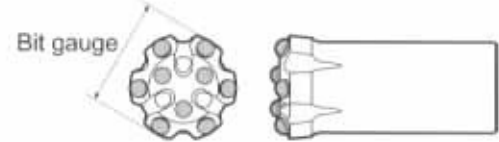
15-9, Uchikanda 2-chome, Chiyoda-ku, Tokyo, Japan.  
Tel : 03-3252-8151  
Fax : 03-5297-3944

## FURUKAWA CO.,LTD.

# Explanation of part name (shape code)

## ■ Button bit

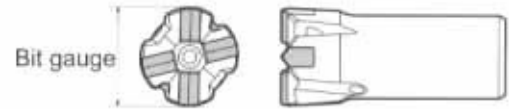
**T 4 5 B 7 0 S 6 - F F**



- Shape of base metal face : FF = Flat face  
FFRB = Flat face reverse blow  
DC = Drop center
- Quantity of gauge tip : 6
- Shape of tip : S = Spherical P = Parabolic  
B = Ballistic C = Conical
- Bit gauge :  $\phi$  70mm
- Kind of bit : B = Button bit
- Thread shape + Size : T = T45 thread H = H thread  
R = Rope thread T = T thread

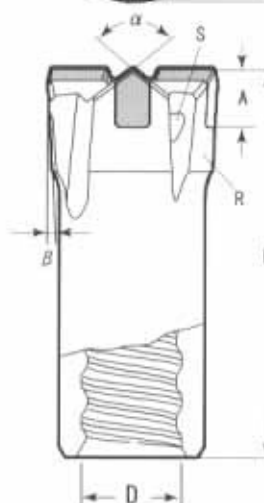
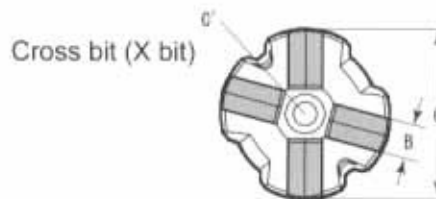
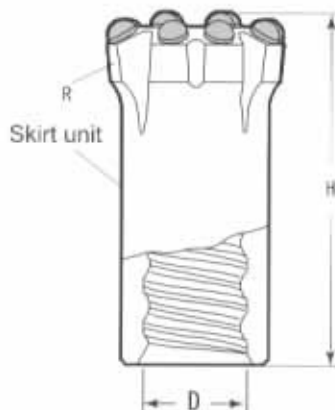
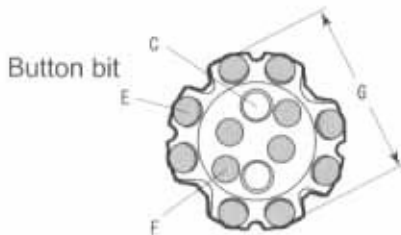
## ■ Cross bit (X bit)

**T 3 8 X 6 4 - 3 0 R B**














- Blow shape : RB = Reverse blow
- Tip material + Tip size : 30 = E3 + Standard tip  
40 = E4 + Standard tip  
30N = E3 + N tip  
40N = E4 + N tip
- Bit gauge :  $\phi$  64mm
- Kind of bit : X = Cross bit and X bit
- Thread shape + Size : T38 = T38 thread H : H thread  
R : Rope thread T : T thread

## Terminology





- A : Tip height
- B : Tip width
- C : Face hole
- C' : Center hole
- D : Thread diameter
- E : Gauge tip
- F : Face tip
- G : Bit gauge
- H : Bit height
- R : Reaming surface
- S : Side hole
- $\alpha$  : Cutting angle
- $\beta$  : Reaming angle

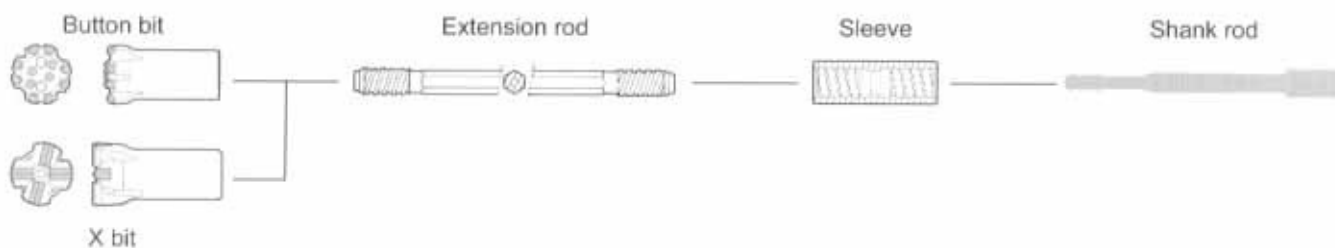
## Kind of bit and application range

Kind of bit	Application range	Tip shape
Spherical button bit 	Hard rock and ultra-hard rock layers Effective in a rock layer which causes wear in a great degree.	S 
Parabolic button bit 	Medium hard rock and hard rock layers	P 
Ballistic button bit 	Soft rock and medium hard rock layers Higher drilling speed can be obtained compared with cross bit.	B 
Conical button bit 	Limestone The tip end is sharp and so the drilling efficiency is excellent. This bit demonstrates its ability especially in limestone.	C 
Reverse blow button bit 	Used in layers including few fracture zones. Reverse blow is proper to enhance the cuttings discharge efficiency.	
Cross bit 	Soft rock and medium hard rock layers Effective in layers where gauges are extremely worn.	

## Thread type and dimension

	Thread shape	Thread type/Kind	Thread outer diameter (mm)	Pitch (mm)
T thread		<b>T38</b> <b>T45</b> <b>T51</b>	38.00 44.40 50.80	15.63 18.47 20.32
High reed		<b>1600(H16)</b>	37.74	12.70

# 1600 High reed



Button bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip q'ty - Dia.		Blow hole		Mass kg	Remarks	
				Gauge	Face	Side	Face			
FF : Flat face Gauge tip : 6 pcs  	64	091506-64115	H16B64S6-FF	6x12	3x11	-	3	1.7	○	
	64	091806-64115	H16B64P6-FF	6x12	3x11	-	3	1.7		
	64	091706-64115	H16B64B6-FF	6x12	3x11	-	3	1.7		
	64	091806-64115	H16B64C6-FF	6x12	3x11	-	3	1.7		
	70	091506-70105	H16B70S6-FF	H16B70S6-FF	6x12	3x11	-	3	1.9	
	70	091806-70105	H16B70P6-FF	H16B70P6-FF	6x12	3x11	-	3	1.9	
	70	091706-70105	H16B70B6-FF	H16B70B6-FF	6x12	3x11	-	3	1.9	
	76	091506-76111	H16B76S6-FF	H16B76S6-FF	6x13	3x12	-	3	2.1	
	76	091806-76111	H16B76P6-FF	H16B76P6-FF	6x13	3x12	-	3	2.1	
	76	091706-76111	H16B76B6-FF	H16B76B6-FF	6x13	3x12	-	3	2.1	

Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".

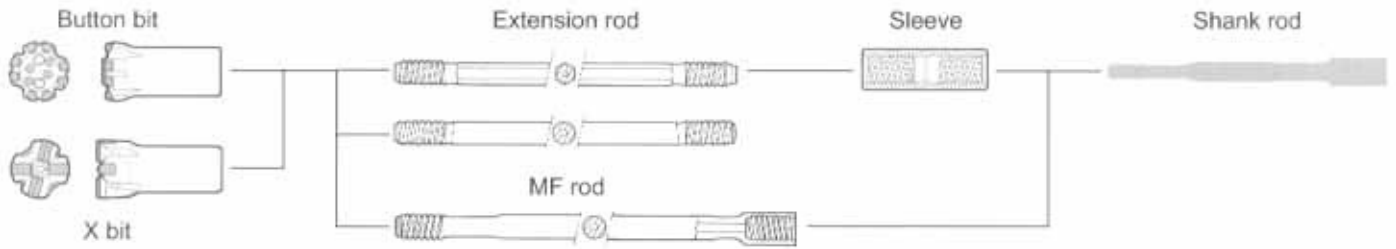
X bit Standard cross bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip size		Blow hole		Mass kg	Remarks
				Size	Material	Side	Face		
Standard  	64	091406-64105	H16X64-40N	12x18	E4	4	1	2.2	○
	64	091406-64115	H16X64-30N	12x18	E3	4	1	2.2	○
	70	091406-70103	H16X70-40N	12x18	E4	4	1	2.3	○
	70	091406-70113	H16X70-30N	12x18	E3	4	1	2.3	

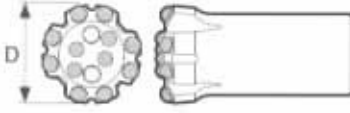
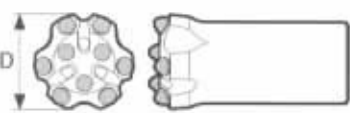
Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".

Extension rod	Part No.	Thread	Length (L) mm	Blow hole dia. mm	Mass kg	
						32 Hexagon
	32HET-160-4	H16-H16	4000	12.5	24.0	

Sleeve	Part No.	Order No.	Thread	Diameter (D) mm	Length (L) mm	Mass kg

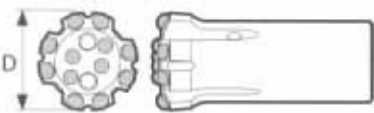
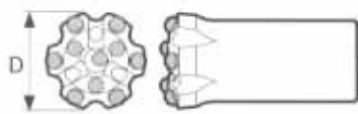
# T38 Thread




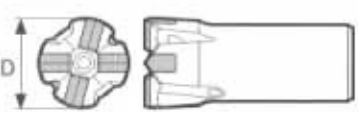
Button bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip q'ty - Dia.		Blow hole		Mass kg	Remarks
				Gauge	Face	Side	Face		
FF : Flat face Gauge tip : 8 pcs  	64	091522-64109	T38B64S8-FF	8x11	4x10	-	2	1.7	○
	64	091622-64109	T38B64P8-FF	8x11	4x10	-	2	1.7	○
	64	091722-64109	T38B64B8-FF	8x11	4x10	-	2	1.7	○
	64	091822-64109	T38B64C8-FF	8x11	4x10	2	2	1.7	○
	70	091522-70107	T38B70S8-FF	8x11	4x10	-	2	2.1	○
	70	091622-70107	T38B70P8-FF	8x11	4x10	-	2	2.1	○
	70	091722-70107	T38B70B8-FF	8x11	4x10	-	2	2.1	○
	70	091822-70107	T38B70C8-FF	8x11	4x10	2	2	2.1	○
	76	091522-76105	T38B76S8-FF	8x12	4x11	-	2	2.2	○
	76	091622-76105	T38B76P8-FF	8x12	4x11	-	2	2.2	○
	76	091722-76105	T38B76B8-FF	8x12	4x11	-	2	2.2	○
	76	091822-76105	T38B76C8-FF	8x12	4x11	2	2	2.2	○
80	091522-80101	T38B80S8-FF	8x13	4x12	-	2	2.9	○	
80	091622-80101	T38B80P8-FF	8x13	4x12	-	2	2.9	○	
80	091722-80101	T38B80B8-FF	8x13	4x12	-	2	2.9	○	
89	091522-89103	T38B89S8-FF	8x14	5x12	-	2	3.8	○	
89	091622-89103	T38B89P8-FF	8x14	5x12	-	2	3.8	○	
89	091722-89103	T38B89B8-FF	8x14	5x12	-	2	3.8	○	
FF : Flat face Gauge tip : 6 pcs  	64	091522-64115	T38B64S6-FF	6x12	3x11	-	3	1.8	○
	64	091622-64115	T38B64P6-FF	6x12	3x11	-	3	1.8	○
	64	091722-64115	T38B64B6-FF	6x12	3x11	-	3	1.8	○
	64	091822-64115	T38B64C6-FF	6x12	3x11	-	3	1.8	○
	70	091522-70105	T38B70S6-FF	6x12	3x11	-	3	2.0	○
	70	091622-70105	T38B70P6-FF	6x12	3x11	-	3	2.0	○
	70	091722-70105	T38B70B6-FF	6x12	3x11	-	3	2.0	○
	70	091822-70105	T38B70C6-FF	6x12	3x11	-	3	2.0	○
	76	091522-76111	T38B76S6-FF	6x13	3x12	-	3	2.2	○
	76	091622-76111	T38B76P6-FF	6x13	3x12	-	3	2.2	○
	76	091722-76111	T38B76B6-FF	6x13	3x12	-	3	2.2	○
	76	091822-76111	T38B76C6-FF	6x13	3x12	-	3	2.2	○

Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".

# T38 Thread


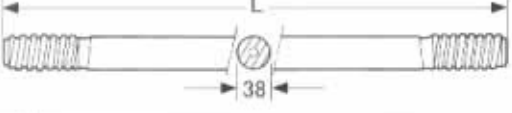
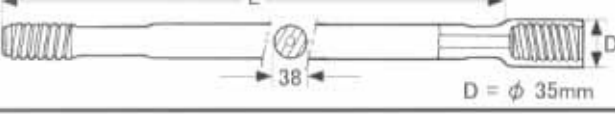
Button bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip q'ty - Dia.		Blow hole		Mass kg	Remarks	
				Gauge	Face	Side	Face			
FFRB : Flat face reverse blow Gauge tip: 8 pcs	64	091522-64001	T38B64S8-FFRB	8x11	4x10	2R	2	2.0	○	
	64	091622-64001	T38B64P8-FFRB	8x11	4x10	2R	2	2.0	○	
	64	091722-64001	T38B64B8-FFRB	8x11	4x10	2R	2	2.0	○	
	64	091822-64001	T38B64C8-FFRB	8x11	4x10	2R	2	2.0	○	
		70	091522-70001	T38B70S8-FFRB	8x11	4x10	2R	2	2.3	○
		70	091622-70001	T38B70P8-FFRB	8x11	4x10	2R	2	2.3	
		70	091722-70001	T38B70B8-FFRB	8x11	4x10	2R	2	2.3	
		70	091822-70001	T38B70C8-FFRB	8x11	4x10	2R	2	2.3	
		76	091522-76001	T38B76S8-FFRB	8x12	4x11	2R	2	2.8	○
		76	091622-76001	T38B76P8-FFRB	8x12	4x11	2R	2	2.8	
		76	091722-76001	T38B76B8-FFRB	8x12	4x11	2R	2	2.8	
		76	091822-76001	T38B76C8-FFRB	8x12	4x11	2R	2	2.8	
	DC : Drop center	64	091522-64301	T38B64S6-DC	6x11	3x10,1x10	-	3	1.7	○
		64	091622-64301	T38B64P6-DC	6x11	3x10,1x10	-	3	1.7	
		64	091722-64301	T38B64B6-DC	6x11	3x10,1x10	-	3	1.7	
		64	091822-64301	T38B64C6-DC	6x11	3x10,1x10	-	3	1.7	
		70	091522-70301	T38B70S6-DC	6x11	3x11,1x9	-	3	2.0	○
		70	091622-70301	T38B70P6-DC	6x11	3x11,1x9	-	3	2.0	
		70	091722-70301	T38B70B6-DC	6x11	3x11,1x9	-	3	2.0	
		70	091822-70301	T38B70C6-DC	6x11	3x11,1x9	-	3	2.0	
		76	091522-76301	T38B76S6-DC	6x13	3x11,1x11	-	3	2.2	○
		76	091622-76301	T38B76P6-DC	6x13	3x11,1x11	-	3	2.2	
		76	091722-76301	T38B76B6-DC	6x13	3x11,1x11	-	3	2.2	
		76	091822-76301	T38B76C6-DC	6x13	3x11,1x11	-	3	2.2	

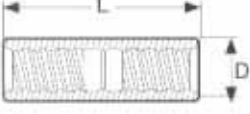
Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".

X bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip size		Blow hole		Mass kg	Remarks	
				Size	Material	Side	Face			
Standard	60	091422-60101	T38X60-40	13x22	E4	2	1	2.1		
		64	091422-64103	T38X64-40	13x22	E4	4	1	2.2	○
		64	091422-64113	T38X64-30	13x22	E3	4	1	2.2	○
		64	091422-64105	T38X64-40N	12x18	E4	4	1	2.2	○
		64	091422-64115	T38X64-30N	12x18	E3	4	1	2.2	○
		64	091422-64001	T38X64-40RB	13x22	E4	2+2R	-	2.2	○
		64	091422-64011	T38X64-30RB	13x22	E3	2+2R	-	2.2	○
	Reverse blow	70	091422-70001	T38X70-40RB	13x22	E4	2+2R	-	2.3	○
		70	091422-70011	T38X70-30RB	13x22	E3	2+2R	-	2.3	
		70	091422-70101	T38X70-40	13x22	E4	4	1	2.3	
70		091422-70103	T38X70-40N	12x18	E4	4	1	2.3		
70		091422-70111	T38X70-30	13x22	E3	4	1	2.3		
70		091422-70113	T38X70-30N	12x18	E3	4	1	2.3		
76		091422-76001	T38X76-40RB	13x22	E4	2+2R	-	2.9		
	76	091422-76011	T38X76-30RB	13x22	E3	2+2R	-	2.9	○	
	76	091422-76103	T38X76-40	13x22	E4	4	1	2.9		
	76	091422-76105	T38X76-40N	12x18	E4	4	1	2.9		
	76	091422-76113	T38X76-30	13x22	E3	4	1	2.9		
	76	091422-76115	T38X76-30N	12x18	E3	4	1	2.9		
	80	091422-80101	T38X80-40	13x22	E4	4	1	3.0	○	
89	091422-89101	T38X89-40	13x22	E4	4	1	3.7			

Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".  
2R : 2 reverse blow holes.  
2+2R : 2 side plus 2 reverse blow holes.

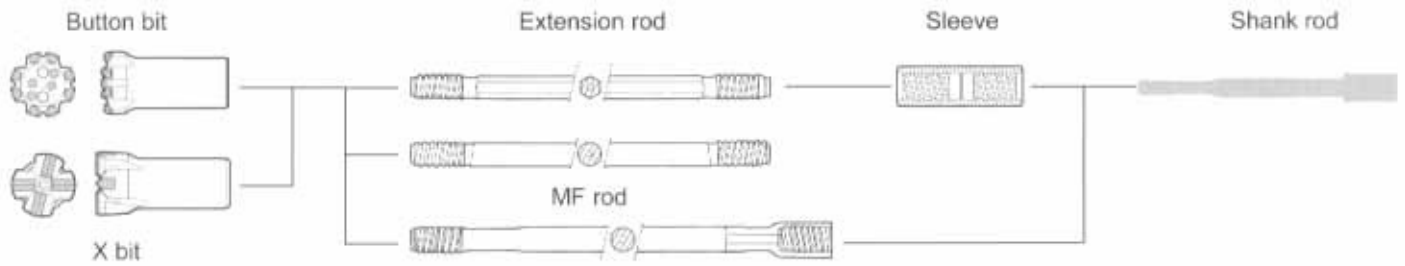
# T38 Thread

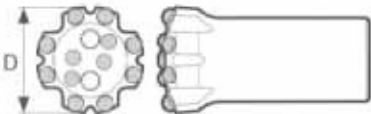
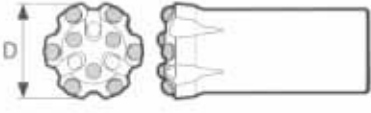
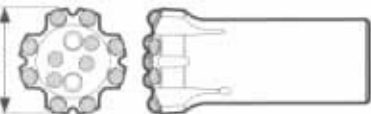
Extension rod	Part No.	Thread	Length (L) mm	Blow hole dia. mm	Mass kg
32 Hexagon 	32HET-T3-3	T38-T38	3050	12.5	18.6
	32HET-T3-4	T38-T38	4000	12.5	24.1
38 Round 	38RET-T3-3	T38-T38	3050	13.5	24.6
	38RET-T3-3.6	T38-T38	3660	13.5	29.5
	38RET-T3-4	T38-T38	4000	13.5	32.3
38 Round  D = $\phi$ 35mm	38RET-T3-3MF	T38-T38	3050 <small>(Overall length 3130)</small>	13.5	26.6
	38RET-T3-3.6MF	T38-T38	3660 <small>(Overall length 3740)</small>	13.5	31.5

Sleeve	Part No.	Order No.	Thread	Diameter (D) mm	Length (L) mm	Mass kg
Semi-bridge 	089914-38001	SL-T3800	T38-T38	55	190	1.9

Reducing sleeve	Part No.	Order No.	Thread	Diameter (D) mm	Length (L) mm	Mass kg
Semi-bridge 	089917-00013	SL-T38XH16	T38-H16	55	165	1.9


# T45 Thread




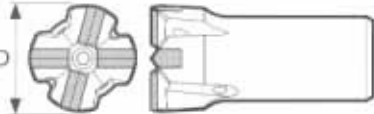
Button bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip q'ty - Dia.		Blow hole		Mass kg	Remarks
				Gauge	Face	Side	Face		
FF : Flat face Gauge tip : 8 pcs  	70	091523-70101	T45B70S8-FF	8x11	4x10	-	2	2.4	
	70	091623-70101	T45B70P8-FF	8x11	4x10	-	2	2.4	
	70	091723-70101	T45B70B8-FF	8x11	4x10	-	2	2.4	
	70	091823-70101	T45B70C8-FF	8x11	4x10	2	2	2.4	
	76	091523-76105	T45B76S8-FF	8x12	4x11	-	2	2.5	○
	76	091623-76105	T45B76P8-FF	8x12	4x11	-	2	2.5	○
	76	091723-76105	T45B76B8-FF	8x12	4x11	-	2	2.5	○
	76	091823-76105	T45B76C8-FF	8x12	4x11	2	2	2.5	○
	80	091523-80101	T45B80S8-FF	8x13	4x12	-	2	3.3	
	80	091623-80101	T45B80P8-FF	8x13	4x12	-	2	3.3	○
	80	091723-80101	T45B80B8-FF	8x13	4x12	-	2	3.3	○
	80	091823-80101	T45B80C8-FF	8x13	4x12	2	2	3.3	○
	89	091523-89103	T45B89S8-FF	8x14	5x12	-	2	4.3	○
	89	091623-89103	T45B89P8-FF	8x14	5x12	-	2	4.3	○
	89	091723-89103	T45B89B8-FF	8x14	5x12	-	2	4.3	○
	89	091823-89103	T45B89C8-FF	8x14	5x12	2	2	4.3	○
102	091523-02103	T45B102S8-FF	8x14	6x12	-	2	5.6	○	
102	091623-02103	T45B102P8-FF	8x14	6x12	-	2	5.6		
102	091723-02103	T45B102B8-FF	8x14	6x12	-	2	5.6		
102	091823-02103	T45B102C8-FF	8x14	6x12	2	2	5.6		
FF : Flat face Gauge tip : 6 pcs  	70	091523-70105	T45B70S6-FF	6x12	3x11	-	3	2.3	○
	70	091623-70105	T45B70P6-FF	6x12	3x11	-	3	2.3	○
	70	091723-70105	T45B70B6-FF	6x12	3x11	-	3	2.3	
	70	091823-70105	T45B70C6-FF	6x12	3x11	-	3	2.3	
	76	091523-76111	T45B76S6-FF	6x13	3x12	-	3	2.5	
	76	091623-76111	T45B76P6-FF	6x13	3x12	-	3	2.5	○
	76	091723-76111	T45B76B6-FF	6x13	3x12	-	3	2.5	
	76	091823-76111	T45B76C6-FF	6x13	3x12	-	3	2.5	
FFRB : Flat face reverse blow Gauge tip : 8 pcs  	76	091523-76001	T45B76S8-FFRB	8x12	4x11	2R	2	2.7	○
	76	091623-76001	T45B76P8-FFRB	8x12	4x11	2R	2	2.7	
	76	091723-76001	T45B76B8-FFRB	8x12	4x11	2R	2	2.7	○
	76	091823-76001	T45B76C8-FFRB	8x12	4x11	2R	2	2.7	
	80	091523-80001	T45B80S8-FFRB	8x13	4x12	2R	2	3.5	
	80	091623-80001	T45B80P8-FFRB	8x13	4x12	2R	2	3.5	
	80	091723-80001	T45B80B8-FFRB	8x13	4x12	2R	2	3.5	○

Column of "Remark": "○" shows "normal production", "No mark" means "Manufactured for order".  
 2R : 2 reverse blow holes.  
 2+2R : 2 side plus 2 reverse blow holes.

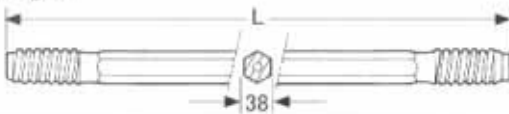

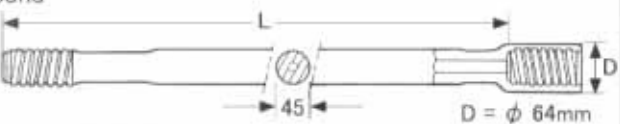
# T45 Thread

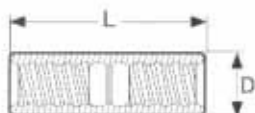
Button bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip q'ty - Dia.		Blow hole		Mass kg	Remarks
				Gauge	Face	Side	Face		
DC : Drop center  	70	091523-70301	T45B70S6-DC	6x11	3x11,1x9	-	3	2.0	
	70	091623-70301	T45B70P6-DC	6x11	3x11,1x9	-	3	2.0	
	70	091723-70301	T45B70B6-DC	6x11	3x11,1x9	-	3	2.0	
	70	091823-70301	T45B70C6-DC	6x11	3x11,1x9	-	3	2.0	
	76	091523-76301	T45B76S6-DC	6x13	3x11,1x11	-	3	2.2	
	76	091623-76301	T45B76P6-DC	6x13	3x11,1x11	-	3	2.2	
	76	091723-76301	T45B76B6-DC	6x13	3x11,1x11	-	3	2.2	

Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".

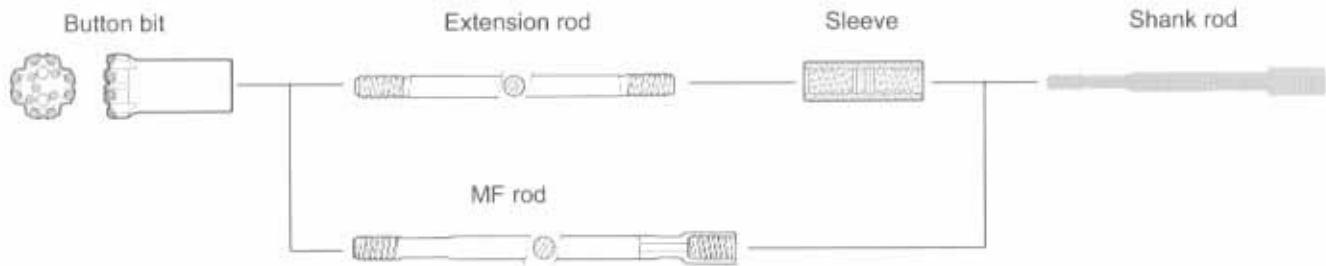
X bit Tip L size	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip size		Blow hole		Mass kg	Remarks
				Size	Material	Side	Face		
Standard  	70	091423-70101	T45X70-40	13x22	E4	4	1	2.6	○
	70	091423-70111	T45X70-30	13x22	E3	4	1	2.6	○
	76	091423-76001	T45X76-40RB	13x22	E4	2+2R	1	2.7	○
	76	091423-76103	T45X76-40	13x22	E4	4	1	2.7	○
	76	091423-76113	T45X76-30	13x22	E3	4	1	2.7	○
Reverse blow (RB)  	80	091423-80101	T45X80-40	13x22	E4	4	1	3.3	○
	89	091423-89101	T45X89-40	13x22	E4	4	1	4.1	○
	89	091423-89111	T45X89-30	13x22	E3	4	1	4.1	○

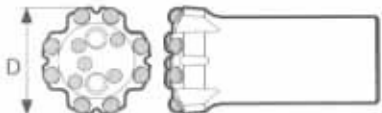
Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".

Extension rod	Part No.	Thread	Length (L) mm	Blow hole dia. mm	Mass kg
38 Hexagon  	38HET-T4-3	T45-T45	3050	15.0	25.9
	38HET-T4-3.6	T45-T45	3660	15.0	30.9
45 Round  	45RET-T4-3	T45-T45	3050	16.5	36.8
	45RET-T4-3.6	T45-T45	3660	16.5	43.6
45 Round  	45RET-T4-3MF	T45-T45	3050 <small>(Overall length 3145)</small>	16.5	36.8
	45RET-T4-3.6MF	T45-T45	3660 <small>(Overall length 3755)</small>	16.5	43.6


Sleeve	Part No.	Order No.	Thread	Diameter (D) mm	Length (L) mm	Mass kg
Semi-bridge  	089914-45001	SL-T4500	T45-T45	66	207	3.0
	089914-45003	SL-T4503S	T45-T45	63	207	2.5

# T51 Thread



Button bit	Bit dia. D mm	Part No. (Order code)	Part name (Shape code)	Tip q'ty - Dia.		Blow hole		Mass kg	Remarks
				Gauge	Face	Side	Face		
FF : Flat face Gauge tip : 8 pcs 	89	091524-89103	T51B89S8-FF	8x14	5x12	-	2	4.4	○
	89	091624-89103	T51B89P8-FF	8x14	5x12	-	2		
	89	091724-89103	T51B89B8-FF	8x14	5x12	-	2		
	89	091824-89103	T51B89C8-FF	8x14	5x12	2	2		
	102	091524-02103	T51B102S8-FF	8x14	6x12	-	2	5.8	○
	102	091624-02103	T51B102P8-FF	8x14	6x12	-	2		
	102	091724-02103	T51B102B8-FF	8x14	6x12	-	2		
	102	091824-02103	T51B102C8-FF	8x14	6x12	2	2		

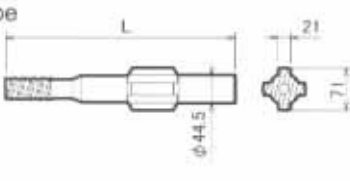
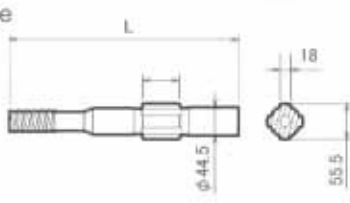
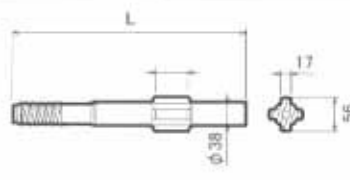
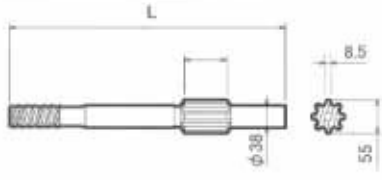
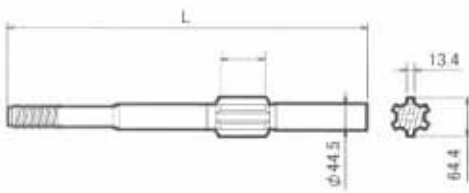
Column of "Remark": "○" shows "normal production". "No mark" means "Manufactured for order".

Extension rod	Part No.	Thread	Length (L) mm	Blow hole dia. mm	Mass kg	
						51 Round
51 Round		51RET-T5-3MF 51RET-T5-3.6MF	T51-T51 T51-T51	3050 3660 <small>(Overall length: 3150)</small>	21.5 21.5	46.7 55.4

Sleeve	Part No.	Order No.	Thread	Diameter (D) mm	Length (L) mm	Mass kg

Reducing sleeve	Part No.	Order No.	Thread	Diameter (D) mm	Length (L) mm	Mass kg

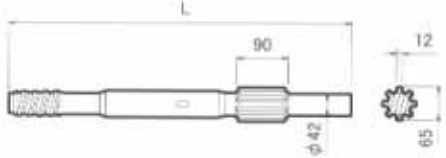
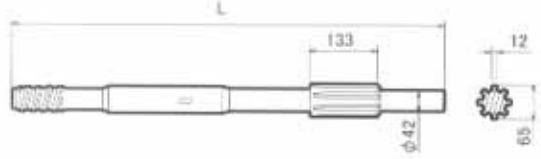
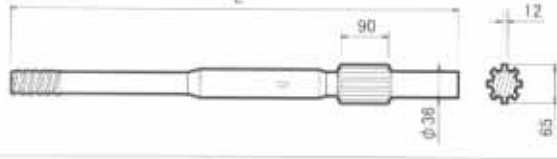
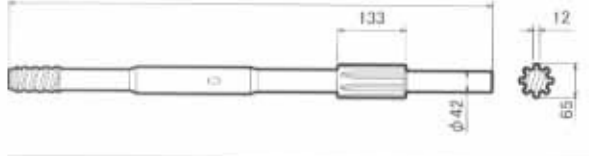
# Shank rod

Drifter model	Part No.	Order No.	Thread	L mm	Blow hole dia. mm	Mass kg
<b>PD200</b>						
High blade type 	907820-91603	PD200H-H1600	H16	380	14	4.2
	007820-93807 007820-93809	PD200H-T3800 PD200H-T3801	T38 T38	380 485	14 14	4.2 4.8
Low blade type 	907820-91605	PD200L-H1600	H16	380	14	3.5
	907820-93813 907820-93815	PD200L-T3800 PD200L-T3801	T38 T38	380 450	14 14	3.5 3.9
<b>M110</b>						
	M110-2107	M110-H1600	H16	380	11.5	3.1
<b>HD180</b>						
	007520-25000	HD180-T3800	T38	455	14	3.8
	007520-25005	HD180-T3801	T38	565	14	4.5
<b>HD260</b>						
	007320-25011	HD260-T3800	T38	590	16	6.2

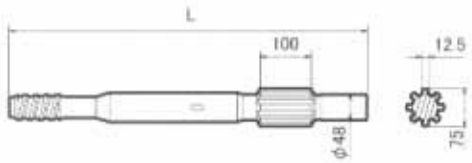
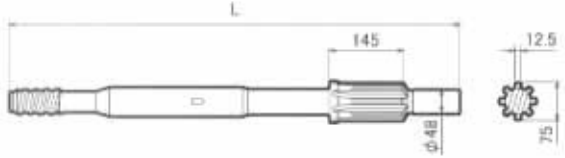
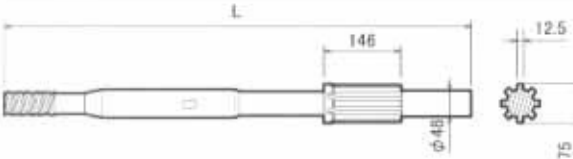
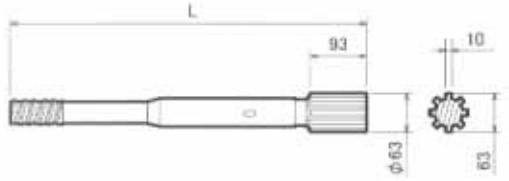
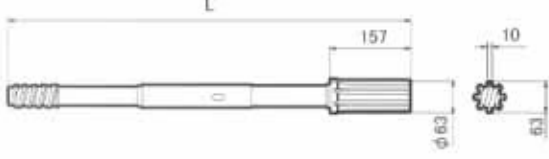
# Shank rod

Drifter model	Part No.	Order No.	Thread	L mm	Blow hole dia. mm	Mass kg
<b>HD300</b>						
	007620-25017	HD300-T3800	T38	655	16	6.0
	007620-25015	HD300-T4500	T45	655	16	6.6
<b>HD500</b>						
	HD500-02510	HD500-T38	T38	710	18	8.0
	HD500-02506	HD500-T4500	T45	710	18	8.3
	HD500-02503	HD500-T5100	T51	710	18	8.8
<b>HD606</b>						
	HD606-02502	HD606-T3800	T38	580	—	4.3
	HD606-02512	HD606-QT3800	T38	755	—	5.6
	HD609-02504	HD609-T38L	T38	690	—	6.2
	HD609-02502 HD609-02505	HD609-T4500 HD609-T45L	T45 T45	620 690	— —	6.1 6.8
	HD609-02521 HD609-02523	HD609-QT3800 HD609-QT38L	T38 T38	795 865	— —	8.0 8.4
	HD609-02522 HD609-02524	HD609-QT4500 HD609-QT45L	T45 T45	795 865	— —	8.0 8.5

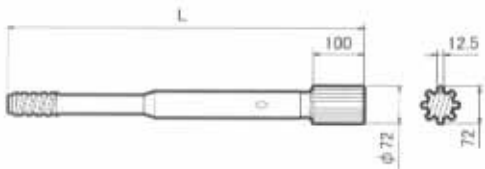
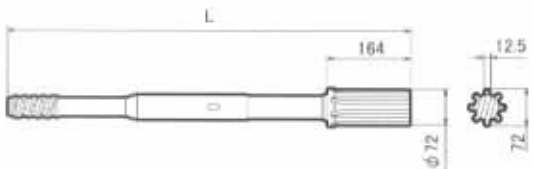
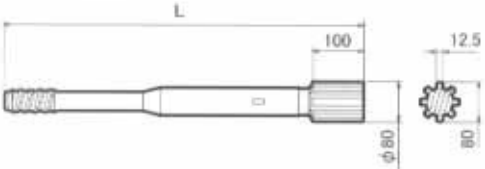
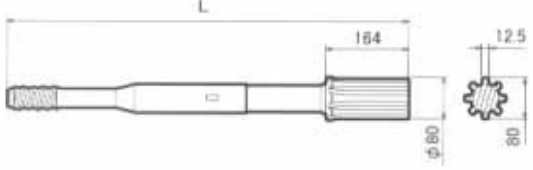
# Shank rod

Drifter model	Part No.	Order No.	Thread	L mm	Blow hole dia. mm	Mass kg	
	HD612-02502 HD612-02507	HD612-T3800 HD612-T38L	T38 T38	670 710	— —	8.4 8.5	
	HD612-02501 HD612-02506 HD612-02503	HD612-T4500 HD612-T45 HD612-T45L	T45 T45 T45	670 710 830	— — —	8.4 8.7 10.2	
	HD612-02505 HD612-02508	HD612-T5100 HD612-T51L	T51 T51	670 730	— —	9.1 9.7	
		HD612-02522 HD612-02527	HD612-QT3800 HD612-QT38L	T38 T38	845 885	— —	11.0 11.2
		HD612-02521 HD612-02526	HD612-QT4500 HD612-QT45L	T45 T45	845 885	— —	11.0 11.3
		HD612-02523 HD612-02528	HD612-QT5100 HD612-QT51L	T51 T51	845 905	— —	10.9 11.7
	HD612-02552 HD612-02551 HD612-02553	HD612-T38DD HD612-T45DD HD612-T51DD	T38 T45 T51	750 750 770	— — —	8.9 9.2 10.1	
		HD612-02572 HD612-02571 HD612-02573	HD612-QT38DD HD612-QT45DD HD612-QT51DD	T38 T45 T51	925 925 945	— — —	11.4 11.7 12.6

# Shank rod

Drifter model	Part No.	Order No.	Thread	L mm	Blow hole dia. mm	Mass kg	
	HD615-02502	HD615-T4500	T45	700	—	11.0	
	HD615-02501	HD615-T5100	T51	700	—	11.3	
	HD615-02504	HD615-T5101	T51	880	—	13.0	
	HD615-02506	HD615-T45DD	T45	880	—	13.4	
	HD615-02505	HD615-T51DD	T51	880	—	13.4	
	HD615-02512	HD615-QT4500	T45	880	—	14.0	
	HD615-02511	HD615-QT5100	T51	880	—	14.5	
	HD615-02516	HD615-QT51L	T51	960	—	15.2	
	HD615-02518	HD615-QT45DD	T45	910	—	14.9	
	HD615-02519	HD615-QT51DD	T51	990	—	15.6	
	HD709-02501	HD709-T3800	T38	590	—	6.0	
	HD709-02503	HD709-T3801	T38	620	—	6.1	
	HD709-02502	HD709-T4500	T45	590	—	6.4	
	HD709-02504	HD709-T4501	T45	620	—	6.5	
		HD709-02511	HD709-QT3800	T38	785	—	9.2
		HD709-02513	HD709-QT3801	T38	815	—	9.3
HD709-02512	HD709-QT4500	T45	785	—	9.2		
HD709-02514	HD709-QT4501	T45	815	—	9.9		

# Shank rod

Drifter model	Part No.	Order No.	Thread	L mm	Blow hole dia. mm	Mass kg	
	HD712-02502 HD712-02505	HD712-T3800 HD712-T3801	T38 T38	590 790	— —	8.7 10.3	
	HD712-02501 HD712-02504	HD712-T4500 HD712-T4501	T45 T45	590 790	— —	8.7 10.5	
	HD712-02503 HD712-02506	HD712-T5100 HD712-T5101	T51 T51	590 790	— —	9.5 10.7	
		HD712-02532 HD712-02535	HD712-QT3800 HD712-QT3801	T38 T38	785 885	— —	10.0 11.3
		HD712-02531 HD712-02534	HD712-QT4500 HD712-QT4501	T45 T45	785 885	— —	10.0 11.5
		HD712-02533 HD712-02536	HD712-QT5100 HD712-QT5101	T51 T51	785 885	— —	10.0 11.7
	HD715-02502 HD715-02505	HD715-T4500 HD715-T4501	T45 T45	590 790	— —	9.5 11.3	
	HD715-02501 HD715-02503 HD715-02504	HD715-T5100 HD715-T5101 HD715-T5101	T51 T51 T51	590 690 790	— — —	10.0 11.0 12.0	
		HD715-02532 HD715-02535	HD715-QT4500 HD715-QT4501	T45 T45	785 885	— —	11.5 14.4
		HD715-02531 HD715-02534	HD715-QT5100 HD715-QT5101	T51 T51	785 885	— —	11.5 14.4