

Lower electrode for nut welding (Original)

Our special designed lower electrode for Weld nut (Anti center core dislocation design)



Application

- ▶ **KCF guide pin**
 - ▶ **Lower electrode**
 - ▶ **Lower electrode holder**
- Lower electrode for weld nuts is combination of these 3 kinds
- ▶ Please use by set of KCF guide pin, Lower electrode and Lower electrode holder.
 - ※ Guide pin will be lifted stably by either Air flow or Spring.

Features

▶ Guide pin

- ① Guide pin has fitting point matching with nut diameter.
- ② Guide pin is available in pitch of 0.2mm in pin diameter.

▶ Lower electrode

There are two kinds, one is made of Chrome Zirconium Copper (CuCrZr) and another is made of CuBe50.

Especially CuBe50 is suitable for projection welding and have long life.

▶ Lower electrode holder

There are wide selections in taper degree and 3 choices in lower electrode holder length that enable efficient cooling effect. By application of water cooling jacket, you can get adjustment on location that make you easy to escape from the trouble on location of the welding object.

KCF guide pin Our original model

- mark and blue letter means ordered product.

Order code

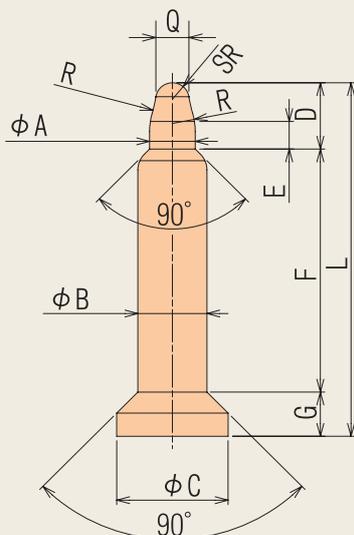
(ϕ)

ϕB

KCF- Nut size - Pin diameter

Ex. In case M6 nut with press hole 7.0
(Order code) **KCF-M6-6.8**

Unit : mm



Nut size	Size									
	A	B	C	D	E	F	G	L	Q	R
M4	3.2	4~7	10	5	2.0	22	4	31	2.5	9.0
M5	4.1	5~8	10	6	2.5	22	4	32	3.0	13.3
M6	4.9	6~10	10	7	2.5	22	3	32	3.5	15.5
M8	6.6	8~11	12	8	3.0	23	3	34	5.0	17.5
M10	8.5	10~13	15	10	3.5	24	3	37	7.0	30.5
UNIFY	9.7	11~14	16	12	4.0	24	3	39	8.0	37.5
M12	10.4	12~15	16	12	4.0	24	3	39	9.0	41.0

◆ ϕB (pin diameter) is available every 0.2mm.

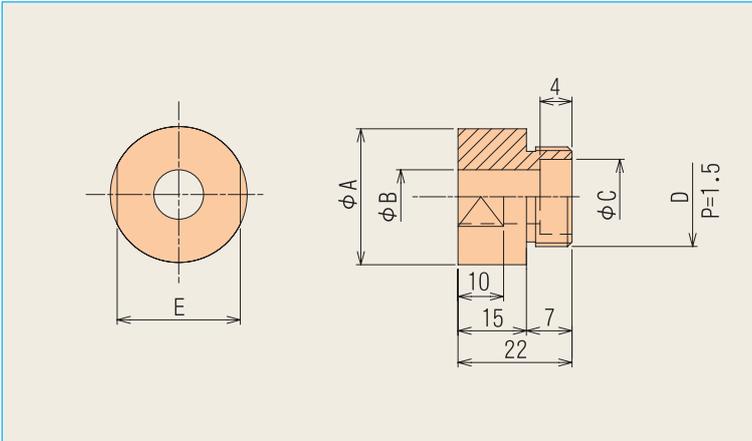
※ Ordered product

Unit : mm

Nut size	Size	
	B	
● M4	4.0, 4.2, 4.4, 5.4, 5.6, 6.0, 6.2, 6.4	
● M5	7.2, 7.4, 7.6, 7.8	
● M6	8.4, 9.2, 9.4, 9.6, 9.8, 10.0	
● M8	10.2, 11.0	
● M10	10.2	
● UNIFY	11.0, 11.2, 11.6, 12.2, 13.2, 13.4, 13.6, 14.0	
● M12	12.0, 12.2, 12.4, 13.2, 13.6, 14.2, 14.4, 14.6	

Lower electrode Our original model

● mark and blue letter means ordered product.



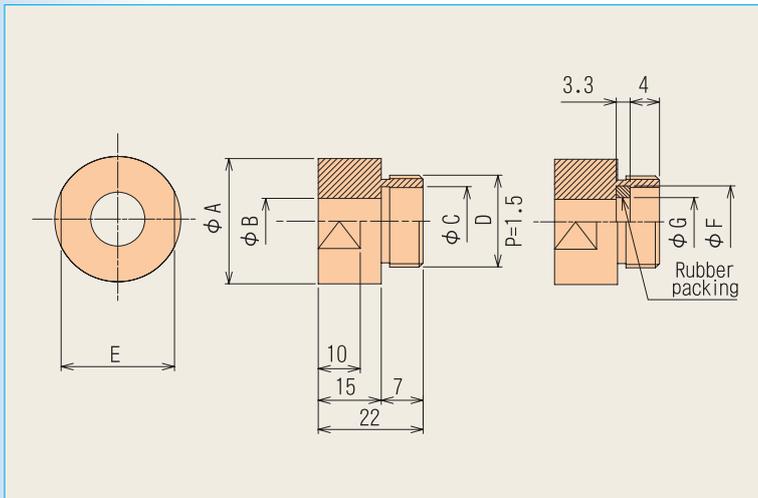
725MO·730MO·735MO·725BO·730BO·735BO

Order code (O) ϕB MO: CuCrZr BO: CuBe50
 Product name - Pin diameter Ex. In case 125MO and Pin B diameter is 6.8 (Order code) **125MO-6.8**
 Unit : mm

Product name	Size				
	A	B	C	D	E
725MO	25	*	12.5	M18	22
730MO	30	*	16.5	M22	27
735MO	35	*	16.5	M22	32
725BO	25	*	12.5	M18	22
730BO	30	*	16.5	M22	27
735BO	35	*	16.5	M22	32

Pin diameter list (ϕB)

Unit : mm		
725MO	730MO	735MO
3.9	● 5.1	● 10.9
4.1	7.1	11.1
4.6	9.1	11.9
4.9	10.1	12.1
5.1	10.9	12.9
5.6	11.1	13.1
5.9	11.9	
6.1	12.1	
6.6	12.9	
6.9	13.1	
7.1	non hole	
7.6		
7.9		
8.1		
8.6		
8.9		
9.1		
9.6		
9.9		
10.1		
non hole		
725BO	730BO	735BO
4.1	11.1	11.1
● 5.1	12.1	● 12.1
6.1	13.1	13.1
6.9	non hole	
7.1		
8.9		
9.1		
non hole		



825B0 · 830B0

Non leakage product

Order code

(\emptyset)

\emptyset B

BO : CuBe50

Product name — Pin diameter

Unit : mm

Product name	Size						
	A	B	C	D	E	F	G
825B0	25	*	12.5	M18	22	13.2	*
830B0	30	*	16.5	M22	27	17.2	*

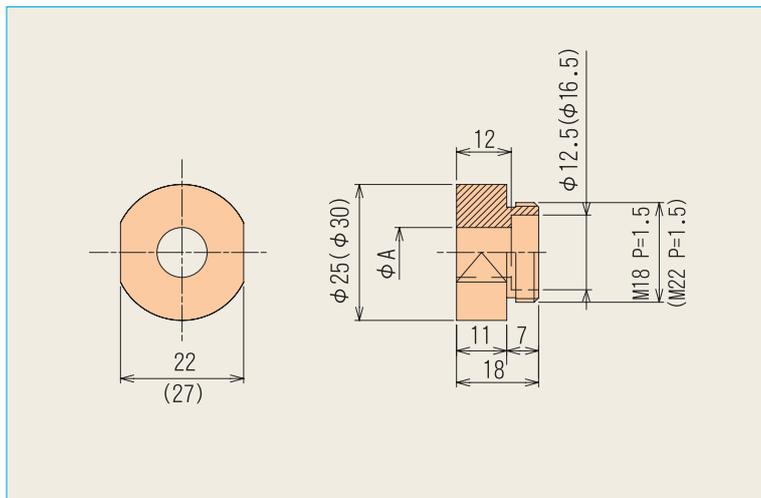
* ϕ G is hole diameter of rubber packing

Hole diameter (B size) and applicable rubber packing

Unit : mm

825B0	
ϕ B	ϕ G
4.8	Rubber packing 13 × 5.6 × 3
5.0	Rubber packing 13 × 5.6 × 3
5.8	Rubber packing 13 × 6.6 × 3
6.0	Rubber packing 13 × 6.6 × 3
6.5	Rubber packing 13 × 7.1 × 3
6.8	Rubber packing 13 × 7.6 × 3
7.0	Rubber packing 13 × 7.6 × 3
8.0	Rubber packing 13 × 8.6 × 3
8.8	Rubber packing 13 × 9.6 × 3
9.0	Rubber packing 13 × 9.6 × 3
10.0	Rubber packing 13 × 10.6 × 3

830B0	
ϕ B	ϕ G
10.8	Rubber packing 17 × 11.6 × 3
11.0	Rubber packing 17 × 11.6 × 3
11.8	Rubber packing 17 × 12.6 × 3
12.0	Rubber packing 17 × 12.6 × 3
12.8	Rubber packing 17 × 13.6 × 3
13.0	Rubber packing 17 × 13.6 × 3

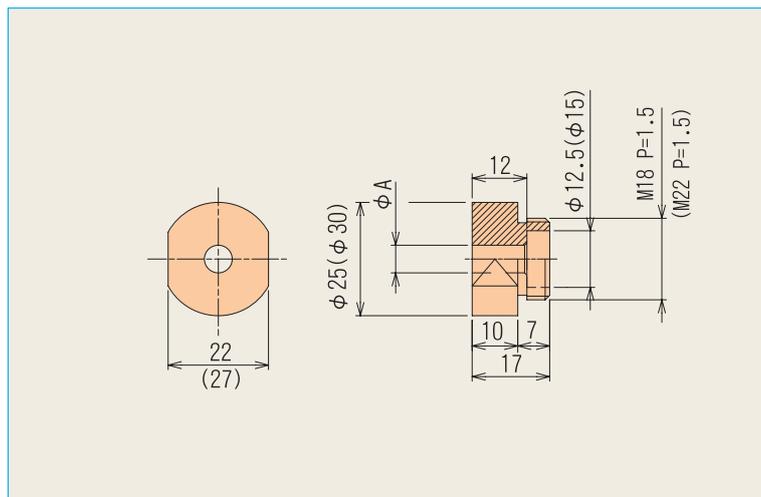


225MO · 230MO

Order code (∅) ϕB Patented product MO: CuCrZr

Product name - Pin diameter Unit : mm

Product name	Hole Diameter
	A
225MO	5.0
225MO	6.0
225MO	7.0
225MO	7.2
225MO	9.1
225MO	non hole
230MO	6.0
230MO	11.0
230MO	12.0
230MO	13.0
230MO	non hole



625 · 630

Order code (∅) ϕB Be50

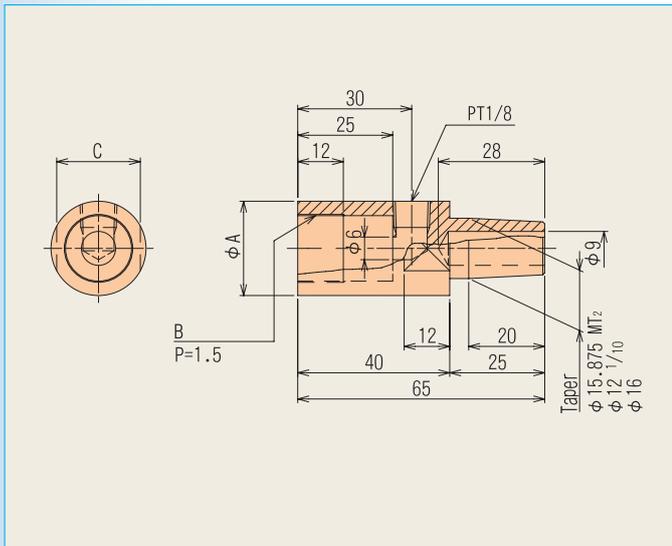
Product name - Pin diameter Unit : mm

Product name	Hole Diameter
	A
● 625	5.1
● 625	6.1
● 625	7.1
● 625	9.1
● 625	11.1
● 630	11.1
● 630	13.1

● mark and blue letter means ordered product.

Lower electrode holder Our original model

● mark and blue letter means ordered product.



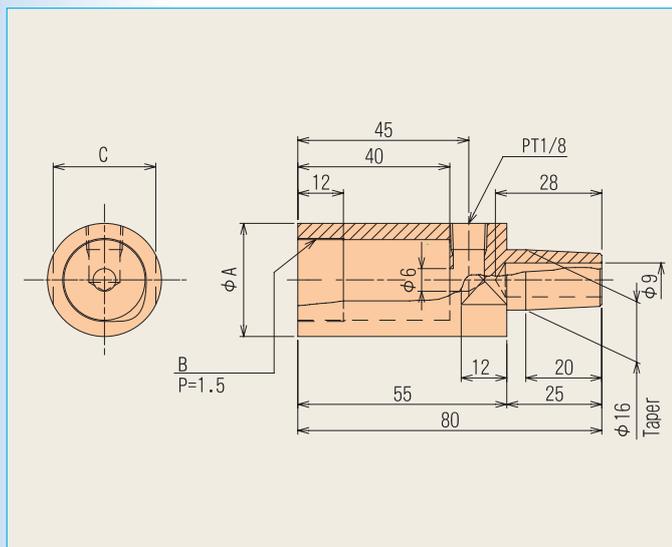
125MF · 130MF · 135MF

Order code

Product name - **Taper**

Unit : mm

Product name	Size			Taper
	A	B	C	
125MF	25	M18	22	12 ¹ / ₁₀ ●, 16 ¹ / ₁₀ , 16 ¹ / ₅ , MT2, 20 ¹ / ₁₀ ●, 20 ¹ / ₅ ●
130MF	30	M22	27	16 ¹ / ₁₀ , 16 ¹ / ₅ , MT2, 20 ¹ / ₁₀ ●, 20 ¹ / ₅ ●
135MF	35	M22	32	16 ¹ / ₁₀ , 16 ¹ / ₅ , MT2, 20 ¹ / ₁₀ ●, 20 ¹ / ₅ ●



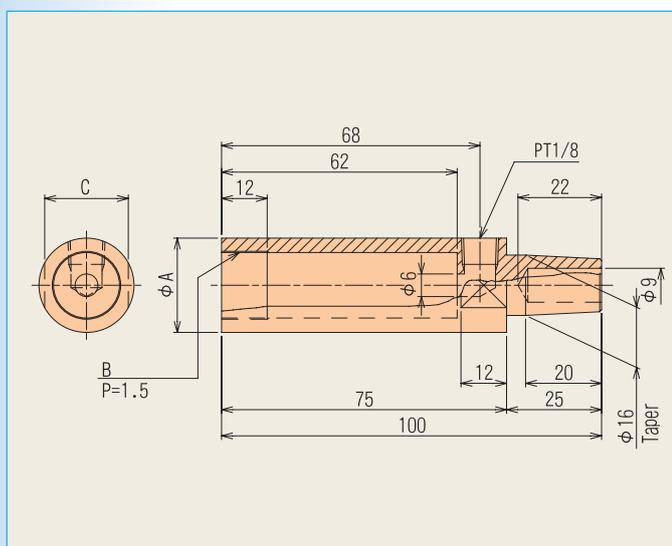
125MF · 130MF Semi long holder

Order code

Product name - **Semi long** - **Taper**

Unit : mm

Product name	Size			Taper
	A	B	C	
125MF	25	M18	22	16 ¹ / ₁₀ , 16 ¹ / ₅ ●
130MF	30	M22	27	16 ¹ / ₁₀ , 16 ¹ / ₅ ●



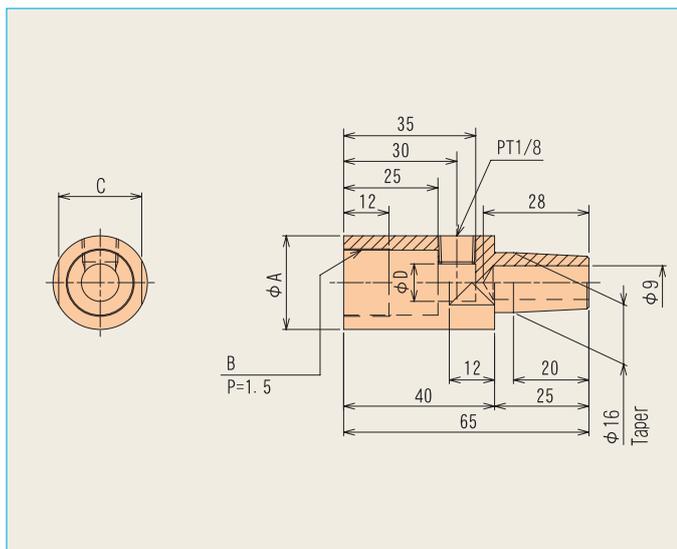
125MF · 130MF Long holder

Order code

Product name - **Long** - **Taper**

Unit : mm

Product name	Size			Taper
	A	B	C	
125MF	25	M18	22	16 ¹ / ₁₀ , 16 ¹ / ₅ ●
130MF	30	M22	27	16 ¹ / ₁₀ , 16 ¹ / ₅ ●



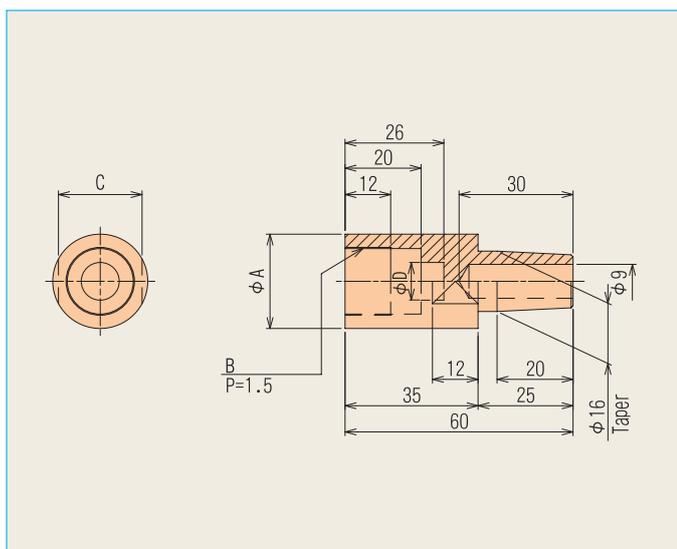
525MF · 530MF

Order code

Product name - Type

Unit : mm

Product name	Size				
	A	B	C	D	Taper
525MF	25	M18	22	10	16°/10, 16°/5 ●
530MF	30	M22	27	13	16°/10, 16°/5 ●



625MF · 630MF

Order code

Product name - Type

Unit : mm

Product name	Size				
	A	B	C	D	Taper
625MF	25	M18	22	10	16°/10, 16°/5 ●
630MF	30	M22	27	13	16°/10, 16°/5 ●

Lower electrode for nut welding (Toyota)

Welding electrode for projection nut



- ▶ KCF guide pin
 - ▶ Lower electrode
 - ▶ Lower electrode holder
- } Lower electrode for weld nuts is combination of these 3 kinds
- ▶ Please use by set of KCF guide pin, Lower electrode and Lower electrode holder
 - ※ Guide pin will be lifted stably by Air flow.



- ▶ Shape of Guide pin tip is tapered convexed. R shaped taper enable stable nut insert and holding.

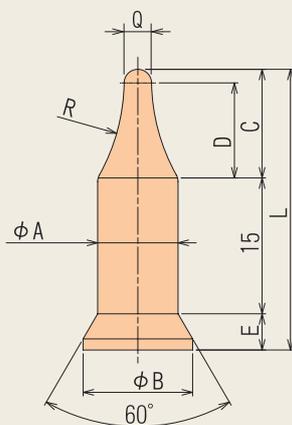
KCF guide pin Welding electrode for projection nut

Order code

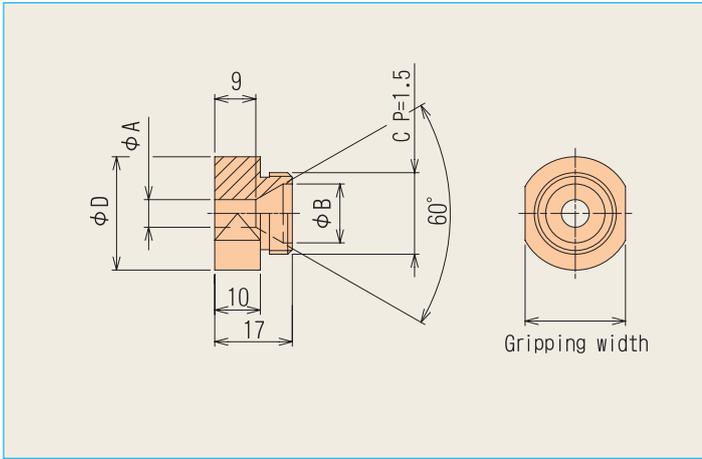
W-PN-Code

Unit : mm

Nut	Code	Size							
		A	B	L	C	D	E	Q	R
M4	4P	4.8	12.0	29.0	6.5	5.5	7.5	2	11.0
M5	5P	5.8	12.0	30.0	8.5	7.5	6.5	2	15.0
M6	6P	6.8	12.0	31.5	11.0	9.5	5.5	3	23.6
M8	8P	8.8	12.0	31.0	12.0	10.5	4.0	3	21.7
M10	10P	10.8	16.0	34.5	14.0	12.0	5.5	4	22.3
M12	12P	12.8	16.0	36.0	17.0	15.0	4.0	4	27.0



Lower electrode Welding electrode for projection nut



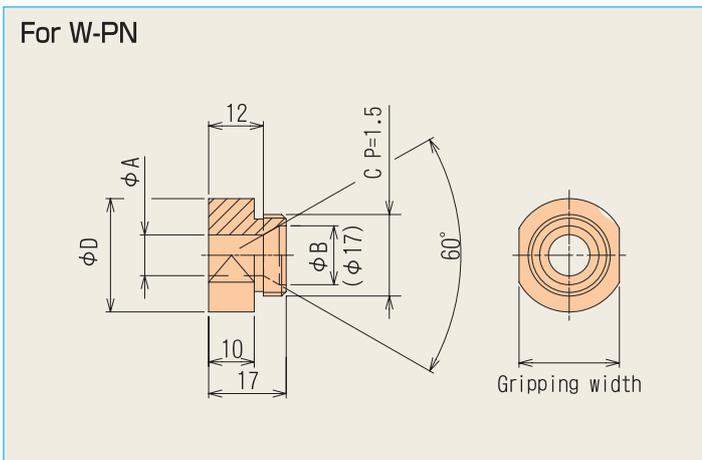
Order code

W-PN-C Code

Unit : mm

Nut	Code	Size				Gripping width
		A	B	C	D	
M4	4	5.1	13	M18	25	22
M5	5	6.1	13	M18	25	22
M6	6	7.1	13	M18	25	22
M8	8	9.1	13	M18	25	22
M10	10	11.1	17	M22	30	27
M12	12	13.1	17	M22	30	27

For W-PN



Order code

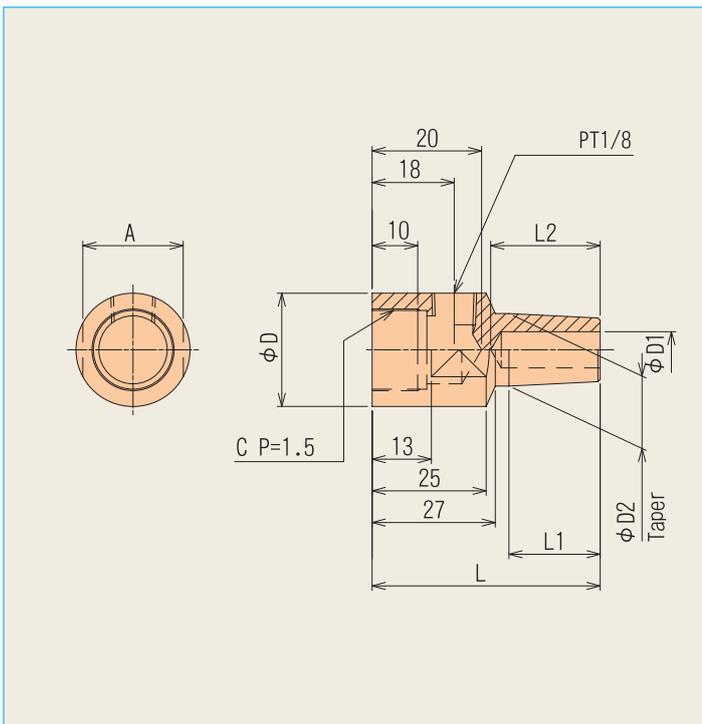
TMS-C Code

Unit : mm

Nut	Code	Size				Gripping width
		A	B	C	D	
M4	4	5	—	M18	25	22
M5	5	6	—	M18	25	22
M6	6	7	—	M18	25	22
M8	8	9	13	M18	25	22
M10	10	11	—	M22	30	27
M12	12	13	17	M22	30	27

Lower electrode holder Welding electrode for projection nut

● mark and blue letter means ordered product.



Order code

W-PN-B Code - Taper

Unit : mm

Code	Size						L	L ₁	L ₂
	A	C	D	D ₁	D ₂	Taper			
1	22	M18	25	8	12.065	MT1 ●	45	16	18
2	27	M22	30	8	15.875	MT2, 16¹/₁₀, 16¹/₅ ●	50	20	24
3	22	M18	25	8	15.875	MT2, 16¹/₁₀, 16¹/₅ ●	50	20	24

Ceramic guide pin (Si_3N_4)

Ceramic guide pin

Material : Silicon nitride

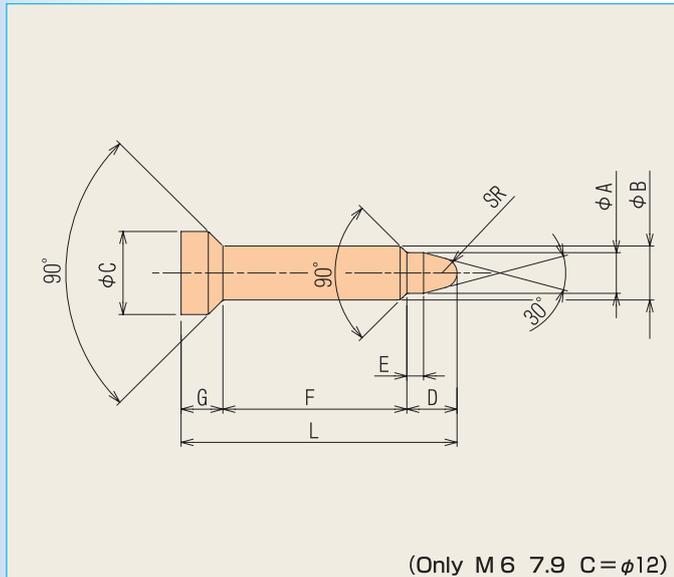
● mark and blue letter means ordered product.



▶ Guide pin for weld nut welding.



- ▶ ① This is excellent durability in attrition, so it is not necessary to do maintenance in attrition.
- ▶ ② The material is insulator so operation of work putting on/off is very smooth.
- ▶ ③ This ceramic is one of Fine ceramic and having high durability in attrition, heat and impact. Further this is given HIP (Hot Isostatic Pressing) treatment that increase durability in impact.

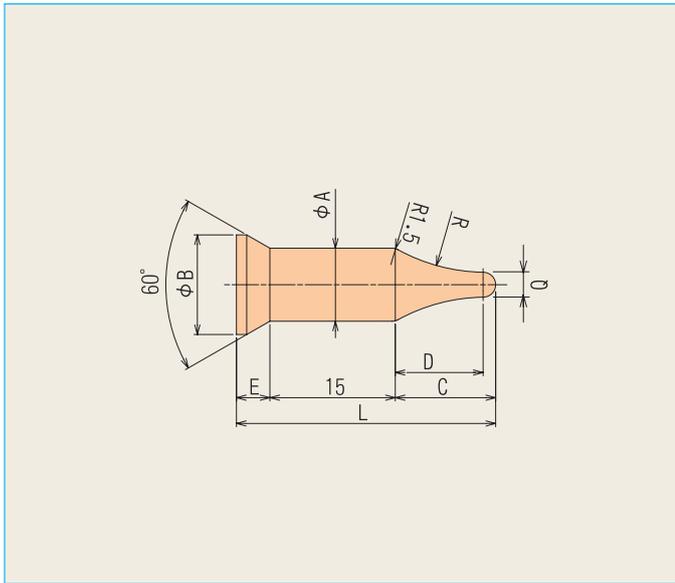


Order code

SAIMINASU-Code - B

Unit : mm

Nut	Code	Size							
		A	B	C	D	E	F	G	L
M 4	M 4	3.2	4.8, 5.0, 5.9 ●	11	5	2.0	21	5	31
M 5	M 5	4.2	5.8, 6.0, 6.9 ●	11	6	2.0	21	5	32
M 6	M 6	4.9	6.8, 7.0	10	6	2.0	22	5	33
M 8	M 8	6.7	8.8, 9.0, 9.9 ●	12	7	2.5	22	5	34
M10	M10	8.5	10.8, 11.0, 11.9 ●	14	10	3.0	23	5	38
	UNIFY	9.8	11.8, 12.0, 12.8, 13.0	16	10	3.0	23	5	38
M12	M12	10.5	12.8, 13.0, 13.9 ●	16	10	3.0	23	5	38
	6/8 Two-way		8.8, 9.0	12	6	2.0	22	5	37

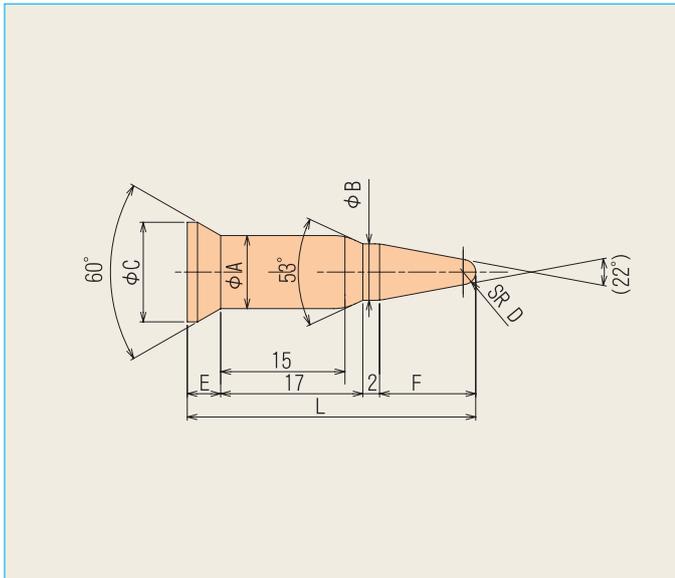


Order code

S-WPN-Code

Unit : mm

Nut	Code	Size							
		A	B	C	D	E	Q	R	L
M 4	4P	4.8	12	6.5	5.5	7.5	2	11.0	29.0
M 5	5P	5.8	12	8.5	7.5	6.5	2	15.5	30.0
M 6	6P	6.8	12	11.0	9.5	5.5	3	22.5	31.5
M 8	8P	8.8	12	12.0	10.5	4.0	3	45.0	31.0
M10	10P	10.8	16	14.0	12.0	5.5	4	23.0	34.5
M12	12P	12.8	16	17.0	15.0	4.0	4	27.6	36.0



Order code

S-WPN-Code

Unit : mm

Nut	Code	Size						
		A	B	C	D	E	F	L
M6/M8	6/8 P	8.8	6.8	12	1.4	4	11.5	34.5
M8/M10	8/10 P	10.8	8.8	16	1.5	6	12.0	37.0