

Locating Pins - Large Head, Tapered

Threaded, Hex Socket

Locating Pins - Large Head, Tapered

Screw Mounted, Standard / Compact

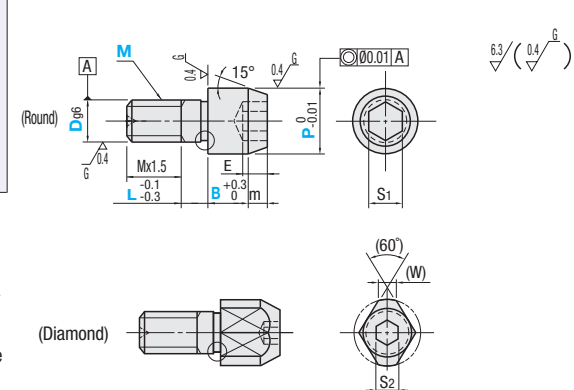


■Features: Hex Socket is attached to the tip of Large Head, Tapered, Threaded. It is easy to mount as you can stop the head rotation.



RoHS 10

Material No.	Material	Surface Treatment	Hardness	Type	Shape Code
①	EN 1.2510 Equiv.	-	Treated Hardness: 60 ~ 63HRC	FPNS	A (Round) D (Diamond)
②	EN 1.2510 Equiv.	Hard Chrome Plating Plating Thickness: 3µm or more	Treated Hardness: 50 ~ 55HRC Plating Hardness: 750HV ~	GFPNS	
③	EN 1.2510 Equiv.	-	-	BFPNS	
④	EN 1.4301 Equiv.	-	-	SFPNS	
⑤	EN 1.4301 Equiv.	Hard Chrome Plating Plating Thickness: 3µm or more	Plating Hardness: 750HV ~	HFPNS	
⑥	EN 1.4125 Equiv.	-	Treated Hardness: 50 ~ 55HRC	CFPNS	



Relief dimension is a reference value.

Tap and Threaded Recommended Tightening Torque (Reference)

M (Coarse)	Tightening Torque N·cm
M3	147
M4	333
M5	676
M6	1156
M8	2803
M10	5557
M12	9702
M16	24108
M20	46942

Tightening torque (reference) will be within Strength Class of Tightening Torque on Technical Data P2297 (10.9). Not applicable when using locking materials or lock washers.

EN 1.4125 Equiv. has an identification groove at any position on D part.

When M<D, the incomplete threaded portion (Pitchx2) is included in Mx1.5.

Part Number		D dim. Tolerance g6		P	L	B	M	m	(W)	S1	S2	E
Type	Shape	D		0.01mm Increment	1mm Increment	0.1mm Increment	(Coarse)					
FPNS GFPNS BFPNS SFPNS HFPNS CFPNS	A (Round) D (Diamond) Applicable when D≥6	3	-0.002 -0.008	6.00~6.50	2~6	3.5~10.0	3	2	-	-	-	-
		4	-0.004 -0.012	6.50~7.00	2~8	2.5~10.0	3 4	-	-	3	-	2
		5	-0.004 -0.012	6.50~8.00	3~10	2.5~10.0	3 4 5	3	-	3	-	-
		6	-0.005 -0.014	6.50(8.00)~10.00	3~10	2.5~12.0	4 5 6	3	-	3	-	-
		8	-0.005 -0.014	9.00(10.00)~13.00	5~10	3.0~15.0	4 5 6 8	4	3.5	4	4	2.5
		10	-0.006 -0.017	11.00(12.00)~15.00	5~15	4.5~20.0	5 6 8 10	4	4	5	5	3
		12	-0.006 -0.017	13.00~18.00	8~15	6.0~20.0	6 8 10 12	5	5	6	6	4
		16	-0.007 -0.020	17.00~25.00	8~20	8.0~20.0	8 10 12 16	7	7	8	8	5
		20	-0.007 -0.020	22.00~30.00	10~20	8.0~20.0	10 12 16 20	9	9	8	8	5

P dimension in () is applicable to Diamond Shape. When M dimension is not specified, D=M.



Ordering Example

Part Number

Type Shape D - P - L - B - M

FPNS A 10 - P12.00 - L5 - B5.0

GFPNS D 16 - P19.50 - L14 - B10.0 - M12



Alterations

Part Number

FPNSA8 - P10.00 - L10 - B10.0 - M6 - NNC



Alterations



Code

NNC



Spec.

Adds a relief at the thread end.

Undercut length is approx. Pitchx2.

Not applicable to D=M.

D	Unit Price Round Shape						Unit Price Diamond Shape					
	①EN 1.2510 Equiv. Hardened	②Hard EN 1.2510 Equiv.	③EN 1.2510 Equiv.	④EN 1.4301 Equiv.	⑤Hard EN 1.4301 Equiv.	⑥EN 1.4125 Equiv.	①EN 1.2510 Equiv. Hardened	②Hard EN 1.2510 Equiv.	③EN 1.2510 Equiv.	④EN 1.4301 Equiv.	⑤Hard EN 1.4301 Equiv.	⑥EN 1.4125 Equiv.
3	FPNSA	GFPNSA	BFPNSA	SFPNSA	HFPNSA	CFPNSA	FPNSD	GFPNSD	BFPNSD	SFPNSD	HFPNSD	CFPNSD
4												
5												
6												
8												
10												
12												
16												
20												

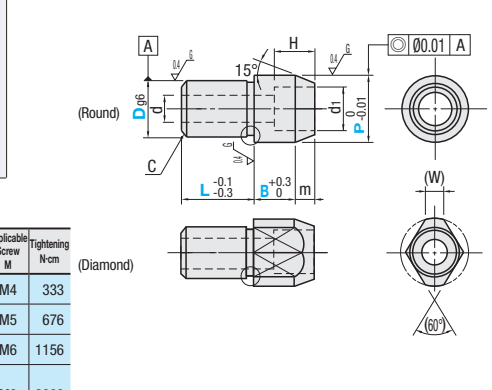
■Features: Large Head, Tapered. The hollow area is a screw hole. Improved maintainability compared to the press fit type.



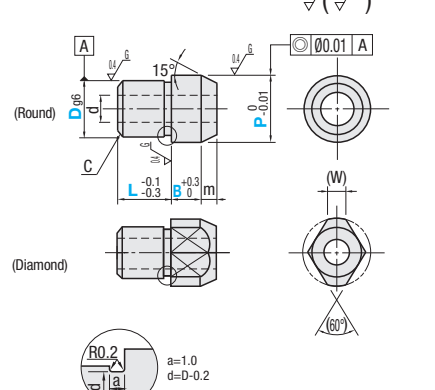
RoHS 10

Material No.	Material	Surface Treatment	Hardness	Standard P Configurable	P, L, B Configurable	Compact P, L, B Configurable	Shape Code
①	EN 1.2510 Equiv.	-	Treated Hardness: 60 ~ 63HRC	JPT	FPT	FPTC	MA (Round) MD (Diamond)
②	EN 1.2510 Equiv.	Hard Chrome Plating Plating Thickness: 3µm or more	Treated Hardness: 50 ~ 55HRC Plating Hardness: 750HV ~	-	GFPT	-	
③	EN 1.2510 Equiv.	-	-	-	BFPT	-	
④	EN 1.4301 Equiv.	-	-	-	SFPT	-	
⑤	EN 1.4301 Equiv.	Hard Chrome Plating Plating Thickness: 3µm or more	Plating Hardness: 750HV ~	-	HFPT	-	
⑥	EN 1.4125 Equiv.	-	Treated Hardness: 50 ~ 55HRC	CJPT	CFPT	-	

Standard



Compact



Relief dimension is a reference value.

Applicable Screws

D	g6	d	d1	H	Applicable Screw M	Tightening N·cm
10	-0.005 -0.014	4.5	8	5	M4	333
12	-0.006 -0.017	5.5	9.5	6.5	M5	676
13	-0.006 -0.017	6.6	11	7.5	M6	1156
16	-0.007 -0.020	9	14	10	M8	2803
20	-0.007 -0.020	9	14	10	M8	2803

EN 1.4125 Equiv. has an identification groove at any position on D part.

Relief dimension is a reference value.

■Standard, P Configurable

Part Number		D		P	L	B	C	m	(W)
Type	Shape	D		0.01mm Increment	1mm Increment	0.1mm Increment			
JPT SJPT CJPT	MA (Round) MD (Diamond)	10	14.00~17.00	15	10	2	4	4	4
		12	15.00~18.00	15	10	2	4	5	5
		13	17.00~20.00	22	10	3	5	5.5	5.5
		16	20.00~27.00	30	15	3	5	7	7
		20	23.00~30.00	30	15	3	5	9	9

■Standard, P, L, B Configurable

Part Number		D		P	L	B	C	m	(W)
Type	Shape	D		0.01mm Increment	1mm Increment	0.1mm Increment			
FPT GFPT BFPT SFPT HFPT CFPT	MA (Round) MD (Diamond)	10	14.00~17.00	5~20	4.0~20.0	2	4	4	4
		12	15.00~18.00	6~24	7.0~20.0	2	4	5	5
		13	17.00~20.00	6~26	8.0~20.0	3	5	5.5	5.5
		16	20.00~27.00	7~32	8.0~20.0	3	5	7	7
		20	23.00~30.00	8~40	8.0~20.0	3	5	9	9

When L<D, C dimension (chamfered) is 0.5.

■Compact

Part Number		D		P	L	B	C	m	(W)
Type	Shape	D		0.01mm Increment	1mm Increment	0.1mm Increment			
FPTC SFPTC	MA (Round) MD (Diamond)	10	11.00~15.00	5~14	3.0~16.0	0.5	2	4	4
		12	13.00~17.00	6~15	3.0~18.0	0.5	2	5	5
		13	14.00~18.00	6~16	3.0~20.0	0.5	2	5.5	5.5
		16	17.00~21.00	7~18	3.0~20.0	0.5	3	7	7
		20	21.00~25.00	8~20	3.0~20.0	0.5	3	9	9



Ordering Example

Part Number

Type Shape D - P - L - B

JPT MA 10 - 14.00

FPT MA 10 - P14.00 - L15 - B6.0

FPTC MA 12 - P13.00 - L6 - B3.0

■Standard, P Configurable

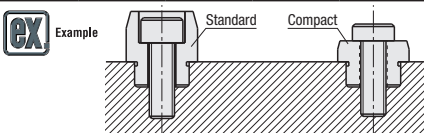
D	Unit Price Round Shape			Unit Price Diamond Shape		
	①EN 1.2510 Equiv. Hardened	④EN 1.4301 Equiv. Hardened	⑥EN 1.4125 Equiv. Hardened	①EN 1.2510 Equiv. Hardened	④EN 1.4301 Equiv. Hardened	⑥EN 1.4125 Equiv. Hardened
10	JPTMA	SJPTMA	CJPTMA	JPTMD	SJPTMD	CJPTMD
12						
13						
16						
20						

■Standard, P, L, B Configurable

D	Unit Price Round Shape						Unit Price Diamond Shape					
	①EN 1.2510 Equiv. Hardened	②Hard EN 1.2510 Equiv.	③EN 1.2510 Equiv.	④EN 1.4301 Equiv.	⑤Hard EN 1.4301 Equiv.	⑥EN 1.4125 Equiv.	①EN 1.2510 Equiv. Hardened	②Hard EN 1.2510 Equiv.	③EN 1.2510 Equiv.	④EN 1.4301 Equiv.	⑤Hard EN 1.4301 Equiv.	⑥EN 1.4125 Equiv.
10	FPTMA	GFPTMA	BFPTMA	SFPTMA	HFPTMA	CFPTMA	FPTMD	GFPTMD	BFPTMD	SFPTMD	HFPTMD	CFPTMD
12												
13												
16												
20												

■Compact

D	Unit Price Round Shape		Unit Price Diamond Shape	
	①EN 1.2510 Equiv. Hardened	④EN 1.4301 Equiv. Hardened	①EN 1.2510 Equiv. Hardened	④EN 1.4301 Equiv. Hardened
10	FPTCMA	SFPTCMA	FPTCMD	SFPTCMD
12				
13				
16				
20				



Although the screw heads protrude from Compact Type pin, head diameter P and height B are configurable to even smaller dimensions.