

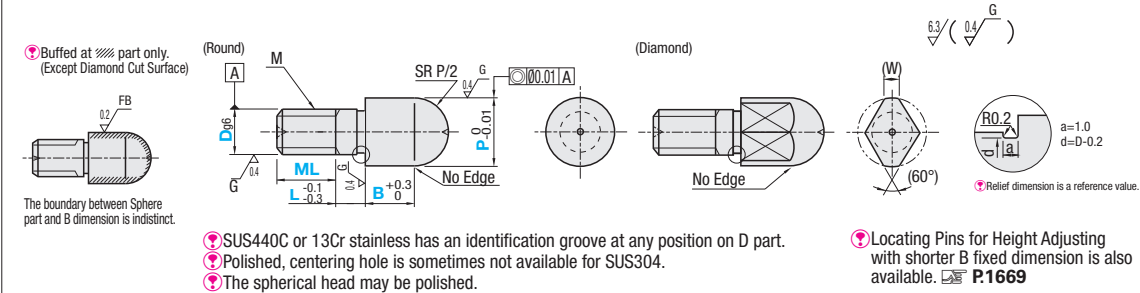
Locating Pins - Sphere Large Head Threaded

For products uncovered by e-Catalog Standard, see P.131.

Features: Sphere Large Head, Threaded + Lock Nut Type. Improved maintainability compared to Press Fit Type.

Material No.	Material	Surface Treatment	Hardness	Type			Shape Code	
				P Selectable	P, L, B Configurable	P, L, B, ML Configurable	P Selectable	Other than P Selectable Type
(1)	SKS3 Equivalent	-	Treated Hardness: 60~63HRC	JPQN	FPQN	FPQNL	BB (Round) A (Round) D (Diamond)	
(2)	SKS3 Equivalent	Hard Chrome Plating	Treated Hardness: 50~55HRC / Plating Hardness: 750HV ~	-	GFPQN	GFPQNL		
(3)	SUS304*	-	-	SJPQN	SFPQN	SFPQNL		
(4)	SUS304	Hard Chrome Plating	Plating Hardness: 750HV ~	-	HFPQN (Round only)	-		
(5)	SUS40C or 13Cr stainless	-	Treated Hardness: 50~55HRC	CJPQN	CFPQN	CFPQNL		
(6)	SKS3 Equivalent	Buffing	Treated Hardness: 60~63HRC	-	MFPQN	-		
(7)	SKS3 Equivalent	Hard Chrome Plating + Buffing	Treated Hardness: 50~55HRC / Plating Hardness: 750HV ~	-	MGFPQN	MGFPQNL		
(8)	SUS40C or 13Cr stainless	Buffing	Treated Hardness: 50~55HRC	-	MCFPQN	MCFPQNL		

* For P Selectable Type, it is SUS304 equivalent.



P Selectable

Type	Part Number		D	D dim. Tolerance g6	P Selection	L	B	M (Coarse)	* Tightening Torque N·cm	ML
	JPQN SJPQN CJPQN	BB (Round)								
JPQN SJPQN CJPQN	BB (Round)	3	-0.002 -0.008	4 5 6	2	5	M 3	98	4.5	
		4	-0.004 -0.012	5 6 7						
		5	-0.004 -0.012	6 7 8	3	6	M 4	225	6	
		6	-0.005 -0.014	7 8 9 10						
		8	-0.005 -0.014	9 10 11 12 13	5	8	M 5	461	7.5	
		10	-0.006 -0.017	11 12 13 15						
12	-0.006 -0.017	15 16	8	10	M 6	784	9			
12	-0.006 -0.017	15 16								

P, L, B Configurable

Type	Part Number		D	D dim. Tolerance g6	P	L	B	M (Coarse)	* Tightening Torque N·cm	ML	(W)
	FPQN GFPQN SFPQN HFPQN CFPQN	A (Round) D (Diamond)									
FPQN GFPQN SFPQN HFPQN CFPQN (Buff Finished) MGFPQN MCFPQN Applicable when D≥5.	A (Round) D (Diamond)	3	-0.002 -0.008	3.50~8.00	2~6	2.0~10.0	M 3	98	4.5	1.5	
		4	-0.004 -0.012	4.50~8.00	2~8	2.0~10.0	M 4	225	6	1.8	
		5	-0.004 -0.012	5.50~8.00	3~10	2.0~15.0(10.0)	M 5	461	7.5	2.2	
		6	-0.005 -0.014	6.50~10.00	3~10	2.0~15.0	M 6	784	9	3	
		8	-0.005 -0.014	8.50~15.00	5~10	2.0~30.0(15.0)	M 8	1911	12	3.5	
		10	-0.006 -0.017	11.00~17.00	5~15	3.0~30.0(25.0)	M10	3783	15	4	
		12	-0.006 -0.017	13.00~20.00(18.00)	5(8)~15	3.0~30.0(25.0)	M12	6605	18	5	
		16	-0.007 -0.020	17.00~27.00	5(8)~20	5.0~30.0	M16	16366	24	7	
20	-0.007 -0.020	22.00~30.00	5(10)~20	5.0~30.0	M20	32928	30	9			

P, L, B dimensions in () are applicable to Diamond Shape.

P, L, B, ML Configurable

Type	Part Number		D	D dim. Tolerance g6	P	L	B	ML	M (Coarse)	* Tightening Torque N·cm	(W)
	FPQNL GFPQNL SFPQNL CFPQNL	A (Round) D (Diamond)									
FPQNL GFPQNL SFPQNL CFPQNL (Buff Finished) MGFPQNL MCFPQNL Applicable when D≥5.	A (Round) D (Diamond)	3	-0.002 -0.008	3.50~6.00	2~6	2.0~10.0	3~9	M 3	98	1.5	
		4	-0.004 -0.012	4.50~7.00	2~8	2.0~10.0	4~12	M 4	225	1.8	
		5	-0.004 -0.012	5.50~8.00	3~10	2.0~10.0	5~15	M 5	461	2.2	
		6	-0.005 -0.014	6.50~10.00	3~10	2.0~12.0	6~18	M 6	784	3	
		8	-0.005 -0.014	9.00~13.00	5~10	2.0~15.0	8~24	M 8	1911	3.5	
		10	-0.006 -0.017	11.00~15.00	5~15	3.0~20.0	10~30	M10	3783	4	
		12	-0.006 -0.017	13.00~18.00	8~15	3.0~20.0	12~30	M12	6605	5	
		16	-0.007 -0.020	17.00~25.00	8~20	5.0~20.0	16~40	M16	16366	7	
20	-0.007 -0.020	22.00~30.00	10~20	5.0~20.0	20~40	M20	32928	9			

* The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on P.2365.) Not applicable when using locking materials or lock washers.

Ordering Example

Part Number	-	P	-	L	-	B	-	ML
JPQNBB3	-	5						
FPQNA16	-	P18.00	-	L12	-	B7.5		
SFPQNL10	-	P11.97	-	L5	-	B5.0	-	ML12

P Selectable

D	Unit Price	Round Shape
(1) Treated SKS3	(3) SUS304	(5) SUS40C or 13Cr stainless
JPQNBB	SJPQNBB	CJPQNBB
3		
4		
5		
6		
8		
10		
12		

(3) Price List for Large Qty. Order of SUS304 (301-500 pcs.)

D	Round Shape		Diamond Shape	
	SFPQNA	SFPQND	SFPQNA	SFPQND
3				
4				
5				
6				
8				
10				
12				
16				
20				

P, L, B Configurable

D	Unit Price Round Shape							Unit Price Diamond Shape								
	(1) Treated SKS3	(2) Hard SKS3	(3) SUS304	(4) Hard SUS304	(5) SUS40C or 13Cr stainless	(6) Treated SKS3 + Buffed	(7) Hard SKS3 + Buffed	(8) SUS40C or 13Cr stainless + Buffed	(1) Treated SKS3	(2) Hard SKS3	(3) SUS304	(4) Hard SUS304	(5) SUS40C or 13Cr stainless	(6) Treated SKS3 + Buffed	(7) Hard SKS3 + Buffed	(8) SUS40C or 13Cr stainless + Buffed
3	FPQNA	GFPQNA	SFPQNA	HFPQNA	CFPQNA	MFPQNA	MGFPQNA	MCFPQNA	FPQND	GFPQND	SFPQND	HFPQND	CFPQND	MFPQND	MGFPQND	MCFPQND
4																
5																
6																
8																
10																
12																
16																
20																

P, L, B, ML Configurable

D	Unit Price Round Shape							Unit Price Diamond Shape								
	(1) Treated SKS3	(2) Hard SKS3	(3) SUS304	(4) Hard SUS304	(5) SUS40C or 13Cr stainless	(6) Treated SKS3 + Buffed	(7) Hard SKS3 + Buffed	(8) SUS40C or 13Cr stainless + Buffed	(1) Treated SKS3	(2) Hard SKS3	(3) SUS304	(4) Hard SUS304	(5) SUS40C or 13Cr stainless	(6) Treated SKS3 + Buffed	(7) Hard SKS3 + Buffed	(8) SUS40C or 13Cr stainless + Buffed
3	FPQNL	GFPQNL	SFPQNL	HFPQNL	CFPQNL	MFPQNL	MGFPQNL	MCFQNL	FPQND	GFPQND	SFPQND	HFPQND	CFPQND	MFPQND	MGFPQND	MCFQND
4																
5																
6																
8																
10																
12																
16																
20																

Price of P, L, B, ML Configurable Type

Price is determined by ML length.

ML	Unit Price (Round off 1s, JPY digit)
Mx1 ≤ ML < Mx1.5	
Mx1.5 ≤ ML < Mx2	
Mx2 ≤ ML < Mx2.5	
Mx2.5 ≤ ML < Mx3	

Alterations

Part Number	-	P	-	L	-	B	-	ML	-	(RC, LAC, SC)
SFPQNL6	-	P10.00	-	L10	-	B5	-	ML10	-	RC

Alterations are not available for P Selectable Type. Combination with RC, LAC or SC is not available.

Alteration	Sphere Tip	Wrench Hole Machining	Wrench Flats
	Code	RC	LAC
Spec.	Changes the relief to R0.5. Ordering Code: RC Applicable when P-D≥2	Machines wrench holes. Ordering Code: LAC Applicable when D≥6 Diamond Shape Hole is drilled on the diamond head vertically but with arbitrary orientation of their diamond surfaces against those of the diamond head. Applicable when Q+1.5≤B.	SC = 1mm Increment P-3 ≤ SC ≤ P-1, SC ≥ D When B ≤ 11, adds wrench flats on the tip.