

Locating Pins

Screw Mounted / Pilot / Large Screw Mounted

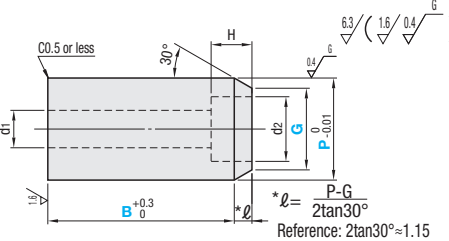
■Features: The pin body is secured by the bolts. You can use it for areas where you cannot use tapped screws since the bolt can be tightened from the top of the insertion guide.

■Screw Mounted



Material	Surface Treatment	Hardness	Type
S45C Equivalent	-	Treated Hardness: 45 ~ 50HRC	LPZ
S45C Equivalent	Black Oxide	Treated Hardness: 45 ~ 50HRC	LPZB
S45C Equivalent	Hard Chrome Plating	Treated Hardness: 45 ~ 50HRC	LPZR
SUS304	-	-	LPZS
SUS304	Hard Chrome Plating	-	LPZH
SUS40C Equivalent	-	Treated Hardness: 50 ~ 55HRC	LPZC

⚡ Hard Chrome Plating: Plating Thickness 3µm / Plating Hardness 750HV ~



Part Number		P		B		G		d1	d2	H	Applicable Screw	*Tightening Torque N·cm	Unit Price					
Type	No.	0.01mm Increment	0.1mm Increment	1mm Increment									LPZ	LPZB	LPZR	LPZS	LPZH	LPZC
LPZ LPZB LPZR	3	11.00~15.00	10.0~25.0	9≤G<P	3.5	6.5	4	M3	147									
	4	12.00~20.00	10.0~25.0	10≤G<P	4.5	8	5	M4	333									
	5	14.00~20.00	10.0~30.0	12≤G<P	5.5	9.5	6	M5	676									
	6	15.00~25.00	12.0~40.0	13≤G<P	6.5	11	7	M6	1156									
	8	18.00~25.00	14.0~50.0	16≤G<P	9	14	9	M8	2803									
	LPZS LPZH LPZC																	

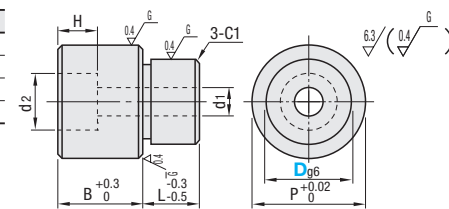
* Tightening torque (reference) will be within Strength Class of Tightening Torque on Technical Data 2297 (10.9). Not applicable when using locking materials or lock washers.

■Pilot



Material	Surface Treatment	Hardness	Type
SKS3 Equivalent	-	Treated Hardness: 60 ~ 63HRC	JJPM
SKS3 Equivalent	Hard Chrome Plating	Treated Hardness: 50 ~ 55HRC	GJJPM
SUS304	-	-	SJJPM
SUS40C Equivalent	-	Treated Hardness: 50 ~ 55HRC	CJJPM

⚡ Hard Chrome Plating: Plating Thickness 3µm / Plating Hardness 750HV ~



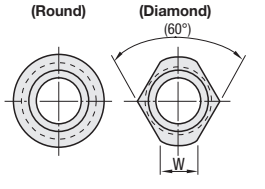
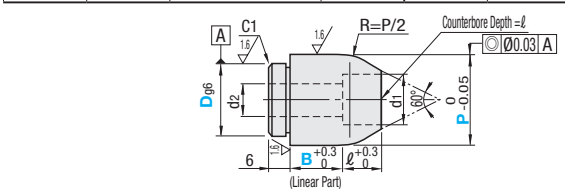
Part Number Type	Dg6	P			d1	d2	H	B	L	Applicable Screw	*Tightening Torque N·cm	Unit Price			
		0.004~0.012	0.01mm Increment	0.1mm Increment								JJPM	GJJPM	SJJPM	CJJPM
JJPM GJJPM SJJPM CJJPM	6	-0.004~0.012	10	3.5	6.5	4		10	5	M3	147				
	8	-0.005~0.014	12	4.5	8	5		10	5	M4	333				
	10	-0.014~0.017	15	5.5	9.5	6		10	5	M5	676				
	12	-0.006~0.017	16	6.5	11	7		10	5	M6	1156				
	15	-0.007~0.020	20	9	14	9		10	5	M8	2803				
	16	-0.007~0.020	20	11	17.5	11		10	5	M10	5557				
	20	-0.007~0.020	30	14	20	13		10	5	M12	9702				
	25	-0.020~0.025	30	14	20	13		10	5	M12	9702				

* Tightening torque (reference) will be within Strength Class of Tightening Torque on Technical Data 2297 (10.9). Not applicable when using locking materials or lock washers.

■Large Screw Mounted



Material	Surface Treatment	Hardness	Shape	Type
SCM435	-	Treated Hardness: 35 ~ 40HRC	Round	B Selectable
			Diamond	B Configurable

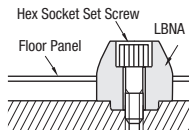
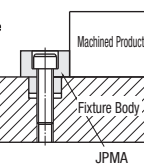


Part Number Type	Dg6	P			B	Selection	1mm Increment	ℓ	W	d1	d2	Applicable Screw	*Tightening Torque N·cm	Unit Price		
		0.1mm Increment	0.1mm Increment	1mm Increment										LBNA	LBND	LBNA
LBNA (Round) LBND (Diamond) LBNA (Round)	16	-0.023	22.0~24.9	25.0~29.9	5	5~20	7.5	7	11	6.6	1156					
	20	-0.027	30.0~37.9	38.0~39.9	10	5~20	11	10	14	9	2803					
	20	-0.027	40.0~49.9	50.0~59.9	15	5~20	16	12	20	16	9702					
	30	-0.027	60.0~80.0		20	5~20	25	20	35	28						

⚡ D dimension 16 is applicable to LBNA and LBND only.

* Tightening torque (reference) will be within Strength Class of Tightening Torque on Technical Data 2297 (10.9). Not applicable when using locking materials or lock washers.

Ordering Example	Part Number	- P -	- B -	- G -
	LPZ5	- P16.00 -	- B25.5 -	- G15 -
	JJPM15	- P30.0 -	- B10 -	
	LBNA20	- P30.0 -	- B10 -	



Locating Pins

Eccentric / Flanged Flat

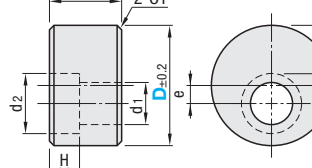
■Features: Locating Pins used when the hole location differs in the mounting area and the locating area. Use them by securing the flange with the bolts.

■Eccentric

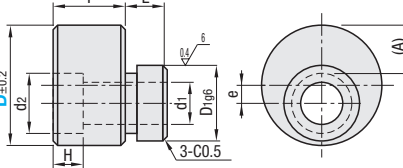


Material	Surface Treatment	Hardness	Type
SKS3 Equivalent	-	Treated Hardness: 60 ~ 63HRC	JJPEA
SKS3 Equivalent	Hard Chrome Plating	Treated Hardness: 50 ~ 55HRC / Plating Hardness: 750HV ~	GJJPEA
SUS304	-	-	SJJPEA
SUS40C Equivalent	-	Treated Hardness: 50 ~ 55HRC	CJJPEA

• Standard



• Pilot

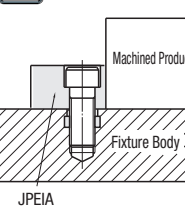


Part Number Type	D	d1	d2	T	H	Applicable Screw	*Tightening Torque N·cm	e	(A)	D1	D1g6	L	Unit Price					
													JJPEA	GJJPEA	SJJPEA	CJJPEA	JJPEA	GJJPEA
JJPEA GJJPEA SJJPEA CJJPEA	10	3.5	6.5	6	4	M3	147	1	2.75	-	-	-						
	12	4.5	8	8	5	M4	333	1.2	3.2	8	-0.006	8						
	16	5.5	9.5	10	6	M5	676	2	5.25	8	-0.017	8						
	20	6.5	11	12	7	M6	1156	2.5	7	11	-0.007	10						
JJPEA GJJPEA SJJPEA CJJPEA	25	9	14	16	9	M8	2803	3.5	9	14	-0.020	12						
	32	11	17.5	20	11	M10	5557	5	12.25	17	-0.009	15						
	40	14	20	24	13	M12	9702	7	17	20	-0.025	18						
	40	14	20	24	13	M12	9702	7	17	20	-0.025	18						

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Ordering Example	Part Number
	JJPEA32
	SJJPEA25

Alterations	Wrench Hole	Pilot Cut
Code	LAC	LC
Spec.	Machines wrench holes. Selection: 45°, 135° Ordering Code: LAC45	Cuts the pilot section. Ordering Code: LC8 (1mm increment)
	D Wrench Hole Dia. ℓ	D LC
	16, 20 3.5 3	12 6~7 25 8~11
	25, 32, 40 5 6	16 6~7 32 10~14
		20 6~9 40 12~17

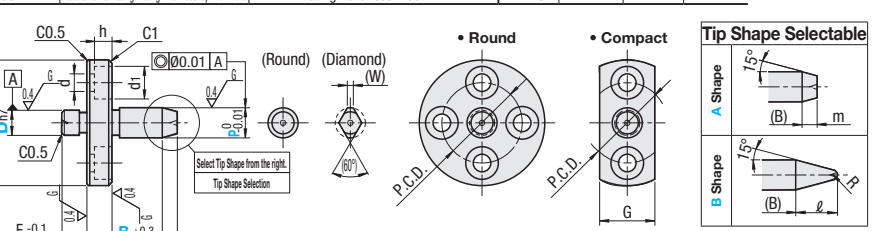


• Easy eccentric adjustment due to the presence of a pilot.

■Flanged Flat



Material	Surface Treatment	Hardness	Round Flange	Compact Flange
SKS3 Equivalent	-	Treated Hardness: 60 ~ 63HRC	Round	Round
SUS304	-	-	MASA	MATA
SUS304	Hard Chrome Plating	Plating Hardness: 750HV ~	MASD	MATD
			SMASA	SMATA
			HMASA	HMATA



⚡ SUS304 may not be polished and may have no centering hole.

Part Number		Tip Shape	Dh7	P	B	T	F	H	G	P, C, D	d	d1	h	m	R	(W)									
Type				0.01mm Increment	0.1mm Increment	0.1mm Increment																			
Round Flange MASA MASD SMASA HMASA	Compact Flange MATA MATD SMATA HMTA	A	5	0	3.00~5.00	3.0~10.0	5	25	11	16	3.5	6.5	3.5	3	1	1.5									
			6	-0.012	4.00~7.00	3.0~12.0										5.0~10.0	1.8								
			8	0	6.00~9.00	3.0~15.0										7.0~15.0	5	36	16	24	5.5	9.5	5.5	4	2.2
			10	-0.015	7.00~11.00	4.0~20.0																			2.3
	B	12	0	8.00~12.00	4.0~20.0	10	54	24	37	9	14	9	5	5	3.2										
		16	-0.018	13.00~16.00	5.0~20.0										4										
		20	-0.021	16.00~20.00	5.0~20.0										5										
		20	-0.021	16.00~20.00	5.0~20.0										5										

Part Number	- P -	- B -	- T -
MASAA8	- P6.50 -	- B7.5 -	- T8.2 -

■Round Flange

D	MASA	MASD	SMASA	HMASA
5				
6				
8				
10				
12				
16				
20				

■Compact Flange

D	MATA	MATD	SMATA	HMATA
5				
6				
8				
10				
12				
16				
20				

⚡ For Compact Flange Type, D dimension 5, 6 are not applicable.