

# Support Pins

## Stepped

■ Features: Locating Pins with the Broad Specifiable Range of Height. Height adjustment and Round/Diamond locating in the horizontal direction are possible.

Material	Surface Treatment	Hardness	Round			Diamond		
			Threaded	Tapped	Pilot	Threaded	Tapped	Pilot
① S45C (SDPCR) S45C Equivalent (SHPCB) (SHPAB) (SHPBB) (SDPAB)	Black Oxide	-	SHPCB	SHPAB	SHPBB	SDPCB	SDPAB	-
② S45C Equivalent	Hard Chrome Plating	Plating Hardness: 750HV ~	SHPCR	SHPAR	SHPBR	-	SDPAR	SDPBR
③ S45C (SHPCB)	Black Oxide	Treated Hardness: 45 ~ 50HRC	SHPCB	SHPAB	SHPBB	SDPCB	-	SDPBB
④ S45C (SDPBR)	Hard Chrome Plating	Treated Hardness: 45 ~ 50HRC Plating Hardness: 750HV ~	-	SHPAHR	SHPBHR	-	SDPASU	SDPBSU
⑤ SUS304	-	-	SHPCSU	SHPASU	SHPBSU	SDPCSU	SDPASU	SDPBSU
⑥ SUS440C or 13Cr stainless	-	Treated Hardness: 50 ~ 55HRC	SHPC	SHPAC	SHPBC	SDPC	SDPAC	SDPBC

① SUS304 may not be polished and may have no centering hole.

② SUS440C or 13Cr stainless has an identification groove at any position on D part.

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Ⓜ Tightening Torque (N·cm)

M3	98
M4	225
M5	461
M6	784
M8	1911
M10	3783
M12	6605

① The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on P.2297.) Not applicable when using locking materials or lock washers.

② Q=1.1 ③ When K=Pitch x 2, the incomplete threaded portion is included in M x 1.5. ④ SUS440C or 13Cr stainless has an identification groove at any position on D part.

⑤ Relief dimension is a reference value.

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# Support Pins

## Stepped, Configurable

■ Features: Each dimension of Stepped Support Pins is configurable.

Material	Surface Treatment	Hardness	Type					
			Press Fit	Threaded	Shouldered	Press Fit	Threaded	Shouldered
① SKS3 Equivalent	-	Treated Hardness: 60 ~ 63HRC	SHFJ	SHFU	SHFN	-	SHXU	SHXN
② SKS3 Equivalent	Hard Chrome Plating	Treated Hardness: 50 ~ 55HRC Plating Hardness: 750HV ~	GSHFJ	GSHFU	GSHFN	GSHXJ	-	-
③ SUS304	-	-	SSHFJ	SSHFU	SSHFN	-	SSHXJ	SSHXN
④ SUS440C or 13Cr stainless	-	Treated Hardness: 50 ~ 55HRC	CSHFJ	CSHFU	CSHFN	CSHXJ	CSHXU	CSHXN

① SUS304 may not be polished and may have no centering hole.

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Ⓜ Tightening Torque (N·cm)

M3	98
M4	225
M5	461
M6	784
M8	1911
M10	3783
M12	6605

① The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on P.2297.) Not applicable when using locking materials or lock washers.

② Q=1.1 ③ When K=Pitch x 2, the incomplete threaded portion is included in M x 1.5. ④ SUS440C or 13Cr stainless has an identification groove at any position on D part.

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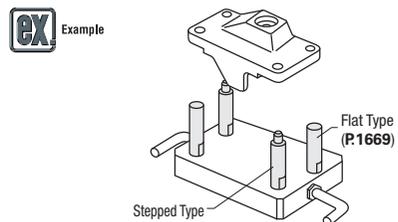
Part Number	Type	D	L	P	B	m	d	M	Tightening Torque	ε1	W1	(W)	ε2
SHFJ	Shouldered	3	3.5-6.0	3.0-5.0	2.0-5.0	3-6	10.00-50.00	M3	98	-	5	1.0	8
GSHFJ	Shouldered	4	4.5-7.0	3.0-5.0	2.00-6.00	4-8	10.00-50.00	M4	225	-	7	1.5	8
SSHFJ	Shouldered	5	5.5-8.0	3.0-7.0	2.00-7.00	5-10	10.00-50.00	M5	461	-	8	1.5	8
CSHFJ	Shouldered	6	6.5-10.0	5.0-7.0	4.00-9.00	6-12	10.00-50.00	M6	784	-	10	1.8	8
SHXJ	Shouldered	8	9.0-13.0	5.0-8.0	4.00-12.00	8-16	10.00-50.00	M8	1911	-	13	2.2	10
GSHXJ	Shouldered	10	11.0-15.0	6.0-11.0	5.00-14.00	10-20	10.00-50.00	M10	3783	-	17	2.5	10
SSHXJ	Shouldered	12	13.0-16.0	6.0-13.0	5.00-15.00	12-24	10.00-50.00	M12	6605	-	20	3	10

① Pilot Type is not available for D6, D8. ② Note the strength of undercut part for Internal Thread and Pilot. P.1566

③ The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on P.2297.) Not applicable when using locking materials or lock washers.

Ordering Example

Part Number	L	P	B
SHPAR10	L20.01	P4.05	B5
SDPCSU20	L50.00	P8.00	B3



### Round Shape

D	Unit Price Threaded						Unit Price Internal Thread						Unit Price Pilot					
	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
6	SHPCB	SHPCR	SHPCB	SHPCR	SHPCSU	SHPC	SHPAB	SHPAR	SHPAB	SHPAR	SHPASU	SHPAC	SHPBB	SHPBR	SHPBB	SHPBR	SHPBSU	SHPBC
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### Diamond Shape

D	Unit Price Threaded						Unit Price Internal Thread						Unit Price Pilot					
	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
6	SDPCB	SDPCR	SDPCB	SDPCR	SDPCSU	SDPC	SDPAB	SDPAR	SDPAB	SDPAR	SDPASU	SDPAC	SDPBB	SDPBR	SDPBB	SDPBR	SDPBSU	SDPBC
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### Press Fit

Part Number	Type	D	P		Q	K	L	B	Unit Price Straight			Unit Price Shouldered		
			0.1mm Increment	Shouldered					①	②	③	④	⑤	⑥
SHFJ	Shouldered	3	3.5-6.0	3.0-5.0	2.00-5.00	3-6	10.00-60.00	2.0-5.0						
GSHFJ	Shouldered	4	4.5-7.0	3.0-5.0	2.00-6.00	4-8	10.00-60.00	2.0-10.0						
SSHFJ	Shouldered	5	5.5-8.0	3.0-7.0	2.00-7.00	5-10	10.00-60.00	2.0-10.0						
CSHFJ	Shouldered	6	6.5-10.0	5.0-7.0	4.00-9.00	6-12	10.00-60.00	2.0-12.0						
SHXJ	Shouldered	8	9.0-13.0	5.0-8.0	4.00-12.00	8-16	10.00-60.00	2.0-15.0						
GSHXJ	Shouldered	10	11.0-15.0	6.0-11.0	5.00-14.00	10-20	10.00-60.00	2.0-20.0						
SSHXJ	Shouldered	12	13.0-16.0	6.0-13.0	5.00-15.00	12-24	10.00-60.00	2.0-20.0						

### Tapped

Part Number	Type	D	P		Q	K	L	B	Unit Price Straight			Unit Price Shouldered		
			0.1mm Increment	Shouldered					①	②	③	④	⑤	⑥
SHFU	Shouldered	6	6.5-10.0	5.0-7.0	4.00-9.00	6-12	10.00-80.00	2.0-12.0						
GSHFU	Shouldered	8	9.0-13.0	5.0-9.0	4.00-12.00	8-16	10.00-80.00	2.0-15.0						
SSHFU	Shouldered	10	11.0-15.0	6.0-11.0	5.00-14.00	10-20	10.00-80.00	2.0-20.0						
CSHFU	Shouldered	12	13.0-16.0	6.0-13.0	5.00-15.00	12-24	10.00-80.00	2.0-20.0						

### Threaded

① Note the strength of under-head part. P.1566

Part Number	Type	D	P		Q	K	L	B	Unit Price Straight			Unit Price Shouldered		
			0.1mm Increment	Shouldered					①	②	③	④	⑤	⑥
SHFN	Shouldered	3	3.5-6.0	3.0-5.0	2.00-5.00	0-6	10.00-60.00	2.0-5.0						
GSHFN	Shouldered	4	4.5-7.0	3.0-5.0	2.00-6.00	0-8	10.00-60.00	2.0-10.0						
SSHFN	Shouldered	5	5.5-8.0	3.0-7.0	2.00-7.00	0-10	10.00-60.00	2.0-10.0						
CSHFN	Shouldered	6	6.5-10.0	5.0-7.0	4.00-9.00	0-12	10.00-60.00	2.0-12.0						
SHXN	Shouldered	8	9.0-13.0	5.0-9.0	4.00-12.00	0-16	10.00-60.00	2.0-15.0						
GSHXN	Shouldered	10	11.0-15.0	6.0-11.0	5.00-									