

# Support Pins

## Configurable / with Pilot

**Support Pins - Configurable / wth Pilot**

RoHS 10

Relief dimension is a reference value.

D	H	M (Coarse)	M <sub>1</sub> (Coarse)	m
3	6	M3	-	1
4	6	M4	-	1
5	8	M5	-	1
6	8	M6	M3	2
8	11	M8	M4	2
10	13	M10	-	3
12	15	M12	M5	3

Type						Material	Surface Treatment	Hardness
Straight			Shouldered					
Standard	Tapped	Threaded	Standard	Tapped	Threaded			
SHFJ	SHFU	SHFN	-	SHXU	SHXN	01 Tool Steel or Equivalent	-	Treated Hardness: 60-63 HRC min.
GSHFJ	GSHFU	GSHFN	GSHXJ	-	-		Hard Chrome Plating	Hardness: 50-55 HRC min. Plating Hardness 750 HV min.
SSHFJ	SSHFU	SSHFN	-	-	SSHXN	304 Stainless Steel	-	-
CSHFJ	CSHFU	CSHFN	CSHXJ	CSHXU	CSHXN	440C or 420 Stainless Steel	-	Treated Hardness: 50-55 HRC min.

**Straight Type Standard**

**Tapped**

**Threaded**

**Shouldered Type Standard**

**Tapped**

**Threaded**

Q ≤ P-1 When K < Pitchx2, the incomplete threaded portion is included in Mx1.5. 440C or 420 Stainless Steel has an identification groove on D mounting section.

**Standard**

Part Number	Type	D	P Increment		Q	K	L	B	
			0.1 mm	0.01 mm					
Straight	Shouldered	3	3.5-6.0	3.0-5.0	2.00-5.00	3-6	10.00-60.00	2.0-5.0	
		4	4.5-7.0	3.0-5.0	2.00-6.00	4-8	10.00-60.00	2.0-10.0	
		5	5.5-8.0	3.0-7.0	2.00-7.00	5-10	10.00-60.00	2.0-10.0	
		6	6.5-10.0	5.0-7.0	4.00-9.00	6-12	10.00-80.00	2.0-12.0	
		8	9.0-13.0	5.0-8.0	4.00-12.00	8-16	10.00-80.00	2.0-15.0	
		10	11.0-15.0	6.0-11.0	5.00-14.00	10-20	10.00-100.00	2.0-20.0	
	SHFJ	GSHXJ	3	3.5-6.0	3.0-5.0	2.00-5.00	3-6	10.00-60.00	2.0-5.0
			4	4.5-7.0	3.0-5.0	2.00-6.00	4-8	10.00-60.00	2.0-10.0
			5	5.5-8.0	3.0-7.0	2.00-7.00	5-10	10.00-60.00	2.0-10.0
			6	6.5-10.0	5.0-7.0	4.00-9.00	6-12	10.00-80.00	2.0-12.0
			8	9.0-13.0	5.0-8.0	4.00-12.00	8-16	10.00-80.00	2.0-15.0
			10	11.0-15.0	6.0-11.0	5.00-14.00	10-20	10.00-100.00	2.0-20.0

**Tapped & Threaded Recommended Tightening Torque (Reference)**

M (Coarse)	Tightening Torque N-cm
M3	98
M4	225
M5	461
M6	784
M8	1911
M10	3783
M12	6605

\* The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on MISUMI 2019 catalog P.4015). Not applicable when using locking agents or spring washers.

**Tapped**

Part Number	Type	D	P Increment		Q	K	L	B
			0.1 mm	0.01 mm				
Straight	Shouldered	6	6.5-10.0	5.0-7.0	4.00-9.00	6-12	10.00-80.00	2.0-12.0
		8	9.0-13.0	5.0-9.0	4.00-12.00	8-16	10.00-80.00	2.0-15.0
		10	11.0-15.0	6.0-11.0	5.00-14.00	10-20	10.00-100.00	2.0-20.0
		12	13.0-16.0	6.0-13.0	5.00-15.00	12-24	10.00-100.00	2.0-20.0

Note the strength of under-head part. P.1542

**Threaded**

Part Number	Type	D	P Increment		Q	K	L	B	
			0.1 mm	0.01 mm					
Straight	Shouldered	3	3.5-6.0	3.0-5.0	2.00-5.00	0-6	10.00-60.00	2.0-5.0	
		4	4.5-7.0	3.0-5.0	2.00-6.00	0-8	10.00-60.00	2.0-10.0	
		5	5.5-8.0	3.0-7.0	2.00-7.00	0-10	10.00-60.00	2.0-10.0	
		6	6.5-10.0	5.0-7.0	4.00-9.00	0-12	10.00-80.00	2.0-12.0	
		8	9.0-13.0	5.0-9.0	4.00-12.00	0-16	10.00-80.00	2.0-15.0	
		10	11.0-15.0	6.0-11.0	5.00-14.00	0-20	10.00-100.00	2.0-20.0	
	SHFN	SHXN	3	3.5-6.0	3.0-5.0	2.00-5.00	0-6	10.00-60.00	2.0-5.0
			4	4.5-7.0	3.0-5.0	2.00-6.00	0-8	10.00-60.00	2.0-10.0
			5	5.5-8.0	3.0-7.0	2.00-7.00	0-10	10.00-60.00	2.0-10.0
			6	6.5-10.0	5.0-7.0	4.00-9.00	0-12	10.00-80.00	2.0-12.0
			8	9.0-13.0	5.0-9.0	4.00-12.00	0-16	10.00-80.00	2.0-15.0
			10	11.0-15.0	6.0-11.0	5.00-14.00	0-20	10.00-100.00	2.0-20.0

The dispersion of dimension L should be within 0.02 for same orders.

**Part Number Alterations** Part Number - P - Q - K - L - B - (SC, HC, DRC, NNC)  
 SHXU10 - P8.5 - Q5.00 - K10 - L80.00 - B3.2 - HC12

**Part Number Example** Part Number - P - Q - K - L - B  
 SHFJ5 - P6.0 - Q4.50 - K5 - L30.55 - B3.2

Alterations	Wrench Flats	Wrench Flats	Screwdriver Slot	Relief
<b>Code</b>	SC	HC	DRC	NNC
<b>Spec.</b>	SC = 1 mm Increment SC>D Ordering Code: SC8 For Tapped, SC≥M1+3 Applicable to Straight Type only.	HC = 1 mm Increment HC>P HC>D Ordering Code: HC10 Applicable to Shouldered Type only.	Width 0.8mm Depth 1 mm Ordering Code: DRC Applicable to Threaded Type only.	Adds a relief at the thread end. Ordering Code: NNC Applicable when K=0. Applicable to Threaded Type only.

# Support Pins

## Flat / Tip Set Screw

**Support Pins - Flat / Tip Set Screw**

RoHS 10

Type	Shape Code	Material Code	Material	Surface Treatment	Hardness
STP (Flat) SPF (Tip Set Screw)	A (Threaded) B (Tapped) D (Threaded with Pilot)	B	1045 Carbon Steel or Equivalent	Black Oxide	-
		R		Hard Chrome Plating	Plating Hardness: 750 HV min.
		HB		Black Oxide	Treated Hardness: 45-50 HRC min.
		HR	304 Stainless Steel	Hard Chrome Plating	Treated Hardness: 45-50 HRC min. Plating Hardness: 750 HV min.
		SU		-	-
		C		440C or 420 Stainless Steel	Treated Hardness: 50-55 HRC min.

**Flat**

**Threaded**

**Tip Set Screw**

**Threaded**

**Tapped**

**Tapped**

\*When D8, L dimension 15 or less is Mx1.2.

The range of L dimension should be within 0.02 for same orders.  
 304 Stainless Steel may not be polished.  
 \*When D8, L dimension 15 or less is M x 1.2.

**Flat**

Type	Part Number		Material Code	D	L	M (Coarse)	d	M <sub>1</sub> (Coarse)	F	W	L
	Shape Code	Material Code									
STP (Flat)	A (Threaded) B (Tapped) D (Threaded with Pilot)	B R HB HR SU C	1045 Carbon Steel or Equivalent	6	10.00-50.00	M3	3	M3	1.5	5	8
				8			5	M5	2	7	
				10	20.00-80.00	M5	6	M6	3	8	
				12			8	M8	4	10	
				15			10	M10	5	13	
				20			12	M12	5	17	

**Tip Set Screw**

Type	Shape Code	Material Code	D	L	P Selection	B	d	F	M <sub>1</sub>	W	L	A	M <sub>2</sub>	N		
															0.01 mm Increment	0.5 mm Increment
SPF (Tip Set Screw)	A (Threaded) B (Tapped)	B SU	1045 Carbon Steel or Equivalent	12	6	4.0-6.0	8	4	M8	10	10	10	M5	M3		
				15			10	5	M10	13	10	15	M8	M4		
				20	10 12	5.0-15.0	12	5	M12	17	10	20	M8	M4		
				25			16	5	M16	20	12	24	M10	M4		
				30			16 20	5.0-23.0	20	6	M20	24	18	28	M16	M4
				35			16 20	5.0-23.0	20	6	M20	24	18	28	M16	M4

L dimension in ( ) is applicable to Tapped Type only. Threaded type not available for Stainless Steel material. Tapped type not available for Carbon Steel material.

**Part Number Example** Part Number - L - P - B  
 STPAB10 - L20.03  
 SPFBUS12 - L20.01 - P6 - B5 Flat Type  
 SPFAB12 - L20.01 - P6 - B5 Tip Set Screw

**Application Example**

**Tapped & Threaded Recommended Tightening Torque (Reference)**

M (Coarse)	Tightening Torque N-cm
M3	98
M4	225
M5	461
M6	784
M8	1911
M10	3783
M12	6605
M16	16366
M20	32928

\* The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on MISUMI 2019 catalog P.4015). Not applicable when using locking agents or spring washers.