

# Shaft Collar Split 2-Hole / 2-Tapped (Coarse)

# Shaft Collar Wedge Type Mechanism and Clamping Force Data / Wedge Type Lineup and Advantages

■ **Features:** Post assembly collar installation makes maintenance easier compared to Set Screw Type (P.279) and Clamp Type (P.281).

■ **2-Hole / 2-Tapped (Coarse) Type**

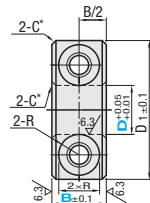
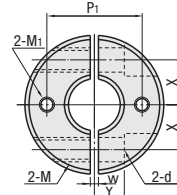
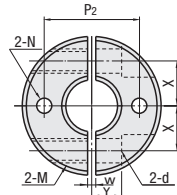


RoHS10

Type		Material	Surface Treatment	Accessory
2-Hole	2-Tapped			
SCSPK	SCSPT	S45C	Black Oxide Coating	Hex Socket Head Cap Screw 2 pcs.
PSCSPK	PSCSPT	S45C Equivalent	Electroless Nickel Plating	SCM435 Equivalent
SSCSPK	SSCSPT	SUS304 Equivalent	-	SUS304 Equivalent

2-Hole

2-Tapped (Coarse)



25/(6.3/)

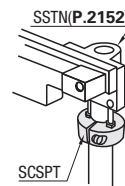
\*D6 ~D25: C0.5  
D30~D50: C1

Part Number	B Selection	D1	M (Coarse)	d	R	W	X	Y	N Through Hole	2-Hole Unit Price			2-Tapped Unit Price						
										P2	M1 (Coarse)	P1	SCSPK	PSCSPK	SSCSPK	SCSPT	PSCSPT	SSCSPT	
6	8	20	M3	3.4	3	1	6	4	3.5	13									
10	10	25	M4	4.5	3.75				4.5	16.5									
8	15	30	M6	6.6	6				5.5	19									
10	8	30	M3	3.4	3		9	5		20									
12	10	30	M4	4.5	3.75					22.5									
15	15	35	M6	6.6	6		6			22.5									
12	8	30	M3	3.4	3		10	5		21									
12	10	30	M4	4.5	3.75					23.5									
15	15	35	M6	6.6	6		11	6		21.5									
10	10	30	M4	4.5	3.75		10	5		23.5									
13	12	34	M5	5.5	4.5		11			24									
15	15	35	M6	6.6	6		11.5	6	5.5	24.5									
10	10	34	M4	4.5	3.75		12			25									
15	15	35	M5	5.5	4.5	1.5	12			27.5									
15	15	40	M6	6.6	6		13	8		25.5									
16	10	35	M5	5.5	4.5		12	6		28									
12	15	40	M6	6.6	6		13	8		28									
10	10	40	M5	5.5	4.5		14	7		29									
18	15	45	M6	6.6	6		15	8		31.5									
10	10	40	M5	5.5	4.5		14	7		30									
20	15	45	M6	6.6	6		15	8		32.5									
12	12	45	M5	5.5	4.5		17	7		35									
25	15	50	M6	6.6	6		18			37.5									
20	20	55	M6	6.6	6		20	10	6.6	40									
30	15	60	M8	9	7		23			42.5									
35	15	60	M6	6.6	6		23			45									
40	18	70	M8	9	7	2	26	13	9	47.5									
50	22	85	M10	11	9	3	32	16	11	67.5									

⚠ The halves must remain in the same orientation as shipped when in use.

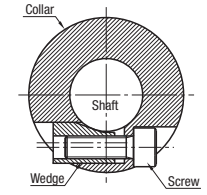
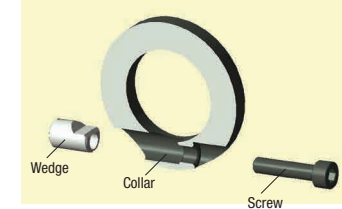
Ordering Example: Part Number - B  
SCSPK10 - 10

EX Example



## Wedge Mechanism Features

- The screws pull a wedge and the shaft is clamped; this structure requires less force for tightening.
- Good work efficiency; suitable for use in frequent positioning adjustments like width guide applications. The wedge for "Clamp Lever Type" (P.286) is made of brass and does not damage shafts.



## About Tightening Torque of Wedge Type Shaft Collars

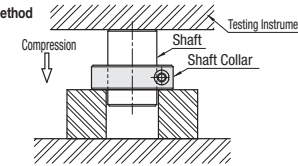
■ **Definition of Max. Thrust Load**  
The shaft collar is tightened to the torque value shown in the chart below, then compressive load is applied with the tester. The compressive load where the shaft begins to move is defined as the Max. Thrust Load.

Nominal	Tightening Torque (N · m)	
	S45C Equivalent / SUS304	A2017
M2.6	0.94	-
M3	1.61	1.61
M4	3.71	3.71
M5	7.54	7.54
M6	12.87	7.54
M8	31.2	12.87
M10	61.75	12.87
M16	267	-

## Testing Conditions

- Shaft: MISUMI Hardened Shaft (SFJ) P117
- Testing Instrument: Universal Tester
- Tightening Torque: Select Tightening Torque from the tables on the left depending on the conditions of use.
- Condition of Antirust Oil: Wiped with a cloth as arrived.

## Testing Method



## Wedge Type

Dimensions			Max. Thrust Load (kN)	Weight (g)
D (I.D.)	B (Width)	M		
10	10	4	1.6	29
12	10	4	2.2	35
15	10	4	1.8	37
16	12	5	3.0	57
20	12	5	3.5	69
25	12	5	3.5	88
30	12	5	3.2	94
35	15	6	-	154
40	15	8	-	243
50	15	8	-	299

## Wedge Type Lineup

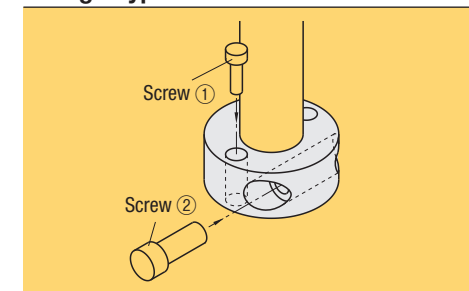
- 24 types are offered including 6 shapes, 2 kinds of levers and 3 materials in combination.

Wedge Type		Wedge Type with Clamp Lever	
2-Hole / 2-Tapped	3-Hole / 3-Tapped	Cut Surface Mounting Holes	Side Mounting Holes

## Advantages of 2-Hole / 2-Tapped / 3-Hole / 3-Tapped Type

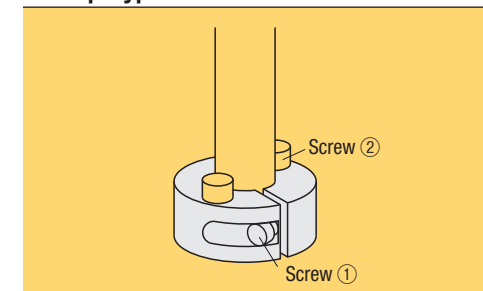
- Unlike the Clamp Type, less limitations in assembly steps.

### Wedge Type



Tightening can be facilitated from both screw ① and screw ② sides!

### Clamp Type

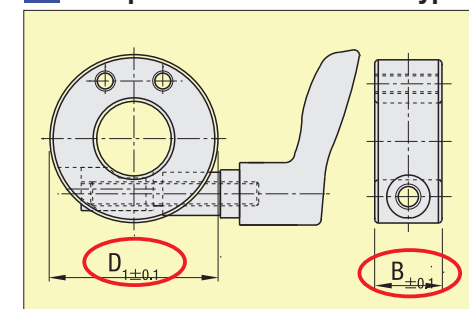


Tightening the Screw ① first, then finally tighten the Screw ②. Secure clamping of the shaft will become difficult if the screw ② is tightened first.

## Advantages of Compact Clamp Lever Type

- Smaller by up to 30% in O.D. and 22% in the width than the Clamp Type with Lever.

## Ex. Comparison with Side Slit Type



I.D.(D)	O.D.(D1 DIM.)		O.D. Comparison	Width (B Dim.)		Width Comparison
	Wedge	Standard, Clamp		Wedge	Standard, Clamp	
10	28	35	▲20%	14	18	
12	28	40	▲30%	14	18	
15	32	44	▲27%	14	18	
16	34	44	▲23%	14	18	▲22%
20	40	48	▲17%	14	18	
25	45	60	▲25%	14	18	
30	52	70	▲26%	14	18	