Shaft Collar - Overview

■ Product Variations

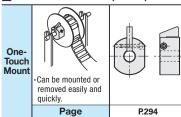
Features •MISUMI offers a wide variety products by combining any of the 5 applications and 4 fastening methods.

[Application]:General Purpose, Bearing Mounting, Mounting other parts (general purpose), Mounting other parts (sensor brackets), Damper [Fastening Method]:Set Screw, Clamp, Split, Lever

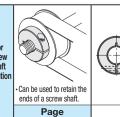
Product Variation List

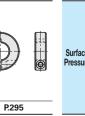
	Fastening Method	Set Screw (Set Screw x 2pcs.)	Clamp (Hex Socket Head Cap Screw x 1 pc.)	Split (Hex Socket Head Cap Screw x 2 pcs.)	Lever
Applicatio	ns	Reasonably priced. More compact in thickness than Clamp Type.	Stronger in clamping force than Set Screw Type. Shaft damage from tightening can be avoided.	 Post assembly installation and removal are possible, making for easy maintenance. Shaft damage from tightening can be avoided. 	Can be fastened without using any tool. Is suitable for portions where the collar position is changed frequently.
General Purpose					9 9
	Can be used as the stopper, locating component or pulley retainer. Page	P.267, P.268	P.269, P.270	P.271, P.272	P.286, P.287, P.288
For Bearing Mounting	Usable as the bearing inner ring retainer.			-	-
	Page	P.275, P.276	P.277, P.278	-	-
For mounting other parts (General Purpose)	Provides a variety of mounting holes and thus, allows mounting of plates, etc. (Hole Type: Through Hole, Tapped Hole, Counterbore Hole)				-
	Page	P.279	P.280, P.281, P.282, P.291, P.292	P.283, P.291, P.292	-
For mounting other parts (Sensor Brackets)	Can be used to mount sensor brackets. Has a mounting hole drilled in conformance with the hole pitch of sensor brackets.				
	Page	P.289	P.289, P.290, P.254	P.289, P.290	P.286, P.287, P.288
Damper	-Reduces noises generated by metal-to-metal contact.	-			-
	Page	-	P.273, P.293	P.273, P.293	-
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Product Variation List (Others)







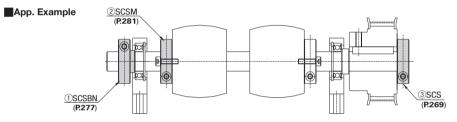




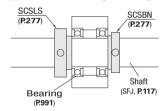
Variation List for I.D. / Material / Surface Treatment

- · A variety of I.D. configurations is available within the range of Ø3~100.
- · Combination use of MISUMI Shaft Collars with O.D. Tolerance g6/h5/f8 Shafts, O.D. Tolerance g6/h7 Rotary Shafts, Circular Posts and Device Stands are recommended.

Applications	Fastening	Listed													I.D.												
Applications	Method	page	3	4	5	6	8	10	12	13	14	15	16	17	18	20	22	24	25	27	30	35	40	50	60	80	100
	Set Screw	P.267~	•	•	•		•	•					•			•			•		•		•	•			
0I D	Clamp	P.269~				•	•	•	•	•		•	•		•	•			•		•	•	•	•	•	•	•
General Purpos	Split	P.271~					•	•					•		•	•			•		•		•	•	•		
	Lever	P.286~				•	•	•	•				•			•			•		•						
Fan Dansier Masse	Set Screw	P.275~	П	•	•	•	•	•	•			•				•			•		•	•	•				
For Bearing Mour	Clamp	P.277~				•	•	•	•					•		•			•		•	•	•	•			
	Set Screw	P.279~		•	•	•	•	•	•	•		•	•		•	•			•		•	•	•	•			
For mounting other (General Purpos		P.280~				•	•	•	•	•		•	•		•	•			•		•	•	•	•			
(General Furpos	Split	P.283~						•	•	•		•	•		•	•			•		•	•	•	•			
	Set Screw	P.289~				•	•	•	•			•				•			•		•						
For mounting other	parts Clamp	P.289~					•	•	•	•		•	•		•	•			•		•	•	•	•			
(Sensor Bracket	s) Split	P.289~					•	•	•	•		•	•		•	•			•		•	•	•	•			
	Lever	P.286~						•	•				•			•			•		•						
D	Clamp	P.273~				•	•	•	•	•			•			•			•		•	•	•	•			
Damper	Split	P.273~				•	•	•	•	•			•			•			•		•						
Others Threaded	Bore -	P.295~	•	•	•	•	•	•	•		•	•	•		•	•	•	•	•	•	•						
One-Touch Fix	ed Type Clamp	P.294~						•	•				•			•	•		•		•						

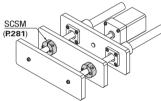


①Applications for bearing mounting



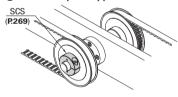
Can be used to retain bearing inner rings.

(General Purpose) Applications for mounting other parts



Allows some other parts to be mounted onto the current part.

3General Purpose Applications



Allows shafts to be secured without damage.

Tightening Torque of Clamp Type Shaft Collars

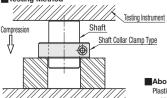
Definition of Max. Thrust Load

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

Whole are direct begins to move to defined do are mak. Hirabi Loda.										
Nominal	Tightening Torque (N·m)									
Nominai	S45C Equivalent / SUS304 Equivalent	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

- 1. Shaft: MISUMI Hardened Shaft (SFJ) P.117
- Tightening Torque: Select Tightening Torque from the tables on the above depending on the conditions of use.
 Condition of Antirust Oil: Wiped with a cloth as arrived.



(Formula for Weight: Weight (g) = Volume (cm³) x Specific Gravity ► P.2219

Clan	ір Туре					Specific Gravity S45C: 7.9, SUS304: 8.0										
Di	mensio	ns	Max. Thrus	t Load (kN)	Weight (g)	Di	mensio	ns	Max. Thrus	Weight (g)						
D .D.)	B (Width)	М	SCS, SCSJ (S45C Equivalent)	SSCS (SUS304 Equivalent)	SCS, SCSJ (S45C Equivalent)	D (I.D.)	B (Width)	М	SCS, SCSJ (S45C Equivalent)	SSCS (SUS304 Equivalent)	SCS, SCSJ (S45C Equivalent)					
	*6	2.6	0.7	0.4	10		*8	3	2.1	1.1	29					
6	8	3	1.1	0.5	17	16	10	5	7.1	2.9	55					
	10	4	1.8	1	21	10	12	5	5.4	2.3	67					
	*6	2.6	0.9	0.3	14		15	6	10.2	1.5	116					
8	8	3	0.6	0.6	26		*8	3	2.2	0.8	38					
	10	4	2.2	1.1	32	20	10	5	5.8	2.7	69					
	*6	2.6	0.7	0.3	17	20	12	5	6.4	1.7	84					
10	8	3	1.2	0.4	36		15	6	10.4	3	140					
10	10	4	2	1	45		*10	4	3.6	1.8	66					
	12	5	5.1	0.9	55	25	12	5	8.8	2.6	98					
	*6	2.6	0.7	0.3	16		15	6	8.8	3.6	164					
12	8	3	1.1	0.8	34		*12	5	8.4	2.8	111					
12	10	4	2.8	0.8	43	30	15	6	8.9	2.2	185					
	12	5	4	1.2	52		20	8	15	4	318					
	*8	3	1.5	0.6	31	35	15	6	9.9	2.7	207					
15	10	4	1.5	1.1	54	40	18	8	21.3	6	348					
10	12	5	5.1	1.8	69	50	22	10	35.8	11.8	604					
	15	6	5.6	1.4	119	Note 1 * marked dimensions are for Compact Type only (SCS L SSCS I)										

- - 2. These values are merely test results, and not guaranteed by the manufacturer.
- $3. \, \mbox{Use}$ optimum tightening torques depending on the condition of use by users.

■About Screw Tightening

Plastic threads may be damaged by repetitive tightening and loosening of the screw.