


Shafts

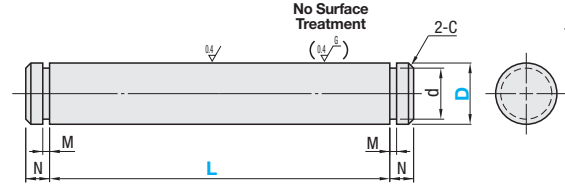
With Retaining Ring Grooves



Type		Material	Hardness	Surface Treatment
D Tol. g6	D Tol. h5			
SFAR	SFUR	SUJ2 Equivalent	Effective Hardened Depth of Induction Hardening	-
SSFAR	SSFUR	SUS40C or 13Cr stainless		
PSFAR	PSFUR	SUJ2 Equivalent	P112 SUJ2 Equivalent 58HRC~ SUS440C or 13Cr stainless 56HRC~	Hard Chrome Plating Plating Hardness: HV750 ~ Plating Thickness: 5µ or More ~
PSSFAR	PSSFUR	SUS440C or 13Cr stainless		
RSFAR	-	SUJ2 Equivalent	-	Low Temp. Black Chrome Plating
-	-	PSFGR	S45C Equivalent	Hard Chrome Plating Plating Hardness: HV750 ~ Plating Thickness: 10µ or More ~
-	-	PSSFGR	SUS304	

RoHS 10

⚠ L Dimension Tolerance, Circularity, Straightness, Perpendicularity, Concentricity and Changes in Hardness P.111
⚠ Features of Low Temp. Black Chrome Plating P.128
⚠ For O.D. tolerance f8 type, D needs to be 6 or more.



D	D Tol.		
	g6	h5	f8
3	-0.002 -0.008	0 -0.004	-
4	-	-	-
5	-0.004 -0.012	0 -0.005	-0.010 -0.028
6	-	-	-
8	-0.005 -0.014	0 -0.006	-0.013 -0.035
10	-	-	-
12	-	-	-
13	-0.006 -0.017	0 -0.008	-0.016 -0.043
15	-	-	-
16	-	-	-
18	-	-	-
20	-0.007 -0.020	0 -0.009	-0.020 -0.053
25	-	-	-
30	-	-	-

Part Number Type	D	L specified in 1mm Increment	N	M	Tolerance	d	Tolerance	Applicable Retaining Ring	C

⚠ For E Type Retaining Rings, see P.2302; and for C Type Retaining Rings, see P.2303.

Ordering Example: Part Number SFAR20 - L 300

Alterations Example: Part Number SFAR20 - L(LLC) (NWC) LLC300

Alterations	One End w/o Retaining Ring Groove	Length Leader Position Change
	Code	NWC
Spec.	One end will be left w/o retaining ring groove. Ordering Code NWC	Dimensioning leader position of L dimension will be altered to the outside of retaining ring grooves. Ordering Code LLC300 ⚠ Specify L dimensions with LLC. ⚠ LLC=1mm Increment

⚠ Alterations may lower hardness. See P.112

Part Number Type	D	Unit Price										
		Min. L 50	L51 100	L101 150	L151 200	L201 300	L301 400	L401 500	L501 600	L601 800	L801 1000	L1001 1200
SFAR SFUR	3, 4, 5	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-
	13	-	-	-	-	-	-	-	-	-	-	-
	15, 16	-	-	-	-	-	-	-	-	-	-	-
	18	-	-	-	-	-	-	-	-	-	-	-
	20	-	-	-	-	-	-	-	-	-	-	-
	25	-	-	-	-	-	-	-	-	-	-	-
	30	-	-	-	-	-	-	-	-	-	-	-
	SSFAR SSFUR	3, 4, 5	-	-	-	-	-	-	-	-	-	-
		6	-	-	-	-	-	-	-	-	-	-
8		-	-	-	-	-	-	-	-	-	-	
10		-	-	-	-	-	-	-	-	-	-	
12		-	-	-	-	-	-	-	-	-	-	
13		-	-	-	-	-	-	-	-	-	-	
15, 16		-	-	-	-	-	-	-	-	-	-	
18, 20		-	-	-	-	-	-	-	-	-	-	
25		-	-	-	-	-	-	-	-	-	-	
30		-	-	-	-	-	-	-	-	-	-	
PSFAR PSFUR		3, 4, 5	-	-	-	-	-	-	-	-	-	-
		6	-	-	-	-	-	-	-	-	-	-
		8	-	-	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	-	-	-	
	12, 13	-	-	-	-	-	-	-	-	-	-	
	15, 16	-	-	-	-	-	-	-	-	-	-	
	18, 20	-	-	-	-	-	-	-	-	-	-	
	25	-	-	-	-	-	-	-	-	-	-	
	30	-	-	-	-	-	-	-	-	-	-	
	PSSFAR PSSFUR	3, 4, 5	-	-	-	-	-	-	-	-	-	-
		6	-	-	-	-	-	-	-	-	-	-
		8, 10	-	-	-	-	-	-	-	-	-	-
		12	-	-	-	-	-	-	-	-	-	-
13		-	-	-	-	-	-	-	-	-	-	
15, 16		-	-	-	-	-	-	-	-	-	-	
18, 20		-	-	-	-	-	-	-	-	-	-	
25		-	-	-	-	-	-	-	-	-	-	
30		-	-	-	-	-	-	-	-	-	-	
RSFAR		3, 4, 5	-	-	-	-	-	-	-	-	-	-
		6	-	-	-	-	-	-	-	-	-	-
		8	-	-	-	-	-	-	-	-	-	-
		10	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	
	15	-	-	-	-	-	-	-	-	-	-	
	16	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	
	20	-	-	-	-	-	-	-	-	-	-	
	25	-	-	-	-	-	-	-	-	-	-	
	30	-	-	-	-	-	-	-	-	-	-	

Part Number Type	D	Unit Price					
		Min. L 100	L101 200	L201 400	L401 600	L601 800	L801 1000
PSFGR	6	-	-	-	-	-	-
	8	-	-	-	-	-	-
	10	-	-	-	-	-	-
	12	-	-	-	-	-	-
	13	-	-	-	-	-	-
	15, 16	-	-	-	-	-	-
PSSFGR	6	-	-	-	-	-	-
	8	-	-	-	-	-	-
	10	-	-	-	-	-	-
	12	-	-	-	-	-	-
	13	-	-	-	-	-	-
	15, 16	-	-	-	-	-	-
18, 20	-	-	-	-	-	-	
25	-	-	-	-	-	-	
30	-	-	-	-	-	-	

