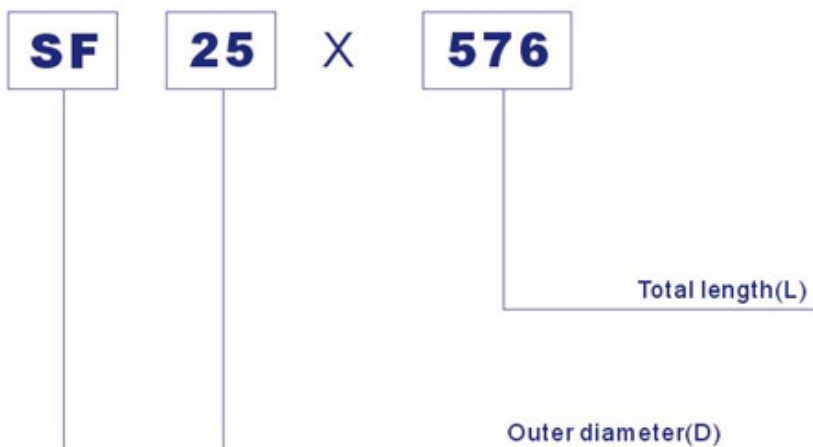


Part number structure example



Material

SF	SUJ2	(solid)
SFH	SUJ2	(hollow)
SFC	SUJ2	(solid chrome plating)
SFHC	SUJ2	(hollow chrome plating)
SSF	SUS440	(solid)
SSFH	SUS440	(hollow)
SFS	S45	(solid)
SFSC	S45	(solid chrome plating)

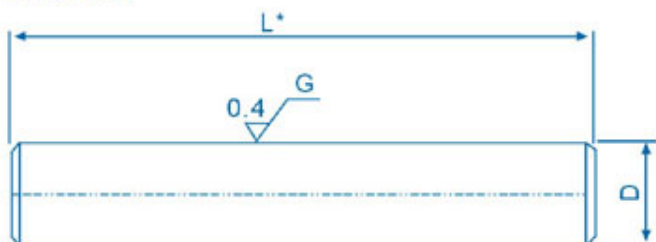
Fine Shaft (SF Type)

Part number	Outer Diameter		Length													Mass kg/m		
	D mm	Tolerance g6 µm	L mm															
			100	200	300	400	500	600	800	1000	1200	1500	1800	2000				
SF 6	6	-4/-12		100				600										0.23
SF 8	8	-5						800										0.4
SF 10	10	-14			200				1000									0.62
SF 12	12	-6									1500							0.89
SF 13	13	1																1.04
SF 16	16	-17				300									2000			1.58
SF 20	20	-7																2.47
SF 25	25	1					400											3.85
SF 30	30	-20																5.55
SF 35	35	-9						500										7.55
SF 40	40	1																9.87
SF 50	50	-25							600									15.4

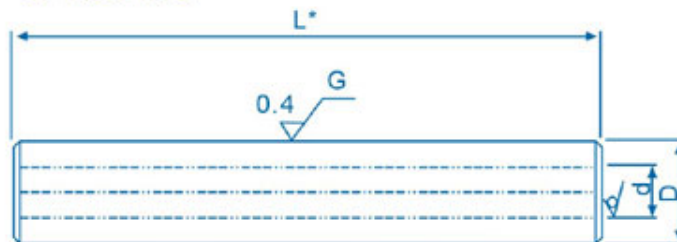
Material: high-carbon chromium bearing steel (SUJ 2)

Hardness: HV 697 (60 HRC) or more

SF/SFH



SFH/SFHC



*JISB0405 coarse-grade applies to length(L).

Linear Motion Bearings-Linaer LM Shaft 直线光轴 SF Series



Pipe Fine Shaft (SFH Type)

Part number	Outer Diameter		Length													Mass kg/m		
	D mm	Tolerance g6 µm	L mm															
			100	200	300	400	500	600	800	1000	1200	1500	1800	2000				
SFH 6	6	-4/-12		100		400												0.2
SFH 8	8	-5						600										0.34
SFH 10	10	-14			200					1000								0.52
SFH 12	12	-6										1500						0.73
SFH 13	13	I																0.82
SFH 16	16	-17				300											2000	1.18
SFH 20	20	-7																1.85
SFH 25	25	I					400											2.46
SFH 30	30	-20																3.97
SFH 35	35	-9						500										5.32
SFH 40	40	I																7.39
SFH 50	50	-25							600									11.3

Material: high-carbon chromium bearing steel (SUJ 2)

hardness: HV 697 (60 HRC) or more Stainless Fine Shaft (SSF & SSFH Type)

Part number	Outer Diameter		Length													Mass kg/m		
	D mm	Tolerance g6 µm	L mm															
			100	200	300	400	500	600	800	1000	1200	1500	1800	2000				
SSF 6	6	-4/-12		100				600										0.33
SSF 8	8	-5							800									0.39
SSF 10	10	-14			200					1000								0.61
SSF 12	12	-6										1500						0.88
SSF 13	13	I																1.03
SSF 16	16	-17				300											2000	1.56
SSF 20	20	-7																2.43
SSF 25	25	I					400											3.8
SSF 30	30	-20																5.48
SSF 35	35	-9						500										7.23
SSF 40	40	I																9.44
SSF 50	50	-25							600									15.2

Material: Matensite stainless steel (equivalent to SUS 440C)

Hardness: HV653 (58HRC) or more, HV613 (56HRC) or more for Ø3-6 Fine Shaft S45C Material (SFS & SFSC)

Linear Motion Bearings-Linaer LM Shaft 直线光轴 SF Series



Part number	Outer Diameter		Length L mm												Mass		
	D mm	Tolerance g6 µm													kg/m		
			500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000			
SFS/SFSC	2	-2															0.02
SFS/SFSC	3	-8															0.06
SFS/SFSC	4																0.1
SFS/SFSC	5																0.16
SFS/SFSC	6	-4															0.23
SFS/SFSC	7	-12															0.3
SFS/SFSC	8	-5															0.4
SFS/SFSC	9	-14															0.5
SFS/SFSC	10																0.62
SFS/SFSC	11																0.75
SFS/SFSC	12																0.89
SFS/SFSC	13																1.04
SFS/SFSC	14																1.21
SFS/SFSC	15																1.39
SFS/SFSC	16																1.56
SFS/SFSC	17	-6															1.78
SFS/SFSC	18	-17															2
SFS/SFSC	19																2.23
SFS/SFSC	20																2.47
SFS/SFSC	22																2.98
SFS/SFSC	25																3.85
SFS/SFSC	28	-7															4.83
SFS/SFSC	30	-20															5.55
SFS/SFSC	32	-9															6.31
SFS/SFSC	35	-25															7.55
SFS/SFSC	38																8.9
SFS/SFSC	40																9.87
SFS/SFSC	45																12.5
SFS/SFSC	50																15.4
SFS/SFSC	55	-10															18.7
SFS/SFSC	60	-29															22.2
SFS/SFSC	65																26.65
SFS/SFSC	70																30.2
SFS/SFSC	75																34.7
SFS/SFSC	80																39.4
SFS/SFSC	85	-12															44.5
SFS/SFSC	90	-34															50
SFS/SFSC	95																55.6
SFS/SFSC	100																61.7

Chemical composition of S45C Material

S45C	C	Si	Mn	P	S	Cu	Ni	Cr	Mo
	0.42 ~0.48	0.15~0.35	0.6~0.9	0.03~ 0.012	0.01 ~0.03	0.1~ 0.3	0.06 ~0.2	0.06 ~0.2	0.15

Rockwell: HRC 54—56

Order Length : 500mm—3000 mm (6.000 mm)

Roughness: 0.6S—1.5S Rmax (µm)

Straightness: 60 (30µm/m)

Tolerance: 96

Roundness: 96 (6—17µm/m)

Out Diameter: Ø2-Ø100

Cylindericity: 4-14µm (Ø2—Ø100)