

Ballscrews

Shaft ends and accessories

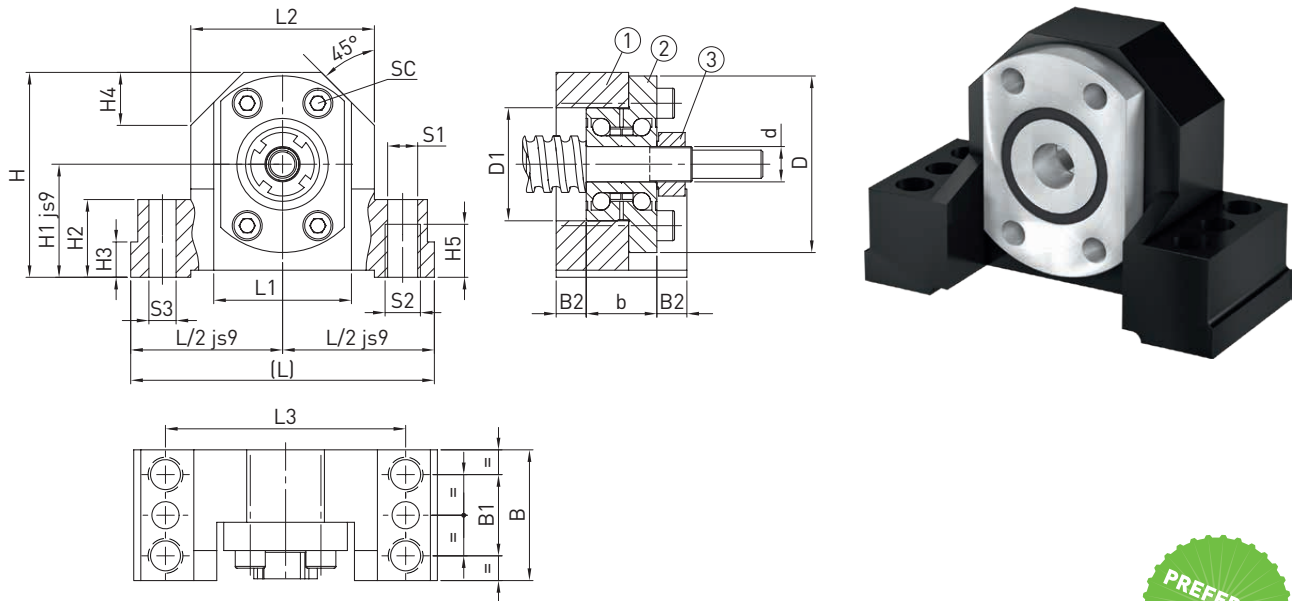
8.3 SFA/SLA bearing series

8.3.1 Fixed bearing SFA

The axis height of the fixed bearing is matched to supported bearing SLA (Section 8.3.2) and nut housing GFD (Section 8.4). The pillow block can be screwed on from above (S1) and below (S2).

The reference edge makes it easier to align the unit. The fixed bearing can be pinned with two tapered pins or cylindrical pins. The end machining suited to the fixed bearing is the S2-xx/S3-xx type (Section 8.1).

SFA06/SFA10



(1) Steel pillow block housing, (2) Bearing, (3) Lock nut



Table 8.13 Bearing unit dimensions

Type	Shaft nominal \varnothing	L	L/2	L1	L2	L3	H	H1	H2	H3	H4	H5	d	D	D1	b
SFA06	12	62	31	34	38	50	41	22	13	5	11	9	6	30	19	12
SFA10	16	86	43	52	52	68	58	32	22	10	15	15	10	50	32	20

Unit: mm

Table 8.14 Bearing unit dimensions

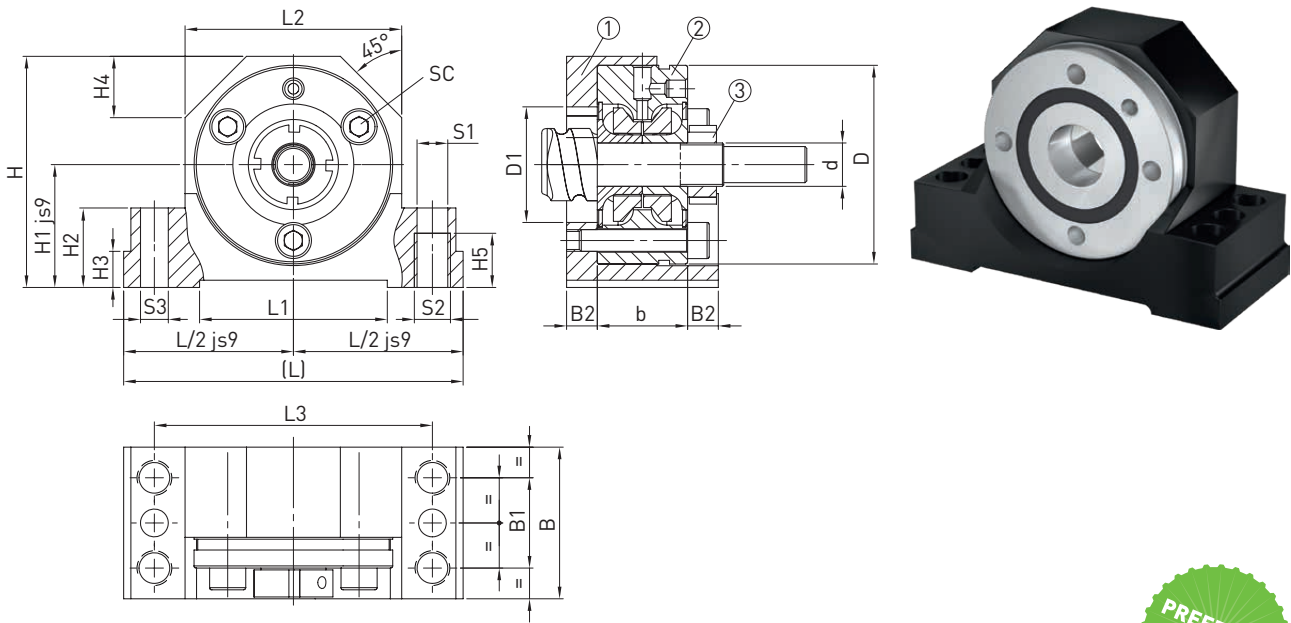
Type	Shaft nominal \varnothing	B	B1	B2	S1	S2	S3	SC ISO 4762-10.9
SFA06	12	32	16	10.0	5.3	M6	3.7	4 × M3 × 12
SFA10	16	37	23	8.5	8.5	M10	7.7	4 × M5 × 20

Unit: mm

Table 8.15 Technical data of bearing

Type	Bearing type	C_0 axial [N]	C_{dyn} axial [N]	Permissible speed [rpm]	Lock nut				Article number
					Type	Nut tightening torque [Nm]	Screw size	Screw tightening torque [Nm]	
SFA06	ZKLFA0630.2Z	6,100	4,900	14,000	HIR 06	2	M4	1	18-000109
SFA10	ZKLFA1050.2RS	8,500	6,900	6,800	HIR 10	6	M4	1	18-000111

SFA12 – SFA40



(1) Steel pillow block housing, (2) Bearing, (3) Lock nut



Table 8.16 Bearing unit dimensions

Type	Shaft nominal \varnothing	L	L/2	L1	L2	L3	H	H1	H2	H3	H4	H5	d	D	D1	b
SFA12	20	94	47	52	60	77	64	34	22	10	17	15	12	55	32	25
SFA17	25	108	54	65	66	88	72	39	27	10	19	18	17	62	36	25
SFA20	32	112	56	65	73	92	78	42	27	10	20	18	20	68	42	28
SFA30	40	126	63	82	84	105	92	50	32	13	23	21	30	80	52	28
SFA40	50	146	73	82	104	125	112	60	32	13	30	21	40	100	66	34

Unit: mm

Table 8.17 Bearing unit dimensions

Type	Shaft nominal \varnothing	B	B1	B2	S1	S2	S3	Lock nut	SC ISO 4762-10.9
SFA12	20	42	25	8.5	8.5	M10	7.7	HIR 12	3 × M6 × 35
SFA17	25	46	29	10.5	10.5	M12	9.7	HIR 17	3 × M6 × 35
SFA20	32	49	29	10.5	10.5	M12	9.7	HIR 20 × 1	4 × M6 × 40
SFA30	40	53	32	12.5	12.6	M14	9.7	HIR 30	6 × M6 × 40
SFA40	50	59	34	12.5	12.6	M14	9.7	HIR 40	4 × M8 × 50

Unit: mm

Table 8.18 Technical data of bearing

Type	Bearing type	C_0 axial [N]	C_{dyn} axial [N]	Permissible speed [rpm]	Lock nut				Article number
					Type	Nut tightening torque [Nm]	Screw size	Screw tightening torque [Nm]	
SFA12	ZKLF1255.2RS-PE	24,700	18,600	3,800	HIR 12	8	M4	1	18-000113
SFA17	ZKLF1762.2RS-PE	31,000	20,700	3,300	HIR 17	15	M5	3	18-000116
SFA20	ZKLF2068.2RS-PE	47,000	28,500	3,000	HIR 20 × 1	18	M5	3	18-000274
SFA30	ZKLF3080.2RS-PE	64,000	32,000	2,200	HIR 30	32	M6	5	18-000121
SFA40	ZKLF40100.2RS-PE	101,000	47,500	1,800	HIR 40	55	M6	5	18-000123

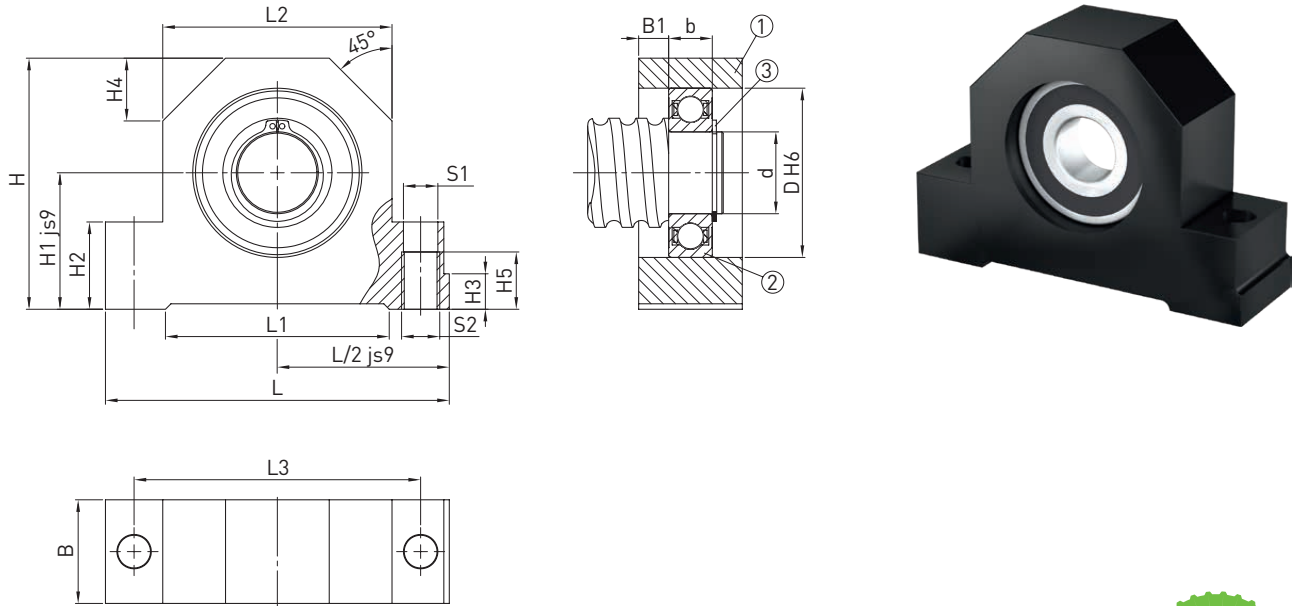
Ballscrews

Shaft ends and accessories

8.3.2 Supported bearing SLA

The axis height of the supported bearing is matched to fixed bearing SFA (Section 8.3.1) and nut housing GFD (Section 8.4). The pillow block can be screwed on from above (S1) and below (S2).

The reference edge makes it easier to align the unit. The end machining suited to the supported bearing is the S1-x type (Section 8.1).



(1) Steel pillow block housing, (2) Bearing, (3) Circlip



Table 8.19 Bearing unit dimensions

Type	Shaft nominal \varnothing	L	L/2	L1	L2	L3	H	H1	H2	H3	H4	H5	b
SLA06	12	62	31	34	38	50	41	22	13	5	11	9	6
SLA10	16	86	43	52	52	68	58	32	22	7	15	15	9
SLA12	20	94	47	52	60	77	64	34	22	10	17	15	10
SLA17	25	108	54	65	66	88	72	39	27	10	19	18	12
SLA20	32	112	56	65	72	92	78	42	27	10	20	18	14
SLA30	40	126	63	82	84	105	92	50	32	13	23	21	16
SLA40	50	146	73	82	104	125	112	60	32	13	30	21	18

Unit: mm

Table 8.20 Bearing unit dimensions

Type	Shaft nominal \varnothing	B	B1	S1	S2	d	D	Circlip DIN 471	Deep groove ball bearing DIN 625	Article number
SLA06	12	15	4.5	5.3	M6	6	19	6 × 0.7	626.2RS	18-000125
SLA10	16	24	7.5	8.4	M10	10	30	10 × 1	6200.2RS	18-000127
SLA12	20	26	8.0	8.4	M10	12	32	12 × 1	6201.2RS	18-000129
SLA17	25	28	8.0	10.5	M12	17	40	17 × 1	6203.2RS	18-000132
SLA20	32	34	10.0	10.5	M12	20	47	20 × 1.2	6204.2RS	18-000134
SLA30	40	38	11.0	12.6	M14	30	62	30 × 1.5	6206.2RS	18-000137
SLA40	50	44	13.0	12.6	M14	40	80	40 × 1.75	6208.2RS	18-000139

Unit: mm