

### 3 Ball & roller screws

Precision rolled ball screws

#### SD/BD/SH - Miniature ball screws

Ball recirculation with composite inserts for SD, BD types. Threaded nose for easy mounting

SD: axial play

BD: backlash elimination by oversized balls

SH: ball recirculation through tube integrated in the nut.

Lead precision G5, G7 or G9

#### SX/BX - Universal ball screws

Ball recirculation with composite inserts, threaded nose for easy mounting

Accessories: see **pages 129 and 142-143**.

Steel inserts are optional

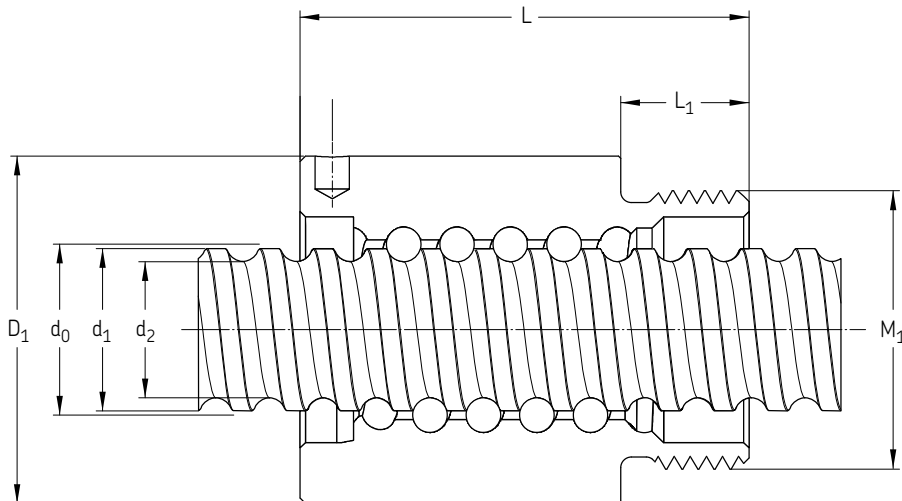
SX: axial play

BX: backlash elimination by oversized balls

Lead precision G5, G7 or G9

Designations	Nominal diameter d <sub>0</sub>	Lead P <sub>h</sub>	Dimensions Shaft			Nut			
			d <sub>1</sub>	d <sub>2</sub>	L Max	L	L <sub>1</sub>	D <sub>1</sub> h10	M <sub>1</sub> 6g
mm									
SH 6×2R	6	2	6	4,7	1 000	20	7,5	16,5	M14×1
SD/BD 8×2,5R	8	2,5	7,6	6,3	1 000	23,5	7,5	17,5	M15×1
SD/BD 10×2R	10	2	9,5	8,3	1 000	22	7,5	19,5	M17×1
SH 10×3R	10	3	9,93	7,8	1 000	29	9	21	M18×1
SD/BD 10×4R	10	4	8,9	7,4	1 000	28	8	21	M18×1
SD/BD 12×2R	12	2	11,15	9,9	2 000	20	8	20	M18×1
SD/BD 12×4R	12	4	11,3	9,4	2 000	34	10	25,5	M20×1
SD/BD 12×5R	12	5	11,81	9,3	2 000	36	10	23	M20×1
SH 12,7×12,7R	12,7	12,7	13,04	10,2	2 000	50	12	29,5	M25×1,5
SD/BD 14×4R	14	4	13,7	11,9	2 000	30	8	27	M22×1,5
SD/BD 16×2R	16	2	15,5	14,3	2 000	27	12	29,5	M25×1,5
SD/BD 16×5R	16	5	15,2	12,7	2 000	42	12	32,5	M26×1,5
SD/BD 16×10R	16	10	15,23	12,6	2 000	46	12	32,5	M26×1,5
SX/BX 20×5R	20	5	19,4	16,7	4 700	54	14	38	M35×1,5
SX/BX 25×5R	25	5	24,65	21,7	4 700	69	19	43	M40×1,5
SX/BX 25×10R	25	10	24,64	20,5	4 700	84	19	43	M40×1,5
SX/BX 32×5R	32	5	31,58	28,7	5 700	64	19	52	M48×1,5
SX/BX 32×10R	32	10	31,95	27,8	5 700	95	19	54	M48×1,5
SX/BX 40×5R	40	5	39,56	36,7	5 700	65	19	60	M56×1,5
SX/BX 40×10R	40	10	39,36	34	5 700	105	24	65	M60×2
SX/BX 40×40R	40	40	38,34	34,2	5 700	121	24	65	M60×2
SX/BX 50×10R	50	10	49,65	44	5 700	135	29	78	M72×2
SX/BX 63×10R	63	10	62,78	57	5 700	135	29	93	M85×2

Symbols, see **page 191**



Designations	Basic load ratings		Support bearing Recommended thrust support bearings	Recommended support pillow block
	dynamic Ca	static C <sub>0a</sub>		
kN				
SH 6×2R	1,9	2,2	-	-
SD/BD 8×2,5 R	2,2	2,7	-	-
SD/BD 10×2R	2,5	3,6	-	-
SH 10×3R	2,6	3,3	-	-
SD/BD 10×4R	4,5	5,5	-	-
SD/BD 12×2R	2,9	4,7	-	-
SD/BD 12×4R	4,9	6,6	-	-
SD/BD 12×5R	4,2	5,4	-	-
SH 12,7×12,7R	6,6	8,9	-	-
SD/BD 14×4R	6,0	9,1	-	-
SD/BD 16×2R	3,3	6,2	FLBU 16/PLBU 16	BUF 16
SD/BD 16×5R	7,6	10,7	FLBU 16/PLBU 16	BUF 16
SD/BD 16×10R	10,7	17,2	FLBU 16/PLBU 16	BUF 16
SX/BX 20×5R	14,0	23,8	PLBU 20/FLBU 20 <sup>(**)</sup>	BUF 20
SX/BX 25×5R	19,0	37,8	PLBU 25/FLBU 25	BUF 25
SX/BX 25×10R	23,5	39,0	PLBU 25/FLBU 25	BUF 25
SX/BX 32×5R	22,0	51,6	PLBU 32/FLBU 32	BUF 32
SX/BX 32×10R	27,1	52,0	PLBU 32/FLBU 32/FLRBU 3 <sup>(*)</sup>	BUF 32
SX/BX 40×5R	24,3	65,6	PLBU 40/FLBU 40	BUF 40
SX/BX 40×10R	61,5	124,1	PLBU 40/FLBU 40/FLRBU 4 <sup>(*)</sup>	BUF 40
SX/BX 40×40R	31,3	72,9	PLBU 40/FLBU 40	BUF 40
SX/BX 50×10R	80,4	188,8	PLBU 50/FLBU 50/FLRBU 5 <sup>(*)</sup>	BUF 50
SX/BX 63×10R	91,2	248,3	PLBU 63/FLBU 63	BUF 63

\* For high load applications, use FLRBU type. Please refer to end shaft and support bearing definitions, pages 188-190.  
 \*\* For high load application, please contact SKF.

Symbols, see page 191