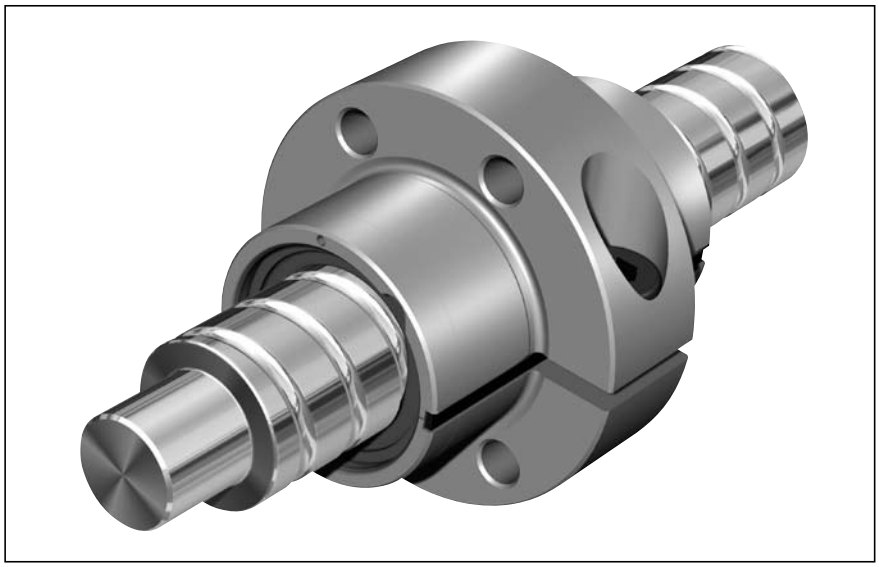
Nuts

Adjustable-Preload Single Nut SEM-E-S

Standard series

Rexroth mounting dimensions

With standard seals
Reinforced seals, see page 112
Adjustable preload
For precision-rolled screws SN-R
of tolerance grade T5, T7
With left-hand thread in some versions



d_0 = nominal diameter
P = lead
(R = right-hand, L = left-hand)
D_W = ball diameter
i = number of ball track turns

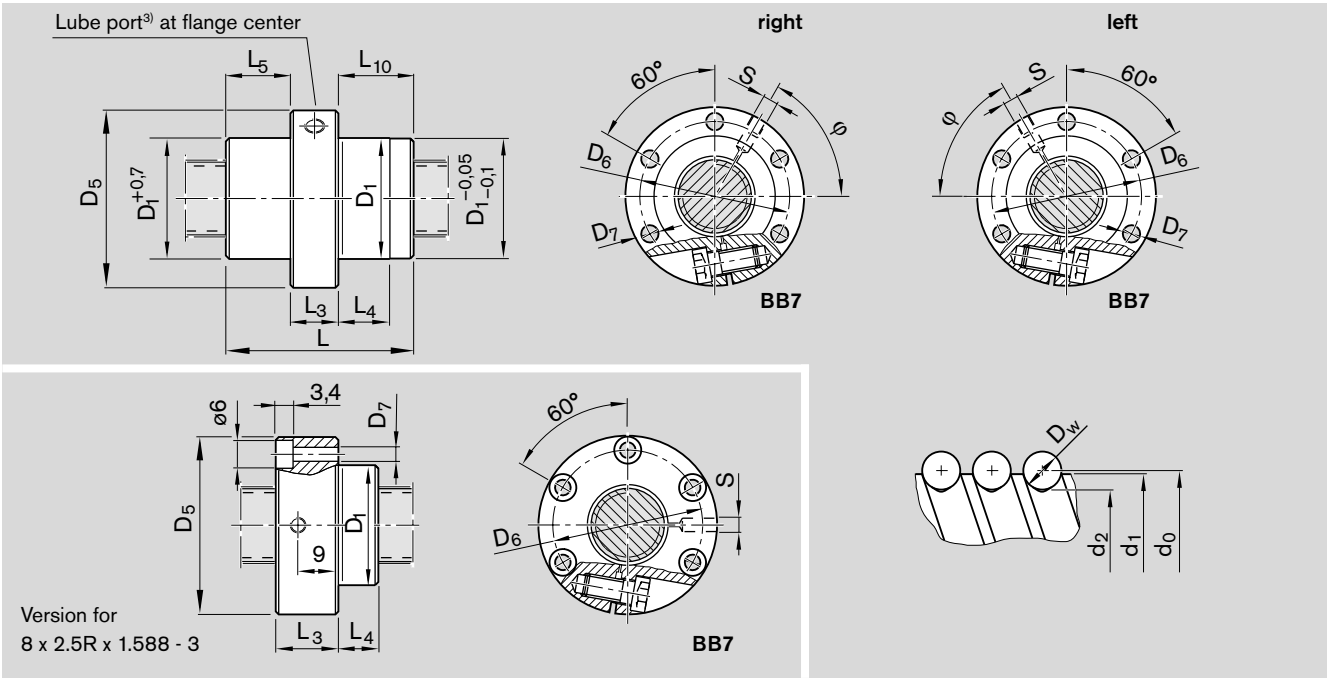
Ordering code:

SEM-E-S	20 x 5R x 3-4	1	2	T7	R	82Z120	41Z120	1250	0	1

Category	Size	Part number	Load ratings		Linear speed[1]	Centering diameter D_1 after adjustment	
			dyn. C	stat. C_0	v_{max}		
	d_0 x P x D_W - i		(N)	(N)	(m/min)	**min.** (mm)	**max.** (mm)
B	**8 x 2.5R x 1.588 - 3**	R1532 230 04	2200	2800	15	15.953	15.987
B	**12 x 5R x 2 - 3**	R1532 460 24	3800	5800	30	23.940	23.975
C	**12 x 10R x 2 - 2**	R1532 490 14	2500	3600	60	23.940	23.975
B	**16 x 5R x 3 - 4**	R1512 010 24	12300	16100	30	27.940	27.975
C	**16 x 10R x 3 - 3**	R1512 040 14	9600	12300	60	27.940	27.975
B	**16 x 16R x 3 - 2**	R1512 060 14	6300	7600	96	32.945	32.973
A	**20 x 5R x 3 - 4**	R1512 110 14	14300	21500	30	32.935	32.970
B	**20 x 20R x 3.5 - 2**	R1512 170 14	9100	12100	120	37.945	37.973
A	**25 x 5R x 3 - 4**	R1512 210 14	15900	27200	30	37.935	37.970
A	**25 x 10R x 3 - 4**	R1512 240 14	15700	27000	60	37.935	37.970
B	**25 x 25R x 3.5 - 2**	R1512 280 14	10100	15100	150	47.945	47.973
A	**32 x 5R x 3.5 - 4**	R1512 310 14	21600	40000	23	47.935	47.970
A	**32 x 5L x 3.5 - 4**	R1552 310 04	21600	40000	23	47.935	47.970
A	**32 x 10R x 3.969 - 5**	R1512 340 14	31700	58300	47	47.935	47.970
B	**32 x 20R x 3.969 - 2**	R1512 370 14	13500	21800	94	55.941	55.969
B	**32 x 32R x 3.969 - 2**	R1512 390 14	13400	22000	150	55.941	55.969
A	**40 x 5R x 3.5 - 5**	R1512 410 14	29100	64100	19	55.931	55.966
B	**40 x 5L x 3.5 - 5**	R1552 410 04	29100	64100	19	55.931	55.966
A	**40 x 10R x 6 - 4**	R1512 440 14	50000	86400	38	62.931	62.966
B	**40 x 10L x 6 - 4**	R1552 440 04	50000	86400	38	62.931	62.966
A	**40 x 20R x 6 - 3**	R1512 470 14	37900	62800	75	62.941	62.969
A	**40 x 40R x 6 - 2**	R1512 490 14	25500	40300	150	71.941	71.969
B	**50 x 5R x 3.5 - 5**	R1512 510 14	32000	81300	15	67.931	67.966
B	**50 x 10R x 6 - 6**	R1512 540 14	79700	166500	30	71.931	71.966
B	**50 x 20R x 6.5 - 3**	R1512 570 14	47900	87900	60	84.936	84.964
B	**50 x 40R x 6.5 - 2**	R1512 590 14	32100	55800	120	84.936	84.964
B	**63 x 10R x 6 - 6**	R1512 640 14	88800	214300	24	84.926	84.961
C	**63 x 20R x 6.5 - 3**	R1512 670 14	53200	112100	48	94.936	94.964
C	**63 x 40R x 6.5 - 2**	R1512 690 14	36900	74300	95	94.936	94.964
C	**80 x 10R x 6.5 - 6**	R1512 740 14	108400	291700	19	104.926	104.961
B	**80 x 20R x 12.7 - 6[2]**	R1512 770 24	262700	534200	30	124.931	124.959

1) See page 101 Characteristic speed $d_0 \cdot n$ and page 124 Critical speed n_{cr}

2) Nuts 80 x 20R x 12.7 - 6 available up to a thread length of 2500 mm, with preload



Size	Dimensions (mm)														Weight
d_0 x P x D_W - i	d_1	d_2	D_1 f9	D_5	Hole pattern	D_6	D_7	L	L_3	L_4	L_5	L_{10}	S3)	φ (°)	m (kg)
8 x 2.5R x 1.588 - 3	7.5	6.3	16	30	BB7	23	3.4	16	13	3.0	-	3.0	M4	0	0.06
12 x 5R x 2 - 3	11.4	9.9	24	40	BB7	32	4.5	28	12	8.0	8.0	8.0	M6	55	0.12
12 x 10R x 2 - 2	11.4	9.9	24	40	BB7	32	4.5	33	12	10.5	10.5	10.5	M6	55	0.13
16 x 5R x 3 - 4	15.0	12.9	28	53	BB7	40	6.6	38	15	10.0	11.5	11.5	M6	53	0.24
16 x 10R x 3 - 3	15.0	12.9	28	53	BB7	40	6.6	45	15	15.0	15.0	15.0	M6	180	0.25
16 x 16R x 3 - 2	15.0	12.9	33	58	BB7	45	6.6	45	15	15.0	15.0	15.0	M6	50	0.42
20 x 5R x 3 - 4	19.0	16.9	33	58	BB7	45	6.6	40	15	10.0	12.5	12.5	M6	56	0.31
20 x 20R x 3.5 - 2	19.3	16.7	38	63	BB7	50	6.6	57	20	18.5	18.5	18.5	M6	60	0.63
25 x 5R x 3 - 4	24.0	21.9	38	63	BB7	50	6.6	45	20	10.0	12.5	12.5	M6	60	0.44
25 x 10R x 3 - 4	24.0	21.9	38	63	BB7	50	6.6	64	20	16.0	22.0	22.0	M6	60	0.53
25 x 25R x 3.5 - 2	24.0	21.4	48	73	BB7	60	6.6	70	25	22.5	22.5	22.5	M6	48	1.13
32 x 5R x 3.5 - 4	31.0	28.4	48	73	BB7	60	6.6	48	20	10.0	14.0	14.0	M6	60	0.64
32 x 5L x 3.5 - 4	31.0	28.4	48	73	BB7	60	6.6	48	20	10.0	14.0	14.0	M6	59	0.64
32 x 10R x 3.969 - 5	31.0	27.9	48	73	BB7	60	6.6	77	20	16.0	28.5	28.5	M6	168	0.87
32 x 20R x 3.969 - 2	31.0	27.9	56	80	BB7	68	6.6	64	20	22.0	22.0	22.0	M6	60	1.14
32 x 32R x 3.969 - 2	31.0	27.9	56	80	BB7	68	6.6	88	20	34.0	34.0	34.0	M6	60	1.44
40 x 5R x 3.5 - 5	39.0	36.4	56	80	BB7	68	6.6	54	20	10.0	17.0	17.0	M8x1	65	0.87
40 x 5L x 3.5 - 5	39.0	36.4	56	80	BB7	68	6.6	54	20	10.0	17.0	17.0	M8x1	65	0.87
40 x 10R x 6 - 4	38.0	33.8	63	95	BB7	78	9.0	70	25	16.0	22.5	22.5	M8x1	57	1.53
40 x 10L x 6 - 4	38.0	33.8	63	95	BB7	78	9.0	70	25	16.0	22.5	22.5	M8x1	57	1.53
40 x 20R x 6 - 3	38.0	33.8	63	95	BB7	78	9.0	88	25	25.0	31.5	31.5	M8x1	180	1.77
40 x 40R x 6 - 2	38.0	33.8	72	110	BB7	90	11.0	102	40	31.0	31.0	31.0	M8x1	49	3.77
50 x 5R x 3.5 - 5	49.0	46.4	68	98	BB7	82	9.0	54	25	10.0	14.5	14.5	M8x1	67	1.23
50 x 10R x 6 - 6	48.0	43.8	72	110	BB7	90	11.0	90	30	16.0	30.0	30.0	M8x1	61	2.44
50 x 20R x 6.5 - 3	48.0	43.4	85	125	BB7	105	11.0	92	30	25.0	31.0	31.0	M8x1	180	3.94
50 x 40R x 6.5 - 2	48.0	43.4	85	125	BB7	105	11.0	109	30	39.5	39.5	39.5	M8x1	60	4.42
63 x 10R x 6 - 6	61.0	56.8	85	125	BB7	105	11.0	90	30	16.0	30.0	30.0	M8x1	65	2.94
63 x 20R x 6.5 - 3	61.0	56.4	95	140	BB7	118	14.0	92	30	25.0	31.0	31.0	M8x1	190	4.45
63 x 40R x 6.5 - 2	61.0	56.4	95	140	BB7	118	14.0	109	30	39.5	39.5	39.5	M8x1	70	4.95
80 x 10R x 6.5 - 6	78.0	73.3	105	150	BB7	125	14.0	95	30	16.0	32.5	32.5	M8x1	67	4.20
80 x 20R x 12.7 - 6	76.0	67.0	125	180	BB7	152	18.0	170	50	25.0	60.0	60.0	M8x1	60	13.30

3) Lube port machining: flat surface $L_3 \leq 13$ mm, countersink $L_3 > 14$ mm. For size 8 x 2.5, a funnel-type lube nipple DIN 3405 is provided.