

## Adjustable-preload single nut SEM-E-S

### Rexroth connection dimensions

With seals  
Left-hand version in some cases  
Preload adjustable  
Tolerance grade T3<sup>2</sup>, T5, T7

**Note:** The front lube unit is only available for the right-hand version.

**⚠** When setting up applications, do not allow components to collide with the front lube unit.

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



Ordering data:

BASA	20 x 5R x 3	SEM-E-S - 4	00	1	2	T7	R	82Z120	41Z120	1250	0	1
------	-------------	-------------	----	---	---	----	---	--------	--------	------	---	---

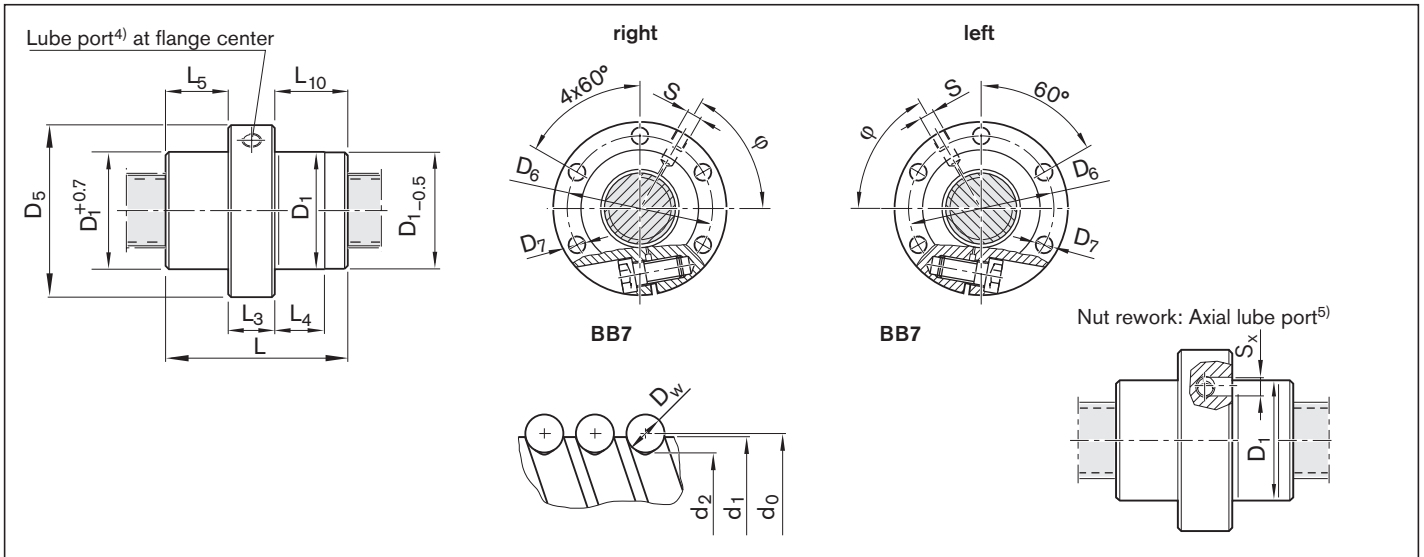
Category	Size $d_0 \times P \times D_w - i$	Part number	Load ratings <sup>3)</sup>		Linear speed <sup>1)</sup> $v_{max}$ (m/min)	Centering diameter $D_1$ after adjustment	
			dyn. C (N)	stat. $C_0$ (N)		min. (mm)	max. (mm)
B	16 x 5R x 3 - 4	R1512 010 24	14,800	16,100	30	27.940	27.975
B	16 x 10R x 3 - 3	R1512 040 14	11,500	12,300	60	27.940	27.975
B	16 x 16R x 3 - 2	R1512 060 14	7,560	7,600	96	32.945	32.973
B	20 x 5R x 3 - 4	R1512 110 14	17,200	21,500	30	32.935	32.970
B	20 x 20R x 3.5 - 2	R1512 170 14	10,900	12,100	120	37.945	37.973
B	25 x 5R x 3 - 4	R1512 210 14	19,100	27,200	30	37.935	37.970
B	25 x 10R x 3 - 4	R1512 240 14	18,800	27,000	60	37.935	37.970
B	25 x 25R x 3.5 - 2	R1512 280 14	12,100	15,100	150	47.945	47.973
B	32 x 5R x 3.5 - 4	R1512 310 14	25,900	40,000	23	47.935	47.970
B	32 x 10R x 3.969 - 5	R1512 340 14	38,000	58,300	47	47.935	47.970
B	32 x 20R x 3.969 - 2	R1512 370 14	16,200	21,800	94	55.941	55.969
B	32 x 32R x 3.969 - 2	R1512 390 14	16,100	22,000	150	55.941	55.969
B	40 x 5R x 3.5 - 5	R1512 410 14	34,900	64,100	19	55.931	55.966
B	40 x 10R x 6 - 4	R1512 440 14	60,000	86,400	38	62.931	62.966
B	40 x 20R x 6 - 3	R1512 470 14	45,500	62,800	75	62.941	62.969
B	40 x 40R x 6 - 2	R1512 490 14	30,600	40,300	150	71.941	71.969
B	50 x 5R x 3.5 - 5	R1512 510 14	38,400	81,300	15	67.931	67.966
B	50 x 10R x 6 - 6	R1512 540 14	95,600	166,500	30	71.931	71.966
B	50 x 20R x 6.5 - 3	R1512 570 14	57,500	87,900	60	84.936	84.964
B	50 x 40R x 6.5 - 2	R1512 590 14	38,500	55,800	120	84.936	84.964
B	63 x 10R x 6 - 6	R1512 640 14	106,600	214,300	24	84.926	84.961
B	63 x 20R x 6.5 - 3	R1512 670 14	63,800	112,100	48	94.936	94.964
B	63 x 40R x 6.5 - 2	R1512 690 14	44,300	74,300	95	94.936	94.964
C	80 x 10R x 6.5 - 6	R1512 740 14	130,100	291,700	19	104.926	104.961
C	80 x 20R x 12.7 - 6	R1512 770 24	315,200	534,200	30	124.931	124.959
<b>Versions with left-hand lead</b>							
B	16 x 5L x 3 - 4	R1552 010 04	14,800	16,100	30	27.94	27.975
B	20 x 5L x 3 - 4	R1552 110 14	17,200	21,500	30	32.935	32.970
B	25 x 5L x 3 - 4	R1552 210 14	19,100	27,200	30	37.935	37.970
B	32 x 5L x 3.5 - 4	R1552 310 04	25,900	40,000	23	47.935	47.970
B	40 x 5L x 3.5 - 5	R1552 410 04	34,900	64,100	19	55.931	55.966
B	40 x 10L x 6 - 4	R1552 440 04	60,000	86,400	38	62.931	62.966

1) See "Characteristic speed  $d_0 \cdot n$ " on page 133 and "Critical speed  $n_{cr}$ " on page 174

2) Tolerance grade T3 for sizes shown in table page 12

3) The load ratings are valid for tolerance grade T3 and T5 only.

For other tolerance grades, please take into account the correction factor  $f_{ac}$  on page 133.



- 4) Lube port machining: flat surface  $L_3 \leq 15$  mm, countersink  $L_3 > 15$  mm. For size 8 x 2.5, a funnel-type lube nipple DIN 3405 is provided.  
5) The axial lube port  $S_x$  is always located on the pitch circle  $D_6$  of the nut unit.

Size $d_0 \times P \times D_w - i$	(mm)															Mass m (kg)
	$d_1$	$d_2$	$D_1$ f9	$D_5$	Hole pattern	$D_6$	$D_7$	L	$L_3$	$L_4$	$L_5$	$L_{10}$	$S^4)$	$S_x$	$\varphi$ (°)	
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	4	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	4	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	4	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	4	56	0.31
20 x 20R x 3.5 - 2	19.0	16.7	38	63	BB7	50	6.6	57	20	18.5	18.5	18.5	M6	4	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	4	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	4	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	4	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	4	60	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	4	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	4	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	4	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	5	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	5	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	5	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	5	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	5	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	5	61	2.44
50 x 20R x 6.5 - 3	48.0	43.3	85	125	BB7	105	11.0	92	30	25.0	31.0	31.0	M8x1	5	180	3.94
50 x 40R x 6.5 - 2	48.0	43.3	85	125	BB7	105	11.0	109	30	39.5	39.5	39.5	M8x1	5	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	5	65	2.94
63 x 20R x 6.5 - 3	61.0	56.3	95	140	BB7	118	14.0	92	30	25.0	31.0	31.0	M8x1	5	190	4.45
63 x 40R x 6.5 - 2	61.0	56.3	95	140	BB7	118	14.0	109	30	39.5	39.5	39.5	M8x1	5	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	5	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	5	60	13.3
<b>Versions with left-hand lead</b>																
16 x 5L x 3 - 4	15.0	12.9	28	53	BB7	40	6.6	38	15	10.0	11.5	11.5	M6	4	53	0.24
20 x 5L x 3 - 4	19.0	16.9	33	58	BB7	45	6.6	40	15	10.0	12.5	12.5	M6	4	56	0.31
25 x 5L x 3 - 4	24.0	21.9	38	63	BB7	50	6.6	45	20	10.0	12.5	12.5	M6	4	60	0.44
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	4	59	0.64
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	5	65	0.87
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	5	57	1.53