

Nuts

## Single Nut with Flange FEM-E-S

### Standard series

#### Rexroth mounting dimensions

With standard seals

With left-hand thread in some versions

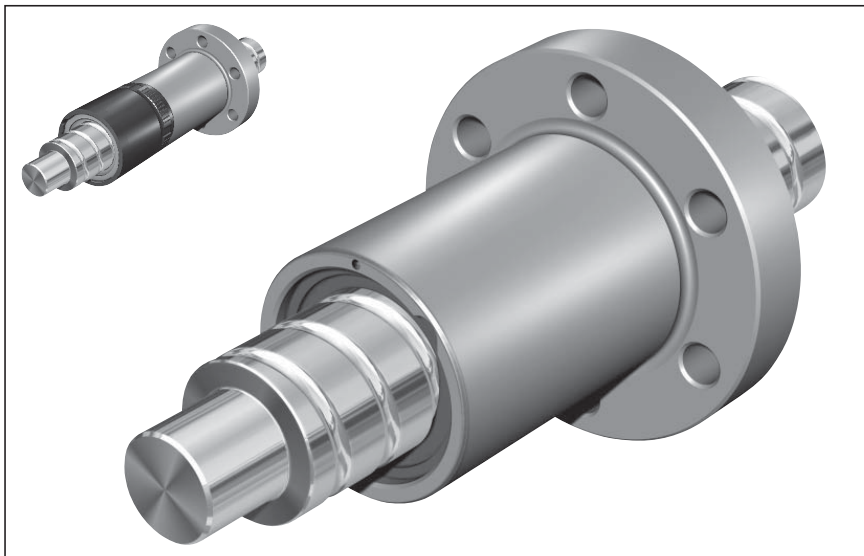
Reinforced seals, see page 126

With backlash, reduced backlash,  
preload 2%; 3%; 5%

For precision-rolled screws SN-R  
of tolerance grade T5, T7, T9

**Note:** The Front Lube Unit is only  
available for right-hand screw  
threads.

**⚠** When setting up applications, do  
not allow components to collide with  
the Front Lube Unit.



Ordering code: **FEM-E-S** 20 x 5R x 3-4 1 2 T7 R 82Z120 41Z120 1250 0 1

$d_0$  = nominal diameter

$P$  = lead

(R = right-hand, L = left-hand)

$D_w$  = ball diameter

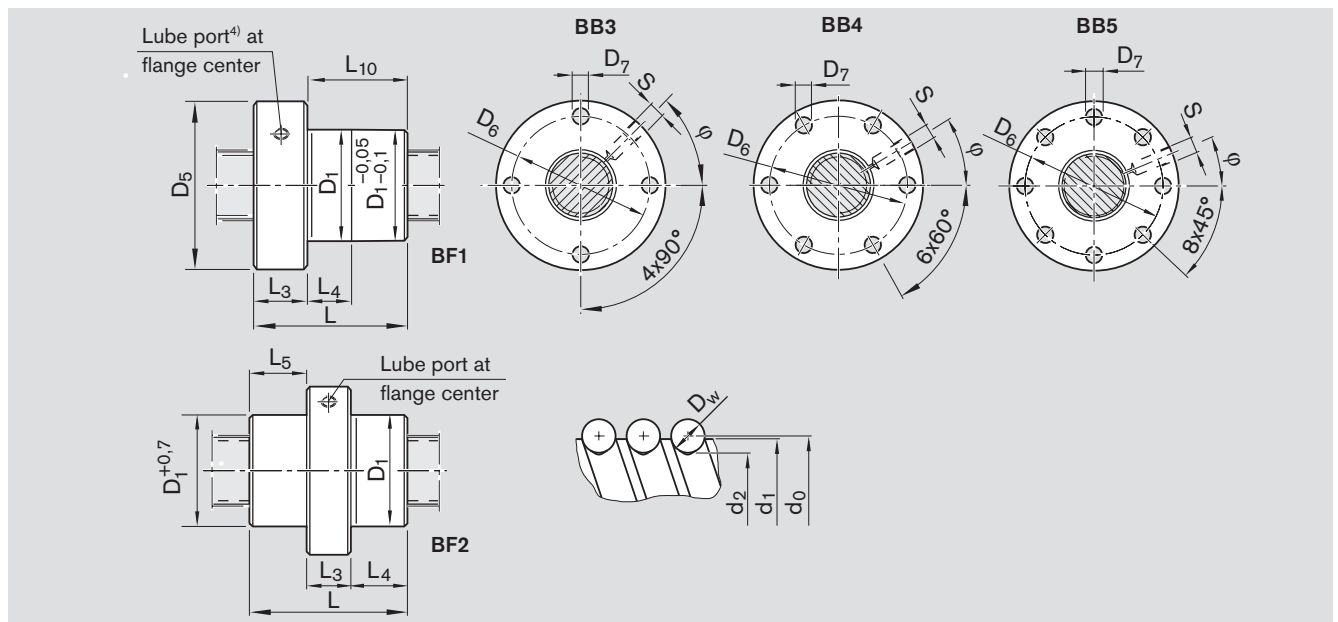
$i$  = number of ball track turns

Category	Size $d_0 \times P \times D_w - i$	Part number	Load ratings		Linear speed <sup>1)</sup> $v_{max}$ (m/min)
			dyn. C (N)	stat. C <sub>0</sub> (N)	
A	8 x 2.5R x 1.588 - 3	R1532 230 03	2200	2800	15
A	12 x 5R x 2 - 3	R1532 460 23	3800	5800	30
B	12 x 10R x 2 - 2	R1532 490 13	2500	3600	60
A	16 x 5R x 3 - 4	R1512 010 23	12300	16100	30
C	16 x 5L x 3 - 4	R1552 010 03	12300	16100	30
A	16 x 10R x 3 - 3	R1512 040 13	9600	12300	60
B	16 x 16R x 3 - 2	R1512 060 13	6300	7600	96
A <sup>2)</sup>	20 x 5R x 3 - 4	R1512 110 13	14300	21500	30
B	20 x 5L x 3 - 4	R1552 110 13	14300	21500	30
A	20 x 10R x 3 - 4	R1512 140 13	14100	21300	60
A	20 x 20R x 3.5 - 2	R1512 170 13	9100	12100	120
B	20 x 20L x 3.5 - 2	R1552 170 13	9100	12100	120
A <sup>2)</sup>	25 x 5R x 3 - 4	R1512 210 13	15900	27200	30
B	25 x 5 L x 3 - 4	R1552 210 13	15900	27200	30
A <sup>2)</sup>	25 x 10R x 3 - 4	R1512 240 13	15700	27000	60
A	25 x 25R x 3.5 - 2	R1512 280 13	10100	15100	150
B	25 x 25 L x 3.5 - 2	R1552 280 13	10100	15100	150
A <sup>2)</sup>	32 x 5R x 3.5 - 4	R1512 310 13	21600	40000	23
A <sup>2)</sup>	32 x 10R x 3.969 - 5	R1512 340 13	31700	58300	47
A <sup>2)</sup>	32 x 20R x 3.969 - 2	R1512 370 13	13500	21800	94
A	32 x 32R x 3.969 - 2	R1512 390 13	13400	22000	150
A	40 x 5R x 3.5 - 5	R1512 410 13	29100	64100	19
A <sup>2)</sup>	40 x 10R x 6 - 4	R1512 440 13	50000	86400	38
A <sup>2)</sup>	40 x 20R x 6 - 3	R1512 470 13	37900	62800	75
B	40 x 40R x 6 - 2	R1512 490 13	25500	40300	150
B	50 x 5R x 3.5 - 5	R1512 510 13	32000	81300	15
A	50 x 10R x 6 - 6	R1512 540 13	79700	166500	30
C	50 x 16R x 6 - 6	R1512 560 13	79400	166000	48
B	50 x 20R x 6.5 - 3	R1512 570 13	47900	87900	60
B	50 x 40R x 6.5 - 2	R1512 590 13	32100	55800	120
A	63 x 10R x 6 - 6	R1512 640 13	88800	214300	24
B	63 x 20R x 6.5 - 3	R1512 670 13	53200	112100	48
C	63 x 40R x 6.5 - 2	R1512 690 13	36900	74300	95
B	80 x 10R x 6.5 - 6	R1512 740 13	108400	291700	19
B	80 x 20R x 12.7 - 6 <sup>3)</sup>	R1512 770 23	262700	534200	30

1) See page 115 Characteristic speed  $d_0 \cdot n$   
and page 150 Critical speed  $n_{cr}$

2) Can be replaced in these sizes by  
FSZ-E-S

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



Size $d_0 \times P \times D_w - i$	Dimensions (mm)														$\varphi$ (°)	Weight m (kg)
	$d_1$	$d_2$	$D_1$ g6	$D_5$	Hole pattern	$D_6$	$D_7$	Type	L	$L_3$	$L_4$	$L_5$	$L_{10}$	$S^{4)}$		
8 x 2.5R x 1.588 - 3	7.5	6.3	16	30	BB4	23	3.4	BF1	16	8	8.0	-	8	M4	30.0	0.05
12 x 5R x 2 - 3	11.4	9.9	24	40	BB4	32	4.5	BF1	28	12	10.0	-	16	M6	330.0	0.12
12 x 10R x 2 - 2	11.4	9.9	24	40	BB4	32	4.5	BF1	33	12	16.0	-	21	M6	330.0	0.14
16 x 5R x 3 - 4	15.0	12.9	28	53	BB3	40	6.6	BF1	38	12	10.0	-	26	M6	315.0	0.24
16 x 5L x 3 - 4	15.0	12.9	28	53	BB3	40	6.6	BF1	38	12	10.0	-	26	M6	45.0	0.24
16 x 10R x 3 - 3	15.0	12.9	28	53	BB3	40	6.6	BF1	45	12	16.0	-	33	M6	315.0	0.25
16 x 16R x 3 - 2	15.0	12.9	33	58	BB4	45	6.6	BF2	45	15	15.0	15.0	-	M6	30.0	0.39
20 x 5R x 3 - 4	19.0	16.9	33	58	BB4	45	6.6	BF1	40	12	10.0	-	28	M6	30.0	0.28
20 x 5L x 3 - 4	19.0	16.9	33	58	BB4	45	6.6	BF1	40	12	10.0	-	28	M6	30.0	0.28
20 x 10R x 3 - 4	19.0	16.9	33	58	BB4	45	6.6	BF1	60	12	16.0	-	48	M6	30.0	0.36
20 x 20R x 3.5 - 2	19.0	16.7	38	63	BB4	50	6.6	BF2	57	20	18.5	18.5	-	M6	30.0	0.60
20 x 20L x 3.5 - 2	19.0	16.7	38	63	BB4	50	6.6	BF2	57	20	18.5	18.5	-	M6	30.0	0.60
25 x 5R x 3 - 4	24.0	21.9	38	63	BB4	50	6.6	BF1	45	12	10.0	-	33	M6	30.0	0.35
25 x 5L x 3 - 4	24.0	21.9	38	63	BB4	50	6.6	BF1	45	12	10.0	-	33	M6	30.0	0.35
25 x 10R x 3 - 4	24.0	21.9	38	63	BB4	50	6.6	BF1	64	12	16.0	-	52	M6	30.0	0.44
25 x 25R x 3.5 - 2	24.0	21.4	48	73	BB4	60	6.6	BF2	70	25	22.5	22.5	-	M6	18.0	1.09
25 x 25L x 3.5 - 2	24.0	21.4	48	73	BB4	60	6.6	BF2	70	25	22.5	22.5	-	M6	18.0	1.09
32 x 5R x 3.5 - 4	31.0	28.4	48	73	BB4	60	6.6	BF1	48	13	10.0	-	35	M6	30.0	0.54
32 x 10R x 3.969 - 5	31.0	27.9	48	73	BB4	60	6.6	BF1	77	13	16.0	-	64	M6	30.0	0.72
32 x 20R x 3.969 - 2	31.0	27.9	56	80	BB4	68	6.6	BF1	64	15	25.0	-	49	M6	30.0	1.02
32 x 32R x 3.969 - 2	31.0	27.9	56	80	BB4	68	6.6	BF2	88	20	34.0	34.0	-	M6	30.0	1.40
40 x 5R x 3.5 - 5	39.0	36.4	56	80	BB4	68	6.6	BF1	54	15	10.0	-	39	M8x1	30.0	0.71
40 x 10R x 6 - 4	38.0	33.8	63	95	BB4	78	9.0	BF1	70	15	16.0	-	55	M8x1	30.0	1.29
40 x 20R x 6 - 3	38.0	33.8	63	95	BB4	78	9.0	BF1	88	15	25.0	-	73	M8x1	30.0	1.54
40 x 40R x 6 - 2	38.0	33.8	72	110	BB4	90	11.0	BF2	102	40	31.0	31.0	-	M8x1	19.0	3.59
50 x 5R x 3.5 - 5	49.0	46.4	68	98	BB4	82	9.0	BF1	54	15	10.0	-	39	M8x1	30.0	1.02
50 x 10R x 6 - 6	48.0	43.8	72	110	BB4	90	11.0	BF1	90	18	16.0	-	72	M8x1	30.0	2.02
50 x 16R x 6 - 6	48.0	43.8	72	110	BB4	90	11.0	BF1	128	18	25.0	-	110	M8x1	30.0	2.58
50 x 20R x 6.5 - 3	48.0	43.4	85	125	BB4	105	11.0	BF1	92	22	25.0	-	70	M8x1	30.0	3.40
50 x 40R x 6.5 - 2	48.0	43.4	85	125	BB4	105	11.0	BF1	109	22	45.0	-	87	M8x1	30.0	3.87
63 x 10R x 6 - 6	61.0	56.8	85	125	BB4	105	11.0	BF1	90	22	16.0	-	68	M8x1	30.0	2.62
63 x 20R x 6.5 - 3	61.0	56.4	95	140	BB4	118	14.0	BF1	92	22	25.0	-	70	M8x1	30.0	3.71
63 x 40R x 6.5 - 2	61.0	56.4	95	140	BB4	118	14.0	BF1	109	22	45.0	-	87	M8x1	30.0	4.21
80 x 10R x 6.5 - 6	78.0	73.3	105	150	BB4	125	14.0	BF1	95	22	16.0	-	73	M8x1	30.0	3.78
80 x 20R x 12.7 - 6	76.0	67.0	125	180	BB5	152	18.0	BF1	170	25	25.0	-	145	M8x1	22.5	11.00

4) 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.