

# Flanged Single Nut FEM-E-S

## Rexroth mounting dimensions

With seals  
 With left-hand thread in some versions  
 With backlash or reduced backlash  
 Preload 2%, 3% or 5%  
 Tolerance grade: T3<sup>2)</sup>, 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:

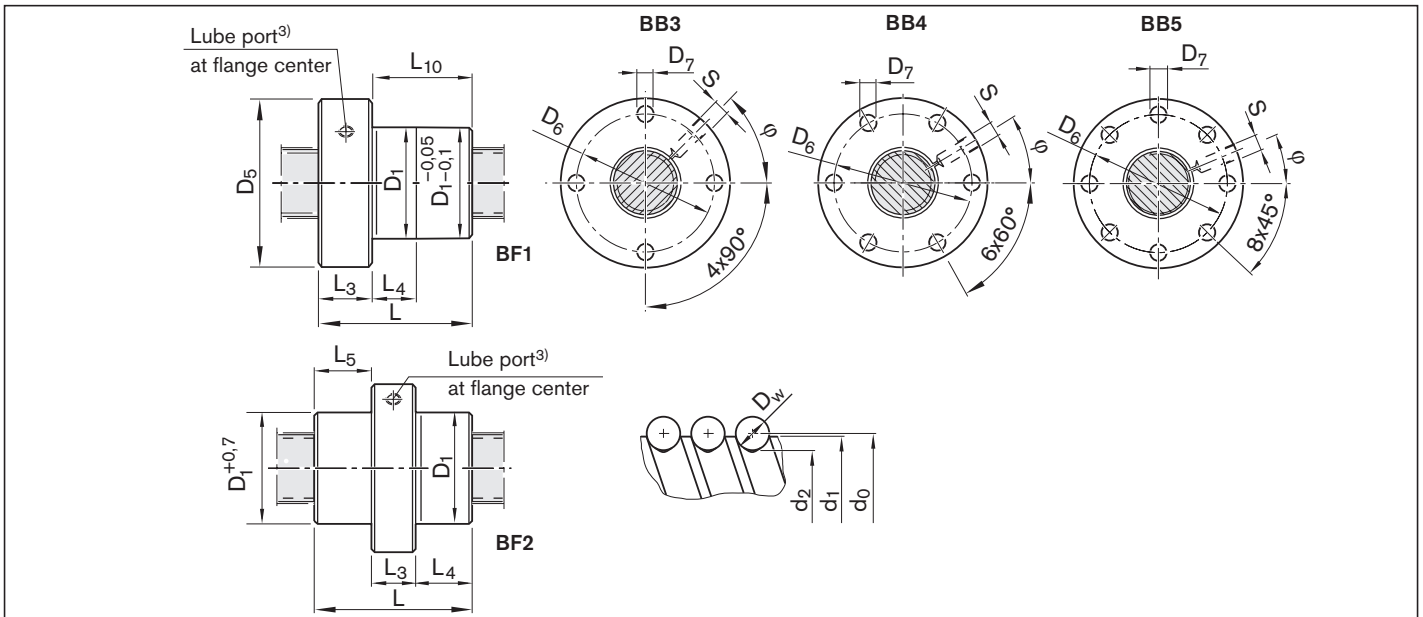
BASA	20 x 5R x 3	FEM-E-S - 4	00	1	2	T7	R	82Z120	41Z120	1250	0	1
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$d_0$  = nominal diameter  
 P = lead (R = right-hand, L = left-hand)  
 $D_w$  = ball diameter  
 i = number of ball track turns

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	16 x 5R x 3 - 4	R1512 010 23	12 300	16 100	30
A	16 x 10R x 3 - 3	R1512 040 13	9 600	12 300	60
A	16 x 16R x 3 - 2	R1512 060 13	6 300	7 600	96
A	20 x 5R x 3 - 4	R1512 110 13	14 300	21 500	30
A	20 x 10R x 3 - 4	R1512 140 13	14 100	21 300	60
A	20 x 20R x 3.5 - 2	R1512 170 13	9 100	12 100	120
A	25 x 5R x 3 - 4	R1512 210 13	15 900	27 200	30
A	25 x 10R x 3 - 4	R1512 240 13	15 700	27 000	60
A	25 x 25R x 3.5 - 2	R1512 280 13	10 100	15 100	150
A	32 x 5R x 3.5 - 4	R1512 310 13	21 600	40 000	23
A	32 x 10R x 3.969 - 5	R1512 340 13	31 700	58 300	47
A	32 x 20R x 3.969 - 2	R1512 370 13	13 500	21 800	94
A	32 x 32R x 3.969 - 2	R1512 390 13	13 400	22 000	150
A	40 x 5R x 3.5 - 5	R1512 410 13	29 100	64 100	19
A	40 x 10R x 6 - 4	R1512 440 13	50 000	86 400	38
A	40 x 10R x 6 - 6	R1512 440 23	72 100	132 200	38
A	40 x 20R x 6 - 3	R1512 470 13	37 900	62 800	75
A	40 x 40R x 6 - 2	R1512 490 13	25 500	40 300	150
B	50 x 5R x 3.5 - 5	R1512 510 13	32 000	81 300	15
B	50 x 10R x 6 - 6	R1512 540 13	79 700	166 500	30
C	50 x 16R x 6 - 6	R1512 560 13	79 400	166 000	48
B	50 x 20R x 6.5 - 3	R1512 570 13	47 900	87 900	60
B	50 x 40R x 6.5 - 2	R1512 590 13	32 100	55 800	120
B	63 x 10R x 6 - 6	R1512 640 13	88 800	214 300	24
B	63 x 20R x 6.5 - 3	R1512 670 13	53 200	112 100	48
B	63 x 40R x 6.5 - 2	R1512 690 13	36 900	74 300	95
C	80 x 10R x 6.5 - 6	R1512 740 13	108 400	291 700	19
C	80 x 20R x 12.7 - 6	R1512 770 23	262 700	534 200	30
<b>Versions with left-hand lead</b>					
B	16 x 5L x 3 - 4	R1552 010 03	12 300	16 100	30
B	20 x 5L x 3 - 4	R1552 110 13	14 300	21 500	30
B	25 x 5L x 3 - 4	R1552 210 13	15 900	27 200	30
B	32 x 5L x 3.5 - 4	R1552 310 03	21 600	40 000	23
B	40 x 5L x 3.5 - 5	R1552 410 03	29 100	64 100	19
B	40 x 10L x 6 - 4	R1552 440 03	50 000	86 400	38

1) See "Characteristic speed  $d_0 \cdot n$ " on page 141 and "Critical speed  $n_{cr}$ " on page 178

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



3) Lube port machining: flat surface  $L_3 \leq 15$  mm, countersink  $L_3 > 15$  mm;

Size $d_0 \times P \times D_w - i$	(mm)																Weight m (kg)
	$d_1$	$d_2$	$D_1$ g6	$D_5$	Hole pattern	$D_6$	$D_7$	Type	L	$L_3$	$L_4$	$L_5$	$L_{10}$	$S^3)$	$\varphi$ (°)		
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 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 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	
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 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	
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 10R x 6 - 6	38.0	33.8	63	95	BB4	78	9.0	BF1	90	15	16.0	-	75	M8x1	30.0	1.59	
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	
<b>Versions with left-hand lead</b>																	
16 x 5L x 3 - 4	15.0	12.9	28	53	BB3	40	6.6	BF1	38	12	10.0	-	26	M6	45	0.24	
20 x 5L x 3 - 4	19.0	16.9	33	58	BB4	45	6.6	BF1	40	12	10.0	-	28	M6	30	0.28	
25 x 5L x 3 - 4	24.0	21.9	38	63	BB4	50	6.6	BF1	45	12	10.0	-	33	M6	30	0.35	
32 x 5L x 3.5 - 4	31.0	28.4	48	73	BB4	60	6.6	BF1	48	13	10.0	-	35	M6	30	0.54	
40 x 5L x 3.5 - 5	39.0	36.4	56	80	BB4	68	6.6	BF1	54	15	10.0	-	39	M8x1	30	0.71	
40 x 10L x 6 - 4	38.0	33.8	63	95	BB4	78	9.0	BF1	70	15	16.0	-	55	M8x1	30	1.29	