

Nuts

## Cylindrical Single Nut ZEM-E-S

### Standard series Rexroth mounting dimensions

With standard seals  
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  
With left-hand thread in some versions



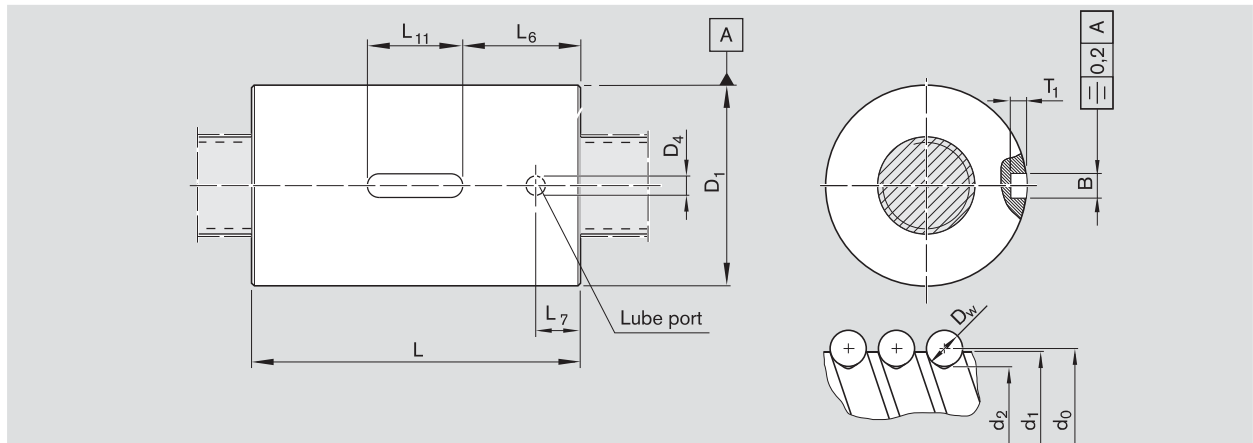
Ordering code: **ZEM-E-S** 20 x 5R x 3-5 1 2 T7 R 82Z120 41Z120 1250 0 1

$d_0$  = 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 02	2200	2800	15
B <sup>2)</sup>	12 x 2R x 1.2 - 4	R1532 422 01	2240	4160	12
A	12 x 5R x 2 - 3	R1532 460 32	3800	5800	30
A <sup>2)</sup>	12 x 5R x 2 - 3	R1532 462 25	3800	5800	30
B	12 x 10R x 2 - 2	R1532 490 22	2500	3600	60
B <sup>2)</sup>	12 x 10R x 2 - 2	R1532 492 00	2500	3600	60
A	16 x 5R x 3 - 4	R1512 010 22	12300	16100	30
B	16 x 5L x 3 - 4	R1552 010 02	12300	16100	30
B <sup>2)</sup>	16 x 5R x 3 - 4	R1512 012 67	12300	16100	30
A	16 x 10R x 3 - 3	R1512 040 12	9600	12300	60
B <sup>2)</sup>	16 x 10R x 3 - 3	R1512 042 08	9600	12300	60
B <sup>2)</sup>	16 x 10R x 3 - 3	R1512 042 09	9600	12300	60
B	16 x 16R x 3 - 2	R1512 060 12	6300	7600	96
B <sup>2)</sup>	16 x 16R x 3 - 2	R1512 062 10	6300	7600	96
B <sup>2)</sup>	16 x 16R x 3 - 3	R1512 062 11	9600	12300	96
A	20 x 5R x 3 - 5	R1512 110 12	17500	27300	30
B <sup>2)</sup>	20 x 5R x 3 - 4	R1512 112 43	14300	21500	30
A	20 x 10R x 3 - 4	R1512 140 12	14100	21300	60
A	20 x 20R x 3.5 - 2	R1512 170 12	9100	12100	120
B	20 x 20R x 3.5 - 3	R1512 170 52	13300	18800	120
B <sup>2)</sup>	20 x 20R x 3.5 - 3	R1512 172 07	13300	18800	120
A	25 x 5R x 3 - 4	R1512 210 12	15900	27200	30
A	25 x 10R x 3 - 4	R1512 240 12	15700	27000	60
B	25 x 25R x 3.5 - 2	R1512 280 12	10100	15100	150
B	25 x 25R x 3.5 - 3	R1512 280 52	14700	23300	150
B	32 x 5R x 3.5 - 4	R1512 310 12	21600	40000	23
B	32 x 5R x 3.5 - 4	R1512 310 52	21600	40000	23
A	32 x 10R x 3.969 - 5	R1512 340 12	31700	58300	47
B	32 x 10R x 3.969 - 5	R1512 340 52	31700	58300	47
C	32 x 20R x 3.969 - 2	R1512 370 12	13500	21800	94
B	32 x 20R x 3.969 - 3	R1512 370 52	19700	33700	94
C	32 x 32R x 3.969 - 2	R1512 390 12	13400	22000	150
B	32 x 32R x 3.969 - 3	R1512 390 52	19500	34000	150
C	40 x 5R x 3.5 - 5	R1512 410 12	29100	64100	19
B <sup>2)</sup>	40 x 5R x 3.5 - 5	R1512 412 21	29100	64100	19
B	40 x 10R x 6 - 4	R1512 440 12	50000	86400	38
B	40 x 20R x 6 - 3	R1512 470 12	37900	62800	75
C	40 x 40R x 6 - 2	R1512 490 12	25500	40300	150
B	40 x 40R x 6 - 3	R1512 490 52	37000	62300	150
C	50 x 5R x 3.5 - 5	R1512 510 12	32000	81300	15
C	50 x 10R x 6 - 6	R1512 540 12	79700	166500	30
C	50 x 20R x 6.5 - 3	R1512 570 12	47900	87900	60
C	63 x 10R x 6 - 6	R1512 640 12	88800	214300	24

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

2) Special nuts for Rexroth modules and drive units



Size	Dimensions (mm)										Weight m (kg)
	d <sub>1</sub>	d <sub>2</sub>	D <sub>1</sub>	D <sub>4</sub>	L	L <sub>6</sub>	L <sub>7</sub>	L <sub>11</sub>	B	T <sub>1</sub>	
d <sub>0</sub> x P x D <sub>w</sub> - i			g6		±0,1			+0,2	P9	+0,1	
8 x 2.5R x 1.588 - 3	7.5	6.3	16	2	16	5.0	3.5	6	3	1.8	0.02
12 x 2R x 1.2 - 4	11.7	10.8	21	2	19	5.5	3.5	8	3	1.8	0.03
12 x 5R x 2 - 3	11.4	9.9	24	2	28	8.0	3.5	12	5	3.0	0.06
12 x 5R x 2 - 3	11.4	9.9	21	2	28	8.0	3.5	12	3	1.8	0.04
12 x 10R x 2 - 2	11.4	9.9	24	2	33	10.5	3.5	12	5	3.0	0.07
12 x 10R x 2 - 2	11.4	9.9	21	2	33	10.5	3.5	12	3	1.8	0.05
16 x 5R x 3 - 4	15.0	12.9	28	4	35	14.5	9.5	12	5	3.0	0.09
16 x 5L x 3 - 4	15.0	12.9	28	4	35	14.5	9.5	12	5	3.0	0.09
16 x 5R x 3 - 4	15.0	12.9	33	2	45	14.5	9.5	16	5	3.0	0.17
16 x 10R x 3 - 3	15.0	12.9	28	4	45	14.5	9.5	16	5	3.0	0.12
16 x 10R x 3 - 3	15.0	12.9	38	4	54	19.0	9.5	16	5	3.0	0.35
16 x 10R x 3 - 3	15.0	12.9	33	4	45	14.5	9.5	16	5	3.0	0.20
16 x 16R x 3 - 2	15.0	12.9	33	4	45	14.5	9.5	16	5	3.0	0.20
16 x 16R x 3 - 2	15.0	12.9	28	4	45	14.5	9.5	16	5	3.0	0.12
16 x 16R x 3 - 3	15.0	12.9	38	4	61	22.5	9.5	16	5	3.0	0.42
20 x 5R x 3 - 5	19.0	16.9	33	4	45	14.5	9.5	16	5	3.0	0.16
20 x 5R x 3 - 4	19.0	16.9	38	4	40	21.0	9.5	12	5	3.0	0.21
20 x 10R x 3 - 4	19.0	16.9	33	4	60	22.0	9.5	16	5	3.0	0.16
20 x 20R x 3.5 - 2	19.0	16.7	38	4	64	22.0	9.5	20	5	3.0	0.34
20 x 20R x 3.5 - 3	19.0	16.7	36	4	77	28.5	9.5	20	5	3.0	0.37
20 x 20R x 3.5 - 3	19.0	16.7	38	4	77	28.5	9.5	20	5	3.0	0.44
25 x 5R x 3 - 4	24.0	21.9	38	4	45	14.5	9.5	16	5	3.0	0.19
25 x 10R x 3 - 4	24.0	21.9	38	4	64	22.0	9.5	20	5	3.0	0.28
25 x 25R x 3.5 - 2	24.0	21.4	48	4	80	30.0	10.5	20	5	3.0	0.73
25 x 25R x 3.5 - 3	24.0	21.4	40	4	95	37.5	10.5	20	5	3.0	0.50
32 x 5R x 3.5 - 4	31.0	28.4	48	4	48	14.0	9.5	20	5	3.0	0.32
32 x 5R x 3.5 - 4	31.0	28.4	50	4	48	14.0	9.5	20	5	3.0	0.35
32 x 10R x 3.969 - 5	31.0	27.9	48	4	77	28.5	9.5	20	5	3.0	0.50
32 x 10R x 3.969 - 5	31.0	27.9	50	4	77	28.5	9.5	20	5	3.0	0.61
32 x 20R x 3.969 - 2	31.0	27.9	56	4	64	22.0	9.5	20	5	3.0	0.74
32 x 20R x 3.969 - 3	31.0	27.9	50	4	84	32.0	9.5	20	5	3.0	0.66
32 x 32R x 3.969 - 2	31.0	27.9	56	4	88	34.0	9.5	20	5	3.0	1.03
32 x 32R x 3.969 - 3	31.0	27.9	50	4	120	50.0	9.5	20	5	3.0	0.97
40 x 5R x 3.5 - 5	39.0	36.4	56	4	54	17.0	9.5	20	5	3.0	0.44
40 x 5R x 3.5 - 5	39.0	36.4	63	4	70	25.0	14.0	20	5	3.0	0.82
40 x 10R x 6 - 4	38.0	33.8	63	4	70	25.0	14.0	20	5	3.0	0.88
40 x 20R x 6 - 3	38.0	33.8	63	4	88	34.0	14.0	20	5	3.0	1.13
40 x 40R x 6 - 2	38.0	33.8	72	4	113	46.5	14.0	20	5	3.0	2.23
40 x 40R x 6 - 3	38.0	33.8	63	4	142	61.0	14.0	20	5	3.0	1.85
50 x 5R x 3.5 - 5	49.0	46.4	68	4	54	17.0	9.5	20	5	3.0	0.62
50 x 10R x 6 - 6	48.0	43.8	72	5	90	35.0	14.0	20	5	3.0	1.34
50 x 20R x 6.5 - 3	48.0	43.4	85	5	92	30.0	14.0	32	6	3.5	2.39
63 x 10R x 6 - 6	61.0	56.8	85	5	90	29.0	14.0	32	6	3.5	1.59