

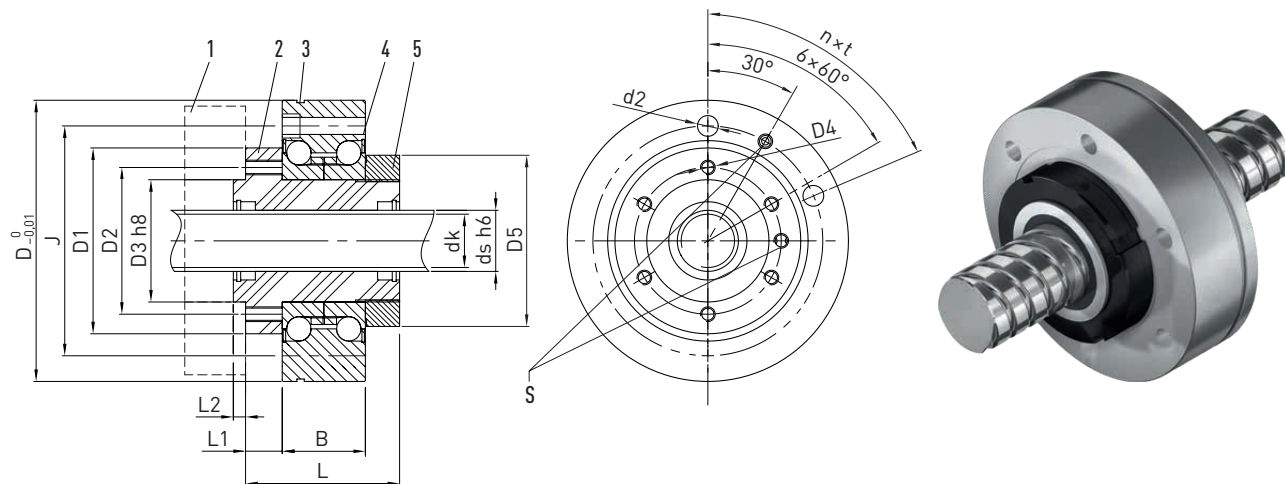
Ballscrews

Ballscrews for special requirements

7. Ballscrews for special requirements

7.1 Driven nut unit AME

- Nuts are arranged with axial angular contact ball bearings ZKLF...ZF (less stringent PE version)
- Bearing is preloaded by HIR lock nut



(1) Toothed belt wheel, (2) Nut, (3) Extraction slot, (4) ZKLF bearing, (5) Lock nut

S Lubrication hole

Table 7.1 Nut dimensions

Type	Shaft dimensions			Nut dimensions									Bearing dimensions					Dynamic load rating C_{dyn} [N]	Static load rating C_0 [N]	n max. [rpm]
	ds	P	dk	D1	D2	D3	D4	D5	L	L1	L2	M	D	J	n × t	d2	B			
R16-05T3-AME	16	5	13.5	50	40	30	M6	47	50	10	3	M6	80	63	6 × (60°)	Ø 8.5	28	9,600	12,700	4,000
R20-05T4-AME	20	5	17.5	63	52	40	M6	60	60	12	5	M6	100	80	4 × (90°)	Ø 8.5	34	13,900	21,800	3,300
R25-05T4-AME	25	5	22.5	76	60	50	M6	72	63	15	5	M6	115	94	6 × (60°)	Ø 8.5	34	15,600	27,900	3,000
R25-10T3-AME	25	10	21.0	76	60	50	M6	72	74	15	5	M6	115	94	6 × (60°)	Ø 8.5	34	24,100	36,200	3,000
R32-05T5-AME	32	5	29.5	76	62	50	M8	72	70	15	5	M6	115	94	6 × (60°)	Ø 8.5	34	20,700	43,900	3,000
R32-10T4-AME	32	10	27.8	76	62	50	M8	72	105	15	5	M6	115	94	6 × (60°)	Ø 8.5	34	40,900	63,200	3,000
R32-20T2-AME	32	20	27.8	76	62	50	M8	72	100	15	5	M6	115	94	6 × (60°)	Ø 8.5	34	20,800	26,800	3,000
R40-05T5-AME	40	5	37.5	90	70	60	M8	82	76	15	5	M6	145	120	8 × (45°)	Ø 15 × 8U Ø 8.5	45	22,500	54,600	2,400
R40-10T3-AME	40	10	35.8	90	70	60	M8	82	85	15	5	M6	145	120	8 × (45°)	Ø 15 × 8U Ø 8.5	45	37,100	61,900	2,400
R40-20T2-AME	40	20	35.8	90	70	60	M8	82	105	15	5	M6	145	120	8 × (45°)	Ø 15 × 8U Ø 8.5	45	23,800	36,400	2,400
R50-05T5-AME	50	5	47.5	100	84	70	M10	94	78	15	5	M6	155	130	8 × (45°)	Ø 15 × 8U Ø 8.5	45	24,900	69,800	2,200
R50-10T4-AME	50	10	45.8	100	84	70	M10	94	95	15	5	M6	155	130	8 × (45°)	Ø 15 × 8U Ø 8.5	45	52,800	106,800	2,200
R50-20T3-AME	50	20	45.8	100	84	70	M10	94	120	15	5	M6	155	130	8 × (45°)	Ø 15 × 8U Ø 8.5	45	40,000	76,200	2,200
R63-10T6-AME	63	10	58.8	130	110	90	M10	122	120	20	7	M8 × 1	190	165	8 × (45°)	Ø 18 × 10U Ø 10.5	55	84,700	210,800	1,800

All dimensions stated without a unit are in mm

Order example:

R 40 20 T2 AME 3800 3900 0.052

7.2 Ballscrews for heavy-duty operation

7.2.1 Areas of application

Ballscrews for heavy-duty operation are used in applications such as in injection moulding machines, die casting machines, presses, driving mechanisms and robots.

7.2.2 Performance features

Can withstand high loads

- Load capacities 2–3 times greater than standard versions
- High load rating for axial loads, good acceleration
- Short travel distance thanks to special design for lubrication

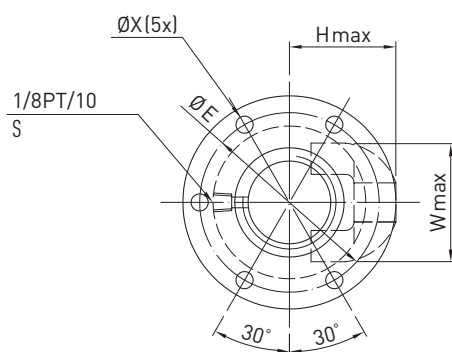
Accuracy

- T5 and T7

High rapid motion speeds and long service life

- Reinforced ball recirculation systems for use at high speeds and with long service lives

Maximum length: 2 m



S Lubrication hole

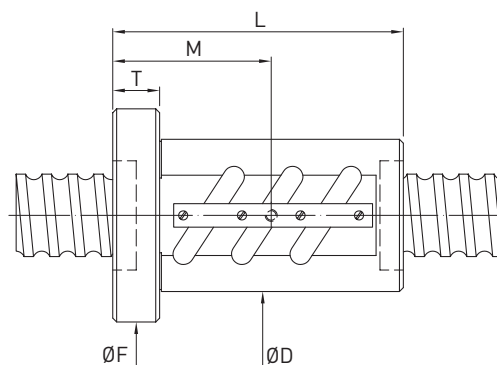


Table 7.2 Nut dimensions

Type	Nominal diameter	Lead	Circuits	Dynamic load rating C_{dyn} [kN]	Static load rating C_0 [kN]	D	L	F	T	E	X	H	W
R45-10B3-FSV	45	10	2.5 × 3	145	488	70	143	104	18	87	9	47.0	57
R50-12B3-FSV	50	12	2.5 × 3	175	602	77	171	111	22	94	9	52.0	62
R50-16B3-FSV	50	16	2.5 × 3	330	971	95	223	129	28	112	9	68.0	66
R55-16B3-FSV	55	16	2.5 × 3	343	1,054	99	223	133	28	116	9	70.0	70
R63-16B3-FSV	63	16	2.5 × 3	368	1,217	105	223	139	28	122	9	72.5	82
R80-16B3-FSV	80	16	2.5 × 3	409	1,543	120	227	154	32	137	9	80.0	98
R80-25B3-FSV	80	25	2.5 × 3	714	2,366	145	338	185	40	165	11	102.0	100
R100-16B3-FSV	100	16	2.5 × 3	453	1,949	145	227	185	32	165	11	91.0	117
R100-25B3-FSV	100	25	2.5 × 3	788	2,920	159	338	199	40	179	11	108.5	118
R120-25B3-FSV	120	25	2.5 × 3	850	3,473	173	338	213	40	193	11	116.0	135

All dimensions stated without a unit are in mm

Order example:

R 80 25 B3 FSV 1180 1530 0.023