

Ballscrews

Peeled Ballscrews

2.3.9 Safety nut SEM

The safety nut consists of a ballscrew unit and a safety unit. The safety nut basically works just like a normal ballscrew nut. If the axial play increases due to wear, ball breakage, or ball loss, the thread of the safety unit comes into contact with the ballscrew. This means the nut cannot be penetrated. The normal function of the unit is guaranteed up to an axial play of 0.4 mm. The function is monitored by measuring the axial play or motor current.

Applications:

- Lifting equipment
- Clamping devices
- Lifting platforms
- Elevators

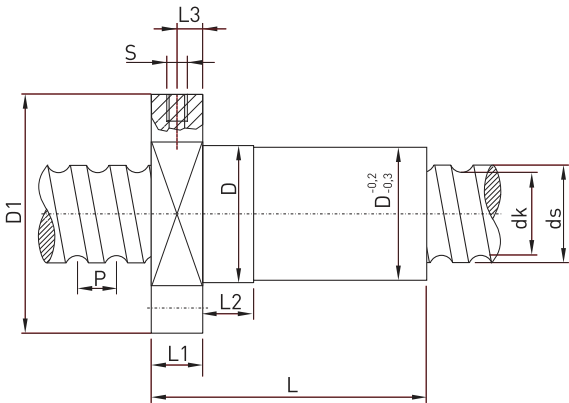
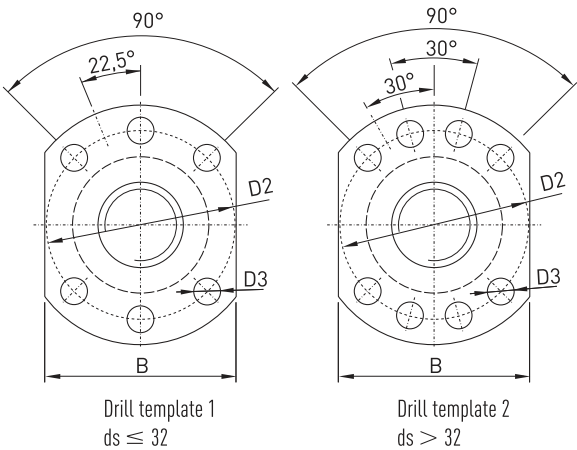
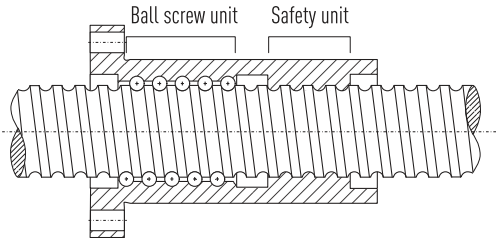


Table 2.14 Dimensions of the safety nut

Article number	ds h6	P	D g7	D1	D2	D3	Drill template	L	L1	L2	L3	S	B	dk	Dyn. Load C _{dyn} [N]	Stat. Load C ₀ [N]
R32-10T4-SEM	32	10	56	86	70	9	1	130	15	16	7,5	M6 × 1	66	27,8	40900	63200
R40-10T4-SEM	40	10	63	93	78	9	2	130	15	16	7,5	M8 × 1	70	35,8	46800	82500
R40-20T2-SEM	40	20	63	93	78	9	2	140	15	16	7,5	M8 × 1	70	35,8	23800	36400
R50-10T5-SEM	50	10	75	110	93	11	2	145	16	16	8,0	M8 × 1	85	45,8	63900	133300
R63-20T4-SEM	63	20	95	135	115	13,5	2	205	20	25	10,0	M8 × 1	100	55,4	105000	250000
R80-20T5-SEM	80	20	125	165	145	13,5	2	230	25	25	12,5	M8 × 1	130	72,4	161500	398000

The use of a safety nut alone is not a sufficient protection against unintentional lowering of a load. The valid for the application security guidelines must be followed. Additional measures, such as the monitoring of the motor current and the monitoring of the drive train are provided.

- Reduced axial play on request
- Nuts with wipers
- Precision ground ball grooves
- Left-hand nuts on request

Order example:

R	32	10	T4	SEM	1200	1350	0,052
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