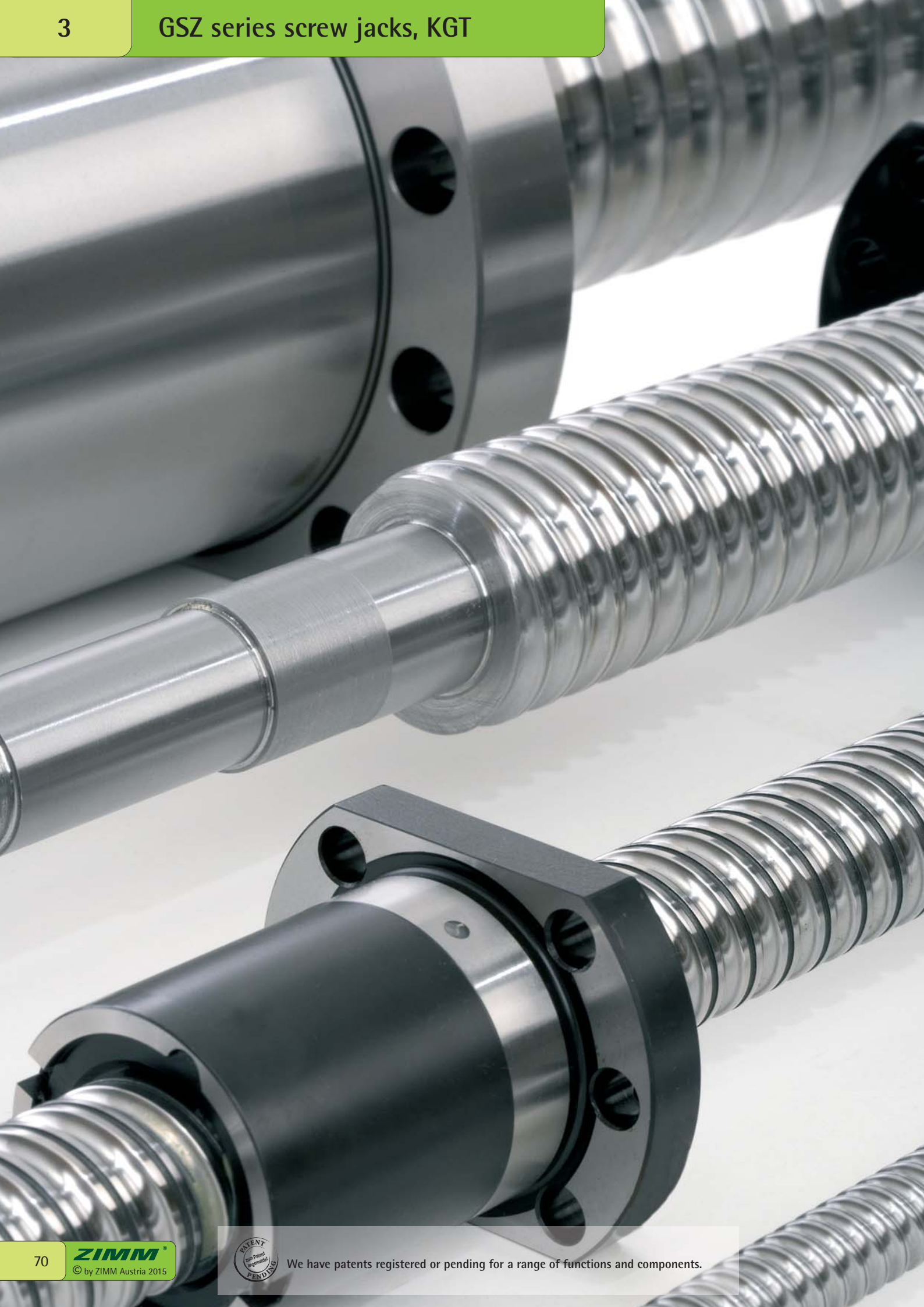
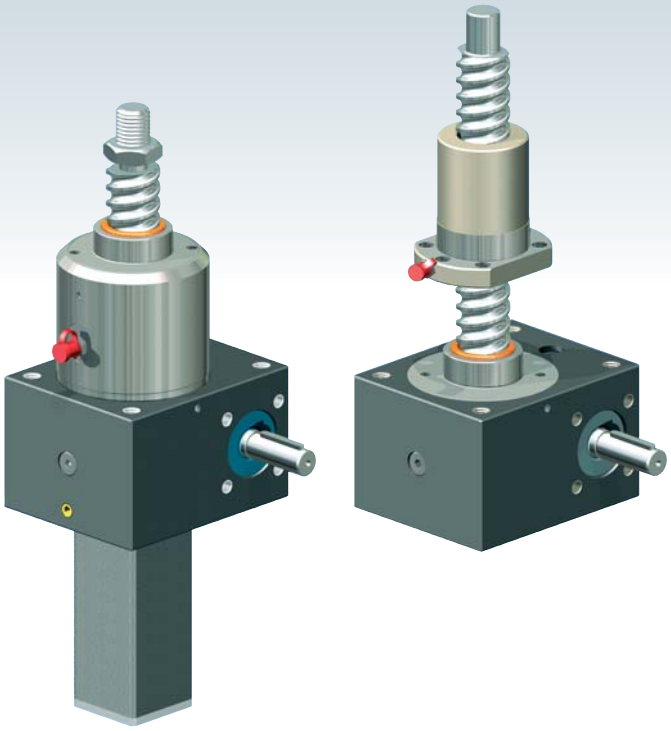


We have patents registered or pending for a range of functions and components.

Ball screw KGT



Most screw jacks use trapezoidal screws Tr, because they are simple, robust and inexpensive. The proportion of screw jacks that use ball screws is however constantly increasing. The reasons for this are primarily their pitch accuracy, their high efficiency (less power consumption and less heat generation) and the higher pitches available, which permit higher stroke speeds.

Technical data KGT

Pitch accuracy
0.05 mm / 300 mm
Material: 1.1213 (Cf 53), induction hardened and polished.

No self-locking!
Because of the lack of friction, a holding brake is necessary: a motor brake or a spring pressure brake is required.

Temperatures, duty cycle
Operating temperature range -20°C to +80°C (when <10° or >40°C please contact us).
The duty cycle can be up to 4 times higher than for trapezoidal screws (see diagrams), and at long strokes up to 2 times higher than for trapezoidal screws.

Service life
Heavy loads reduce the service life of the KGT. Tell us the load and stroke speed and we will calculate the service life.

Contamination
All nuts are fitted with scrapers. For heavy contamination and fine dust/chips, we recommend fitting bellows or a spiral spring cover.

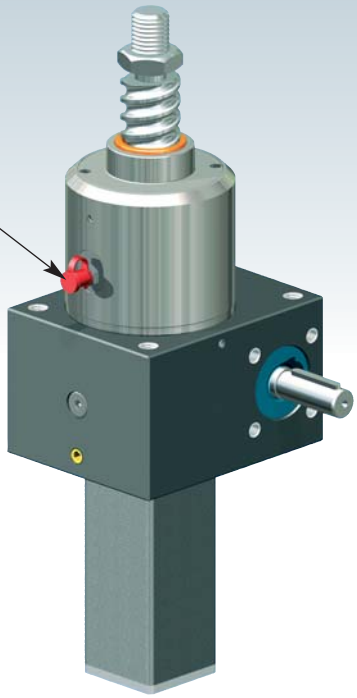
Escape/rotation protection
Under no circumstances may the nut be screwed off the screw. We therefore always provide escape/rotation protection on the S version.

Start ramp / braking ramp
We recommend using a frequency converter or a servomotor, especially for high lead screw jacks. This allows regulation of the start ramp / braking ramp. This ensures protection for the entire system.
Safety clearance L3 can also be reduced at your own discretion, in particular for high pitches.

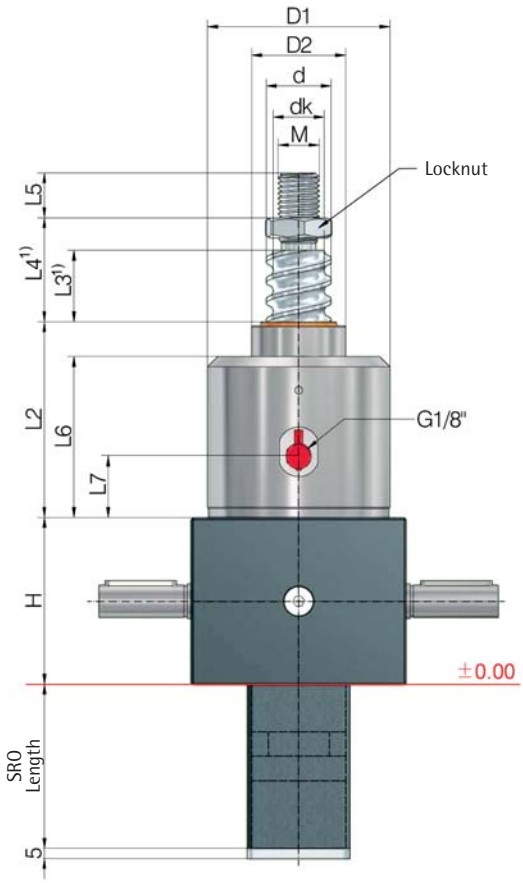
Grease nipples
The standard position of the grease nipple on the S version is on the gearbox face "C". Optionally, face A is available. Faces B and D are available on request.

Ball screw KGT

UNIQUE:
Ball screw lubrication for the S version



GSZ-5 to GSZ-100, KGT-S translating screw



- further technical information: Page 71
- see the respective screw jack page for all other dimensions
- see Section 4 for accessories
- dimensions on the illustrative diagrams are in mm. We reserve the right to make changes.

Ordering example:

GSZ-100-SN-KGT 50x20, C = 112.4 kN

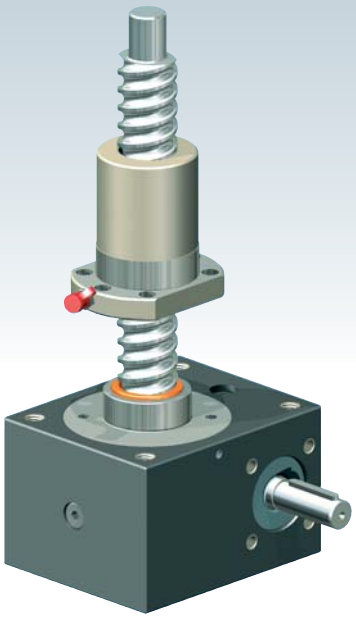
dynamic load rating C

Screw jacks	Ball screw KGT	Stroke per drive revolution [mm]		KGT load rating [kN]		Dimensions [mm]												Axial play max[5] [mm]
	ØxP	SN	SL	dyn. C[2]	stat. $C_0=C_{0a}$	H	d	d_K	D_1	D_2	L_2	L_3 1)	L_4 1)	L_5	L_6	L_7	M	
GSZ-5	16x5	1.25	0.31	9.3	13.1	62	15.5	12.9	59	29	66	15	25	19	54	23	M12	0.08
	16x10	2.50	0.63	15.4	26.5	62	15.4	13.0	59	29	66	25	35	19	54	23	M12	0.08
GSZ-10	25x5	1.25	0.31	12.3	22.5	74	24.5	21.9	69	39	85	15	27	20	69	21	M14	0.08
	25x10	2.50	0.63	13.2	25.3	74	24.5	21.9	69	39	85	25	37	20	69	21	M14	0.08
	25x25	6.25	1.56	16.7	32.2	74	24.5	22.0	69	39	85	60	72	20	69	21	M14	0.08
	25x50	12.50	3.13	15.4	31.7	74	24.1	21.5	69	39	85	125	137	20	69	21	M14	0.15
GSZ-25	32x5	0.83	0.21	21.5	49.3	82	31.5	28.9	89	46	99	15	31	22	82	33	M20	0.08
	32x10	1.67	0.42	33.4	54.5	82	32.7	27.3	89	46	99	20	36	22	82	33	M20	0.08
	32x20	3.33	0.83	29.7	59.8	82	31.7	27.9	89	46	99	35	51	22	82	33	M20	0.08
	32x40	6.67	1.67	14.9	32.4	82	30.9	28.3	89	46	99	70	86	22	82	33	M20	0.08
GSZ-50	40x5	0.71	0.18	23.8	63.1	116	39.5	36.9	125	60	93	15	39	29	74	17	M30	0.08
	40x10	1.43	0.36	38	69.1	116	39.5	34.1	125	60	93	15	39	29	74	17	M30	0.08
	40x20	2.86	0.72	33.3	76.1	116	39.7	35.9	125	60	93	30	54	29	74	17	M30	0.08
	40x40	5.71	1.43	35	101.9	116	38.9	36.3	125	60	93	60	84	29	74	17	M30	0.08
GSZ-100	50x10	1.11	0.28	68.7	155.8	160	49.5	44.1	148	85	112	20	48	48	82	19	M36	0.08
	50x20	2.22	0.56	60	136.3	160	49.5	44.1	148	85	112	40	68	48	82	19	M36	0.08
	50x10	1.11	0.28	112.1	338.5	160	50	43.6	148	85	148	20	48	48	118	19	M36	0.03
	50x20	2.22	0.56	112.4	214.7	160	50	41.1	148	85	148	40	68	48	118	19	M36	0.03
	50x40	4.44	1.11	84.7	143.1	160	50	41.1	148	85	148	80	108	48	118	19	M36	0.03

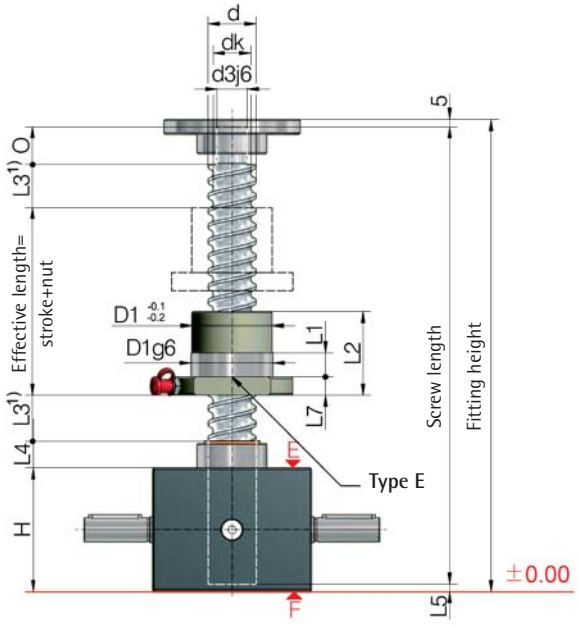
[1] Depending on the control system and drive, the dimensions L_3 and L_4 can be reduced at your own discretion.
An extension may be required if a bellows or spiral spring is fitted

[2] Dynamic load rating to DIN 69051 part 4 draft 1989.
[5] Reduced play 0.02 mm available on request.

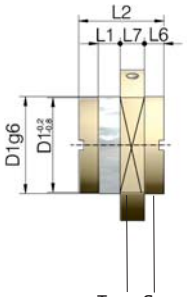
Ball screw
KGT



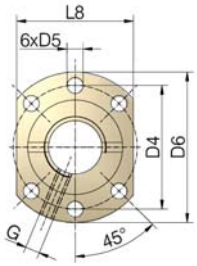
GSZ-2 to GSZ-100, KGT-R rotating screw



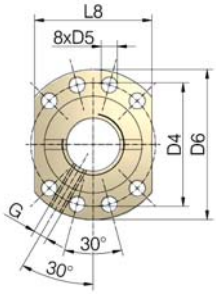
Position of the flange nut:
G = flange gearbox side
(as shown)
S = flange screw side



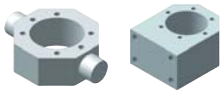
Type S



Hole pattern 1
to DIN 69051



Hole pattern 2
to DIN 69051



Adapter for KGT
Dimension sheet on request

An increased screw (such as: Z-10-RN with screw 32x10) can also be used for the rotating version.

Ordering example:

GSZ-100-RN-KGT 50x20, C = 112.4 kN - G

- dynamic load rating C
- Nut flange
  - G: flange gearbox side
  - S: flange screw side

Screw jacks	Ball screw KGT	Stroke per drive revolution [mm]		KGT load rating [kN]		Nut		Dimensions [mm]																	Lubrication hole	Axial play max[5] [mm]
	ØxP	RN	RL	dyn. C[2]	stat. C_0=C_{0a}	Type	Hole pattern	d	d_K	d_3	O	H	D_1	D_4	D_5	D_6	L_1	L_2	L_3[1]	L_4	L_5	L_6	L_7	L_8	G	
GSZ-2	16x5	1.25	0.31	9.3	13.1	E	1	15.5	12.9	10	12	50	28	38	5.5	48	10	42	15	11	3	-	10	40	M6	0.08
	16x10	2.50	0.63	15.4	26.5	E	1	15.4	13.0	10	12	50	28	38	5.5	48	10	55	25	11	3	-	10	40	M6	0.08
GSZ-5	16x5	1.25	0.31	9.3	13.1	E	1	15.5	12.9	12	15	62	28	38	5.5	48	10	42	15	12	8	-	10	40	M6	0.08
	16x10	2.50	0.63	15.4	26.5	E	1	15.4	13.0	12	15	62	28	38	5.5	48	10	55	25	12	8	-	10	40	M6	0.08
GSZ-10	25x5	1.25	0.31	12.3	22.5	E	1	24.5	21.9	15	20	74	40	51	6.6	62	10	42	15	16	8	-	10	48	M6	0.08
	25x10	2.50	0.63	13.2	25.3	E	1	24.5	21.9	15	20	74	40	51	6.6	62	16	55	25	16	8	-	10	48	M6	0.08
	25x25[3]	6.25	1.56	16.7	32.2	S	1	24.5	22.0	15	20	74	40	51	6.6	62	9	35	60	16	8	8	10	-[3]	M6	0.08
	25x50	12.50	3.14	15.4	31.7	S	1	24.1	21.5	15	20	74	40	51	6.6	62	10	58	125	16	8	10	10	48	M6	0.15
GSZ-25	32x5	0.83	0.21	21.5	49.3	E	1	31.5	28.9	20	25	82	50	65	9.0	80	10	55	15	17	5	-	12	62	M6	0.08
	32x10	1.67	0.42	33.4	54.5	E	1	32.7	27.3	20	25	82	53[6]	65	9.0	80	16	69	20	17	5	-	12	62	M8x1	0.08
	32x20	3.33	0.83	29.7	59.8	E	1	31.7	27.9	20	25	82	53[6]	65	9.0	80	16	80	35	17	5	-	12	62	M6	0.08
	32x40[3]	6.67	1.67	14.9	32.4	S	N[4]	30.9	28.3	20	25	82	53[6]	68[6]	7.0[6]	80	14	45	70	17	5	7.5	16	-[3]	M6	0.08
GSZ-50	40x5	0.71	0.18	23.8	63.1	E	2	39.5	36.9	25	30	116	63	78	9	93	10	57	15	19	7	-	14	70	M6	0.08
	40x10	1.43	0.36	38	69.1	E	2	39.5	34.1	25	30	116	63	78	9	93	16	71	15	19	7	-	14	70	M8x1	0.08
	40x20	2.86	0.72	33.3	76.1	E	2	39.7	35.9	25	30	116	63	78	9	93	16	80	30	19	7	-	14	70	M8x1	0.08
	40x40	5.71	1.43	35	101.9	S	2	38.9	36.3	25	30	116	63	78	9	93	16	85	60	19	7	7.5	14	-[3]	M8x1	0.08
GSZ-100	50x10	1.11	0.28	68.7	155.8	E	2	49.5	44.1	40	45	160	75	93	11	110	16	95	20	30	8	-	16	85	M8x1	0.08
	50x20	2.22	0.56	60	136.3	E	2	49.5	44.1	40	45	160	85[6]	103[6]	11	125[6]	22	95	40	30	8	-	18	95	M8x1	0.08
	50x10	1.11	0.28	112.1	338.5	E	2	50	43.6	40	45	160	75	93	11	110	16	107	20	30	8	-	16	85	M8x1	0.03
	50x20	2.22	0.56	112.4	214.7	E	2	50	41.1	40	45	160	85[6]	103[6]	11	120[6]	16	125	40	30	8	-	16	95	M8x1	0.03
	50x40	4.44	1.11	84.7	143.1	E	2	50	41.1	40	45	160	85[6]	103[6]	11	120[6]	16	125	80	30	8	-	16	95	M8x1	0.03
	50x50[4]	5.56	1.39	84.7	143.1	E	2	50	41.1	40	45	160	85[6]	103[6]	11	120[6]	16	145	100	30	8	-	16	95	M8x1	0.03

[1] An extension may be required if a bellows or spiral spring is fitted.
[2] Dynamic load rating to DIN 69051 part 4 draft 1989.
[3] Round flange.
[4] Non-preferred design.
[5] Reduced play 0.02 mm available on request.
[6] Not to DIN 69051.