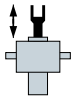


Everything from a single source GSZ & KSZ | 2,5 kN



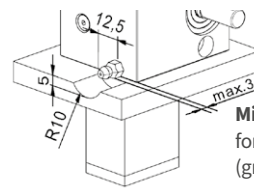


Screw jacks 2,5 kN

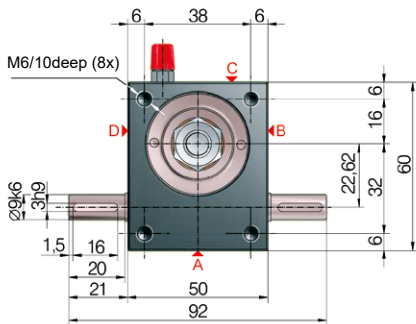
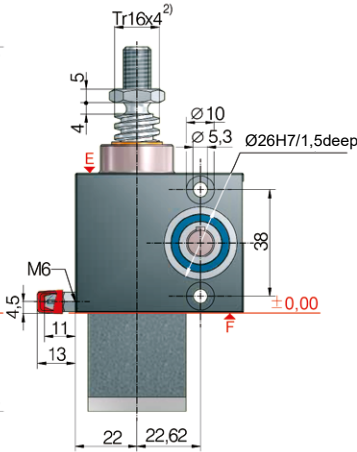
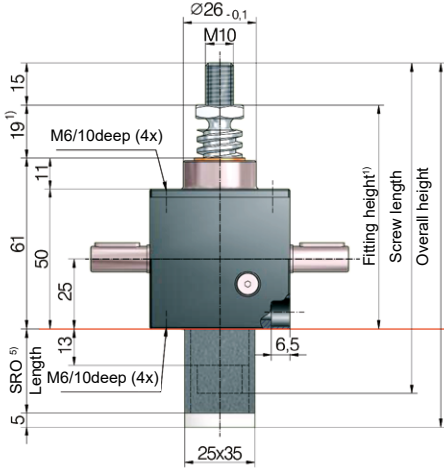
GSZ-2-S-TR | Trapezoidal screw jacks | translating screw



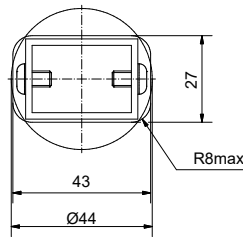
Screw lubrication during operation



Minimum space requirement for greasing the screw (grease gun)



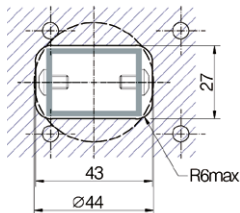
Opening for protective tube SRO:



⁵⁾ Protective tube length SRO with Tr 16x4-Screw

Without escape/rotation protection	47 + stroke
Escape/rotation protection	62 + stroke
Rotation protection, with limit switch set ES	117 + stroke
Rotation protection and ESSET and KAR*	139 + stroke

*with bellows fixing ring FBR

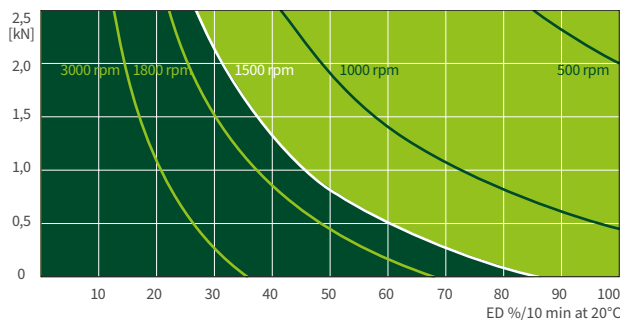


Code	Gearbox (series)	Size	Version (variant)	Ratio	Screw	Stroke per drive shaft rotation
GSZ-2-SN	GSZ	2,5	S (translating screw)	N (normal) 4:1	Tr 16x4	1,00 mm
GSZ-2-SL				L (low) 16:1		0,25 mm

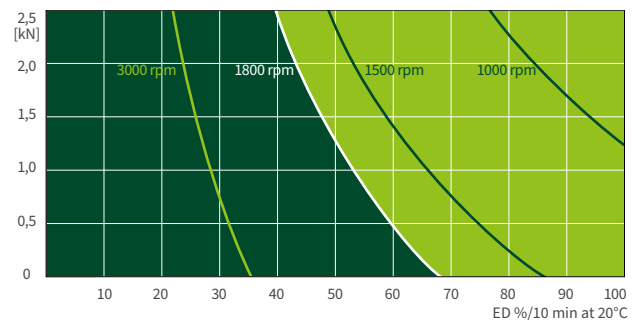
2,5 kN

Duty cycle thermal limit (S + R)

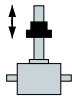
Ratio „N“ (4:1)



Ratio „L“ (16:1)

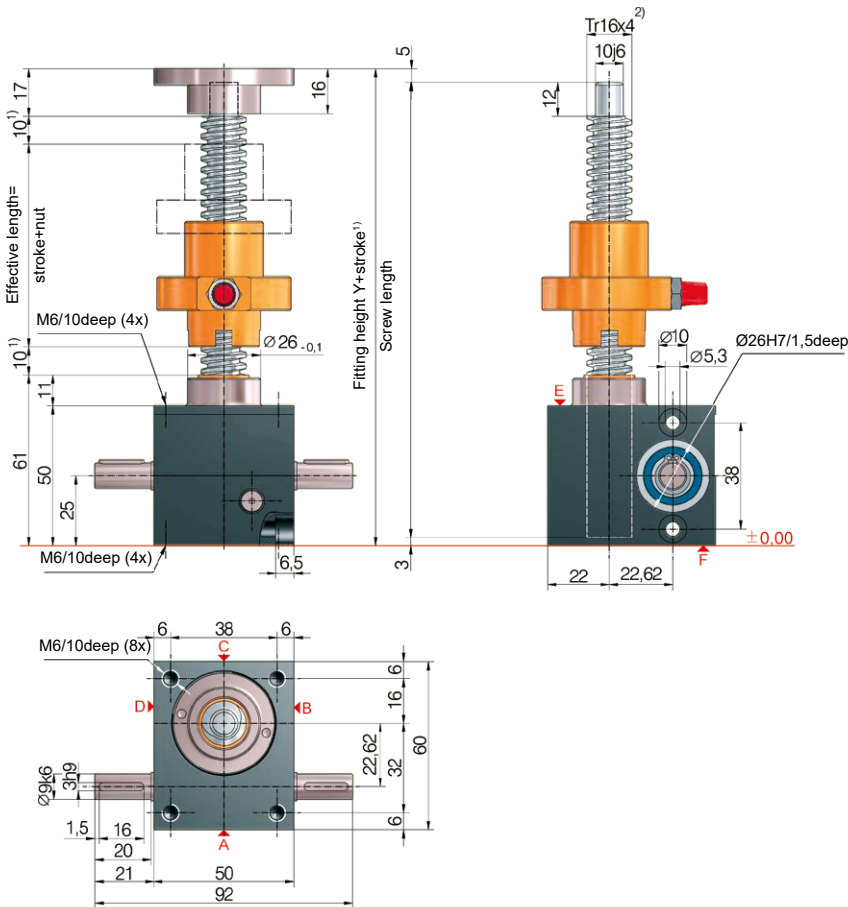


These curves are for guidance under standard industrial conditions (ambient temperature 20°C etc.) and correct maintenance (lubrication etc.). They are based on the ZIMM standard trapezoidal thread Tr 16x4. The operation cycles can be many times longer, when using ball screws.



R Screw jacks 2,5 kN

GSZ-2-R-TR | Trapezoidal screw jacks | rotating screw



Code	Gearbox (series)	Size	Version (variant)	Ratio	Screw	Stroke per drive shaft rotation
GSZ-2-RN	GSZ	2,5	R (rotating screw)	N (normal) 4:1	Tr 16x4	1,00 mm
GSZ-2-RL				L (low) 16:1		0,25 mm

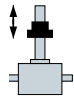
Technical data series GSZ-2-S / GSZ-2-R

max. compressive/tensile force, static: 2,5 kN (250 kg)
max. compressive/tensile force, dyn: see duty cycle curves
Input speed: 1500 rpm / max. 3000 rpm (depending on the load and duty cycle)
Screw size standard: Tr 16x4²
Gear ratio: 4:1 (N) / 16:1 (L)
Housing material: aluminium, corrosion-resistant
Worm shaft: steel, case-hardened, ground
Weight of screw jack body: 0,6 kg
Weight of screw/m: 1,21 kg
Gearbox lubrication: synthetic fluid grease
Screw lubrication: grease lubrication
Gearbox operating temperature: max. 60°C, higher on request
Moment of inertia: N: 0,047 kg cm² / L: 0,031 kg cm²
Input torque (at 1500 rpm): max. 1,4 Nm (N) / max. 0,5 Nm (L)
Drive-through torque: max. 9 Nm
Drive torque M_G (Nm): F (kN) x 0,52^{3,4} (N-Normal)
 F (kN) x 0,15^{3,4} (L-Low)
Breakaway torque: Drive torque M_G x 1,5

Make a plan to keep a safe distance of at least 10 mm between gearbox and nut or between nut and threaded end!
 Detailed calculation of the fitting dimensions (bellows, screw, protective tube...) can be conveniently determined with our online configurator: www.zimm.com

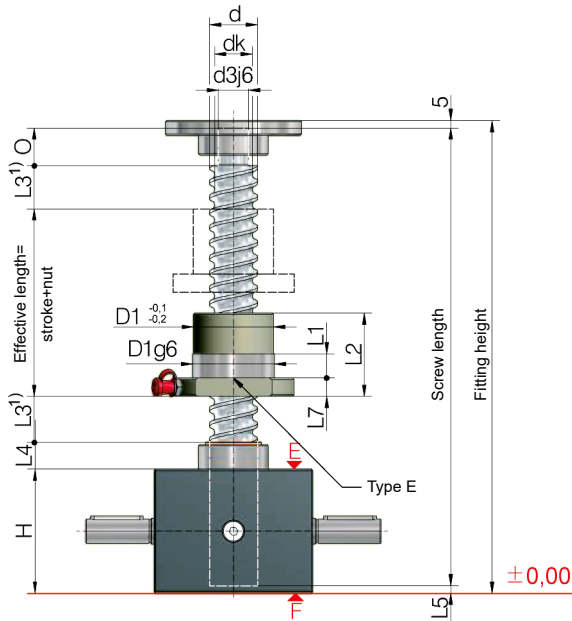
Important information:

- 1) for bellows extension please check e.g. by online configurator
- 2) Tr 16x4 is standard, also available: double-pitch, INOX, left-handed, increased screw Tr 18x4 (only for the R-Version)
- 3) factor includes efficiency, ratio and 30% safety
- 4) for a 4 mm screw pitch
- 5) to calculate the length of our protective tube length SRO simply use our online configurator: www.zimm.com



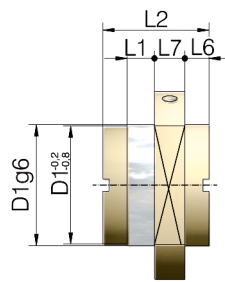
R Screw jacks 2,5 kN

GSZ-2-R-KGT | Ball screw jacks | rotating screw

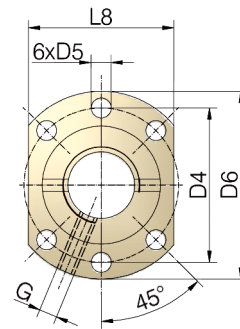


Position of the flange nut:

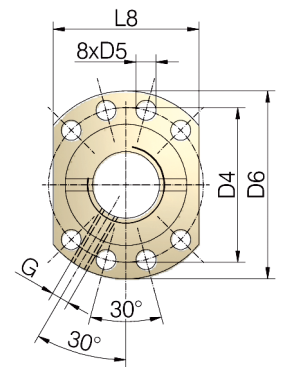
G = flange gearbox side (as shown)
S = flange screw side



Type S



Hole pattern 1
to DIN 69051



Hole pattern 2
to DIN 69051

Screw jacks	KGT Screw		Stroke per drive revolution		KGT Load rating kN		Nut		Lubrication hole	Axial play max ³⁾
	ØxP	RN	RL	dyn. C ²⁾	stat. Co=C _{oa}	Type	Hole pattern	G	mm	
GSZ-2	16x5	1,25	0,31	10,1	12	E	1	M6	0,06	
	16x10	2,5	0,63	11,1	12,9	E	1	M6	0,06	

Screw jacks	KGT Screw		Dimensions mm														
	ØxP	d	dk	d3j6	O	H	D1	D4	D5	D6	L1	L2	L3 ¹⁾	L4	L5	L6	L7
GSZ-2	16x5	15,5	12,9	10	12	50	28	38	5,5	48	10	42	15	11	3	10	40
	16x10	15,4	13	10	12	50	28	38	5,5	48	10	55	25	11	3	10	40

Technical data series GSZ-2-R

max. compressive/tensile force, static: 2,5 kN (250 kg)
Input speed: 1500 rpm / max. 3000 rpm
Gearbox operating temperature: max. 60°C, higher on request
Moment of inertia: N: 0,047 kg cm² / L: 0,031 kg cm²
Input torque (at 1500 rpm): max. 1,4 Nm (N) / max. 0,5 Nm (L)
Drive-through torque: max. 9 Nm
Gear ratio: 4:1 (Normal) / 16:1 (Low)
Housing material: aluminium, corrosion-resistant
Worm shaft: steel, case-hardened, ground
Weight of screw jack body: 0,6 kg
Gearbox / Screw lubrication: synthetic gear oil / grease lubrication

Because of the lack of friction, a holding brake is necessary: a motor brake or a spring pressure brake is required.
Screw: 1.1213 (Cf 53), induction hardened and polished.
Pitch accuracy: 0,05 mm / 300 mm

1) Depending on the control system and drive, the dimension L3 and L4 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 ISO 3408.
 3) Reduced play 0,02 mm available on request.

Bevel gearboxes 2,5 kN

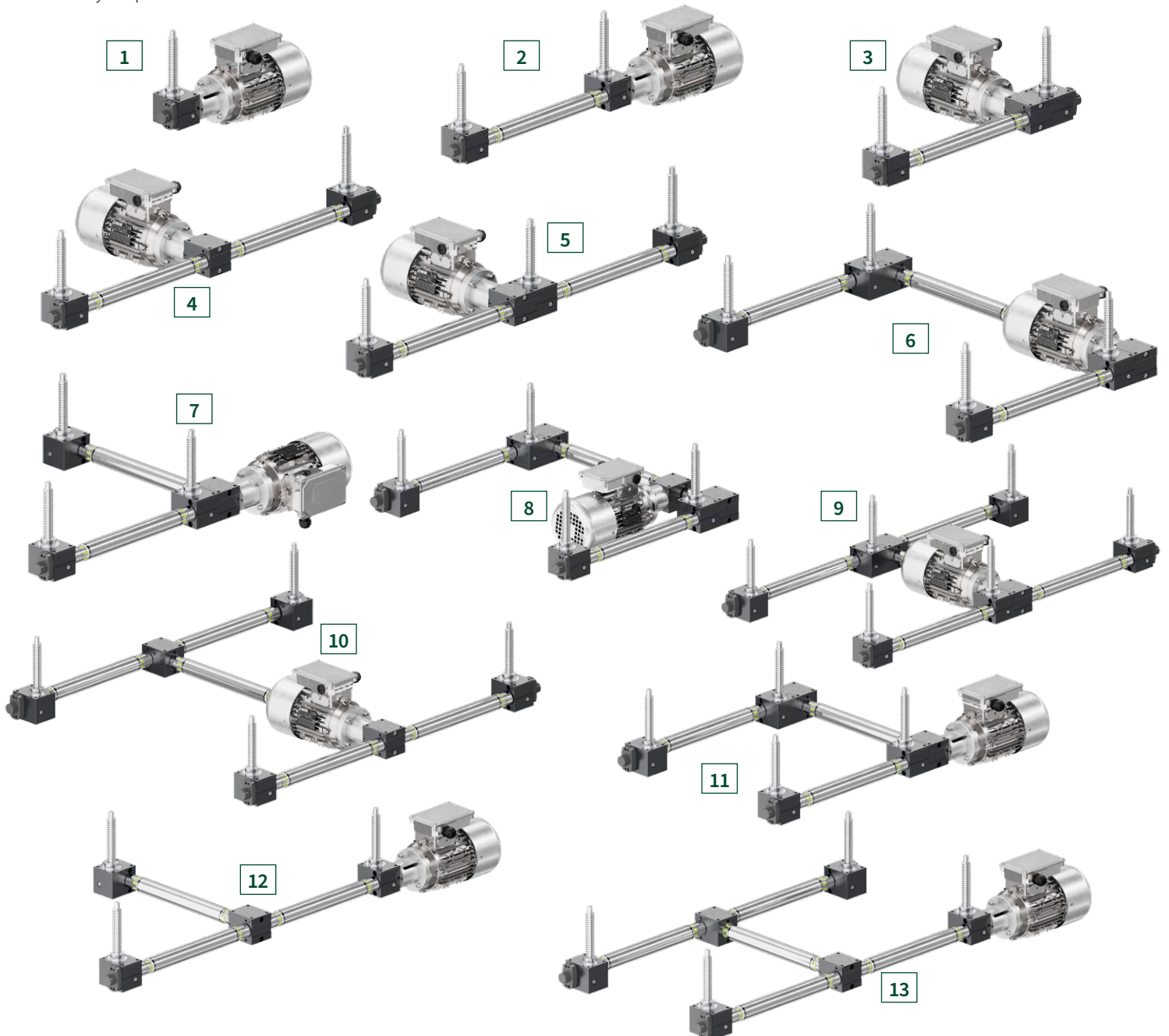
KSZ-2

The KSZ-2 is a bolt-on gearbox and therefore where larger bevel gearboxes such as the KSZ-H series are used the layouts will be different.

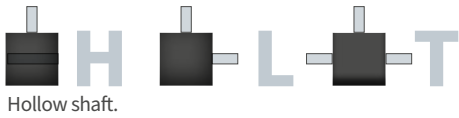


Layout examples

Other layouts possible.



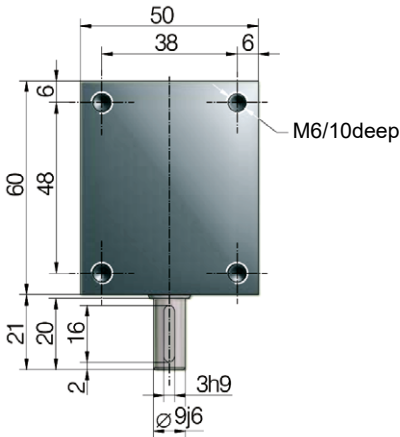
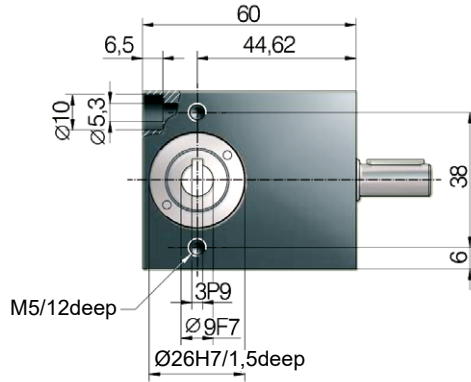
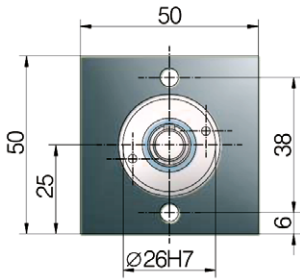
Spiral-toothed



Hollow shaft.

Bevel gearboxes 2,5 kN

KSZ-2



Bolt-on, shaft-mounted gearbox
The KSZ-2 has a continuous hollow shaft. Thus it can easily be bolted on to the GSZ-2 screw jack gearbox and requires very little space.



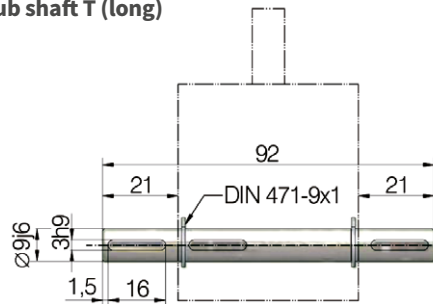
Spiral-toothed
Spiral toothing ensures high torque and low running noise

Technical data KSZ-2

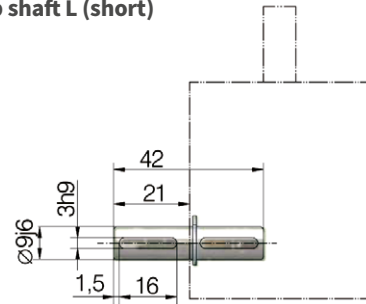
max. compressive/tensile force, static:	2,5 kN (250 kg)
Input speed:	1500 rpm / max. 3000 rpm
Screw size standard GSZ-2:	Tr 16x4 ² (GSZ-2)
Gear ratio:	1:1
Housing material:	aluminium, hard anodised
Worm shaft:	steel, case-hardened, ground
Weight of screw jack body:	0,45 kg
Screw lubrication:	gear oil
Duty cycle:	40%
max. torque:	3 Nm
Drive-through torque:	max. 4,2 Nm



Stub shaft T (long)



Stub shaft L (short)



Note

Fitting a stub shaft allows the KSZ-2 to be used as a conventional right-angle gearbox.

Your enquiry
is our drive



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