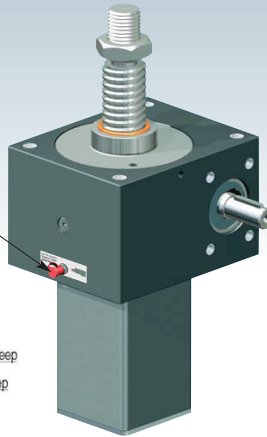
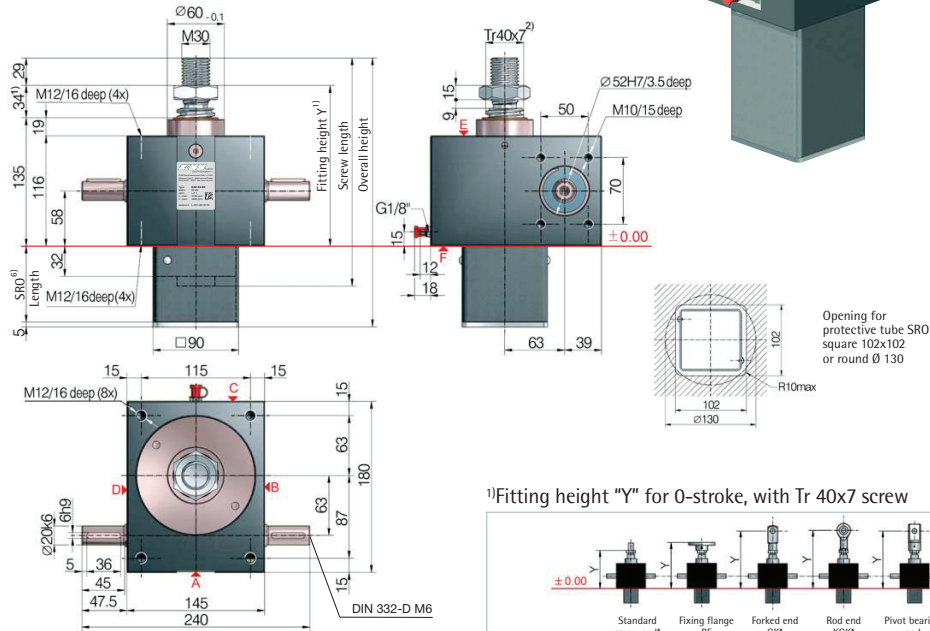




UNIQUE:  
Screw lubrication  
during operation



GSZ-50-S translating screw 50 kN



1) Fitting height "Y" for 0-stroke, with Tr 40x7 screw

End Configuration	Y
Standard screw end*	±0.00
Fixing flange BF	Y
Forked end GK*	Y
Rod end KKG*	Y
Pivot bearing end SLK	Y

Bel lows FB	Y	Y	Y	Y	Y
without bellows FB	169	199	289	279	261
Z-50-FB-390	264	248	384	374	310
Z-50-FB-600	251	235	371	361	297
Z-50-FB-1000	309	293	429	419	355
Z-50-FB-1200	304	288	424	414	350
Z-50-FB-1500	359	343	479	469	405

2) Protective tube length SRO with Tr 40x7 screw

Without escape/rotation protection	Escape/rotation protection	Rotation protection, with limit switch set ES	Rotation protection with ES and KAR*
62+stroke	92+stroke	144+stroke	169+stroke

\*Hinged bearing plate KAR, fitted on face F (below).

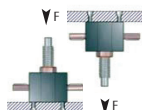
\*with bellows fixing ring Z-50-FBR

Standard ratios

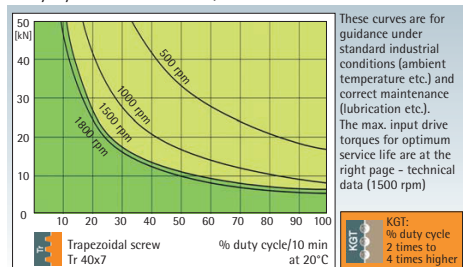
Type	Version	Speed	Standard screw <sup>2)</sup>	i	Stroke per drive shaft rotation <sup>3)</sup>
GSZ-50-SN	Translating	Normal	Tr 40x7	7:1	1.00 mm
GSZ-50-SL	screw	Low speed		28:1	0.25 mm
GSZ-50-RN	Rotating	Normal	Tr 40x7	7:1	1.00 mm
GSZ-50-RL	screw	Low speed		28:1	0.25 mm

Screw jack mounting

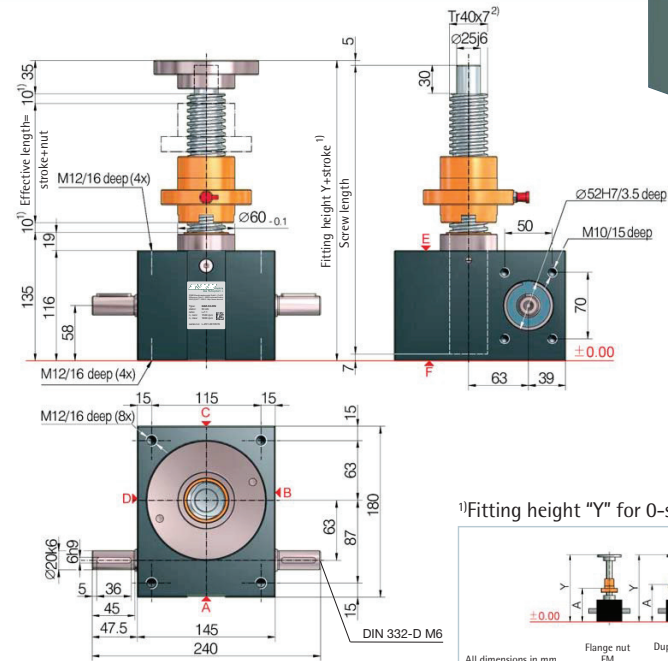
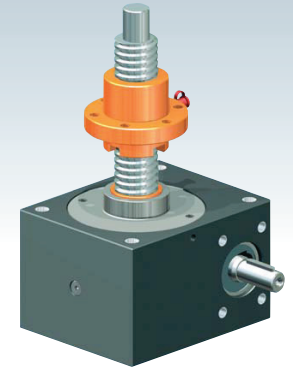
max. load: 50 kN compressive and tensile load  
Screw: M12, strength class 8.8  
Screw-in depth: 12 to 17 mm  
Tightening torque: 38 Nm  
Screw locking: with Loctite 243



Duty cycle thermal limit, for S+R



GSZ-50-R rotating screw 50 kN



1) Fitting height "Y" for 0-stroke, with Tr 40x7 screw

End Configuration	Y/A	Y/A	Y/A	Y/A	Y/A
Standard screw end*	±0.00				
Flange nut FM	Y/A				
Duplex nut DM	Y/A	Y/A			
Duplex nut DM with SIFA	Y/A	Y/A	Y/A		
Self-aligning nut PM	Y/A	Y/A	Y/A	Y/A	
Greaseless nut FDM	Y/A	Y/A	Y/A	Y/A	Y/A

Bel lows FB	Y/A	Y/A	Y/A	Y/A	Y/A
without bellows FB	256/161	260/179	323/242	319/244	275/195
2x Z-50-FB-390	-	403/252	462/311	462/317	420/270
2x Z-50-FB-600	-	377/239	436/298	436/304	394/257
2x Z-50-FB-1000	-	493/297	552/356	552/362	510/315
2x Z-50-FB-1200	-	483/292	542/351	542/357	500/310
2x Z-50-FB-1500	-	593/347	652/406	652/412	610/365

Detailed instructions for determining the length can be found in Section 8

50 kN

Technical data series GSZ-50-S / GSZ-50-R

max. compressive/tensile force, static: - 50 kN (5 t)  
max. compressive/tensile force, dynamic: - see duty cycle curves  
Nominal speed: - 1500 rpm  
max. drive shaft speed: - 1800 rpm (depending on the load and duty cycle)  
Screw size standard: - Tr 40x7<sup>2)</sup>  
Gear ratio: - 7:1 (N) / 28:1 (L)  
Housing material: - GGG-50, corrosion-resistant  
Worm shaft: - steel, case-hardened, ground  
Weight of screw jack body: - 15 kg  
Weight of screw/m: - 8 kg  
Gearbox lubrication: - synthetic fluid grease  
Screw lubrication: - grease lubrication  
Gearbox operating temperature: - max. 60°C, higher on request  
Moment of inertia: - N: 6.40 kg cm<sup>2</sup> / L: 2.53 kg cm<sup>2</sup>  
Input torque (at 1500 rpm): - max. 31.5 Nm (N) / max. 10.4 Nm (L)  
Drive-through torque: - max. 260 Nm

Drive torque M<sub>0</sub> (Nm): - F (kN) x 0.68<sup>3)</sup> + M<sub>0</sub> (N-normal)  
- F (kN) x 0.23<sup>3)</sup> + M<sub>0</sub> (L-low speed)  
Breakaway torque: - Drive torque M<sub>0</sub> x 1.5  
Idling torque<sup>4)</sup> M<sub>0</sub> (Nm): - 0.76 (N-normal) / 0.54 (L-low speed)

Between gearbox and nut or nut and end of thread, provide for a safety distance of (minimum) 10 mm!  
See Section 7 for the checklist.

**Important information**  
1) - extension if a bellows or spiral spring is fitted: see the table or Section 8  
2) - Tr 40x7 is standard, also available: double-pitch, stainless steel, left-handed, increased screw Tr 55x9 (only for the R version)  
3) - factor includes efficiency, ratio and 30% safety  
4) - at 20°C, can be higher when new  
5) - for a 7 mm screw pitch