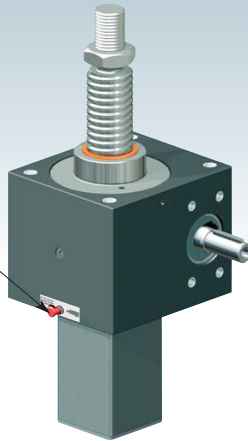
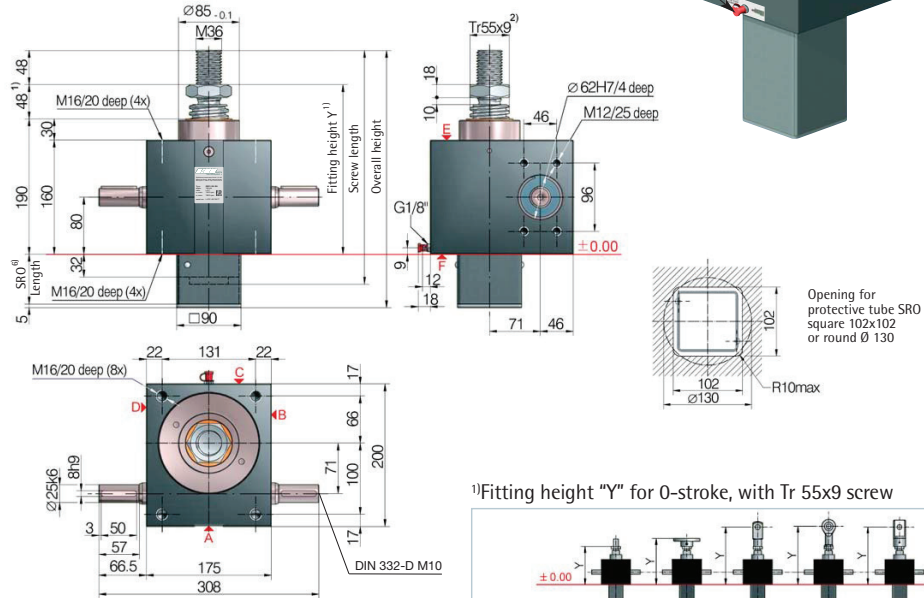




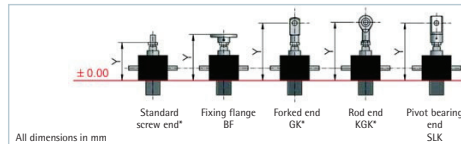
UNIQUE:
Screw lubrication
during operation



GSZ-100-S translating screw 100 kN



¹⁾Fitting height "Y" for 0-stroke, with Tr 55x9 screw



Bel lows FB	Y	Y	Y	Y	Y
without bellows FB	238	288	382	380	346
Z-100-FB-285	311	313	455	453	371
Z-100-FB-600	308	310	452	450	368
Z-100-FB-1000	366	368	510	508	426
Z-100-FB-1500	416	418	560	558	476

*with bellows fixing ring Z-100-FBR

²⁾Protective tube length SRO with Tr 55x9 screw

Without escape/rotation protection	Escape/rotation protection	Rotation protection with limit switch set ES	Rotation protection with ES and KAR*
82+stroke	112+stroke	144+stroke	189+stroke

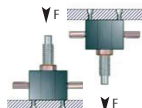
*Hinged bearing plate KAR, fitted on face F (below)

Standard ratios

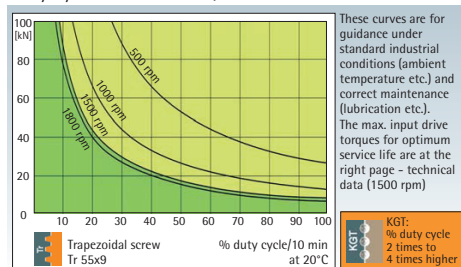
Type	Version	Speed	Standard screw ²⁾	i	Stroke per drive shaft rotation ³⁾
GSZ-100-SN	Translating	Normal	Tr 55x9	9:1	1.00 mm
GSZ-100-SL	screw	Low speed		36:1	0.25 mm
GSZ-100-RN	Rotating	Normal	Tr 55x9	9:1	1.00 mm
GSZ-100-RL	screw	Low speed		36:1	0.25 mm

Screw jack mounting

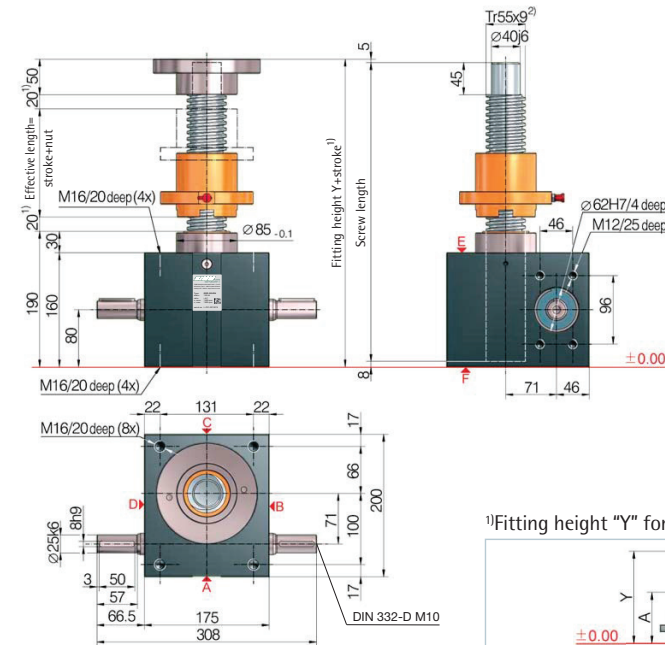
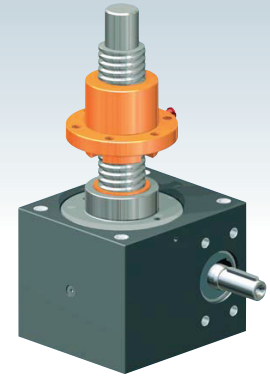
max. load: 100 kN compressive and tensile load
Screw: M16, strength class 8.8
Screw-in depth: 16 to 20 mm
Tightening torque: 82 Nm
Screw locking: with Loctite 243



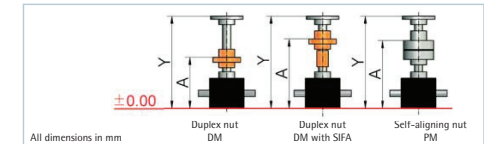
Duty cycle thermal limit, for S+R



GSZ-100-R rotating screw 100 kN



¹⁾Fitting height "Y" for 0-stroke, with Tr 55x9 screw



Bel lows FB	Y/A	Y/A	Y/A
without bellows FB	370/246	453/329	470/355
2x Z-100-FB-285	478/299	556/377	578/408
2x Z-100-FB-600	472/296	550/374	572/405
2x Z-100-FB-1000	588/354	666/432	688/463
2x Z-100-FB-1500	688/404	766/482	788/513

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

100 kN

Technical data series GSZ-100-S / GSZ-100-R

max. compressive/tensile force, static - 100 kN (10 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 55x9²⁾
Gear ratio - 9:1 (N) / 36:1 (L)
Housing material - GGG-50, corrosion-resistant
Worm shaft - steel, case-hardened, ground
Weight of screw jack body - 30 kg
Weight of screw/m - 15.7 kg
Gearbox lubrication - synthetic fluid grease
Screw lubrication - grease lubrication
Gearbox operating temperature - max. 60°C, higher on request
Moment of inertia - N: 12.53 kg cm² / L: 4.75 kg cm²
Input torque (at 1500 rpm) - max. 53.4 Nm (N) / max. 13.5 Nm (L)
Drive-through torque - max. 540 Nm

Drive torque M₀ (Nm) - F (kN) x 0.72³⁾ + M₀ (N-normal)
- F (kN) x 0.23³⁾ + M₀ (L-low speed)
Breakaway torque - Drive torque M₀ x 1.5
Idling torque⁴⁾ M₀ (Nm) - 1.68 (N-normal) / 1.02 (L-low speed)
Between gearbox and nut or nut and end of thread, provide for a safety distance of (minimum) 20 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 55x9 is standard, also available: double-pitch, stainless steel, left-handed, increased screw Tr 60x9 (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 9 mm screw pitch