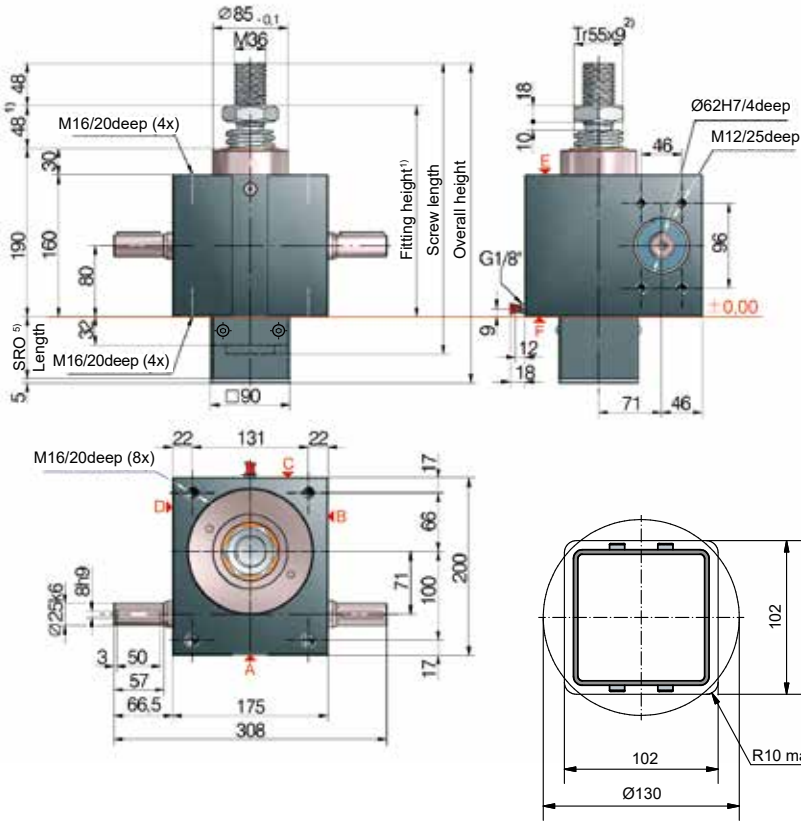


**S 100 kN**  
**GSZ-100-S | translating screw**



**5) Protective tube length SRO with Tr 55x9-Screw**

Without escape/rotation protection	82 + stroke
Escape/rotation protection	112 + stroke
Rotation protection, with limit switch set ESSET	144 + stroke
Rotation protection and ESSET and KAR*	169 + stroke

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

Opening for protective tube square and round

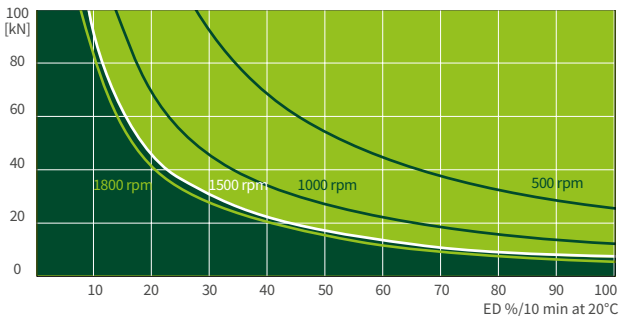
**Standard configuration**

Code	Gearbox (series)	Size	Version (variant)	Ratio	Screw	Stroke per drive shaft rotation
GSZ-100-SN	GSZ	100	S (translating screw)	N (normal) 9:1	Tr 55x9	1,00 mm
GSZ-100-SL				L (low) 36:1		0,25 mm

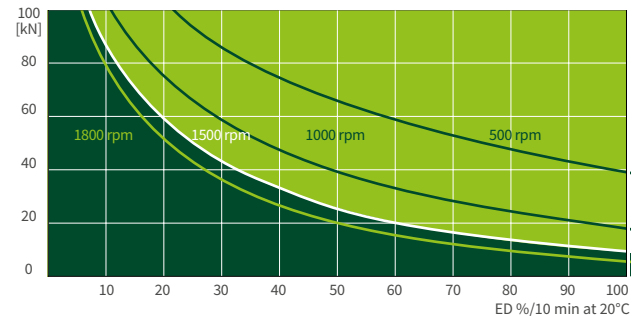
# 100 kN

**Duty cycle thermal limit (S + R)**

Ratio „N“ (9:1)



Ratio „L“ (36:1)

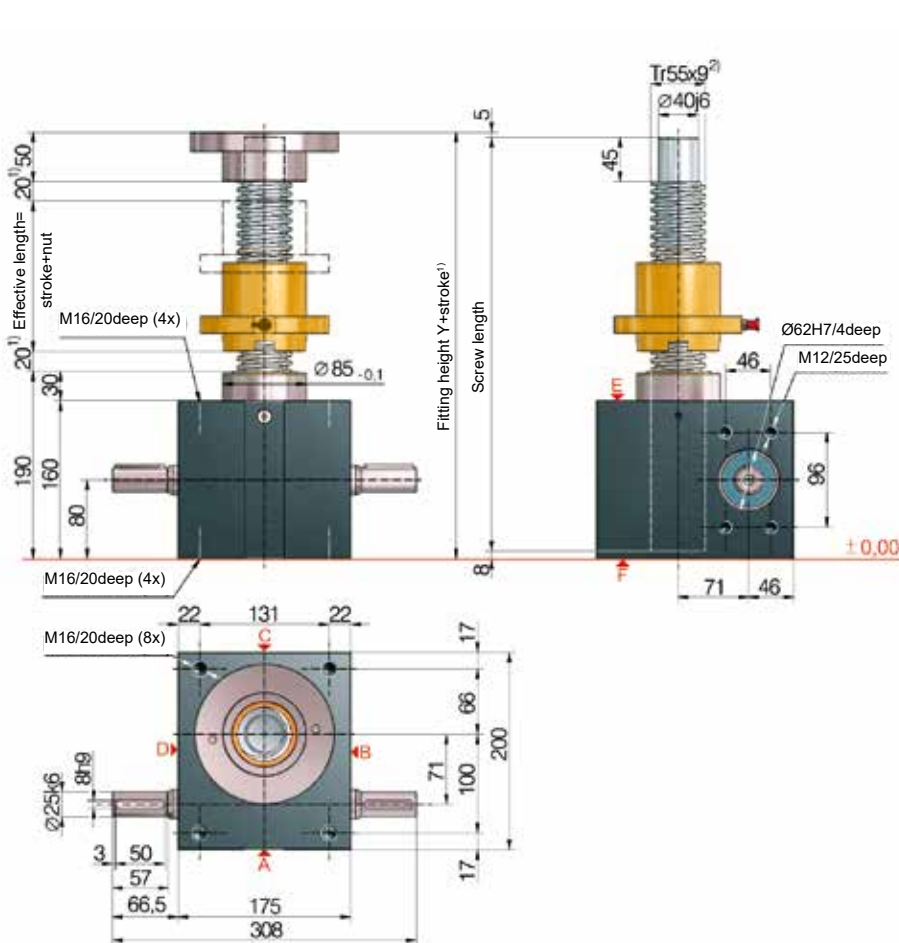


These curves are for guidance under standard industrial conditions (ambient temperature 20°C etc.) and correct maintenance (lubrication etc.). They are based on the ZIMM standard trapezoidal thread Tr 55x9. With the use of a ball screw, the operation cycles can be many times longer.



# R 100 kN

## GSZ-100-R | rotating screw



### Standard configuration

Code	Gearbox (series)	Size	Version (variant)	Ratio	Screw	Stroke per drive shaft rotation
GSZ-100-RN	GSZ	100	R (rotating screw)	N (normal) 9:1	Tr 55x9	1,00 mm
GSZ-100-RL				L (low) 36:1		0,25 mm

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

max. compressive/tensile force, static:	100 kN (10 t)
max. compressive/tensile force, dyn.:	see duty cycle curves
Input speed:	1500 rpm / max. 1800 rpm (depending on the load and duty cycle)
Screw size standard:	Tr 55x9 <sup>2)</sup>
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: 4,66 kg cm <sup>2</sup> / L: 3,38 kg cm <sup>2</sup>
Input torque (at 1500 rpm):	max. 53,4 Nm (N) / max. 13,5 Nm (L)
Drive-through torque:	max. 540 Nm
Drive torque M <sub>G</sub> (Nm):	F (kN) x 0,72 <sup>3,4)</sup> (N-Normal) F (kN) x 0,23 <sup>3,4)</sup> (L-Low)
Breakaway torque:	Drive torque M <sub>G</sub> x 1,5

Make a plan to keep a safe distance of at least 20 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](http://www.zimm.com)

#### Important information:

- 1) for bellows extension please check e.g. by online configurator.
- 2) Tr 55x9 is standard, also available: double-pitch, INOX, left-handed, increased screw Tr 60x9 (only for the R-Version)
- 3) factor includes efficiency, ratio and 30% safety
- 4) for a 9 mm screw pitch
- 5) to calculate the length of our protective tube length SRO simply use our online configurator: [www.zimm.com](http://www.zimm.com)