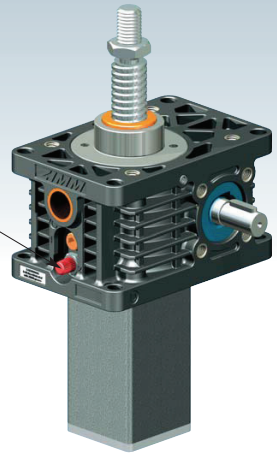
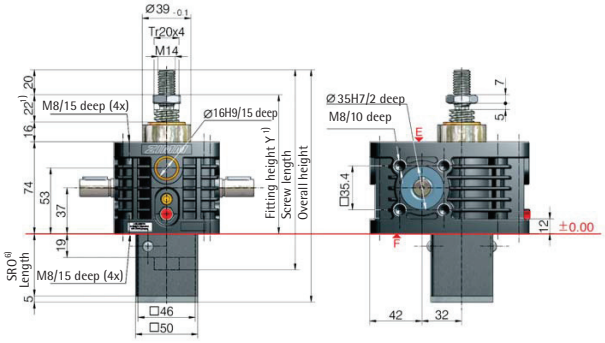
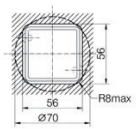
Trapezoidal screw Tr

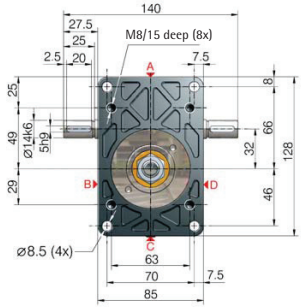



## Z-10-S translating screw 10 kN




Opening for protective tube SRO square 56x56 or round Ø 70

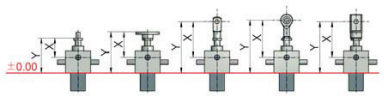



### 6)Protective tube length SRO with Tr 20x4 screw

| Without escape/ rotation protection | Escape/ rotation protection | Rotation protection, with limit switch set ES | Rotation protection with ES and KAR* |
|---|---|---|---|
| 49+stroke | 69+stroke | 121+stroke | 141+stroke |

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

### 1)Fitting height for 0-stroke, with Tr 20x4 screw




All dimensions in mm

| Bellows FB | X/Y | X/Y | X/Y | X/Y | X/Y |
|---|---|---|---|---|---|
| without bellows FB | 59/112 | 80/133 | 115/168 | 120/173 | 115/168 |
| Z-10-FB-340 | 140/193 | 136/189 | 196/249 | 201/254 | 171/224 |
| Z-10-FB-700 | 160/213 | 156/209 | 216/269 | 221/274 | 191/244 |
| Z-10-FB-1000 | 210/263 | 206/259 | 266/319 | 271/324 | 241/294 |

*with bellows fixing ring Z-10-FBR

### Standard ratios

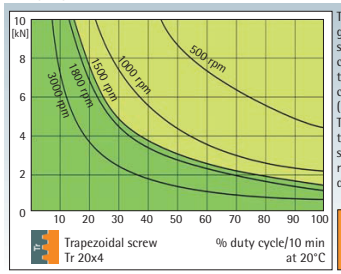
| Type | Version | Speed | Standard screw2) | i | Stroke per drive shaft rotation5) |
|---|---|---|---|---|---|
| Z-10-SN | Translating | Normal | Tr 20x4 | 4:1 | 1.00 mm |
| Z-10-SL | screw | Low speed | | 16:1 | 0.25 mm |
| Z-10-RN | Rotating | Normal | Tr 20x4 | 4:1 | 1.00 mm |
| Z-10-RL | screw | Low speed | | 16:1 | 0.25 mm |

### Screw jack mounting


Full static nominal load

max. load: see Section 8

### Duty cycle thermal limit, for S+R



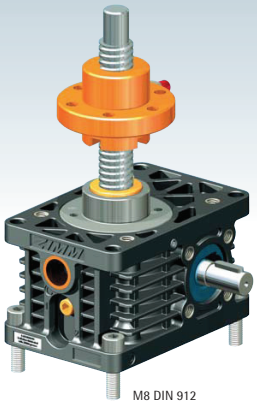

These curves are for guidance under standard industrial conditions (ambient temperature etc.) and correct maintenance (lubrication etc.). The max. input drive torques for optimum service life are at the right page - technical data (1500 rpm)

KGT: % duty cycle 2 times to 4 times higher

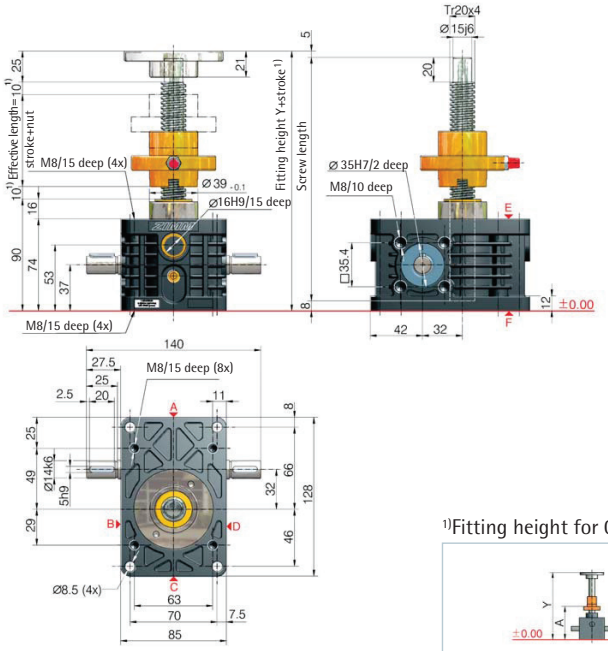




Trapezoidal screw Tr

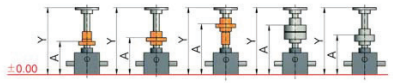



## Z-10-R rotating screw 10 kN




10 kN

### 1)Fitting height for 0-stroke, with Tr 20x4 screw




All dimensions in mm

| Bellows FB | Y/A | Y/A | Y/A | Y/A | Y/A |
|---|---|---|---|---|---|
| without bellows FB | 179/112 | 180/125 | 219/164 | 218/159 | 188/133 |
| 2x Z-10-FB-340 | – | 314/193 | 350/229 | 352/227 | 322/201 |
| 2x Z-10-FB-700 | – | 354/213 | 390/249 | 392/247 | 362/221 |
| 2x Z-10-FB-1000 | – | 454/263 | 490/299 | 492/297 | 462/271 |

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

### Technical data series Z-10-S / Z-10-R

| | |
|---|---|
| max. compressive/tensile force, static | - 10 kN (1 t) |
| max. compressive/tensile force, dynamic | - see duty cycle curves |
| Nominal speed | - 1500 rpm |
| max. drive shaft speed | - 3000 rpm (depending on the load and duty cycle) |
| Screw size standard | - Tr 20x4[2] |
| Gear ratio | - 4:1 (N) / 16:1 (L) |
| Housing material | - aluminium, corrosion-resistant |
| Worm shaft | - steel, case-hardened, ground |
| Weight of screw jack body | - 2.1 kg |
| Weight of screw/m | - 2 kg |
| Gearbox lubrication | - synthetic fluid grease |
| Screw lubrication | - grease lubrication |
| Gearbox operating temperature | - max. 60°C, higher on request |
| Moment of inertia | - N: 0.641 kg cm² / L: 0.271 kg cm² |
| Input torque (at 1500 rpm) | - max. 13.5 Nm (N) / max. 7.5 Nm (L) |
| Drive-through torque | - max. 57 Nm |
| Drive torque $M_0$ (Nm) | - F (kN) x 0.64[3][5] + $M_L$ (N-normal)<br>- F (kN) x 0.20[3][5] + $M_L$ (L-low speed) |
| Breakaway torque | - Drive torque $M_0$ x 1.5 |
| Idling torque[4] $M_L$ (Nm) | - 0.26 (N-normal) / 0.16 (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 20x4 is standard, also available: double-pitch, stainless steel, left-handed, increased screw Tr 30x6 (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 4 mm screw pitch