# NSE 10-RN/RL – Specifications
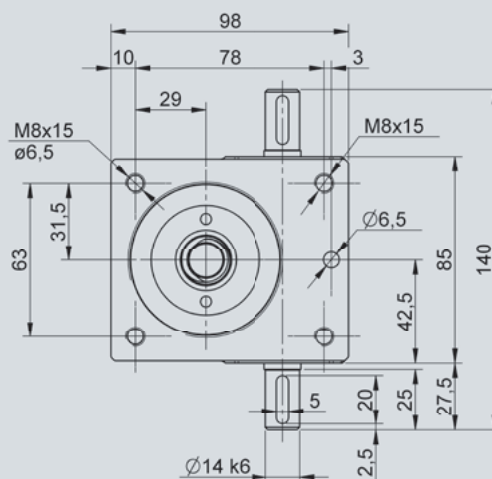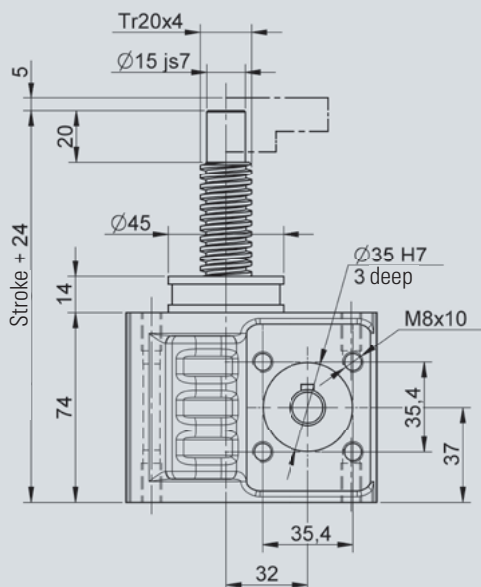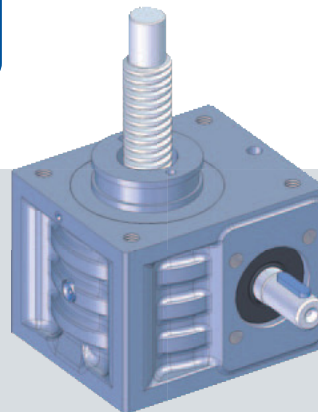## Screw jack with rotating screw

## NSE10-RN / RL





The innovative modular screw jack system from Nozag, allows for perfect drive solutions from low cost standard components. The kit is subject to the highest standards of functionality, quality and design. With little effort, very much can be moved and still, the investment, maintenance and operating costs are kept within narrow limits.

Screw jacks developed and produced by Nozag, solve these tasks in a simple and cost efficient manner.

### Specifications
Maximum lifting capacity:  10 kN (1000 kg)
Maximum driveshaft speed:  1400 min$^{-1}$ (higher on request)
Spindel:  TR 20/4 (standard)
TR 30/6 (optional, strengthened version)

### Material
Material (housing):  Aluminium
Lubrication:  Grease

### Weight
Screw jack weight:  1.92 kg (with grease/without spindle)
Spindle weight:  2.00 kg/m

| | Basis | Options |
|---|---|---|
| **Spindle length** | | |
| Stroke: | ................ | |
| Safety clearance (spindle pitch) | + 4 | |
| Basis length | + 64 | |
| Flange nut (FM) | | + 44 |
| Duplex nut (DMN) | | + 44 |
| Safety nut (SFM) | | + 16 |
| Safety clearance (Spindelsteigung) | + 4 | |
| Pin | | + 20 |

Compressed length of bellows above nut  ................

Compressed length of bellows beneath nut  ................

**Overall length of spindle**  =  ............... + ............... = _____

### Compressed length of bellows

$^{Stroke}/_{24.5}$ = ......................... x 3,5 = ...............................
(round number)
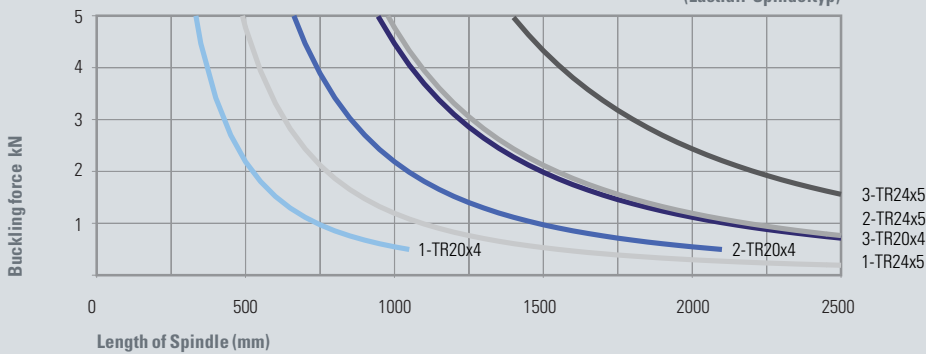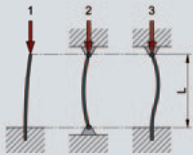
### Features

| Type | Ratio | Stroke per revolution | Driving torque[1] | Max torque | Drive through torque[2] |
|---|---|---|---|---|---|
| | i | mm | Nm | Nm | Nm |
| **NSE10-RN** | 4:1 | 1.00 | F(kN) x 0.46 + 0.26 | 10.50 | 42 |
| **NSE10-RL** | 16:1 | 0.25 | F(kN) x 0.14 + 0.16 | 4.20 | 42 |
| **NSE10-RN[3]** | 4:1 | 1.25 | F(kN) x 0.56 + 0.26 | 10.50 | 42 |
| **NSE10-RL[3]** | 16:1 | 0.31 | F(kN) x 0.18 + 0.16 | 4.20 | 42 |

1) Factor includes efficiency, ratio and safety 1

2) By more that six gearboxes in series, please contact our technicians

3) Optional, strengthened version TR24/5

## Buckling



Buckling force kN (y-axis): 5, 4, 3, 2, 1

Length of Spindle (mm) (x-axis): 0, 500, 1000, 1500, 2000, 2500

(Lastfall-Spindeltyp)

1-TR20x4
2-TR20x4
3-TR24x5
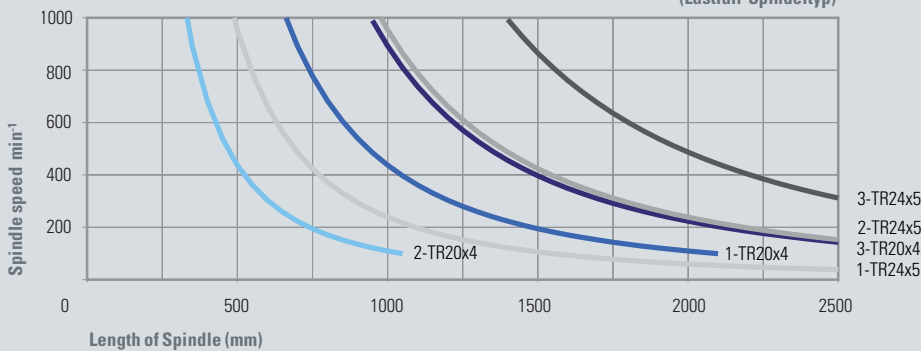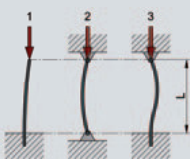2-TR24x5
3-TR20x4
1-TR24x5

**Load case**



Determine, In the diagram (safety 1), with the corresponding load case (1 / 2 / 3), the intersection of the buckling force F and free spindle length L. The intersection point must lie below the boundary line of the chosen spindle diameter. If not, a bigger spindle, respectively, the next larger gearbox is to be selected.

## Critical speed



Spindle speed min⁻¹ (y-axis): 1000, 800, 600, 400, 200

Length of Spindle (mm) (x-axis): 0, 500, 1000, 1500, 2000, 2500

(Lastfall-Spindeltyp)

2-TR20x4
1-TR20x4
3-TR24x5
2-TR24x5
3-TR20x4
1-TR24x5

**Load case**



Determine, In the diagram (safety 1), with the corresponding load case (1 / 2 / 3), the intersection of the buckling force F and free spindle length L. The intersection point must lie below the boundary line of the chosen spindle diameter. If not, a bigger spindle, respectively, the next larger gearbox is to be selected.

We reserve the right on printing and dimension errors, as well as technical changes and improvements.
**CAD files can be downloaded at www.nozag.ch.**

## Attachments



1   Spindle
2   Flange nut
3   Duplex nut
4   Pendulum nut adapter
5   Carrier flange
6   Flange bearing
7   Suspension adapter for gearboxes
8   Suspension adapter for flange nut
9   Shaft cover
10  Bellows
11  Spiral spring cover
12  Lubricant dispenser
13  Hand wheel

## Drive components



1   Coupling
2   Clamp coupling
3   Connecting shaft
4   Pedestal bearing
5   Bevel gearboxes

## Motor mounting



1   Motor adapter
2   Motor/brake motor
3   Rotary pulse encoder
4   Spring brake

Refer to the catalog, program system 2010, for attachments, drive components and motor mountings.

## Available on request:

> Double-threaded trapezoidal screw
> Ballscrew
> Stainlesssteel spindle (INOX)
> Surface-treated spindle