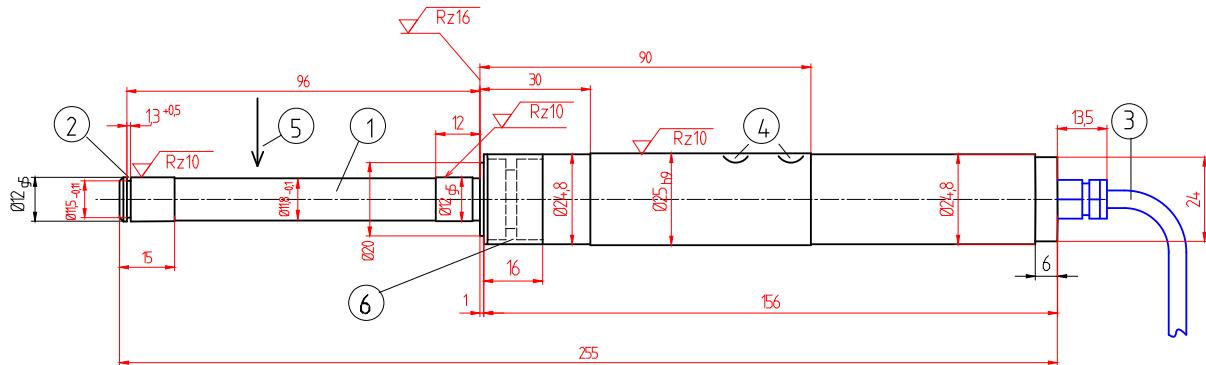


Technical data *Radial Force Sensor M 1391-HA*

Dimensions Radial Force Sensor Series M 1391-HA:



- 1 = Shaft (Journal-bearing)
- 2 = Seegerring A 12
- 3 = Cable
- 4 = Red marks
- 5 = Load in measuring direction
- 6 = Sealing

Type M 1391-HA is with built-in amplifier.
It supplies an output signal of 0 to +10V, corresponding to 0-100% off the nominal load.
The adjustment off electrical zero and the gain (calibration) is made by Tensometric.

By ordering this type - the desired service-voltage must be indicated.
Service-voltage and output-signal are galvanic separate. (not with ± 15 V !)
Connection-cable is fixed, 3 m long. Shield of the connection cable is connected to the housing.

- Application:** Tensile force measurement on material which is flexible
- Nominal loads:** 30 N, 40 N, 50 N, 60 N, 100 N, 200 N, or 300 N others upon request
- Overload-protection:** > 10 times the nominal load
- Protection:** IP 54 at the shaft-side / IP 54 at the cableside
Independent of the nominal load of the sensor, sealing for IP 64 can cause an additional error of 0,2 N. To obtain the highest possible accuracy, customer can remove sealing
- Journal-bearing (shaft):** standard Ø 12 mm, fixing the measuring roller through a Seegerring
- Material:** (tube) housing and shaft : stainless steel Sealing material : Silicon, SL 601
- Electrical connection:** shielded, fixed cable - standard length 3 m, upon request: 5 m. Shield is connected to the housing.
- Mounting:** Mounting into a hole Ø 25 mm, locking by means of screw-pressure on the tube
- Measuring principle:** strain-gage, full-bridge
- Measuring range:** 1 % up to min. 115 %
- Charact. range of temp.:** +5°C ...+60°C
- Coef. of temperature**
 - of the zero: < 0,025% / °C
 - of the measuring range: < 0,02 % / °C
- Error in measurement:** < ± 0,3 %
- max. error in line. :** < ± 0,2 %
- Service voltage:**
 - 5 V ± 10% < 90 mA
 - 12 V ± 10% < 70 mA
 - 24 V ± 10% < 25 mA
 - Option: ± 15 V ± 10% +20/ -5 mA
- Adjusting range zero:** ± 20% of the nom. load
- Adjusting range gain:** ± 20% of the nom. load
- Output signal:** 0 ... ± 10 V
- Output current max.:** 2 mA
- Volume of delivery:** Sensor without measuring roller, fixed connection cable
Instruction manual with calculation tabular
- Accessories available:** Connection cable, amplifier with or without display
measuring roller, clamping device Z 25A or B