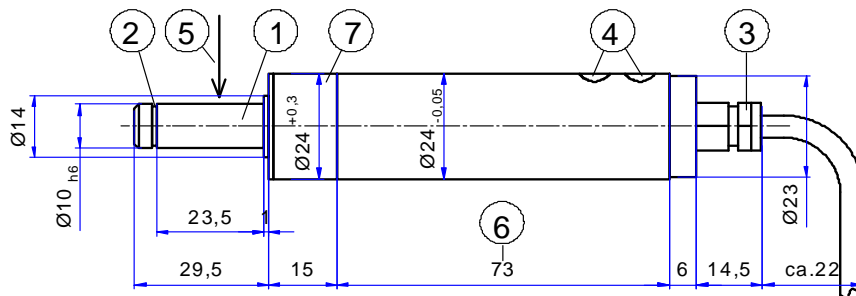


**Technical data** **Radial Force Sensor M 1191 KA**

**Dimensions Radial Force Sensor Series M 1191 KA:**



- 1 = Shaft ( Journal-bearing )
- 2 = Seegerring A 10
- 3 = Cable
- 4 = Red mark
- 5 = Load in measuring direction
- 6 = Mounting range
- 7 = Sealing

Type M 1191 KA is a radial force sensor without amplifier.  
For transformation the low measuring- voltage into a norm-signal, it needs an external amplifier.

Therefor Tensometric amplifier are suited : KMV 10, MV 10 ( without display )  
SA DMS 610, SA DMS 310 ( with display )

**Application:** Tensile force measurement on material which is flexible

**Nominal loads:** 30 N, 40 N, 50 N, 60 N, 100 N, 200 N, 300 N others upon request

**Overload-protection:** > 10 times the nominal load

**Protection:** **IP 61 Option IP 64**  
Independent of the nominal load of the sensor, sealing for IP 61 and IP 64 can cause an additional error of 0,2 N. To obtain the highest possible accuracy, customer can remove sealing IP 61 by themselves, without problem. In this manner protection reduces to IP 50.

**Journal- bearing (shaft):** standard Ø 10 mm, fixing the measuring roller by means of a Seegerring other shafts or roller-fixing upon request

**Material:** (tube) housing and shaft : stainless steel Sealing material: Silicon, SL 601

**Electrical connection:** M 1191 5-pol. connector  
M 1191 KA shielded, fixed cable - standard length 3 m. upon request: 5 m. Shield is connected to the housing.

**Mounting:** Mounting into a hole Ø 24 mm, locking by means of screw-pressure on the tube  
Mounting by using Tensometric clamping device Z 1391

**Measuring principle:** strain- gage, full- bridge *max. error in line. :* < ± 0,2 %  
**Measuring range:** 1 % up to 120% *Coef. of temp.:* < ± 0,02% /°C  
**Error in measurement:** < ± 0,3% *Resistance input:* 350 Ohm

**Charact. Value:** 1,5 mV / V *Resistance output:* 350 Ohm  
**Charact. value tolerance:** < ± 0,2 % *Reference- voltage:* 10 V  
**Charact. range of temp.:** + 5°C ...+ 60°C *Max. service voltage:* 10 V

**Series :**  
**Type M 1191:** Realization the measured data via strain-gages, electrical connection via 5-pol. connector  
**Type M 1191 KA:** Realization the measured data via strain-gages, electrical connection via 3 m connection cable with built-in amplifier. Technical data please see separate data sheet  
**Type M 1391:**

**Volume of delivery:** M 1191 Sensor without measuring roller, 5-pol. connector  
Instruction manual with calculation tabular  
M 1191 KA Sensor without measuring roller, fixed cable 3 m long  
Instruction manual with calculation tabular

**Accessories available:** Connection cable, amplifier with or without display  
measuring roller, clamping device Z 1191 or Z 1391