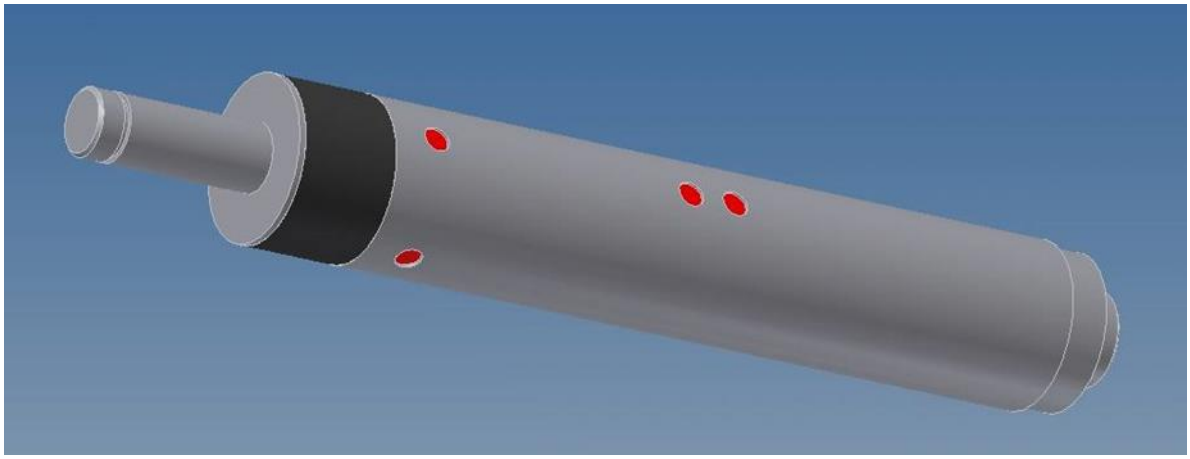
## *Technical data* *Radial Force Sensor M 1191 XY*

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



Type M1191 XY is a radial force sensor with strain gage full-bridge, for the measurement of forces from two 90 ° direction offsets without amplifier.

To transform the low measuring-voltage into a normal signal, it needs an external amplifier.

| | | |
|---|---|---|
| Therefore Tensometric amplifier are suited: | 2KMV 10, MV 110 | ( without display ) |
| | SA 2xDMS 610 | ( with display ) |

*Application:* Tensile force measurement on X and Y direction

***Nominal loads:*** **30 N, 40 N, 50 N, 100 N, 200 N** others upon request
***Overload-protection:*** **> 4 to 8 times of nominal load**

***Protection:*** **IP 52, Option IP 64**
Independent of the nominal load of the sensor, sealing for IP 52 and IP 64 can cause an additional error of 0,2 N. To obtain the highest possible accuracy, customer can remove sealing IP 52 by themselves, without problem. In this manner, protection reduces to IP 50.

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

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

*Electrical connection:* 7-pol. connector

*Mounting:* Mounting into a drill hole ∅ 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 115% | *Coef. of temp.:* | < ± 0,02% /°C |
| *Error in measurement:* | < ± 0,5% | *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 |

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

**Tensometric-**Messtechnik GmbH
Derken 7
D - 42327 Wuppertal

Tel.: ++49 (0) 202 – 7052149-00
Fax.: ++49 (0) 202 – 7052149-90
Email: Info@tensometric.com
Web: http://www.tensometric.com

**Tensometric-**Messtechnik GmbH
Derken 7
D - 42327 Wuppertal

Tel.: ++49 (0) 202 – 7052149-00
Fax.: ++49 (0) 202 – 7052149-90
Email: Info@tensometric.com
Web: http://www.tensometric.com