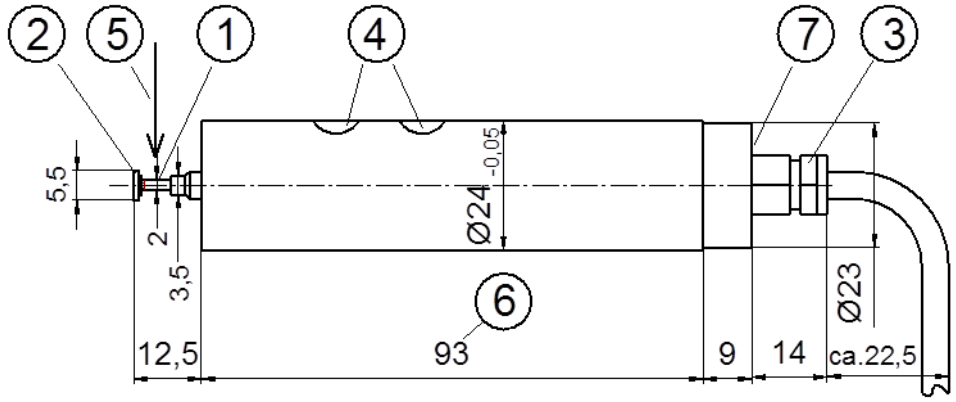
Tensometric Messtechnik GmbH

Technical data *Radial Force Sensor M 1392-L*

Dimensions Radial Force Sensor Series M 1392-L:



1 = Shaft (Journal bearing)
2 = Screw nut M2
3 = Cable
4 = Red Marks
5 = Load in measuring direction
6 = Mounting range
7 = Potentiometer for adjusting ZERO + CAL

Type M 1392-L is with built-in amplifier.
It supplies an output signal of 0 to +10V, corresponding to 0-100% the nominal load.
To adjust the electrical zero and the gain (calibration), the corresponding potentiometer (7) are accessible from outside.

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 thin and flexible material
Nominal loads:	**20 cN 30 cN 50 cN, 1 N 2 N or 3 N** others upon request
Overload protection:	**> 10 times the nominal load**
Protection:	IP 50
Journal- bearing (shaft):	standard ∅ 2 mm, fixing the measuring roller by means of a Screw nut M2 other shafts or roller-fixing upon request
Material:	(tube) housing : stainless steel shaft : aluminium alloy
Electrical connection:	shielded, fixed cable - standard length 3 m upon request : 5 m. Shield is connected to the housing.
Mounting:	Mounting into a hole ∅ 24 mm, locking by means of screw-pressure on the tube Mounting into a chucking tool ∅ 24 mm. Mounting by using Tensometric clamping device Z 1191 or Z 1391

Measuring principle:	strain-gage, full-bridge	*Service voltage:*	5 V ± 10%	< 90 mA
Measuring range:	1 % up to min. 120 %		12 V ± 10%	< 70 mA
Charact. range of temp.:	+5°C ...+60° C		24 V ± 10%	< 25 mA
Coef. of temperature		*Option:*	± 15 V ± 10%	+20/ -5 mA
- of the zero:	< 0,025% / °C	*Adjusting range zero:*	± 20% of the nom. load	
- of the measuring range:	< 0,02 % / °C	*Adjusting range gain:*	± 20% of the nom. load	
Error in measurement:	< ± 0,3 %	*Output signal:*	0 ... ± 10 V	
max. error in line.:	< ± 0,2 %	*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 1191 or Z 1391

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