

RMGZ 900 mini Series Force Measuring Roller

10 times overload protection

Recalibration is not required

20 : 1 force measuring range

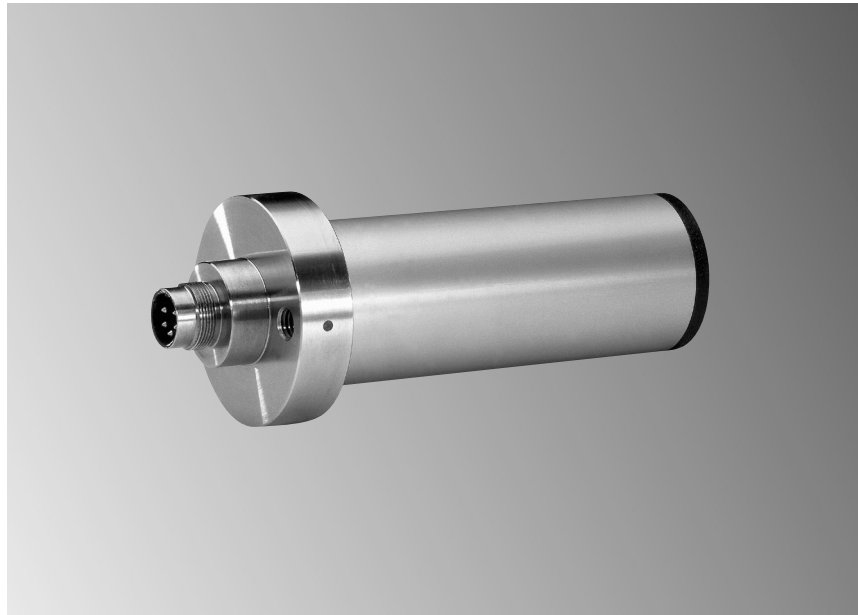
Wide measuring capability

Parallel plane / double flexion beam design

Material position and measurement consistent

Stainless steel sensor, anodised roller

Corrosion resistant, ultra-durable



● Functional description

The RMGZ 900 mini Series sensors are designed as self contained cantilever mount sensors that minimise machine space requirements in narrow material processing applications. They can be mounted horizontally or vertically directly to the machine frame.

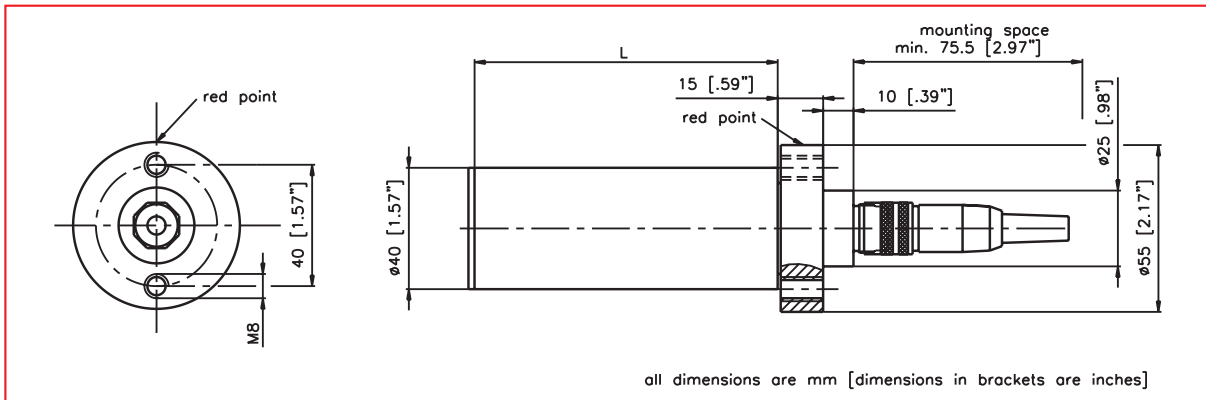
The red point on the base of the sensor indicates the positive measuring direction. Even with low material wrap angles, the design of the RMGZ 900 mini Series offers high accuracy measuring capability.

● Measuring principle

Foil type strain gauges mounted in a full Wheatstone Bridge configuration perform the actual tension measurement. The dual flexion beam design ensures accurate measurement at any position on the roller while maintaining the parallel position of the material and eliminating angular deflection. A built in mechanical hard-stop provides high overload protection ensuring that recalibration is not required.

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RMGZ 900 mini Series • Dimensions in mm



RMGZ 900 mini Series • Technical Data

Sensitivity	1.8 mV/V
Tolerance of sensitivity	< ± 0.2 %
Accuracy class	± 0.5 % (F _{nominal})
Temperature coefficient	± 0.1 % / 10K
Temperature range	-10...+60 °C [14...140 °F]
Input resistance	350 Ω
Supply voltage	1...12 VDC
Overload protection	10 times the rated nominal force
Roller	Anodised aluminium

RMGZ 900 mini Series • Dimensions / Nominal Force

Length (L) mm [in]	Nominal Force N [lbf]	Order Code FMS
100 [3.94]	20 [4.5]	RMGZ912.100.40.E
	50 [11.2]	RMGZ915.100.40.E
	100 [22.5]	RMGZ921.100.40.E
	200 [45]	RMGZ922.100.40.E
	500 [112]	RMGZ925.100.40.E
150 [5.91]	50 [11.2]	RMGZ915.150.40.E
	100 [22.5]	RMGZ921.150.40.E
	200 [45]	RMGZ922.150.40.E
200 [7.87]	50 [11.2]	RMGZ915.200.40.E
	100 [22.5]	RMGZ921.200.40.E
	200 [45]	RMGZ922.200.40.E

Options:

- H14** = right angle connector
- H29** = modified wiring and sealing for use in aggressive media

Order code (example):

RMGZ915.100.40.E.H14

Scope of delivery:

Straight connection plug, fixing screw

Special sizes and roller surface treatments available on request

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