

## RMGZ 900 mini Series Force Measuring Roller

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**10 times overload protection**

**Recalibration is not required**

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**20 : 1 force measuring range**

**Wide measuring capability**

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**Parallel plane / double flexion beam design**

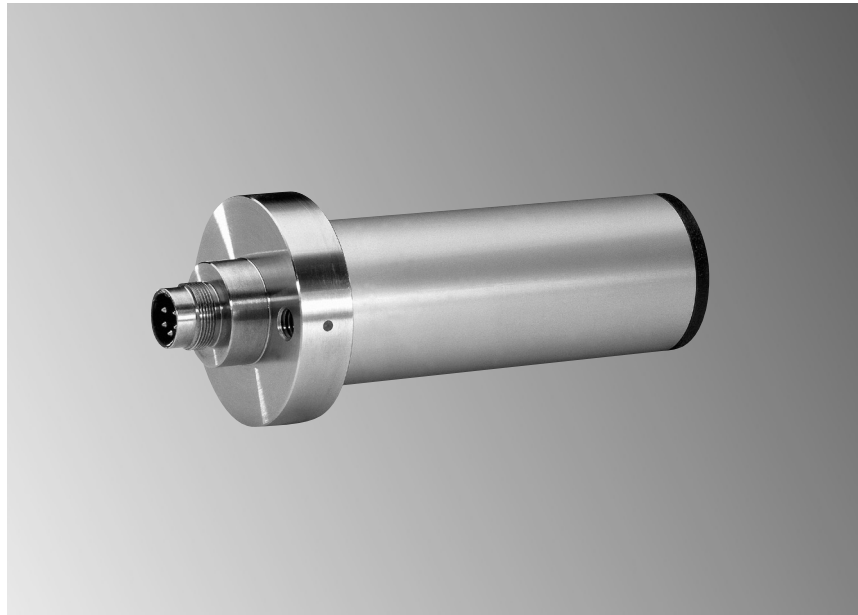
**Material position and measurement consistent**

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**Stainless steel sensor, anodised roller**

**Corrosion resistant, ultra-durable**

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### ● 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.

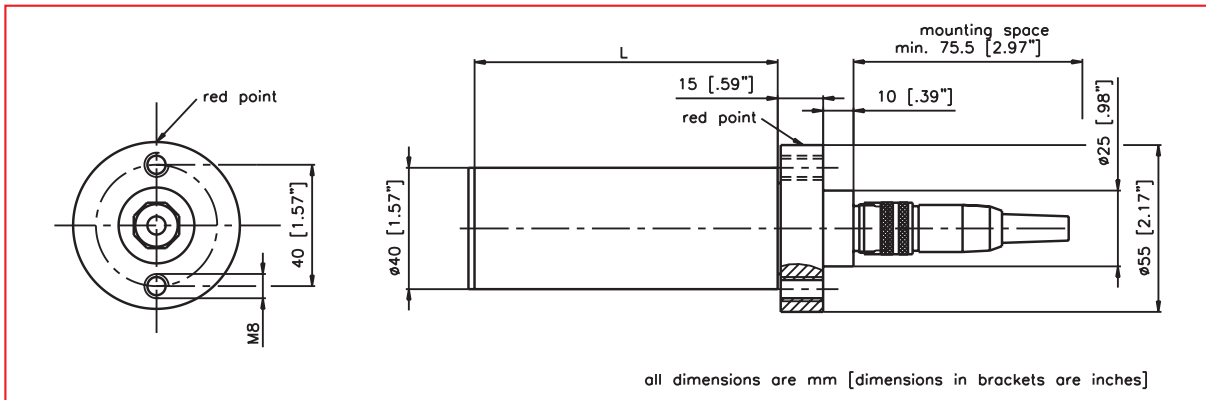
The red point on the base of the sensor indicates the positive measuring direction. Even with low material wrap angles, the design of the RMGZ 900 mini Series offers high accuracy measuring capability.

### ● 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

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

RMGZ 900 mini Series • Dimensions / Nominal Force

Length (L) mm [in]	Nominal Force N [lbf]	Order Code FMS
<b>100 [3.94]</b>	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
<b>150 [5.91]</b>	50 [11.2]	RMGZ915.150.40.E
	100 [22.5]	RMGZ921.150.40.E
	200 [45]	RMGZ922.150.40.E
<b>200 [7.87]</b>	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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