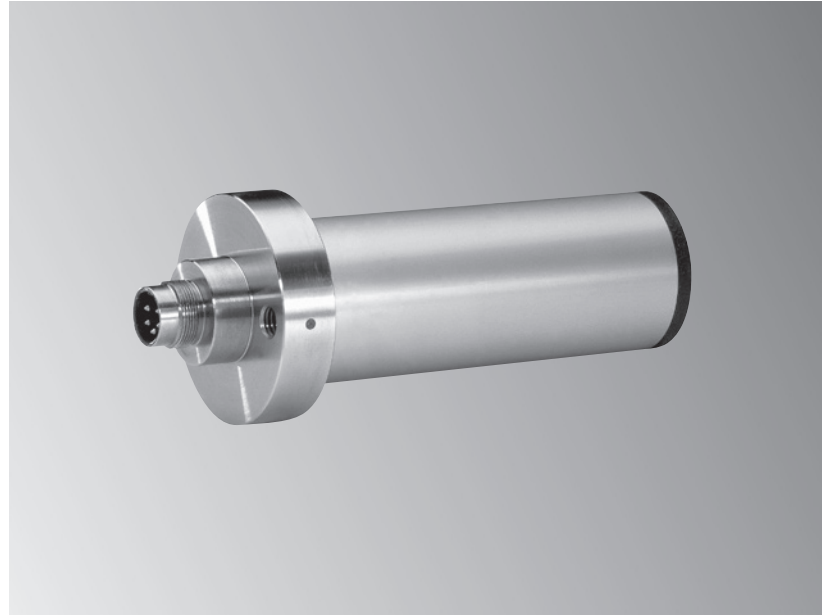


FMS Tension Control / Force Sensors

RMGZ 900 mini Small Cantilever Force Measuring Roller in standard sizes with short delivery times

- **10 times overload protection:**
No recalibration required
- **20 : 1 force measuring range:**
Wide measuring capability
- **Nominal forces from 20 to 500 N**
[4.5 to 110 lbf]:
Material position and measurement
consistent
- **Stainless steel sensor, anodised roller:**
Corrosion resistant, ultra-durable

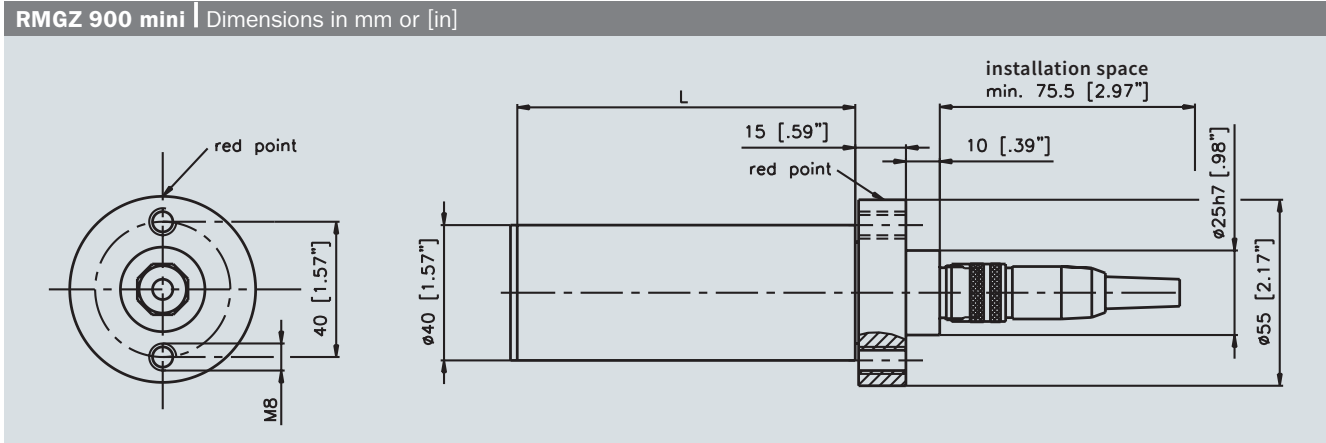


RMGZ 900 mini

The RMGZ 900 mini Series force measuring rollers are designed as self contained cantilever mount sensors that minimise machine space requirements in continuous 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.

Functional Description

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. An integrated mechanical hard-stop provides high overload protection ensuring that frequent calibration is not required.



RMGZ 900 mini 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 to +60 °C [14 to 140 °F]
Input resistance	350 Ω
Supply voltage	1 to 12 VDC
Overload protection	10 times nominal force
Roller material	Anodised aluminum
Protection rating	IP42

RMGZ 900 mini 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
250 [9.84]	100 [22.5]	RMGZ921.250.40.E
	200 [45]	RMGZ922.250.40.E

RMGZ 900 mini Texture of the order code	
RMGZ915.	100. 40. E. H14
	Options
	Roller surface, anodised aluminum
	Roller diameter
	Roller length
Series and nominal force (encoded)	

RMGZ 900 mini Option	
H 14	right angle connector
RMGZ 900 mini Scope of delivery	
• Measuring roller	• Straight connector
• Fixing screw	