

RMGZ 200 Series Force Measuring Roller for Stranding Machines

Engineered for rotating Applications

Excellent performance even at high revolutions and low strand tensions

Exact alignment of sensor position

No influence of centrifugal forces on measurement

Nominal forces from 6 – 300 N

Designed for the low and middle application range

Maintenance-free bearings

No lubrication required

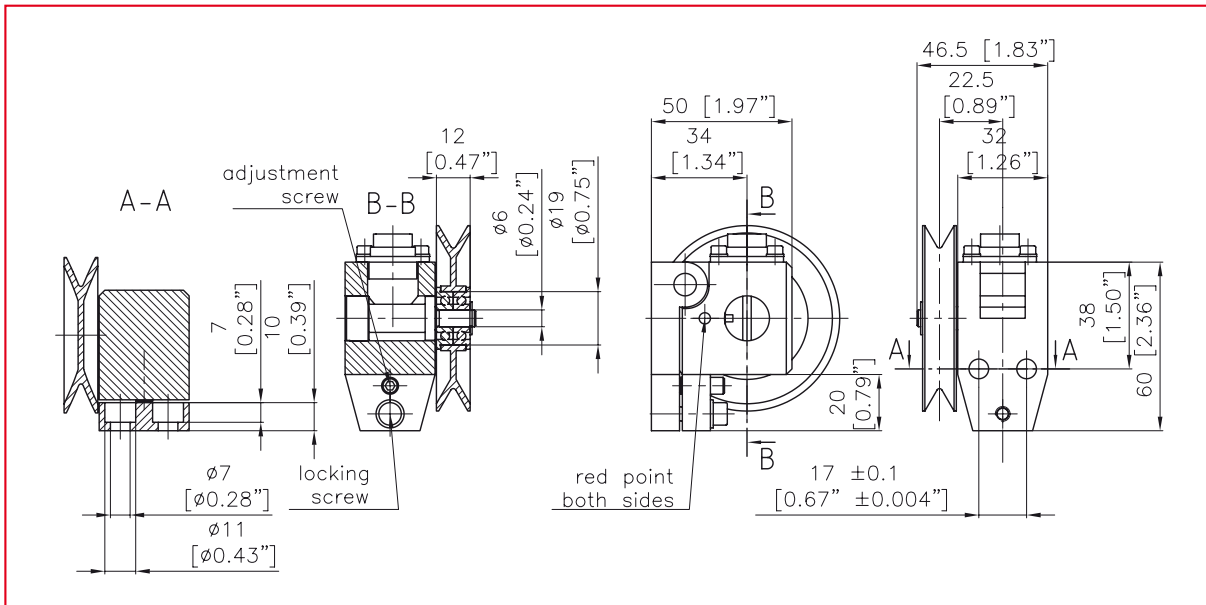
**● RMGZ 200 Series**

The Force Measuring Rollers of the RMGZ 200 series are used to measure the material tension in wire and cable producing machinery such as planetary cage, tubular, rigid frame stranding machines, bunchers and twisters. The rollers comprise a device for proper alignment and adjustment of the force measuring direction. This prevents centrifugal forces influencing the measuring results. The life-time lubricated bearings can accommodate a variety of sheaves.

● Functional Description

The RMGZ 200 works according to the dual flexion beam design. A quadruple foil type strain gauge mounted in a full Wheatstone bridge configuration performs the actual tension measurement. This measuring principle ensures tension measurement with the highest accuracy also for low forces and at small wrap angles. It eliminates angular deflection under load. Overload protection devices provide a high safety standard.

RMGZ 200 Series • Dimensions in mm or [inch]



RMGZ 200 Series • Specifications

Sensor Type	Nominal Force		Speed Limit rpm	Gewicht	
	N	[lbf]		kg	[lbs]
RMGZ 206	6	[1.33]	40 000	0.57	[1.26]
RMGZ 211	10	[2.2]			
RMGZ 212	20	[4.5]			
RMGZ 215	50	[11.2]			
RMGZ 221	100	[22]			
RMGZ 223	300	[67]			

Options:

H14 = right angle connector

Order Code (example):

RMGZ215.H14
 Sensor type ————
 Option ————

RMGZ 200 Series • Technical Data

Sensitivity	1.8 mV / V
Tolerance of sensitivity	< ± 0.2 %
Accuracy class	± 0.5 % (F _{nominal})
Load rating of bearings	C dyn. = 4.61 kN, [1036 lbf]
Temperature coefficient	± 0.1 % / 10 K
Temperature range	-10...+60°C [14...140°F]
Input resistance	350 Ω
Supply voltage	1...12 VDC
Overload protection	10-times Nominal Force
Protection class	Protected against dust (IP 42)
Sensor Material	Stainless steel

Scope of delivery:

1 Force measuring roller, 1 Locking screw,
 1 Adjustment screw, 1 Straight connector

Not included:

Mounting screws, Sheaves

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