

## RMGZ 200 Series Force Measuring Roller for Stranding Machines

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**Engineered for rotating Applications**

Excellent performance even at high revolutions and low strand tensions

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**Exact alignment of sensor position**

No influence of centrifugal forces on measurement

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**Nominal forces from 6 – 300 N**

Designed for the low and middle application range

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**Maintenance-free bearings**

No lubrication required

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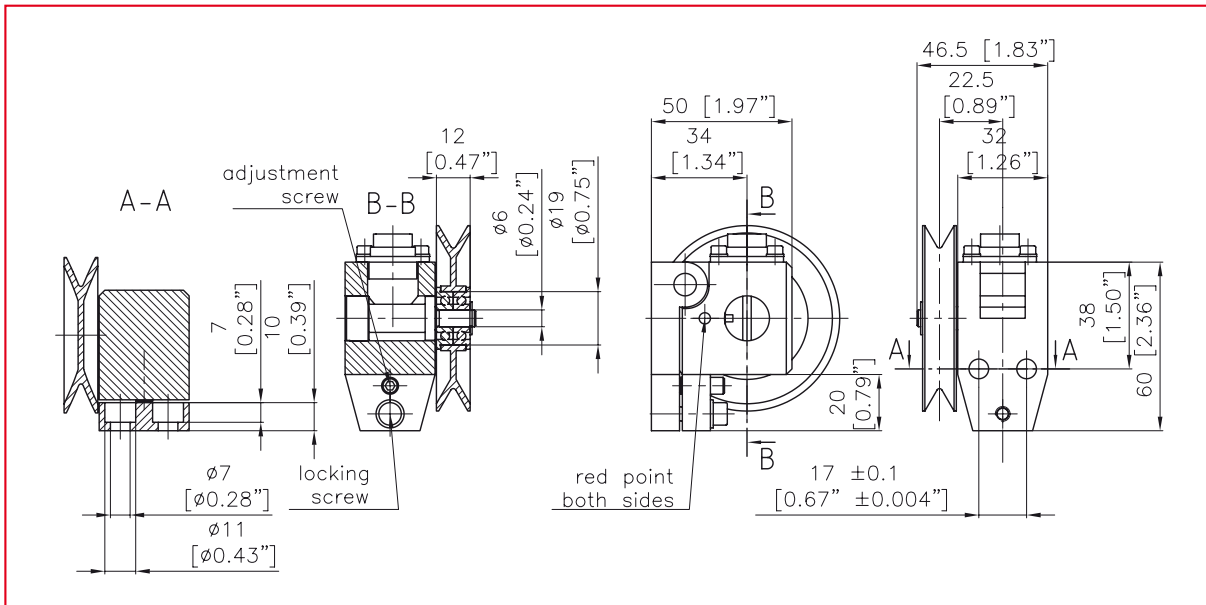
**● RMGZ 200 Series**

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**

<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>Load rating of bearings</b>	C dyn. = 4.61 kN, [1036 lbf]
<b>Temperature coefficient</b>	± 0.1 % / 10 K
<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 Nominal Force
<b>Protection class</b>	Protected against dust (IP 42)
<b>Sensor Material</b>	Stainless steel

**Scope of delivery:**

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

**Not included:**

Mounting screws, Sheaves

**World Headquarters:**

**FMS Force Measuring Systems AG**  
 Aspstrasse 6  
 8154 Oberglatt (Switzerland)  
 Phone + 41 44 852 80 80  
 Fax + 41 44 850 60 06  
 info@fms-technology.com

**FMS USA, Inc.**  
 2155 Stonington Avenue  
 Suite 119  
 Hoffman Estates, IL 60169  
 Phone + 1 847 519 4400  
 Fax + 1 847 519 4401  
 fmsusa@fms-technology.com

**FMS UK**  
 Highfield, Atch Lench Road  
 Church Lench  
 Evesham WR 11 4UG  
 Phone + 44 1386 871023  
 Fax + 44 1386 871021  
 fmsuk@fms-technology.com

**FMS Italy**  
 Via Baranzate 67  
 20026 Novate Milanese  
 Phone + 39 02 39487035  
 Fax + 39 02 39487035  
 fmsit@fms-technology.com