

# C 203 Series Force Measuring Sensor

**10 times overload protection** No re-calibration required

20:1 force measuring range Accuracy class 0.5 %

Nominal forces 50, 125, 250, 500, and 1000 N.

Covers a wide application range

Stainless steel sensor, Aluminium Cover Corrosion resistant, ultra durable



### C 203 Series

The C 203 Series Force Measuring Sensors are designed as live shaft sensors to allow easy roller change in continuous material processing applications. They can be easily mounted to the machine side frame with the included mounting screws or to the top frame utilizing an optional mounting bracket. The red point on the connector indicates the positive measuring direction. The C 203 Force Measuring Sensor ensures that even with low material wrap angles and high roller weights, tension will still be measured accurately.

#### Functional Description

Foil type strain gauges mounted in a full Wheatstone Bridge configuration in each sensor perform the actual tension measurement. The dual flexion beam design eliminates angular deflection under load and ensures tension measurement with the highest accuracy and reliability under the most stringent requirements. A built in mechanical hard-stop provides high overload protection and ensures that frequent calibration is not required.

## C 203 Serie • Dimensions in mm 74 assembly option H14 space 4x socket head cap screw DIN912 M6x40 red Point free for 82. 1203TV space assembly 88 2203TV free for c 92. Ø40 40 9.5 43 ø70 39 16 63 Ø85

#### \* bearings 1203 TV/2203 TV are not part of the delivery scope. They can be ordered separately.

C 203 Serie ● Specifications		
Sensor Type	Nominal force	<b>Weight</b> kg
C 203.50.17	50	0.87
C 203.125.17	125	0.87
C 203.250.17	250	0.87
C 203.500.17	500	0.87
C 203.1000.17	1000	0.87

C 203 Serie ● Technical data		
Sensitivity	1.8 mV / V ± 2 %	
Accuracy class	± 0.5 % (F <sub>nominal</sub> )	
Temperature coefficient	±0.1%/10K	
Temperature range	-10+60°C	
Input resistance	350 Ω	
Supply voltage	112 VDC	
Maximum overload	>10 times rated nominal force	
Sensor material	Stainless steel, aluminium cover	

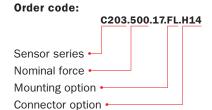
## Options:

**FL** = Options for flat mounting

**H14** = Right angle connector

**H16** = Temperature range of sensor with PG-gland up to 150 °C.

Connectors up to 120 °C.



#### Scope of delivery:

Sensor, snap ring, mounting screws and washers, straight connector.

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