

## C 203 Series Force Measuring Sensor

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**10 times overload protection**

**No re-calibration required**

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**20:1 force measuring range**

**Accuracy class 0.5 %**

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

**Covers a wide application range**

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**Stainless steel sensor, Aluminium Cover**

**Corrosion resistant, ultra durable**

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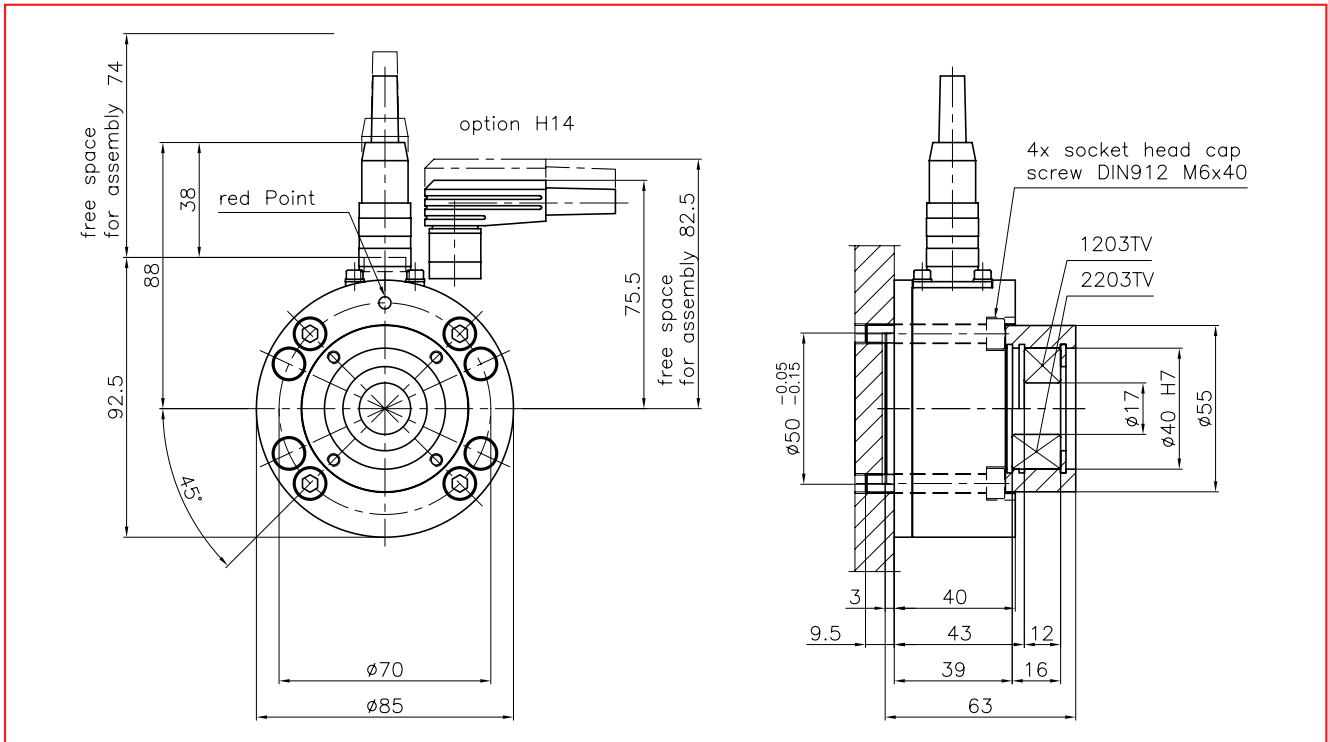
### ● C 203 Series

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**



\* 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 N	Weight kg
<b>C 203.50.17</b>	50	0.87
<b>C 203.125.17</b>	125	0.87
<b>C 203.250.17</b>	250	0.87
<b>C 203.500.17</b>	500	0.87
<b>C 203.1000.17</b>	1000	0.87

**C 203 Serie • Technical data**

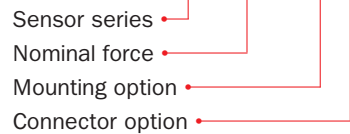
<b>Sensitivity</b>	1.8 mV/V ± 2 %
<b>Accuracy class</b>	± 0.5 % (F <sub>nominal</sub> )
<b>Temperature coefficient</b>	± 0.1 % / 10 K
<b>Temperature range</b>	-10...+ 60 °C
<b>Input resistance</b>	350 Ω
<b>Supply voltage</b>	1...12 VDC
<b>Maximum overload</b>	>10 times rated nominal force
<b>Sensor material</b>	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.

**Order code:**

**C203.500.17.FL.H14**



**Scope of delivery:**

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

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