

## CR 208, CR 210 and CR 212 Series Force Measuring Roller

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**10 times overload protection**

**No recalibration required**

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**20 : 1 force measuring range**

**Wide measuring range at high resolution**

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**Nominal forces 50, 125, 250, 500, 1000,  
1500 N**

**Covers a wide application range**

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**Stainless steel sensor, Aluminium Cover**

**Corrosion resistant, ultra durable**

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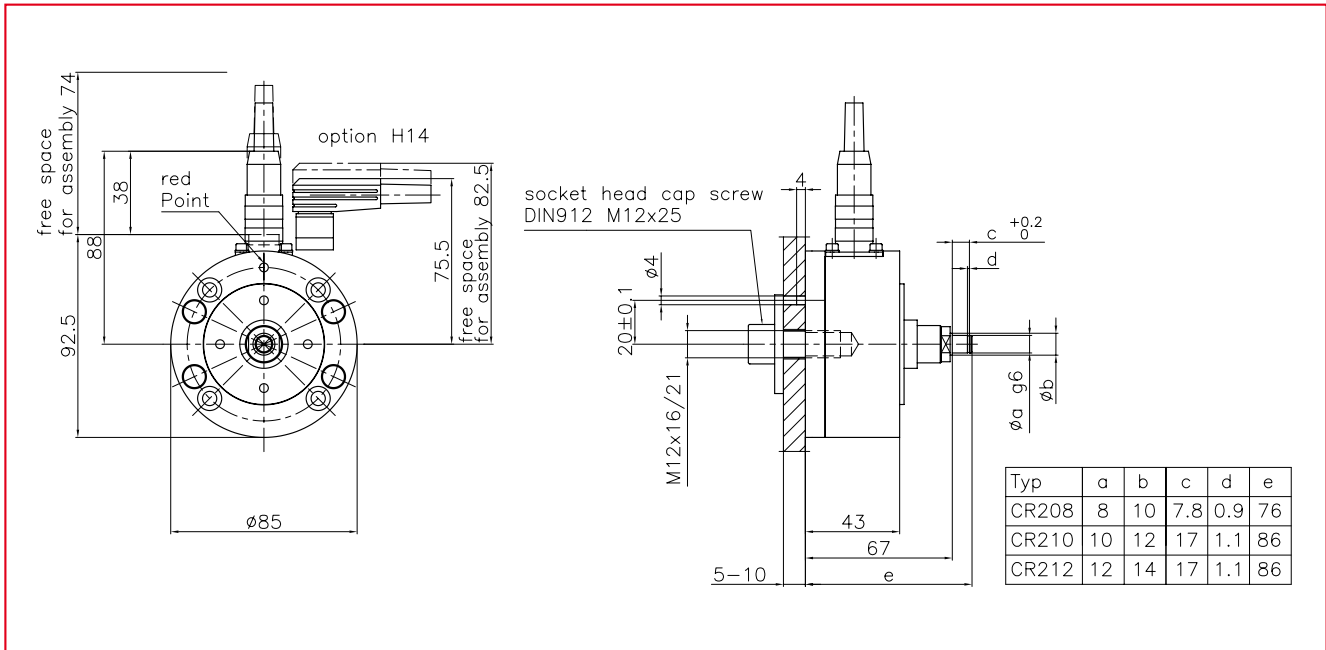
- **CR 208 / 210 / 212 Series**

The force measuring rollers of the CR 208, CR 210 and CR 212 Series are ideal devices to measure tensions in wires, cables and narrow flat materials. Because of their ability to accept a wide range of standard sheaves they can be utilised very flexibly. Sheave and bearing mount to the bearing seat of the load cell. The assembly of sheave and sensor to the machine frame is straight forward and quickly done. The red point at the connector indicates the positive measuring direction.

- **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.

**CR 208 / CR 210 / CR 212 Series • Dimensions in mm**



**CR 208 / CR 210 / CR 212 Series • Journal Specifications**

Bearing Seat 8 mm	Bearing Seat 10 mm	Bearing Seat 12 mm	Nominal Force N	Weight kg
<b>CR 208.50</b>	<b>CR 210.50</b>	<b>CR 212.50</b>	50	1.080
<b>CR 208.125</b>	<b>CR 210.125</b>	<b>CR 212.125</b>	125	1.080
<b>CR 208.250</b>	<b>CR 210.250</b>	<b>CR 212.250</b>	250	1.080
<b>CR 208.500</b>	<b>CR 210.500</b>	<b>CR 212.500</b>	500	1.080
<b>CR 208.1000</b>	<b>CR 210.1000</b>	<b>CR 212.1000</b>	1000	1.080
<b>CR 208.1500</b>	<b>CR 210.1500</b>	<b>CR 212.1500</b>	1500	1.080

**CR 208 / CR 210 / CR 212 Series • 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

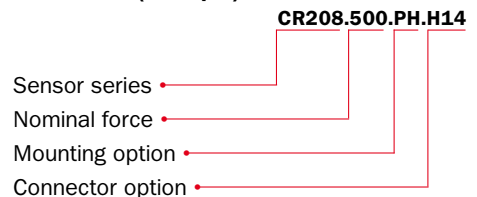
**Options:**

**PH** = Pilot hole mounting option

**H14** = Right angle connector

**H16** = Temperature range for sensor with PG-gland up to 150 °C. Connectors up to 120 °C.

**Order code (example):**



**Scope of delivery:**

Force measuring journal, screw and washer for central mounting, straight electrical connector.

**Sheaves are not in the scope of delivery.**

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