

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

10 times overload protection

No recalibration required

20 : 1 force measuring range

Wide measuring range at high resolution

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

Covers a wide application range

Stainless steel sensor, Aluminium Cover

Corrosion resistant, ultra durable



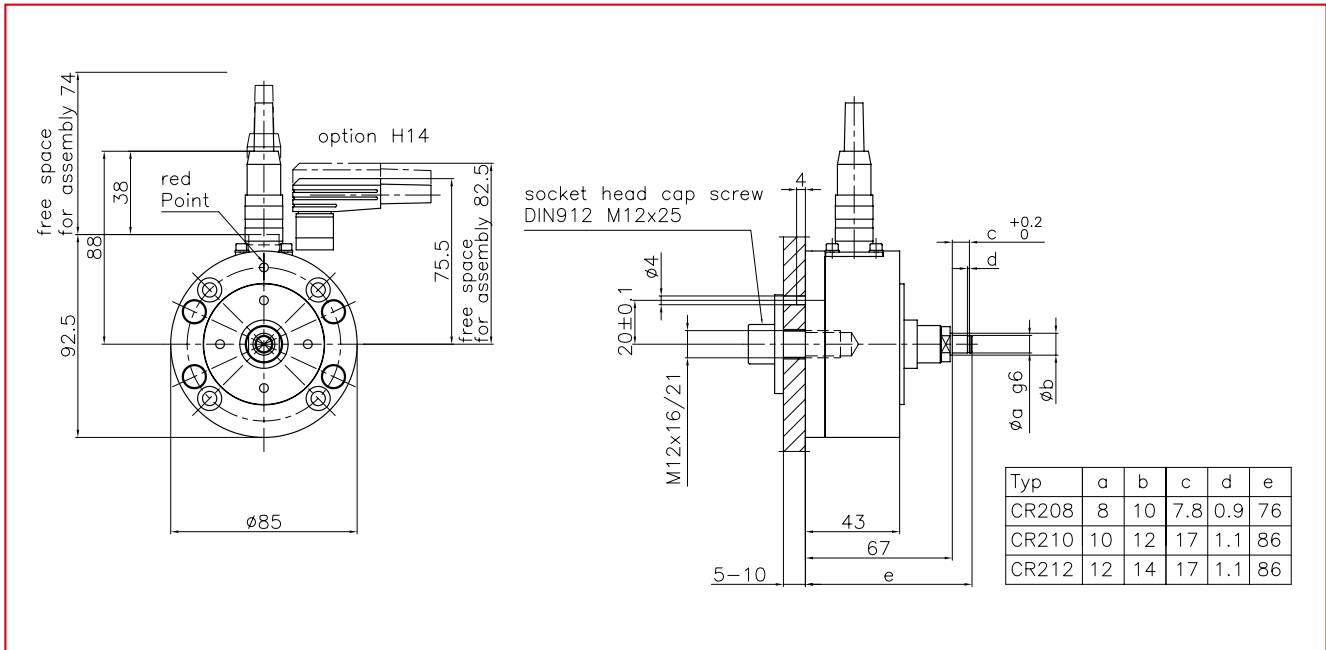
- **CR 208 / 210 / 212 Series**

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
CR 208.50	CR 210.50	CR 212.50	50	1.080
CR 208.125	CR 210.125	CR 212.125	125	1.080
CR 208.250	CR 210.250	CR 212.250	250	1.080
CR 208.500	CR 210.500	CR 212.500	500	1.080
CR 208.1000	CR 210.1000	CR 212.1000	1000	1.080
CR 208.1500	CR 210.1500	CR 212.1500	1500	1.080

CR 208 / CR 210 / CR 212 Series • Technical Data

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

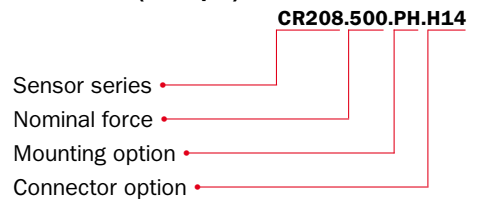
Options:

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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