

## CA203 Series Force Measuring Sensor with Dead Shaft Adapter

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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 from 28 - 337 lbs.**  
Sizes available for every application

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**Stainless steel sensor, Aluminum Cover**  
Corrosion resistant, ultra durable

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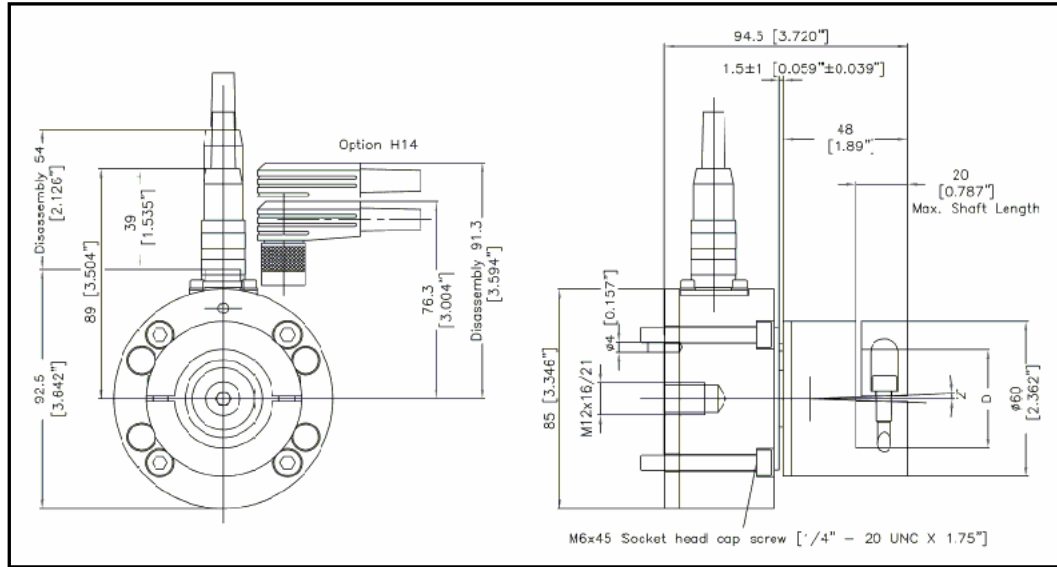
### ● CA203 Series

The CA203 Series Force Measuring Sensors are designed as dead shaft sensors to allow easy roller change in continuous material processing applications. They can be easily mounted to the machine side frame with a single bolt from the back or with 4 bolts from the front (flange style) or to the top frame utilizing optional mounting brackets. The red point on the connector indicates the positive force measuring direction. The CA203 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.

**CA203 Series ● Dimensions in mm [inch]**



**CA203 Series ● Specifications**

Sensor FMS Order Code	Nominal force		Weight	
	lbs.	N	lbs.	kg
CA203.125	28	125	2lbs.	0.87
CA203.250	56	250	2lbs.	0.87
CA203.500	112	500	2lbs.	0.87
CA203.1000	225	1000	2lbs.	0.87
CA203.1500	337	1500	2lbs.	0.87

**Option:**  
H14 = right angle connection plug

Order Code:  
CA203.500.DI125.H14



**CA203 Series ● Adapter**

Adapter FMS Order Code	D	
	inch	mm
CA203.DI100	1.00"	25
CA203.DI125	1.25"	31.75
CA203.DI150	1.50"	38.10

**CA203 Series ● Technical data**

<b>Sensitivity</b>	1.8 mV/V +/- 2%
<b>Accuracy class</b>	± 0.5 %
<b>Temperature coefficient</b>	± 0.1 % /10K [±0.0055% F]
<b>Temperature range</b>	-10...+60°C [14°F...140°F]
<b>Input resistance</b>	350 Ω
<b>Supply voltage</b>	1...12VDC
<b>Overload protection</b>	10 times rated nominal force
<b>Sensor material</b>	Stainless steel sensor, Aluminum cover

Special sizes available on request

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