



Transducer Instruction Manual

Range: Advance

Type: OWL200

Revision: V1.0



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CMC
Tension · Control · Integration



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1. Overview

The latest Stainless Steel Tension Transducers for use on dead shaft idler rollers from the web tension specialists. Designed to maximize performance and reliability. The unique dual beam load cell design reduces load cell deflection by more than 66% compared to traditional load cell designs. Lower deflection means fewer tracking and steering problems on your machine and greater accuracy in the control.

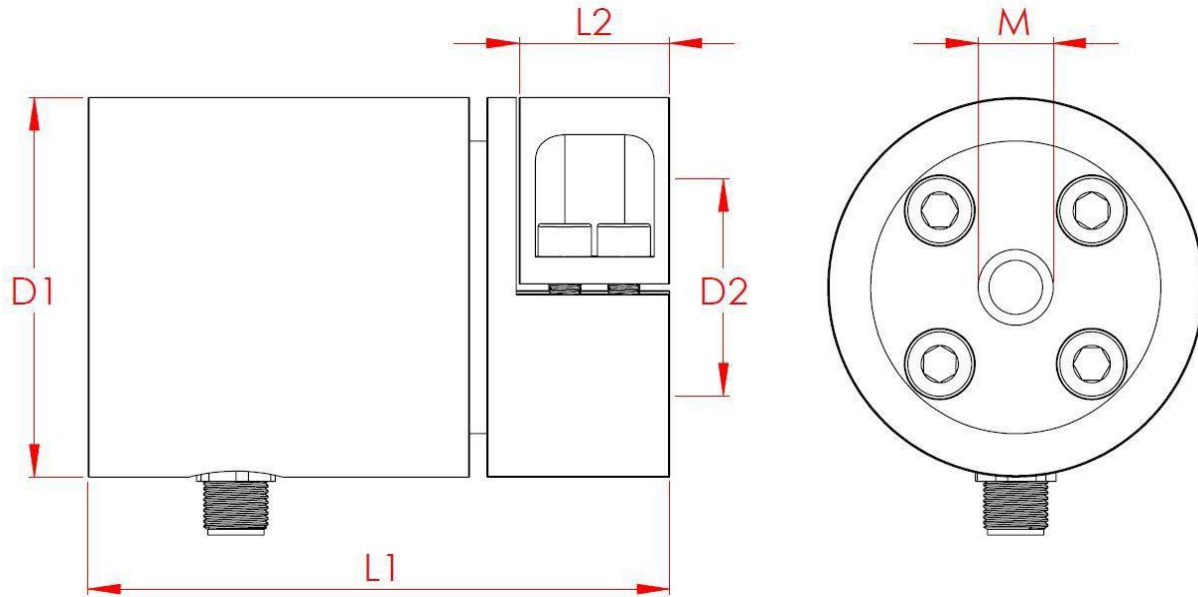
Available in two industry standard sizes and a wide variety of load ratings, the Stainless Steel Transducer Series lead the industry in performance.



2. Key Features

- ✓ Compact stainless steel body.
- ✓ Twin parallel beam design ensuring high output at a minimum deflection.
- ✓ Dual beam giving lowest possible deflection.
- ✓ Choose between Semiconductor or Foil strain gauge.
- ✓ Industry standard 1x M12 connector.
- ✓ Connector position available in 4 different positions relative to the load direction.
- ✓ Overload ratings typical 200 – 500%.
- ✓ Flexible head automatically compensates for changes in axial load and shaft linear expansion.

3. Dimensions



Dimensions in millimetres (mm) and inches (in)						
Type	Units	D1	D2	L1	L2	M
SSCM210	mm	50	25	75	13	M10 x 12
	in	1.97	1.00*	2.95	0.51	M10 x 0.47
SSCM220	mm	70	40	108	28	M16 x 15
	in	2.76	1.50*	4.25	1.10	M16 x 0.59

* To be specified on order

4. Load Rating

Load ratings in Newtons (N) and Pounds (Lbs)											
Type	Units										
SSCM210	N	25	50	125	250	375	500	750			
	Lbs	5.6	11	28	56	84	112	168			
SSCM220	N					375	500	750	1250	2500	5000
	Lbs					84	112	168	281	562	1124

5. Technical Data

5.1 Half bridge technical data

OWL200 Technical Data

Supply

Power Supply Voltage 5VDC

Outputs

Nominal Output 50mV/V

Configuration

Strain gauge configuration Half bridge

Characteristics

Strain gauge resistance 80...120 Ohms
Max operating force relative to F_n 150%
Force limit relative to F_n 200%
Deflection at F_n (<0.0039") <0.1mm
Combined error relative to F_n <0.5%

Temperature

Operating Range (-4...185°F) -20...+85°C
Temperature coefficient <0.4% / 10K

5.2 Full bridge technical data

OWL200 Technical Data

Supply

Power Supply Voltage 10VDC

Outputs

Nominal Output 1mV/V

Configuration

Foil gauge configuration Full bridge

Characteristics

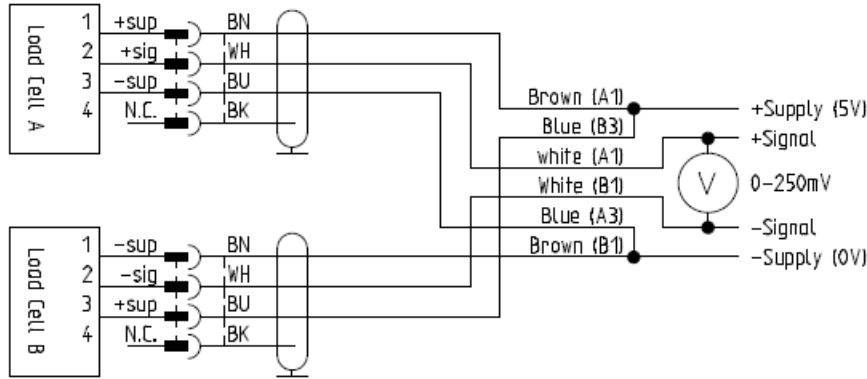
Foil gauge resistance 350 Ohms
Max operating force relative to F_n 150%
Force limit relative to F_n 200%
Deflection at F_n (<0.0039") <0.1mm
Combined error relative to F_n <0.5%

Temperature

Operating Range (-4...185°F) -20...+85°C
Temperature coefficient <0.4% / 10K

6. Wiring Diagrams

6.1 Half bridge wiring diagram



6.2 Full bridge wiring diagram

