

Polished Rod Load Cell Model F9870

Polished Rod Load Cell 9/2023



Applications

- Pump-off Control

Special features

- 2 mV/V Output
- $\pm 0.50\%$ Accuracy (Combined)
- Approved for use in hazardous location
- Industry-Standard Footprint



Polished Rod Load Cell, Model F9870




Description

Model F9870 is a purpose-built compression load cell tailored for monitoring polished rod forces in oilfield pump-off control systems. Ranges include 30,000 and 50,000 lbs., this hermetically sealed load cell ensures robust outdoor performance with shock and vibration, protection. Its sturdy steel body resists off-axis loading and matches industry standard footprints, offering easy integration into both new and existing pump-off control applications. The model F9870 includes international certifications for use in hazardous locations.

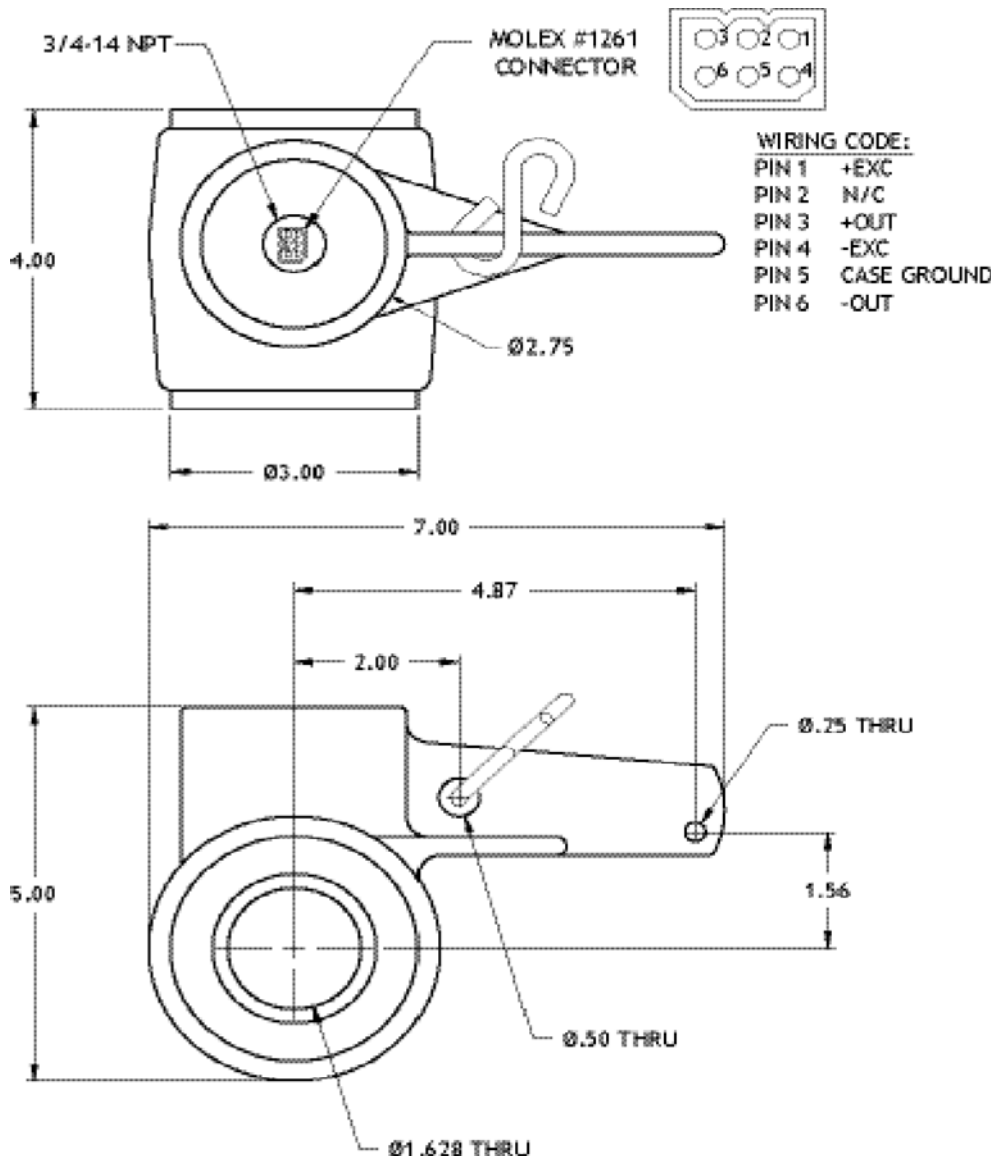
Performance Specifications

Model F9870		
Standard Ranges (psi)		0-30,000 to 0-50,000 lbs.
Excitation		5-15 Vdc
Output.		2 mV/V (Nominal)
Bridge Resistance		700 Ohms (Nominal)
Insulation Resistance		1 Megaohm
Linearity/Hysteresis/Repeatability		±0.50% FSO (Combined)
Operating Temperature Range		-40° to +175°F (-40 to +85°C)
Compensated Temperature Range		0° to +150°F (-18 to +65°C)
Thermal Effects:		
	Zero	±0.05% FSO/°F
	Span	±0.02% Reading/°F
Safe Overload		200% of Capacity
Calibration (Standard)		Compression
Standard Connector		MOLEX #1261 or Equivalent
Wiring Code		
	Pin 1	+ EXC.
	Pin 2	N/C
	Pin 3	+ OUT
	Pin 4	- EXC.
	Pin 5	CASE GROUND
	Pin 6	-OUT
FSO = Full Scale Output		

Approvals

Logo	Description	Region
	ATEX Directive Per EN IEC 60079-0: 2018 and EN 60079-11: 2012 Hazardous area Ex ia II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +85°C)	European area
	IECEx Per IEC 60079-0:2017 Edition: 7.0 and IEC 60079-11:2011 Edition: 6.0 Hazardous area Ex ia Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +85°C)	International
	MET Per UL 61010-1, Third Edition CSA C22.2 No.61010-1, Third Edition UL93, Eighth Edition CAN/CSA C22.2 No. 60079-0:15 CAN/CSA C22.2 No. 60079-11:14 ANSI 12.12.01-2016 / CSA C22.2 No. 213-16 UL 60079-7, Fifth Edition CAN/CSA-C22.2 No. 60079-7:16	USA and Canada

Dimensions in inches



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