0/4...20 mA Output • Hazardous Area Certification
Ranges: 0-2 to 0-60 inches
Industrial Grade

PT8420

Specification Summary:

GENERAL

Full Stroke Range Options	0-2 to 0-60 inches
Output Signal Options	4...20 mA (2-wire) and 0...20 mA (3-wire)
Accuracy	± 0.28% to ±0.15% full stroke *see ordering information*
Repeatability	± 0.05% full stroke
Resolution	essentially infinite
Measuring Cable Options	nylon-coated stainless steel or thermoplastic
Enclosure Material	powder-painted aluminum or stainless steel
Sensor	plastic-hybrid precision potentiometer
Potentiometer Cycle Life	*see ordering information*
Maximum Retraction Acceleration	*see ordering information*
Weight, Aluminum (Stainless Steel) Enclosure	3 lbs. (6 lbs.) max.

ELECTRICAL

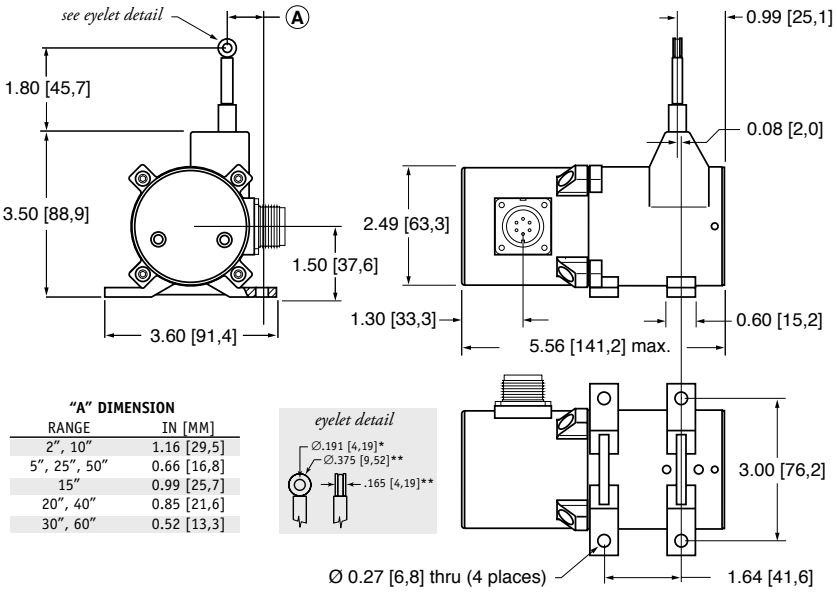
Input Voltage	*see ordering information*
Input Current	20 mA max.
Maximum Loop Resitance (Load)	(loop supply voltage - 8)/0.020
Circuit Protection	38 mA max.
Impedence	100M ohms@100 VDC, min.
Output Signal Adjustment	
Zero Adjustment	from factory set zero to 50% of full stroke range
Span Adjustment	to 50% of factory set span
Thermal Effects	
Zero	0.01% f.s./ºF, max.
Span	0.01% f.s./ºF, max.

ENVIRONMENTAL

Enclosure	NEMA 4/4X/6, IP 67/68
Hazardous Area Certification	*see ordering information*
Operating Temperature	-40º to 200ºF (-40º to 90ºC)
Vibration	up to 10 G's to 2000 Hz maximum

EMC COMPLIENCE PER DIRECTIVE 89/336/EEC

Emission/Immunity	EN50081-2/EN50082-2



"A" DIMENSION

RANGE	IN [MM]
2", 10"	1.16 [29,5]
5", 25", 50"	0.66 [16,8]
15"	0.99 [25,7]
20", 40"	0.85 [21,6]
30", 60"	0.52 [13,3]

DIMENSIONS ARE IN INCHES [MM]
tolerances are ±0.02 in. [±0,5 mm] unless otherwise noted

* tolerance = +.005 –.001 [+.13 –.03]
** tolerance = +.005 –.005 [+.13 –.13]

The PT8420 with its 4-20 mA feedback signal, is ideal for monitoring the stroke of a hydraulic cylinder and other applications requiring position data acquistion in harsh environments.

As a member of Celesco's family of NEMA 4-rated cable-extension transducers, the PT8420 provides a feedback signal that is proportional to the linear movement of a traveling stainless-steel extension cable. Simply mount the body of the transducer to a fixed surface and attach the extension cable to the moving object.

Output Signal