

Cable-Extension Position Transducer

- ▼ Industrial Grade – Long Range
- ▼ 4...20 mA Output Signal
- ▼ Intrinsically Safe



EXTENDED RANGE

PT9420

Specification Summary:

GENERAL

Full Stroke Ranges—on this datasheet . 0-600 to 0-1700 inches, see ① next page
 Output Signal 4 - 20 mA (2-wire), 0 - 20 mA (3-wire), see ⑦
 Accuracy ± 0.12% full stroke, max.
 Repeatability ± 0.05% full stroke, max.
 Resolution essentially infinite
 Measuring Cable stainless steel, nylon-coated or thermoplastic, see ③
 Enclosure Material powder-painted aluminum or stainless steel, see ④
 Sensor plastic-hybrid precision potentiometer
 Potentiometer Cycle Life 250,000, min.
 Maximum Retraction Acceleration see ⑥
 Maximum Velocity see ⑤
 Weight, Aluminum (Stainless Steel) Enclosure 8 lbs. (16 lbs.) max.

ELECTRICAL

Input Voltage 12 to 40 VDC
 Input Current 4 - 20 mA
 Loop Resistance (Load) (loop supply voltage - 12) / 0.02, max
 Circuit Protection 38 mA maximum
 Impedance 100 MW @ 100 VDC, min.
 Zero and Span Adjustment 2:1 turndown

ENVIRONMENTAL

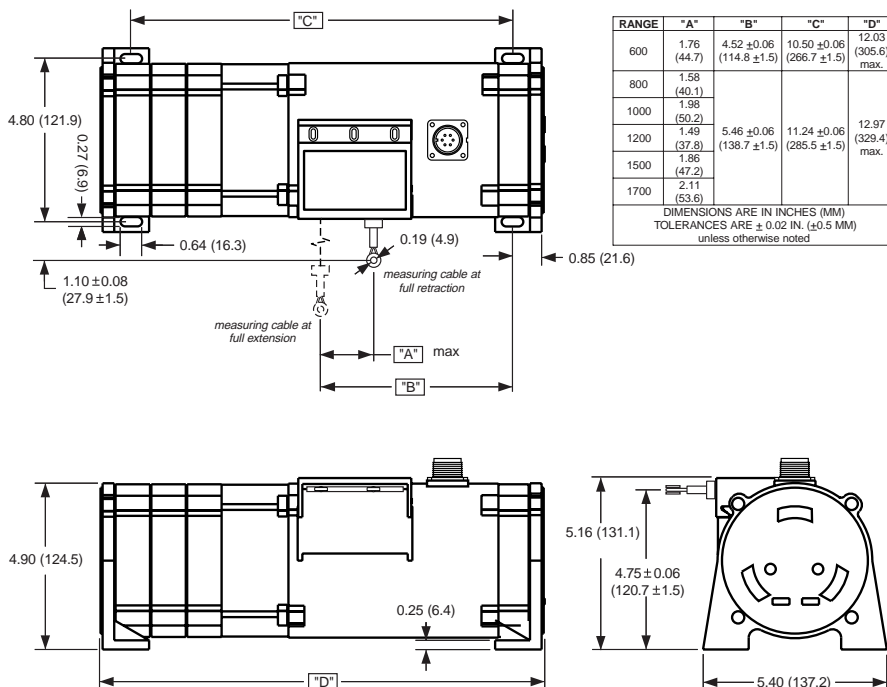
⑧ Enclosure Design NEMA 4/4X/6, IP 65/67/68, see ⑨ and ⑩
 Hazardous Area Certification .. CSA 22.2: Class 1, Groups A, B, C and D, see ③
 Operating Temperature -40° F to 200° F
 Thermal Effects
 Zero 0.01% full stroke / °F, max.
 Span 0.01% / °F, max.
 Vibration up to 10 G's to 2000 Hz max.

CE EMC COMPLIANCE PER DIRECTIVE 89/336/EEC

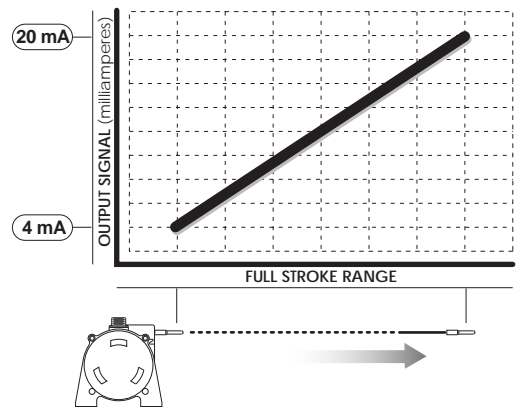
Emission / Immunity EN50081-2 / EN50082-2



The PT9420 is a great value for demanding long-range applications requiring a 4 - 20 mA linear position feedback signal. Sealed to meet NEMA 4 standards, this Cable-Extension Transducer will perform even under the harshest of environmental conditions. The PT9420 provides a 4 - 20 mA 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.



Electrical Output Signal:



celesco

PT9420 • Extended Range • Cable-Extension Transducer • 4...20 mA Output Signal

▼ Ordering Information

Model Number:

PT9420- _____ **-** _____ **1** _____ **-** _____ **1** _____ **0**
 order code: **R** **A** **B** **C** **D** **E** **F** **G**

Full Stroke Range:

	R order code:	0600	0800	1000	1200	1500	1700
①	full stroke range, min:	600 inches	800 inches	1000 inches	1200 inches	1500 inches	1700 inches
②	cable tension (±30%):	25 oz.	25 oz.	24 oz.	24 oz.	23 oz.	23 oz.
③	cable construction:	.034 nylon-coated stainless	.024 nylon-coated stainless	.019 nylon-coated stainless	.015 stainless steel		

Enclosure Material:

	A order code:	1	3
④	enclosure material:	powder-painted aluminum	303 stainless steel
⑤	maximum velocity:	60 inches per second	20 inches per second
⑥	max. retraction acceleration:	1 G	0.33 G

Cable Exit:

G order code:	1	2	3	4
direction:	front	top	rear	bottom

Output Signals:

B order code:	1	2	3	4	5*	6*
⑦ output signal configuration:	4...20 mA [2-wire]	20...4 mA [2-wire]	0...20 mA [3-wire]	20...0 mA [3-wire]	4...20 mA [2-wire]	20...4 mA [2-wire]
⑧ hazardous area certification	none	none	none	none		CSA Standard 22.2 Class 1 Groups A, B, C and D

***Important:** Intrinsically Safe when powered from a CSA certified zener barrier rated 28 VDC max, 110 mA max as per Installation Drawing 677984

PT9420 • Extended Range • Cable-Extension Transducer • 4...20 mA Output Signal

Electrical Connection:

⑩ order code:

	1	2	3	4																																																																		
electrical connection:	6-pin plastic connector and mating plug	10 ft. waterproof cable	6-pin metal connector and mating plug	25 ft. instrumentation cable																																																																		
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note: *requires factory submersion test **applies to stainless steel enclosure, see ⑥

⑨

⑩

▼ Sample Model Number

PT9420-1500 - 1 1 1 - 1 1 1 0
order code: ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯

Specifications: Full Stroke Range: 1500 inches
 Enclosure Material: powder-painted aluminum
 Measuring Cable: 0.015-in dia. stainless steel cable
 Cable Exit: front
 Output Signals: 4-20 mA, 2-wire, output increasing with cable extension
 Electrical Connection: 6-pin plastic connector

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