

Cable-Extension Position Transducer

- ▼ Short to Medium Range
- ▼ Compact Size • OEM Applications
- ▼ Potentiometer Sensor - RS232 / 485 Output

PT1232



Specification Summary:

GENERAL

Full Stroke Ranges 0-2 to 0-50 inches, see ① next page
 Output Signal RS232 or RS485, see ③
 Accuracy ± 0.25 to $\pm 0.10\%$ full stroke, max., see ②
 Repeatability $\pm 0.02\%$ full stroke, max.
 Resolution 0.001in. (0.1 mm)
 Measuring Cable 0.019-in. dia. nylon-coated stainless steel
 Enclosure Material ABS plastic and black anodized aluminum
 Sensor plastic-hybrid precision potentiometer
 Weight 1 lb., max

ELECTRICAL

Input Voltage 10...30 VDC
 Input Current 100 mA, max.
 Temperature Coefficient of Sensing Element 88 P.P.M./°F

COMMUNICATIONS

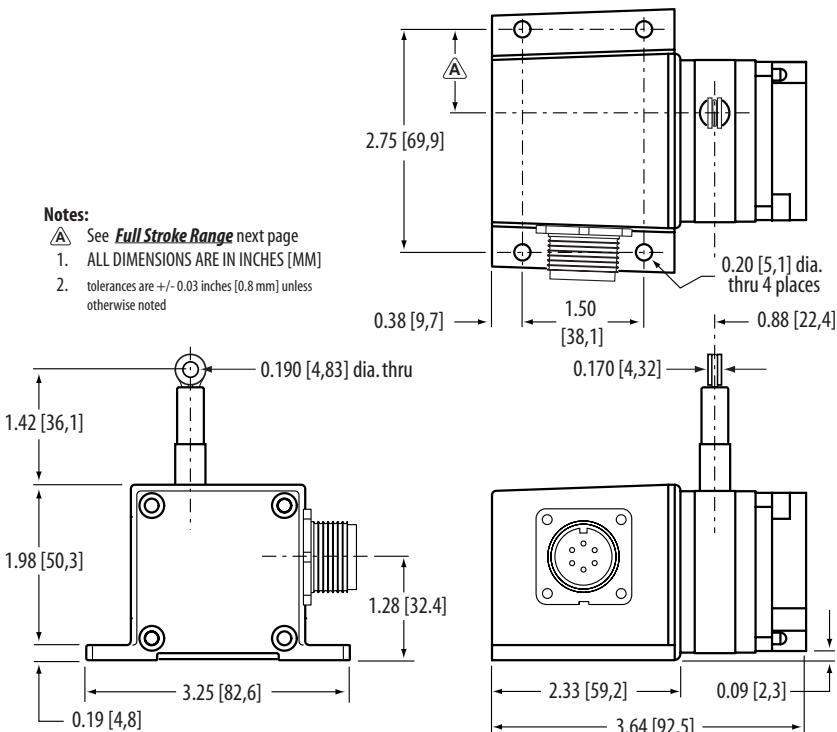
Baud Rate 9600 (programmable to 19.2K)
 Format startbit, 8 databits, stopbit, no parity
 Position Output Data ASCII string

ENVIRONMENTAL

Enclosure Design NEMA 4, IP65/67
 Operating Temperature 0° to 80°C
 Vibration up to 10 G's to 2000 Hz

The PT1232 is part of CeleSCO's compact line of cable-extension transducers. Using a high cycle plastic-hybrid potentiometer and an embedded microcontroller, the PT1232 delivers a positional feedback signal via RS232 or RS485 serial communication. This transducer can either transmit data continuously or polled as needed.

Because a potentiometer is used as the sensor, the PT1232 constantly maintains position information even when power is lost. Software for Win95/98/NT is also available that allows user to access all programmable features such as calibration, "zero" position adjust and baudrate settings.



Communication Format:

format: 8 databits, 1 stopbit, no parity
 string length: 8 bytes
 structure: <Do, D1, D2, D3, D4, D5, D6, D7>
 Do = sign (+/-)
 D1...D7 = linear position
 D4 = decimal point

Latin Tech, Inc.

Ordering Information

Model Number:

PT1232 - - - - -
 order code: **R** **A** **B** **C**

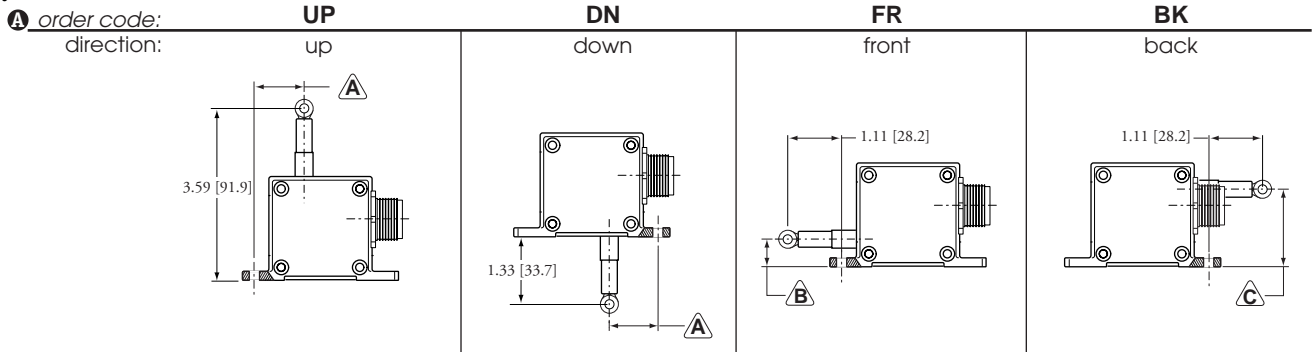
Full Stroke Range:

R order code:	2	5	10	15	20	25	30	40	50
① full stroke range, min:	2 in.	5 in.	10 in.	15 in.	20 in.	25 in.	30 in.	40 in.	50 in.
② accuracy (% of f.s.):	0.25%	0.25%	0.15%	0.15%	0.15%	0.15%	0.10%	0.10%	0.10%
maximum cable acceleration:	11 G's	3 G's	11 G's	5 G's	4 G's	3 G's	5 G's	4 G's	3 G's
std. cable tension (±30%):	12 oz.	5 oz.	12 oz.	9 oz.	6 oz.	5 oz.	9 oz.	6 oz.	5 oz.
potentiometer cycle life*:	2.5 x 10 ⁶	2.5 x 10 ⁶	5 x 10 ⁵	5 x 10 ⁵	5 x 10 ⁵	5 x 10 ⁵	5 x 10 ⁵	2.5 x 10 ⁵	2.5 x 10 ⁵
A - inches (mm)**:	1.04 (26.3)	0.54 (13.8)	1.04 (26.3)	0.82 (20.7)	0.74 (18.7)	0.54 (13.8)	0.82 (20.7)	0.74 (18.7)	0.54 (13.8)
B - inches (mm)**:	0.75 (19.1)	0.29(6.1)	0.75 (19.1)	0.53 (13.5)	0.45 (11.5)	0.29 (6.1)	0.53 (13.5)	0.45 (11.5)	0.29 (6.1)
C - inches (mm)**:	1.43 (36.3)	1.89 (48.0)	1.43 (36.3)	1.65 (41.9)	1.73 (43.7)	1.89 (48.0)	1.65 (41.9)	1.73 (43.7)	1.89 (48.0)

*note: **potentiometer cycle life** is defined as the minimum number of times the measuring cable can be fully extended and retracted before any measurable degradation of the output signal occurs.

note: refer to **Cable Exit below.

Cable Exit:



note: **A** — see ③ above **B** — see ④ above **C** — see ⑤ above

Data Communication:

B order code:	232	485
③ input / output signal:	RS232	RS485

Electrical Connections:

C order code:	M6	C25																																										
electrical connection:	6-pin plastic connector and mating plug	25 ft. instrumentation cable																																										
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