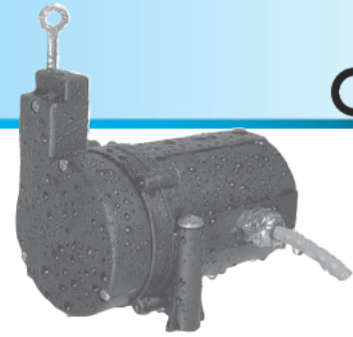


JX-EP SERIES DIGITAL OUTPUT



The UniMeasure JX-EP series linear position transducer with digital output is oriented for use in moderate duty applications in hostile wet or dry environments. The chemical resistant thermoplastic case of the transducer with integral dust wiper is factory configurable to NEMA 12 (IP-52) for dust protection or to NEMA 4X (IP-65) for applications where exposure to wash-down, rain, oil and other liquids may occur. The sealed case is achieved through the use of o-rings and a low friction shaft seal. The wire rope exit direction may be specified at time of order or may be user adjusted at time of installation. The standard electrical connection includes a sealed bulkhead fitting and multi-conductor electrical cable. An optional cable to cable connector with mating connector may be added to the electrical cable. Alternatively, the cable to cable connector may be ordered without the mating connector. The mating connector with a length of electrical cable attached may be ordered as a separate item. As a convenience, optional connector locations on the transducer body are offered. The standard electrical output of the unit is a TTL level two channel square wave in quadrature. Optional outputs include line driver and push-pull circuits.

SPECIFICATIONS

General

Measurement Range.....	See Range Table below
Sensing Device	Digital Encoder
Nominal Resolution ²	
10" range.....	445 counts/inch, 17.5 counts/mm
15", 30" range	327 counts/inch, 12.9 counts/mm
20", 40" range	246 counts/inch, 9.7 counts/mm
25", 50" range	198 counts/inch, 7.8 counts/mm
60" range.....	166 counts/inch, 6.5 counts/mm
80" range.....	126 counts/inch, 5.0 counts/mm
Linearity	±0.10% Full Scale
Repeatability	
(in times 1 counting mode).....	±1 Count, ranges to 25" ±2 Counts, ranges 30" to 80"
Construction	Thermoplastic Body
Wire Rope	Ø.018 (0.46 mm) Jacketed Stainless Steel
Wire Rope Tension.....	See Supplemental Data ¹
Weight	6.3 oz. (180 gm)
Connection	24 AWG Shielded Electrical Cable

Life (to wire rope replacement)

Ranges 10" to 25"	1,000,000 full stroke cycles
Ranges 30" to 80"	500,000 full stroke cycles

Electrical

Excitation Voltage	+5 VDC ±5% or 8-28 VDC
Excitation Current	85mA MAX
Output	2 channel square wave in quadrature TTL level current sinking with 65 K Ω pullups

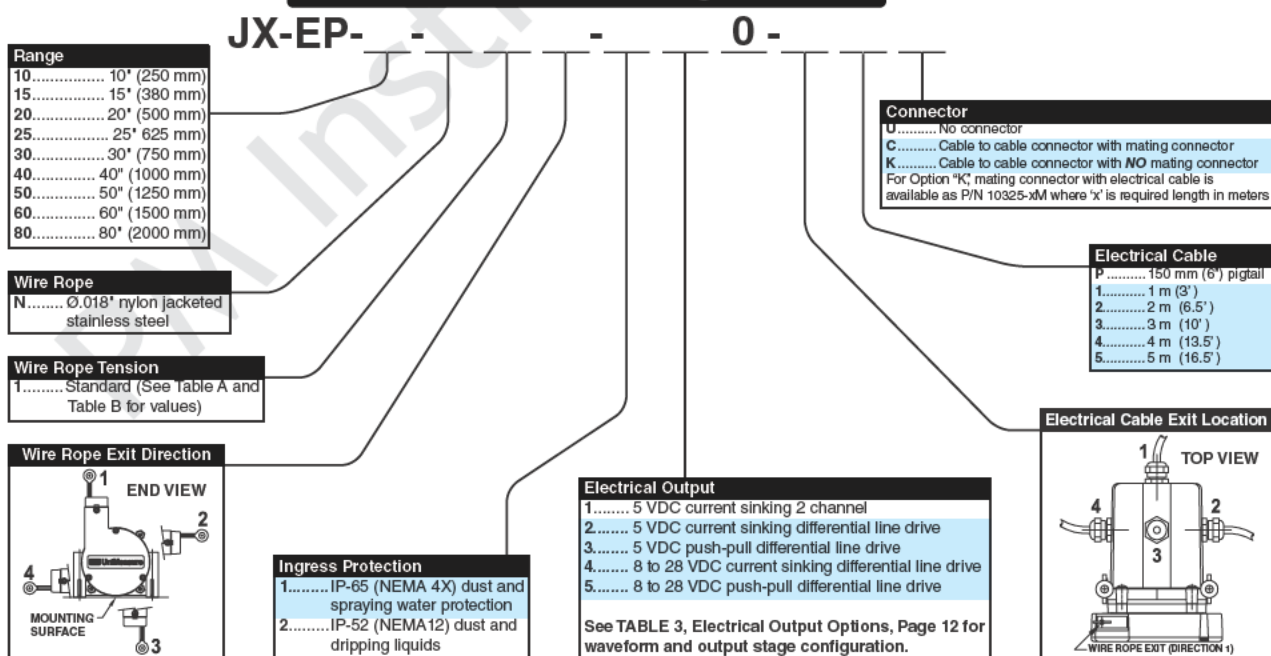
Environmental

Operating Temperature	-40°C to 70°C
Storage Temperature.....	-40°C to 80°C
Operating Humidity	95% R.H. non-condensing IP-52 case 100% R.H. IP-65 case
Vibration.....	20 G's maximum
Ingress Protection.....	NEMA 12 or 4X, IP-52 or 65

FOOTNOTES TO SPECIFICATIONS

- Supplemental Data section located at end of JX Series pages.
- Resolution shown is for times one counting mode. Resolution may be increased by a factor of four with interface electronics capable of quadrature times 4 counting mode.

Model Number Configuration



NOTE
1) Shaded options available at additional cost.

Example
JX-EP-50-N11-110-42U

JX SERIES SUPPLEMENTAL DATA



DIMENSIONAL INFORMATION

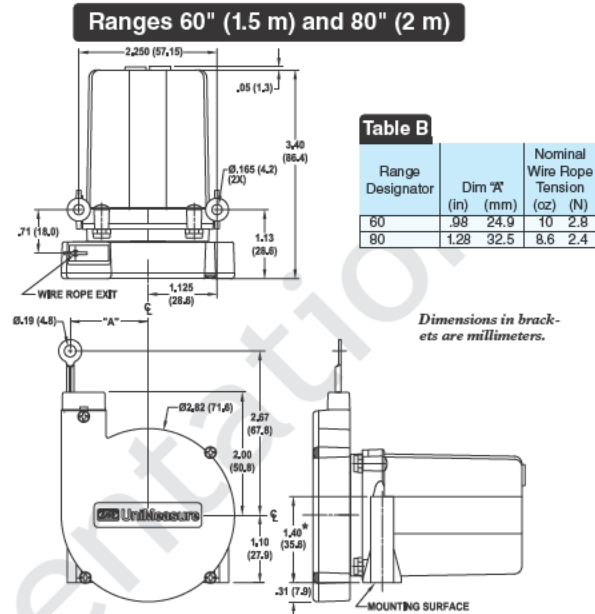
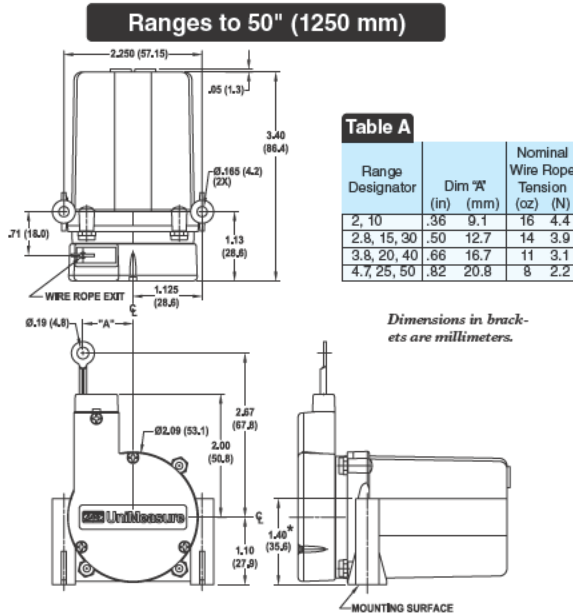
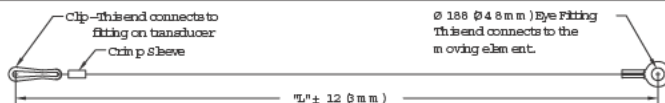


TABLE 3 Electrical Output Options—JX-EP Series

Option	Output Type	Output Stage	Waveform
1	5 VDC TTL Two Channel Current Sinking Two channels in quadrature with 65K Ω internal pullup resistors. 5 VDC input voltage		
2	5 VDC TTL Current Sinking Differential Line Drive Current sinking line drive output. 2K Ω internal pullup resistors. 5 VDC input voltage		
3	5 VDC Push-Pull Differential Line Drive Push-Pull, current sourcing and current sinking output. 5 VDC input voltage. Output is compliant with requirements of TIA/EIA-422-B.		
4	8 to 28 VDC Current Sinking Differential Line Drive Current sinking line drive output with 10K Ω internal pullup resistors. 8 to 28 VDC input voltage		
5	8 to 28 VDC Push-Pull Differential Line Drive Push-Pull, current sourcing and current sinking output. 8 to 28 VDC input voltage.		

Accessory—10067 Auxiliary Wire Rope Extension Kit



The auxiliary wire rope extension may be used to facilitate mounting the transducer remotely from the measurement point. The clip on the extension attaches to the eye fitting on the transducer. The eye fitting on the opposite end which is identical to the fitting on the transducer mounts to the moving element. The extension kit is also available with the clip end unterminated for situations where it is more convenient to size the wire rope length during installation. The clip and crimp sleeve are included as loose parts for user termination.

10067- CM-

* Completed kit (no designator required)
 U Unterminated clip end (clip and crimp sleeve included in kit)
 * Leave blank. No designator required.

Dimension "L"
 Specify dimension "L" in centimeters to the nearest whole centimeter.

Note 1. 1 cm = 0.394"; 1 inch = 2.54 cm
 Note 2. Shortest length "L" is 5 cm (approximately 2").