

The UniMeasure LX-EP Series linear position transducer with digital output is a low cost, compact device for use in light to moderate duty applications in dry environments. The plastic bodied device is ideal for high volume OEM situations where cost is a major consideration and in applications where small size or low weight are of paramount importance. The sensing element in the LX-EP is an optical incremental encoder with electrical outputs consisting of two square wave, TTL level output channels in quadrature. Each output channel is open collector, current sinking with an internal $5.4 \text{K}\Omega$ pullup resistor.



THIS PRODUCT HAS BEEN DISCONTINUED AND IS NO LONGER AVAILABLE. PLEASE CLICK HERE OR SEE LX-EP2 FOR REPLACEMENT PRODUCT.

GENERAL

Measurement RangesSee Table 2 Sensing Device.....Incremental Optical Encoder ResolutionSee Table 2 Linearity.....±0.10% of Full Scale Repeatability.....±0.015% of Full Scale Construction......Thermoplastic Body Wire Rope......Ø.018 (0.46 mm) Jacketed Stainless Steel

Wire Rope Tension See Table 2

Dimensional Information......See Supplemental Data[1]

Ranges 10" to 25"2,000,000 full stroke cycles Ranges 30" to 50" 1,000,000 full stroke cycles

ENVIRONMENTAL

Operating Temperature......-40°C to 75°C Storage Temperature.....-40°C to 85°C

Operating Humidity95% R.H. max. non-condensing

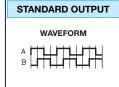
Vibration5G

ELECTRICAL

Excitation Voltage......5.00 ± 0.25 VDC Excitation Current......30 mA max.

OutputTwo channel square wave in quadrature, TTL level current sinking with $5.4K\Omega$ pullups





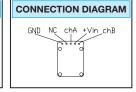


TABLE 2

MODEL	RANGE		RESOLUTION[2]		RESOLUTION	NOMINAL WIRE ROPE TENSION	
	(inch)	(mm)	counts/inch	counts/mm	TOLERANCE	(oz)	(N)
LX-EP-10	10	250	113.5	4.46	±.50%	16	4.4
IV ED 15	15	200	00 E	2 25	250/	10	20

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tour with interface electronics capable of quadrature times 4 counting mode.

3. Resolution shown is a calculation based upon the capstan diameter, wire rope diameter and line count of the encoding device. Tolerance on resolution accounts for resolutional differences from unit to unit due to manufacturing tolerances on the capstan and wire rope. In practice, the output count in a given unit of travel is an integer.

| LX-EP-50 | 50 | 1250 | 50.4 | 1.98 | ±.35% | 6 | 1.7 |

MODEL NUMBER CONFIGURATION





BASIC CONFIGURATION (FOR ALL RANGES)

LX-EP-50

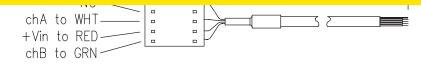


......50" (1250 mm) Note: For mating connector with electrical cable see Accessory 10172.

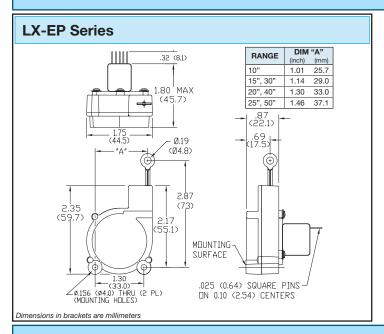
ACCESSORY-10172 ELECTRICAL CABLE (LX-EP ONLY)

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10172 2181	2 111 (0.0 1t)		
10172-3M	3 m (10 ft)		
10172-4M	4 m (13.5 ft)		
10172-5M	5 m (16.5 ft)		



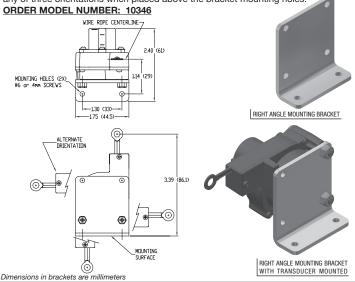
DIMENSIONAL INFORMATION



ACCESSORIES

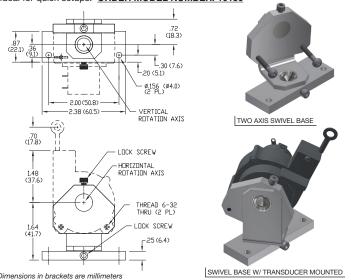
10346 - RIGHT ANGLE MOUNTING BRACKET

The Right Angle Mounting Bracket serves as a base for mounting the LX transducer perpendicular to a surface. The transducer may be mounted in any of four different wire rope exit orientations when mounted on the outside of the bracket (see figure) or any of three orientations when placed above the bracket mounting holes.



10156 – TWO AXIS SWIVEL BASE

With a capability of 360° rotation about the vertical axis and 245° rotation about the horizontal axis, the 10156 Two Axis Swivel Base allows easy setup of the LX-PA or the LX-EP transducer. The axes may be locked in place after the transducer is oriented. Ideal for quick setups. ORDER MODEL NUMBER: 10156



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. Clip and crimp fitting are included with the unterminated version.



10067- -CM- 2

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

NOTES: 1. 1 cm = 0.394", 1 inch = 2.54 cm
2. Shortest length "L" is 5 cm (approximately 2")

UNTERMINATED CLIP END