

General Installation Guidelines

Wire Rope Attachment

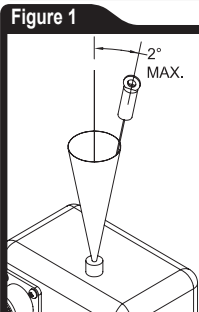


Figure 1
Angularity --The wire rope should be aligned within 2° of perpendicular (Fig. 1) when at full extension.

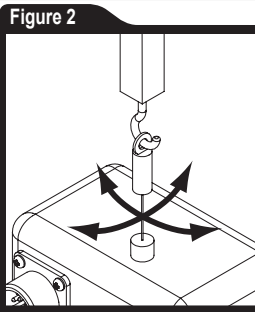


Figure 2
Eye Fitting Freedom --The eye fitting on the end of the wire rope should be mounted to allow rotation both axially about the pivot point and perpendicular to the axis of the pivot (Fig. 2 & 3) to allow the crimp barrel of the eye fitting to follow the direction of the wire rope. This eliminates all bending stress on the wire rope at the crimp of the eye fitting.

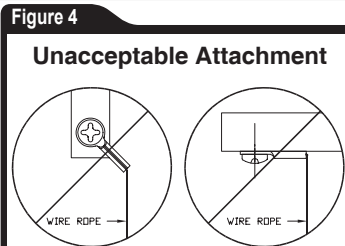
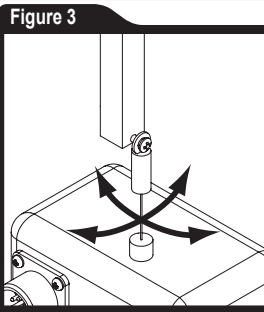


Figure 4
Unacceptable Attachment
Prevention -- Attaching the eye fitting as shown in Fig. 4 above will put undue bending stress on the wire rope which may cause early fatigue. To prevent premature wire rope failure, eye fitting mounting conditions as shown above should be avoided.

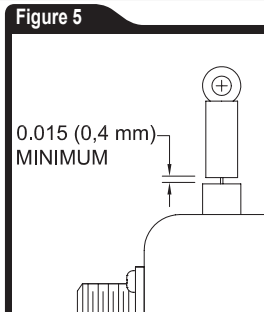


Figure 5
Zero Extension -- Insure that the wire rope starting point is not less than .015" (0,4 mm) from the zero extension position (Fig. 5).

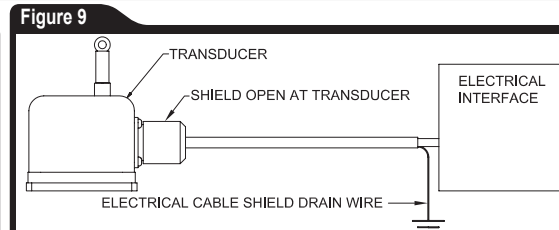


Figure 9
Electrical Cable Shielding -- It is generally recommended that shielded, twisted pair cabling be used between transducer and electrical interface. The shield should remain open at the transducer and be tied to ground at the electrical interface. As shown in Fig. 9 above.

Alternative Mounting Suggestions

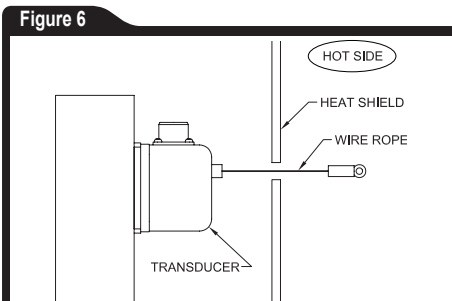


Figure 6
Close Proximity to Hot Areas -- In applications where radiated heat can increase the temperature of the transducer beyond its operating temperature limit, it is advisable to use a heat shield between the transducer and the hot area as shown in Fig. 6 above.

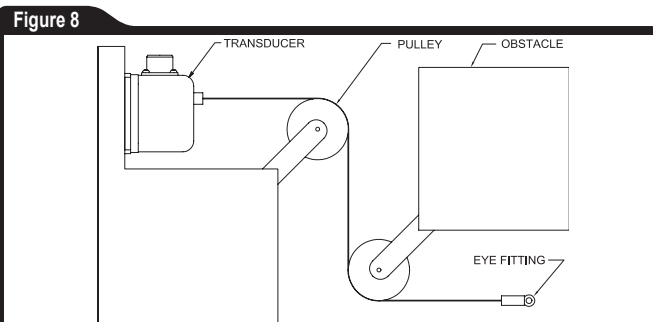


Figure 8
Obstacle Avoidance -- The wire rope of the transducer may be routed over pulleys to facilitate mounting. To maximize wire rope life the minimum root pulley diameter should be 1.5" (38 mm) for wire rope diameters less than Ø.020" (0,5 mm) and 2.5" (64 mm) for wire rope diameters between Ø.020" and Ø.040" (0,5 and 1.0 mm).

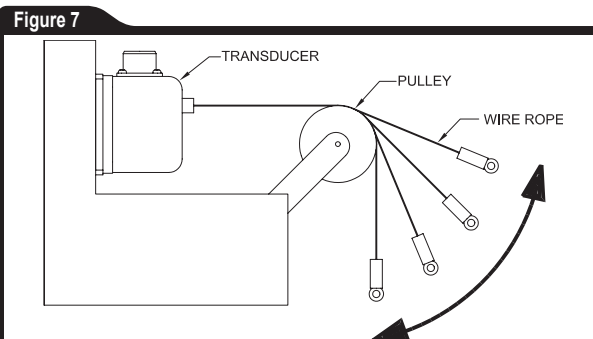


Figure 7
Oscillating Motion -- For applications where oscillating motion as shown in Fig. 7 above may be encountered, a pulley should be employed to insure that the wire rope exits the transducer in a perpendicular manner.

Other Information

Short Range Transducers
 Units with ranges of 6" (150 mm) or less employ single turn potentiometers without end stops. As the wire rope is extracted from the unit, the wiper on the potentiometer will traverse the full electrical working range. However, since no mechanical stop exists in the potentiometer, it is possible to continue extracting the wire rope beyond the working range of the transducer. When this occurs, the wiper of the potentiometer passes through a dead zone where no electrical output is observed and then begins at the zero output position again and repeats its output. Although the full extension of the wire rope may, in some cases, approach 12" (300 mm) the working range occurs from initial extension.

Linearity
 The linearity specified for UniMeasure position transducers is terminal linearity. The linearity calculation determines the error as a percent of full scale of intermediate data points relative to a straight line drawn through the first and last data point in a set of data. The first and last data points correspond to the initial starting point of wire rope travel and full extension of the wire rope respectively.

WARRANTY
 UniMeasure products are warranted for 6 months from date of shipment against defects in materials and workmanship. During the warranty period, UniMeasure will promptly repair defective units at no charge to the purchaser if the product is returned to the factory with inbound freight prepaid. The warranty is void if the product is misused, damaged by accident, disassembled or intentionally abused. UniMeasure makes no other warranties either expressed or implied other than that above. UniMeasure assumes no liability for consequential damages under any circumstances. Prices, specifications and product appearance are subject to change without notice.
RETURN POLICY
 A 35% (45% for specials) restocking fee plus original outbound freight charge applies to all goods returned within 60 days of invoice date. Goods must be in 'as new' condition otherwise adjustment to restock fee will be commensurate with condition of units. After 60 day grace period, no credit is given for returns.