JX-P510 | POSITION TRANSDUCER | INSTALLATION GUIDE

DIMENSIONAL INFORMATION
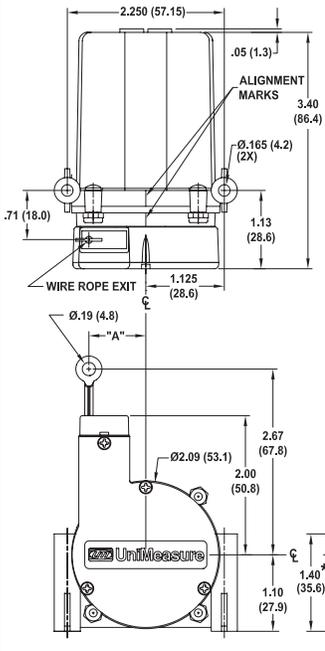
RANGES TO 50" (1250 MM)

TABLE A

RANGE	Dim A		Nominal Cable Tension	
	(in)	(mm)	(oz)	(N)
2,10	.36	9.1	16	4.4
2.8,15, 30	.50	12.7	14	3.9
3.8, 20, 40	.66	16.7	11	3.1
4.7, 25, 50	.82	20.8	8	2.2

FIG 1

Dimensions in brackets are millimeters.   **Mounting screws must accommodate this distance.*
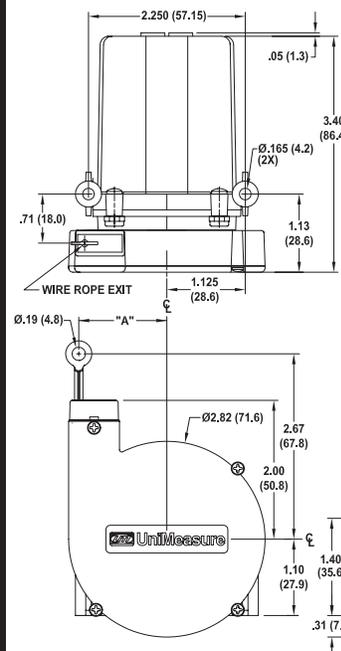
RANGES 60 & 80" (1250 MM)

TABLE B

RANGE	Dim A		Nominal Cable Tension	
	(in)	(mm)	(oz)	(N)
60	.98	24.9	10	2.8
80	1.28	32.5	8.6	2.4

FIG 2

Dimensions in brackets are millimeters.   **Mounting screws must accommodate this distance.*

SPECIFICATIONS

Output..0 to 10 VDC 0 to 5 VDC
    Alternatively ±5 or ±10 VDC
Excitation Voltage ....4.9 to 30 VDC
Excitation Current ....25 mA maximum
Output Load................................5K ohm minimum
Output Impedance......................10 ohm maximum
Protection....................................Reversed Polarity Input
Linearity: Ranges to 4.7"............±1.0% Full Scale
        10" to 25" range ....±0.5% Full Scale
        30" to 80" range ....±0.25% Full Scale
Operating Temperature ....-25°C to 75°C

MOUNTING

1 To maximize wire rope life, align transducer with moving element so that wire rope exits perpendicular to axis of wire rope exit hole within 2° *(See FIG 3)*.
2 Use Table A or B to determine wire rope exit location relative to transducer mounting holes.
3 Mount unit with two #8 or two M4 (or smaller) pan head machine screws. On units with ranges of 60" (1500 mm) or 80" (2000 mm), place spacer blocks under mounting surface *(See FIG 2)*. Torque 8-32 screws to **8 lb-in** maximum. Torque M4 screws to **0.80 N-m** maximum.

FIG 3

2°
Max.

REPLACEMENT WIRE ROPE WIPERS

The JX transducer contains wire rope dust wipers which are located just beneath the wire rope exit location. Periodic, replacement of the dust wipers may be necessary depending upon the amount of dust in the operating environment. To access the dust wipers, remove the dust wiper cover by placing a small blade screwdriver into the slot as shown in *FIG 4* and pry upward while squeezing the ends of the cover. The wipers may be removed with tweezers and cleaned or replaced. The replacement wiper kit which contains six pair of prelubricated wipers is UniMeasure part number 10198.

To install replacement wipers, place a wiper into wiper opening on both sides of the wire rope. Press wiper cover into place until detented.
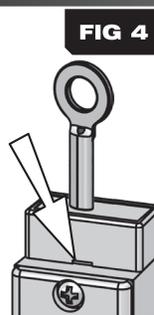
FIG 4

ZERO & SPAN POTENTIOMETER ADJUSTMENT

To adjust the zero and span, first remove the two Phillips head screws from the potentiometer access holes located on the end of the transducer *(See FIG. 7)*. Visually locate the adjustment screws on each potentiometer. The screws are very small and will require a small blade type screwdriver (.06" (1.5mm) max. blade width x .016" (.4mm) max. blade thickness) for the adjustment.

0 TO 5 VDC OR 0 TO 10 VDC OUTPUT

Rotate the shaft of the transducer to the desired zero position (must be within 0% to 30% of range) and adjust the Zero potentiometer to give 0 VDC output. Rotate the shaft to the desired maximum position (must be within 80% to 100% of range) and adjust the Span potentiometer to the desired maximum output of 5 or 10 VDC.
Since the zero and span controls are somewhat interactive, recheck the zero and span settings and adjust as necessary. Insure that a sealing o-ring *(See FIG. 7)* is on each of the two Phillips head screws. Thread each screw into each potentiometer access hole until the head of the screw bottoms against the raised shoulder. Do not tighten the screw against the shoulder.

±5 VDC OR ±10 VDC OUTPUT

Rotate the shaft of the transducer to the desired zero position (must be between 40% and 60% of maximum range) and adjust the Zero potentiometer to give 0 VDC output. Rotate the shaft to the desired maximum position (must be within 80% to 100% of range) and adjust the Span potentiometer to the desired maximum output of 5 or 10 VDC output.
Since the zero and span controls are somewhat interactive, recheck the zero and span settings and adjust as necessary. Insure that a sealing o-ring *(See FIG. 7)* is on each of the two Phillips head screws. Thread each screw into each potentiometer access hole until the head of the screw bottoms against the raised shoulder. Do not tighten the screw against the shoulder.

ROTATION OF WIRE ROPE EXIT

To rotate wire rope exit location, loosen four screws *(See FIG 5*, which retain mechanism to mounting housing. Note that alignment marks on mechanism occur at 45° intervals. Rotate housing to desired position and torque screws to **50 oz-in (0.35 N-m)**.
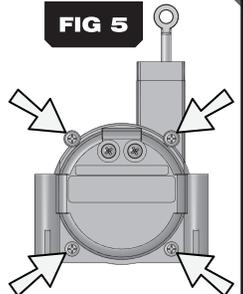
FIG 5

ZERO & SPAN POTENTIOMETER ACCESS

FIG 7

ZERO POT ACCESS
SPAN POT ACCESS
O-RING
PHILLIPS HEAD SCREW
RAISED SHOULDER
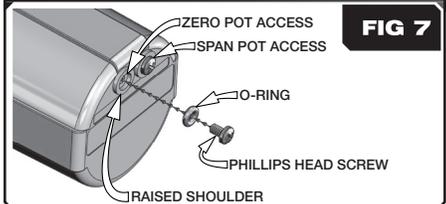
CONNECTOR WIRING

As viewed on transducer and on cable attachment side of mating connector.

ALIGNMENT KEY
±Vout
+Vin
COMMON

ELECTRICAL CABLE WIRING

RED +Vin
BLK COMMON
WHT ±Vout
SHIELD
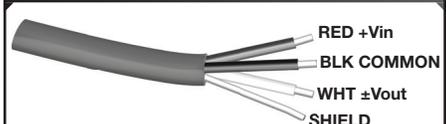
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