**UniMeasure ZX-HM Series** employs a non-contact hall effect internal sensing element. With an overall measurement range of 1.5" (38mm), model ZX-HM-1.5 is ideal for applications where space is at a premium or where dithering motion or continuous oscillation may be encountered. With a wide operating temperature range, the non-contact internal hall effect sensing element allows for an extremely long service life without output signal degradation.

The mounting holes in the housing allow mounting with two #2 or two 2 mm screws. Alternatively the unit may be mounted with two 4-40 screws that thread directly into the housing. The wire rope of the unit may be ordered with an eye fitting termination or with a length of leader wire rope, a clip, and several crimp fittings to hold the clip in place.
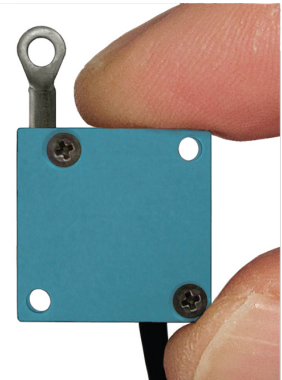
SPECIFICATIONS

GENERAL

Measurement Range .... 1.5 inch (38 mm)
Sensing Device.................... Non Contact Hall Effect Device
Resolution............................ 0.0016 in (0.04 mm)
Linearity .... ±1.0% Full Scale
Repeatability........................ ±0.0032 in (0.08 mm)
Construction .... Anodized Aluminum Housing
Wire Rope........................... Ø0.018" (0.46 mm) Nylon Jacketed Stainless Steel
Wire Rope Tension.............. 4 oz (1.1 N)
Weight.................................. 0.52 oz (15 gm)
Electrical Connection.......... 3 conductor cable, 18" (457mm) length
Dynamic Response.............. 25 Hz over full range extension
Life .... 30,000,000 full stroke cycles

ENVIRONMENTAL

Operating Temperature........ -40° C to 100° C
Storage Temperature .... -55° C to 100° C
Vibration .... 15 G's 0.1 ms max.
Shock .... 50 G's 0.1 ms max.
Ingress Protection................ IP-40 (NEMA 1)

ELECTRICAL

Excitation Voltage .... 5.00 ± 0.25 VDC
Excitation Current .... 21 mA Max.
Output Voltage................................ 89% ± 3% of Excitation Voltage
Minimum Load Impedance .... 30K Ohms

CONNECTION DIAGRAM

+Ve (RED)
COM (BLK)
+Vout (WHT)

ELECTRICAL CABLE
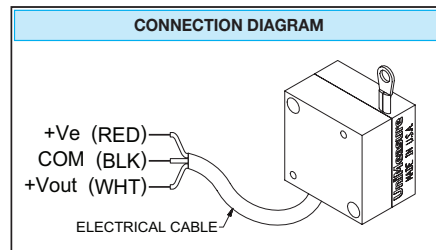
MODEL NUMBER CONFIGURATION

ZX-HM-1.5- _
Ⓘ

BASIC CONFIGURATION

ZX-HM-1.5-A

Ⓘ WIRE ROPE CONFIGURATION
A.............. Eye Fitting, *See* FIG A
B.............. 24" (600 mm) Leader Wire Rope with Fittings, *See* FIG B

EYE FITTING **FIG A**

Ø0.140 [3.6]   Ø0.093 [2.4]
0.28 [7.1]

Dimensions in brackets are millimeters

LEADER WIRE WITH FITTINGS **FIG B**

CRIMP BALL   LEADER WIRE ROPE 24" [600]
Ø0.093 [2.4]
ELECTRICAL CABLE
CLIP (1 EA)   CRIMP FERRULES (3 EA)

Dimensions in brackets are millimeters
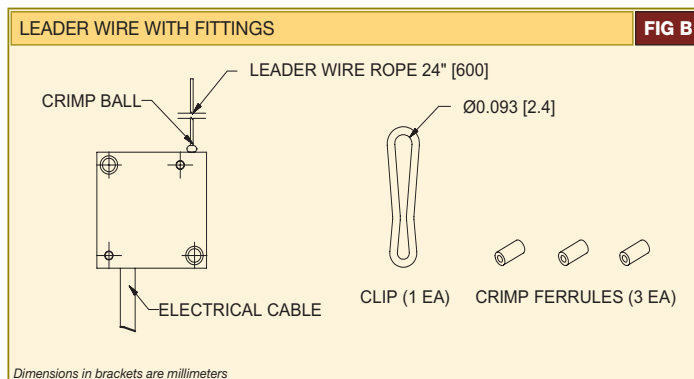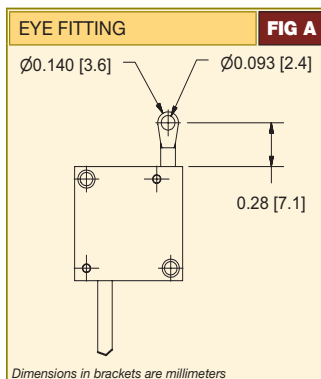
DIMENSIONAL INFORMATION

ZX-HM Series

0.188 [4.78]

Ø0.018 WIRE ROPE

0.500 [12.70]

0.098 [2.49]

Ø0.093 [2.36] THRU (2X)
THRD 4-40 OPP END

0.650 [16.51]

0.730 [18.54]

0.080 [2.03]

0.080 [2.03]

0.650 [16.51]   0.730 [18.54]

ELECTRICAL CABLE 18" [457]

0.14 [3.6]

ELECTRICAL
CABLE EXIT

0.55 [14.0]

Bottom View

Dimensions in brackets are millimeters