

LOOP INDICATORS

Affordable Analog and Digital Indication



- Rugged NEMA 4X Case
- Wall Mount or Horizontal/Vertical 2" Pipe Mount
- FM and CSA Approved Versions
- ATEX Approved - Certain Models Only
- Less than 1.0V Voltage Drop - MLD1 Only
- 6 Digit Field Configurable Display and Square Root Extraction - MLX Only



MLA



MLD



MLD1



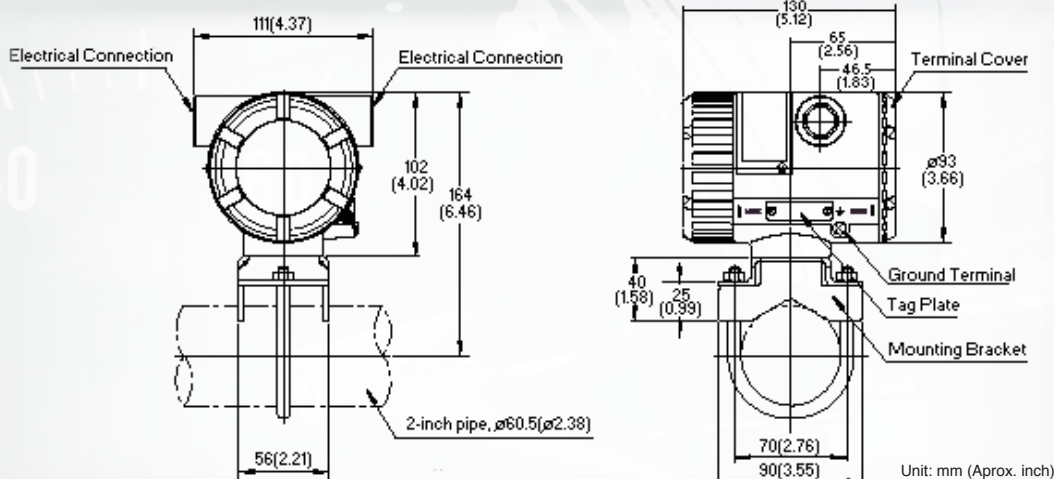
MLX

Indicating Options for all
your Process Needs

YOKOGAWA 

Model MLA, MLD, MLD 1 & MLX Loop Powered Process Indicators

Dimensions



Model MLA (Analog)

Input Resistance: < 6.5 ohm (MLA 4-20mA), < 13.5 ohm (MLA 10-50mA), ~4K ohm (MLA 1-5V)
Scale: Black. Analog single graduations 0-100% standard. Digital 0-100.0% w/decimal standard.
Accuracy: ± 1.5% of full scale
Operating Temperature Range: -20 to 60°C (MLA)
Insulation Resistance: Between input terminals and case 100 Mohm at 500 V DC
Dielectric Strength: Between input terminals and case: 1000 VAC for 1 minute.
Mounting: Nominal 2" (50mm) pipe mount or surface.
Electrical Classification: FM, CSA, EXPLOSIONPROOF CL1, DIV1, GPS A,B,C,D, DUST-IGNITIONPROOF CLII / III, GPS E,F,G
Case and Cover: Die cast aluminum, baked polyurethane paint. Dark green; NEMA 4X
Electrical Connection: 1/2 NPT
Weight: 3.0 lbs (MLA)



Model MLD (Digital)

Input Resistance: < 6.5 ohm (MLA 4-20mA), < 13.5 ohm (MLA 10-50mA), ~4K ohm (MLA 1-5V)
Voltage Drop: 1.8V typ., 2V max. (MLD)
Scale: Black. Digital 0-100.0% w/decimal standard.
Accuracy: ± 0.05% of full scale (1999) +1 digit (MLD)
Operating Temperature Range: 0 to 60°C (MLD)
Temperature drift: ±0.3digit/°C (MLD)
Insulation Resistance: Between input terminals and case 100 Mohm at 500 V DC
Dielectric Strength: Between input terminals and case: 1000 VAC for 1 minute.
Mounting: Nominal 2" (50mm) pipe mount or surface.
Electrical Classification: FM, CSA, EXPLOSIONPROOF CL1, DIV1, GPS A,B,C,D, DUST-IGNITIONPROOF CLII / III, GPS E,F,G
Case and Cover: Die cast aluminum, baked polyurethane paint. Dark green; NEMA 4X
Electrical Connection: 1/2 NPT
Weight: 2.7 lbs (MLD)



Model MLD1 (Digital)

Input: 4-20mA 2-wire
Voltage Drop: Less than 1 Volt at 20mA
Accuracy: ± 1 digit
Display: 3 1/2 digit LCD. Height 12.5mm
Decimal Point: Selectable by DIP switch
Ambient Temperature: -10 to 70° C
Over Range: ± 200mA without damage
Rangeability: Zero can be set between -1300 and +1999
 Span is Fully adjustable ±1999
Method: DIP switches and multi-turn potentiometers
Vibration: 3G @ 9-80Hz, 1G @ 80-150Hz
Shock: 50G
Mounting: Nominal 2" (50mm) pipe mount or surface. (horizontal or vertical)
Explosion Protection: ATEX Intrinsically Safe (II 1 Ga Ex ia IIC T5, Tamb - 10° C to 70° C; Supply circuit: Ui = 28V; Ii = 93mA, Pi = 0.65W, Ci = 25nF, Li = 3.3mH
 Certificate: ITS09ATEX26770X
Enclosure Degrees of Protection: IP67
Case and Cover: Aluminum alloy casting
Paint: Polyurethane resin baked finish. Deep sea moss green (equivalent of Munsell 0.6GY3.1/2.0)
Electrical Connection: 1/2 NPT female
Weight: 2.7 lbs.



Model MLX

Input: 4-20mA 2-wire
Voltage Drop: 3.5 Volt at 20mA
Accuracy: ± 0.05 of full scale + 1 digit
Display: Numerical; Six 7-segment digits
 Alpha-numerical: Six 14-segment characters
 Bar graph: 20-segment bar graph
 Symbols: P, SP, T, F, %, √, x10, x100, x1000
 Configuration: User configurable for desired engineering units.
Zero & Span: Zero and span can be set between ±999999
Ambient Temperature: -30 to 60° C
Over Range: 200mA without damage
Vibration: 3G @ 10-150Hz
Shock: 50G
Mounting: Nominal 2" (50mm) pipe mount or surface. (horizontal or vertical)
Explosion Protection: FM, CSA, ATEX, and IEC
Enclosure Degrees of Protection: NEMA 4X, IP67
Case and Cover: Aluminum alloy or Stainless steel casting
Paint: Polyurethane resin baked finish. Deep sea moss green (equivalent of Munsell 0.6GY3.1/2.0)
Electrical Connection: 1/2 NPT female or M20 female
Weight: 2.7 lbs. without mounting bracket; 3.05 lbs. with mounting bracket

YOKOGAWA ◆

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