

# General Specifications

# Model MLA & MLD Loop Powered Process Indicator

GS 61A01A01-01E-A

The Model MLA and MLD field mounted indicators receive DC voltage or current signals from electronic Transmitters and indicate process measurement values. Standard models are NEMA4X and Explosion Proof.



Model MLD (Digital)

Model MLA (Analog)

## STANDARD SPECIFICATIONS MODEL MLA & MLD

**Input Resistance:** < 6.5 ohm (MLA-A 4-20mA), < 13.5 ohm (MLA-B 10-50mA), ~4K ohm (MLA-C 1-5V)

**Voltage Drop:** 1.8V typ., 2V max. (MLD)

**Scale:** Black. Analog single graduations 0-100% standard. Digital 0-100.0% w/decimal standard.

**Accuracy:** ± 1.5% of full scale (MLA)  
± 2.0% of full scale (MLA with /T1 Option)  
± 0.05% of full scale (1999) ±1 count (MLD)

**Operating Temperature Range:**  
-50 to 60°C (MLA with Options /CF1 and /T1)  
-20 to 60°C (MLA/MLD with all other Options)

**Temperature drift:** ±0.3 Count/°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.

**Explosion Protection Type:** FM, CSA, EXPLOSIONPROOF CL1, DIV1, GROUPS A,B,C,D, DUST-IGNITIONPROOF CLII / III, GROUPS E,F,G

**Case and Cover:** Die cast aluminum, baked polyurethane paint. Moss Green; NEMA 4X

**Electrical Connection:** ½ x 14 NPT or M20 x 1.5

**Weight:** 3.0 lbs (MLA), 2.7 lbs (MLD)

Model	Suffix Codes	Description
MLA	.....	Field Mounted Loop Indicator (Analog)
MLD	.....	Field Mounted Loop Indicator (Digital)
Input Signal	-A ..... -B ..... -C .....	4 to 20 mA DC 10 to 50 mA DC (MLA only) 1 to 5 VDC (MLA only)
Mounting	1..... 2 .....	2" Horizontal Pipe 2" Vertical Pipe (or wall mount)
Optional Specifications		
Ex Protection	/FF1 /CF1	FM Explosion Proof CSA Explosion Proof
Calibration	/ENG	Engineering Unit Calibration (MLD Only)
Face plate	/WHT	White scale or face plate (MLA Only)
Scale	/SC	Scale in Engineering units (MLA Only)
Stain Steel Tag	/SST /SSW	Stainless Steel tag screw attached to housing Stainless Steel tag wired to housing
Coating	/X1 /X2	Epoxy resin coating Polyurethane-Epoxy Anti-corrosion coating
Housing	/1 /2	Cast Aluminum Alloy - (Standard Housing) SUS316 Cast Stainless Steel and ASTM CF-8M
Electrical Connection	/00 /10 /20 /30 /40	ANSI ½ NPT female, without blind plug ANSI ½ NPT female, 304 Stainless Steel blind plug ANSI ½ NPT female, 316 Stainless Steel blind plug ISO M20 female, without blind plug ISO M20 female, 316 Stainless Steel blind plug
Temperature	/T1	Low-Temperature (-50°C, MLA only with Option CF1)
Paint	/P1 /P2 /P3 /P4 /P5 /P6 /P7	Light Blue (RAL # 5012) Orange (RAL # 2008) Red (Munsell # 7.5 R4/14) Mint Green Silver (RAL # 9006) Yellow (RAL # 1018) Gray (RAL # 7046)

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## ■ OPTIONS

**Scale:** Analog: Special range scale in Engineering Units (/SC)

**Scale or Faceplate color:** White on request (/WHT)

**Scaling:** Digital: Special calibration in Engineering Units (/ENG). Max. value = 1999

## ■ ORDERING INSTRUCTIONS

1. Model and suffix codes.
2. Option codes.

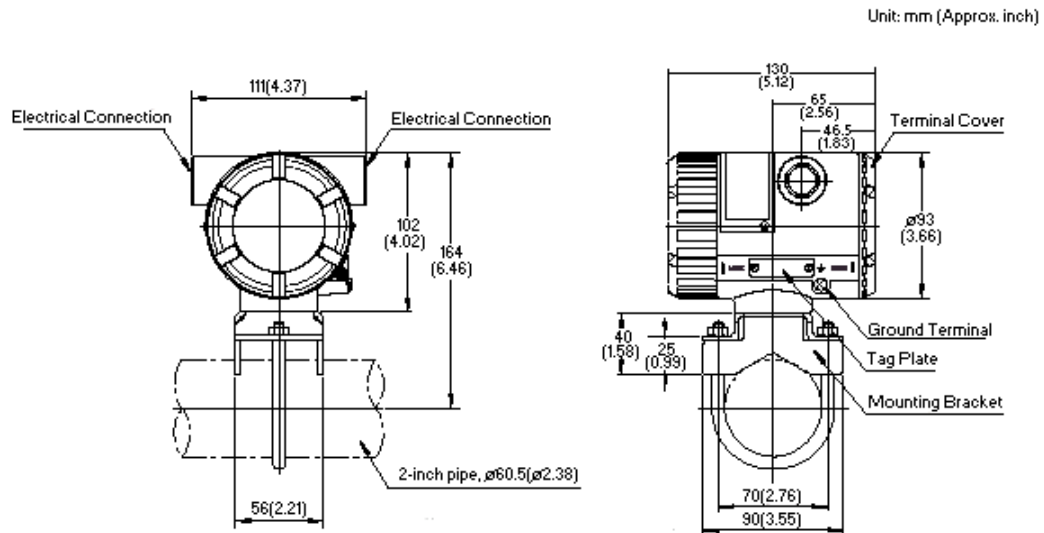
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### Example Ordering Instructions:

MLA-A1/FF1/SC/SST  
0-200 InH<sub>2</sub>O  
/SC. FT-201

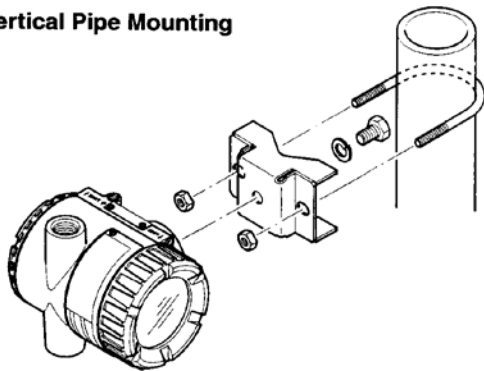
(Field Mounted Loop Indicator (Analog), 4 to 20 mA DC, 2" Horizontal Pipe, FM Explosion Proof, scale in Engineering Units.) Please specify Scale and Engineering units when ordering. Specify Tag Number when ordering /SST or /SSW.

## DIMENSIONS

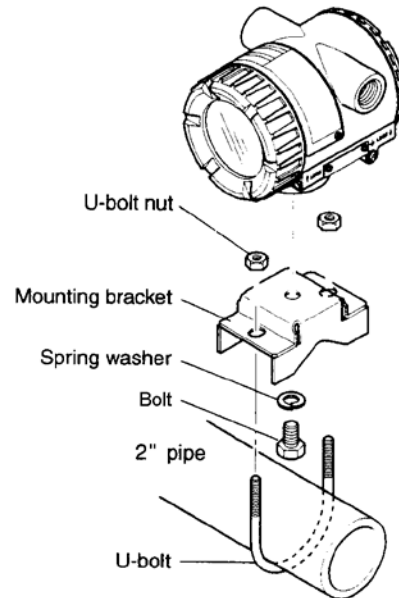


## Mounting

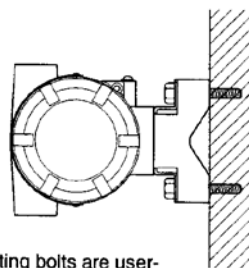
### Vertical Pipe Mounting



### Horizontal Pipe Mounting



### Wall Mounting

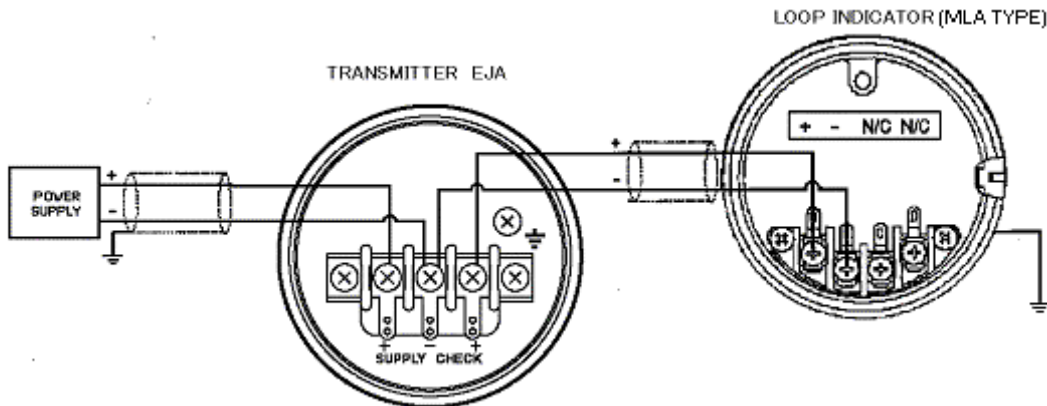


Note: Wall mounting bolts are user-supplied.

## WIRING

The loop powered indicator series is powered by the current loop and does not require external power. All devices must be wired in series with the current loop. Twisted pair shielded cable is recommended.

The following is a typical wiring example of the MLA (Analog type) Loop Indicator connected to an EJA Pressure Transmitter. The impedance of the MLA is low enough that you can connect it across the Check Terminals.



The following is another wiring example of the MLA (Analog type) or MLD (Digital type) Loop Indicator connected to an EJA Pressure Transmitter (Note: The EJA Transmitter below can be replaced with any 4-20mA 2 wire device).

