

MODEL A38

Loop Powered RF Level Transmitter

FEATURES

- Low Cost Loop Powered, 4-20 mAdc Output
- **Integral Transmitter with Dual Compartment Housing**
- Solid State, Microprocessor Based No Moving Parts
- **Complete Digital Calibration Eliminates Analog Pots**
- External Magnet Calibration No Need to Open Case
- Partial Fill Tank Calibration 2 Points With Only Partial Fill
- **Explosion Proof Enclosure, Intrinsically Safe Probes**
- **Rugged Probe Designs**
- **Eliminates Explosion Proof Conduit Seal Requirement**

OPTIONS

- Remote Mounting up to 200 Ft. / 61 m
- **External Power Supply / Field Indicators**
- Variety of Probes Available
- 316L SS Dual Compartment Housing

APPLICATIONS

- Finished Goods with Stable Dielectric
- Interface Measurement
- Slurries
- Open Channel flow
- Foams

- **Conductive Products**
- **Non-Conductive Products**
- Organic
- Inorganic
- High or Low Level Alarm

Special Applications:

- High Temperature
- Corrosive Environments
- High Pressure
- Special Probe Materials

SPECIFICATIONS Electronic Transmitter

Housing

Explosion Proof Powder Coated Cast Aluminum, Dual Compartment ±0.25% full scale, 5 to 150°F / -15 to 65°C Accuracy

Linearity ±0.25% full scale

Minimum Dielectric 1.7

Sensitivity 50 to 10,000 pf

Static Protection Maximum Surge Current: 100 Amps

Remote Mounting Up to 200 ft. / 61 m

Input Power 10 to 36 VDC (17 to 30 VDC with FMX Option)

Output Signal 4 - 20 madc

Max Load Resistance $R_{max} = (V_S - 10) / 0.021$, $\{R_{max} = (V_S - 17) / 0.021 \text{ with FMX Option}\}\$ where $V_S = Input Power$

Ambient Temp -40 to 170°F / -40 to 77°C

Approvals





Reference SLG-0005-1 Table 1B for pressure / temperature ratings of probes Factory Mutual System (FM) & Canadian Standards Association (CSA) XP CLI, DIV1 & 2, ABCD, CLII, III, EFG, I/O, AExdIIC T6@ Ta = 77°C I.S CLI, DIV1 & 2, ABCD, CLII, DIV1, EFG, CLII, DIV2, FG, CLIII I/0, AExiaIIC T4@ Ta = 77°C FM NEMA 4X CSA Type 4X



GOST Russia: 0ExialICT4, 1Exd[ia]IICT6



ORDERING INFORMATION:

A38/a/b/c/d/e/f/q:

/a Transmitter Configuration

Local Transmitter -40 to 250°F / -40 to 121°C Standard

H6 Above 250°F / 121°C; Electronics enclosure is extended 6" above process connection. Refer to RF

Capacitance Probe Selection Guide (SLG-0005-1) for maximum process temperatures.

R1xxx Remote Mounted Electronics in Standard Dual Compartment Transmitter Housing & Local Sensing Probe

in Explosion Proof Single Compartment Enclosure: RG62 with PVC insulation cable rated to 185° F / 85° C

specify length "xxx" in feet (max lengths listed in Table 1)

R2xxx Remote Mounted Electronics in Standard Dual Compartment Transmitter

Housing & Local Sensing Probe in Explosion Proof Single Compartment

Enclosure; RG62 with Teflon insulation cable rated to 450°F / 232° C

specify length "xxx" in feet (max lengths listed in Table 1)

Table 1	
Pf Range	Max. Cable Length
0-75 pf	25 ft.
76-300 pf	50 ft.
301-1200 pf	100 ft.
1201-4800 pf	200 ft.

/b Transmitter Housing

Α Aluminum Housing Standard S 316L Stainless Steel Housing

/c Probe Type

Probe configuration from RF Capacitance Probe Selection Guide (SLG-0005-1) **XXXXX**

Probe Type Code (1 to 5 digits from SLG-0005-1 Table 1A)

Seal Code: **V** = Viton O-Ring Seal Standard; K = Kalrez O-Ring Seal

/d Probe Length

Insertion length from bottom of process connection in inches (standard) or centimeters (cm)

/e Process Connection

Note: a dual probe assembly is recommended to compensate for non-linear tank (spherical, bullet, cone shaped bins) or nonmetallic tank configurations

Single Probe Process Connection (SLG-0005-1 Table 1A) Standard

P2 Dual Probe Process Connection (SLG-0005-1 Table 1A)

FL Flange Shipped Loose; Specify from Flange Chart (SLG-0001-1)

FLD Dual Sensor integrally mounted on flange (4" minimum) with primary probe

Flange Welded: Specify from Flange Chart (SLG-0001-1) WP

WPD Dual Sensor integrally mounted on flange (4" minimum) with primary probe Tnn Tri-Clamp; Specify "nn" as follows: 10 = 1", 15 = 1.5", 20 = 2.0", 25 = 2.5" up to 6"

/f Options

X

Extended Teflon Insulator (specify extension length in inches or mm) **ETI**

EDI Extended Delrin Insulator

/g Approvals

No Approvals X

Factory Mutual (FM) & Canadian Standards Association (CSA) Intrisically Safe **FMI**

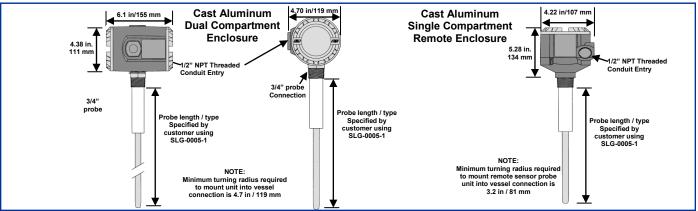
FMX Factory Mutual (FM) Flame Proof Standard

GOST Russia Intrinsically Safe GRI **GOST Russia Flame Proof GRX**

FM







AVAILABLE ACCESSORIES

M20 ISO FITTING M20 Female Electrical Connection

3/4" NPT Teflon Mounting Nipple for Type R Probe only

Contact the Factory for Applications not covered above.