SUBMERSIBLE PUMP LIFT STATION / SLUDGE LEVEL TRANSMITTER

MODEL 311-M351

Model 311-M351
Submersible Pump Lift Station /
Sludge Level Transmitter

(Approvals Optionally Available)

FEATURES:

- 3-inch diameter sensing diaphragm resists clogging
- Protective baffle plate reduces risk of sensor damage
- Corrosion-resistant, all stainless steel construction
- Submersible to 1,100 feet (335 meters) WC
- Surge protection from lightning strikes and voltage spikes
- Ranges from 0 to 10 thru 0 to 1,100 feet WC
  (0 to 3 thru 0 to 335 meters WC)

APPLICATIONS:

- Submersible pump lift station level monitoring
- Wet wells
- Process sumps
- Water tanks and reservoirs
- Process sludge (including heavy sludge)
- Water and wastewater level monitoring

PRODUCT OVERVIEW:

The Model 311-M351 from GP:50 is a submersible lift station and sludge level transmitter. Its all stainless-steel design incorporates a 3-inch diameter clog-resistant sensing diaphragm and corrosion-resistant protective baffle plate. These features facilitate high-accuracy level measurements, even in heavy sludge conditions. This combination of durability and accuracy, along with over 25 years of proven field service, have helped make the GP:50 Model 311-M351 an industry gold standard for water and wastewater level monitoring.

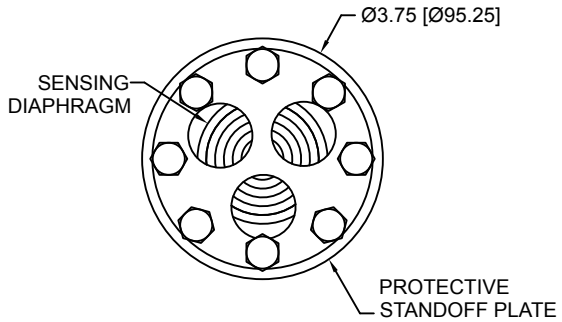
FIELD OPTIONS:

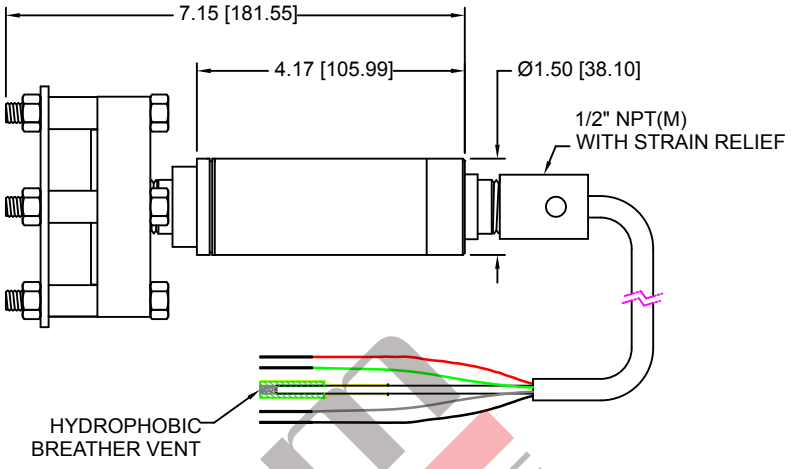
- Optional FM/CSA hazardous approvals
- External lightning / surge protection package optional
- 4-20 mA or 0 to 5 Vdc output
- Optional temperature output

GP:50 MODEL 311-M351

DIMENSIONAL DRAWING

All dimensions are in inches (mm)





STANDARD WIRING

WIRE	MODEL 211-M351	MODEL 311/I-M351
1/RED	+EXC	+EXC/SIG
2/GRN	+SIG	N/C
3/WHT	N/C	N/C
4/BLK	-EXC/SIG	-EXC/SIG
5/BLU	N/C	N/C
6/BRN	N/C	N/C
SHIELD	OPEN	OPEN

REFERENCE SPECIFICATIONS

ELECTRICAL

- **Supply Voltage:**

(Model 211-M351) 10.5 to 42 Vdc

(Model 311/I-M351) 9 to 36 Vdc

- **Output Signal:**

(Model 211-M351) 0 to 5 Vdc

(Model 311/I-M351) 4-20 mA

- **Circuit Protection:** RFI and EMI surge protection
- **Load Impedance:**

(Model 211-M351) 50K Ω min. for <0.1% FSO attenuation

(Model 311/I-M351) 1,350 Ω max. at 36 Vdc and 750 Ω at 24 Vdc

- **Input Current:**

(Model 211-M351) 8 mA, nominal

- **Insulation Resistance:** >10 MΩ at 50 Vdc and +70 °F
- **Connection:** 1/2" NPT (M) conduit with 40 feet of 3-conductor, 18 AWG Hytrel jacketed cable (optional Tefzel jacketing)

MATERIALS OF CONSTRUCTION

All 316 stainless steel construction of sensor, baffle plate and housing

STATIC ACCURACY (RSS) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)

Standard ±0.5%

Optional ±0.2%

- **Zero Balance and FSO:** ±1% FSO at +70 °F

MECHANICAL

- **Process Connection:** Oil filled diaphragm
- **Proof Pressure:** 2X FSO or 22,500 PSI (1,551 BAR), whichever is less
- **Burst Pressure:** 5X FSO or 22,500 PSI (1,551 BAR), whichever is less
- **External Pressure:** 500 PSI max. (35 BAR)
- **Weight:** 5.5 lb (2.5 kg)

PRESSURE RANGES

0 to 5 thru 0 to 500 PSI (0 to 10 feet thru 0 to 1,153 feet WC)

(0 to 3 thru 0 to 335 meters WC)

THERMAL SPECIFICATIONS

- **Compensated:** -0 °F to +140 °F (-17.7 °C to +60 °C)
- **Operating Ambient:** -40 °F to +150 °F (-40 °C to +66 °C)
- **Effect on Zero/Span:** ±2.0% FSO/100 °F

Standard configurations shown.
Please consult factory for other options.

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without noticePlease contact GP:50 for assistance with your application.