



RPM



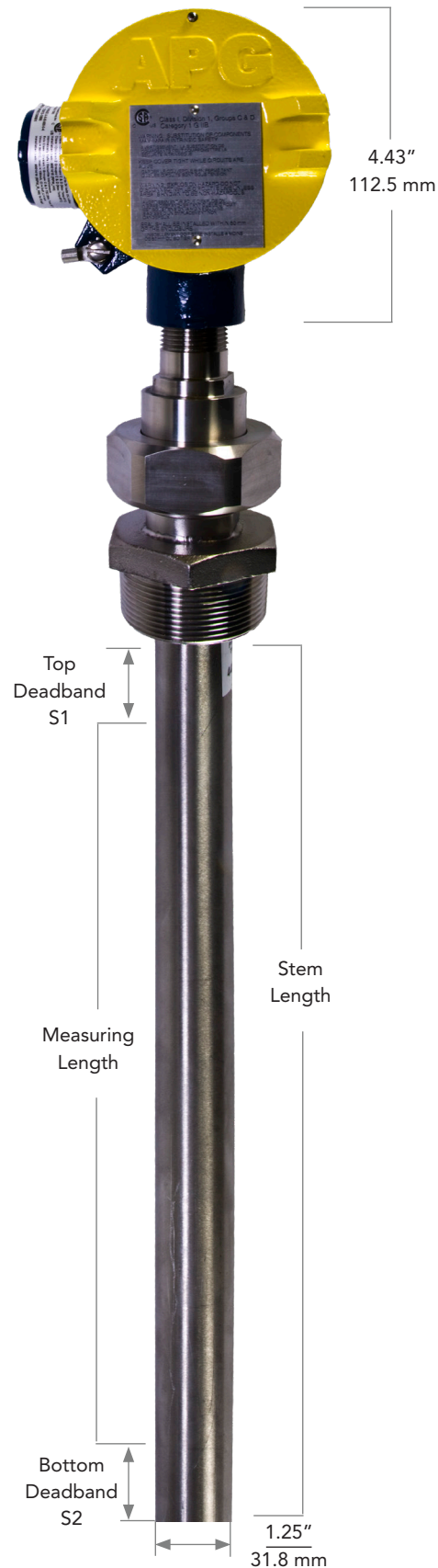
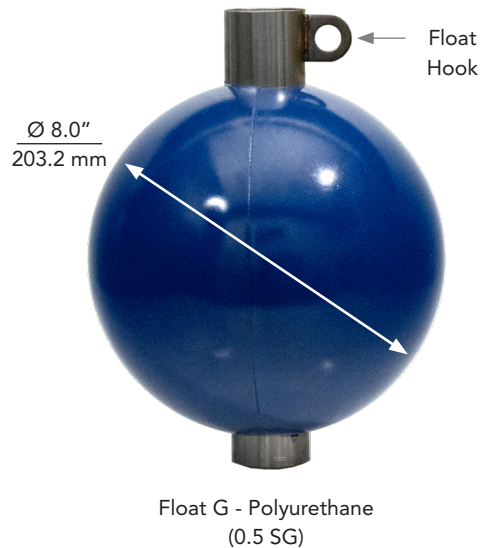
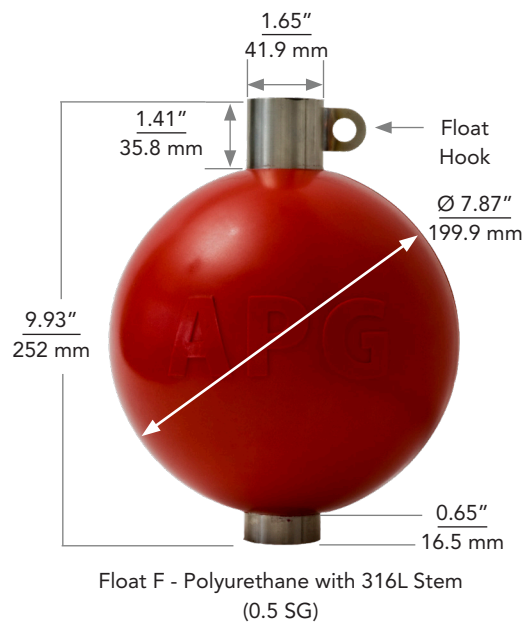
Hazardous Location, Resistive-Chain Level Sensor with 1.25" 316L SS Stem

This float level transmitter is the ultimate in durability. It's commonly referred to in the oil field as a mud probe, one of the most demanding applications in the industry. It's also well suited for extreme sewage level measurement and has PDA approval for marine applications. Each RPM is manufactured to the user's specifications, making it fit to work precisely according to the application requirements.

FEATURES

- Continuous level indication
- Rugged 1.25"Ø 316L SS stem
- NEMA 4 & 7 / IP65 cast aluminum housing protects highly reliable electronics
- Anti-stick float design
- Resistive chain or loop-powered 4-20 mA output
- Hazardous location approvals: Explosion Proof, Intrinsically Safe, Non-incendive

RPM DIMENSIONS



RPM SPECIFICATIONS

PERFORMANCE

- **Resolution:**
High: 0.25 in. (6.4 mm)
Standard: 0.5 in. (12.7 mm)
- **Accuracy:**
± 0.12 in. (±3 mm)

CONNECTIVITY

- **4-20 mA:**
APG Settler & Explorer—Online datalogging (optional)

ENVIRONMENTAL

- **Maximum Pressure:**
72.5 psi (5 bar)
- **Enclosure Protection:**
NEMA 4 & 7, IP65
- **Temperature rating:**
Explosion proof: -40°C to 40°C (-40°F to 104°F)
Intrinsically safe: -40°C to 85°C (-40°F to 185°F)

ELECTRICAL

- **Typical Connection: (Resistive Chain Voltage Output)**
High Res: $I = \text{VDCSupply} / (40\Omega * \text{Probe Length in inches.})$
Standard Res: $I = \text{VDCSupply} / (20\Omega * \text{Probe Length in inches.})$
- **Power requirements:**
Resistive Output: 5-24 VDC supply, 100 mA max
(5-15 VDC in certain hazardous locations)
mA output: 12-24 VDC supply for 4-20 mA

PHYSICAL

- **Housing:** Aluminum Die Cast
- **Cable Entry:** 3/4 in. NPT
- **Stem Material:** 316L SS
- **Stem Length:** 36 to 288 in. (914 to 7315 mm)
- **Float Materials:**
Polyurethane
316L SS
ABS

CERTIFICATION

- Explosion Proof (Resistive output)
- Class I, Division 1, Groups C & D T3 (Ta 40°C)
 - Ex d, IIB T3
 - Class I, Zone 1, AEx d, IIB T3 (Ta 40°C)
 - Class I, Division 2, Groups C & D T3 (Ta 85°C)
- Intrinsically Safe (4-20 mA output)
- Class I, Division 1, Groups C & D T3 (Ta 85°C)
 - IECEX: Ex II 1G
 - ATEX: Ex ia IIB T3 Ga (Ta 85°C)
 - Class I, Division 1, Groups C & D T3 (Ta 40°C)
 - Ex d, IIB T3
 - Class I, Zone 1, AEx d, IIB T3 (Ta 40°C)
 - Class I, Division 2, Groups C & D T3 (Ta 85°C)

MODEL CONFIGURATION OPTIONS

MODEL NUMBER: RPM - - - - - - -

A B C D E F G

A. Probe Length

- ☐ Specify in inches (36 to 288 in.)

B. Housing Logo Designation

- ☐ **A** APG
- ☐ **N** None

C. Float

- ☐ **N** None

1/2" Resolution Floats

- ☐ **B** Red cylindrical polyurethane float
(0.65 SG, 8.65 in. H, 4 in. OD)
- ☐ **F** Red spherical polyurethane float with designated logo
(0.5 SG, 8 in. OD)
- ☐ **S** 316L SS spherical float (0.5 SG, 5 in. OD)

1/4" Resolution Floats

- ☐ **G** Blue spherical polyurethane float, no logo
(0.5 SG, 8 in. OD)
- ☐ **Z** Blue cylindrical polyurethane/ABS float
(0.5 SG, 6 in. H, 8 in. OD)
- ☐ **T** 316L SS spherical float (0.5 SG, 5 in. OD)

D. Output Signal / Hazard Rating

- ☐ **EX1** 0-24 VDC (resistive) with XP approval
(Explosion Proof, Class 1, Div. 1)
- ☐ **AIS** 4-20 mA with IS and XP approval
Intrinsically Safe and Explosion Proof, Class 1, Div. 1)
(ATEX and IECEx, Ex ia)
- ☐ **AISr** 20-4 mA with IS and XP approval
Intrinsically Safe and Explosion Proof, Class 1, Div. 1)
(ATEX and IECEx, Ex ia)

E. Cable Gland

- ☐ **000** None
- ☐ **001** T&B 2531 strain relief
- ☐ **011** T&B 2531 strain relief and plug

F. Resolution / Deadband S1, S2 Type

- ☐ **02** 1/2 in. resolution
top deadband (S1) = 8 inches
bottom deadband (S2) = 5 inches
- ☐ **03** 1/2 in. resolution
top deadband (S1) = 8 inches
bottom deadband (S2) = 4 inches
- ☐ **04** 1/2 in. resolution
top deadband (S1) = 1/2 float height
bottom deadband (S2) = 1/2 float height
- ☐ **12** 1/4 in. resolution
top deadband (S1) = 8 inches
bottom deadband (S2) = 5 inches
- ☐ **13** 1/4 in. resolution
top deadband (S1) = 8 inches
bottom deadband (S2) = 4 inches
- ☐ **14** 1/4 in. resolution
top deadband (S1) = 1/2 float height
bottom deadband (S2) = 1/2 float height

G. Mounting (Optional)

- ☐ **00** None
- ☐ **4Tx** 316L SS NPT plug mounted outside of tank
(specify size in ordering code: x=2" or 3")
- ☐ **OAx** 150# Flat Face Flange, ANSI 2 - ANSI 6
- ☐ **1Ax** 150# Raised Face Flange, ANSI 2 - ANSI 6

RPM ACCESSORIES

Please order separately, by part number.

Description	Part Number
Float Stop	135414
Bottom bracket	135396
Right angle bracket pipe clamp	125603
Red cylindrical polyurethane float (0.65 SG, 8.65" H, 4" OD, 1/2" resolution)	125767
Red spherical polyurethane float with designated logo (0.5 SG, 8" OD, 1/2" resolution)	125665
316 SS spherical float (0.5 SG, 5" OD, 1/2" resolution)	125705
Blue spherical polyurethane float, no logo (0.5 SG, 8" OD, 1/4" resolution)	125679
Black and blue cylindrical polyurethane/ABS float (0.5 SG, 6" H, 4.5" OD, 1/4" resolution)	125682
316 SS spherical float (0.5 SG, 5" OD, 1/4" resolution)	125704
Settler	125422-000x

SETTLER

Your Gateway to Smarter Monitoring

Settler, APG's next remote monitoring gateway, makes getting real-time level data easier than ever.

Settler seamlessly connects Modbus and 4-20 mA sensors—transmitting encrypted data securely to Explorer, APG's cloud-based interface. View tank and well levels anytime, anywhere, with reliable Ethernet connectivity and robust data security powered by MQTT with AES (Advanced Encryption Standard). Plus, with over-the-air (OTA) firmware updates, your system stays up to date without hassle.

Designed for general-purpose environments, Settler is not intended for use in hazardous areas.

Explorer makes monitoring simple. Access real-time readings, enable datalogging, and set up alarms so you're always informed of critical changes—right from your smartphone, tablet, or desktop.

Save time, reduce costs, and gain peace of mind with remote monitoring powered by Settler and Explorer. Contact us today to learn more or visit apgsensors.com/settler-remote-monitoring-gateway/.



Note: Accessories may not carry hazardous area certifications. Please refer to the corresponding datasheets for detailed information on accessory specifications. All datasheets can be found at apgsensors.com/resources/datasheets.