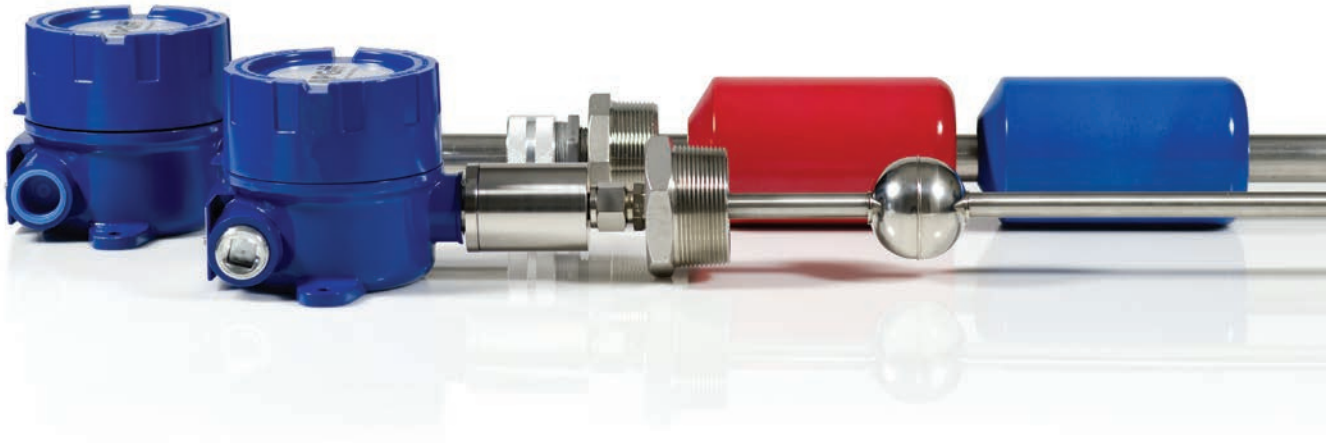


MPX Series Magnetostrictive Level Sensor



Flexible by Design

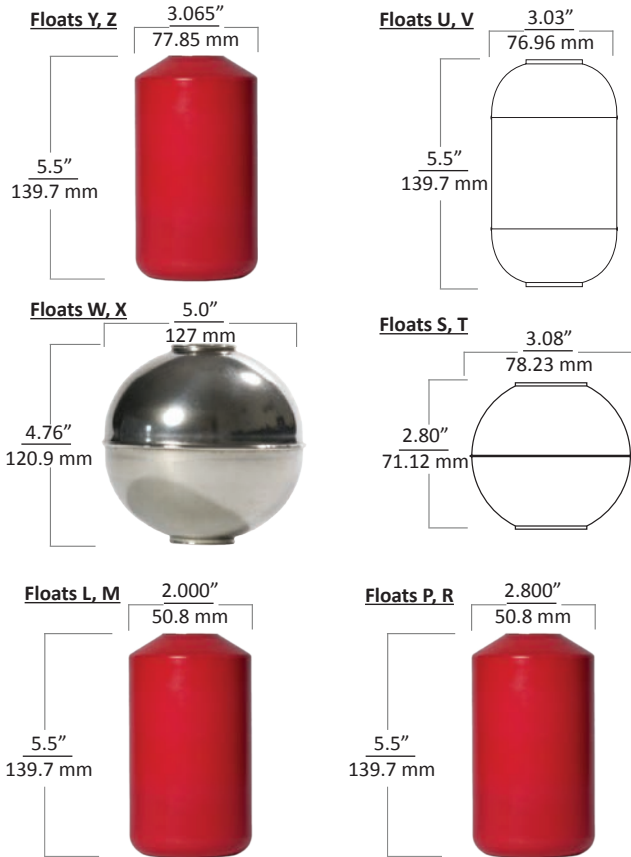
The MPX Series Magnetostrictive Level sensor provides highly accurate and repeatable level readings in a wide variety of liquid level measurement applications. The MPX-R's large, buoyant and robust float allows it to be used in harsh applications where fouling or buildup might otherwise be of concern. The MPX-E's lighter weight design allows it to be used in applications where space is limited.

Features

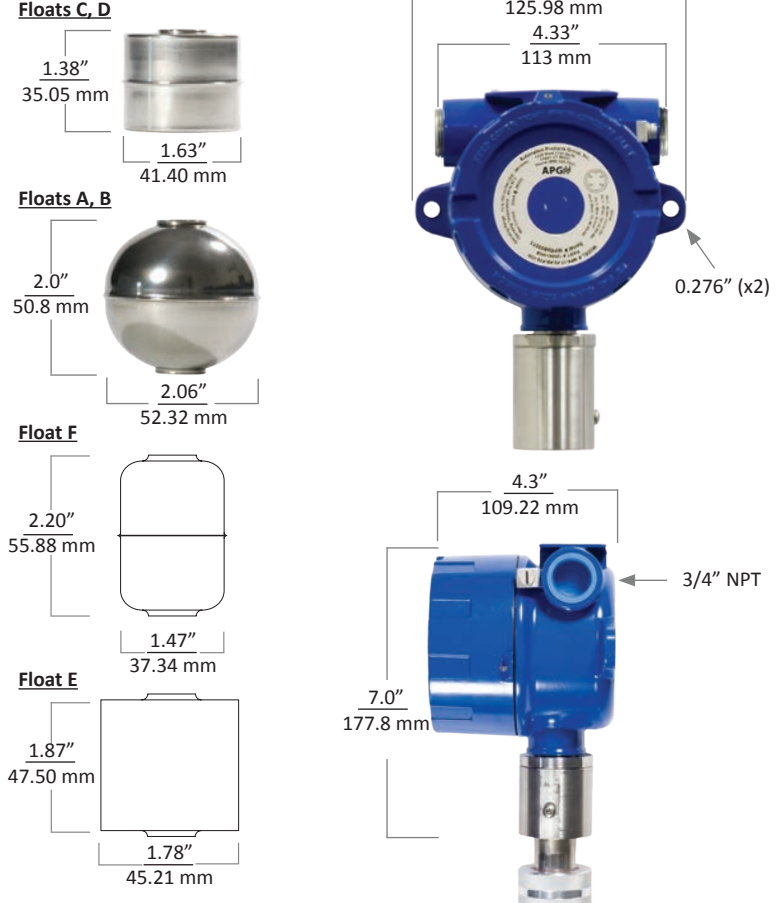
- Class 1 Division 1 Groups C & D, Class 1 Zone 1, Class 1 Zone 2
- Highly accurate and repeatable readings
- 4-20 mA, RS-485 (Modbus RTU) output
- Rugged and reliable, lengths up to 25 feet (7.62 m)
- Dual level (interface) measurement
- Tank volume/level, strapping table

MPX Specifications

MPX-R Floats



MPX-E Floats



Performance

- Resolution:
 4-20 mA: 14 bit DAC
 Modbus: 0.04 in. (1mm)
- Accuracy:
 ±0.05% of full scale

Programming

- RS-485: optional RST-6001
 USB to RS-485 converter
- 4-20 mA: factory set or optional
 RST-4100 programming module.

Environmental

- Operating Temperature:
 -40° - 185°F (-40° - 85°C)
- NEMA 4X, IP65

Physical

- Housing: Cast aluminium, epoxy coated
- Stem: 304 SS or 316L SS
- Stem Length:
 MPX-E: 12 - 153 in. (0.3 - 3.9 m)
 MPX-R: 4 - 25 ft. (1.22 - 7.62 m)
- Float Sleeve (MPX-R, Floats P & R only):
 .035" thick Titanium 2

Electrical

- Electrical Connection: Terminal Block
 12-24 vdc
- Total current draw:
 MPX-E: 4-20 mA: (single) 22 mA, (dual) 44 mA
 MPX-R: 4-20 mA: (single) 22 mA, (dual) 44 mA
 MPX-E: Modbus (RS-485): 25 mA
 MPX-R: Modbus (RS-485): 28 mA

Connectivity

- Output:
 Single or dual loop powered 4-20 mA
 Modbus RTU (RS-485)
 - Temperature output

Certification

- MPX-E / MPX-R
- NEMA 4X, IP65
- Class I Division 1 Groups C & D T4 (Ta 85°C)
 Class I Division 2 Groups C & D T4 (Ta 85°C)
 Class I, Zone 1; AEx d IIB T4
 Class I, Zone 2; AEx nA IIB T4
 Ex d IIB T4
 Ex nA IIB T4

Options

Part Number: MPX - - - - - - - - - L

A B C D E F G H

A. Stem Type

- E** 0.5 in. diameter
- R** 1 in. diameter

B. Output

- 1** Modbus RTU w/ temperature sensor
- 2** 4-20 mA (loop powered, 2 wire)
- 3** Dual 4-20 mA (loop powered, 3 wire)

C. Float 1

MPX-E (0.5 in. stem)

- A** 2 in. Round 316L SS (0.65 SG)
- B** 2 in. Round 316L SS (0.92 SG)
- C** 1.38h x 1.63d in. Cylindrical 316L SS (0.61 SG)
- D** 1.38h x 1.63d in. Cylindrical 316L SS (0.92 SG)
- E** 1.75h x 1.87d Buna-N (0.65 SG)
- F** 2.19h x 1.46d in. Oval 316L SS 3A (0.5 SG)

MPX-R (1 in. stem)

- Z** 5.5h x 3d in. Red Polyurethane (0.65 SG)
- Y** 5.5h x 3d in. Blue Polyurethane (0.94 SG)
- X** 5 in. Round 316L SS (0.52 SG)
- W** 5 in. Round 316L SS (0.92 SG)
- V** 6h x 3d in. Oval 316L SS (0.58 SG)
- U** 6h x 3d in. Oval 316L SS (0.94 SG)
- T** 3 in. Round 316L SS (0.60 SG)
- S** 3 in. Round 316L SS (0.94 SG)
- R** 5.5h x 2.8d in. Red Polyurethane (0.59 SG)
- P** 5.5h x 2.8d in. Blue Polyurethane (0.94 SG)
- M** 5.5h x 2d in. Red Polyurethane (0.57 SG)
- L** 5.5h x 2d in. Blue Polyurethane (0.94 SG)

D. Float 2 (optional)

Refer to float options in section C or

- N** None

E. Mounting Option and Size (ex. F2.5)

- F** Flat Face ANSI Flange 150# (size-2, 2.5, 3, 4, 5, 6 in.)
- R** Raised Face Flange 150# (size-2, 2.5, 3, 4, 5, 6 in.)
- S** 3A Sanitary ferrule (size-2, 2.5, 3, 4 in.)
- P** NPT Plug (size-1.5, 2, 2.5, 3, 4 in.)
- N** None

F. Mounting Adjustment

- W** Welded (fixed)
- S** Slide with Compression Fitting (adjustable)

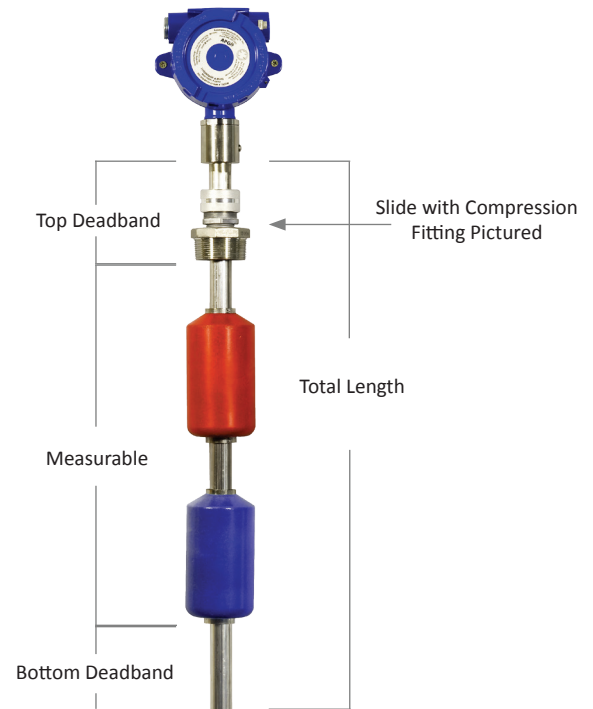
G. Stem Material

- A** 304 SS (MPX-E)
- B** 316L SS (MPX-E, MPX-R)

H. Total Stem Length in Inches

- MPX-E** Min. 12 in. - Max. 153 in.
- MPX-R** Min. 24 in. - Max. 300 in.

*Measurable length = stem length - top deadband - bottom deadband:
 Top Deadband: MPX-E: 6 in.; MPX-R: 10 in.
 Bottom Deadband: MPX-E: 1.5 in.; MPX-R: 8 in.



MPX Accessories

Please order separately, by part number.

Description	Part Number
Programming Module	
RST-6001 (Modbus: MPX-x1)	125734
RST-4100 (4-20mA: MPX-x2, MPX-x3)	125759
*sold with 6 ft USB cable	

For custom configurations call 1.88.525.7300

Tank Cloud



Put Your Tanks In The Cloud

1 Remote Sensors

Connect to any 4-20mA signal or APG Modbus sensor for constant access to your data. Access up to 10 Modbus sensors on a single connection.

2 Use the Internet Backbone

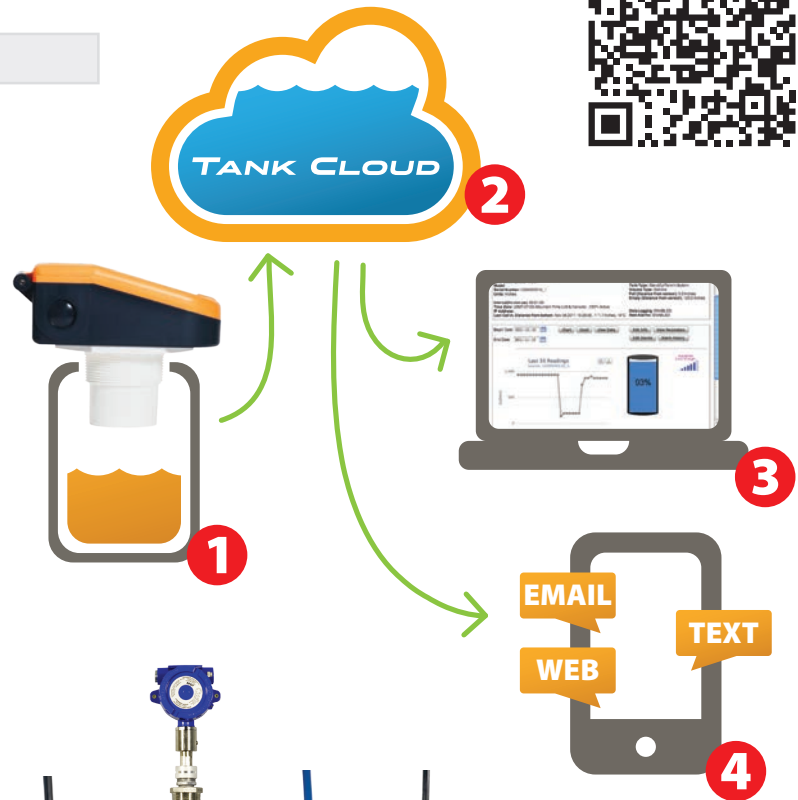
Connect the APG sensor or module to the Internet via landline, radio, cellular, or satellite.

3 View Secure Data 24/7

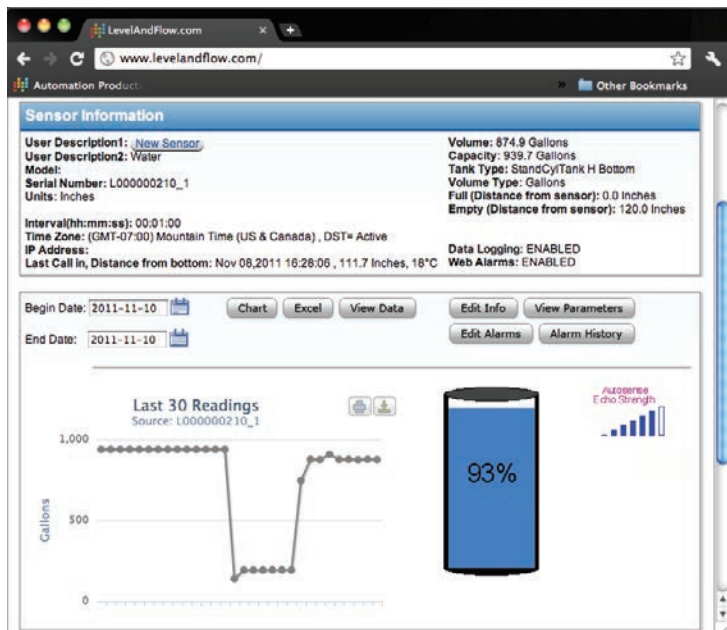
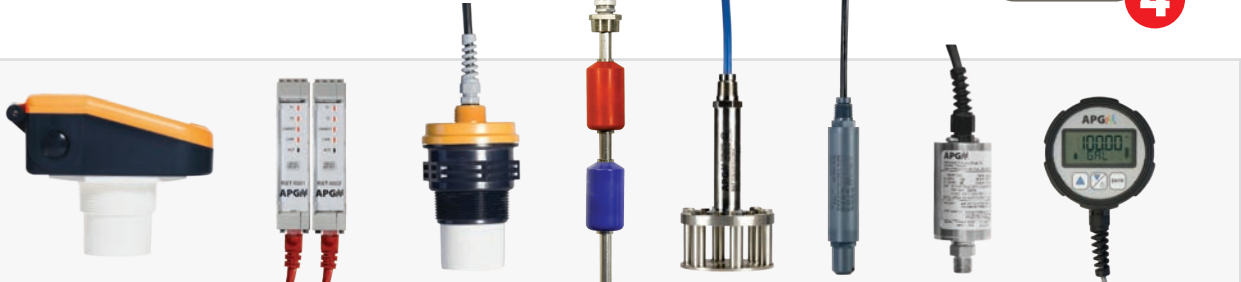
Access sensor data online through our secure portal at levelandflow.com. If the Internet is accessible, so is your information.

4 Stay Up-To-Date

Program custom alarms - receive email and text (sms) message alerts on your computer, mobile phone, or tablet.



The Line-Up:



Online Data Portal

The Tank Cloud data portal, located online at www.levelandflow.com, displays everything you need to know about your measurement.

Here you can:

- View your current and past readings,
- Manage alarms,
- Configure your sensors,
- and Setup user permissions for others in your organization.

Measurements are sorted by location and grouped into sites. Simply select the site you would like to view, and then choose the sensor. Current readings are prominent in the center of the screen.

Contact us today at 888-525-7300 to set-up a demonstration of our sensors and online software. We are excited to show you how it can impact your business.