

LEVEL & PRESSURE Submersible Transmitters

Endress+Hauser 

People for Process Automation

Endress+Hauser WaterPilot FMX21 Submersible Level Transmitters

- Built for wastewater lift station applications
- Field-adjustable span using HART® signal
- Intrinsically safe

The WaterPilot is ideal for use in wastewater and sewage treatment plant applications. Use in lift stations, reservoirs and sumps as well as various tank level applications. The transmitter features a ceramic measuring sensor that resists abrasion, scratching, denting and corrosion, and gives you high mechanical resistance to overload and aggressive media. It offers proven reliability and unparalleled long-term stability.

The WaterPilot has a permanent hermetically sealed submersible cable probe. Durable polyethylene cable sheathing protects the probe from water or sewage ingress and ensures long-term reliability, even in the corrosive environment of a sewage pump lift station. Potted electronics and 2-filter pressure compensation system provide environmental protection.

Wastewater



Endress+Hauser WaterPilot FMX21 Submersible Level Transmitters

- Great for measuring level of fresh water and wastewater
- Ceramic measuring cell provides high precision and low maintenance
- Field-adjustable span with HART® signal

Endress+Hauser's WaterPilot FMX21 offers high reliability in a compact design. Its 0.87" outer diameter makes it ideal for use in standard 1" well casings. Use it to measure level in deep wells, reservoirs, sumps, tanks and cooling towers.

Its ceramic measuring cell provides high mechanical resistance to overload and aggressive media. The ceramic sensor is the key to its optimum performance. Using this submersible transmitter can eliminate possible future maintenance issues. Some advantages of the ceramic sensor are corrosion resistance to chemicals and acids, abrasion and dent resistance, pressure overload up to 40 times adjusted span, accuracy, linear and true long-term stability.

The WaterPilot FMX21 has a permanent hermetically sealed submersible cable probe. Potted electronics and two-filter pressure compensation system ensures environmental protection. Transmitter provides a loop-powered 4-20 mA with superimposed HART 6.0 output signal and has an integrated over-voltage protection feature.

General purpose



Ceramic Sensor

NSF models are also available; contact USABlueBook for more information.

| | |
|----------------------------|---|
| Accuracy: | ±0.2% full scale |
| Output: | 4-20 mA, 2-wire with superimposed HART 6.0 output signal |
| Materials: | 316L stainless steel, Viton® seal |
| External diaphragm: | aluminum oxide ceramic, high-density polyethylene protective cap (can be removed for water and wastewater applications) |
| Cable: | vented, polyethylene |
| Overpressure: | up to 40 times adjusted span |
| Power: | 10-30 VDC excitation, loop-powered |
| Temperature: | -4 to 158°F |
| Diameter: | 0.87" |
| Rating: | intrinsically safe*, Class I, Div I, Groups A-D |
| Agency approvals: | FM |

* For intrinsically safe applications, you must connect the transmitter to the appropriate apparatus. Order stock # 17702 and follow all relevant regulations.

| MFR # | RANGE (PSI) | RANGE (FT H ₂ O) | CABLE LENGTH | STOCK # | EACH |
|-------------|-------------|-----------------------------|--------------|---------|------|
| FE211DGE20A | 0 to 2.6 | 0 to 6' | 30' | 63188 | \$ |
| FE211FGE20A | 0 to 5.6 | 0 to 13' | 30' | 63189 | |
| FE211GGE20A | 0 to 8.7 | 0 to 20' | 30' | 63190 | |
| FE211HGE21A | 0 to 14.3 | 0 to 33' | 60' | 63191 | |
| FE211KGE25A | 0 to 29 | 0 to 67' | 80' | 63192 | |
| FE211MGE25A | 0 to 57.6 | 0 to 133' | 150' | 63193 | |
| FE211PGE25A | 0 to 144.2 | 0 to 333' | 360' | 63194 | |

| DESCRIPTION | STOCK # | EACH |
|--|---------|------|
| Termination Enclosure, Vented | 47129 | \$ |
| Surge Protector (DIN-Rail Mountable) | 17701 | |
| Isolation Barrier (DIN-Rail Mountable) | 17702 | |
| DIN-Rail (35 mm, 1 Meter Length) | 71088 | |

| | |
|----------------------------|--|
| Accuracy: | ±0.2% full scale |
| Output: | 4-20 mA, 2-wire with superimposed HART 6.0 output signal |
| Wetted materials: | 316L stainless steel, Viton® seal |
| External diaphragm: | aluminum oxide ceramic |
| Cable: | vented, polyethylene |
| Power: | 10-30 VDC |
| Temperature: | -14 to 158°F |
| Diameter: | 1.66" |
| Rating: | intrinsically safe*: Class I, Div I, Groups A-D |
| Agency approvals: | CE, FM |

* For intrinsically safe applications, you must connect the transmitter to the appropriate apparatus. Order stock # 17702 and follow all relevant regulations.

| MFR # | RANGE (PSI) | RANGE (FT H ₂ O) | CABLE LENGTH | STOCK # | EACH |
|-------------|-------------|-----------------------------|--------------|---------|------|
| FE221DGE20A | 0 to 2.6 | 0 to 6' | 30' | 63195 | \$ |
| FE221FGE20A | 0 to 5.6 | 0 to 13' | 30' | 63196 | |
| FE221GGE20A | 0 to 8.7 | 0 to 20' | 30' | 63197 | |
| FE221HGE21A | 0 to 14.3 | 0 to 33' | 60' | 63198 | |

| DESCRIPTION | STOCK # | EACH |
|--|---------|------|
| Termination Enclosure, Vented | 47129 | \$ |
| Surge Protector (DIN-Rail Mountable) | 17701 | |
| Isolation Barrier (DIN-Rail Mountable) | 17702 | |
| DIN-Rail (35 mm, 1 Meter Length) | 71088 | |

We also RECOMMEND...

Pepperl+Fuchs SafeZap™ 4-20 mA Loop Surge Protection Barriers

- Protect transmitters, flowmeters, input cards, recorders and other instrumentation from power surges and lightning transients

This DIN-rail mountable surge protection barrier protects your instrumentation by preventing damaging voltage spikes. It diverts the transient current to ground and limits the signal line voltage to a safe level for the duration of the surge.



| DESCRIPTION | STANDARD | | INTRINSICALLY SAFE | |
|--|----------|------|--------------------|------|
| | STOCK # | EACH | STOCK # | EACH |
| 1-Channel SafeZap Surge Protection Barrier | 17701 | \$ | 37340 | \$ |
| 2-Channel SafeZap Surge Protection Barrier | 37341 | | 37342 | |