



LR2050 Level Sensor with Guided Wave Radar Technology



Reliable level detection for oils or water-based media

- Increased foam and turbulence suppression
- High performance in temperatures up to 212 °F (100 °C)
- Probe lengths up to 78" (2 meters)
- Coaxial tube available for oil or media with a low dielectric constant
- IO-Link compatible for plug-and-play replacement, real-time recipe changes and diagnostic feedback

Versatile level sensor for harsh applications

The LR2050 level sensor's measuring principle uses guided wave radar technology to detect liquid level in applications such as parts cleaning, coolant monitoring, water treatment, hydraulic power units and hot glue in corrugated cardboard manufacturing. This technology enables a strong signal strength and the ability to suppress foam and buildup that causes false triggers.

Quick and easy installation

The modular design consists of a compact, 316 stainless steel sensor housing with digital display, pushbutton setup and stainless steel measuring probe that easily attaches to the sensor housing. A wide variety of common adapters and probe lengths are available. Probes can be cut to fit any custom length.

To monitor oil and low-dielectric fluids, a coaxial tube is required that slips over the probe and provides a direct 3/4" NPT (or G3/4 BSPP) process connection.

Resistant construction materials

The one-piece, completely welded sensor eliminates moisture ingress and has a high protection rating of IP 69K. Parameters are easily set by using the sensor's pushbutton menu, ifm's LineRecorder software or IO-Link. The LR2050 features an LED display for at-a-glance level indication.


ifm's LR2050 continuous level sensor has no moving parts to stick and break, withstands the harshest of environments and provides long life-in-application.




The LR2050 continuous level sensor is ideal for level detection of fluid in a parts cleaning system.




LR Series level sensor

| Type | Output | Probe Length | Media | Medium Temperature Range | Part No. | List Price (USD) |
|---|-----------------------------------|--------------------------|-------------------------------|----------------------------|----------|------------------|
|  | 4...20 mA and PNP / NPN switching | See required accessories | Oil and water-based solutions | -4...212 °F (-20...100 °C) | LR2050 | \$525.00 |

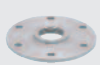



Required accessory – probe

| Type | Description | Part No. | List Price (USD) |
|---|-----------------------|----------|------------------|
|  | 210 mm Probe, 316 SS | E43225 | \$18.00 |
| | 240 mm Probe, 316 SS | E43203 | \$19.00 |
| | 300 mm Probe, 316 SS | E43226 | \$29.00 |
| | 450 mm Probe, 316 SS | E43204 | \$30.00 |
| | 500 mm Probe, 316 SS | E43227 | \$39.00 |
| | 700 mm Probe, 316 SS | E43205 | \$41.00 |
| | 1000 mm Probe, 316 SS | E43207 | \$66.00 |
| | 1200 mm Probe, 316 SS | E43208 | \$76.00 |
| | 1400 mm Probe, 316 SS | E43209 | \$91.00 |
| | 1600 mm Probe, 316 SS | E43210 | \$105.00 |
| | 2000 mm Probe, 316 SS | E43353 | \$100.00 |



Required accessory for oil applications, optional for water-based applications – coaxial tube

| Type | Description | Part No. | List Price (USD) |
|---|---------------------------------|----------|------------------|
|  | 450 mm Tube, 3/4" NPT, 304 SS | E43218 | \$89.00 |
| | 700 mm Tube, 3/4" NPT, 304 SS | E43219 | \$100.00 |
| | 1000 mm Tube, 3/4" NPT, 304 SS | E43220 | \$115.00 |
| | 1200 mm Tube, 3/4" NPT, 304 SS | E43223 | \$138.00 |
| | 1400 mm Tube, 3/4" NPT, 304 SS | E43224 | \$162.00 |
| | 1600 mm Tube, 3/4" NPT, 304 SS | E43221 | \$183.00 |
| | 150 mm Tube, G3/4 BSPP, 304 SS | E43230 | \$63.00 |
| | 240 mm Tube, G3/4 BSPP, 304 SS | E43211 | \$77.00 |
| | 300 mm Tube, G3/4 BSPP, 304 SS | E43228 | \$85.00 |
| | 450 mm Tube, G3/4 BSPP, 304 SS | E43212 | \$89.00 |
| | 500 mm Tube, G3/4 BSPP, 304 SS | E43229 | \$98.00 |
| | 700 mm Tube, G3/4 BSPP, 304 SS | E43213 | \$100.00 |
| | 1000 mm Tube, G3/4 BSPP, 304 SS | E43214 | \$115.00 |
| | 1200 mm Tube, G3/4 BSPP, 304 SS | E43215 | \$138.00 |
| | 1400 mm Tube, G3/4 BSPP, 304 SS | E43216 | \$162.00 |

Optional accessories

| Type | Description | Part No. | List Price (USD) |
|---|---|----------|------------------|
|  | Mounting flange, 73 - 90 / G3/4 BSPP, 303 SS | E43201 | \$47.00 |
| | Mounting flange, 65 - 80 / G3/4 BSPP, 303 SS | E43202 | \$46.00 |
|  | LineRecorder sensor, software for parameter setting (requires E30396 cable) | QA0001 | \$55.00 |
|  | USB IO-Link master cable for parameter setting | E30396 | \$142.00 |
|  | Memory plug to store sensor's parameters for easy upload without a computer | E30398 | \$51.00 |

Cordsets

| Type | Description | Part No. | List Price (USD) |
|---|--------------------------------|----------|------------------|
|  | M12 Micro DC (4-pin) 2 m, PUR | EVC001 | \$9.95 |
| | M12 Micro DC (4-pin) 5 m, PUR | EVC002 | \$13.50 |
| | M12 Micro DC (4-pin) 10 m, PUR | EVC003 | \$18.00 |
|  | M12 Micro DC (4-pin) 2 m, PUR | EVC004 | \$9.95 |
| | M12 Micro DC (4-pin) 5 m, PUR | EVC005 | \$13.50 |
| | M12 Micro DC (4-pin) 10 m, PUR | EVC006 | \$18.00 |

Technical Specs

| | |
|-----------------------|---|
| Supply voltage: | 18...30 VDC |
| Maximum load current: | 200 mA per output |
| Pressure rating: | -14.5...232 psi (-1...16 bar) |
| Accuracy: | ±0.6" +0.5% of full range (±1.5 cm +0.5% of full range) |
| Repeatability: | ±0.2" (±0.5 cm) |
| Wetted parts: | 316 stainless steel, PTFE, FKM |
| Protection rating: | IP 69K |

Distributed by:



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