Honeywell

EM940 Radar Type Level Gauge

The EM940 is a marine-approved smart radar level solution specifically designed for level measurement on tankers sailing the oceans. This instrument is suitable for use with liquid media like hydrocarbons, chemicals, bitumen, etc. In addition to transmitting tank level, pressure, and temperature to the centralized communication interface, this radar gauge is also feature-rich with self-diagnosis, selfmonitoring, and remote configuration.



The EM940 Radar employs advanced smart sensor technology packaged with a planar antenna. The radar beam is shaped electronically without the use of additional mechanical parts like a lens or horn as seen in traditional radar type level sensors. The integrated IG (inert gas) pressure transmitter offers added measurement parameters from a single instrument.

The use of intrinsically safe, two-way digital signal transmission between the radar gauge and the central monitoring system enables easy integration of the EM940 into any type of control system. The unit is compliant with certification rules and regulations issued by international classification societies.

TECHNICAL SPECIE	ICATIONS
Antenna aperture angle	13° (FMCW 10GHz)
Storage temperature	- 40°C to + 85°C
Operating temperature	- 40°C to + 70°C
Product temperature*	- 40°C to +200°C
Maximum pressure	1 bar
Range	600 mm to 42,000 mm
Resolution	1mm
Accuracy	Instrument: +/- 3mm Operating: +/- 5mm
Communication Protocol	EMS
Protection Class	IP66/67
Material	Housing: Stainless Steel SS316L
Weight	18 Kg.

SPECIAL FEATURE	S & CONNECTIONS
Special Features	 Automatic radar self-test during power up Automatic antenna fouling detection Antenna FEP protection Integrated inert gas pressure transmitter with a built-in test
Additional Input Options	 ✓ 3 PT100 temperature inputs ✓ 3 Analog inputs
Electrical Connection Variations	 ✓ 2 X BV2: Cable Ø 7mm to Ø 14.5mm ✓ 1 X BV3: Cable Ø 8.5mm to Ø 19mm ✓ 3 X ISO M28x1.5
Process connection	PN10 DN250

* with special mounting features

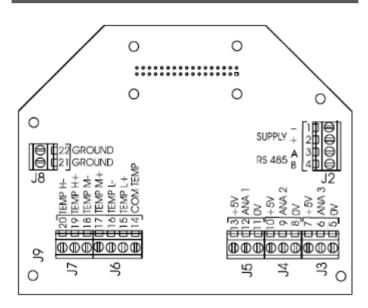
APPROVALS

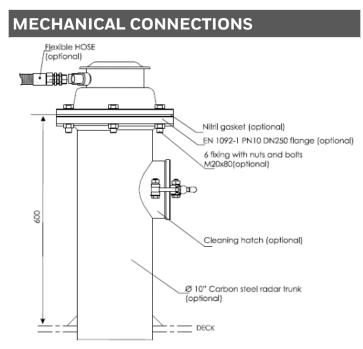
Intrinsic Safety Approval	IECEx, ATEX.
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DOCUMENTATION

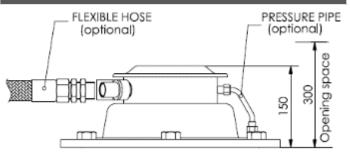
Technical manual	MT5016
Installation manual	MI5016
Maintenance manual	MM5016

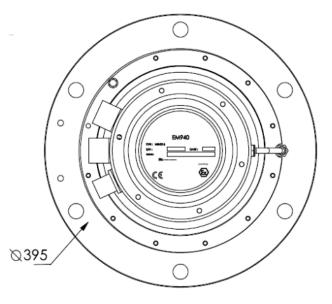
ELECTRICAL CONNECTION





MECHANICAL FITTINGS & DIMENSIONS





Honeywell www.process.honeywell.com This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. HM-22-01-02-TS-EN; 09/2022 ©2022 Honeywell International Inc.

