Evikon

Sensor Technologies Measurement & Control Instrumentation

Fuel Level Transmitter E2706





Features

- Accurate, reliable, temperature compensated design
- CAN interface, SAE J1939 protocol + 0-10 V analog output
- Easy installation, stem cuttable to length
- High performance at competitive price

Description

CAN Bus enabled sensor

E2706 with CAN interface and 0-10 V analog output is the latest addition to the Evikon E2700 family of digital level transmitters, which has been specially designed for precision fuel level measurement in vehicle and stationary tanks. Applications include vehicle tracking, AVL and fleet capacitive management systems. Highly sensitive technology, robust construction and full digital signal accurate reliable processing ensure stable, and measurements.

High accuracy

The resolution is better than 0.1% of the range, typically 0.07 mm. Thus high accuracy is provided even in low profile tanks. Thanks to adjustable digital integrating filter, short term fuel level fluctuations do not affect the sensor output.

Stable construction

E2706 is carefully engineered for best performance and reliability. The sensor stem is made of special light metal alloy for corrosion resistance and stiffness. The vertical slot in the stem reduces its clogging by residues in the fuel, facilitates cleaning and maintenance and improves the reaction time compared to closed tube geometry. The electronics box is completely sealed, providing protection from mechanical and corrosive impact.

Adjustable stem length

The stem can be easily cut directly at the installation place up to 20% of initial length to fit into the tank. Two standard lengths that suit majority of fuel tanks are available: L800 mm which may be cut to 150 mm and L1600 mm which may be cut to 300 mm.

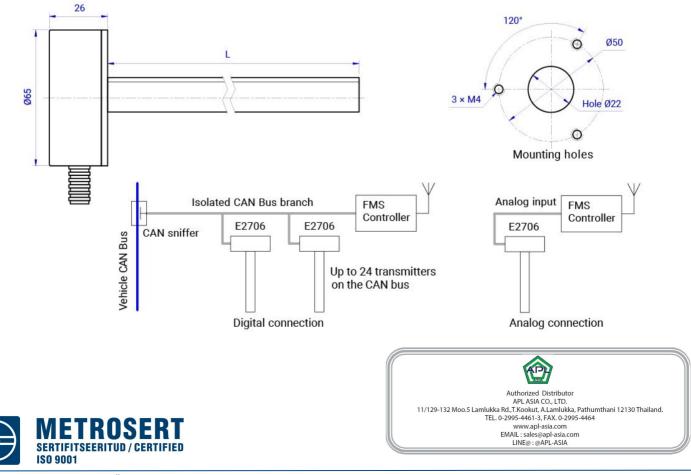


Specifications

Level sensitivity	> 2 units per mm, typically 15 units per mm
Resolution	< 0.1% of the range, typically 0.07 mm
Ambient temperature effect	< 0.03%, typically ±0.01% of the range per $^\circ\text{C}$
	adjustable temperature compensation
Non-linearity	< 0,3% of the range
Digital integrating filters	Adjustable time constant and integrating factor,
	output change rate 15240 mm/min
Digital interface	CAN 2.0B as per ISO 11898,
	250 kbps baud rate,
	SAE J1939 compatible protocol
Analog interface	0-10 V, programmable
Internal calibration	Digital calibration, internal calibration
	table up to 32 points, custom output units
Supply voltage	10 to 72 VDC, transient overvoltage,
	reverse polarity, short circuit protection
Operating conditions	–40 to +85 °C, 0 to 100 %RH, IP67 protection
Fuel types	Petro-diesel, biodiesel fuels with flash point
	up to +60 °C and above

Construction

Measurement system	Cylinder capacitor Ø20 mm with slot,
	light metal alloy EN–AW–6063–T6
Insulating seals	PTFE
Stem length	800mm / 1600mm as standard,
	up to 2400 mm on request
Electronics enclosure	Hard Polypropylene, Ø65 × H25 mm,
	protection class IP68
Bottom flange	Light metal alloy, NBR rubber gasket 3 mm
Mounting	3 screws M4 × 40
Connection cable	1 m cable in plastic protection armour Ø10 mm
	SuperSeal connector, 7 m cable extension



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