

MRL23

Submersible Level Transmitter for Sewage Applications and Corrosive Environment

MeasureX

Features

- PVDF housing and teflon coated cable
- Wide Range of Media Compatibility (suitable for strong acids and bases)
- Level Measurement Range of 0.5m H₂O to 500m H₂O
- Rugged Model with IP68 Protection
- Low Static and Thermal Errors
- Reverse Polarity And Transient Current Protected



Description

MRL23 series with PVDF housing is a rugged ceramic technology based pressure transmitter designed for harsh and corrosive environments like those found in sewage applications. This compact pressure transmitter offers great flexibility and reliability for a wide range of applications over a wide temperature range with highly competitive pricing.

MRL23 is available in pressure ranges from 0m H₂O to 500m H₂O with an output of mA or V. It is suitable for level measurement of different corrosive media compatible with PVDF housing (*for corrosive media such as hydrochloric acid, concentrated nitric acid, nitro-hydrochloric acid*). While the standard Precision is 0.5% FS, you can optionally get a precision of 0.25% FS and 0.1% FS. The robust construction and IP68 protection level of MRL23 with its high performance make it ideal for demanding long term applications.

Applications

- Waste water and sewage tanks
- Petroleum and chemical industries
- Level measurement of liquids in tanks
- Irrigation and other agricultural applications
- Hydrostatic level control

Technical Specifications

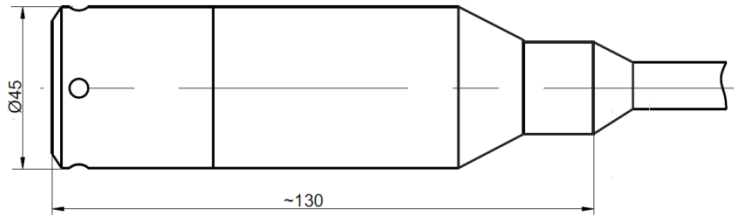
- **Pressure media:** all fluids compatible with PTFE
- **Ranges:** 0 to 500m H₂O
- **Pressure references:** Vented Gauge, Absolute
- **Overpressure rating:** 300% FS
- **Supply voltage:** 12 to 36 VDC, 3 to 5VDC
- **Output signals:** 4/20mA, 0/5V, 0/10V, 1/5V, 0/2.5V
- **Precision:** 0.5% FS (standard), 0.25% FS, 0.1% FS, combine LRH error
- **Long term stability:** <0.1% FS/year
- **Protection Level:** IP68 with cable connection
- **Compensated temp. range:** 0 to +70°C
- **Operating temp. range:** -30 to +100°C
- **Temp. coefficient of zero:** 0.025% FS /°C
- **Temp. coefficient of span:** 0.02% FS /°C
- **Insulation resistance:** 100MΩ @ 50VDC
- **Electrical connection:** 7.6mm shield cable connection
- **Housing materials:** PVDF
- **Diaphragm materials:** Ceramic
- **Cable:** Teflon coated (IP68)
- **Sealing:** n-Butyronitrile or fluoro-rubber sealing O-ring

MRL23

Submersible Level Transmitter for Sewage Applications and Corrosive Environment

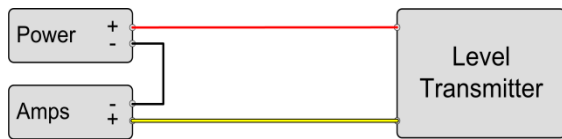
MeasureX

Dimensions

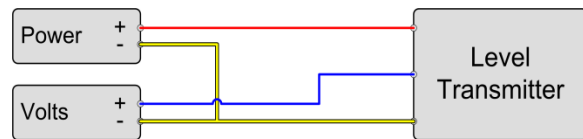


MRL23 with integrated amplifier and IP68 protected cable connector

Connection Diagrams



Power+: Red Signal+: Yellow
4/20mA, 2 wire loop powered



Power+: Red Signal+: Blue GND: Yellow
Voltage, 3-wire

Ordering Code

MRL23						
	Range	0.5, 1, 2, 5,10, 20, 50, 100, 200, 500m H ₂ O				
		Pressure Reference				
		VG (vented gauge)		Abs (absolute)		
		Precision ±⁽¹⁾				
		0.5% FS	0.25% FS		0.1% FS	
		Output Signal				
		4/20mA		0/20mA (2 wire loop-powered)		
		0/10V volts	0/5V volts		0/2.5V ² volts	
		Cable Length				
		5m		10m		
		20m		and others		
		Amplifier Type				
		Integrated				
		Separated				
MRL23	5m H₂O	VG	0.5%	4/20mA	10m	Integrated

Notes:

(1): Sensors with range of up to 3m are available in the accuracy of 0.25% and 0.5% FS.

All specifications are subject to change without prior notice

(2): 0/2.5VDC output option available only with 3-5VDC input

Ver. 5.13-17/04