Submersible Level Transmitters

MPS580

LIQUID

OVERVIEW

Operation

MPS580 series submersible transmitters are specifically designed for depth and level measurements of groundwater wastewater,and sea water.
Relatively low water levels can be measured with the MPS580 submersible level transmitter despite its 27 mm diameter. This is possible by incorporating a highly sensitive miniature silicon diaphragm with a very thin isolation membrane back filled with silicone oil.

Features

- Compact design
- Protection type IP68 (up to 250m depth)
- Corrosion resistant stainless steel design
- Wide measuring range
- Simple installation
- Various output signal
- PE, PUR, FEP shealted cable with inner ventilation

Application

- Irrigation
- Sewage lift stations
- Rivers
- Oceanopraphy
- Dams
- Wells

OPERATING DATA

Temperature Limit	-20...+80°C
	-20...+120°C with electronic junction box
Compensated Temp. Limit	0...70°C
Stability	<0.1% of FS/year
Accuracy	±0.5% FS (Base)
	±0.2% FS as optional
Over Pressure	FS range up to 1,6 mH20- 2x
	Above 1,6 to 100 mH2O - 3x
	Above 100 mH2O - 2x
Enclosure	IP68
Weight	0,7 kg without cable
Hysteresis, Repeatability	0,05% of FS
ATEX	II 1/2G Ex ia IIC T1....T6 Ga/Gb (Optional)

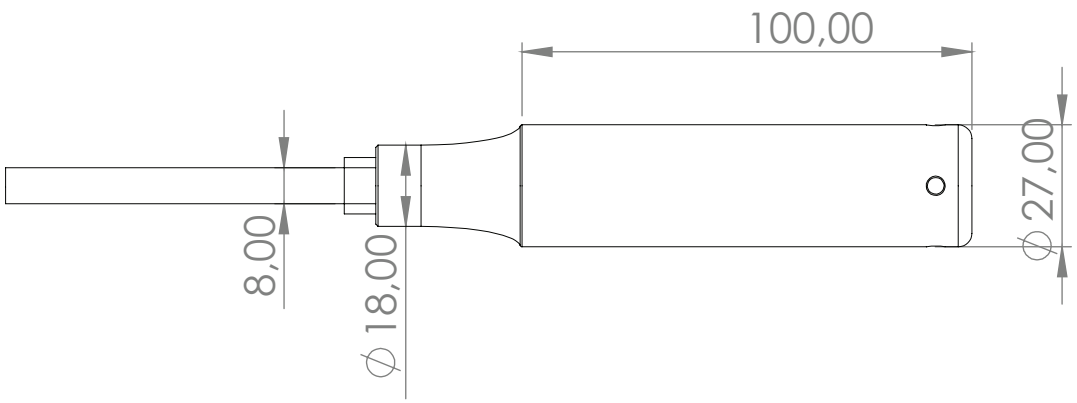
MEASURING RANGES

Measuring Range	0...250 m H_2O

MATERIALS

Body	AISI304 standard
	AISI316L, PTFE, PVC as optional
Diaphragm	AISI316L standard
	Ceramic, flush as optional
Cable	PE standard
	PUR, FEP as optional

TECHNICAL DRAWINGS AND DIMENSIONS



Unit is mm*

ELECTRICAL DATA

Output 2 wires, 4-20 mA
0-5 VDC, 0-10 VDC as optional (Supply should be min 14 VDC)

Power Supply 10-32 VDC

WIRING

4-20 mA		0-10 VDC or 0-5 VDC	
Cable Colour	Description	Cable Colour	Description
Red	Supply V+	Red	Supply V+
Blue	Output +	Blue	Supply V-
		Yellow	Output +

MEASURING RANGES

Code	Range	Code	Range	Code	Range
001	0...1 m H2O	006	0...10 m H2O	011	0...100 m H2O
002	0...1,6 m H2O	007	0...16 m H2O	012	0...160 m H2O
003	0...2,5 m H2O	008	0...25 m H2O	013	0...250 m H2O
004	0...4,0 m H2O	009	0...40 m H2O	XXX	Special Ranges
005	0...6.0 m H2O	010	0...60 m H2O		

OPTIONS, ELECTRONIC

BAB100.L

Inputs	
Analog	4…20 mA,
Output	
Analog	4…20 mA, 0-5 VDC, 0-10VDC selectable
Digital	4x SPDT relay, 5A max.
Optional Output Modules	2x 4-20 mA, 5x SPDT or others
Display	
Type	4.3" TFT full graphic colour display
Resolution	480x272 pixel resistive touchscreen
Refresh rate	Fast or user selectable (1…99 sec.)
Programming	By touch-screen or push-button
Power Requirements	
For Panel Mount	24VDC ±10%
For Wall Mount	24VDC ±10% or 100…240VAC
Max Power Consumption	DC: <5W / AC: 20VA
Enclosure	
Connections	Removable screw terminal blocks
Dimensions	144x144x94 mm DIN standard
Material	PC
Protection	IP65, Front
Ambient Temperature	
Operating Temp	-20…+70°C
Storage Temp	-30…+80°C
Max. Humidity	80%, non-condenstaing
Measurement Units	
Metric	lt, kg, m3, mm, cm, m
Imperial	inch, feet
Other	
Non-Volatile Memory	All programmed settings are stored in non-volatile memory for a minimum of five years if power is lost.
Recalibration	All ranges are calibrated at the factory. Recalibration is recommended at least every 12 months.

ORDERING

MPS580													Submersible Level Transmitters
Output	420												4...20 mA
	010												0-10 VDC
	050												0-5 VDC
Communication		N											None
		R											MODBUS RS485
		H											HART
Measuring Range			XXX										Please see the “Measuring Ranges Table”
Accuracy				05									±0.5% FS
				02									±0.2% FS
Body Material					1								AISI 304
					2								AISI 316L
					3								PVC
					4								PTFE
					X								On request
Body Diameter						1							27 mm (standard)
						2							19 mm
Diaphragm Material							SS						AISI 316L (standard)
							CR						Ceramic
Diaphragm Type								1					Standard
								2					Flush
Temperature Measuring									N				None
									X				4-20 mA (0-70°C)
Cable Material										PE			PE
										PU			PUR
										FE			FEP
Cable Length(meter)											XXX		Please specify as unit is meter
Additional Weight												N	None
												W	Weight
Hazardous Area													N None
													Xi II 1/2G Ex ia IIC T4 Gb(Ga)

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