Cage-Protected Submersible Level Transmitters





FEATURES

- Advanced diffused semiconductor and sputtered thin film sensor for maximum stability
- High accuracy and long term stability
- Ranges from 0 inH₂O to 50 inH₂O through 0 psi to 300 psi
- Corrosion resistant stainless steel construction
- Optional 5-30 Vdc input for 0.5 to 2.5 Vdc output, for field applications
- Optional integrated temperature measurement (PT100 RTD)

APPLICATIONS

- Sewage
- Lift stations
- Storm canals
- Wet wells
- Slurry tanks

613 SERIES

- Designed for severe high solids environments such as sewage, lift stations, storm canals, wet
 wells and slurry tanks where sludge, slurry or turbulence may be present
- Ideal for a wide variety of industrial and municipal liquid level measurement applications requiring watertight protection
- · Welded at cap and base to provide a leak-tight seal
- · Highly accurate, shock resistant and extremely stable over long periods of time
- · Standard 1/2" NPT conduit for attaching lifting rings or mounting brackets
- · Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Ranges from 0 inH₂O to 50 inH₂O through 0 psi to 300 psi (higher ranges available on request)
- · Corrosion resistant 316L stainless steel construction
- · Reverse polarity protection and short circuit protection are standard
- · Optional 5 to 30 Vdc input for 0.5 to 2.5 Vdc output, for field applications
- Optional integrated temperature measurement (PT100 RTD)

	SPECIFICATIONS					
Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 2.5 Vdc, 3-wire					
Pressure ranges	0 in H ₂ O to 50 in H ₂ O through 0 psig to 300 psig					
Proof pressure	2 times range					
Burst pressure	4 times range					
Accuracy	$\pm0.25\%$ full scale (BFSL); optional $\pm0.125\%$ full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)					
Repeatability	≤ ± 0.05% full scale					
Electrical connection	Submersible 1/2" NPT conduit					
Hysteresis	≤ ± 0.1% full scale					
Stability	≤ ± 0.2% full scale for 1 year, non-accumulating					
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire					
Wetted materials	Housing: 316 stainless steel Cage seal: All 316 stainless steel Cable: Polyurethane, FEP available on special versions					
Power supply*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire) 5 Vdc to 30 Vdc (0.5 Vdc to 2.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)					
Temperature ranges	Compensated 32 °F to 122 °F (0 °C to 50 °C) Effect ± 0.01%/ °F for zero and span Storage -22 °F to 175 °F (-30 °C to 80 °C) Medium 14 °F to 122 °F (-10 °C to 50 °C)					
Temperature measurement	Optional PT100, 4-wire per IEC 60751					
Response time	≤ 1 ms (between 10% and 90% full scale)					
Environmental protection	NEMA 6P, IP68					
Electromagnetic rating	2004/108/EEC, EN 61326 Emission (Group 1, Class B) and Immunity (industrial locations)					
Electrical protection	Reverse polarity protection, short circuit and optional lightning protection per EN 6100-4-5; 1.5J					
Shock	Less than ± 0.05% full scale effect for 100 g's @ 20 ms on any axis					
Vibration	Less than ± 0.01% full scale effect for 15 g's @ 0 Hz to 2,000 Hz on any axis					
Weight	Approximately 3.2 lb cable extra					

^{*} Unregulated power supplies

WIRING DIAGRAMS
ELECTRICAL CONNECTIONS

ORDERING INFORMATION										
SERIES	613									
PRESSURE RANGES	5	0 psi to 5 psi (11.55 ft/H ₂ O)	20	0 psi to 20 psi (46.20 ft/H ₂ O)	75	0 psi to 75 psi (173.25 ft/H ₂ O)	300	0 psi to 300 psi (693 ft/H ₂ O)		
	10	0 psi to 10 psi (23.10 ft/H ₂ O)	30	0 psi to 30 psi (69.30 ft/H ₂ O)	100	0 psi to 100 psi (231.00 ft/H ₂ O)				
	15	0 psi to 15 psi (34.65 ft/H ₂ O)	50	0 psi to 50 psi (115.50 ft/H ₂ O)	150	0 psi to 150 psi (346.50 ft/H ₂ O)				
ACCURACIES	1	±0.25% full scale (BFSL)			2	±0.125% full scale (BFSL)				
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire			5	0 Vdc to 10 Vdc, 3-wire				
	2	0 Vdc to 5 Vdc, 3-wire			11	0.5 Vdc to 2.5 Vdc, 3-wire				
ELECTRICAL CONNECTIONS	-XX	Standard Polyurethane (PUR)	cable)	-38-XX	FEP cable				
		NOTE: XX=length of cable in feet.								
OPTIONS	CC	Cable Clamp	FE	Filter Element	LP	Lightning Protection ¹	PT1	PT100 RTD ¹		
	DC	Desiccant Cartridge	JB	Cable Junction Box (NEMA 4X)	LR	Lifting Ring				

¹ Only available with PUR cable

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.



