Submersible Level Transmitters





FEATURES

- Advanced diffused semiconductor and sputtered thin film sensor for maximum stability
- High accuracy and long term stability
- Ranges from 0 inH₂0 to 50 inH₂0 through 0 psi to 1000 psi
- Corrosion resistant stainless steel construction
- Nosecone standard
- Optional 5-30 Vdc input for 0.5 to 2.5 Vdc output, for field applications
- Optional integrated temperature measurement (PT100 RTD)

APPLICATIONS

- Irrigation
- Food and beverage
- Waste water
- Water distribution
- Level and depth
- Bore hole
- Offshore
- R&D

SERIES 612

SUBMERSIBLE LEVEL TRANSMITTERS

NOSHOK Series 612 Submersible Level Transmitters were designed to provide a previously unequalled level of performance. Utilizing diffused semiconductor and thin film technologies, Series 612 transducers are accurate, shock resistant and extremely stable over long periods of time. Reverse polarity protection and short circuit protection have been installed as standard features. Lightning protection is optional.

Advanced manufacturing techniques combined with technologically advanced standard features allow NOSHOK to offer a level of performance previously found on transducers costing hundreds of dollars more.

A final electrical output and calibration inspection is performed on all NOSHOK transducers prior to shipment to ensure 100% "out of the box" reliability.

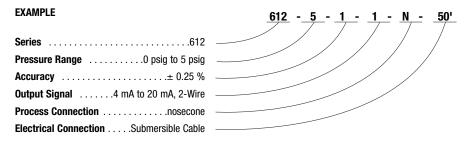
	SPECIFICATIONS		
Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 2.5 Vdc, 3-wire		
Pressure ranges	0 in H ₂ 0 to 50 in H ₂ 0 through 0 psig to 1000 psig		
Proof pressure	2 times range		
Burst pressure	4 times range		
Accuracy	\pm 0.25 % Full Scale (BFSL); Optional \pm 0.125 % Full Scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero poi and full scale errors)		
Repeatability	≤ ± 0.05 % Full Scale		
Hysteresis	\leq ± 0.1% Full Scale		
Stability	≤ ± 0.2 % Full Scale for 1 year, non accumulating		
Load limitations	\leq (VPower-10)/0.020 Amp for 4 mA to 20 mA \geq 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire \geq 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire		
Wetted materials	Housing: 316 stainless steel Cap: Polyamide, 316 stainless steel with weighted nosecone Cable: Polyurethane, Teflon available on special versions PVC with double water block		
Power supply	10 Vdc to 30 Vdc for current output, unregulated 14 Vdc to 30 Vdc for voltage output, unregulated 5 Vdc to 30 Vdc for 0.5 Vdc to 2.5 Vdc output, unregulated		
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		
Response time	≤ 1 ms (between 10 % to 90 % Full Scale)		
Durability	>100,000,000 Full Scale cycles		
Environmental protection	NEMA 6P, IP68		
Electromagnetic rating	CE compliant to EMC norm EN61326: 1997/A1: 1998 RFI, EMI and ESD protection		
Electrical protection	Reverse polarity protection, short circuit and optional lightning protection per EN 6100-4-5; 1.5J		
Shock	Less than \pm 0.05 % Full Scale effect for 100 g's @ 20 ms on any axis		
Vibration	Less than \pm 0.01 % Full Scale effect for 15 g's @ 0 Hz to 2000 Hz on any axis		
Weight	Approximately 7 oz. with standard nosecone - cable extra		



WIRING DIAGRAMS ELECTRICAL CONNECTIONS

ORDERING INFORMATION								
SERIES	612							
PRESSURE	0 inH ₂ 0 to 50 inH ₂ 0	50 inH ₂ 0	0 psig to 2 psig (4.6 ftH ₂ 0)	2	0 psig to 20 psig (46.2 ftH ₂ 0)	20	0 psig to 200 psig (461.3 ftH ₂ 0)	200
RANGES	$0 \text{ inH}_2^{-}0 \text{ to } 100 \text{ inH}_20$	100 inH ₂ 0	0 psig to 3 psig (6.9 ftH ₂ 0)	3	0 psig to 25 psig (57.7 ftH ₂ 0)	25	0 psig to 300 psig (692.5 ftH ₂ 0)	300
	$0 \text{ inH}_{2}^{-}0 \text{ to } 150 \text{ inH}_{2}^{-}0$	150 inH ₂ 0	0 psig to 5 psig (11.5 ftH ₂ 0)	5	0 psig to 30 psig (69.2 ftH ₂ 0)	30	0 psig to 350 psig (807.9 ftH ₂ 0)	350
	$0 \text{ inH}_{2}^{-}0 \text{ to } 200 \text{ inH}_{2}^{-}0$	200 inH ₂ 0	0 psig to 10 psig (23.1 ftH ₂ 0)	10	0 psig to 60 psig (138.5 ftH ₂ 0)	60	0 psig to 500 psig (1154.2 ftH ₂ 0)	500
	$0 \text{ inH}_{2}^{-}0 \text{ to } 400 \text{ inH}_{2}^{-}0$	400 inH ₂ 0	0 psig to 15 psig (34.6 ftH ₂ 0)	15	0 psig to 100 psig (230.8 ftH ₂ 0)	100	0 psig to 750 psig (1733.3 ftH20)	750
	psig = Gauge Pressure	Other ranges a	vailable on special request		0 psig to 150 psig (346.3 ftH ₂ 0)	150	0 psig to 1000 psig (2311.0 ftH20)	1000
ACCURACY		± 0.25 % F	ull Scale (BFSL)		2 ± 0.125 % Full Scale (BFSL)			
OUTPUT SIGNALS 1 4 mA to 20 mA, 2-wire		mA, 2-wire		5 0 Vdc to 10 Vdc, 3-wire				
		2 0 Vdc to 5 V	dc, 3-wire		11 0.5 Vdc to 2.5 Vdc, 3-wire			
PROCESS CONNECTIONS N nosecone W nos		econe v	v/added weight (1.1 lbs.)					
T G 1/2 B x 1/2 " NPT Male with 1/4 " NPT		'2 " NPT Male with 1/4 " NPT Fen	nale					
ELECTRICAL CONNECTIONS -XX Standard Polyurethane cable -22-XX Optional Water-blocked PVC cable (200+ psi only -38-XX Ootional FEP cable								
			·					
			Optional FEP cable					
			length of cable in feet.					
OPTIONS	P	I PT100 RTD						

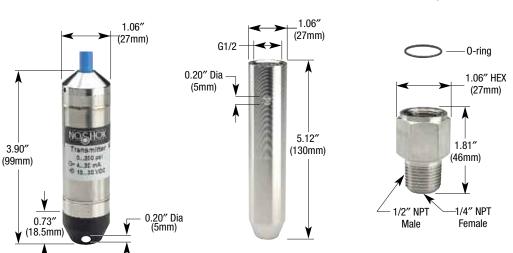
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.



Outline Dimensions

Weighted nosecone

NPT adapter



2-WIRE WIRING

Wiring	Cable
+ Supply	Red
+ Output	Black

3-WIRE WIRING

Wiring	Cable
+ Supply	Red
Common	Black
+ Output	White

Optional Accessories

Dust filter 612-Filter-Element
Desiccant Cartridge
Cable Clamp 612-Desiccant Cartridge
612-Cable Clamp