



### APPLICATIONS

- Irrigation
- Tank monitoring
- Water & wastewater
- Well head measurement

## 612 SERIES

- Ranges from 0 inH<sub>2</sub>O to 50 inH<sub>2</sub>O through 0 psig to 1,000 psig
- Current and voltage outputs available
- 316 Stainless Steel, polyamide and polyurethane wetted parts
- CE compliant to suppress RFI, EMI and ESD

### SPECIFICATIONS

<b>Output signals</b>	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
<b>Pressure ranges</b>	0 inH <sub>2</sub> O to 50 inH <sub>2</sub> O through 0 psig to 1,000 psig
<b>Accuracy</b>	± 0.25% full scale (BFSL); optional ± 0.125% full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
<b>Stability</b>	≤ ± 0.2% full scale for 1 year, non-accumulating
<b>Response time</b>	≤ 1 ms (between 10% and 90% full scale)
<b>Service life</b>	> 100,000,000 load cycles
<b>Temperature ranges</b>	Compensated 32 °F to 122 °F/0 °C to 50 °C Effect ± 0.01%/ °F for zero and span Media 14 °F to 122 °F / -10 °C to 50 °C Storage -22 °F to 175 °F/-30 °C to 80 °C
<b>Power requirement*</b>	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 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)
<b>Load limitations</b>	≤ (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
<b>Proof pressure</b>	2 times range
<b>Burst pressure</b>	4 times range
<b>Measuring element</b>	Cap: Polyamide, 316 Stainless Steel with weighted nosecone Cable: Polyurethane, optional FEP or PVC with double water block
<b>Connection</b>	316 Stainless Steel
<b>Housing material</b>	316 Stainless Steel
<b>Environmental rating</b>	IP68
<b>Electromagnetic rating</b>	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
<b>Electrical protection</b>	Reverse polarity protection, short circuit and optional lightning protection per EN 6100-4-5; 1.5J
<b>Shock</b>	100 g's according to IEC 60068-2-27
<b>Vibration</b>	15 g's according to IEC 60068-2-6
<b>Weight</b>	Approximately 7 oz. with standard nosecone - cable extra

\* Unregulated

ORDERING INFORMATION								
SERIES	612							
PRESSURE RANGES	50 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 50 inH <sub>2</sub> O	2	0 psig to 2 psig (4.6 ftH <sub>2</sub> O)	20	0 psig to 20 psig (46.2 ftH <sub>2</sub> O)	200	0 psig to 200 psig (461.3 ftH <sub>2</sub> O)
	100 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 100 inH <sub>2</sub> O	3	0 psig to 3 psig (6.9 ftH <sub>2</sub> O)	25	0 psig to 25 psig (57.7 ftH <sub>2</sub> O)	300	0 psig to 300 psig (692.5 ftH <sub>2</sub> O)
	150 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 150 inH <sub>2</sub> O	5	0 psig to 5 psig (11.5 ftH <sub>2</sub> O)	30	0 psig to 30 psig (69.2 ftH <sub>2</sub> O)	350	0 psig to 350 psig (807.9 ftH <sub>2</sub> O) *
	200 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 200 inH <sub>2</sub> O	10	0 psig to 10 psig (23.1 ftH <sub>2</sub> O)	60	0 psig to 60 psig (138.5 ftH <sub>2</sub> O)	500	0 psig to 500 psig (1154.2 ftH <sub>2</sub> O) *
	400 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 400 inH <sub>2</sub> O	15	0 psig to 15 psig (34.6 ftH <sub>2</sub> O)	100	0 psig to 100 psig (230.8 ftH <sub>2</sub> O)	750	0 psig to 750 psig (1733.3 ftH <sub>2</sub> O) *
psig = gauge pressure      Other ranges available on request				150	0 psig to 150 psig (346.3 ftH <sub>2</sub> O)	1000	0 psig to 1,000 psig (2311.0 ftH <sub>2</sub> 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		
PROCESS CONNECTIONS	N	Nosecone			W	Nosecone w/added weight (1.1 lb.)		
	T	G 1/2 B x 1/2" NPT male with 1/4" NPT female						
ELECTRICAL CONNECTIONS	XX	Standard polyurethane (PUR) cable			38-XX	Optional FEP cable		
	22-XX	Optional water-blocked PVC cable (>200 psi only)						
NOTE: XX = length of cable in feet.								
OPTIONS	PT1	PT100 RTD **		CBC	Cable Clamp		FE	Filter Element
	DC	Desiccant Cartridge		LP	Lightning Protection **		JB	Cable Junction Box

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

\* Only available with 4-20 mA output

\*\* Not available for FEP/PVC cable or Water-Block PVC cable

\*\*\* Only available for ranges ≥ 5 psi

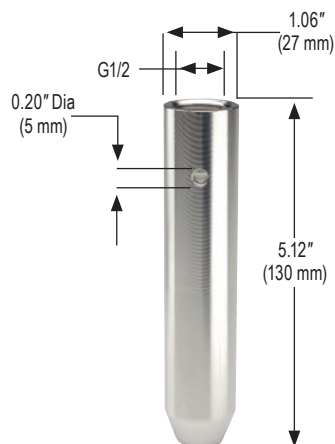
## EXAMPLE

Series ..... 612 Series  
 Pressure range ..... 0 psig to 5 psig  
 Accuracy ..... ±0.25% full scale (BFSL)  
 Output signal ..... 4 mA to 20 mA, 2-wire  
 Process connection ..... Nosecone  
 Electrical connection ..... 50' of submersible polyurethane cable

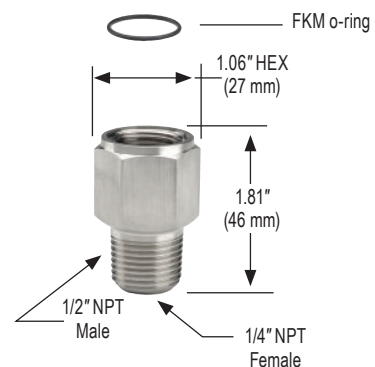
612 - 5 - 1 - 1 - N - 50



## Weighted nosecone



## NPT adapter



612 Series Wiring	4 mA to 20 mA		
CONNECTION TYPE (CODE)	V+	V-	CASE GROUND
PUR Cable	Brown	Green	Gray
FEP Cable	Brown	White	Blue

612 Series Wiring	0-5 Vdc, 0-10 Vdc, 0.5 to 2.5 Vdc			
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT	CASE GROUND
PUR Cable	Brown	Green	White	Gray
FEP Cable	Brown	Green	White	Gray

Load Limitations 4 mA to 20 mA output	
Vmin	= [10V + (.020 x RL)] - RC
RL	= RS + RW
RL	= Loop resistance (Ω)
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)
RC	= 0.0435 x cable length (ft.)