



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 1000 psi
- Corrosion resistant stainless steel construction
- Nosecone standard
- Optional 6 VDC input .5 to 2.5 output for field applications

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. Lighting 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 inH ₂ O to 50 inH ₂ O through 0 psig to 1000 psig |
| Proof pressure | 2 times range |
| Burst pressure | 4 times range |
| Accuracy | ± 0.25 % Full Scale (best fit straight line) (Includes the combined effects of linearity, hysteresis and repeatability) ± .125 % Full Scale (optional) |
| Repeatability | ≤ ± 0.05 % Full Scale |
| Hysteresis | ≤ ± 0.5 Vdc to 2.5 Vdc, 3-wire |
| Stability | ≤ ± 0.2 % Full Scale for 1 year, non accumulating |
| Load limitations | ≤ (V _{Power} -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 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 6 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 ± 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 2000 Hz on any axis |
| Weight | Approximately 7 oz. with standard nosecone – cable extra |

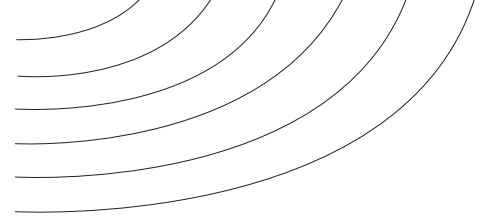
| ORDERING INFORMATION | | | | | | | | |
|-------------------------------|--|---------------|---|--|---|------------|---|-------------|
| SERIES 612 | | | | | | | | |
| PRESSURE RANGES | 0 inH ₂ O to 50 inH ₂ O | 50 IN | 0 psig to 2 psig (4.6 ftH ₂ O) | 2 | 0 psig to 20 psig (46.2 ftH ₂ O) | 20 | 0 psig to 200 psig (461.3 ftH ₂ O) | 200 |
| | 0 inH ₂ O to 100 inH ₂ O | 100 IN | 0 psig to 3 psig (6.9 ftH ₂ O) | 3 | 0 psig to 25 psig (57.7 ftH ₂ O) | 25 | 0 psig to 300 psig (692.5 ftH ₂ O) | 300 |
| | 0 inH ₂ O to 150 inH ₂ O | 150 IN | 0 psig to 5 psig (11.5 ftH ₂ O) | 5 | 0 psig to 30 psig (69.2 ftH ₂ O) | 30 | 0 psig to 350 psig (807.9 ftH ₂ O) | 350 |
| | 0 inH ₂ O to 200 inH ₂ O | 200 IN | 0 psig to 10 psig (23.1 ftH ₂ O) | 10 | 0 psig to 60 psig (138.5 ftH ₂ O) | 60 | 0 psig to 500 psig (1154.2 ftH ₂ O) | 500 |
| | 0 inH ₂ O to 400 inH ₂ O | 400 IN | 0 psig to 15 psig (34.6 ftH ₂ O) | 15 | 0 psig to 100 psig (230.8 ftH ₂ O) | 100 | 0 psig to 750 psig (1733.3 ftH ₂ O) | 750 |
| | psig = Gauge Pressure | | Other ranges available on special request | | 0 psig to 150 psig (346.3 ftH ₂ O) | 150 | 0 psig to 1000 psig (2311.0 ftH ₂ O) | 1000 |
| ACCURACY | 1 ± 0.25 % Full Scale (Best fit straight line) | | | 2 ± 0.125 % Full Scale (Best fit straight line) | | | | |
| 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 lbs.) | | | | | |
| | T NPT adapter, 1/2" NPT male outer thread with 1/4" NPT female inner thread attached to transmitter process connection with straight thread and O-ring seal | | | | | | | |
| ELECTRICAL CONNECTIONS | Submersible cable (specify length in feet) | | | | | | | |

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

EXAMPLE

Series612
 Pressure Range0 psig to 5 psig
 Accuracy± 0.25 %
 Output Signal4 mA to 20 mA, 2-Wire
 Process Connectionnosecone
 Electrical ConnectionSubmersible Cable

612 - 5 - 1 - 1 - N - 50'



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

| | |
|---------------------|-------------------------|
| Moisture filter | 612-Filter-Element |
| Desiccant Cartridge | 612-Desiccant Cartridge |
| Cable Clamp | 612-Cable Clamp |