

Cage-Protected Submersible



613 SERIES

- Ranges from 0 psi to 5 psi through 0 psi to 300 psi
- Current & voltage outputs available
- 316 Stainless Steel and polyurethane wetted parts
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Lift stations
- Sewage
- Slurry tanks
- Storm canals
- Water & wastewater
- Wet wells

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 psi to 5 psi through 0 psi to 300 psi
Accuracy	± 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)
Stability	≤ ± 0.2% full scale for 1 year, non-accumulating
Response time	≤ 1 ms (between 10% and 90% full scale)
Service life	> 100,000,000 full scale cycles
Temperature measurement	Optional PT100, 4-wire per IEC 60751
Temperature ranges	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
Power requirement*	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)
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
Proof pressure	2 times range
Burst pressure	4 times range
Measuring element	Cage seal: All 316 Stainless Steel Cable: Polyurethane, optional FEP
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP68
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/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	100 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 3.2 lb. - cable extra

* Unregulated

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 NOTE: XX = length of cable in feet.		38-XX Optional FEP cable	
OPTIONS	CBC Cable Clamp	FE Filter Element	LP Lightning Protection *	PT1 PT100 RTD *
	DC Desiccant Cartridge	JB Cable Junction Box	LR Lifting Ring	

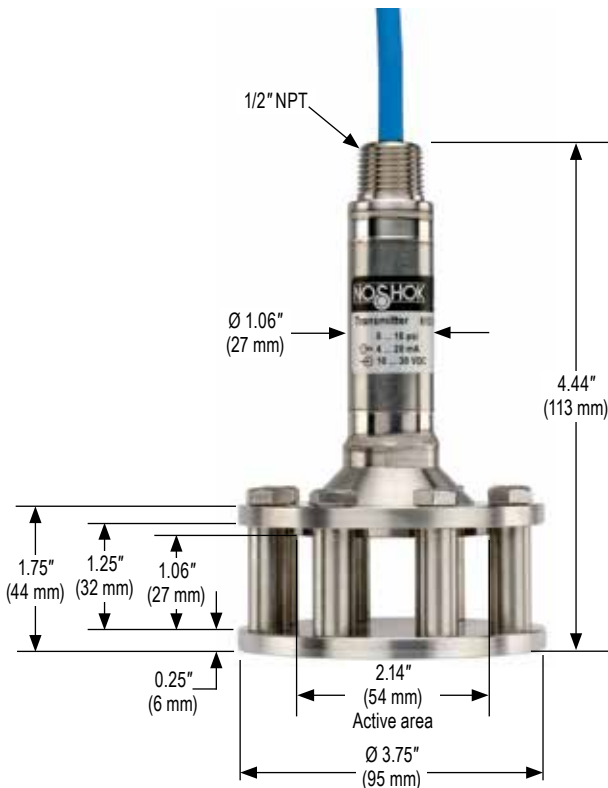
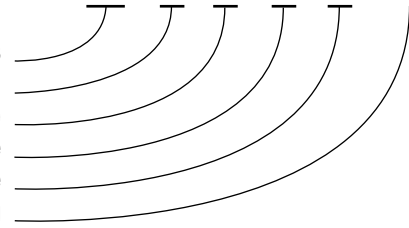
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Only available with PUR cable

EXAMPLE

Series 613 Series
Pressure range 0 psi to 5 psi
Accuracy ±0.25% full scale (BFSL)
Output signal 4 mA to 20 mA, 2-wire
Electrical connection 50' of submersible polyurethane cable
Option Lifting Ring

613 - 5 - 1 - 1 - 50' - LR



Optional Cable Clamp



Optional Cable Junction Box



Optional Desiccant Cartridge



Optional Filter Element



Optional Lifting Ring

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

613 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	
V _{min}	= [10V + (.020 x RL)] - RC
RL	= RS + RW
RL	= Loop resistance (Ω)
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)
RC	= 0.0435 $\frac{\Omega}{ft}$ x cable length (ft.)



WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov