

High pressure  
model

## APPLICATIONS

- Construction
- Hydraulics & pneumatics
- Laboratory & test equipment
- Power generation
- Stamping & forming presses
- Transportation



Also available with our 1800 Series Attachable Loop Indicator. Visit [www.noshok.com](http://www.noshok.com) for more information.

## 615/616 SERIES

- Vacuum ranges through 0 psig to 145,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Current and voltage outputs available
- 316 and 17-4PH stainless steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

## SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc, 1 Vdc to 11 Vdc, 3-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 4-wire
Pressure ranges	Vacuum through 0 psig to 145,000 psig Absolute from 0 psia to 15 psia through 0 psia to 300 psia
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
Adjustment	± 10% full scale for zero and span
Response time	Less than 1 ms (between 10% and 90% full scale)
Pressure cycle limit	150 Hz
Durability	>100,000,000 full scale cycles
Temperature ranges	Compensated 32 °F to 175 °F (0 °C to 80 °C) Effect ± 0.01%/ °F for zero and span Media -20 °F to 212 °F (-30 °C to 100 °C) Ambient -15 °F to 175 °F (-10 °C to 80 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 1 Vdc to 5 Vdc, 3-wire, 1 Vdc to 6 Vdc, 3-wire, 0 Vdc to 5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire, 1 Vdc to 11 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	3 times full scale for ranges 0 psi to 2 psi through 0 psi to 200 psi 1.75 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi 1.2 times full scale for ranges 0 psi to 20,000 psi through 0 psi to 145,000 psi
Burst pressure	3.8 times full scale for ranges 0 psi to 2 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi 1.5 times full scale for ranges 0 psi to 20,000 psi through 0 psi to 145,000 psi
Measuring element	316 stainless steel for vacuum through 300 psi; 17-4PH stainless steel for ≥500 psi
Connection	316 stainless steel
Housing material	316 stainless steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, overvoltage and short circuit protection
Shock	1,000 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 7.2 oz.

\* Unregulated

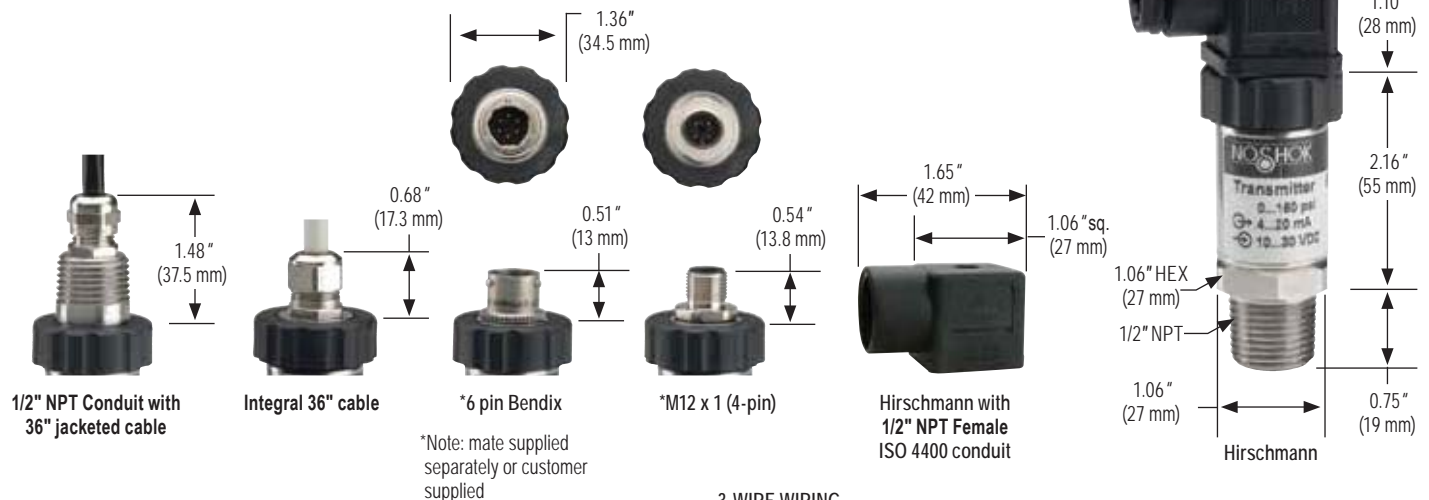
ORDERING INFORMATION											
SERIES	615 (Internal diaphragm)			616 (Front flush diaphragm)							
PRESSURE RANGES	30vac	-30 inHg to 0 psig	2 0 psig to 2 psig	150	0 psig to 150 psig	2000	0 psig to 2,000 psig	20000	0 psig to 20,000 psig	145000	0 psig to 145,000 psig
	30/15	-30 inHg to 15 psig	3 0 psig to 3 psig	200	0 psig to 200 psig	3000	0 psig to 3,000 psig	30000	0 psig to 30,000 psig	15A	0 psia to 15 psia
	30/30	-30 inHg to 30 psig	5 0 psig to 5 psig	300	0 psig to 300 psig	4000	0 psig to 4,000 psig	36000	0 psig to 36,000 psig	30A	0 psia to 30 psia
	30/60	-30 inHg to 60 psig	10 0 psig to 10 psig	500	0 psig to 500 psig	5000	0 psig to 5,000 psig	58000	0 psig to 58,000 psig	60A	0 psia to 60 psia
	30/100	-30 inHg to 100 psig	15 0 psig to 15 psig	600	0 psig to 600 psig	6000	0 psig to 6,000 psig	72000	0 psig to 72,000 psig	100A	0 psia to 100 psia
	30/150	-30 inHg to 150 psig	30 0 psig to 30 psig	750	0 psig to 750 psig	7500	0 psig to 7,500 psig	87000	0 psig to 87,000 psig	150A	0 psia to 150 psia
	30/200	-30 inHg to 200 psig	60 0 psig to 60 psig	1000	0 psig to 1,000 psig	10000	0 psig to 10,000 psig	100000	0 psig to 100,000 psig	200A	0 psia to 200 psia
	30/300	-30 inHg to 300 psig	100 0 psig to 100 psig	1500	0 psig to 1,500 psig	15000	0 psig to 15,000 psig	115000	0 psig to 115,000 psig	300A	0 psia to 300 psia
		psig = gauge pressure	psia = absolute pressure	Other ranges available on request		Note: 616 Series is available for pressure ranges up to 0 psig to 8,000 psig					
ACCURACIES	1	±0.25% full scale (BFSL)		2	±0.125% full scale (BFSL)						
OUTPUT SIGNALS *Ranges up to 0 psig to 60,000 psig	1	4 mA to 20 mA, 2-wire		4	1 Vdc to 6 Vdc, 3-wire*						
	2	0 Vdc to 5 Vdc, 3-wire		5	0 Vdc to 10 Vdc, 3-wire		NOTE: 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc outputs are also available in 4-wire configurations for use with other electrical systems.				
	3	1 Vdc to 5 Vdc, 3-wire		6	1 Vdc to 11 Vdc, 3-wire*						
PROCESS CONNECTIONS	615:	2	1/4" NPT male		6	9/16" -18 UNF 2B high pressure cone** (Standard on 30,000 to 120,000 psig)			8	1/2" NPT male	
	616:	11	G 1/2 B (Pressure ranges ≥ 0 psig to 30 psig)		13	G 1 B (Pressure ranges ≤ 0 psig to 30 psig)			Other connections available upon request		
ELECTRICAL CONNECTIONS	1	36" cable (connected to option 8)		8	Hirschmann (DIN EN 175301-803 Form A)			25	M12 x 1 (4-pin)		
	3	6-pin Bendix		14	Hirschmann type with 1/2" NPT female conduit			36	Integral 36" cable		
	6	1/2" NPT conduit w/ 36" cable									
OPTIONS	ST8	SS Threaded Orifice		G1	G 1 Weld-on adapter (616 only)			G½	G 1/2 Weld-on adapter (616 only)		

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

\*\* Equivalent to F250C Parker Autoclave

#### EXAMPLE

Series .....615 Series  
 Pressure range .....0 psig to 500 psig  
 Accuracy .....±0.25% full scale (BFSL)  
 Output signal ..... 4 mA to 20 mA, 2-wire  
 Process connection .....1/2" NPT Male  
 Electrical connection .....36" cable  
 Option..... Threaded Orifice



#### 2-WIRE WIRING

	Hirschmann	Cable	M12	Bendix
+ Supply	1	Red	1	A
+ Output	2	Black	3	B

#### 3-WIRE WIRING

	Hirschmann	Cable	M12	Bendix
+ Supply	1	Red	1	A
Common	2	Black	3	B
+ Output	3	White	4	C

**NOTE**  
 See 621/622 Series  
 for G1/2B and G1B  
 Front Flush Process  
 Connection Dimensions  
 pg. 85