

# 11 SERIES



Meets 3A requirements for the food & beverage, dairy, pharmaceutical and biotechnology industries in addition to ASME BPE-2009 and CE compliant.

## FEATURES

- CE compliant
- Current or voltage output signals available to suit most applications
- NEMA 4X, IP65 (IEC529)
- Diffused semiconductor or sputtered thin film sensor for maximum stability
- Can be cleaned-in-place or steamed-in-place
- High accuracy and long term stability
- Integral cooling extension allows for higher media temperatures

- Designed for heavy-duty sanitary applications where high accuracy, shock resistance and durability are required
- Diffused semi-conductor or sputtered thin film sensor for maximum stability
- Current or voltage output signals available to suit most applications
- NEMA 4X, IP65 (IEC529)
- 1-1/2" or 2" ASME-BPE Sanitary Clamp connections with integral cooling extension that allows for higher media temperatures
- 316L stainless steel housing is welded to the ASME-BPE Sanitary Clamp process connection for greater strength and integrity
- ASME-BPE Sanitary Clamp housing and diaphragm are constructed from 316L stainless steel with wetted surfaces electropolished to Ra25 or better
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)
- CE compliant to suppress RFI, EMI, and ESD

## SPECIFICATIONS

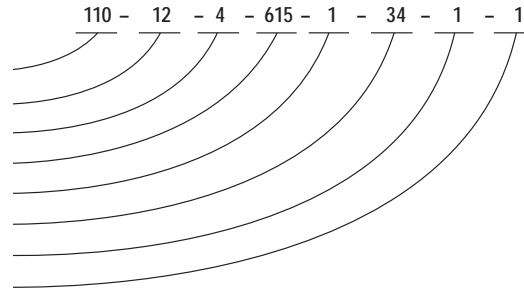
Output signals	4 mA to 20 mA 2-wire, 0 Vdc to 5 Vdc 3-wire, 1 Vdc to 5 Vdc 3-wire, 1 Vdc to 6 Vdc 3-wire, 0 Vdc to 10 Vdc, 3-wire, 1 Vdc to 11 Vdc 3-wire
Pressure ranges	Standard gauge ranges from vacuum to 400 psi
Proof pressure	3 times full scale for ranges 0 psig to 2 psig through 0 psig to 200 psig 1.75 times full scale for ranges 0 psig to 300 psig through 0 psig to 400 psig
Burst pressure	3.8 times full scale for ranges 0 psig to 2 psig through 0 psig to 200 psig 4 times full scale for ranges 0 psig to 300 psig through 0 psig to 400 psig
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)
Repeatability	≤ ±0.05% full scale
Hysteresis	≤ ±0.1% full scale
Stability	±0.2% full scale for 1 year, non-accumulating
Power supply*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire) 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire) 10 Vdc to 30 Vdc (1 Vdc to 6 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) 14 Vdc to 30 Vdc (1 Vdc to 11 Vdc, 3-wire)
Load limitations	≤ (VPower -10)/0.020 Amp for 4 mA to 20 mA output ≤ 5,000 Ω for 1 Vdc to 5 Vdc output ≤ 10,000 Ω for 0 Vdc to 10 Vdc output ≤ 4,500 Ω for 0.5 Vdc to 4.5 Vdc output
Case materials	316 stainless steel
Temperature ranges	Compensated 32 °F to 175 °F (0 °C to 80 °C) Effect ±0.01%/°F for zero and span Ambient -40 °F to 176 °F (-40 °C to 80 °C)
Adjustment	±10% full scale for zero and span
Environment protection	NEMA 4X, IP65 (IEC 529)
Electromagnetic rating	2004/108/EEC, EN 61326 Emission (Group 1, Class B) and Immunity (industrial locations)
Electrical protection	Reverse polarity, overvoltage and short circuit protection
Process connection	1-1/2" or 2" ASME-BPE Sanitary Clamp
Seal housing material	316L stainless steel
Diaphragm material	316L stainless steel electropolished to Ra25 or better
Fill fluid	White Oil (FFL 77), USP grade
Media temperature	-40 °F to 300 °F (-40 °C to 150 °C)

\* Unregulated power supplies

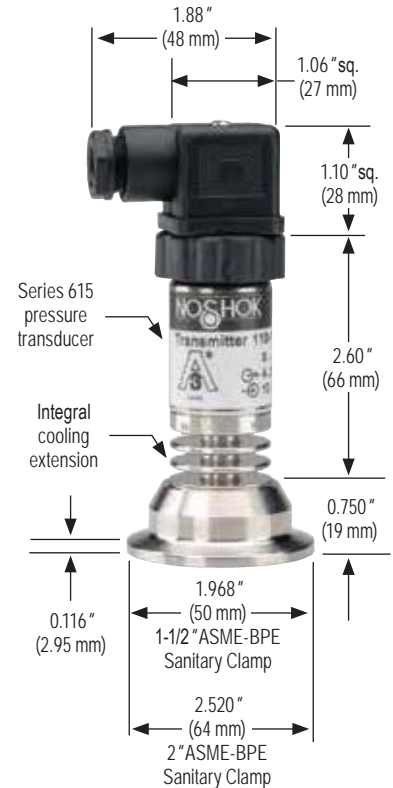
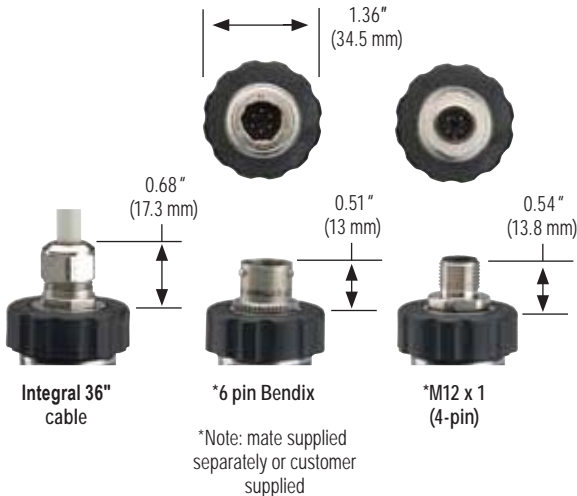
ORDERING INFORMATION				
SERIES	110			
CLAMP SIZES	12 1-1/2"	16 2"		
SEAL FILL FLUID	4 FFL77 White oil Other food grade quality fill fluids available — please consult factory			
TRANSDUCER	615 615 Series transducer			
ACCURACIES	1 ±0.25% full scale (BFSL)	2 ±0.125% full scale		
PRESSURE RANGES	01 -30 inHg to 0 psig	16 -30 inHg to 150 psig	37 0 psig to 10 psig	52 0 psig to 150 psig
	04 -30 inHg to 15 psig	19 -30 inHg to 200 psig	40 0 psig to 15 psig	58 0 psig to 200 psig
	07 -30 inHg to 30 psig	22 -30 inHg to 300 psig	43 0 psig to 30 psig	61 0 psig to 300 psig
	10 -30 inHg to 60 psig	31 0 psig to 100 inH <sub>2</sub> O	46 0 psig to 60 psig	64 0 psig to 400 psig
	13 -30 inHg to 100 psig	34 0 psig to 5 psig	49 0 psig to 100 psig	
	OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	3 1 Vdc to 5 Vdc, 3-wire	5 0 Vdc to 10 Vdc, 3-wire
	2 0 Vdc to 5 Vdc, 3-wire	4 1 Vdc to 6 Vdc, 3-wire	6 1 Vdc to 11 Vdc, 3-wire	
ELECTRICAL CONNECTIONS	1 36" Cable attached to Hirschmann	14 Hirschmann connection with ISO 4400 1/2" NPT conduit		
	3 6-pin Bendix	25 M12 X 1 (4-pin)		
	8 Hirschmann (DIN EN 175301-803 form A)	36 Integral 36" cable		

### EXAMPLE

Series ..... 11  
 Clamp size ..... 1-1/2" ASME-BPE Sanitary Clamp  
 Seal fill fluid..... White oil  
 Transmitter ..... 615 Series  
 Accuracy ..... ±0.25% full scale  
 Pressure range..... 0 psig to 5 psig  
 Output signal ..... 4 mA to 20 mA, 2-wire  
 Electrical connection ..... Hirschmann with 3' of cable



### Outline Dimensions



### 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