



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

FEATURES

- Meets current 3A standards and ASME BPE-2009
- 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

SERIES 11

HIGH PERFORMANCE SANITARY PRESSURE TRANSMITTERS

The NOSHOK Series 11 Sanitary Pressure Transmitter is designed for heavy duty sanitary applications where high accuracy and durability are required. Using diffused semiconductor or sputtered thin film sensor technology these transducers are stable, accurate, shock resistant and extremely durable.

The housing is constructed of 316SS and welded to the process connection for greater strength and integrity. The available 1 1/2 inch or 2 inch Tri-Clamp® connection, with its integral cooling extension, is 316L stainless steel and wetted parts are electro-polished to Ra25 microinch or better.

NOSHOK Series 11 Sanitary Transmitters meet 3A requirements for the food & beverage, dairy, pharmaceutical and biotechnology industries in addition to ASME BPE-2009 and CE compliant.

A final electrical output and calibration inspection is performed on all NOSHOK transmitters prior to shipment to ensure 100% “out-of-the-box” reliability.

SPECIFICATIONS

Output Signals	4mA to 20mA 2-wire, 0Vdc to 5Vdc 3-wire, 1Vdc to 5Vdc 3-wire, 1Vdc to 6Vdc 3-wire, 0Vdc to 10Vdc, 3-wire, 1Vdc to 11Vdc 3-wire
Pressure Ranges	Standard gauge ranges from vacuum to 400 psig
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 (B.F.S.L); 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	10Vdc to 30Vdc for current output 14Vdc to 30Vdc for voltage output, unregulated
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	CE compliant to EMC norm EN61326: 1997/A1: 1998 RFI, EMI, ESD protection
Electrical Protection	Reverse polarity, overvoltage and short circuit protection
Process Connection	1 1/2 inch or 2 inch Tri-Clamp®
Seal Housing Material	316L stainless steel
Diaphragm Material	316L stainless steel electropolished to Ra25 or better
Fill Fluid	White Oil (FLL 77), USP grade
Media Temperature	-40°F to 300°F (-40°C to 150°C)

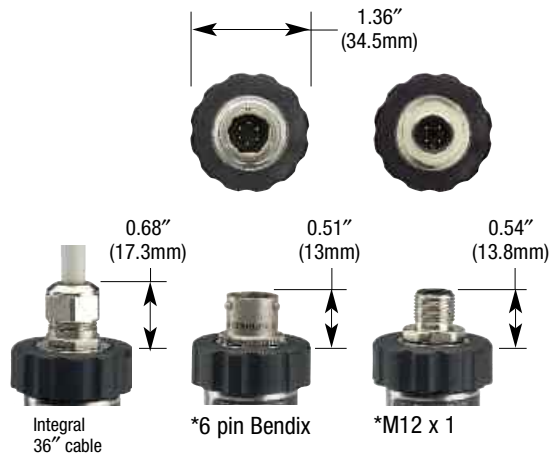
ORDERING INFORMATION				
SERIES 11	110			
CLAMP SIZE	12	1 1/2 Inch	16	2 Inch
SEAL FILL FLUID	4	F7L77 White Oil Other Food Grade Quality Fill Fluids Available - Please Consult Factory		
TRANSMITTER	615	Series 615 Transmitter		
ACCURACY	1	±0.25% Full Scale (BFS)	2	±0.125% Full Scale
PRESSURE RANGE	-30 inHg to 0 psig	01	-30 inHg to 150 psig	16
	-30 inHg to 15 psig	04	-30 inHg to 200 psig	19
	-30 inHg to 30 psig	07	-30 inHg to 300 psig	22
	-30 inHg to 60 psig	10	0 psig to 100 inH ₂ O	31
	-30 inHg to 100 psig	13	0 psig to 5 psig	34
	0 psig to 10 psig	37	0 psig to 150 psig	52
	0 psig to 15 psig	40	0 psig to 200 psig	58
	0 psig to 30 psig	43	0 psig to 300 psig	61
	0 psig to 60 psig	46	0 psig to 400 psig	64
	0 psig to 100 psig	49		
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire		2 0 Vdc to 5 Vdc, 3-wire	
	4 1 Vdc to 6 Vdc, 3-wire		3 1 Vdc to 5 Vdc, 3-wire	
ELECTRICAL CONNECTION	1 36 " cable attached to Hirschmann		14 Hirschmann connection with ISO 4400 1/2 inch 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

SeriesSeries 11 Sanitary Transmitter
Clamp Size1 1/2 " Tri-Clamp®
Seal Fill FluidWhite oil
Transmitter615 Series
Accuracy±0.25% Full Scale
Pressure Range0 psig to 5 psig
Output Signal4 mA to 20 mA, 2-wire
Electrical ConnectionHirschmann with 3 feet of cable

110 - 12 - 4 - 615 - 1 - 34 - 1 - 1

Outline Dimensions



*Note: mate supplied separately or customer supplied

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





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

FEATURES

- Meets current 3A standards and ASME BPE-2009
- CE compliant
- Current or voltage output signals available to suit most applications
- Span and zero adjustments
- NEMA 4X, IP65 (IEC529)
- Sputtered thin film sensor for maximum stability and shock resistance
- Ranges from 1000 psig to 15000 psig
- High accuracy and long term stability
- Can be cleaned-in-place or steamed-in-place

SERIES 21

HIGH PERFORMANCE HOMOGENIZER TRANSMITTERS

The NOSHOK Series 21 Homogenizer Pressure Transmitter is a high accuracy, heavy duty pressure transmitter designed for the demanding requirements found in high pressure sanitary homogenizer applications. Using proven sputtered thin film sensor technology these transducers are stable, highly accurate, shock resistant and extremely durable.

The NOSHOK Series 21 is offered in a variety of Current or Voltage output signals and is constructed of 316SS. The housing is welded to the 316L stainless steel process connection for greater strength and durability while providing exceptional corrosion resistance. Wetted parts are electro polished to Ra25 or better providing a cleaner, more sanitary surface.

NOSHOK Series 21 homogenizer transmitters meet the current standards for 3A and ASME BPE-2009 in addition to being CE compliant. A final electrical output and calibration inspection is performed on all NOSHOK transmitters prior to shipment to ensure 100% "out-of-the-box" reliability.

SPECIFICATIONS

Output Signals	4mA to 20mA 2-wire, 0Vdc to 5Vdc 3-wire, 1Vdc to 5Vdc 3-wire, 1Vdc to 6Vdc 3-wire, 0Vdc to 10Vdc, 3-wire, 1Vdc to 11Vdc 3-wire
Pressure Ranges	Standard gauge ranges from 1000 psig to 15000 psig
Proof Pressure	1.75 times full scale for ranges 0 psig to 300 psig through 0 psig to 10000 psig 1.5 times full scale for ranges 0 psig to 15000 psig
Burst Pressure	4 times Full Scale for ranges 0 psig to 300 psig through 0 psig to 10000 psig 3 times full scale for ranges 0 psig to 15000 psig
Accuracy	±0.25% Full Scale (B.F.S.L); 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	10Vdc to 30Vdc for current output, unregulated 14Vdc to 30Vdc for voltage output, unregulated
Power Supply	≤ (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
Housing Materials	316 stainless steel
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
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	CE compliant to EMC norm EN61326: 1997/A1: 1998 RFI, EMI, ESD protection
Electrical Protection	Reverse polarity, overvoltage and short circuit protection
Process Connection	1 1/8 inch Homogenizer Flange
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)

ORDERING INFORMATION									
SERIES 21	210								
CLAMP SIZE	42 1 1/8 Inch Flange								
SEAL FILL FLUID	4 FFL77 White Oil (Other Fill Fluids Available - Please Consult Factory)								
TRANSMITTER	615 Series 615 Transmitter								
ACCURACY	1 ±0.25% Full Scale (BFSL)		2 ±0.125% (BFSL)						
PRESSURE RANGE	0 psig to 1000 psig	73	0 psig to 2000 psig	79	0 psig to 5000 psig	85	0 psig to 10000 psig	91	
	0 psig to 1500 psig	76	0 psig to 3000 psig	82	0 psig to 6000 psig	88	0 psig to 15000 psig	94	
OUTPUT SIGNAL	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 CONNECTION	1 36 " cable attached to Hirschmann				14 Hirschmann connection with ISO 4400 1/2 inch 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 Series 21 homogenizer transmitter
 Clamp Size 1 1/8 " homogenizer flange
 Seal Fill Fluid White oil
 Transmitter 615 Series
 Accuracy ±0.25% Full Scale
 Pressure Range 0 psig to 5000 psig
 Output Signal 4 mA to 20 mA, 2-wire
 Electrical Connection Hirschmann (DIN EN 175301-803 Form A)

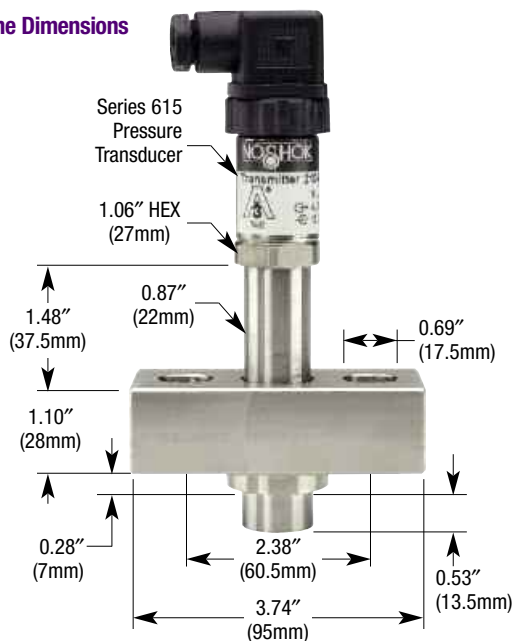
210 - 42 - 4 - 615 - 1 - 85 - 1 - 8



2-WIRE WIRING

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

Outline Dimensions



3-WIRE WIRING

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