# Homogenizer Pressure Transmitters & Transducers





Meets 3A requirements for the food & beverage, dairy, pharmaceutical and biotechnology industries in addition to ASME BPE-2002 and CE compliant.

## FEATURES

- Meets current 3A standards and ASME BPE-2002
- E 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



## 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-2002 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 psi		
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) ±0.125% Full Scale (optional)		
Repeatability	≤±0.05% Full Scale		
lysteresis	≤±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	$ \leq (VPower -10)/0.020 \text{ Amp for 4 mA to 20 mA output}  \leq 5,000 \Omega \text{ for 1 Vdc to 5 Vdc output}  \leq 10,000 \Omega \text{ for 0 Vdc to 10 Vdc output}  \leq 4,500 \Omega \text{ for 0.5 Vdc to 4.5 Vdc output} $		
Housing Materials	316 stainless steel		
oad limitations	$\leq$ (VPower -10)/0.020 Amp for 4 mA to 20 mA output $\leq 5,000 \Omega \text{ for 1 Vdc to 5 Vdc output}$ $\leq 10,000 \Omega \text{ for 0 Vdc to 10 Vdc output}$ $\leq 4.500 \Omega \text{ for 0.5 Vdc to 4.5 Vdc output}$		
Temperature Ranges	ature 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		
nvironment 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		
eal 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)		



#### WIRING DIAGRAMS ELECTRICAL CONNECTIONS

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 (Best fit straight line) 2 ±0.125% (Best fit straight line)						
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       1/2 " ISO 4400 Conduit         3 6-Pin Bendix       25       M12 X 1 4-pin         8 Hirschmann (DIN EN 175301-803 Form A)       36       Integral 36 "						

#### EXAMPLE

210 - 42 - 4 - 615 - 1 - 85 - 1 - 8
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	Hirschmann	Cable	M12	Bendix		
+ Supply	1	Red	1	А		
+ Output	2	Black	3	В		

3-WIRE WIRING							
	Hirschmann	Cable	M12	Bendix			
+ Supply	1	Red	1	A			
Common	2	Black	3	В			
+ Output	3	White	4	С			

(Custom Flange Dimensions To Your Specification – Please Consult Factory)