Sanitary Clamp

11 SERIES

- Ranges from vacuum through 0 psig to 400 psig
- Current and voltage outputs available
- 316 Stainless Steel wetted parts
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)
- Meets 3A requirements for the food and beverage, dairy, pharmaceutical and biotechnology industries
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Food & beverage processing
- Pasteurization systems
- Pharmaceutical
- Medical

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	Vacuum 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)
Stability	±0.2% full scale for 1 year, non-accumulating
Adjustment	±10% full scale for zero and span
Response time	< 10 ms
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 175 °F (0 °C to 80 °C) Effect ±0.01%/°F for zero and span Media -40 °F to 300 °F (-40 °C to 150 °C) Ambient -40 °F to 176 °F (-40 °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, 0 Vdc to 5 Vdc, 3-wire, 1 Vdc to 5 Vdc, 3-wire, 1 Vdc to 6 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire, 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
Proof pressure	3 times full scale for 0 psig to 2 psig through 0 psig to 200 psig 1.75 times full scale for 0 psig to 300 psig through 0 psig to 400 psig
Burst pressure	3.8 times full scale for 0 psig to 2 psig through 0 psig to 200 psig 4 times full scale for 0 psig to 300 psig through 0 psig to 400 psig
Measuring element	316 Stainless Steel
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/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 1.1 lb.

* Unregulated

Diaphragm seal must be installed facing downward or in a vertical position for drainability.
Do not intall diaphragm seal facing in an upward position.

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

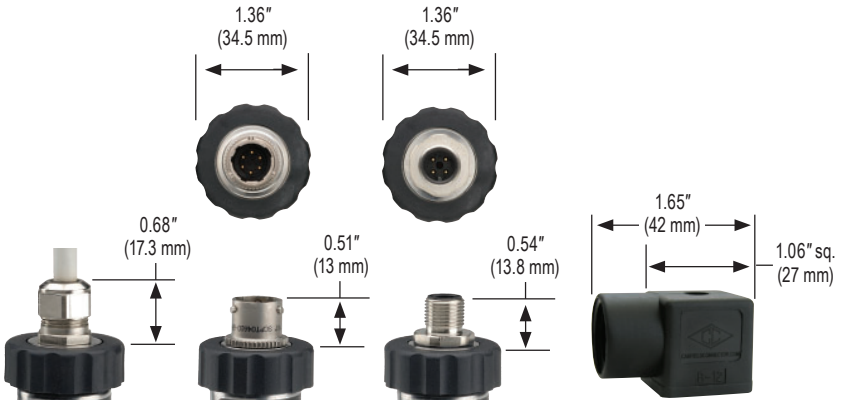
ORDERING INFORMATION

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	**55** 0 psig to 160 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_2O	**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			

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

EXAMPLE **110 – 12 – 4 – 615 – 1 – 34 – 1 – 1**

Series ..... 11 Series
Clamp size ..... 1-1/2" Sanitary Clamp
Seal fill fluid ..... FFL77 White oil
Transmitter ..... 615 Series
Accuracy ..... ±0.25% full scale (BFSL)
Pressure range ..... 0 psig to 5 psig
Output signal ..... 4 mA to 20 mA, 2-wire
Electrical connection ..... Hirschmann with 36" of cable



*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