

# SERIES 1800

## HIGH ACCURACY 4 mA to 20 mA LOOP-POWERED INDICATORS (for series 300, 600, 615, 616 and 800 transmitters)

The Model 1800 Attachable Loop-Powered Digital Indicator can be fitted to NOSHOK pressure transmitters utilizing a 4 mA to 20 mA output signal and the Hirschmann (DIN 43650A) connector. It is simply inserted between the transmitter body and the connector. The indicator is programmable to display a range of -1999 to 9999, and it may be tilted for better viewing. Also, there is user selectable digital filtering to improve readability in rapidly varying pressure applications. All parameters are stored in non-volatile memory so that reprogramming is not necessary in the event of a power failure.

NOSHOK will calibrate the indicator to your transmitter at no additional cost. Simply tell us how you want it set up and it is done.



### FEATURES

- 4 digit local display
- Easy menu-driven programming
- Powered by the 4 mA to 20 mA loop
- No extra wiring needed, inserts between the Hirschmann connector and transmitter body
- Selectable digital filtering
- CE Compliant

### APPLICATIONS

- Hydraulic and pneumatic systems
- Pumps and compressors
- Test equipment and systems
- Industrial machinery and machine tools
- HVAC systems
- Power generation
- Water and wastewater
- Stamping and forming presses

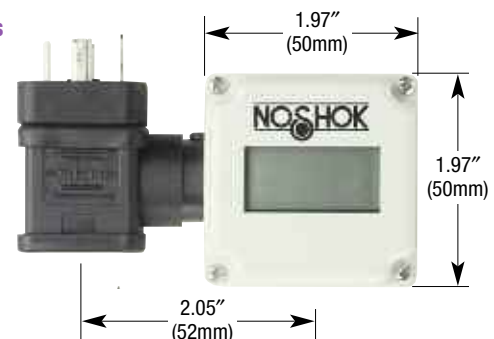
### ORDERING INFORMATION

1. Order Series 1800-0
2. Indicate display range on order eg. 0-1000 for 4 mA to 20 mA

### SPECIFICATIONS

<b>Display</b>	0.4" Liquid Crystal Display
<b>Digits</b>	4, from -1999 to 9999
<b>Accuracy</b>	±0.2 % Full Scale, ±1 digit
<b>Update rate</b>	5 times/second
<b>Filtering</b>	Digital, field selectable .2, .5, 1 or 1.5 seconds, display only
<b>Range</b>	The 4 mA to 20 mA signal from the transmitter can be assigned any display value within the display range. Both scaling points are individually adjustable using the push buttons inside the case
<b>Power Supply</b>	Loop-powered - no additional power supply required. Maximum current rating is 40 mA and voltage drop of 3 Vdc, unregulated
<b>Temperature ranges</b>	Ambient 32 °F to 122 °F (0 °C to 50 °C) Effect is ±0.006 % Full Scale/°F Storage -22 °F to 176 °F (-30 °C to 80 °C)
<b>Electrical</b>	Requires NOSHOK transmitter with 4 mA to 20 mA (2-wire) output and Hirschmann (DIN 43650A) connector
<b>Environmental Protection</b>	IP65, NEMA 4X according to EN 60529/IEC 529
<b>Electromagnetic rating</b>	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection
<b>Case material</b>	ABS plastic with polycarbonate window
<b>Weight</b>	Approximately 3 oz.

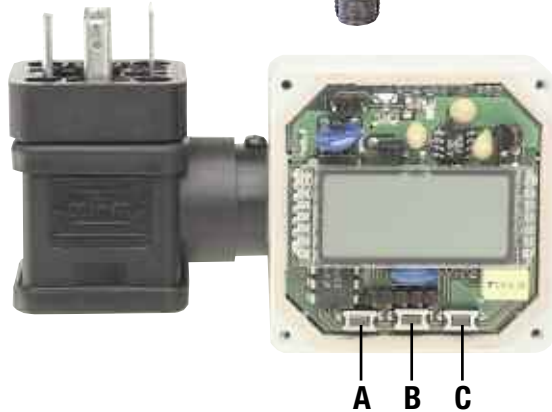
### Outline Dimensions





To install, remove the DIN 43650A plug and insert indicator on top of transducer and reinstall the plug. This indicator can be used with NOSHOK and some competitive transmitters with 2-wire 4 mA to 20 mA output, Hirschmann connector with the same pin configuration. (Pin 1 + supply, Pin 2 + output)

To program, first remove the cover from the indicator housing and identify the buttons A, B, and C. These buttons are used to program the indicator to match the pressure range of the transmitter.



- A → down
- B → program steps
- C → up

1. → Set the decimal point  
 1 x B: 

d	P		
---	---	--	--

  
 → C/A up or down
2. Set the lower end of the range  
 2 x B: 

A	n	4
---	---	---

  
 → C/A up or down
3. Set the upper end of the range  
 3 x B: 

A	n	2	0
---	---	---	---

  
 C/A up or down

4. To enable error codes  
 3 x B: 

L	1	
---	---	--

  
 1 x C: 

		1
--	--	---

 on  
 → 1 x A: 

		0
--	--	---

 off  
 C/A up or down  
 Errors are shown as F1 for an underrange condition, and F2 for an overrange condition

5. Set digital filtering value  
 5 x B: 

F	I	L	T
---	---	---	---

  
 1 x C: 

		0
--	--	---

 0.2 seconds  
 2 x C: 

		1
--	--	---

 0.5 seconds  
 3 x C: 

		2
--	--	---

 1.0 seconds  
 → 4 x C: 

		3
--	--	---

 1.5 seconds  
 C/A up or down
6. Return to measurement mode  
 2 x A