



## 660 SERIES

- Ranges from 0 psig to 200 through 0 psig to 15,000 psig
- Current & voltage outputs available
- Stainless Steel wetted parts
- 1.0 mm standard orifice size for improved performance in dynamic applications
- CE compliant to suppress RFI, EMI and ESD

### APPLICATIONS

- Hydraulics & pneumatics
- Mobile hydraulics
- Power generation
- Pumps & compressors
- Refrigeration controls

### SPECIFICATIONS

<b>Output signals</b>	4 mA to 20 mA 2-wire, 1 Vdc to 5 Vdc 3-wire; 0.1 Vdc to 10 Vdc, 3-wire
<b>Pressure ranges</b>	0 psig to 200 psig through 0 psig to 15,000 psig
<b>Accuracy</b>	±0.25% full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
<b>Stability</b>	≤ ±2% full scale for 1 year, non-accumulating
<b>Response time</b>	<2 ms (between 10% and 90% full scale)
<b>Service life</b>	> 100,000,000 load cycles
<b>Temperature ranges</b>	Compensated -4 °F to 185 °F (-20 °C to 85 °C) Zero effect ±0.01% full scale/ °F Span effect ±0.01% full scale/ °F Media -13 °F to 185 °F (-40 °C to 100 °C); -40 °F to 257 °F (-40 °C to 125 °C) available on request Ambient -4 °F to 185 °F (-25 °C to 85 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
<b>Power requirement*</b>	10 Vdc to 36 Vdc (4 mA to 20 mA, 2-wire) 8 Vdc to 36 Vdc (1 Vdc to 5 Vdc, 3-wire) 14 Vdc to 36 Vdc (0.1 Vdc to 10 Vdc, 3-wire)
<b>Load limitations</b>	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 1 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 1 Vdc to 5 Vdc, 3-wire
<b>Proof pressure</b>	2 times full scale for ranges 0 psi to 200 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi range
<b>Burst pressure</b>	9 times full scale for 0 psi to 200 psi through 0 psi to 1,000 psi 3 times full scale for ranges 0 to 3,000 psi through 0 psi to 15,000 psi
<b>Measuring element</b>	17-4PH Stainless Steel
<b>Connection</b>	316 Stainless Steel
<b>Housing material</b>	316 Stainless Steel
<b>Environmental rating</b>	IP65; IP67 M12x1 electrical connection for pressure ranges 0 psig to 1,500 psig or higher
<b>Electromagnetic rating</b>	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
<b>Electrical protection</b>	Reverse polarity, over-voltage and short circuit protection
<b>Shock</b>	1,000 g's according to IEC 60068-2-27
<b>Vibration</b>	20 g's according to IEC 60068-2-6
<b>Weight</b>	Approximately 1.75 oz.

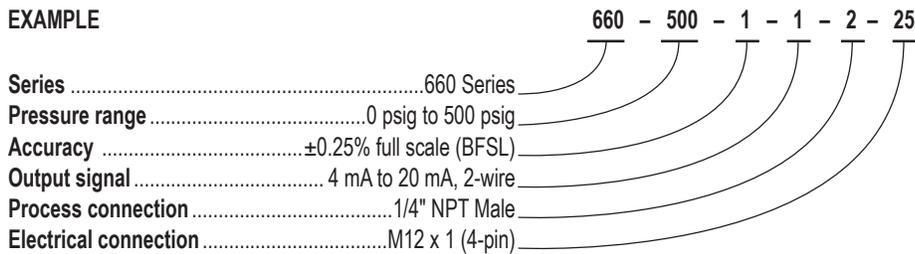
\* Unregulated



ORDERING INFORMATION				
<b>SERIES</b>	660			
<b>PRESSURE RANGES</b>	200 0 psig to 200 psig	500 0 psig to 500 psig	3000 0 psig to 3,000 psig	10000 0 psig to 10,000 psig
	300 0 psig to 300 psig	1000 0 psig to 1,000 psig	5000 0 psig to 5,000 psig	15000 0 psig to 15,000 psig
	psig = gauge pressure    Other ranges available on request			
<b>ACCURACY</b>	1 ±0.25% full scale (BFSL)			
<b>OUTPUT SIGNALS</b>	1 4 mA to 20 mA, 2-wire	3 1 Vdc to 5 Vdc, 3-wire	27 0.1 Vdc to 10 Vdc, 3-wire	
<b>PROCESS CONNECTIONS</b>	2 1/4" NPT male			
<b>ELECTRICAL CONNECTIONS</b>	1 DIN EN 175301-803 Form C w/ 36" Cable	7 DIN EN 175301-803 Form C	25 M12 x 1 (4-pin)	

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

**EXAMPLE**



660 Series Wiring	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
DIN EN 175301-803 Form C (7)	1	2
DIN EN 175301-803 Form C w/ Cable (1)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Brown	Green

660 Series Wiring	1-5 Vdc, 0.1-10 Vdc		
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT
DIN EN 175301-803 Form C (7)	1	2	3
DIN EN 175301-803 Form C w/ Cable (1)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Brown	Green	White

Load Limitations 4 mA to 20 mA output	
V <sub>min</sub>	= 10V + (.020 x R <sub>L</sub> )
R <sub>L</sub>	= Loop resistance (Ω)
	RL = RS + RW
R <sub>S</sub>	= Sensor resistance (Ω)
R <sub>W</sub>	= Wire resistance (Ω)