



## 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.

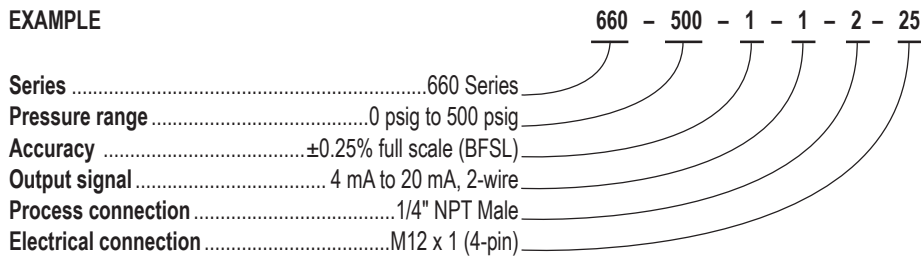
\* Unregulated

 **WARNING:** This product can expose you to chemicals including Lead and Nickel, which are 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](http://www.P65Warnings.ca.gov)

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
	300	0 psig to 300 psig	1000	0 psig to 1,000 psig	5000	0 psig to 5,000 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)
	R <sub>L</sub> = R <sub>S</sub> + R <sub>W</sub>
R <sub>S</sub>	= Sensor resistance (Ω)
R <sub>W</sub>	= Wire resistance (Ω)