



## **APPLICATIONS**

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

## 660 SERIES

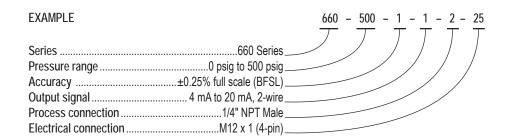
- Ranges from 0 psig to 200 through 0 psig to 15,000 psig
- Current & voltage outputs available
- · Stainless steel wetted parts
- 1.0 mm standard orifice size for improved performance in dynamic applications
- CE compliant to suppress RFI, EMI and ESD

	SPECIFICATIONS			
Output signals	4 mA to 20 mA 2-wire, 1 Vdc to 5 Vdc 3-wire; 0.1 Vdc to 10 Vdc, 3-wire			
Pressure ranges	0 psig to 200 psig through 0 psig to 15,000 psig			
Accuracy	±0.25% full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)			
Stability	≤ ±2% full scale for 1 year, non-accumulating			
Response time	<2 ms (between 10% and 90% full scale)			
Service life	> 100,000,000 load cycles			
Temperature ranges	Compensated -4 °F to 185 °F (-20 °C to 85 °C) Zero effect $\pm$ 0.01% full scale/ °F Span effect $\pm$ 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)			
Power requirement*	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)			
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 $\Omega$ for 1 Vdc to 10 Vdc, 3-wire ≥ 5,000 $\Omega$ for 1 Vdc to 5 Vdc, 3-wire			
Proof pressure	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			
Burst pressure	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			
Measuring element	17-4PH stainless steel			
Connection	316 stainless steel			
Housing material	316 stainless steel			
Environmental rating	mental rating IP65; IP67 M12x1 electrical connection for pressure ranges 0 psig to 1,500 psig or higher			
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection			
Electrical protection	Reverse polarity, over-voltage and short circuit protection			
Shock	1,000 g's according to IEC 60068-2-27			
Vibration	20 g's according to IEC 60068-2-6			
Weight	Approximately 1.75 oz.			

<sup>\*</sup> Unregulated

ORDERING INFORMATION								
SERIES	660							
PRESSURE RANGES	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								
ACCURACY	1	±0.25% full scale (BFSL)						
OUTPUT SIGNALS	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		
PROCESS CONNECTIONS	2	1/4" NPT male						
ELECTRICAL CONNECTIONS	1	36" cable (connected to optio	option 7) 7 Mini-Hirschmann (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.





## 2-WIRE WIRING

Wiring	M12	Mini-Hirschmann	Cable			
+ Supply	1	1	Red			
+ Output	3	2	Black			



## 3-WIRE WIRING

Wiring	M12	Mini-Hirschmann	Cable
+ Supply	1	1	Red
Common	3	2	Black
+ Output	4	3	White