Precision Heavy-Duty CE

640 SERIES

- Vacuum ranges through 0 psig to 15,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Standard 4 mA to 20 mA output
- 316 and 17-4PH Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Aerospace equipment
- Laboratory & test equipment
- Precision measurement

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire
Pressure ranges	Vacuum through 0 psig to 15,000 psig Absolute from 0 to 15 psia through 0 psia to 300 psia
Accuracy	±0.05% full scale (BFSL); optional ±0.025% full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.1% full scale; 5 psi ±0.2% full scale per year
Response time	< 300 ms (between 10% to 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 160 °F (0 °C to 70 °C) Effect: ±0.005% °F (32 °F to 50 °F) to zero point and pressure range no effect (50 °F to 104 °F) for zero and span ±0.005%/ °F (104 °F to 158 °F) to zero point and pressure range Media - 5 °F to 160 °F (-20 °C to 70 °C) Ambient 32 °F to 160 °F (0 °C to 70 °C) Storage -5 °F to 160 °F (-20 °C to 70 °C)
Power requirement*	9 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) Voltage supply via RS232 interface (RS232)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire
Proof pressure	3 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 2 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi
Burst pressure	4 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi
Measuring element	316 Stainless Steel for vacuum through 300 psi; 17-4PH Stainless Steel for ≥500 psi
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	100 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 11 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

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ORDERING INFORMATION

SERIES	**640**										
PRESSURE RANGES	**30vac**	-30 inHg to 0 psig	**30/300**	-30 inHg to 300 psig	**150**	0 psig to 150 psig	**3000**	0 psig to 3,000 psig	**30A**	0 psia to 30 psia	
	30/15	-30 inHg to 15 psig	**5**	0 psig to 5 psig	**200**	0 psig to 200 psig	**5000**	0 psig to 5,000 psig	**60A**	0 psia to 60 psia	
	30/30	-30 inHg to 30 psig	**10**	0 psig to 10 psig	**300**	0 psig to 300 psig	**6000**	0 psig to 6,000 psig	**100A**	0 psia to 100 psia	
	30/60	-30 inHg to 60 psig	**15**	0 psig to 15 psig	**500**	0 psig to 500 psig	**7500**	0 psia to 7,500 psig	**150A**	0 psia to 150 psia	
	30/100	-30 inHg to 100 psig	**30**	0 psig to 30 psig	**750**	0 psig to 750 psig	**10000**	0 psia to 10,000 psig	**200A**	0 psia to 200 psia	
	30/150	-30 inHg to 150 psig	**60**	0 psig to 60 psig	**1000**	0 psig to 1,000 psig	**15000**	0 psia to 15,000 psig	**300A**	0 psia to 300 psia	
	30/200	-30 inHg to 200 psig	**100**	0 psig to 100 psig	**2000**	0 psig to 2,000 psig	**15A**	0 psia to 15 psia			
		psig = gauge pressure		psia = absolute pressure		Other ranges available on request					
ACCURACIES	**1**	±0.05% full scale (BFSL)			**2**	±0.025% full scale (BFSL)					
OUTPUT SIGNALS	**1**	4 mA to 20 mA, 2-wire analog			**5**	0 Vdc to 10 Vdc, 3-wire analog					
	2	0 Vdc to 5 Vdc, 3-wire analog									
PROCESS CONNECTIONS	**2**	1/4″ NPT male			**8**	1/2″ NPT male; other connections available upon request					
ELECTRICAL CONNECTIONS	**1**	54″ Integral cable			**25**	M12 x 1 (4-pin)					
OPTION	**ST8**	Threaded Orifice									

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

EXAMPLE **640 – 3000 – 1 – 1 – 8 – 25 – ST8**

Series .....640 Series
Pressure range .....0 psig to 3,000 psig
Accuracy .....±0.05% full scale (BFSL)
Output signal .....4 mA to 20 mA, 2-wire analog
Process connection .....1/2" NPT Male
Electrical connection .....M12 x 1 (4-pin)
Option..... Threaded Orifice

640 Series Wiring	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
M12 x 1, 4-Pin (25)	1	3
Integral Cable (1)	Brown	Blue

640 Series Wiring	0-5 Vdc, 0-10 Vdc, 0-20 mA		
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (1)	Brown	Blue	Black

Load Limitations 4 mA to 20 mA output		
Vmin	=	10V + (.020 x RL)
RL	=	Loop resistance (Ω) RL = RS + RW
RS	=	Sensor resistance (Ω)
RW		Wire resistance (Ω)