Hall Effect Pressure Transducers

630 SERIES

- Provide excellent performance and reliability at an economical price
- ±1.0% full scale (BFSL)
- Proven Hall Effect sensor and nearly frictionless transduction method provides exceptional repeatability and reliability
- Wide variety of pressure ranges, connections and outputs available
- Available ratiometric output
- CE compliant to suppress RFI, EMI, and ESD
- Final calibration tests prior to shipment ensures 100% "out of the box" reliability

FEATURES

- Proven Hall Effect sensor
- Excellent reliability
- Wide variety of pressure ranges, connections and outputs
- Available ratiometric output
- CE compliant

APPLICATIONS

- OEM equipment
- Pumps and compressors
- Industrial machinery and machine tools
- HVAC systems
- Medical equipment
- Refrigeration systems

SPECIFICATIONS

Output signals	0 Vdc to 5 Vdc, 3-wire; 0 Vdc to 10 Vdc, 3-wire; 1 Vdc to 5 Vdc, 3-wire 0.5 Vdc to 4.5 Vdc, 3-wire ratiometric to the power supply
Accuracy	±1% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Hysteresis	≤ ±0.4% full scale
Repeatability	≤ ±0.06% full scale
Stability	≤ ±0.4% full scale for 1 year, non-accumulating
Pressure ranges	Standard gauge ranges from vacuum through 300 psig
Proof pressure	3 times full scale for ranges 0 psi to 2 psi through 0 psi to 100 psi 2 times full scale for ranges 0 psi to 150 psi through 0 psi to 300 psi
Power supply*	8 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire) 8 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire) 8 Vdc to 30 Vdc (0.5 Vdc to 4.5 Vdc, 3-wire) 12 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) 5 ± 10% (0.5 Vdc to 4.5 Vdc ratiometric, 3-wire)
Load limitations	≤ 10,000 W for 0 Vdc to 10 Vdc, 3-wire ≤ 5,000 W for 0 Vdc to 5 Vdc, 3-wire; 1 Vdc to 5 Vdc, 3-wire ≤ 4,500 W for .5 Vdc to 4.5 Vdc, 3-wire ratiometric
Wetted materials	Nickel-Copper diaphragm (ranges up through 0 psig to 30 psig) and Nickel-Beryllium diaphragm (ranges greater than 0 psig to 30 psig) and Copper alloy body
Housing material	Copper alloy with Polyamid top cap
Temperature ranges	Compensated -4 °F to 176 °F (-20 °C to 80 °C) Zero effect ±0.022% full scale/ °F Span effect ±0.011% full scale/ °F Ambient -20 °F to 176 °F (-20 °C to 80 °C) Media -20 °F to 176 °F (-20 °C to 80 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Environmental rating	IP67, NEMA 4X according to EN 60529/IEC529
Electromagnetic rating	CE compliant to EMC norm EN61326: 1997/A1:1998 RFI, EMI and ESD protected
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Weight	Approximately 3.5 oz.

* Unregulated power supplies

ORDERING INFORMATION

SERIES	630C	(Copper alloy wetted parts)				
PRESSURE RANGES	30vac	-30 inHg to 0 psig	30/200	-30 inHg to 200 psig	30	0 psig to 30 psig
	30/15	-30 inHg to 15 psig	30/300	-30 inHg to 300 psig	60	0 psig to 60 psig
	30/30	-30 inHg to 30 psig	2	0 psig to 2 psig	100	0 psig to 100 psig
	30/60	-30 inHg to 60 psig	5	0 psig to 5 psig	150	0 psig to 150 psig
	30/100	-30 inHg to 100 psig	10	0 psig to 10 psig	200	0 psig to 200 psig
	30/150	-30 inHg to 150 psig	15	0 psig to 15 psig	300	0 psig to 300 psig
		psig = gauge pressure	Other ranges available on special request			
ACCURACY	1	±1.0% full scale (full scale typical)				
OUTPUT SIGNALS	2	0 Vdc to 5 Vdc, 3-wire	5	0 Vdc to 10 Vdc, 3-wire	13	0.5 Vdc to 4.5 Vdc ratiometric to power supply, 3-wire
	3	1 Vdc to 5 Vdc, 3-wire	Other outputs available upon special request			
PROCESS CONNECTIONS	1	1/8″ NPT Male	2	1/4″ NPT Male		
ELECTRICAL CONNECTIONS	1	36″ cable	25	M12 x 1 (4-pin)		
OPTION	ORF	Threaded Orifice				

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

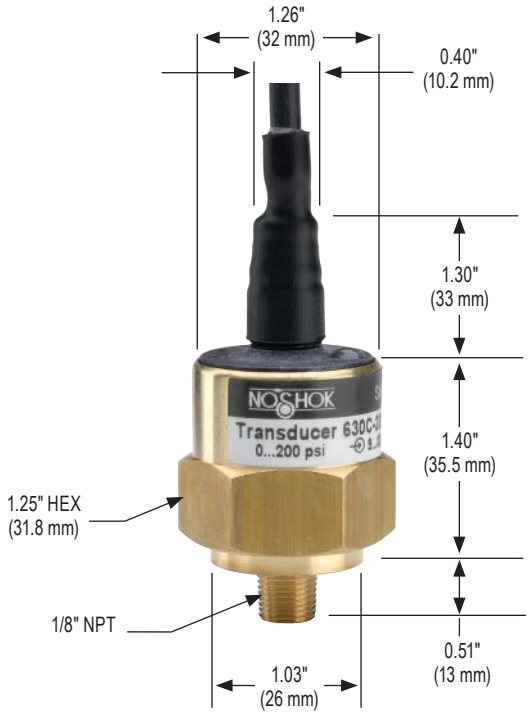
EXAMPLE

630C – 300 – 1 – 2 – 2 – 25 – ORF

Series 630C
Pressure range ..... 0 psig to 300 psig
Accuracy ..... ±1.0% full scale
Output signal ..... 0 Vdc to 5 Vdc
Process connection ..... 1/4″ NPT Male
Electrical connection ..... M12 x 1 (4-pin)
Option ..... Threaded orifice

Outline Dimensions

M12 x 1 (4-pin)



3-WIRE WIRING

Wiring	M12	Hirschmann	Cable
+ Supply	1	1	Brown
Common	3	3	Blue
+ Output	4	4	Black