



SERIES 630

HALL EFFECT PRESSURE TRANSDUCERS

The NOSHOK 630 pressure transducer is designed to provide excellent performance and reliability at an economical price. This transducer uses a proven diaphragm capsule with an attached highly stable ceramic magnet that is magnetically coupled to a Hall Effect sensing device.

Because it does not use links, levers or any other similar techniques, the nearly frictionless transduction method provides exceptional repeatability, long service life and high reliability. As are all NOSHOK transducers, the 630 is CE compliant, providing significant suppression of radio interference and magnetic interference found in most factory environments.

A rigorous inspection is performed on all NOSHOK Series 630 pressure transducers prior to shipment to ensure 100% "out of the box" reliability.

Please consult your local NOSHOK Distributor or NOSHOK for minimum quantity requirements.

FEATURES

- Proven Hall Effect sensor
- Excellent reliability
- Wide variety of pressure ranges, connections and outputs
- Available ratio-metric 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 .5 Vdc to 4.5 Vdc, 3-wire ratio-metric 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	9 Vdc to 30 Vdc for 0 Vdc to 5 Vdc, 3-wire, unregulated 1 Vdc to 5 Vdc, 3-wire, unregulated 12 Vdc to 30 Vdc for 0 Vdc to 10 Vdc, 3-wire, unregulated 5 Vdc ±10 % for .5 Vdc to 4.5 Vdc, 3-wire ratiometric, unregulated
Load Limitations	≤ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≤ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire; 1 Vdc to 5 Vdc, 3-wire ≤ 4,500 Ω 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.

ORDERING INFORMATION

SERIES 630C (copper alloy wetted parts)						
PRESSURE RANGES	-30 inHg to 0 psig	30V	-30 inHg to 200 psig	30/200	0 psig to 30 psig	30
	-30 inHg to 15 psig	30/15	-30 inHg to 300 psig	30/300	0 psig to 60 psig	60
	-30 inHg to 30 psig	30/30	0 psig to 2 psig	2	0 psig to 100 psig	100
	-30 inHg to 60 psig	30/60	0 psig to 5 psig	5	0 psig to 150 psig	150
	-30 inHg to 100 psig	30/100	0 psig to 10 psig	10	0 psig to 200 psig	200
	-30 inHg to 150 psig	30/150	0 psig to 15 psig	15	0 psig to 300 psig	300
	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 .5 Vdc to 4.5 Vdc ratio-metric to power supply, 3-wire			
	3 1 Vdc to 5 Vdc, 3-wire	Other outputs available on 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				
OPTIONS	ORF Threaded Orifice					

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for minimum quantity requirements and delivery information.

EXAMPLE

Series630C
Pressure Range0 psig to 300 psig
Accuracy± 1.0 % Full Scale
Output Signal0 Vdc to 5 Vdc
Process Connection1/4" NPT Male
Electrical ConnectionM12 x 1
OptionOrifice

630C - 300 - 1 - 2 - 2 - 25 - ORF

Outline Dimensions

