

## **NEW** Noshok Pressure Transmitter

- Field Upgradeable with Plug-in Option Cards
- 24 VDC Transmitter Power Supply
- 16 Point Scaling for Non-linear Processes
- MAX and MIN Value Display
- Easy Menu-Driven Programming
- NEMA 4X/IP65 Sealed Front Bezel
- 4 Set Point Alarms (with plug-in card)
- Analog Output (with plug-in card)
- Serial Communication (with plug-in card)
- PC Software Available for Configuration
- AC or DC input power
- Signal Totalizer for Batch Weighing or other Timed Input Processes
- CE Compliant
- Programmable Signal Response Ttime
- Standard DIN Panel Cutout



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### Specifications

Output	4-20 mA, 2 wire
Accuracy	+/-0.05% Full Scale (Best Fit Straight Line), including the effects of linearity,
Total accuracy	+/-0.15% Full Scale Full Scale, including the effects of linearity, hysteresis
Hysteresis	+/-0.04% Full Scale
Repeatability	+/-0.05% Full Scale
Stability	+/-0.1% Full Scale for 1 year
Pressure ranges	Standard ranges from vacuum through 15,000 PSIG
Proof pressure	3.5 times Full Scale for ranges through 0-250 PSIG; 2 times Full Scale for ranges greater than 0-250 PSIG through 0 to 7,500 PSIG; 1.2 times Full Scale for 0-15,000 PSIG;
Burst	Pressure 5 times Full Scale for ranges 0-5 PSI through 0 to 7,500 PSI 2 times Full Scale for ranges greater than 0 to 250 PSIG through 0 to 7,500 PSIG; 1.2 times Full Scale for 0 to 15,000 PSIG
Power supply	10-30Vdc, unregulated
Response time	<10 milliseconds (between 10% and 90% Full Scale)
Durability	User selectable from 0-40 seconds for display and output signal
Temperature ranges	Compensated -4 to 176°F (-20 to 80°C) Ambient -4 to 158°F (-20 to 70°C) Storage -31 to 176°F (-35 to 80°C)
Wetted materials	316 stainless steel (ranges up through 0-200psi) 316 stainless steel with 17-4PH stainless steel diaphragm (ranges 0-500psig and higher)
Housing material	iberglass reinforced PBT (polybutene terephthlate)
Environmental rating	IP65, NEMA 4X according to EN 60529/IEC529
Electromagnetic rating	CE compliant, emission to EN 50081-1. EN 50081-2 capability and EN 50082-2
Electrical rating	Reverse polarity, over-voltage and short circuit protection
Electrical Connection	Cable gland m2-x1.5 with internal terminal block, accepts cable diameter from .25 to .5
Process Connection	1/4 " NPT male
Weight	Approximately 24 oz.

The NOSHOK Series 750 digital pressure transmitter combines the reliability and long life of diffused semiconductor and sputtered thin film strain gage sensors with digital electronics for outstanding performance and value. With up to 20:1 span turn down and -2.5 to 99% zero point adjustment there is maximum flexibility to meet the most unusual application requirements.

Additional features including 32 point process linearization, adjustable display orientation and integral process temperature measurement give the Series 750 an advantage over many other pressure transmitters.

### Ordering Information

Order #	Mfg #	Description	Price
MP750-□-1-1-2-1	Series 750	Pressure Transmitter w/ Digital Indicator	

### Enter Range Codes Below Into Ordering Info Above

Note: Add \$30 for all absolute ranges

Code	Range	Code	Range
5	0-5 psig	1500	0-1500 psig
25	0-25 psig	3000	0-3000 psig
100	0-100 psig	7500	0-7500 psig
250	0-250 psig	15000	0-15000psig
500	0-500 psig		
5A	0-5 psia		
25A	0-25psia		
100A	0-100 psia		
250A	0-250 psia		

Pressure/Flow Test Instruments



**Pressure Calibrators**  
can be found on pages A64-A91

## Noshok Pressure Transducers and Transmitters

- Thin Film and Diffused Semiconductor Sensor
- High Accuracy and Long Term Stability
- Ranges from 2 through 10,000 PSI
- Corrosion Resistant Stainless Steel Construction
- Span and Zero Adjustments

Noshok Series 615 and 625 pressure transmitters and transducers are designed to provide a previously unequalled level of performance, utilizing diffused semiconductor or sputtered thin film technology. Series 625 transmitters were developed for applications that require pressure measurement in potentially explosive environments. RFI, EMI, and ESD protection has been engineered in as a standard feature.

### Specifications

Output Signal:	4–20 mA, 2-wire; 1–5 VDC, 1–6 VDC, 0–5 VDC and 0–10 VDC, 3-wire
Pressure Ranges:	Vacuum and compound through 10,000 PSI
Proof Pressure:	0–2 PSI through 0–7500 PSI; 2 times range
Burst Pressure:	0–2 PSI through 0–7500 PSI; 4 times range 0–10000 PSI; 2 times range
Accuracy BFSL: (includes repeatability, hysteresis, and linearity)	± 0.25% FS (standard) ± 0.1% FS (optional)
Input Excitation:	10–30 VDC for current output 14–30 VDC for voltage output
Stability:	± 0.2%FS per year
Temperature Ranges:	Compensated 32° to 175°F/0 to 80°C Effect ±0.01%/°F of zero and span Medium: 20° to 212°F/-30° to 100°C Ambient: 15° to 175°F/-10° to 80°C
Response Time:	Less than 1 ms
Durability:	100 million cycles minimum
Adjustment:	±5% FS of zero and span
Environmental Protection:	NEMA 4X, IP65 (IEC 529)
Electromagnetic Capability per IEC 1000 (EN 50081, EN 50082):	4-2 ESD Level 2 4-3 Fields (RFI) Level 2, (EN 50081, EN 50082) 4-4 Burst Level 3, 4-5 Surge Level 2
Electrical Protection:	Reverse polarity, overvoltage, and short circuit protection
Shock:	Less than ±0.05% FS effect for 100 gs @ 20 ms on any axis
Vibration:	Less than ± 0.01% FS effect for 15 gs @ 0–2000 Hz on any axis



### Ordering Information

To Order—Insert Number Code for Each Letter to Select Catalog Number  
Order Example: MP615-60-1-1-2-8

A	B	C	D	E	F	
<b>A Basic Unit</b>						Price & Adders
MP615		High Performance				
MP625		Intrinsically Safe; FM, CSA approved				
<b>B Pressure Range</b>						
<b>Code</b>	<b>Range</b>	<b>Code</b>	<b>Range</b>			
30V	0–30 "Hg VAC	30/60	30 "Hg/60 PSIG			
30/15	30 "Hg/15 PSIG					
2	0–2 PSIG					
5	0–5 PSIG	500	0–500 PSIG			
15	0–15 PSIG	750	0–750 PSIG			
30	0–30 PSIG	1000	0–1000 PSIG			N/C
60	0–60 PSIG	2000	0–2000 PSIG			
100	0–100 PSIG	3000	0–3000 PSIG			
150	0–150 PSIG	5000	0–5000 PSIG			
300	0–300 PSIG	7500	0–7500 PSIG			
10000	0–10,000 PSIG					
<b>C Accuracy (BFSL)</b>						
1	±0.25% of FS				N/C	
2	±0.1% of FS					
<b>D Output Signal</b>						
1	4–20 mA DC (Standard on 625), 2-wire				N/C	
2	0–5 VDC, 3-wire					
5	0–10 VDC, 3-wire					
<b>E Process Connections</b>						
2	¼" NPT male				N/C	
8	½" NPT male				STD	
<b>F Electrical Connections</b>						
1	36" cable (connected to option 8)					
3	6 Pin BENDIX					
6	½" NPT conduit with 36" cable					
8	Hirschmann with mating connector STD					

Pressure/Flow Test Instruments

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**For Pressure Calibrators**  
see pages A64-A91

# Noshok Pressure Transducers and Transmitters

- Thin Film and Diffused Semiconductor Sensor
- High Accuracy and Long Term Stability
- RFI, EMI, and ESD Protection per IEC 1000
- High Overpressure Protection
- Corrosion Resistant Stainless Steel Construction

Series 100 and 200 pressure transmitters and transducers are designed to provide a previously unequalled level of performance, utilizing diffused semiconductor or sputtered thin film technology. Series 100 and 200 transducers are highly accurate, shock resistant and extremely stable over a long period of time.

## Ordering Information

To Order—Insert Number Code for Each Letter to Select Catalog Number			
Order Example: MP100-7500-1-5-2-7-ORF			
A	B	C	D - E - F
<b>A Basic Unit</b>			Price & Address
MP100	4–20 mADC Output		
MP200	DC Voltage Output		
<b>B Pressure Range</b>			
<b>Code</b>	<b>Range</b>	<b>Code</b>	<b>Range</b>
30V	0–30" VAC	30/60	30"/60 PSIG
30/15	30"/15 PSIG	30/150	30"/150 PSIG
30/30	30"/30 PSIG		
5	0–5 PSIG	1000	0–1000 PSIG
30	0–30 PSIG	1500	0–1500 PSIG
60	0–60 PSIG	2000	0–2000 PSIG
100	0–100 PSIG	3000	0–3000 PSIG
200	0–200 PSIG	5000	0–5000 PSIG
300	0–300 PSIG	7500	0–7500 PSIG
500	0–500 PSIG		
10000	0–10000 PSIG		
15A	0–15 PSIA	150A	0–150 PSIA
30A	0–30 PSIA	200A	0–200 PSIA
60A	0–60 PSIA	300A	0–300 PSIA
100A	0–100 PSIA		
<b>C Accuracy (BFSL)</b>			
1	±0.5% of FS		STD
2	±0.25% of FS		
<b>D Output Signal</b>			
1	4–20 mADC, 2-wire		STD
2	0–5 VDC, 3-wire		N/C
4	1–6 VDC, 3-wire		N/C
5	0–10 VDC, 3-wire		N/C
<b>E Process Connections</b>			
1	1/8" NPT male		N/C
2	1/4" NPT male		STD
3	7/16" 20 UNF—2A male		
<b>F Electrical Connections</b>			
1	36" cable (connected to option 7)		
2	4-pin BENDIX		
3	6-pin BENDIX		
6	1/2" NPT Conduit with 36" Cable		
7	Mini Hirschmann with mating connector		STD
<b>G Options</b>			
0	None		N/C
ORF	Stainless steel threaded orifice		



▲ **Series 100**



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## Specifications

Output Signal:	4–20 mA, 2-wire; 0–5V, 3-wire; 0–10V, 3-wire; 1–6V, 3-wire
Pressure Ranges:	Vacuum and compound through 15,000 PSI; gauge and absolute
Proof Pressure:	0–5, 0–10, 0–7500 through 0–15000 PSI: 1.5 times 0–15 PSI through 0–6000 PSI: 2 times range
Burst Pressure:	0–5, 0–10, 0–7500 through 0–15000 PSI: 2 times 0–15 PSI through 0–6000 PSI: 5 times range
Accuracy BFSL: (includes repeatability, hysteresis, and linearity)	±0.5% FS (standard) ±0.25% FS (optional)
Repeatability:	±0.05% FS
Hysteresis:	±0.1% FS
Input Excitation:	14–30 VDC for voltage output; 12–30 for 4–20 mA
Temperature Ranges:	Compensated 0° to 175°F/-16 to 80°C Effect ±0.02% FS/°F for zero and span Medium -22° to 212°F/-30° to 100°C Ambient -40° to 185°F/-40° to 85°C
Response Time:	Less than 1 ms (between 10–90% FS)
Durability:	100 million cycles minimum
Adjustment:	±5% FS of zero and span
Environmental Protection:	NEMA 4X, DIN IP65 (IEC 529)
Electromagnetic Capability per IEC 1000 (EN 50081, EN 50082):	4-2 ESD Level 2 4-3 Fields (RFI) Level 2, (EN 50081, EN 50082) 4-4 Burst Level 3, 4-5 Surge Level 2
Electrical Protection:	Reverse polarity, overvoltage, and short circuit protection
Shock:	Less than ±0.05% FS effect on 100 gs @ 20 ms on any axis
Vibration:	Less than ±0.05% FS effect for 30 gs @ 5–2000 Hz on any axis

**Pressure/Flow Test Instruments**

## Honeywell Series 900 Differential Pressure Transmitters

- Transmit an Output Signal Proportional to the Measured Variable in Either an Analog 4 to 20 mA Format or in a Digital DE Protocol Format, or HART Protocol
- Choice of Linear or Square Root Output Conformity is a Simple Configuration Selection
- Unique Piezoresistive Sensor Automatically Compensates Input for Temperature (and Static Pressure in the Differential Models)
- Added "Smart" Features Include Configuring Lower and Upper Range Values, Simulating Accurate Analog Output, and Selecting Preprogrammed Engineering Units for Display
- Smart Transmitter Capabilities with Local or Remote Interfacing
- Three Differential, Two Absolute, and Five Gauge Pressure Ranges
- Wide Selection of Options are Available Including: Meter Body, Mounting, Warranty, and Approvals
- Can Replace any 4 to 20 mA Output Transmitter in Use Today
- Features Two-Way Communication Between the Operator and the Transmitter Through Our SFC



ST3000



ST3000 900 Series

### Differential Model

The measuring means is a piezoresistive sensor which actually contains three sensors in one. It contains a differential pressure sensor, a temperature sensor, and a static pressure sensor.

### Gauge and Absolute Models

The measuring means is a piezoresistive sensor that actually contains a pressure sensor and a temperature sensor.

In the standard transmitter you easily select the analog or digital transmission format through the Smart Field Communicator (SFC<sup>®</sup>) which is the common hand-held operator interface for our DE-based Smartline<sup>®</sup> Transmitters.

All configuration, operation, and communications functions are under the control of the ST3000 Smart Transmitter's microprocessor and are accessible through the SFC.

The transmitter's meter body and electronics housing resist shock, vibration, corrosion, and moisture. The electronics housing contains a compartment for the single-board electronics, which is isolated from an integral junction box. The single-board electronics is replaceable and interchangeable with any other ST3000 Series 900 or Series 100E model transmitter.

**NOTE:** A wide selection of options are available for this Honeywell product. Contact Transcat for help in selecting the option codes and features to meet your requirements.



STS103D

Find Calibration Labels on page A24



### Ordering Information

Order #	Description	Price
MPSTG944-A1A-00000-MB-F1D3	Smart Dual Head Gauge Pressure (0–20 to 0–500 PSI) Carbon Steel/316 Silicone Fill, 1/4" NPT FM Approval	
MPSTD924-A1A-00000-MB-F1D3	Smart Differential (0–10 "H2O to 0–400 "H2O) Carbon Steel/316 Silicone Fill, 1/4" NPT FM Approval	
MPSTS103-001-0006-00-F1D2	Smart Field Communicator without Charger	
MPSTS103-001-00006-12-F1D2	Smart Field Communicator with Charger	