

809 Series – Industrial OEM Pressure Transducer

- Sensing Ranges from Vacuum to 10,000 psi (-1 to 690 bar)
- ► Rugged Stainless Steel & Valox® Housings
- Ideal for High Shock & Vibration Applications

The 809 Series pressure transducers are designed specifically for industrial applications with demanding price and performance requirements. They offer exceptional reliability in typical industrial grade environments. 809 Series transducers operate on low-cost, unregulated DC power, and over a wide temperature band with both liquids and gases. Designed for harsh environments, they are suitable for use in high shock and vibration applications. Stainless steel and Valox® housings are small and lightweight for easy integration into compact systems. The standard feature set of the 809 Series delivers exceptional performance in extreme environmental conditions at a price that OEMs will appreciate.

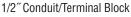
Common Specifications

Pressure Range					
Proof Pressure See ordering chart Burst Pressure See ordering chart Fatigue Life >1 million cycles Performance Supply Voltage (Vs) 9-30 VDC (5 VDC on 0.5-4.5 VDC units) Long Term Drift 0.5% FS/year Accuracy ±0.25% FS Thermal Error Zero ±0.02% FS/°F (±0.036% FS/°C) Thermal Error Span ±0.015% FS/°F (±0.030% FS/°C) Compensated Temperatures -4°F to +176°F (-20°C to +80°C) Operating Temperatures -40°F to +185°F (-40°C to +85°C) Storage Temperatures -40°F to +185°F (-40°C to +85°C) Zero Tolerance 1% of span Span Tolerance 1% of span Response Time 5 ms Mechanical Configuration Pressure Port See ordering chart Wetted Parts 17-4 PH Stainless Steel Electrical Connection See Dimensions chart, next page					
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Pressure Port See ordering chart Wetted Parts 17-4 PH Stainless Steel Electrical Connection See Dimensions chart, next page					
Wetted Parts 17-4 PH Stainless Steel Electrical Connection See Dimensions chart, next page					
Electrical Connection See Dimensions chart, next page					
	17-4 PH Stainless Steel				
Fnclosure Weather-Resistant (Stainless Steel and Valox®)	See Dimensions chart, next page				
Troublet (Claimede Clor and Valex)	Weather-Resistant (Stainless Steel and Valox®)				
Vibration 20g (MIL STD 202, Method 204, Condition C)					
Shock 200g (MIL STD 202, Method 213B, Condition C)	200g (MIL STD 202, Method 213B, Condition C)				
Weight 2.3 oz	2.3 oz				

Individual Specifications

Voltage Output Units					
Output	3 Wire, see ordering chart				
Current Consumption	8 mA				
Min. Load Resistance	5000 ohms				
Current Output Units					
Output	4-20 mA (2 wire)				
Max. Loop Resistance	(Vs-9) x 50 ohms				













Hirschmann Connector

Applications

- · Hydraulic Systems
- · Compressor Control
- HVAC/R Equipment
- · Industrial Engines
- · Process and Containerized Refrigeration Systems
- Industrial OEM Equipment

How They Operate

809 Series transducers utilize a proven center mount electrode configuration combined with a durable 17-4 PH stainless steel pressure sensing element to form a variable capacitor. As pressure (or vacuum) increases or decreases, the capacitance changes. Self-contained high-level output IC-circuitry converts the change in capacitance to a fully conditioned linear voltage or current output signal.

Dimensions

Electrical Termination Style	Cable Anchor	1/2" Conduit/Terminal Block	Hirschmann Connector	3-Pin Packard Connector
	0.50 DIA. 2.40 1.62 DIA. 2.00 2.00 3/4"HEX PRESSURE PORT	TERMINAL BLOCK (3 TERMINALS)	0.63 16 0.75 19.1 1.38 DIA 1.62 41 DIA 9PESSURE PORT	0.45 11 0.49 13 DIA 0.67 DIA 0.33 8 0 1.62 DIA 1
Terminal Specifications	Standard: 2 ft. multiconductor cable. Longer lengths options. See ordering chart.	1/2″ conduit connection with 3-screw terminal block. (T1 version is same without conduit connection.)	Mating connector is Hirschmann G4WIF. May be ordered separately from Gems— Option 590.	Mating connector is comprised of Packard P/Ns 12065287 & 12103881. May be ordered separately from Gems— Option 581/582.
Ordering Code	XX (cable length in feet)	A1 - Conduit / T1- Terminal Block	H2	P1 (3-Pin)

How to Order

Use the **bold** characters from the chart below to construct a product code.

