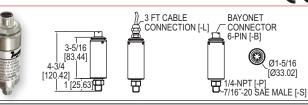
Dwyer **HIGH ACCURACY PRESSURE TRANSMITTER** $\pm 0.05\%$ FS, $<\pm 0.25\%$ FS Total Error Band



The Series 644 High Accuracy Pressure Transmitter is a robust transmitter designed for high accuracy pressure applications. Boasting an accuracy of $\pm 0.05\%$ FS RSS (< $\pm 0.25\%$ TEB), the 644 is intended for precise measurements in the critical applications.

FEATURES/BENEFITS

- · High accuracy provides exceptional measurement for insuring tight-control and minimizing costly out of specification conditions
- NIST calibrated to provide traceability for regulated processes where production and documentation is monitored
- · Low thermal error over a wide range of temperatures helps to insure accurate pressure measurement and process operation

MODEL CHA	MODEL CHART								
Example	644	-L	-V	-00	-P	644-L-V-00-P			
Series	644					Industrial pressure transmitter			
Electrical Connection		L B				3 ft cable Male 6-pin bayonet			
Signal Output			V C			0 to 10 volt 4 to 20 mA			
Range				00 01 02 03 04 05 06 07 08 09 10 11		0 to -14.7 psig 0 to 15 psig 0 to 25 psig 0 to 50 psig 0 to 100 psig 0 to 150 psig 0 to 200 psig 0 to 300 psig 0 to 500 psig 0 to 500 psig 0 to 750 psig 0 to 1000 psig 0 to 15 psia			
Process Connection					P S	1/4" male NPT 7/16"-20 SAE male			

SPECIFICATIONS

Service: Compatible gases and liquids. Wetted Materials: 17- 4 PH SS. Accuracy: ±0.05% FS RSS. Total Error Band (Includes all thermal effects): <±0.25% FS over entire temperature compensated range. Stability: < 0.15% FS/year. Temperature Limits: -40 to 185°F (-40 to 85°C). Pressure Limits: Proof pressure and burst pressure: See pressure limits table below Compensated Temperature Range: -4

Power Requirements: 9-30 VDC for current output; 15-30 VDC for voltage output.

Minimum Supply Voltage: Min. supply voltage (VDC) for current output = 9 + 0.02 x loop resistance Ω (loop resistance Ω = line resistance + receiver resistance) Output Signal: 0 to 10 VDC (4-wire); 4 to 20 mA (2-wire). Response Time: < 10 ms (voltage output), < 80 ms (current output). **Max Current Consumption:** 4 to 20 mA: 22 mA; 0 to 10 VDC: 20 mA. Electrical Connections: 3 ft cable or 6-pin male bayonet connector Process Connection: 1/4" male NPT or 7/16"-20 male SAE with O-ring. Enclosure Rating: NEMA 4X (IP65). Mounting Orientation: Vertical. Weight: 9 oz (254 g). Agency Approvals: CE

APPLICATIONS

- Calibration equipment
- · Hydraulic/pneumatic controls
- Test benches
- Transportation
- · Pulp and paper mills
- Power generation

ACCESSORIES

Model Description A-495 6-pin female bayonet mate connector

CE



The Series 638R OEM Pressure Transmitter is a high-accuracy, low-cost pressure transmitter designed for industrial equipment markets. This transmitter is designed to work with all liquids and gases that are compatible with the wetted materials. The series features a number of configurable options including wetted materials, process connections, and pressure ranges. Whether the application involves aggressive fluids or extreme temperatures, this transmitter is a great option for most applications.

FEATURES/BENEFITS

SERIES 638R

- High-accuracy pressure transmitter with a fast response time and excellent pressure surge protection
- Suitable for use in applications with extreme temperatures and aggressive fluids · Highly configurable cost-effective transmitter with a compact design

APPLICATIONS

- HVAC equipmentRefrigeration equipment
- Refrigerant recovery
- Leak detection systems
 Building pressurization
 Isolated diaphragm packages
- Closed loop hydraulics
 Paint and agriculture spraying



Service: Compatible gases and liquids. Wetted Materials: Brass, aluminum, or 316 SS

Accuracy: ±1.2% FS (includes linearity,	pull-down).
hysteresis, repeatability and calibration);	Current Consumption: < 10 mA @ 5.5
Static error band @ 25°C, 5.0 VDC	VDC (8.5 mA typical).
supply voltage.	Electrical Connection: Packard
Cycle Life: 10 million FS cycles.	connection.
Storage Temperature: -40 to 302°F (-40	Process Connection: 7/16" 20 UNF
to 150°C).	(female) or 1/4" NPT (female).
Operating Temperature: -40 to 275°F	Enclosure Rating: IP67 (with IP67 plug).
(-40 to 135°C).	Mounting Orientation: Mount in any
Pressure Limit: see model chart.	position.
Thermal Effect: ± 0.013% FS/°C.	Weight: 1.1 oz (30 g).
Power Supply: 5 VDC.	Agency Approvals: CE.

MODEL CHART									
Example	638R	-00	-P2	-E1	-S2	-SS	638R-00-P2-E1-S1-SS		
Series	638R						OEM pressure transmitter		
Pressure Range		00 01 02 03 04 05 06					0 to 75 psia (0 to 5.2 bar(a)) 0 to 150 psia (0 to 10.3 bar(a)) 10 to 200 psia (0 to 13.8 bar(a)) 14.5 to 265 psia (1 to 18.3 bar(a)) 14.5 to 315 psia (1 to 21.7 bar(a)) 14.5 to 567 psia (1 to 35.5 bar(a)) 14.5 to 667 psia (1 to 46 bar(a))		
Process Connection			P1 P2				7/16" 20 UNF (female) 1/4" NPT (female)		
Electrical Connection				E1			Packard connection		
Electrical Output					S2		0.5-4.5 V ratiometric		
Housing Material						AL BR SS	Aluminum Brass 316L stainless steel		

Output Signal: 0.5-4.5 VDC ratiometric. Response Time: 10 ms typical.

Output Load: 20 k Ω min. (pull-up or