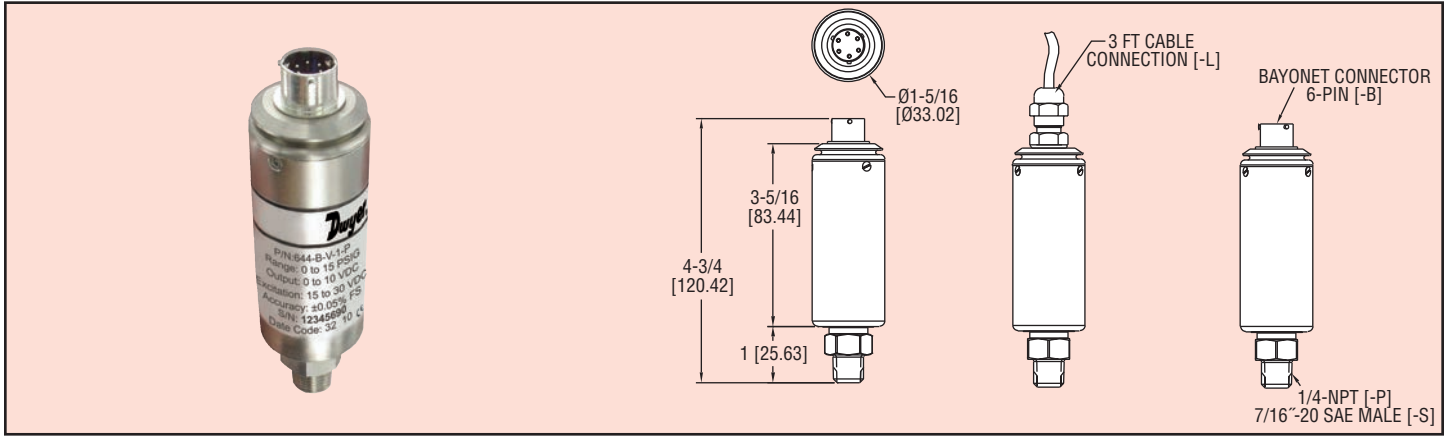




Series  
644

# High Accuracy Pressure Transmitter

±0.05% FS, <±0.25% F.S. Total Error Band



The Series 644 High Accuracy Pressure Transmitter is a robust transmitter designed for high accuracy pressure applications. Boasting an accuracy of ±0.05% FS RSS (<±0.25% TEB), the 644 is intended for precise measurements in the critical applications of calibration technology, hydraulic/pneumatic controls, and many more laboratory and industrial settings. The Series 644 offers multiple measurement options with two output choices (VDC or mA) and ten psig pressure ranges (optional 0 to 15 psia). The robust and compact all stainless steel Series 644 is available with either a 1/4" male NPT, or 7/16"-20 male SAE process connections. Each transmitter is provided with an 11 point NIST traceable calibration certificate.

**FEATURES**

- High accuracy: ±0.05% F.S. RSS
- 15 to 1000 psig ranges (optional 0 to 15 psia)
- Two output options
- Low thermal error over wide temperature range

**APPLICATIONS**

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

**ACCESSORY**

**A-495**, 6-pin female bayonet mate connector

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

Ex. 644-L-V-00-P

**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 to 140°F (-20 to 60°C).
- Power Requirements:**
  - 9 to 30 VDC for current output;
  - 15 to 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 Approval:** CE.

Range Number	Range	Proof Pressure	Burst Pressure
00	0 to -14.7 psig	30 psig	3000 psig
01	0 to 15 psig	30 psig	3000 psig
02	0 to 25 psig	50 psig	3000 psig
03	0 to 50 psig	100 psig	8000 psig
04	0 to 100 psig	200 psig	10000 psig
05	0 to 150 psig	300 psig	10000 psig
06	0 to 200 psig	400 psig	10000 psig
07	0 to 300 psig	600 psig	10000 psig
08	0 to 500 psig	800 psig	10000 psig
09	0 to 750 psig	1200 psig	10000 psig
10	0 to 1000 psig	1500 psig	10000 psig
11	0 to 15 psia	30 psia	3000 psia