

A Low Cost, High Performance Solution



DESIGNED FOR HARSH CONDITIONS

Fairchild's Model TD8600 uses piezo and thin film technology to offer a rugged but inexpensive solution that is small and fits into hard-to-access areas.

INSPIRED BY DIVERSE NEEDS






Pneumatic and Hydraulic systems in process, test and control applications may generate severe "spikes" that overpressure many sensors. To combat spikes, Fairchild employs a thin film technology on a stainless steel diaphragm. This higher mass diaphragm withstands short-term overpressure conditions inherent in hydraulic applications.

EASILY ADAPTABLE






The TD8600 series utilizes several features to fit the widest possible applications. The EN175301-801A DIN connector is an industrial standard with excellent weather resistance. The TD8600 also has 0.5% Accuracy and is offered with a wide selection of 1/4" NPT or BSPP pressure ports.

All New Model TD8600 P/I Pressure Transmitter

Features:

-  Low Cost
-  0.5% Accuracy
-  Resistant to pressure spikes
-  Cost effective DIN connector
-  Welded stainless steel construction

Typical Applications:

-  Hydraulic or Pneumatic systems
-  Process Control
-  Automation
-  Off road vehicles
-  Compressors and pumps

PERFORMANCE

Full Scale Pressure Range	0- 10K PSIG(See Ordering Information)
Non-Linearity (Best Fit Straight Line)	≤ ± 0.5% FSO
Hysteresis & Repeatability	< 0.16% FSO
Full Scale Output (FSO)	
Model TD8601	5 VDC ± 2% at 70° F
Model TD8602	20 mA ± 2% at 70° F
Resolution	Infinite
Long Term Maximum Drift	≤ ± 0.1%
Compensated Temperature Range	70° F to 170° F
Maximum Operating Temperature	212°F (100°C) with "0" p/n designation
Minimum Operating Temperature	-22°F (-30°C) with "0" p/n designation
Non-Operating Temperature Range	-22° F to +212° F
Thermal Effect on Zero	≤ ± 0.5% FSO per 100° F Typical
Thermal Effect on Span	≤ ± 1% FSO per 100° F Typical
Zero offset	≤ 0.5 typ of span ≤ 0.8 max.
Fatigue life	10 million load cycles maximum
Shock Resistance	500g per IEC 60068-2-27 (mechanical shock)
Vibration Resistance	10g per IEC 60068-2-8 (vibration under resonance)

ELECTRICAL

Supply Voltage	8 to 30 VDC
Power Supply Regulation	
Current consumption	depends on signal
Output Signal	
Model TD8601	0 to 5 VDC
Model TD8602	4 to 20 mA
Maximum ohmic load RA	0... 10 V, 3-wire RA > 10K
	0... 5 V, 3-wire RA > 5K
	1... 5 V, 3-wire RA > 5K
	0.5... 4.5 V, 3-wire RA > 4.5K
RoHS-conformity	Yes
Overvoltage protection	VDC 32; 36 with 4 ... 20 mA
Short-circuit protection	Sig+ to UB-
Reverse polarity protection	UB+ to UB-
Load Resistance (Model TD8602 only) ...	1500 Ohms maximum
Circuit Protection	Reverse polarity protected. Varistor protected across input leads for surges above 36 VDC
Response Time	≤ 5 mSec for 90% change in output
Electrical Connections	DIN plug EN175301-801-A

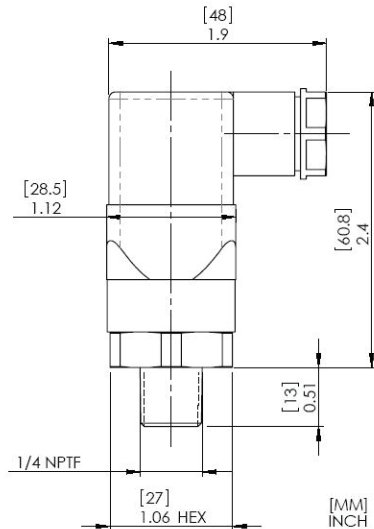
MECHANICAL

Pressure Connections	1/4" NPT (Typical)
Proof Pressure	1.5 times FSPR or 25K PSI, whichever is less
Burst Pressure	5 times FSPR or 30K PSI, whichever is less
Mounting	May be supported by process piping

Materials of Construction

Wetted Parts	316L
Housing	316L
Weight	6 oz
Identification	Sticker label

OVERALL DIMENSIONS



NOTE:
ALL DIMENSIONS ARE NOMINAL, FOR REFERENCE ONLY

ORDERING INFORMATION

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Temperature Range

-22° F to +212° F	0
32° F to +176° F	1

Output

0-5 VDC	1
4-20 mA	2

Input Range *

0-15 psi	11
0-30 psi	12
0-100 psi	13
0-300 psi	14
0-1000 psi	15
0-1500 psi	16
0-5000 psi	17
0-10,000 psi	18
[0-1 BAR]	21
[0-10 BAR]	22
[0-25 BAR]	23
[0-40 BAR]	24
[0-100 BAR]	25
[0-250 BAR]	26
[0-400 BAR]	27
[0-600 BAR]	28
SPECIAL RANGE*	--

*Compound ranges also available. Please Contact Factory

Pressure Format

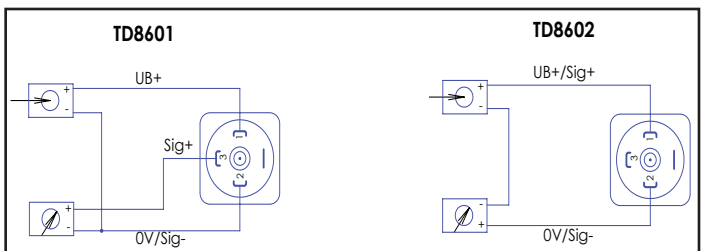
Absolute	A
Gage	G

(gage format standard)

Pressure Port

1/4" NPT Female	0
1/4" NPT Male	1
1/4 G Male	2
1/2 G male	4

Electrical Connections



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