



The transducer provides a large low-level output signal proportional to input pressure and voltage. The standard output signal of 0-100 mVDC (with 10 VDC excitation). Alternative outputs for special customer requirements for end point offsets are available. Operating pressure range from 50 to 10,000 psi. Virtually any electrical receptacle and pressure fitting is adaptable to this design.

Since the sensor elements are inorganically attached to the metal member, no adhesives are required; therefore it inherently provides excellent long-term stability. The sensors are batch-processed to minimize cost and to provide uniformity of performance.

It uses piezoresistive gauges which are inorganically bonded to an all metallic, corrosion-resistant pressure diaphragm. The diaphragm is mechanically isolated from the pressure fitting giving complete mounting stress isolation. All mechanical connections are welded, thereby assuring maximum strength and a rugged build.

Features

- Silicon on Sapphire SOS technology
- Pressure range from 50 to 10,000 psi or higher
- Wide operating temperature range: -65°F to 250°F (-54°C to 121°C)
- No oil refill
- 10 mV/V output sensitivity
- All-welded construction
- Combined linearity/hysteresis < 0.5% FSO typical
- $\pm 2\%$ FSO error is typical for total error band for most applications
- Consult Eaton factory for accuracy
- Titanium construction sensing element
- Standard soldering is in accordance with ANSI J-STD-001, Class 3

Applications

- Commercial/military aircraft
- Land vehicles
- Light rail/mass transit

Options

- 10 VDC excitation standard, other available
- 1.5 mA constant current available
- 100% titanium construction available
- Other soldering standards may be incorporated upon request, including NHB5300, MIL-STD-454, or MIL-STD-2000A



Powering Business Worldwide

**ISO 9001
AS 9100**

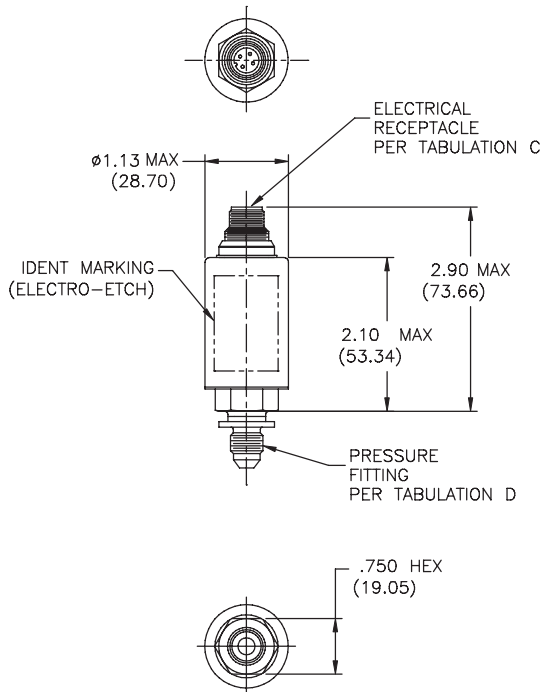
Specifications

Pressure		Proof Pressure		Burst Pressure	
Psia/Psig	Bar	Psia/Psig	Bar	Psia/Psig	Bar
0 — 50	0	100	NA	300	NA
0 — 100	0 — 6.9	200	13.8	600	27.6
0 — 1,000	0 — 69.0	2,000	137.9	4,000	275.6
1 — 5,000	0 — 344.8	7,500	517.2	15,000	1034.5

Higher ranges available.

Dimensions

Dimensions shown in inches (mm)



Part Number Breakdown

41SC102 — 15 G — 1 A

Pressure Range

Tabulation A

Pressure Code	Pressure Range
15	15
30	30
60	60
100	100

Pressure Ref

Tabulation B

Pressure Ref Code	Ref Type
G	Gauge
A	Absolute

Electrical Receptacle

Tabulation C

Interface Code	Interface Description
A	4 cond cable
B	Turk pn 4.4-05, M12x1 thread
C	Amphenol (Bendix) PT2H-8-4P
D	Hermetic receptacle 4 pin M38999 type

Fitting End

Tabulation D

Fitting Code	Fitting Type
1	1/4-18 NPT external
2	7/16-20UNF to SAE J514
3	1/8-27 NPT external