

# Data Sheet

## P4056

### Pressure Transducer



#### Main Features

Pressure Ranges	0 to 200 mBar up to 0 to 20 bar
Electrical Connection	Packard Electric Metri-Pack 150 Series
Pressure Connection	1/4-18 NPT (external), 1/8-27 NPT (external) - for more options see how to order
Housing Material	Brass
Output Signal	0.5 - 4.5 VDC

#### Attributes

- Small Size
- Absolute, Gage or Sealed Gage Pressure References
- Packard Metri-Pack 150 Electrical Connector Standard
- 0.5 to 4.5 Vdc Output
- High Vibration Tolerance
- Superior EMI/RFI Performance
- Available with NPT, G1/4, M10, & M12 Pressure Ports
- Temperature Compensated
- RoHS Compliant

#### Typical Applications

- Pumps & Compressors
- Process Controls
- Filter Restriction
- Oil and Fuel Pressures
- Water Management
- Level Measurement
- Test & Monitoring Equipment

#### Description

The P4056 Pressure Transducer incorporate a back-side PRT configuration that is compatible with many types of liquid and gaseous media. This flexible product family can be supplied with a built in Metri-Pack 150 electrical connector. The small sensor size is ideal for high volume applications. Pressure ranges may be customized for OEM applications. The P4056 pressure ranges are measured in Bar.

# Technical Specifications

## Pressure Ranges

from 0 to ...* <sup>1</sup>	bar	200 mBar	300 mBar	1	2	4	5	7	10	15	20
Proof pressure	bar	400 mBar	600 mBar	2	4	8	10	14	20	22.5	30
Burst pressure	bar	600 mBar	900 mBar	3	6	12	15	21	30	30	40

1. for more options see How to Order

## Physical

Operating Life Cycle	min. 10 million full pressure cycles over the full range
Vibration Resistance	10 G's peak to peak sinusoidal, from 20 to 2000 Hz
Shock Resistance	75 G's ½ sine wave
Drop Test	1m onto concrete surface
Weight	≤ 50 grams
Ingress Protection	IP67
Operating Temperature	-40°C to + 125°C
Environmental Temperature	-40°C to + 125°C
Storage Temperature	-40°C to + 125°C
Media	All class II fluids and gases compatible with brass and fluorosilicone

## Performance

Total error band <sup>2</sup>	+/-2% of span (-20 ≤ T ≤ 100° C) +/-3% of span (T < -20° C, T < 100° C)
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2. Including accuracy, calibration, temperature, non-linearity, hysteresis, non-repeatability, error

## Electrical

Output Signal	0.5...4.5 VDC ratiometric
Operating Supply Signal	5 VDC $\pm$ 5%
Power Consumption	$\leq$ 25 mW
Overvoltage Protection	16 VDC
Short-circuit Proofness	Yes <sup>3</sup>
Insulation Voltage	500 VDC
Reverse Polarity Protection	Yes <sup>4</sup>
Impedance	Min load 25 k $\Omega$
Response Time	$\leq$ 10 ms max. to 63% of full scale pressure with step change on input

3. for min. 3 intervals at 5 minutes each

4. for min. 10 seconds on assigned pins

## Approvals & Certificates

CE Compliance	Pressure equipment directive 97/23/EC EMC directive 2004/108/EEC, EN 61 326 Emission (Group 1, Class B) and Immunity (industrial locations), EMI, ESD protected
ROHS	2002/95/EC RoHS Directive

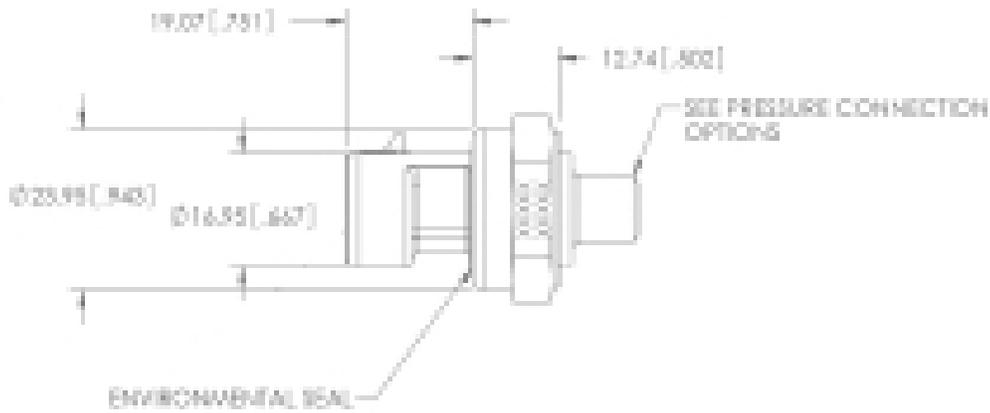
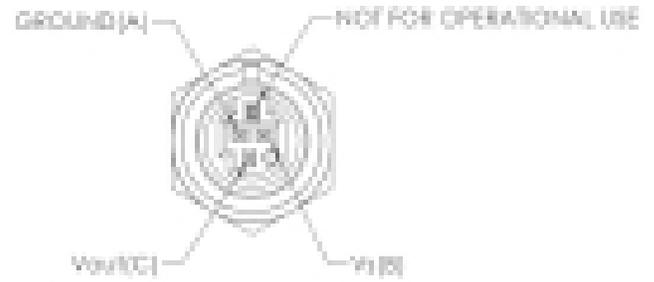
## Dimensions

### Pressure Sensor with Electrical Connection

Dimensions in mm [Inch]

Packard (metri-pack 150) Pin Call Outs

Output	Pin A	Pin B	Pin C
0.5-4.5 VDC ratiometric	GND	Vsup	Vout



# How to Order

## Reference

- A Absolute
- G Gauge
- S Sealed Gauge

## Built-in Connector

- A Metripack 150 with mating connector 12" leads
- C Metripack 150 without mating connector

## Internal Seal Material

- E Fluorosilicone

**P4056 - 15 - A - E - 1 - A**

## Pressure Ranges

P2	0 - 200 mBar
P3	0 - 300 mBar
1	0 - 1
2	0 - 2
4	0 - 4
5	0 - 5
7	0 - 7
10	0 - 10
14	0 - 14
<b>15</b>	<b>0 - 15</b>
16	0 - 16
20	0 - 20

## Pressure Connection (port)

- 1 1/4-18 NPT
- 2 M12 X 1.5-6g PER ISO 6149
- 3 M10 X 1-6g PER ISO 6149
- 4 1/8-27 NPTF
- 5 STUD END PER DIN 3852-A-G1/4 (sealing by washer, not supplied)
- 6 M14 X 1.5-6g PER ISO 6149
- 7 STUD END PER DIN 3852-C-R1/4 (1/4-19 BSPT)
- 8 7/16-20UNF-2A
- 9 M16 X 1.5-6g
- 10 STUD END PER DIN 3852-C-R1/8 (1/8-28 BSPT)

### Example:

P4056-15A-E1A

### Description:

P4056 Pressure Sensor, 0 – 1 Bar Absolute, Fluorosilicone Internal Sealmaterial , 1/4-18 NPT- Pressure Connection, with Packard Metri-Pack 150 Built-in Connector

Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions. Non-compliance can result in serious injury and/or damage to the equipment.



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