FEATURES

- **0...10 "H_2O to 0...150 psi gage,**
  0...15 to 0...150 psi absolute
- **Precision temperature compensated**
- **Calibrated offset and span**
- **Voltage excitation**
- **Excellent long term stability**



SERVICE

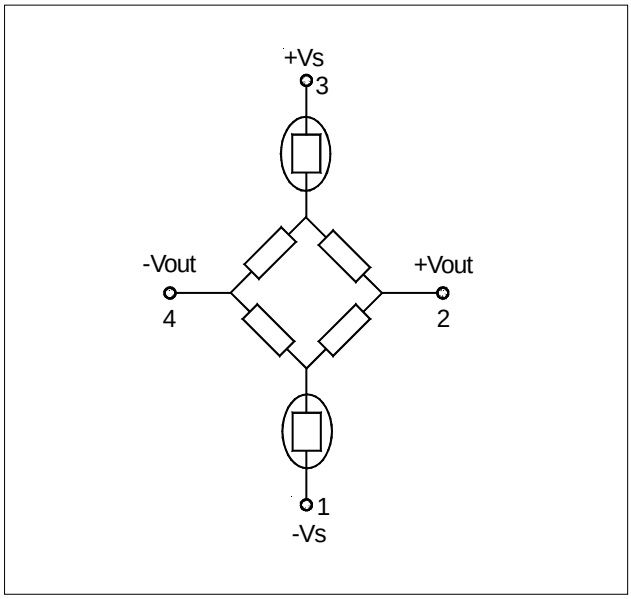
Non-corrosive, non-ionic working fluids such as clean dry air, dry gases and the like.

The media wetted materials are:

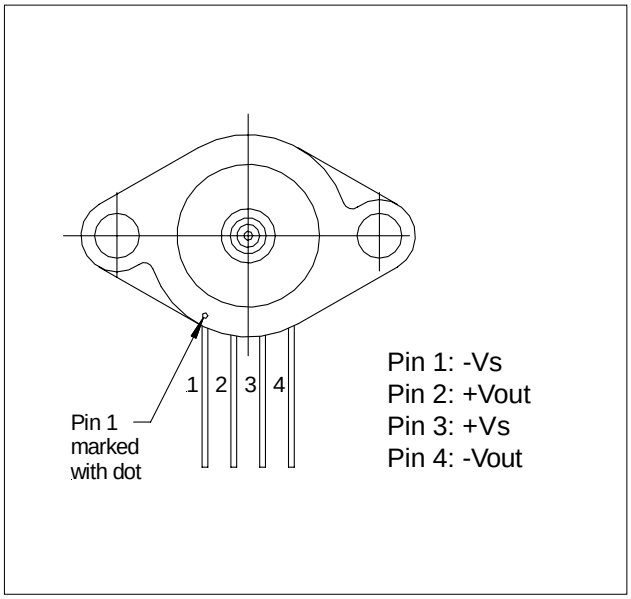
port 1:
- front side of silicon sensor chip
- glass filled nylon
- RTV
- silgel (for devices of 5 psi and above)
- ceramic (Al_2O_3)

port 2:
- silicon sensor chip
- glass filled nylon
- RTV
- ceramic (Al_2O_3)

EQUIVALENT CIRCUIT



ELECTRICAL CONNECTION



SPECIFICATIONS

Maximum ratings (for all devices)

Supply voltage V_S	3 to 16 V
Lead temperature (soldering 5 seconds)	315°C
Common mode pressure	50 psig

Environmental specifications (for all devices)

Temperature range	
Compensated	0 to 70°C
Operating	-25 to 85°C
Storage	-40 to 125°C
Humidity limits (non-condensing)	0 to 95 %RH

PRESSURE SENSOR CHARACTERISTICS

V_S = 12 V, T_A = 25°C, pressure applied to port P1[7]

Part no.	Operating pressure	Proof pressure[1]	Burst pressure[2]	Full scale span[3]		
				Min.	Typ.	Max.
XPCL10...	10 "H_2O	3 psi	5 psi	19.5 mV	20 mV	20.5 mV
XPC0.3...	0.3 psi	3 psi	5 psi	19.5 mV	20 mV	20.5 mV
XPC01...	1 psi	3 psi	5 psi	17.5 mV	18 mV	18.5 mV
XPC05...	5 psi	15 psi	25 psi	59 mV	60 mV	61 mV
XPC15...	15 psi	45 psi	75 psi	89 mV	90 mV	91 mV
XPC30...	30 psi	90 psi	150 psi	89 mV	90 mV	91 mV
XPC60...	60 psi	180 psi	300 psi	89 mV	90 mV	91 mV
XPC100...	100 psi	250 psi	400 psi	99 mV	100 mV	101 mV
XPC150...	150 psi	250 psi	400 psi	89 mV	90 mV	91 mV

PERFORMANCE CHARACTERISTICS

V_S = 12 V, T_A = 25°C, pressure applied to port P1[7]

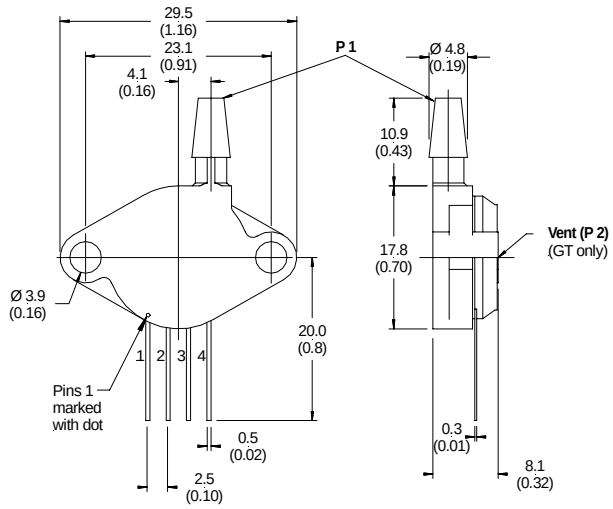
Characteristics		Min.	Typ.	Max.	Unit
Zero pressure offset		-0.5	0	+0.5	mV
Combined non-linearity and hysteresis[4]			±0.25	±0.5	%FSS
Temperature effects (0 to 70°C)[5]	Span			±1.0	
	Offset			±0.5	mV
Input resistance		5			kΩ
Output resistance			3		
Response time (10 to 90 %FSS)	XPCL...		500		µs
	XPC...		100		
Common mode voltage[6]			6		V

Notes

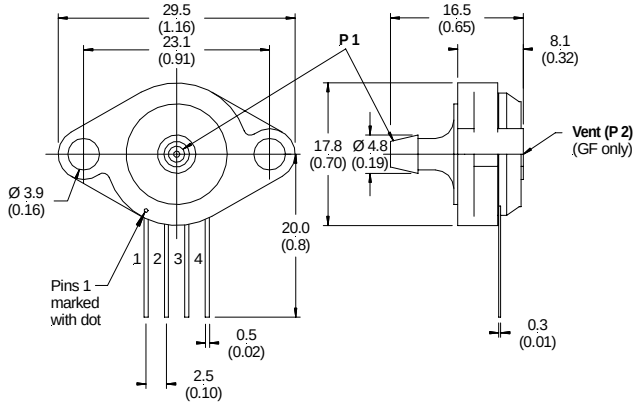
1 Proof pressure is the maximum pressure which may be applied without causing durable shifts of the electrical parameters of the sensing element.
2 Burst pressure is the maximum pressure which may be applied without causing damage to the sensing element or leaks from the housing.
3 Full scale span is the algebraic difference between the output voltage at full-scale pressure and the output at zero pressure. The span is ratiometric to the supply voltage.
4 Non-linearity refers to the **B**est **S**traight **L**ine fit measured for offset pressure, full-scale pressure and ½ full-scale pressure.
5 Shift is relative to 25°C.
6 This is the common-mode voltage of the output arms (pins 2 and 4) for V_S = 12 V.
7 For backside port devices (XPC...B...) pressure applied to P2.

OUTLINE DRAWING

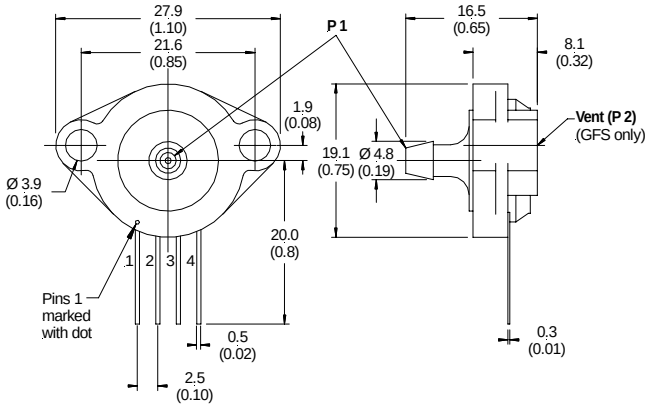
Package version AT and GT



Package version AF and GF



Package version AFS and GFS

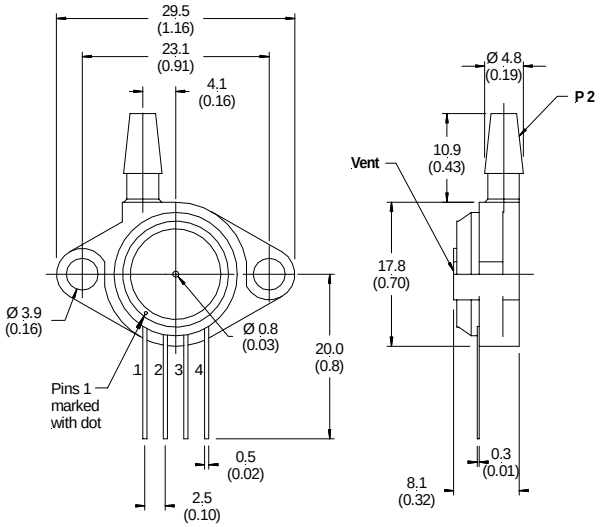


mass: approx. 2 g

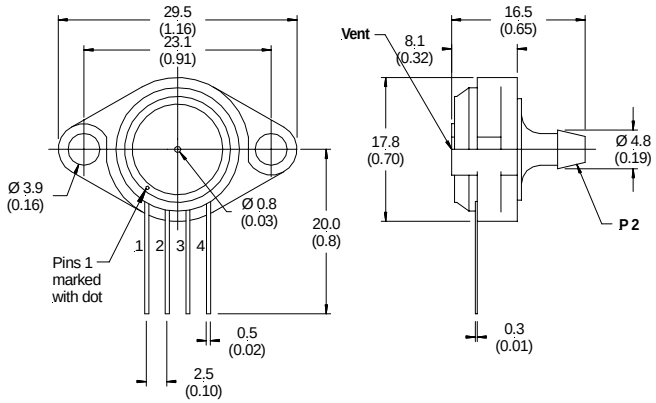
dimensions in
mm (inches)

OUTLINE DRAWING

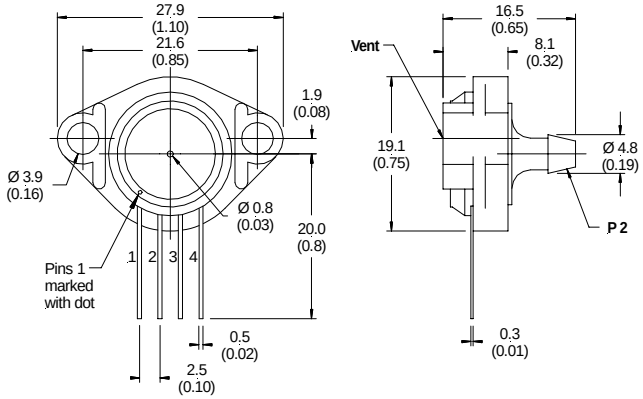
Package version GBT



Package version GBF



Package version GBFS

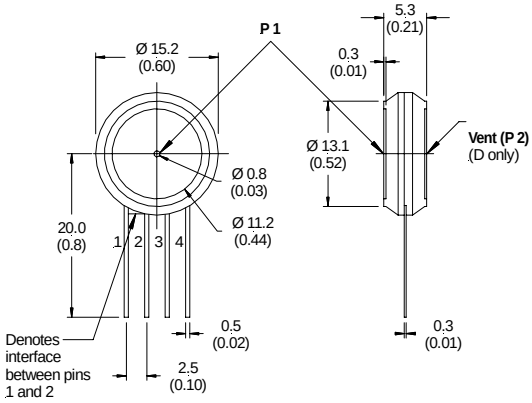


mass: approx. 2 g

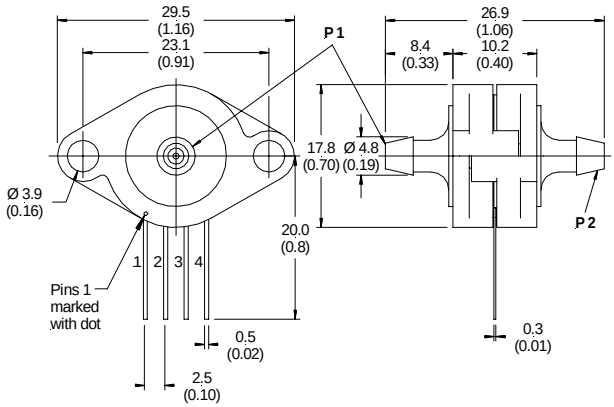
dimensions in
mm (inches)

OUTLINE DRAWING

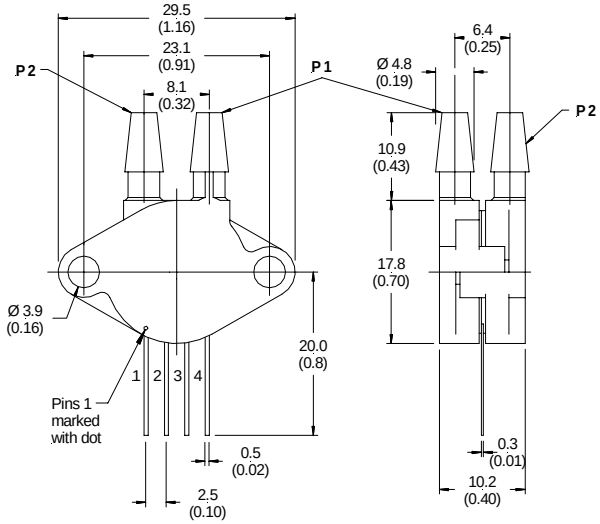
Package version A and D (no port)



Package version DF



Package version DT



mass: approx. 2 g

dimensions in
mm (inches)

ORDERING INFORMATION

Pressure range	Gage devices					
	Axial port (GF)	Radial port (GT)	Offset axial port (GFS)	Back side Axial port (GBF)	Back side Radial port (GBT)	Back side Offset axial port (GBFS)
10 "H_2O	---[8]	---[8]	---[8]			
0.3 psi	---[8]	---[8]	XPC0.3GFSH	---[8]	---[8]	---[8]
1 psi	---[8]	XPC01GTH	XPC01GFSH	---[8]	---[8]	---[8]
5 psi	---[8]	XPC05GTH	---[8]	---[8]	---[8]	---[8]
15 psi	XPC15GFH	---[8]	---[8]	---[8]	---[8]	---[8]
30 psi	---[8]	---[8]	XPC30GFSH	---[8]	---[8]	---[8]
60 psi	---[8]	---[8]	XPC60GFSH	XPC60GBFH	XPC60GBTH	XPC60GBFSH
100 psi	XPC100GFH	---[8]	---[8]	---[8]	---[8]	---[8]
150 psi	---[8]	XPC150GTH	---[8]	---[8]	---[8]	---[8]

Pressure range	Absolute devices				Differential devices		
	No port (A)	Axial port (AF)	Radial port (AT)	Offset axial port (AFS)	No port (D)	Axial port (DF)	Radial port (DT)
10 "H_2O					XPCL10DH	XPCL10DFH	XPCL10DTH
0.3 psi					XPC0.3DH	---[8]	XPC0.3DTH
1 psi					XPC01DH	---[8]	XPC01DTH
5 psi					---[8]	XPC05DFH	XPC05DTH
15 psi	XPC15AH	XPC15AFH	---[8]	---[8]	---[8]	XPC15DFH	XPC15DTH
30 psi	---[8]	---[8]	---[8]	---[8]	---[8]	---[8]	XPC30DTH
60 psi	---[8]	---[8]	---[8]	---[8]	---[8]	---[8]	XPC60DTH
100 psi	---[8]	---[8]	---[8]	---[8]	---[8]	---[8]	---[8]
150 psi	---[8]	---[8]	---[8]	---[8]	---[8]	---[8]	---[8]

Note

[8] **THESE DEVICES ARE AVAILABLE ON SPECIAL REQUEST. MINIMUM ORDER QUANTITY APPLIES.**

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