Honeywell

Honeywell Sensing and Control

236PC15GW

Actual product appearance may vary.

Pressure Sensors: Measurement Type: Gage, Vacuum Gage; Unamplified; Range: ± 15.0 psi

Features

- Robust package
- Prewired
- Temperature compensated for span over 0 °C to 50 °C [32 °F to 122 °F]
- Calibrated null and span

Potential Applications

Medical

- Oxygen and nitrogen gas distribution in hospitals
- Respirators and ventilators

Environmental

- Water control valves
- Instrumentation
- Irrigation equipment

Industrial Instrumentation

- Robotics
- Pressure valves
- Leak detection
- Air compressors

Description

236PC Series pressure sensors provide a millivolt output that is proportional to the pressure applied. They operate from 0 psi to 5.0 psi and 0 psi to 150 psi using a single, positive supply voltage ranging from 10.0 Vdc to 16.0 Vdc.

Product Specifications	
Signal Conditioning	Unamplified
Pressure Range	± 15.0 psi
Maximum Overpressure	45.0 psi
Supply Voltage	10 Vdc typ., 16.0 Vdc max.
Compensated	No
Output Calibration	Yes
Response Time	1 ms max.
Port Style	Threaded 1/4-28 UNF
Package Style	Honeywell - 200PC
Typical Sensitivity	6.67 mV/psi

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Full Scale Span	100 mVdc typ.
Null Offset	0 mV typ.
Null Shift over Temperature	± 3.0 mV typ.
Repeatability & Hysteresis Error	± 0.25 % span typ.
Shock	Qualification tested to 150 g
Vibration	MIL-STD-202 Method 213 (150 g half sine 11 ms)
Weight	57 g [2 oz]
Operating Temperature Range	-30 °C to 70 °C [-22 °F to 1581 °F]
Compensated Temperature Range	0 °C to 50 °C [32 °F to 122 °F]
Storage Temperature Range	-40 °C to 105 °C [-40 °F to 221 °F]
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	236PC

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MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91929

BRIDGE PRESSURE SENSOR

CATALOG LISTING
236PC SERIES CHART 1

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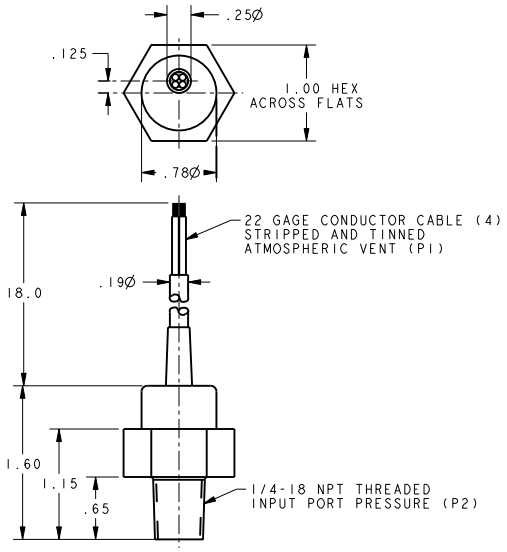
CATALOG LISTING (B)
236PC15GW
236PC30GW

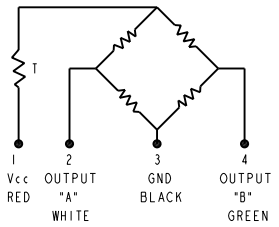


GENERAL OPERATING CHARACTERISTICS
(ELECTRICAL PERFORMANCE AT 10.0 ±0.01 VDC EXCITATION, 25°C)

PARAMETERS	PRESSURE RANGES (PSI)	MIN	TYP	MAX	UNITS
NULL OFFSET	ALL	-2	0	+2	MV
NULL SHIFT (2) 0° < 25°C > 50°			±3.0		
SPAN (1)	0 TO 05G	48	50	52	
	0 TO 15G	98	100	102	
	0 TO 30G	78	80	82	
SENSITIVITY PER PSI	0 TO 05G		10.00		MV/PSI
	0 TO 15G		6.67		
	0 TO 30G		2.67		
SENSITIVITY SHIFT (2) 0° < 25°C > 50° AT 10 VDC	ALL		±1.5		% SPAN
LINEARITY (P2 > P1) (BFSL)	0 TO 05G			±3.0	
	0 TO 15G			±2.5	
	0 TO 30G			±1.5	
REPEATABILITY & HYSTERISIS	ALL		±0.25		
STABILITY OVER 1 YEAR			±1.5		
VOLTAGE EXCITATION			10	16	VDC
INPUT RESISTANCE			6.8K		OHMS
OVERPRESSURE (P2 > P1)	0 TO 05G			20	PSI
	0 TO 15G			45	
	0 TO 30G			60	
TEMPERATURE STORAGE	ALL	-40° TO +105°C (-40° TO +221°F)			
OPERATE		-30° TO +70°C (-22° TO +158°F)			
COMPENSATED		0° TO +50°C (+32° TO +122°F)			

NOTES
(1) SPAN IS THE ALGEBRAIC DIFFERENCE BETWEEN END POINTS (OUTPUT AT MINIMUM AND MAXIMUM PRESSURE)
(2) TEMPERATURE ERROR IS CALCULATED WITH RESPECT TO 25°C AND EXPRESSES THE DEVIATION THAT COULD OCCUR AS TEMPERATURE IS RAISED OR LOWERED TO LIMITS INDICATED
3 PRESSURE MEDIUM CAN BE LIQUID OR GASEOUS, SO LONG AS IT DOES NOT REACT WITH SILICON, GLASS, 300 SERIES STAINLESS STEEL OR URETHANE BASED EPOXY

CIRCUIT DIAGRAM



OUTPUT "A" INCREASES AS INPUT PRESSURE INCREASES

OUPUT "B" DECREASES AS INPUT PRESSURE DECREASES

THIRD ANGLE PROJECTION
SCALE FULL
DO NOT SCALE PRINT
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE
ONE PLACE (.0) ±.030
TWO PLACE (.00) ±.015
THREE PLACE (.000) ±.005
ANGLES ±
WEIGHT 2 OZ

ANSI Y14.5M-1982 APPLIES

REVISIONS
A 206541 GLH 20CT02
B 0033081 DBM 27 AUG 07

CATALOG LISTING M 236PC SERIES CHART 1 PAGE 1 OF 1 RELEASE NO. PR-12997 27 AUG 07 CMH REPLACES -
ISSUE 8
CHECK
CHECK 20CT02 SAV
CHECK
PTC/CAD 2D
DRAWN 20CT02 GLH

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