Honeywell

Honeywell Sensing and Control

26PCCFB6G

Actual product appearance may vary.

Pressure Sensors: Measurement Type: Gage, Vacuum Gage; Signal Conditioning: Unamplified; Pressure Range: ± 15.0 psi; Port Style: Barbed

Features

- Lowest priced sensor with temperature compensation and calibration
- Variety of gage pressure port configurations - easily and quickly modified for your special needs
- Operable after exposure to frozen conditions
- Choice of termination for gage sensors
- Calibrated null and span
- Temperature compensated
- Provides interchangeability
- Can be used to measure vacuum or positive pressure

Potential Applications

Medical

- Oxygen and nitrogen gas distribution in hospitals
- Dental chairs

Environmental

- Water control valves
- Instrumentation
- Irrigation equipment
- Filter monitoring equipment

Industrial Instrumentation

- Robotics
- Pressure valves
- Leak detection
- Air compressors

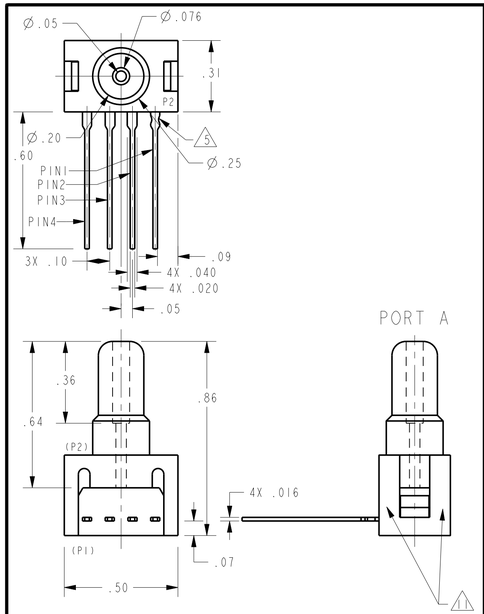
Analytical Instrumentation

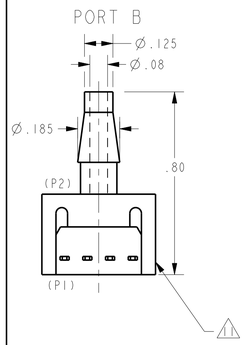
- Gas chromatography

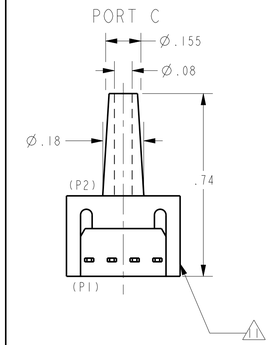
Description

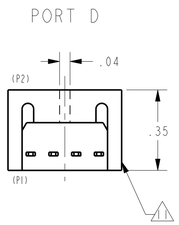
The factory calibrated 26PC Series miniature pressure sensors provide reliable gage pressure sensing performance in a compact package. The sensor features a proven sensing technology that utilizes a specialized piezoresistive micro-machined sensing element which allows part interchangeability, high performance, reliability, and accuracy. The low power, non-amplified, non-compensated Wheatstone bridge circuit design provides inherently stable mV outputs over 1.0 psi through 250 psi sensing ranges.

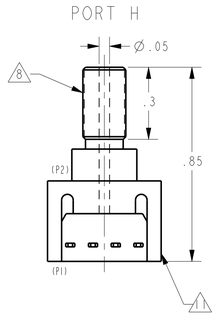
Product Specifications	
Measurement Type	Vacuum Gage, Gage
Signal Conditioning	Unamplified
Pressure Range	± 15.0 psi
Maximum Overpressure	45.0 psi
Supply Voltage	10.0 Vdc typ., 16.0 Vdc max.
Compensated	Yes
Output Calibration	Yes
Response Time	1 ms max.
Termination	PCB; 1 x 4; 0.600 in
Port Style	Barbed
Package Style	Honeywell - 20PC
Linearity	0.25% span typ., 0.50% span max.
Typical Sensitivity	6.67 mV/psi
Full Scale Span	100 mV typ.
Null Offset	0 mV typ.
Null Shift over Temperature	± 0.5 mV typ., ± 1.0 mV max.
Span Shift Over Temperature	± 0.75% span typ., ± 1.5% span max.
Repeatability & Hysteresis Error	± 0.20 % span typ.
Input Resistance	5.5 kOhm min., 7.5 kOhm typ., 11.5 kOhm max.
Output Resistance	1.5 kOhm min., 2.5 kOhm typ., 3.0 kOhm max.
Shock	Qualification tested to 150 g
Vibration	MIL-STD-202 Method 213 (150 g half sine 11 ms)
Weight	2 g [0.07 oz]
Operating Temperature Range	-40 °C to 85 °C [-40 °F to 185 °F]
Compensated Temperature Range	0 °C to 50 °C [32 °F to 122 °F]
Storage Temperature Range	-55 °C to 100 °C [-67 °F to 212 °F]
Media Compatibility	Limited to media which will not attack polyetherimide, silicon, flourosilicone, silicone, EPDM and neoprene seals.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	26PC

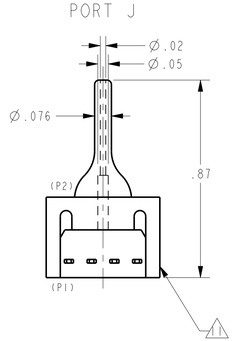


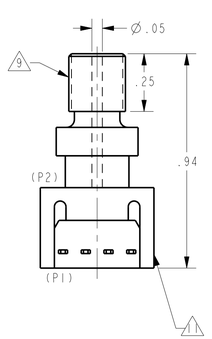












CATALOG LISTING	LASER BRAND 1
26PCCFH6G	6CF6G
26PCBFA6G (B)	6BF6G
26PCCFA6G	6CF6G
26PCCFJ6G	6CF6G
26PCDFA6G	6DF6G
26PCEFA6G	6FF6G
26PCAFA6G (B)	6AF6G
26PCBFM6G (B)	6BF6G
26PCDFM6G	6DF6G
26PCFFM6G	6FF6G
26PCFFJ6G	6FF6G
26PCFFH6G	6FF6G
26PCAFB6G	6AF6G
26PCAFH6G	6AF6G
26PCBFB6G	6BF6G
26PCBFC6G	6BF6G
26PCBFD6G	6BF6G
26PCBFH6G	6BF6G
26PCBFJ6G	6BF6G
26PCCFB6G	6CF6G
26PCCEB6G	6CE6G
26PCCFC6G	6CF6G
26PCCFD6G	6CF6G
26PCDFB6G	6DF6G
26PCDFD6G	6DF6G
26PCFEB6G	6FE6G
26PCGFA6G	6GF6G
26PCGFM6G	6GF6G
26PCAFM6G	6AF6G
26PCCFM6G	6CF6G
26PCCEA6G	6CE6G
26PCDFJ6G	6DF6G
26PCGNM6G	6GN6G

26PC_F_6G

- STYLE
  - (G) GAGE
- TERMINATION
  - (6) 1 X 4 (.60 IN.)
- PORT
  - (A) STRAIGHT
  - (B) BARB
  - (C) LUER
  - (D) MODULAR
  - (H) 5mm THREAD
  - (J) SMALL NEEDLE
  - (M) 1/4-28 THREAD
- SEAL
  - (F) FLUOROSILICONE
  - (E) EPDM
  - (N) NEOPRENE
- PRESSURE
  - (A) 1 PSI
  - (B) 5 PSI
  - (C) 15 PSI
  - (D) 30 PSI
  - (F) 100 PSI
  - (G) 250 PSI

GENERAL OPERATING CHARACTERISTICS
(ELECTRICAL PERFORMANCE AT 10.00±0.01 VDC EXCITATION, 25°C)

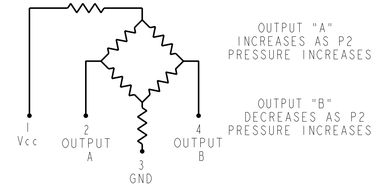
PRESSURE RANGE (PSI)	0 - 1			0 - 5			0 - 15			0 - 30			0 - 100			0 - 250			
	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	UNITS
SPAN (P2>P1) 1	14.7	16.7	18.7	47	50	53	97	100	103	97	100	103	95	100	105	143	150	157	mV
NULL OFFSET	-1.5	0	+1.5	-1.5	0	+1.5	-1.5	0	+1.5	-1.5	0	+1.5	-2.0	0	+2.0	-2.0	0	+2.0	mV
		TYP	MAX		TYP	MAX		TYP	MAX		TYP	MAX		TYP	MAX		TYP	MAX	UNITS
LINERITY (BFSL, P2>P1)		0.25	0.5		0.4	0.5		0.25	0.5		0.1	0.2		0.4	0.6		0.5	0.7	%SPAN
NULL SHIFT (0 TO 25°C, 25 TO 50°C) 2		±0.5	±1.0		±0.5	±1.0		±0.5	±1.0		±0.75	±1.5		±1.0	±2.0		±1.0	±2.0	mV
SPAN SHIFT (0 TO 25°C, 25 TO 50°C) P2>P1 2		±1.0	±2.0		±1.0	±1.5		±0.75	±1.5		±0.75	±1.5		±0.5	±1.5		±0.5	±1.5	%SPAN
REPEATABILITY AND HYSTERESIS		±0.5			±0.2			±0.2			±0.2			±0.2			±0.2		%SPAN
OVERPRESSURE (P2>P1; P1>P2)			20			20			45			60			200			500	PSI

ALL PRESSURE RANGES	MIN	NOM	MAX	UNITS
EXCITATION VOLTAGE		10	16	VDC
INPUT RESISTANCE	5.5K	7.5K	11.5K	OHMS
OUTPUT RESISTANCE	1.5K	2.5K	3.0K	OHMS
RESPONSE TIME			1.0	ms

TEMPERATURE RANGES	
STORAGE	-55°C TO +100°C (-67°F TO +212°F)
OPERATE	-40°C TO +85°C (-40F° TO +185°F)
COMPENSATED	0 TO +50°C (+32°F TO +122°F)
OPERATE 10	-20°C TO +85°C

NOTES
1 SPAN IS THE ALGEBRAIC DIFFERENCE BETWEEN OUTPUT AT MAXIMUM RATED OPERATING PRESSURE AND OUTPUT AT 0 PSI
2 TEMPERATURE ERROR IS CALCULATED WITH RESPECT TO 25°C
3 - INPUT MEDIA LIMITED ONLY TO THOSE MATERIALS THAT WILL NOT ATTACK SILICON, THE HOUSING MATERIAL OR SEAL MATERIAL
4 - TERMINALS ARE PLATED FOR SOLDERING (LIMIT SOLDERING TO 315°C FOR 10 SECONDS MAXIMUM)
5 PIN 1 IS IDENTIFIED BY NOTCH IN LEAD
6 - SENSOR IS OPERATIONAL OVER VACUUM PRESSURE RANGE
7 - RATIOMETRIC TO SUPPLY VOLTAGE
8 M5 THREADED PRODUCT
RECOMMENDED TORQUE FOR SEALING: 4 IN-LBS
DO NOT EXCEED 6 IN-LBS OF TORQUE
SIZE 007 O-RING
O-RING COUNTERBORE DIMENSIONS
Ø.300±.003 X ↧.040
9 1/4-28 UNF THREADED PRODUCT:
RECOMMENDED TORQUE FOR SEALING: 8 IN-LBS
DO NOT EXCEED 12 IN-LBS OF TORQUE
SIZE 009 O-RING
O-RING COUNTERBORE DIMENSIONS:
Ø.360±.003 X ↧.040±.002
10 THIS IS FOR CATALOG LISTINGS WITH EPDM SEALS ONLY
11 CATALOG LISTING AND DATE CODE HERE. ALTERNATE FORMAT OF CATALOG LISTING BRAND IS THE ENTIRE CATALOG LISTING

CIRCUIT DIAGRAM



METRIC	INCHES
0,41	.016
0,51	.020
1,02	.040
1,3	.05
1,8	.07
1,93	.076
2,0	.08
2,3	.09
2,5	.10
5,1	.20
6,4	.25
7,9	.31
9,1	.36
12,7	.50
15,3	.60
16,3	.64
20,4	.80
21,6	.85
21,8	.86
22,1	.87
23,9	.94

ANSI Y14.5M-1982 APPLIES

FED. MFG. CODE 91929
MICRO SWITCH a Honeywell Division

BRIDGE PRESSURE SENSOR

CATALOG LISTING
26PC SERIES CHART 5

THIRD ANGLE PROJECTION
SCALE 3 : 1
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.

M 26PC SERIES CHART 5 | PAGE 1 OF 1 | RELEASE NO. CO-174532 | REPLACES -
DRAWING NUMBER 35 | ISSUE
DRAWN J A F 16FEB93 | CHECK SAV 17FEB93 | PTC/CAD 2D

REVISIONS			
A	0000347	JAH 23 MAY 03	23JUN05
B	0001143	CSL 26 AUG 03	AK
C	0002283	CSL 25 NOV 03	
D	0014045	CMH 23 JAN 05	CHECK