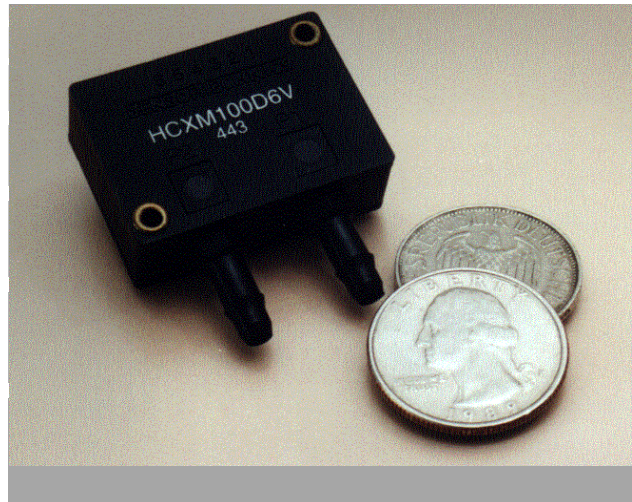


HCX...A6 / HCX(M)...D6 - Series

Fully signal conditioned pressure transducer

FEATURES

- Pressure ranges
from ± 5 mbar to 5 bar differential,
1 and 2 bar absolute
- TTL power supply
- 0.5 to 4.5 V output
- Inline pinning for easy PCB-mounting
- Externally adjustable offset and span



SERVICE

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

Scale: 1 cm
 1 inch

SPECIFICATIONS

Maximum ratings

Excitation voltage 4.8 V to 15 V

Output current

Source 10 mA

Sink 10 mA

Temperature limits

Operating -20°C to 70°C

Storage -20°C to 85°C

Compensated 0°C to 50°C

Humidity 0 - 95 %RH

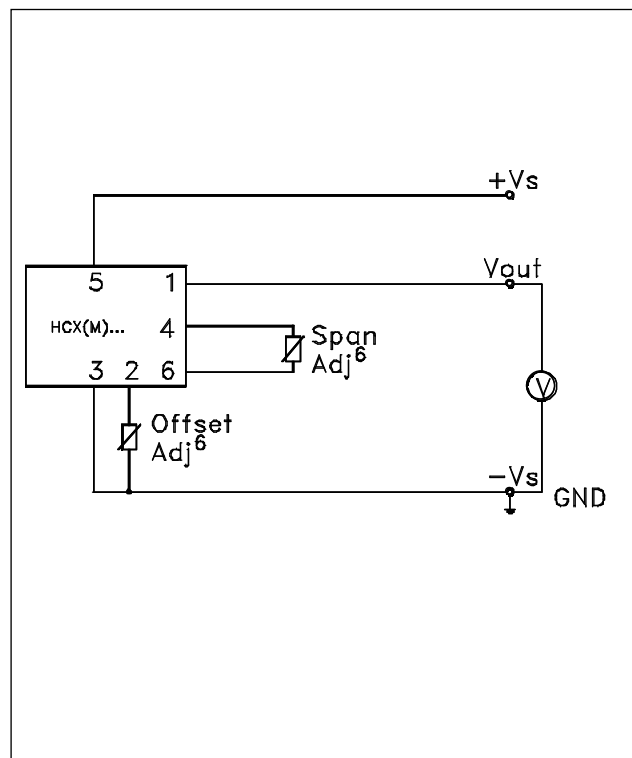
Proof pressure¹

HCXP...M005, HCX...M010 350 mbar

HCXM050 to HCXM350 1.4 bar

all HCX... 2 x rated pressure

ELECTRICAL CONNECTION



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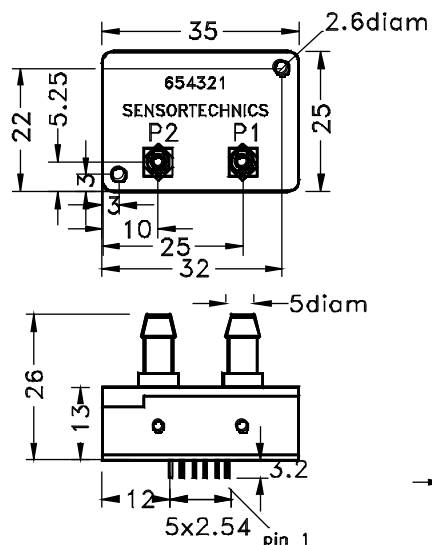
PERFORMANCE CHARACTERISTICS

(unless otherwise noted, $V_s = 5\text{ V}$, $R_L > 100\text{ k}\Omega$, $t_{\text{amb}} = 25^\circ\text{C}$)

Characteristics	Min.	Typ.	Max.	Unit
Operating pressure				
HCXPM005D6...	-5		5	mbar
HCXM010D6...	0		10	
HCXPM010D6...	-10		10	
HCXM020D6...	0		20	
HCXM050D6...	0		50	
HCXM100D6...	0		100	
HCXM350D6...	0		350	
HCX001...6...	0		1000	
HCX002...6...	0		2000	
HCX005...6...	0		5000	
Zero pressure offset				V
all HCXPM...	2.40	2.50	2.60	
HCXM010D6/HCXM020D6...	0.40	0.50	0.60	
all other devices	0.45	0.5	0.55	
Span ⁵	3.95	4.0	4.05	
Full scale output		4.5		
Output at lowest specified pressure		0.5		
Non-linearity and hysteresis (BSL) ²				%FSO
HCXM020D6...		0.5	1.0	
all other devices		0.1	0.5	
Thermal effects (0 to 50°C) ⁴				%FSO/°C
Combined offset and span				
HCXP...M005D6...			0.20	
HCXM010D6... to HCXM050D6...			0.12	
HCXM100D6...			0.10	
all other devices			0.05	
Output impedance			50	Ω
Long term stability ³		± 0.2		%FSO
Power supply rejection				%FSO/V
Offset		0.05		
Span		0.03		
Power consumption		50		mW

OUTLINE DRAWING

HCX(M)...6H, HCXPM...6H



P1: High pressure port for 5 mbar and 10 mbar devices
P2: High pressure port for all other devices.

Mass: 14 g

January 1998/026

SENSORTechnics

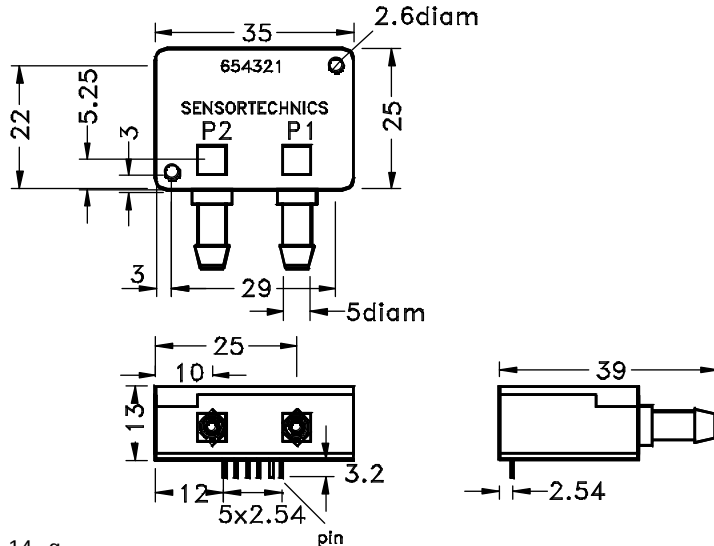
Aubinger Weg 27, 82178 Puchheim, Germany
Phone 0049 - (0) 89 80 08 30, Fax 0049 - (0) 89 8 00 83 33
<http://www.sensortechncs.com>

HCX...A6 / HCX(M)...D6 - Series

Fully signal conditioned pressure transducer

OUTLINE DRAWING

HCX(M)...6V



P1: High pressure port for 5 mbar and 10 mbar devices
P2: High pressure port for all other devices.

Mass: 14 g

All dimensions in mm

ORDERING INFORMATION

Pressure range	Part Number Package version	
	Side facing ports	Top facing ports
Differential / gage devices		
0 to ± 5 mbar	HCXPM005D6V	HCXPM005D6H
0 to 10 mbar	HCXM010D6V	HCXM010D6H
0 to ± 10 mbar	HCXPM010D6V	HCXPM010D6H
0 to 20 mbar	HCXM020D6V	HCXM020D6H
0 to 50 mbar	HCXM050D6V	HCXM050D6H
0 to 100 mbar	HCXM100D6V	HCXM100D6H
0 to 350 mbar	HCXM350D6V	HCXM350D6H
0 to 1 bar	HCX001D6V	HCX001D6H
0 to 2 bar	HCX002D6V	HCX002D6H
0 to 5 bar	HCX005D6V	HCX005D6H
Absolute devices		
0 to 1 bar	HCX001A6V	HCX001A6H
0 to 2 bar	HCX002A6V	HCX002A6H

Specification Notes

1. Proof pressure is the maximum pressure which may be applied without causing damage to the sensing element.
2. Non-linearity - the maximum deviation of measured output at constant temperature, from "Best Straight Line" through three points (offset pressure, full scale pressure and 1/2 full scale pressure).
3. Change after one year or 1 million pressure cycles.
4. Thermal effects tested and guaranteed from 0°C to 50°C relative to 25°C. All specifications shown are relative to 25°C.
5. Span is the algebraic difference between the output at full scale pressure and offset.
6. Offset adjustment possible to lower values only. Do not trim for nominal value minus 150 mV.
Span adjustment possible to lower pressure range (higher gain). Do not trim for more than 15% of full scale pressure

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