

DATASHEET

SPD102DAhyb Pressure Sensor

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spd102dahyb n

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SPECIAL LOW PRESSURE RANGE DIFFERENTIAL SENSOR WITH ANALOGUE OUTPUT



This Smartec differential pressure sensor has an amplified analogue output. The sensor is compensated for offset, sensitivity, temperature drift and nonlinearity.

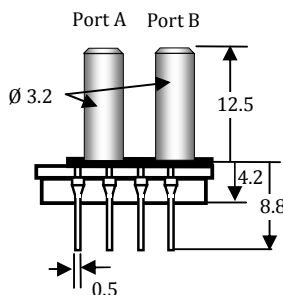
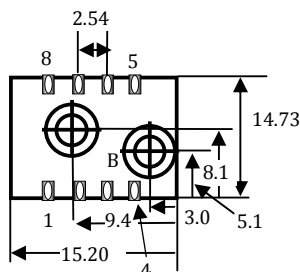
The sensor has a range of 102 mm H₂O FS and the output is ratiometric to the power supply voltage. Other pressure ranges on request (0.3 – 100 PSI).

Electrical Characteristics

Performance Characteristic at V_{cc} =5V excitation @ 25 °C

Parameter	Min	Typ	Max	Units
Supply Voltage	4.75	5.00	5.25	V
Supply Current	-		2.0	mA
Pressure range (fs)		±102		mmH2O
Zero Output (Dif)	2.45	2.5	2.55	V _{dc} @0mmH2O
Span Output (Dif)		2.00		V _{dc} (pos)
Response time		25		ms
Linearity	-2.5		+2.5	%FS
Thermal Hysteresis	-0.1		+0.1	%FS
Temp coeff. Offset	-2.5		+2.5	%FS
Temp coeff. Span	-2		+2	%FS
Pressure overload			10X	rating
Temp compensation	0		50	°C
Operating Temp range	-20		70	°C
Storage temperature	-40		125	°C

- It is advised to place a 100nF capacitor between V_{cc} and Gnd
- Wetted materials are: Pyrex glass, RTV, Ceramic, Nickel and Silicon
- The output is ratiometric to V_{cc}



Pin	Description
1	NC
2	Gnd
3	Out
4	V _{cc}
5 - 8	NC

Use of N.C. pins will cause malfunction
Connect between Gnd and V_{cc} a capacitor of 100 nF