Figure 1. Nomenclature and Order Guide

Package Selection[13] *Calibration Selection*

ASDX **X** **A**

Series

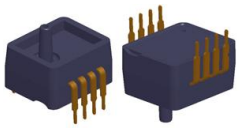
Power Supply Voltage
3 = 3.3 Vdc
5 = 5.0 Vdc

Transfer Function Limits[14]
A = 10% to 90% calibration
B = 5% to 95% calibration

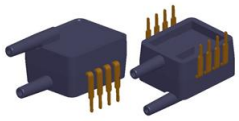
Output Type[15]
A = Analog voltage

Pressure Port

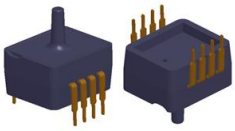
AV = Axial port on top, vented cover on bottom



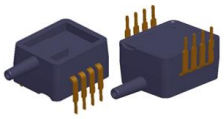
RR = Radial port on top, radial port on bottom



AC = Axial port, sealed cover (commonly used for absolute)



RV = Radial port, single



Future Option

Pressure Range[16, 17, 18]

Gage	Differential	Absolute
-	**005ND =** ±5 in H_2O	-
010NG = 10 in H_2O	**010ND =** ±10 in H_2O	-
-	**015CD =** ±15 cm H_2O	-
025CG = 25 cm H_2O	**025CD =** ±25 cm H_2O	-
001PG = 1 psi	**001PD** = ±1 psi	-
005PG = 5 psi	**005PD** = ±5 psi	-
015PG = 15 psi	**015PD** = ±15 psi	**015PA** = 15 psi
030PG = 30 psi	**030PD** = ±30 psi	**030PA** = 30 psi
100PG = 100 psi	-	**100PA** = 100 psi
-	**015MD** = ±15 mbar	-
025MG = 25 mbar	**025MD** = ±25 mbar	-
050MG = 50 mbar	**050MD** = ±50 mbar	-
100MG = 100 mbar	**100MD** = ±100 mbar	-
200MG = 200 mbar	**200MD** = ±200 mbar	-
500MG = 500 mbar	**500MD** = ±500 mbar	-
001BG = 1 bar	**001BD** = ±1 bar	**001BA** = 1 bar
002BG = 2 bar	**002BD** = ±2 bar	**002BA** = 2 bar
007BG = 7 bar	-	**007BA** = 7 bar
003KG = 3 kPa	**003KD** = ±3 kPa	-
004KG = 4 kPa	**004KD** = ±4 kPa	-
005KG = 5 kPa	**005KD** = ±5 kPa	-
010KG = 10 kPa	**010KD** = ±10 kPa	-
020KG = 20 kPa	**020KD** = ±20 kPa	-
050KG = 50 kPa	**050KD** = ±50 kPa	-
100KG = 100 kPa	**100KD** = ±100 kPa	**100KA** = 100 kPa
200KG = 200 kPa	**200KD** = ±200 kPa	**200KA** = 200 kPa
700KG = 700 kPa	-	**700KA** = 700 kPa

Notes:

13. Other package combinations are possible, please contact Honeywell Customer Service.
14. The transfer function limits define the output of the sensor at a given pressure input. By specifying the output signal at the maximum (Pmax.) and minimum (Pmin.) limits of the pressure range, the complete transfer curve for the sensor is defined. See Figure 2 for a graphical representation of each calibration.
15. For a digital output, please refer to the ASDX Digital Series.
16. Custom pressure ranges are available, please contact Honeywell Customer Service.
17. The pressure units (inches H_20, cm H_20, psi, mbar, bar, kPa) define the units used during calibration and in the application.
18. See Table 5 for an explanation of sensor types.

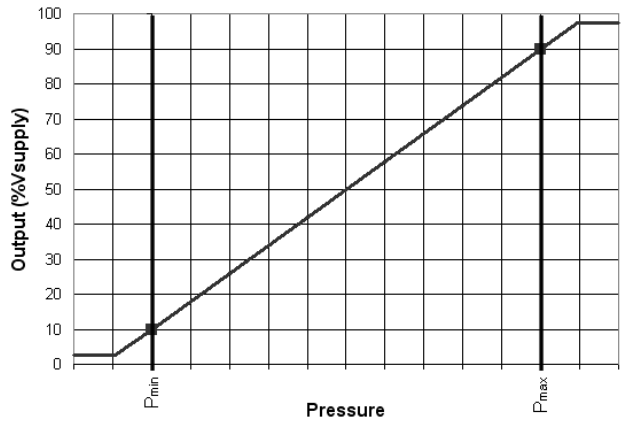
ASDX Series Silicon Pressure Sensors

Table 5. Sensor Types

Type	Description
Absolute	Output is proportional to difference between applied pressure and built-in reference to vacuum (zero pressure).
Gage	Output is proportional to difference between applied pressure and atmospheric (ambient) pressure.
Differential	Output is proportional to difference between pressure applied to each of the pressure ports (Port 1 – Port 2).

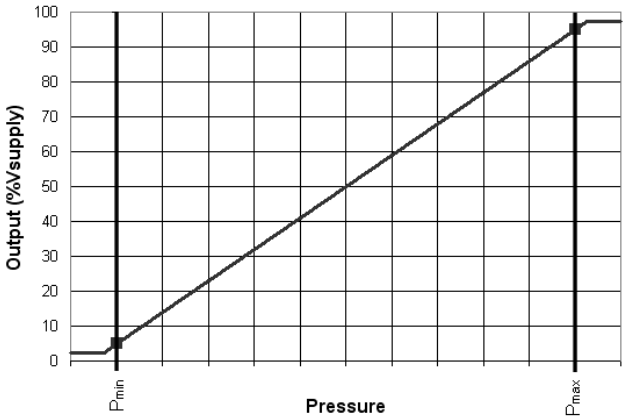
Figure 2. Transfer Functions and Limits

A Calibration, 10% to 90%



$$\text{Output (volts)} = \frac{0.8 \cdot V_{supply}}{P_{max} - P_{min}} \cdot (\text{Pressure}_{applied} - P_{min}) + 0.10 \cdot V_{supply}$$

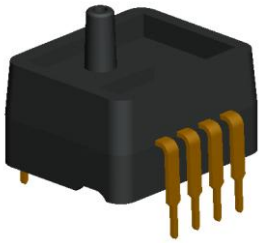
B Calibration, 5% to 95%



$$\text{Output (volts)} = \frac{0.9 \cdot V_{supply}}{P_{max} - P_{min}} \cdot (\text{Pressure}_{applied} - P_{min}) + 0.05 \cdot V_{supply}$$

Figure 3. Completed Catalog Listing Example

ASDXAVX001PGAA3:
AV pressure port, 1 psi gage, analog output, 10% to 90% calibration at 3.3 Vdc operation.



ASDXAV001PGAA3 Output vs. Pressure