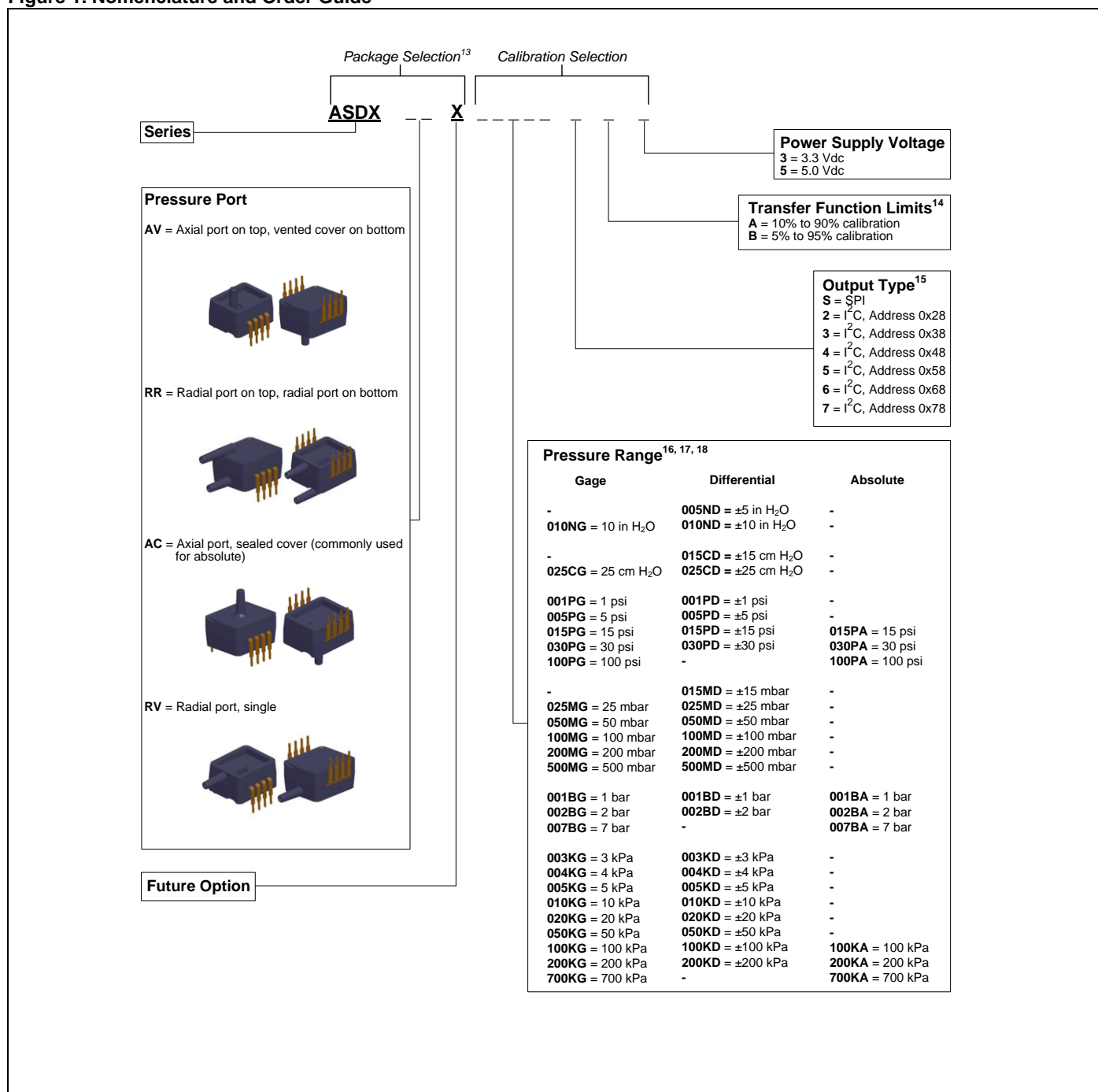


Low and Ultra-Low Pressure Digital Output

Figure 1. Nomenclature and Order Guide



Notes:

- Other package combinations are possible, please contact Honeywell Customer Service.
- 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. For the 12-bit digital output, Table 6 provides the output of the sensor at significant percentages. These outputs are valid at the rated input voltage of the sensor.
- The output type defines which communication protocol the sensor uses to communicate. Available protocols are I²C or half duplex SPI (sensor acts only as a slave). This communication protocol is not field selectable, and must be defined when ordering the sensor.
- Custom pressure ranges are available, please contact Honeywell Customer Service.
- The pressure units (inches H₂O, cm H₂O, psi, mbar, bar, kPa) define the units used during calibration and in the application.
- 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

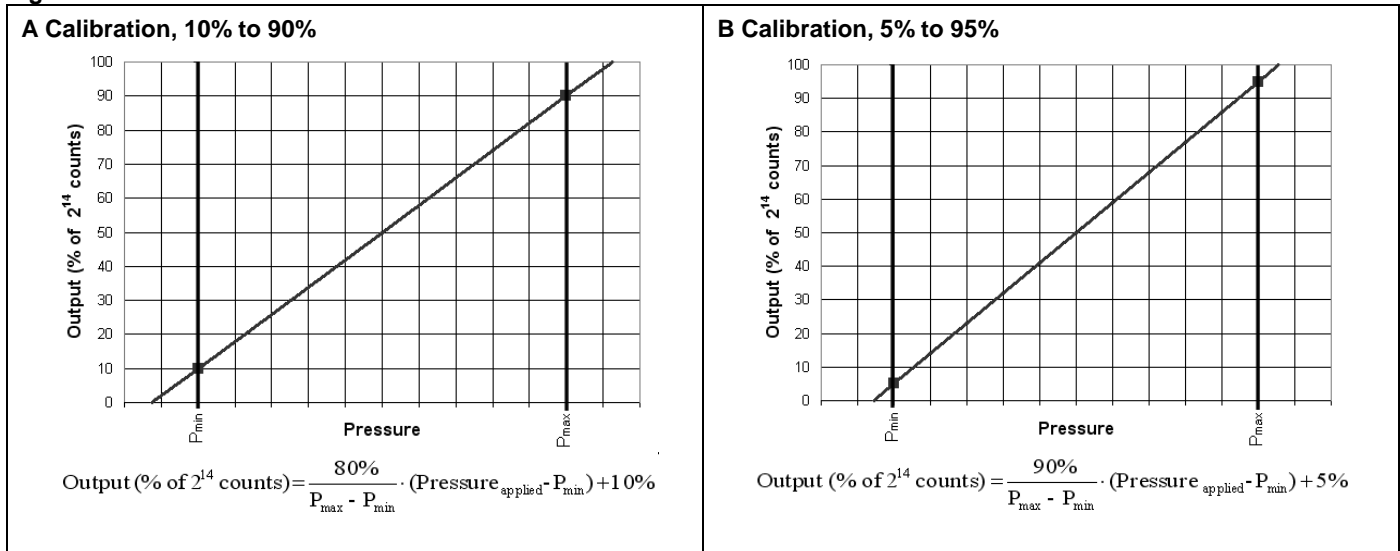


Table 6. Sensor Output at Significant Percentages

% Output	Digital Counts (dec)	Digital Counts (hex)
0%	0	0x0000
5%	819	0x0333
10%	1638	0x0666
50%	8192	0x2000
90%	14746	0x399A
95%	15565	0x3CCD
100%	16383	0x3FFF

Figure 3. Completed Catalog Listing Example

