

Installation Instructions for the TruStability® Board Mount Pressure Sensors

HSC Series—High Accuracy, Compensated/Amplified

±1.6 mbar to ±10 bar | ±160 Pa to ±1 MPa | ±0.5 inH₂O to ±150 psi

Digital or Analog Output

SSC Series—Standard Accuracy, Compensated/Amplified

±1.6 mbar to ±10 bar | ±160 Pa to ±1 MPa | ±0.5 inH₂O to ±150 psi

Digital or Analog Output

GENERAL INFORMATION

Honeywell's TruStability® High Accuracy Silicon Ceramic (HSC) Series and Standard Accuracy Silicon Ceramic (SSC) Series are piezoresistive silicon pressure sensors offering a digital or analog output for reading pressure over the specified full scale pressure span and temperature range.

These sensors measure absolute, gage, or differential pressures. The absolute versions have an internal vacuum reference and an output value proportional to absolute pressure. Gage versions are referenced to atmospheric pressure and provide an output proportional to pressure variations from atmosphere. Differential versions allow measurement of pressure between the two pressure ports.

The HSC Series is calibrated over the temperature range of 0 °C to 50 °C [32 °F to 122 °F] while the SSC Series is calibrated over the temperature range of -20 °C to 85 °C [-4 °F to 185 °F].

The TruStability® pressure sensors are intended for use with non-corrosive, non-ionic gases, such as air and other dry gases. An available option extends the performance of these sensors to non-corrosive, non-ionic liquids for pressure ranges above 40 mbar | 4 kPa | 20 inH₂O.

CLEANING

CAUTION

IMPROPER CLEANING

Avoid cleaning the sensor; however, if it must be cleaned ensure cleaning fluids, such as appropriate alcohols or fluorinated solvents, are used based on the type of contaminants to be removed. Do not immerse the sensor. **Failure to comply with these instructions may result in product damage.**

CAUTION

PRODUCT DAMAGE FOR SENSORS WITH LIQUID MEDIA OPTION (ONLY AVAILABLE 60 MBAR | 6 KPA | 1 PSI AND ABOVE)

- Ensure liquid media is applied to Port 1 only; Port 2 is not compatible with liquids.
- Ensure liquid media contains no particulates. All TruStability® sensors are dead-ended devices. Particulates can accumulate inside the sensor, causing damage or affecting sensor output.
- Recommend that the sensor be positioned with Port 1 facing downwards; any particulates in the system are less likely to enter and settle within the pressure sensor if it is in this position.
- Ensure liquid media does not create a residue when dried; build-up inside the sensor may affect sensor output. Rinsing of a dead-ended sensor is difficult and has limited effectiveness for removing residue.
- Ensure liquid media are compatible with wetted materials. Noncompatible liquid media will degrade sensor performance and may lead to sensor failure.

Failure to comply with these instructions may result in product damage.

Table 1. Absolute Maximum Ratings¹

Characteristic	Min.	Max.	Unit
Supply voltage (V_{supply}) ² :	-3.0	6.0	Vdc
Storage temperature	-40 [-40]	85 [185]	°C [°F]
Soldering time and temperature:			
lead solder temperature (SIP, DIP)	4 s max. at 250 °C [482 °F]		
peak reflow temperature (SMT)	15 s max. at 250 °C [482 °F]		

¹ Absolute maximum ratings are the extreme limits the device will withstand without damage.

² Incorrect application of supply voltage or ground to the wrong pin may cause electrical failure.

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Table 2. Environmental Specifications

Characteristic	Parameter
Humidity: gases only (See “Options N and D” in Figures 5 and 6.) liquid media (See “Options T and V” in Figures 5 and 6.)	0% to 95% RH, non-condensing 100% condensing or direct liquid media on Port 1
Vibration	MIL-STD-202G Method 204D, Condition B (15 g, 10 Hz to 2 Hz)
Shock	MIL-STD-202G, Method 213B, Condition C (100 g, 6 ms duration)
Life ¹	1 million pressure cycles minimum
Solder reflow	J-STD-020-D.1 Moisture Sensitivity Level 1 (unlimited shelf life when stored at ≤30 °C/85 % RH)

¹Life may vary depending on specific application in which sensor is utilized.

Table 3. Wetted Materials¹

Component	Port 1 (Pressure Port)	Port 2 (Reference Port)
Ports and covers	high temperature polyamide	high temperature polyamide
Substrate	alumina ceramic	alumina ceramic
Adhesives	epoxy, silicone	epoxy, silicone
Electronic components	ceramic, silicon, glass, solder	silicon, glass, gold

¹Contact Honeywell Customer Service for detailed material information.

Table 4. HSC Series and SSC Series Analog Operating Specifications

Characteristic	Min.	Typ.	Max.	Unit
Supply voltage (V_{supply}) ^{1, 2, 3} : pressure ranges ≥60 mbar 6 kPa 1 psi: 3.3 Vdc 5.0 Vdc pressure ranges ≤40 mbar 4 kPa 20 inH ₂ O: 3.3 Vdc 5.0 Vdc	3.0 4.75 3.27 4.95	3.3 5.0 3.3 5.0	3.6 5.25 3.33 5.05	Vdc
Supply current: 3.3 Vdc 5.0 Vdc	— —	2.1 2.7	2.8 3.5	mA
Operating temperature range ⁴ : HSC SSC	-20 [-4] -40 [-40]	— —	85 [185] 85 [185]	°C [°F]
Compensated temperature range ⁵ : HSC SSC	0 [-32] -20 [-4]	— —	50 [122] 85 [185]	°C [°F]
Startup time (power up to data ready)	—	—	5	ms
Response time	—	1	—	ms
Clipping limit: upper lower	— 2.5	— —	97.5 —	%Vsupply
Accuracy ⁶	—	—	±0.25	%FSS BFSL ⁸
Output resolution	0.03	—	—	%FSS
Orientation sensitivity (± 1 g) ^{7, 9} : pressure ranges ≤40 mbar 4 kPa 20 inH ₂ O: pressure ranges ≤2.5 mbar 250 Pa 1 inH ₂ O:	— —	±0.1 ±0.2	— —	%FSS

¹Sensors are either 3.3 Vdc or 5.0 Vdc based on the catalog listing selected.

²Ratiometricity of the sensor (the ability of the device output to scale to the supply voltage) is achieved within the specified operating voltage.

³The sensor is not reverse polarity protected. Incorrect application of supply voltage or ground to the wrong pin may cause electrical failure.

⁴Operating temperature range: The temperature range over which the sensor will produce an output proportional to pressure.

⁵Compensated temperature range: The temperature range over which the sensor will produce an output proportional to pressure within the specified performance limits.

⁶Accuracy: The maximum deviation in output from a Best Fit Straight Line (BFSL) fitted to the output measured over the pressure range at 25 °C [77 °F]. Includes all errors due to pressure non-linearity, pressure hysteresis, and non-repeatability.

⁷Orientation sensitivity: The maximum change in offset of the sensor due to a change in position or orientation relative to Earth's gravitational field.

⁸Full Scale Span (FSS): The algebraic difference between the output signal measured at the maximum (Pmax.) and minimum (Pmin.) limits of the pressure range. (See Figures 5 and 6 for ranges.)

⁹Insignificant for pressure ranges above 40 mbar | 4 kPa | 20 inH₂O.

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Table 5. HSC Series and SSC Series Digital Operating Specifications

Characteristic	Min.	Typ.	Max.	Unit
Supply voltage (V_{supply}) ^{1, 2, 3:}				
pressure ranges ≥ 60 mbar 6 kPa 1 psi:				
3.3 Vdc	3.0	3.3	3.6	Vdc
5.0 Vdc	4.75	5.0	5.25	
pressure ranges ≤ 40 mbar 4 kPa 20 inH ₂ O:				
3.3 Vdc	3.27	3.3	3.33	
5.0 Vdc	4.95	5.0	5.05	
Supply current:				
3.3 Vdc	—	3.1	3.9	mA
5.0 Vdc	—	3.7	4.6	
Operating temperature range ^{4:}				
HSC	-20 [-4]	—	85 [185]	°C [°F]
SSC	-40 [-40]	—	85 [185]	
Compensated temperature range ^{5:}				
HSC	0 [-32]	—	50 [122]	°C [°F]
SSC	-20 [-4]	—	85 [185]	
Startup time (power up to data ready)	—	—	3	ms
Response time	—	0.46	—	ms
SPI/I ² C voltage level:				
low	—	—	20	%Vsupply
high	80	—	—	
Pull up on SDA/MISO, SCL/SCLK, SS	1	—	—	kOhm
Accuracy ⁶	—	—	± 0.25	%FSS BFSL ⁸
Output resolution	12	—	—	bits
Orientation sensitivity (± 1 g) ^{7, 9}				
pressure ranges ≤ 40 mbar 4 kPa 20 inH ₂ O:	—	± 0.1	—	%FSS
pressure ranges ≤ 2.5 mbar 250 Pa 1 inH ₂ O:	—	± 0.2	—	

¹Sensors are either 3.3 Vdc or 5.0 Vdc based on the catalog listing selected.

²Ratiometricity of the sensor (the ability of the device output to scale to the supply voltage) is achieved within the specified operating voltage.

³The sensor is not reverse polarity protected. Incorrect application of supply voltage or ground to the wrong pin may cause electrical failure.

⁴Operating temperature range: The temperature range over which the sensor will produce an output proportional to pressure.

⁵Compensated temperature range: The temperature range over which the sensor will produce an output proportional to pressure within the specified performance limits.

⁶Accuracy: The maximum deviation in output from a Best Fit Straight Line (BFSL) fitted to the output measured over the pressure range at 25 °C [77 °F]. Includes all errors due to pressure non-linearity, pressure hysteresis, and non-repeatability.

⁷Orientation sensitivity: The maximum change in offset of the sensor due to a change in position or orientation relative to Earth's gravitational field.

⁸Full Scale Span (FSS): The algebraic difference between the output signal measured at the maximum (Pmax.) and minimum (Pmin.) limits of the pressure range. (See Figures 5 and 6 for ranges.)

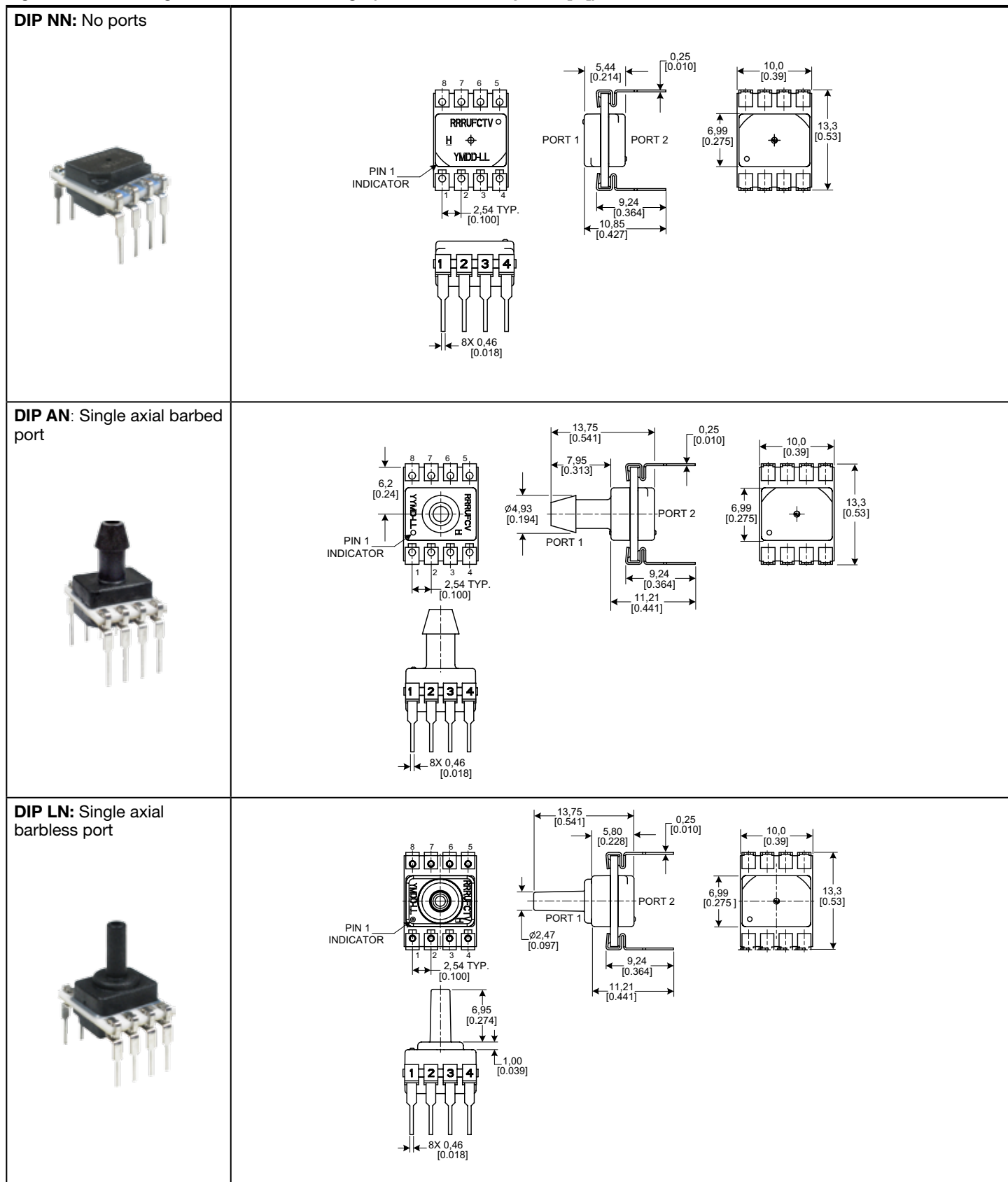
⁹Insignificant for pressure ranges above 40 mbar | 4 kPa | 20 inH₂O.

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Figure 1. DIP Package Dimensional Drawings (For reference only: mm [in])



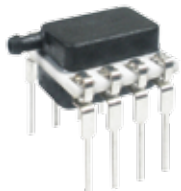
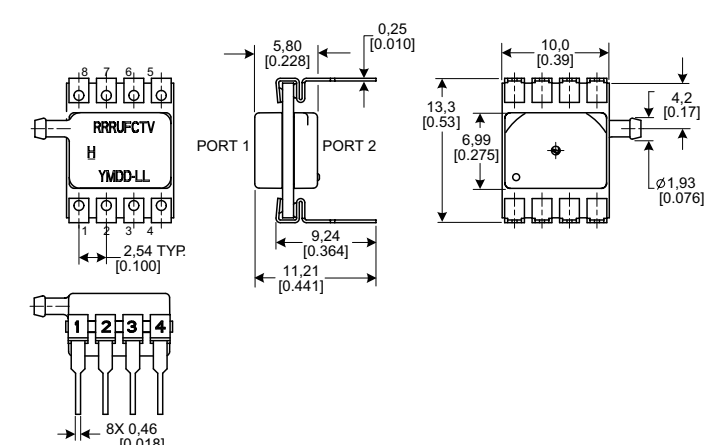
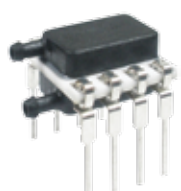
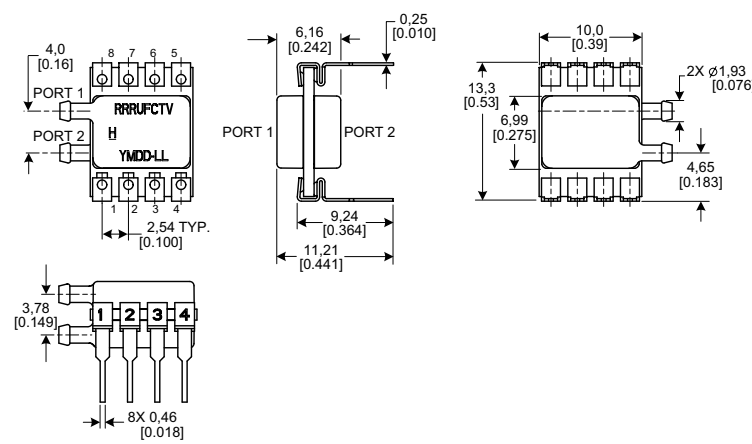
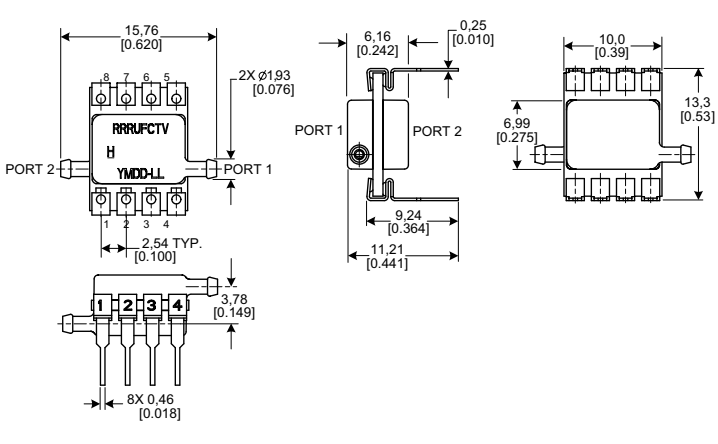
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Figure 1. DIP Package Dimensional Drawings (continued)

DIP RN: Single radial barbed port 	 Top view dimensions: 10.0 [0.39] (width), 13.3 [0.53] (height), 6.99 [0.275] (pin pitch), 4.2 [0.17] (port offset), $\phi 1.93$ [0.076] (port diameter). Side view dimensions: 5.80 [0.228] (port height), 0.25 [0.010] (port thickness), 9.24 [0.364] (pin length), 11.21 [0.441] (total length). Bottom view dimensions: 2.54 TYP. [0.100] (pin pitch), 8X 0.46 [0.018] (pin diameter).
DIP RR: Dual radial barbed ports, same side 	 Top view dimensions: 10.0 [0.39] (width), 13.3 [0.53] (height), 6.99 [0.275] (pin pitch), 4.65 [0.183] (port offset), 2X $\phi 1.93$ [0.076] (port diameter). Side view dimensions: 6.16 [0.242] (port height), 0.25 [0.010] (port thickness), 9.24 [0.364] (pin length), 11.21 [0.441] (total length). Bottom view dimensions: 2.54 TYP. [0.100] (pin pitch), 8X 0.46 [0.018] (pin diameter), 3.78 [0.149] (port offset).
DIP DR: Dual radial barbed ports, opposite sides 	 Top view dimensions: 15.76 [0.620] (width), 13.3 [0.53] (height), 6.99 [0.275] (pin pitch), 4.65 [0.183] (port offset), 2X $\phi 1.93$ [0.076] (port diameter). Side view dimensions: 6.16 [0.242] (port height), 0.25 [0.010] (port thickness), 9.24 [0.364] (pin length), 11.21 [0.441] (total length). Bottom view dimensions: 2.54 TYP. [0.100] (pin pitch), 8X 0.46 [0.018] (pin diameter), 3.78 [0.149] (port offset).

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Figure 1. DIP Package Dimensional Drawings (continued)

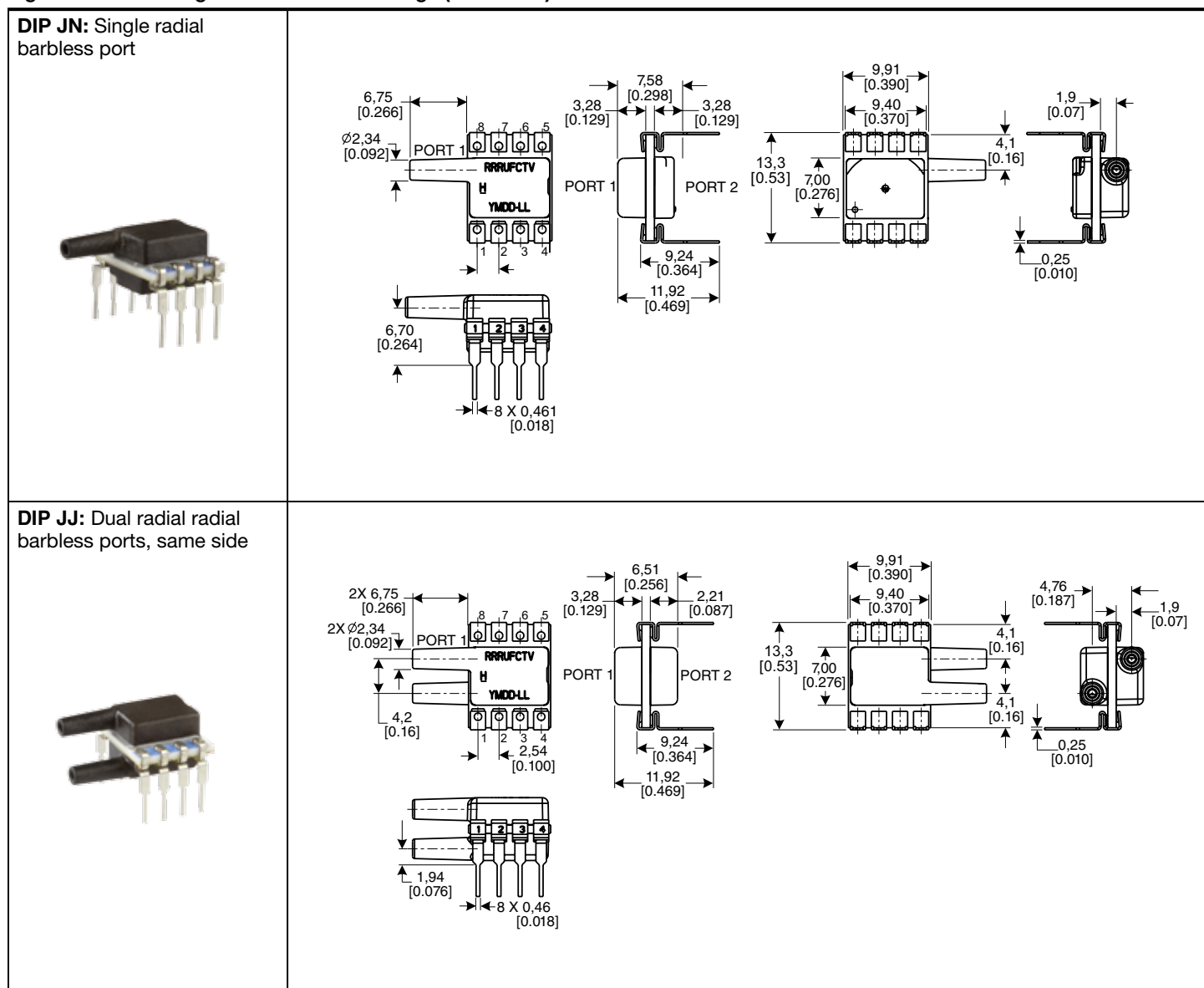
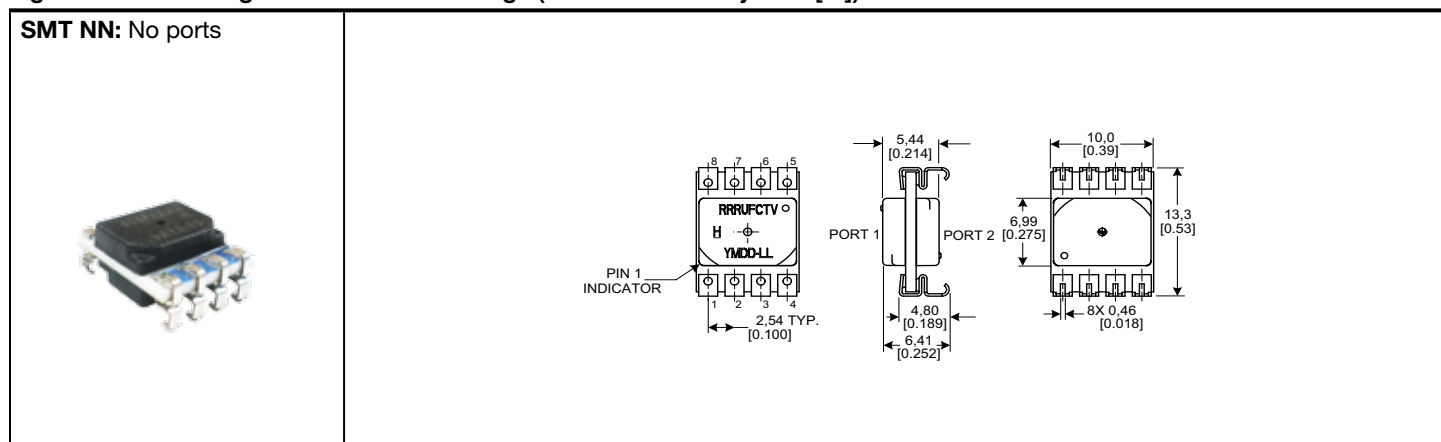


Figure 2. SMT Package Dimensional Drawings (For reference only: mm [in])

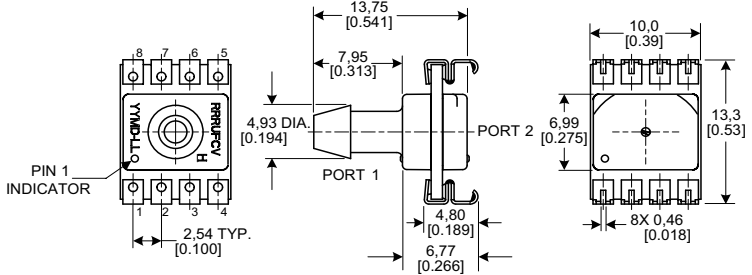
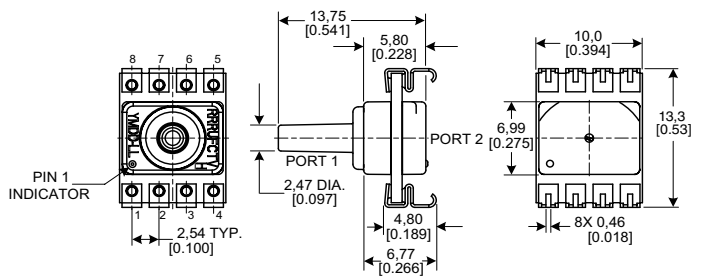
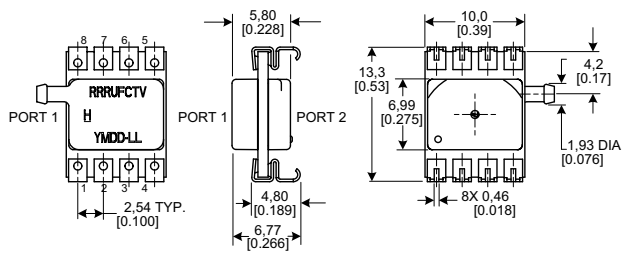


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Figure 2. SMT Package Dimensional Drawings (continued)

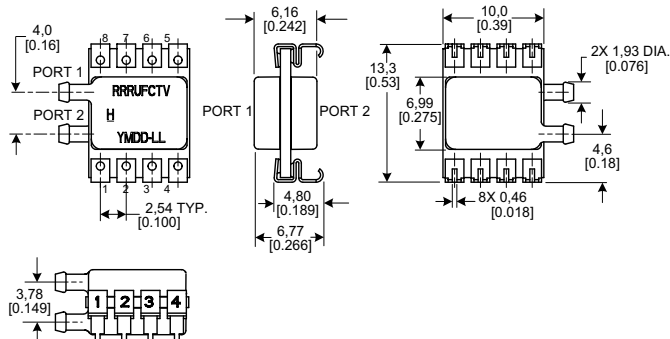
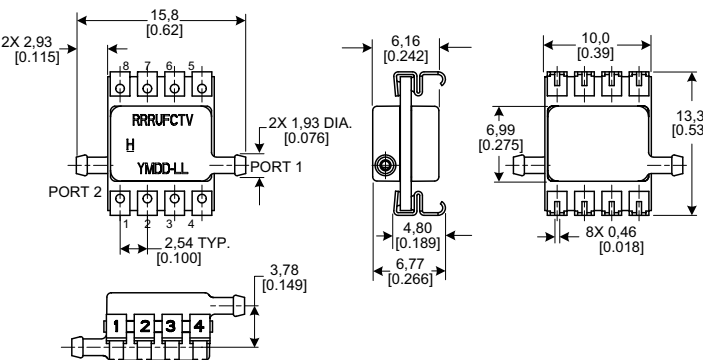
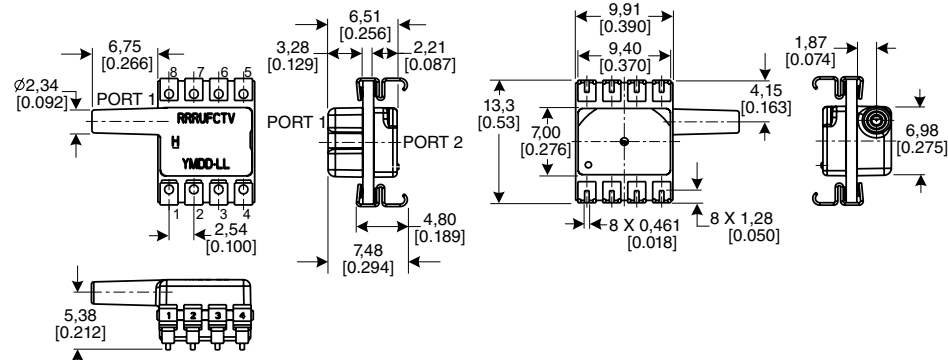
SMT AN: Single axial barbed port 	 Top view dimensions: 8, 7, 6, 5, 4, 3, 2, 1 (pins); 2.54 TYP. [0.100] (pitch); PIN 1 INDICATOR; 4.93 DIA. [0.194] (PORT 1); 13.75 [0.541] (PORT 1 length); 7.95 [0.313] (PORT 1 length); 10.0 [0.39] (PORT 2 width); 6.99 [0.275] (PORT 2 width); 13.3 [0.53] (PORT 2 height); 4.80 [0.189] (PORT 2 length); 6.77 [0.266] (PORT 2 length); 8X 0.46 [0.018] (PORT 2 pins).
SMT LN: Single axial barbless port 	 Top view dimensions: 8, 7, 6, 5, 4, 3, 2, 1 (pins); 2.54 TYP. [0.100] (pitch); PIN 1 INDICATOR; 2.47 DIA. [0.097] (PORT 1); 13.75 [0.541] (PORT 1 length); 5.80 [0.228] (PORT 1 length); 10.0 [0.394] (PORT 2 width); 6.99 [0.275] (PORT 2 width); 13.3 [0.53] (PORT 2 height); 4.80 [0.189] (PORT 2 length); 6.77 [0.266] (PORT 2 length); 8X 0.46 [0.018] (PORT 2 pins).
SMT RN: Single radial barbed port 	 Top view dimensions: 8, 7, 6, 5, 4, 3, 2, 1 (pins); 2.54 TYP. [0.100] (pitch); PORT 1; PORT 2; 5.80 [0.228] (PORT 1 length); 10.0 [0.39] (PORT 2 width); 13.3 [0.53] (PORT 2 height); 6.99 [0.275] (PORT 2 width); 4.2 [0.17] (PORT 2 length); 1.93 DIA. [0.076] (PORT 2 pins); 4.80 [0.189] (PORT 2 length); 6.77 [0.266] (PORT 2 length); 8X 0.46 [0.018] (PORT 2 pins).

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Figure 2. SMT Package Dimensional Drawings (continued)

SMT RR: Dual radial barbed ports, same side 	 Top view dimensions: 4.0 [0.16] (PORT 1), 4.0 [0.16] (PORT 2), 2.54 TYP. [0.100] (pins 1-4), 2.54 TYP. [0.100] (pins 5-8), 10.0 [0.39] (pin pitch), 13.3 [0.53] (height), 6.99 [0.275] (height), 4.6 [0.18] (height), 2X 1.93 DIA. [0.076] (ports), 8X 0.46 [0.018] (pins). Side view dimensions: 6.16 [0.242] (height), 4.80 [0.189] (height), 6.77 [0.266] (height). Bottom view dimensions: 3.78 [0.149] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height).
SMT DR: Dual radial barbed ports, opposite sides 	 Top view dimensions: 15.8 [0.62] (width), 2X 2.93 [0.115] (ports), 2.54 TYP. [0.100] (pins 1-4), 2.54 TYP. [0.100] (pins 5-8), 10.0 [0.39] (pin pitch), 13.3 [0.53] (height), 6.99 [0.275] (height), 4.6 [0.18] (height), 2X 1.93 DIA. [0.076] (ports), 8X 0.46 [0.018] (pins). Side view dimensions: 6.16 [0.242] (height), 4.80 [0.189] (height), 6.77 [0.266] (height). Bottom view dimensions: 3.78 [0.149] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height).
SMT JN: Single radial barbless port 	 Top view dimensions: 6.75 [0.266] (PORT 1), 3.28 [0.129] (PORT 2), 2.21 [0.087] (PORT 3), 2.54 TYP. [0.100] (pins 1-4), 2.54 TYP. [0.100] (pins 5-8), 9.91 [0.390] (pin pitch), 9.40 [0.370] (pin pitch), 13.3 [0.53] (height), 7.00 [0.276] (height), 4.15 [0.163] (height), 1.87 [0.074] (height), 6.98 [0.275] (height), 8 X 0.461 [0.018] (pins), 8 X 1.28 [0.050] (pins). Side view dimensions: 6.51 [0.256] (height), 3.28 [0.129] (height), 2.21 [0.087] (height), 4.80 [0.189] (height), 7.48 [0.294] (height). Bottom view dimensions: 5.38 [0.212] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height), 1.27 [0.050] (height).

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Figure 2. SMT Package Dimensional Drawings (continued)

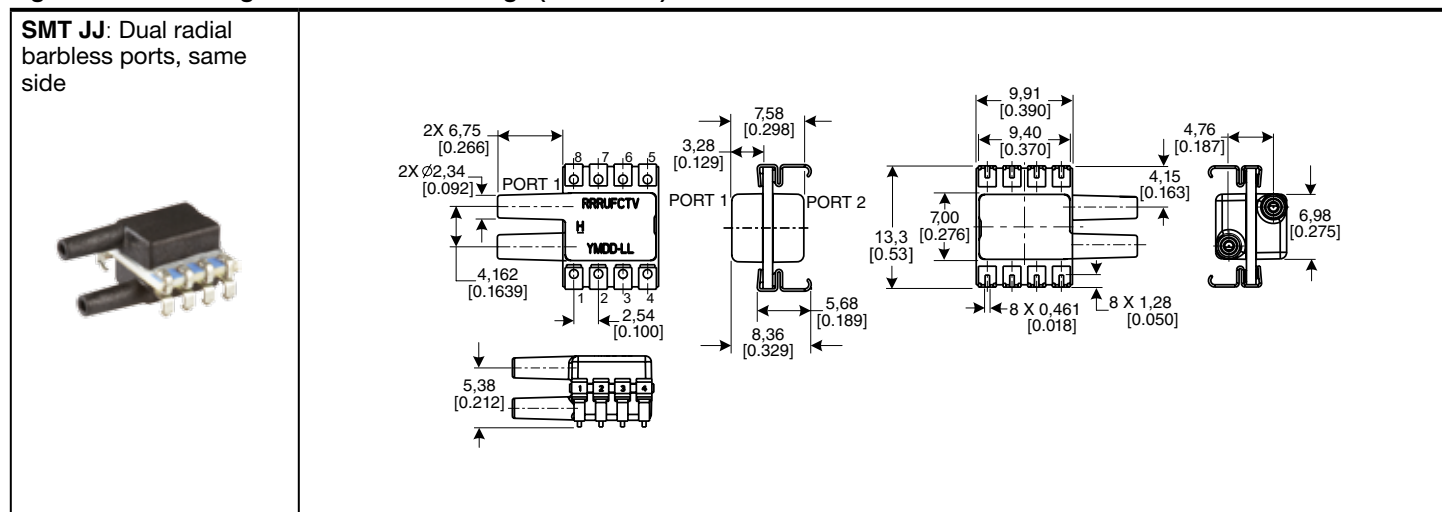
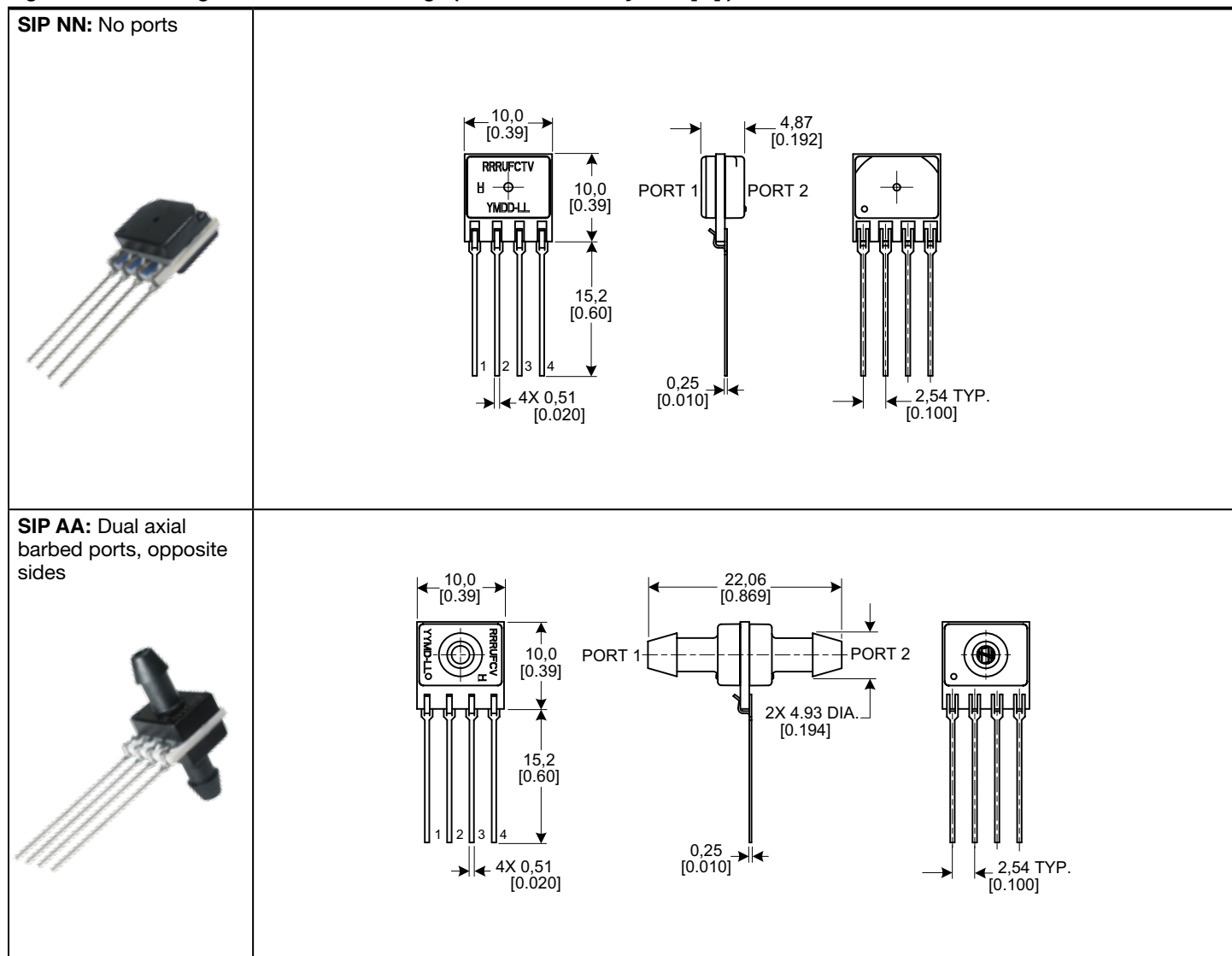


Figure 3. SIP Package Dimensional Drawings (For reference only: mm [in].)

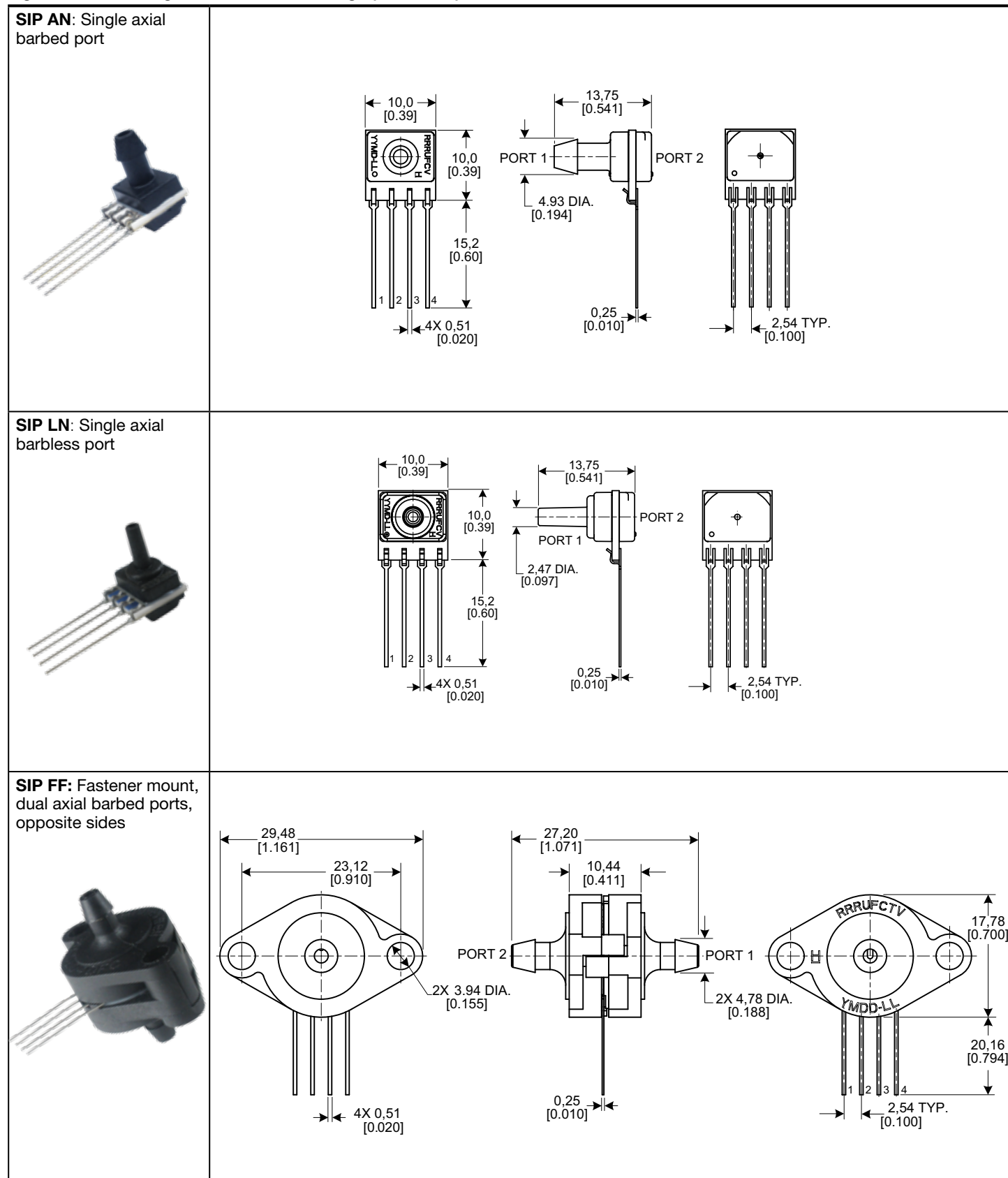


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Figure 3. SIP Package Dimensional Drawings (continued)

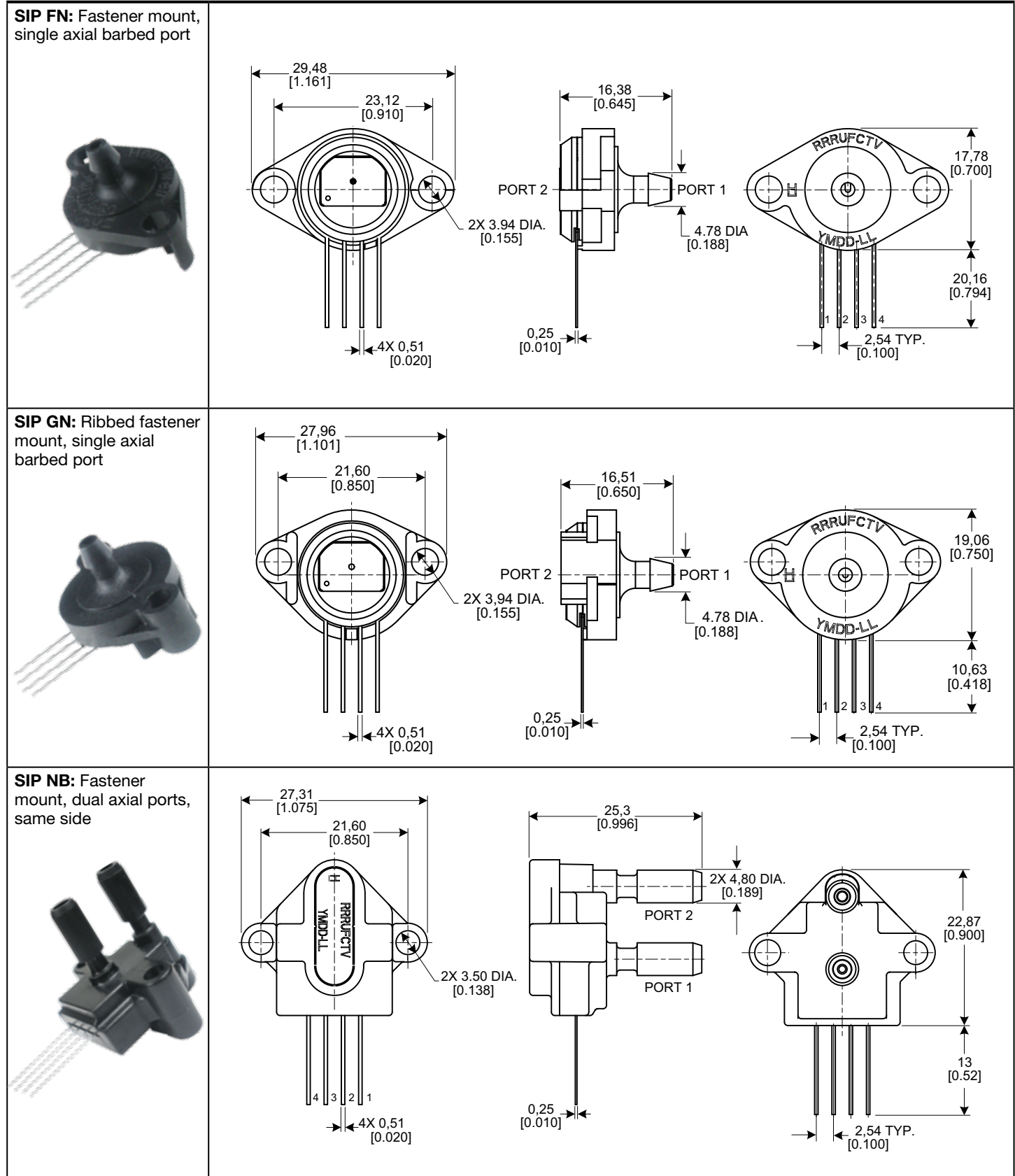


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Figure 3. SIP Package Dimensional Drawings (continued)

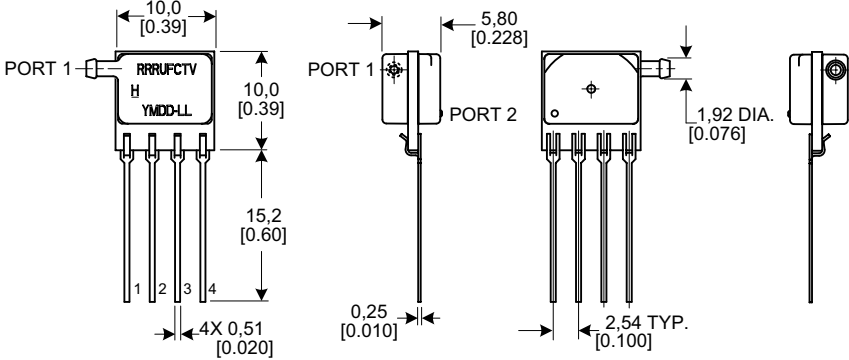
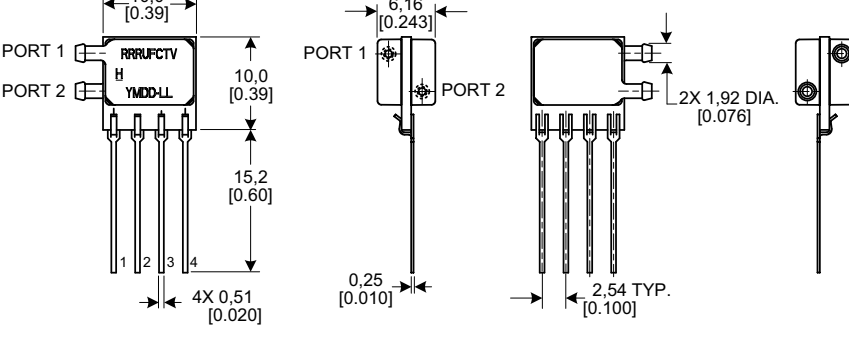
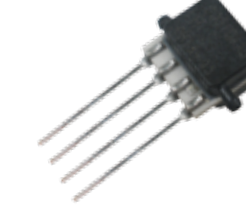
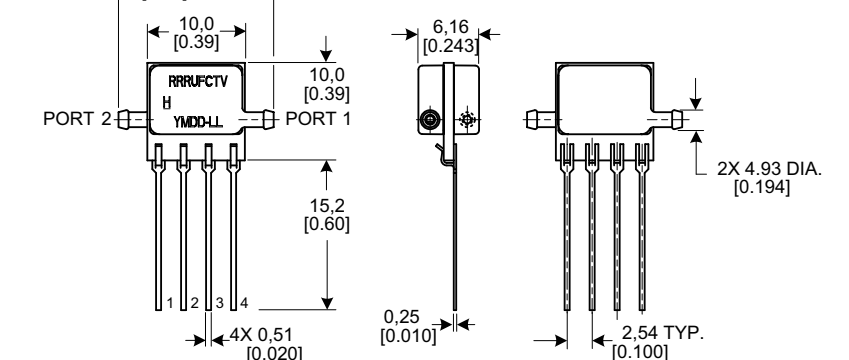


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Figure 3. SIP Package Dimensional Drawings (continued)

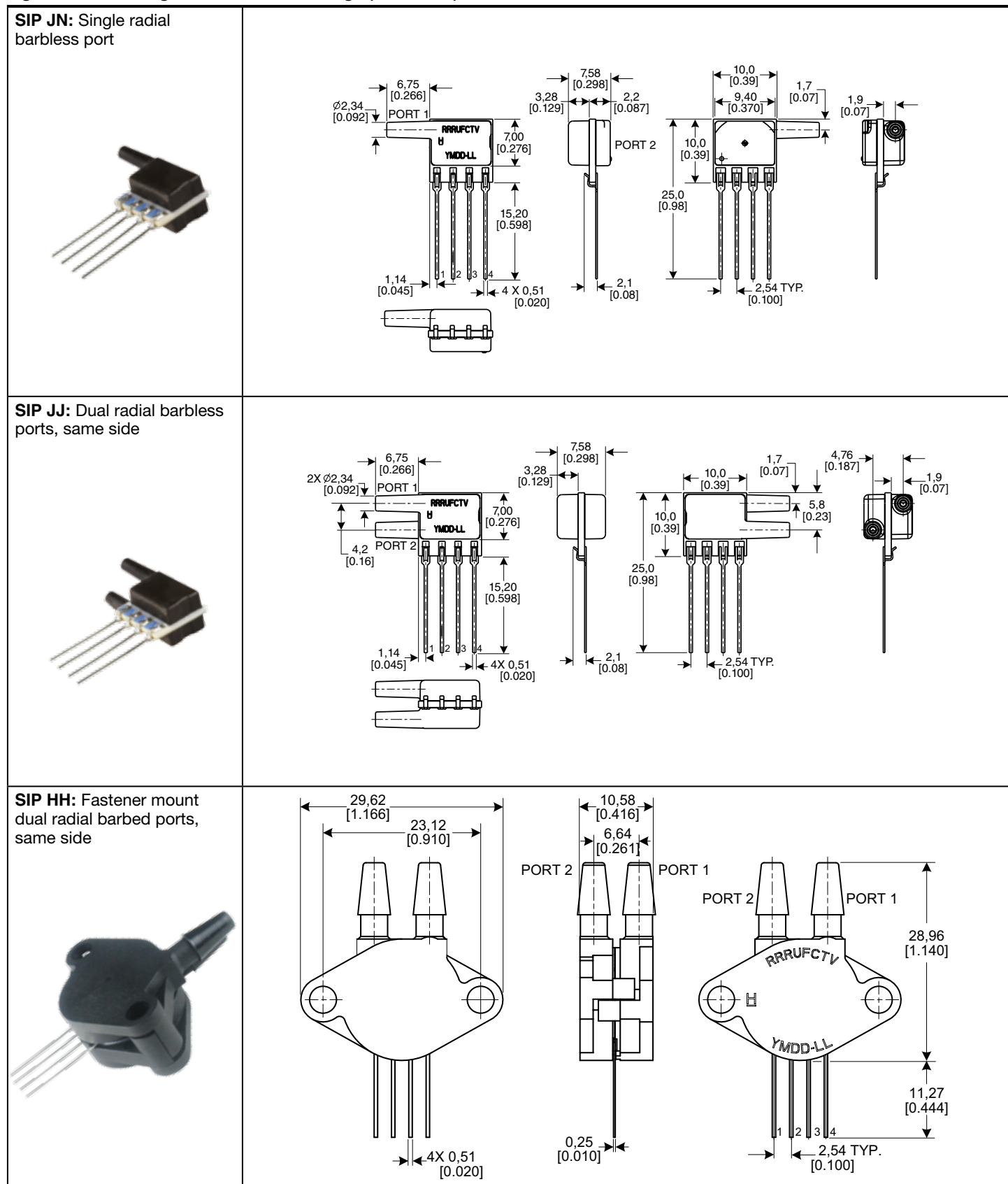
SIP RN: Single radial barbed port 	 Top view dimensions: 10,0 [0.39] (PORT 1 to center), 10,0 [0.39] (center to edge), 15,2 [0.60] (pin pitch), 4X 0,51 [0.020] (pin width). Side view dimensions: 5,80 [0.228] (PORT 1 to center), 0,25 [0.010] (pin diameter), 2,54 TYP. [0.100] (pin pitch). Front view dimensions: 1,92 DIA. [0.076] (port diameter), 2,54 TYP. [0.100] (pin pitch).
SIP RR: Dual radial barbed ports, same side 	 Top view dimensions: 10,0 [0.39] (PORT 1 to center), 10,0 [0.39] (center to edge), 15,2 [0.60] (pin pitch), 4X 0,51 [0.020] (pin width). Side view dimensions: 6,16 [0.243] (PORT 1 to center), 0,25 [0.010] (pin diameter), 2,54 TYP. [0.100] (pin pitch). Front view dimensions: 2X 1,92 DIA. [0.076] (port diameter), 2,54 TYP. [0.100] (pin pitch).
SIP DR: Dual radial barbed ports, opposite sides 	 Top view dimensions: 15,8 [0.62] (PORT 2 to center), 10,0 [0.39] (center to edge), 10,0 [0.39] (center to edge), 15,2 [0.60] (pin pitch), 4X 0,51 [0.020] (pin width). Side view dimensions: 6,16 [0.243] (PORT 1 to center), 0,25 [0.010] (pin diameter), 2,54 TYP. [0.100] (pin pitch). Front view dimensions: 2X 4,93 DIA. [0.194] (port diameter), 2,54 TYP. [0.100] (pin pitch).

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Figure 3. SIP Package Dimensional Drawings (continued)



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Figure 3. SIP Package Dimensional Drawings (continued)

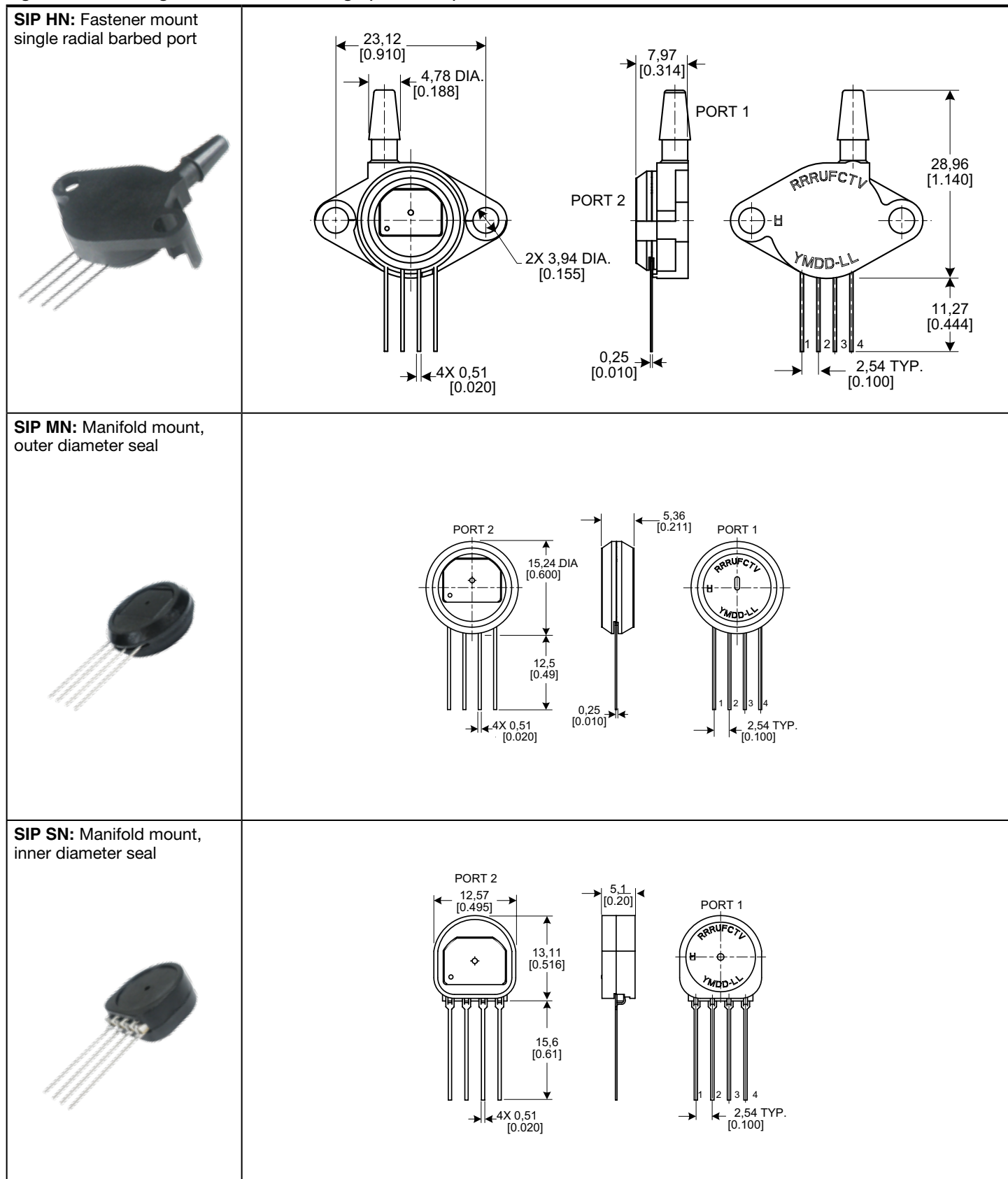


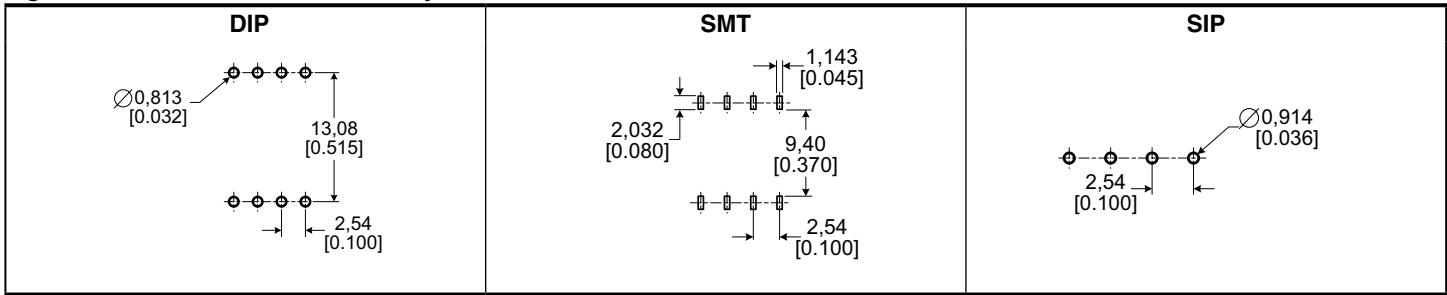
Table 6. Pinouts for DIP and SMT Packages

Output Type	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
I ² C	GND	Vsupply	SDA	SCL	NC	NC	NC	NC
SPI	GND	Vsupply	MISO	SCLK	SS	NC	NC	NC
Analog	NC	Vsupply	Vout	GND	NC	NC	NC	NC

Table 7. Pinouts for SIP Packages

Output Type	Pin 1	Pin 2	Pin 3	Pin 4
I ² C	GND	Vsupply	SDA	SCL
Analog	NC	Vsupply	Vout	GND

Figure 4. Recommended PCB Pad Layouts



HSC Series—High Accuracy, Compensated/Amplified

SSC Series—Standard Accuracy, Compensated/Amplified

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Figure 5. HSC Series Nomenclature and Order Guide

For example, **HSCDNNN150PGAA3** defines an HSC Series TruStability® Pressure Sensor, DIP package, NN pressure port, no special options, 150 psi gage pressure range, analog output type, 10% to 90% of Vsupply transfer function, 3.3 Vdc supply voltage.

Product Series			Supply Voltage		
HSC High Accuracy, Compensated/Amplified			3	3.3 Vdc	
			5	5.0 Vdc	
Package			Transfer Function ¹		
D	DIP (Dual Inline Pin)		A	10% to 90% of Vsupply (analog), 2 ¹⁴ counts (digital)	
M	SMT (Surface Mount Technology)		B	5% to 95% of Vsupply (analog), 2 ¹⁴ counts (digital)	
S	SIP (Single Inline Pin)		C	5% to 85% of Vsupply (analog), 2 ¹⁴ counts (digital)	
			F	4% to 94% of Vsupply (analog), 2 ¹⁴ counts (digital)	
Pressure Port			Output Type ²		
DIP			A	Analog	
SMT			S	SPI	
SIP			2	I ² C, Address 0x28	
			3	I ² C, Address 0x38	
			6	I ² C, Address 0x68	
			7	I ² C, Address 0x78	
			4	I ² C, Address 0x48	
			5	I ² C, Address 0x58	
			6	I ² C, Address 0x68	
			7	I ² C, Address 0x78	
			8	I ² C, Address 0x88	
			9	I ² C, Address 0x98	
			10	I ² C, Address 0xA8	
			11	I ² C, Address 0xB8	
			12	I ² C, Address 0xC8	
			13	I ² C, Address 0xD8	
			14	I ² C, Address 0xE8	
			15	I ² C, Address 0xF8	
			16	I ² C, Address 0x08	
			17	I ² C, Address 0x18	
			18	I ² C, Address 0x28	
			19	I ² C, Address 0x38	
			20	I ² C, Address 0x48	
			21	I ² C, Address 0x58	
			22	I ² C, Address 0x68	
			23	I ² C, Address 0x78	
			24	I ² C, Address 0x88	
			25	I ² C, Address 0x98	
			26	I ² C, Address 0xA8	
			27	I ² C, Address 0xB8	
			28	I ² C, Address 0xC8	
			29	I ² C, Address 0xD8	
			30	I ² C, Address 0xE8	
			31	I ² C, Address 0xF8	
			32	I ² C, Address 0x08	
			33	I ² C, Address 0x18	
			34	I ² C, Address 0x28	
			35	I ² C, Address 0x38	
			36	I ² C, Address 0x48	
			37	I ² C, Address 0x58	
			38	I ² C, Address 0x68	
			39	I ² C, Address 0x78	
			40	I ² C, Address 0x88	
			41	I ² C, Address 0x98	
			42	I ² C, Address 0xA8	
			43	I ² C, Address 0xB8	
			44	I ² C, Address 0xC8	
			45	I ² C, Address 0xD8	
			46	I ² C, Address 0xE8	
			47	I ² C, Address 0xF8	
			48	I ² C, Address 0x08	
			49	I ² C, Address 0x18	
			50	I ² C, Address 0x28	
			51	I ² C, Address 0x38	
			52	I ² C, Address 0x48	
			53	I ² C, Address 0x58	
			54	I ² C, Address 0x68	
			55	I ² C, Address 0x78	
			56	I ² C, Address 0x88	
			57	I ² C, Address 0x98	
			58	I ² C, Address 0xA8	
			59	I ² C, Address 0xB8	
			60	I ² C, Address 0xC8	
			61	I ² C, Address 0xD8	
			62	I ² C, Address 0xE8	
			63	I ² C, Address 0xF8	
			64	I ² C, Address 0x08	
			65	I ² C, Address 0x18	
			66	I ² C, Address 0x28	
			67	I ² C, Address 0x38	
			68	I ² C, Address 0x48	
			69	I ² C, Address 0x58	
			70	I ² C, Address 0x68	
			71	I ² C, Address 0x78	
			72	I ² C, Address 0x88	
			73	I ² C, Address 0x98	
			74	I ² C, Address 0xA8	
			75	I ² C, Address 0xB8	
			76	I ² C, Address 0xC8	
			77	I ² C, Address 0xD8	
			78	I ² C, Address 0xE8	
			79	I ² C, Address 0xF8	
			80	I ² C, Address 0x08	
			81	I ² C, Address 0x18	
			82	I ² C, Address 0x28	
			83	I ² C, Address 0x38	
			84	I ² C, Address 0x48	
			85	I ² C, Address 0x58	
			86	I ² C, Address 0x68	
			87	I ² C, Address 0x78	
			88	I ² C, Address 0x88	
			89	I ² C, Address 0x98	
			90	I ² C, Address 0xA8	
			91	I ² C, Address 0xB8	
			92	I ² C, Address 0xC8	
			93	I ² C, Address 0xD8	
			94	I ² C, Address 0xE8	
			95	I ² C, Address 0xF8	
			96	I ² C, Address 0x08	
			97	I ² C, Address 0x18	
			98	I ² C, Address 0x28	
			99	I ² C, Address 0x38	
			100	I ² C, Address 0x48	
			101	I ² C, Address 0x58	
			102	I ² C, Address 0x68	
			103	I ² C, Address 0x78	
			104	I ² C, Address 0x88	
			105	I ² C, Address 0x98	
			106	I ² C, Address 0xA8	
			107	I ² C, Address 0xB8	
			108	I ² C, Address 0xC8	
			109	I ² C, Address 0xD8	
			110	I ² C, Address 0xE8	
			111	I ² C, Address 0xF8	
			112	I ² C, Address 0x08	
			113	I ² C, Address 0x18	
			114	I ² C, Address 0x28	
			115	I ² C, Address 0x38	
			116	I ² C, Address 0x48	
			117	I ² C, Address 0x58	
			118	I ² C, Address 0x68	
			119	I ² C, Address 0x78	
			120	I ² C, Address 0x88	
			121	I ² C, Address 0x98	
			122	I ² C, Address 0xA8	
			123	I ² C, Address 0xB8	
			124	I ² C, Address 0xC8	
			125	I ² C, Address 0xD8	
			126	I ² C, Address 0xE8	
			127	I ² C, Address 0xF8	
			128	I ² C, Address 0x08	
			129	I ² C, Address 0x18	
			130	I ² C, Address 0x28	
			131	I ² C, Address 0x38	
			132	I ² C, Address 0x48	
			133	I ² C, Address 0x58	
			134	I ² C, Address 0x68	
			135	I ² C, Address 0x78	
			136	I ² C, Address 0x88	
			137	I ² C, Address 0x98	
			138	I ² C, Address 0xA8	
			139	I ² C, Address 0xB8	
			140	I ² C, Address 0xC8	
			141	I ² C, Address 0xD8	
			142	I ² C, Address 0xE8	
			143	I ² C, Address 0xF8	
			144	I ² C, Address 0x08	
			145	I ² C, Address 0x18	
			146	I ² C, Address 0x28	
			147	I ² C, Address 0x38	
			148	I ² C, Address 0x48	
			149	I ² C, Address 0x58	
			150	I ² C, Address 0x68	
			151	I ² C, Address 0x78	
			152	I ² C, Address 0x88	
			153	I ² C, Address 0x98	
			154	I ² C, Address 0xA8	
			155	I ² C, Address 0xB8	
			156	I ² C, Address 0xC8	
			157	I ² C, Address 0xD8	
			158	I ² C, Address 0xE8	
			159	I ² C, Address 0xF8	
			160	I ² C, Address 0x08	
			161	I ² C, Address 0x18	
			162	I ² C, Address 0x28	
			163	I ² C, Address 0x38	
			164	I ² C, Address 0x48	
			165	I ² C, Address 0x58	
			166	I ² C, Address 0x68	
			167	I ² C, Address 0x78	
			168	I ² C, Address 0x88	
			169	I ² C, Address 0x98	
			170	I ² C, Address 0xA8	
			171	I ² C, Address 0xB8	
			172	I ² C, Address 0xC8	
			173	I ² C, Address 0xD8	
			174	I ² C, Address 0xE8	
			175	I ² C, Address 0xF8	
			176	I ² C, Address 0x08	
			177	I ² C, Address 0x18	
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			180	I ² C, Address 0x48	
			181	I ² C, Address 0x58	
			182	I ² C, Address 0x68	
			183	I ² C, Address 0x78	
			184	I ² C, Address 0x88	
			185	I ² C, Address 0x98	
			186	I ² C, Address 0xA8	
			187	I ² C, Address 0xB8	
			188	I ² C, Address 0xC8	
			189	I ² C, Address 0xD8	
			190	I ² C, Address 0xE8	
			191	I ² C, Address 0xF8	
			192	I ² C, Address 0x08	
			193	I ² C, Address 0x18	
			194	I ² C, Address 0x28	
			195	I ² C, Address 0x38	
			196	I ² C, Address 0x48	
			197	I ² C, Address 0x58	
			198	I ² C, Address 0x68	
			199	I ² C, Address 0x78	
			200	I ² C, Address 0x88	
			201	I ² C, Address 0x98	
			202	I ² C, Address 0xA8	
			203	I ² C, Address 0xB8	
			204	I ² C, Address 0xC8	
			205	I ² C, Address 0xD8	
			206	I ² C, Address 0xE8	
			207	I ² C, Address 0xF8	
			208	I ² C, Address 0x08	
			209	I ² C, Address 0x18	
			210	I ² C, Address 0x28	
			211	I ² C, Address 0x38	
			212	I ² C, Address 0x48	
			213	I ² C, Address 0x58	
			214	I ² C, Address 0x68	
			215	I ² C, Address 0x78	
			216	I ² C, Address 0x88	
			217	I ² C, Address 0x98	
			218	I ² C, Address 0xA8	
			219	I ² C, Address 0xB8	
			220	I ² C, Address 0xC8	
			221	I ² C, Address 0xD8	
			222	I ² C, Address 0xE8	
			223	I ² C, Address 0xF8	
			224	I ² C, Address 0x08	
			225	I ² C, Address 0x18	
			226	I ² C, Address 0x28	
			227	I ² C, Address 0x38	
			228	I ² C, Address 0x48	
			229	I ² C, Address 0x58	
			230	I ² C, Address 0x68	
			231	I ² C, Address 0x78	
			232	I ² C, Address 0x88	
			233	I ² C, Address 0x98	
			234	I ² C, Address 0xA8	
			235	I ² C, Address 0xB8	
			236	I ² C, Address 0xC8	
			237	I ² C, Address 0xD8	
			238	I ² C, Address 0xE8	
			239	I ² C, Address 0xF8	
			240	I ² C, Address 0x08	
			241	I ² C, Address 0x18	
			242	I ² C, Address 0x28	
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			244	I ² C, Address 0x48	
			245	I ² C, Address 0x58	
			246	I ² C, Address 0x68	
			247	I ² C, Address 0x78	
			248	I ² C, Address 0x88	
			249	I ² C, Address 0x98	
			250	I ² C, Address 0xA8	
			251	I ² C, Address 0xB8	
			252	I ² C, Address 0xC8	
			253	I ² C, Address 0xD8	
			254	I ² C, Address 0xE8	
			255	I ² C, Address 0xF8	
			256	I ² C, Address 0x08	
			257	I ² C, Address 0x18	
			258	I ² C, Address 0x28	
			259	I ² C, Address 0x38	
			260	I ² C, Address 0x48	
			261	I ² C, Address 0x58	
			262</		

¹The transfer function limits define the output of the sensor at a given pressure input. By specifying Pmin. and Pmax., the output at Pmin. and Pmax., the complete transfer function of the sensor is defined. See the graphical representations of the transfer function in the product datasheet, Figure 2. For other available transfer functions contact Honeywell Customer Service.

²SPI output function is not available in SIP package.

³Custom pressure ranges are available. Contact Honeywell Customer Service for more information.

⁴See the explanation of sensor pressure types in the product datasheet, Table 4.

⁵See the CAUTION in this document.

⁶Options T and V are only available on pressure ranges ±60 mbar to ±10 bar | ±6 kPa to ±1 MPa | ±1 psi to ±150 psi.

HSC Series—High Accuracy, Compensated/Amplified

SSC Series—Standard Accuracy, Compensated/Amplified

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Figure 6. SSC Series Nomenclature and Order Guide

For example, **SSCDNNN150PGAA3** defines an SSC Series TruStability® Pressure Sensor, DIP package, NN pressure port, no special options, 150 psi gage pressure range, analog output type, 10% to 90% of Vsupply transfer function, 3.3 Vdc supply voltage.

SSC D N N N 150 P G A A 3			Supply Voltage	
Product Series			3	3.3 Vdc
SSC Standard Accuracy, Compensated/Amplified			5	5.0 Vdc
Package			Transfer Function¹	
D DIP (Dual Inline Pin)			A	10% to 90% of Vsupply (analog), 2 ¹⁴ counts (digital)
M SMT (Surface Mount Technology)			B	5% to 95% of Vsupply (analog), 2 ¹⁴ counts (digital)
S SIP (Single Inline Pin)			C	5% to 85% of Vsupply (analog), 2 ¹⁴ counts (digital)
Pressure Port			F	4% to 94% of Vsupply (analog), 2 ¹⁴ counts (digital)
DIP			Output Type²	
NN No ports			A	Analog
AN Single axial barbed port			S	SPI
LN Single axial barless port			2	I ² C, Address 0x28
—			3	I ² C, Address 0x38
—			4	I ² C, Address 0x48
—			5	I ² C, Address 0x58
—			6	I ² C, Address 0x68
—			7	I ² C, Address 0x78
—			Pressure Range^{3, 4}	
—			±1.6 mbar to ±10 bar	
—			±160 Pa to ±1 MPa	
—			±0.5 inH₂O to ±150 psi	
—			Absolute	
—			001BA 0 bar to 1 bar	
—			1.6BA 0 bar to 1.6 bar	
—			2.5BA 0 bar to 2.5 bar	
—			004BA 0 bar to 4 bar	
—			006BA 0 bar to 6 bar	
—			010BA 0 bar to 10 bar	
—			100KA 0 kPa to 100 kPa	
—			160KA 0 kPa to 160 kPa	
—			250KA 0 kPa to 250 kPa	
—			400KA 0 kPa to 400 kPa	
—			600KA 0 kPa to 600 kPa	
—			001GA 0 kPa to 1 MPa	
—			Differential	
—			1.6MD ±1.6 mbar	
—			2.5MD ±2.5 mbar	
—			004MD ±4 mbar	
—			006MD ±6 mbar	
—			010MD ±10 mbar	
—			016MD ±16 mbar	
—			025MD ±25 mbar	
—			040MD ±40 mbar	
—			060MD ±60 mbar	
—			100MD ±100 mbar	
—			160MD ±160 mbar	
—			250MD ±250 mbar	
—			400MD ±400 mbar	
—			600MD ±600 mbar	
—			001BD ±1 bar	
—			100KD ±100 kPa	
—			1.6BD ±1.6 bar	
—			160KD ±160 kPa	
—			2.5BD ±2.5 bar	
—			250KD ±250 kPa	
—			004BD ±4 bar	
—			400KD ±400 kPa	
—			Gage	
—			2.5MG 0 mbar to 2.5 mbar	
—			004MG 0 mbar to 4 mbar	
—			006MG 0 mbar to 6 mbar	
—			010MG 0 mbar to 10 mbar	
—			016MG 0 mbar to 16 mbar	
—			025MG 0 mbar to 25 mbar	
—			040MG 0 mbar to 40 mbar	
—			060MG 0 mbar to 60 mbar	
—			100MG 0 mbar to 100 mbar	
—			160MG 0 mbar to 160 mbar	
—			250MG 0 mbar to 250 mbar	
—			400MG 0 bar to 400 mbar	
—			600MG 0 bar to 600 mbar	
—			001BG 0 bar to 1 bar	
—			1.6BG 0 bar to 1.6 bar	
—			2.5BG 0 bar to 2.5 bar	
—			004BG 0 bar to 4 bar	
—			006BG 0 bar to 6 bar	
—			010BG 0 bar to 10 bar	
—			001GG 0 kPa to 1 MPa	
—			160KG 0 kPa to 160 kPa	
—			250KG 0 kPa to 250 kPa	
—			400KG 0 kPa to 400 kPa	
—			600KG 0 kPa to 600 kPa	
—			001NG 0 inH ₂ O to 1 inH ₂ O	
—			002NG 0 inH ₂ O to 2 inH ₂ O	
—			004NG 0 inH ₂ O to 4 inH ₂ O	
—			005NG 0 inH ₂ O to 5 inH ₂ O	
—			010NG 0 inH ₂ O to 10 inH ₂ O	
—			020NG 0 inH ₂ O to 20 inH ₂ O	
—			030NG 0 inH ₂ O to 30 inH ₂ O	
—			001PG 0 psi to 1 psi	
—			005PG 0 psi to 5 psi	
—			015PG 0 psi to 15 psi	
—			030PG 0 psi to 30 psi	
—			060PG 0 psi to 60 psi	
—			100PG 0 psi to 100 psi	
—			150PG 0 psi to 150 psi	
Options^{5, 6}				
N Dry gases only, no diagnostics				
D Dry gases only, diagnostics on				
T Liquid media on Port 1, no diagnostics				
V Liquid media on Port 1, diagnostics on				

¹The transfer function limits define the output of the sensor at a given pressure input. By specifying Pmin. and Pmax., the output at Pmin. and Pmax., the complete transfer function of the sensor is defined. See the graphical representations of the transfer function in the product datasheet, Figure 2. For other available transfer functions contact Honeywell Customer Service.

²SPI output function is not available in SIP package.

³Custom pressure ranges are available. Contact Honeywell Customer Service for more information.

⁴See the explanation of sensor pressure types in the product datasheet, Table 4.

⁵See the CAUTION in this document.

⁶Options T and V are only available on pressure ranges ±60 mbar to ±10 bar | ±6 kPa to ±1 MPa | ±1 psi to ±150 psi.

HSC Series—High Accuracy, Compensated/Amplified

SSC Series—Standard Accuracy, Compensated/Amplified

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WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARRANTY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

E-mail: info.sc@honeywell.com

Internet: sensing.honeywell.com

Phone and Fax:

Asia Pacific	+65 6355-2828
	+65 6445-3033 Fax
Europe	+44 (0) 1698 481481
	+44 (0) 1698 481676 Fax
Latin America	+1-305-805-8188
	+1-305-883-8257 Fax
USA/Canada	+1-800-537-6945
	+1-815-235-6847
	+1-815-235-6545 Fax