



Model P895 Test & Measurement Grade Pressure Transducer

- 0.1% FS Accuracy
- Gage, Differential and Absolute Versions
- Low Temperature Error
- For Liquid or Gas Service
- FS Ranges from 2.22 In H2O
- +/-5 Vdc and 4-20 mA Output Signals

Description:

The Validyne P895 is a test and measurement grade pressure transducer for applications requiring high accuracy and outstanding performance through ambient temperature changes. The P895 is digitally compensated and corrected to provide high accuracy pressure measurement in a robust cylindrical form factor.

The P895 is designed for a wide variety of pressure measurements where high resistance to vibration and superior stability through temperature change is required. The P895 accepts both liquids and gases.

The zero and full-scale output calibrations are set by potentiometer adjustments accessible from the top cover.

The + pressure port is 1/4" NPT male pipe thread. The – port is a 5/16" straight thread port fitted with a 1/4" male NPT adapter. Both ports can be changed using the appropriate fitting adapters to provide the most convenient connections.

The P895 has 1/4 inch NPT pressure port connections and measures just 2.25" OD x 8" overall.

The P895 is DC powered and is available in the most popular analog output versions including +/5 Vdc and 4-20 mA. A CAN Bus version is also available

The P895 has a standard six-pin Amphenol electrical connector.

The P895 is Ideal for:

- Laboratory Pressure Measurement
- Automotive Test Cells
- Any High Accuracy Application

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P895 Specifications

General Specifications - Sensor Physical Specifications -

Ranges: Pressure Media: Liquids & gases compatible

P895D/G: +/-0.08 psid to +/-3200 psid with 410 SST and Inconel **P895A**: 0 - 0.08 psia to 0 - 3200 psia

O-Rings: Buna-N Standard, other compounds available

P895: +/-0.1% FS, includes compounds available

Pressure Cavity Volume: 4 e-3 cu in, each port

Volumetric Displacement: 3 e-4 cu in at FS

Overpressure: Weight: 32 Oz.

P895D/G: 400% FS up to 4000 psi

maximum
Power Requirements -

whichever is greater, up to 4000 psia Power Supply: +9 to +55 Vdc

maximum

Current Draw: 3 mA, typ

Line Pressure: Insulation Resistance: 100 Mohms, any terminal

P895D/G: 3200 psig maximum, with zero shift less than 1%/Kpsi

Output Signals -

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P895D:1/4" male NPT, + port

1/4" fmale NPT, - port

Analog Output: 0 to +5 Vdc

P895A: 1/4" male NPT, single port 0 to +/-5 Vdc 4-20 mA

Environmental Specifications - Zero Balance: Via External Adjustment

Operating Temp: 0 to +160 F Span: Via External Adjustment

Compensated Temp: 40 to +140 F

Output Noise: 2 mVrms

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Temperature Error: +/-0.5% FS

Over Compensated

Temperature Range of 40 F to +140 F

401 10 +1401

non-linearity, hysteresis

and non-repeatability

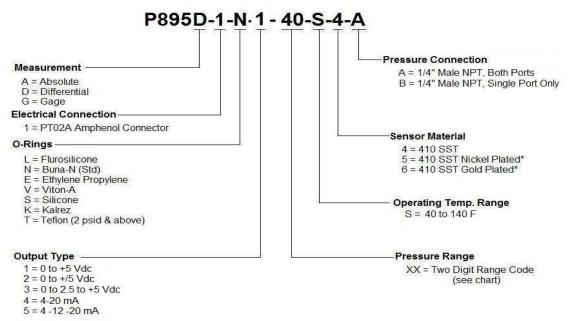
P895A: 20 psia or 400% FS,

Pressure Ports:

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P895 Test & Measurement Pressure Transducer Ordering Information



Output Signal Types:

Absolute and Gage pressure transducers have options 1 and 4 for signal outputs. Differential pressure transducers will have options 2, 3 or 5 for signal outputs.

Option	 FS Pressure 	Zero Pressure	+FS Pressure	Models
-1		0 Vdc	+5 Vdc	P895A, P895G
-2	-5 Vdc	0 Vdc	+5 Vdc	P895D
-3	0 Vdc	+2.5 Vdc	+5 Vdc	P895D
-4		4 mA	20 mA	P895A, P895G
-5	4 mA	12 mA	20 mA	P895D

Mating Electrical Connector:

Validyne p/n 1280-1002 – Order Separately

Pressure Ports:

Differential and gage pressure transducers will have 1/4" male NPT pressure connections for + and – pressure ports.

Absolute pressure transducers will have a single 1/4" male NPT pressure connection located at the bottom of the unit. No – pressure port is supplied.

Wetted Materials:

Absolute transducers are available only in 410 SST (option -4)

Validyne Engineering

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PRESSURE RANGE CHART									
Range Dash No.	PSI	IN HG.	IN H ₂ O	КРА	TORR	СМ Н₂О			
20	.125	.25	3.5	.86	6.5	8.80			
22	.20	.41	5.5	1.40	10.3	14.0			
24	.32	.65	8.9	2.2	16.5	22.5			
26	.50	1.02	14.0	3.5	25.8	35.0			
28	.80	1.6	22.2	5.5	41.4	56.0			
30	1.25	2.5	35.0	8.6	65.0	88.0			
32	2.0	4.1	55.0	14.0	103	140			
34	3.2	6.5	90	22.0	165	225			
36	5.0	10.2	140	35.0	258	350			
38	8.0	16.0	222	55.0	414	560			
40	12.5	25.0	350	86.0	650	880			
42	20	41.0	550	140	1030	1400			
44	32	65.0	890	220	1650	2250			
46	50	102	1400	350	2580	3500			
48	80	160	2220	550	4140	5600			
50	125	250	3500	860	6500	8800			
52	200	410	5500	1400	10300	14000			
54	320	650	8900	2200	16500	22500			
56	500	1020	14000	3500	25800	35000			
58	800	1600	22200	5500	41400	56000			
60	1250	2500	35000	8600	65000	88000			
62	2000	4100	55000	14000	103000	140000			
64	3200	6500	89000	22000	165000	225000			

