

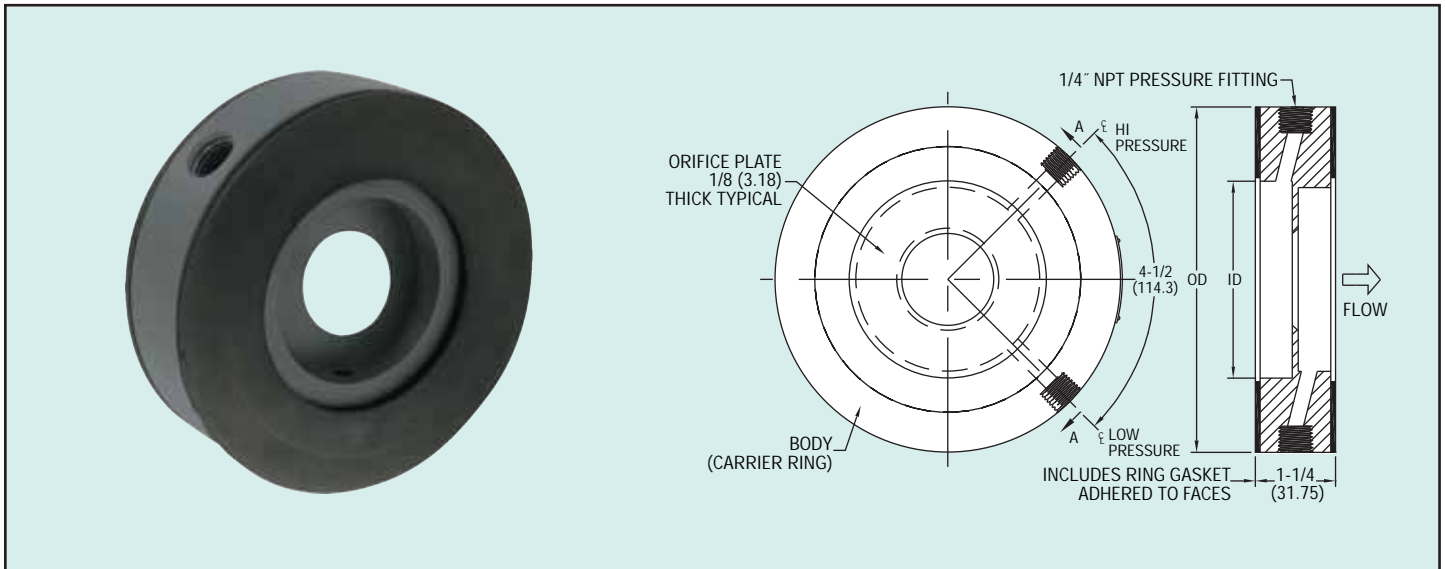


Series
PE

Orifice Plate Flowmeter

PVC Orifice Plate for Use with Gases

Flow



The **Series PE Orifice Plate Flow Meter** offers one-piece PVC construction incorporating a unique holder or carrier ring containing metering taps and integral gaskets. Unlike a standard orifice plate, the Series PE is a true primary element including the various components for differential pressure measurement. It was designed for use wherever there is an application for a conventional flow orifice plate. It can also be used in place of other primary differential producers for efficiency and cost effectiveness. The Series PE is available in line sizes from 1/2" to 24" and used for air and most gases. It meets or exceeds ASME, AGA & ISO standards.

FEATURES

- Mounted with standard flanges
- Standard "corner tap" configuration
- Corrosion free material
- Simplified installation
- Built in metering taps (1/4" female NPT STD)
- Proven through a wide range of applications for accuracy and energy efficiency
- Assures long term reliability and accuracy

SPECIFICATIONS

Service: Clean air and compatible gases.

Wetted Material: Monolithic (single piece) constructed entirely of gray PVC, BUNA-N gaskets.

Accuracy: $\pm 0.6\%$ full scale flow. (Beta = .2-.6) $\pm 0.7\%$ for Beta greater than .6.

Temperature: 140°F max (60°C max).

Pressure: 150 psi (10 bar) max.

Head Loss: $1 - \text{Beta ratio}^2$ eg: $1 - 0.7^2 = 1 - 0.49 = 51\%$ of the d.p.

Line Sizes: 1/2" to 24".

Process Connections: 1/4" female NPT.

Installation: Standard flange 125#/150# rating.

Pipe Requirements: General requirements 10 diameter upstream and 5 diameter downstream.

Weight: Varies with line size. See chart.

**Series PE Orifice Plate Flowmeter
Air Capacity Structure**

- Material PVC- Gaskets Buna-N
- Based on 70°F, 14.7 psia (Base Conditions)
- Beta Value Based on Std Sch pipe I.D.

- 1.25" overall thickness
- Orifice plate thickness is 0.125"

Model	Weight (lb)	Line Size	Bore	Beta	Inch d/p W/C	Air Capacity - Flow in SCFM		
						at 14.7 psia (0 psig)	at 20 psig	at 100 psig
PE-A-1	1.00	1/2"	0.200"	0.3	20	2.35	3.63	6.61
PE-A-2	1.00	1/2"	0.310"	0.5	100	12.21	19.58	36.37
PE-A-3	1.00	1/2"	0.430"	0.69	200	32.77	56.15	107.47
PE-B-1	1.00	3/4"	0.250"	0.3	20	3.65	5.66	10.3
PE-B-2	1.00	3/4"	0.400"	0.49	100	20.21	32.44	60.26
PE-B-3	1.00	3/4"	0.580"	0.7	200	59.92	102.91	197.2
PE-C-1	1.00	1"	0.300"	0.29	20	5.24	8.11	14.8
PE-C-2	1.00	1"	0.520"	0.49	100	34.2	54.92	102.09
PE-C-3	1.00	1"	0.720"	0.69	200	91.28	156.51	300
PE-D-1	1.00	1.25"	0.400"	0.29	20	9.31	14.41	26.3
PE-D-2	1.00	1.25"	0.700"	0.51	100	62.09	99.75	185.5
PE-D-3	1.00	1.25"	1.00"	0.72	200	180	309.97	595.2
PE-E-1	2.00	1.5"	0.500"	0.31	20	14.57	22.55	41.16
PE-E-2	2.00	1.5"	0.800"	0.5	100	80.82	129.68	241.5
PE-E-3	2.00	1.5"	1.100"	0.68	200	212.18	363.93	697.39
PE-F-1	2.00	2"	0.600"	0.29	20	20.92	32.38	59.13
PE-F-2	2.00	2"	1.000"	0.48	100	125.74	202.03	375.8
PE-F-3	2.00	2"	1.450"	0.7	200	372.09	639.87	1227.63
PE-G-1	2.00	2.5"	0.750"	0.3	20	32.71	50.64	92.48
PE-G-2	2.00	2.5"	1.250"	0.5	100	197.54	317.58	590.91
PE-G-3	2.00	2.5"	1.750"	0.7	200	543.99	936.56	1798.86
PE-H-1	2.00	3"	0.920"	0.3	20	49.17	78.13	139.06
PE-H-2	2.00	3"	1.500"	0.49	100	282.9	454.77	846.21
PE-H-3	2.00	3"	2.150"	0.7	200	816.7	1404.95	2696.28
PE-J-1	3.00	4"	1.200"	0.3	20	83.58	129.44	236.48
PE-J-2	3.00	4"	2.000"	0.5	100	503.76	810.06	1507.64
PE-J-3	3.00	4"	2.800"	0.7	200	1380.03	2373.02	4553.68
PE-K-1	3.00	5"	1.500"	0.3	20	130.48	202.11	369.29
PE-K-2	3.00	5"	2.500"	0.5	100	786.23	1264.42	2353.51
PE-K-3	3.00	5"	3.500"	0.69	200	2152.83	3701.57	7103.22
PE-L-1	4.00	6"	1.800"	0.3	20	187.86	291	531.75
PE-L-2	4.00	6"	3.000"	0.49	100	1331.63	1820.05	3387.93
PE-L-3	4.00	6"	4.200"	0.69	200	3097.20	5325.20	10219.28
PE-M-1	5.00	8"	2.400"	0.3	20	333.87	517.25	945.28
PE-M-2	5.00	8"	4.000"	0.5	100	2014.95	3241.45	6034.85
PE-M-3	5.00	8"	5.600"	0.7	200	5532.00	9525.43	18290.00
PE-N-1	6.00	10"	3.000"	0.3	20	521.58	808	1476.77
PE-N-2	6.00	10"	5.000"	0.5	100	3145.50	5060.38	9421.74
PE-N-3	6.00	10"	7.000"	0.7	200	8626.42	14846.80	28506.17
PE-O-1	7.00	12"	3.600"	0.3	20	750.9	1163.44	2126.47
PE-O-2	7.00	12"	6.000"	0.5	100	4530	7288.16	13570.33
PE-O-3	7.00	12"	8.400"	0.7	200	12430.00	21397.00	41089.02
PE-P-1	9.00	14"	4.000"	0.3	20	927.14	1436.59	2625.81
PE-P-2	9.00	14"	6.600"	0.5	100	5477.67	8812.87	16409.42
PE-P-3	9.00	14"	9.300"	0.7	200	15251.50	28262.66	50437.78
PE-Q-1	10.00	16"	4.500"	0.3	20	1172.63	1817.05	3321.32
PE-Q-2	10.00	16"	7.600"	0.5	100	7264.58	11688.26	21764.08
PE-Q-3	10.00	16"	10.700"	0.7	200	20179.85	34749.32	66737.64
PE-R-1	12.00	18"	5.200"	0.3	20	1565.79	2426.34	4435.12
PE-R-2	12.00	18"	8.600"	0.5	100	9302.08	14966.93	27869.85
PE-R-3	12.00	18"	12.000"	0.7	200	25299.92	43535.32	83587.01
PE-S-1	14.00	20"	5.780"	0.3	20	1935.37	2999.11	5482.22
PE-S-2	14.00	20"	9.600"	0.5	100	11588.20	18645.74	34720.84
PE-S-3	14.00	20"	13.500"	0.7	200	32115.34	55303.34	106215.88
PE-T-1	16.00	24"	7.000"	0.3	20	2838.14	4398.25	8038.99
PE-T-2	16.00	24"	11.700"	0.5	100	17229.62	27726.33	51633.81
PE-T-3	16.00	24"	16.300"	0.7	200	46810.53	80610.19	154823.78

Note: Differential pressure values should be less than 50% of the inlet absolute pressure.