

# CV Series Venturi Flow Meters 2" to 16"

The CV Venturi Flow Meter is a differential pressure element designed to accurately measure the flow of liquids and gases by forcing the flow into a smaller diameter section of pipe, then measuring the pressure differences between the unrestricted flow and the restricted flow. It can be installed in any position with minimal straight pipe requirements (5 pipe diameters upstream and 2 pipe diameters downstream).

Preso can relate the success of the CV Venturi to the Low-Loss design which amounts to over 35 years of field performance in a wide variety of applications. The reduced operating costs inherent with the design will let the CV pay for itself in a very short time. Low installation costs due to short laying length make the CV the right choice for many applications.

## **Features**

- Carbon Steel Construction
- 1/8" MNPT x 1/4" SAE Brass Ball Process Connections
- NPT, Butt Weld or Flanged End Connections
- Polycarbonate ID Tag
- Maximum Temperature \* 250 °F (120 °C)
- Maximum Pressure \* 300 PSIG (2070 kPa)

## **Options**

- Quick Disconnect Fittings
- Pressure & Temperature Plugs
- Pressure Port Extensions
- Stainless Steel ID Tag



\* For higher pressure and temperature applications please consult factory

## Model Selector: PCV

#### PIPE SIZE

F - 2"

G - 2-1/2"

H - 3

I - 4"

. - 4

J - 5"

K - 6"

L - 8"

M - 10"

N - 12"

O - 14"

P - 16"

## **MATERIAL**

1 - CARBON STEEL

#### **END CONNECTION**

A - RF FLANGE - 150#

C - NPT (UP TO 3")

D - GROOVED

E - BUTT WELD

#### **BETA**

1 - (-38) NORMAL FLOW

2 - (-65) HIGH FLOW

## INSTRUMENT CONNECTION

A - BRASS BALL VALVE - 1/4" SAE

B - BRASS BALL VALVE - 1/4" SAE w/QUICK CONNECT

C - PRESSURE & TEMP PLUGS

D - BRASS BALL VALVE - 1/4" SAE w/EXTENSIONS

E - QUICK CONNECT w/EXTENSIONS

F - PRESSURE & TEMP PLUGS w/EXTENSIONS

### TAG \*

1 - POLYCARBONATE

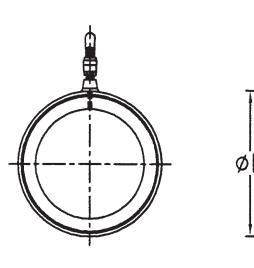
2 - STAINLESS STEEL

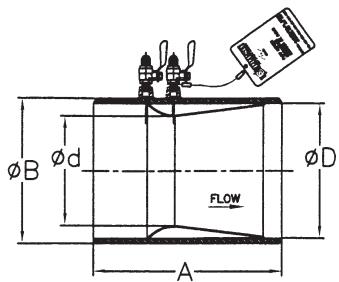
\* Tag information must be included with order.

# Specifications and Submittal Data

## **Butt Weld and Grooved Models**

SIZE THROAT	MODEL	Ød inch (mm)	ØD inch (mm)	ВЕТА	A inch (mm)	ØB inch (mm)	APP. WEIGHT lbs (kg)
2" -38	PCVF1XX1X	1.375 (34.9)	2.067 (52.5)	0.665 (16.9)	6 (152.4)	2.38 (60.5)	1.75 (.8)
2" -65	PCVF1XX2X	1.688 (42.9)	2.067 (52.5)	0.816 (20.7)	6 (152.4)	2.38 (60.5)	1.75 (.8)
2-1/2" -38	PCVG1XX1X	1.625 (41.3)	2.469 (62.7)	0.658 (16.7)	6 (152.4)	2.88 (73.2)	3 (1.36)
2-1/2" -65	PCVG1XX2X	2 (50.8)	2.469 (62.7)	0.810 (20.6)	6 (152.4)	2.88 (73.2)	3 (1.36)
3" -38	PCVH1XX1X	2 (50.8)	3.068 (77.9)	0.652 (16.6)	6 (152.4)	3.5 (88.9)	5 (2.27)
3" -65	PCVH1XX2X	2.5 (63.5)	3.068 (77.9)	0.815 (20.1)	6 (152.4)	3.5 (88.9)	5 (2.27)
4" -38	PCVI1XX1X	2.625 (66.7)	4.026 (102.3)	0.652 (16.9)	7 (177.8)	4.5 (114.3)	7 (3.18)
4" -65	PCVI1XX2X	3.25 (82.6)	4.026 (102.3)	0.807 (20.5)	7 (177.8)	4.5 (114.3)	7 (3.18)
5" -38	PCVJ1XX1X	3.25 (82.6)	5.047 (128.2)	0.644 (16.4)	8.5 (215.9)	5.56 (141.2)	9 (4.1)
5" -65	PCVJ1XX2X	4.125 (104.8)	5.047 (128.2)	0.817 (20.8)	8.5 (215.9)	5.56 (141.2)	9 (4.1)
6" -38	PCVK1XX1X	3.875 (98.4)	6.065 (154.1)	0.639 (16.2)	9.5 (241.3)	6.63 (168.4)	17 (7.71)
6" -65	PCVK1XX2X	4.938 (125.4)	6.065 (154.1)	0.814 (20.7)	9.5 (241.3)	6.63 (168.4)	17 (7.71)
8" -38	PCVL1XX1X	4.875 (123.8)	7.981 (202.7)	0.611 (15.5)	13.5 (342.9)	8.63 (219.2)	35 (15.88)
8" -65	PCVL1XX2X	6.5 (165.1)	7.981 (202.7)	0.814 (20.7)	13.5 (342.9)	8.63 (219.2)	35 (15.88)
10" -38	PCVM1XX1X	6 (152.4)	10 (254)	0.599 (15.2)	16 (406.4)	10.75 (273)	59 (26.76)
10" -65	PCVM1XX2X	8.125 (206.4)	10 (254)	0.811 (20.6)	16 (406.4)	10.75 (273)	59 (26.76)
12" -38	PCVN1XX1X	8 (203.2)	12 (304.8)	0.667 (16.9)	17.25 (438.15)	12.75 (323.9)	106 (48.08)
12" -65	PCVN1XX2X	9.75 (247.65)	12 (304.8)	0.813 (20.7)	17.25 (438.15)	12.75 (323.9)	106 (48.08)
14" -38	PCVO1XX1X	8.5 (215.9)	13.25 (336.55)	0.642 (16.3)	19.25 (488.95)	14 (355.6)	130 (58.97)
14" -65	PCVO1XX2X	10.5 (266.7)	13.25 (336.55)	0.816 (20.7)	19.25 (488.95)	14 (355.6)	130 (58.97)
16" -38	PCVP1XX1X	10.5 (266.7)	15.25 (387.35)	0.689 (17.5)	19.25 (514.35)	16 (406.2)	160 (72.57)
16" -65	PCVP1XX2X	12.5 (317.5)	15.25 (387.35)	0.820 (20.8)	19.25 (514.35)	16 (406.2)	160 (72.57)

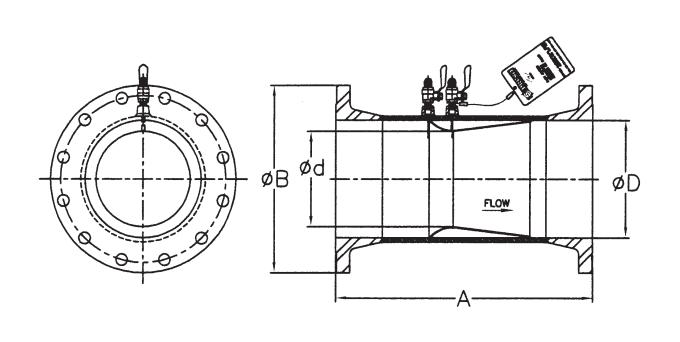




# Specifications and Submittal Data

Flange 150# Model

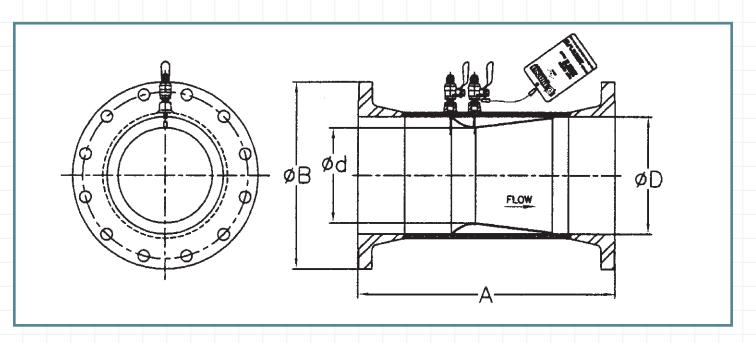
SIZE THROAT	MODEL	Ød inch (mm)	ØD inch (mm)	ВЕТА	A inch (mm)	ØB inch (mm)	APP. WEIGHT lbs (kg)	
2" -38	PCVF1AX1X	1.375 (34.9)	2.067 (52.5)	0.665 (16.9)	11.13 (282.7)	6 (152.4)	15 (6.8)	
2" -65	PCVF1AX2X	1.688 (42.9)	2.067 (52.5)	0.816 (20.7)	11.13 (282.7)	6 (152.4)	15 (6.8)	
2-1/2" -38	PCVG1AX1X	1.625 (41.3)	2.469 (62.7)	0.658 (16.7)	11.625 (295.3)	7 (177.8)	19 (8.62)	
2-1/2" -65	PCVG1AX2X	2 (50.8)	2.469 (62.7)	0.810 (20.6)	11.625 (295.3)	7 (177.8)	19 (8.62)	
3" -38	PCVH1AX1X	2 (50.8)	3.068 (77.9)	0.652 (16.9)	11.625 (295.3)	7.5 (190.5)	25 (11.34)	
3" -65	PCVH1AX2X	2.5 (63.5)	3.068 (77.9)	0.815 (20.1)	11.625 (295.3)	7.5 (190.5)	25 (11.34)	
4" -38	PCVI1AX1X	2.625 (66.7)	4.026 (102.3)	0.652 (16.9)	13.125 (333.4)	9 (228.6)	37 (16.78)	
4" -65	PCVI1AX2X	3.25 (82.6)	4.026 (102.3)	0.807 (20.5)	13.125 (333.4)	9 (228.6)	37 (16.78)	
5" -38	PCVJ1AX1X	3.25 (82.6)	5.047 (128.2)	0.644 (16.4)	15.625 (396.9)	10 (254)	47 (21.32)	
5" -65	PCVJ1AX2X	4.125 (104.8)	5.047 (128.2)	0.817 (20.8)	15.625 (396.9)	10 (254)	47 (21.32)	
6" -38	PCVK1AX1X	3.875 (98.4)	6.065 (154.1)	0.639 (16.2)	16.625 (422.3)	11 (279.4)	65 (29.48)	
6" -65	PCVK1AX2X	4.938 (125.4)	6.065 (154.1)	0.814 (20.7)	21.625 (549.3)	11 (279.4)	65 (29.48)	
8" -38	PCVL1AX1X	4.875 (123.8)	7.981 (202.7)	0.611 (15.5)	21.625 (549.3)	13.5 (342.9)	113 (51.26)	
8" -65	PCVL1AX2X	6.5 (165.1)	7.981 (202.7)	0.814 (20.7)	24.125 (612.8)	13.5 (342.9)	113 (51.26)	
10" -38	PCVM1AX1X	6 (152.4)	10 (254)	0.599 (15.2)	24.125 (612.8)	16 (406.4)	163 (73.94)	
10" -65	PCVM1AX2X	8.125 (206.4)	10 (254)	0.811 (20.6)	24.125 (612.8)	16 (406.4)	163 (73.94)	
12" -38	PCVN1AX1X	8 (203.2)	12 (304.8)	0.667 (16.9)	26.75 (679.5)	19 (482.6)	266 (120.66)	
12" -65	PCVN1AX2X	9.75 (247.65)	12 (304.8)	0.813 (20.7)	26.75 (679.5)	19 (482.6)	266 (120.66)	
14" -38	PCVO1AX1X	8.5 (215.9)	13.25 (336.55)	0.642 (16.3)	29.75 (755.7)	21 (533.4)	350 (158.76)	
14" -65	PCVO1AX2X	10.5 (266.7)	13.25 (336.55)	0.816 (20.7)	29.75 (755.7)	21 (533.4)	350 (158.76)	
16" -38	PCVP1AX1X	10.5 (266.7)	15.25 (387.35)	0.689 (17.5)	30.75 (781)	23.5 (596.9)	440 (199.58)	
16" -65	PCVP1AX2X	12.5 (317.5)	15.25 (387.35)	0.820 (20.8)	30.75 (781)	23.5 (596.9)	440 (199.58)	



# Specifications and Submittal Data

## Flange 300# Model

SIZE THROAT	MODEL	Ød inch (mm)	ØD inch (mm)	ВЕТА	A inch (mm)	ØB inch (mm)	APP. WEIGHT lbs (kg)
2" -38	PCVF1AX1X	1.375 (34.9)	2.067 (52.5)	0.665 (16.9)	11.63 (295.4)	6.5 (165.1)	20 (9.1)
2" -65	PCVF1AX2X	1.688 (42.9)	2.067 (52.5)	0.816 (20.7)	11.63 (295.4)	6.5 (165.1)	20 (9.1)
2-1/2" -38	PCVG1AX1X	1.625 (41.3)	2.469 (62.7)	0.658 (16.7)	12.125 (308)	7.5 (190.5)	27 (12.3)
2-1/2" -65	PCVG1AX2X	2 (50.8)	2.469 (62.7)	0.810 (20.6)	12.125 (308)	7.5 (190.5)	27 (12.3)
3" -38	PCVH1AX1X	2 (50.8)	3.068 (77.9)	0.652 (16.9)	12.625 (320.7)	8.25 (209.6)	35 (15.9)
3" -65	PCVH1AX2X	2.5 (63.5)	3.068 (77.9)	0.815 (20.1)	12.625 (320.7)	8.25 (209.6)	35 (15.9)
4" -38	PCVI1AX1X	2.625 (66.7)	4.026 (102.3)	0.652 (16.9)	13.875 (352.4)	10 (254)	57 (25.9)
4" -65	PCVI1AX2X	3.25 (82.6)	4.026 (102.3)	0.807 (20.5)	13.875 (352.4)	10 (254)	57 (25.9)
5" -38	PCVJ1AX1X	3.25 (82.6)	5.047 (128.2)	0.644 (16.4)	16.375 (415.9)	11 (279.4)	73 (33.2)
5" -65	PCVJ1AX2X	4.125 (104.8)	5.047 (128.2)	0.817 (20.8)	16.375 (415.9)	11 (279.4)	73 (33.2)
6" -38	PCVK1AX1X	3.875 (98.4)	6.065 (154.1)	0.639 (16.2)	17.375 (441.3)	12.5 (317.5)	101 (45.9)
6" -65	PCVK1AX2X	4.938 (125.4)	6.065 (154.1)	0.814 (20.7)	17.375 (441.3)	12.5 (317.5)	101 (45.9)
8" -38	PCVL1AX1X	4.875 (123.8)	7.981 (202.7)	0.611 (15.5)	21.625 (549.3)	13.5 (342.9)	169 (76.7)
8" -65	PCVL1AX2X	6.5 (165.1)	7.981 (202.7)	0.814 (20.7)	21.625 (549.3)	13.5 (342.9)	169 (76.7)
10" -38	PCVM1AX1X	6 (152.4)	10 (254)	0.599 (15.2)	24.125 (612.8)	16 (406.4)	241 (109.3)
10" -65	PCVM1AX2X	8.125 (206.4)	10 (254)	0.811 (20.6)	24.125 (612.8)	16 (406.4)	241 (109.3)
12" -38	PCVN1AX1X	8 (203.2)	12 (304.8)	0.667 (16.9)	26.75 (679.5)	19 (482.6)	386 (175.1)
12" -65	PCVN1AX2X	9.75 (247.65)	12 (304.8)	0.813 (20.7)	26.75 (679.5)	19 (482.6)	386 (175.1)
14" -38	PCVO1AX1X	8.5 (215.9)	13.25 (336.55)	0.642 (16.3)	29.75 (755.7)	21 (533.4)	490 (222.3)
14" -65	PCVO1AX2X	10.5 (266.7)	13.25 (336.55)	0.816 (20.7)	29.75 (755.7)	21 (533.4)	490 (222.3)
16" -38	PCVP1AX1X	10.5 (266.7)	15.25 (387.35)	0.689 (17.5)	30.75 (781.1)	23.5 (596.9)	660 (299.4)
16" -65	PCVP1AX2X	12.5 (317.5)	15.25 (387.35)	0.820 (20.8)	30.75 (781.1)	23.5 (596.9)	660 (299.4)





8635 Washington Avenue Racine, WI 53406-3738 USA www.preso.com

WWW.preso.com

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Tel: 800-632-7337 or 262-639-6770

Fax: 262-417-1148 E-mail: info@preso.com

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