Honeywell

“ConF V5” Series

2-Way,Wafer ,Constant Flow Balancing Valve

PRODUCT SPECIFICATION SHEET



FEATURES

- In this balanced valve design, the constant flow cartridge moves up and down with system pressure fluctuating to keep the flow constant .
- No power need in the constant flow modulating.
- Every loop automatically limited to design flow
- Robusting design save the installation space.
- Simplified pipe design and calculation
- Quick and easy setup
- No balancing debug work required
- Stainless steel valve stem resists corrosion & long service life

APPLICATION

Honeywell “ConF V5” series constant flowrate balancing valves are new type of balancing valve for flow control in HVAC hydronic system, It can keep the flow constant in working differential pressure range when system pressure fluctuates.

“ConF V5” series constant flowrate balancing valve can also be used in other applications when it has the same function demand.

“ConF V5” series constant flowrate balancing valve is a self-balanced flow control valve, used in 2-way controls, of Size from DN50-DN500. It consists of a ductile iron valve body and some constant flow cartridges in the valve body.

SPECIFICATIONS

Size Range:	DN50～500(2″ ～ 20″)
Flow Precision:	5%
Pressure Rating:	Static 375 psi (25 Bars), Burst 1875 psi (125 Bars)
End Connections:	Compatible with DIN EN 1092-1 2002 steel flanges
Medium:	water
Media temperature:	0～ 110℃
Valve Material:	Body of ductile iron Cartridge of stainless steel O-ring seals of EPDM
Operating ambient temperature:	0 to 65°C
Shipping & storage temperature:	-40 to +65°C
Atmosphere:	non-corrosive, non-explosive
Dimensions:	See Diagram

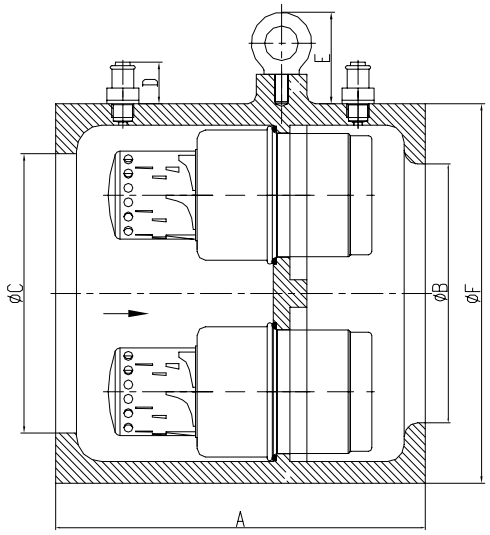
OS Number Structure：

V5CF ××× ×× ×××

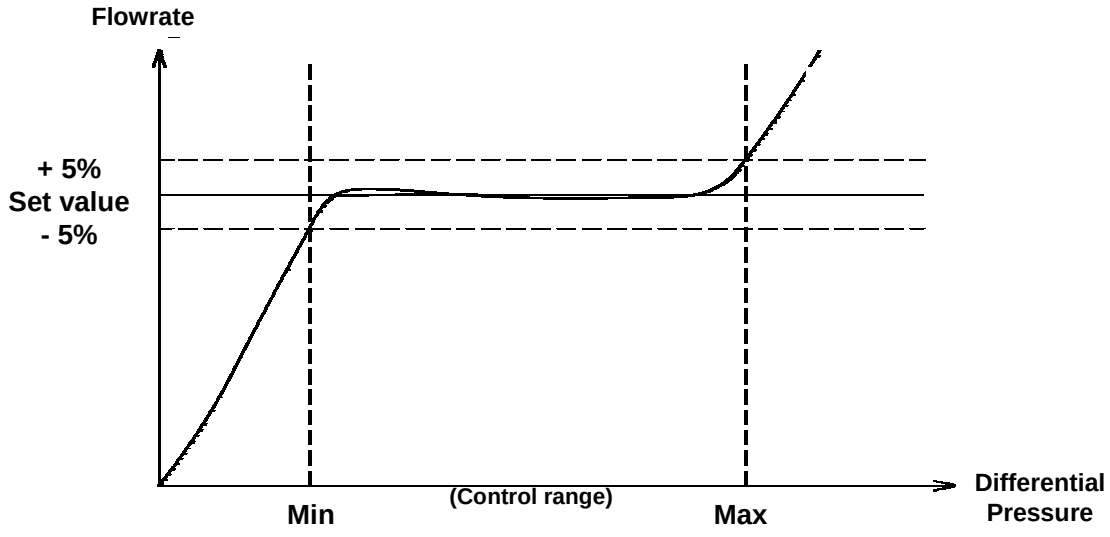
- Flowrate Code(Pls see "Technical Data")
- Differential Pressure Code: DN50～80: ML(15-150KPa)、MM(22-210KPa)、MH(33-330KPa)、MS(35-250) DN100～500: BL(15-150KPa)、BM(22-210KPa)、BH(33-330KPa) 、BS(35-250)
- Size Code：050(DN50)、065(DN65)、080(DN80)、100(DN100)、125(DN125)、150(DN150)、200(DN200)、250(DN250)、300(DN300)、350(DN350)、400(DN400)、450(DN450)、500(DN500)
- Product Code:V5CF (Constant Flowrate Balancing Valve "ConF V5)

Dimension and Weight:

Size	A	B	C	D	E	F	Weight(Kg)
DN50	180	50	83	24		106	5.7
DN65	180	65	83	24		120	5.9
DN80	180	80	83	24		132	6.2
DN100	220	100	133	24		177	10.7
DN125	220	125	140	24		193	15.3
DN150	220	150	162	24	53	220	21.7
DN200	220	200	214	24	53	280	30.2
DN250	220	250	280	24	53	341	34.5
DN300	223	300	328	24	69	400	50.7
DN350	223	350	382	24	69	448	58.8
DN400	242	400	440	24	69	510	90.3
DN450	242	450	487	24	69	560	110.8
DN500	242	500	545	24	69	618	149.7



Flowrate-Differential Pressure Characteristic Curve



Technical Data:

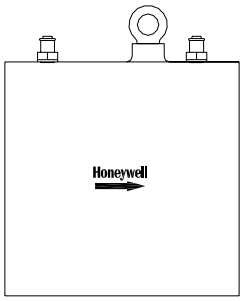
Size	Differential Pressure (KPa)	Flowrate(m3/h)/Flowrate code
DN50	15-150	5.44/003,5.90/004,6.37/005,6.80/006,7.27/007,7.70/008,8.17/009,8.64/010,9.07/011,9.54/012,10.01/013,10.44/014,10.91/015,11.34/016,11.81/017,12.28/018, 12.71/019,13.18/020,13.95/021
	22-210	14.18/016,14.76/017,15.34/018,15.91/019,16.45/020,17.43/021
	33-330	17.93/019,18.54/020,19.42/021
	35-250	20.32/022,21.25/023,22.25/024,23.35/025,24.50/026,25.63/027,26.75/028,27.93/029,29.04/030,30.25/031,31.52/032,32.82/033,34/034,35.10/035,36.3/036
DN65	15-150	6.80/006,7.27/007,7.70/008,8.17/009,8.64/010,9.07/011,9.54/012,10.01/013,10.44/014,10.91/015,11.34/016,11.81/017,12.28/018,12.71/019,13.18/020,13.95/021
	22-210	14.18/016,14.76/017,15.34/018,15.91/019,16.45/020,17.43/021
	33-330	17.93/019,18.54/020,19.42/021
	35-250	20.32/022,21.25/023,22.25/024,23.35/025,24.50/026,25.63/027,26.75/028,27.93/029,29.04/030, 30.25/031,31.52/032,32.82/033,34/034,35.10/035,36.3/036
DN80	15-150	7.27/007,7.70/008,8.17/009,8.64/010,9.07/011,9.54/012,10.01/013,10.44/014,10.91/015,11.34/016,11.81/017,12.28/018,12.71/019,13.18/020,13.95/021
	22-210	14.18/016,14.76/017,15.34/018,15.91/019,16.45/020,17.43/021
	33-330	17.93/019,18.54/020,19.42/021
	35-250	20.32/022,21.25/023,22.25/024,23.35/025,24.50/026,25.63/027,26.75/028,27.93/029,29.04/030, 30.25/031,31.52/032,32.82/033,34/034,35.10/035,36.3/036
DN100	15-150	8.17/009,9.07/011,10.01/013,10.91/015,11.81/017,12.71/019,13.61/021,15.40/023,17.28/025,19.08/027,20.88/029,22.68/031,24.56/033,26.89/035
	22-210	28.36/031,30.68/033,32.9/035,36.08/037
	33-330	37.66/035
	35-250	39.26/035,41.1/037,43.21/039,45.33/041,47.58/043,50.01/045,52.55/047,55.32/049,58.13/051,61.05/053,64.81/055,68.15/057,71.65/059,75.33/061,79.13/063, 82.15/065,85.4/067
DN125	15-150	11.81/017,12.71/019,13.61/021,15.40/023,17.28/025,19.08/027,20.88/029,22.68/031,24.56/033, 26.89/035,28.62/037,31.32/039,34.02/041,36.84/043,40.09/045
	22-210	42.52/041,46.02/043,50.02/045
	33-330	51.84/043,56.26/045
	35-250	58.13/051,61.05/053,64.81/055,68.15/057,71.65/059,75.33/061,79.13/063,82.15/065,85.4/067,89.73/069,94.22/071,99.05/073,103.9/075,109.2/077,114.7/079, 120.4/081,124.3/083,128.1/085
DN150	15-150	15.40/023,17.28/025,19.08/027,20.88/029,22.68/031,24.56/033,26.89/035,28.62/037,31.32/039,34.02/041,36.84/043,40.09/045,41.76/047,45.36/049,49.12/051, 53.27/053
	22-210	56.72/049,61.36/051,66.24/053
	33-330	69.12/051,75.07/053
	35-250	79.13/063,82.15/065,85.4/067,89.73/069,94.22/071,99.05/073,103.9/075,109.2/077,114.7/079,120.4/081,124.3/083,128.1/085,134.6/087,141.3/089,148.3/091, 155.7/093,163.5/095,170.8/097
DN200	15-150	40.09/045,41.76/047,45.36/049,49.12/051, 53.27/053,57.19/055,63.49/057,70.07/059,76.37/061, 82.67/063,88.97/065,97.14/067
	22-210	99.26/069,103.32/071,107.38/073,111.37/075,115.15/077,121.15/079
	33-330	123.56/075,127.95/077,134.19/079
	35-250	141.3/089,148.3/091,155.7/093,163.5/095,170.8/097,179.3/099,188.3/101,197.7/103,207.7/105,218.1/107,229/109,240.5/111,252.5/113,265.4/115,282.7/117, 298.9/119
DN250	15-150	70.07/059,76.37/061,82.67/063,88.97/065,97.14/067,104.94/069,114.84/071,124.74/073,135.08/075,146.23/077
	22-210	155.98/091,162.36/093,168.74/095,175.01/097,180.95/099,189.58/101
	33-330	193.38/097,200.89/099,209.33/101
	35-250	218.1/107,229/109,240.5/111,252.5/113,265.4/115,282.7/117,298.9/119,310.5/121,322.9/123,339.1/125,356.2/127,374.1/129,392.8/131,412.3/133,433.2/135, 451.1/137,469.7/139
DN300	15-150	104.94/069,114.84/071,124.74/073,135.08/075,146.23/077,150.15/079,163.65/081,177.15/083, 190.65/085,206.47/087
	22-210	212.7/107,221.4/109,230.1/111,238.65/113,246.75/115,257.88/117
	33-330	259.2/113,268.95/115,278.1/117,290.33/119

	35-250	298.9/119,310.5/121,322.9/123,339.1/125,356.2/127,374.1/129,392.8/131,412.3/133,433.2/135,451.1/137,469.7/139,498.9/141,527/143,553.5/145,581.3/147, 610.2/149,640.5/151

Size	Differential Pressure (KPa)	Flowrate(m3/h)/Flowrate Code
DN350	15-150	163.65/081,177.15/083,190.65/085,206.47/087,213.50/089,226.8/091,236.2/093,245.6/095, 254.2/097,263.6/099,275.7/101
	22-210	277.9/121,289.4/123,301/125,312.5/127,323.6/129,336.9/131
	33-330	352.1/129,364.7/131,380.8/133
	35-250	392.8/131,412.3/133,433.2/135,451.1/137,469.7/139,498.9/141,527/143,553.5/145,581.3/147,610.2/149,640.5/151,673.2/153,707.8/155,743.3/157, 780.2/159,817.1/161,854/163
DN400	15-150	190.65/085,204.15/087,213.50/089,226.8/091,236.2/093,245.6/095,254.2/097,263.6/099,275.7/101,283.5/103,295.25/105,307/107,317.75/109,329.5/111, 343.67/113
	22-210	348.8/133,363.2/135,377.7/137,392.05/139,405.85/141,422.44/143
	33-330	432/141,448.25/143,463.5/145,482.33/147
	35-250	498.9/141,527/143,553.5/145,581.3/147,610.2/149,640.5/151,673.2/153,707.8/155,743.3/157,780.2/159,817.1/161,854/163,897.4/165,940.5/167,986.3/169, 1027/171,1067.5/173
DN450	15-150	245.6/095,254.2/097,263.6/099,275.7/101,283.5/103,295.25/105,307/107,317.75/109,329.5/111,343.67/113,351.54/115,366.11/117,380.68/119,394.01/121, 408.58/123,424.88/125
	22-210	431.03/145,448.86/147,466.84/149,484.66/151,501.85,153,522.41/155
	33-330	546.08/153,565.59/155,590.37/157
	35-250	610.2/149,640.5/151,673.2/153,707.8/155,743.3/157,780.2/159,817.1/161,854/163,897.4/165,940.5/167,986.3/169,1027/171,1067.5/173,1121/175, 1177/177,1228.4/179,1279.8/181,1323.7/183
DN500	15-150	275.7/101,283.5/103,295.25/105,307/107,317.75/109,329.5/111,343.67/113,351.54/115,366.11/117,380.68/119,394.01/121,408.58/123,424.88/125, 436.97/127,454.36/129,470.27/131,487.66/133, 512.28/135
	22-210	522.41/155,536.26/157,557.72/159,578.98/161,599.47/163,642.42/165
	33-330	652.36/163,675.61/165,725.39/167
	35-250	743.3/157,780.2/159,817.1/161,854/163,897.4/165,940.5/167,986.3/169,1027/171,1067.5/173,1121/175,1177/177,1228.4/179,1279.8/181,1323.7/183, 1390/185,1455.5/187,1520.5/189,1579.9/191

Installation

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service-person.
4. Always conduct a thorough checkout when installation is completed.
5. IMPORTANT:
   For trouble-free operation of the product,Good installation practice must include initial system flushing,chemical water treatment,and the use of a 50 micron (or finer)system side stream filter(s), Remove all filters before flushing.
6. Suggest using a tentative pipe to do the initial system flushing, Then plumb the valve in the pipe.
7. Do not use boiler additives,Solder flux and wetted materials which are petroleum based or contain mineral oil,hydrocarbons,or ethylene glycol acetate.Compounds which can be used,with minimum 50% water dilution,are diethylene glycol,ethyleneglycol,and propylene glycol (antifreeze solutions).
8. The valve may be installed with flow direction same as the arrow on the valve body,Wrong installaion will lead to hydronic system paralysis.
9. Attention not to damage the test cock during installation.（above DN200）



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Subject to change without notice.