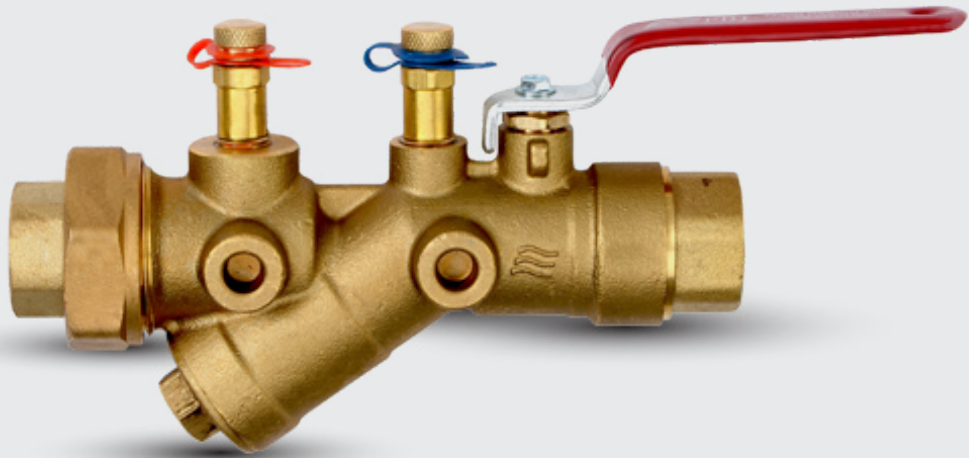


AC



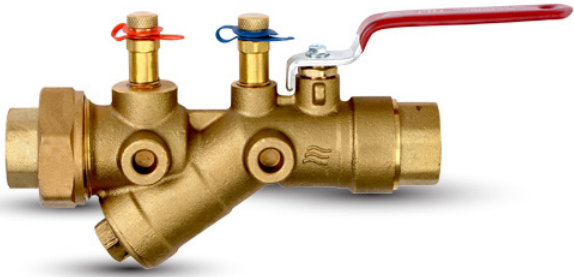
## Automatic Balancing Valves

Flow regulator & union

Engineering  
*GREAT* Solutions

# AC

AutoFlow combination ball valve, AutoFlow regulator and union with up to five (5) accessory port locations. Unit is factory set to automatically limit the flow rate to within 5% of the specified amount. The flow cartridge is removable from the valve body to provide access for flow rate changes, inspection, and cleaning without breaking the main piping. The ball valve has PTFE packing, brass packing nut and blowout-proof stem, large diameter plated ball and a full size steel handle with vinyl grip. The union has an EPDM “o”-ring and tailpiece available in M, F and S connections. Ball valve end is available only in FPT or SWT. Pressure / Temperature ports are standard.



## Key features

- > **Flow Limiting**  
No wasted pumping
- > **Combination Valve**  
Union, regulator and shut-off in one
- > **+/- 5%**
- > **Tamper Resistant**

## Technical description

**Application:**  
Hydronic Balancing

**Functions:**  
Flow regulator, union and shut-off

**Dimensions:**  
1/2" - 2"

**Rating:**  
400 psig at 250° F (27 bar at 120° C)

**Pressure range:**  
2-32 psi or 5-60 psi

**Accuracy:**  
±5%

**Material:**  
Body: DZR Brass  
Flow cartridge: Series 300 stainless steel  
wear surfaces with stainless steel spring

## Connections

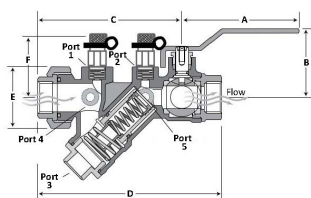
**S = sweat F = female NPT M = male NPT**

Model	Size in./mm		Fixed Conn. (Outlet) in./mm			Union Conn. (Intlet) in./mm		
AC0050	1/2"	(15)	1/2"	(15)	S, F	3/8	(10)	S
						1/2	(15)	F, M, S
						3/4	(20)	F, M, S
AC0075	3/4"	(20)	3/4"	(20)	S, F	3/8	(10)	S
AC0100R*	1"	(25)	1"	(25)	S, F	1/2	(15)	F, M, S
						3/4	(20)	F, M, S
						1	(25)	M, S
AC0100	1"	(25)	1"	(25)	S, F	1/2	(15)	M, S
						3/4	(20)	F, M, S
						1	(25)	F, M, S
						1 1/4	(32)	F, M, S
AC0125	1 1/4"	(32)	1 1/4"	(32)	S, F	1/2	(15)	M, S
AC0150R*	1 1/2"	(40)	1 1/2"	(40)	S, F	3/4	(20)	F, M, S
						1	(25)	F, M, S
						1 1/4	(32)	F, M, S
AC0150	1 1/2"	(40)	1 1/2"	(40)	S, F	1 1/2	(40)	F, M, S
						2	(50)	F, M, S
						1 1/4	(32)	F, M, S
AC0200	2"	(50)	2"	(50)	S, F	1 1/2	(40)	F, M, S
						2	(50)	F, M, S
						1 1/4	(32)	F, M, S

## Flow Rate

Size	psid Range	Flow Rate (gpm)
1/2" - 3/4"	2 - 32 (L)	0.33, 0.5, 0.67, 0.75, 0.88, 1.0, 1.1, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.28, 6.0, 7.0, 8.0
	5 - 60 (H)	1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10, 11, 12
1" - 1 1/4"	2 - 32 (L)	0.5, 0.67, 0.75, 0.88, 1.0, 1.1, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.64, 3.0, 3.5, 4.0, 4.5, 5.0, 5.28, 6.0, 7.0, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
	5 - 60 (H)	1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27
1 1/2" - 2"	2 - 32 (L)	5.0, 6.0, 7.0, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50
	5 - 60 (H)	8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 68, 70
Size	kPa Range	Flow Rate (lps)
15 - 20 mm	14 - 220 (L)	0.021, 0.032, 0.042, 0.047, 0.056, 0.063, 0.069, 0.079, 0.095, 0.110, 0.126, 0.142, 0.158, 0.167, 0.189, 0.221, 0.252, 0.284, 0.315, 0.333, 0.379, 0.442, 0.505
	35 - 414 (H)	0.063, 0.095, 0.126, 0.158, 0.189, 0.252, 0.315, 0.379, 0.442, 0.505, 0.568, 0.631, 0.694, 0.757
25 - 32 mm	14 - 220 (L)	0.032, 0.042, 0.047, 0.056, 0.063, 0.069, 0.079, 0.095, 0.110, 0.126, 0.142, 0.158, 0.167, 0.189, 0.221, 0.252, 0.284, 0.315, 0.333, 0.379, 0.442, 0.505, 0.568, 0.631, 0.694, 0.757, 0.820, 0.883, 0.946, 1.009, 1.073, 1.136, 1.199
	35 - 414 (H)	0.063, 0.095, 0.126, 0.158, 0.189, 0.252, 0.315, 0.379, 0.442, 0.505, 0.568, 0.631, 0.694, 0.757, 0.820, 0.883, 0.946, 1.009, 1.073, 1.136, 1.199, 1.262, 1.325, 1.388, 1.451, 1.514, 1.577, 1.640, 1.703
40 - 50 mm	14 - 220 (L)	0.315, 0.379, 0.442, 0.505, 0.568, 0.631, 0.694, 0.757, 0.820, 0.883, 0.946, 1.009, 1.073, 1.136, 1.199, 1.262, 1.388, 1.514, 1.640, 1.767, 1.893, 2.019, 2.145, 2.271, 2.397, 2.524, 2.650, 2.776, 2.902, 3.028, 3.155
	35 - 414 (H)	0.505, 0.568, 0.631, 0.694, 0.757, 0.820, 0.883, 0.946, 1.009, 1.073, 1.136, 1.199, 1.262, 1.325, 1.388, 1.451, 1.514, 1.577, 1.640, 1.703, 1.767, 1.893, 2.019, 2.145, 2.271, 2.397, 2.524, 2.650, 2.776, 2.902, 3.028, 3.155, 3.281, 3.407, 3.533, 3.659, 3.785, 3.912, 4.038, 4.290, 4.416

## Articles



### Dimensions / Flow

Model	Size in.	A in.	B in.	C in.	D in.	E in.	F in.	Weight lb.	Cvs	Maximum Flow gpm (lps)* Control Range psi (kpa)	
										2-32 (L) (14-220)	5-60 (H) (35-414)
AC0050	1/2	4.1	2.0	4.8	6.7	2.1	2.2	2.5	7.9	8	12
AC0075	3/4	4.1	2.0	4.9	6.7	2.1	2.2	2.5	8.8	8	12
ACR100*	1	4.1	2.0	5.5	7.6	2.1	2.2	2.5	8.8	8	12
AC0100	1	4.7	2.7	6.6	9.5	2.8	2.3	6.2	19.7	19	27
AC0125	1 1/4	4.7	2.7	6.6	9.6	2.8	2.3	6.1	20.4	19	27
AC0150*	1 1/2	4.7	2.7	7.9	10.7	2.8	2.3	6.8	20.4	19	27
AC0150	1 1/2	5.6	3.6	8.4	11.7	3.8	2.4	15.6	52.7	50	70
AC0200	2	5.6	3.6	8.5	12.0	3.8	2.4	15.4	55.1	50	70

### Notes

Weight and dimension based on F X F connections and will vary with mixed options/connections.

All weights and dimensions are subject to minor changes.

Cvs based on the body only without flow regulator.

For pump head calculations, add the indicated pressure drop of 4.6 ft or 2 psi for 2-32 psi or 11.6 ft or 5 psi for 5-60 psi to the calculated drop for other components.

\* Denotes female thread not available on union end.

Available in ISO7 threads.

## Model Order Designation

**Model Size**  
1" AC Shown

**Pressure Range**  
L = 2-32 psi

**Option w/ Locations**  
Use for options that require specified locations.  
Dual P/T's in Ports 2 & 4 and Air Vent in Port 1 Shown

**GPM**  
12 GPM Shown

**AC0100L - 0075S - DP2&4, AV1 - MI - 12**

**Connections**  
Ball valve end first. See specifications  
for available connections. Female Sweat X 3/4"  
Reduced Female Sweat Shown.

**Options**  
Use for options that have specific locations.  
Metal I.D. Tag Shown

S = female sweat      F = female NPT      M = male NPT

## Options Available

<b>AA</b> Manual Air Vent	<b>MI</b> Metal ID Tag	<b>SE</b> Stem Extender
<b>DX</b> Ext. P/T Ports	<b>PI</b> Plastic ID Tag	<b>T4</b> 1/4" Tap
<b>EH</b> Extended Handle	<b>PL</b> Plug	
<b>HN</b> Hose End Drain	<b>PP</b> ProPress®	



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