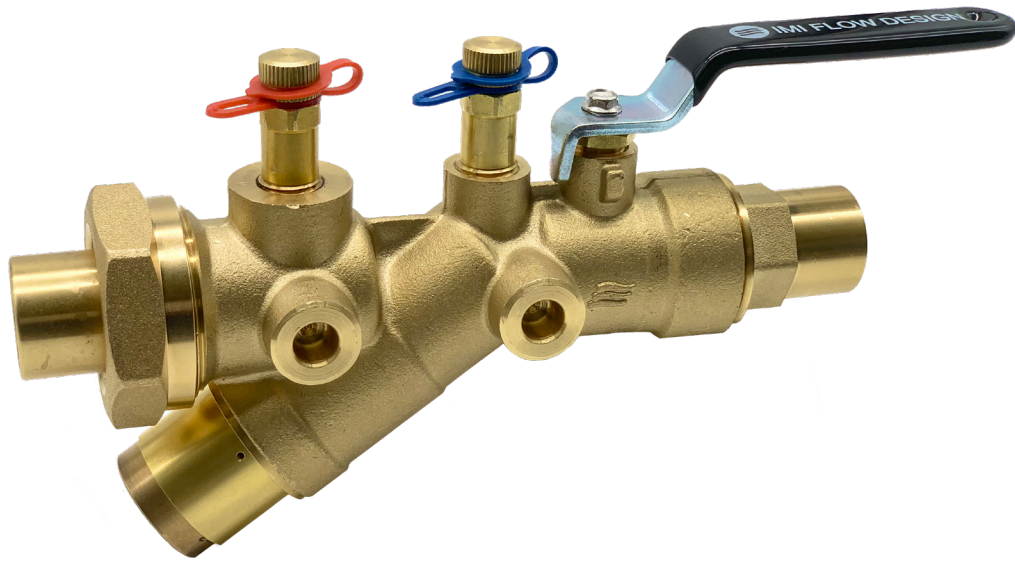


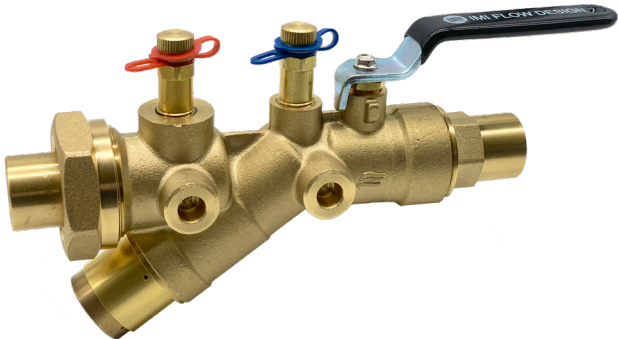
ACA / ACRA



Automatic Balancing Valves
Field Adjustable Flow Limiter

ACA / ACRA

ACA is a field adjustable flow limiter with AutoFlow combination ball valve, AutoFlow 2.0 regulator, and union with up to five (5) accessory port locations. Unit is field adjustable to allow for a range of flow to automatically limit the flow rate with +/- 5% regulation accuracy of the specified amount. The desired flow can be adjusted and locked with the cap at the end of the cartridge. The flow cartridge is removable to allow 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.



ACRA is the Compact, AutoFlow combination ball valve, AutoFlow 2.0 regulator, and union with four accessory port locations. Both AC and ACRA can also be ordered with stainless steel ball and stem as an option.

Key features

- > **Flow Limiting**
No wasted pumping
- > **Combination Valve**
Union, regulator and shut-off in one
- > **Accuracy**
+/- 5%
- > **Field Adjustability**
Adjustment knob labeled with actual gpm values
- > **Significantly Reduced Interactivity**
Adapts to system pressure changes within its working range
- > **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

Regulation accuracy:

+/- 5%

Material:

Body: DZR Brass

Flow cartridge: Series 300 stainless steel wear surfaces with stainless steel spring

Connections

ACA

Model	Size in./mm		Fixed Conn. (Outlet) in./mm			Union Conn. (Inlet) in./mm		
ACA050	1/2"	(15)	1/2"	(15)	S, F, PP	1/2	(15)	F, M, S, PP
						3/4	(20)	F, M, S, PP
ACA075	3/4"	(20)	3/4"	(15)	S, F, PP	1/2	(15)	F, M, S, PP
						3/4	(20)	F, M, S, PP
						1	(25)	M, S, PP
ACA100	1"	(25)	1"	(25)	S, F, PP	1/2	(15)	M, S, PP
						3/4	(20)	F, M, S, PP
						1	(25)	F, M, S, PP
						1 1/4	(32)	F, M, S, PP
ACA125	1 1/4"	(32)	1 1/4"	(32)	S, F, PP	1/2	(15)	M, S, PP
						3/4	(20)	F, M, S, PP
						1	(25)	F, M, S, PP
						1 1/4	(32)	F, M, S, PP
						1 1/2	(40)	M, S, PP
ACA150	1 1/2"	(40)	1 1/2"	(40)	S, F, PP	1 1/4	(32)	F, M, S, PP
						1 1/2	(40)	F, M, S, PP
						2	(50)	F, M, S, PP
ACA200	2"	(50)	2"	(50)	S, F, PP	1 1/4	(32)	F, M, S, PP
						1 1/2	(40)	F, M, S, PP
						2	(50)	F, M, S, PP

F = Female NPT

M = Male NPT

S = Sweat

PP = ProPress

ACRA

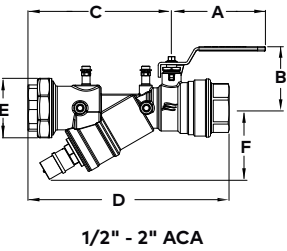
Model	Size in./mm		Fixed Conn. (Outlet) in./mm			Union Conn. (Inlet) in./mm		
ACRA050 (LF)	1/2"	(15)	1/2"	(15)	S, F, PP	1/2	(15)	F, M, S, PP
ACRA050 (HF)	1/2"	(15)	1/2"	(15)	S, F, PP	3/4	(20)	F, M, S, PP
ACRA075 (LF)	3/4"	(20)	3/4"	(20)	S, F, PP	1/2	(15)	F, M, S, PP
ACRA075 (HF)	3/4"	(20)	3/4"	(20)	S, F, PP	3/4	(20)	F, M, S, PP
ACRA100*	1"	(25)	1"	(25)	S, F, PP	1/2	(15)	F, M, S, PP
						3/4	(20)	F, M, S, PP
						1	(25)	M, S, PP
ACRA150*	1 1/2"	(40)	1 1/2"	(40)	S, F, PP	1/2	(15)	F, M, S, PP
						3/4	(20)	F, M, S, PP
						1	(25)	F, M, S, PP
						1 1/4	(32)	F, M, S, PP
						1 1/2	(40)	M, S, PP

Notes

R on model number stands for reduced body size

LF is the low flow version and HF is the high flow version

*Denotes female thread not available on union end

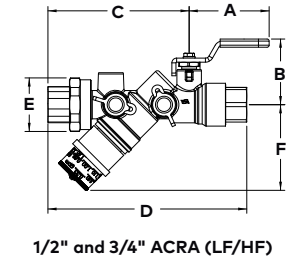


Dimensions / Flow
ACA

Model	Size	A		B		C		D		E		F		Minimum Flow (gpm) 2-32 psi	Maximum Flow (gpm) 2-32 psi
		in.	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm		
ACA050	1/2	4.1	(104)	2.0	(51)	4.8	(122)	6.7	(170)	2.1	(53)	2.8	(71)	2.5	8
ACA075	3/4	4.1	(104)	2.0	(51)	4.9	(124)	6.7	(170)	2.1	(53)	2.8	(71)	2.5	8
ACA100	1	4.7	(104)	2.7	(69)	6.6	(168)	9.5	(241)	2.8	(71)	3.2	(81)	6	20
ACA125	1 1/4	4.7	(119)	2.7	(69)	6.6	(168)	9.6	(244)	2.8	(71)	3.2	(81)	6	20
ACA150	1 1/2	5.6	(119)	3.6	(91)	8.4	(213)	11.7	(297)	3.8	(97)	4.18	(106)	15	50
ACA200	2	5.6	(119)	3.6	(91)	8.5	(213)	12.0	(305)	3.8	(97)	4.18	(106)	15	50

Notes
Dimensions based on F X F connections and will vary with mixed options/connections.
Dimensions are subject to minor changes.
For pump head calculations, add the indicated pressure drop of 4.6 ft or 2 psi to the calculated drop for other components.

Dimensions / Flow
ACRA



Model	Size	A		B		C		D		E		F		Minimum Flow (gpm) 2-32 psi	Maximum Flow (gpm) 2-32 psi
		in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm	in./mm		
ACRA050 (LF)*	1/2	2.3	(58)	1.9	(48)	4.0	(102)	6.0	(152)	1.6	(41)	2.5	(63.5)	0.33	1.25
ACRA050 (HF)*	1/2	2.3	(58)	1.9	(48)	4.0	(102)	6.0	(152)	1.6	(41)	2.5	(63.5)	1	3
ACRA075 (LF)*	3/4	2.3	(58)	1.9	(48)	4.1	(104)	6.5	(165)	1.6	(41)	2.5	(63.5)	0.33	1.25
ACRA075 (HF)*	3/4	2.3	(58)	1.9	(48)	4.1	(104)	6.5	(165)	1.6	(41)	2.5	(63.5)	1	3
ACRA100	1	4.1	(104)	2.0	(51)	5.5	(140)	7.6	(193)	2.1	(53)	2.8	(71.1)	6	20
ACRA150	1 1/2	4.7	(119)	2.7	(69)	7.9	(201)	10.7	(271)	2.8	(71)	3.2	(81.3)	15	50

Notes
Dimensions based on F X F connections and will vary with mixed options/connections.
Dimensions are subject to minor changes.
*1/4" port (1/2" 3/4" only)
For pump head calculations, add the indicated pressure drop of 4.6 ft or 2 psi to the calculated drop for other components.

Weight / Cv

ACA

Model	Weight lb./ (kg)	Cv (Kv)
ACA050	2.45 (1.11)	8.8 (7.60)
ACA075	2.48 (1.12)	8.8 (7.60)
ACA100	6.2 (2.81)	20.4 (17.63)
ACA125	6.2 (2.81)	20.4 (17.63)
ACA150	14.39 (6.52)	55.1 (47.61)
ACA200	14.45 (6.55)	55.1 (47.61)

Notes

Weights based on F X F connections and will vary with mixed options connections

Weights are subject to minor changes

Cv's based on the body only without flow cartridge.

See operation manual for Installation and Maintenance F033

ACRA

Model	Weight lb./ (kg)	Cv (Kv)
ACRA050 (LF)	1.7 (0.77)	7.9 (6.83)
ACRA050 (HF)	1.7 (0.77)	7.9 (6.83)
ACRA075 (LF)	1.8 (0.82)	7.9 (6.83)
ACRA075 (HF)	1.8 (0.82)	7.9 (6.83)
ACRA100	2.52 (1.14)	8.8 (7.60)
ACRA150	6.2 (2.81)	20.4 (17.63)

Notes

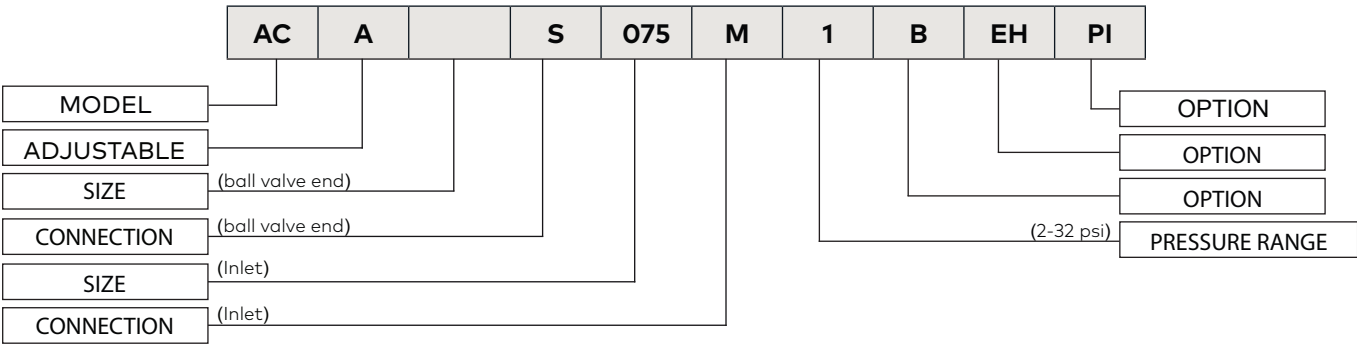
Weights based on F X F connections and will vary with mixed options/connections.

Weights are subject to minor changes.

Cv's based on the body only without flow cartridge.

See operation manual for Installation and Maintenance F033

Model Order Designation



S = female sweat **F** = female NPT **M** = male npt **PP** = propress

Note
Please mention clearly the HF/LF option along with the size for ACRA050 and ACRA075
Standard option will be provided as a standard offering if BAA is not specified in the options
Pricing may vary based on the options required

Options Available

- | | |
|---|------------------------------------|
| AA Automatic Air Vent | SE Stem Extender |
| AV Manual Air Vent | T4 1/4" F Tap |
| DX Dual Extended P/T Ports | XL Extended P/T port |
| EH Extended Handle | B BAA |
| HN Hose End Drain Valve with Cap | S Stainless Ball and Stem |
| MI Metal ID Tag | 2 BAA with SS Ball and Stem |
| PI Plastic ID Tag | |
| PL Plug | |



The products, texts, photographs, graphics and diagrams in this document may be subject to alteration by IMI Hydronic Engineering without prior notice or reasons being given. For the most up to date information about our products and specifications, please visit www.flowdesign.com.