

ACA/ACRA



Automatic Balancing Valves

Field Adjustable Flow Limiter



Breakthrough Engineering

ACA/ACRA

ACA is a field adjustable flow limiter with AutoFlow combination ball valve, AutoFlow 2.0 regulator, and union with up to five (4) 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"

Ratina:

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	•	Fixed C	Conn. (Outlet)	Uni	on Conn. (In	ilet)
	in./m	m		in./mm		in./mm	
ACA050	1/2"	(15)	1/2"	(15) S, F, PP	1/2	(15)	F, M, S, PP
-CAUJU	1/ 2	(13)	1/ 2	(15) 5,1,11	3/4	(20)	F, M, S, PP
					1/2	(15)	F, M, S, PP
ACA075	3/4"	(20)	3/4"	(15) S, F, PP	3/4	(20)	F, M, S, PP
					1	(25)	F, M, S, PP
			,		1/2	(15)	M, S, PP
ACA100	1"	(25)	411	(3E) C E DD	3/4	(20)	F, M, S, PP
	1"		1"	(25) S, F, PP	1	(25)	F, M, S, PP
					1 1/4	(32)	F, M, S, PP
					1/2	(15)	M, S, PP
					3/4	(20)	F, M, S, PP
ACA125	1 1/4"	(32)	1 1/4"	(32) S, F, PP	1	(25)	F, M, S, PP
					1 1/4	(32)	F, M, S, PP
					11/2	(40)	F, M, S, PP
	<u> </u>		·		1 1/4	(32)	F, M, S, PP
ACA150	1 1/2"	(40)	1 1/2"	(40) S, F, PP	11/2	(40)	F, M, S, PP
					2	(50)	F, M, S, PP
					1 1/4	(32)	F, M, S, PP
ACA200	2"	(50)	2"	(50) S, F, PP	11/2	(40)	F, M, S, PP
					2	(50)	F, M, S, PP
F = F4	emale NPT		M = Mc	ile NPT	S = Sweat		PP = ProPress

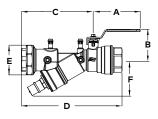
ACRA

Model	Siz in./m			Conn. (in./mn	Outlet)	1	Jnion Conn. (in./mm	
ACRAO50 (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 3/4 1	(15) (20) (25)	F, M, S, PP F, M, S, PP M, S, PP
ACRA150	1 1/2"	(40)	11/2"	(40)	S, F, PP	1/2 3/4 1 11/4 11/2	(15) (20) (25) (32) (40)	F, M, S, PP F, M, S, PP F, M, S, PP F, M, S, PP 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

Articles



1/2" - 2" ACA

Dimensions / Flow ACA

											Minimum	Maximum
Model	Size		Α		В		С	D	E	F	Flow (gpm)	Flow (gpm)
	in.	in.	/mm	in./	mm	in.	/mm	in./mm	in./mm	in./mm	2-32 psi	2-32 psi
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	11/4	4.7	(119)	2.7	(69)	6.6	(168)	9.6 (244)	2.8 (71)	3.2 (81)	6	20
ACA150	11/2	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

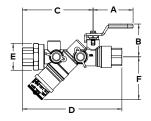
Dimensions based on F $\rm X$ F connections and will vary with mixed options/connections.

Dimensions are subject to minor changes.

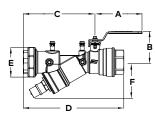
For pump head calculations, add the indicated pressure drop of 4.6 ft or 2 psi to the calculated drop for other components.

Dimensions / Flow

ACRA



1/2" and 3/4" ACRA (LF/HF)



1" and 1 1/2" ACRA

Model	Size in./mm	A in./mm	B in./mm	C in./mm	D in./mm	E in./mm	F in./mm	Minimum Flow (gpm) 2-32 psi	Maximum Flow (gpm) 2-32 psi
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)	2.5	8
ACRA150	11/2	4.7 (119)	2.7 (69)	7.9 (201)	10.7 (271)	2.8 (71)	3.2 (81.3)	6	20

Notes

Dimensions based on F $\rm X$ 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

	Weight		
Model	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 $\rm X$ 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 F113

ACRA

	Weight		
Model	lb./(kg)	C	v (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

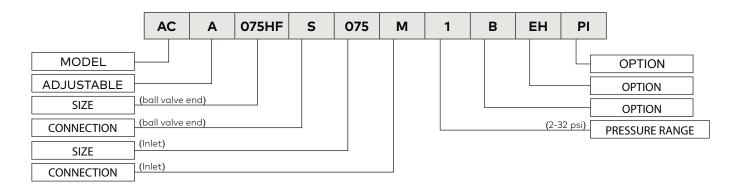
Weights based on F $\rm X$ F connections and will vary with mixed options/connections.

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

See operation manual for Installation and Maintenance F113

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



