

# AC SBS



### **Automatic Balancing Valves**

Flow regulator & union with stainless steel ball and stem

Engineering

GREAT Solutions



## AC SBS

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 stainless steel stem, large diameter stainless steel 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"

#### Pressure class:

400 wwp

#### 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

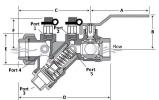
Model	Size in./mm	Fixed Conn. (Outlet) in./mm	Un	Union Conn. (Intlet) in./mm			
ACSBS0050	1/2" (15)	1/2" (15) S, F	1/2 3/4	(15) F, M, S (20) F, M, S			
ACSBS0075	3/4" (20)	3/4" (20) S, F	1/2 	(15) F, M, S (20) F, M, S			
ACSBS0100R*	1" (25)	1" (25) S, F	1	(25) M, S			
ACSBS0100	1" (25)	1" (25) S, F	1/2 3/4 1 1 1/4	(15) M, S (20) F, M, S (25) F, M, S (32) F, M, S			
ACSBS0125	1 1/4" (32)	1 1/4" (32) S, F	1/2 3/4	(15) M, S (20) F, M, S			
ACSBS0150R*	1 1/2" (40)	1 1/2" (40) S, F	1 1/4 1 1/2	(25) F, M, S (32) F, M, S (40) M, S			
ACSBS0150	1 1/2" (40)	1 1/2" (40) S, F	1 1/4 1 1/2 2	(32) F, M, S (40) F, M, S (50) F, M, S			
ACSBS0200	2" (50)	2" (50) S, F	1 1/4 1 1/2 2	(32) F, M, S (40) F, M, S (50) 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					
0:	LD. D.	Flow Bate (lea)					
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					
	14 - 220 (L)	0.032,0.042,0.047,0.056,0.063,0.069,0.079,0.095,0.110,0.126,0.142,0.158,0.167,0.189,0.221,0.252,0.042,0.042,0.047,0.047,0.044,					
25 - 32 mm -		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					
25 - 52 11111	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,  0.631,  0.694,  0.757,  0.820,  0.883,  0.8					
		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)	0.315,0.379,0.442,0.505,0.568,0.631,0.694,0.757,0.820,0.883,0.946,1.009,1.073,1.136,1.199,1.262,0.883,0.946,0.883,0.946,					
		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					

Dimensions

#### **Articles**



Diffictions										Maximum Flo	ow gpm (lps)*
-						Control Range psi (kpa)					
Model	Size	Α	В	С	D	E	F	Weight		2 - 32 (L)	5 - 60 (H)*
-	in.	in.	in.	in.	in.	in.	in.	lb.	Cvs	(14 - 220)	I(35 - 414)
ACSBS0050	1/2	4.1	2.0	4.8	6.7	2.1	2.2	2.5	7.9	8	12
ACSBS0075	3/4	4.1	2.0	4.9	6.7	2.1	2.2	2.5	8.8	8	12
ACRSBS100*	1	4.1	2.0	5.5	7.6	2.1	2.2	2.5	8.8	8	12
ACSBS0100	1	4.7	2.7	6.6	9.5	2.8	2.3	6.2	19.7	19	27
ACSBS0125	1 1/4	4.7	2.7	6.6	9.6	2.8	2.3	6.1	20.4	19	27
ACSBS0150*	1 1/2	4.7	2.7	7.9	10.7	2.8	2.3	6.8	20.4	19	27
ACSBS0150	1 1/2	5.6	3.6	8.4	11.7	3.8	2.4	15.6	52.7	50	70
ACSBS0200	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 FXF connections and will vary with mixed options/connections.

All weights and dimensions are subject to minor changes.

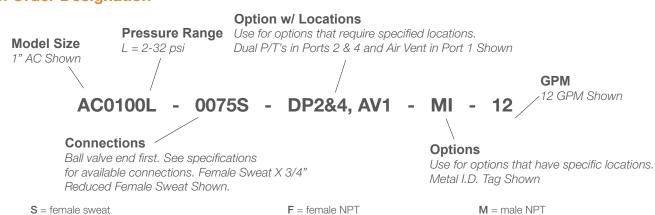
Cvs based on the body only without flow regulator.

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**



#### **Options Available**

**AA** Manual Air Vent

DX Ext. P/T Ports

EH Extended Handle

**HN** Hose End Drain

MI Metal ID Tag

PI Plastic ID Tag

**PL** Plug

**PP** ProPress®

SE Stem Extender

**T4** 1/4" Tap



