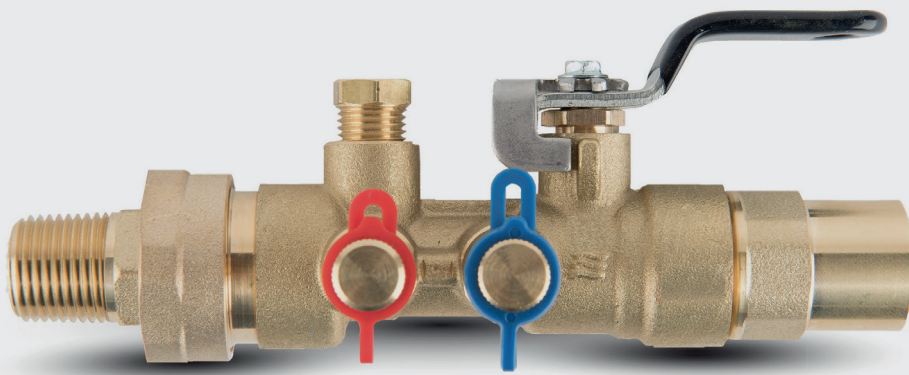


UA SBS

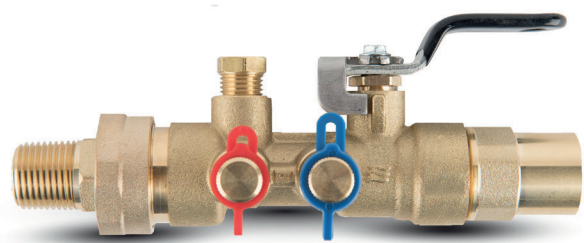


Manual Venturi Balancing
Venturi ball valve, stainless steel ball
and stem

Engineering
GREAT Solutions

UA SBS

Model UA SBS is a shutoff and manual throttling venturi valve with large diameter stainless steel ball and PTFE seats. The stainless steel stem is blowout proof with EPDM O-ring and PTFE packing with packing nut. Micro handle customary on the A and M body, and standard handle customary on the B and C bodies both utilize a standard adjustable memory stop for shutoff and resetting and vinyl coated grip. Dual Pressure / Temperature ports are standard on all UA bodies. Models A, B and C are available with union connection or fixed threaded or sweat connections each with a metal to metal and EPDM O-ring seal.



Key features

- > **Fixed Measures Element**
Reading depends on flow only
- > **Fixed Measures Element**
Unions, fixed and sweat
- > **Stainless Steel ball and stem**

Technical description

Application: Hydronic Balancing	Rating: Body M: 400 psig at 250° F (25 Bar at 120° C) Bodies A, B & C: 600 psig at 250° F (40 Bar at 120° C)	Material: Body: DZR Brass Union (Optional): Brass with EPDM O-ring Fixed Connection: DZR Brass Ball and Stem: 316 Stainless Steel
Functions: Balancing, Measuring and Isolation		
Dimensions: 1/2" - 2"	Accuracy: ±3%	

Configuration Information

Body	Venturi No.	Venturi Flow Ranges* gpm (lps)	Cv (Kv)	Inlet Connections in. (mm)			Outlet Connections in. (mm)		
A	1	0.2 - 0.7 (0.01 - 0.04)	.28	-	-		1/2 (15)	S, F	
	2	0.4 - 1.5 (0.03 - 0.09)	.77	1/2 (15)	S, F, M		3/4 (20)	S, F	
	3	1.0 - 3.4 (0.06 - 0.21)	2.2	3/4 (20)	S, F, M		1 (25)	S, F	
	4	2.2 - 7.5 (0.14 - 0.47)	4.8						
B	5	2.6 - 9.5 (0.16 - 0.6)	6.0	1/2 (15)	S, F, M		1/2 (15)	S, F	
	6	5.8 - 21.0 (0.37 - 1.32)	18.0	3/4 (20)	S, F, M		3/4 (20)	S, F	
				1 (25)	S, F, M		1 (25)	S, F	
				1 1/4 (32)	S, F, M		1 1/4 (32)	S, F	
C	7	9.5 - 37.0 (0.6 - 2.33)	18.0	1 1/4 (32)	S, F, M		1 1/4 (32)	S, F	
	8	22.0 - 80.0 (1.39 - 5.05)	68.0	1 1/2 (40)	S, F, M		1 1/2 (40)	S, F	
				2 (50)	S, F, M		2 (50)	S, F	
				2 1/2 (65)	F, M		2 1/2 (65)	S, F	

Notes

* Flow range is from the minimum recommended differential pressure 24" to 500" W.C. (5.97 to 124.42 kPa)

See installation and operation manual (Flowset)

Connection Weights

Connection Weights

Body Size	Connection Type	Weight lb./ (kg)			
		1/2 (15mm)	3/4 (20mm)	1 (25mm)	—
A	S	0.1 (.05)	0.1 (.05)	0.2 (.08)	—
	F	0.1 (.06)	0.2 (.08)	0.4 (.16)	—
	Union S	0.4 (.20)	0.4 (.20)	—	—
	Union F	—	0.5 (.21)	—	—
	Union M	0.5 (.24)	0.5 (.20)	—	—
B		1/2 (15mm)	3/4 (20mm)	1 (25mm)	1 1/4 (32mm)
	Fixed S	0.2 (.07)	0.2 (.08)	0.1 (.05)	0.3 (.20)
	Fixed F	0.2 (.08)	0.2 (.09)	0.3 (.13)	0.4 (.12)
	Union S	0.4 (.20)	0.5 (.20)	2.7 (1.21)	1.2 (.54)
	Union F	0.5 (.22)	0.5 (.22)	2.8 (1.25)	1.3 (.57)
	Union M	0.6 (.26)	0.6 (.28)	3.0 (1.34)	1.5 (.69)
C		1 1/4 (32mm)	1 1/2 (40mm)	2 (50mm)	2 1/2 (64mm)
	Fixed S	0.7 (.31)	0.6 (.28)	0.7 (.29)	1.2 (0.5)
	Fixed F	0.8 (.34)	0.6 (.29)	0.6 (.29)	1.5 (0.7)
	Union S	2.4 (1.10)	2.4 (1.10)	2.8 (1.27)	—
	Union F	2.7 (1.24)	2.7 (1.24)	3.1 (1.38)	3.5 (1.6)
	Union M	2.8 (1.28)	3.0 (1.37)	2.8 (1.29)	4.54 (2.1)

S = female sweat

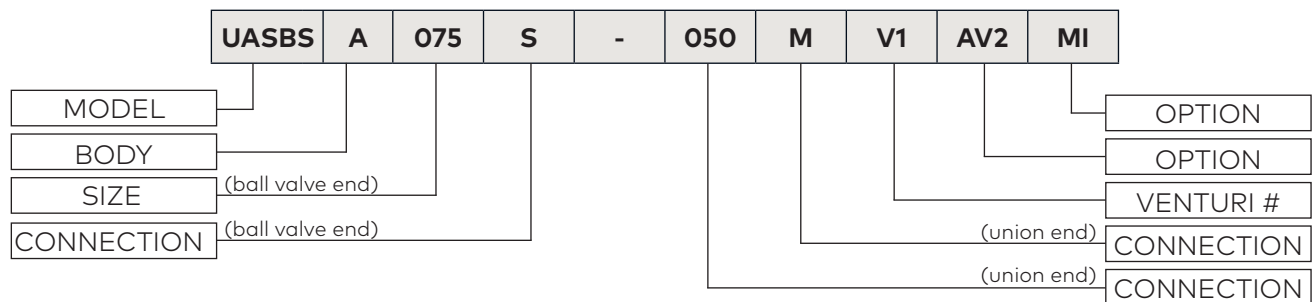
F = female NPT

M = male NPT

Notes

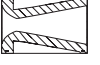
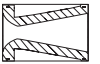
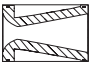
All weights and dimensions are subject to minor changes.

Model UA SBS Order Designation

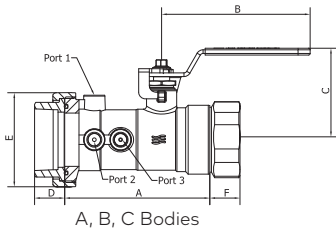


S = female sweat **F** = female NPT **M** = male npt

1/2" - 2" AccuSetter Products

Connections (Inlet) Union  U 3/8" S  U 1/2" S  U 3/4" S  U 1/2" F  U 3/4" F  U 1/2" M  U 3/4" M 1" inlet connection not available	Body A  Includes Venturi, two P/T ports & Memory Stop Venturis (Choose One) Venturi #1 .2 - .7 gpm  Venturi #2 .4 - 1.5 gpm  Venturi #3 1.0 - 3.4 gpm  Venturi #4 2.2 - 7.5 gpm 	Connections (Outlet) Fixed  1/2" S  3/4" S  1" S  1/2" F  3/4" F  1" F
Connections (Inlet) Union  U 1/2" S  U 3/4" S  U 1" S  U 1 1/4" S  U 1/2" F  U 3/4" F  U 1" F  U 1 1/4" F  U 1/2" M  U 3/4" M  U 1" M U 1 1/4" M	Body B  Includes Venturi, two P/T ports & Memory Stop Venturis (Choose One) Venturi #5 2.6 - 9.5 gpm  Venturi #6 5.8 - 21.0 gpm 	Connections (Outlet) Fixed  1/2" S  3/4" S  1" S  1 1/4" S  1/2" F  3/4" F  1" F  1 1/4" F
Connections (Inlet) Union  U 1 1/4" S  U 1 1/2" S  U 2" S  U 1 1/4" F  U 1 1/2" F U 2" F U 2 1/2" F U 1 1/4" M U 1 1/2" M U 2" M U 2 1/2" M	Body C  Includes Venturi, two P/T ports & Memory Stop Venturis (Choose One) Venturi #7 9.5 - 37.0 gpm  Venturi #8 22.0 - 80.0 gpm 	Connections (Outlet) Fixed  1 1/4" S  1 1/2" S  2" S  2 1/2" S  1 1/4" F 1 1/2" F 2" F 2 1/2" F

Articles



Body Dimensions

Body	A		B		C		Weight	
	in.	(mm)	in.	(mm)	in.	(mm)	lb.	(kg)
A	3.5	(90)	2.3	(58)	2.1	(53)	0.8	(0.4)
B	3.8	(97)	2.3	(58)	2.2	(56)	1.2	(0.5)
C	5.4	(137)	5.5	(140)	3.5	(89)	3.6	(1.6)

Connection Dimensions

Body	Conn. Type	D in./mm					E in./mm					F in./mm			
		1/2 (15)	3/4 (20)	1 (25)	-	-	1/2 (15)	3/4 (20)	1 (25)	-	-	1/2 (15)	3/4 (20)	1 (25)	-
A	Fixed S	-	-	-	-	-	-	-	-	-	-	1.03 (26.2)	1.28 (32.5)	1.57 (39.8)	-
	Fixed F	-	-	-	-	-	-	-	-	-	-	0.64 (16.3)	0.79 (20.1)	1.13 (28.7)	-
	Union S	0.7 (17.8)	0.88 (22.4)	*1.38 (35.1)	-	-	1.6 (40.6)	1.6 (40.6)	2.1 (52.2)	-	-	-	-	-	-
	Union F	0.91 (23.1)	*1.09 (27.7)	-	-	-	1.6 (40.6)	2.1 (52.2)	-	-	-	-	-	-	-
	Union M	1.54 (39.1)	1.65 (41.9)	*2.14 (54.4)	-	-	1.6 (40.6)	1.6 (40.6)	2.1 (52.2)	-	-	-	-	-	-
		1/2 (15)	3/4 (20)	1 (25)	1 1/4 (32)	1 1/2 (40)	1/2 (15)	3/4 (20)	1 (25)	1 1/4 (32)	1 1/2 (40)	1/2 (15)	3/4 (20)	1 (25)	1 1/4 (32)
B	Fixed S	-	-	-	-	-	-	-	-	-	-	1.03 (26.2)	1.28 (32.5)	1.57 (39.8)	1.63 (41.3)
	Fixed F	-	-	-	-	-	-	-	-	-	-	0.68 (17.3)	0.72 (18.3)	0.93 (23.6)	1.11 (28.2)
	Union S	0.73 (18.5)	0.98 (24.9)	1.14 (29)	*1.36 (34.5)	*1.48 (37.6)	2.1 (52.2)	2.1 (52.2)	2.1 (52.2)	2.8 (70.8)	2.8 (70.8)	-	-	-	-
	Union F	0.80 (20.3)	0.85 (21.6)	*1.14 (29)	*1.14 (29)	-	2.1 (52.2)	2.1 (52.2)	2.8 (70.8)	2.8 (70.8)	-	-	-	-	-
	Union M	1.63 (41.4)	1.50 (38.1)	1.90 (48.3)	*2.35 (59.7)	*2.36 (60)	2.1 (52.2)	2.1 (52.2)	2.1 (52.2)	2.8 (70.8)	2.8 (70.8)	-	-	-	-
		1 1/4 (32)	1 1/2 (40)	2 (50)	2 1/2 (64)	-	1 1/4 (32)	1 1/2 (40)	2 (50)	2 1/2 (64)	-	1 1/4 (32)	1 1/2 (40)	2 (50)	2 1/2 (64)
C	Fixed S	-	-	-	-	-	-	-	-	-	-	1.15 (29.2)	1.22 (31.0)	1.65 (41.9)	2.05 (52.10)
	Fixed F	-	-	-	-	-	-	-	-	-	-	0.90 (22.9)	0.90 (22.9)	1.15 (29.2)	1.25 (31.8)
	Union S	1.22 (31)	1.34 (34)	1.59 (40.4)	-	-	3.8 (96.7)	3.8 (96.7)	3.8 (96.7)	-	-	-	-	-	-
	Union F	1.10 (27.9)	0.95 (24.1)	1.13 (28.7)	*1.58 (40.1)	-	3.8 (96.7)	3.8 (96.7)	3.8 (96.7)	4.6 (116.8)	-	-	-	-	-
	Union M	2.40 (61)	2.14 (54.4)	2.00 (50.8)	*3.15 (80)	-	3.8 (96.7)	3.8 (96.7)	3.8 (96.7)	4.6 (116.8)	-	-	-	-	-

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

Notes

All weights and dimensions are subject to minor changes. The Overall length may be calculated by adding dimensions A, D, and F.

*Requires Union Expander

Options Available

*AA Automatic Air Vent	*EH Extended Handle	*PI Plastic ID Tag
*AV Manual Air Vent	*MH Micro Handle (optional on B Body)	*PL Plug
*DX Two Extended P/T Ports	*MI Metal ID Tag	*SE Stem Extender

Notes
* Only available on A, B, C bodies

