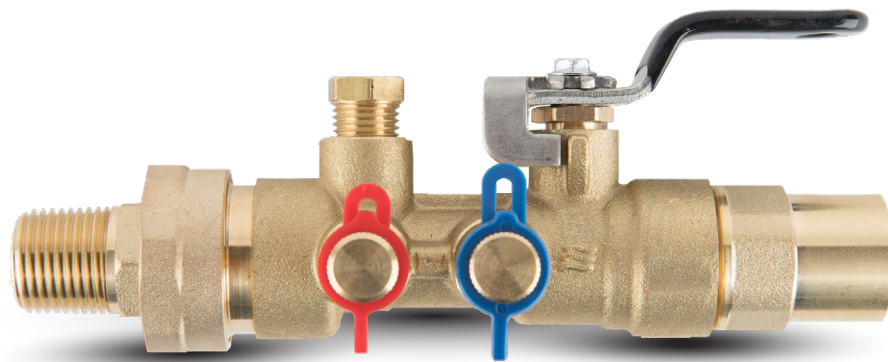


# UA

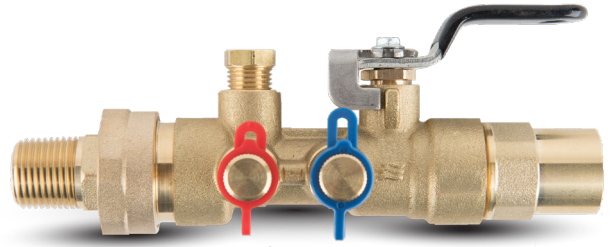


## Manual Venturi Balancing

Venturi ball valve

# UA

Model UA is a shutoff and manual throttling venturi valve with large diameter plated ball and PTFE seats. 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
- > Optional Connections  
Unions, fixed and sweat

## Technical description

### Application:

Hydronic Balancing

### Functions:

Balancing, Measuring and Isolation

### Dimensions:

1/2" - 2"

### 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)

### Accuracy:

±3%

### Material:

Body: DZR Brass

Union (Optional): Brass with EPDM

O-ring

Fixed Connection: DZR Brass

## Configuration Information

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

### 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)

## Articles

### Connection Weights

Body Size	Connection Type	Weight lb./ (kg)			
		1/2 (15mm)	3/4 (20mm)	1 (25mm)	1 1/4 (32mm)
<b>A</b>	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>B</b>	S	0.2 (.07)	0.2 (.08)	0.1 (.05)	0.3 (.20)
	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)
<b>C</b>	S	0.7 (.31)	0.6 (.28)	0.7 (.29)	—
	F	0.8 (.34)	0.6 (.29)	0.6 (.29)	—
	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)	—
	Union M	2.8 (1.28)	3.0 (1.37)	2.8 (1.29)	—

**S** = female sweat

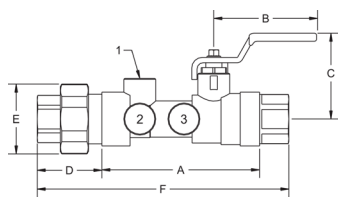
**F** = female NPT

**M** = male NPT

### Notes

All weights and dimensions are subject to minor changes.

## Articles



A, B, C Bodies

### Body Dimensions

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

### Connection Dimensions

Body	Connection Type	D					E		
		in./(mm)							
		<b>3/8</b> (10)	<b>1/2</b> (15)	<b>3/4</b> (20)	<b>1</b> (25)	<b>3/8</b> (10)	<b>1/2</b> (15)	<b>3/4</b> (20)	<b>1</b> (25)
<b>A</b>	S	—	0.5 (14)	0.8 (20)	1.2 (29)	—	1.1 (28)	1.2 (29)	1.5 (29)
	F	—	0.7 (17)	0.8 (20)	1.1 (29)	—	1.1 (28)	1.3 (33)	1.6 (29)
	Union S	1.4 (35)	1.5 (37)	1.6 (40)	—	1.6 (39)	1.6 (39)	1.6 (39)	—
	Union F	—	1.5 (37)	—	—	—	1.6 (39)	—	—
	Union M	—	2.4 (61)	2.2 (57)	—	—	1.6 (39)	1.6 (39)	—
		<b>1/2</b> (15)	<b>3/4</b> (20)	<b>1</b> (25)	<b>1 1/4</b> (32)	<b>1/2</b> (15)	<b>3/4</b> (20)	<b>1</b> (25)	<b>1 1/4</b> (32)
<b>B</b>	S	0.5 (14)	0.8 (19)	1.0 (25)	1.2 (28)	1.3 (34)	1.3 (34)	1.5 (37)	1.8 (51)
	F	0.7 (18)	0.7 (19)	0.9 (24)	1.1 (32)	1.3 (34)	1.3 (34)	1.6 (41)	2.0 (45)
	Union S	1.5 (37)	1.7 (43)	1.7 (42)	1.8 (45)	2.1 (53)	2.1 (53)	2.4 (60)	2.8 (72)
	Union F	1.5 (39)	1.6 (40)	1.7 (43)	1.7 (43)	2.1 (53)	2.1 (53)	2.4 (60)	2.8 (72)
	Union M	2.4 (60)	2.2 (56)	2.5 (63)	2.5 (64)	2.1 (53)	2.1 (53)	2.4 (60)	2.8 (72)
		<b>1 1/4</b> (32)	<b>1 1/2</b> (40)	<b>2</b> (50)		<b>1 1/4</b> (32)	<b>1 1/2</b> (40)	<b>2</b> (50)	
<b>C</b>	S		1.2 (29)	1.2 (31)	1.7 (42)		2.4 (62)	2.4 (62)	2.7 (69)
	F		0.9 (23)	0.9 (23)	1.2 (29)		2.4 (62)	2.4 (62)	2.9 (72)
	Union S		2.0 (51)	2.1 (54)	2.4 (61)		3.5 (88)	3.5 (88)	3.8 (97)
	Union F		1.9 (49)	1.9 (49)	2.0 (50)		3.5 (88)	3.5 (88)	3.8 (97)
	Union M		3.0 (75)	3.0 (76)	2.8 (72)		3.5 (88)	3.5 (88)	3.8 (97)

**S** = female sweat

**F** = female NPT

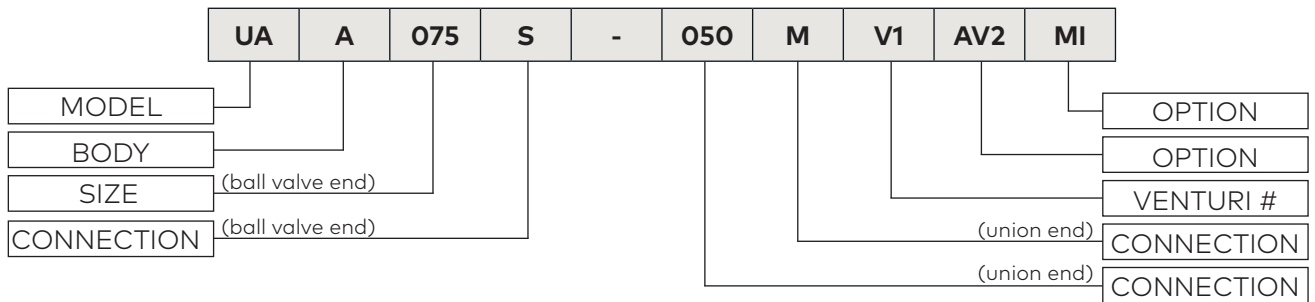
**M** = male NPT

### Notes

All weights and dimensions are subject to minor changes.

\*The F dimension may be calculated by using two D dimensions and adding them to the A dimension of the valve body.

## Model UA Order Designation



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

### 1/2" - 2" AccuSetter Products (Model UA)

<p><b>Connections (Inlet)</b></p> <p style="text-align: center;"><b>Union</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">               U 3/8" S              U 1/2" S              U 3/4" S         </div> <div style="text-align: center;">               U 1/2" F              U 3/4" F         </div> <div style="text-align: center;">               U 1/2" M              U 3/4" M         </div> </div> <p style="font-size: small;">1" inlet connection not available</p>	<p style="text-align: center;"><b>Body A</b></p> <p style="text-align: center; font-size: small;">Includes Venturi, two P/T ports &amp; Memory Stop</p> <p style="text-align: center;"><b>Venturis</b> (Choose One)</p> <table style="width: 100%; text-align: center; font-size: x-small;"> <tr> <td><b>Venturi #1</b> 0.2 - 0.7 gpm</td> <td><b>Venturi #2</b> 0.4 - 1.5 gpm</td> <td><b>Venturi #3</b> 1.0 - 3.4 gpm</td> <td><b>Venturi #4</b> 2.2 - 7.5 gpm</td> </tr> </table> <div style="display: flex; justify-content: space-around;"> </div>	<b>Venturi #1</b> 0.2 - 0.7 gpm	<b>Venturi #2</b> 0.4 - 1.5 gpm	<b>Venturi #3</b> 1.0 - 3.4 gpm	<b>Venturi #4</b> 2.2 - 7.5 gpm	<p><b>Connections (Outlet)</b></p> <p style="text-align: center;"><b>Fixed</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">               1/2" S              3/4" S              1" S         </div> <div style="text-align: center;">               1/2" F              3/4" F              1" F         </div> </div>
<b>Venturi #1</b> 0.2 - 0.7 gpm	<b>Venturi #2</b> 0.4 - 1.5 gpm	<b>Venturi #3</b> 1.0 - 3.4 gpm	<b>Venturi #4</b> 2.2 - 7.5 gpm			

<p><b>Connections (Inlet)</b></p> <p style="text-align: center;"><b>Union</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">               U 1/2" S              U 3/4" S              U 1" S              U 1 1/4" S         </div> <div style="text-align: center;">               U 1/2" F              U 3/4" F              U 1" F              U 1 1/4" F         </div> <div style="text-align: center;">               U 1/2" M              U 3/4" M              U 1" M              U 1 1/4" M         </div> </div>	<p style="text-align: center;"><b>Body B</b></p> <p style="text-align: center; font-size: small;">Includes Venturi, two P/T ports &amp; Memory Stop</p> <p style="text-align: center;"><b>Venturis</b> (Choose One)</p> <table style="width: 100%; text-align: center; font-size: x-small;"> <tr> <td><b>Venturi #5</b> 2.6 - 9.5 gpm</td> <td><b>Venturi #6</b> 5.8 - 21.0 gpm</td> </tr> </table> <div style="display: flex; justify-content: space-around;"> </div>	<b>Venturi #5</b> 2.6 - 9.5 gpm	<b>Venturi #6</b> 5.8 - 21.0 gpm	<p><b>Connections (Outlet)</b></p> <p style="text-align: center;"><b>Fixed</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">               1/2" S              3/4" S              1" S              1 1/4" S         </div> <div style="text-align: center;">               1/2" F              3/4" F              1" F              1 1/4" F         </div> </div>
<b>Venturi #5</b> 2.6 - 9.5 gpm	<b>Venturi #6</b> 5.8 - 21.0 gpm			

<p><b>Connections (Inlet)</b></p> <p style="text-align: center;"><b>Union</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">               U 1 1/4" S              U 1 1/2" S              U 2" S         </div> <div style="text-align: center;">               U 1 1/4" F              U 1 1/2" F              U 2" F         </div> <div style="text-align: center;">               U 1 1/4" M              U 1 1/2" M              U 2" M         </div> </div>	<p style="text-align: center;"><b>Body C</b></p> <p style="text-align: center; font-size: small;">Includes Venturi, two P/T ports &amp; Memory Stop</p> <p style="text-align: center;"><b>Venturis</b> (Choose One)</p> <table style="width: 100%; text-align: center; font-size: x-small;"> <tr> <td><b>Venturi #7</b> 9.5 - 37.0 gpm</td> <td><b>Venturi #8</b> 22.0 - 80.0 gpm</td> </tr> </table> <div style="display: flex; justify-content: space-around;"> </div>	<b>Venturi #7</b> 9.5 - 37.0 gpm	<b>Venturi #8</b> 22.0 - 80.0 gpm	<p><b>Connections (Outlet)</b></p> <p style="text-align: center;"><b>Fixed</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">               1 1/4" S              1 1/2" S              2" S         </div> <div style="text-align: center;">               1 1/4" F              1 1/2" F              2" F         </div> </div>
<b>Venturi #7</b> 9.5 - 37.0 gpm	<b>Venturi #8</b> 22.0 - 80.0 gpm			

---

## Options Available

**\*AA** Automatic Air Vent

**\*AV** Manual Air Vent

**\*DX** Two Extended P/T Ports

**\*EH** Extended Handle

**\*MH** Micro Handle (optional on B Body)

**\*MI** Metal ID Tag

**\*PI** Plastic ID Tag

**\*PL** Plug

**\*SE** Stem Extender

### Notes

\* Only available on A, B, C bodies



*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](http://www.flowdesign.com).*