

# AF AG AW



### **Manual Balancing Valves**

2"-16" Steel venturi with butterfly Valve

Engineering GREAT Solutions



## AF AG AW

The AccuSetter uses a low-loss venturi to obtain a measurement accuracy of 3% F. S. The butterfly has a 2" extended neck above the flange for insulation. The valve handle has an infinite-position memory stop for sizes 2" to 6" and a gear operator on 8" to 16" sizes. The total pressure drop added to the pump head seldom exceeds one foot. The exact drop can be calculated using the formula on Form F199. Flow measurement can be obtained with a differential pressure meter reading across the venturi taps. The GPM can be calculated using the formula on Form F199. (See "Flow Measurement Test Kits," form F011 for the differential pressure meter kits.) The design flow can be obtained by adjusting the valve operator until the desired GPM is reached. The set handle position is maintained by using the memory stop.



#### **Key features**

> Low Loss Venturi
Measure with 3% accuracy

> Infinite Position Fine adjustment > Memory Stop 2" - 8"

#### **Technical description**

#### Application:

Hydronic Balancing

#### **Functions:**

Balancing, measurement, shut-off

#### **Dimensions:**

2" - 6", 8",10",12",14",16"

#### **Accuracy:**

±3% F.S.

#### Design:

Low loss piezo-ring throat

#### Pressure class:

240 psig at 250° F (1655 kPa at 120° C)

#### Material:

Venturi Body: Steel ASTM - A120

Instrument Valve: Extended SuperSeal P/T

Test Ports

Butterfly Valve Body: Ductile Iron, full-lug

type body, ANSI Class 125/150

Seat & Gasket: EPDM Stem: Stainless Steel Bearings: Nylon Disc: Stainless Steel

(if Al-Bronze is required please consult factory)



#### **Model Information**

#### Model AF

Model AF AccuSetter includes a flanged venturi with a lug butterfly valve attached to the downstream side. Extended Pressure/ Temperature Ports are standard.

• Field installation requires one 150# mating flange. Cap screws are included to mate the butterfly and the customer-supplied flange.

#### **Model AG**

Model AG AccuSetter includes a grooved venturi on the entry with a lug butterfly valve mounted on the downstream exit end. The Model FG is also available as an option on all sizes. Extended Pressure/Temperature Ports are standard.

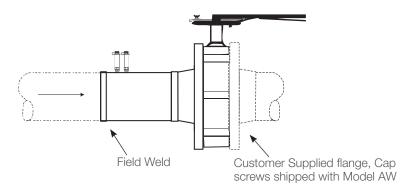
• Field installation requires one standard grooved coupling for the upstream attachment.

#### **Model AW**

Model AW AccuSetter includes a weldend venturi on the inlet with a lug type butterfly valve mounted to the downstream venturi flange (Illustration shown below with customer supplied flange). Extended Pressure/Temperature Ports are standard.

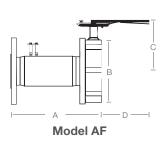
• Field installation requires no additional material.

#### **Supplemental Installation Instructions**



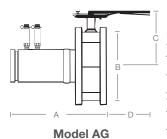
See Venturi & AccuSetter Valves Installation, Operation & Maintenance (F033) for more information

#### **Articles**

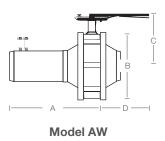


Dimensions										
Model	Size	Connections	А	В	С	D	Weight			
AG0200(*)		Grooved	10.5	6.0	6.6	10.0	19.3			
AF0200(*)	2"	150# Flange	8.3	6.0	6.6	10.0	20.6			
AW0200(*)	_	Welded	7.65	5.6	7.0	9.0	15.0			
AG0250(*)		Grooved	10.7	7.0	7.2	10.0	25.2			
AF0250(*)	2 ½"	150# Flange	8.3	7.0	7.2	10.0	27.6			
AW0250(*)	_	Welded	7.9	5.47	7.3	9.0	22.0			
AG0300(*)		Grooved	11.3	7.5	7.6	10.0	34.0			
AF0300(*)	3"	150# Flange	10.9	7.5	7.6	10.0	35.0			
AW0300(*)	_	Welded	10.5	6.0	8.0	9.0	27.0			
AG0400(*)		Grooved	14.3	9.0	8.4	10.0	53.0			
AF0400(*)	4"	150# Flange	13.9	9.0	8.4	10.0	53.7			
AW0400(*)	_	Welded	13.5	7.5	8.3	9.0	45.0			

#### **Articles**



Dimensions											
Size	Connections	Α	В	С	D	Weight					
	Grooved	14.9	10.0	9.0	10.0	61.3					
5"	150# Flange	14.5	10.0	9.0	10.0	64.7					
	Welded	14.3	8.47	8.85	9.0	52.0					
_	Grooved	15.6	11.0	9.7	10.0	78.6					
6"	150# Flange	15.1	11.0	9.7	10.0	86.6					
	Welded	14.63	9.5	9.3	9.0	71.5					
_	Grooved	16.6	13.5	7.5	8.0	123.3					
8"	150# Flange	16.0	13.5	7.5	8.0	135.7					
	Welded	15.75	11.7	17.4	5.0	117.5					
_	Grooved	18.1	16.0	7.5	9.0	178.3					
10"	150# Flange	17.4	16.0	7.5	9.0	194.5					
	Welded	16.83	14.25	17.4	5.0	167.5					
_	Grooved	20.3	19.0	7.5	9.0	279.6					
12"	150# Flange	19.5	19.0	7.5	9.0	307.0					
	Welded	19.5	17.0	19.1	6.0	261.5					
_	Grooved	26.9	21.0	11.8	9.0	399.3					
14"	150# Flange	21.6	21.0	11.8	9.0	372.9					
	Welded	20.5	19.0	21.0	10.0	379.5					
_	Grooved	27.8	16.0	11.8	9.0	550.9					
16"	150# Flange	22.5	23.5	11.8	9.0	539.9					
	Welded	22.7	21.25	26.2	10.6	529.9					
	5" - 6" - 8" - 10" - 12" -	Grooved     5"   150# Flange     Welded     Grooved     6"   150# Flange     Welded     Grooved     8"   150# Flange     Welded     Grooved     10"   150# Flange     Welded     Grooved     12"   150# Flange     Welded     Grooved     14"   150# Flange     Welded     Grooved     150# Flange     Welded     Grooved     150# Flange     Welded     Grooved     150# Flange     T50# Fl	Grooved         14.9           5"         150# Flange         14.5           Welded         14.3           Grooved         15.6           6"         150# Flange         15.1           Welded         14.63           Grooved         16.6           8"         150# Flange         16.0           Welded         15.75           Grooved         18.1           10"         150# Flange         17.4           Welded         16.83           Grooved         20.3           12"         150# Flange         19.5           Welded         19.5           Grooved         26.9           14"         150# Flange         21.6           Welded         20.5           Grooved         27.8           16"         150# Flange         22.5	Grooved         14.9         10.0           5"         150# Flange         14.5         10.0           Welded         14.3         8.47           Grooved         15.6         11.0           6"         150# Flange         15.1         11.0           Welded         14.63         9.5           Grooved         16.6         13.5           8"         150# Flange         16.0         13.5           Welded         15.75         11.7           Grooved         18.1         16.0           10"         150# Flange         17.4         16.0           Welded         16.83         14.25           Grooved         20.3         19.0           12"         150# Flange         19.5         19.0           Welded         19.5         17.0           Grooved         26.9         21.0           14"         150# Flange         21.6         21.0           Welded         20.5         19.0           Grooved         27.8         16.0           16"         150# Flange         22.5         23.5	Grooved         14.9         10.0         9.0           5"         150# Flange         14.5         10.0         9.0           Welded         14.3         8.47         8.85           Grooved         15.6         11.0         9.7           6"         150# Flange         15.1         11.0         9.7           Welded         14.63         9.5         9.3           Grooved         16.6         13.5         7.5           8"         150# Flange         16.0         13.5         7.5           Welded         15.75         11.7         17.4           Grooved         18.1         16.0         7.5           10"         150# Flange         17.4         16.0         7.5           Welded         16.83         14.25         17.4           Grooved         20.3         19.0         7.5           Welded         19.5         19.0         7.5           Welded         19.5         17.0         19.1           Grooved         26.9         21.0         11.8           14"         150# Flange         21.6         21.0         11.8           Welded         20.5 <td< td=""><td>Grooved         14.9         10.0         9.0         10.0           5"         150# Flange         14.5         10.0         9.0         10.0           Welded         14.3         8.47         8.85         9.0           Grooved         15.6         11.0         9.7         10.0           6"         150# Flange         15.1         11.0         9.7         10.0           Welded         14.63         9.5         9.3         9.0           Grooved         16.6         13.5         7.5         8.0           8"         150# Flange         16.0         13.5         7.5         8.0           Welded         15.75         11.7         17.4         5.0           Grooved         18.1         16.0         7.5         9.0           10"         150# Flange         17.4         16.0         7.5         9.0           Welded         16.83         14.25         17.4         5.0           Grooved         20.3         19.0         7.5         9.0           12"         150# Flange         19.5         19.0         7.5         9.0           Welded         19.5         17.0         19.1</td></td<>	Grooved         14.9         10.0         9.0         10.0           5"         150# Flange         14.5         10.0         9.0         10.0           Welded         14.3         8.47         8.85         9.0           Grooved         15.6         11.0         9.7         10.0           6"         150# Flange         15.1         11.0         9.7         10.0           Welded         14.63         9.5         9.3         9.0           Grooved         16.6         13.5         7.5         8.0           8"         150# Flange         16.0         13.5         7.5         8.0           Welded         15.75         11.7         17.4         5.0           Grooved         18.1         16.0         7.5         9.0           10"         150# Flange         17.4         16.0         7.5         9.0           Welded         16.83         14.25         17.4         5.0           Grooved         20.3         19.0         7.5         9.0           12"         150# Flange         19.5         19.0         7.5         9.0           Welded         19.5         17.0         19.1					



#### Notes

(\*) denotes L (low flow) or H (high flow) must be specified.

All weights and dimensions given are in pounds and inches and are subject to change.

Venturi products made from fabricated materials may vary  $\pm 1/16$  inch per component.

#### **Model Order Designation**



L = Low Flange Range

H = High Flange Range

#### **Options Available**

**AV** Manual Air Vent

C2 1/2" Accessory Port

C3 3/4" Accessory Port

C4 1/4" Accessory Port

**CPT** Capillary Port/Tee

**HN** Hose End Drain

PI Plastic ID Tag

MI Metal ID Tag





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