

Y Strainer



General

AFCO Y Strainer offers a compact and cost effective solution for removal of debris or foreign material from the pipe lines. Typically use in pump system, compressor, valve, or in similar application where the amount of debris to be removed is small, and frequent cleaning is not required.

The Y Strainer valves may be installed in horizontal pipe work or vertical pipe work. However, the screening part shall be on the downside of the strainer body, so the entrapped debris or foreign material can be collected for disposal.

Available in Flange-Flange, Flange-Groove and Groove-Groove end connection. Flange drill is ANSI B16.1 Class 150 or PN 16 EN1092-2. Other Flange end connection are available upon request.

Technical Data

Approval

UL Listed

Maximum Working pressure

300 PSI (20.87 bar)

Operating temperature

14°F (-10°C) to 230°F (110°C), for optimal performance: refer to figure 1

Nominal Sizes

2" (DN50), 2 1/2" (DN65), 3" (DN80), 4" (DN100), 5" (DN125), 6" (DN150), 8" (DN200), 10" (DN250) and 12" (DN300)

Connections

Flanged Ends

ANSI B16.1 Class 150

EN1092-2 PN16

Grooved Ends

Conforms to AWWA C606

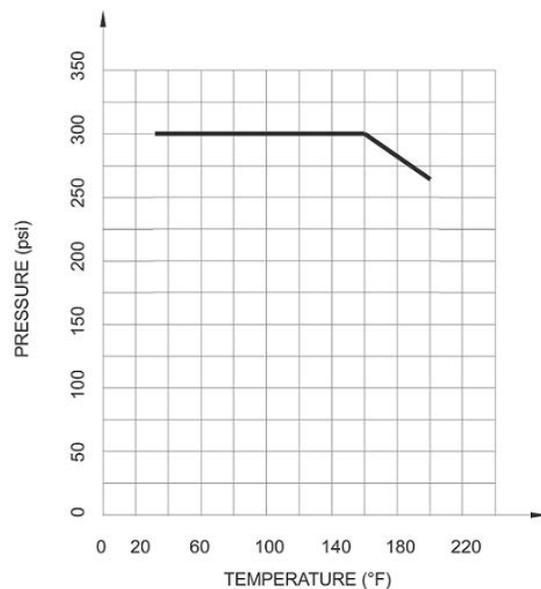
Finish

Fusion bond epoxy coated

Pressure-Temperature Performance

See figure 1

Figure 1 Operating Pressure-Temperature chart



Components

See material list and figure 2

Figure 2 Swing check valve components

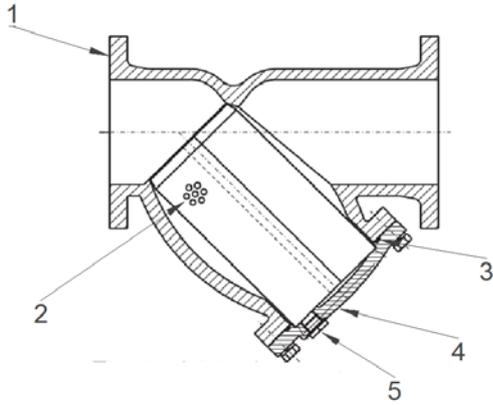


Table 1 Material list

No	Description	Material	Specification
1	Body	Ductile Iron	ASTM A536 65-45-12
2	Screen	Stainless Steel	AISI 304 (Perforated)
3	Gasket	EPDM	Commercial
4	Cover	Ductile Iron	ASTM A536 65-45-12
5	Plug	Carbon Steel	ASTM A 197

Figure 3 Swing check valve dimensions

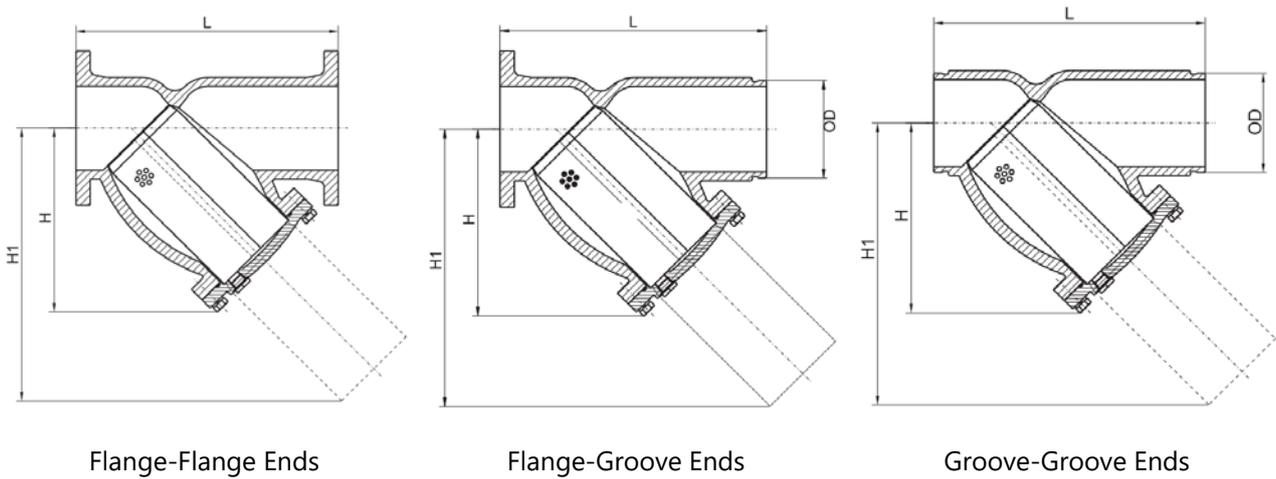


Table 2 Standard screens

Description	Unit	Size			
		2"-2 1/2"	3"-4"	5"	6"-12"
Hole Diameter	inch	0.16	0.20	0.24	0.25
	mm	4.06	5.08	6.10	6.35
Free Flow Area	%	48	59	62	64

Table 3 Dimensions

SIZE	Unit	2"	2 1/2"	3	4	5	6	8	10	12
		50	65	80	100	125	150	200	250	300
Flange-Flange Ends										
L	inch	7.99	10.00	10.24	12.13	15.67	18.58	21.65	25.75	30.00
	mm	203	254	260	308	398	472	550	654	762
H	inch	5.20	6.22	6.89	7.99	11.42	13.15	15.39	18.11	23.23
	mm	132	158	175	202	290	334	391	460	590
H1	inch	7.68	9.45	10.63	12.60	16.73	19.49	22.44	27.56	33.07
	mm	195	240	270	320	425	495	570	700	840
Flange-Groove Ends										
L	inch	7.99	10.00	10.24	12.13	15.67	18.58	21.65	25.75	30.00
	mm	203	254	260	308	398	472	550	654	762
H	inch	5.12	6.22	6.89	7.99	11.42	13.15	15.39	18.11	23.23
	mm	130	158	175	202	290	334	391	460	590
H1	inch	7.68	9.45	10.63	12.60	16.73	19.49	22.44	27.56	33.07
	mm	195	240	270	320	425	495	570	700	840
OD	inch	2.37	2.87	3.50	4.50	5.56	6.63	8.63	10.75	12.75
	mm	60.3	73.0	88.9	114.3	141.3	168.3	219.1	273.0	323.9
Groove-Groove Ends										
L	inch	9.03	10.00	10.71	12.13	15.67	18.58	21.65	25.75	30.00
	mm	230	254	272.4	308	398	472	550	654	762
H	inch	5.12	6.22	6.89	7.99	11.42	13.15	15.39	18.11	23.23
	mm	130	158	175	202	290	334	391	460	590
H1	inch	7.68	9.45	10.63	12.60	16.73	19.49	22.44	27.56	33.07
	mm	195	240	270	320	425	495	570	700	840
OD	inch	2.37	2.87	3.50	4.50	5.56	6.63	8.63	10.75	12.75
	mm	60.3	73.0	88.9	114.3	141.3	168.3	219.1	273.0	323.9

Table 4 Part number and ordering information

Nominal Sizes	Part Number				
	Flange-Flange ANSI Class 150	Flange-Flange EN1092-2 PN16	Flange-Groove ANSI Class 150	Flange-Groove EN1092-2 PN16	Groove-Groove
2" (DN50)	YS01-300FF50	YS01-16FF50	YS01-300FG50	YS01-16FG50	YS01-GG50
2 1/2" (DN65)	YS01-300FF65	YS01-16FF65	YS01-300FG65	YS01-16FG65	YS01-GG65
3" (DN80)	YS01-300FF80	YS01-16FF80	YS01-300FG80	YS01-16FG80	YS01-GG80
4" (DN100)	YS01-300FF100	YS01-16FF100	YS01-300FG100	YS01-16FG100	YS01-GG100
5" (DN125)	YS01-300FF125	YS01-16FF125	YS01-300FG125	YS01-16FG125	YS01-GG125
6" (DN150)	YS01-300FF150	YS01-16FF150	YS01-300FG150	YS01-16FG150	YS01-GG150
8" (DN200)	YS01-300FF200	YS01-16FF200	YS01-300FG200	YS01-16FG200	YS01-GG200
10" (DN250)	YS01-300FF250	YS01-16FF250	YS01-300FG250	YS01-16FG250	YS01-GG250
12" (DN300)	YS01-300FF300	YS01-16FF300	YS01-300FG300	YS01-16FG300	YS01-GG300

Installation

1. The strainer should be considered to be located in order to allow access for operation, adjustment and maintenance.
2. Ensure the operating pressure of the strainer accordance to the system pressure.
3. Strainer shall be installed on adequate support and all joining pipe work shall be supported to avoid the imposition of pipeline strains on the valve, which would decrease its performance or damage the strainer. Heavy strainer may needs independent support or anchorage.
4. Handling strainer carefully, ensure the environment temperature is in operating temperature of the strainer.
5. Visual inspection of the strainer should be perform through the end ports to avoid any dirt.
6. Examine both flanges (valve and pipe) for correct gasket material, operating pressure/temperature, contact face and surface finish.
7. Strainers may be installed in horizontal pipe work or vertical pipe work. However, the screening part shall be on the downside of the strainer body.
8. Fix all potential cause of leakage, prior to final installation of the strainer.

Maintenance

1. Strainer should be at zero pressure and ambient temperature while performing any maintenance.
2. In the event of gland leakage, each gland nut should be tightened diametrically and evenly until the leakage stops. Replace the gland if it is required.

Copyright © 2017 **AFCO American Fire Products Company**

500 Delaware Ave, Ste 1 #1960 - Wilmington, DE, US 19899
www.afcovalves.com