

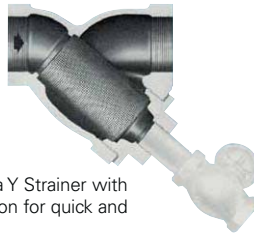
Model 85



- 1/4" to 10"
- Carbon Steel and Stainless Steel
- Threaded, Flanged, or Socket Weld Connections

FEATURES

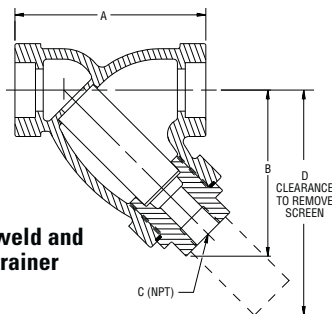
- Compact design
- Bolted or threaded covers
- Standard stainless steel screens
- Horizontal or vertical installation



Cross-section of a Y Strainer with blow off connection for quick and easy clean-out.

OPTIONS

- Basket perforations from 1/32" to 1/2"
- Basket mesh from 20 to 400
- Monel screens



Typical socket weld and threaded Y strainer

Eaton Model 85 Y strainers are engineered to withstand aggressive industrial and commercial applications. Y strainers protect downstream process system components by mechanically removing unwanted solids from liquid, gas, or steam lines by means of a perforated or wire mesh straining element.

To protect against any bypass, the Model 85 Y strainers are manufactured with a precision-machined screen seat on the body of the strainer and high-quality stainless steel screens fabricated to fit the strainer body perfectly. Model 85 Y strainers are available in

carbon steel or stainless steel for pipeline sizes from 1/4" to 10" with threaded, flanged, or socket weld connections.

For cost-effective straining solutions, Y strainers work well in applications in which the amount of material to be removed from the flow is relatively small—resulting in long intervals between screen cleanings. The strainer screen is manually cleaned by shutting down the line and removing the strainer cap.

For applications with heavier dirt loading, Y strainers fitted with a "blow off" connection permit cleaning of the screen without removing it from the strainer body.

Eaton Model 85 Y Strainers 1/4" to 10" Carbon and Stainless Steel-Threaded, Socket Weld & Flanged

Size	Material	End Connection	Cover	Rating (WOG) non-shock
1/4" to 2"	Carbon Steel	Threaded or Socket Weld 600#	Threaded	1480 psi @ 100 °F
1/4" to 2"	Stainless Steel	Threaded or Socket Weld 600#	Threaded	1440 psi @ 100 °F
1/2" to 10"	Carbon Steel	Flanged 150#	Bolted	285 psi @ 100 °F
1/2" to 10"	Carbon Steel	Flanged 300#	Bolted	740 psi @ 100 °F
1/2" to 10"	Stainless Steel	Flanged 150#	Bolted	275 psi @ 100 °F
1/2" to 10"	Stainless Steel	Flanged 300#	Bolted	720 psi @ 100 °F

Socket Weld, Threaded Carbon Steel & Stainless Steel – 600# (in/mm)

Size	A	B	C (Nom.)	D	Wt (lb / kg)
1/4	3.00 / 76	3.00 / 76	3/8	4.00 / 102	2 / 0.9
3/8	3.00 / 76	3.00 / 76	3/8	4.00 / 102	2 / 0.9
1/2	3.00 / 76	3.00 / 76	3/8	4.00 / 102	2 / 0.9
3/4	3.75 / 95	3.50 / 89	3/8	4.75 / 121	4 / 1.8
1	4.63 / 118	4.00 / 102	1/2	5.75 / 146	6 / 2.7
1-1/4	5.00 / 127	4.63 / 118	3/4	6.50 / 165	8 / 3.6
1-1/2	5.63 / 143	5.25 / 133	3/4	7.50 / 191	10 / 4.5
2	7.00 / 178	5.75 / 146	1	8.75 / 222	15 / 6.8

Consult Eaton for 12" and larger size dimensions. Dimensions and weights are for references only. Contact Eaton for certified drawings.



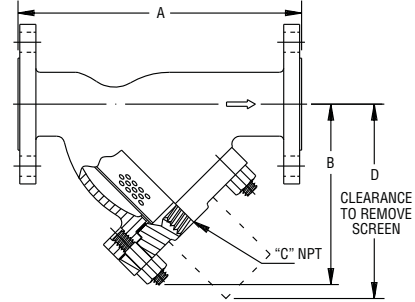
Powering Business Worldwide

MODEL 85Y Strainer

Flanged Carbon Steel & Stainless Steel – 150# (in/mm)

Size	A	B	C (Nom.)	D	Wt (lb / kg)
1/2	5.00 / 127	2.75 / 70	3/8	3.50 / 89	5 / 2.3
3/4	5.63 / 143	3.00 / 76	3/8	4.00 / 102	7 / 3.2
1	6.38 / 162	3.64 / 92	1/2	5.00 / 127	9 / 4.1
1-1/4	7.25 / 184	4.25 / 108	3/4	5.75 / 146	14 / 6.3
1-1/2	8.88 / 226	5.75 / 146	3/4	6.50 / 165	18 / 8.2
2	7.88 / 200	6.00 / 152	1	8.25 / 210	16 / 7.3
2-1/2	9.75 / 248	6.50 / 165	1	9.25 / 235	25 / 11.4
3	10.00 / 254	7.25 / 184	1-1/4	10.50 / 267	35 / 16
4	12.13 / 308	9.75 / 248	1-1/2	14.75 / 375	70 / 32
6	18.50 / 470	14.25 / 362	2	21.00 / 533	130 / 59
8	21.63 / 549	18.00 / 457	2	26.75 / 679	240 / 109
10	26.00 / 660	22.50 / 565	2	33.75 / 857	300 / 136

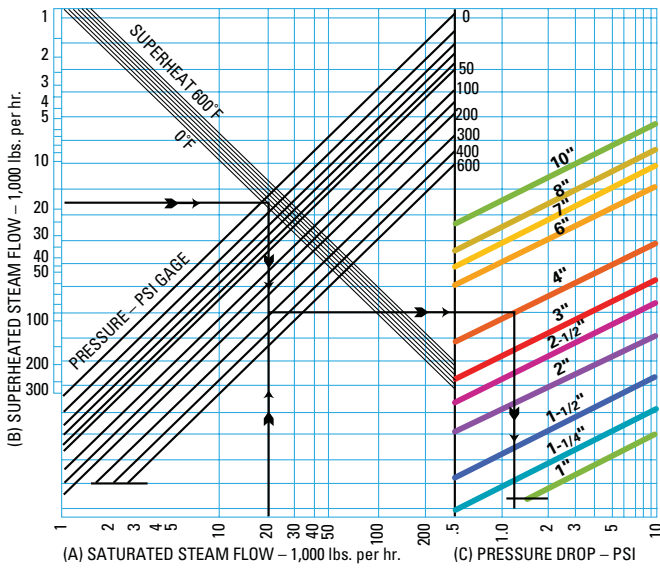
Typical Flanged Y Strainer



Flanged Carbon Steel & Stainless Steel – 300# (in/mm)

Size	A	B	C (Nom.)	D	Wt (lb / kg)
1/2	5.25 / 133	2.75 / 70	3/8	3.50 / 89	6 / 2.7
3/4	6.00 / 152	3.00 / 76	3/8	4.00 / 102	9 / 4.1
1	6.88 / 175	3.63 / 92	1/2	5.00 / 127	13 / 6.0
1-1/4	7.75 / 197	4.25 / 108	3/4	5.75 / 146	18 / 8.2
1-1/2	9.38 / 238	5.75 / 146	3/4	6.50 / 165	24 / 11
2	8.63 / 219	6.25 / 159	1	8.25 / 210	30 / 13.6
2-1/2	10.63 / 270	7.00 / 178	1	9.25 / 235	40 / 18.2
3	12.00 / 305	7.75 / 197	1-1/4	10.50 / 267	55 / 25
4	14.50 / 368	10.50 / 267	1-1/2	14.75 / 375	105 / 48
6	20.00 / 508	14.75 / 375	2	21.00 / 533	200 / 91
8	23.38 / 594	18.75 / 476	2	27.00 / 686	360 / 164
10	27.38 / 695	22.75 / 578	2	34.50 / 876	430 / 195

Steam Pressure Drops



Calculating Saturated Steam Pressure Drop

Example: Pressure = 300 psig, Flow Rate = 20,000 lb/hr, Strainer Size = 4 inches

1. Locate steam flow on Scale A.
2. Follow vertical line to required pressure.
3. Follow horizontal line to strainer size.
4. Follow vertical line downward and read pressure drop on Scale C.
5. Pressure drop equals 1.25 psi.

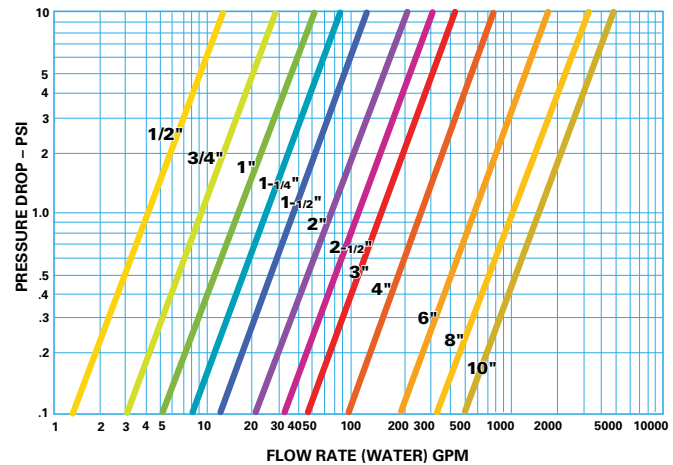
Calculating Superheated Steam Pressure Drop

Example: Pressure = 300 psig, Flow Rate = 18,000 lb/hr, Strainer Size = 4 inches

1. Locate steam flow on Scale B.
2. Follow horizontal line to superheat.
3. Follow vertical line to pressure.
4. Follow horizontal line to strainer size.
5. Follow vertical line and read pressure drop on Scale C.
6. Pressure drop equals 1.25 psi.

Note: Use the superheat temperature value above the saturated steam temperature to obtain the point on this graph.

Flow Rates



Eaton North America – HQ

44 Apple Street,
Tinton Falls, NJ 07724

Toll Free: 800 656-3344
(North America only)

Voice: +1 732 212-4700
Fax: 952 906-3706

Eaton Brazil

Voice: +55 11 2465 8822

Eaton China

Voice: +86-21 5200 0422

Eaton

Europe/Africa/Middle East

Voice: +49-2486-809-0

Eaton Singapore

Voice: +65 6825 1668

©2013 Eaton Corporation. All Rights Reserved. All trademarks and registered trademarks are the property of their respective owners. Litho USA. All information and recommendations appearing in this brochure concerning the use of products described herein are based on tests believed to be reliable. However, it is the user's responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Eaton as to the effects of such use or the results to be obtained. Eaton assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

For more information, e-mail us at filtration@eaton.com

Visit us online at eaton.com/filtration for a complete list of Eaton's filtration products.



Powering Business Worldwide



EF-SCPS-02
3-2013