

- Threaded, Flanged or Socket Weld
- Carbon Steel or Stainless Steel

FEATURES

- Designed for High Liquid Loading Applications
- High Efficiency Over Wide Flow Range
- No Required Maintenance
- Removes 99% of Liquid and Solid Entrainment Particles Larger Than 10 Microns
- Gas, Steam, or Air Applications

OPTIONS

- ASME UM or U Code Stamp (Carbon Steel and Stainless Steel Models)
- Support Legs

High Efficiency – No Maintenance

The Eaton Type TS Gas/Liquid Separator automatically removes 99% of all liquid and solid entrainment particles 10 microns in size or larger from air, gas, and steam processes. And it does so with no moving parts to wear out and with no required maintenance.

Applications

The Eaton Type TS Gas/Liquid Separator is designed for applications where heavier than normal liquid loading causes a "slugging" problem. These applications are widely found in refineries and

chemical plants. In many cases, there is a liquid holdup requirement where instrumentation is provided for controlling the level of the liquid in the reservoir of the vessel. Some common applications include upstream of gas turbines, absorption towers, steam generator outlets and gas scrubbers.

Exclusive Design

Moisture-laden gas enters the inlet of the separator, where it is deflected in a centrifugal downward motion. The entrained solids and moisture droplets are separated out by a reduction in velocity. Separated liquid and solids fall into a reservoir where the exclusive Eaton Vortex Containment Plate (VCP) ensures that they can't be re-entrained. The clean, dry flow is then directed to the outlet by the VCP. This eliminates the need for expensive, delicate baffles used in ordinary separators.

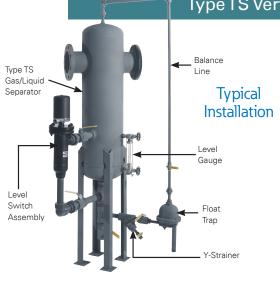
Fabricated Construction

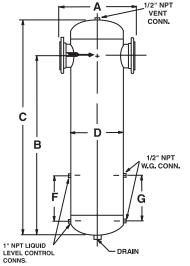
The Type TS Separator is available in fabricated carbon steel, stainless steel, or other alloy construction with socket weld, threaded or 150 lb., 300 lb., or 600 lb. flange connections. Depending on the separator size, liquid holdup capacities range from 0.19 cu. ft. to 32.64 cu. ft., or larger should the application require. The separators can be furnished with an ASME Code Stamp as an option. Optional integral support legs can also be specified.



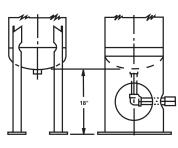


Type TS Vertical Fabricated Gas/Liquid Separators





Four angle legs with base plates or skirts are optional.



Dimensions: Type TS (Carbon Steel) with ANSI Flanges (in/mm)

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Pipe Size	Threaded & Skt Weld A	Flanged A	В	С	D	F	G		Drain Opt'l	Thd'd & Socket Weld 1000 psig @ 650 °F	-vveignt (lb/k 150 lb Flanged 150 psig @ 450 °F	g) 300 lb Flanged 500 psig @ 650 °F	Liquid Holdup Cap (cu ft/m)
1	6.87 / 174	10.5 / 267	22 / 559	28 / 711	5.56 / 141	-	7.87 / <mark>200</mark>	1	1-1/2	44 / 20	47 / <mark>21</mark>	49 / <mark>22</mark>	0.19 / 0.0053
1-1/4	6.87 / 174	10.5 / 267	22 / 559	28 / 711	5.56 / 141	-	7.87 / <mark>200</mark>	1	1-1/2	45 / <mark>20</mark>	50 / <mark>23</mark>	52 / <mark>24</mark>	0.19 / 0.0053
1-1/2	7.87 / <mark>200</mark>	11.5 / 292	24 / 610	30 / 762	6.62 / 168	9.12 / 232	9.12 / 232	1	2	83 / 38	69 / <mark>31</mark>	75 / 34	0.20 / 0.0056
2	7.87 / <mark>200</mark>	11.5 / 292	24 / 610	30 / 762	6.62 / 168	9.12 / 232	9.12 / 232	1	2	85 / <mark>39</mark>	74 / <mark>34</mark>	78 / <mark>36</mark>	0.20 / 0.0056
2-1/2	-	16 / 406	27 / 686	35 / 889	8.62 / 219	9.12 / 232	9.12 / 232	1	2	_	122 / 55	132 / 60	0.39 / 0.011
3	-	18 / 457	30 / 762	38 / 965	10.75 / 273	9.12 / 232	9.12 / 232	1-1/2	2-1/2	-	170 / <mark>77</mark>	180 / 82	0.66 / 0.018
4	-	20 / 508	36 / <mark>914</mark>	45 / 1143	12.75 / 324	10.25 / 260	10.25 / <mark>260</mark>	1-1/2	2-1/2	-	225 / 102	250 / 114	1.07 / 0.03
5	-	22 / 559	40 / 1016	50 / 1270	14 / 356	10.25 / <mark>260</mark>	10.25 / <mark>260</mark>	1-1/2	2-1/2	-	265 / 120	335 / <mark>152</mark>	1.35 / 0.04
6	-	24 / 610	55 / 1397	66 / 1676	16 / 406	10.25 / <mark>260</mark>	10.25 / <mark>260</mark>	1-1/2	2-1/2	-	400 / 182	435 / 198	3.03 / 0.084
8	-	28 / 711	62 / 1575	75 / 1905	18 / 457	11.87 / 301	11.87 / 301	2	3	-	545 / <mark>248</mark>	700 / 318	3.83 / 0.107
10	-	34 / 864	76 / 1930	91 / 2311	24 / 610	11.87 / 301	11.87 / <mark>301</mark>	2	3	-	800 / 364	1355 / 616	6.94 / <mark>0.194</mark>
12	-	38 / 965	82 / 2083	99 / 2515	28 / 711	11.87 / 301	11.87 / 301	2-1/2	4*	_	1090 / 495	1735 / <mark>789</mark>	11.74 / 0.33
14	-	42 / 1067	89 / 2261	108 / 2743	32 / 813	12.62 / 321	12.62 / 321	2-1/2	4*	-	1335 / 607	2535 / 1152	16.81 / 0.47
16	-	47 / 1194	98 / 2489	119 / 3023	36 / 914	12.62 / 321	12.62 / 321	3	5*	_	1850 / 841	3200 / 1455	20.22 / 0.57
18	-	54 / 1372	108 / 2743	132 / 3353	42 / 1067	12.62 / 321	12.62 / 321	3	5*	_	2600 / 1182	5025 / <mark>2284</mark>	22.99 / 0.64
20	-	62 / 1575	118 / 2997	145 / 3683	48 / 1219	15 / 381	15 / 381	3	5*	-	3275 / 3275	6480 / 2945	26.47 / 0.74
22	-	64 / 1626	121 / 3073	149 / 3785	48 / 1219	15 / <mark>381</mark>	15 / 381	3	5*	_	3450 / 1568	7000 / 3182	26.47 / 0.74
24	-	70 / 1778	127 / 3226	158 / 4013	54 / 1372	15 / <mark>381</mark>	15 / <mark>381</mark>	4*	6*	_	4940 / 2245	9020 / 4100	32.64 / 0.91

^{*} Flanged drain

Note: Type TS Separators are of welded steel construction in accordance with ASME code for unfired pressure vessels. Available in stainless steel on request. Inlet and outlet connections can be rotated radially, if specified

North America — HQ 70 Wood Avenue, South 2nd Floor Iselin, NJ 08830

Toll Free: (800) 656-3344 (North America only) Voice: (732) 767-4200 **Brazil**

Voice: +55 (11) 2465-8822

China

Voice: +86-21-5200-0099

Europe/Africa/Middle East

Voice: +49-2486-809-0

Singapore Voice: +65-6825-1668 ©2012 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.

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