

# Type T Cast Construction



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

### **FEATURES**

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

### **OPTIONS**

- Integral Trap
- Trap Heating Element
- ASME UM or U Code Stamp (CS and SS Models Only)
- Water Gauge Tap
- Thermometer Tap
- Larger Drain Size









No Maintenance

Type T Cast Iron

Separator

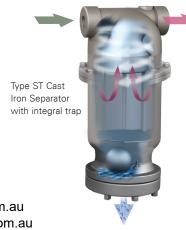
The Eaton Type T Gas/Liquid Separator automatically removes 99% of all liquid and solid entrainment particles 10 microns in size or larger from air, gas, and steam processes. And it does so with no moving parts to wear out and no required maintenance. The Type T, with its cost-effective design, is the separator of choice for most applications that require clean, dry air, gas or steam.

### **Exclusive Design**

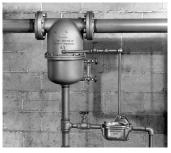
Moisture-laden gas enters the inlet of the separator where it is deflected in a centrifugal downward motion. The entrained solids and moisture droplets are separated out by a reduction in velocity. Separated liquid and solids fall into a reservoir where the exclusive Vortex Containment Plate (VCP) ensures that they cannot 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.

### Application Flexibility

The basic Type T Gas/Liquid Separator's straightforward, time-proven design fits most applications without options. For more specialized applications, the Type T is available as the Type ST with an integral trap as part of its design. The trap mechanism is a foolproof design which automatically ejects the condensate, without loss of line pressure, when it reaches a predetermined level. The Type ST is compact, easily installed, and can be supported by the line. Removal of the bottom flange releases the trap mechanism for inspection. The internal trap components are rust-proof stainless steel and include a nonmagnetic 18-8 stainless steel valve and seat. For applications below freezing, the Type ST Separator can be ordered as the Type STH that includes a heater for the trap. The heater is rated at 50W and runs with 110 volt service. The self-limiting heating element will keep fluid above freezing but does not add to the line temperature. The heater can be easily removed for inspection.



# TypeT Cast Gas/Liquid Separators

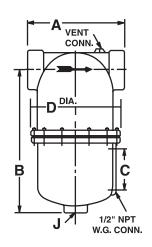


Typical Installation

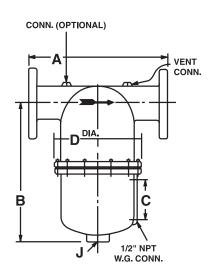
### **Selection Table**

Pipe Size (in)	Material	Connection	Rating
3/4 to 3	Cast Iron	Threaded	250 psi @ 450°F
2 to 4	Cast Iron	Flanged 125# FF	150 psi @ 353°F 125 psi @ 450°F
1 to 2	Cast Carbon Steel	Threaded or Socket Weld	1000 psi @ 650°F
1 to 2	Cast Stainless Steel	Threaded or Socket Weld	500 psi @ 300°F
1 to 24	Fabricated CS or SS	Flanged 150# RF Flanged 300# RF	150 psi @ 450°F 500 psi @ 650°F

**TYPE T Cast Iron Threaded** 



TYPE T Cast Iron Flanged



Dimensions - Type T Threaded (Cast Iron) - (in/mm)

Pipe Size	A	В	С	D	J - NP1 Regular	T Drains Optional	NPT Vent	Weight (lb/kg)
3/4	5.50 / <mark>40</mark>	9.19 / <mark>233</mark>	-	5.75 / <mark>146</mark>	3/4	_	1/4	22 / 10
1	6.00 / 152	9.00 / 229	_	6.75 / 171	1	1-1/4	1/4	25 / 11.4
1-1/4	6.00 / 152	9.13 / 232	_	7.00 / 178	1	1-1/4	1/4	28 / 12.7
1-1/2	7.25 / 184	11.69 / 297	_	8.13 / 207	1	1-1/2	1/4	44 / 20
2	8.13 / <mark>206</mark>	13.69 / 348	_	8.50 / <mark>216</mark>	1	2	1/4	47 / 21.3
2-1/2	12.00 / 305	15.94 / <del>405</del>	3.50 / 89	11.38 / 289	1-1/4	2	1/4	89 / 40
3	11.00 / <mark>281</mark>	15.94 / <mark>405</mark>	3.50 / 89	11.38 / 289	1-1/4	2-1/2	1/4	107 / 48

### Dimensions - Type T Flanged (Cast Iron) - (in/mm)

Pipe Size	А	В	С	D	J - NPT Regular	Drains Optional	NPT Vent	Weight (lb/kg)
2	10.50 / <mark>267</mark>	13.75 / <mark>349</mark>	_	8.50 / <mark>216</mark>	1	2	1/4	59 / <mark>27</mark>
3	14.00 / 356	16.00 / 406	3.50 / 89	11.38 / 289	1-1/4	2-1/2	1/4	130 / 59
4	15.88 / 403	19.38 / 492	5.00 / 127	14.06 / <mark>357</mark>	1-1/4	2-1/2	1/4	195 / 88.6
5	18.38 / 467	24.63 / 626	7.88 / <mark>200</mark>	17 / 432	1-1/2		1/4	370 / 168

Note: Threaded ends, NPT, Material ASTM A-278. Flanged ends, 125 lb ANSI flat face and drilling, Material ASTM A-278

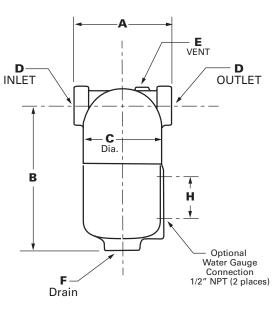
# Cast Carbon Steel or Cast Stainless Steel Construction

Type T Gas/Liquid Separators are available in 1", 1-1/4", 1-1/2", and 2" sizes in cast carbon steel or cast stainless steel with standard configurations. Cast construction separators are readily available but not easy or cost effective to modify to conform to special application requirements. For these applications, see Fabricated Type T Separators which are made of carbon or stainless steel in sizes up to 24". Fabricated separators are not as heavy as cast ones, an important consideration in applications when weight is a concern.

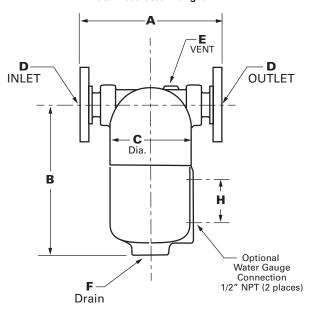
### Capacities - Maximum Air Flow Rating in SCFM

Pipe Size	25 psig	50 psig	100 psig	150 psig	200 psig	250 psig
3/4	55	75	105	125	150	170
1	82	110	155	190	220	255
1-1/4	130	175	245	300	345	400
1-1/2	185	245	345	425	485	560
2	330	445	620	770	870	1000
2-1/2	500	680	945	1170	1350	1550
3	750	1000	1400	1750	1950	2300
4	1325	1775	2500	3075	3600	4000
5	2050	2750	3800	4750	5200	6000
Rated <b>∆</b> P (psi)	0.88	0.99	1.19	1.40	1.60	1.85

TYPE T Cast Carbon Steel or Stainless Steel Threaded



TYPE T Cast Carbon Steel or Stainless Steel Flanged



Dimensions: Type T Cast Threaded or Socket Weld - (in/mm)

Pipe Size	A	В	С	D	E	F	н	Weight (Ib/kg)
1	6.38 / 161	10.50 / <mark>267</mark>	5.56 / <mark>141</mark>	1 / 25	1/4	1	4.75	25 / <mark>11.4</mark>
1-1/4	6.38 / 161	10.50 / <mark>267</mark>	5.56 / 141	1-1/4 / 32	1/4	1	4.75	28 / 12.7
1-1/2	7.63 / <b>194</b>	12.50 / 317	6.63 / 168	1-1/2 / 40	1/4	1	4.75	44 / 20
2	7.63 / 194	12.50 / 317	6.63 / 168	2 / 50	1/4	1	4.75	47 / 21.3

Note: Threaded ends, NPT, Material ASTM A-278

### Dimensions: Type T Cast Flanged - (in/mm)

Pipe Size	Α	В	С	D	E	F	Н	Weight (lb/kg)
1	10.50 / <mark>267</mark>	10.50 / <mark>267</mark>	5.56 / <mark>141</mark>	1 / 25	1/4	1	4.75	29 / 13
1-1/4	10.50 / <mark>267</mark>	10.50 / <mark>267</mark>	5.56 / <mark>141</mark>	1-1/4 / 32	1/4	1	4.75	30 / 13.6
1-1/2	11.50 / 292	12.50 / 317	6.63 / 168	1-1/2 / 40	1/4	1	4.75	53 / <mark>24</mark>
2	11.50 / <mark>292</mark>	12.50 / 317	6.63 / 168	2 / 50	1/4	1	4.75	57 / <mark>25.8</mark>

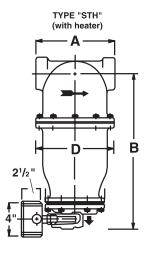
Note: Flanged ends, 125 lb ANSI flat face and drilling, Material ASTM A-278.



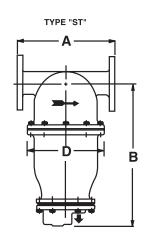
## Type T Cast Gas/Liquid Separators

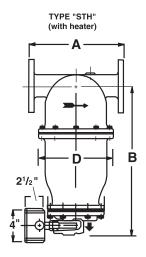
### TYPE ST & STH Cast Iron Threaded

# TYPE "ST"



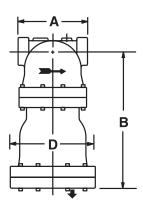
# TYPE ST & STH Cast Iron Flanged





### Dimensions - Type ST & STH - Threaded Inlet & Outlet (in /mm)

TYPE ST 3/4" Cast Iron Threaded



Pipe Size	A	B (ST)	D	Drain NPT	Vent NPT	Wt (lb/kg) ST	Wt (lb/kg) STH
3/4	5.5 / <mark>40</mark>	11.69 / <mark>297</mark>	6.75 / <mark>171</mark>	3/4	1/4	31 / 14.1	31 / 14
1	6.0 / <mark>152</mark>	10.25 / <mark>260</mark>	6.75 / <mark>171</mark>	3/4	1/4	39 / 17.7	41 / 18.7
1-1/4	6.0 / <mark>152</mark>	12.25 / <mark>311</mark>	7.00 / 178	3/4	1/4	47 / 21.3	50 / 22.3
1-1/2	7.25 / 184	14.06 / 357	8.13 / <del>207</del>	3/4	1/4	53 / <mark>24</mark>	53 / 24
2	8.13 / <mark>206</mark>	14.94 / 380	8.50 / <mark>216</mark>	3/4	1/4	58 / <mark>26.3</mark>	58 / <mark>26</mark>
2-1/2	12.00 / 305	20.44 / 520	11.38 / 289	3/4	1/4	109 / 29.5	109 / 50
3	11.00 / 280	22.44 / 570	11.38 / 289	3/4	1/4	105 / 47.7	108 / 48.7

Note: For steam service use hard valve seat only

### Dimensions - Type ST & STH - 125# Flanged Inlet & Outlet (in /mm)

Pipe Size	A	B (ST)	D	Drain NPT	Vent NPT	Wt (lb/kg) ST	Wt (lb/kg) STH
2	10.50 / <mark>267</mark>	15.31 / <mark>389</mark>	8.50/ <mark>216</mark>	3/4	1/4	51 / 23.2	54 / <mark>24.2</mark>
3	14.00 / <mark>356</mark>	20.44 / 519	11.38 / 289	3/4	1/4	100 / 45.5	103 / 46.5
4	15.88 / <mark>403</mark>	23.50 / <mark>597</mark>	14.06 / <del>357</del>	3/4	1/4	225 / 102.3	228 / 103.3
5	18.38 / 467	31 / 787	17 / 432	3/4	1/4	390 / 177	393 / 178



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