

TYPE "ST" ("STH") COMBINATION SEPARATOR-TRAP (CAST IRON)

160 PSI-450°F OR 250 PSI-250°F

SPECIFICATIONS

The new combination Separator-Trap design with "Vortex Containment Plate" is available in cast iron conforming to ASTM-A-278. Vessel design and construction is in accordance with ASME code for unfired pressure vessels. Design pressure 250 PSI @ 250°F with hydrostatic test of 500 PSI. Proof destruction tests have run between 1200 and 1400 PSI. ASME code stamp available at extra charge. Internal trap parts are rust-proof stainless steel including non magnetic 18-8 stainless valve and seat.

The "STH" Model includes a 50 watt, 110 volt, brass-copper, self limiting heating element which keeps condensed fluid above freezing conditions, does not add to temperature of air in lines and can be easily removed for inspection or replacement.

GENERAL DESCRIPTION

Wright-Austin's "ST" with their exclusive "VCP" design is an economical combined separator and trap for steam, air and gas service. The separator employs centrifugal force, whirling the steam, air or gas and throwing the entrainment to the wall. Unable to reach the outlet, it drains into the reservoir. The trap mechanism is a fool-proof design, providing for automatic ejection of condensate at a predetermined level without loss of line pressure. Tests have shown that the performance of this separator-trap design to be superior and the removal efficiency exceeds 99% over the entire velocity range.

The "ST" is compact, can be supported by the line, is easily installed. Removal of the bottom flange releases the trap mechanism for inspection or maintenance service.

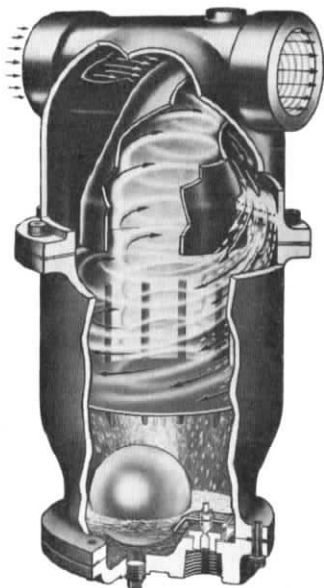
Certified for dimensions

For complete sizing and determining actual pressure drop, refer to Bulletin TB 547 (Steam) and TB 546 (Air-Gas) using example and method shown at bottom of Bulletins.

EXAMPLE:

$$\left[\frac{\text{Given Air Flow SCFM}}{\text{Rated Air Flow SCFM}} \right]^2$$

Multiply by rated pressure drop shown this Bulletin or pressure drop indicated at right side of Air, Gas or Steam charts.



TYPE "ST" COMBINATION SEPARATOR-TRAP NPT CONNECTIONS

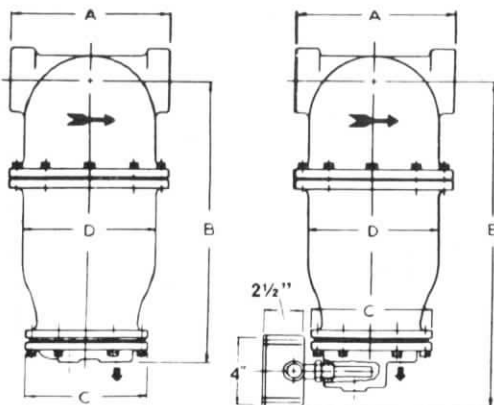
PIPE SIZE	DIMENSIONS AND WEIGHTS					
	A	B	C	D	DRAIN	LBS.
3/4"	5 1/2"	10 1/2"	6 1/8"	4 1/8"	3/4"	20
1"	6"	10 1/2"	6 1/8"	4 3/4"	3/4"	20
1 1/4"	6"	12 1/4"	6 1/8"	5 1/4"	3/4"	22
1 1/2"	7 1/2"	13 3/4"	6 1/8"	5 7/8"	3/4"	30
2"	8 1/8"	15 3/8"	6 1/8"	6 5/8"	3/4"	42
2 1/2"	9 3/8"	18 7/8"	6 1/8"	7 3/4"	3/4"	66
3"	11 1/16"	20 3/8"	6 1/8"	9 1/8"	3/4"	100

TYPE "STH" COMBINATION SEPARATOR-TRAP WITH 50 WATT HEATER

PIPE SIZE	DIMENSIONS AND WEIGHTS					
	A	B	C	D	DRAIN	LBS.
3/4"	5 1/2"	13"	6 1/8"	4 1/8"	3/4"	23
1"	6"	13"	6 1/8"	4 3/4"	3/4"	23
1 1/4"	6"	14 3/4"	6 1/8"	5 1/4"	3/4"	25
1 1/2"	7 1/2"	14 3/4"	6 1/8"	5 7/8"	3/4"	33
2"	8 1/8"	16 1/2"	6 1/8"	6 5/8"	3/4"	45
2 1/2"	9 3/8"	20"	6 1/8"	7 3/4"	3/4"	69
3"	11 1/16"	21 1/2"	6 1/8"	9 1/8"	3/4"	103

TYPE "ST"

TYPE "STH"



SIZE	CAPACITIES							
	MAXIMUM AIR FLOW RATING IN SCFM							
	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	5600	6200		
Rated ΔP PSI	0.88	0.99	1.19	1.40	1.60	1.85		
3/4" - 4" Liq. Discharge Lbs./Hr.	502	790	785	1273	1130	1370	1550	1750
Orifice" Dia.	1/8"	5/32"	1/8"	5/32"	1/8"	1/8"	1/8"	1/8"
5" Liquid Discharge Lbs./Hr.	790	1273	1850	2250				
5" Orifice" Dia.	5/32"	5/32"	5/32"	5/32"				

*The 1/8" orifice is the standard for the 3/4" to 4" type ST. The 3/4" to 4" type ST may be fitted with a 5/32" orifice where a higher drainage rate is needed and where the operating pressure does not exceed 75 PSI. SPECIFY A "HARD VALVE SEAT" FOR STEAM AND OTHER HEAVY DUTY APPLICATIONS.

Effective Dec. 1, 1995

WRIGHT-AUSTIN

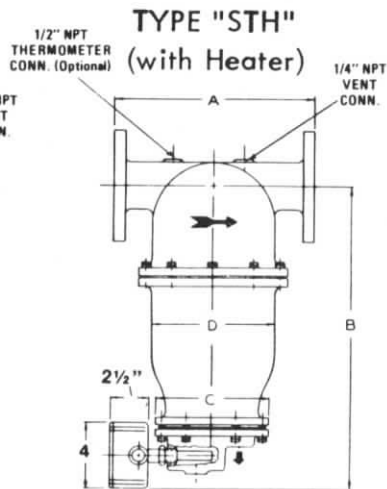
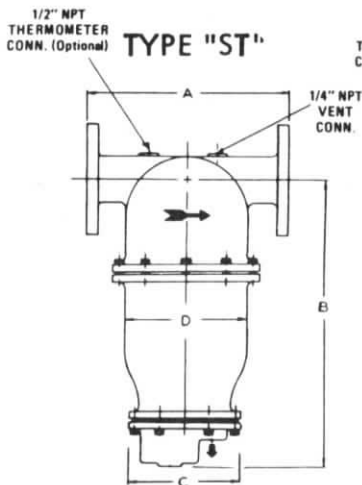
3250 Franklin Street, Detroit, MI 48207

Phone: 313-259-1925

Fax: 313-259-1962

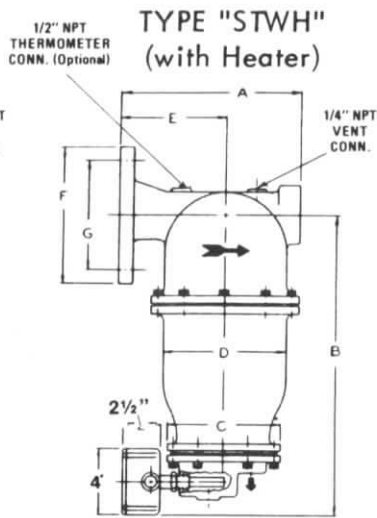
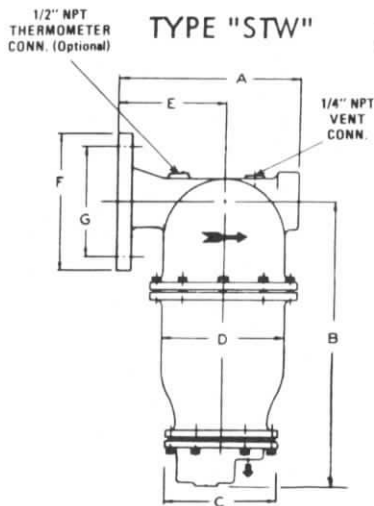
TB-534L

TYPE "STW" AND "ST" COMBINATION SEPARATOR-TRAP (CAST IRON) 150 PSI-450°F



TYPE "ST" & "STH" 125 lb. FLANGED INLET & OUTLET
Large, flat face, drilled flanges. Material ASTM-A278

Pipe Size Inches	Dimensions in inches and Weight in lbs., net						Lbs.	
	A	ST B	STH B	C	D	Drain	ST	STH
2	10-3/4	15-3/8	16-1/2	6-1/8	6-5/8	3/4	50	53
2-1/2	11-1/2	18-7/8	20	6-1/8	7-3/4	3/4	80	83
3	14-1/4	20-3/8	21-1/2	6-1/8	9-1/8	3/4	110	113
4	15-7/8	23-1/2	24-1/2	6-1/8	11-1/4	3/4	152	155
5	18-5/8	30	31	7	13-5/8	1	311	314



TYPE "STW" & "STWH" 125 lb. FLANGED INLET & THREADED OR 125 lb. FLANGED OUTLET
Enlarged inlet and outlet. Material ASTM - A278

Unit Size Inches	Dimensions in inches and Weight in lbs., net											Lbs.	
	125# Inlet Flange Size	F	G	Outlet Conn.	A	STW B	STWH B	C	D	E	NPT Drain	STW	STWH
1-1/2	2-1/2	7	5-1/2	2NPT	9-1/4	13-3/4	14-3/4	6-1/8	5-7/8	5-3/8	3/4	38	41
2	3	7-1/2	6	2 1/2 NPT	10-1/4	15-3/8	16-1/2	6-1/8	6-5/8	5-3/4	3/4	54	57
2-1/2	4	9	7-1/2	3NPT	11-3/4	18-7/8	20	6-1/8	7-3/4	6-3/4	3/4	84	87
3	5	10	8-1/2	4Flg.	15	20-3/8	21-1/2	6-1/8	9-1/8	8-1/2	3/4	130	133
4	6	11	9-1/2	5Flg.	17-1/2	23-1/2	24-1/2	6-1/8	11-1/4	9-1/2	3/4	169	172
5	8	13-1/2	11-3/4	6Flg.	21	30	31	7	13-5/8	11-3/4	1	331	334

SEE REVERSE SIDE

Certified for dimensions