

FTE SERIES

FLOAT & THERMOSTATIC STEAM TRAPS

Pressures to 464 PSIG (32 barg)

Temperatures to 850°F (454°C)

- High Capacities
- Rugged cast iron, ductile iron or cast steel body and cover
- Stainless steel thermostatic element eliminates air binding
- Stainless steel float and lever mechanism
- Below condensate level seat design prevents steam leakage
- Resistant to water hammer and corrosion
- In-Line repairable

Applications

- Very High Condensate Loads
- Continuous Drainage With High Air Venting
- Capacity Requirements
- Industrial And Commercial Applications
- Absorption Systems
- Air Handling Coils
- Heat Exchangers
- Dryers Evaporators
- Hot water Generators
- Rendering Machines
- Steam Process Equipment
- Air Make-up Coils
- Unit Heaters And Cooking Kettles

MODELS*

CAST IRON BODY

- **FTE-10** – To 200 PSIG Threaded Connections
- **FTE-43** – To 200 PSIG Flanged Connections

DUCTILE IRON BODY

- **FTE-14** – To 200 PSIG Threaded Connections

CAST STEEL BODY

- **FTE-44** – To 465 PSIG Threaded/Socket Weld Connections
- **FTE-44F** – To 465 PSIG Flanged Connections

Note: * Add "S" to end of model for SLR



FTE 10



FTE 14



FTE 43



FTE 44



FTE 44F

Options

- BSPT Threaded connection
- S-SLR Orifice
- Socket Weld connection on FTE-44
- Flanged connections
 - ANSI 125/150, 300, 600
 - DIN 10, 16, 25 or 40
 - BS10 - F, H, J, K or R

Installation Tip:

Add Uniflex Pipe Coupling for ease of maintenance on NPT Traps

SEE PAGE 102

Installation Tip: Always install STV Test & Block Valve as part of trap station

SEE PAGE 118

Operation

During startup, air and non-condensable gases enter the trap and are automatically vented through an accurate balanced pressure internal thermostatic air vent. As condensate enters the trap, the float and lever mechanism is raised, lifting the valve off the

seat, discharging the condensate. Condensate will continue to be discharged at the same rate at which it is entering. Any air or non-condensable gas that may accumulate will be continually and efficiently passed by the thermostatic air vent.

FTE SERIES

FLOAT & THERMOSTATIC STEAM TRAPS

SPECIFICATION

Steam trap shall be of float and thermostatic design. Float shall actuate the valve via a hinged lever and linkage. Air vent shall be of balanced pressure design with stainless steel welded encapsulated bellows capable of discharging air and noncondensable gases continuously. Trap shall be _____ bodied suitable for pressures to _____ PSI and shall be a _____ connection.

Maximum operating conditions

CAST IRON/DUCTILE IRON

PMO: Max. Operating Pressure see orifice selection
TMO: Max. Operating Temperature saturated at pressure
PMA: Max. Allowable Pressure 232 psig (16 barg)
PMA: Max. Allowable Pressure 450°F (232°C)

CAST STEEL

PMO: Max. Operating Pressure see orifice selection
TMO: Max. Operating Temperature saturated at pressure
PMA: Max. Allowable Pressure 465 psig (32 barg)
TMA: Max. Allowable Pressure 850°F (454°C)

Materials of construction

Body & Cover Cast Iron (ASTM A48 Cl. 30)
..... Ductile Iron (DIN 1693 GGG 40)
..... Cast Steel (ASTM A216 Gr. WCB)
Valve Stainless Steel 304 (up to 1")
..... Stainless Steel 410 (1 1/2", 2")
Valve Seat Stainless Steel 410
Housing & Housing Cover
for Float Mechanism
..... ASTM A743 Gr. CA 40 (Investment Cast)
Float Stainless Steel 304
Lever Assembly Stainless Steel 304
Thermostatic Airvent . Stainless Steel 304
Cover Bolts SAE Gr. 8

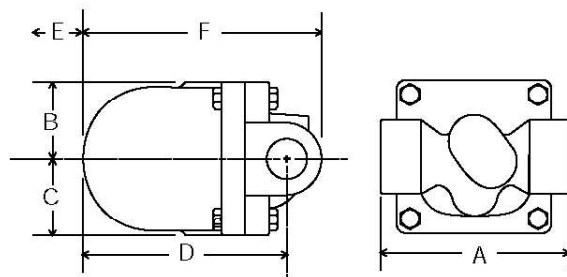
Connections: 1/2"– 2" NPT, Flanged or Socket Weld

Maximum Capacity—lbs/hr (10°F Below Saturation)																		
Trap	Size inlet	Orifice (in.)	Max ΔP		Differential Pressure-PSIG (barg)													
			BAR	PSI	5 (.345)	10 (.690)	20 (1.38)	40 (2.76)	50 (3.45)	65 (4.50)	80 (5.52)	100 (6.90)	125 (8.62)	145 (10.0)	180 (12.4)	200 (13.8)	300 20.7	400 27.6
FTE-10, 14, & 43	1/2 & 3/4	0.142 0.095 0.079	4.5 10.0 14.0	65 145 200	400 275 200	520 380 290	700 530 400	950 720 570	1000 800 640	1150 900 700	1000 800 800	1080 1250 900	1380 1380 1100					
FTE-10, 14, & 43	1	0.256 0.17 0.142	4.5 10.0 14.0	65 145 200	1650 870 640	2200 1250 800	3050 1650 1250	4200 2350 1600	5000 2600 1800	5200 3000 2000	3200 3500 2200	3900 2780 2550	4100 2900 2780					
FTE-10 & 43	1½	0.689 0.571 0.531	4.5 10.0 14.0	65 145 200	4200 2800 1800	6000 3900 2600	8800 5600 3600	12500 8000 5000	13500 9000 5450	15000 10000 5450		13000 14200 7800	15000 9000 8600					
FTE-10 & 43	2	1.063 0.811 0.657	4.5 10.0 14.0	65 145 200	13500 7300 3500	19800 10000 5000	28000 14500 6800	40000 20000 9600	45000 22500 10500	50500 26000 12000		32000 29000 13500	35000 40000 16500					
FTE-44 & 44F	1/2 & 3/4	0.142 0.095 0.079 0.07 0.063	4.5 10.0 14.0 21.0 32.0	65 145 200 300 465	400 275 200 110 65	520 380 290 145 90	700 530 400 200 120	950 720 570 315 155	1000 800 640 700 170	1150 900 700 350 200	1000 800 400 215	1080 900 430 250	1250 1020 480 280	1380 1100 520 300				
FTE-44 & 44F	1	0.256 0.17 0.142 0.114 0.095	4.5 10.0 14.0 21.0 32.0	65 145 200 300 465	1650 870 640 400 275	2200 1250 800 520 380	3050 1650 1250 700 530	4200 2350 1600 950 720	5000 2600 1800 1000 800	5200 3000 2000 1150 900	5200 3000 2200 1600 1000	5200 3000 2200 1600 1080	5200 3000 2200 1600 1250	5200 3000 2200 1600 1380				
FTE-44 & 44F	1½	0.689 0.571 0.531 0.531	4.5 10.0 14.0 21.0	65 145 200 300	4200 2800 1800 1800	6000 3900 2600 2600	8800 5600 3600 3600	12500 8000 5000 5000	13500 9000 5450 5450	15000 10000 6000 6000		13000 7800 6900 7800	15000 8600 9000 8600					
FTE-44 & 44F	2	1.063 0.811 0.657 0.657 0.657	4.5 10.0 14.0 21.0 32.0	65 145 200 300 465	13500 7300 3500 3500 3500	19800 10000 5000 5000 5000	28000 14500 6800 6800 6800	40000 20000 9600 9600 9600	45000 22500 10500 10500 10500	50500 26000 12000 12000 12000		32000 29000 13500 15000 15000	35000 40000 16500 17500 17500					

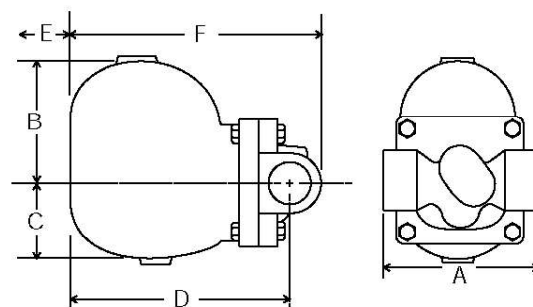
For Kg/Hr Multiply by .454

SERIES FTE DIMENSIONS

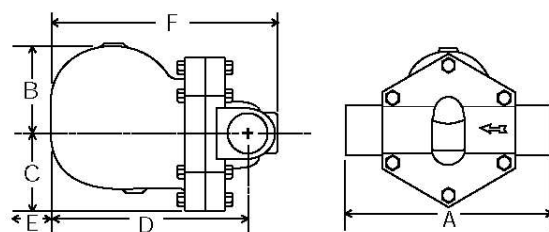
DIMENSIONS inches (mm) AND WEIGHTS pounds (kg) SERIES FTE-10 & FTE 44								
Size	Inches (mm)						Weight Lbs (kg)	
	A	B	C	D	E	F	FTE-10	FTE-44
1/2	5 ¹ / ₁₆ (128)	2 ¹ / ₈ (54)	2 ¹ / ₈ (54)	5 ¹ / ₁₆ (145)	4 ³ / ₁₆ (110)	6 ¹ / ₁₆ (170)	10.5 (4.8)	11.4 (5.2)
3/4	5 ¹ / ₁₆ (128)	2 ¹ / ₈ (54)	2 ¹ / ₈ (54)	5 ¹ / ₁₆ (145)	4 ³ / ₁₆ (110)	6 ¹ / ₁₆ (170)	10.5 (4.8)	11 (5.0)
1	5 ¹ / ₁₆ (128)	4 ³ / ₁₆ (110)	2 ¹ / ₈ (75)	7 ¹ / ₂ (190)	6 ³ / ₁₆ (160)	8 ¹ / ₂ (216)	18.7 (8.5)	17.6 (8.0)
1	11 ¹ / ₈ (282)	5 (127)	4 ³ / ₁₆ (110)	10 (254)	7 ⁷ / ₈ (200)	11 ³ / ₈ (289)	49.5 (22.5)	48.4 (22.0)
2	12 ¹ / ₈ (308)	5 ¹ / ₂ (140)	5 (127)	10 ¹ / ₄ (260)	7 ⁷ / ₈ (200)	11 ¹³ / ₁₆ (300)	61.6 (28.0)	59.4 (27.0)



FTE-10 CAST IRON & FTE-44 CAST STEEL 1/2" & 3/4"

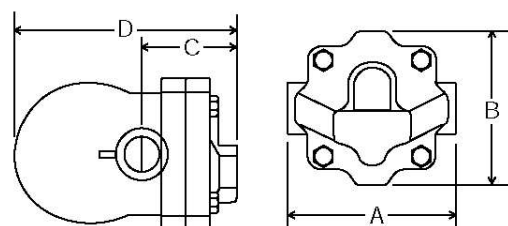


FTE-10 CAST IRON & FTE-44 CAST STEEL 1"



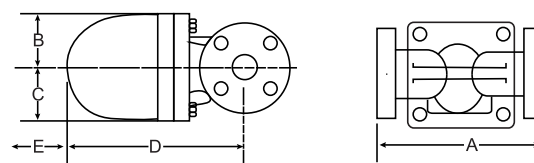
FTE-10 CAST IRON & FTE-44 CAST STEEL 1 1/2" & 2"

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg) SERIES FTE-14					
Size	Inches (mm)				Weight Lbs (kg)
	A	B	C	D	
1/2	4 (121)	4 (108)	2 (67)	5 (148)	7.9 (3.6)
3/4	4 (121)	4 (108)	2 (67)	5 (148)	7.9 (3.6)
1	5 (145)	4 (108)	3 (76)	6 (167)	10.1 (4.6)

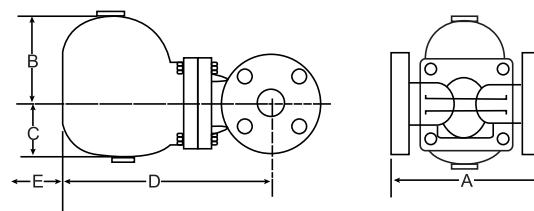


FTE-14-DUCTILE IRON 1/2", 3/4" & 1"

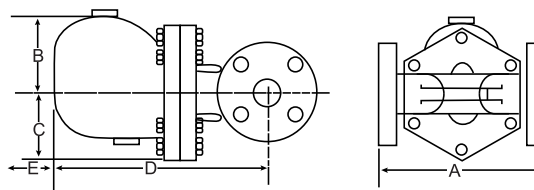
SERIES FTE DIMENSIONS



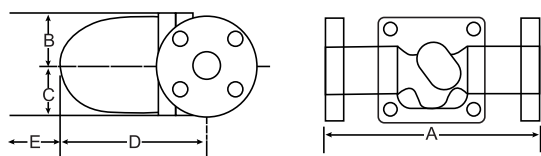
FTE-43 CAST IRON 1/2" & 3/4"



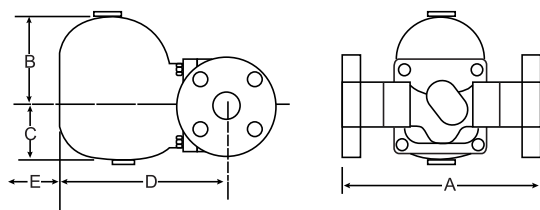
FTE-43 CAST IRON 1"



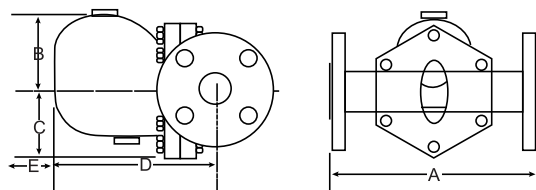
FTE-43 CAST IRON 1 1/2" & 2"



FTE-44F CAST STEEL 1/2" & 3/4"



FTE-44F CAST STEEL 1"



FTE-44F CAST STEEL 1 1/2" & 2"

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)
SERIES FTE-44F

Size	Inches (mm)					Weight Lbs (kg)
	A	B	C	D	E	
1/2	8 (210)	2 (54)	2 (54)	5 (141)	4 (110)	16.5 (7.5)
3/4	8 (210)	2 (54)	2 (54)	5 (141)	4 (110)	17.6 (8.0)
1	8 (210)	4 (110)	2 (75)	7 (190)	6 (160)	25.3 (11.5)
1	12 (325)	5 (127)	4 (110)	9 (245)	7 (200)	60.5 (27.5)
2	12 (325)	5 (140)	5 (127)	9 (251)	7 (200)	74.8 (34.0)