

## STEAM TRAPS

**FT600 & FT601 Series**

Float &amp; Thermostatic Steam Trap

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Model	<b>FT600 &amp; FT601*</b>
Sizes	<b>3/4", 1", 1 1/2", 2", 3", 4"</b>
Connections	<b>NPT, SW, FLG</b>
Body Material	<b>Carbon Steel or 316SS</b>
Options	<b>Live Orifice Air Vent</b>
PMO Max. Operating Pressure	<b>450 PSIG</b>
TMO Max. Operating Temperature	<b>750°F</b>
PMA Max. Allowable Pressure	<b>990 PSIG @ 100°F</b>
TMA Max. Allowable Temperature	<b>750°F @ 670 PSIG</b>

\* **FT601 Body Material is 316 SS**  
**FT600 Body Material is Carbon Steel**

**TYPICAL APPLICATIONS**

**PROCESS** The **FT600 & FT601 Series** high-pressure float and thermostatic steam traps are primarily used on industrial process applications. The excellent air handling capabilities of float and thermostatic traps make them a better choice than bucket traps for applications requiring quick system start-up. These traps have in-line pipe connections. Used in chemical plants and petrochemical refineries on reboilers, heat exchangers, and other critical process applications. Model FT601 is identical to FT600 except body material is 316 SS.

**HOW IT WORKS**

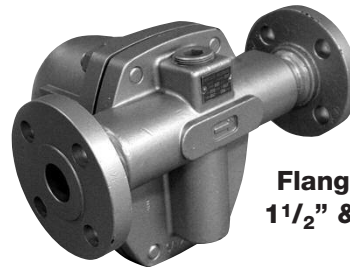
Float and thermostatic steam traps have a float and thermostatic element that work together to remove both condensate and air from the steam system. The float, which is attached to a valve, rises and opens the valve when condensate enters the trap. Air is discharged through the thermostatic air vent to the outlet side of the trap. The thermostatic air vent closes when steam enters the trap.

**FEATURES**

- Investment cast steel body and cover with class 400 shell rating (670 PSIG @ 750°F)
- Hardened stainless steel seat and disc for extended service life even at extreme temperatures and pressures
- In-line repairability is simplified by having all internals attached to the cover. Studded cover allows for easier removal of body.
- Welded stainless steel air vent resists shock from water hammer. Live orifice air vent is available for superheated applications
- F & T traps discharge condensate immediately as it is formed (No condensate will back up into the system)

**SAMPLE SPECIFICATION**

The steam trap shall be of the mechanical float type having cast steel bodies, horizontal in-line connections in NPT, SW, or flanged, and all stainless steel internals. Incorporated into the trap body shall be an all stainless steel welded thermal element air vent which is water hammer resistant. The air vent is to be located at the high point of trap body to assure proper venting of non-condensables. The trap body will be in-line renewable. All bodies and covers shall be class 400 shell design, suitable for 670 PSIG @ 750°F.

**1 1/2" & 2"****3/4" & 1"****Flanged  
1 1/2" & 2"****INSTALLATION**

Installation should include a strainer and isolation valves for maintenance purposes.

**MAINTENANCE**

Trap is in-line repairable. Studs are permanently installed into the cover simplifying the replacement of internal components.

**OPTIONS**

Live orifice air vent for superheated applications.

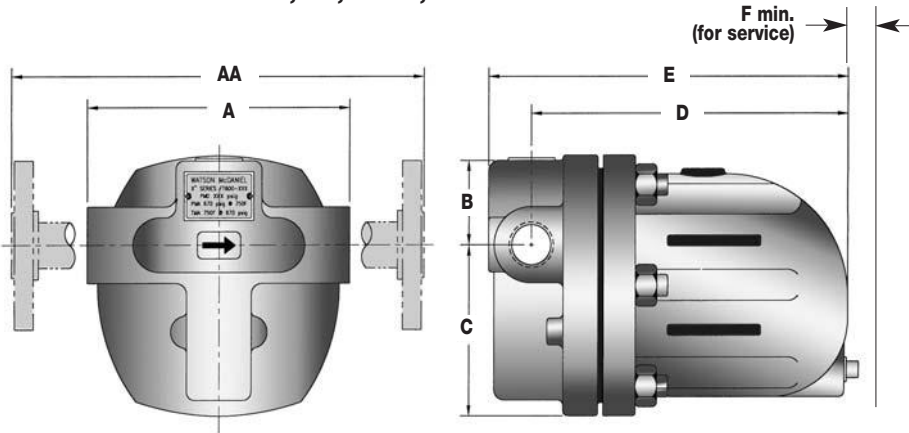
**MATERIALS**

FT 600: Body & Cover	Cast Steel, ASTM A-216
FT 601: Body & Cover	316 SS
Cover Studs	Steel, AS 193, GR B7
Cover Nuts	Steel, SA 194, GR 2H
Cover Gasket	Stainless Steel Reinforced Grafoil
Valve Assembly	Stainless Steel, AISI 431
Gasket, Valve Assembly	Stainless Steel Reinforced Grafoil
Pivot Assembly	Stainless Steel, 17-4 PH
Mounting Screws	Stainless Steel Hex Head, 18-8
Float	Stainless Steel, ASTM -240, 304
Air Vent Assembly	Thermostatic element 304 SS Optional: Live orifice

# FT600 & FT601 Series

Float & Thermostatic Steam Trap

FT600 & FT601: 3/4", 1", 1 1/2", 2"



DIMENSIONS & WEIGHTS – inches/pounds										
Model*	Size	A	AA	B	C	D	E	F	Weight (lbs)	
									NPT/SW	FLG
FT600	3/4"	6.10	10.10	2.07	3.93	7.38	8.41	5.75	25	31
FT600	1"	6.50	10.40	2.50	5.50	8.44	9.50	6.25	31	36
FT600	1 1/2"	9.80	14.00	3.26	6.85	10.40	11.94	7.75	82	91
FT600	2"	11.80	16.00	3.60	7.40	11.59	13.27	8.00	93	107

\* Chart is applicable for both Models FT600 & FT601

### HOW TO SIZE/ORDER

From the capacity chart, select the model that can handle the working pressure of the system (PMO). Select the trap that will meet the capacity requirements at the differential pressure. Example:

Application: 1690 lbs/hr at 30 PSIG working pressure and 5 PSI differential pressure  
 Size/Model: 1" FT600-65-14 (65 PSIG max), Specify connections (NPT, SW, FLG)

CAPACITIES – Condensate (lbs/hr)																						
Model*/ (PSIG)	PMO Sizes	Differential Pressure (PSI)																				
		1	2	3	4	5	6	8	10	20	30	40	50	65	80	100	145	200	300	400	450	
FT600-65-13	3/4"	225	300	363	413	463	500	575	635	960	1060	1180	1320	1460								
FT600-65-14	1"	775	1094	1340	1520	1690	1865	2125	2370	3260	3990	4500	5000	5500								
FT600-65-16	1 1/2"	2500	3450	4130	4750	5300	5875	6750	7500	10625	13125	15000	16800	18850								
FT600-65-17	2"	8500	11950	14670	16800	18700	20100	23650	25250	35900	43000	49600	55500	61250								
FT600-145-13	3/4"	137	180	218	250	275	297	340	380	520	625	725	863	895	995	1120	1315					
FT600-145-14	1"	400	555	660	755	850	925	1060	1237	1593	1925	2240	2490	2750	3000	3430	3935					
FT600-145-16	1 1/2"	1275	1750	2125	2430	2740	2930	3370	3750	5100	6250	7200	7995	8875	9900	11250	13300					
FT600-145-17	2"	3125	4400	5375	6250	6900	7100	8700	9250	14625	16875	19375	21875	25000	27500	31000	37000					
FT600-200-13	3/4"	93	137	160	187	205	227	260	287	400	487	560	610	710	775	875	1060	1250				
FT600-200-14	1"	300	410	487	560	610	660	750	925	1140	1375	1520	1687	1875	2060	2312	2750	3100				
FT600-300-13	3/4"	50	68	83	95	106	118	137	155	197	240	275	300	340	375	413	490	570	710			
FT600-300-14	1"	225	300	363	413	463	500	575	635	960	1060	1180	1320	1468	1640	1815	2130	2550	3000			
FT600-450-13	3/4"	32	42	49	56	62	67	76	84	119	145	163	175	192	210	186	275	312	375	425	450	
FT600-450-14	1"	137	180	218	250	275	297	340	380	520	625	725	863	895	995	1120	1315	1500	1870	2125	2250	
FT600-450-16	1 1/2"	825	1130	1400	1570	1760	1937	2190	2500	3375	4125	4740	5250	6000	6600	7300	8650	10200	12600	14375	15200	
FT600-450-17	2"	1560	2187	2800	3100	3490	3750	4300	4800	6750	8250	9500	10625	12400	13700	15000	18120	21200	26250	28700	31250	

Note: For 450 Model, the Thermostatic Air Vent is replaced with a live Orifice.

\* Chart is applicable for both Models FT600 & FT601

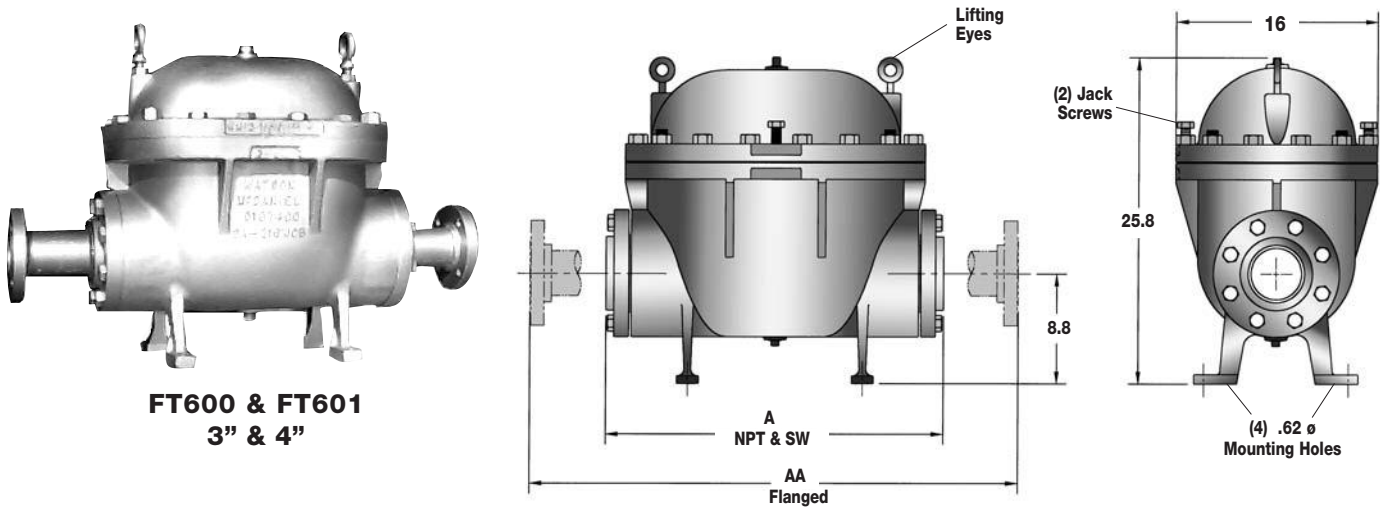
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### Float & Thermostatic Steam Trap

FT600 & FT601: 3" & 4"



FT600 & FT601  
3" & 4"

#### DIMENSIONS & WEIGHTS – inches/pounds

Model*	Size	A	AA	Weight (lbs)	
				NPT/SW	FLG
FT600	3"	27	39	587	626
FT600	4"	N/A	39	N/A	654

\* Chart is applicable for both Models FT600 & FT601

#### CAPACITIES – Condensate (1000 lbs/hr)

Temp	Differential Pressure (PSI)																				
	1/2	1	2	5	10	15	20	30	40	50	75	100	125	150	175	200	250	300	350	400	450
COLD*	44	59	81	122	170	205	230	280	317	350	425	480	540	580	625	670	740	800	860	910	960
HOT	44	53	64	83	100	112	121	138	149	159	177	190	201	212	222	230	247	260	270	280	290

\* Cold Water capacities are to be used when the trap is used as a liquid drain trap.  
Note: For liquid drain trap applications, please specify "liquid drain trap" when ordering.

#### CAPACITY CORRECTION FACTORS

To obtain capacity with a liquid other than water, multiply water capacity by correction factor.

Spec. Gravity	1	.98	.96	.94	.92	.90	.88	.86	.84	.82	.80	.75	.70	.65	.60	.55	.50
Corr. Factor	1	.990	.980	.970	.959	.949	.938	.927	.917	.906	.894	.866	.837	.806	.775	.742	707

#### PRESSURE-TEMPERATURE RATING - 3" & 4" Models

PMA 650 PSIG up to 450°F  
TMA 750°F @ 375 PSIG

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