

## FLOAT AND THERMOSTATIC STEAM TRAPS FLT45 (Stainless steel 1"; DN 25)

### DESCRIPTION

The FLT45 is a series of float and thermostatic steam traps with integral air vent designed for modulating discharge of condensate, ensuring maximum system heat transfer.

Typical applications include unit heaters, heat exchangers, dryers, jacketed vessels and other applications where continuous discharge is essential.

### MAIN FEATURES

Modulating discharge of condensate at steam temperature.  
Unaffected by sudden or wide load and pressure variations.  
No backing-up with condensate.

Excellent air discharge through its integrated air vent.

Flow direction can be easily changed by repositioning the body in relation to the mechanism and cover.

**OPTIONS:**

- Equalizing (vent) and drain connections.
- SLR – Steam lock release.
- HVV – Hand vent valve.
- BDV – Blowdown valve.
- AFZ – Anti-freeze device.
- FLL – Float lifting lever.
- VB21M – Vacuum breaker.

**USE:** Saturated and superheated steam.

**AVAILABLE MODELS:** FLT45-4,5 , 10, 14, 21 and 32 – stainless steel.

**SIZES:** 1"; DN 25.

**CONNECTIONS:** Female threaded ISO 7 Rp or NPT.  
Flanged EN 1092-1 PN 40.  
Flanged ASME B16.5 Class 150 or 300.  
Socket weld (SW) ASME 16.11.

**INSTALLATION:** Inline horizontal or vertical installation.  
Angled horizontal or vertical installation.  
See IMI – Installation and maintenance instructions.

**MAX. ΔP:**

- FLT45-4,5 – 4,5 bar
- FLT45-10 – 10 bar
- FLT45-14 – 14 bar
- FLT45-21 – 21 bar
- FLT45-32 – 32 bar



#### CE MARKING – GROUP 2 (PED – European Directive)

CLASS 150	PN 40	Category
1" – DN 25	–	SEP
–	1" – DN 25	1 (CE marked)

BODY LIMITING CONDITIONS			
FLANGED PN 40 *	FLANGED CLASS 300 **	FLANGED CLASS 150 **	RELAT. TEMP.
ALLOW. PRESS.	ALLOW. PRESS.	ALLOW. PRESS.	
37,9 bar	34,4 bar	13,3 bar	100 °C
31,8 bar	28,8 bar	11,1 bar	200 °C
29,9 bar	26,6 bar	10,2 bar	250 °C
27,6 bar	25,2 bar	9,7 bar	300 °C

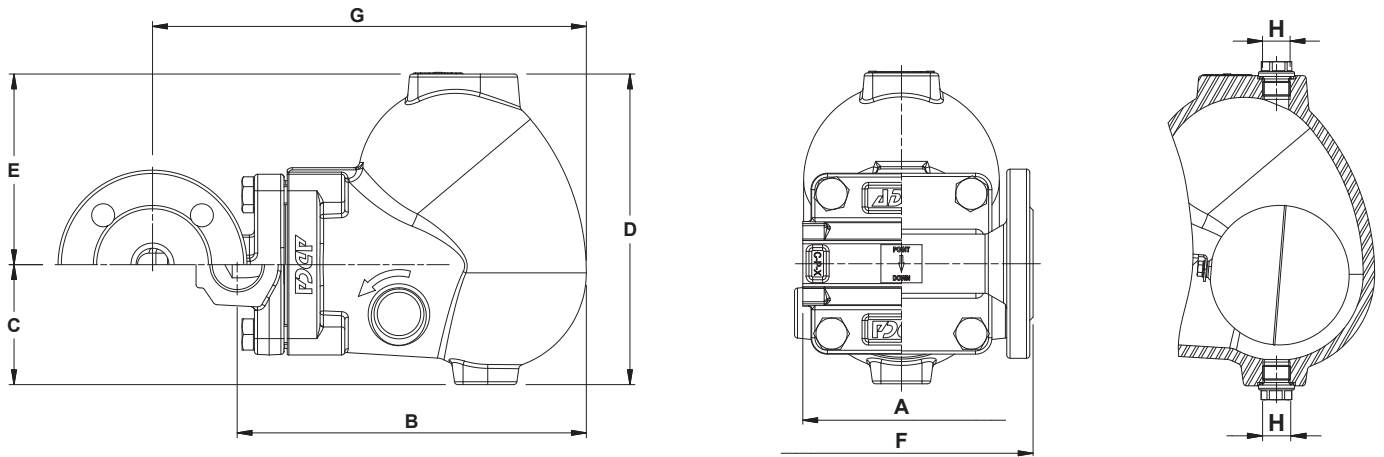
PMO – Maximum operating pressure: 32 bar.

TMO – Maximum operating temperature: 250 °C.

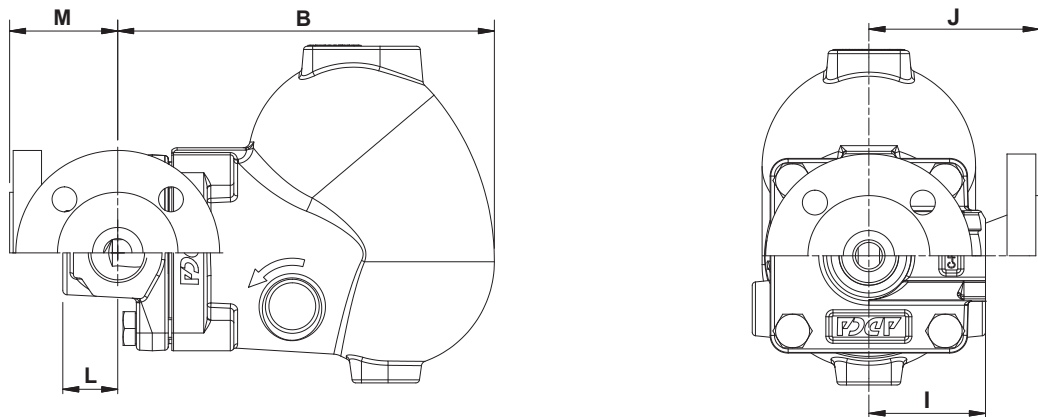
\* Acc. to EN 1092-1:2018; \*\* Acc. to EN 1759-1:2004.

Body limiting conditions PN 40 or below, depending on the type of connection adopted. Rating PN 40 for threaded and SW versions.

FLOW RATE CAPACITY (kg/h)														
MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)												
		0,5	1	1,5	2	4,5	7	10	12	14	16	21	25	32
FLT45-4,5	1" – DN 25	900	1250	1490	1630	2490	–	–	–	–	–	–	–	–
FLT45-10	1" – DN 25	445	610	705	850	1285	1670	1820	–	–	–	–	–	–
FLT45-14	1" – DN 25	335	445	515	600	885	1150	1350	1500	1610	–	–	–	–
FLT45-21	1" – DN 25	255	335	380	410	555	680	745	790	815	895	920	–	–
FLT45-32	1" – DN 25	230	275	315	345	440	500	570	600	610	650	705	750	810



Inline design



Angled design

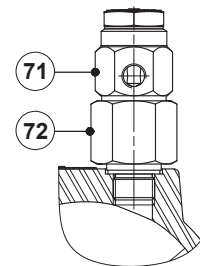
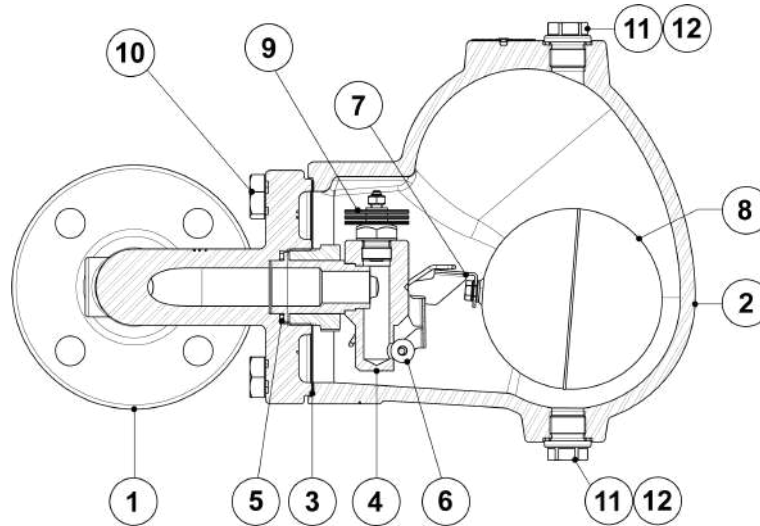
**DIMENSIONS (mm) – INLINE DESIGN**

SIZE	THREADED / SW							PN 40			CLASS 150			CLASS 300		
	A	B	C	D	E	H *	WGT. (kg)	F	G	WGT. (kg)	F	G	WGT. (kg)	F	G	WGT. (kg)
1" – DN 25	120	212	73	189	116	3/8"	8,9	160	264	12	160	264	11,9	160	264	12,6

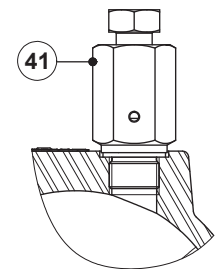
**DIMENSIONS (mm) – ANGLED DESIGN**

SIZE	THREADED / SW								PN 40			CLASS 150			CLASS 300		
	B	C	D	E	H *	I	L	WGT. (kg)	J	M	WGT. (kg)	J	M	WGT. (kg)	J	M	WGT. (kg)
1" – DN 25	212	73	189	116	3/8"	65	31	8,4	95	61	11	100	66	10,5	110	76	11,7

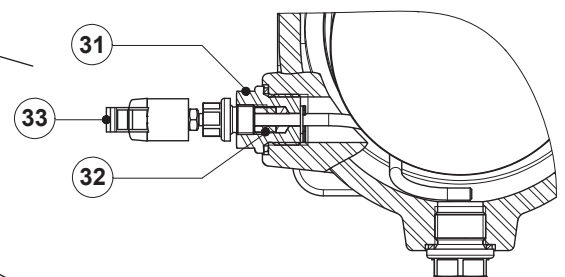
\* As standard, in versions with EN flanges or female ISO 7 Rp threads, these connections are female threaded ISO 228. In versions with ASME flanges, female NPT threads or SW, these connections are female threaded NPT.



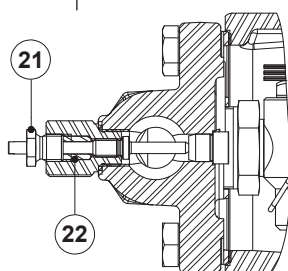
VB21M - Vacuum breaker



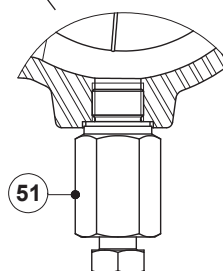
HVV - Hand vent valve



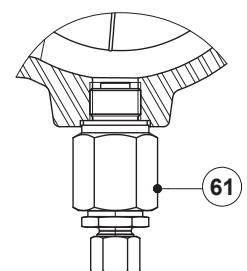
FLL - Float lifting lever



SLR - Steam lock release



BDV - Blowdown valve  
(Manual)

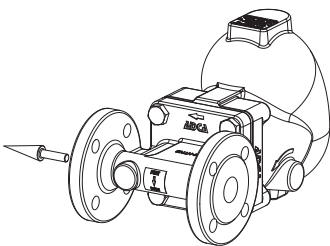


AFZ - Anti-freeze device  
(Automatic)

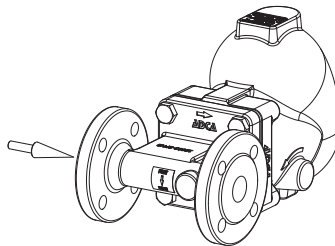
MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body (inline flanged)	A351 CF8M / 1.4408
	Body (inline threaded)	AISI 316L / 1.4404
	Body (angled)	AISI 316L / 1.4404
2	Cover	A351 CF8M / 1.4408
3	* Gasket	Stainless steel / Graphite
4	* Seat	AISI 303 / 1.4305
5	* Gasket	Copper
6	* Valve ball	AISI 316 / 1.4401
7	* Lever	AISI 304 / 1.4301
8	* Float	AISI 304 / 1.4301
9	* Automatic air vent	Stainless steel; Bimetallic
10	Bolts	Stainless steel A2-70
11	Plug	AISI 316L / 1.4404
12	** Gasket	Copper; AISI 304 / 1.4301
21	Steam Lock Release	AISI 420 / 1.4021 AISI 316L / 1.4404
22	Packing	Graphite
31	Lever mechanism	AISI 303 / 1.4305 ; AISI 304 / 1.4301; AISI 316L / 1.4404
32	Packing	Graphite
33	Lever	Plastic
41	Hand vent valve	AISI 303 / 1.4305; AISI 316L / 1.4404
51	Blowdown valve	AISI 303 / 1.4305; AISI 316L / 1.4404
61	Anti-freeze device	AISI 303 / 1.4305; AISI 316L / 1.4404
71	Vacuum breaker	AISI 303 / 1.4305
72	Adapter fitting	AISI 303 / 1.4305

\* Available spare parts; \*\* Not applicable in NPT version.

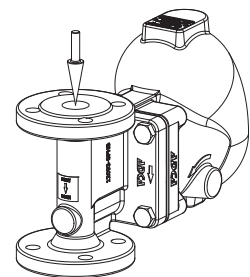
**FLOW DIRECTION**



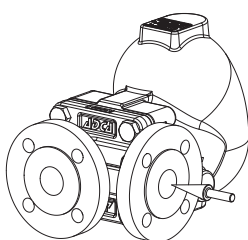
*IR - Horizontal from right to left*



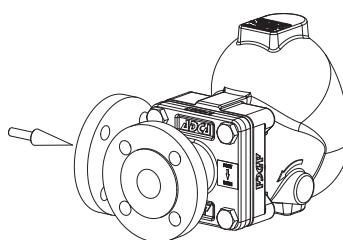
*IL - Horizontal from left to right*



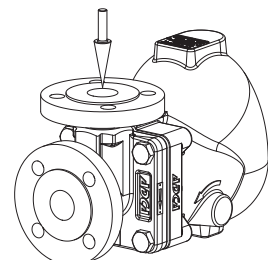
*IT - Vertical from top to bottom*



*AR - Angled from right to front*



*AL - Angled from left to front*



*AT - Angled from top to front*

ORDERING CODES FLT45										
Model	A45	2	V	XX	X	X	IR	A	25	
FLT45 – stainless steel	A45									
<b>Differential pressure</b>										
4,5 bar		2								
10 bar		3								
14 bar		4								
21 bar		5								
32 bar		7								
<b>Automatic air vent</b>										
Bimetallic air vent (standard)			V							
None			X							
<b>Cover connections</b>										
None				XX						
3/8" threaded connections on top and bottom, closed with plugs (mandatory if any options are considered)				10						
<b>Options</b>										
If any, these have specific separate ordering codes, please refer to the appropriate documentation.										
<b>SLR - Steam lock release</b>										
None						X				
With steam lock release assembled						S				
<b>FLL - Float lifting lever</b>										
None							X			
Lifting lever on the right side (when facing the steam trap body)								R		
Lifting lever on the left side (when facing the steam trap body)									L	
<b>Flow direction</b>										
Inline horizontal from right to left (standard)										IR
Inline horizontal from left to right										IL
Inline vertical from top to bottom										IT
Angled from right to front										AR
Angled from left to front										AL
Angled from top to front										AT
<b>Pipe connections</b>										
Female threaded ISO 7 Rp										A
Female threaded NPT										C
Socket weld (SW) ASME 16.11										H
Flanged EN 1092-1 PN 40										N
Flanged ASME B16.5 Class 150										U
Flanged ASME B16.5 Class 300										V
<b>Size</b>										
1" or DN 25										25
<b>Special valves / Extras</b>										
Full description or additional codes have to be added in case of a non-standard combination										E