

## FLOAT AND THERMOSTATIC STEAM TRAPS

### FLT49

(Stainless steel ; 2" – DN 50)

#### DESCRIPTION

The ADCA FLT49 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 and high flow capacities are involved.

#### 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:** FLT49-4,5, FLT49-10, FLT49-21 and FLT49-32 – stainless steel.

**SIZES:** 2"; DN 50.

**CONNECTIONS:** Flanged EN 1092-1 PN 40.  
 Flanged ASME B16.5 Class 150 or 300.

**INSTALLATION:** Horizontal or vertical installation.

**ΔPMX:** FLT49-4,5 – 4,5 bar  
 FLT49-10 – 10 bar  
 FLT49-21 – 21 bar  
 FLT49-32 – 32 bar



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

| PN 40      | Category      |
|------------|---------------|
| 2" – DN 50 | 1 (CE marked) |

#### BODY LIMITING CONDITIONS

| FLANGED PN 40 /<br>CLASS 300 * | FLANGED<br>CLASS 150 ** | RELATED<br>TEMPERATURE |
|--------------------------------|-------------------------|------------------------|
| ALLOWABLE<br>PRESSURE          | ALLOWABLE<br>PRESSURE   |                        |
| 40 bar                         | 16,3 bar                | 100 °C                 |
| 33,7 bar                       | 13,5 bar                | 200 °C                 |
| 31,8 bar                       | 12,1 bar                | 250 °C                 |
| 29,7 bar                       | 10,2 bar                | 300 °C                 |

PMO – Maximum operating pressure: 32 bar.

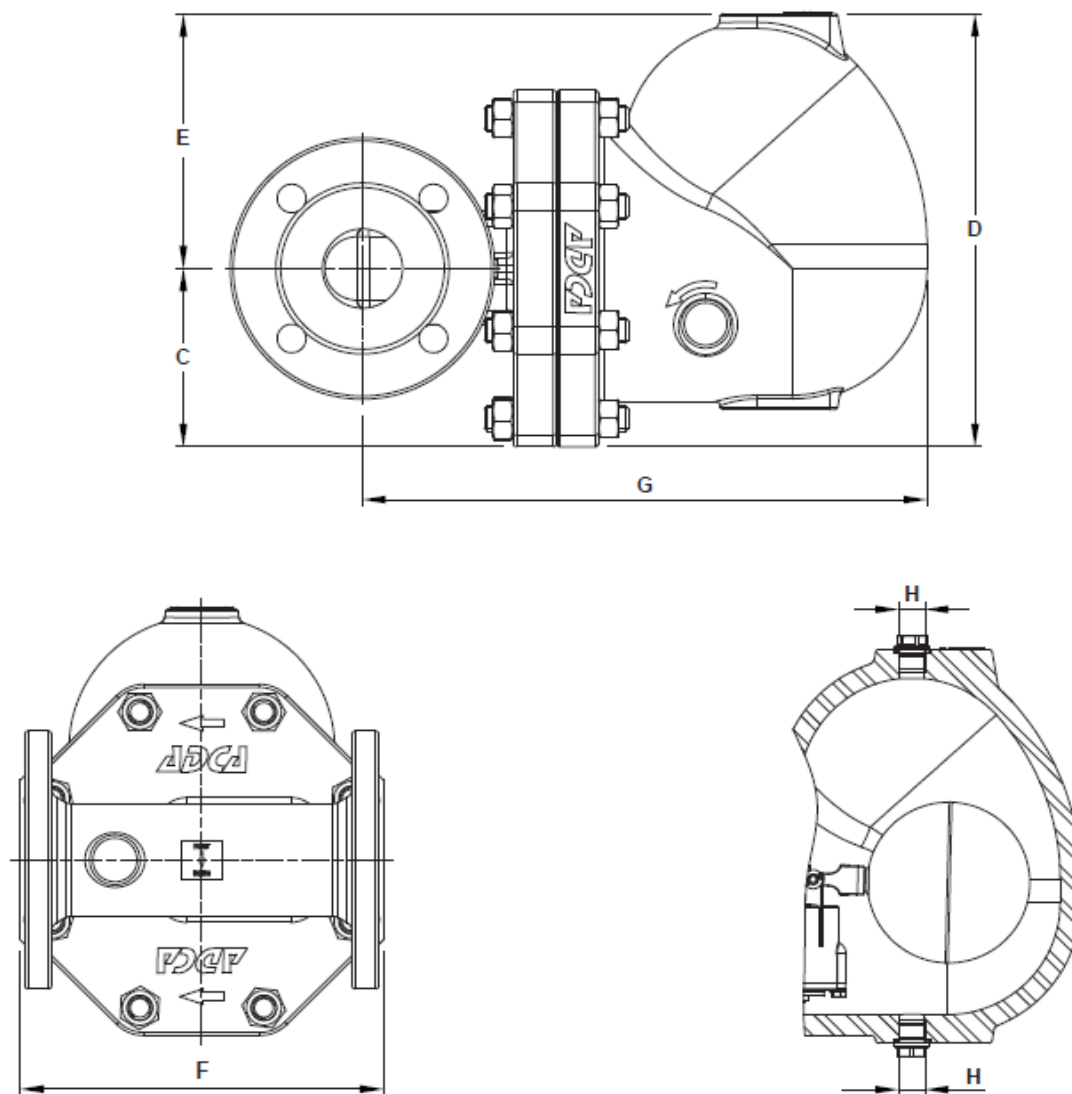
TMO – Maximum operating temperature: 250 °C.

\* According to EN 1092-1:2018.

\*\* According to EN 1759-1:2004.

Body limiting conditions PN 40 or below, depending on the type of connection adopted.

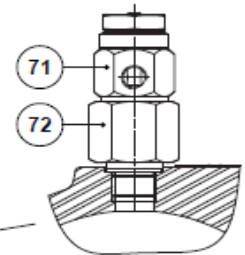
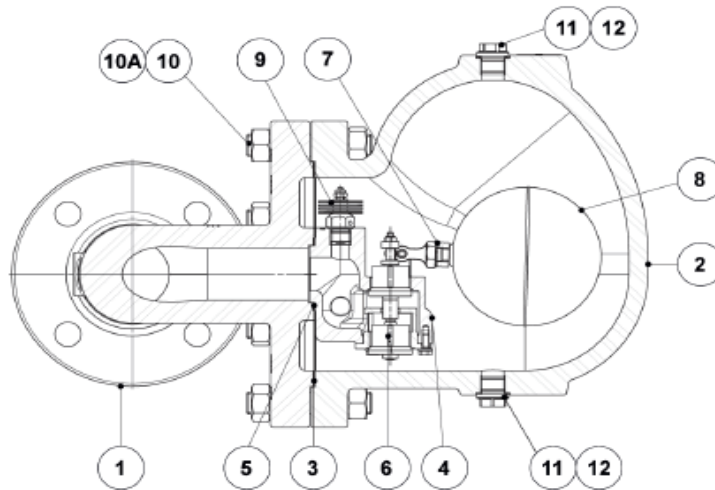
| FLOW RATE CAPACITY (kg/h) |            |                             |       |       |       |       |       |       |      |      |       |       |       |       |
|---------------------------|------------|-----------------------------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|
| MODEL                     | SIZE       | DIFFERENTIAL PRESSURE (bar) |       |       |       |       |       |       |      |      |       |       |       |       |
|                           |            | 0,5                         | 1     | 1,5   | 2     | 4,5   | 7     | 10    | 12   | 14   | 16    | 21    | 25    | 32    |
| FLT49-4,5                 | 2" – DN 50 | 7550                        | 11000 | 14000 | 15500 | 22500 | –     | –     | –    | –    | –     | –     | –     | –     |
| FLT49-10                  | 2" – DN 50 | 3900                        | 5000  | 6100  | 7100  | 10000 | 13750 | 16000 | –    | –    | –     | –     | –     | –     |
| FLT49-21                  | 2" – DN 50 | 1900                        | 2700  | 3100  | 3600  | 5000  | 6900  | 8100  | 9000 | 9800 | 10050 | 11150 | –     | –     |
| FLT49-32                  | 2" – DN 50 | 1900                        | 2700  | 3100  | 3600  | 5000  | 6900  | 8100  | 9000 | 9800 | 10050 | 11150 | 12000 | 12550 |



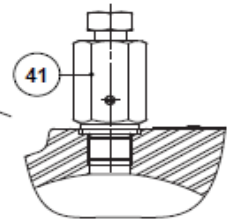
| DIMENSIONS (mm) |       |     |     |     |     |      |             |             |             |
|-----------------|-------|-----|-----|-----|-----|------|-------------|-------------|-------------|
| SIZE            | PN 40 |     |     |     |     |      |             | CLASS 150   | CLASS 300   |
|                 | C     | D   | E   | F   | G   | H *  | WEIGHT (kg) | WEIGHT (kg) | WEIGHT (kg) |
| 2" – DN 50      | 113   | 273 | 161 | 230 | 352 | 3/8" | 40,8        | 39,9        | 40,4        |

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

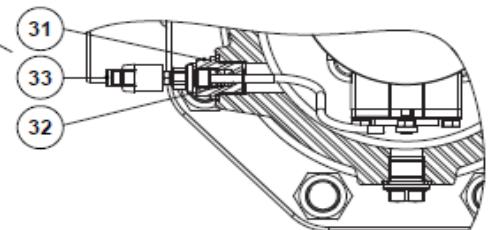
**MATERIALS**



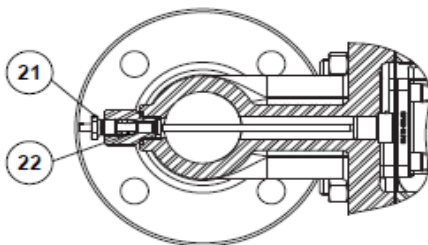
*Optional vacuum breaker  
(VB21M)*



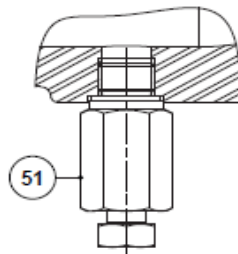
*Optional hand vent valve  
(HVV)*



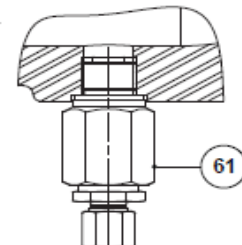
*Optional float lifting lever (FLL)*



*Optional steam lock release  
(SLR)*



*Optional blowdown valve (BDV);  
Manual*



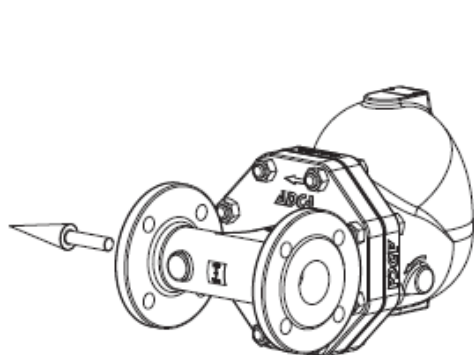
*Optional anti-freeze device (AFZ);  
Automatic*

**MATERIALS**

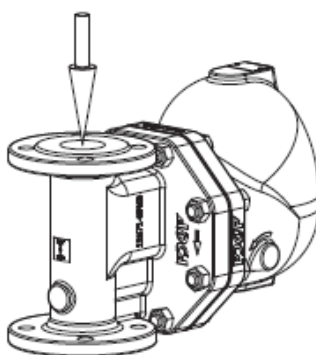
| POS. N° | DESIGNATION          | MATERIAL                                                 |
|---------|----------------------|----------------------------------------------------------|
| 1       | Body                 | A351 CF8M / 1.4408                                       |
| 2       | Cover                | A351 CF8M / 1.4408                                       |
| 3       | * Gasket             | Stainless steel / Graphite                               |
| 4       | * Seat               | A351 CF8 / 1.4308; A276-98B / 1.4057                     |
| 5       | * Gasket             | Graphite                                                 |
| 6       | * Valve              | AISI 316 / 1.4401; AISI 420 / 1.4021                     |
| 7       | * Lever              | A351 CF8M / 1.4408                                       |
| 8       | * Float              | AISI 304 / 1.4301                                        |
| 9       | * Automatic air vent | Stainless st. (bimetallic)                               |
| 10      | Stud                 | Stainless steel A2-70                                    |
| 10A     | Nut                  | 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.

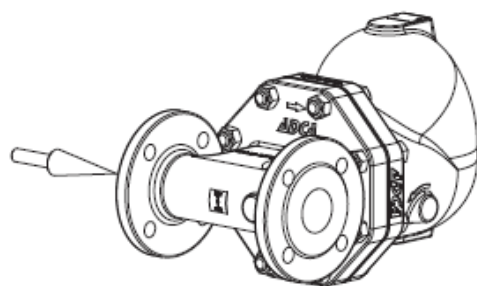
**FLOW DIRECTION**



*IR - Horizontal from right to left*



*IT - Vertical from top to bottom*



*IL - Horizontal from left to right*

ORDERING CODES FLT49

| Model                                                                                                    | A49 | 2 | V | XX | X | X | IR | N | 50 |
|----------------------------------------------------------------------------------------------------------|-----|---|---|----|---|---|----|---|----|
| FLT49 – A351 CF8M / 1.4408 stainless steel                                                               | A49 |   |   |    |   |   |    |   |    |
| Maximum allowable differential pressure ( $\Delta PMX$ )                                                 |     |   |   |    |   |   |    |   |    |
| 4,5 bar                                                                                                  |     | 2 |   |    |   |   |    |   |    |
| 10 bar                                                                                                   |     | 3 |   |    |   |   |    |   |    |
| 21 bar                                                                                                   |     | 4 |   |    |   |   |    |   |    |
| 32 bar                                                                                                   |     | 5 |   |    |   |   |    |   |    |
| Automatic air vent                                                                                       |     |   |   |    |   |   |    |   |    |
| Bimetallic air vent (standard)                                                                           |     |   | V |    |   |   |    |   |    |
| None                                                                                                     |     |   | X |    |   |   |    |   |    |
| Cover connections                                                                                        |     |   |   |    |   |   |    |   |    |
| None                                                                                                     |     |   |   | XX |   |   |    |   |    |
| 3/8" threaded connections on top and bottom, closed with plugs (mandatory if any options are considered) |     |   |   | 10 |   |   |    |   |    |
| Options                                                                                                  |     |   |   |    |   |   |    |   |    |
| If any, these have specific separate ordering codes, please refer to the appropriate documentation       |     |   |   |    |   |   |    |   |    |
| SLR - Steam lock release                                                                                 |     |   |   |    |   |   |    |   |    |
| None                                                                                                     |     |   |   |    | X |   |    |   |    |
| With steam lock release assembled                                                                        |     |   |   |    | S |   |    |   |    |
| FLL - Float lifting lever                                                                                |     |   |   |    |   |   |    |   |    |
| 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 |    |   |    |
| Flow direction                                                                                           |     |   |   |    |   |   |    |   |    |
| Horizontal from right to left (standard)                                                                 |     |   |   |    |   |   | IR |   |    |
| Horizontal from left to right                                                                            |     |   |   |    |   |   | IL |   |    |
| Vertical from top to bottom                                                                              |     |   |   |    |   |   | IT |   |    |
| Pipe connections                                                                                         |     |   |   |    |   |   |    |   |    |
| Flanged EN 1092-1 PN 40                                                                                  |     |   |   |    |   |   |    | N |    |
| Flanged ASME B16.5 Class 150                                                                             |     |   |   |    |   |   |    | U |    |
| Flanged ASME B16.5 Class 300                                                                             |     |   |   |    |   |   |    | V |    |
| Size                                                                                                     |     |   |   |    |   |   |    |   |    |
| 2" or DN 50                                                                                              |     |   |   |    |   |   |    |   | 50 |
| Special construction / Additional options                                                                |     |   |   |    |   |   |    |   |    |
| A full description must be provided and validated in case of a non-standard construction                 |     |   |   |    |   |   |    |   | E  |