

**FLOAT AND THERMOSTATIC STEAM TRAPS**  
**FLT27**  
**(SG iron ; 1 1/2" and 2" – DN 40 and DN 50)**

**DESCRIPTION**

The ADCA FLT27 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:** FLT27-4,5, FLT27-10 and FLT27-14 – SG iron.

**SIZES:** 1 1/2" and 2"; DN 40 and DN 50.

**CONNECTIONS:** Female threaded ISO 7 Rp or NPT.  
 Flanged EN 1092-2 PN 16.  
 Flanged ASME B16.42 Class 150.

**INSTALLATION:** Horizontal or vertical installation.

**ΔPMX:** FLT27-4,5 – 4,5 bar  
 FLT27-10 – 10 bar  
 FLT27-14 – 14 bar



| CE MARKING – GROUP 2<br>(PED – European Directive) |          |
|----------------------------------------------------|----------|
| PN 16                                              | Category |
| 1 1/2" and 2"<br>DN 40 and 50                      | SEP      |

| BODY LIMITING CONDITIONS |                         |                        |
|--------------------------|-------------------------|------------------------|
| FLANGED<br>PN 16 *       | FLANGED<br>CLASS 150 ** | RELATED<br>TEMPERATURE |
| ALLOWABLE<br>PRESSURE    | ALLOWABLE<br>PRESSURE   |                        |
| 16 bar                   | 16 bar                  | 100 °C                 |
| 15,5 bar                 | 14,8 bar                | 150 °C                 |
| 14,7 bar                 | 13,9 bar                | 200 °C                 |
| 13,9 bar                 | 12,1 bar                | 250 °C                 |

PMO – Maximum operating pressure: 14 bar.

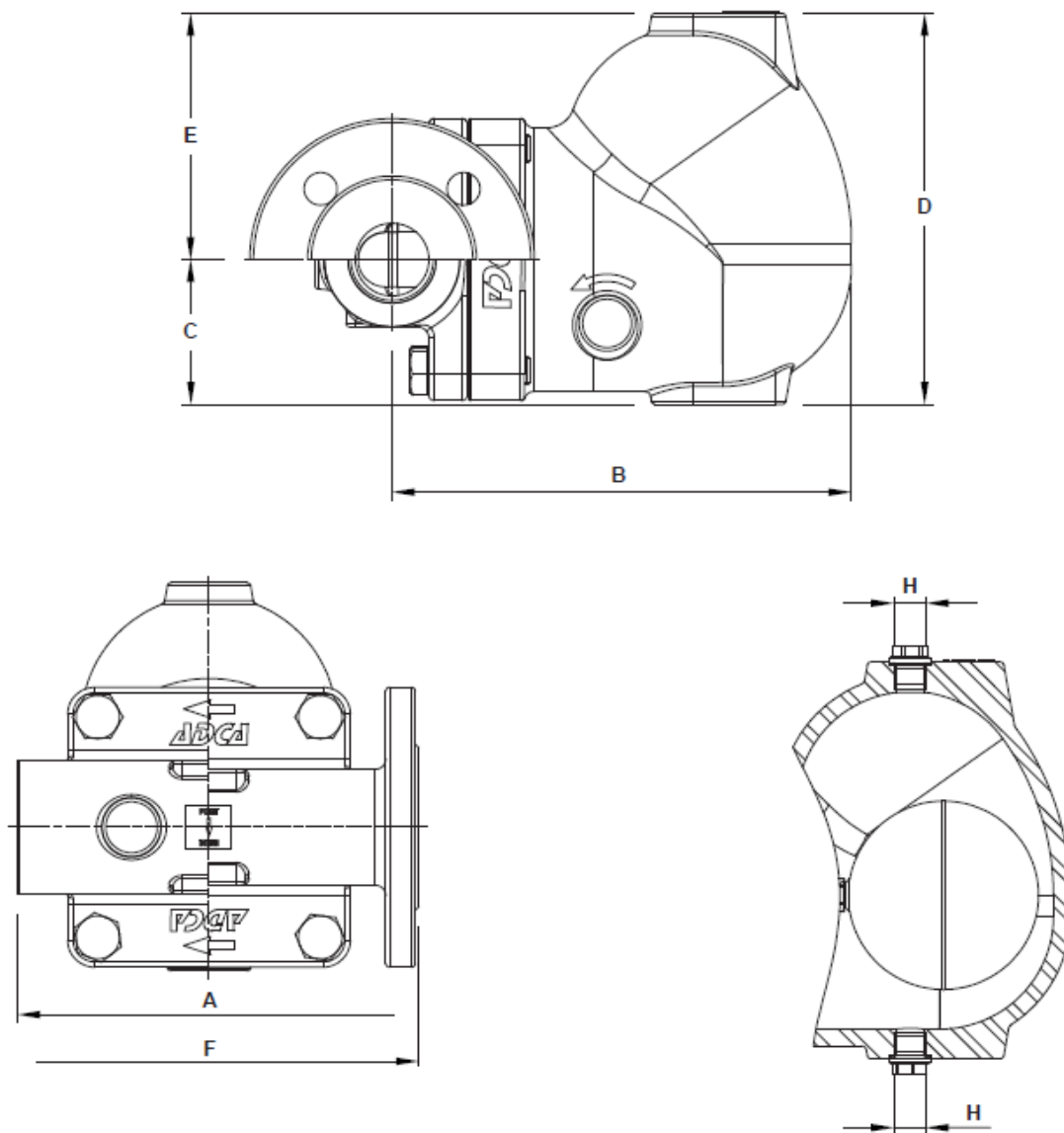
TMO – Maximum operating temperature: 250 °C.

\* According to EN 1092-2:2018.

\*\* According to ASME B16.42.

Body limiting conditions PN 16 or below, depending on the type of connection adopted. Rating PN 16 for threaded versions.

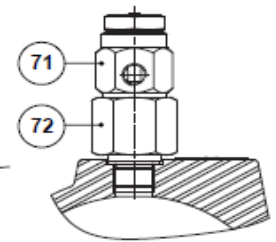
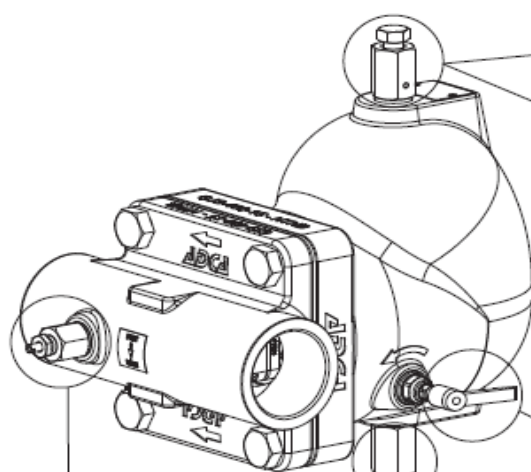
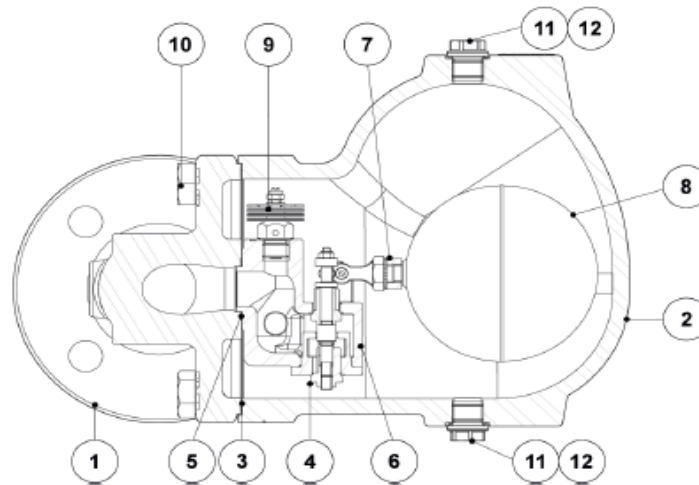
| FLOW RATE CAPACITY (kg/h) |                              |                             |      |      |      |      |      |      |      |      |
|---------------------------|------------------------------|-----------------------------|------|------|------|------|------|------|------|------|
| MODEL                     | SIZE                         | DIFFERENTIAL PRESSURE (bar) |      |      |      |      |      |      |      |      |
|                           |                              | 0,5                         | 1    | 1,5  | 2    | 4,5  | 7    | 10   | 12   | 14   |
| FLT27-4,5                 | 1 1/2" and 2" – DN 40 and 50 | 2400                        | 3400 | 3900 | 4500 | 7300 | –    | –    | –    | –    |
| FLT27-10                  | 1 1/2" and 2" – DN 40 and 50 | 1500                        | 2000 | 2600 | 3000 | 4000 | 5400 | 6200 | –    | –    |
| FLT27-14                  | 1 1/2" and 2" – DN 40 and 50 | 950                         | 1300 | 1600 | 1800 | 2600 | 3250 | 3900 | 4210 | 4950 |



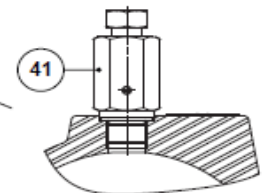
| DIMENSIONS (mm) |          |     |    |     |     |      |             |       |             |           |             |
|-----------------|----------|-----|----|-----|-----|------|-------------|-------|-------------|-----------|-------------|
| SIZE            | THREADED |     |    |     |     |      |             | PN 16 |             | CLASS 150 |             |
|                 | A        | B   | C  | D   | E   | H *  | WEIGHT (kg) | F     | WEIGHT (kg) | F         | WEIGHT (kg) |
| 1 1/2" – DN 40  | 210      | 250 | 80 | 215 | 136 | 3/8" | 19          | 230   | 21,9        | 230       | 20,4        |
| 2" – DN 50      | 210      | 250 | 80 | 215 | 136 | 3/8" | 18,4        | 230   | 23,8        | 230       | 21,7        |

\* 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 or female NPT threads, these connections are female threaded NPT.

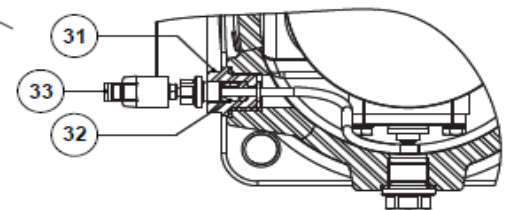
**MATERIALS**



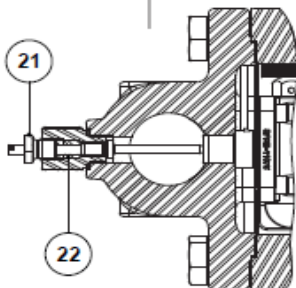
*Optional vacuum breaker  
(VB21M)*



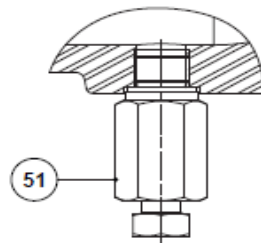
*Optional hand vent valve  
(HVV)*



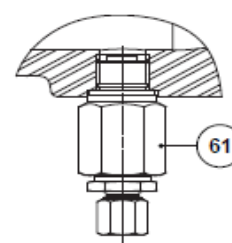
*Optional float lifting lever (FLL)*



*Optional steam lock release  
(SLR)*



*Optional blowdown valve (BDV);  
Manual*



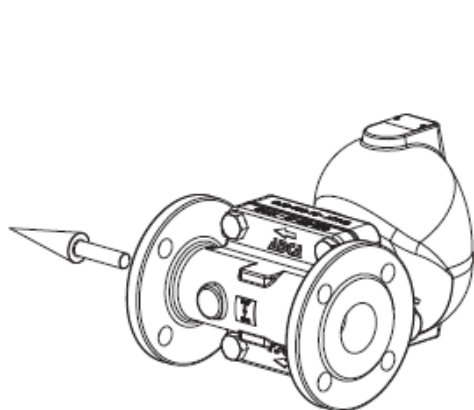
*Optional anti-freeze device (AFZ);  
Automatic*

**MATERIALS**

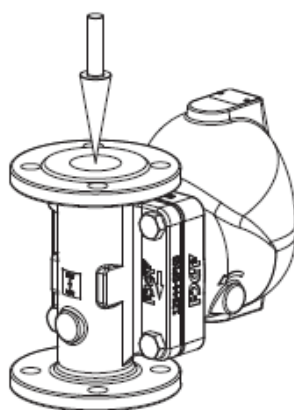
| POS. N° | DESIGNATION          | MATERIAL                                                 |
|---------|----------------------|----------------------------------------------------------|
| 1       | Body                 | GJS-400-15 / 0.7040                                      |
| 2       | Cover                | GJS-400-15 / 0.7040                                      |
| 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 steel (bimetallic)                             |
| 10      | Bolt                 | Zinc plated steel                                        |
| 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.

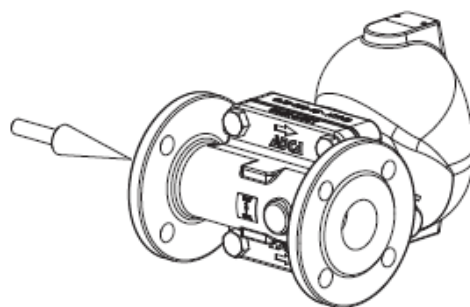
**FLOW DIRECTION**



*IR - Horizontal from right to left*



*IT - Vertical from top to bottom*



*IL - Horizontal from left to right*

ORDERING CODES FLT27

| Model                                                                                                    | A27 | 2 | V | XX | X | X | IR | A | 40 |
|----------------------------------------------------------------------------------------------------------|-----|---|---|----|---|---|----|---|----|
| FLT27 – GJS-400-15 / 0.7040 SG iron                                                                      | A27 |   |   |    |   |   |    |   |    |
| Maximum allowable differential pressure ( $\Delta PMX$ )                                                 |     |   |   |    |   |   |    |   |    |
| 4,5 bar                                                                                                  |     | 2 |   |    |   |   |    |   |    |
| 10 bar                                                                                                   |     | 3 |   |    |   |   |    |   |    |
| 14 bar                                                                                                   |     | 4 |   |    |   |   |    |   |    |
| 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                                                                                         |     |   |   |    |   |   |    |   |    |
| Female threaded ISO 7 Rp                                                                                 |     |   |   |    |   |   |    | A |    |
| Female threaded NPT                                                                                      |     |   |   |    |   |   |    | C |    |
| Flanged EN 1092-2 PN 16                                                                                  |     |   |   |    |   |   |    | L |    |
| Flanged ASME B16.42 Class 150                                                                            |     |   |   |    |   |   |    | U |    |
| Size                                                                                                     |     |   |   |    |   |   |    |   |    |
| 11/2" or DN 40                                                                                           |     |   |   |    |   |   |    |   | 40 |
| 2" or DN 50                                                                                              |     |   |   |    |   |   |    |   | 50 |
| Special construction / Additional options                                                                |     |   |   |    |   |   |    |   |    |
| A full description must to be provided and validated in case of a non-standard construction              |     |   |   |    |   |   |    |   | E  |