

FLOAT AND THERMOSTATIC STEAM TRAPS

FLT39

(Carbon steel 2"; DN 50)

DESCRIPTION

The FLT39 is a range 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: FLT39-4,5 , 10 , 21 and 32 – carbon steel.

SIZES: 2"; DN 50.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.
Flanged EN 1092-1 PN 40.
Flanged ASME B16.5 Class 150 or 300.
Socket weld ASME B16.11.

INSTALLATION: Horizontal or vertical installation.

MAX. ΔP:

- FLT39-4,5 – 4,5 bar
- FLT39-10 – 10 bar
- FLT39-21 – 21 bar
- FLT39-32 – 32 bar



CE MARKING – GROUP 2 (PED – European Directive)

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

| BODY LIMITING CONDITIONS | | |
|-----------------------------|----------------------|---------------|
| FLANGED PN 40 / CLASS 300 * | FLANGED CLASS 150 ** | RELATED TEMP. |
| ALLOWABLE PRESSURE | ALLOWABLE PRESSURE | |
| 40 bar | 17,7 bar | 100 °C |
| 40 bar | 14 bar | 200 °C |
| 39 bar | 12,1 bar | 250 °C |
| 35,2 bar | 10,2 bar | 300 °C |

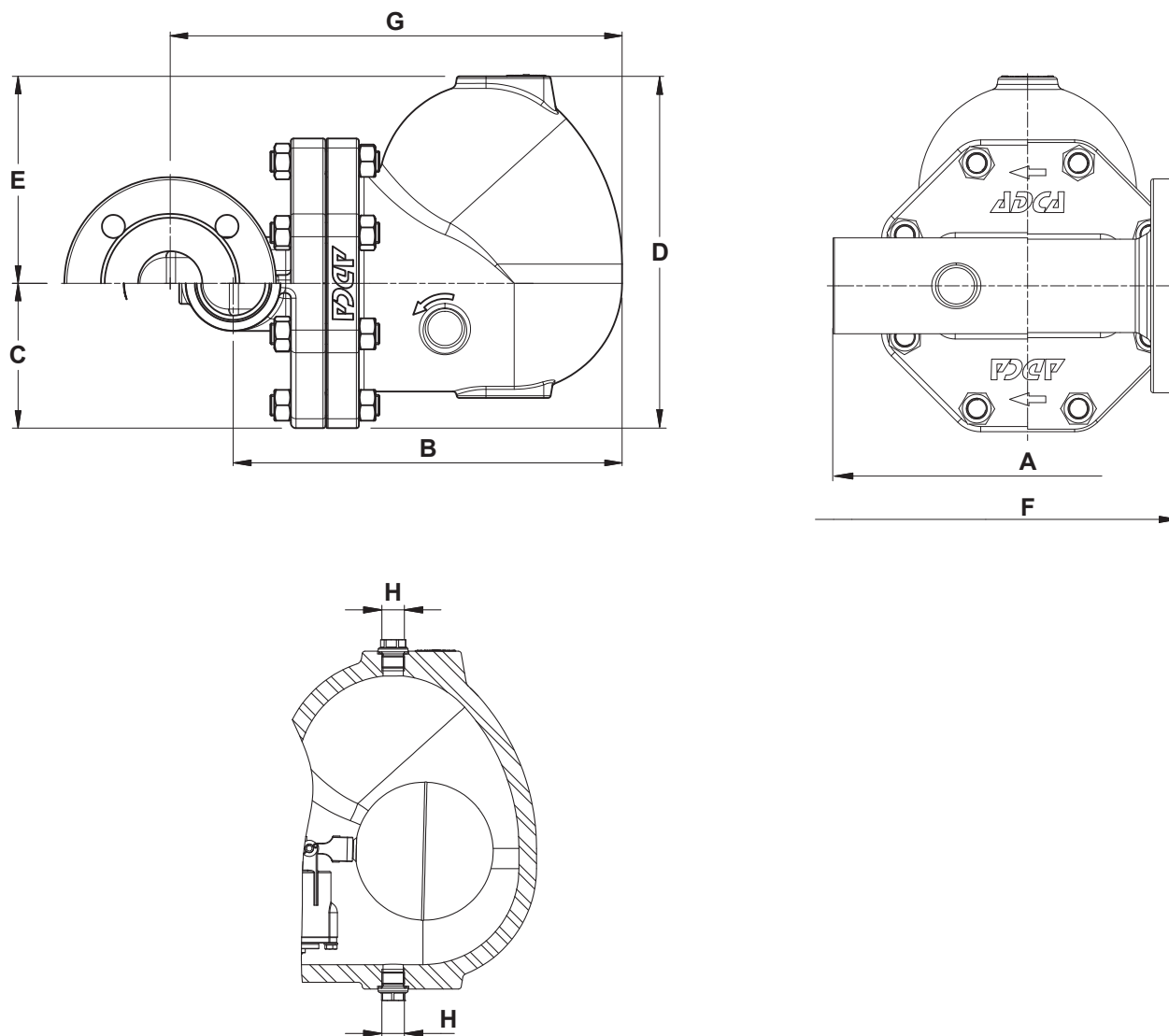
PMO – Maximum operating pressure: 32 bar.

TMO – Maximum operating temperature: 250 °C.

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

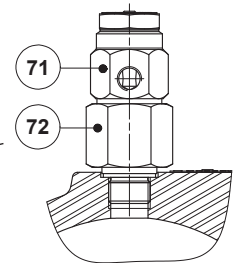
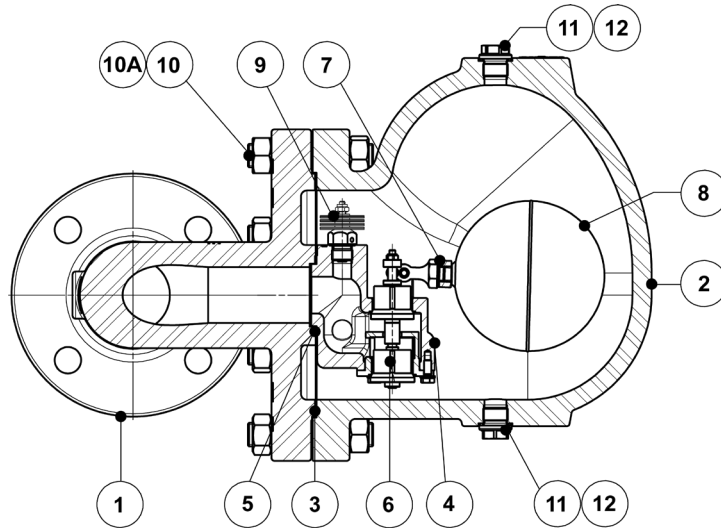
Body limiting conditions PN 40 or below, depending on the type of connection adopted. Rating PN 40 for threaded and SW versions.

| 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 |
| FLT39-4,5 | 2" – DN 50 | 7550 | 11000 | 14000 | 15500 | 22500 | – | – | – | – | – | – | – | – |
| FLT39-10 | 2" – DN 50 | 3900 | 5000 | 6100 | 7100 | 10000 | 13750 | 16000 | – | – | – | – | – | – |
| FLT39-21 | 2" – DN 50 | 1900 | 2700 | 3100 | 3600 | 5000 | 6900 | 8100 | 9000 | 9800 | 10050 | 11150 | – | – |
| FLT39-32 | 2" – DN 50 | 1900 | 2700 | 3100 | 3600 | 5000 | 6900 | 8100 | 9000 | 9800 | 10050 | 11150 | 12000 | 12550 |

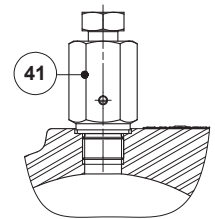


| DIMENSIONS (mm) | | | | | | | | | | | | | | | | |
|-----------------|---------------|-----|----|-----|-----|------|-----------|-------|-----|-----------|-----------|-----|-----------|-----------|-----|-----------|
| SIZE | THREADED / SW | | | | | | | PN 40 | | | CLASS 150 | | | CLASS 300 | | |
| | A | B | C | D | E | H* | WGT. (kg) | F | G | WGT. (kg) | F | G | WGT. (kg) | F | G | WGT. (kg) |
| 2" – DN 50 | 300 | 303 | 80 | 215 | 136 | 3/8" | 35,5 | 230 | 352 | 40,8 | 230 | 352 | 39,9 | 230 | 352 | 40,4 |

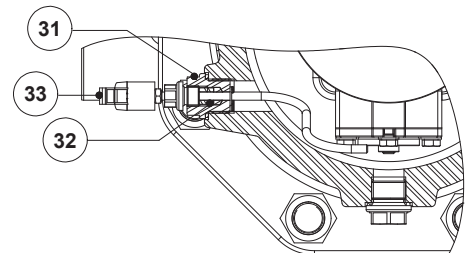
* As standard, in versions with EN flanges and female ISO 7 Rp threads, these connections are female threaded ISO 228. In versions with ASME flanges, female NPT threads or SW, these connections are female threaded NPT.



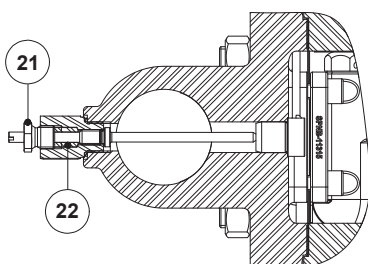
VB21M - Vacuum breaker



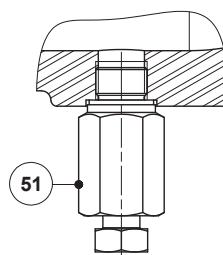
HVV - Hand vent valve



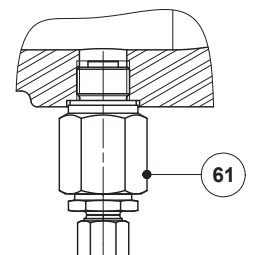
FLL - Float lifting lever



SLR - Steam lock release



BDV - Blowdown valve
(Manual)

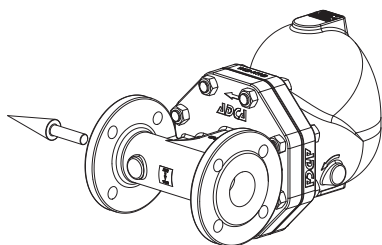


AFZ - Anti-freeze device
(Automatic)

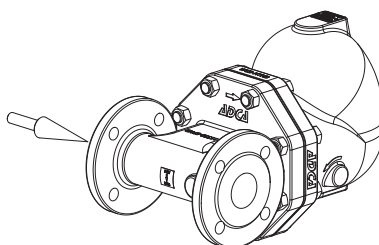
| MATERIALS | | |
|-----------|----------------------|---|
| POS. N° | DESIGNATION | MATERIAL |
| 1 | Body | A216 WCB / 1.0619 |
| 2 | Cover | A216 WCB / 1.0619 |
| 3 | * Gasket | Stainless steel / Graphite |
| 4 | * Seat | A351 CF8 / 1.4308; A276-98B / 1.4057 |
| 5 | * Gasket | Graphite |
| 6 | * Valve | 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 | Studs | Zinc plated steel |
| 10A | Nuts | 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.

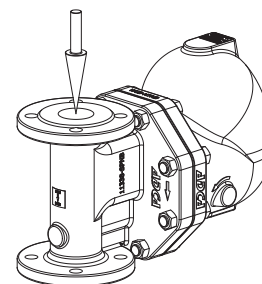
FLOW DIRECTION



IR - Horizontal from right to left



IL - Horizontal from left to right



IT - Vertical from top to bottom

| ORDERING CODES FLT39 | | | | | | | | | | |
|--|------------|----------|----------|-----------|----------|----------|-----------|----------|-----------|----------|
| Model | A39 | 2 | V | XX | X | X | IR | A | 50 | |
| FLT39 – A216 WCB / 1.0619 carbon steel | A39 | | | | | | | | | |
| Differential pressure | | | | | | | | | | |
| 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 | | | | | | | | | | |
| Female threaded ISO 7 Rp | | | | | | | | A | | |
| Female threaded NPT | | | | | | | | C | | |
| Socket weld ASME B16.11 | | | | | | | | H | | |
| 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 valves / Extras | | | | | | | | | | |
| Full description or additional codes have to be added in case of a non-standard combination | | | | | | | | | | E |