

FLOAT AND THERMOSTATIC STEAM TRAPS FLT20 (SG iron ; 1/2" to 1" – DN 15 to 25)

DESCRIPTION

The FLT20 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.
- VB21M – Vacuum breaker.

USE: Saturated and superheated steam.

AVAILABLE MODELS: FLT20-4,5 , 10 and 14 – SG iron.

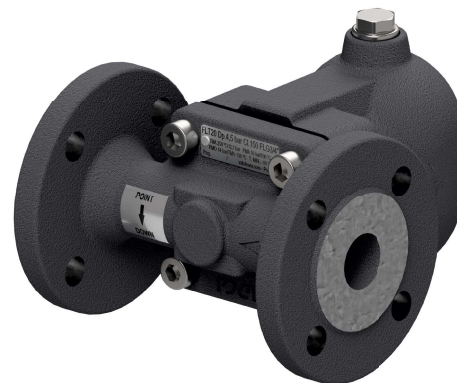
SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.
Flanged EN 1092-1/-2 PN 16.
Flanged ASME B16.42 Class 150.

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

MAX. ΔP:

- FLT20-4,5 – 4,5 bar
- FLT20-10 – 10 bar
- FLT20-14 – 14 bar



CE MARKING – GROUP 2 (PED – European Directive)

| PN 16 | Category |
|--------------------------|----------|
| 1/2" to 1" – DN 15 to 25 | SEP |

| BODY LIMITING CONDITIONS | | |
|--------------------------|----------------------|--------------|
| FLANGED PN 16 * | FLANGED CLASS 150 ** | RELAT. TEMP. |
| ALLOWABLE PRESSURE | ALLOWABLE 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 |

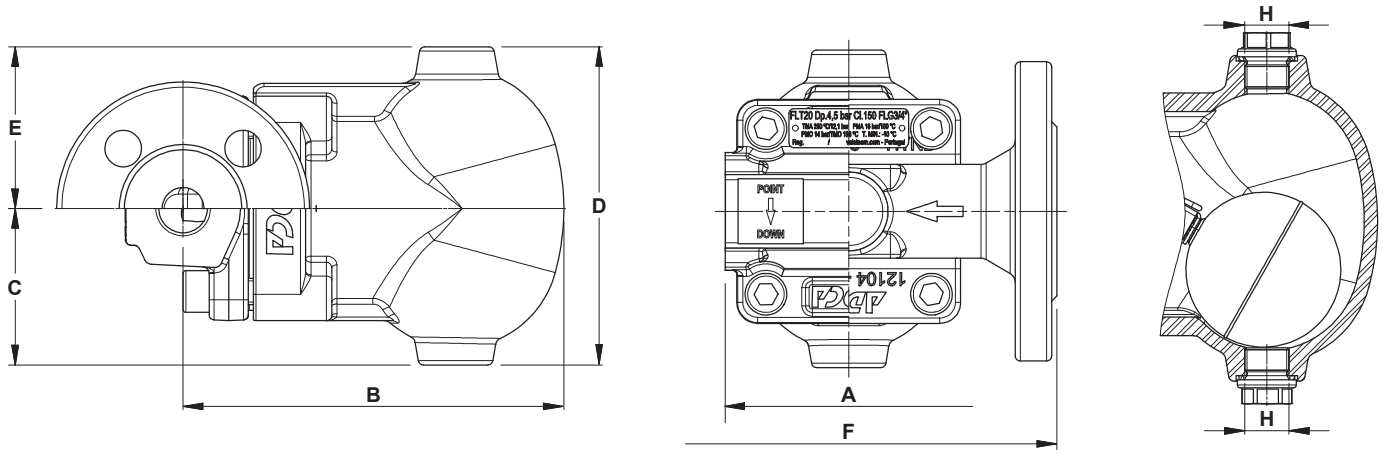
PMO – Maximum operating pressure: 14 bar.

TMO – Maximum operating temperature: 250 °C.

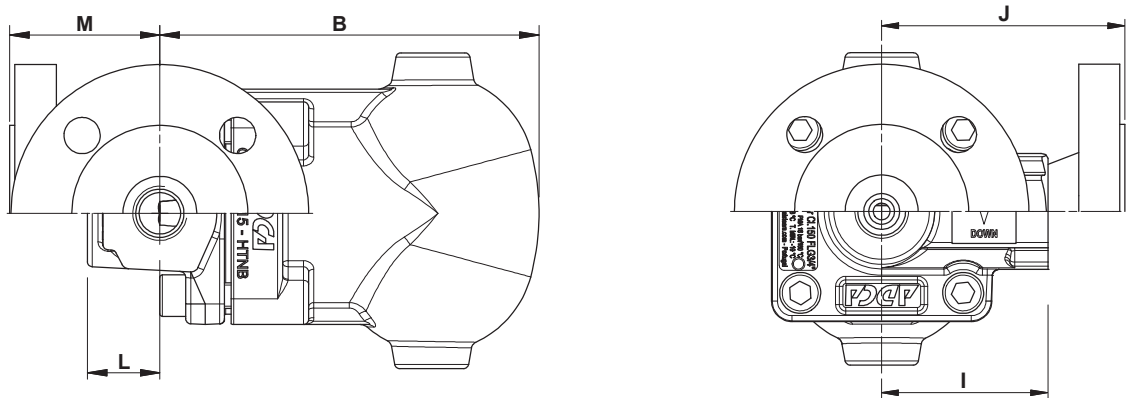
* Acc. to EN 1092-2:2018; ** Acc. to ASME B16.42.

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 |
| FLT20-4,5 | 1/2" to 1" – DN 15 to 25 | 220 | 280 | 320 | 360 | 495 | – | – | – | – |
| FLT20-10 | 1/2" to 1" – DN 15 to 25 | 200 | 252 | 290 | 335 | 440 | 505 | 595 | – | – |
| FLT20-14 | 1/2" to 1" – DN 15 to 25 | 145 | 198 | 225 | 252 | 350 | 415 | 480 | 535 | 580 |



Inline design



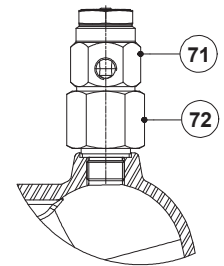
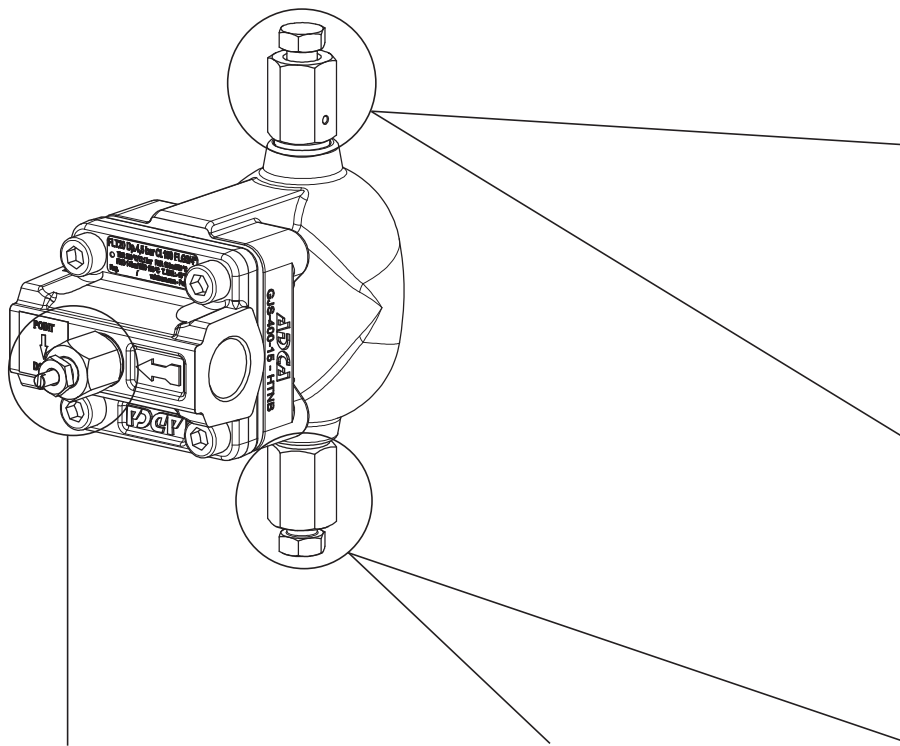
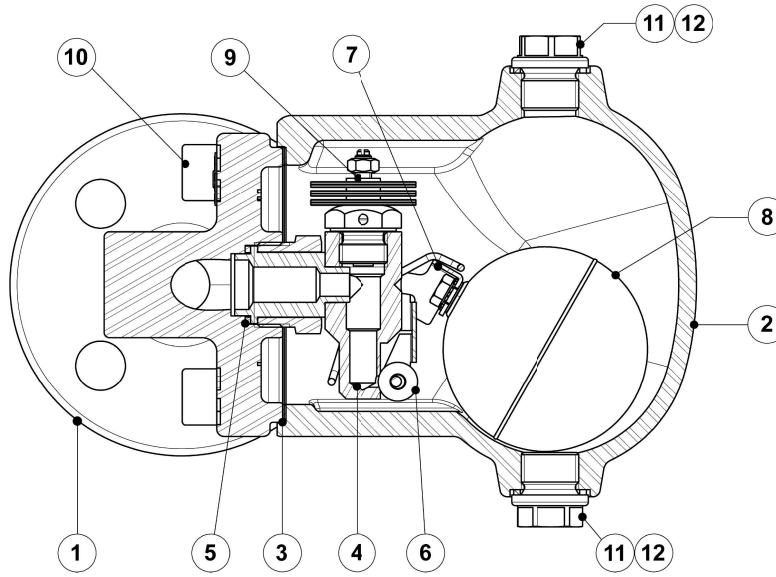
Angled design

| DIMENSIONS (mm) – INLINE DESIGN | | | | | | | | | | | |
|---------------------------------|----------|-----|----|-----|----|------|-------------|-------|-------------|-----------|-------------|
| SIZE | THREADED | | | | | | | PN 16 | | CLASS 150 | |
| | A | B | C | D | E | H * | WEIGHT (kg) | F | WEIGHT (kg) | F | WEIGHT (kg) |
| 1/2" – DN 15 | 95 | 146 | 60 | 122 | 62 | 3/8" | 3,8 | 150 | 5,1 | 150 | 4,8 |
| 3/4" – DN 20 | 95 | 146 | 60 | 122 | 62 | 3/8" | 3,8 | 150 | 5,7 | 150 | 5 |
| 1" – DN 25 | 95 | 146 | 60 | 122 | 62 | 3/8" | 3,6 | 160 | 6,4 | 160 | 6 |

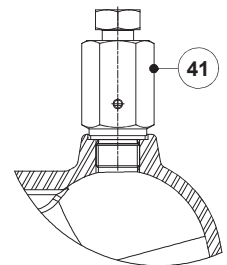
| DIMENSIONS (mm) – ANGLED DESIGN | | | | | | | | | | | | | | |
|---------------------------------|----------|----|-----|----|------|----|----|-----------|-------|----|-----------|-----------|----|-----------|
| SIZE | THREADED | | | | | | | | PN 16 | | | CLASS 150 | | |
| | B | C | D | E | H * | I | L | WGT. (kg) | J | M | WGT. (kg) | J | M | WGT. (kg) |
| 1/2" – DN 15 | 146 | 60 | 122 | 62 | 3/8" | 65 | 28 | 3,8 | 95 | 58 | 5,3 | 100 | 63 | 4,8 |
| 3/4" – DN 20 | 146 | 60 | 122 | 62 | 3/8" | 65 | 28 | 3,8 | 95 | 58 | 5,9 | 100 | 63 | 5,2 |
| 1" – DN 25 | 146 | 60 | 122 | 62 | 3/8" | 65 | 28 | 3,8 | 95 | 58 | 6,3 | 100 | 63 | 5,7 |

* 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.

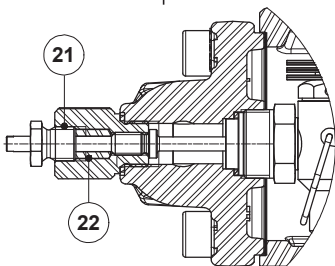
MATERIALS



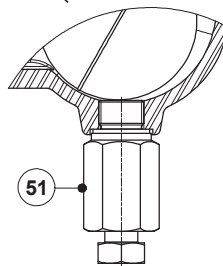
VB21M - Vacuum breaker



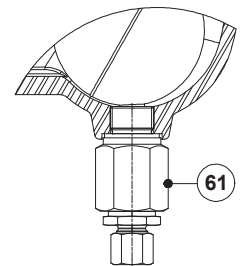
HVV - Hand vent valve



SLR - Steam lock release



BDV - Blowdown valve
(Manual)

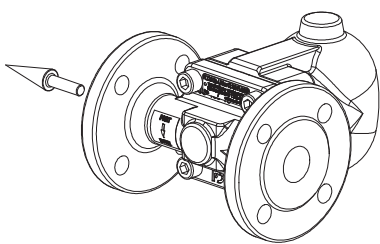


AFZ - Anti-freeze device
(Automatic)

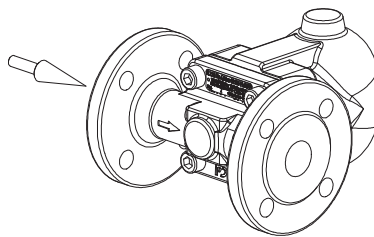
| MATERIALS | | |
|-----------|------------------------|------------------------------------------|
| POS. N° | DESIGNATION | MATERIAL |
| 1 | Body (inline flanged) | GJS-400-15 / 0.7040 |
| | Body (inline threaded) | P250GH / 1.0460 |
| | Body (angled) | P250GH / 1.0460 |
| 2 | Cover | GJS-400-15 / 0.7040 |
| 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 | 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 |
| 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 | Connector | AISI 316L / 1.4404 |

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

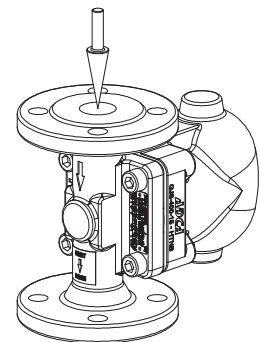
FLOW DIRECTION



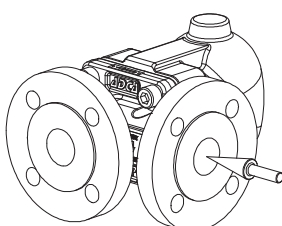
IR - Horizontal from right to left



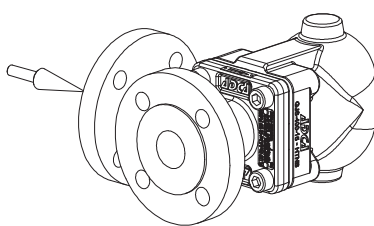
IL - Horizontal from left to right



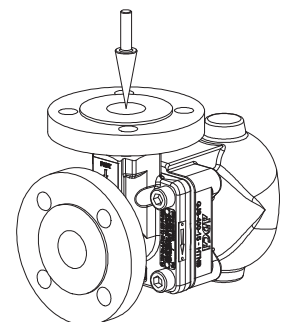
IT - Vertical from top to bottom



AR - Angled from right to front



AL - Angled from left to front



AT - Angled from top to front

| ORDERING CODES FLT20 | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------|-----|---|---|----|----|----|----|----|----|---|
| Model | A20 | 2 | V | XX | X | IR | A | 15 | | |
| FLT20 | A20 | | | | | | | | | |
| Differential pressure | | | | | | | | | | |
| 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 | | | | |
| Flow direction | | | | | | | | | | |
| 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 | | | |
| 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 | | | | | | | | | | |
| 1/2" or DN 15 | | | | | | | | | 15 | |
| 3/4" or DN 20 | | | | | | | | | 20 | |
| 1" or DN 25 | | | | | | | | | 25 | |
| Special valves / Extras | | | | | | | | | | |
| Full description or additional codes have to be added in case of a non-standard combination | | | | | | | | | | E |