

FLOAT AND THERMOSTATIC STEAM TRAPS FLT151

DESCRIPTION

The FLT151 is a series of high capacity float and thermostatic steam traps with integral air vent, designed for modulating discharge of condensate to ensure maximum system heat transfer.

Specially designed for applications where continuous drainage is essential and extremely high loads are involved, such as those found in sugar and alcohol refineries.

MAIN FEATURES

- High capacity.
- 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 thermostatic air vent.

OPTIONS: Level gauge.
 HVV – Hand vent valve.
 VB21M – Vacuum breaker.

USE: Saturated steam.

AVAILABLE MODELS: FLT151S-O – carbon steel.

SIZES: 4" and 6"; DN 100 and DN 150.

CONNECTIONS: Flanged EN 1092-1 PN 16.
 Flanged ASME B16.5 Class 150.

INSTALLATION: Horizontal installation.
 See IMI – Installation and maintenance instructions.



| CE MARKING – GROUP 2 (PED – European Directive) | |
|---|---------------|
| PN 16 | Category |
| 4" and 6" – DN 100 and 150 | 3 (CE marked) |

| FLOW RATE CAPACITY WITH MECHANISM AND ORIFICE (kg/h) | | | | | | | | |
|--|------------|-------------|-------|-------|-------|-------------|--------|------------|
| MODEL | ORIFICE N° | O1 | O2 | O3 | O4 | O5 | O6 | MAXIMUM ΔQ |
| | ΔP (bar) | 4" – DN 100 | | | | 6" – DN 150 | | |
| FLT151S-O | 0,1 | 22300 | 24100 | 26600 | 33700 | 43600 | 56400 | 18800 |
| | 0,3 | 27400 | 30300 | 34200 | 45400 | 61200 | 81400 | 22700 |
| | 0,7 | 32200 | 36200 | 41800 | 57700 | 79900 | 108600 | 26200 |
| | 1 | 34700 | 39500 | 46500 | 65800 | 93100 | 128100 | 27700 |
| | 1,4 | 37000 | 42600 | 50500 | 72900 | 104400 | 144900 | 29200 |
| | 2 | 40700 | 47600 | 57200 | 84800 | 144900 | 172900 | 31700 |

Example: One FLT151-O DN150-O5 (with orifice n° 5), operating at a D.P. of 0,3 bar, must have a minimum flow of 38500 kg/h (61200-22700).

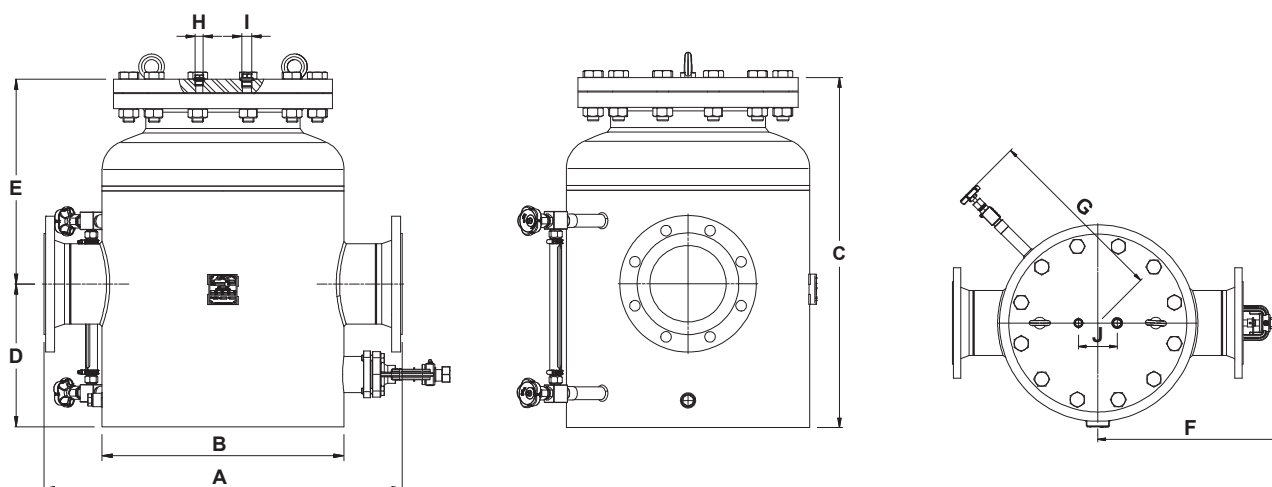
| FLOW RATE CAPACITY WITH MECHANISM ONLY (kg/h) | | | | | | | | | | | | | | | | | |
|---|-----------------------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MODEL | SIZE | DIFFERENTIAL PRESSURE (bar) | | | | | | | | | | | | | | | |
| | | 0,1 | 0,3 | 0,5 | 1 | 1,5 | 2 | 2,5 | 3 | 3,5 | 4 | 5 | 6 | 7 | 8 | 10 | 12 |
| FLT151S-O | 4" and 6" DN 100 and 150 | 18800 | 22700 | 24500 | 29000 | 31000 | 34000 | 37000 | 38000 | 39500 | 42000 | 43500 | 45500 | 47000 | 48000 | 49500 | 50000 |

BODY LIMITING CONDITIONS *

| FLANGED PN 16 / CLASS 150 | RELATED TEMPERATURE |
|---------------------------|---------------------|
| ALLOWABLE PRESSURE | |
| 16 bar | 50 °C |
| 14,8 bar | 100 °C |
| 13,3 bar | 200 °C |
| 12,1 bar | 250 °C |

PMO – Maximum operating pressure: 12 bar.
 TMO – Maximum operating temperature: 250 °C.

* According to EN 1092-1:2018.



DIMENSIONS (mm)

| SIZE | A PN 16 | A CLASS 150 | B | C | D | E | F | G | H * | I * | J | WEIGHT (kg) |
|-------------|------------|-------------------|-----|-----|-----|-----|-----|-----|------|------|-----|----------------|
| 4" – DN 100 | 694 | 743 | 457 | 685 | 275 | 410 | 451 | 450 | 3/8" | 1/2" | 100 | 170 |
| 6" – DN 150 | 752 | 820 | 508 | 730 | 300 | 430 | 476 | 475 | 3/8" | 1/2" | 100 | 202 |

* 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 | | |
|-----------|----------------------|---|
| POS. N° | DESIGNATION | MATERIAL |
| 1 | Body | P265GH / 1.0425; P235GH / 1.0345; S235JR / 1.0038; A105 / 1.0432 |
| 2 | Cover | P250GH / 1.0460 |
| 3 | * Gasket | Stainless steel / Graphite |
| 4 | * Seat | A351 CF8 / 1.4308 |
| 5 | * Gasket | Graphite |
| 6 | * Valve | AISI 420 / 1.4021; A351 CF8M / 1.4408 |
| 7 | * Lever | AISI 316 / 1.4401; AISI 304 / 1.4301 |
| 8 | * Float | AISI 304 / 1.4301 |
| 9 | * Automatic air vent | Stainless steel (thermostatic) |
| 10 | Bolts | Steel 8.8 |
| 10A | Nuts | Steel 8.8 |
| 11 | Plug | AISI 316L / 1.4404 |
| 12 | ** Gasket | Copper |
| 13 | Level gauges | Stainless steel; Borosilicate glass |
| 14 | By-pass valve | GJS-400-15 / 0.7040; AISI 304 / 1.4301; AISI 316 / 1.4401 |
| 41 | Hand vent valve | AISI 303 / 1.4305; AISI 316L / 1.4404 |
| 71 | Vacuum breaker | AISI 303 / 1.4305 |

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

