

## AIR AND GAS FLOAT TRAPS FA35.3 (Carbon steel 11/2" – 2"; DN 40 – 50)

### DESCRIPTION

The FA35.3 is a range of fully automatic ball float traps specially designed for condensate drainage in compressed air and gas systems. Typical applications include aftercoolers, separators and compressed air mains.

### MAIN FEATURES

Modulating discharge.  
Unaffected by sudden or wide load and pressure variations.  
Flow direction can be easily changed by repositioning the body in relation to the mechanism and cover.

**OPTIONS:** Equalizing (vent) and drain connections.  
BDV – Blowdown valve.  
AFZ – Anti-freeze device.  
FLL – Float lifting lever.

**USE:** Compressed air and other non corrosive gases compatible with the construction.

**AVAILABLE MODELS:** FA35.3-4,5 , 10 , 14 , 21 and 32 – carbon steel.

**SIZES:** 11/2" to 2"; DN 40 to 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 (SW) ASME B16.11.

**INSTALLATION:** Horizontal or vertical installation.

**MAX. ΔP:** FA35.3-4,5 – 4,5 bar  
FA35.3-10 – 10 bar  
FA35.3-14 – 14 bar  
FA35.3-21 – 21 bar  
FA35.3-32 – 32 bar



#### BODY LIMITING CONDITIONS

| FLANGED PN 40 /<br>CLASS 300 * | FLANGED<br>CLASS 150 ** | RELATED<br>TEMP. |
|--------------------------------|-------------------------|------------------|
| ALLOWABLE<br>PRESSURE          | ALLOWABLE<br>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 – Max. operating pressure: 32 bar.

TMO – Max. operating temperature: 250 °C.

Min. liquid specific weight: 0,75 kg/dm³.

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

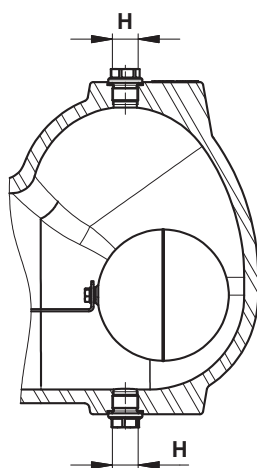
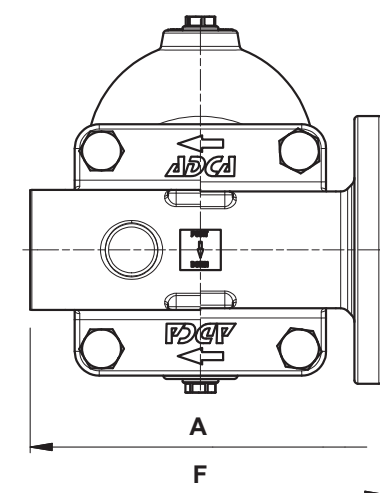
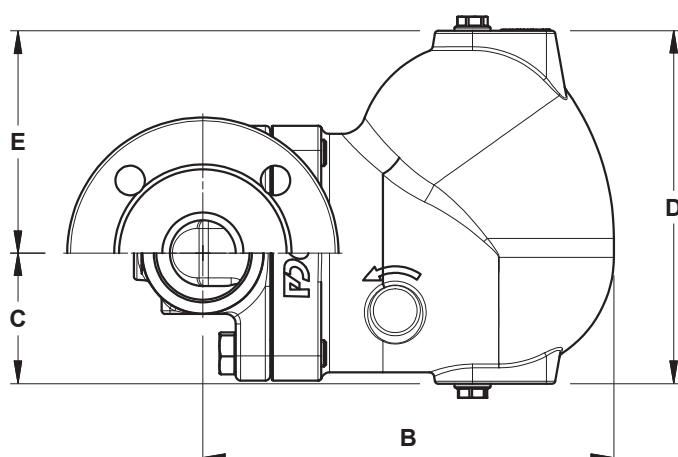
Body limiting conditions PN 40 or below, depending on the type of connection adopted. Rating PN 40 for threaded, SW and BW versions.

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

| CLASS 150                 | PN 40                     | Category      |
|---------------------------|---------------------------|---------------|
| 11/2" to 2" – DN 40 to 50 | –                         | SEP           |
| –                         | 11/2" to 2" – DN 40 to 50 | 1 (CE marked) |

#### 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   |
| FA35.3-4,5 | 11/2" to 2" – DN 40 to 50 | 995                         | 1450 | 1710 | 2000 | 2990 | –    | –    | –    | –    | –    | –    | –    | –    |
| FA35.3-10  | 11/2" to 2" – DN 40 to 50 | 505                         | 720  | 850  | 1010 | 1600 | 1890 | 2300 | –    | –    | –    | –    | –    | –    |
| FA35.3-14  | 11/2" to 2" – DN 40 to 50 | 370                         | 520  | 610  | 735  | 1150 | 1430 | 1620 | 1750 | 1980 | –    | –    | –    | –    |
| FA35.3-21  | 11/2" to 2" – DN 40 to 50 | 305                         | 430  | 515  | 600  | 900  | 1160 | 1435 | 1590 | 1620 | 1760 | 1995 | –    | –    |
| FA35.3-32  | 11/2" to 2" – DN 40 to 50 | 175                         | 230  | 290  | 340  | 505  | 625  | 745  | 815  | 900  | 955  | 1125 | 1250 | 1480 |



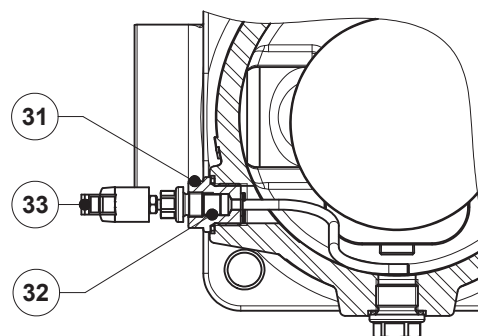
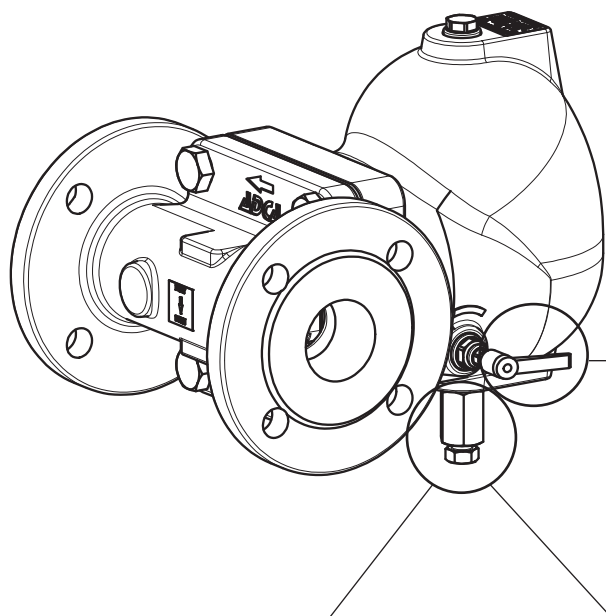
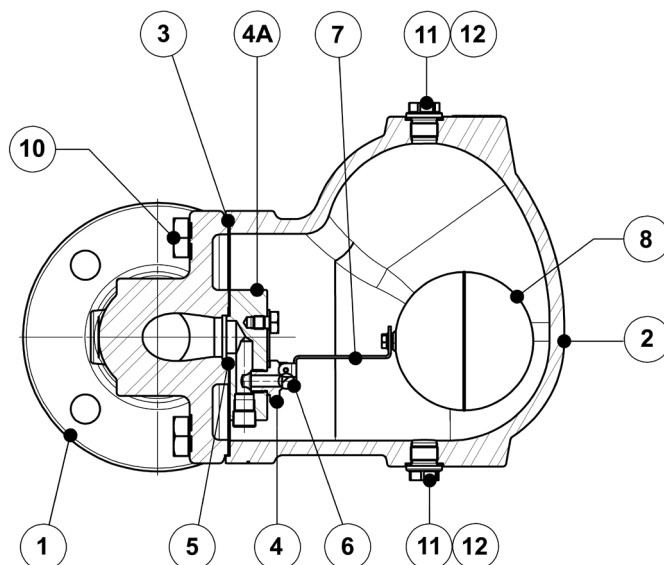
| DIMENSIONS (mm) |     |     |    |     |     |      |           |       |     |           |           |     |           |           |     |           |
|-----------------|-----|-----|----|-----|-----|------|-----------|-------|-----|-----------|-----------|-----|-----------|-----------|-----|-----------|
| THREADED / SW   |     |     |    |     |     |      |           | PN 40 |     |           | CLASS 150 |     |           | CLASS 300 |     |           |
| SIZE            | A   | B   | C  | D   | E   | H *  | WGT. (kg) | F     | B   | WGT. (kg) | F         | B   | WGT. (kg) | F         | B   | WGT. (kg) |
| 1 1/2" – DN 40  | 210 | 250 | 80 | 215 | 136 | 3/8" | 18,9      | 230   | 250 | 21,7      | 230       | 250 | 20,2      | 230       | 250 | 21,5      |
| 2" – DN 50      | 210 | 250 | 80 | 215 | 136 | 3/8" | 18,2      | 230   | 250 | 23,6      | 230       | 250 | 21,5      | 230       | 250 | 23,2      |

\* 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.

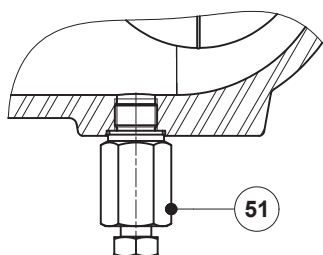
**MATERIALS**

| POS. N° | DESIGNATION        | MATERIAL                                                        |
|---------|--------------------|-----------------------------------------------------------------|
| 1       | Body               | A216 WCB / 1.0619                                               |
| 2       | Cover              | A216 WCB / 1.0619                                               |
| 3       | * Gasket           | Stainless steel / Graphite                                      |
| 4       | * Seat             | AISI 410 / 1.4006                                               |
| 4A      | Mounting plate     | AISI 316 / 1.4401                                               |
| 5       | * Gasket           | Graphite                                                        |
| 6       | * Valve ball       | AISI 440C / 1.4125                                              |
| 7       | * Lever            | AISI 304 / 1.4301                                               |
| 8       | * Float            | AISI 304 / 1.4301                                               |
| 10      | Bolts              | Zinc plated steel                                               |
| 11      | Plug               | AISI 316L / 1.4404                                              |
| 12      | ** Gasket          | Copper;<br>AISI 304 / 1.4301                                    |
| 31      | Lever mechanism    | AISI 303 / 1.4305 ;<br>AISI 304 / 1.4301;<br>AISI 316L / 1.4404 |
| 32      | Packing            | Graphite                                                        |
| 33      | Lever              | Plastic                                                         |
| 51      | Blowdown valve     | AISI 303 / 1.4305;<br>AISI 316L / 1.4404                        |
| 61      | Anti-freeze device | AISI 303 / 1.4305;<br>AISI 316L / 1.4404                        |

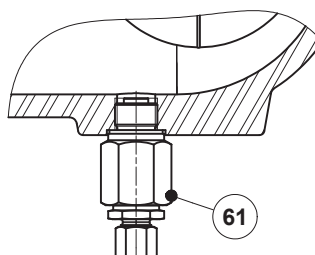
\* Available spare parts; \*\* Not applicable in NPT version.



*FLL - Float lifting lever*

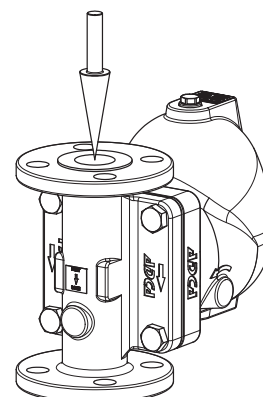
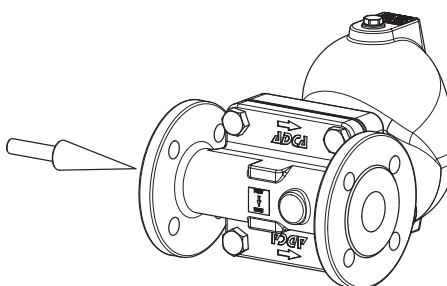
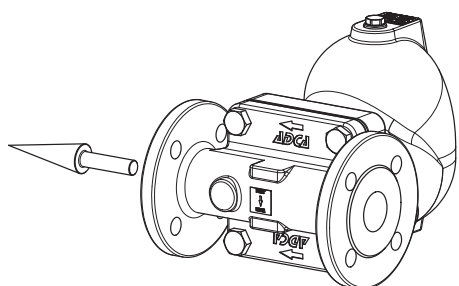


*BDV - Blowdown valve  
(Manual)*



*AFZ - Anti-freeze device  
(Automatic)*

**FLOW DIRECTION**



*R - Horizontal from right to left*

*L - Horizontal from left to right*

*V - Vertical from top to bottom*

**ORDERING CODES FA35.3**

| Model                                                                                                       | FA353 | 2 | M | XX | X | IR | A | 40 |   |
|-------------------------------------------------------------------------------------------------------------|-------|---|---|----|---|----|---|----|---|
| FA35.3 – A216 WCB / 1.0619 carbon steel                                                                     | FA353 |   |   |    |   |    |   |    |   |
| <b>Differential pressure</b>                                                                                |       |   |   |    |   |    |   |    |   |
| 4,5 bar                                                                                                     |       | 2 |   |    |   |    |   |    |   |
| 10 bar                                                                                                      |       | 3 |   |    |   |    |   |    |   |
| 14 bar                                                                                                      |       | 4 |   |    |   |    |   |    |   |
| 21 bar                                                                                                      |       | 5 |   |    |   |    |   |    |   |
| 32 bar                                                                                                      |       | 7 |   |    |   |    |   |    |   |
| <b>Valve sealing</b>                                                                                        |       |   |   |    |   |    |   |    |   |
| Metal to metal                                                                                              |       |   | M |    |   |    |   |    |   |
| <b>Cover connections</b>                                                                                    |       |   |   |    |   |    |   |    |   |
| None                                                                                                        |       |   |   | XX |   |    |   |    |   |
| 3/8" threaded connections on top and bottom, closed with plugs<br>(mandatory if any options are considered) |       |   |   | 10 |   |    |   |    |   |
| <b>Options</b>                                                                                              |       |   |   |    |   |    |   |    |   |
| BDV and AFZ have specific separated ordering codes, please refer to the appropriate documentation.          |       |   |   |    |   |    |   |    |   |
| <b>FLL - Float lifting lever</b>                                                                            |       |   |   |    |   |    |   |    |   |
| 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 |    |   |    |   |
| <b>Flow direction</b>                                                                                       |       |   |   |    |   |    |   |    |   |
| Horizontal from right to left – standard                                                                    |       |   |   |    |   | IR |   |    |   |
| Horizontal from left to right                                                                               |       |   |   |    |   | IL |   |    |   |
| Vertical from top to bottom                                                                                 |       |   |   |    |   | IT |   |    |   |
| <b>Pipe connections</b>                                                                                     |       |   |   |    |   |    |   |    |   |
| Female threaded ISO 7 Rp                                                                                    |       |   |   |    |   |    | A |    |   |
| Female threaded NPT                                                                                         |       |   |   |    |   |    | C |    |   |
| Socket weld (SW) 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 |    |   |
| <b>Size</b>                                                                                                 |       |   |   |    |   |    |   |    |   |
| 11/2" or DN 40                                                                                              |       |   |   |    |   |    |   | 40 |   |
| 2" or DN 50                                                                                                 |       |   |   |    |   |    |   | 50 |   |
| <b>Special valves / Extras</b>                                                                              |       |   |   |    |   |    |   |    |   |
| Full description or additional codes have to be added in case of a non-standard combination                 |       |   |   |    |   |    |   |    | E |