

## AIR AND GAS FLOAT TRAPS FA41.1 (Stainless steel 1/2" – 1"; DN 15 – 25)

### DESCRIPTION

The FA41.1 is a series 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:** Metal to metal sealing.  
 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:** FA41.1-4,5 , 10, 14 , 21 and 32 – stainless steel.

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

**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 16.11.

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

**MAX. ΔP:** FA41.1-4,5 – 4,5 bar  
 FA41.1-10 – 10 bar  
 FA41.1-14 – 14 bar  
 FA41.1-21 – 21 bar  
 FA41.1-32 – 32 bar



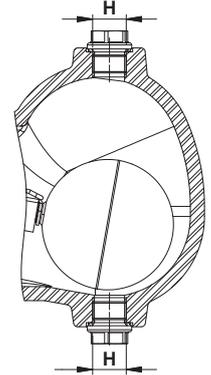
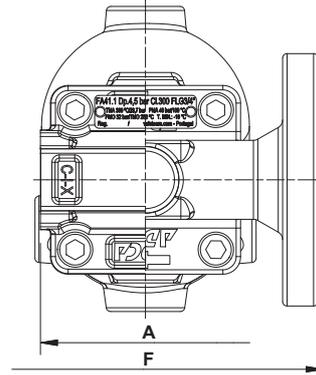
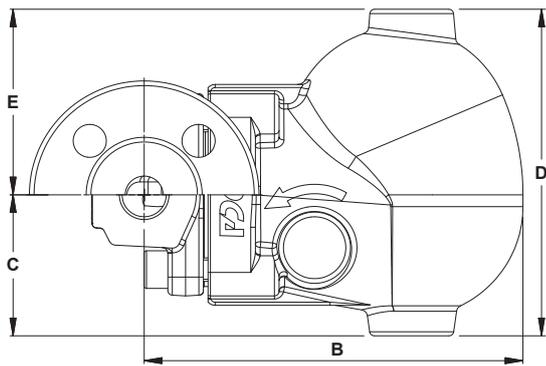
### CE MARKING – GROUP 2 (PED – European Directive)

| CLASS 150                 | PN 40                     | Category      |
|---------------------------|---------------------------|---------------|
| 1/2" to 1"<br>DN 15 to 25 | –                         | SEP           |
| –                         | 1/2" to 1"<br>DN 15 to 25 | 1 (CE marked) |

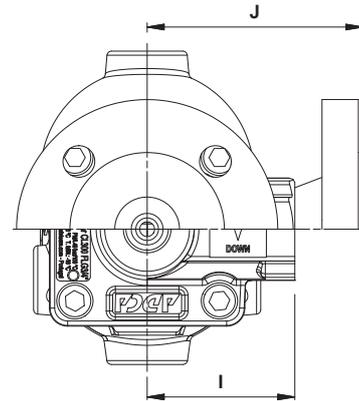
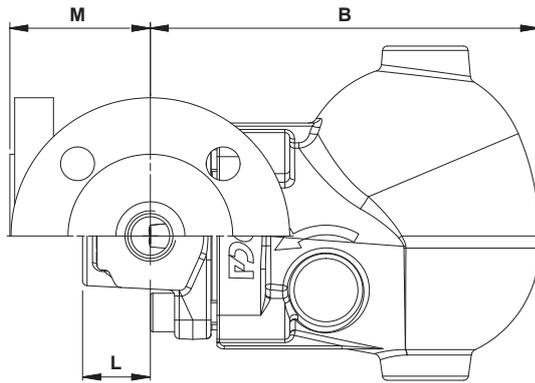
| BODY LIMITING CONDITIONS |                      |                      |              |
|--------------------------|----------------------|----------------------|--------------|
| FLANGED PN 40 *          | FLANGED CLASS 300 ** | FLANGED CLASS 150 ** | RELAT. TEMP. |
| ALLOW. PRESS.            | ALLOW. PRESS.        | ALLOW. PRESS.        |              |
| 37,9 bar                 | 34,4 bar             | 13,3 bar             | 100 °C       |
| 31,8 bar                 | 28,8 bar             | 11,1 bar             | 200 °C       |
| 29,9 bar                 | 26,6 bar             | 10,2 bar             | 250 °C       |
| 27,6 bar                 | 25,2 bar             | 9,7 bar              | 300 °C       |

PMO – Maximum operating pressure: 32 bar.  
 TMO – Maximum operating temperature:  
 FPM / Viton valve sealing: 200 °C.  
 Metal to metal sealing: 250 °C.  
 Min. liquid specific weight: 0,75 kg/dm<sup>3</sup>.  
 \* 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  |
| FA41.1-4,5                | 1/2" to 1" – DN 15 to 25 | 455                         | 644 | 788 | 910 | 1366 | –    | –    | –    | –    | –   | –    | –   | –   |
| FA41.1-10                 | 1/2" to 1" – DN 15 to 25 | 285                         | 403 | 494 | 570 | 856  | 1068 | 1276 | –    | –    | –   | –    | –   | –   |
| FA41.1-14                 | 1/2" to 1" – DN 15 to 25 | 215                         | 304 | 372 | 430 | 645  | 805  | 962  | 1054 | 1139 | –   | –    | –   | –   |
| FA41.1-21                 | 1/2" to 1" – DN 15 to 25 | 154                         | 219 | 268 | 309 | 464  | 579  | 693  | 759  | 820  | 876 | 1004 | –   | –   |
| FA41.1-32                 | 1/2" to 1" – DN 15 to 25 | 71                          | 100 | 123 | 142 | 214  | 267  | 319  | 349  | 377  | 403 | 462  | 504 | 570 |



Inline design

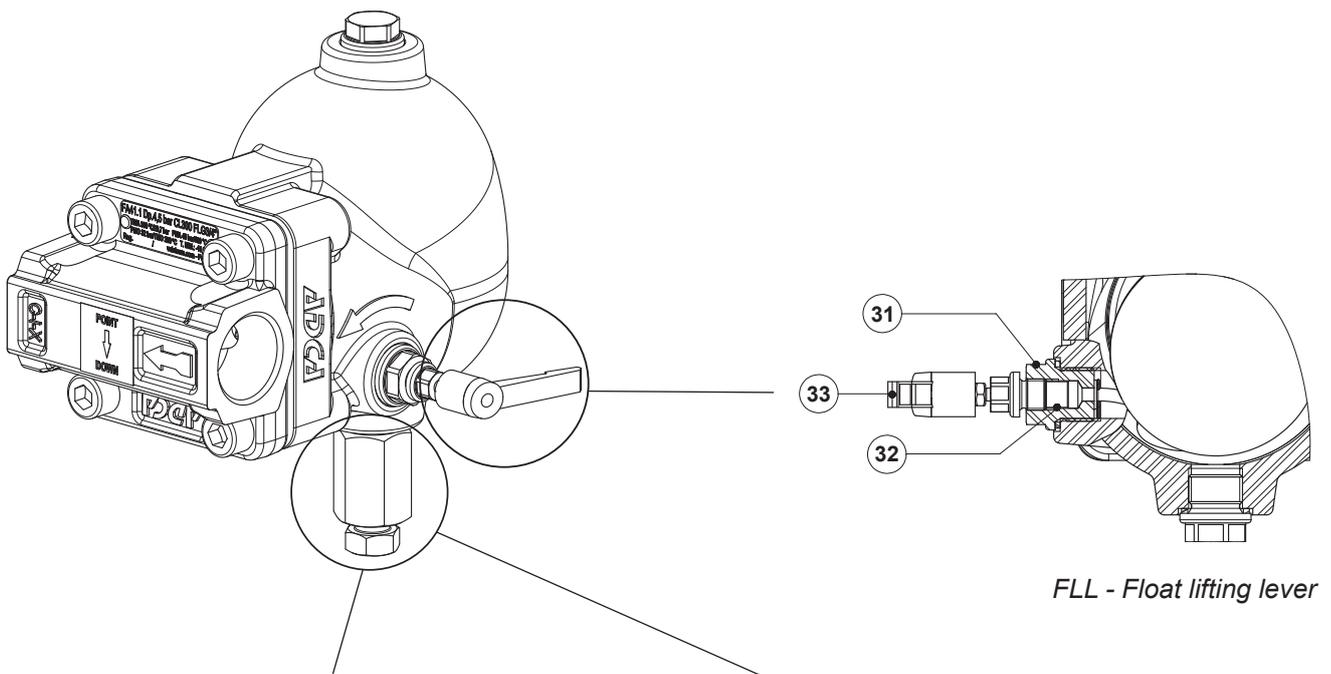
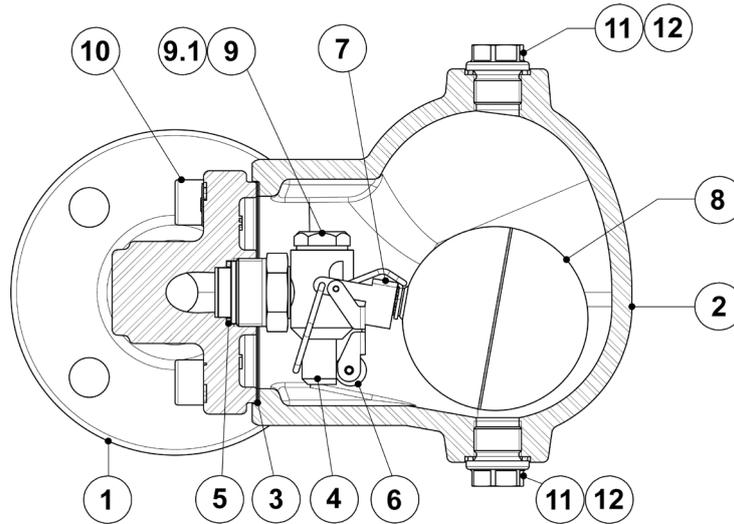


Angled design

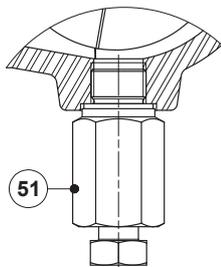
| DIMENSIONS (mm) – INLINE DESIGN |               |     |    |     |    |      |             |       |             |           |             |           |             |
|---------------------------------|---------------|-----|----|-----|----|------|-------------|-------|-------------|-----------|-------------|-----------|-------------|
| SIZE                            | THREADED / SW |     |    |     |    |      |             | PN 40 |             | CLASS 150 |             | CLASS 300 |             |
|                                 | A             | B   | C  | D   | E  | H *  | WEIGHT (kg) | F     | WEIGHT (kg) | F         | WEIGHT (kg) | F         | WEIGHT (kg) |
| 1/2" – DN 15                    | 95            | 160 | 60 | 139 | 79 | 3/8" | 4,9         | 150   | 6,2         | 150       | 5,8         | 150       | 6,1         |
| 3/4" – DN 20                    | 95            | 160 | 60 | 139 | 79 | 3/8" | 4,8         | 150   | 6,7         | 150       | 6,1         | 150       | 7,2         |
| 1" – DN 25                      | 95            | 160 | 60 | 139 | 79 | 3/8" | 4,7         | 160   | 7,4         | 160       | 7,2         | 160       | 7,9         |

| DIMENSIONS (mm) – ANGLED DESIGN |               |    |     |    |      |    |    |           |       |    |           |           |    |           |           |    |           |
|---------------------------------|---------------|----|-----|----|------|----|----|-----------|-------|----|-----------|-----------|----|-----------|-----------|----|-----------|
| SIZE                            | THREADED / SW |    |     |    |      |    |    |           | PN 40 |    |           | CLASS 150 |    |           | CLASS 300 |    |           |
|                                 | B             | C  | D   | E  | H *  | I  | L  | WGT. (kg) | J     | M  | WGT. (kg) | J         | M  | WGT. (kg) | J         | M  | WGT. (kg) |
| 1/2" – DN 15                    | 160           | 60 | 139 | 79 | 3/8" | 65 | 28 | 4,8       | 95    | 58 | 6,5       | 100       | 63 | 6         | 105       | 68 | 6,5       |
| 3/4" – DN 20                    | 160           | 60 | 139 | 79 | 3/8" | 65 | 28 | 4,8       | 95    | 58 | 7         | 100       | 63 | 6,4       | 110       | 73 | 7,5       |
| 1" – DN 25                      | 160           | 60 | 139 | 79 | 3/8" | 65 | 28 | 4,8       | 95    | 58 | 7,5       | 100       | 63 | 6,9       | 110       | 73 | 8         |

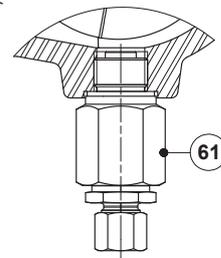
\* As standard, in versions with EN flanges or female ISO 7 Rp threads, these connections are female threaded ISO 228. In versions with ASME flanges, female NPT threads or SW, these connections are female threaded NPT.



FLL - Float lifting lever



BDV - Blowdown valve  
 (Manual)

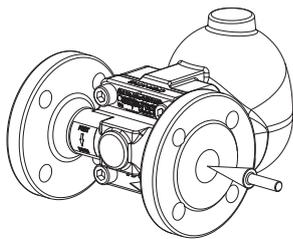


AFZ - Anti-freeze device  
 (Automatic)

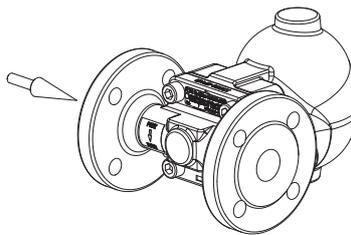
| MATERIALS |                        |  |
|-----------|------------------------|--|
| POS. N°   | DESIGNATION            | MATERIAL   |
| 1         | Body (inline flanged)  | A351 CF8M / 1.4408                                       |
|           | Body (inline threaded) | AISI 316L / 1.4404                                       |
|           | Body (angled)          | AISI 316L / 1.4404                                       |
| 2         | Cover                  | A351 CF8M / 1.4408                                       |
| 3         | * Gasket               | Stainless steel / Graphite                               |
| 4         | * Seat                 | AISI 303 / 1.4305  |
| 5         | * Gasket               | Copper   |
| 6         | * Valve ball           | AISI 316 / 1.4401; Viton                                 |
| 7         | * Lever                | AISI 304 / 1.4301  |
| 8         | * Float                | AISI 304 / 1.4301  |
| 9         | Plug                   | AISI 316L / 1.4404                                       |
| 9.1       | Gasket                 | Copper   |
| 10        | Bolts                  | Stainless steel A2-70                                    |
| 11        | Plug                   | AISI 316L / 1.4404                                       |
| 12        | ** Gasket              | Copper; AISI 304 / 1.4301                                |
| 31        | Lever mechanism        | AISI 303 / 1.4305; AISI 304 / 1.4301; AISI 316L / 1.4404 |
| 32        | Packing                | Graphite   |
| 33        | Lever                  | Plastic  |
| 51        | Blowdown valve         | AISI 303 / 1.4305; AISI 316L / 1.4404                    |
| 61        | Anti-freeze device     | AISI 303 / 1.4305; AISI 316L / 1.4404                    |

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

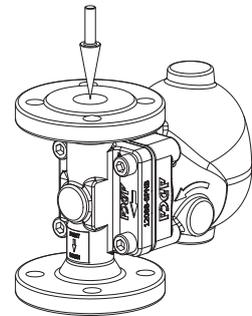
### FLOW DIRECTION



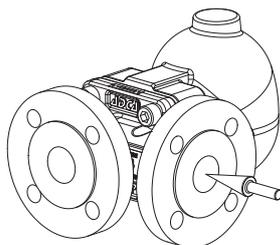
*IR - Horizontal from right to left*



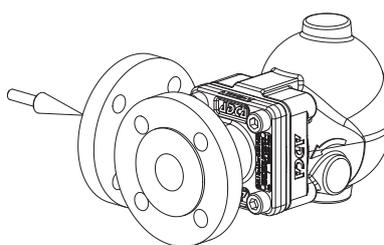
*IL - Horizontal from left to right*



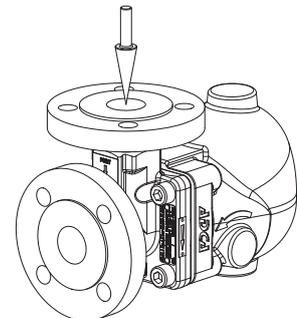
*IT - Vertical from top to bottom*



*AR - Angled from right to front*



*AL - Angled from left to front*



*AT - Angled from top to front*

| ORDERING CODES FA41.1  |              |          |          |           |          |           |          |           |          |
|--|--------------|----------|----------|-----------|----------|-----------|----------|-----------|----------|
| <b>Model</b>   | <b>FA411</b> | <b>2</b> | <b>V</b> | <b>XX</b> | <b>X</b> | <b>IR</b> | <b>A</b> | <b>15</b> |          |
| FA41.1 – stainless steel   | FA411        |          |          |           |          |           |          |           |          |
| <b>Differential pressure</b>   |              |          |          |           |          |           |          |           |          |
| 4,5 bar  |              | <b>2</b> |          |           |          |           |          |           |          |
| 10 bar   |              | <b>3</b> |          |           |          |           |          |           |          |
| 14 bar   |              | <b>4</b> |          |           |          |           |          |           |          |
| 21 bar   |              | <b>5</b> |          |           |          |           |          |           |          |
| 32 bar   |              | <b>7</b> |          |           |          |           |          |           |          |
| <b>Valve sealing</b>   |              |          |          |           |          |           |          |           |          |
| FPM / Viton (standard)   |              |          | <b>V</b> |           |          |           |          |           |          |
| Metal to metal   |              |          | <b>M</b> |           |          |           |          |           |          |
| <b>Cover connections</b>   |              |          |          |           |          |           |          |           |          |
| None   |              |          |          | <b>XX</b> |          |           |          |           |          |
| 3/8" threaded connections on top and bottom, closed with plugs (mandatory if any options are considered) |              |          |          | <b>10</b> |          |           |          |           |          |
| <b>Options</b>   |              |          |          |           |          |           |          |           |          |
| If any, these have specific separate ordering codes, please refer to the appropriate documentation       |              |          |          |           |          |           |          |           |          |
| <b>FLL - Float lifting lever</b>   |              |          |          |           |          |           |          |           |          |
| None   |              |          |          |           | <b>X</b> |           |          |           |          |
| Lifting lever on the right side (when facing the steam trap body)  |              |          |          |           | <b>R</b> |           |          |           |          |
| Lifting lever on the left side (when facing the steam trap body)   |              |          |          |           | <b>L</b> |           |          |           |          |
| <b>Flow direction</b>  |              |          |          |           |          |           |          |           |          |
| Inline horizontal from right to left (standard)  |              |          |          |           |          | <b>IR</b> |          |           |          |
| Inline horizontal from left to right   |              |          |          |           |          | <b>IL</b> |          |           |          |
| Inline vertical from top to bottom   |              |          |          |           |          | <b>IT</b> |          |           |          |
| Angled from right to front   |              |          |          |           |          | <b>AR</b> |          |           |          |
| Angled from left to front  |              |          |          |           |          | <b>AL</b> |          |           |          |
| Angled from top to front   |              |          |          |           |          | <b>AT</b> |          |           |          |
| <b>Pipe connections</b>  |              |          |          |           |          |           |          |           |          |
| Female threaded ISO 7 Rp   |              |          |          |           |          |           | <b>A</b> |           |          |
| Female threaded NPT  |              |          |          |           |          |           | <b>C</b> |           |          |
| Socket weld (SW) ASME 16.11  |              |          |          |           |          |           | <b>H</b> |           |          |
| Flanged EN 1092-1 PN 40  |              |          |          |           |          |           | <b>N</b> |           |          |
| Flanged ASME B16.5 Class 150   |              |          |          |           |          |           | <b>U</b> |           |          |
| Flanged ASME B16.5 Class 300   |              |          |          |           |          |           | <b>V</b> |           |          |
| <b>Size</b>  |              |          |          |           |          |           |          |           |          |
| 1/2" or DN 15  |              |          |          |           |          |           |          | <b>15</b> |          |
| 3/4" or DN 20  |              |          |          |           |          |           |          | <b>20</b> |          |
| 1" or DN 25  |              |          |          |           |          |           |          | <b>25</b> |          |
| <b>Special valves / Extras</b>   |              |          |          |           |          |           |          |           |          |
| Full description or additional codes have to be added in case of a non-standard combination              |              |          |          |           |          |           |          |           | <b>E</b> |