

## HUMIDITY SEPARATORS S25/SHV and S25/SVH (PN 16 and PN 40)

### DESCRIPTION

The ADCA S25/SHV and S25/SVH series centrifugal separators remove moisture from steam and compressed air pipelines. Steam or compressed air pass through the separator and, as a result of centrifugal forces, impacts and swirling effects, the particles with a heavier specific gravity, such as water and oil droplets, moisture in suspension, dirt and scale are separated from the fluid.

The condensate collected at the bottom of the separator is automatically drained by a suitable steam or compressed air trap, which is supplied separately.

### MAIN FEATURES

Several possibilities of installation.

No moving parts.

Maintenance-free design.

**OPTIONS:** Flanged condensate connection.  
Stainless steel construction.

**USE:** Steam, compressed air and other gases.

**AVAILABLE MODELS:** S25/SHV or S25/SVH – carbon steel.

**SIZES:** 1/2" to 8"; DN 15 to DN 200.

**CONNECTIONS:** Flanged EN 1092-1 PN 16 or PN 40.  
Flanged ASME B16.5 Class 150 or 300 on request.  
Female threaded ISO 7 Rp or NPT on request.

**INSTALLATION:** Always with the condensate discharge pointing downwards.  
See IMI – Installation and maintenance instructions.



**S25/SVH**



**S25/SHV**

### CE MARKING – GROUP 2 (PED – EUROPEAN DIRECTIVE)

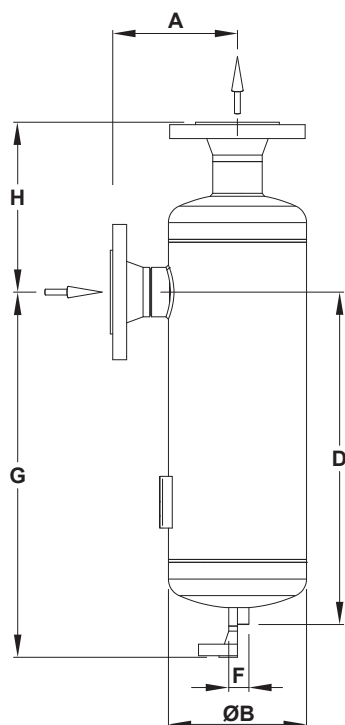
| PN 16                       | CATEGORY      | PN 40                        | CATEGORY      |
|-----------------------------|---------------|------------------------------|---------------|
| 1/2" to 1" – DN 15 to 25    | SEP           | 1/2" to 1 1/4" – DN 15 to 32 | 1 (CE marked) |
| 1 1/4" to 2" – DN 32 to 50  | 1 (CE marked) | 1 1/2" to 3" – DN 40 to 80   | 2 (CE marked) |
| 2 1/2" to 5" – DN 65 to 125 | 2 (CE marked) | 4" to 6" – DN 100 to 150     | 3 (CE marked) |
| 6" and 8" – DN 150 and 200  | 3 (CE marked) | 8" – DN 200                  | 4 (CE marked) |

### BODY LIMITING CONDITIONS \*

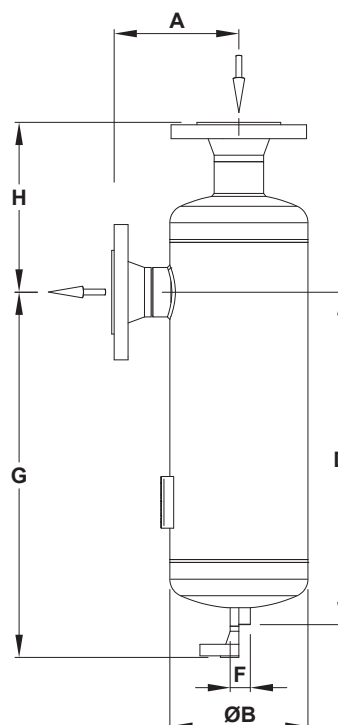
| FLANGED PN 16   |               | FLANGED CLASS 150 |               | FLANGED PN 40 / CLASS 300 |               |
|-----------------|---------------|-------------------|---------------|---------------------------|---------------|
| ALLOW. PRESSURE | RELATED TEMP. | ALLOW. PRESSURE   | RELATED TEMP. | ALLOW. PRESSURE           | RELATED TEMP. |
| 16 bar          | 50 °C         | 16 bar            | 50 °C         | 40 bar                    | 50 °C         |
| 14 bar          | 100 °C        | 14 bar            | 100 °C        | 37 bar                    | 100 °C        |
| 13 bar **       | 195 °C        | 13 bar **         | 195 °C        | 31 bar **                 | 239 °C        |
| 12 bar          | 250 °C        | –                 | –             | 27 bar                    | 300 °C        |

\* Rating according to EN 1092-1:2018. \*\* PMO – Maximum operating pressure for saturated steam.

Minimum operating temperature: -10 °C. Design code: AD-Merkblatt.



*S25/SHV – Direct horizontal inlet / Vertical outlet*



*S25/SVH – Direct vertical inlet / Horizontal outlet*

**DIMENSIONS (mm) \***

| SIZE           | PN 16 |     |     |      |     |     | PN 40 | CLASS 150 |     | CLASS 300 |     | VOLUME<br>(L) | WEIGHT<br>(kg) |
|----------------|-------|-----|-----|------|-----|-----|-------|-----------|-----|-----------|-----|---------------|----------------|
|                | A     | ØB  | D   | F ** | G   | H   | A     | A         | G   | A         | G   |               |                |
| 1/2" – DN 15   | 115   | 114 | 205 | 1/2" | 245 | 140 | 115   | 125       | 255 | 130       | 260 | 2             | 5              |
| 3/4" – DN 20   | 115   | 114 | 205 | 1/2" | 245 | 160 | 115   | 128       | 255 | 132       | 260 | 2,5           | 6              |
| 1" – DN 25     | 115   | 114 | 220 | 1/2" | 260 | 157 | 115   | 131       | 270 | 137       | 275 | 3             | 7              |
| 1 1/4" – DN 32 | 130   | 140 | 305 | 1/2" | 345 | 188 | 130   | 145       | 355 | 152       | 360 | 5             | 12             |
| 1 1/2" – DN 40 | 130   | 140 | 345 | 1/2" | 385 | 195 | 130   | 147       | 395 | 154       | 400 | 5,7           | 13,8           |
| 2" – DN 50     | 155   | 168 | 405 | 1/2" | 445 | 207 | 155   | 170       | 455 | 177       | 460 | 10,5          | 19,5           |
| 2 1/2" – DN 65 | 190   | 219 | 430 | 3/4" | 470 | 261 | 197   | 215       | 482 | 221       | 487 | 18,5          | 32             |
| 3" – DN 80     | 200   | 219 | 482 | 3/4" | 522 | 295 | 205   | 220       | 534 | 230       | 539 | 25            | 38             |
| 4" – DN 100    | 235   | 273 | 548 | 3/4" | 588 | 345 | 245   | 260       | 600 | 267       | 605 | 35,4          | 57             |
| 5" – DN 125    | 268   | 324 | 652 | 1"   | 698 | 435 | 280   | 303       | 714 | 311       | 720 | 50            | 81,5           |
| 6" – DN 150    | 283   | 356 | 714 | 1"   | 760 | 475 | 303   | 316       | 776 | 326       | 782 | 75            | 153            |
| 8" – DN 200    | 303   | 406 | 902 | 1"   | 948 | 500 | 329   | 343       | 964 | 352       | 970 | 140           | 195            |

\* For certified values, consult manufacturer. Volume and weight refer to PN 16 version. Other versions may have slightly different values.

\*\* As standard, in units manufactured with EN 1092-1 flanges, the drain connection is female threaded ISO 7 Rp. In models with ASME B16.5 flanges, this connection is female threaded NPT. Alternatively, EN 1092-1 or ASME B16.5 flanged drain connections can be supplied (ASME in the same class as main connections).

**MATERIALS**

| DESIGNATION         | MATERIAL           |
|---------------------|--------------------|
| Body                | P235GH / 1.0325    |
| Head                | P265GH / 1.0425    |
| Inlet / outlet pipe | P235GH / 1.0325    |
| EN flange           | P250GH / 1.0460    |
| ASME flange         | ASTM A105 / 1.0432 |
| Socket              | ASTM A105 / 1.0432 |
| Internals           | S235JR / 1.0038    |

**FLANGE CONNECTIONS**

| RATING | SIZE                         | EN STANDARD     | ASME STANDARD        |
|--------|------------------------------|-----------------|----------------------|
| PN 16  | 1/2" to 2"<br>DN 15 to 50 *  | EN 1092-1 PN 40 | ASME B16.5 Class 150 |
| PN 16  | 2 1/2" to 8"<br>DN 65 to 200 | EN 1092-1 PN 16 | ASME B16.5 Class 150 |
| PN 40  | 1/2" to 8"<br>DN 15 to 200   | EN 1092-1 PN 40 | ASME B16.5 Class 300 |

\* Flanges EN 1092-1 PN 16 and PN 40, from DN 15 to DN 50, have the same number and size of holes.