

HUMIDITY SEPARATORS SH25 PN16 – PN40

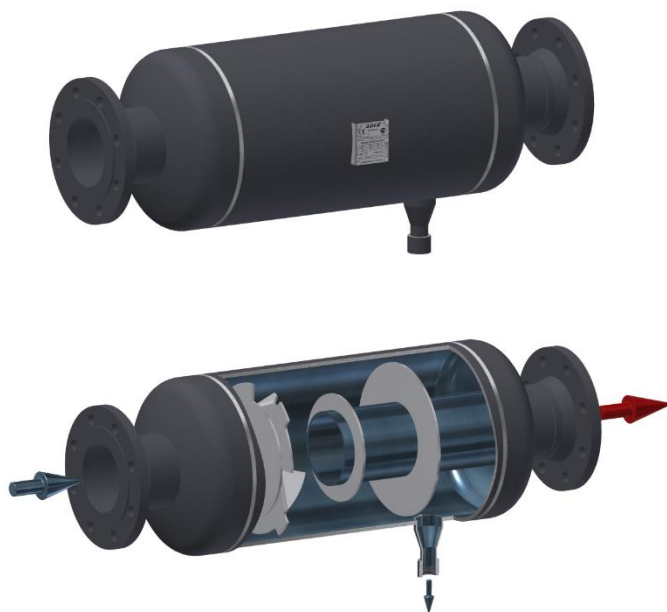
DESCRIPTION

The SH25 series horizontal centrifugal separators remove moisture from steam and compressed air pipelines. Steam and compressed air pass through the separator and, as a result of centrifugal forces, impact 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 must be automatically drained by a suitable steam or compressed air trap.

MAIN FEATURES

In-line design.
No moving parts.



- OPTIONS:** Flanged condensate connection.
- USE:** Steam, compressed air and other gases (Group 2).
- AVAILABLE MODELS:** SH25/S – carbon steel body.
- SIZES:** DN 15 to DN 100.
- PIPE CONNECTIONS:** Flanged EN1092-1 PN16 / PN40.
Flanged ANSI Class 150 lb / 300 lb.
Female screwed BSP or NPT on request.
- INSTALLATION:** Always with the condensate discharge pointing downwards.
See IMI – Installation and maintenance instructions.
- HOW TO SELECT:** Generally, in an existing plant, it is advisable to fit a separator with the same size as the pipeline. Pressure drop is normally negligible. For approximate pressure drop calculation please consult factory.

CE MARKING – GROUP 2 (PED – European Directive)

| Rating | Size | Category | Rating | Size | Category |
|--------|-----------------|---------------|--------|----------------|---------------|
| PN16 | DN 15 to DN 25 | SEP | PN40 | DN 15 to DN 32 | 1 (CE marked) |
| | DN 32 to DN 50 | 1 (CE marked) | | DN 40 to DN 80 | 2 (CE marked) |
| | DN 65 to DN 100 | 2 (CE marked) | | DN 100 | 3 (CE marked) |

LIMITING CONDITIONS **

| Rating | Pressure (bar) | Temperature (°C) | Rating | Pressure (bar) | Temperature (°C) | Rating | Pressure (bar) | Temperature (°C) |
|--------|----------------|------------------|-------------|----------------|------------------|--------------------|----------------|------------------|
| PN16 | 16 | 50 | ANSI 150 lb | 16 | 50 | PN40 / ANSI 300 lb | 40 | 50 |
| | 14 | 100 | | 14 | 100 | | 37 | 100 |
| | 13 * | 195 | | 13 * | 195 | | 31 * | 239 |
| | 12 | 250 | | – | – | | 27 | 300 |

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

Minimum operating temperature: -10 °C;

Design code: AD-Merkblatt.

MATERIALS

| DESIGNATION | MATERIAL |
|----------------------|------------------------------|
| Body | EN10216-2 / P235GH / 1.0325 |
| Heads | EN10028-2 / P265GH / 1.0425 |
| Inlet / Outlet pipes | EN10216-2 / P235GH / 1.0325 |
| EN flanges | EN10222-2 / P250GH / 1.0460 |
| ANSI flanges | ASTM A105 / 1.0432 |
| Sockets | ASTM A105 / 1.0432 |
| Internals | EN 10025-2 / S235JR / 1.0038 |

EN 10204 3.1 certificate available if requested with the order.

FLANGE CONNECTIONS

| Rating | Size | EN Standard | ANSI Standard |
|--------|------------------|----------------|-----------------------|
| PN16 | * DN 15 to DN 50 | EN 1092-1 PN40 | ANSI B16.5 Cl. 150 lb |
| PN16 | DN 65 to DN 100 | EN 1092-1 PN16 | ANSI B16.5 Cl. 150 lb |
| PN40 | DN 15 to DN 100 | EN 1092-1 PN40 | ANSI B16.5 Cl. 300 lb |

* Flanges EN 1092-1 PN16 and PN40, from DN 15 to DN 50, have the same number and size of holes.

APPROXIMATE DIMENSIONS (mm) *

| SIZE DN | FLANGED | | | | | | | | THREADED | | | |
|---------|---------|--------|----------|----------|-----|-----|------|-----|--------------|---------------|-----|-----------|
| | A PN16 | A PN40 | A 150 lb | A 300 lb | B | E | F ** | G | VOL. (L) *** | WGT. (kg) *** | C | WGT. (kg) |
| 15 | 365 | 365 | 384 | 394 | 114 | 136 | 1/2" | 115 | 2,1 | 4,1 | 357 | 2,7 |
| 20 | 370 | 370 | 395 | 404 | 114 | 138 | 1/2" | 115 | 2,2 | 4,8 | 362 | 2,8 |
| 25 | 390 | 390 | 421 | 434 | 114 | 138 | 1/2" | 115 | 2,4 | 5,2 | 396 | 2,9 |
| 32 | 475 | 475 | 505 | 521 | 140 | 148 | 1/2" | 130 | 4,6 | 8 | 487 | 4,6 |
| 40 | 515 | 515 | 549 | 562 | 140 | 152 | 1/2" | 130 | 5,1 | 9 | 521 | 4,7 |
| 50 | 590 | 590 | 621 | 634 | 168 | 166 | 1/2" | 143 | 8,7 | 11,6 | 606 | 6,5 |
| 65 | 656 | 670 | 706 | 718 | 219 | 196 | 3/4" | 180 | 16,3 | 20,4 | – | – |
| 80 | 724 | 740 | 764 | 783 | 219 | 200 | 3/4" | 180 | 18,6 | 21,7 | – | – |
| 100 | 824 | 850 | 872 | 891 | 273 | 217 | 3/4" | 207 | 28,5 | 31 | – | – |

* For certified values, consult factory.

** Screwed drain connection as standard. Alternatively, EN1092-1 or ANSI flanged versions can be supplied. (ANSI on the same class as main dimensions.)

*** Weight and volume refer to PN16 design. Other ratings may have slightly different values.

