



Steam-Powered Condensate-Return Unit FPS 14

Description

The steam-powered condensate-return unit FPS 14 uses booster steam to collect and pump condensate in level-dependent intervals. A special float valve controls the delivery intervals. This system does not require an electric condensate pump.

Function

The condensate enters the vessels through the inlet pipe **7**, air venting is effected via the vent hole **8**. As the condensate level rises, the ball float **2** is lifted up. As soon as the maximum level is reached, a spring mechanism integrated in the float valve **2** snaps over, closes the vent hole **8** and simultaneously opens the booster-steam valve **9**. The booster-steam pressure closes the non-return valve **5** and pushes the condensate out through the outlet pipe **4**. When the condensate level reaches its lowest point, the spring mechanism closes the booster-steam valve **9** and simultaneously opens the vent hole **8**. Condensate can again flow into the vessel via the inlet pipe **7** until the next delivery cycle starts.

Design

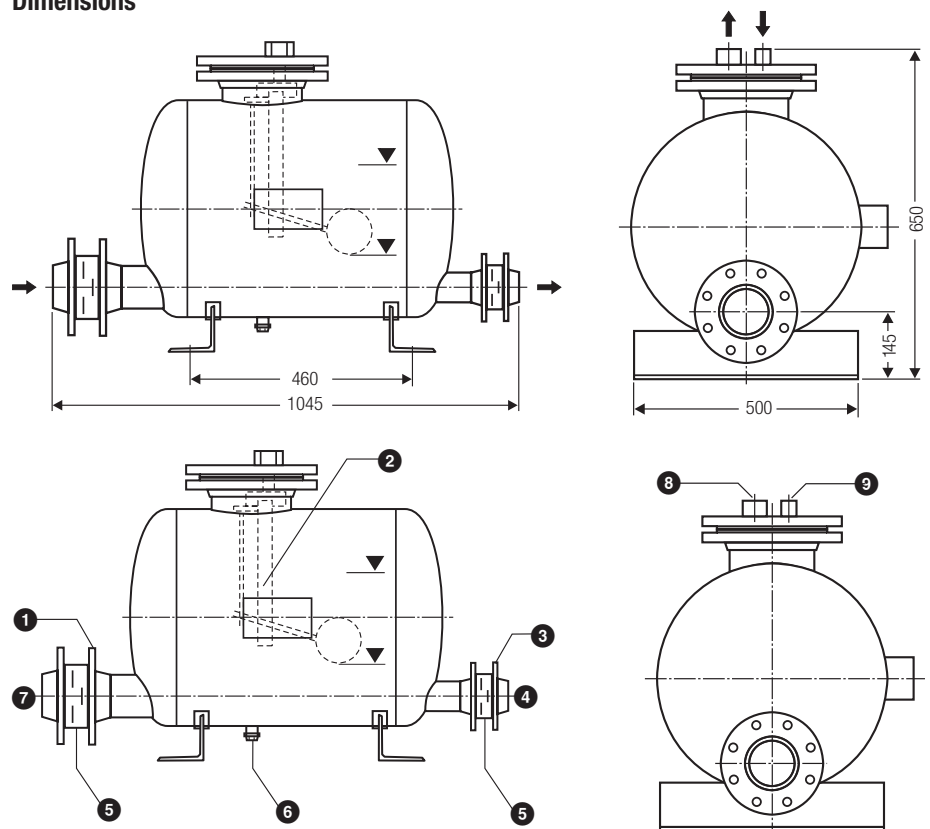
FPS 14:

Made from steel grade P265GH, ball float trap made of chromium steel. Vessel made of welded sheet steel, inside: untreated, outside: anti-corrosion coating. Equipped with the necessary connecting ends and standpipes, two Disco non-return valves RK... The installation rests on sectional supports.

FPS 14 Stainless Steel:

Made from stainless steel grade 1.4571, ball float trap made of chromium steel. Vessel made of welded s. s. plate, inside and outside pickled and passivated. Equipped with the necessary connecting ends and standpipes, two Disco non-return valves RK... The installation rests on sectional supports.

Dimensions



Key

- | | |
|--|---------------------------------|
| 1 Flange DN 80, PN 16, DIN 2633 | 5 Non-return valve RK 86 |
| 2 Ball float trap | 6 Drain plug |
| 3 Flange DN 50, PN 16, DIN 2633 | 7 Condensate inlet |
| 4 Condensate outlet | 8 Air vent G 1 |
| | 9 Booster steam G ½ |

Steam-Powered Condensate-Return Unit FPS 14

Technical data

The standard version of the steam-powered condensate-return unit FPS 14 is designed for condensate capacities up to 6 t/h. The discharge capacity decreases with rising back pressure.

For larger condensate flowrates we recommend GESTRA condensate recovery and return systems types SD and SDR.

Service pressure

13 barg

Service temperature

200 °C

Discharge head

Booster steam pressure [barg] x 0.7

Key

- 5 Disco Non-return valve RK...
- 10 Condensate return unit FPS 14
- 11 Pressure gauge unit
- 12 Steam trap
- 13 Vaposcope sightglass VK...
- 14 Strainer GSF...
- 15 Shut-off valve GAV...
- 16 Capacity with booster steam 3 bar
- 17 Capacity with booster steam 6 bar
- 18 Capacity with booster steam 13 bar

Order & Enquiry Specification

GESTRA Condensate return unit **FPS 14**

Steam pressure/service pressure.....
 Back pressure.....
 Condensate flowrate.....
 Design.....
 Nominal size.....
 Location.....
 Type of steam user(s).....
 Please enter data or delete if not applicable.

Refer to the folder "GESTRA Specification Texts" for more detailed specification.

PED (Pressure Equipment Directive)

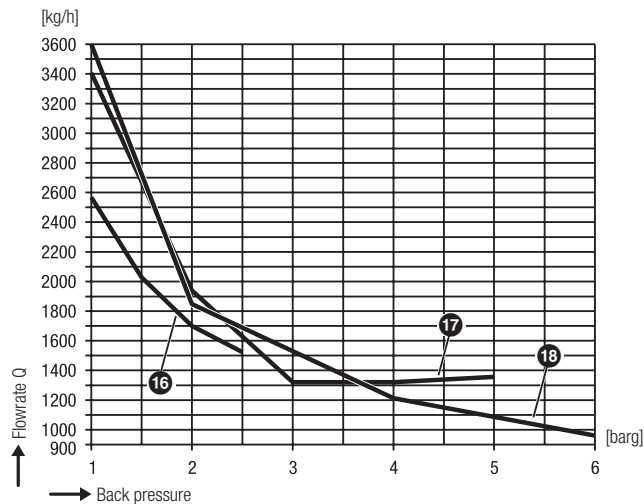
The equipment meets the requirements of the Pressure Equipment Directive 97/23/EC and the AD 2000 Bulletins in compliance with the conformity assessment. For use with fluids of group 1 and 2. With CE marking (apart from equipment that is excluded from the scope of the PED as specified in section 3.3). For more information please refer to our PED Declaration of Conformity.

ATEX (Atmosphère Explosible)

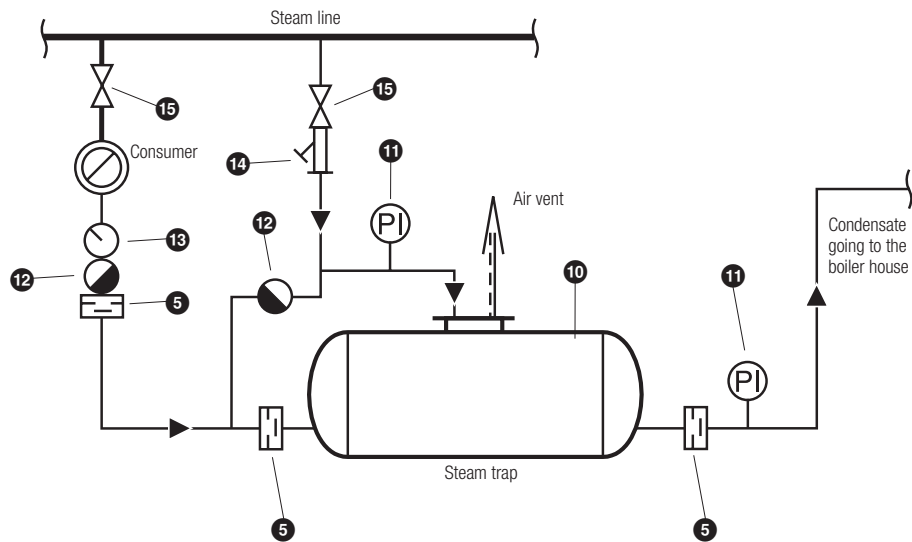
The equipment does not have its own potential source of ignition and is therefore not subject to the ATEX Directive 94/9/EC. Applicable in Ex zones 0, 1, 2, 20, 21, 22 (1999/92/EC). The equipment does not bear an Ex marking. For more information refer to our ATEX Declaration of Manufacturer.

Supply in accordance with our general terms of business.

Technical Data - continued -



Schematic arrangement



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