



## Steam-Powered Condensate-Return Unit **FPS 23**

### Description

The steam-powered condensate-return unit type FPS 23 collects and pumps condensate by means of booster steam in level-dependent intervals. It uses a special float valve as the control and operating mechanism, additional condensate pumps are not required.

### Function

The condensate enters the vessel through the inlet pipe **6**, air venting is effected by the vent valve **7**. As the condensate level in the vessel rises, the ball float **2** is lifted. As soon as the maximum level is reached a spring mechanism integrated in the float valve **2** snaps over, closes vent valve **7**, and simultaneously opens booster-steam valve **3**. The booster-steam pressure closes non-return valve **5**, and pushes the condensate out via outlet pipe **4**. When the condensate level reaches its lowest point, the spring mechanism closes the booster-steam valve **3**, and simultaneously opens vent valve **7**. Condensate can again flow into the vessel via the inlet **6** until the next cycle is reached.

### Design

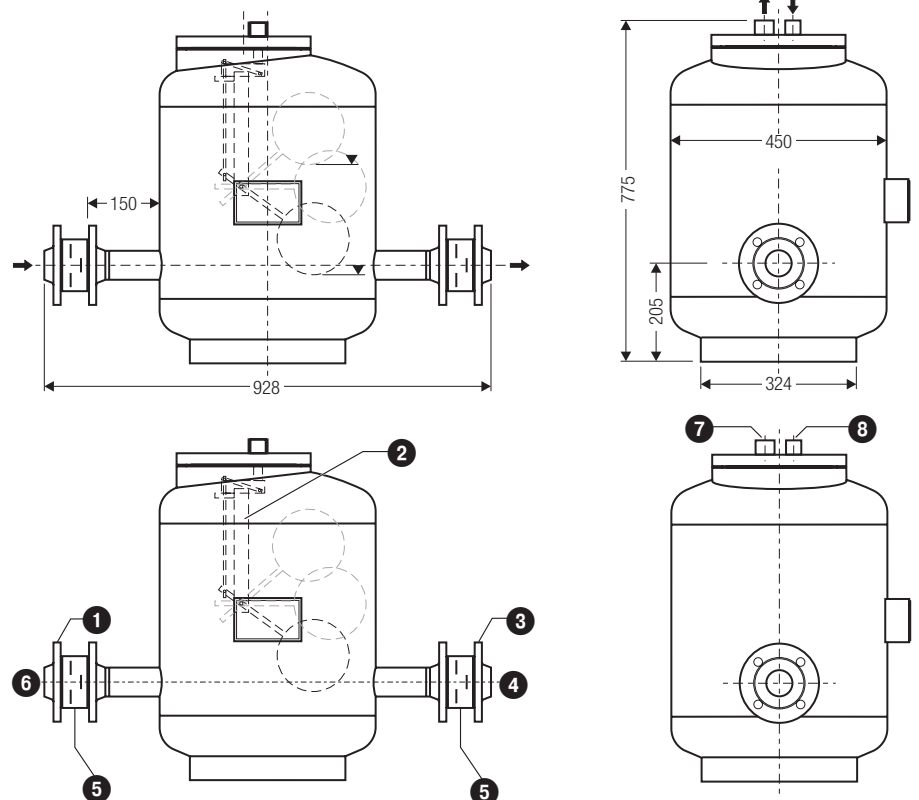
#### FPS 23:

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 connecting standpipes and ends, as well as two DISCO non-return valves RK... The installation rests on sectional supports.

#### FPS 23 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 connecting standpipes and ends, as well as two DISCO non-return valves type RK... The installation rests on sectional supports.

### Dimensions



### Key

- |  |                                      |
|--|--------------------------------------|
| <b>1</b> Flange DN 50 mm (2"), PN 16, DIN 2633 | <b>5</b> Non-return valve type RK 86 |
| <b>2</b> Float valve                           | <b>6</b> Condensate inlet            |
| <b>3</b> Flange DN 50 mm (2"), PN 16, DIN 2633 | <b>7</b> Vent valve 1" BSP           |
| <b>4</b> Condensate outlet                     | <b>8</b> Booster-steam valve ½" BSP  |

# Steam-Powered Condensate-Return Unit FPS 23

## Technical Data

Standard design for hot condensate flowrates up to 4 t/h. The discharge capacity decreases with rising back pressure.

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

### Max. service pressure

12 barg (174 psig)

### Max. temperature

200 °C (392 °F)

### Discharge head

Booster-stream pressure in bar x 0.7

## Key

- 5 DISCO Non-return valve RK...
- 9 Condensate return unit FPS 23
- 10 Pressure gauge
- 11 Steam trap
- 12 Vaposcope VK...
- 13 Strainer GSF...
- 14 Isolating valve GAV...
- 15 Capacity for booster steam 3 bar
- 16 Capacity for booster steam 6 bar
- 17 Capacity for booster steam 13 bar

## When ordering please state:

GESTRA Condensate Return Unit FPS 23

Steam pressure / Service pressure .....

Back pressure .....

Condensate flowrate .....

Design .....

Nominal size .....

Place of installation .....

Type of steam user(s) .....

Please enter data if applicable.

For more information please refer to our Specification Texts.

## PED (Pressure Equipment Directive)

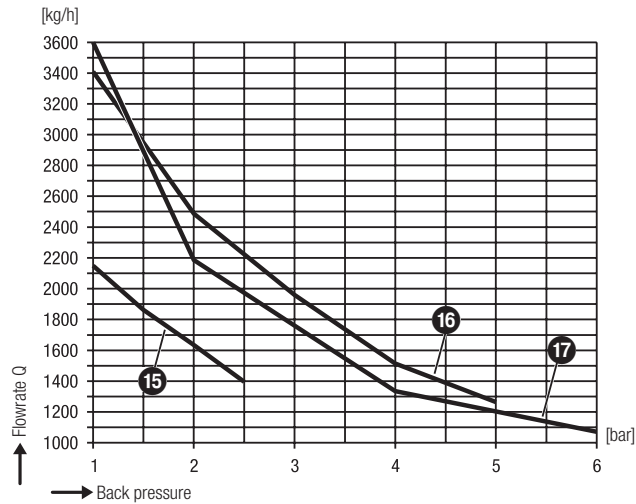
These products comply with the requirements of the Pressure Equipment Directive PED 97/23/EC and the AD 2000 Bulletins, taking the conformity assessment into account. Applicable with fluids of group 1 and 2. With CE marking, except for equipment according to section 3.3. For more information refer to our PED Declaration of Conformity.

## ATEX (Atmosphère Explosible)

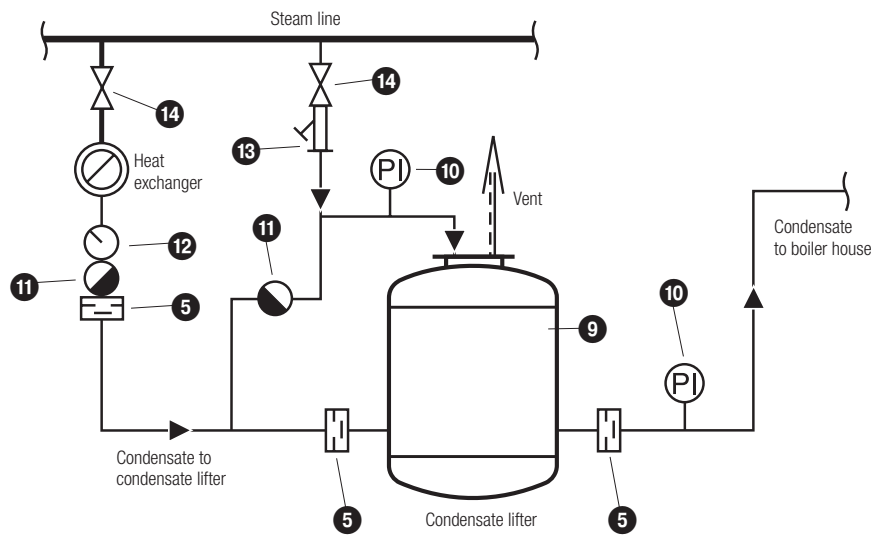
The equipment does not have its own potential source of ignition and its therefore excluded from the scope of the ATEX Directive 94/9/EC. It can be used in Ex zones 0, 1, 2, 20, 21, 22 (1999/92/EC). Equipment without Ex marking. For more information see our ATEX Declaration of Manufacturer.

Supply in accordance with our general terms of business.

## Technical Data continued



## Schematic Layout



# GESTRA AG

Münchener Straße 77, 28215 Bremen, Germany  
 Telefon +49 421 3503-0, Telefax +49 421 3503-393  
 E-mail info@de.gestra.com, Web www.gestra.de

