Ball float steam traps UNA series

Steam traps with ball float for removing condensate from steam, cold condensate or distillates without banking-up

The traps with the tried and tested rolling ball seal work with exceptionally low friction and therefore have very low actuating forces. They are durable and guarantee maximum tightness.

Use

Versatile steam trap for virtually all requirements.

Especially recommended for the drainage of:

- Steam-regulated heat exchangers
- Systems with a large condensate flowrate
- Steam headers
- Steam driers, cyclone separators
- Systems with very low operating pressures very small differential pressures extremely variable operating conditions
- Vacuum systems
- Float traps with integral air vents can be used as air traps, gas traps and liquid drainers
- Drying cylinders

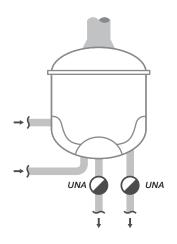
The series is also ideal for use as a discharge regulator for flash tanks and feedwater tanks.

Advantages

- Reliable function regardless of back pressure and condensate temperature
- No loss of steam due to the formation of a water seal
- Maximum tightness and durability as well as excellent control characteristics, as the sealing unit of the regulator has a rolling ball or segmented ball
- Immediate response level control without automatic venting – Simplex version
- With automatic, fast-acting venting for steam systems – Duplex version
- Especially insensitive to dirt
- Inner parts of corrosion-resistant stainless steel
- Fully operational even when back pressure is nearly 100% of upstream pressure
- Can be serviced without removing the body

Installation example

Brewing pan





UNA 14

UNA 45, 46 with electrode and manual vent valve



UNA 27



UNA 43/46 DN 80-150



UNA 38



LINA 39



UNA Special PN 63



UNA 45/46 in detail:

GESTRA UNA 4 ball float steam traps cannot fail to impress, with their simple, modular design that makes them perfectly flexible in use.

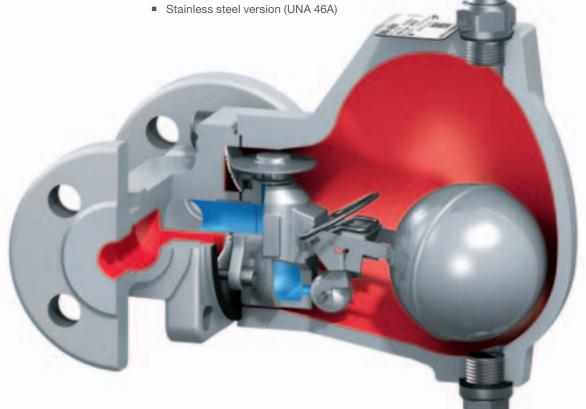
The modular design means that the steam trap's direction of flow can be varied. With a total of 33 different options for installation in the pipe (11 types of connection for each direction of flow – vertical, horizontal to the left and horizontal to the right), these traps fit every pipe. The materials and design of the forged body conform to EN and ASME standards.

Key data

- DN 15-65 (NPS ½″-2½″)
- PN 40/CI 300
- Max. differential pressure: 32 bar
- Rolling ball regulator with various pressure capabilities AO2–AO32 (DN 15-65)
- MAX regulator (DN 40-65) for large condensate flowrates over 15,000 kg/h (hot condensate)
- Automatic venting (DUPLEX) or hand-vent valve (SIMPLEX)

Options

- Direction of flow vertical, horizontal to the left or horizontal to the right
- Inner bypass, adjustable from outside
- Sightglass (UNA 45) PN 16/Cl 150
- Connection for monitoring sensor
- Cover with monitoring sensor (UNA 45) PN 40/Cl 300
- Manual lifting lever
- Dirt strainer
 Stainless steel version (UNA 46A)



www.gestra.com

Steam Traps and Monitoring Equipment

Pumping trap UNA 25-PK Pumping trap UNA 25-PS

Valves that discharge and lift condensate

Ball-float steam traps with pump function – UNA 25-PK:

These units function primarily as steam traps. The integrated, automated pump function ensures that condensate is discharged even under reduced steam pressure or high back pressure. The condensate is then pumped out of the body with the aid of motive steam.

Pump trap with ball float - UNA 25-PS:

The automated pump function ensures that the return of condensate is always based on demand. The condensate is pumped out of the body with the aid of motive steam.

Use

UNA 25-PK:

- Regulated heat exchangers, special platetype heat exchangers with major load fluctuations during operation
- Drainage of vacuum systems
- Also suitable for returning condensate

UNA 25-PS:

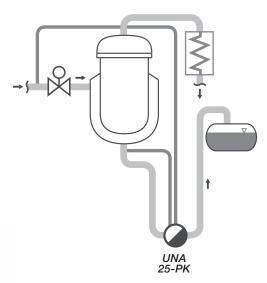
- For returning condensate, e.g. as an alternative to pump-driven return
- Drainage of vacuum systems

Advantages

- Integrated non-return valve in the inlet and outlet area
- Body with straight through design
- Small size
- Standard flange length
- Float-actuated, compact switchover unit for controlling booster steam and venting
- Optimised performance with versions for 6 bar or 13 bar
- Inner parts of corrosion-resistant stainless steel
- Compact regulator unit

Installation example

Distilling flask





UNA 25-PK, UNA 25-PS



UNA 25-PK, UNA 25-PS



UNA 25-PK in detail:

The use of compact UNA 25-PK units guarantees drainage without banking-up, and a leakproof seal in all operating conditions

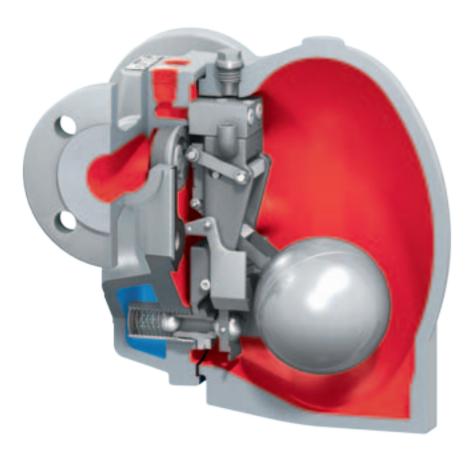
In addition to the tried-and-tested rolling ball regulator, a mechanism is incorporated that independently conveys higher pressure steam into the body when the upstream pressure is low. With this motive steam, the condensate is actively fed into the condensate system. When the pressure in the heat exchanger is sufficiently high, the rolling ball regulator works like a conventional ball-float steam trap.

Key data

- DN 40 (NPS 1½")
- PN 40/CI 150
- Max. differential pressure: 6 or 13 bar
- Compact regulator unit, contains control block and switchover unit
- Modular control block
- Separate, wear-resistant connections for motive steam and venting
- Orifice with rolling ball
- Integrated non-return valve in inlet and outlet area

Options

- Different versions for 6 bar or 13 bar operating pressure
- EN flange, ASME flange or screwed end connection



www.gestra.com 15