

GESTRA thermostatic steam trap

with membrane regulator, up to PN 40

FLOWSERVE

GESTRA

Rhombic cover

Easy in-line maintenance.
Flange connecting bolts can be inserted into the flange holes from the trap side.

Thermostatic capsule

A regulating element that can easily be exchanged without removing the body. Precise reaction to any temperature change. Corrugated membrane of Hastelloy®.
High elasticity.
Long service life.

Tandem shut-off

Seat unaffected by dirt, with double shut-off.

Metallic base bushing

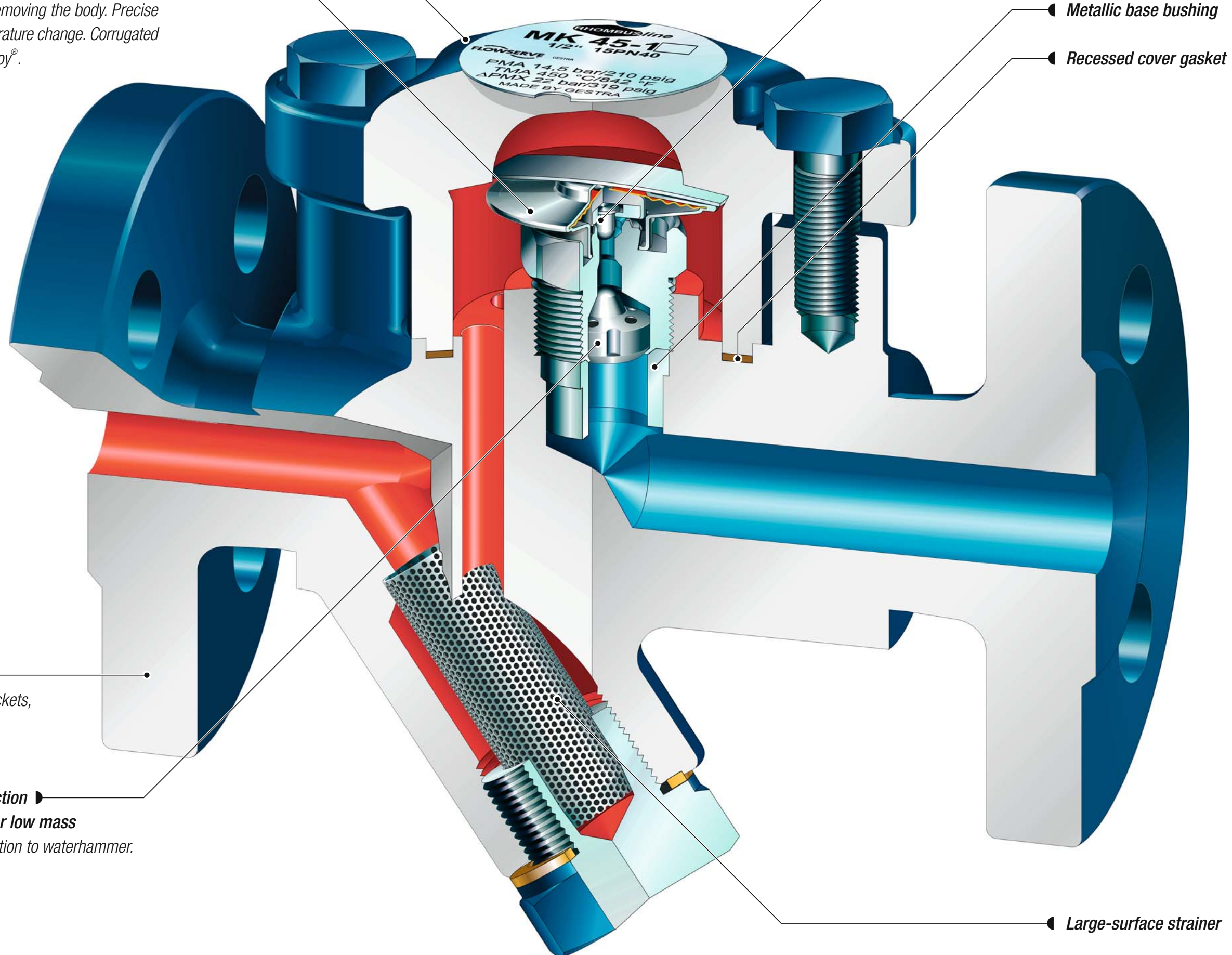
Recessed cover gasket

Connections

Flanges, screwed sockets, socket-weld or butt-weld ends.

Non-return valve action

with hollow cone for low mass
Quick closure in reaction to waterhammer.

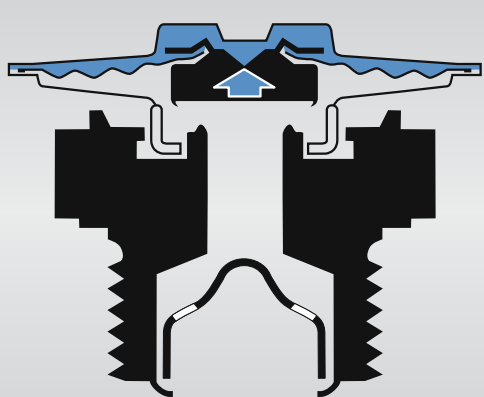


Shown here: MK 45-1, PN 40

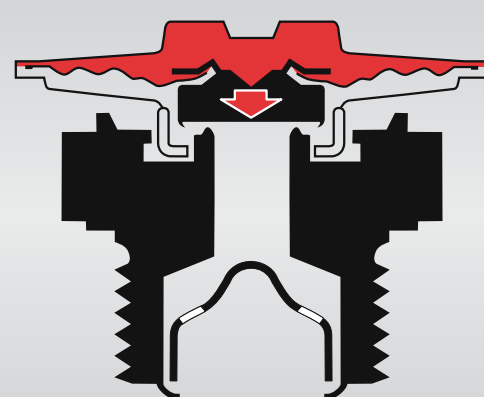


Functional principle

Thermostatic capsule

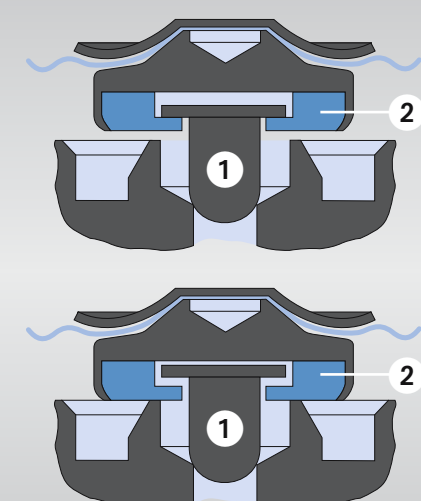


Opening:
The thermostatic capsule contains a liquid filling, the evaporation temperature of which is slightly lower than that of the water. When the plant has been shut down, or if the condensate is cold, the liquid filling is completely in the liquid state, owing to the low ambient temperature. The internal pressure of the thermostatic capsule is lower than the surrounding pressure (service pressure), so that the membrane presses the valve towards the open position.



Closing:
With increasing temperature of the condensate, the liquid filling begins to evaporate. The pressure in the thermostatic capsule then rises. The membrane presses the valve towards the closed position, which is reached shortly before the temperature attains the boiling point of the condensate.

Tandem shut-off



The self-centring valve cone (1) ensures a steam-tight closure. With increasing temperature, the downstream single seat (2) follows, offering a further guarantee of tightness, even in the case of dirt accumulation. Through the twofold pressure drop, wear is reduced and the service life extended.

Top: during operation Seating surface 1 closed (regulator moves to closed position)

Bottom: Steam trap closed
Both seating surfaces closed