

## BI-THERMOSTATIC BIMETALLIC STEAM TRAP MAGNUS 3/45-N (DN 25 - 100 / DN 1" - 4")

### General Description

This super steam trap is made of a "N" number of bimetallic regulators what allows discharge a high flowrate of condensate and also offers a high flexibility and capacity of regulation.

The number of bimetallic regulators depends on the application. The behaviour is like several steam traps in parallel, inside the same body. This fact increases unlimitedly its reliability and reduces maintenance and installation costs.

It is the ideal steam trap to guarantee a safety operation completely free of failures because it is unlikely that all regulators fail at the same time. The condensate temperature can be adjusted for each application.

The condensate discharge is controlled by bimetallic thermostats, continuously adjusting their regulators to changes of condensate flow. Automatic air venting. Installation in horizontal position.

### Operation

The steam trap is able to adjust itself to changing conditions of condensate flow. The condensate pressure opens the valve of each bimetallic regulator allowing the discharge of condensate. During the discharge, the temperature of the condensate increases expanding the bimetals producing the progressive closure of each valve. So there is a balance between pressure and temperature handling the steam trap operation.

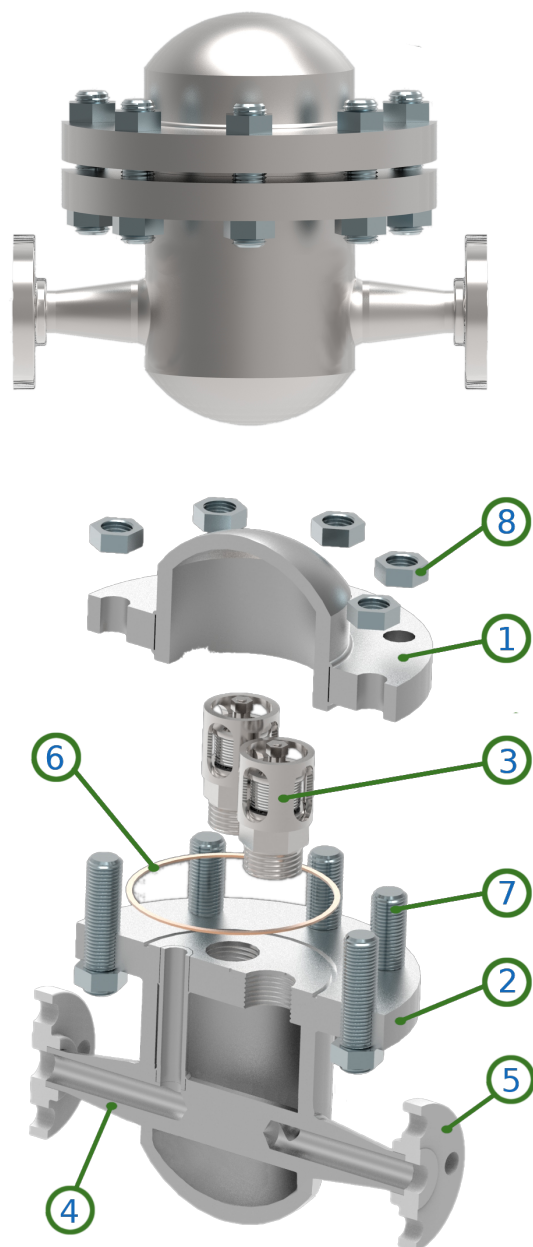
### Operating conditions

Max. Operating Pressure:	45 bar
Max. Differential Pressure:	3 - 45 bar
Max. Temperature:	400°C

### Connections

- Flange: DIN PN 10/16/25/40, DN 25 up to 100.  
ANSI 150/300/600# RF, DN 1" up to 4".
- Other connections and materials upon request.

### Materials



### Materials

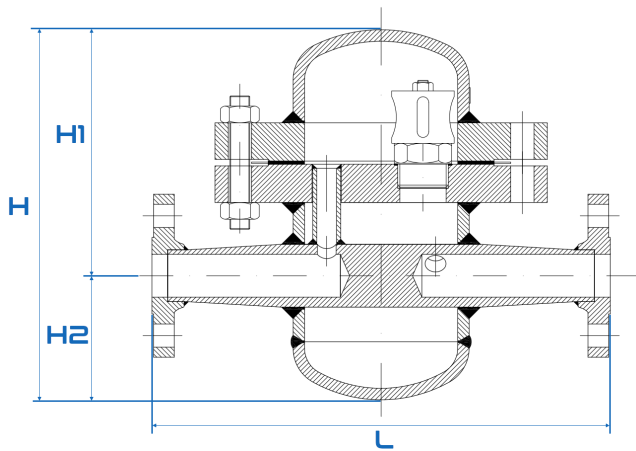
1 Cover	ASTM A234 WPB
2 Body	ASTM A234 WPB
3 Regulator	AISI 420
4 Pipe/Tube	F1 Carbon steel
5 Flange	ASTM A105
6 Joint	AISI 316L + graph.
7 Screw	ASTM A193 Gr. B7
8 Bonnet nut MB	ASTM A194 Gr. 2H

## STEAM TRAP MAGNUS 3/45-N

### Other characteristics

This type of steam trap allows can be, continuously and remotely, monitored by SmartWatchWeb system in order to detect anomalies during operation, such as the possibility of appearance of external or internal leak, correct condensate discharge temperature in order to improve the energy efficiency of the installation, pressure and backpressure problems.

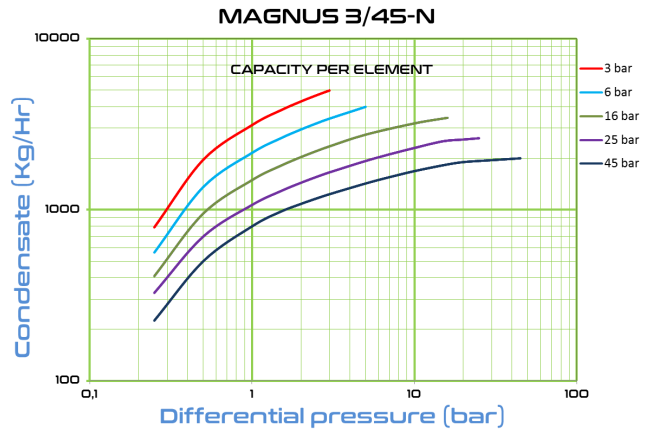
### Dimensions



	Regulators No.		
	1	Up to 3	Up to 4
H (mm)	330	350	420
H1 (mm)	220	230	260
H2 (mm)	110	120	160
L (mm)	380	430	530

Valid dimensions from 1" to 4" connections.  
Dimensions from 6" and above, on demand.

### Capacity Curve



Capacity refer to continues service.  
Cold water (Start-up) capacity will be 2.5 higher.

Capacities given are continuous discharge capacities of hot condensate. The cold water capacity at start-up condition will be 2.5 of the hot condensate capacity (1kg=2,2lbs., 1 bar=14,5 psi).

Example of selection:

Magnus 6-3 (with 3 regulators)

Diff. Pres = 5 bar.

Capacity per regulator = 5000 Kg/h.

Total capacity = 3 x 5000 = 15000 Kg/h.

Produced in accordance with European Pressure Equipment Directive - PED 2014/68/EU.

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