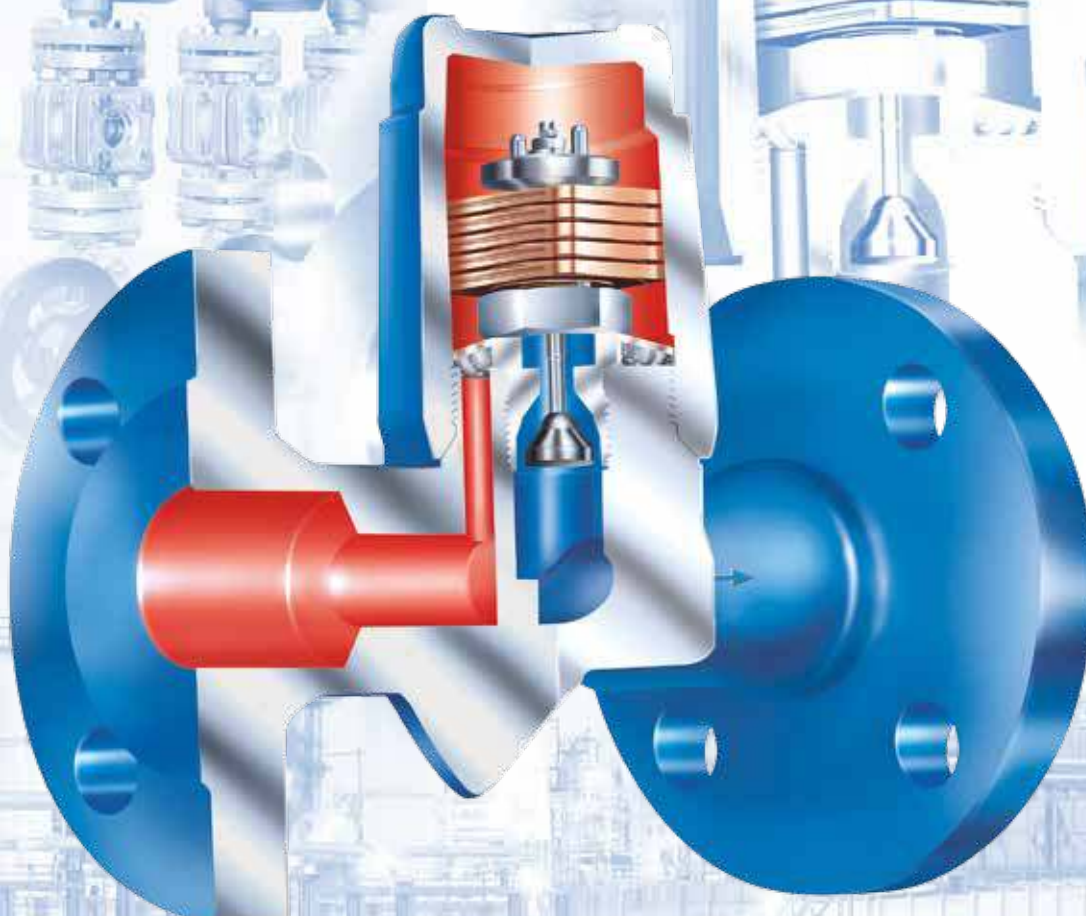


New from ARI! CONLIFT® condensate pump – Now also with a casted body or in stainless steel

New from ARI! CONA® S ball float steam trap – for more performance

# CONA®

## Compact discharge



**NEW**  
from ARI!

**NEW**  
from ARI!



**Thermostatic traps**  
e.g. CONA® B  
CONA® M



**Thermodynamic traps**  
CONA® TD



**Mechanical traps**  
CONA® S – now  
also for more  
performance



**Condensate pump systems**  
CONLIFT® – now  
also with a  
casted body



**Pump trap**  
CONA® P



**Optional components**  
e.g. CONA®  
All-in-One

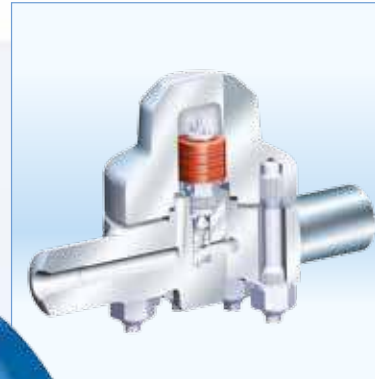


**Monitoring systems**  
e.g. CONA®-control



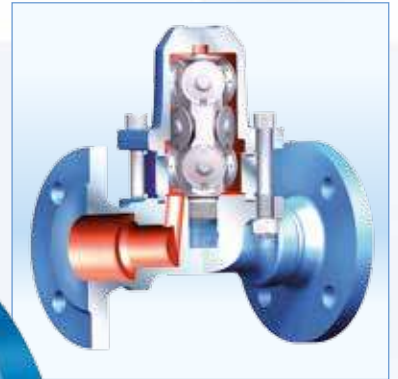
# Thermostatic

For high temperature applications

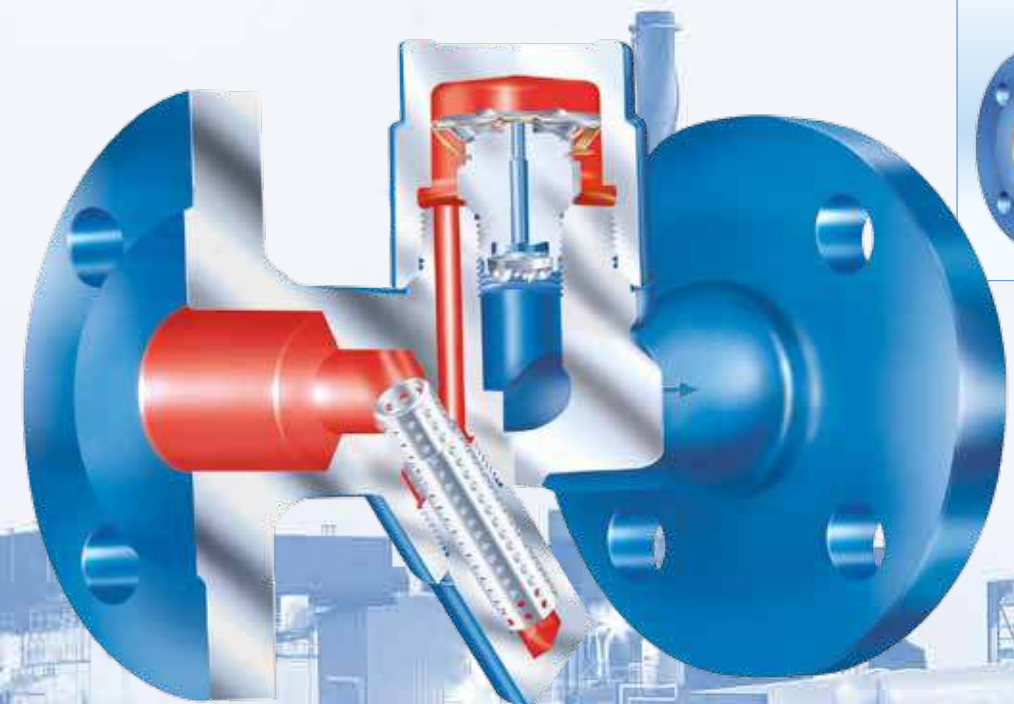
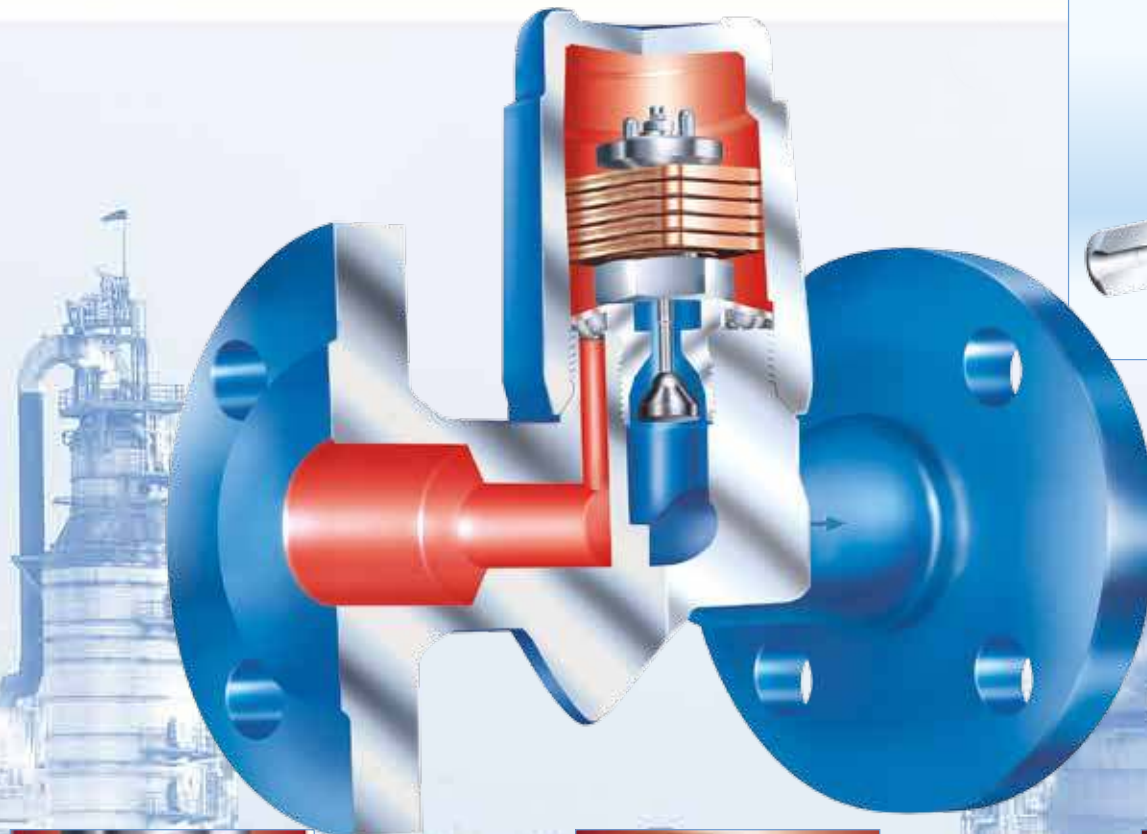


CONA® B PN 630 in 1.4901 with R320 controller for high temperature applications

For more flow



CONA® M 616 diaphragm multi-capsule thermostatic steam trap (4, 6 or 10 capsules)



Precise control characteristic and long life due to profiled bimetallic plates.



Self-aligning bearing and combination check valve for high performance and robustness!



Contamination protection for long life (integral strainer)! Optional outside strainer also available.



Highly responsive for efficient performance (using ultra-sensitive, rapid-reaction control fluid)!



Water hammer protection for long life (integral back-flow protection)!



Contamination protection for long life (integral strainer or optional outside strainer – easy to clean)!

## CONA® B Bimetallic steam trap

For condensate drainage in steam systems. Extra-high performance with precise control characteristic!

- Ideal control characteristics and high-performance precision by combining multiple profiled bimetallic plates, self-aligning bearing and combination check valve.
- High performance and long life: profiled bimetallic plates are dirt resistant and permit optimum reaction time to temperature changes.
- Metal seal for long life and economy.
- Quick-assembly housing for optimum handling (DN 15-25 and PN 40)! Seal-free.

**Design:**  
DN 15-50 // PN 16-630  
Size 1/2"-2" // ANSI Class 150-2500

**Materials:**  
Cast iron, forged steel, heat resistant steel, stainless steel, ASTM materials

**Connection types:**  
Flanges, screwed sockets, socket weld ends, butt weld ends, union with butt weld ends

## CONA® M Diaphragm capsule thermostatic steam trap

For condensate drainage in steam systems – targeted condensate sub-cooling for high energy utilisation and minimal re-evaporation (due to condensate backpressure).

- Highly responsive for efficient performance (using ultra-sensitive, rapid-reaction control fluid).
- Precision control characteristics for high performance (using sensitive control diaphragm).
- Flexibility for high performance (sub-cooling options by selecting different diaphragm capsules).

- Flexibility for high performance through diaphragm multi-capsule controller – for discharge of extremely high condensate volumes.
- User friendly thanks to quick-assembly housing – seal-free.

**Design:**  
DN 15-50 // PN 16-40  
Size 1/2"-2" // ANSI Class 150-300

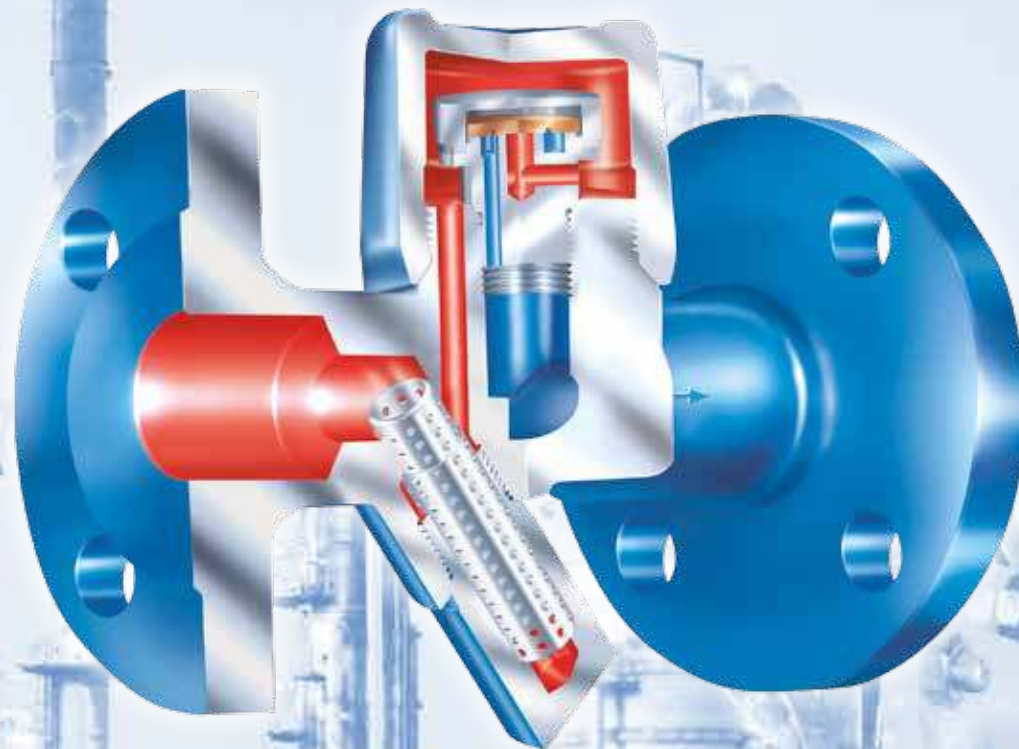
**Materials:**  
Cast iron, forged steel, heat resistant steel, stainless steel, ASTM materials

**Connection types:**  
Flanges, screwed sockets, socket weld ends, butt weld ends, union with butt weld ends, screwed male / socket



# Thermodynamic

# Mechanical



Cap with heat chamber (water shock resistant) is robust and impervious to the weather!



Integral back-flow protection for double the performance!



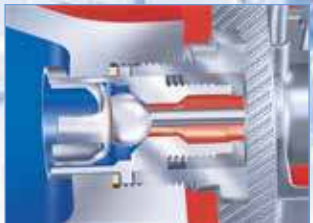
Metal seal for long life and economy! Seal-free, quick-assembly housing for optimum handling!



Double-seat version for high performance and optimised lever forces as well as integrated air venting via the diaphragm valve.



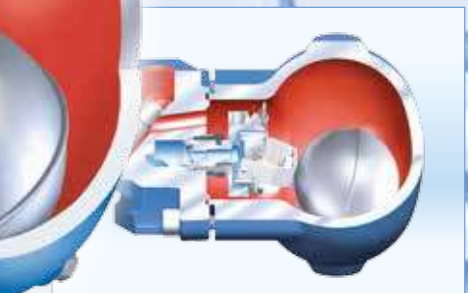
Rapid system start-up due to thermostatic control element (liquid drainage)!



Integral back-flow protection as standard for high performance and economy. Benefit for you: no need for a separate check valve in line!



Extra-high performance version for condensate volumes > 10,000 kg/h and differential pressures up to 32 bar. Robust lever and ball design



CONA® SC PN 40 with outside strainer (Y) Compact and lightweight due to the slim design

## CONA® TD Thermodynamic steam trap

Small, practical, impervious to the weather for discharge of condensate with limited sub-cooling.

- Cap with heat chamber (water shock resistant) is impervious to the weather and ensures high performance!
- Integral back-flow protection for high performance!
- User friendly: separate control cartridge and heat chamber replaceable in situ.
- Small size and weight for optimum handling. Quick assembly.
- Contamination protection for long life (integral strainer or optional outside strainer – easy to clean)!

**Design:**  
DN 15-25 // PN 40-63  
Size 3/8"-1" // ANSI Class 150-600

**Materials:**  
Forged steel, heat resistant steel, chromium steel, stainless steel, ASTM materials

**Connection types:**  
Flanges, screwed sockets, socket weld ends, butt weld ends, universal connector, system connector

## CONA® S/SC Ball float steam trap

For major fluctuations in pressure and volume – instant discharge with no temperature loss ...!  
For discharge of condensate at boiling temperature.

- High performance: Instant discharge of condensate with no temperature loss permits backpressure-free condensate removal, even with extreme fluctuations of pressure and volume.
- Integral back-flow protection as standard for high performance and economy. Benefit for you: Extremely economical because there is no need for a separate check valve in line.

- Controller with automatic air venting / liquid drainage also incorporated as standard for high performance and economy.
- Exceptionally robust ball float for long life.
- Rapid system start-up due to thermostatic control element (liquid drainage).
- Optimum handling: converts easily from vertical to horizontal installation.

**Design:**  
DN 15-100 // PN 16-160  
Size 1/2"-4" // ANSI Class 150-900

**Materials:**  
Cast iron, SG iron, cast steel, forged steel, heat resistant steel, stainless steel, ASTM materials

**Connection types:**  
Flanges, screwed sockets, socket weld ends, butt weld ends

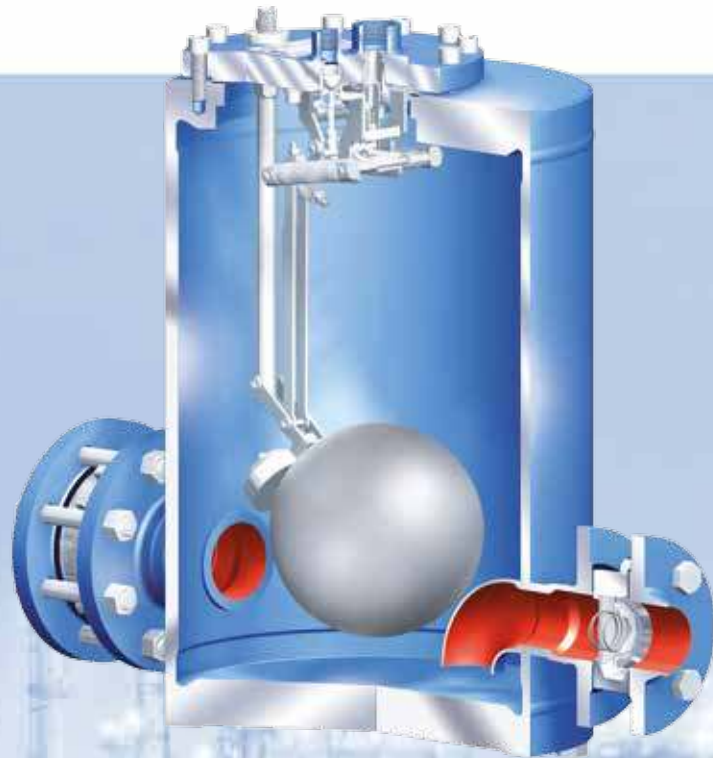


# Mechanical pump systems



**NEW**  
from ARI!

Now also with a casted body and lightweight design for higher differential pressure up to 14 bar and lower motive steam consumption!



Extended life due to double guided motive steam valve with marginal seat – for reliable closure of the motive steam pipe.



Extended life due to spring-operated air vent valve with marginal seat – for reliable closure of the vented pipe.



Low inlet into the feed pipe – to prevent steam from entering.



Steam trap mechanism has a shut-off element with a rolling ball for reliable closure of the feed pipe.



Steam trap / pump switching mechanism, valves have a marginal seat to ensure reliable closure of the vented and motive steam pipes.



High-endurance Inconel springs prevent malfunctions.

## CONLIFT®

### Mechanical condensate pump

Versatile and energy efficient – for optimal condensate collection and return.

**New from ARI –now also in stainless steel or with a casted body!**

- Economical and energy efficient because the pump is operated purely mechanically under steam or gas pressure (ideal for use in potentially explosive atmosphere).
- Condensate can be removed under *any* conditions (from vacuum to high temperatures), ensuring safety and flexibility.
- Economical through maximum energy recovery (condensates can be pumped up to boiling temperature).
- Powerful pump with a high delivery rate.
- Low filling head means greater planning flexibility.
- Cost-effective due to minimal maintenance required.

- Only *one* control unit is used for *all* nominal diameters, resulting in easy handling.
- Reliable and durable because all internals are made of corrosion-resistant stainless steel.
- More dependable than electric pumps as the flow is free from cavitation even at temperatures exceeding 95°C.

#### Fluids pumped:

Group 2 fluids with a density of 0.85-1.15 kg/dm³

#### Nominal diameter:

DN 25/25, DN 40/40, DN 50/50, DN 80/50

#### Materials:

Body: Jacket P235GH, sockets and flanges P250GH, plates P265GH, cover P265GH

Stainless steel: Body / bonnet: 1.4571

SG iron: Body / bonnet: EN-JS1049

#### Connection types:

Flange connections to DIN EN 1092-1, PN 16,

Optional: Flanges drilled to ANSI Class 150

#### Mounting position:

Horizontal flow

#### Temperature:

-10°C to +200°C

## CONA® P

### Pump trap

For continuous control of steam users without problems under negative pressure conditions (backpressure downstream of the trap  $\geq$  inlet pressure upstream of the trap).

Operates as a conventional ball float steam trap if the pressure difference is positive.

- Economical and flexible: “Two-in-One” principle unites all the functionality of a traditional float trap and a condensate pump in ONE item – ideal when space is restricted (compact design).
- Versatile: applicable for all loads.
- High performance: large displacement.
- Economical: water hammer in the system reduced to a minimum.

- Easy handling: low filling head required.
- Economical: condensate recovery from steam systems under varying operating conditions, also at part load.
- Energy efficient: self-acting without electricity.
- Easy to service: maintenance is possible without disturbing the pipework.
- Optimum handling: simple replacement of functional units as one complete entity.
- Durable: all internals made of stainless steel and wearing parts made of hardened stainless steel.

#### Fluid pumped:

Group 2 fluids with a density of 0.85-1.15 kg/dm³

**Nominal diameter:** DN 25/25, 40/40, 50/50

**Materials:** Body EN JS-1049

**Connection types:** Standard flanges acc. to DIN EN 1092-1 PN 16, optional 1 1/2" thread or flange drilled to ANSI CL150 1 1/2"



# More steam trap options and components



CONA® B  
All-in-One



CONA® M All-in-One



CONA® TD All-in-One



CONA® SC All-in-One



Bellows seal  
type on  
request

## CONA® All-in-One

**Compact condensate discharge in a multi-valving system!**

*Patented* – Integrated system comprises a steam trap, stop valve, strainer, check valve and drain valve! Up to 80% reduction in pipe connections. Now also with DIN and ANSI face-to-face dimensions!

- Economical through integrated stop valves (eliminates two stop valves) – patented design (DE 10 2006 041 132).
- Variable, modular design guarantees easy servicing: Replacement of the controller or conversion to other steam trap types without completely disturbing the pipework; replacement of integrated valves by changing the valve bonnet.
- Economical through time and cost savings because piping is reduced to a minimum (the number of pipe connections can be reduced from as many as twelve to just one or two).

- Integrated drain valve provides optimised safety.
- Manufactured from strong materials for maximum durability, robustness and resistance to water hammer.
- Multifunctional because the system features integrated non-return protection.
- Flexible in use through variable mounting position (horizontal or vertical).
- Gasket-free sealing guarantees an extended lifetime (metal seated – CONA® B/M/TD).
- Connection types: New from ARI! Now also available in DIN EN 26554 (face-to-face dimensions).
- Choice of butt weld ends / socket weld ends / screwed sockets (length acc. to company standard or as specified by customer).

**Nominal diameter:**  
DN 15, DN 20, DN 25; ½"-1"

**Nominal pressure:**  
PN 40, ANSI CI300

**Materials:**  
Forged steel, stainless steel

## CODI®

**Collector / Distributor**

Collects and distributes condensate, steam and fluids (minimal welding, reduced assembly time, rapid start-up)!

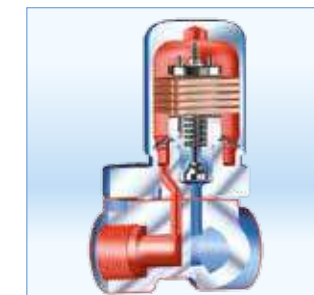
- Flexibility through design: compact, variable modular components (choose from 2, 4, 6, 8, 10, 12, 14, 16 or 18 ready-integrated stop valves! All functional parts replaceable in situ – without removing the manifold)!
- Two-fold safety due to integral stop valves with double sealing mechanism when the valve is fully open!
- Economical: optimum on-site handling and durability (forged steel and metal seal ...).
- Dual function: collector or distributor.
- Optional: manifold complete with steam traps.

- Vertical or horizontal mounting.
- Variable gap between modular components.
- Optional insulating jacket provides added plant safety and saves energy.

**Design:**  
DN 40-50 / size 1 ½"-2" (main connection),  
DN 15-25 / size ½"-1" (secondary connections)  
PN 40-63 / ANSI Class 300

**Materials:**  
Forged steel, stainless steel, ASTM materials

**Connection types:**  
Flanges, socket weld ends, butt weld ends

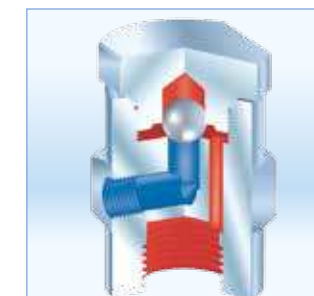


CONA® Universal  
CONA® Connector

For thermostatic, thermo-dynamic and mechanical trap functions. Optionally with integral stop function.

Benefit for you: quick and easy replacement or maintenance of steam traps – full functionality is retained.

**Optional components ensure flexibility:**



Vacuum breaker



Liquid return temperature limiter



Liquid drainer



# Monitoring systems



## Multifunction tester

**Functional testing of steam traps and valves.  
Detection of compressed air leaks.  
Machine diagnostics / ball bearing.**

Use the ultrasonic gauge with integral temperature measurement (optionally up to 800°C)...

- Reduces the failure rate in your system for increased availability and energy efficiency.
- Monitors ultrasound levels in steam traps and valves (leakage).
- Measures the surface temperature of steam traps and valves (leakage) or pipelines in order to detect temperature shifts in the system.
- Performs characteristic tests – then stores the results and transfers them to a PC.
- Allows precise operational checks through a combination of ultrasonic and surface temperature measurements (leakage).
- Steam trap survey with report and evaluation as an additional service.
- For use in hazardous areas.

## CONA® Control

**Patented test system for remote monitoring**

Steam traps are required to operate continuously. Early detection of malfunctions is therefore vital. Unlike conventional systems, CONA® Control does not measure the conductivity of the condensate but the temperature (patented).

If a predefined variable temperature range is exceeded, the system reports continuous steam leakage; a low temperature is interpreted as blockage of the steam trap. Fast, efficient, reliable – and an important energy saver.

### How CONA® Control benefits you:

- Precision: individual error messages for every single steam trap in a matter of seconds thanks to the ASI bus wiring (as well as optional networking with a higher-level bus system).

- Speed: dynamic error reporting because the steam traps are monitored individually and continuously (unnecessary energy losses are eliminated).
- Efficiency: your system works more efficiently because error messages indicate leakage or blockage of the steam trap.
- Reliability: the temperature gauge is exceptionally reliable (insensitive to deposits on the sensor, e.g. magnetite).
- Economy: prompt error reporting extends the lifetime of your system and guarantees trouble-free production processes (preventing water hammer and saving energy).
- Convenience: Optimum handling because there is no need for a separate handheld unit (a local indication is always provided) and you can define variable temperature ranges.



