New from ARI! CONLIFT[®] condensate pump - versatile, economical, energy efficient New from ARI! CONA® P pump trap











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Mechanical traps Condensate pump systems **CONLIFT®**



irom ARI

Pump trap

CONA® P



from ARI





Monitoring systems e.g. CONA®-control





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

Thermodynamic traps e.g. CONA® TD

e.g. CONA® S

Thermostatic

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



High performance and long life: profiled bimetallic plates are dirt resistant and permit optimum reaction time to temperature changes!

CONA[®] B **Bimetallic steam trap**

For condensate drainage in steam systems dirt resistant

- 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.

Self-aligning bearing and combination

check valve for high-performance precision

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

- Long life by combining self-aligning, low-friction bearing with bimetallic plates.
- Erosion deflector for long life (PN 63 to PN 630).

AUSCOL

Frost and water hammer resistant for long life.

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



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

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

CONA[®] M

Diaphragm capsule thermostatic steam trap

With the option of condensate drainage in steam systems - plus 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).



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





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

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 impervious to the weather and ensures high performance!

Integral back-flow protection for high performance!

Metal seal for long life and economy! (Quick-assembly housing for optimum handling! Seal-free!)

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 (see also CONA[®] B)
- 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

Also available as CONA® SC: Compact, lightweight, optimum handling due to slimmer design concept. DN 15-25 // PN 16-40 Size 1/2"-1" // ANSI Class 150-300

static control element (liquid drainage)!

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: no need for a separate check valve in line!

Rapid system start-up due to thermo-

Integral back-flow protection as standard for high performance and economy. Benefit for you: 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





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

CONLIFT® Mechanical condensate pump

Versatile - energy efficient - for condensate collection and return

- 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



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

- 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

Connection types:

Flange connections to DIN EN 1092-1, PN 16, DIN 2533 Optional: Flanges drilled to ANSI Class 150

Mounting position:

Horizontal flow **Temperature:**

-10°C to +200°C



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

of the vented and motive steam pipes

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. In case of higher backpressure it works automatically as a condensate pump. Prevents condensate from backing up in the heat exchanger if the pressure difference is negative.

- 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







High-endurance Inconel springs prevent malfunctions

- 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 (self-acting operating principle)
- 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
- Durable: 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[®] All-in-One

Compact condensate discharge in a multi-valving system!

Patented - The 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 face-to-face dimensions!

- Economical through integrated stop valves (eliminates two stop valves) - patented design (DE 10 2006 041 132)
- Variable, modular design guarantees extremely easy servicing due to replacement of the controller without disturbing the pipework, conversion to other steam trap types simply by dismantling the cap and controller (also without removing the steam trap from the pipework), conversion of the integrated valves by replacing 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: Materials: DN 15. DN 20. DN 25: 1/2"-1" Forged steel, stainless steel

Nominal pressure: PN 40, ANSI CI300

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



Materials:

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

Forged steel, stainless steel, ASTM materials

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



CONA® Universal **CONA®** Connector

For thermostatic, thermodynamic 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



ARImetec[®] S

Multifunction tester for steam systems.

ARImetec[®]-S is an 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:

in a matter of seconds thanks to the ASI bus wiring (as well as optional networking with a higher-level bus system)

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Precision: individual error messages for every single steam trap

- 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

ARI product diversity





(Series 448/449)



STEVI[®] Pro (Series 422/462, 470/471, 472)



Control without auxiliary power PREDU® / PREDEX® / PRESO® / TEMPTROL®

Isolation

(Series 423/463, 425/426,

440/441, 450/451)



Process valve ZETRIX®

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Butterfly valve ZIVA®



Bellows sealed valve FABA® Plus, FABA® Supra I/C



Stop valves with gland seal STOBU®

Safety



Safety valves (DIN) SAFE



Safety valves



Safety valves (API 526) ARI-REYCO™



Safety valves (ANSI) ARI-REYCO™ RL-series

Edition 10/2015 - Data subject to alteration

Steam trapping



Steam traps CONA® (mechanical ball float / thermostatic bimetallic and membrane / thermodynamic), monitoring systems CONA® Control



Manifolds CODI[®] for collecting and diverting purpose



Steam trap with multi-valving technology CONA® "All-in-One" (incl. stop valve, inside strainer, back-flow protection, drain valve)



Mechanical pump systems CONLIFT®, CONA® P



Profit from diversity made by ARI. Please don't hesitate to ask for more information!

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