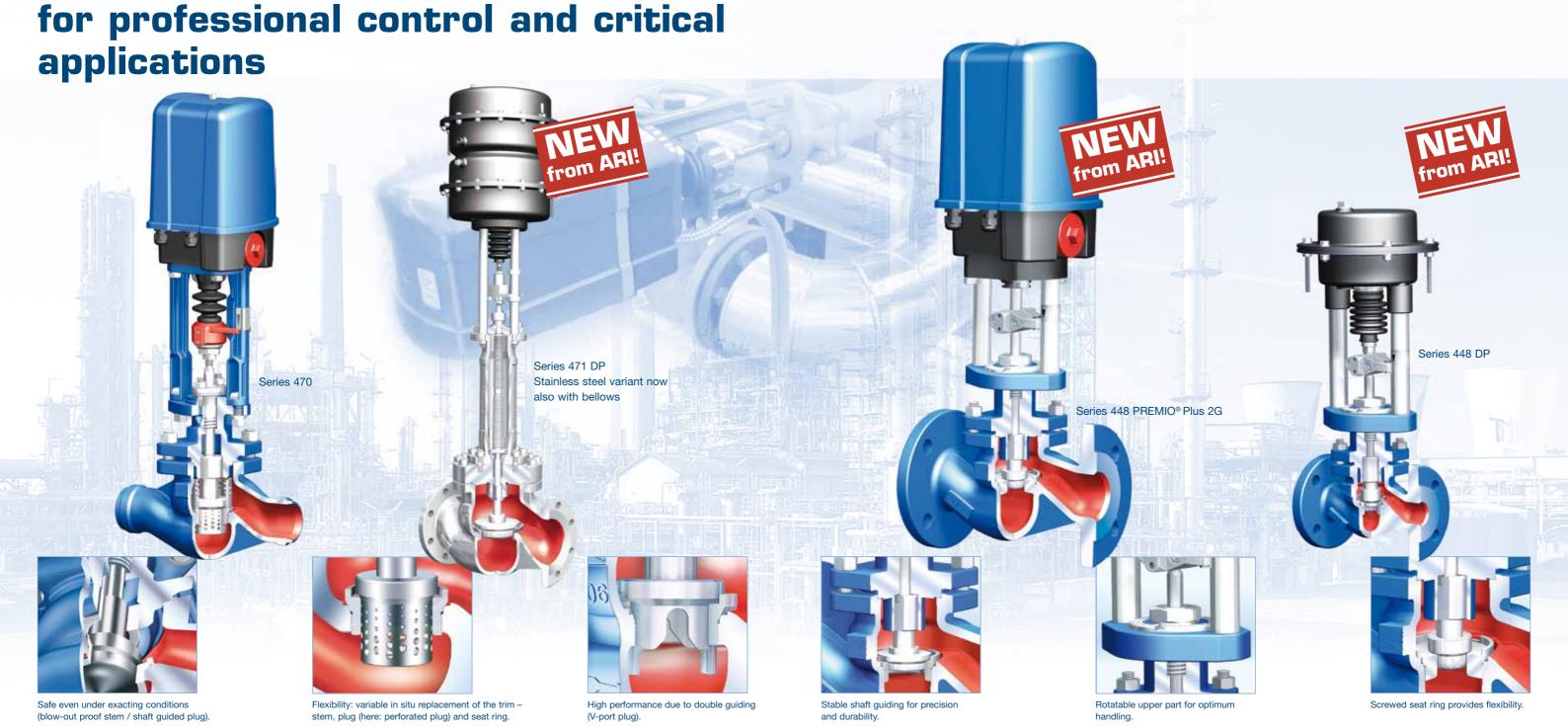


steel variant now also with bellows



The high-performance control valve

The variable, compact control valve



- Precise and high performance: optimised characteristic quality.
- Variable: up to 6(!) reducible Kvs values.
- Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM lining).
- Variable: changeable trim.
- Minimal noise: multi-stage trim (optional).
- Safe: blow-out proof stem.
- Safe: shaft guided plug.
- Safe: two-ply bellows seal (optional).
- Long life: precision stem guiding.
- Precise: even better control accuracy (optimised flow paths).

 Flexible: wide range of applications (very high differential pressures up to max. nominal pressure).

Plug design: Parabolic plug, optional V-port or perforated plug

(optional pressure balancing in both cases)

Nominal diameter: DN 15-250 / NPS 1"-8"

Nominal pressure: PN 16-40 / ANSI Class 150-300

Actuators: Electric or pneumatic

Body materials: e.g. EN-JL1040, EN-JS1049, 1.0619+N,

SA216WCB, 1.4581

Flow media: e.g. hot water, steam, gas, refrigerant, brine, etc.

- Long life: stem seals already proven millions of times over, service life now further extended (PTFE V-ring sealing units and EPDM linings).
- Optimum handling: upper part can be rotated 360°.
- Flexible: changeable, variable trim (at least 4 Kvs values as well as multiple flow characteristics and plug designs).
- Precise and durable: vibration is prevented even at high differential pressures (stable shaft guiding).
- Easy handling: small footprint and reduced weight (low height).
- Economical: very low air consumption (smaller pneumatic actuators on request).

Plug design: Parabolic plug / perforated plug

Nominal diameter: DN 15-100 Nominal pressure: PN 16-40 Actuators: Electric or pneumatic

Body materials: e.g. EN-JL1040, EN-JS1049, 1.0619+N,

1.4408

Flow media: e.g. brine, warm water, hot water, refrigerant, steam, gas, etc.

mixing / diverting

Precision









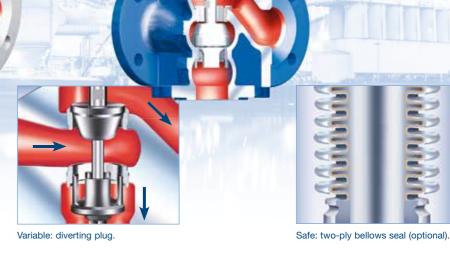
Stem seal options for flexibility (here: PTFE V-ring units).











Series 451

■ 50:1 rangeability for precision and high performance (inherent rangeability 40:1).

■ Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM lining).

- Long life: precision stem guiding.
- Safe: two-ply bellows seal (optional).

Plug design: Parabolic plug, optional V-port plug

(optional pressure balancing in both cases from DN 65) / equalpercentage or linear characteristic

Series 441

Nominal diameter: DN 15-500 Nominal pressure: PN 16-40 **Actuators:** Electric or pneumatic

Body materials: e.g. EN-JL1040, EN-JS1049, 1.0619+N,

Flow media: e.g. cooling water, brine, warm water, hot water, steam, gas, refrigerant, heat transfer oil, etc.

- 30:1 rangeability for precision and high performance.
- Variable: reducible Kvs values.

Variable: mixing plug.

- Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM linings).
- Variable and economical: two screwed seat rings (optional).
- Long life: stable plug guidance.
- Long life: precision stem guiding.
- Safe: two-ply bellows seal (optional).

Plug design: Mixing plug / diverting plug

Nominal diameter: DN 15-300 Nominal pressure: PN 16-40 **Actuators:** Electric or pneumatic

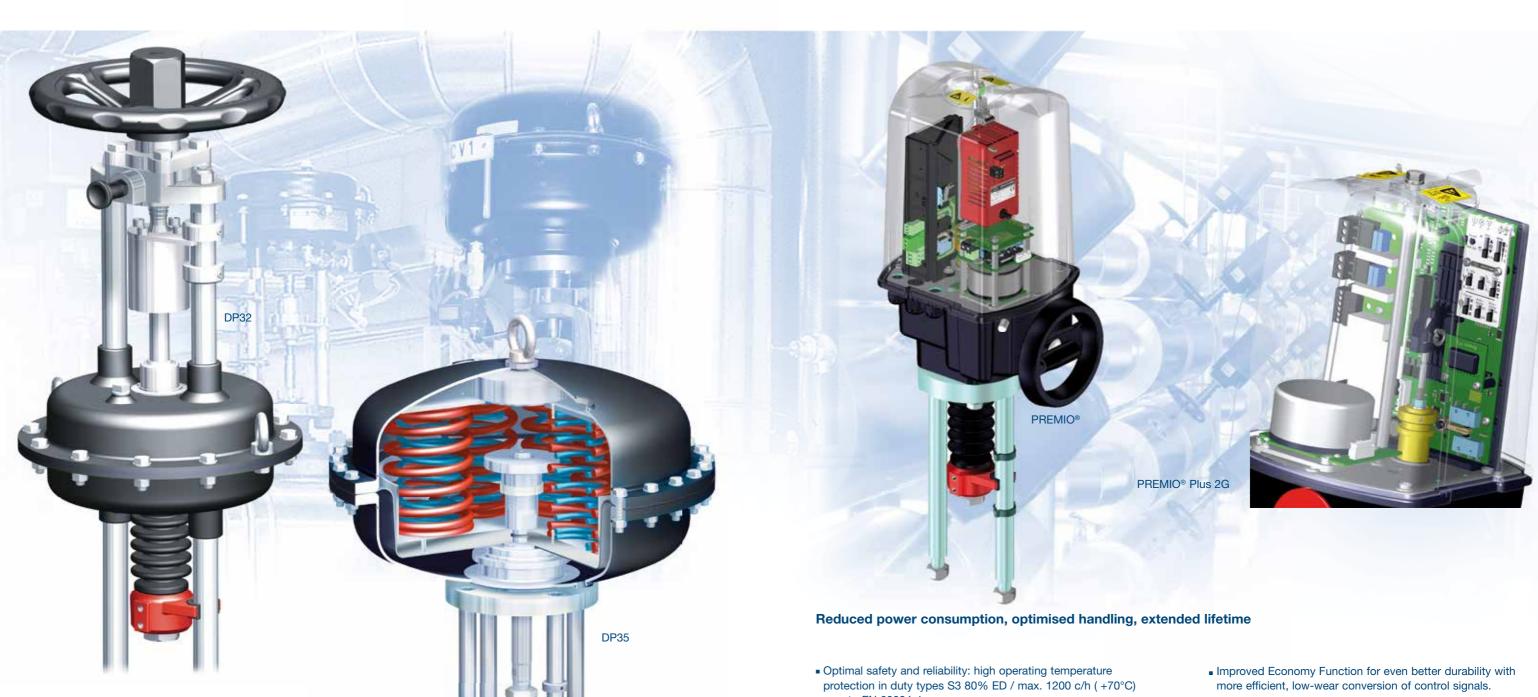
Body materials: e.g. EN-JL1040, EN-JS1049, 1.0619+N,

Flow media: Cooling water, brine, warm water, hot water, refrigerant, heat transfer oil, etc.



ARI-DP pneumatic actuators

ARI-PREMIO® and PREMIO® Plus 2G electric actuators



- High performance: broad spring rangeability (higher closing forces).
- Practical: reversible operating direction.
- Economical: favourable size / performance ratio.
- Variable: wide range of accessories (positioners, solenoid valves, limit switches, etc.).
- Sizes up to 2800 cm² diaphragm area (DP 35).
- Durable even in aggressive environments: corrosion-resistant
- Added safety through manual override (optional).

Nominal diameter: Diaphragm area 80-2800 cm²

Actuating force: 490-83,000 N

Max. permitted air supply pressure: 6 bar

Operating modes: Spring closes / air supply pressure closes

body seat

- acc. to EN 60034-1.
- High performance: optimised gear transmission and improved load cut-off.
- BLDC motor: significantly reduced power consumption, exceptionally smooth and quiet running due to circular rotating field, high duty classification (ED) even at high actuating forces because self-heating of the motor is restricted to a minimum.
- Variable control speeds.

Added value with PREMIO®-Plus 2G:

- Self-initialisation feature.
- User friendly operator panel.
- Positioner: Freely selectable analogue control signal (0 to 10 V or 4 to 20 mA).

- Variable speed control for extended gear lifetime.
- High durability and precision because small positional deviations are approached at low speed.
- Optional: Version with fail-safe function.

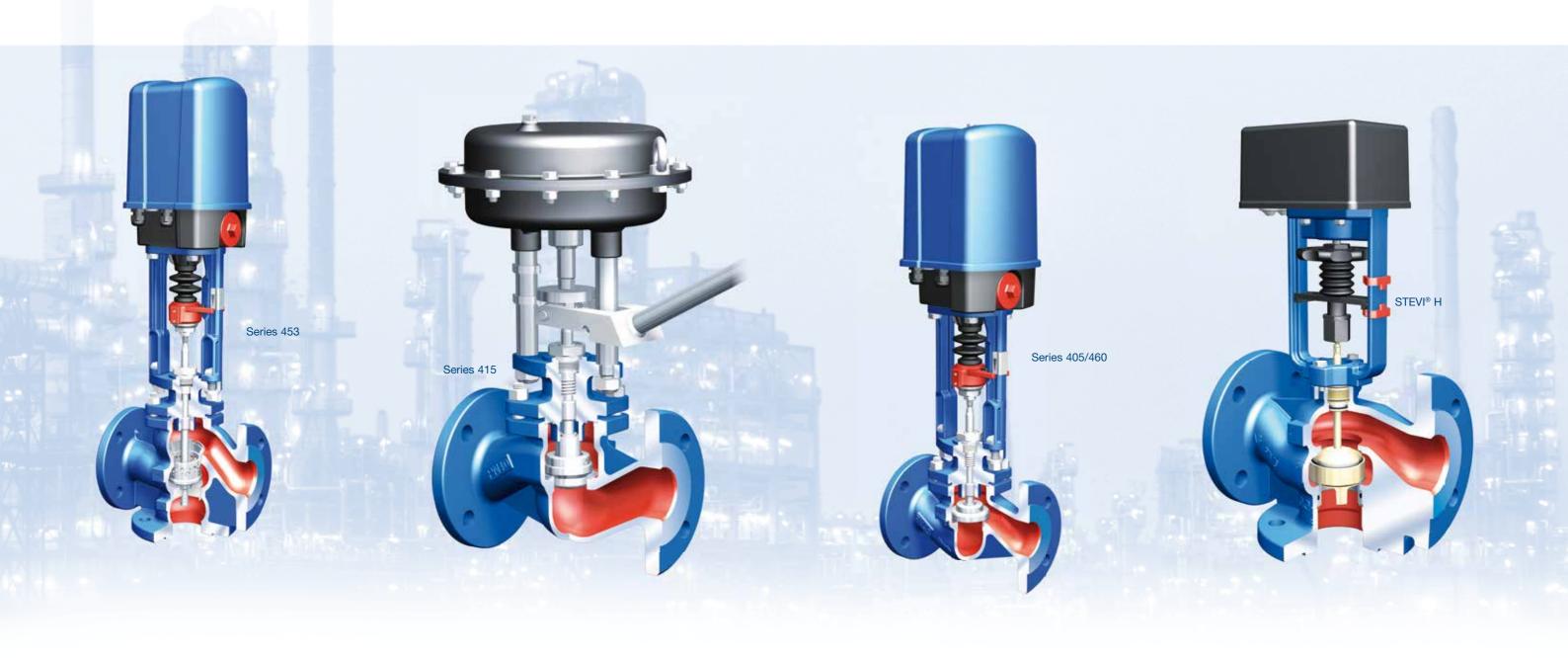
Actuating force: 2.2 kN, 5 kN, 12 kN, 15 kN, 25kN Permissible ambient temperature: -20°C to +70°C

Compatible with a wide voltage range (AC from 90 to 264 V /47 to 63 Hz, wide voltage range (DC from 137 to 370 V or 24 V AC/DC).

Other actuators available on request!



"Even more STEVI® diversity..."



STEVI® 453

Feedwater control valve with integrated pump spill-back

- Permanently reliable because the pump is protected (guaranteed supply of feedwater – integrated pump spill-back).
- Variable: Kvs values adapted to the quantities required.
- Long life: trim optimised for critical operating conditions.

Applications: Boiler construction / plant manufacturing

STEVI® 415

Automatic blow-down valve – e.g. for steam boilers or autoclaves

- Optimum handling: compact design.
- Flexible: accessories adapted to the blow-down process (e.g. limit switches, solenoid valve, time delay relays, etc.).
- Optional: operation by means of a separate lever (for quick and easy manual control).

Applications: Boiler construction

STEVI® 405/460

Automatic stop valve (with electric or pneumatic actuator)

- Long life: precision stem guiding.
- Safe: two-ply bellows seal (optional).
- Variable: stem seal options (PTFE V-ring unit, PTFE packing, graphite packing, stainless steel bellows seal, EPDM linings).

Applications: Industry, chemicals, shipbuilding

STEVI® H

Lightweight, compact valve

- Precise: optimised control accuracy even at low flow rates (rangeability 30:1).
- Economical: maintenance-free, frictionless EPDM lining.
- Variable: available with cast iron flanges or red brass sockets.
- Flexible: intelligent PACO® electric actuators.

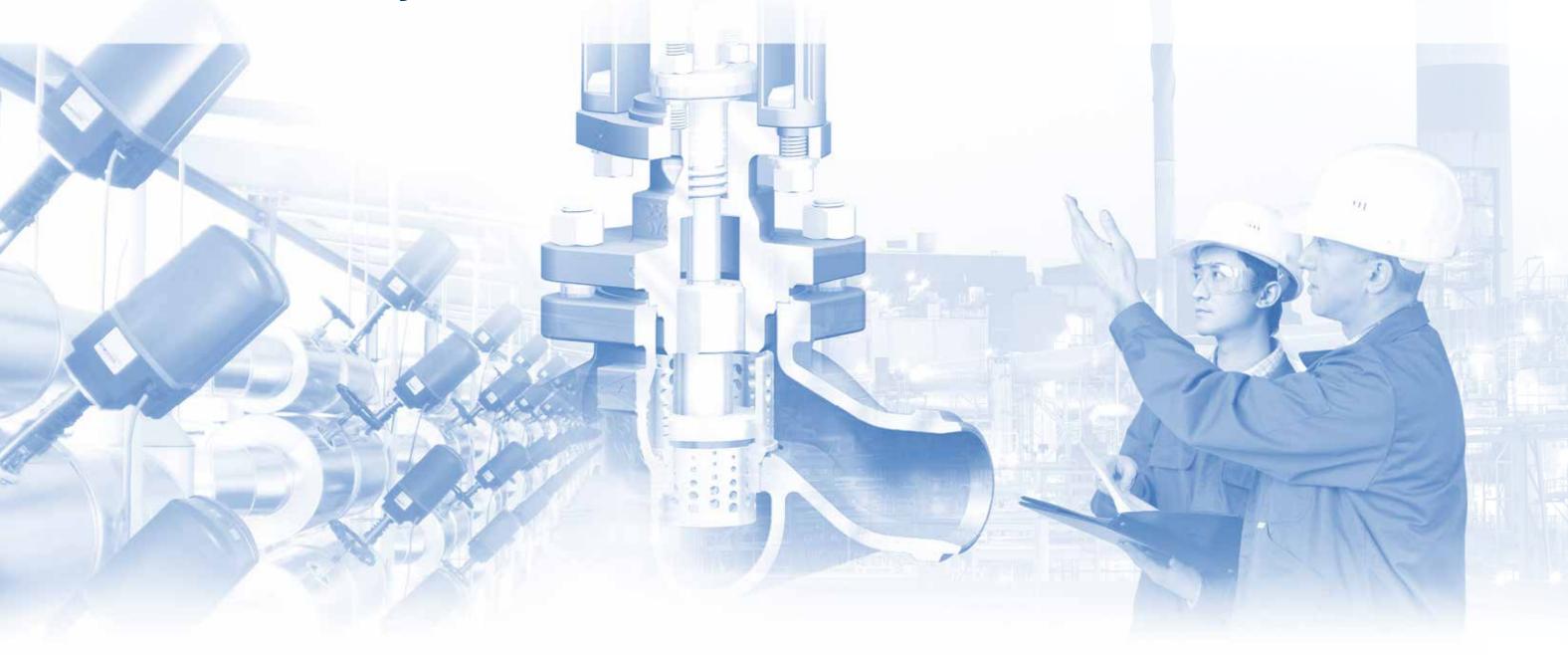
Applications: HVAC and industry (for low differential pressures and low flow velocities)

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Reliable, precise, individual for more than 40 years...



... Control valve technologies for control and mixing / diverting

- More than forty years experience in the development and sale of advanced control valve technologies.
- Your strong service partner with 13 branches and sales partners in more than 60 countries worldwide.
- A sharp focus on our customers, competent advice and short delivery times.
- All ARI products are developed in keeping with the very latest design standards, tested under the most rigorous conditions on our in-house experimental facilities, manufactured with the highest possible precision and subjected to continuous in-process quality controls.
- Comprehensive design know-how, for example through ARI-myValve®, our user-friendly sizing software.
- ARI products are manufactured at three different locations all of them in Germany. Benefit for you: quality "Made in Germany" – certified acc. to DIN ISO 9001. Numerous product approvals, e.g. Det Norske Veritas and Lloyd's Register Quality Assurance.
- High degree of vertical integration for flexibility, speed and professionalism.
- What sets us apart: all valves AND all electric and pneumatic actuators are developed and manufactured in-house.

We make it as simple as possible for you to order – by recommending valve-actuator combinations tailored to your individual needs.

If you too would like to profit from ARI's extensive know-how and experience, just give us a call. You are also welcome to visit one of our regular training events in Germany or abroad!

Expert control made by ARI – profit from a wide array of services and a strong partnership!

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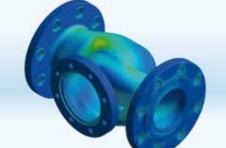


Modern development methods, tested in our own experimental lab

High-precision manufacturing

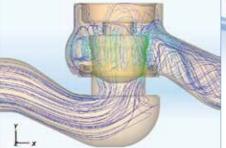


ARI's own test bench.



Finite element analysis

The finite element analysis (FEA) is a numerical calculation technique that is used to simulate stresses and their distribution. The aim is to achieve the required strength at pressure load levels in combination with an optimal weight and a flow friendly shape.



State-of-the-art flow simulations

The twofold objective of uniform flow and high flow capacity is realised with the aid of special flow software. The software simulations enable the flow velocity, flow direction and pressure distribution to be visualised. Due to the optimised geometry, turbulences and pressure loss are reduced to a minimum.



Optimum handling: easy start-up of the PREMIO® / PREMIO® PLUS 2G.

Modern technologies

are the key to optimal safety and reliability.

Our products are manufactured at three different locations – all of them in Germany – promptly and according to rigorous quality criteria.

High performance machining centres, automated assembly cells, programmable assembly robots and a highly qualified team of staff are vital prerequisites of top-quality product solutions specially tailored to your individual requirements.

The benefit for you: Optimal reliability and efficiency.

Your strong partner - in more than 60 countries worldwide

ARMATUREN

For control – isolation – safety – steam trapping – system engineering.



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unlimited possibilities depending on your application, with

solutions specially tailored to your individual requirements.

exchangers, condensate return systems and condensate

pumps - your key to maximum flexibility and efficiency.

Control valves, pressure reducing valves, pressure regulators,

temperature controllers without auxiliary power, butterfly valves, globe valves, safety valves, steam traps, measuring technologies and accessories such as pressure reducing stations, heat

like Det Norske Veritas, Lloyd's Register Quality Assurance,

the Russian Maritime Register of Shipping, TR CU (EAC),

Rostechnadzor (Russia) and many more.

and guaranteed safety.

German Lloyd, SELO (China), CCS (China), the Korean Register,

Quality made by ARI - your key to reliability, durability

Control

Control valve STEVI® Pro (Series 422/462, 470/471)



STEVI® Vario (Series 448/449)



STEVI® Smart (Series 423/463, 425/426, 440/441, 450/451)



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

Isolation



Process valve ZETRIX®



Butterfly valve ZIVA®



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



Stop valves with gland seal STOBU®

Safety



Safety valves (DIN/EN) SAFE



Safety valves (DIN/EN) SAFE TCP



Safety valves (API 526, ASME) ARI-REYCO™



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

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