



HP/IP steam conditioning valve Flow-to-close design

Model 115

Steam pressure and temperature control valves that provide greater reliability and flexibility under extreme conditions.

Features

- Pressure reduction by multi-stage cage controlled expansion
- Atomizing steam desuperheater, providing short evaporation length and protection of downstream piping against thermal shock
- Subsequent adjustment to changed operational conditions possible due to easily exchangeable trim and seat
- Spring-loaded packing for long term leak tightness
- Pressure seal bonnet
- Optional: Pre-warming and condensate drain studs
- Pressure balanced trim with pilot plug and cup springs (option)

Applications

HP, IP or Hot Reheater (HRH) turbine bypass and steam conditioning in process applications.



LP steam conditioning valve Flow-to-close design

Model 111

Steam pressure and temperature control valves for medium and lowpressure conditions. They integrate atomizing steam nozzle to cool superheated steam at low pressures.

Features

- No mechanical wear parts in water injection nozzle providing long lifetime and low maintenance
- Generous straight through globe body for low pressure losses
- Atomizing steam nozzle
- Order-specific optimization of trim flow areas and desuperheater
- Leakage class FCI 70-2: up to V
- Optional safety function: in close direction

Applications

IP or Hot Reheater (HRH) turbine bypass, turbine start-up and steam conditioning in process applications.

HP/IP steam conditioning valve Flow-to-open design

Model 315

Steam pressure and temperature control valves for extreme and medium pressure conditions. They can integrate safety function.

Features

- Safety functions (option)
- Body, optimized against stress
- Continuous operation possible
- Excellent low load behavior
- Multi-stage trim
- Low noise and no vibration
- Internal atomizing steam extraction
- No thermal shock
- Short evaporation length

Applications

HP, IP or Hot Reheater (HRH) turbine bypass, HP turbine bypass with safety function and steam conditioning in process applications.



Severe Service Control Valves





HP steam conditioning valve Flow-to-open design Model 302

Steam pressure and temperature control valves for extreme pressure conditions. They protect the cold reheat system, in particular the reheater and condenser in case of a turbine trip event.

Features

- Water injection into the turbulence zone
- Short evaporation length
- Even temperature distribution
- No thermal pipe shock and erosion optimized seat injection
- Optional pre-warming and condensate drain studs
- Body optimized against stress

Applications

HP, IP or Hot Reheater (HRH) turbine bypass, HP turbine bypass with safety function and steam conditioning in process applications.



Hydraulically operated safety valve Model VSH with STE6 Control Unit

A hydraulically operated safety valve designed to protect the super-heater and re-heater in a power station.

Features

- Safety function can be combined with control function
- High closing forces provide seat tightness up to set pressure
- Accurate adjustment of opening and closing pressures
- Reseating pressure widely adjustable
- Accurate and reliable operation at set pressure
- Valve function independent of any pressure losses in connected pipes
- High back pressure by silencer possible
- Opening of the safety valve possible from 0 bar system pressure
- Control function can be tested without opening of the safety valve
- One control unit can operate more than one safety valve

Applications

Protection of the super-heater and re-heater in a power station. Ideally suitable for sliding pressure plant operation.



HP steam reducing valve Angle design Model 155

Steam reducing valves controlled by multistage trims ensure high wear resistance even in extreme working conditions. The optimum-staged CV-values and a large turn-down ratio allow accurate adjustment.

Features

- Forged body with angle design
- Low-noise and low-vibration design through tailor-made multi-stage pressure reduction
- Trim can be changed for amended operational conditions
- Pressure seal bonnet
- Low maintenance gland, packing pure graphite (can be retightened)
- Hardfaced guidings and sealing surfaces
- Pressure balanced plug
- Pre-warming and drain studs
- Resistant to standard pickling process

Applications

IP or Hot Reheater (HRH) turbine bypass, turbine start-up and steam conditioning in process applications.



IP/LP steam reducing valve Straight through design Model 151C

A globe valve designed to control pressure, temperature, level and flow. Suitable for a medium pressure range it is ideal to control non-aggressive liquids.

Features

- Cast body
- Valve can be easily disassembled
- Exchangeable seat

- Low maintenance gland, packing pure graphite
- PTFE-collar up to 250°C (480°F)
- Burnished valve stem for low friction.
- Spacious body helps in difficult operating conditions
- Custom designs available

Applications

Steam applications in boiler and turbine areas, as well as associated auxiliary systems.



Severe service feedwater valve
Models 145 and 146

High pressure drop control valves for severe water applications with various trims for flashing and cavitation conditions or continuous control.

Features

- Forged body with angle or Z-type design
- Low-noise and low-vibration design through tailor-made multi-stage pressure reduction
- Suitable for flashing conditions
- Cavitation resistant
- Easily exchangeable trim, seat and jacket
- Different plug types available
- Minimized wear and tear through, separation of sealing and control
- Live loading packing/ safety packing (option)

Applications

Main feedwater control, level control, boiler circulation control and water separator drain control.



Water control / isolation valve
Straight through design
Model 141

Water control and isolation globe valve for low to high pressure lines, made from cast and forged material.

Features

- Valve can be easily disassembled
- Exchangeable seat
- Safety or live-loading packing for long term leak tightness (option)
- Spacious body for difficult operating conditions

Applications

Minimum flow control, feedwater control, level control, injection control and water shut-off



Combined water control and isolation valve. Angle design
Model 142

Specially designed low-maintenance, high pressure control valves with narrowly scaled Cv values.

Features

- Forged body with angle design
- Low-noise and low-vibration design through tailor-made multi-stage pressure reduction
- Separated control and sealing edge
- Easily changeable trims and seats
- Different plug types available
- Suitable for continuous operation
- Minimized wear and tear through separation of sealing and control area
- Resistant to standard pickling process
- Live loading packing / safety packing
- Actuator: hydraulic, pneumatic, electric

Applications

High pressure applications, desuperheater water injection at HP/IP turbine bypass. Feedwater start-up, feedwater pump control and boiler drum blow down.



HP Drain valve
Model 179/172

Globe valve with heavy duty trim and flow patch for steam and water turbine drain applications.

Features

- Forged body with angle design
- Stellite seat
- Guided disc
- Dust-tight enclosure of actuator head

- Position indicator
- Small driving forces
- Continuous blow down
- Easy to maintain
- 1 or 3 pressure stage(s)

Applications

Turbine start-up, turbine drainage and boiler drainage.