VALVTECHNOLOGIES®

ERV - Electronic Relief Valves

Electronic Relief Valves.

Protection of conventional and nuclear main steam safety relief systems

ERV

Quality and dependability - guaranteed

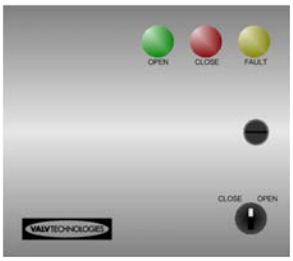
ValvTechnologies' ERV fulfills the need for a zero-leakage, pilot-operated relief valve. The ERV package combines ValvTechnologies' zero-leakage isolation valve with electronic controls to monitor and regulate system pressure. Whether in a capacity relieving function requiring the ASME V-Stamp or simply an overpressure protection application, the ERV provides reliable protection for standard safety valves in many industries.

- 1/2 – 12"
- ANSI/ASME Class 150 - 4500
- ANSI/ASME Section I Capacity Certified
- Integral isolation valve available
- Easily adapted to existing controls
- Four-year, zero-leakage guarantee
- Repeatable tight shut-off
- Accurate to 1/10% of 1 psi
- High precision reliability
- Low maintenance requirements
- Accurate blow downs = major cost savings
- Seat out of flow path when open
- Easily adapted to existing controls
- Various standard control packages
- Integral isolation valves available

ERV Control Box

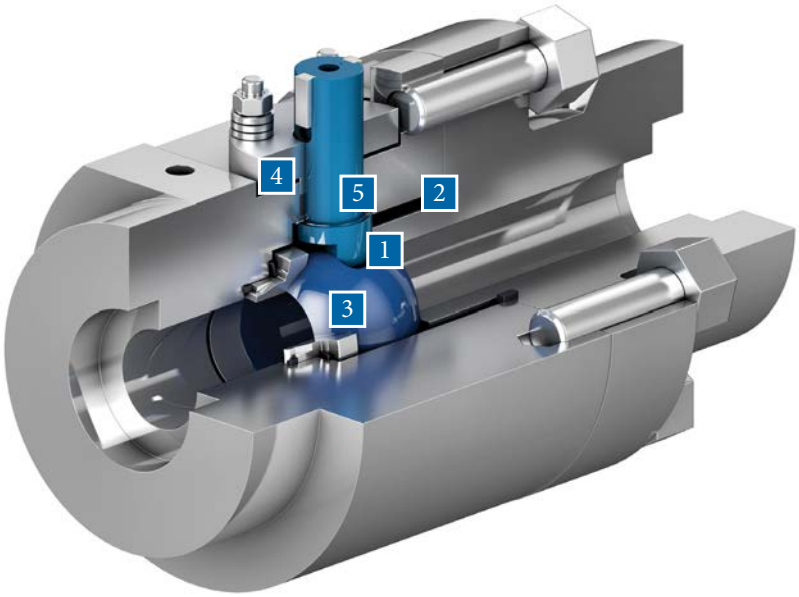
Control box for ValvTechnologies' ERV

ValvTechnologies' ERV control box delivers reliable automation in light-weight, compact packages, optimizing overall productivity in the distribution of power to flow control devices. With state-of-the-art improvements, the new ERV control boxes integrates better environmental performance, simplified wiring and control, set point programmability and fault indication.



- Enclosure: NEMA 4X, stainless steel
- Auto/manual function: Automatic + DCS auto
- DCS function: Dry contact
- Fault indication: Yellow LED
- Pressure transmitter: 4-20mA
- Calibrated by PLC interface

Technology



ValvTechnologies' design features are the implementation of extensive industry experience.

1 Integral metal seat.

With our patented HVOF RiTech® coating technology, the integral seat in ValvTechnologies' valves is resistant to the attack of abrasive magnetite and ferrous oxides that may be seen in the steam flow.

2 Body seal ring.

ValvTechnologies employs a field proven seal ring technology to ensure sealing under all operating conditions, up to 1400°F. The body seal ring is loaded at a pressure higher than 20,000 psi. In addition, valves sized 3" and above contain a secondary Grafoil® seal to further guarantee reliability.

3 Patented coating process.

The sealing surfaces are overlaid with tungsten or chromium carbide using our HVOF RiTech® coating process. These surfaces have a hardness of 68 - 72 Rc to provide uninterrupted operation in the most severe conditions.

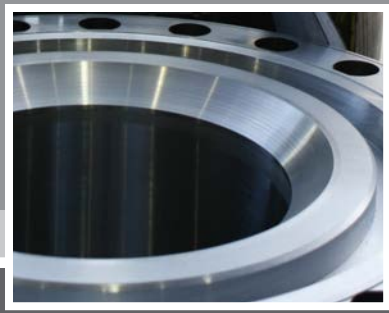
4 Live-loaded gland area.

The V Series' sealing design features a four stud, live-loaded assembly designed for heavy industrial applications. The sealing material is high purity Grafoil® surrounded by stainless steel wire mesh anti-extrusion rings. The six Belleville® springs (per stud) provide constant load pressure through extreme thermal shocks and prevent wear leaks in high-cycle service.

5 Blow-out proof stem.

ValvTechnologies' design utilizes a one-piece, hard-coated, blow-out proof stem that is inserted through the inside of the body cavity eliminating the possibility of blow-out through the gland area. There are no pins, collars or other devices used to retain the stem in the valve body.

Electronic Relief Valves.



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