Relief Valves

RVHS Series Relief Valves

BuTech relief valves feature a repeatable pressure release design and set the standard for safety in high-pressure applications, where maximum safety and reliability are critical. The cost saving design minimizes the need for frequent recalibration, resulting in reduced maintenance and downtime. Set at the factory based on customer requirements, precalibrated, tagged and locked in.

Applications

Engineered to provide reliable, repeatable venting of gases or liquids in pressure gas systems, cryogenic systems and petrochemical applications where flow is not important.

General Specifications

- Pressure range from 1,500 psig (103 bar) to 20,000 psig (1378 bar)
- Standard temperature range is -148°F (-100°C) to 400°F (204°C)
- Set at the factory based on customer requirements, precalibrated, tagged and locked in

Features

- CE/PED certified (CAT I, II)
- Designed to EN ISO 4126-1 standard
- Proportionally actuated
- Constructed of 316 SS, Nitronic 60 and 17-7 spring as standard
- Alternative spring material: 316SS, Inconel 718

Benefits

- Lower whole-life cost
- Repeatable release minimizes need for frequent re calibration
- Optimized outlet flow for faster relieving

BuTech relief valves are CE certified, falling within categories I and II of Directive 97/23/EC, known as Pressure Equipment Directive (PED), except steam.

Capable of handling air, gases, steam, vapor and liquids, the valves are not fire rated and not suitable for steam boiler applications. Valves are not ASME code stamped safety devices. Standard model not suitable for sea water, hydrogen and oxygen service. Consult factory for alternative material.

| | Variant | Repeatability | Life | Corrosion resistance | CE Mark | Seawater or Hydrogen | | | |
|--|---------------|---------------|------|----------------------|---------|----------------------|--|--|--|
| | Standard 17-7 | ~~~ | ~~~ | ~ | ~ | - | | | |
| | 316SS | ~ | ~~ | ~ ~ ~ ~ | - | <pre></pre> | | | |
| | Inconel 718 | ~ ~ ~ ~ | 111 | ~ ~ ~ ~ | - | - | | | |

Spring variants performance specifications:

344 BAR





Available Models

| Catalog | Connection Size & Type | | Orifice Diameter | Pressure Rating psi (bar @100° (38°C) | | | |
|---------|------------------------|----------------------|------------------|---------------------------------------|--------------------|--------------------------|--|
| Number | Inlet Connection | Outlet Connection | Inches (mm) | Minimum Setting | Maximum Setting | Maximum Back Pressure | |
| 5RVHS | 9/16" M/P | 34" FNPT | 0.312 (7.92) | 1,500 (103.42) | 5,000 (344.73) | 500 (34.47) | |
| 10RVHS | 9/16" M/P | 34" FNPT | 0.250 (6.35) | 5,000 (344.73) | 10,000 (689.46) | 500 (34.47) | |
| 15RVHS | 9/16" M/P | 34" FNPT | 0.188 (4.78) | 10,000 (689.46) | 15,000 (1034.20) | 500 (34.47) | |
| 20RVHS | 9/16" M/P | 34" FNPT | 0.156 (3.96) | 15,000 (1034.20) | 20,000 (1378.93) | 500 (34.47) | |

Flow Curves



Dimensions





BuTec



