500 Series

Adjustable Popoff & Inline Relief Valves 0.5 to 150 psig (10 bar)



Features

Popoff or inline valves
Adjustable crack pressure
Zero leakage
Optional factory preset
Accurate set pressure
Wide range of cracking pressure
Tamper-proof adjustment
100% seat leakage tested
PED certifications and CE marking available for most models

Applications

- System overpressure protection
- Storage tanks
- · Freon® recovery systems
- Medical equipment
- · Refrigeration & heating equipment
- Measuring & dispensing pumps
- Communications equipment
- · Process control instruments
- · R & D pilot plants
- Vacuum pump safety

Technical Data

Body Construction Materials	Aluminum, brass, 303 or 316 stainless steel
O-ring Materials	Buna N, ethylene propylene, neoprene, silicone, PTFE, or Viton®
Spring Materials	302 stainless steel or 17-7 PH stainless steel
Operating Pressure	Vacuum to 200 psig (14 bar)
Inline Valve Proof Pressure	400 psig (28 bar)
Inline Valve Burst Pressure	Above 500 psig (34 bar)
Temperature Range	-320° F to +400° F (-196° C to +204° F) Based on o-ring & body material, see "How to Order"
Connection Sizes	% inch to 1¼ inch

Note: Proper filtration is recommended to prevent damage to sealing surfaces.

How it Works



Closed

Resilient seal design prevents leakage. Sealing efficiency increase with increased pressure up to cracking pressure. Metal-tometal poppet stop supports spring load, prevents sticking.



Open

When system pressure overcomes spring force, poppet opens. As pressure continues to rise, variable orifice between poppet and body increases, allowing greater flow.

Reseating

Resilient seal automatically establishes line of contact with spherical seat. Seal provides zero leakage at reseat.

Circle Seal Controls

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