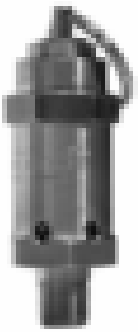
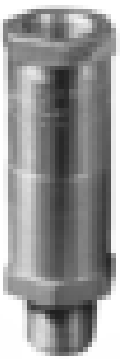
CIRCLE SEAL CONTROLS

5100 Series

Inline Relief Valves
10 to 2400 psig (0.7 – 165 bar)





Features

- Zero leakage up to 95% of cracking pressure
- Positive reseat at high percentage of cracking pressure
- Accurate set pressure
- Wide range of cracking pressure
- Tamper-proof adjustment
- PED certifications and CE marking available for most models

Technical Data

Body Construction Materials	Brass, steel, 303 or 316 stainless steel
O-ring Materials	Buna-N, ethylene propylene, neoprene, FKM, and Viton®
Spring Material	17-7 PH stainless steel
Operating Pressure	4 to 2400 psig (165 bar)
Flow Pressure	3000 psig (206 bar)
Burst Pressure	Over 5000 psig (345 bar)
Temperature Range	-320° F to +450° F (-196° C to +232° C) Based on O-ring material; see "How to Order"
Connection Size	¼" to ½"

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

How It Works

Closed
The spring load is controlled a metal-to-metal stop. The O-ring provides a leak-tight seal. Sealing efficiency increases as the pressure increases up to the cracking pressure.

Cracking
The piston is pushed open fully and often more rapid to reseat in the pressure. The flow is directed between the poppet shoulder and the seat, which provides regularly increasing flow area with increasing flow rates.

Open
The inline construction and full flow port permit maximum flow with minimum increase in the system pressure.

relief valves

Circle Seal Controls
2301 Wardlow Circle • Corona, CA 92880
Phone (951) 270-6200 • Fax (951) 270-6201
www.circlesealcontrols.com