

Relief Valves



Valcor Engineering Corporation

DESCRIPTION

Relief valves are designed to protect sensitive pneumatic and hydraulic systems from over pressurization by relieving the excess pressure in the system. They open (crack) at the desired pressure, and close (reseat) at a lower system pressure. Adjustable and preset cracking pressures, with customizable crack to reseal pressure ranges are available, along with an extensive range of pressure and flow capacities. Optional outlet porting includes captured-vent or vent to atmosphere construction (non-propulsive venting).

APPLICATION

Relief valves are used in aircraft cabin and potable water system pressurization systems, canopy seal pressure control, and emergency landing gear systems. Relief valves are often used downstream of pressure regulators to protect the system from a regulator malfunction.

FEATURES

- Maximum Operating Pressure: Up to 3300 PSI
- Leak Rate: Internal is less than 6.0 cc/hr; External is 0 cc/min at 3000 PSIG
- Temperature: -65°F to 165°F
- Low weight, typically < 1 lb.
- Adjustable cracking pressure available
- Ported and manifold mount connections available
- Extensive configurable body and seal material combinations
- Fully customizable for your application



Contact us today to see how we can help on your next project.

Valcor Engineering Corporation
2 Lawrence Road | Springfield, NJ 07081
(973) 467-8400 | aircraft@valcor.com
www.valcor.com

Valcor specializes in custom designs. Below are just a few examples of solutions we have created in the past for our customers.

Examples	Operating Fluid	Cracking Pressure	Reseat Pressure	Flow Rate	Weight (lb)	Body Material
V3500-61-W	Hydraulic Oil	3800-3916 PSIA	3742 PSIA	40 cc/min.	0.23	CRES 303
V3500-89-W	Air/GN ₂	3250-3350 PSIG		0.024" ESEO	0.22	Aluminum
V3500-154-W	Turbine Oil and Air	18-20 PSID		0.276" ESEO	0.82	Nitronic 60
841031-2-1-W	GN ₂	3450-3750 PSI		0.024" ESEO	0.16	Aluminum
V3500-1300-3-W	GN ₂ , Air	2755-3045 PSIG	2625 PSIG	0.055" ESEO	1.0	Aluminum