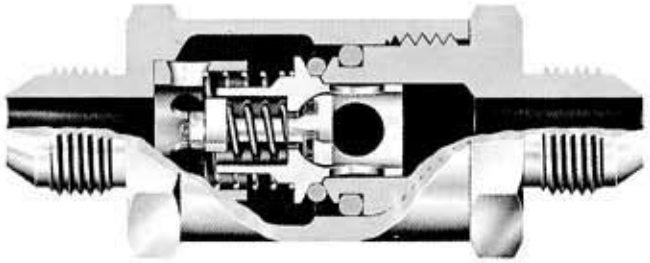
Wherever perfect sealing is required,
the proven reliability of Circle Seal precision valves
provides the one complete answer —
a combination of absolute leakproof sealing when closed
and virtually maintenance-free operation.

CIRCLE SEAL CONTROLS

Check-Relief Valves



TYPICAL TECHNICAL CHARACTERISTICS

PART NUMBER	SERVICE	OPERATING TEMPERATURE	END CONNECTIONS	CRACKING CHECK	PRESSURE PSI RELIEF	WEIGHT LBS.
P-389	AIR, FUEL	–65 to 165°F	MS33656-4	1 MAX.	400 ± 5%	.08
P25-389	AIR FLUORO CHEMICAL LIQUID PER MIS14755	–65 to 230°F	SIX HOLES & MS33656-E6	9.5 MAX.	27 MAX.	.12 MAX.
P49-389	AIR, FUEL	–65 to 135°F	MS33656-E10 MS33656-6	8"H_2O MAX.	20 ± 1	.25
P6-389	ORONITE	–65 to 275°F	MS33656-16	.3 MAX.	31-70	.58
P10-389	JP-4, 5	–65 to 165°F	MS33656-8	.3 MAX.	15-22	.25
P16-389	AIR, FUEL	–20 to 160°F	AND 10056/50-12	4 MAX.	50 ± 4	.48

MATERIALS

Aluminum, 303 stainless steel

SIZES

¼" to 1" Tube

NOTE

P-389 Series valves normally are not stocked and may be subject to minimum run quantity for unusual materials, sizes, or connections.

TYPICAL APPLICATIONS

On suction side of hydraulic pump to prevent loss of prime or flooding of reservoir tank, also used as vacuum and pressure relief.

Air, oil, or fuel supply line to reservoir tank.

TYPE OF VALVE

A combination check and thermal relief valve to provide free flow in one direction, zero leakage in the reverse direction, with an internal thermal relief unit.

PURPOSE

To prevent back flow or back leakage in a liquid or gas system, and to protect the system down stream of the valve from overpressure resulting from thermal or other causes.

OPERATING CHARACTERISTICS

Check valve opens at low cracking pressure, has low pressure drop.

Poppet spring insures that valve is closed before start of return flow.

Floating "O" Ring positions automatically for perfect line-of-contact sealing.

Internal relief unit eliminates need for external relief unit and piping.

Relief unit seals with no leakage virtually to cracking pressure.

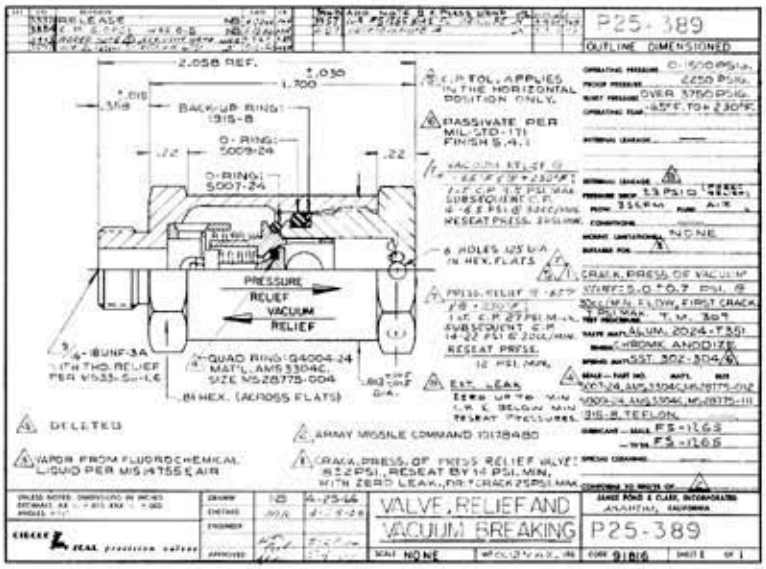
CIRCLE SEAL CONTROLS, INC.
A CIRCOR International company
2301 WARDLOW CIRCLE
CORONA, CALIFORNIA 92880
TEL: (951) 270-6200 FAX: (951) 270-6201

Check-Relief Valves

TYPE OF VALVE
Spring loaded Circle Seal Check Valve with built-in poppet type relief element.

PURPOSE
To allow free flow of vapor from Fluoro Chemical Liquid and Air on missile launching systems in one direction, zero flow in reverse direction except for bleed off of thermal pressure buildup, small spring loaded relief poppet in check valve poppet opens to bleed off excess pressure.

OPERATING CHARACTERISTICS
Light spring holds check valve normally closed, Circle Seal "O" Ring prevents leakage. With thermal pressure buildup, small spring loaded relief poppet in check valve poppet opens to bleed off excess pressure.

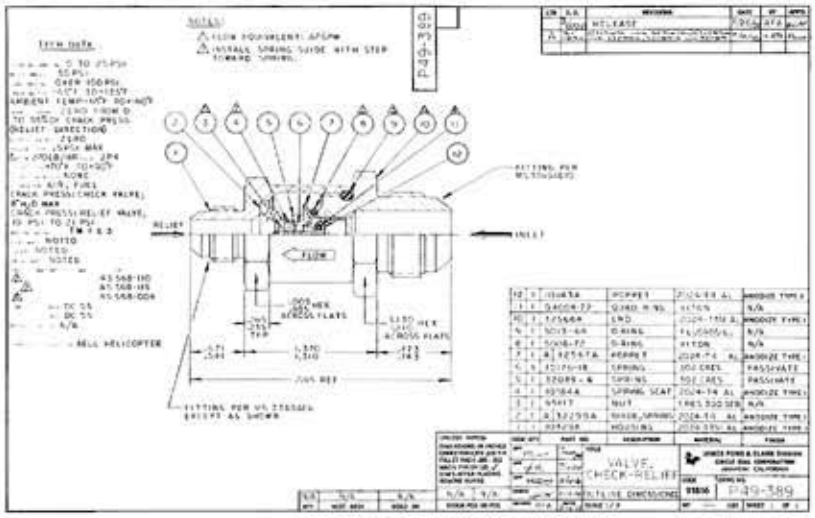


TYPE OF VALVE
Spring loaded Circle Seal Check Valve with built-in poppet type relief element.

PURPOSE
To allow flow from reservoir to fuel pump on helicopters, prevents reverse flow without leakage except to bleed off any excess pressure buildup into reservoir.

OPERATING CHARACTERISTICS
When pump starts up, valve opens to allow flow. When pump is not running, valve seals dead tight holding head of fluid with no leakage, any thermal buildup bleeds off through the relief unit.

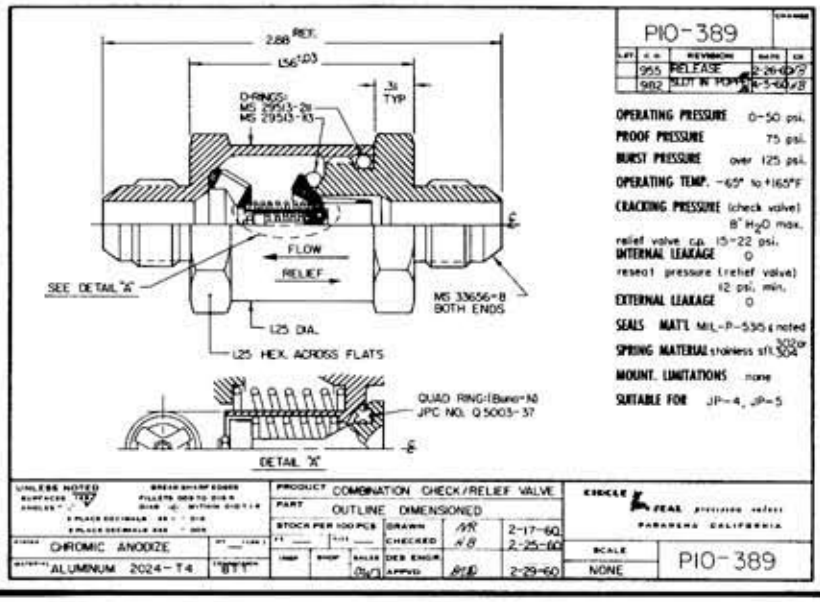
TYPICAL APPLICATIONS
Suction check valve in helicopter fuel system where reservoir is below average system level.



TYPE OF VALVE
Spring loaded Circle Seal Check Valve with built-in poppet type relief unit.

PURPOSE
To allow free flow of fuel during operation, hold head of fuel without leakage when non-operating, bleed off thermal pressure buildup.

OPERATING CHARACTERISTICS
Flow passes through valve with minimum pressure drop. When flow ceases, poppet closes, Circle Seal "O" Ring seals dead tight to prevent back leakage or seepage. In the event of excessive pressure due to thermal buildup, relief unit opens to allow bleed off of excess fuel.



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