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

Bleed Valves, Manual, Low Pressure

TYPICAL TECHNICAL CHARACTERISTICS

Part Number	Operating Pressure	Operating Temperature	Inlet Connection	Bleed Port(s)
P4-228	0-100 psi	—65 to 200°F	AND10056-4*	10-32 NF-2(3)†
P12-228	0-100 psi	—65 to 200°F	AND10056-4*	.093 dia (2)
P13-228	0-100 psi	—65 to 200°F	AND10056-4*	10-32 NF-2(3)†
P16-228	0-2500 psi	—65 to 200°F	MS33657-4*	10-32 NF-2
P24-228	155 psi	—65 to 165°F	Cartridge	10-32 NF-2
P59-228	0-250 psi	—65 to +160°F	MS33656-4*	MS28889
P71-228	0-35 psi	—65 to +250°F	MS33656-6*	

* Straight thread portion only; cone point removed.

† Bleed ports sealed with AN520-10-4 screw with fiber gasket. After bleed valve is installed, screw most convenient to access opening is removed and automotive fitting or special adapter is used for drain hose.

MATERIALS: Body—Aluminum (2024 T4), stainless steel (303).
Seals — Synthetic rubber material as required for service.

TYPICAL APPLICATIONS: Bleeding air out of reservoir in an "airless" hydraulic system. Bleeding high points in hydraulic system during filling.

NOTES: P-228 series are designed to be actuated at relatively low pressure. If actuation at high pressure is required, P-416 or P-500 series should be used. For fuel drain requirements, P-394 Manual Drain Valves should be used.

TYPE OF VALVE

P-228 types are simple manually actuated bleed valves—push to open, release to close. Valve is closed—safe; it does not have a lock to hold it open.

PURPOSE

To permit ready manual bleed from high points in a system; to permit bleeding a low pressure system.

OPERATING CHARACTERISTICS

Opens freely with low actuating force. Seals dead tight when closed. Self-cleaning poppet arrangement in P-228 types permits free passage of foreign material and eliminates any possibility of malfunction or leakage.
Threaded bleed port (optional) or bleed connection permit bleeding off drain flow.

QUALIFICATION STATUS

The P4, P15-228, P71-228, and others have been qualified for specific airborne systems; test reports are on file.

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

BLEED VALVES, MANUAL, LOW PRESSURE

TYPE OF VALVE

Manual Bleed, Low Pressure, Normally Closed.

PURPOSE

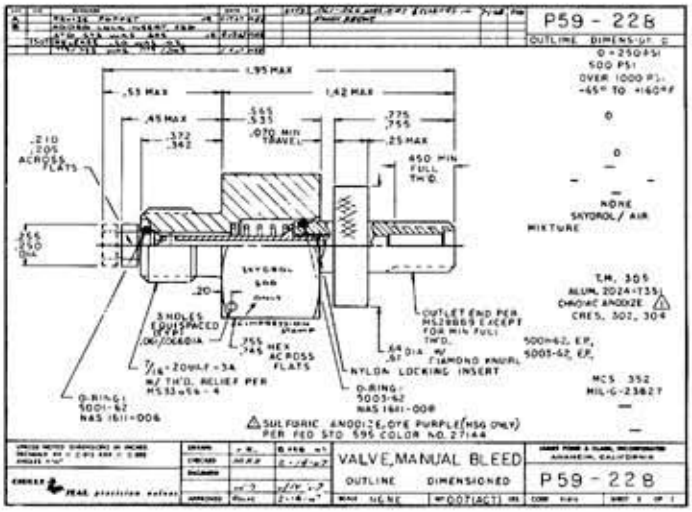
To permit bleeding air and hydraulic fluid from low pressure aircraft hydraulic systems.

OPERATING CHARACTERISTICS

Valve is held normally closed by spring. "O" Ring seals to prevent leakage or loss of pressure. Manually depressing plunger opens valve to permit flow. When plunger is released, valve closes automatically.

TYPICAL APPLICATIONS

Bleeding air from hydraulic reservoirs.
Bleeding low pressure sealed systems.
Unit is qualified for use on commercial aircraft.



TYPE OF VALVE

Bleed Valve, Manual.

PURPOSE

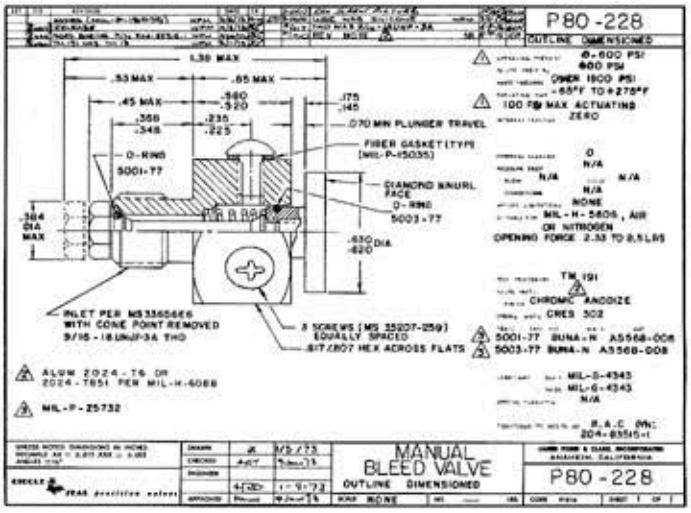
To bleed air or oil out of a high pressure system (when the system is not pressurized).

OPERATING CHARACTERISTICS

Push to open. Closes automatically when released. "O" Ring on plunger seals dead tight, preventing loss of pressure or fluid. When valve is open, clearance around stem permits contaminents to wash out. Adapter for overboard bleed can be fitted to one of the 10-32 tapped holes.

TYPICAL APPLICATIONS

Bleeding air out of high points in "airless" hydraulic system.



TYPE OF VALVE

Manual bleed or drain.

PURPOSE

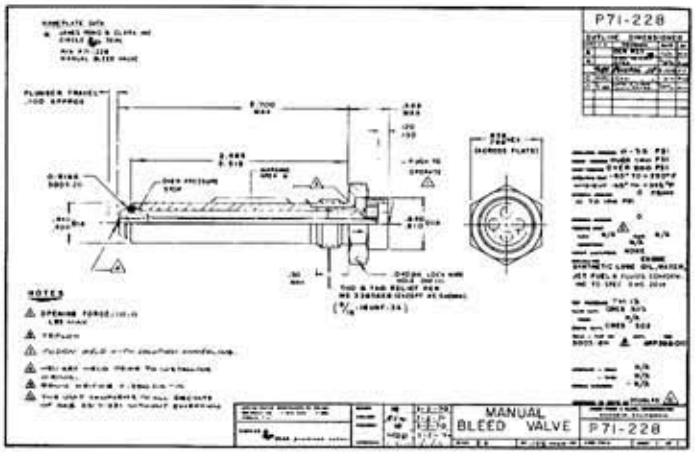
To permit bleeding of fuel, oil, and water.

OPERATING CHARACTERISTICS

Valve is manually actuated by rotating stem. In the closed position, an "O" Ring seal prevents through port leakage.

TYPICAL APPLICATIONS

Draining of fuel, water, lube oil, and hydraulic oil from aircraft engine nacelle and wing sumps.



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