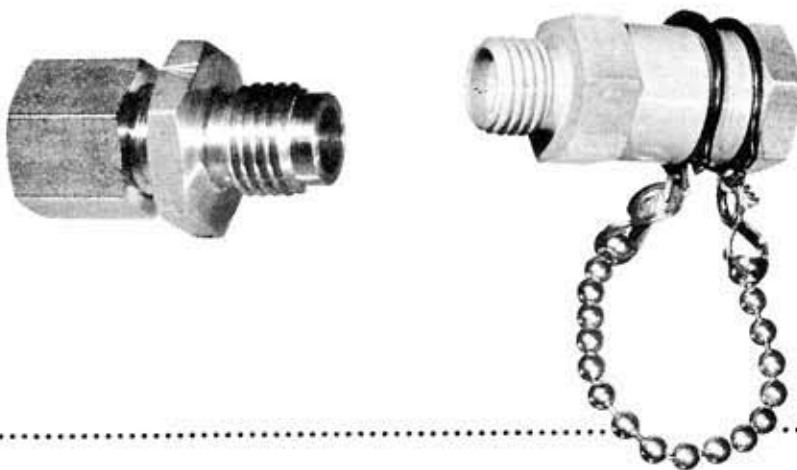


Wherever perfect sealing is required,  
the proven reliability of Circle Seal precision valves  
provides the one complete answer —  
a combination of absolute leakproof sealing when closed  
and virtually maintenance-free operation.

**CIRCLE SEAL**  
  
**CONTROLS**



**FILLER  
VALVES  
Fill & Bleed  
Valves**

**TYPICAL TECHNICAL CHARACTERISTICS**

**FILLER VALVES**

Part Number	Service	Operating Temperature	Operating Pressure	Cracking Pressure	Service
P4-308	Air	-65 to 212°F	0-25 psi	.5 psi max.	1
P4-691	Air, Nitrogen	-100 to 450°F	0-5000 psi	8 psi max.	2

**FILL AND BLEED VALVES**

P20-228	Air, Nitrogen	-65 to 200°F	0-50 psi	—	3
P1-427	Air, Nitrogen	-65 to 165°F	0-4500 psi	—	4

1. Oral inflation.
2. Charging high pressure gas systems.
3. Filling and bleeding low pressure system.
4. Charging and bleeding high pressure system.

**MATERIALS**

Body — Aluminum, stainless steel.  
Seals — Synthetic rubber (as required by service), Teflon.

**SERVICE**

Air, Helium, Oxygen, Nitrogen, Hydraulic Fluid, etc.

**NOTES**

Filler valves described above are special types designed to meet specific system requirements. Standard Circle Seal Check Valves, 200 Series, 2100 Series or 2600 Series provide the dead tight sealing required for filler valve requirements in most systems.

**TYPICAL APPLICATIONS**

Oral inflation of life jackets. Charging missile control or pressurizing systems.  
Charging airborne oxygen systems.

**TYPE OF VALVE**

A filler valve is a normally closed check valve which opens when charging or filling pressure is applied, closes and seals dead tight when system is charged or filled.

Fill and bleed valves are normally closed valves which are opened by insertion of the filling connection, close automatically when it is withdrawn.

**PURPOSE**

To permit rapid filling of container or system without the necessity of opening and closing a manual type valve. Dead tight sealing is essential to prevent loss of charging pressure.

**OPERATING CHARACTERISTICS**

Dead tight sealing when closed.

Very low opening pressure — where required.

Manual locking of poppet closed is not required.

Suitable for long term storage.

Complete operating reliability.

 **CIRCLE SEAL CONTROLS, INC.**

A CIRCOR International company  
2301 WARDLOW CIRCLE  
CORONA, CALIFORNIA 92880

TEL: (951) 270-6200 FAX: (951) 270-6201

# FILLER VALVES FILL and BLEED VALVES

## TYPE OF VALVE

Filler, Low Pressure, Oral Inflation.

## PURPOSE

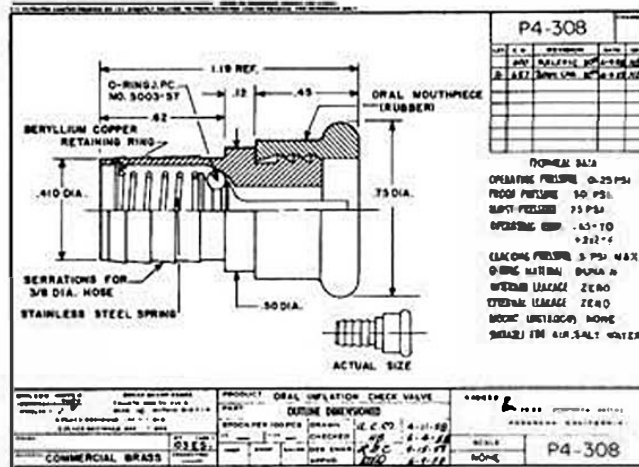
Oral inflation of low pressure units.

## OPERATING CHARACTERISTICS

Light oral pressure opens poppet to allow flow. When oral pressure is removed, poppet closes and seals dead tight.

## TYPICAL APPLICATIONS

Oral inflation of inflatable life vest.



## TYPE OF VALVE

Filler Valve.

## PURPOSE

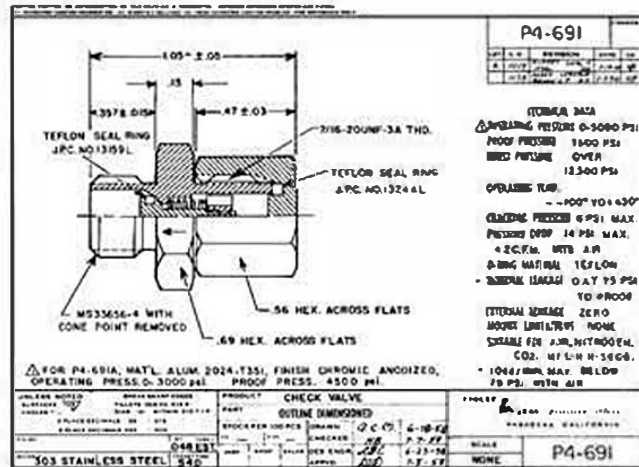
Charging low pressure or high pressure bottles or other reservoirs for long term (or short term) storage.

## OPERATING CHARACTERISTICS

Charging line is connected to 7/16-20 inlet thread. Charging pressure opens valve to fill reservoir. Valve closes automatically before charging line is withdrawn. Teflon "O" Ring seats dead tight. Use of Teflon seal eliminates possibility of seal deterioration.

## TYPICAL APPLICATIONS

Charging missile system pressurizing spheres.



## TYPE OF VALVE

Fill and Bleed, Low Pressure.

## PURPOSE

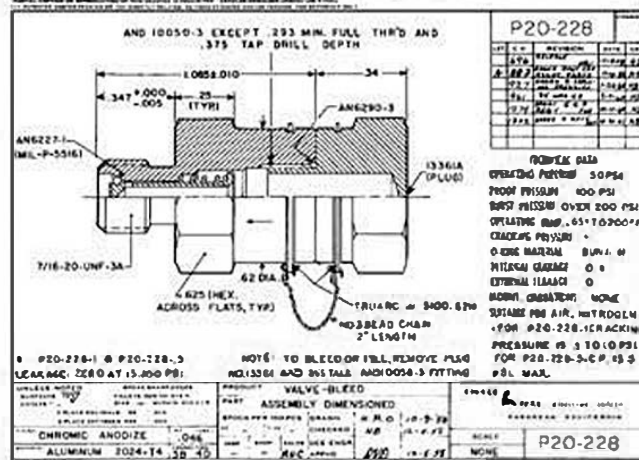
To provide a simple valve unit for filling and bleeding low pressure containers.

## OPERATING CHARACTERISTICS

Valve is normally closed. When fitting is inserted, the last fraction of a turn opens valve. As fitting is removed valve closes, sealing pressure in container.

## TYPICAL APPLICATIONS

Pressurizing and bleeding small pressurized electronic control boxes on missile systems.



## TYPE OF VALVE

Fill and Bleed, High Pressure.

## PURPOSE

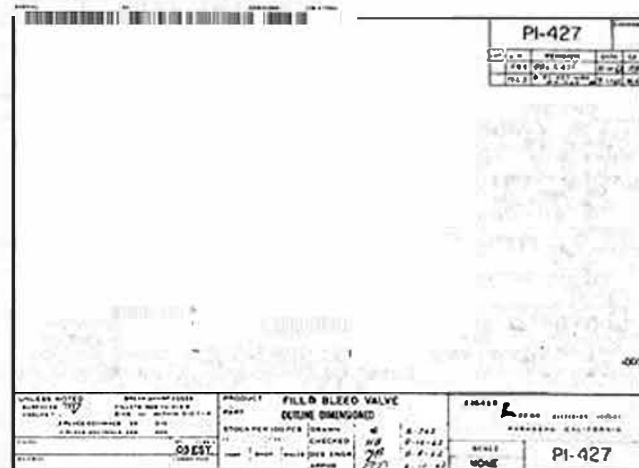
To simplify filling and bleeding an high pressure reservoir.

## OPERATING CHARACTERISTICS

Valve is normally closed and sealed dead tight by "O" Ring seal. During pressurizing, pressure overcomes poppet spring allowing flow around modified triangular poppet. Bleeding is accomplished with modified nut which upsets poppet.

## TYPICAL APPLICATIONS

Filling missile control pressure supply reservoirs.



2301 WARDLOW CIRCLE  
CORNA, CALIFORNIA 92880

TEL: (951) 270-6200 FAX: (951) 270-6201