



**CIRCLE SEAL**  
  
**CONTROLS**

## **Sampling and Bleed Valve**

### **High Pressure**

### **0 TO 6000 PSIG**

#### **DESCRIPTION**

The valves that comprise the P-500 Series line offer a complete series of minimum weight and compact configuration Hydraulic Sampling and Bleed Valves. Two configurations are available, one with a high pressure capability (0-6000 psig) and the other with a 0-3000 psig pressure capability. Each model features "easy operation" and "dead tight" sealing shutoff. The complete P-500 Series is designed for minimum self-generated contamination utilizing a non-rotating corrosion resistant seal.

#### **OPERATING CHARACTERISTICS**

Each model of the P-500 Series can be opened for metered or full flow within one-quarter clockwise turn of the "easy grip" handle. Closing of the valve is accomplished by releasing the handle which automatically returns to the closed position effecting a "dead tight" seal.

This series provides metered flows ranging from 0 psig to 3000 psig with a maximum exit velocity of 30-feet per second at 3000 psig for personnel safety.

The P14-500 and P15-500 configurations of the Miniaturized High Pressure Sampling and Bleed Valves have been qualified specifically, including envelope, to the requirements of Specification MIL-V-81940 (QPL).

The P12-500, P13-500, and P16-500 and other models in the P12-500 thru P25-500 Series may be qualified to the MIL-V-81940 Specification by similarity.

#### **APPLICATIONS**

All models of each configuration of the P-500 Series are used in Airborne Installations, Ground Support Equipment, Shipboard, and in numerous other applications where ease of operation, minimum weight, compact size, and zero leakage are the criteria for Sampling and Bleed Valves with low to high pressure capabilities.

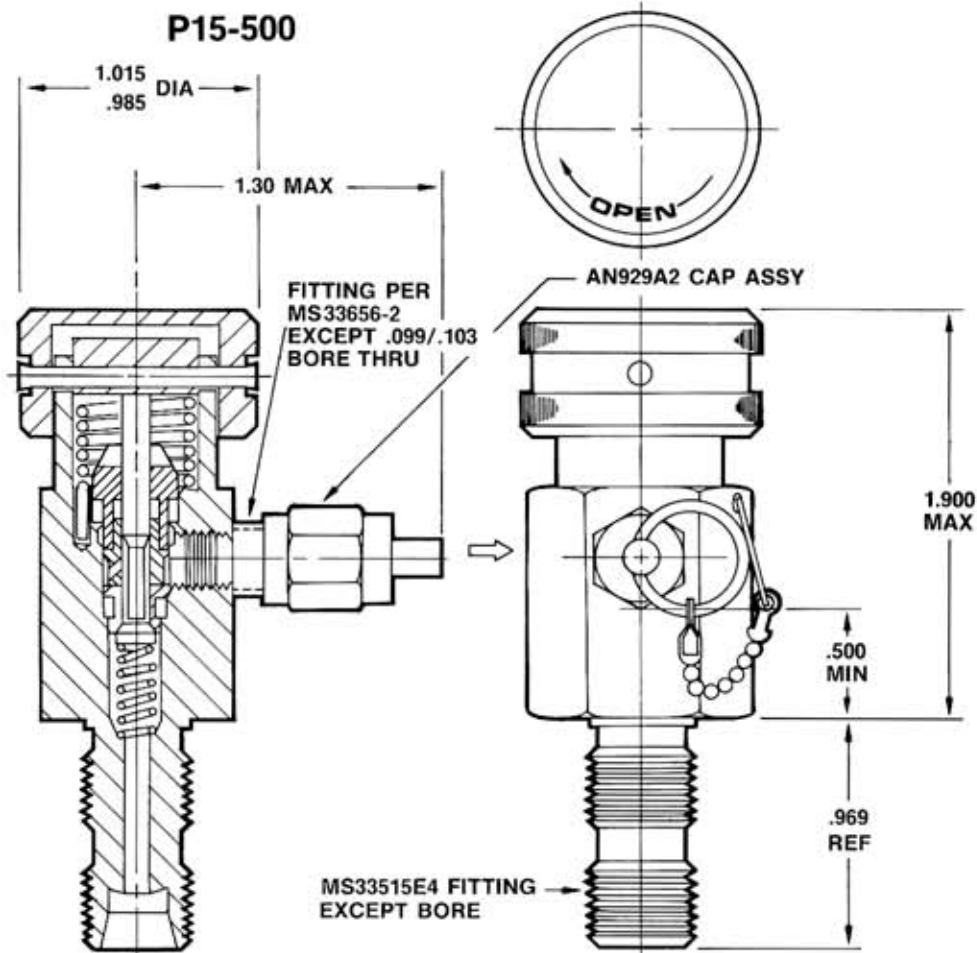


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**SPECIFICATIONS:**

- OPERATING PRESSURE**  
0 TO 3000 PSI
- PROOF PRESSURE**  
6000 PSI
- BURST PRESSURE (MIN)**  
10,000 PSI
- OPERATING TEMP.**  
-65° TO +275°F
- INTERNAL LEAKAGE** 0
- EXTERNAL LEAKAGE** 0
- FLOW** 100ML/MIN  
@ 50 PSID MAX
- PRESSURE DROP**  
MIL-H-5606.
- CONDITIONS** 90 ± 20°F
- SUITABLE FOR**  
MIL-H-6083 AIR, N<sub>2</sub>
- VALVE MAT'L.**  
7075-T651 AL ALLOY
- CONFORMS TO REQ'TS OF**  
MIL-V-81940
- MAX VELOCITY**  
32 FT/SEC @ 3000 PSI

**SAMPLING VALVE DATA**

PART NUMBER	INLET CONNECTION	OUTLET CONNECTION	QUALIFYING SPECIFICATION (QPL)
P14-500	MS33514E4	MS33656-2 (Mod.) with AN929A2 Cap	MIL-V-81940
P15-500	MS33515E4 Bulkhead Fitting	MS33656-2 (Mod.) with AN929A2 Cap	MIL-V-81940

**VARIATIONS\***

PART NUMBER	INLET CONNECTION	OUTLET CONNECTION	QUALIFYING SPECIFICATION (Similarity)
P12-500	MS33657E4	¼-28UNF, 2A	Same as MIL-V-81940 except Inlet/Outlet Connection
P13-500	MS33657E6	¼-28UNF, 2A & Hose Bib	Same as MIL-V-81940 except Inlet/Outlet Connection
P16-500	MS33657E4	MS33656-2 (Mod.) with AN929A2 Cap	Same as MIL-V-81940 except Inlet Connection
P59-500	¼-18NPT	MS33656-2 Fitting AN929A2 Cap Assembly	Same as MIL-V-81940 except Inlet Connection
HV50-2	7/16-20UNJF-3A with adapter nut to allow 360° orientation of outlet connection	MS33656-2 Fitting AN929A2 Cap Assembly	Same as MIL-V-81940 except Inlet Connection

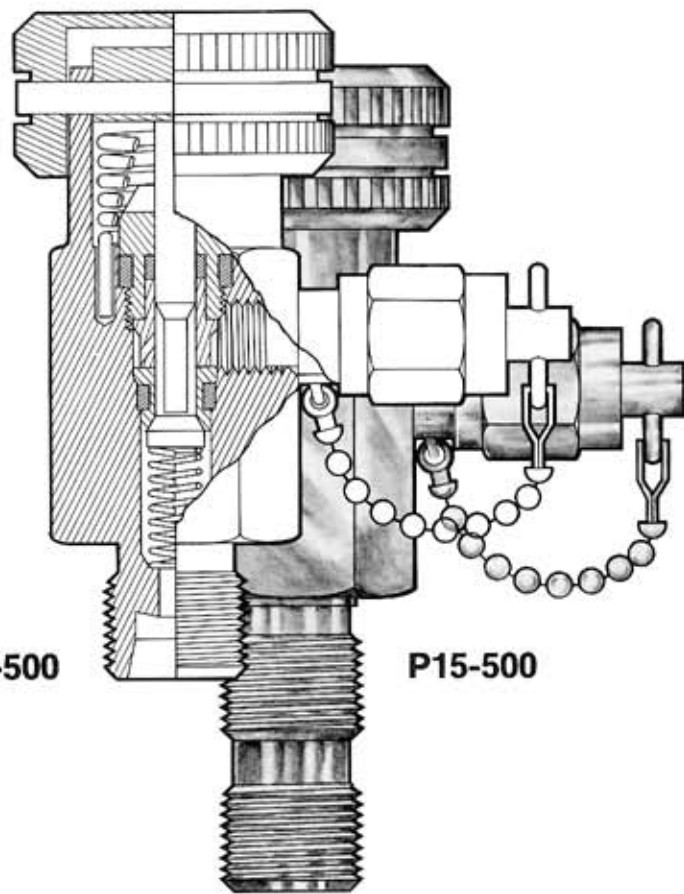
\*Other inlet and outlet combinations are available to meet individual installations

Non-destructive testing, such as individual flow test, testing with fluids other than compressed air or hydraulic oil, hydrostatic testing, x-ray, dye penetrant are not normal to our production processing, but are available at extra costs.

# Sampling and Bleed Valve

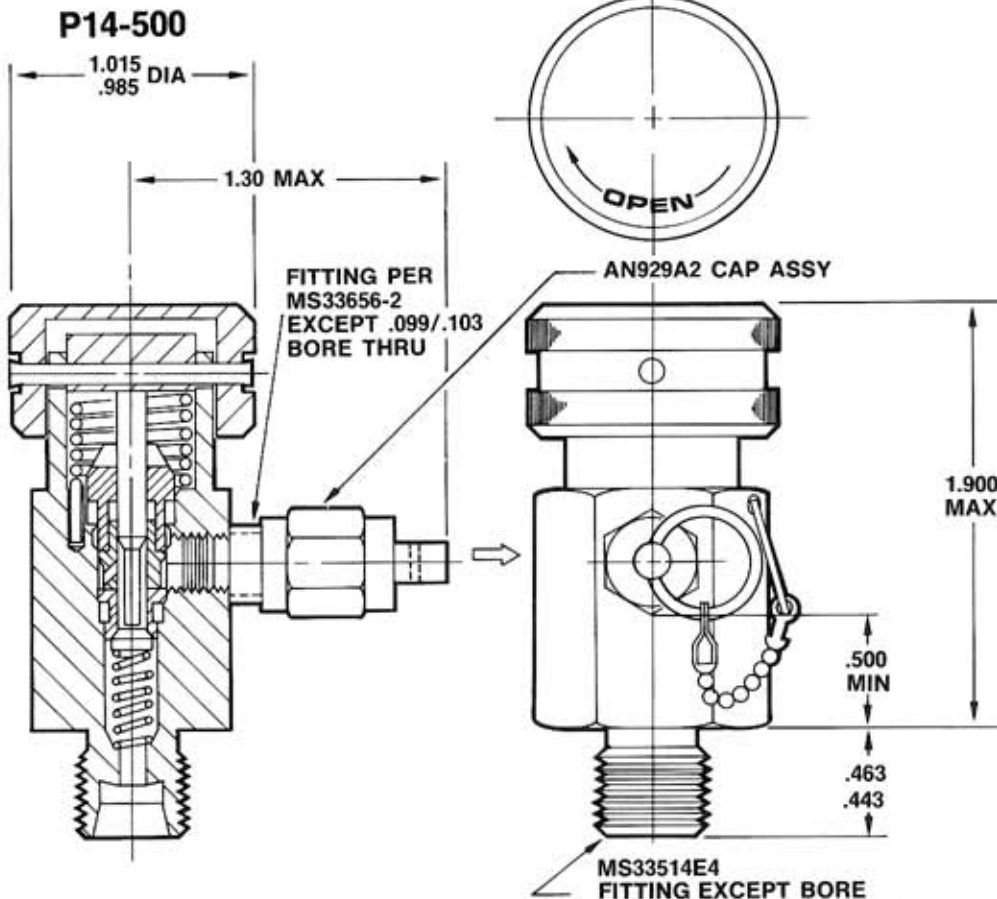
High Pressure

0 TO 6000 PSIG



P14-500

P15-500



**SPECIFICATIONS:**  
OPERATING PRESSURE  
0 TO 3000 PSI

PROOF PRESSURE  
6000 PSI

BURST PRESSURE  
(MIN.) 10,000 PSI

OPERATING TEMP.  
-65° TO +275°F

INTERNAL LEAKAGE 0

EXTERNAL LEAKAGE 0

FLOW 100ML/MIN

@ 50 PSID MAX

PRESSURE DROP

MIL-H-5606.

CONDITIONS 90 ± 20°F

SUITABLE FOR

MIL-H-5606, AIR, GN<sub>2</sub>, H<sub>2</sub>O

VALVE MAT'L.  
7075-T651 AL ALLOY

CONFORMS TO  
REQ'TS. OF  
MIL-V-81940

MAX VELOCITY  
30 FT/SEC @ 3000 PSI

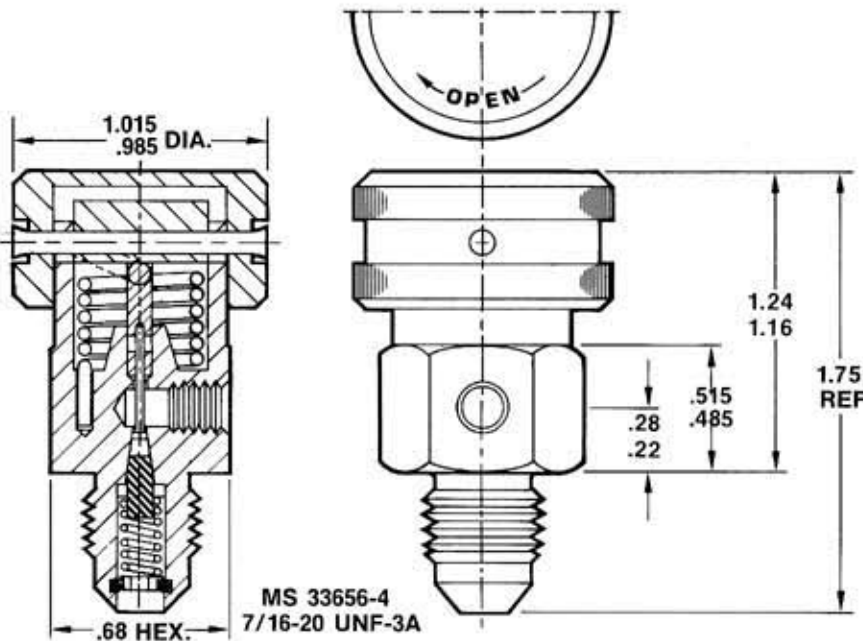
# Sampling and Bleed Valve

**High Pressure**

**0 TO 6000 PSIG**



ACTUAL SIZE



## SPECIFICATIONS:

**OPERATING PRESSURE**  
 6000 PSI

**PROOF PRESSURE**  
 9000 PSI

**BURST PRESSURE**  
 OVER 14,000 PSI

**OPERATING TEMP.**  
 -65° TO 160°F AMBIENT

**INTERNAL LEAKAGE** 0  
**EXTERNAL LEAKAGE** 0

**SUITABLE FOR**  
 AIR, N<sub>2</sub>, He, O<sub>2</sub> &  
 HYD. FLUID, H<sub>2</sub>O

**OPERATING TORQUE**  
 1.5 IN. LB TO 8 IN. LB

## VARIATIONS

PART NUMBER	BODY MATERIAL	END CONNECTIONS
P-500 P-500A P1-500	Cres 303 Alum Alloy (6061-T6) Brass QQ-B-622 Comp. 22½ Hard	MS33656E4 MS33656E4 MS33656E4
P2-500 P3-500	Alum Alloy (6061-T6) Alum Alloy (6061-T6)	MS33657E4 MS33657E4
P4-500	Alum Alloy (6061-T6)	MS33515E4