

B

# AUTOMATIC AIR RELEASE VALVE

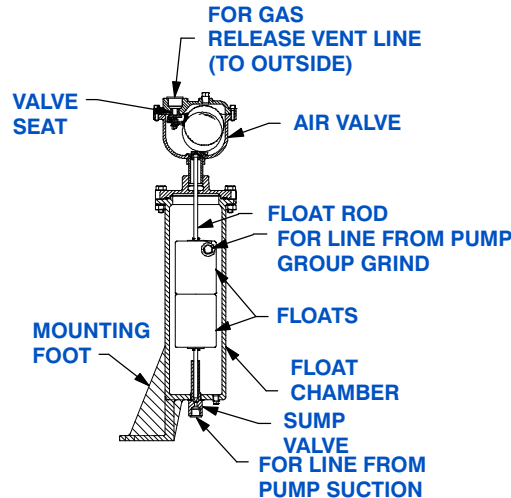


Model GRP33-06A

Size 3/8" x 3/4"

## VALVE SPECIFICATIONS

- Size:** 3/8" x 3/4" (9,6 mm x 19 mm) NPT - Female.
- Air Valve:** Gray Iron.
- Float Chamber:** Ductile Iron.
- Floats:** Rubber.
- Linkage:** Stainless Steel.
- Valve Seat:** Stainless Steel.
- O-ring:** Buna-N.
- Hardware:** Standard Plated Steel.



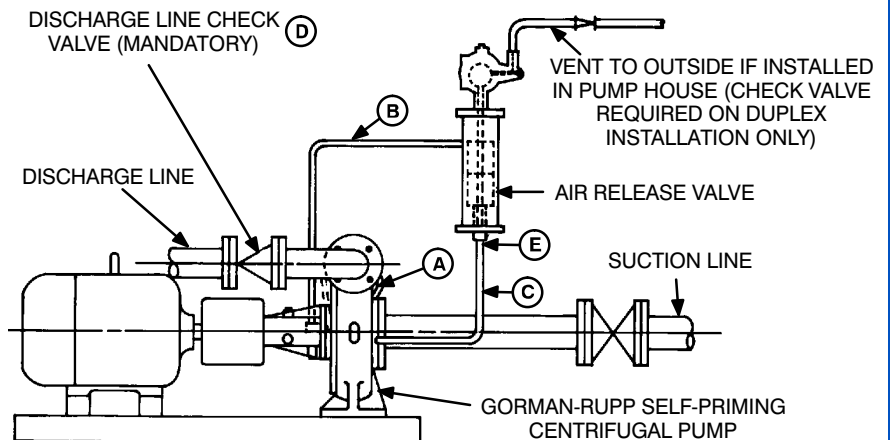
## TYPICAL INSTALLATION AND THEORY OF OPERATION

The Air Release Valve is designed with an air valve in the head of the assembly and a sump valve in the base. These valves are controlled by a common rod that is moved vertically by an attached set of floats.

When the pump is started, air is drawn from the suction line into the priming pump and directed through the discharge tube "B" to the Air Release Valve. This air and vapor is then vented to atmosphere through the valve head.

With the float down, sump valve "E" is closed; air cannot re-enter the suction piping through the return tube assembly "C".

As product fills the pump casing, pressure develops, opening the check valve "D" in the discharge piping. The priming pump delivers product and fills the float chamber, causing the float to rise, which opens the sump valve "E" and closes the air valve.



The product recirculates through the return tube assembly "C" to the pump suction. The liquid pressure equalizes the priming pump spring pressure and the priming pump slides into neutral. At this point, the pump is fully primed.

In the neutral position, the priming pump circulates a small amount of liquid through the discharge tube to the float chamber and back to the pump suction through the return tube.

If air or vapor enters the suction piping during the pumping operation, the discharge line check valve closes again and the priming pump again evacuates the air through the Air Release Valve.



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Specifications Subject to Change Without Notice

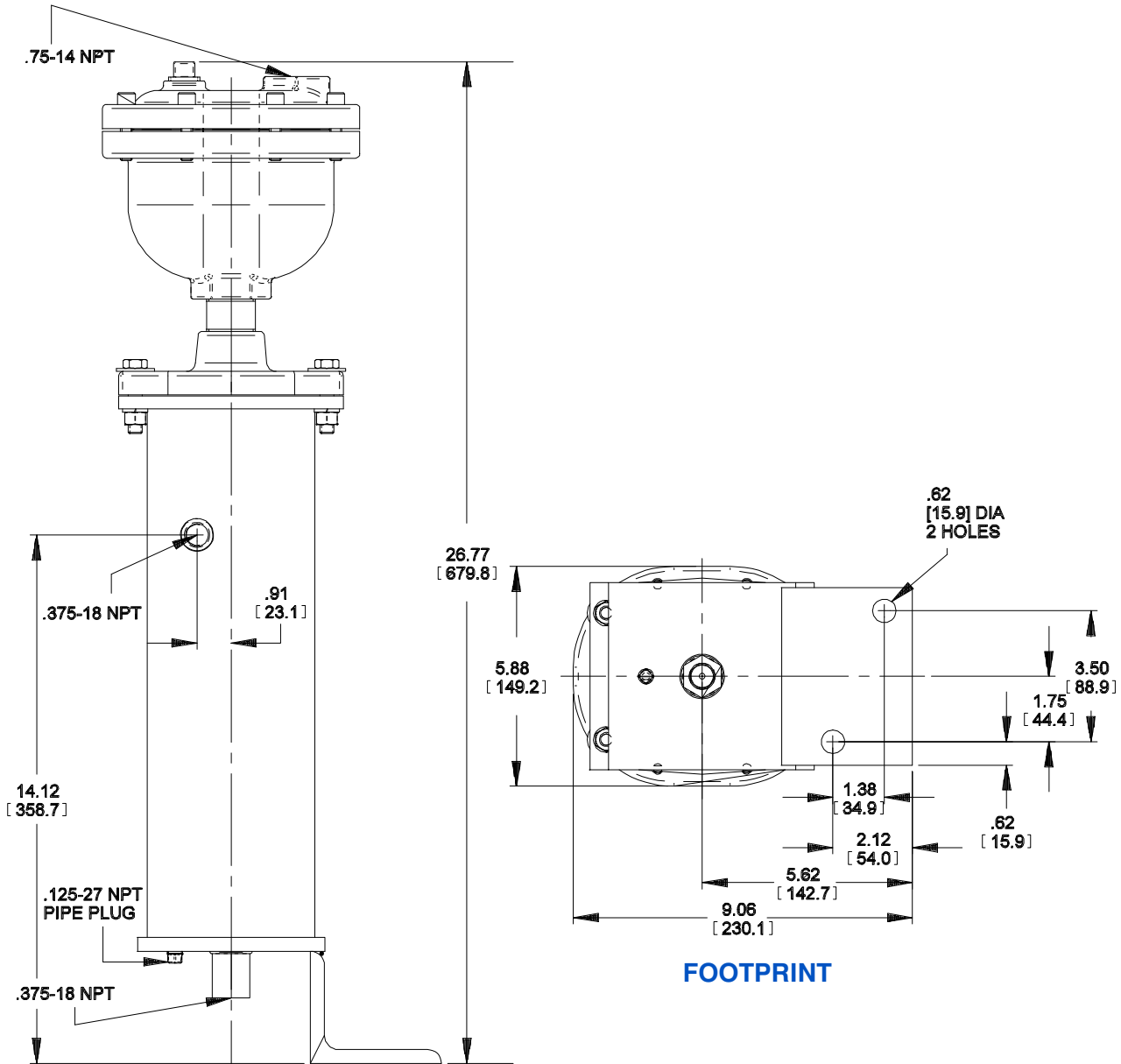
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**Specification Data**

**SECTION 10, PAGE 1490**

OVERALL DIMENSIONS  
and  
WEIGHTS APPROXIMATE

**NET WEIGHT:** 40 LBS. [18,1 KG.]  
**SHIPPING WEIGHTS:** 45 LBS. [20,4 KG.]  
**CARTON:** 2.5 CU. FT. [0,07 CU. M.]



DIMENSIONS:  
INCHES  
[MILLIMETERS]



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