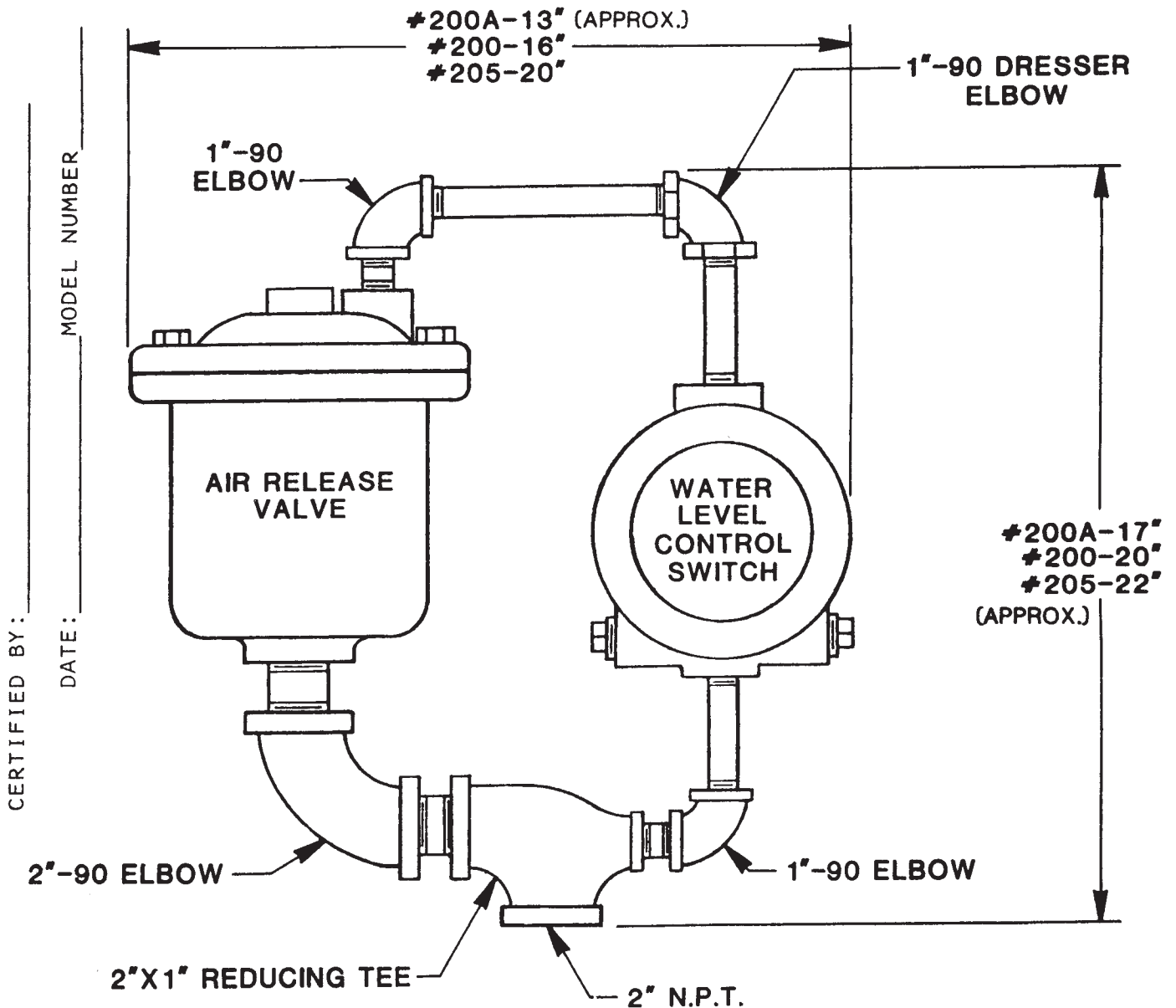


PUMP PROTECTOR

THIS ARRANGEMENT IS USED TO PREVENT CENTRIFUGAL PUMPS FROM RUNNING IF NOT PRIMED OR AS A WARNING IF A STATIONARY PUMP SHOULD LOSE ITS PRIME. THE WATER LEVEL CONTROL SWITCH IS LOCATED BELOW THE FLOAT IN THE AIR RELEASE VALVE WHEN FULLY OPEN. THIS PERMITS THE AIR RELEASE VALVE TO EXHAUST SMALL QUANTITIES OF AIR WHICH COLLECT DURING NORMAL OPERATION WITHOUT INTERRUPTING THE WATER LEVEL CONTROL SWITCH. THIS ARRANGEMENT IS SHIPPED COMPLETELY ASSEMBLED AS SHOWN AND CAN BE FURNISHED WITH SPECIAL TRIM FOR CORROSIVE CONDITIONS.



DATE
09-01-03



DRWG. NO.
S-2123P

SPECIFICATIONS OTHER SIDE



SPECIFICATIONS

SERIES 2123P PUMP PROTECTOR

The Pump Protector shall allow the centrifugal pump to run when primed (flooded) and stop the pump due to loss of prime by means of a water level control switch.

The Pump Protector shall operate (open) under pressure, and allow entrapped air to escape from the suction pipe and centrifugal pump volute to allow the pump to become primed. After air escapes out of the valve orifice, the valve orifice shall close by means of a compound lever mechanism activated by a float to prevent water from escaping. Meanwhile water shall fill the level control body, thereby raising the float to make the level control switch circuit and start the centrifugal pump. The Valve orifice will then stay closed until more air accumulates in it and the opening cycle will repeat automatically to prevent air binding of the pump, should a major air bubble enter the pump.

The needle shall be 60 Durometer Buna-N for tight shut-off and resistance to leakage thru the orifice, due to pipeline or pump vibrations.

The Valve compound internal lever mechanism shall be Bronze with stainless steel pins and float. The stainless steel float must withstand a minimum pressure of 1000 psi (static) and be skirted for increased buoyancy to insure drop tight shut-off while the pump is running.

The Pump Protector shall be designed to withstand 300 psi line pressure and have a 5/16" orifice for 50 psi operating (opening) pressure rating or 3/16" orifice for 150 psi static operating pressure or 3/32" orifice for 300 psi operating pressure. (Engineer to select one orifice).

Level control switch shall be single pole/single throw or single pole/double throw or double pole/double throw style. (Engineer to select one style).

All materials of construction shall be certified in writing to conform to A.S.T.M. Specifications as follows:

Body & cover	Cast Iron	ASTM A48 Class 30
Internal linkage	Bronze	ASTM 584
*Float	Stainless Steel	ASTM A276
Needle	Buna-N	
"Mercoïd" level control switch (mercury type)	Commercial	
Exterior paint	Universal primer	FDA Approved for potable water contact

***Float design may vary on certain sizes**

Valve to be APCO Series 2123P Pump Protector, as manufactured by Valve & Primer Corp., Schaumburg, Illinois, U.S.A.