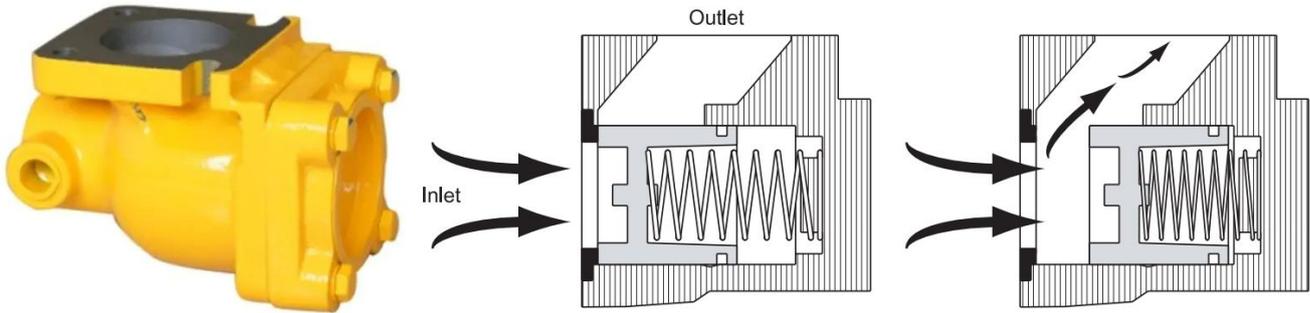


Add: Bali Village Qiaoxia Town, Yongjia County, Wenzhou City, Zhejiang Province, China.

Air-Actuated Differential Check Valve for Positive Displacement Flow Meter Systems



General Information

Air Actuated/Differential Check Valves are designed to prevent flow whenever air or vapor is present, thereby assuring accurate measurement. Check Valves are normally closed, spring loaded valves installed on the meter outlet. When fluid enters the valve from the inlet side, and the pressure is greater than the back pressure combined with the force of the spring, the spring will compress, opening the valve and allowing fluid to pass through (as shown in the figure below). When back pressure plus spring strength is greater than the fluid pressure entering the meter, the valve will remain closed. These meters are used in conjunction with the air/vapor eliminator to prevent air/vapor from being metered. This is important when split compartment testing.



New Installations

When ordered with a new metering system, the Check Valve is supplied mounted to the metering system as shown in the example to the left. A line must be connected to the flange on the outlet side of the check valve. This flange connection is 3" NPT. Finally, install a vent line from one port of the check valve to the air eliminator. Plug the other side of the check valve

Installations

Depending on the existing configuration, adding a Check Valve may require modification of the outlet piping. After the internal pressure is relieved from the system, the output line can be disconnected from the output side of the meter. In the example to the right, the output line would be connected to the valve. The check valve assembly can then be connected to the output side of the preset piston valve. Use the four bolts and washers to fasten the check valve assembly to the present piston valve. The check valve has an arrow showing the direction of flow. Ensure that the valve is properly oriented. Tighten the bolts in a crossing pattern. Once the check valve is secure, the output line may be reconnected to the output side of the check valve. The output fitting is 3" NPT

Ordering Specifications:

Item No.	Flange Type	Material	Max. Flow Rate	to be used for Meter
K-50-AL	Square	Aluminum	550 LPM	for M-40 (1.5") & M-50(2") Meter
K-80-AL	Square	Aluminum	1150 LPM	for M-80 (3") & M-100(4") Meter

Warning!

Before disassembly of any meter or accessory component, ALL INTERNAL PRESSURES MUST BE RELIEVED. Pressure must be 0 (zero) psi. Close all liquid and vapor lines between the meter and liquid or gas pressure source (such as the supply tank, discharge lines and supply lines).