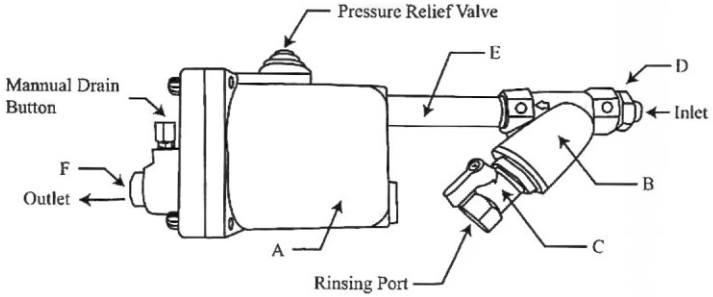
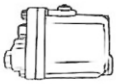
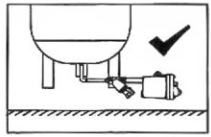
KDV40-3Z04 - Zero Air Loss Drain Valve

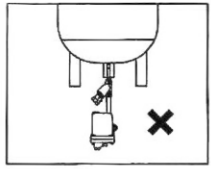
Installation Instructions



A Housing		D Threaded Connector	
B Strainer Filter		E Connect Pipe Fitting	
C Ball Valve		F Straight Fitting Connector	

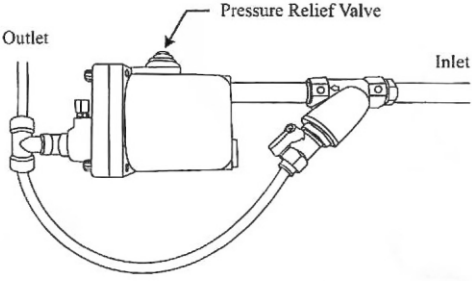
Type	KDV40-3Z04
Inlet Connection	Rc1/2"
Outlet Connection	Rc3/8"
Max. Pressure	1.6MPa
Max. Temperature	100°C
Max. Capacity	680L/H
Dimensions(L×W×H)	150×82×103mm





Notes for strainer

When pipes such as tanks are aged, the piping scale and contaminants are concentrated in the condensate, which blocks the INLET piping or prevents the drainer from working properly. In such places, it is necessary to install our strainer-filter(B). Additionally, suggest that connected together strainer filter(B) with the exit from the drainer to allow for the safe cleaning of the contaminated particles by operator.



Notes for balance line

If the inlet line of the condensate enter horizontally using elbow from the point of condensation (e.g. air receiver tank), the condensate discharge is not smooth. If the equivalent pressure connection(air circulation line) is not installed, condensate collects in the tank continuously, as shown in Figure 1 below, and will not enter the trap even though the water level rises. This is due to the air pocket phenomenon within the trap. If air (A) in the trap does not flow to any place, the condensate in the tank is full to the rear end but the trap will not work.

However, when the equivalent pressure is connected from the top inlet of the trap with the high pressure hose or the copper tube as shown in Figure 2, a safety condensate discharge would be secured.

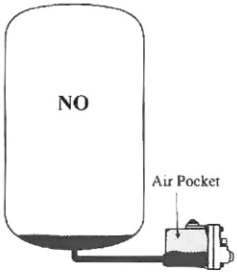


Figure 1

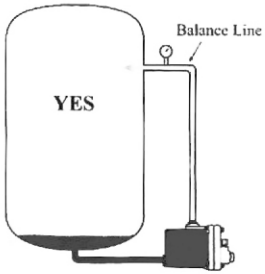
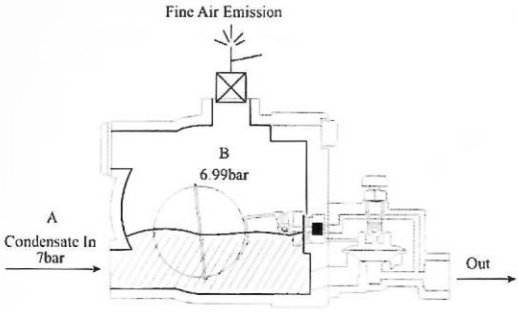


Figure 2

Condensate accumulates in the tank and flows into the condensate drain. If air can not flow anywhere in the trap, the condensate will not flow into the condensate drain due to the air pocket. At this time, the balance line should be connected by connecting the line above the point where condensation occurs or gauge, so that the air pocket circulate to tank and the condensed water can flow freely.

Notes for air vent(Pressure relief valve)



If the inlet of A is subjected to a pressure that over 7 bar, continuous fine air release at the top of the drainer causes differential pressure inside the condensate drain, and the condensate to be drawn into the condensate drain smoothly. This causes smooth inflow of condensate into the container of drainer, and causes smooth condensate drain.

Notes for filters and filter lines

Make sure that the installation height is secured when installing on filters and pipelines. If the height is enough, the condensate enters by gravity and can be piped directly to the top inlet of the condensate drain without additional balance lines.

Excessive condensate flow from the up stream may also cause air pocket inside the condensate drain. In particular, check the condensate drain of the refrigerant dryer to generate a large amount of condensate. And if the capacity of the filter is large and the pipe is getting old, please install the strainer filter.