RECOMMENDED - The Best Method



This is the best method for piping in a liquid drainer. The liquid drainer is below the receiver to allow the the receiver to drain out completely, and the drainer is back vented.

Notice there are no dips in the piping. However, if there were dips the drainer would operate just fine due to the back vent.



The drain trap installed at side of a receiver, close to the

This piping method works because the liquid drainer is

back vented. However, the liquid drainer is not below the

receiver, so the receiver will hold a water level. This water

level causes a water seal. But, since the liquid drainer is

back vented, the water seal does not cause any issues.

floor. Water will rise to the broken line before the drain trap

Maximum Water Level

Float Drain Trap with

Vent Connection

⊐ズ Drain

Equalizing

Line

Water Seal

Receiver

opens.

ACCEPTABLE For light loads only



On very light loads, back venting is not necessary. In this case, the piping is appropriate. If there is no back vent, the top connection must be used as the inlet. The side connection cannot be used as the inlet.

Install the drain trap on side of drip leg to get better access or compensate for lack of space under the receiver (particularly for drain trap used under compressors).



The float inside the liquid drainer causes the liquid drainer to hold a water level. This water level in the liquid drainer body causes a water seal. Without a back vent, the drainer will lock shut due to air lock.

Plugged

Float Drain

Trap

⊐⊼ Drain



Air will lock the drainer shut and prevent condensate from entering the drainer, because there is a water seal and there is no back vent/equalizing line.

Also, the side connection should not be used as the inlet if there is no back vent.

NOT RECOMMENDED

Installation with a strainer protecting the drain trap.

A strainer can be used when a dirt pocket is absent

as long as there is a regular blowdown schedule to

clean the strainer screen.



Air will lock the drainer shut and prevent condensate from entering the drainer, because there is a water seal and there is no back vent/equalizing line.

dirt problem that can occur with a drain trap installed directly under the receiver.

While this piping method will work, the absence of a dirt pocket will cause the internal seat orifice to eventually plug.



Air will lock the drainer shut and prevent condensate from entering the drainer, because there is a water seal and there is no back vent/equalizing line.

NOT RECOMMENDED