

LIQUID REFRIGERANT RECEIVERS

Horizontal, ASME



The function of a Liquid Refrigerant Receiver is to store liquid refrigerant to provide continuous flow of liquid refrigerant to the expansion device and to provide storage for the refrigerant charge during system service or maintenance.

Applications

Liquid Refrigerant Receivers are installed in air conditioning and refrigeration systems. The Receiver is installed after the Condenser in order to collect the condensed refrigerant to allow a continuous liquid supply to the expansion device. Liquid Receivers are also used to store the refrigerant charge while the system is pumped down for service or maintenance.

Henry Technologies' Liquid Refrigerant Receivers are suitable for use with ammonia, HFC and HCFC refrigerants and their associated oils, as well as other industrial fluids non-corrosive to steel.

Main Features

- ODS refrigerant connections
- NPT relief device fitting
- Bare receiver without mounting brackets
- Custom models available upon request

Technical Specifications

Maximum working pressure = 450 PSI (31 Bar)

Allowable operating temperature = -20°F to +250°F (-29°C to +121°C)

Henry Technologies' Liquid Refrigerant Receivers are constructed to ASME Section VIII. Additionally, Liquid Receivers are designed and registered for use in Canada. Please contact Technical Support at 1-800-627-5148 for CRN details and list of approved provinces and territories.

Materials of Construction

The shell and caps are made of steel and the ODS connections are made of plated steel.

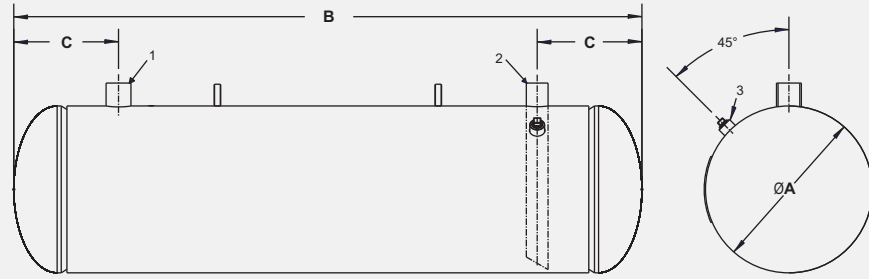
Selection Guidelines

Receiver storage capacities are based on the liquid occupying no more than 90% of the internal volume when the temperature of the refrigerant is 90°F (32°C) per ASHRAE Standard 15-78. Receivers should be selected based on the operating charge for all system components, including the liquid lines. It is usual to add a small percentage to cover the refrigerant in long runs of suction and discharge lines, etc. It is essential that the maximum operating charge be determined, e.g., winter charge in air cooled condenser having flooded head pressure control, this being much greater than the normal summer charge.

Installation - Notes

1. Install the Liquid Refrigerant Receiver after the Condenser and before the Liquid Line Filter-Drier.
2. An NPT fitting is provided at the top of the vessel for installation of a pressure relief device. The user must ensure the vessel is protected from over-pressure.

- ❶ ODS Inlet
- ❷ ODS Outlet
- ❸ NPT Relief Device Fitting



Part No	ODS (inch)		Dimensions (inch)			Pump Down Capacity* (lbs)				Internal Volume (ft ³) at 90%	Weight (lbs)
	Inlet	Outlet	ØA	B	C	R134a	R22	R404A	R407		
S-8639	7/8	7/8	6.63	36.0	4.63	40.9	40.3	34.9	39.2	0.56	44
S-8640	1-1/8	7/8	8.63	36.0	4.63	70	69	59.8	37.1	0.95	65
S-8650	1-1/8	7/8	8.63	42.0	4.63	82.2	81.1	70.3	78.8	1.12	71
S-8660	1-1/8	1-1/8	8.63	48.0	4.63	94.4	93.1	80.7	90.5	1.28	77
S-8670	1-1/8	1-1/8	8.63	60.0	4.63	118.8	117.1	101.5	113.8	1.61	108
S-8680	1-1/8	1-1/8	8.63	72.0	4.63	142.9	140.8	122.1	136.9	1.94	127
S-8690	1-3/8	1-3/8	10.75	36.0	6.50	106.9	105.3	91.3	102.4	1.45	115
S-8700	1-3/8	1-3/8	10.75	48.0	6.50	144.8	142.7	123.7	138.8	1.97	138
S-8710	1-3/8	1-3/8	10.75	60.0	6.50	182.8	180.1	156.2	175.1	2.48	166
S-8720	1-3/8	1-3/8	10.75	72.0	6.50	220.7	217.5	188.6	211.5	3.00	196
S-8730	1-5/8	1-3/8	10.75	84.0	6.50	258.7	254.9	221	247.9	3.52	255
S-8740	1-5/8	1-3/8	10.75	96.0	6.50	296.6	292.3	253.4	284.2	4.03	288
S-8750	1-5/8	1-3/8	12.75	48.0	8.00	205.4	202.4	175.5	196.8	2.79	128
S-8760	1-5/8	1-3/8	12.75	60.0	8.00	259.5	255.8	221.7	248.7	3.53	218
S-8770	2-1/8	1-3/8	12.75	72.0	8.00	313.7	309.2	268.0	300.6	4.26	260
S-8780	2-1/8	1-3/8	12.75	96.0	8.00	422.1	416.0	360.7	404.5	5.74	360

*All Pump Down Capacities calculated at 90% of receiver volume at 90°F (32°C)