Oil Receiver
Type PKOR, CE

Applications

HPEOK Oil receivers are used in "Low and High pressure oil control systems". Due to system design, loading and defrosting cycle, the changing oil mass can be send back by oil separator, thus, a safety oil reserve is required for the operation of oil control system. In the oil receiver, any refrigerant trapped within the oil is boiled–off and the oil is cooled and kept available. HPEOK oil receivers are normally equipped with sight glasses with float ball level indicators, for upper and lower level indication, and with two shut off valves, the top valve receives valve form oil separator, a nd the bottom valve sends oil to the oil regulator.

Construction

HPEOK oil receivers are supplied with:

– Two/Three sight glasses with level indicator balls
– check the oil level in the receiver.
– Two rotalock valves to easy connect oil fill and oil drain.
  These valves are not mounted on the receiver; they are in the package with the proper gaskets.
– A 3/8" SAE Flare connection on top of the receiver can allow to assemble a pressure differential check valve.
  Note: The Pressure differential check valve is not supplied with receiver; if it's necessary to use a positive differential pressure between the receiver and the compressor crankcase, we recommend HPEOK Pressure differential check valve:
– PKV–20 (with differential pressure of 1.38 bar)

When Screwing the differential valve onto the 3/8"SAE connection, remember to use a PTFE gasket between the receiver and valve.

Optional device

sight glass

Differential check valve

Installation

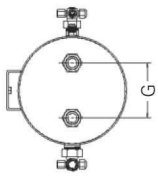
Oil should be added to the oil receiver to the upper (or middle) sight glass on new system start–up. During the first two working days of the refrigerating system, oil should be added to maintain a level between the two sight glasses. This procedure may require several oil charges because the oil is adsorbed in the refrigerant. When the refrigerating system is balanced, the oil level in the receiver must be controlled during each maintenance inspection and the oil should be added again if the level decreases the lower sight glass.

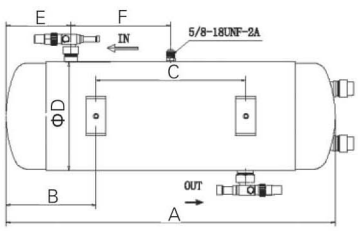
When adding or replacing an oil receiver to an existing system, the oil should be filled to the top of the lower sight glass only. Because the system is placed into operation, the oil level is needed to be observed during the first two days.

Add adequate oil to the receiver if the level decreases below the lower sight glass;Drain adequate oil from the receiver if the level rises above the upper sight glass.

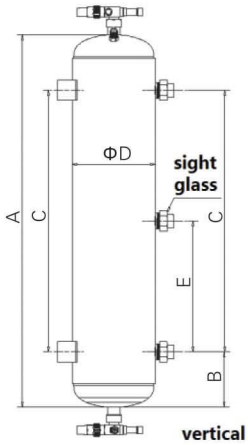
Technical specification

Max. Allowable operating pressure: 3.0Mpa
Refrigerant: Suitable with HFC & HCFC Refrigerants and associated oil (R134a, R404A, R507, R407A, R407C, R22 etc).





horizontal



vertical

Specification

Part No.	Inlet & Outlet	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	Sight Glasses Qty	Oil storage volume (L)
PKOR–6	3/8	338	94	150	165	–	–	2	6
PKOR–8	3/8	438	109	220	165	–	–	2	8
PKOR–10	3/8	548	131	285	165	–	–	2	10
PKOR–12	3/8	638	139	360	165	–	–	2	12
PKOR–14	1/2	738	110	518	165	259	–	3	14
PKOR–19	1/2	580	140	300	219	–	–	2	19
PKOR–23	5/8	700	140	420	219	210	–	3	23
PKOR–10CL	3/8,1/2	548	144	260	165	90	208	2	10
PKOR–20CL	3/8,5/8	660	180	300	219	130	200	2	20

HPEOK can customize oil receivers that can be approved for all hazardous fluids on request.

Differential Check Valve Type PKV, CE

Applications

The differential check valves are designed for use in “Low pressure oil control systems” and are installed on commercial refrigerating systems and on civil and industrial conditioning plants.

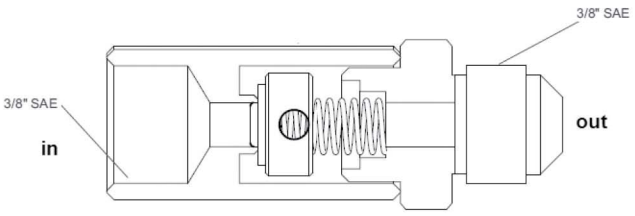
Installation

In order to return oil from the receiver back to the compressors at a sufficient flow rate, there must be a differential between receiver pressure and crankcase pressure. The valve is installed between the oil receiver and the suction line. The differential check valve is directly mounted on the 3/8" SAE Flare connection of the receiver and is piped to the suction line.

For CO2 units with significant pressure fluctuations we provide valves on request, it is able to ensure the pressure equalization between the suction line and the receiver if the excess pressure in the suction line is above 0.1bar. As a result the oil receiver pressure will never be significant lower the suction line pressure.

Refrigerant

HPEOK differential check valves is suitable with HFC & HCFC Refrigerants and their associated oils (R134a, R404A, R507, R407A, R407C, R22 etc).
Moreover, HPEOK provide valves for different refrigerants on request.



Specification	
Part NO.	Pressure differentia initiallzation
PKV–20	20psi (1.3bar)