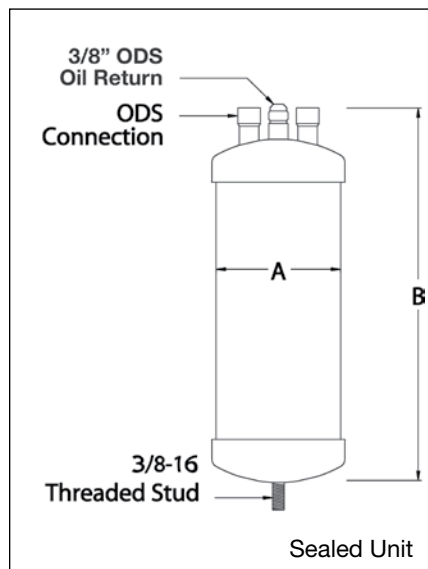


High Pressure Conventional Oil Separators

Maximum Working Pressure—675 psig



High Pressure Conventional Oil Separators

Our standard screen style separators remove oil from refrigerant gas using three methods: velocity reduction, filtering through screens and baffling. All separated oil is then returned to the compressor crankcase or reservoir by an internal oil float valve.

Select an oil separator based on the system's tonnage under normal operating conditions. This is the capacity or compressor(s) BTUs based on the refrigerant gas at the saturated suction and condensing temperatures of the operating system. For selection purposes, select an oil separator with the nearest capacity to the system's load at the evaporating temperature

For refrigerants and conditions not listed, see our sizing calculator at www.westermeyerind.com or contact Westermeyer Industries for assistance.

Features

- Welded design for higher strength
- Nitrogen tested for cleanliness
- Powder paint finish
- 675 psig maximum working pressure



Catalog Number	ODS Conn. Size	Dimensions		Max. Capacity in Tons of Refrigeration		Precharge Amount (oz.)
				CO ₂	R-410A	
		A	B	-20°F	+40°F	
OSH4-02	1/4	4"	8.25"	4	2.5	15
OSH4-03	3/8	4"	8.25"	4	2.5	15
OSH4-04	1/2	4"	10.25"	5	3	15
OSH4-05	5/8	4"	14.25"	16	10	15
OSH4-07	7/8	4"	17.75"	25	16	15
OSH4-11	1-1/8	4"	21"	33	21	15
OSH4-13	1-3/8	4"	21"	37	23	15
OSH6-11	1-1/8	6"	15.38"	40	25	40
OSH6-13	1-3/8	6"	15.38"	43	27	40
OSH6-15	1-5/8	6"	18.63"	57	35	40

See page 15 for oil separator sizing information. All capacities shown for R-410A are based on 100°F condensing temperature. All capacities shown for CO₂ are based on 20°F condensing temperature.

Centrifugal, Coalescing, and Conventional Oil Separator

Discharge CFM Sizing Chart

Example of Use

Find the DCFM value for the refrigerant being used at the appropriate evaporating and condensing temperature. Then, multiply this value by the system tonnage at the operating conditions. Use this value to select an oil separator with the nearest maximum DCFM value to the calculated DCFM.

i.e. R-134A, 20 Tons @ 20F/110F = 1.02 DCFM. Total DCFM = 20.40 (20 tons x 1.02 DCFM)

For refrigerants and conditions not listed, see our sizing calculator at www.westermeyerind.com or contact Westermeyer Industries for assistance.

Evaporating Temperature										
		-40°F	-30°F	-20°F	-10°F	0°F	10°F	20°F	30°F	40°F
R-134A Condensing Temperature	80°F	1.60	1.56	1.52	1.48	1.45	1.42	1.39	1.36	1.33
	90°F	1.44	1.40	1.37	1.33	1.30	1.27	1.24	1.22	1.19
	100°F	1.31	1.27	1.24	1.21	1.17	1.15	1.12	1.09	1.07
	110°F	1.20	1.17	1.13	1.10	1.07	1.04	1.02	0.99	0.97
	120°F	1.11	1.08	1.04	1.01	0.98	0.95	0.93	0.91	0.88
R-22 Condensing Temperature	80°F	1.03	1.01	1.00	0.98	0.97	0.96	0.94	0.93	0.92
	90°F	0.93	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.83
	100°F	0.84	0.83	0.81	0.80	0.79	0.78	0.77	0.76	0.75
	110°F	0.77	0.75	0.74	0.73	0.72	0.71	0.70	0.69	0.68
	120°F	0.71	0.69	0.68	0.67	0.65	0.64	0.63	0.62	0.61
R-404A Condensing Temperature	80°F	1.02	1.00	0.96	0.94	0.92	0.89	0.87	0.85	0.83
	90°F	0.95	0.92	0.89	0.86	0.84	0.81	0.80	0.78	0.76
	100°F	0.88	0.85	0.81	0.79	0.76	0.74	0.72	0.70	0.68
	110°F	0.83	0.80	0.77	0.74	0.71	0.69	0.67	0.65	0.63
	120°F	0.77	0.75	0.71	0.68	0.66	0.63	0.61	0.59	0.58
R-410A Condensing Temperature	80°F					0.62	0.62	0.61	0.60	0.60
	90°F					0.56	0.55	0.55	0.54	0.53
	100°F					0.50	0.50	0.49	0.49	0.48
	110°F					0.46	0.45	0.44	0.44	0.43
	120°F					0.42	0.41	0.40	0.40	0.39
CO₂ Condensing Temperature	20°F	0.37		0.37		0.37				
	40°F	0.30		0.30		0.30				
	60°F	0.23		0.23		0.23				