OIL SEPARATOR-RESERVOIRS

The function of a Helical Oil Separator-Reservoir is to remove and store oil from the discharge gas so that it can be returned to the Compressor.

Applications

Helical Oil Separator-Reservoirs can be used in a variety of applications. Common applications include multi-compressor racks. Helical Oil Separator-Reservoirs are intended for High Pressure Oil Management Systems.

These products are designed for use with scroll and reciprocating type compressors. They are not recommended for screw or rotary vane compressors. Henry Technologies' Oil Separators are suitable for use with HCFC and HFC refrigerants, and their associated oils, as well as other industrial fluids non-corrosive to steel, copper and Teflon.

How it works

The Helical Separator does not rely on any moving parts for oil separation. As the oil laden hot gas enters the separator it is directed in a spiral motion around a helical flighting. The centrifugal forces act on the gas/oil mixture causing heavier oil particles to spin to the perimeter where they impact an internal screen. The screen layer functions as both an oil stripping and draining medium. Separated oil flows downward along the boundary of the shell through a baffle and into an oil collection chamber. The specially engineered baffle isolates the oil collection chamber and eliminates oil re-entrapment by preventing turbulence. The virtually oil free refrigerant gas then exits through a screen fitting just below the lower edge of the helical flighting. Oil Separator-Reservoirs do not have an oil float assembly. Instead, a dip tube is located in the oil chamber that feeds oil to the compressor through a High Pressure Oil Management System.

Main Features

- *Patented Henry Technologies Design
- ODS refrigerant connections
- SAE flare Rotalock valve oil connection
- High oil separation efficiency - up to 99%
- Low pressure drop
- Integrated oil reservoir

Technical Specifications

Maximum working pressure = 450 PSI (31 Bar)
Allowable operating temperature = +15°F to +300°F (-10°C to +149°C)

Oil Separators are UL and C-UL Listed by Underwriters Laboratories, Inc. Henry Technologies' Oil Separators 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 main components; shell, end caps and connections are made from carbon steel.

Installation - Notes

Full instructions are given in the Product Instruction Sheet, included with each Oil Separator-Reservoir.

Selection Guidelines

Henry Technologies' Oil Separator-Reservoirs rely on adequate gas velocities to allow for oil extraction from the hot gas so sizing according to the DCFM rating is important. The Oil Separator-Reservoir DCFM Rating table shows the min/max ratings allowed for sufficient separation and low pressure drop. When sized correctly the Oil Separator-Reservoir models will separate up to 99% of the oil from the hot gas. Please contact Technical Support at 1-800-627-5148 for assistance or recommendations when selecting Oil Separators.

❶ Inlet ODS
❷ Outlet ODS
❸ Oil Return
❹ Sight Glass
❺ 1/2” NPT Fitting

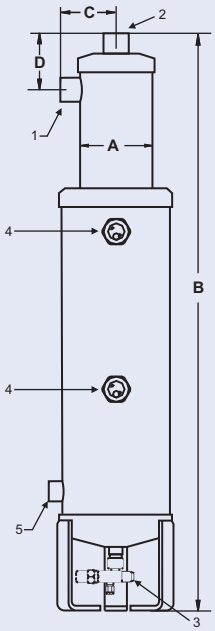

FIG 1

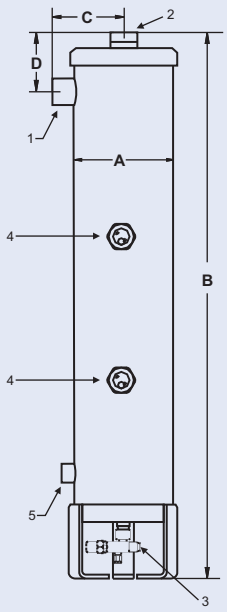

FIG 2

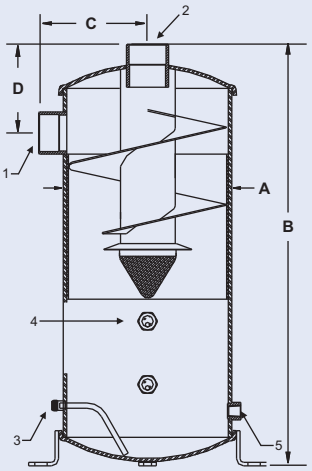

FIG 3

Part No	Fig No	ODS (inch)	Dimensions (inch)				Pre-charge Amount (gal*)	Weight (lbs)
			A	B	C	D		
S-5388	1	1 1/8	4.0	32.0	3.00	2.97	2	35.0
S-5390	2	1 3/8	6.0	33.5	4.25	3.69	2	36.0
S-5392	2	1 5/8	6.0	35.5	4.25	3.95	2	37.0
S-5394	2	2 1/8	6.0	35.5	4.38	4.19	2	37.0
S-5302	3	2 1/8	8.0	25.5	5.38	5.07	2	43.0
S-5303	3	2 5/8	10.0	30.0	6.50	5.63	2	64.0
S-5304	3	3 1/8	12.0	30.0	7.75	6.32	2	106.0

*on existing installation pre-charge with 1 Gallon

Part No	Oil Separator-Reservoir DCFM Capacity											
	R-507		R-404A		R22		R134a		R407A		R407C	
	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM
S-5388	6.8	14.9	6.8	14.9	6.8	18.3	6.9	21.2	6.8	16.3	6.8	17.0
S-5390	12.6	26.4	12.6	26.4	12.7	32.0	12.6	37.2	12.6	28.9	12.7	30.1
S-5392	13.6	34.7	13.6	34.8	13.6	41.9	13.8	48.6	13.5	37.9	13.6	39.3
S-5394	14.6	44.3	14.8	44.4	14.7	53.4	14.9	62.3	14.7	48.4	14.6	50.2
S-5302	26.9	60.3	26.5	60.5	26.7	72.9	26.6	84.8	26.8	66.1	26.8	68.7
S-5303	51.9	88.8	52.0	88.8	52.0	107.0	52.0	124.8	51.8	96.7	52.0	100.7
S-5304	74.7	130.1	74.6	130.3	74.7	157.1	74.7	182.7	74.5	141.8	74.7	147.9

OIL SEPARATORS
Helical

The function of a Helical Oil Separator is to remove oil from the discharge gas and return it to the Compressor either directly or through an Oil Management System.

Applications
Helical Oil Separators are typically used on multi-compressor refrigeration racks or air conditioning units. They are primarily intended for use with scroll and reciprocating type compressors, and not intended to be used with screw or rotary vane compressors. Helical Oil Separators are intended for Low Pressure Oil Management Systems. Helical Oil Separators are suitable for use with HCFC and HFC refrigerants, and their associated oils, as well as other industrial fluids non-corrosive to steel, copper and brass.

Main Features
- *Patented Henry Technologies' Design
- ODS refrigerant connections
- SAE flare or ODS oil connection
- High oil removal efficiency - up to 99%
- Low pressure drop
- No moving parts within oil separation zone
- Serviceable models available, S-52** series
- 1/8 NPT oil drain
- Magnet on oil float to collect debris
- Replacement parts available

Standard 3/8" flare oil return connection; 3/8" ODS oil return connection available by ordering an "X" suffix (i.e. S-5292X).

How it Works
The Helical Separator does not rely on any moving parts for oil separation. As the oil laden hot gas enters the separator it is directed in a spiral motion around a helical flighting. The centrifugal forces act on the gas/oil mixture causing heavier oil particles to spin to the perimeter where they impact an internal screen. The screen layer functions as both an oil stripping and draining medium. Separated oil flows downward along the boundary of the shell through a baffle and into an oil collection chamber. The specially engineered baffle isolates the oil collection chamber and eliminates oil re-entrapment by preventing turbulence. The virtually oil free refrigerant gas then exits through a screen fitting just below the lower edge of the helical flighting. Oil flow out of the separator is controlled by an oil float assembly in the bottom of the collection chamber. The oil may be returned directly to the compressor or to an Oil Management System.

Technical Specifications
Maximum working pressure = 450 PSI (31 Bar)
Allowable operating temperature = +15°F to +300°F (-10°C to +149°C)

Henry Technologies' Helical Oil Separators are UL and C-UL Listed by Underwriters Laboratories, Inc. Additionally, Helical Oil Separators 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 main components; shell, end caps and connections are made from carbon steel. The float assemblies are made from stainless steel, brass and copper.

Installation - Notes
Full instructions are given in the Oil Level Control Manual, included with each separator.

Selection Guidelines
Henry Technologies' Helical Oil Separators rely on adequate gas velocities to allow for oil extraction from the hot gas so sizing according to the DCFM rating is important. The Helical Oil Separator DCFM Rating table shows the min/max ratings allowed for sufficient separation and low pressure drop. When sized correctly the helical models will separate up to 99% of the oil from the hot gas. Please contact Technical Support at 1-800-627-5148 for assistance or recommendations when selecting Oil Separators.

c UL us CRN

❶ Inlet ODS
❷ Outlet ODS
❸ 3/8” SAE Flare Oil Return
❹ 3/8”-16 Stud

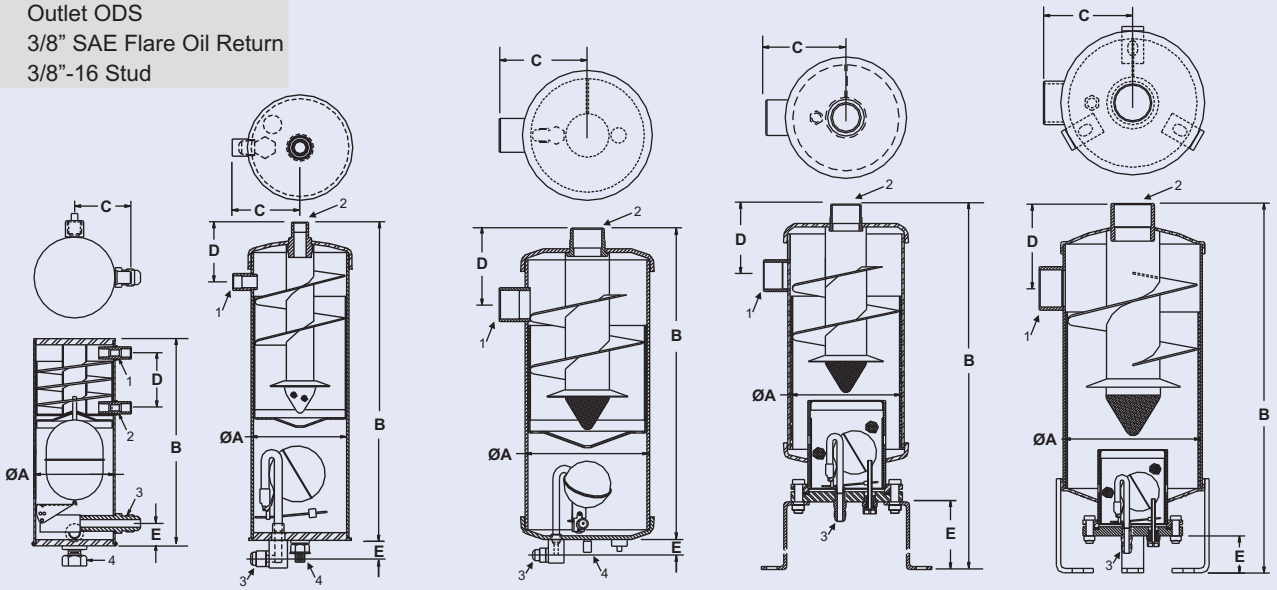

FIG 1 FIG 2 FIG 3 FIG 4 FIG 5

NON-SERVICEABLE OIL SEPARATORS

Part No	ODS (inch)	Fig No	Dimensions (inch)					Pre-charge Oil (oz)	Weight (lbs)
			ØA	B	C	D	E		
S-5180	1/4	1	2.5	6.38	1.75	1.69	0.69	14	2.65
S-5181	3/8	1	2.5	7.50	1.75	3.71	0.65	14	3.09
S-5182	1/2	2	4.0	13.00	2.75	2.44	0.75	14	7.50
S-5185	5/8	2	4.0	15.00	2.75	2.50	0.75	14	8.60
S-5187	7/8	2	4.0	17.00	3.00	2.94	0.75	14	10.14
S-5188	1 1/8	2	4.0	19.00	3.00	3.06	0.75	14	10.14
S-5190	1 3/8	3	6.0	15.00	4.25	3.69	0.75	40	19.62
S-5192	1 5/8	3	6.0	17.00	4.25	3.95	0.75	40	20.94
S-5194	2 1/8	3	6.0	17.00	4.38	4.19	0.75	40	21.38

Notes: Standard 3/8” flare oil return connection. 3/8” O.D.S. oil return connection available by ordering an “X” suffix (i.e. S-5292X). See Selection Guidelines for sizing instructions.

SERVICEABLE OIL SEPARATORS

Part No	ODS (inch)	Fig No	Dimensions (inch)					Pre-charge Oil (oz)	Weight (lbs)
			ØA	B	C	D	E		
S-5290	1 3/8	4	6.0	20.19	4.25	3.69	4.94	25	25.0
S-5292	1 5/8	4	6.0	22.00	4.25	3.95	4.94	25	25.0
S-5294	2 1/8	4	6.0	22.25	4.38	4.19	4.94	25	25.0
S-5202	2 1/8	5	8.0	24.00	5.38	4.88	4.94	25	39.0
S-5203	2 5/8	5	10.0	27.29	6.50	5.63	4.94	25	58.0
S-5204	3 1/8	5	12.0	29.31	7.75	6.45	4.94	25	94.0

Notes: Standard 3/8” flare oil return connection. 3/8” O.D.S. oil return connection available by ordering an “X” suffix (i.e. S-5292X). See Selection Guidelines for sizing instructions.

Part No	Helical Oil Separator DCFM Capacity											
	R-507		R-404A		R22		R134a		R407A		R407C	
	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM	Min DCFM	Max DCFM
S-5180	0.29	0.45	0.29	0.45	0.29	0.54	0.29	0.63	0.29	0.49	0.29	0.51
S-5181	0.43	1.42	0.44	1.42	0.44	1.71	0.44	2.00	0.42	1.54	0.42	1.61
S-5182	1.6	3.1	1.6	3.1	1.6	3.7	1.6	4.3	1.6	3.3	1.6	3.5
S-5185	1.9	4.1	1.9	4.1	1.9	5.0	1.9	5.8	1.9	4.5	1.9	4.7
S-5187	4.8	11.2	4.8	11.2	4.8	13.5	4.9	15.7	4.8	12.2	4.8	12.7
S-5188	6.8	14.9	6.8	14.9	6.8	18.3	6.9	21.2	6.8	16.3	6.8	17.0
S-5190	12.5	26.4	12.5	26.4	12.5	31.8	12.6	37.1	12.5	28.8	12.5	30.0
S-5192	13.5	34.6	13.5	34.6	13.6	41.8	13.6	48.6	13.5	37.8	13.5	39.3
S-5194	14.7	44.2	14.7	44.2	14.7	53.3	14.7	62.1	14.7	48.2	14.7	50.1
S-5290	12.6	26.4	12.6	26.4	12.7	32.0	12.6	37.2	12.6	28.9	12.7	30.1
S-5292	13.6	34.7	13.6	34.8	13.6	41.9	13.8	48.6	13.5	37.9	13.6	39.3
S-5294	14.6	44.3	14.8	44.4	14.7	53.4	14.9	62.3	14.7	48.4	14.6	50.2
S-5202	26.9	60.3	26.5	60.5	26.7	72.9	26.6	84.8	26.8	66.1	26.8	68.7
S-5203	51.9	88.8	52.0	88.8	52.0	107.0	52.0	124.8	51.8	96.7	52.0	100.7
S-5204	74.7	130.1	74.6	130.3	74.7	157.1	74.7	182.7	74.5	141.8	74.7	147.9

OIL SEPARATORS
Conventional

The function of an Oil Separator is to remove oil from the discharge gas and return it to the Compressor either directly or through an Oil Management System.

Applications
Conventional Oil Separators can be used in a wide variety of applications. Common applications include multi-compressor racks and remote condensing units. These separators are designed for use with scroll and reciprocating type compressors. They are not recommended for screw or rotary vane compressors. Conventional oil separators are intended for Low Pressure Oil Management Systems.

Conventional Oil Separators are suitable for use with HCFC and HFC refrigerants, and their associated oils, as well as other industrial fluids non-corrosive to steel, copper and brass.

Main Features

- •ODS refrigerant connection
- •SAE flare oil connections
- •Low pressure drop
- •No moving parts within oil separation zone
- •Serviceable models available, S-19** series
- •1/8" NPT oil drain
- •Magnet on oil float to collect debris
- •Replacement parts available

Technical Specifications
Maximum working pressure = 450 PSI (31 Bar)
Allowable operating temperature = +15°F to +300°F (-10°C to +149°C)

Henry Technologies' Convetional OIl Separators are UL and C-UL Listed by Underwriters Laboratories, Inc. Additionally, Conventional Oil Separators 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 main components; shell, end caps and connections are made from carbon steel. The separation screens are made from brass. The float assemblies are made from stainless steel, brass and copper.

Installation - Notes
Full instructions are given in the Oil Level Control Manual, included with each separator.

Selection Guidelines
Henry Technologies' Conventional Oil Separators should not be undersized (calculated DCFM greater than 125% of nominal), which would cause higher gas velocities to pass through the inlet/outlet screens. Higher flow velocities may cause pre-mature failure of the screens. Please contact Technical Support at 1-800-627-5148 for assistance or recommendations when selecting Oil Separators.

❶ Inlet ODS
❷ Outlet ODS
❸ 3/8” SAE Flare Oil Return
❹ 3/8” X 16 Stud

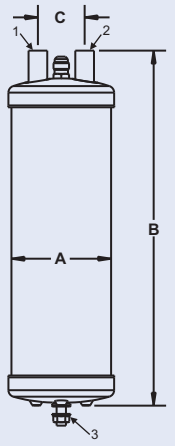

FIG 1

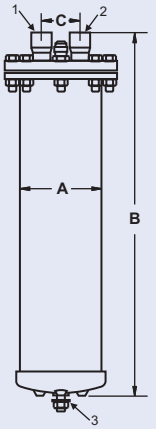

FIG 2

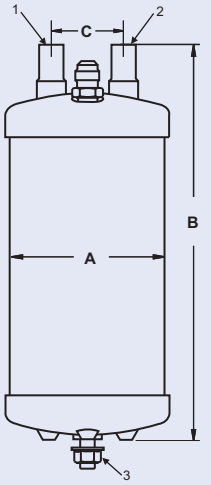

FIG 3

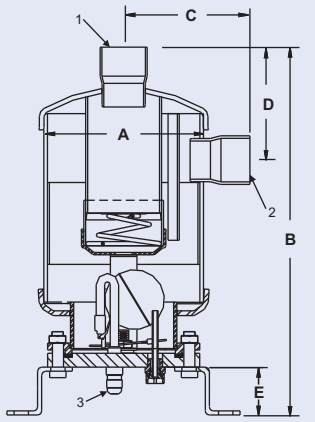

FIG 4

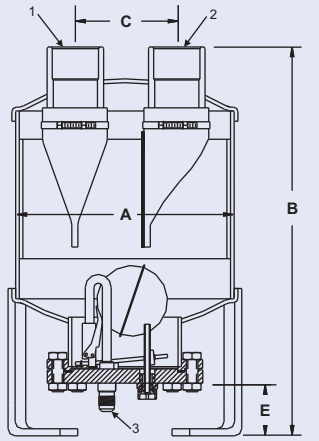

FIG 5

NON-SERVICEABLE OIL SEPARATORS

Part No	ODS (inch)	Fig No	Dimensions (inch)			Min Discharge CFM	Max Discharge CFM	Pre-charge Amount	Weight (lbs)
			ØA	B	C				
S-5580	1/4	1	4.0	8.25	1.88	0.25	0.75	12	4.2
S-5581	3/8	1	4.0	8.25	1.88	0.33	1.0	12	4.2
S-5582	1/2	1	4.0	10.25	1.88	0.50	1.5	12	5.1
S-5585	5/8	1	4.0	14.25	1.88	1.32	4.0	12	7.1
S-5587	7/8	1	4.0	17.75	1.88	2.15	6.5	12	7.9
S-5588	1 1/8	1	4.0	21.00	1.88	2.64	8.0	12	9.0
S-5590	1 3/8	1	4.0	21.25	1.88	3.30	10.0	12	9.9
S-5687	7/8	3	6.0	11.13	3.00	2.48	7.5	30	12.1
S-5688	1 1/8	3	6.0	15.38	3.00	2.97	9.0	30	15.0
S-5690	1 3/8	3	6.0	15.63	3.00	3.63	11.0	30	15.0
S-5692	1 5/8	3	6.0	18.63	3.00	4.62	14.0	30	18.1
S-5694	2 1/8	3	6.0	19.13	3.00	7.43	22.5	30	19.0

SERVICEABLE OIL SEPARATORS

Part No	ODS (inch)	Fig No	Dimensions (inch)				Min Discharge CFM	Max Discharge CFM	Pre-charge Amount	Weight (lbs)
			ØA	B	C	D				
S-5882	1/2	2	4.0	10.25	1.88	N/A	.50	1.5	12	9.0
S-5885	5/8	2	4.0	14.25	1.88	N/A	1.32	4.0	12	11.0
S-5887	7/8	2	4.0	17.75	1.88	N/A	1.98	6.0	12	12.1
S-5888	1 1/8	2	4.0	12.00	1.88	N/A	2.64	8.0	12	13.0
S-5890	1 3/8	2	4.0	21.25	1.88	N/A	3.30	10.0	12	13.0
S-5792	1 5/8	4	6.0	29.25	4.75	5.00	4.62	14.0	20	27.1
S-5794	2 1/8	4	6.0	29.56	4.60	5.25	7.43	22.5	20	27.1
S-1901	1 5/8	5	8.0	21.00	3.50	N/A	5.94	18.0	20	31.1
S-1902	2 1/8	5	8.0	21.00	3.50	N/A	8.91	27.0	20	32.0
S-1903	2 5/8	5	10.0	21.50	4.63	N/A	16.17	49.0	20	44.1
S-1904	3 1/8	5	12.0	25.75	5.56	N/A	22.44	68.0	20	75.0

OIL SEPARATORS
Coalescing - All-Welded

The function of a Coalescing Oil Separator is to remove oil from the discharge gas and return it to the Compressor either directly or through an Oil Management System.

Applications

The Coalescing Oil Separators are typically used on larger industrial refrigeration systems and rely on a coalescing element to remove oil from the hot gas. Once the filtering element becomes saturated with oil it will begin accumulating within the vessel. An optional float valve can be attached to control oil flow to an Oil Management System or straight to a compressor crankcase.

Henry Technologies' Coalescing Oil Separators are suitable for use with Ammonia, HCFC and HFC refrigerants, and their associated oils, as well as other industrial fluids non-corrosive to steel.

Main Features

- ODS and Butt Weld refrigerant connections
- NPT oil connections
- All welded steel design
- Designed specifically for reciprocating refrigeration compressors
- Five models available covering entire range of single stage and booster compressors
- Oil float valve assembly and shut off valves available as optional accessories.
- Can be mounted horizontal or vertical

CRN

Technical Specifications

Maximum working pressure = 400 PSI (27.5 Bar)
Allowable operating temperature = -20°F to +230°F (-29°C to +110°C)

Henry Technologies' Coalescing Oil Separators are constructed in accordance with ASME Section VIII. Additionally, Coalescing Oil Separators 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

All pressure bearing components and connections are made of steel.

❶ Inlet ❷ Outlet ❸ 3/4" NPT Drain ❹ 1/2" NPT Relief Port ❺ Horizontal Mount ❻ Vertical Mount

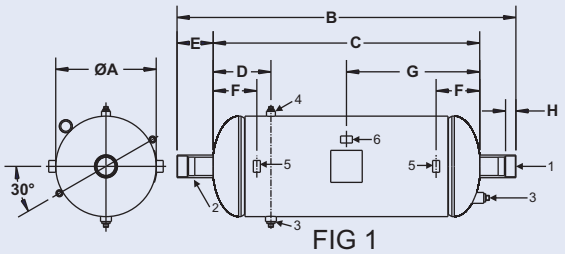

FIG 1

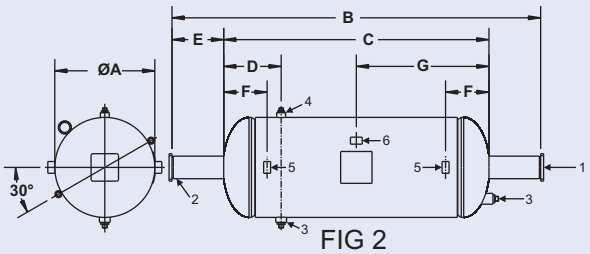

FIG 2

ODS CONNECTIONS*										
Part No	ODS (inch)	Fig No	Dimensions (inch)							Weight (lbs)
			ØA	B	C	D	E	F	G	H	
COS-030F	2 1/8	1	8.63	33.13	23.31	4.93	4.91	4.93	11.74	1.37	78.0
COS-070F	2 5/8	1	12.75	43.00	33.82	7.33	4.59	5.54	16.91	1.31	238.0
COS-140F	3 1/8	1	16.00	51.00	41.80	7.53	4.60	6.66	20.93	1.69	333.0
*All ODS connection separators can be cut back to BW connections											

BUTT WELD CONNECTIONS									
Part No	BW (inch)	Fig No	Dimensions (inch)						Weight (lbs)
			ØA	B	C	D	E	F	G	
COS-030	2	2	8.63	37.03	23.31	4.93	6.86	4.93	11.73	78.0
COS-070	2 1/2	2	12.75	47.00	33.82	7.33	6.59	5.54	16.91	238.0
COS-140	3	2	16.00	55.06	41.86	7.53	6.60	6.66	20.93	333.0
COS-205	4	2	18.00	65.00	51.70	9.04	6.65	8.04	25.85	462.0
COS-250	5	2	20.00	69.00	52.60	9.49	8.20	8.55	26.30	536.0

Nominal D.C.F.M.Capacity Rating						
Refrigerant		COS-030	COS-070	COS-140	COS-205	COS-250
Group 1	R-717 (Ammonia), Natural Gas	30	70	140	205	250
Group 2	R-290 (Propane), R744 (Carbon Dioxide)	25	65	135	200	225
Group 3	R-22, R-23, R-407C, R-410A, R508B	20	50	105	150	180
Group 4	R-134A, R-404A, R507A, R-417A, R422D, R434A	19	45	95	140	160
For additional refrigerants or sizing informatoin contact Technical Support at 1(800)-627-5148						

OIL SEPARATORS
Coalescing - Replaceable Cartridges

The function of a Coalescing Oil Separator is to remove oil from the discharge gas and return it to the Compressor either directly or through an Oil Management System.

Applications

The Coalescing Oil Separators are typically used on larger industrial refrigeration systems and rely on a coalescing element to remove oil from the hot gas. Once the filtering element becomes saturated with oil it will begin accumulating within the vessel. An optional float valve can be attached to control oil flow to an Oil Management System or straight to a compressor crankcase.

Henry Technologies' Coalescing Oil Separators are suitable for use with Ammonia, HCFC and HFC refrigerants, and their associated oils, as well as other industrial fluids non-corrosive to steel.

Main Features

- ODS and Butt Weld refrigerant connections
- NPT oil connections
- Easily replaceable coalescing cartridge
- Designed specifically for reciprocating refrigeration compressors
- Five models available covering entire range of single stage and booster compressors
- Oil float valve assembly and shut off valves available as optional accessories
- Can be mounted horizontal or vertical

Technical Specifications

Maximum working pressure = 400 PSI (27.5 Bar)
Allowable operating temperature = -20°F to +230°F (-29°C to +110°C)

Henry Technologies' Coalescing Oil Separators are constructed in accordance with ASME Section VIII. Additionally, Coalescing Oil Separators 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

All pressure bearing components and connections are made of steel.

❶ Inlet ❷ Outlet ❸ 3/4" NPT Drain ❹ 1/2" NPT Relief Port ❺ Horizontal Mount ❻ Vertical Mount

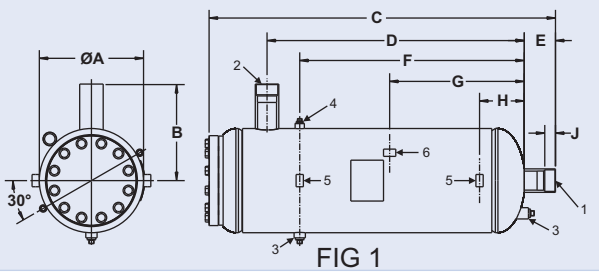

FIG 1

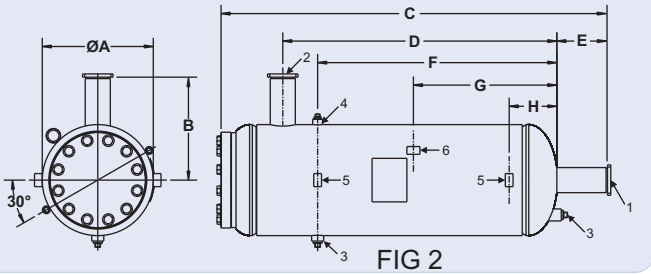

FIG 2

ODS CONNECTIONS											
Part No	ODS (inch)	Fig No	Dimensions (inch)								Weight (lbs)
			ØA	B	C	D	E	F	G	H	J	
COSM-030F	2 1/8	1	8.63	9.81	32.07	22.87	4.82	19.71	14.46	6.21	1.37	138.0
COSM-070F	2 5/8	1	12.75	11.75	42.35	31.47	3.82	27.47	16.47	5.47	1.31	379.0
COSM-140F	3 1/8	1	16.00	14.00	52.56	38.04	5.46	30.54	20.10	6.66	1.69	566.0

All ODS connection separators can be cut back to BW connections

BUTT WELD CONNECTIONS										
Part No	BW (inch)	Fig No	Dimensions (inch)							Weight (lbs)
			ØA	B	C	D	E	F	G	H	
COSM-030	2	2	8.63	10.31	33.76	22.87	6.51	19.71	14.46	6.21	138.0
COSM-070	2 1/2	2	12.75	11.82	44.38	31.47	5.82	27.47	16.47	5.47	379.0
COSM-140	3	2	16.00	14.00	52.56	38.04	5.46	30.54	20.10	6.66	566.0
COSM-205	4	2	18.00	16.00	70.06	49.91	8.27	44.41	27.54	8.04	773.0
COSM-250	5	2	20.00	16.00	71.49	50.79	7.32	44.29	32.73	8.54	896.0

Nominal D.C.F.M.Capacity Rating						
Refrigerant		COSM-030	COSM-070	COSM-140	COSM-205	COSM-250
Group 1	R-717 (Ammonia), Natural Gas	30	70	140	205	250
Group 2	R-290 (Propane), R744 (Carbon Dioxide)	25	65	135	200	225
Group 3	R-22, R-23, R-407C, R-410A, R508B	20	50	105	150	180
Group 4	R-134A, R-404A, R507A, R-417A, R422D, R434A	19	45	95	140	160

For additional refrigerants or sizing informatoin contact Technical Support at 1(800)-627-5148

OIL SEPARATORS
Screen Type

The function of a Screen Type Oil Separator is to remove oil from the discharge gas and return it to the Compressor either directly or through an Oil Management System.

Applications
Similar to the Coalescing Separators, Screen Type Oil Separators are typically used on larger industrial refrigeration systems. The stainless steel screen element offers a lower pressure drop compared to coalescing filters. Oil droplets are removed from the hot gas discharge by the stainless steel screen. The oil then drains and collects in the separator before being returned to the compressor. Henry Technologies' Screen Type Oil Separators are suitable for use with ammonia, HCFC and HFC refrigerants, and their associated oils, as well as other industrial fluids non-corrosive to steel.

Main Features

- ODS and Butt Weld refrigerant connections
- NPT oil connections
- Stainless steel 303 screen mesh filter media
- Oil float valve assembly and shut off valves available as optional accessories
- All welded design
- Lower pressure drop than coalescing models

Technical Specifications
Maximum working pressure = 400 PSI (27.5 Bar)
Allowable operating temperature = -20°F to +300°F (-29°C to +149°C)

Henry Technologies' Screen Type Oil Separators are constructed to ASME Section VIII. Additionally, Screen Type Oil Separators 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
All pressure bearing components and connections are made of steel. Filter element is made of stainless steel mesh.

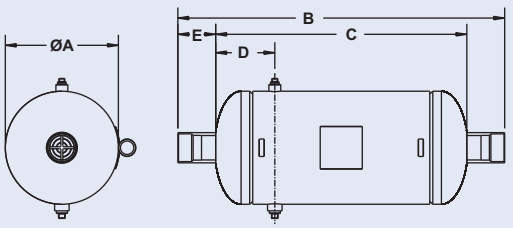

FIG 1

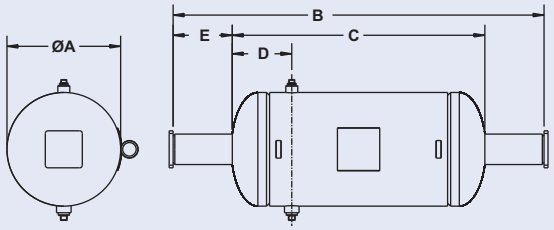

FIG 2

ODS CONNECTIONS*										
Part No	ODS (inch)	Fig No	Rating in CFM**		Dimensions (inch)					Weight (lbs)
			Max	Min	ØA	B	C	D	E	
O-100F	2 1/8	1	100	20	6.63	31.0	23.75	5.06	3.62	38.0
O-175F	2 5/8	1	175	30	8.63	30.95	23.23	4.89	3.86	48.0
O-250F	2 5/8	1	250	50	10.75	31.08	23.88	5.62	3.60	76.0
O-350F	3 1/8	1	350	75	12.75	40.00	31.26	9.01	4.37	120.0

*All ODS connection separators can be cut back to BW connections
**Compressor Displacement in cubic feet per minute

BUTT WELD CONNECTIONS										
Part No	BW (inch)	Fig No	Rating in CFM*		Dimensions (inch)					Weight (lbs)
			Max	Min	ØA	B	C	D	E	
O-100	2	2	100	20	6.63	35.0	23.75	5.06	5.62	40.0
O-175	2 1/2	2	175	30	8.63	32.75	23.25	4.89	4.75	54.0
O-250	2 1/2	2	250	50	10.75	35.08	23.88	5.62	5.60	81.0
O-350	3	2	350	75	12.75	42.00	31.26	9.01	5.37	124.0
O-650	4	2	650	100	14.0	44.61	31.89	9.47	6.36	162.0
O-900	4	2	900	150	16.0	52.00	44.00	15.5	4.00	218.0

*Compressor Displacement in cubic feet per minute