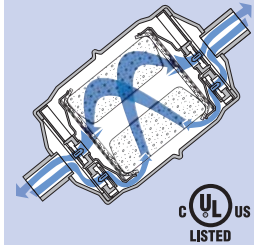




REVERSIBLE HEAT PUMP FILTER-DRIERS



DESIGN BENEFITS:

- A short overall length for easy installation.
- Drier operates in either flow direction with low pressure drop.
- Proven metal check valves used in construction — no synthetic materials.
- The Sporlan dependable molded core used for maximum filtration ability. When the flow direction reverses, dirt already collected remains in the filter-drier.
- A carefully engineered blend of desiccants for maximum water capacity and acid removal ability. The HPC-160 and HPC-300 Series have the HH style core with activated charcoal which offers maximum ability to remove oleoresin and other reactive chemical constituents in the lubricant.
- Same rugged construction as used in the Catch-All Series.

APPLICATION — These filter-driers are easy to install — even on compact units — because they are designed for installation in the reversing liquid line. The smaller HPC-100 Series, using the standard Catch-All core, is designed specifically for new installations and for use on OEM equipment. The HPC-160-HH Series uses a larger core which includes activated charcoal for maximum performance in removing all types of contaminants that might be found in a hermetic motor burnout, or in a highly contaminated field system.

The HPC-100 Series is recommended for new installations and system clean-up on HFC refrigerant systems because of its added water capacity. For HFC system clean-up, a compact style suction line filter-drier is suggested (see page 28) in addition to an HPC-100 Series Catch-All.

While intended for use in the reversing liquid line, these driers can be used in the reversing gas line, providing the system size does not exceed one ton. Since heat pump systems can operate in the winter at very low evaporator temperatures, problems with wax can occur. The HPC-160-HH and HPC-300-HH Series Filter-

Driers, with the charcoal style core, will remove wax and prevent problems with the expansion device.

In cleaning up a system after a hermetic motor burnout, follow the same general principles used on standard air conditioning systems. Always remove driers on the unit at the time of burnout. Test a sample of lubricant from the burned out compressor to see if a suction line filter-drier should be used in addition to a new liquid line drier. The HPC style reversible filter-driers can be used in the reversing liquid line, or the driers originally on the units can be replaced with similar standard Catch-All Filter-Driers.

CONSTRUCTION — Both filter-driers consist of one core in a shell with two check valves at either end. These check valves control the flow so filtration occurs on the outside of the core, regardless of the flow direction. The HPC driers do not release the dirt collected in one mode when the flow direction reverses. The reliable check valves used in these filter-driers have passed the most rigid OEM testing — no synthetic materials are used. These check valves have been thoroughly proven in field systems over a period of many years. They function well even in the presence of solid contaminants.

SPECIFICATIONS – FOR NEW INSTALLATIONS

TYPE NUMBER	CONNECTION SIZE Inches	SELECTION RECOMMEND. Tons	DIMENSIONS		SPECIFICATIONS											
			OVERALL LENGTH Inches	DIA. Inches	FLOW CAPACITY Tons @ 1 psi ΔP			WATER CAPACITY						LIQUID CAPACITY Ounces (wt.) @ 100°F		
					R-22	R-407C	R-410A	R-22		R-407C		R-410A		R-22	R-407C	R-410A
HPC-103	3/8 Flare	1 thru 5	6.75	3.0	3.4	3.1	3.3	215	176	181	60	94	70	12.2	10.7	10.6
HPC-103-S	3/8 Solder		5.88													
HPC-104	1/2 Flare		6.94													
HPC-104-S	1/2 Solder		6.00													

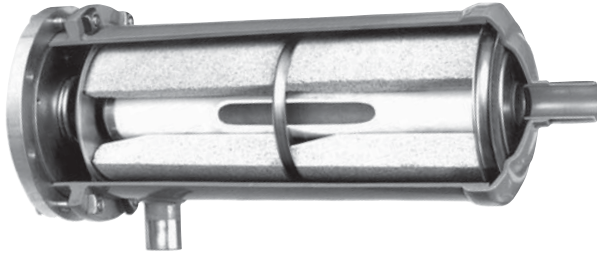
SPECIFICATIONS – FOR CLEAN-UP AFTER BURNOUT

TYPE NUMBER	CONNECTION SIZE Inches	SELECTION RECOMMEND. Tons	DIMENSIONS		SPECIFICATIONS											
			OVERALL LENGTH Inches	DIA. Inches	FLOW CAPACITY Tons @ 1 psi ΔP			WATER CAPACITY						LIQUID CAPACITY Ounces (wt.) @ 100°F		
					R-22	R-407C	R-410A	R-22		R-407C		R-410A		R-22	R-407C	R-410A
HPC-163-HH	3/8 SAE Flare	1 thru 5	7.78	3.0	3.7	3.4	3.6	93	81	90	88	69	100	14.5	12.7	12.6
HPC-163-S-HH	3/8 ODF Solder		6.92													
HPC-164-HH	1/2 SAE Flare		7.95													
HPC-164-S-HH	1/2 ODF Solder		7.07													
HPC-165-HH	5/8 SAE Flare	4 thru 12	8.28	3.0	4.9	4.5	4.8	167	119	161	88	123	109	19.7	17.3	17.2
HPC-165-S-HH	5/8 ODF Solder		7.35													
HPC-303-HH	3/8 SAE Flare		10.82													
HPC-303-S-HH	3/8 ODF Solder		10.06													
HPC-304-HH	1/2 SAE Flare	11.08														
HPC-304-S-HH	1/2 ODF Solder	10.18														
HPC-305-HH	5/8 SAE Flare	11.38														
HPC-305-S-HH	5/8 ODF Solder	10.42														
HPC-307-S-HH	7/8 ODF Solder	11.02														

HPC-100 Series — Core volume is 10 cubic inches. Core surface filtering area is 18 sq. inches. Maximum rated pressure is 650 psig.
 HPC-160-HH Series — Core volume is 14 cubic inches. Core surface filtering area is 26 sq. inches. Maximum rated pressure is 650 psig.
 HPC-300-HH Series — Core volume is 30 cubic inches. Core filtering area is 53 sq. inches. Maximum rated pressure is 650 psig.
 cUL_{us} Listed — Guide-SMGT-File No. SA-1756A & B.

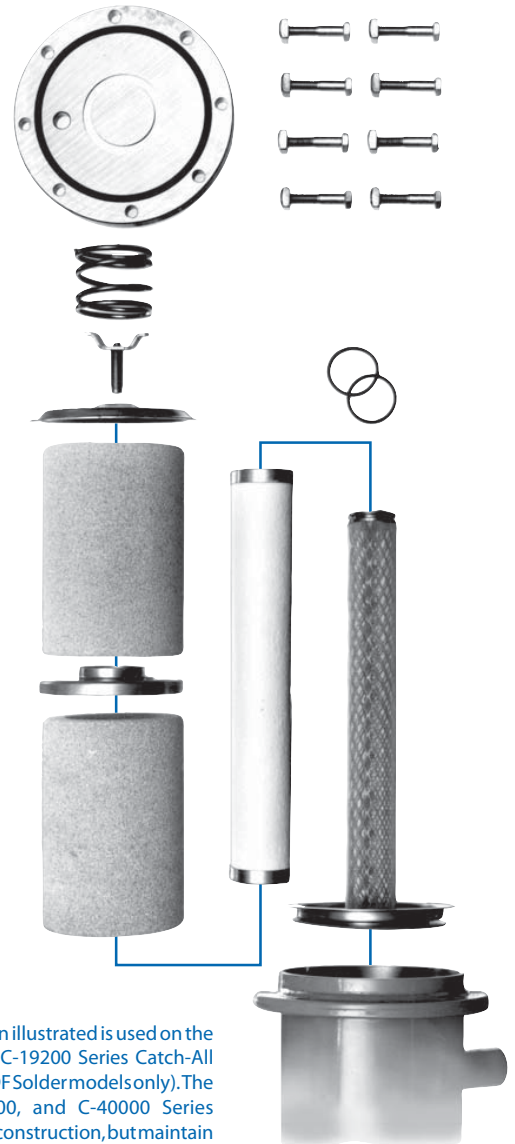


REPLACEABLE CORE TYPE



• DESIGN FEATURES

- The Catch-All shell utilizes an exclusive filter-within-a-filter construction. The new internal assembly, when used with Sporlan molded cores, provides maximum water capacity, excellent acid removal characteristics, the ability to remove products of lubricant decomposition, and outstanding filtration. The optional replaceable secondary filter offers unsurpassed filtration efficiencies without compromising the Catch-All's ability to hold a large amount of foreign material. The assembly is designed so the cores remove larger sized particles while the secondary filter removes microscopic particles. This unique construction aggressively filters particles circulating in a refrigerant system. This design is especially advantageous when commissioning a larger system.
- The shell design offers flexibility. The new internal assembly can be used with or without the secondary filter. The type of filtration needed depends upon the system requirements or application. Using the assembly without the secondary filter offers the same time tested, field-proven, filtration characteristics expected in a Catch-All Filter-Drier.
- The internal construction is designed to improve ease of assembly. The molded cores simply slide over the center tube, followed by spacer plates (if applicable). The outlet plate is fastened to the assembly by a wing screw. With the addition of a spring, the resulting assembly is easy to install and remove.
- The seal gasket prevents solid contaminants from bypassing the filter. The assembly is held tight against the gasket by a spring. O-rings are used with the secondary filter to provide a tight seal.
- The internal parts are plated steel – no plastic parts.
- The bolt and nut attachment of the endplate allows for simple, trouble-free installation. The nuts lock against the side of the shell for ease in tightening. Other designs, using cap screws threaded into the flange ring, run the risk of twisting off the head of the screw making removal difficult.
- Copper fittings are excellent for fast easy soldering. Fittings are pre-sized for proper fit, and suitable for use with soft solder, silver solder, Sil-Fos, or Phos-Copper. The fittings are brazed to the shell with a high temperature brazing alloy so they never loosen during the brazing operation on the job.

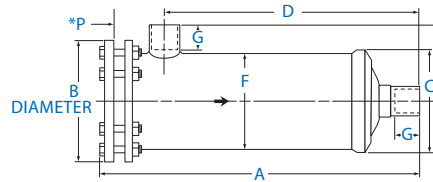


The construction illustrated is used on the C-480 through C-19200 Series Catch-All Filter-Driers (ODF Solder models only). The C-R420, C-30000, and C-40000 Series models differ in construction, but maintain the field-proven features that have been used successfully for many years.

- A complete line of fitting sizes are available with solder connections from 1/2" to 4-1/8" ODF - and pipe connections from 1/2" to 2".
- Heavy steel shells provide high bursting strength and are listed by Underwriters' Laboratories Inc.
- The shell exterior uses an epoxy powder coating to prevent corrosion even under the most adverse conditions.



REPLACEABLE CORE TYPE — SPECIFICATIONS



TYPE	CONNECTIONS Inches ODF Solder	OPTIONAL SECONDARY FILTER **	NO. OF CORES OR FILTER ELEMENTS	CORE PART NO.	VOLUME OF DESSICANT Cu. In.	FILTER ELEMENT PART NO.	MOUNTING BRACKETS	SHELL DIMENSIONS							NET WEIGHT Lbs.	SHIPPING WEIGHT Lbs.		
								A	B	C	D	E	F	G			*P	
C-R424-G	1/2		1	RCW-42	42	--	A-175-1	9.00			6.76	2.81		.50			5-1/2	6-1/2
C-R425-G	5/8	--						9.06	4.75	--	6.94	2.69	3.50	.62	6.50			
C-R427-G	7/8							9.44			7.25	3.03		.75				

C-R420 Series have a maximum rated pressure of 650 psig.

C-485-G	5/8		1					9.15			5.92	3.50		.50				
C-487-G	7/8							9.30			6.07	3.72		.75				
C-489-G	1-1/8	FS-480	1		48	RPE-48-BD	A-685	9.50	6.00	5.00	6.37	3.78	4.75	.91	7.50	10	12	
C-4811-G	1-3/8							9.60			6.37	3.94		.97				
C-4813-G	1-5/8							9.60			6.37	3.97		1.09				
C-967-G	7/8		2	RCW-48, RCW-4864, or RC-4864-HH	96	RPE-48-BD	A-685	14.84			11.61	3.72		.75				
C-969-G	1-1/8	FS-960						15.04	6.00	5.00	11.81	3.78	4.75	.91	13.00	14	16	
C-9611-G	1-3/8							15.04			11.81	3.78		.91				
C-9613-G	1-5/8							15.14			11.91	3.94		.97				
C-9613-G	1-5/8							15.14			11.91	3.97		1.09				
C-1449-G	1-1/8		3		144	RPE-48-BD	A-685	20.58			17.45	3.94		.97				
C-14411-G	1-3/8	FS-1440						20.68	6.00	5.00	17.45	3.94	4.75	.97	18.62	17	20	
C-14413-G	1-5/8							20.68			17.45	3.97		1.09				
C-19211-G	1-3/8		4		192	RPE-48-BD	A-685	26.22			22.99	3.94		.97				
C-19213-G	1-5/8	FS-19200						26.22	6.00	5.00	22.99	3.97	4.75	1.09	24.25	20	23	
C-19217-G	2-1/8							26.22			22.43	4.65		1.38				

C-485 through C-19200 Series (including NPT pipe connections) have a maximum rated pressure of 650 psig.

C-30013-G	1-5/8		3		300	RPE-100	A-175-2	27.94			23.88	5.12		1.12				
C-30017-G	2-1/8	--						28.06	7.50	6.25	24.00	5.12	6.00	1.38	25.62	36	40	
C-40017-G	2-1/8		4	RCW-100, RC-10098, or RC-10098-HH	400	RPE-100	A-175-2	34.56			30.50	5.31		1.38			43	47
C-40021-G	2-1/8							34.56			30.50	5.31		1.38			43	47
C-40025-G	2-5/8	--						34.75			30.56	5.38		1.50			45	47
C-40029-G	3-1/8							34.44	7.50	6.25	29.81	5.06	6.00	1.75	32.12	45	47	
C-40029-G	3-5/8							34.81			30.06	5.50		2.00			47	49
C-40033-G	4-1/8							35.12			29.81	5.62		2.19			47	49

C-30000 & C-40000 Series (including the C-40016-P) have a maximum rated pressure of 500 psig.

NPT PIPE CONNECTIONS																		
C-484-P	1/2		1		48			9.08			5.85	3.41			7.50	10	12	
C-966-P	3/4		2	RCW-48, RC-4864, or RC-4864-HH	96	RPE-48-BD	A-685	14.67			11.44	3.48			13.00	14	16	
C-1448-P	1	--	3		144			20.42	6.00	5.00	17.19	3.66	4.75	--	18.62	17	20	
C-19212-P	1-1/2		4		192			25.85			22.62	3.76			24.25	20	23	
C-40016-P	2	--	4	RCW-100 RC-10098, or RC-10098-HH	400	RPE-100	A-175-2	34.44	7.50	6.25	30.38	4.38	6.00	--	32.12	46	51	

UL_{US} Listed. — Guide-SMGT-File No. SA-1756

*P Dimension is the pull space required to change core.

**Optional Secondary Filter must be purchased separately. O-rings (p/n621-025) are supplied with each secondary filter, but can be purchased separately. This secondary filter cannot be used if the shell is installed in the suction line.

G SUFFIX — indicates unit is supplied with 1/4(female pipe connection in the flange plate and pipe plug. If the unit is intended for liquid line service an angle charging valve for system charging purposes can be installed in place of the pipe plug. If the unit is used in the suction line for clean-up after burnout, then insert a Schrader type access valve to serve as a pressure tap. Angle charging and

Schrader type access valves are available from your Sporlan wholesaler. NOTE: Catch-All shells with plain flange plate are available as a non-catalog option with a minimum order requirement.

TYPE NUMBERS WITH P SUFFIX indicates female threaded pipe connections.