BFK Liquid Line Bi-Directional Filter Drier

The BFK is a solid core, bi-directional, liquid line filter drier for heat pump applications for use with CFC, HCFC, and HFC refrigerants.

Features

- Available 5 to 30 cu. in. size
- Internal check valves allow flow and filtration in either direction, eliminates need for external check valves
- High moisture and acid removal capacity
- Corrosion resistant epoxy powder paint finish
- Copeland™ brand products approved for POE oils

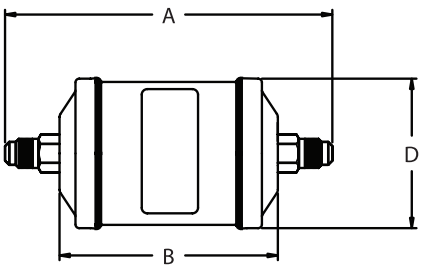
Specifications

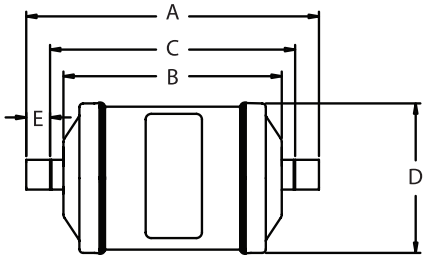
- Desiccant Blend: optimized for high water capacity and acid capacity
- Filtration: 40 microns
- Maximum working pressure: 680 psig
- UL/CUL file number: SA 3124

Nomenclature example: BFK 165S

BFK	16	5	S
Series	Unit Size (in cu. in.)	Connection Size (in 1/8")	S = ODF connections (omit for SAE)

Dimensional Data





Ordering Information

PCN	Description	Connection	Dimension (in)					Average Weight (lbs)
			A	B	C	D	E	
062300	BFK-052	1/4 SAE	4.84	3.03		2.64		0.99
062425	BFK-052S	1/4 ODF	4.16		3.47		0.35	
062254	BFK-053	3/8 SAE	5.15					
062255	BFK-053S	3/8 ODF	4.49		3.25		0.62	
058597	BFK-0825S	5/16 ODF	5.02	3.84	4.38		0.32	
043321	BFK-083	3/8 SAE	5.96					
043323	BFK-083S	3/8 ODF	5.31		4.50		0.40	
043325	BFK-084	1/2 SAE	6.184					
043327	BFK-084S	1/2 ODF	5.40		4.40		0.50	
043728	BFK085	5/8 SAE	6.64					
043730	BFK-085S	5/8 ODF	5.62		4.37		0.63	
043330	BFK-163	3/8 SAE	6.824	4.70		3.14		2.08
043333	BFK-163S	3/8 ODF	6.17		5.37		0.40	
043335	BFK-164	1/2 SAE	7.04					
043337	BFK-164S	1/2 ODF	6.26		5.26		0.50	
043732	BFK-165	5/8 SAE	7.50					
043734	BFK-165S	5/8 ODF	6.48		5.23		0.63	
058589	BFK-167S	7/8 ODF	7.06		5.56		0.75	
063076	BFK303	3/8 SAE	9.674	7.55				0.35
063077	BFK-303S	3/8 ODF	9.01		7.77		0.62	
063078	BFK-304	1/2 SAE	9.89					
063079	BFK-304S	1/2 ODF	9.05		7.79		0.63	
063080	BFK-305	5/8 SAE	10.35					
063081	BFK-305S	5/8 ODF	9.32		7.81		0.76	
063082	BFK-306	3/4 SAE	10.67					
063083	BFK-306S	3/4 ODF	9.74		7.83		0.96	
063084	BFK-307S	7/8 ODF	9.91		7.79		1.06	
063451	BFK-309S	1 1/8 ODF	10.27		7.98		1.14	

BFK Liquid Line Bi-Directional Filter Drier

Description	Connection	Flow Capacity Tons @ 1 psi ΔP [1,4] (For kW, multiply tons by 3.5)				Water Capacity [2] Drops Of Water [3]							
						R-22		R-407C		R-410A		R-744	
		R-22	R-410A	R-407C	R-744	75°F	125°F	75°F	125°F	75°F	125°F	-10°F	25°F
BFK-05 2	1/4 SAE	1.6	1.6	1.6	2.1	73	66	58	42	39	35	81	89
BFK-05 2S	1/4 ODF	2.2	2.2	2.2	2.8								
BFK-05 3	3/8 SAE	3.5	3.5	3.4	4.5								
BFK-05 3S	3/8 ODF	4.0	4.0	3.9	5.2								
BFK-08 3	3/8 SAE	4.5	4.5	4.4	5.8	159	144	106	79	85	75	136	150
BFK-08 3S	3/8 ODF	5.1	5.1	5.0	6.6								
BFK-08 4	1/2 SAE	6.4	6.4	6.3	8.3								
BFK-08 4S	1/2 ODF	6.7	6.7	6.6	8.6								
BFK-08 5	5/8 SAE	7.2	7.2	7.0	9.3								
BFK-08 5S	5/8 ODF	8.1	8.1	7.9	10.4								
BFK-16 3	3/8 SAE	4.6	4.6	4.5	5.9	323	294	237	179	178	160	221	260
BFK-16 3S	3/8 ODF	5.2	5.2	5.1	6.7								
BFK-16 4	1/2 SAE	7.7	7.7	7.6	9.9								
BFK-16 4S	1/2 ODF	8.1	8.1	7.9	10.4								
BFK-16 5	5/8 SAE	8.3	8.3	8.1	10.7								
BFK-16 5S	5/8 ODF	8.7	8.7	8.5	11.2								
BFK-30 3S	3/8 ODF	5.8	5.8	5.7	7.5	585	532	452	345	415	293	453	533
BFK-30 4	1/2 SAE	7.6	7.6	7.5	9.8								
BFK-30 4S	1/2 ODF	9.7	9.7	9.5	12.5								
BFK-30 5	5/8 SAE	10.3	10.3	10.1	13.3								
BFK-30 5S	5/8 ODF	14.2	14.2	13.9	18.3								
BFK-30 6S	3/4 ODF	16.0	16.0	15.7	20.6								
BFK-30 7S	7/8 ODF	16.7	16.7	16.4	21.5								
BFK-30 9S	1 1/8 ODF	18.0	18.0	17.5	23.2								

[1] All ratings in accordance with ARI Standard 710-04. 86°F liquid refrigerant temperature
5°F saturated vapor temperature
3.1 lbs./min./ton for R-134a
2.9 lbs./min./ton for R-22 and R-407C
4.0 lbs./min./ton for R-404A/507 and R-12
2.7 lbs./min./ton for R-410A

[2] Water Capacities are based on:
Equilibrium Point Dryness (EPD) of:
50 parts per million for R-134a, R404-A/507, R-410A and R-407C
60 parts per million for R-22
15 parts per million for R-12

[3] 20 drops of water = 1 gram = 1 cc

[4] For 2 PSI ΔP, Multiply values by 1.4

[5] Since there is currently no ARI standard for R-744, values are based on 1 ton of refrigeration at 20°F liquid refrigerant temperature and -20°F saturated vapor temperature.

Liquid Refrigerant Holding Capacity-Ounces

Unit Size	R-22		R-407C		R-410A		R-744	
	75°F	125°F	75°F	125°F	75°F	125°F	20°F	-20°F
05	4.6	4.2	4.4	3.9	4.1	3.5	3.7	4.1
08	7.7	6.9	7.3	6.4	6.9	5.8	6.2	6.9
16	14.2	12.7	13.5	11.8	12.6	10.6	11.4	12.7
30	21.0	18.7	20.0	17.4	19.6	16.5	16.8	18.7