

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

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)

Ordering Information

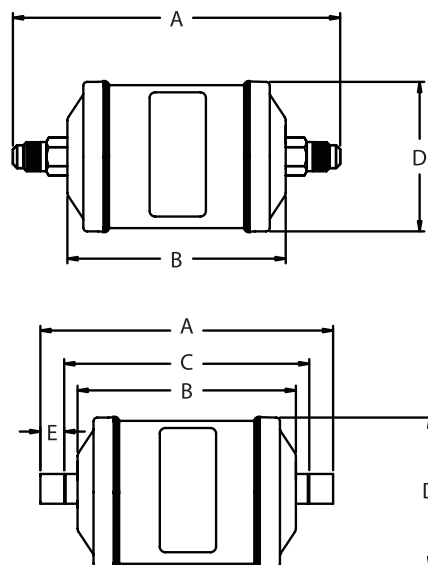
PCN	Description	Connection Size	Dimensions (in)					Weight (lbs)
			A	B	C	D	E	
062300	BFK-052	1/4 SAE	4.82	3.00	3.69	2.62	0.38	1.00
062425	BFK-052S	1/4 ODF	4.44					
062254	BFK-053	3/8 SAE	5.13					
062255	BFK-053S	3/8 ODF	4.48	3.82	4.37	2.62	0.40	
058584	BFK-082S	1/4 ODF	5.27					
058597	BFK-0825S	5/16 ODF	5.02					
043321	BFK-083	3/8 SAE	5.94					
043323	BFK-083S	3/8 ODF	5.29					
043325	BFK-084	1/2 SAE	6.16					
043327	BFK-084S	1/2 ODF	5.38	4.38	2.62	0.50		
043728	BFK085	5/8 SAE	6.62					
043730	BFK-085S	5/8 ODF	5.60					
043330	BFK-163	3/8 SAE	6.74	4.61	5.28	3.15	0.40	
043333	BFK-163S	3/8 ODF	6.08					
043335	BFK-164	1/2 SAE	6.96					
043337	BFK-164S	1/2 ODF	6.17					
043732	BFK-165	5/8 SAE	7.41					
043734	BFK-165S	5/8 ODF	6.39	5.14	3.15	0.63		
058589	BFK-167S	7/8 ODF	6.99					
063076	BFK303	3/8 SAE	9.63	7.5	5.49	3.15	0.25	
063077	BFK-303S	3/8 ODF	8.97					
063078	BFK-304	1/2 SAE	9.84					
063079	BFK-304S	1/2 ODF	9.02					
063080	BFK-305	5/8 SAE	10.31					
063081	BFK-305S	5/8 ODF	9.31					
063082	BFK-306	3/4 SAE	10.61					
063083	BFK-306S	3/4 ODF	9.72					
063084	BFK-307S	7/8 ODF	9.91					
063451	BFK-309S	1 1/8 ODF	10.22				0.91	



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

Dimensional Data



BFK Capacity Tables

Description	Connection	Flow Capacity Tons @ 1 psi $\Delta P^{1,4}$ (For kW, multiply tons by 3.5)			Water Capacity ² Drops Of Water ³					
					R-22		R-407C		R-410A	
		R-22	R-410A	R-407C	75°F	125°F	75°F	125°F	75°F	125°F
BFK-05 2	1/4 SAE	1.6	1.6	1.6	73	66	58	42	39	35
BFK-05 2S	1/4 ODF	2.2	2.2	2.2						
BFK-05 3S	3/8 ODF	4.0	4.0	3.9						
BFK-08 3	3/8 SAE	4.5	4.5	4.4	159	144	106	79	85	75
BFK-08 3S	3/8 ODF	5.1	5.1	5.0						
BFK-08 4	1/2 SAE	6.4	6.4	6.3						
BFK-08 4S	1/2 ODF	6.7	6.7	6.6						
BFK-08 5S	5/8 ODF	8.1	8.1	7.9						
BFK-16 3	3/8 SAE	4.6	4.6	4.5	323	294	237	179	178	160
BFK-16 3S	3/8 ODF	5.2	5.2	5.1						
BFK-16 4	1/2 SAE	7.7	7.7	7.6						
BFK-16 4S	1/2 ODF	8.1	8.1	7.9						
BFK-16 5	5/8 SAE	8.3	8.3	8.1						
BFK-16 5S	5/8 ODF	8.7	8.7	8.5	585	532	452	345	415	293
BFK-30 3S	3/8 ODF	5.8	5.8	5.7						
BFK-30 4	1/2 SAE	7.6	7.6	7.5						
BFK-30 4S	1/2 ODF	9.7	9.7	9.5						
BFK-30 5	5/8 SAE	10.3	10.3	10.1						
BFK-30 5S	5/8 ODF	14.2	14.2	13.9						
BFK-30 6S	3/4 ODF	16.0	16.0	15.7						
BFK-30 7S	7/8 ODF	16.7	16.7	16.4						

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
 4.4 lbs./min./ton for R-502
 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
 30 parts per million for R-502

³ 20 drops of water = 1 gram = 1 cc

⁴ For 2 PSI ΔP , Multiply values by 1.4

Liquid Refrigerant Holding Capacity-Ounces

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