



BFK 083S

BFK Series Hermetic Liquid Line Bi-Directional Filter Driers

The BFK is a liquid line filter drier for heat pump applications.

Features

- Available 5 to 30 Cubic In. size
- Internal check valve allows flow and filtration in either direction eliminating the need for external check valves
- High moisture and acid removal capacity
- Corrosion resistant epoxy powder paint finish
- Approved for POE oils

Specifications

Desiccant blend Optimized for high water and acid capacity
 Filtration 40 microns
 Maximum working pressure 680 psig (47 bar)
 UL/CUL file number SA3124
 Canadian CRN OE21971.513467890YTN

Model number nomenclature - Example: BFK 165S

Series	Unit size	Connection size	Connection style	Sequential identifier	Customer special	Pack type
BFK	16	5	S			
Hermetic Liquid Line Bi-Directional Filter Driers	In Cubic In.	In 1/8" Increments	S = ODF	Blank Thru -99	G = Customer Special (Omit for Standard)	B1 = Bulk Pack (Omit for Individual Pack)

BFK Bi-Directional Liquid Line Filter Driers

Unit size (cubic inches)	Inlet x outlet connection size	Model number	Item number
5	1/4" X 1/4" SAE	BFK 052	062300
5	1/4" X 1/4" ODF	BFK 052S	062425
5	3/8" X 3/8" SAE	BFK 053	062254
5	3/8" X 3/8" ODF	BFK 053S	062255
8	3/8" X 3/8" SAE	BFK 083	043321
8	3/8" X 3/8" ODF	BFK 083S	043323
8	1/2" X 1/2" SAE	BFK 084	043325
8	1/2" X 1/2" ODF	BFK 084S	043327
8	5/8" X 5/8" ODF	BFK 085S	043730
16	3/8" X 3/8" SAE	BFK 163	043330
16	3/8" X 3/8" ODF	BFK 163S	043333
16	1/2" X 1/2" SAE	BFK 164	043335
16	1/2" X 1/2" ODF	BFK 164S	043337
16	5/8" X 5/8" SAE	BFK 165	043732
16	5/8" X 5/8" ODF	BFK 165S	043734
16	7/8" X 7/8" ODF	BFK 167S	058589
30	3/8" X 3/8" ODF	BFK 303S	063077
30	1/2" X 1/2" SAE	BFK 304	063078
30	1/2" X 1/2" ODF	BFK 304S	063079
30	5/8" X 5/8" SAE	BFK 305	063080
30	5/8" X 5/8" ODF	BFK 305S	063081
30	3/4" X 3/4" ODF	BFK 306S	063083
30	7/8" X 7/8" ODF	BFK 307S	063084
30	1-1/8" X 1-1/8" ODF	BFK 309S	063451

BFK series capacity table

Model number	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-410a		R-407c		R-744		R-22		R-407c		R-410a		R-744	
		75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	14°F	75°F	75°F	125°F	14°F	75°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. 86oF 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
 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.

² Water Capacities are based on:
 Equilibrium Point Dryness (EPD) of:
 50 parts per million for R-134a,
 R404-A/507, R-410A, R-407C, and R-744
 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

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	1.4	12.7
30	21.0	18.7	20.0	17.4	19.6	16.5	16.8	18.7