BFKZ Liquid Line Bi-Directional Filter Drier

R-410A OPTIMIZED

System Protectors

The BFKZ is a solid core, bi-directional, liquid line filter drier for OEM heat pump applications optimized for use with R-410A.

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

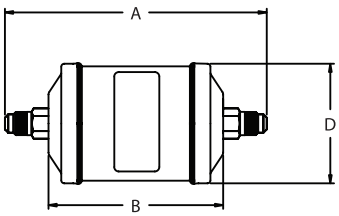
Specifications

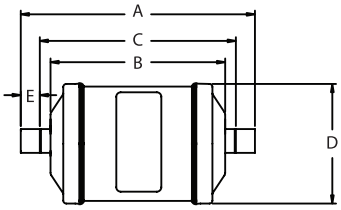
- Desiccant Blend: 100% Molecular Sieve Desiccant optimized for high water capacity
- Filtration: 40 microns
- Maximum working pressure: 680 psig
- UL/CUL file number: SA 3124

Nomenclature example: BFKZ 165S

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

Dimensional Data





Ordering Information

Description	Connection	Dimension (in)					Weight (lbs)
		A	B	C	D	E	
BFKZ-052	1/4 SAE	4.84	3.00	0.00	2.64		1.03
BFKZ-052S	1/4 ODF	4.16		3.47		0.35	
BFKZ-053	3/8 SAE	5.15		0.00			
BFKZ-053S	3/8 ODF	4.49		3.25		0.62	
BFKZ-054	1/2 SAE	5.34					
BFKZ-054S	1/2 ODF	4.50		3.29		0.61	
BFKZ-0825S	5/16 ODF	5.02	3.82	4.38		0.32	
BFKZ-083	3/8 SAE	5.96		0.00			
BFKZ-083S	3/8 ODF	5.31		4.50		0.40	
BFKZ-084	1/2 SAE	6.18		0.00			
BFKZ-084S	1/2 ODF	5.40		4.40		0.50	
BFKZ-085	5/8 SAE	Is not set up in GDL		Is not set up in GDL			
BFKZ-085S	5/8 ODF	5.62		4.37		0.63	
BFKZ-163	3/8 SAE	6.82	4.64	0.00	3.14		2.07
BFKZ-163S	3/8 ODF	6.17		5.37		0.40	
BFKZ-164	1/2 SAE	7.04		0.00			
BFKZ-164S	1/2 ODF	6.26		5.26		0.50	
BFKZ-165	5/8 SAE	7.50		0.00			
BFKZ-165S	5/8 ODF	6.48		5.23		0.63	
BFKZ-166S	3/4 ODF	Is not set up in GDL		Is not set up in GDL		Is not set up in GDL	
BFKZ-167S	7/8 ODF	7.06		5.56		0.75	
BFKZ-305	5/8 SAE	10.35	7.50	0.00	3.14		3.18
BFKZ-305S	5/8 ODF	9.32		7.81		0.76	
BFKZ-306S	3/4 ODF	9.74		7.83		0.96	
BFKZ-307S	7/8 ODF	9.91		7.79		1.06	
BFKZ-309S	1 1/8 ODF	10.27		7.98		1.14	

BFKZ Capacity Tables

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
BFKZ-05 2	1/4 SAE	1.6	1.6	1.6	2.1	95	90	95	90	95	90	90	105
BFKZ-05 2S	1/4 ODF	2.2	2.2	2.2	2.8								
BFKZ-05 3	3/8 SAE	3.5	3.5	3.4	4.5								
BFKZ-05 3S	3/8 ODF	4.0	4.0	3.9	5.2								
BFKZ-05 4	1/2 SAE	6.0	6.0	5.9	7.7								
BFKZ-05 4S	1/2 ODF	6.3	6.3	6.2	8.1								
BFKZ-082 5S	5/16 ODF	3.0	3.0	3.0	3.9	150	140	150	140	150	140	149	175
BFKZ-08 3	3/8 SAE	4.5	4.5	4.4	5.8								
BFKZ-08 3S	3/8 ODF	5.1	5.1	5.0	6.6								
BFKZ-08 4	1/2 SAE	6.4	6.4	6.3	8.3								
BFKZ-08 4S	1/2 ODF	6.7	6.7	6.6	8.6								
BFKZ-08 5	5/8 SAE	7.2	7.2	7.0	9.3								
BFKZ-08 5S	5/8 ODF	8.1	8.1	7.9	10.4								
BFKZ-16 3	3/8 SAE	4.6	4.6	4.5	5.9	295	280	295	280	295	280	289	338
BFKZ-16 3S	3/8 ODF	5.2	5.2	5.1	6.7								
BFKZ-16 4	1/2 SAE	7.7	7.7	7.6	9.9								
BFKZ-16 4S	1/2 ODF	8.1	8.1	7.9	10.4								
BFKZ-16 5	5/8 SAE	8.3	8.3	8.1	10.7								
BFKZ-16 5S	5/8 ODF	8.7	8.7	8.5	11.2								
BFKZ-16 6S	3/4 ODF	15.0	15.0	14.7	19.4								
BFKZ-16 7S	7/8 ODF	16.0	16.0	15.7	20.6								
BFKZ-30 5	5/8 SAE	10.3	10.3	10.1	13.3	550	540	610	570	610	570	418	490
BFKZ-30 5S	5/8 ODF	14.2	14.2	13.9	18.3								
BFKZ-30 6S	3/4 ODF	16.0	16.0	15.7	20.6								
BFKZ-30 7S	7/8 ODF	16.7	16.7	16.4	21.5								
BKFZ-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
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 , R-407C, and R-744
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

[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	16.3	18.7