



Selection table for filter and filter driers

Selection Criteria	Series										
	BFK	ADK	FDB	ADKS/FDH with Core		FDS-24 with Core		ASF	ASD	BTAS with Core	
				H/S/ W48	F48	S24	F24			AF	AF-D
Hermetic design	+	+	+					+	+		
For exchangeable cores				+	+	+	+			+	+
Quick cap fange						+	+				
Filter					+		+	+		+	
Filter drier	+	+	+	+		+			+		+
For liquid service	+	+	+	+		+					
For suction service					+	+	+	+	+	+	+
For heat pumps (bi-flow)	+										
Shell material	Steel	Steel	Steel	Steel		Steel		Steel	Steel	Brass	
Max. allowable pressure PS	45 bar	45 bar	45 Bbar	34.5*/46.0* bar		34.5* bar		27.5 bar		24 bar	

Note: *) Dependent on Medium Temperature

Bi-flow filter driers series BFK hermetic design for liquid refrigerants

Features

- Solid block style
- Integrated check valves ensure Bi-flow capability, eliminate the need for external check valves and reduce the external piping
- ODF Copper fittings for easy brazing
- Pattern flow for non-turbulent performance
- High water, acid adsorption capacity
- Filtration down to 40 microns
- Temperature range TS: -45°C...+65°C
- Max. allowable pressure PS: 45 bar
- CE marking not required acc. PED
-  US LISTED Underwriter Laboratories



BKF

Selection table - A1 refrigerants

Type	Part No.	Connection ODF*/SAE*	Flow Capacity (kW) Pressure Drop 0.07 bar**					
			R134a	R407C	R404A R507	R410A	R450A	R513A
BKF 052	007343	1/4" (6 mm) SAE	5.2	5.4	3.7	5.6	4.8	4.6
BKF 052S	007344	1/4" ODF	6.7	7.0	4.8	7.2	6.1	5.9
BKF 083	007345	3/8" (10 mm) SAE	10.6	11.0	7.5	11.4	9.7	9.2
BKF 083S	007346	3/8" ODF	12.0	12.5	8.5	12.9	11.0	10.5
BKF 084	007347	1/2" (12 mm) SAE	15.2	15.8	10.8	16.4	13.9	13.3
BKF 084S	007348	1/2" ODF	15.6	16.2	11.1	16.8	14.3	13.6
BKF 163	007349	3/8" (10 mm) SAE	13.6	14.2	9.7	14.7	12.5	11.9
BKF 163S	007350	3/8" ODF	15.5	16.1	11.0	16.7	14.2	13.5
BKF 164	007351	1/2" (12 mm) SAE	20.3	21.1	14.4	21.9	18.6	17.7
BKF 164S	007352	1/2" ODF	24.3	25.3	17.3	26.1	22.2	21.2
BKF 165	007353	5/8" (16 mm) SAE	25.1	26.2	17.9	27.1	23.0	21.9
BKF 165S	007354	5/8" ODF	25.6	26.7	18.3	27.6	23.5	22.4
BKF 305S	007356	5/8" (16 mm) ODF	34.1	35.6	24.3	36.8	31.3	29.8
BKF 307S	007357	7/8" (22 mm) ODF	40.6	42.3	28.9	43.7	37.2	35.5
BKF 309S	007358	1-1/8" ODF	47.0	49.0	33.5	50.7	43.1	41.1

Selection table - A2L refrigerants

Type	Part No.	Connection ODF*/SAE*	Flow capacity (kW) pressure drop 0.07 bar**					
			R32	R452B	R454B	R454C	R1234ze	R1234yf
BKF 052	007343	1/4" (6 mm) SAE	8.1	6.3	6.4	4.2	4.6	3.8
BKF 052S	007344	1/4" ODF	10.4	8.1	8.2	5.4	5.9	4.8
BKF 083	007345	3/8" (10 mm) SAE	16.3	12.8	12.8	8.5	9.2	7.6
BKF 083S	007346	3/8" ODF	18.5	14.5	14.6	9.7	10.5	8.6
BKF 084	007347	1/2" (12 mm) SAE	23.5	18.4	18.5	12.3	13.3	10.9
BKF 084S	007348	1/2" ODF	24.1	18.8	18.9	12.6	13.6	11.2
BKF 163	007349	3/8" (10 mm) SAE	21.1	16.5	16.6	11.0	11.9	9.8
BKF 163S	007350	3/8" ODF	23.9	18.7	18.8	12.5	13.6	11.1
BKF 164	007351	1/2" (12 mm) SAE	31.3	24.5	24.7	16.4	17.8	14.6
BKF 164S	007352	1/2" ODF	37.5	29.3	29.5	19.6	21.3	17.5
BKF 165	007353	5/8" (16 mm) SAE	38.8	30.4	30.6	20.3	22.0	18.1
BKF 165S	007354	5/8" ODF	39.7	31.0	31.2	20.7	22.5	18.5
BKF 305S	007356	5/8" (16 mm) ODF	52.8	41.3	41.5	27.6	29.9	24.6
BKF 307S	007357	7/8" (22 mm) ODF	62.8	49.1	49.4	32.8	35.6	29.2
BKF 309S	007358	1-1/8" ODF	72.7	56.9	57.2	38.0	41.2	33.8

Note 1: Flow capacities are in accordance with ARI710-86 and DIN 8949

Note 2: **) for 0.14 bar pressure drop, multiple values by 1.4

Note 3: *) SAE = Flare ODF = Brazing female

Note 4: Product label update is pending!

Nominal operating capacities based on following conditions:

Refrigerant	Evaporating Temperature	Liquid Temperature	Flow Rate (kg/kW/sec.)	Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec.)
R134a	-15°C	+30°C	0.0068	R32	-15°C	+30°C	0.0039
R407C			0.0063	R452B			0.0043
R404A/R507			0.0088	R454B			0.0047
R410A			0.0059	R454C			0.0058
R450A			0.0074	R1234ze			0.0076
R513A			0.0079	R1234yf			0.0089

Note: For selection of other operating conditions please use Copeland Select software. Product label update is pending!

Water and acid adsorption capacity

A1 refrigerants

Type / Size	Water Adsorption Capacity (gram)												Acid Adsorption Capacity (gram)
	Liquid Temperature 24°C						Liquid Temperature 52°C						
	R134a	R404A/ R507	R407C	R410A	R450A	R513A	R134a	R404A/ R507	R407C	R410A	R450A	R513A	
BFK-05...	4.4	4.5	3.4	2.8	6.0	6.0	4.1	4.3	2.8	2.2	5.4	5.4	0.3
BFK-08...	9.6	9.9	7.5	6.2	10.2	10.1	8.9	9.4	6.0	4.7	9.2	9.2	0.6
BFK-16...	18.9	19.5	14.8	12.2	14.1	14.1	17.5	18.5	11.9	9.3	15.5	15.5	1.2
BFK-30...	34.5	35.6	27.1	22.4	28.8	28.8	31.9	33.7	21.7	17.0	31.7	31.7	2.0

A2L refrigerants

Type / Size	Water Adsorption Capacity (gram)										Acid Adsorption Capacity (gram)
	Liquid Temperature 24°C					Liquid Temperature 52°C					
	R32	R452B	R454B/ R454C	R1234ze	R1234yf	R32	R452B/ R454C	R454B	R1234ze	R1234yf	
BFK-05...	3.4	3.4	3.4	6.0	6.0	2.7	2.6	2.6	5.4	5.4	0.3
BFK-08...	5.7	5.7	5.7	10.2	10.2	4.5	4.4	4.4	9.2	9.2	0.6
BFK-16...	11.5	10.8	10.8	19.1	14.1	9.1	8.3	8.3	17.4	17.4	1.2
BFK-30...	23.2	21.9	21.9	39.1	28.8	18.4	17.0	17.0	35.5	35.5	2.0

Technical data

Max. Allowable Pressure PS	45 bar
Test Pressure PT	47.3 bar
Liquid Temperature Refrigerant	-45...+65 °C
Fluid Group	I + II
List of Released Refrigerants Fluid Group II (A1): Fluid Group I (A2L): Note: Fluid group classification according to PED 2014/68/EU.	R134a, R404A, R407C, R410A, R450A, R507, R513A R32, R452B, R454B, R454C, R1234ze, R1234yf

Material Shell	Steel
Paint	Epoxy Powder paint
Connections	Solder Flare Copper, ODF Burnished, SAE
Protection	500+ Hours salt spray test
Package	Individual packaged
Marking	 (A2L pending)  (acc. PED, V > 1 liter),

Filter driers series ADK hermetic design for liquid refrigerants

Features

- Robust block with optimum blend of molecular sieve and activated alumina
- ODF Copper fittings for easy brazing
- High water and acid adsorption capacity
- Filtration down to 20 microns
- Temperature range TS: -45°C...+65°C
- Max. allowable pressure PS: 45 bar
- CE marking not required acc. PED
-  Underwriter Laboratories



ADK

Selection table - A1 refrigerants

Type	Part No.	Connection ODF*/SAE*	Flow capacity (kW) pressure drop 0.07 bar **									
			R134a	R407C	R404A R507	R410A	R448A	R449A	R450A	R513A	R452A	R744
ADK-032	003595	1/4" (6 mm) SAE	6.7	7.0	4.8	7.2	6.4	6.2	6.1	5.9	4.8	8.1
ADK-032S	003596	1/4" ODF	8.1	8.4	5.7	8.7	7.7	7.5	7.4	7.0	5.8	9.7
ADK-036MMS	003597	6 mm ODF	7.3	7.6	5.2	7.9	7.0	6.8	6.7	6.4	5.3	8.8
ADK-052	003598	1/4" (6 mm) SAE	6.9	7.2	4.9	7.5	6.6	6.5	6.4	6.1	5.0	8.3
ADK-052S	003599	1/4" ODF	9.9	10.3	7.0	10.7	9.4	9.2	9.1	8.6	7.1	11.9
ADK-056MMS	003600	6 mm ODF	9.2	9.5	6.5	9.9	8.7	8.5	8.4	8.0	6.6	11.0
ADK-053	003601	3/8" (10 mm) SAE	13.0	13.5	9.2	14.0	12.3	12.1	11.9	11.3	9.4	15.6
ADK-053S	003602	3/8" ODF	15.0	15.6	10.7	16.1	14.3	14.0	13.7	13.1	10.8	18.0
ADK-0510MMS	003603	10 mm ODF	15.0	15.6	10.7	16.1	14.3	14.0	13.7	13.1	10.8	18.0
ADK-082	003604	1/4" (6 mm) SAE	7.1	7.4	5.1	7.7	6.8	6.7	6.5	6.2	5.2	8.6
ADK-082S	003605	1/4" ODF	10.9	11.4	7.8	11.8	10.4	10.2	10.0	9.6	7.9	13.2
ADK-086MMS	003606	6 mm ODF	9.8	10.2	7.0	10.5	9.3	9.1	9.0	8.5	7.1	11.7
ADK-083	003607	3/8" (10 mm) SAE	15.0	15.6	10.7	16.2	14.3	14.0	13.8	13.1	10.8	18.1
ADK-083S	003608	3/8" ODF	15.0	15.7	10.7	16.2	14.3	14.0	13.8	13.1	10.9	18.1
ADK-0810MMS	003609	10 mm ODF	15.0	15.6	10.7	16.2	14.3	14.0	13.8	13.1	10.8	18.1
ADK-084	003610	1/2" (12 mm) SAE	23.5	24.5	16.7	25.3	22.4	21.9	21.5	20.5	17.0	28.3
ADK-084S	003611	1/2" ODF	24.5	25.6	17.5	26.4	23.3	22.9	22.5	21.4	17.7	29.5
ADK-0812MMS	003612	12 mm ODF	24.1	25.1	17.2	26.0	22.9	22.5	22.1	21.1	17.4	29.0
ADK-162	003613	1/4" (6 mm) SAE	7.3	7.6	5.2	7.8	6.9	6.8	6.7	6.4	5.3	8.8
ADK-163	003614	3/8" (10 mm) SAE	15.4	16.0	10.9	16.5	14.6	14.3	14.1	13.4	11.1	18.5
ADK-163S	003615	3/8" ODF	17.2	17.9	12.2	18.5	16.3	16.0	15.7	15.0	12.4	20.6
ADK-1610MMS	003616	10 mm ODF	17.1	17.8	12.2	18.5	16.3	16.0	15.7	15.0	12.4	20.6
ADK-164	003617	1/2" (12 mm) SAE	28.7	29.9	20.4	30.9	27.3	26.7	26.3	25.1	20.7	34.5
ADK-164S	003618	1/2" ODF	33.0	34.3	23.5	35.5	31.4	30.7	30.2	28.8	23.8	39.6
ADK-1612MMS	003619	12 mm ODF	29.6	30.8	21.1	31.9	28.2	27.6	27.1	25.9	21.4	35.6
ADK-165	003620	5/8" (16 mm) SAE	41.1	42.8	29.2	44.3	39.1	38.3	37.7	35.9	29.7	49.4
ADK-165S	003621	5/8" (16 mm) ODF	45.6	47.4	32.4	49.1	43.3	42.5	41.8	39.8	32.9	54.8
ADK-303	003622	3/8" (10 mm) SAE	16.2	16.9	11.5	17.5	15.4	15.1	14.9	14.2	11.7	19.5
ADK-304	003623	1/2" (12 mm) SAE	28.7	29.9	20.4	30.9	27.3	26.7	26.3	25.1	20.7	34.5
ADK-304S	003624	1/2" ODF	33.0	34.4	23.5	35.6	31.4	30.8	30.3	28.8	23.8	39.7
ADK-305	003626	5/8" (16 mm) SAE	48.2	50.2	34.3	52.0	45.9	45.0	44.2	42.1	34.8	58.0
ADK-305S	003627	5/8" (16 mm) ODF	48.4	50.4	34.4	52.1	46.0	45.1	44.3	42.2	34.9	58.1
ADK-307S	003628	7/8" (22 mm) ODF	60.7	63.2	43.2	65.4	57.8	56.6	55.7	53.0	43.9	73.0
ADK-414	003629	1/2" (12 mm) SAE	33.7	35.1	24.0	36.3	32.1	31.4	30.9	29.4	24.3	40.5
ADK-415	003632	5/8" (16 mm) SAE	53.7	55.9	38.2	57.8	51.1	50.0	49.2	46.9	38.8	64.5
ADK-415S	003633	5/8" (16 mm) ODF	57.7	60.1	41.1	62.2	54.9	53.8	52.9	50.4	41.7	69.4
ADK-417S	003634	7/8" (22 mm) ODF	71.4	74.3	50.8	76.9	67.9	66.6	65.4	62.4	51.5	85.8
ADK-757S	003635	7/8" (22 mm) ODF	96.7	100.7	68.8	104.2	92.0	90.1	88.6	84.4	69.8	116.2
ADK-759S	003636	1-1/8" ODF	107.4	111.8	76.4	115.7	102.1	100.1	98.4	93.8	77.5	129.0

Note 1: Flow capacities are in accordance with ARI710-86 and DIN8949. R744 is not specified by standard.

Note 2: **) for 0.14 bar pressure drop, multiple values by 1.4

Note 3: *) SAE = Flare. ODF = Brazing female

Note 4: Product label update is pending!

Nominal flow capacities bases on following operating conditions:

Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec.)	Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec.)
R134a	-15°C	+30°C	0.0068	R448A	-15°C	+30°C	0.0061
R407C			0.0063	R449A			0.0061
R404A/R507			0.0088	R450A			0.0074
R410A			0.0059	R452A			0.0086
R744	-40°C	-10°C	0.0039	R513A			0.0079

Note: For selection of other operating conditions please use Copeland Select software.

Selection table - A2L refrigerants

Type	Part No.	Connection ODF*/SAE*	Flow capacity (kW) pressure drop 0.07 bar **							
			R32	R452B	R454B	R454A	R454C	R455A	R1234ze	R1234yf
ADK-032	003595	1/4" (6 mm) SAE	10.4	8.1	8.1	6.2	5.4	5.7	5.9	4.8
ADK-032S	003596	1/4" ODF	12.4	9.7	9.8	7.4	6.5	6.9	7.1	5.8
ADK-036MMS	003597	6 mm ODF	11.3	8.9	8.9	6.8	5.9	6.3	6.4	5.3
ADK-052	003598	1/4" (6 mm) SAE	10.7	8.4	8.4	6.4	5.6	5.9	6.1	5.0
ADK-052S	003599	1/4" ODF	15.3	12.0	12.0	9.1	8.0	8.5	8.7	7.1
ADK-056MMS	003600	6 mm ODF	14.2	11.1	11.1	8.5	7.4	7.8	8.0	6.6
ADK-053	003601	3/8" (10 mm) SAE	20.1	15.7	15.8	12.0	10.5	11.1	11.4	9.3
ADK-053S	003602	3/8" ODF	23.2	18.1	18.2	13.8	12.1	12.8	13.1	10.8
ADK-0510MMS	003603	10 mm ODF	23.2	18.1	18.2	13.8	12.1	12.8	13.1	10.8
ADK-082	003604	1/4" (6 mm) SAE	11.0	8.6	8.7	6.6	5.8	6.1	6.2	5.1
ADK-082S	003605	1/4" ODF	16.9	13.2	13.3	10.1	8.8	9.4	9.6	7.9
ADK-086MMS	003606	6 mm ODF	15.1	11.8	11.9	9.0	7.9	8.4	8.6	7.0
ADK-083	003607	3/8" (10 mm) SAE	23.2	18.2	18.3	13.9	12.1	12.8	13.2	10.8
ADK-083S	003608	3/8" ODF	23.2	18.2	18.3	13.9	12.1	12.9	13.2	10.8
ADK-0810MMS	003609	10 mm ODF	23.2	18.2	18.3	13.9	12.1	12.8	13.2	10.8
ADK-084	003610	1/2" (12 mm) SAE	36.3	28.4	28.6	21.7	19.0	20.1	20.6	16.9
ADK-084S	003611	1/2" ODF	37.9	29.7	29.9	22.6	19.8	21.0	21.5	17.7
ADK-0812MMS	003612	12 mm ODF	37.3	29.2	29.3	22.3	19.5	20.6	21.1	17.4
ADK-162	003613	1/4" (6 mm) SAE	11.3	8.8	8.9	6.7	5.9	6.2	6.4	5.2
ADK-163	003614	3/8" (10 mm) SAE	23.7	18.6	18.7	14.2	12.4	13.1	13.4	11.0
ADK-163S	003615	3/8" ODF	26.5	20.7	20.9	15.8	13.8	14.7	15.0	12.3
ADK-1610MMS	003616	10 mm ODF	26.5	20.7	20.8	15.8	13.8	14.7	15.0	12.3
ADK-164	003617	1/2" (12 mm) SAE	44.4	34.7	34.9	26.5	23.2	24.5	25.1	20.6
ADK-164S	003618	1/2" ODF	51.0	39.9	40.1	30.4	26.6	28.2	28.9	23.7
ADK-1612MMS	003619	12 mm ODF	45.8	35.8	36.0	27.3	23.9	25.3	25.9	21.3
ADK-165	003620	5/8" (16 mm) SAE	63.5	49.7	50.0	37.9	33.2	35.1	36.0	29.6
ADK-165S	003621	5/8" (16 mm) ODF	70.4	55.1	55.4	42.0	36.8	39.0	39.9	32.8
ADK-303	003622	3/8" (10 mm) SAE	25.0	19.6	19.7	15.0	13.1	13.9	14.2	11.7
ADK-304	003623	1/2" (12 mm) SAE	44.4	34.7	34.9	26.5	23.2	24.5	25.1	20.6
ADK-304S	003624	1/2" ODF	51.0	39.9	40.1	30.5	26.7	28.2	28.9	23.7
ADK-305	003626	5/8" (16 mm) SAE	74.5	58.3	58.7	44.5	38.9	41.2	42.2	34.7
ADK-305S	003627	5/8" (16 mm) ODF	74.8	58.5	58.8	44.6	39.0	41.4	42.4	34.8
ADK-307S	003628	7/8" (22 mm) ODF	93.9	73.4	73.9	56.0	49.0	51.9	53.2	43.7
ADK-414	003629	1/2" (12 mm) SAE	52.1	40.8	41.0	31.1	27.2	28.8	29.5	24.3
ADK-415	003632	5/8" (16 mm) SAE	83.0	64.9	65.3	49.5	43.3	45.9	47.0	38.6
ADK-415S	003633	5/8" (16 mm) ODF	89.2	69.8	70.2	53.3	46.6	49.4	50.5	41.5
ADK-417S	003634	7/8" (22 mm) ODF	110.4	86.3	86.8	65.9	57.6	61.1	62.5	51.4
ADK-757S	003635	7/8" (22 mm) ODF	149.4	116.9	117.6	89.2	78.1	82.7	84.7	69.5
ADK-759S	003636	1-1/8" ODF	166.0	129.8	130.6	99.1	86.7	91.8	94.0	77.2

Note 1: Flow capacities are in accordance with ARI710-86 and DIN8949.

Note 2: *) SAE = Flare. ODF = Brazing female

Note 3: **) for 0.14 bar pressure drop, multiple values by 1.4

Note 4: Product label update is pending!

Nominal flow capacities bases on following operating conditions:

Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec.)	Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec.)
R32	-15°C	+30°C	0.0039	R454C	-15°C	+30°C	0.0058
R452B			0.0043	R455A			0.0072
R454B			0.0047	R1234ze			0.0076
R454A			0.0061	R1234yf			0.0089

Note: For selection of other operating conditions please use Copeland Select software.

Water and acid adsorption capacity

A1 refrigerants / CO2

Type / Size	Water Adsorption Capacity (gram)										Acid Adsorption Capacity (gram)
	Liquid Temperature 24°C					Liquid Temperature 52°C					
	R134a	R404A/ R507	R407C	R410A	R744	R134a	R404A/ R507	R407C	R410A	R744	
ADK-03	4.9	4.9	3.4	2.8	4.6	4.4	4.6	2.9	2.4	4.2	0.8
ADK-05	11.8	11.8	8.2	6.8	8.7	10.6	10.9	7	5.8	7.9	2.3
ADK-08	17.9	18.0	12.4	10.3	13.2	16.2	16.6	10.7	8.8	12.0	3.3
ADK-16	23.0	23.1	16.0	13.2	17.0	20.8	21.3	13.8	11.4	15.4	4.5
ADK-30	51.8	53.5	36.9	30.6	41.0	47.4	49.3	31.8	26.3	38.1	11.3
ADK-41	81.7	84.3	58.2	48.3	54.3	74.8	77.8	50.2	41.4	50.5	16.8
ADK-75	143.5	148.1	102.1	84.8	96.3	131.4	136.6	88.1	72.8	89.5	29.9

Type / Size	Water Adsorption Capacity (gram)										Acid Adsorption Capacity (gram)
	Liquid Temperature 25°C					Liquid Temperature 52°C					
	R448A	R449A	R450A	R513A	R452A	R448A	R449A	R450A	R513A	R452A	
ADK-03	4.7	4.7	6.0	6.0	3.4	4.3	4.3	5.5	5.4	2.7	0.8
ADK-05	9.0	9.0	11.4	11.3	6.5	8.2	8.2	10.3	10.3	5.0	2.3
ADK-08	13.7	13.7	17.3	17.2	9.8	12.4	12.4	15.7	15.7	7.7	3.3
ADK-16	17.5	17.5	22.2	22.1	12.6	16.0	16.0	20.2	20.1	9.9	4.5
ADK-30	39.9	39.9	52.0	51.7	32.8	37.5	36.3	46.1	45.9	25.6	11.3
ADK-41	52.8	52.8	68.8	68.4	43.4	49.7	48.1	61.0	60.7	33.9	16.8
ADK-75	93.8	93.8	122.1	121.4	77.1	88.2	85.3	108.4	107.8	60.1	29.9

A2L refrigerants

Type / Size	Water Adsorption Capacity (gram)										Acid Adsorption Capacity (gram)
	Liquid Temperature 24°C					Liquid Temperature 52°C					
	R32	R452B	R454A R454B R454C	R455A	R1234ze R1234yf	R32	R452B	R454A R454B R454C	R455A	R1234ze R1234yf	
ADK-03	3.4	3.4	3.4	3.4	6.0	2.7	2.7	2.7	2.7	5.5	0.8
ADK-05	6.5	6.5	6.5	6.5	11.4	5.2	5.0	5.0	5.0	10.3	2.3
ADK-08	9.8	9.8	9.8	9.8	17.3	7.8	7.7	7.7	7.7	15.7	3.3
ADK-16	12.6	12.6	12.6	12.6	22.2	10.1	9.9	9.9	9.9	20.2	4.5
ADK-30	32.8	32.8	32.8	32.8	57.6	26.2	25.6	25.6	25.6	52.5	11.3
ADK-41	43.4	43.4	43.4	43.4	76.2	34.6	33.9	33.9	33.9	69.4	16.8
ADK-75	77.1	77.1	77.1	77.1	135.4	61.5	60.1	60.1	60.1	123.3	29.9

Technical data

Max. allowable pressure PS	45 bar
Test pressure PT	47.3 bar
Liquid temperature refrigerant	-45...+65°C
Fluid group	I + II
List of released refrigerants Fluid group II (A1):	R134a, R404A, R407C, R410A, R448A, R449A, R450A, R452A, R507, R513A, R744
Fluid group I (A2L):	R32, R452B, R454B, R454A, R454C, R455A, R1234ze, R1234yf
Note: Fluid group classification according to PED 2014/68/EU.	

Material shell	Steel
Paint	Epoxy powder paint
Connections	Solder Flare Copper, ODF Burnished, SAE
Protection	500+ hours salt spray test
Package	Individual packaged
Marking	 (A2L pending)  (acc. PED, V > 1 liter)

Filter driers series FDB hermetic design, bead style for liquid refrigerants

Features

- Compacted bead style (spring loaded)
- Optimum blend of molecular sieve and activated alumina combined with high filtration capacity
- Filtration first for more effective use of surface area of desiccant
- High water and acid capacity
- Cushioned flow for non-turbulent performance
- ODF Copper fittings for easy brazing
- Rugged steel shells
- Corrosion-resistant epoxy paint
- Temperature range TS: -40°C...+65°C
- Max. allowable pressure PS: 45 bar
- CE marking not required acc. PED
-  Underwriter Laboratories



FDB

Selection table - A1 refrigerants

Type	Part No.	Connection ODF*/SAE*	Flow capacity (kW) pressure drop 0.07 bar **								
			R134a	R407C	R404A R507	R410A	R448A	R449A	R450A	R452A	R513A
FDB-032	059305	1/4"(6 mm) SAE	6.3	6.6	4.5	6.8	6.0	5.9	5.8	4.6	5.5
FDB-032S	059306	1/4" ODF	9.7	10.1	6.9	10.5	9.2	9.1	8.9	7.0	8.5
FDB-052	059307	1/4"(6 mm) SAE	6.5	6.8	4.6	7.0	6.2	6.1	6.0	4.7	5.7
FDB-052S	059309	1/4" ODF	9.7	10.1	6.9	10.5	9.2	9.1	8.9	7.0	8.5
FDB-053	059308	3/8"(10 mm) SAE	15.5	16.1	11.0	16.7	6.4	6.3	6.2	4.9	5.9
FDB-053S	059310	3/8" ODF	19.3	20.1	13.8	20.8	9.4	9.2	9.1	7.1	8.6
FDB-082	059311	1/4"(6 mm) SAE	6.8	7.1	4.8	7.3	6.4	6.3	6.2	4.9	5.9
FDB-082S	059314	1/4" ODF	9.9	10.3	7.0	10.7	14.7	14.4	14.2	11.2	13.5
FDB-083	059312	3/8"(10 mm) SAE	15.8	16.4	11.2	17.0	18.4	18.0	17.7	14.0	16.9
FDB-083S	059315	3/8" ODF	19.8	20.6	14.1	21.3	15.0	14.7	14.4	11.4	13.8
FDB-084	059313	1/2"(12 mm) SAE	26.4	27.5	18.8	28.4	18.8	18.4	18.1	14.3	17.3
FDB-084S	059316	1/2" ODF	28.3	29.5	20.1	30.5	15.4	15.1	14.9	11.7	14.2
FDB-162	059317	1/4"(6 mm) SAE	6.8	7.1	4.8	7.3	21.9	21.4	21.1	16.6	20.1
FDB-163	059318	3/8"(10 mm) SAE	16.2	16.9	11.5	17.5	17.2	16.8	16.5	13.0	15.8
FDB-163S	059321	3/8" ODF	23.0	23.9	16.4	24.8	25.1	24.6	24.2	19.0	23.0
FDB-164	059319	1/2"(12 mm) SAE	27.9	29.1	19.9	30.1	26.9	26.4	25.9	20.4	24.7
FDB-164S	059322	1/2" ODF	36.0	37.5	25.6	38.8	26.6	26.0	25.6	20.2	24.4
FDB-165	059320	5/8"(16 mm) SAE	36.6	38.2	26.1	39.5	34.2	33.6	33.0	26.0	31.4
FDB-165S	059323	5/8" ODF	48.8	50.8	34.8	52.6	30.2	29.6	29.1	23.0	27.8
FDB-303	059324	3/8"(10 mm) SAE	18.0	18.8	12.8	19.4	36.2	35.4	34.8	27.4	33.2
FDB-304	059325	1/2"(12 mm) SAE	31.8	33.1	22.6	34.2	34.9	34.2	33.6	26.5	32.0
FDB-304S	003667	1/2" ODF	38.0	39.6	27.1	41.0	46.4	45.5	44.7	35.3	42.6
FDB-305	059326	5/8"(16 mm) SAE	40.3	42.0	28.7	43.4	38.3	37.6	36.9	29.1	35.2
FDB-305S	059327	5/8" ODF	53.8	56.0	38.3	57.9	51.2	50.1	49.3	38.8	47.0
FDB-307S	059328	7/8" ODF	60.5	63.1	43.1	65.2	47.3	46.4	45.6	35.9	43.4
FDB-415	059329	5/8"(16 mm) SAE	49.7	51.8	35.4	53.6	57.6	56.5	55.5	43.7	52.9
FDB-417S	059330	7/8" ODF	77.2	80.4	55.0	83.2	73.5	72.0	70.8	55.8	67.5

Note 1: Flow capacities are in accordance with ARI710-86 and DIN8949.

Note 2: **) for 0.14 bar pressure drop, multiple values by 1.4

Note 3: *) SAE = Flare. ODF = Brazing female

Note 4: Product label update is pending!

Nominal flow capacities bases on following operating conditions:

Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec)	Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec)
R134a	-15°C	+30°C	0.0068	R448A	-15°C	+30°C	0.0061
R407C			0.0063	R449A			0.0061
R404A/R50			0.0088	R450A			0.0074
R410A			0.0059	R452A			0.0086

Note: For selection of other operating conditions please use Copeland Select software.

Selection table - A2L refrigerants

Type	Part No.	Connection ODF*/SAE*	Flow capacity (kW) pressure drop 0.07 bar **							
			R32	R452B	R454B	R454A	R454C	R455A	R1234ze	R1234yf
FDB-032	059305	1/4" (6 mm) SAE	9.8	7.6	7.7	5.8	5.1	5.4	4.5	5.5
FDB-032S	059306	1/4" ODF	15.0	11.7	11.8	9.0	7.8	8.3	7.0	8.5
FDB-052	059307	1/4" (6 mm) SAE	10.1	7.9	7.9	6.0	5.3	5.6	4.7	5.7
FDB-052S	059309	1/4" ODF	15.0	11.7	11.8	9.0	7.8	8.3	7.0	8.5
FDB-053	059308	3/8" (10 mm) SAE	23.9	18.7	18.8	14.3	12.5	13.2	11.1	13.6
FDB-053S	059310	3/8" ODF	29.9	23.4	23.5	17.8	15.6	16.5	13.9	16.9
FDB-082	059311	1/4" (6 mm) SAE	10.5	8.2	8.2	6.3	5.5	5.8	4.9	5.9
FDB-082S	059314	1/4" ODF	15.3	12.0	12.0	9.1	8.0	8.3	7.1	8.7
FDB-083	059312	3/8" (10 mm) SAE	24.4	19.1	19.2	14.5	12.7	13.5	11.3	13.8
FDB-083S	059315	3/8" ODF	30.6	23.9	24.1	18.3	16.0	16.9	14.2	17.3
FDB-084	059313	1/2" (12 mm) SAE	40.8	31.9	32.1	24.3	21.3	22.6	19.0	23.1
FDB-084S	059316	1/2" ODF	43.8	34.2	34.4	26.1	22.9	24.2	20.4	24.8
FDB-162	059317	1/4" (6 mm) SAE	10.5	8.2	8.2	6.3	5.5	5.8	4.9	5.9
FDB-163	059318	3/8" (10 mm) SAE	25.1	19.6	19.7	15.0	13.1	13.9	11.7	14.2
FDB-163S	059321	3/8" ODF	35.5	27.8	28.0	21.2	18.6	19.7	16.5	20.1
FDB-164	059319	1/2" (12 mm) SAE	43.2	33.8	34.0	25.8	22.6	23.9	20.1	24.5
FDB-164S	059322	1/2" ODF	55.7	43.5	43.8	33.2	29.1	30.8	25.9	31.5
FDB-165	059320	5/8" (16 mm) SAE	56.6	44.3	44.6	33.8	29.6	31.3	26.4	32.1
FDB-165S	059323	5/8" ODF	75.5	59.0	59.4	45.1	39.4	41.8	35.1	42.8
FDB-303	059324	3/8" (10 mm) SAE	27.9	21.8	21.9	16.7	14.6	15.4	13.0	15.8
FDB-304	059325	1/2" (12 mm) SAE	49.1	38.4	38.7	29.3	25.7	27.2	22.9	27.8
FDB-304S	003667	1/2" ODF	58.8	46.0	46.2	35.1	30.7	32.5	27.3	33.3
FDB-305	059326	5/8" (16 mm) SAE	62.3	48.7	49.0	37.2	32.5	34.5	29.0	35.3
FDB-305S	059327	5/8" ODF	83.1	65.0	65.4	49.6	43.4	46.0	38.7	47.1
FDB-307S	059328	7/8" ODF	93.6	73.2	73.6	55.9	48.9	51.8	43.6	53.0
FDB-415	059329	5/8" (16 mm) SAE	76.9	60.1	60.5	45.9	40.2	51.8	35.8	43.6
FDB-417S	059330	7/8" ODF	119.4	93.4	93.9	71.3	62.3	66.0	55.6	67.6

Note 1: Flow capacities are in accordance with ARI710-86 and DIN8949.

Note 2: *) SAE = Flare. ODF = Brazing female

Note 3: **) for 0.14 bar pressure drop, multiple values by 1.4

Note 4: Product label update is pending!

Nominal flow capacities bases on following operating conditions:

Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec)	Refrigerant	Evaporating Temperature	Liquid Temperature	Flow rate (kg/kW/sec)
R32	-15°C	+30°C	0.0039	R454C	-15°C	+30°C	0.0058
R452B			0.0043	R455A			0.0072
R454B			0.0047	R1234ze			0.0076
R454A			0.0061	R1234yf			0.0089

Note: For selection of other operating conditions please use Copeland Select software.

Water and acid adsorption capacity

A1 refrigerants

Type / Size	Water Adsorption Capacity (gram)									
	Liquid Temperature 24°C					Liquid Temperature 52°C				
	R134a	R404A/R507	R407C	R410A	R452A	R134a	R404A/R507	R407C	R410A	R452A
FDB-03...	1.9	1.9	1.7	1.6		1.8	1.9	1.6	1.3	
FDB-05...	5.5	5.5	5.0	4.4		5.2	5.3	4.5	3.3	
FDB-08...	8.8	8.8	8.0	7.1		8.4	8.5	7.2	5.4	
FDB-16...	17.7	17.6	15.9	14.2		16.8	17.1	14.5	10.8	
FDB-30...	31.7	31.6	28.5	25.0		30.1	30.5	26.0	19.0	
FDB-41...	44.2	44.1	39.9	35.0		42.1	42.7	36.3	26.6	

Type / Size	Water Adsorption Capacity (gram)							
	Liquid Temperature 25°C				Liquid Temperature 52°C			
	R448A	R449A	R450A	R513A	R448A	R449A	R450A	R513A
FDB-03...	2.5	2.5	2.5	2.5	2.3	2.3	2.3	2.3
FDB-05...	6.8	6.8	6.9	6.9	6.2	6.2	6.3	6.3
FDB-08...	10.9	10.9	11.1	11.1	9.9	9.9	10.1	10.1
FDB-16...	21.6	21.6	22.0	22.0	19.7	19.7	20.0	20.0
FDB-30...	37.9	37.9	38.6	38.6	34.6	34.6	35.2	35.2
FDB-41...	53.2	53.2	54.2	54.2	48.5	48.5	49.4	49.4

A2L refrigerants

Type / Size	Water Adsorption Capacity (gram)									
	Liquid Temperature 24°C					Liquid Temperature 52°C				
	R32	R452B	R454A R454B R454C	R455A	R1234ze R1234yf	R32	R452B	R454A R454B R454C	R455A	R1234ze R1234yf
FDB-03...	2.3	2.4	2.4	2.4	2.5	2.2	2.0	2.0	2.0	2.3
FDB-05...	6.3	6.5	6.5	6.5	6.9	5.9	5.5	5.5	5.5	6.3
FDB-08...	10.1	10.4	10.4	10.4	11.1	9.5	8.8	8.8	8.8	10.1
FDB-16...	20.1	20.7	20.7	20.7	22.0	18.8	17.5	17.5	17.5	20.0
FDB-30...	35.3	36.3	36.3	36.3	38.6	33.1	30.8	30.8	30.8	35.2
FDB-41...	49.5	50.9	50.9	50.9	54.2	46.4	43.2	43.2	43.2	49.4

Technical data

Max. Allowable Pressure PS	45 bar
Test pressure PT	47.3 bar
Liquid temperature refrigerant	-45...+65°C
Fluid Group	I + II
List of released refrigerants Fluid group II (A1):	R134a, R404A, R407C, R410A, R448A, R449A, R450A, R452A, R507, R513A
Fluid group I (A2L):	R32, R452B, R454B, R454A, R454C, R455A, R1234ze, R1234yf
Note: Fluid group classification according to PED 2014/68/EU.	

Material shell	Steel
Paint	Epoxy Powder paint
Connections	Solder Flare Copper, ODF Burnished, SAE
Protection	
Package	Individual packaged
Marking	 (A2L pending)  (acc. PED, V > 1 liter)

Filter drier shells series ADKS-plus for liquid - and suction applications with replaceable cores

Features

- Rustproof Aluminum flange cover with notch hole for ease of mounting
- ODF Copper fittings for easy brazing
- Rigid core holder from steel (no plastic)
- Service-friendly core holder and flange cover
- Optimum flow capacity at low pressure drop
- Temperature range TS: -45°C...+65°C
- Max. allowable pressure PS:
34.5 bar (-10°C...+65°C)
25.9 bar (-45°C...-10°C)
-  according PED CE0036
(Cat.II/Mod.D1 acc. to PED, V> 1l)
-  US LISTED Underwriter Laboratories



ADKS-Plus

Selection table

Type	Part No.	Connection Solder/ODF		Nominal Flow Capacity (kW)										Number of Blocks S48, H48 W48, F48
				Pressure Drop 0.07 bar										
		(mm)	(inch)	R22	R134a	R404A/ R507	R407C	R410A	R448A	R449A	R450A	R513A	R1234ze	
Conformity Assessment Cat. I, Procedure Module A														
485T	883551	16	5/8	78	72	51	75	77	68	67	66	63	63	1
487T	883552	22	7/8	145	133	95	138	143	126	124	122	116	116	
489T	883553		1-1/8	204	187	133	195	202	178	174	172	163	164	
4811T	883554	35	1-3/8	285	261	186	272	281	248	243	239	228	228	
4813T MM	883836	42		310	284	202	196	306	270	265	260	248	249	
4817	882603	54	2-1/8	Primary for Suction Line Applications										2
967T	883555	22	7/8	159	146	104	152	157	139	136	134	127	128	
969T	883556		1-1/8	250	229	163	239	247	218	214	210	200	201	
9611T	883557	35	1-3/8	305	279	199	291	301	266	260	256	244	245	
9613T	883558		1-5/8	350	321	228	334	345	305	299	294	280	281	
9613T MM	883559	42		355	325	231	339	350	309	303	298	284	285	3
9617	887215	54	2-1/8	350	321	228	334	345	305	299	294	280	281	
1449T	883560		1-1/8	252	231	165	241	249	220	216	212	202	202	
14411T	883561	35	1-3/8	351	322	229	335	347	306	300	295	281	282	
14413T	883562		1-5/8	354	325	231	338	350	309	303	298	284	284	
14413T MM	883563	42		360	330	235	343	355	314	307	302	288	289	4
14417T	883564	54	2-1/8	420	385	274	401	415	366	359	353	336	337	
Conformity Assessment Cat. II, Procedure Module D1														
19211T	883565	35	1-3/8	358	328	233	342	353	312	306	301	287	287	4
19213T	883566		1-5/8	395	362	258	377	390	344	337	332	316	317	
19213T MM	883567	42		400	366	261	382	395	349	342	336	320	321	
19217T	883568	54	2-1/8	430	394	281	411	425	375	368	361	344	345	

Nominal capacity (Q_n) is based on the following conditions:

Refrigerant	Evaporating Temperature	Liquid Temperature
R744	-40°C	-10°C
R22, R134a, R404A, R407C, R410A, R450A, R507, R513A, R1234ze, R448A, R449A	-15°C	+30°C

Filter drier shells series FDH for liquid- and suction applications with replaceable cores

Features

- Steel flange cover with notch hole for ease of mounting
- Plated steel ODF connections
- Rigid core holder from steel (no plastic)
- Service-friendly core holder and flange cover
- Optimum flow capacity at low pressure drop
- Temperature range TS: -45°C...+65°C
- Max. allowable pressure PS:
46 bar (-10°C...+65°C)
25.9 bar (-45°C...-10°C)
- **CE** according PED
CE 0036(Cat.II/Mod.D1) (acc. to PED, V>1l)



FDH

Selection table

Type	Part No.	Connection Solder/ODF		Nominal Flow Capacity (kW)												Number of Blocks
				Pressure Drop 0.07 bar						Pressure Drop 0.14bar						
		(mm)	(inch)	R22	R134a	R404A R507	R407C	R410A	R744	R22	R134a	R404 R507	R407C	R410A	R744	
Conformity Assessment Cat. I, Procedure Module A																
FDH-485	880300	16	5/8"	78	72	51	75	77	114	100	92	65	95	99	146	1
FDH-487	880301	22	7/8"	145	133	95	138	143	211	182	167	119	174	180	265	
FDH-489	880302		1-1/8"	204	187	133	195	202	297	262	240	171	250	258	380	
FDH-969	880306		1-1/8"	250	229	163	239	247	364	300	275	196	286	296	436	2
FDH-9611	880307	35	1-3/8"	305	279	199	291	301	443	402	369	262	384	397	585	

Note: Conditions for nominal capacities see previous page. For selection of other operating condition, please use Copeland Select software.

Features core

- Water capacities to suit specific system conditions
- Exceptional acid capacities for normal system protection, or to effectively clean-up following a compressor burnout (W48)



Core H48

Selection table - core for ADKS-plus & FDH (to be ordered separately)

Size	Part No.	Water Adsorption Capacity (g)								Acid Adsorption Capacity (g)
		Liquid Temperature 24°C				Liquid Temperature 52°C				
		R134a	R22	R404A R507	R407C	R134a	R22	R404A R507	R407C	
S48	003508	79.7	74.7	82.3	56.7	73.0	66.7	75.9	48.9	16.3
H48	006969	35.0	31.7	37.0	24.4	29.0	24.5	28.9	18.1	44.6
W48	006970	24.7	22.1	26.2	17.1	19.9	16.4	19.5	12.1	39.7
F48	006973	Filter For Suction Line								
H100 / W100 are for Use with Phased-out ADKS-300/-400 Only										
H100	006971	59.9	53.3	63.8	41.2	47.4	38.3	46.0	28.5	105.1
W100	006972	52.7	47.1	56.0	36.4	42.4	34.7	41.4	25.7	85.5

Accessories and spare parts for ADKS & FDH

Description	Type	Part No.
ADKS, FDH		
Gasket Set	X 99961	003710
Schrader Nipple 1/4" NPT	X 11562-2	803251
Core Holder	X 99963	003712

Filter-drier shells with quick-cap series FDS-24 for liquid and suction applications with replaceable cores

Features

- Quick-cap flange (one bolt) design makes replacing of cores in a matter of seconds
- Ideal for retrofit, reducing installation / material cost
- Ideal for refrigerant recovery / reclaim units with regular change of filter-drier
- Free volume as a receiver in FDS-24... (580 cm³)
- ODF Copper fittings for easy brazing
- Corrosion-resistant powder painting of shell body
- Temperature range TS: -45°C...+65°C
- Max. allowable pressure PS:
34.5 bar (-10°C...+65°C)
25.9 bar (-45°C...-10°C)
-  (Cat.I, Mod.A)
- 
-  Listed



FDS-24

Selection table suction application

Type	Part No.	Connection		Nominal Flow Capacity (kW)												
		(mm)	(inch)	Block Core S24								Filter F24				
				R134a	R22	R407C	R507 R404A	R448A	R449A	R450A	R513A	R1234ze	R134a	R22	R407C	R507 R404A
FDS-245	003573	16	5/8	22.3	30.6	28.5	26.0	65.1	63.8	62.7	59.8	59.9	24.7	33.9	31.5	28.8
FDS-247	003574	22	7/8	32.2	44.1	44.1	37.5	97.4	95.4	93.8	89.4	89.7	37.8	51.8	48.2	44.0
FDS-249	003575		1 1/8	46.0	63.0	58.6	53.6	98.5	96.5	94.9	90.4	90.7	50.7	69.4	64.5	59.0
FDS-249	003576	28		44.2	60.5	56.3	51.4	99.0	97.0	95.3	90.9	91.1	48.6	66.9	61.9	56.6

Selection table liquid application

Type	Part No.	Connection		Nominal Flow Capacity (kW)									
		Solder/ODF		Pressure Drop 0.07 bar					Pressure Drop 0.14 bar				
		(mm)	(inch)	R22	R134a	R507/R404A	R407C	R410A	R22	R134a	R507/R404A	R407C	R410A
FDS-245	003573	16	5/8	75	68	49	71	74	98	90	64	93	97
FDS-247	003574	22	7/8	112	102	73	107	110	151	139	99	144	149
FDS-249	003575		1-1/8	113	104	74	108	112	160	147	104	153	158
FDS-249	003576	28		114	104	74	108	112	163	150	106	156	161

Note: For selection of other operating condition, please use Copeland Select software.

Selection table cores

Type	Part No.	Water Capacity in Grams at a Liquid Temperature of 24°C (52°C)			Application	Acid Adsorption Capacity (g)
		R134a	R22	R404A/R507		
S24	003504	35.2 (32.3)	34.8 (29.5)	35.4 (32.1)	Liquid and Suction Line	8.9
W24	003505	12.5 (9.2)	12.3 (8.9)	13.5 (10.4)	For Motor Burn-Out (Suction)	25.6
F24	003506	- (-)	- (-)	- (-)	Filter for Suction Line	-

Note: Cores have to be ordered separately. 1 piece needed for FDS24 shell.

Accessories and spare parts for FDS

Description	Type	Part No.
Gasket Set	X 99967	003716
O-Ring Set	X 99968	003717
Core Holder	X 99969	003718

Suction line filters and filter driers series ASF and ASD hermetic design

Features

- Minimum pressure drop due to internal construction and compacted bead style
- Service-friendly with 2 Schrader valves for pressure drop measurement
- ODF Copper fittings for easy brazing
- Filtration down to 40 microns
- Temperature range TS: -45°C...+50°C
- Max. allowable pressure PS: 27.5 bar
-  marking not required acc. PED



ASF, ASD

Suction line filters

Type	Part No.	Connection Solder/ODF		Nominal Flow Capacity (kW)								
		(mm)	(inch)	R134a	R22	R404A	R407C	R507	R448A R449A	R450A	R513A	R1234ze
ASF-28 S3	008965		3/8	6.0	8.4	7.7	7.8	7.7	8.6	4.1	3.7	3.5
ASF-28 S4	008941		1/2	9.9	14.4	13.4	13.4	13.4	14.8	6.8	6.2	5.8
ASF-35 S5	008915	16	5/8	15.9	23.2	21.4	21.6	21.4	23.7	11.2	10.2	9.6
ASF-45 S6	008946		3/4	23.3	34.5	32.0	32.1	32.0	35.3	16.3	14.8	14.0
ASF-45 S7	008904	22	7/8	32.5	42.5	34.5	39.5	34.5	43.2	22.8	20.7	19.6
ASF-50 S9	008908		1-1/8	46.0	67.1	55.5	62.4	55.5	68.4	32.3	29.3	27.8
ASF-75 S11	008919	35	1-3/8	60.2	85.4	70.7	79.4	70.7	57.6	40.8	37.0	35.1
ASF-75 S13	008940		1-5/8	65.4	87.5	73.1	81.4	73.1	86.4	47.6	43.2	40.9

Suction line filter driers

Type	Part No.	Connection Solder/ODF		Nominal Flow Capacity (kW)								
		(mm)	(inch)	R134a	R22	R404A	R407C	R507	R448A R449A	R450A	R513A	R1234ze
ASD-28 S3	008909		3/8	5.5	8.1	7.4	7.5	7.4	8.3	3.7	3.4	3.2
ASD-28 S4	008910		1/2	9.1	13.4	12.7	12.5	12.7	13.7	6.5	5.9	5.6
ASD-35 S5	008899	16	5/8	14.3	20.4	19.0	19.0	19.0	20.9	9.9	8.9	8.5
ASD-45 S6	008925		3/4	19.1	24.6	22.5	22.9	22.5	25.2	13.3	12.0	11.4
ASD-45 S7	008896	22	7/8	25.0	32.3	26.4	30.0	26.4	33.1	17.3	15.7	14.9
ASD-50 S9	008881		1-1/8	35.3	46.4	38.3	43.2	38.3	47.5	24.8	22.5	21.3
ASD-75 S11	008891	35	1-3/8	42.9	56.9	47.8	52.9	47.8	58.3	29.9	27.1	25.7
ASD-75 S13	008953		1-5/8	45.2	60.8	51.0	56.5	51.0	62.2	31.6	28.7	27.2

Nominal flow capacity at +4°C evaporating temperature (saturated condition/ dew point) and a pressure drop of 0.21 bar between inlet and outlet of ASF/ASD.
Correction factor for other evaporating temperatures than +4°C:

$$Q_n = Q_o \times K_s$$

Q_n : Nominal Capacity

K_s : Correction Factor for a Pressure Drop Corresponding 1 K Saturation Temperature

Q_o : Required Cooling Capacity

For selection of other operating condition, please use Copeland Select software.

Evaporating Temperature (°C)	+4	0	-5	-10	-15	-20	-25	-30	-35	-40
Correction Factor k_t	1.00	1.12	1.35	1.75	2.00	2.50	3.00	3.75	5.00	6.60

Water and acid adsorption capacity

Type	Water Adsorption Capacity (g)										Acid Adsorption Capacity (g)
	Liquid Temperature 24°C					Liquid Temperature 52°C					
	R134a	R22	R404A R507	R407C	R410A	R134a	R22	R404A R507	R407C	R410A	
ASD-28	11.8	5.7	12.2	9.1	8.0	10.0	3.6	9.7	6.7	5.6	3.0
ASD-35	14.5	7.0	15.0	11.2	9.9	12.3	4.4	12.0	8.2	6.9	3.6
ASD-45	18.0	8.8	18.6	13.9	12.3	15.3	5.5	14.9	10.2	8.6	4.5
ASD-50	21.4	10.4	22.2	16.5	14.6	18.2	6.5	17.7	12.1	10.2	5.4
ASD-75	31.5	15.4	32.6	24.3	21.5	26.7	9.6	26.0	17.8	15.0	7.9

Suction line filter and filter drier shells series BTAS for replaceable filters and filter drier cores

Features

- Corrosion-free brass body ideal for suction line applications
- Extremely large filtration area for optimum flow capacity
- Low pressure drop
- Filtration down to 40 micron
- Temperature range TS: -45°C ... +50°C
- Max. allowable pressure PS: 24 bar
- UL/CUL: File Nr. SA3124



BTAS

Selection table - suction line shells with filter core

Type	Part No.	Connection Solder/ODF		Nominal Capacity Q _n (kW)									Filter Core	
		(mm)	(inch)	R134a	R22	R404A	R407C	R507	R448A R449A	R450A	R513A	R1234ze	Type	Part No.
CE marking not required acc. PED														
BTAS 25	015353		5/8	12.5	17.1	13.9	15.9	13.9	18.2	9.4	8.5	8.4	A2F	009 907
BTAS 27	015354	22	7/8	22.3	29.6	24.3	27.5	24.3	31.7	16.3	14.8	14.6		
BTAS 39	015355		1 1/8	37.7	50.4	40.6	46.9	40.6	50.4	24.8	22.5	22.2	A3F	009 909
BTAS 311	015356	35	1 3/8	60.3	80.7	65.2	75.1	65.2	54.0	27.5	25.0	24.7		
BTAS 313	015357		1 5/8	73.4	97.5	81.1	90.7	81.1	86.4	44.2	40.1	39.6		
BTAS 342	015358	42		73.4	97.5	81.1	90.7	81.1	86.4	44.2	40.1	39.6		
BTAS 317	015359	54	2 1/8	97.6	127.7	104.8	118.8	104.8	104.3	54.4	49.3	48.7	A4F	009 911
BTAS 417	015360	54	2 1/8	134.7	178.2	145.3	165.7	145.3	190.7	98.6	89.4	88.3		
CE Marked, Conformity Assessment Cat. I, Procedure Module A														
BTAS 521	015361		2 5/8	209.0	282.4	229.8	262.6	229.8	302.2	153.0	138.7	137.0	A5F	009 913
BTAS 525	015362		3 1/8	260.1	346.1	283.9	321.9	283.9	370.6	190.4	172.6	170.4		
BTAS 580	015363	80		260.1	346.1	283.9	321.9	283.9	370.6	190.4	172.6	170.4		

Note: Filter Core has to be ordered separately.

Selection table - suction line shells with filter drier core

Type	Part No.	Connection Solder/ODF		Nominal Capacity Q _n (kW)									Filter Drier Core	
		(mm)	(inch)	R134a	R22	R404A	R407C	R507	R448A R449A	R450A	R513A	R1234ze	Type	Part No
CE marking not required acc. PED														
BTAS 25	015353		5/8	11.6	15.5	12.8	14.3	12.8	16.6	8.5	7.7	7.6	A2F-D	009 908
BTAS 27	015354	22	7/8	19.1	25.2	20.6	23.4	20.6	27.0	13.9	12.6	12.5		
BTAS 39	015355		1 1/8	34.4	45.7	37.5	42.5	37.5	36.0	18.0	16.3	16.1	A3F-D	009 910
BTAS 311	015356	35	1 3/8	49.2	65.5	53.7	60.9	53.7	50.4	25.2	22.8	22.5		
BTAS 313	015357		1 5/8	57.1	77.3	62.5	71.9	62.5	72.0	37.4	33.9	33.5		
BTAS 342	015358	42		57.1	77.3	62.5	71.9	62.5	72.0	37.4	33.9	33.5		
BTAS 317	015359	54	2 1/8	77.1	94.1	77.7	87.5	77.7	82.8	40.8	37.0	36.5	A4F-D	009 912
BTAS 417	015360	54	2 1/8	106.8	144.5	118.3	134.4	118.3	154.7	78.2	70.9	70.0		
CE marked, Conformity Assessment Cat. I, Procedure Module A														
BTAS 521	015361		2 5/8	153.3	205.1	169.0	190.7	169.0	219.5	112.2	101.7	100.4	A5F-D	009 914
BTAS 525	015362		3 1/8	181.2	242.0	199.4	225.1	199.4	259.1	132.6	120.2	118.7		
BTAS 580	015363	80		181.2	242.0	199.4	225.1	199.4	259.1	132.6	120.2	118.7		

Note: Filter drier core has to be ordered separately.

Nominal capacity at +4°C evaporating temperature (saturated condition/ dew point) and a pressure drop of 0.21 bar between inlet and outlet of BTAS. Correction factor for other evaporating temperatures than +4°C:

$$Q_n = Q_o \times K_s$$

Q_n : Nominal capacity

K_s : Correction factor for a pressure drop corresponding 1K saturation temperature

Q_o : Required cooling capacity

Evaporating Temperature (°C)	+4	0	-5	-10	-15	-20	-25	-30	-35	-40
Correction Factor k_s	1.00	1.12	1.35	1.75	2.00	2.50	3.00	3.75	5.00	6.60

BTAS - water and acid adsorption capacity

Core	Water Adsorption Capacity (g)								Acid Adsorption Capacity (g)
	Liquid Temperature 24°C				Liquid Temperature 52°C				
	R134a	R22	R404A R507	R407C	R134a	R22	R404A R507	R407C	
A2F-D	2.8	2.5	2.9	4.8	2.3	1.9	2.3	5.0	3.7
A3F-D	7.6	6.8	8.0	13.3	6.3	5.3	6.2	13.8	10.3
A4F-D	14.8	13.3	15.7	25.9	12.2	10.3	12.2	26.9	20.1
A5F-D	21.8	19.6	23.1	38.2	18.0	15.1	17.9	39.7	29.6

Accessories and spare parts

Repair Kits with Cover, Screws and Gaskets	Type	Part No.
Repair Kit BTAS 2	KD 30519-2	065970
Repair Kit BTAS 3	KD 30519-3	065971
Repair Kit BTAS 4	KD 30519-4	065972
Repair Kit BTAS 5	KD 30519-5	065973