

# 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
- **CE** 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