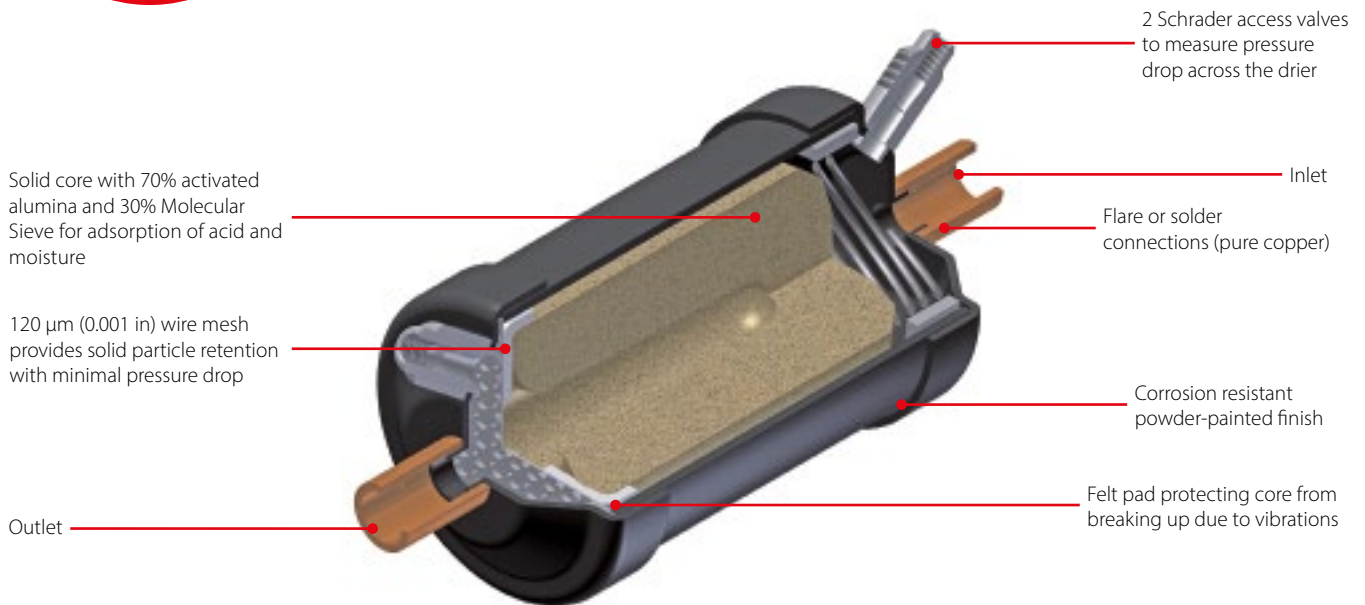


DAS, Hermetic burn-out filter drier

DAS **ELIMINATOR**® hermetic burn-out filter driers are used in the suction line to clean up refrigeration and air conditioning systems with fluorinated refrigerants after a compressor motor burn-out.

The solid core, which is composed of 70% activated alumina and 30% Molecular Sieve, adsorbs harmful acids as well as moisture, in order to protect the new compressor against failure.



Facts

Application:

- Traditional refrigeration
- Air conditioning units
- Transport refrigeration
- Applicable to R22, R143a, R407C, R410A and R507

For a fully updated list of approved refrigerants, visit www.products.danfoss.com and search for individual code numbers, where refrigerants are listed as part of product specifications.

- The large diameter of the hermetic burn-out filter drier means that flow velocity is suitably low and the pressure drop minimal
- Bonded solid core grains eliminate powder formation
- Corrosion resistant powder-painted finish, tested for 500 hrs in salt spray
- Installation with any orientation provided the flow is in the arrow direction
- Available in sizes from 8 to 60 cubic inches

Technical data and ordering

DAS - Hermetic burn-out filter drier

Rated acid capacities

Type	Rated capacity, Q_n 1)						Acid capacity 2)	Max. working pressure PS / MWP [bar / psig]
	R407C / R410A		R134a		R404A / R507			
	[TR]	[kW]	[TR]	[kW]	[TR]	[kW]	[g]	
DAS 083	1.5	5.3	1.0	3.5	1.3	4.5	3.8	35 / 507
DAS 084	2.6	9.1	1.6	5.5	2.3	8.0	3.8	35 / 507
DAS 085	4.1	14.5	2.6	9.0	3.6	12.5	3.8	35 / 507
DAS 086	5.4	19.0	3.3	11.5	4.7	16.5	3.8	35 / 507
DAS 164	2.7	9.5	1.7	6.0	2.4	8.5	8.7	35 / 507
DAS 165	4.2	14.7	2.7	9.5	3.7	13.0	8.7	35 / 507
DAS 166	5.6	19.6	3.5	12.2	4.9	17.0	8.7	35 / 507
DAS 167	6.2	21.7	3.9	13.5	5.4	19.0	8.7	35 / 507
DAS 305	5.0	17.5	3.1	11.0	4.3	15.0	17.3	35 / 507
DAS 306	6.3	22.0	4.0	14.0	5.4	19.0	17.3	35 / 507
DAS 307	7.3	25.6	4.6	16.0	6.3	22.0	17.3	35 / 507
DAS 309	8.8	30.7	5.5	19.3	7.6	26.6	17.3	35 / 507
DAS 417	8.1	28.4	5.0	17.5	7.0	24.5	22.6	35 / 507
DAS 419	9.8	34.3	6.1	21.5	8.5	29.8	22.6	35 / 507
DAS 607	5.5	19.2	3.9	13.7	5.5	19.2	34.6	35 / 507

1) Rated capacity is stated at:
 evaporating temperature $t_e = 4\text{ }^\circ\text{C} / 39.2\text{ }^\circ\text{F}$
 pressure drop $\Delta p = 0.07\text{ bar} / 1\text{ psig}$

2) Adsorption capacity of oleic acid at 0.05 TAN (Total Acid Number)

Capacities for other temperatures than $4\text{ }^\circ\text{C} / 39.2\text{ }^\circ\text{F}$ are calculated by use of correction factors. Divide your actual evaporator capacity with the correction factor given for your actual evaporating temperature. Look up the capacity table for the necessary rated capacity

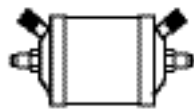
$$Q_e / F_e = Q_n$$

Q_e = Actual evaporator capacity

Q_n = Nominal capacity

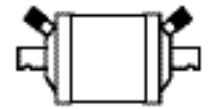
F_e = Correction factor

DAS - Flare Ordering



Type	Connection	Code no.
	[in]	
DAS 084VV	1/2	023Z1002
DAS 164VV	1/2	023Z1007
DAS 165VV	3/8	023Z1008

DAS - Solder (pure copper) Ordering



Type	Connection	Code no.
	[in]	
DAS 084sVV	1/2	023Z1004
DAS 085sVV	3/8	023Z1005
DAS 086sVV	3/4	023Z1006
DAS 164sVV	1/2	023Z1009
DAS 165sVV	3/8	023Z1010
DAS 166sVV	3/4	023Z1011
DAS 167sVV	7/8	023Z1012
DAS 305sVV	3/8	023Z1013
DAS 306sVV	3/4	023Z1014
DAS 307sVV	7/8	023Z1015
DAS 309sVV	1 1/2	023Z1016
DAS 417sVV	7/8	023Z1017
DAS 419sVV	1 1/2	023Z1018
DAS 607sVV	7/8	023Z1019
DAS 609sVV	1 1/2	023Z1020

Correction factors F_e for evaporating temperatures $[\text{ }^\circ\text{C}] / [^\circ\text{F}]$

$[\text{ }^\circ\text{C}] / [^\circ\text{F}]$	4 / 39.2	0 / 32	-5 / 23	-10 / 14	-15 / 5	-20 / -4	-25 / -13	-30 / -22	-35 / -31	-40 / -40
F_e	1	0.9	0.75	0.6	0.5	0.4	0.35	0.25	0.2	0.15

Example

To select a hermetic burn-out filter drier for a R22 plant with an evaporator capacity at $8.5\text{ kW} / 2.41\text{ TR}$ at $-20 / -4\text{ }^\circ\text{F}$ you may use a hermetic burn-out filter drier with a rated capacity of $8.5 / 0.4 = 21.25\text{ kW} / 6.02\text{ TR}$

For example DAS 306