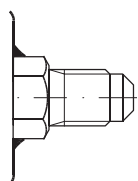
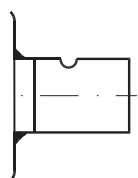




## ***Eliminator***<sup>®</sup> Burn-out filter drier Type DAS



Flare connection



Solder connection (copper)

**Introduction**



**Eliminator®** burn-out filter driers type DAS are used in the suction line to clean up refrigeration and AC-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. By adsorbing these acids, the DAS burn-out filter drier protects the new compressor against premature failure.

**Features**

- Solid core with 70% activated alumina and 30% Molecular Sieve for adsorption of acid and moisture
- 2 Schraeder access valves to measure pressure drop across the drier
- Available in sizes from 8 to 60 cubic inches
- Corrosion resistant powder-painted finish
- Available with solder (solid copper) and flare connections
- UL approved for MWP 500 psig (35 bar)
- 120 mesh wire mesh provides solid particle retention with minimal pressure drop
- Allows installation with any orientation provided the flow is in the arrow direction

**Approvals**

CE US, file SA 6398  
 PED 97/23/EC - a3p3

**Capacities**

	Rated capacity, $Q_n$ <sup>1)</sup>						Acid capacity <sup>2)</sup>
	R22/R407C/R410A		R134a		R404A/R507		
	[TR]	[kW]	[TR]	[kW]	[TR]	[kW]	[g]
DAS 083	1.7	6.0	1.0	3.5	1.3	4.5	3.8
DAS 084	2.9	10.0	1.6	5.5	2.3	8.0	
DAS 085	4.1	14.5	2.6	9.0	3.6	12.5	
DAS 086	5.4	19.0	3.3	11.5	4.7	16.5	
DAS 164	3.0	10.5	1.7	6.0	2.4	8.5	8.6
DAS 165	4.3	15.0	2.7	9.5	3.7	13.0	
DAS 166	5.7	20.0	3.4	12.0	4.9	17.0	
DAS 167	6.3	22.0	3.9	13.5	5.4	19.0	
DAS 305	5.1	18.0	3.1	11.0	4.3	15.0	18.2
DAS 306	6.3	22.0	4.0	14.0	5.4	19.0	
DAS 307	7.4	26.0	4.6	16.0	6.3	22.0	
DAS 309	8.9	31.0	5.7	20.0	7.7	27.0	
DAS 417	8.6	30.0	5.1	18.0	7.1	25.0	24.3
DAS 419	10.0	35.0	6.3	22.0	8.6	30.0	
DAS 607	5.7	20.0	3.4	12.0	4.9	17.0	36.5

<sup>1)</sup> Rated capacity is stated at:  
evaporating temperature  $t_e = 4^\circ\text{C}$   
pressure drop  $\Delta p = 0.21$  bar

<sup>2)</sup> Adsorption capacity of oleic acid at 0.05 TAN (Total Acid Number).

Capacities for other temperatures than  $4^\circ\text{C}$  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

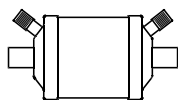
$F_e$  = Correction factor

Correction factors.  $F_e$  evaporating temperatures [ $^\circ\text{C}$ ]

[ $^\circ\text{C}$ ]	4	0	-5	-10	-15	-20	-25	-30	-35	-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 burn-out filter drier for a R22 plant with an evaporator capacity at  $8.5$  kW at  $-20^\circ\text{C}$  you may use a burn-out filter drier with a rated capacity of  $8.5/0.4 = 21.25$  kW or bigger. For example DAS 306.

**Ordering**

**Flare**

Type	Connection in.	Code no.
DAS 083VV DAS 084VV	$\frac{3}{8}$ $\frac{1}{2}$	<b>023Z1001</b> <b>023Z1002</b>
DAS 164VV DAS 165VV	$\frac{1}{2}$ $\frac{5}{8}$	<b>023Z1007</b> <b>023Z1008</b>

**Solder**

Type	Connection in.	Code no.
DAS 083 sVV DAS 084 sVV DAS 085 sVV DAS 086 sVV	$\frac{3}{8}$ $\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{4}$	<b>023Z1003</b> <b>023Z1004</b> <b>023Z1005</b> <b>023Z1006</b>
DAS 164 sVV DAS 165 sVV DAS 166 sVV DAS 167 sVV	$\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$	<b>023Z1009</b> <b>023Z1010</b> <b>023Z1011</b> <b>023Z1012</b>
DAS 305 sVV DAS 306 sVV DAS 307 sVV DAS 309 sVV	$\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$ $1\frac{1}{8}$	<b>023Z1013</b> <b>023Z1014</b> <b>023Z1015</b> <b>023Z1016</b>
DAS 417 sVV DAS 419 sVV	$\frac{7}{8}$ $1\frac{1}{8}$	<b>023Z1017</b> <b>023Z1018</b>
DAS 607 sVV DAS 609 sVV	$\frac{7}{8}$ $1\frac{1}{8}$	<b>023Z1019</b> <b>023Z1020</b>

**Identification**

Example for type codes

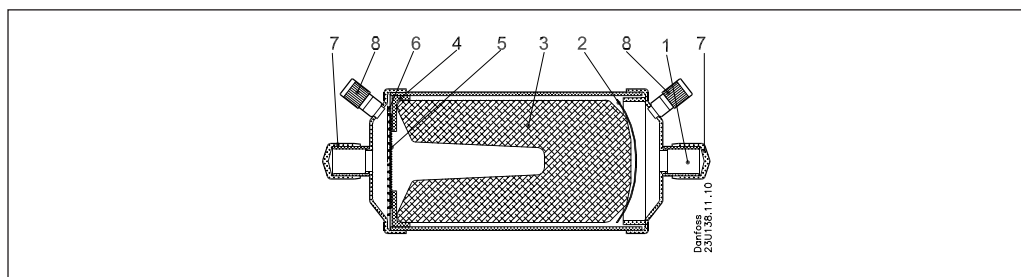
**D A S 08 3 s VV**

Type codes

Filter drier	<b>D</b>	
Solid core	<b>A</b>	Burn-out, 70% activated alumina, 30% Molecular Sieves
Application	<b>S</b>	Suction line
Size (volume)	<b>08</b> <b>16</b> <b>30</b> <b>41</b> <b>60</b>	8 in <sup>3</sup> 16 in <sup>3</sup> 30 in <sup>3</sup> 41 in <sup>3</sup> 60 in <sup>3</sup>
Connection (filter connection in 1/8 of an inch increments)	<b>3</b> <b>4</b> <b>5</b> <b>6</b> <b>7</b> <b>9</b>	3/8 in. / 10 mm 1/2 in. / 12 mm 5/8 in. / 16 mm 3/4 in. / 18 (19) mm 7/8 in. / 22 mm 1 1/8 in. / 28 mm
Connection type	<b>(blank)</b> <b>s</b>	Flare connection Solder connection
Access valves	<b>(blank)</b> <b>V</b> <b>VV</b>	<b>Inlet:</b> No access valves Schraeder valve Schraeder valve <b>Outlet:</b> No access valves Schraeder valve

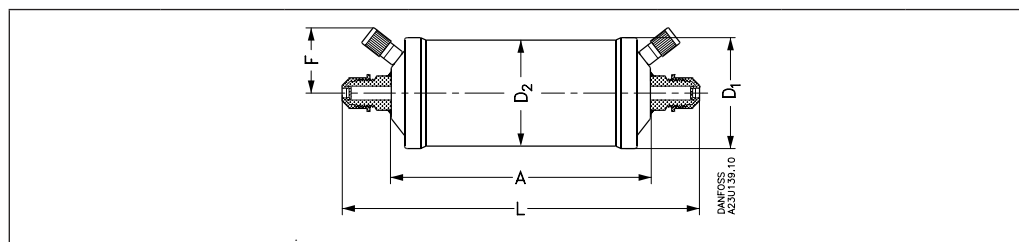
**Design and function**

- 1. Inlet
- 2. Spring
- 3. Solid core
- 4. Polyester mat
- 5. Metal mesh
- 6. Perforated plate
- 7. Seal cap
- 8. Schraeder valve

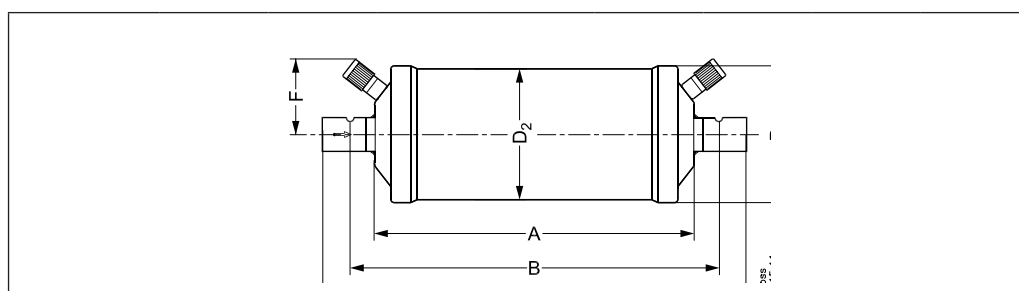


The large diameter of the burn-out filter drier means that flow velocity is suitably low and the pressure drop minimal.

Powder formation is eliminated because the solid core grains are bonded and cannot move against each other.

**Dimensions and weights**
*Flare connections*


Type		A	L	D <sub>1</sub>	D <sub>2</sub>	F	Weight
DAS 083VV	mm	101	158	58	54	40	0.51 kg
DAS 084VV	mm	101	166	58	54	40	0.62 kg
DAS 164VV	mm	110	175	80	76	40	0.91 kg
DAS 165VV	mm	110	184	80	76	40	0.95 kg

*Solder connections*


Type		A	B	L	D <sub>1</sub>	D <sub>2</sub>	F	Weight
DAS 083sVV	mm	101	120	139	58	54	40	0.47 kg
DAS 084sVV	mm	101	122	143	58	54	40	0.50 kg
DAS 085sVV	mm	101	125	149	58	54	40	0.50 kg
DAS 086sVV	mm	101	131	161	58	54	40	0.50 kg
DAS 164sVV	mm	110	131	152	80	76	50	0.83 kg
DAS 165sVV	mm	110	134	158	80	76	50	0.84 kg
DAS 166sVV	mm	110	140	170	80	76	50	0.84 kg
DAS 167sVV	mm	110	136	172	80	76	50	0.84 kg
DAS 169sVV	mm	110	131	173	80	76	50	1.9 kg
DAS 305sVV	mm	186	210	234	80	76	50	1.31 kg
DAS 306sVV	mm	186	216	246	80	76	50	1.31 kg
DAS 307sVV	mm	186	212	248	80	76	50	1.33 kg
DAS 309sVV	mm	186	207	249	80	76	50	1.35 kg
DAS 417sVV	mm	187	213	249	93	89	55	2.08 kg
DAS 419sVV	mm	187	208	250	93	89	55	2.08 kg
DAS 607sVV	mm	337	363	399	80	76	50	2.39 kg
DAS 609sVV	mm	337	358	400	80	76	50	2.40 kg





