Data sheet

ELIMINATOR® Hermetic filter drier
DMT

The filter drier is a vital element of the system's reliability as well as its lifespan. When you choose Danfoss filter driers, you are guaranteed a product that has been developed specifically for the challenges encountered in Air Conditioning and Refrigeration Systems.

All ELIMINATOR® driers have a solid core with binding material held to an absolute minimum. For CO_2 applications Danfoss offer one type of ELIMINATOR® core.

Type DMT driers have a core composition of 100% Molecular Sieve.

ELIMINATOR® type DMT driers are designed for applications requiring the highest moisture capacity.

Available with flare and solder (cu-plated steel) connections.

Features

The Core
- 100 % 3Å Molecular Sieve core
- High drying capacity minimizing the risk of acid formation (hydrolysis)
- Recommended for use with R744 (CO_2) refrigerants
- Will not deplete oil additives

The Shell
- Support PS / MWP up to 140 bar / 2030 psig
- Available with solder (copper plated) and flare connections (standard and NPT)
- Lowest leak rate
- Corrosion resistant powder-painted finish. Special coating for marine applications available upon request

- Allows installation with any orientation provided the arrow is in the flow direction
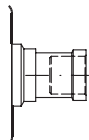- Available in sizes from 8 to 13 cubic inches

The Filter
- 25 µm (0.001 in) filter provides high retention with minimal pressure drop
- Black paint gives a better look after brazing installation
- No residual moisture when delivered
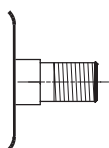- Thermally stable up to 120 °C (250 °F)

Technical data and capacities
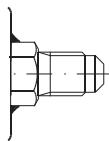
Flare connection

Solder connection (cu-plated steel)

NPT connection

Drying and liquid capacity

Type	Drying capacity[1]						Liquid capacity[2]		Max. Working Pressure PS/MWP [bar]/ [psig]	Additional Data		
	R 744 - CO$_2$ -6.6 °C			R 744 - CO$_2$ 24 °C			R 744 - CO$_2$ Flare / Cu-plated			Volume [lt]		
	[g] H$_2$O	[Kg] Ref	Drop Water	[g] H$_2$O	[Kg] Ref	Drop Water	[kW]	[TR]		Shell	Core	Net
DMT 082 / DMT 082s	7.2	7.2	143	5.7	5.8	114	3.56	1.0	140/2030	0.22	0.058	0.162
DMT 083 / DMT 083s	7.2	7.2	143	5.7	5.8	114	10.61	3.0	140/2030	0.22	0.058	0.162
DMT 084s	7.2	7.2	143	5.7	9.3	114	13.49	3.8	140/2030	0.22	0.058	0.162
DMT 132 NPT	11.6	11.7	232	9.2	9.3	184	10.99	3.1	140/2030	0.32	0.095	0.225
DMT 133 / DMT 133s	11.6	11.7	232	9.2	9.3	184	10.99	3.1	140/2030	0.32	0.095	0.225
DMT 134s	11.6	11.7	232	9.2	9.3	184	13.49	3.8	140/2030	0.32	0.095	0.225

Note: The moisture test was performed according with ASHRAE standard on liquid phase.

[1] Drying Capacity:
Drying capacity is based on following moisture content test standards before and after drying:
EPD: From 1110 ppm W to 50 ppm W at 24 °C
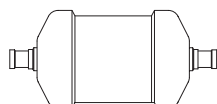EPD: From 445 ppm W to 50 ppm W at -6.6 °C

Temperature range:
-40 – 100 °C (-40 – 212 °F)

[2] Liquid Capacity:
Given in accordance with ARI 710-2004 for
t_e= -15 °C (5 °F),
t_c= 30 °C (85 °F) and
Δp = 0.07 bar (1 psig)

Ordering

Type DMT, flare

Type	Connection	Industrial pack	
	[in]	Qty.	Code no.
DMT 082	¼	12	**023Z8407**
DMT 083	⅜	12	**023Z8406**
DMT 132 NPT	¼	8	**023Z8410**
DMT 133	⅜	8	**023Z8405**

Type DMT, solder

| Type	Connection	Industrial pack		Multi-pack
	[in]	Qty.	Code no.	Code no.
DMT 082s	¼	12	**023Z8408**	**023Z8415**
DMT 083s	⅜	12	**023Z8409**	**023Z8416**
DMT 084s	½	12	**023Z8412**	**023Z8417**
DMT 133s	⅜	8	**023Z8402**	**023Z8418**
DMT 134s	½	8	**023Z8411**	**023Z8419**

Design / function

Solder connection (cu-plated steel)
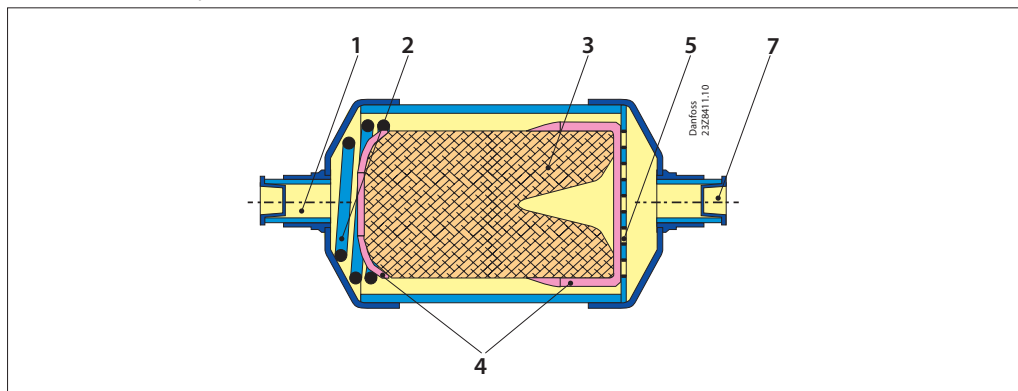
Flare connection
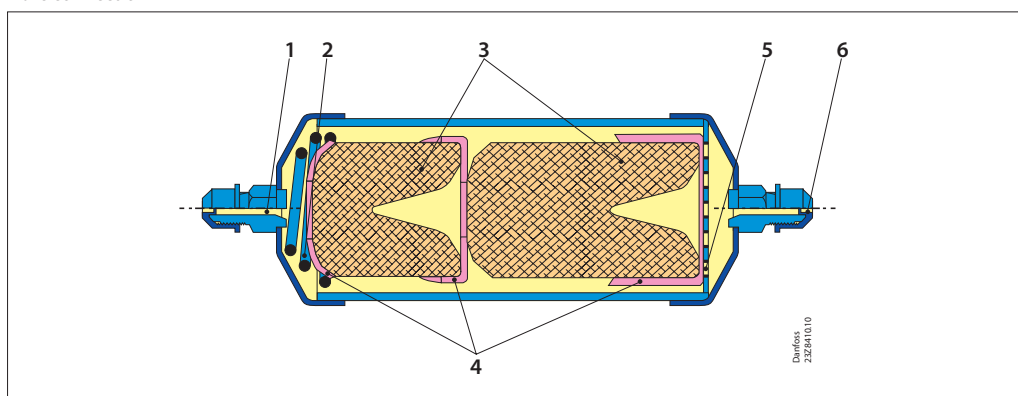
1. Inlet
2. Spring
3. Solid core
4. Polyester mat
5. Perforated plate
6. Seal cap, flare connection
7. Seal cap, solder connection

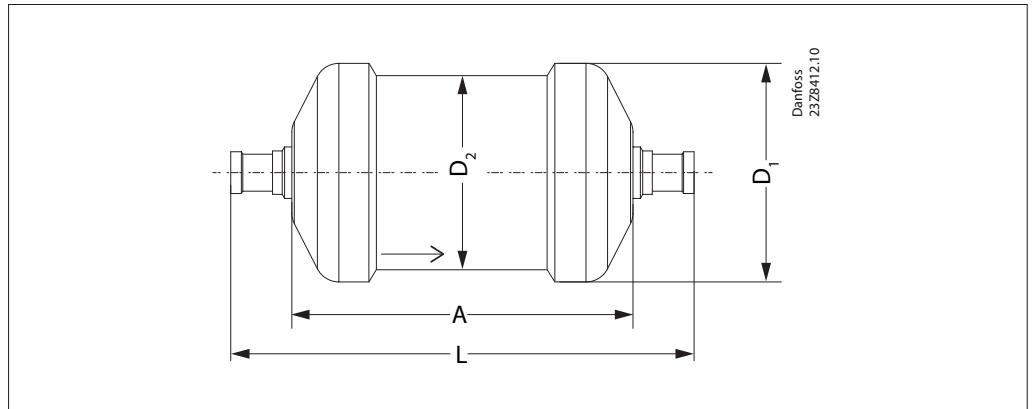**Dimensions [mm] and weights [kg]**

Flare connections
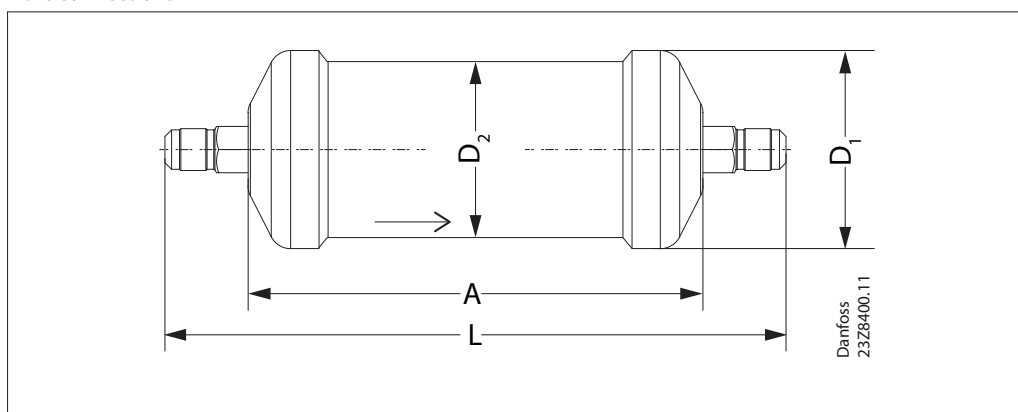
Type	A	L	D_1	D_2	Net weight
DMT 082	106.0	150.0	68.0	60.0	0.8
DMT 083	106.0	163.0	68.0	60.0	0.9
DMT 132 NPT	156.0	212.0	68.0	60.0	1.2
DMT 133	156.0	213.0	68.0	60.0	1.3

Solder connection (cu-plated steel)

Danfoss
23Z8412.10

Type	A	L	D$_1$	D$_2$	Net weight
DMT 082s	106.0	138.0	68.0	60.0	0.8
DMT 083s	106.0	144.0	68.0	60.0	0.8
DMT 084s	106.0	148.0	68.0	60.0	0.9
DMT 133s	156.0	194.0	68.0	60.0	1.2
DMT 134s	156.0	198.0	68.0	60.0	1.3