

Cyclone separator DF-C

The cyclone separator for the removal of solid and liquid particles and aerosols from compressed air and gases.

Product description:

The cyclone separators DF-C are designed for the processing of compressed air or other gases in industrial applications.

The units offer a high degree of separation over a large flow range with small pressure losses.

This is ensured by an innovative spin insert and a flow-optimised design of the housing.

This product series DF-C offers 6 different housings with a flow range between 120 and 1100 m³/h (related to 7 bar (g)).

The cyclone separator is conform to the requirements of the European directive 97/23/EG for pressure vessels.



Two versions are available:

Standard

Type with time controlled condensate drain UFZ

Superplus

Type with level-controlled condensate drain UFM-T



Function description:

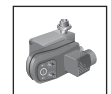
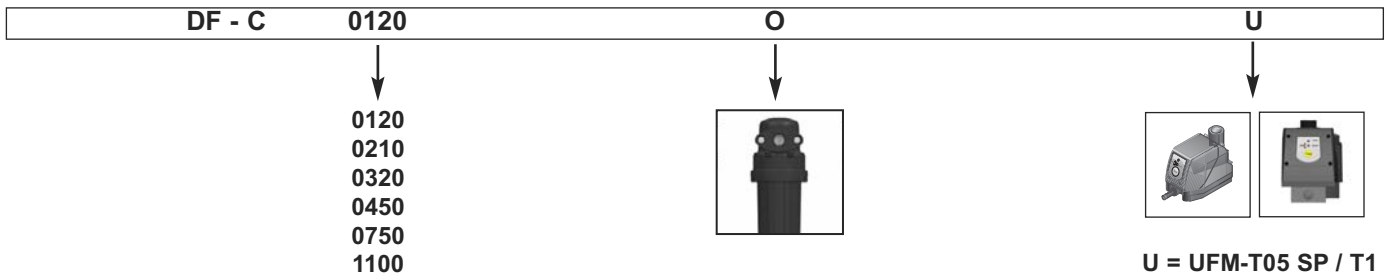
Through the innovative insert in the cyclone head the inlet air flow is moved into a fast rotating drive, which centrifuges larger particles due to their mass inertia against the inner housing wall. Through friction with the housing the particles lose part of their kinetic energy and slide down with reduced speed towards housing ground. The collected condensate on the housing ground is removed via condensate drain, while the purified compressed air is made available to the system.

DF-C 0120 - DF-C 1100

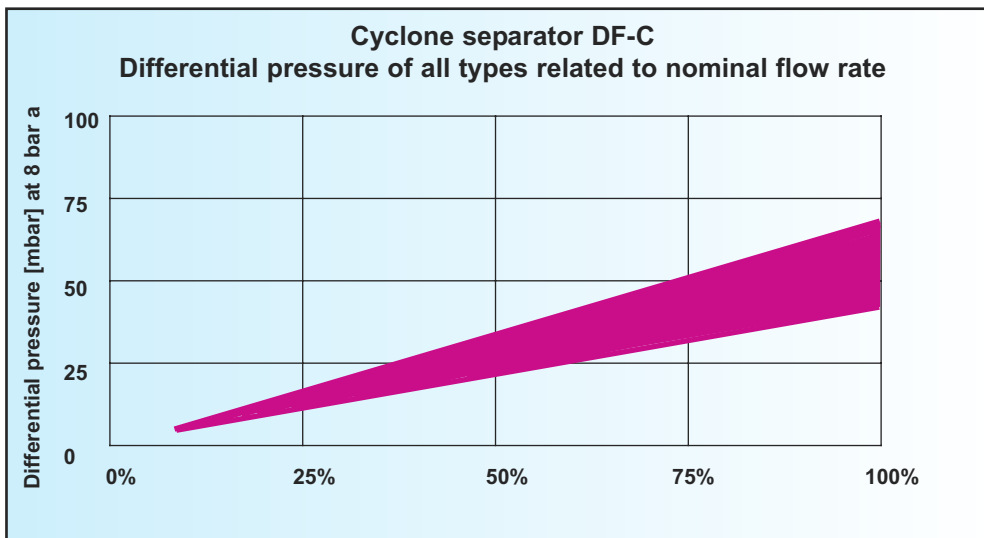
Technical Data

Features:	Benefits:
Flow-optimised design of the housing	Low pressure losses, thereby saving energy costs
Innovative spin insert	High retention rates over a large volume flow range
Intelligent overall concept	Series range, retention rates and available options perfectly meet requirements of industrial air purification. Adequate to the industrial filter series DF
Bayonet fixing between housing head and housing bowl	Easy to use construction, simple inspection and cleaning of the housing
Housing cannot be opened under pressure due to bayonet lock	High safety during operation
Housings immersion-laquererd on the inside and outside surface	Long-term corrosion protection, also against aggressive condensates

Options:	
UFM-T	Electronic level-controlled condensate drain without compressed air losses
UFZ	Time-controlled condensate drain
Wall bracket	Distance to the wall gradelessly adjustable
Connection adapter	Intelligent adapter solution for filter combination



T = UFZ



Full retention rate related to 8 bar a:	
≥ 5 µm	99%
≥ 10 µm	100%

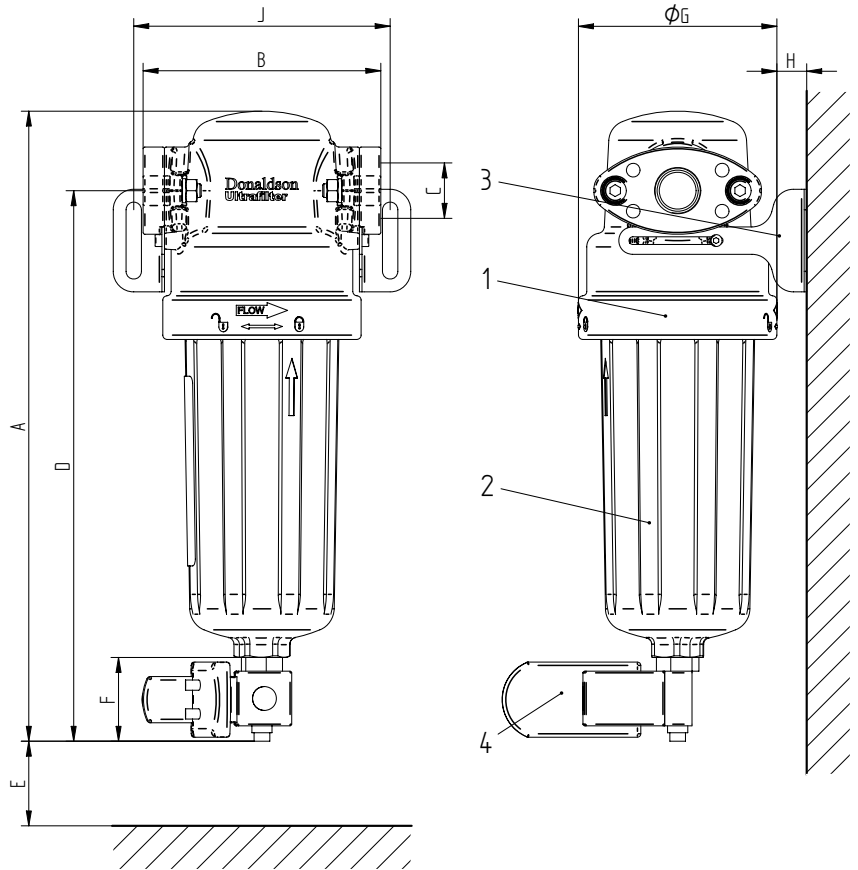
DF-C 0120-1100 Standard

Pos.	Piece	Description
1	1	Housing head
2	1	Housing bowl
3	2	Wall bracket (option)
4	1	Drain UFZ

Materials	
Filter housing	Aluminium die cast
Float drain	Brass
Sealings	Viton / NBR

Max. operating pressure	16 bar
Test pressure	22.9 bar
Perm. operating temperature	+1°C / +65°C

Classification acc. to 97 / 23 / EG for fluids group 2	
DF-C 0120 - DF-C 0320	Art. 3, par. 3
DF-C 0450 - DF-C 1100	Cat. I



Size	Flow rate* m ³ /h	Volume (l)	Weight (kg)	A mm	B mm	C	D mm	E mm	F mm	G mm	H min./ max. mm	I mm
0120	0120	0.40	1.6	283	103	G 1/2	243.5	115	49	85	22.5 / 51.5	107
0210	0210	1.15	2.7	368.5	139	G 3/4	322	180	49	116	22.5 / 70.5	150
0320	0320	1.15	2.7	368.5	139	G 1	322	180	49	116	22.5 / 70.5	150
0450	0450	5	2.9	572.5	190	G 1 1/2	509.5	250	49	160	22.5 / 90.5	190
0750	0750	5	2.9	572.5	190	G 2	509.5	250	49	160	22.5 / 90.5	190
1100	1100	5	2.9	572.5	190	G 2	509.5	250	49	160	22.5 / 90.5	190

* Nominal flow at 7 bar g, m³/h related to 1 bar abs. and 20°C

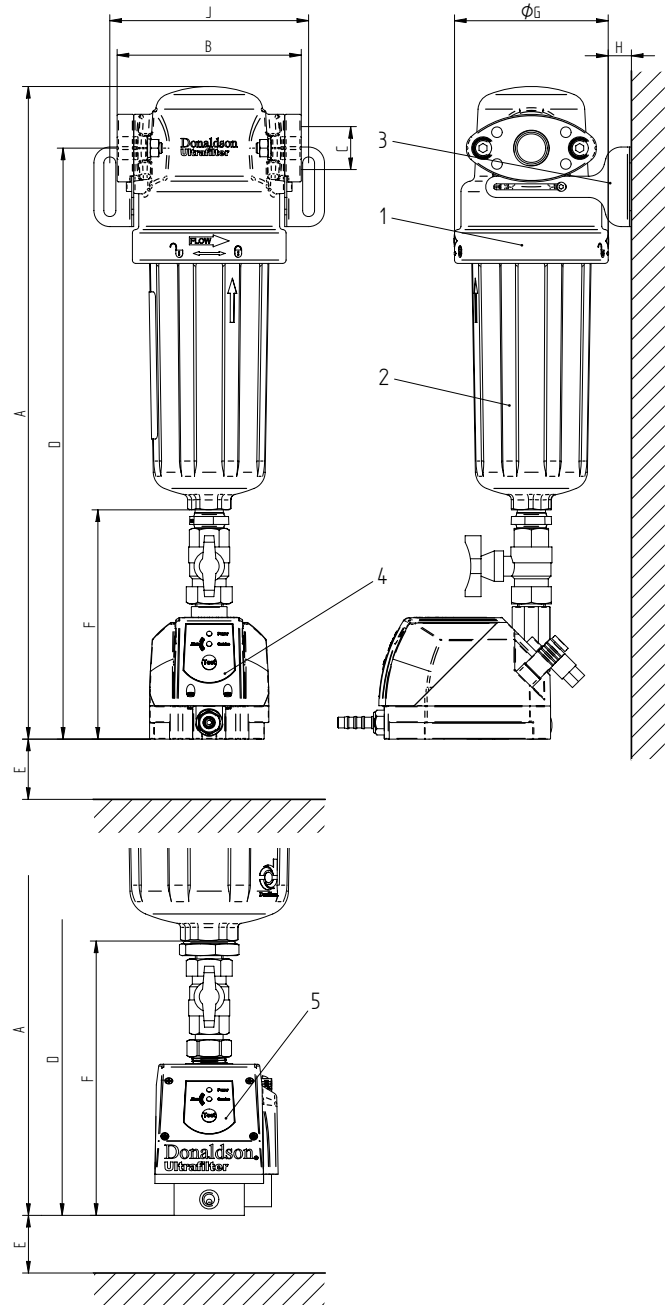
DF-C 0120-1100 Superplus

Pos.	Pcs.	Description
1	1	Housing head
2	1	Housing bowl
3	2	Wall bracket (option)
4 DF-C 0120 - DF-C 0450	1	Condensate drain UFM-T05
5 DF-C 0750 - DF-C 1100	1	Condensate drain UFM-T1

Materials	
Filter housing	Aluminium die cast
UFM-T	Aluminium, glass fibre reinforced polymer
Sealings	Viton / NBR

Max. operating pressure	16 bar
Test pressure	22.9 bar
Perm. operating temperature	+1°C / +65°C

Classification acc. to 97 / 23 / EG for fluids group 2	
DF-C 0120 - DF-C 0320	Art. 3, par. 3
DF-C 0450 - DF-C 1100	Cat. I



Size	Flow rate* m ³ /h	Volume (l)	Weight (kg)	A mm	B mm	C	D mm	E mm	F mm	G mm	H min./ max. mm	I mm
0120	0120	0.40	1.6	407	103	G 1/2	367.5	115	173	85	22.5 / 51.5	107
0210	0210	1.15	2.7	492.5	139	G 3/4	446	180	173	116	22.5 / 70.5	150
0320	0320	1.15	2.7	492.5	139	G 1	446	180	173	116	22.5 / 70.5	150
0450	0450	5	2.9	696.5	190	G 1 1/2	633.5	250	173	160	22.5 / 90.5	190
0750	0750	5	2.9	722	190	G 2	659	250	207	160	22.5 / 90.5	190
1100	1100	5	2.9	722	190	G 2	659	250	207	160	22.5 / 90.5	190

* Nominal flow at 7 bar g, m³/h related to 1 bar abs. and 20°C