



# DF-C SERIES

## CYCLONE SEPARATORS

Process Filtration

**Donaldson® cyclone separators are designed for efficient removal of liquid water and particulate from compressed air and gases.**

Donaldson DF-C cyclone separators deliver high separation efficiency at low pressure drop through an optimal flow-path design. An innovative insert in the cyclone head creates centrifugal force that guides liquid and particulate to the housing wall. Friction with the housing causes the liquid and particulate to lose part of their kinetic energy and drop out of the higher moving airstream. Collected condensate is removed by a time controlled UF-Z condensate drain, while the purified compressed air or gas exits to the industrial application downstream.

Available in six different sizes with a flow range from 70 to 647 scfm at 100 psig. Conforms to European directive 97/23/EG for pressure vessels.



**DF-C STANDARD**  
with UF-Z time-controlled  
condensate drain



Flow optimized design

FEATURES	BENEFITS
Flow-optimized design	Low pressure drop resulting in energy savings
Innovative spin insert	High efficiency over a broad flow range
Bayonet lock ensures housing cannot be opened under pressure	High safety during operation
Immersion-laquered housing on inside and outside surfaces	Long-term corrosion protection
Wall-bracket and UFM-D electronic level-controlled condensate drain options	Flexibility to meet installation and application requirements

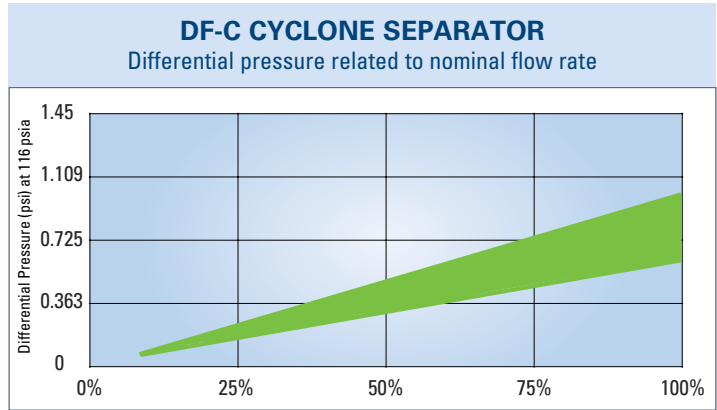
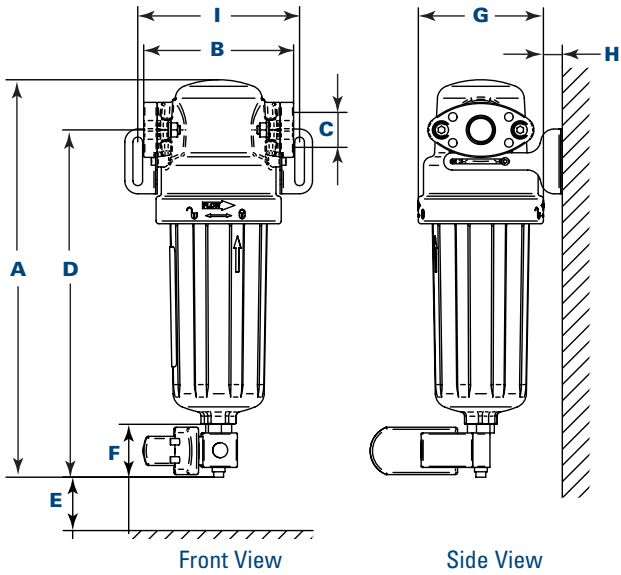
## SPECIFICATIONS

MATERIALS	
Filter Housing	Aluminum die cast
Timer Drain	Brass
Housing Bowl Seal	Buna

RETENTION RATE RELATED TO 116 PSIA	
≥ 5 micron	99%
≥ 10 micron	100%

OPERATING CONDITIONS	
Design Pressure and Temperature	232 psi @ 150°F
Test Pressure	332 psi
Continuous Operating Temperature	34°F to 149°F

CLASSIFICATION PER 97/23/EG FOR FLUIDS GROUP 2	
DF-C 0120 to DF-C 0320	Art. 3, Par. 3
DF-C 0450 to DF-C 1100	Cat. 1



Size	Flow Rate* (m3/hr)	Volume (l)	Weight (kg)	Dimensions (mm)								
				A	B	C (FNPT)	D	E	F	G	H (min/max)	I
0120	119	0.40	1.6	283	103	13	244	115	49	85	22 / 51	107
0210	209	1.15	2.7	369	140	19	323	180	49	117	22 / 71	150
0320	319	1.15	2.7	369	140	25	323	180	49	117	22 / 71	150
0450	449	5.00	2.9	572	191	38	508	249	49	160	22 / 344	191
0750	749	5.00	2.9	572	191	51	508	249	49	160	22 / 344	191
1100	1099	5.00	2.9	572	191	51	508	249	49	160	22 / 344	191

Size	Flow Rate* (scfm)	Volume (gal)	Weight (lbs)	Dimensions (inches)								
				A	B	C (FNPT)	D	E	F	G	H (min/max)	I
0120	70	0.106	3.5	11.14	4.06	½	9.6	4.53	1.93	3.35	0.88 / 2	4.2
0210	123	0.304	5.9	14.51	5.5	¾	12.7	7.1	1.93	4.6	0.88 / 2.8	5.9
0320	188	0.304	5.9	14.51	5.5	1	12.7	7.1	1.93	4.6	0.88 / 2.8	5.9
0450	264	1.32	6.4	22.5	7.5	1½	20	9.8	1.93	6.3	0.88 / 13.56	7.5
0750	441	1.32	6.4	22.5	7.5	2	20	9.8	1.93	6.3	0.88 / 13.56	7.5
1100	647	1.32	6.4	22.5	7.5	2	20	9.8	1.93	6.3	0.88 / 13.56	7.5

\* Nominal flow at 69 bar (100 psig), scfm related to 1.01 bar (14.7 psia).

**Important Notice:** Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, specifications, availability and data are subject to change without notice, and may vary by region or country.



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