

Product Training

Industrial Filtration

DF-C Cyclone Separator

Product Line Industrial Filtration Technology

Status: December 2009



Donaldson.
FILTRATION SOLUTIONS

DF-C Cyclone Separator



Main Features

- DF-C offers unrivalled high performance & efficiency
- Innovative new swirl-insert causes low pressure drop (patent applied)
- DF-C completes DF portfolio and can be adapted to appropriate DF filter housing
- 6 DF-C sizes substitutes old AG-Z 0125 – 1000 range

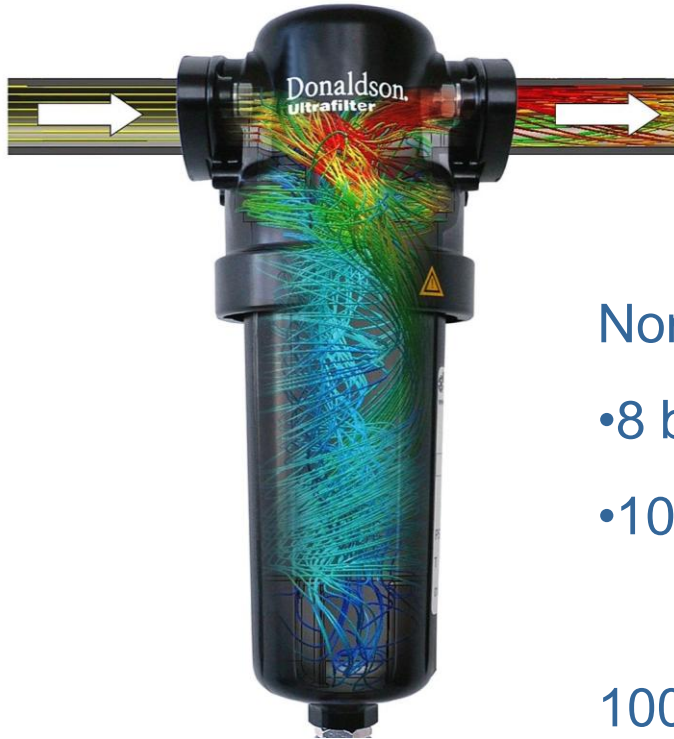
Performance and Efficiency

No.	Cyclone type	Nominal flow capacity ¹⁾ m ³ /h ²⁾	Connection
1	0120	120	1/2"
2	0210	210	3/4"
3	0320	320	1"
4	0450	450	1 1/2"
5	0750	750	2"
6	1100	1100	2"

1) Nominal flow capacity related to 8 bar (absolute) operating pressure

2) Volume flow related to 1 bar (absolute) / 20°C

Performance and Efficiency



Nominal efficiency at

- 8 bar (absolute) operating pressure
- 100 % nominal flow

100 % related to particles $\geq 10 \mu\text{m}$

99 % related to particles $\geq 5 \mu\text{m}$

Differential Pressure

No.	Cyclone type	Nominal flow m ³ /h ²⁾	Δp ¹⁾ mbar
1	0120	120	60
2	0210	210	50
3	0320	320	65
4	0450	450	40
5	0750	750	55
6	1100	1100	70

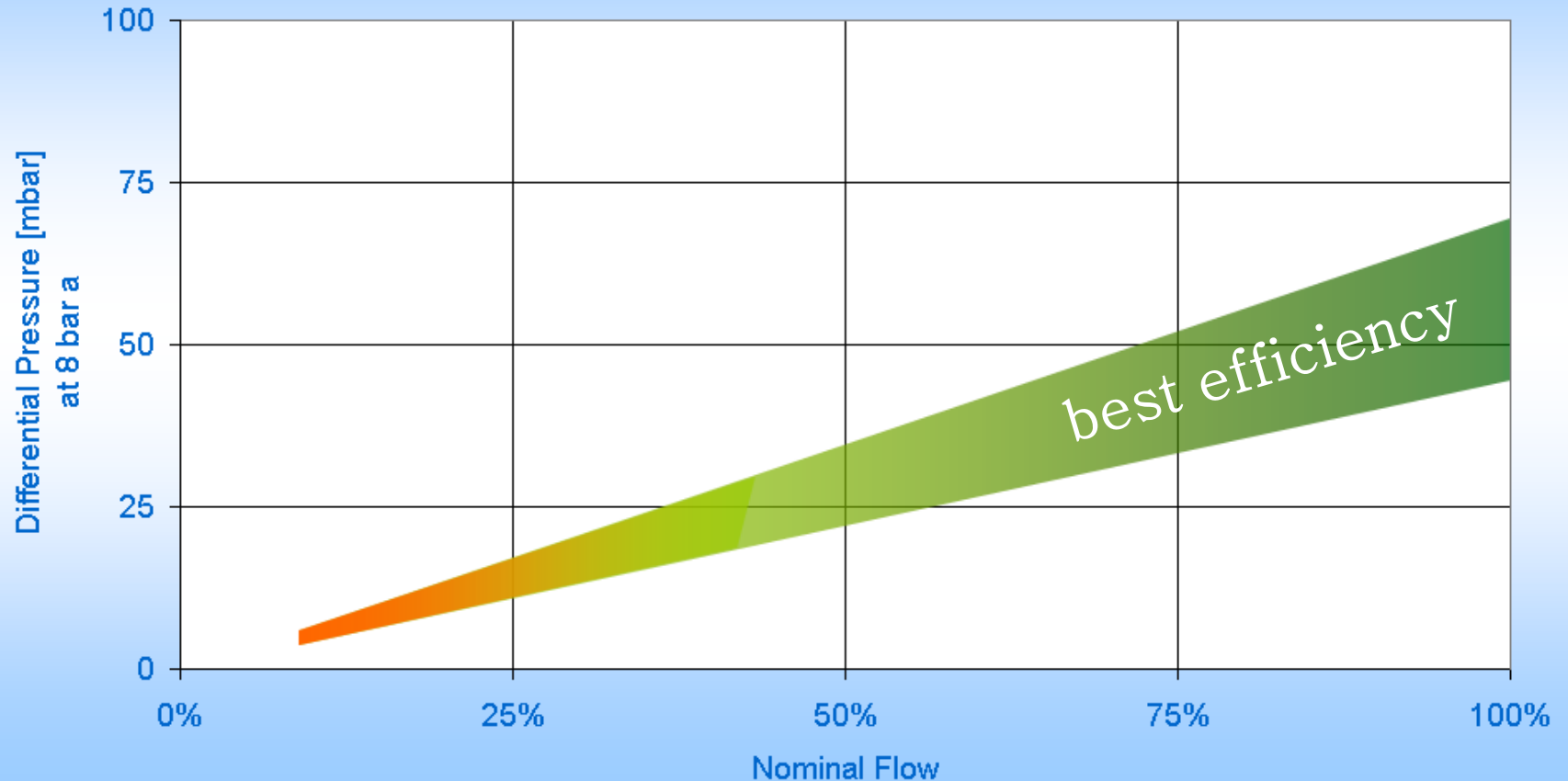
1) Differential pressure related to 8 bar (absolute) operating pressure

2) Volume flow related to 1 bar (absolute) / 20°C

Differential Pressure

Cyclone Separator DF-C

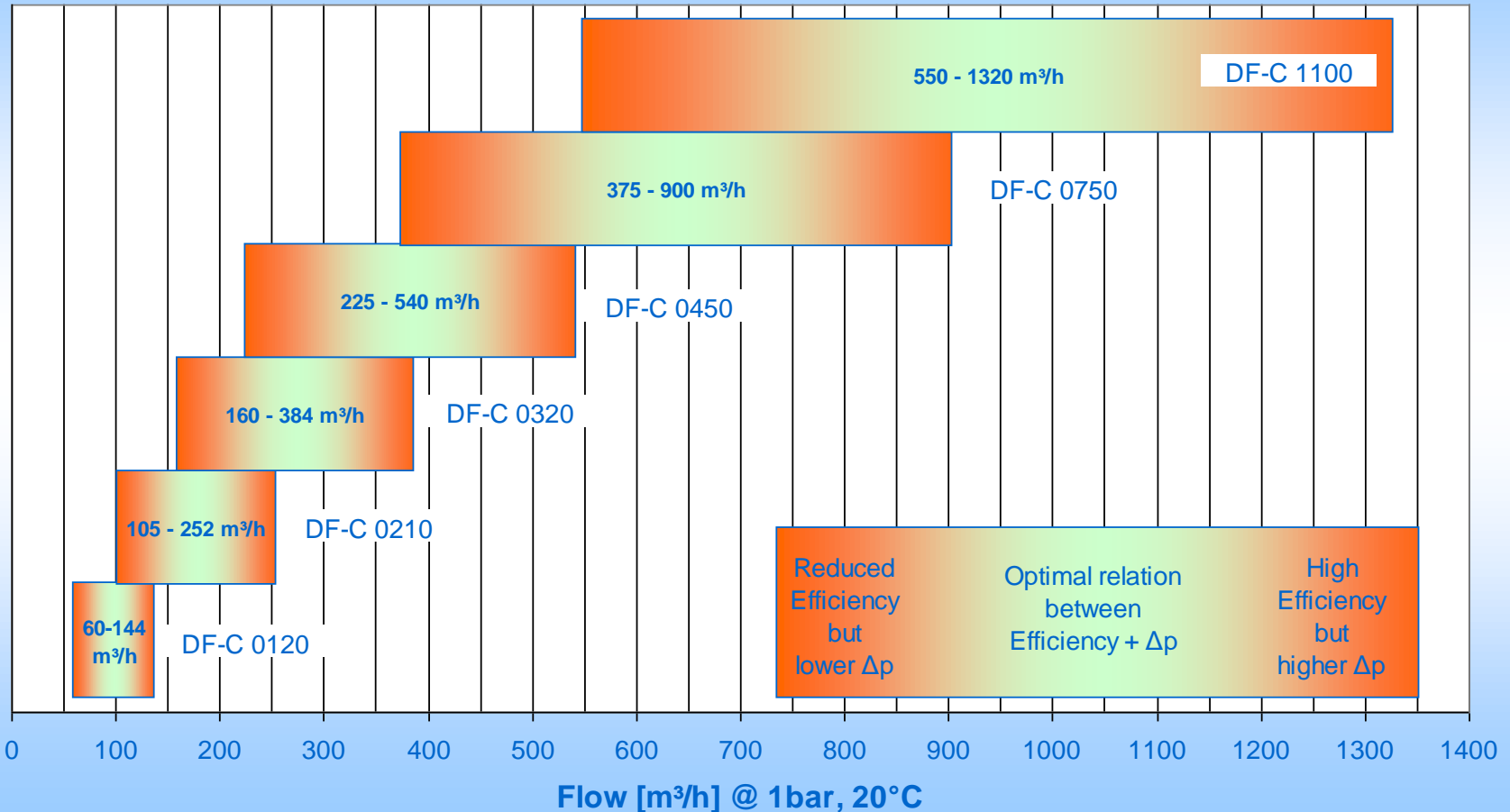
Differential pressure range over all types related to nominal flow



Low differential pressure across whole flow range

DF-C Flow Range

Cyclone Separator DF-C Flow Range

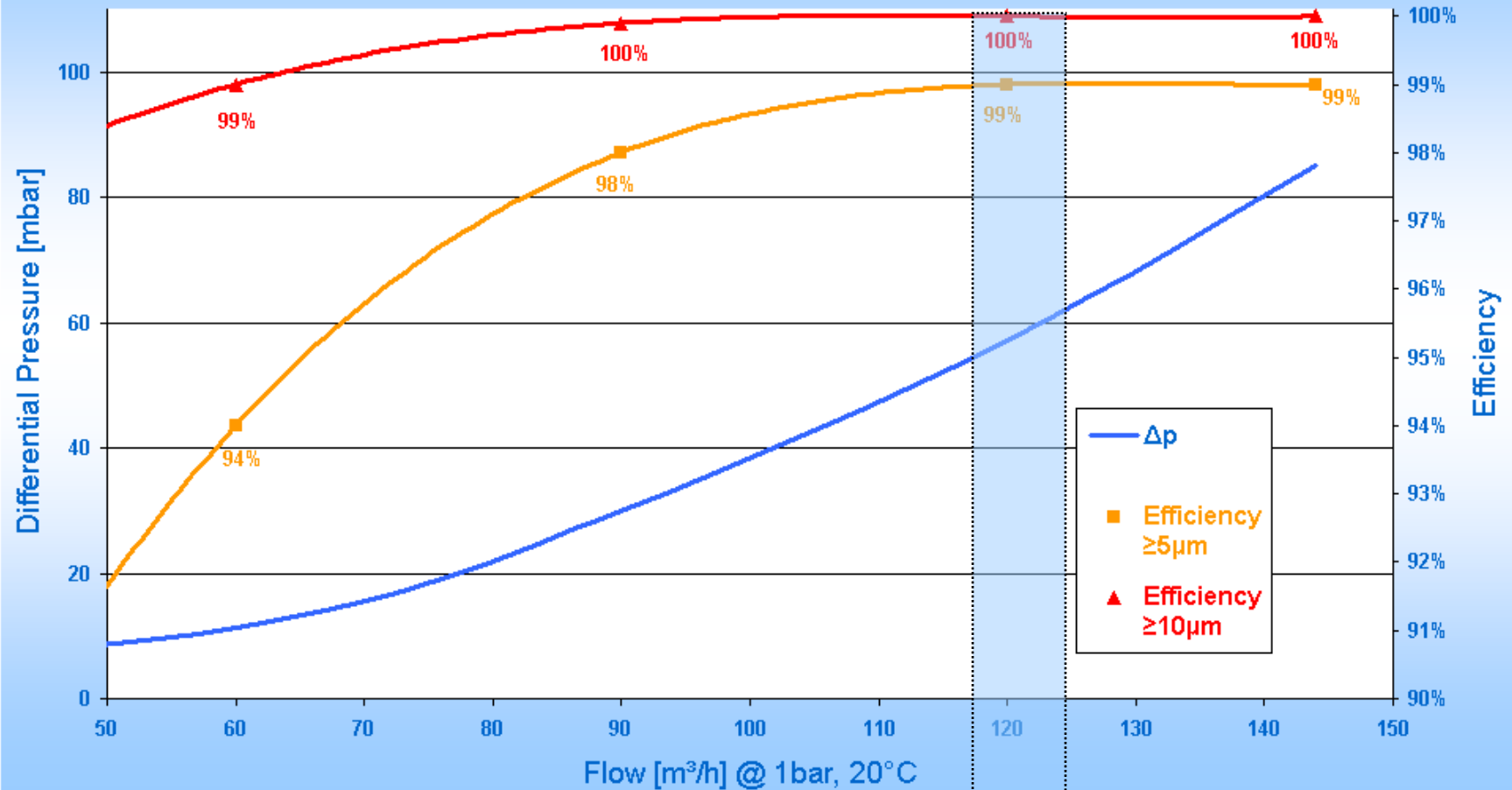


Very wide application area (depending on customer preference)

Differential Pressure + Efficiency

DF-C 0120

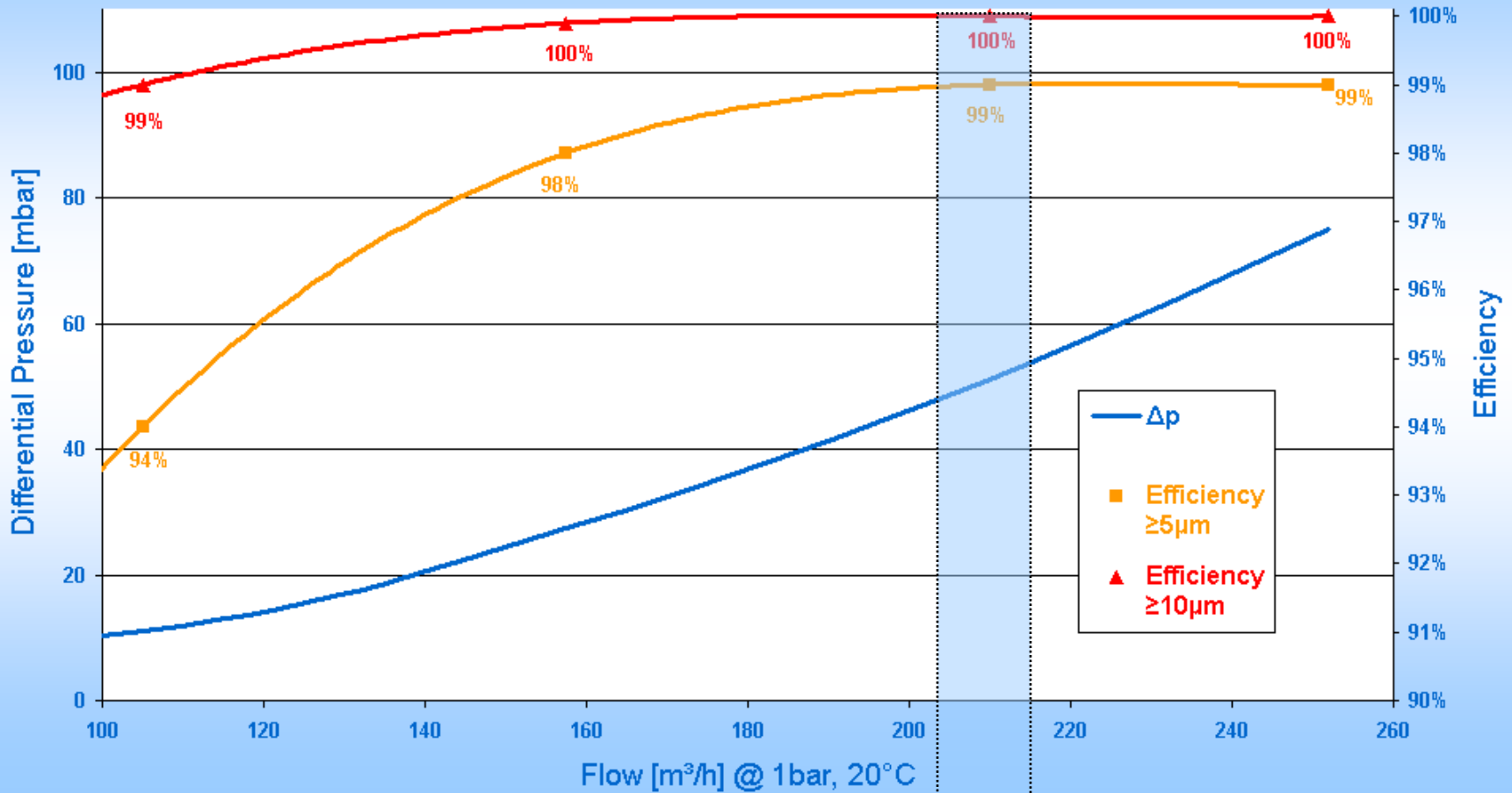
Differential Pressure + Efficiency related to volume flow



Differential Pressure + Efficiency related to Flow

DF-C 0210

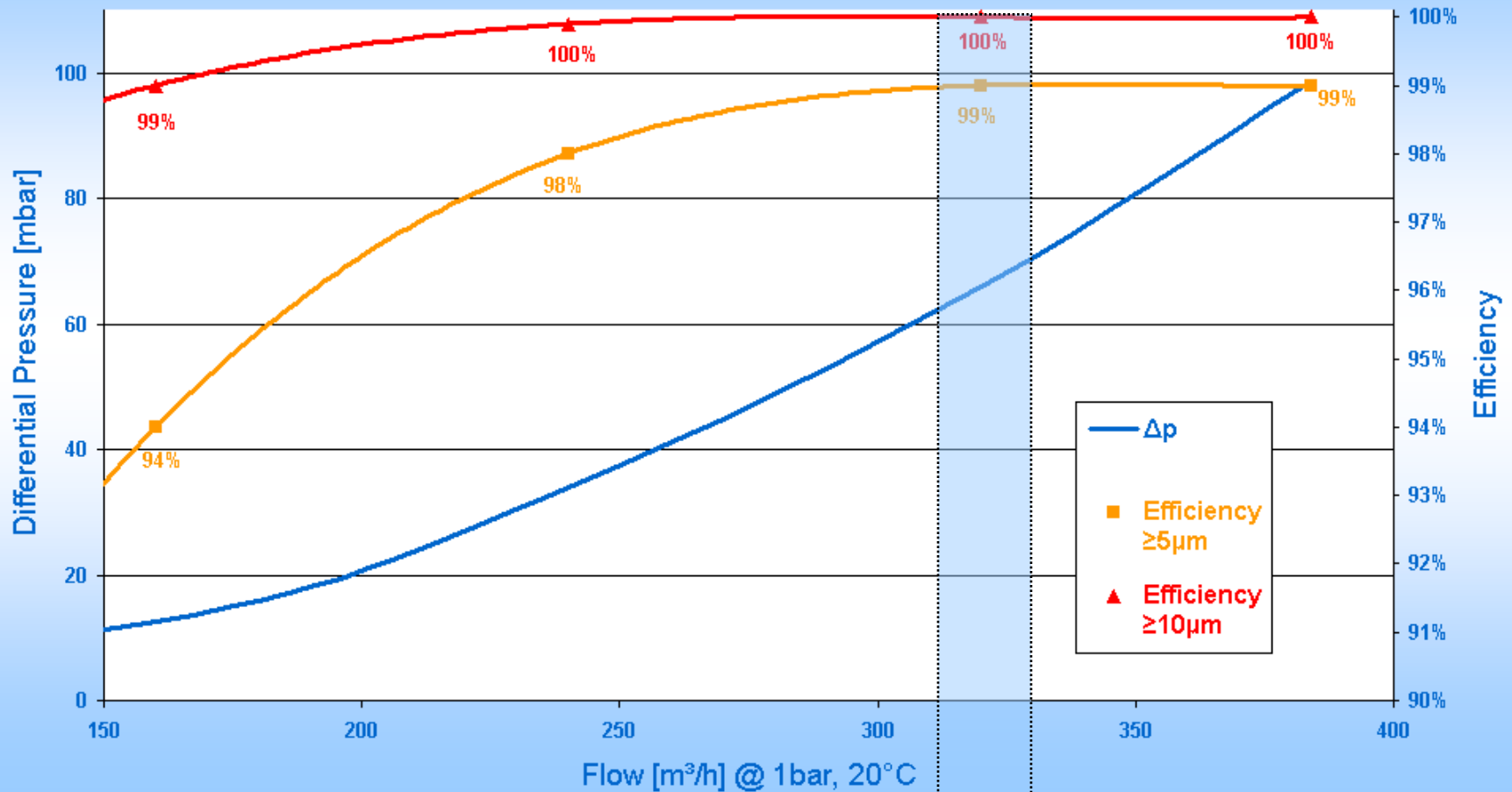
Differential Pressure + Efficiency related to volume flow



Differential Pressure + Efficiency related to Flow

DF-C 0320

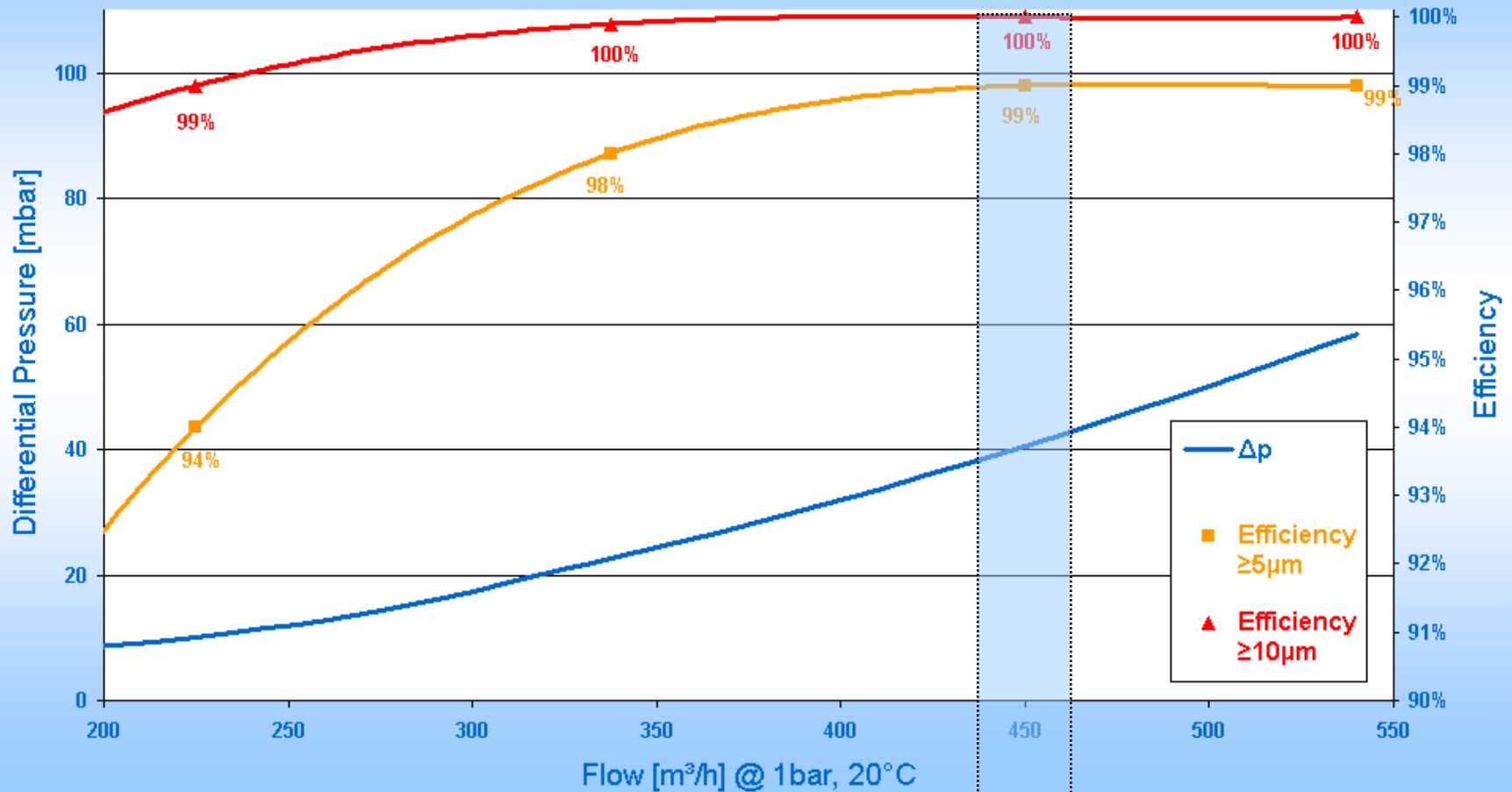
Differential Pressure + Efficiency related to volume flow



Differential Pressure + Efficiency related to Flow

DF-C 0450

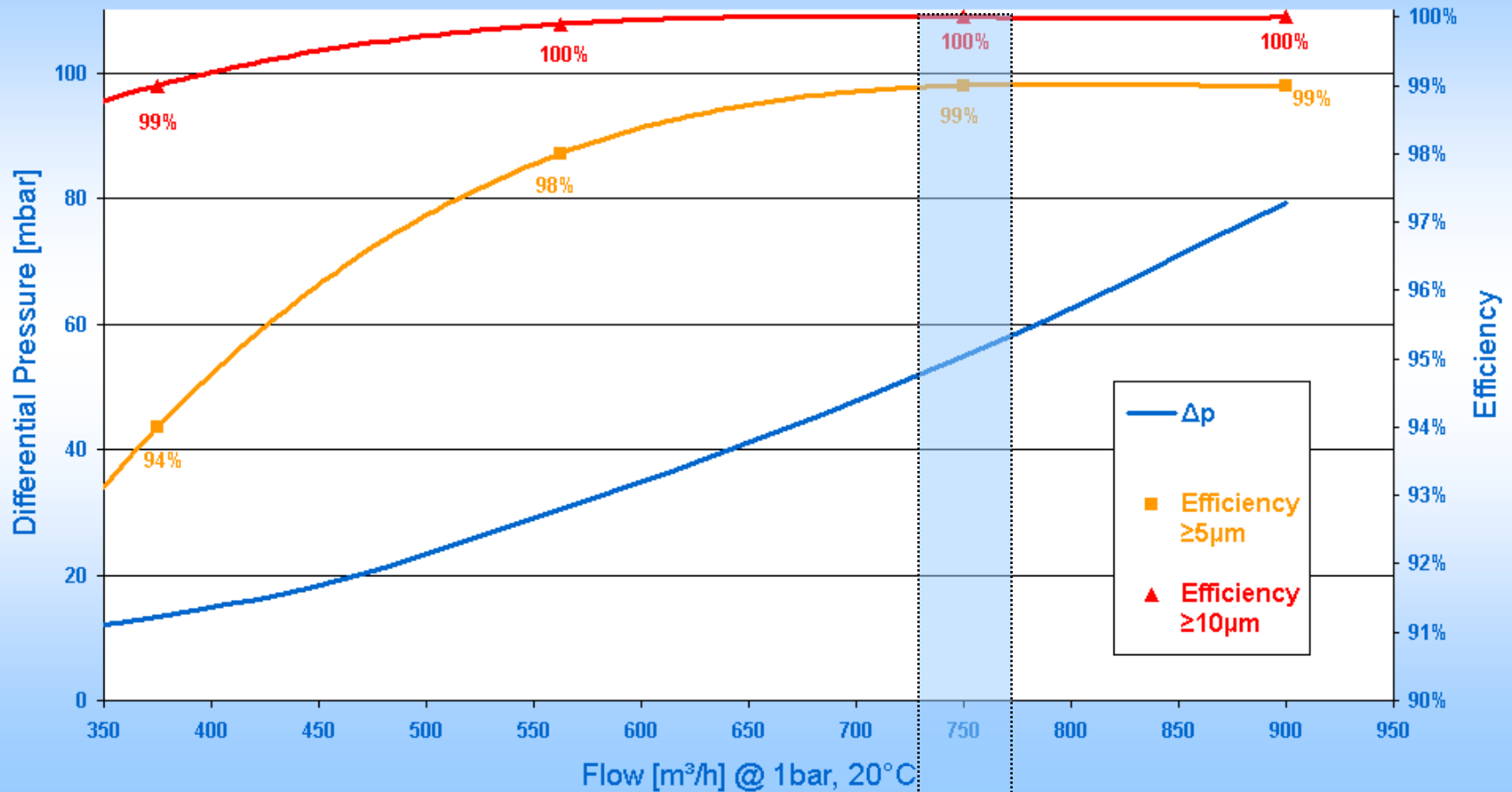
Differential Pressure + Efficiency related to volume flow



Differential Pressure + Efficiency related to Flow

DF-C 0750

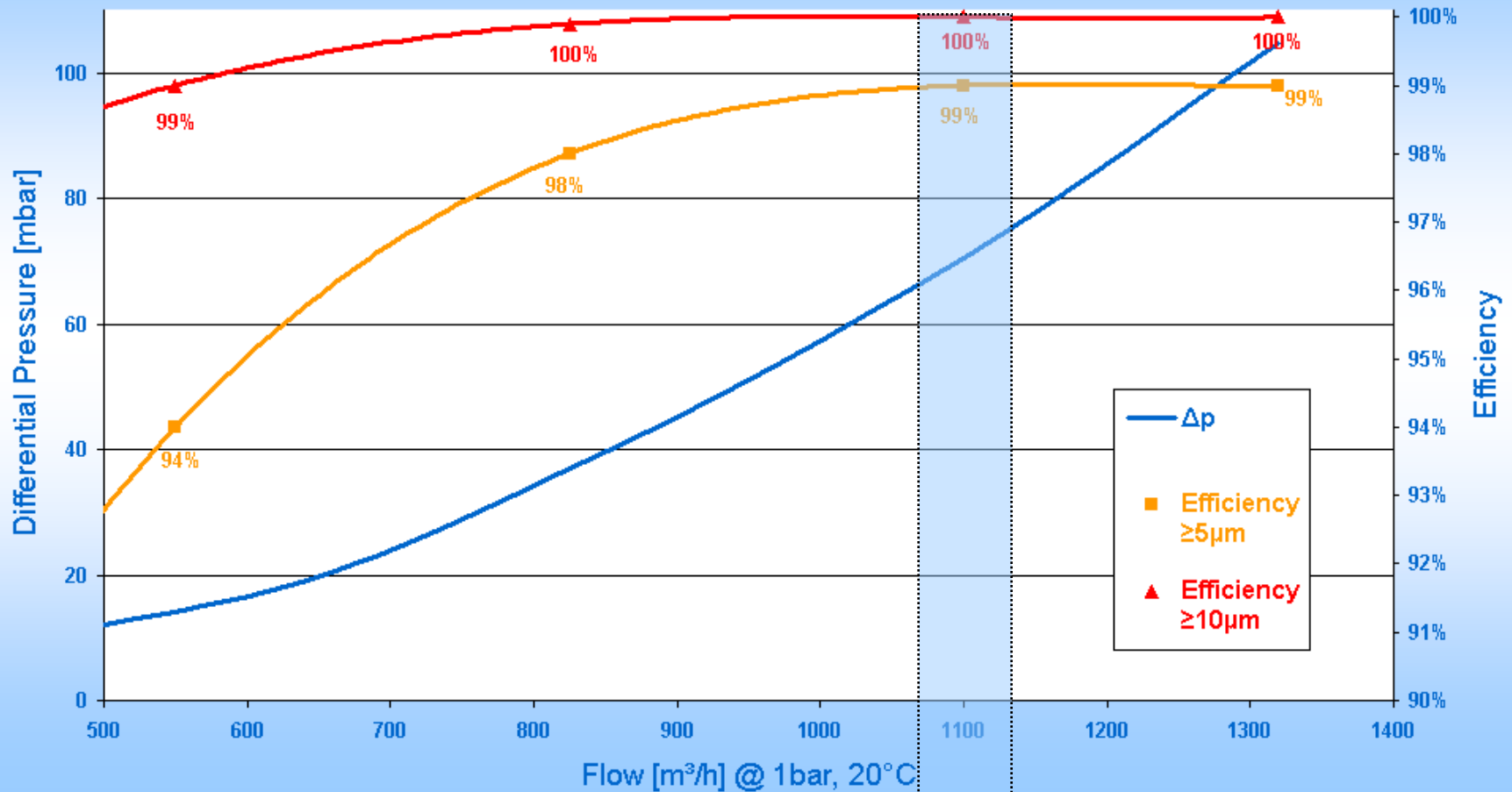
Differential Pressure + Efficiency related to volume flow



Differential Pressure + Efficiency related to Flow

DF-C 1100

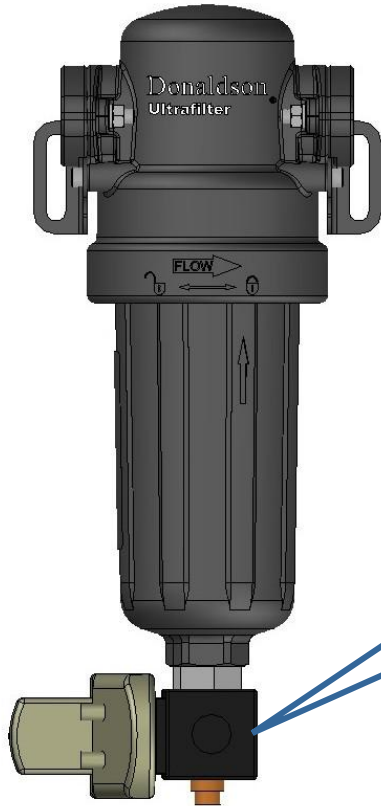
Differential Pressure + Efficiency related to volume flow



DF-C 1100

Configuration Variants

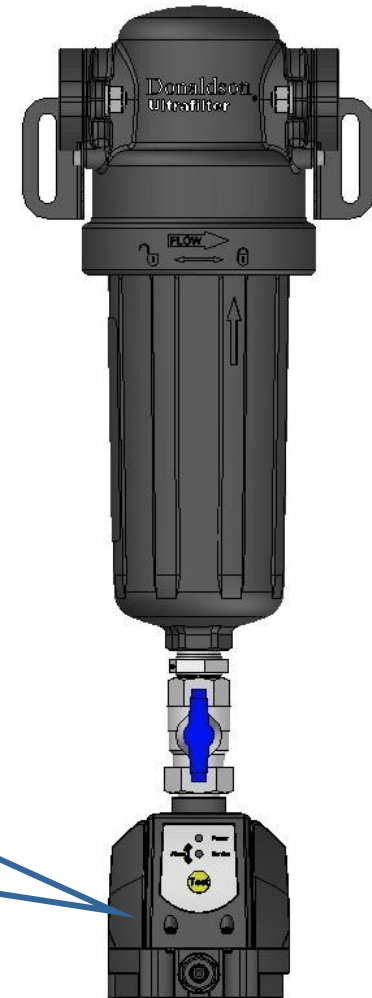
Standard



UFZ
Timer-controlled
solenoid valve drain

UFM-T
Electronic drain w/o air
loss

Superplus



DF Nomenclature

