

**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

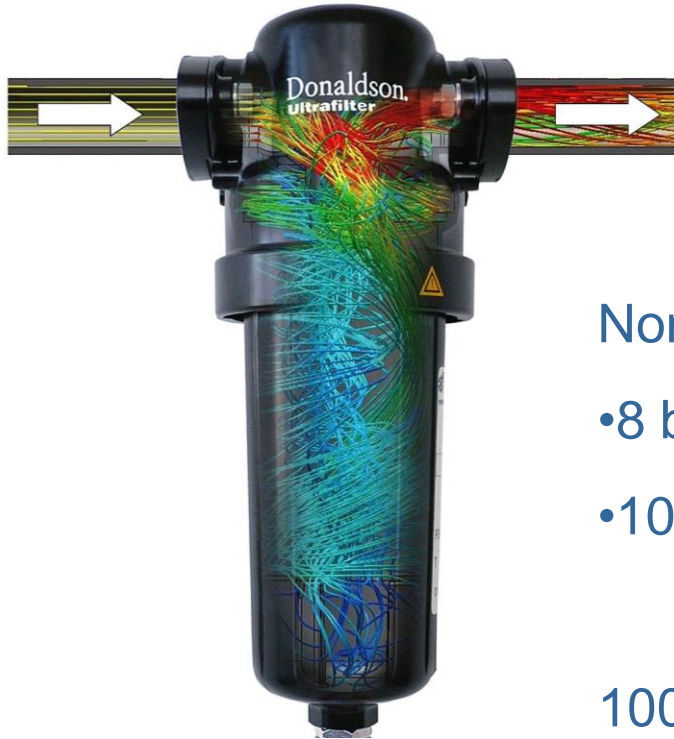
# Performance and Efficiency

No.	Cyclone type	Nominal flow capacity <sup>1)</sup> m <sup>3</sup> /h <sup>2)</sup>	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 <sup>3</sup> /h <sup>2)</sup>	$\Delta p$ <sup>1)</sup> 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

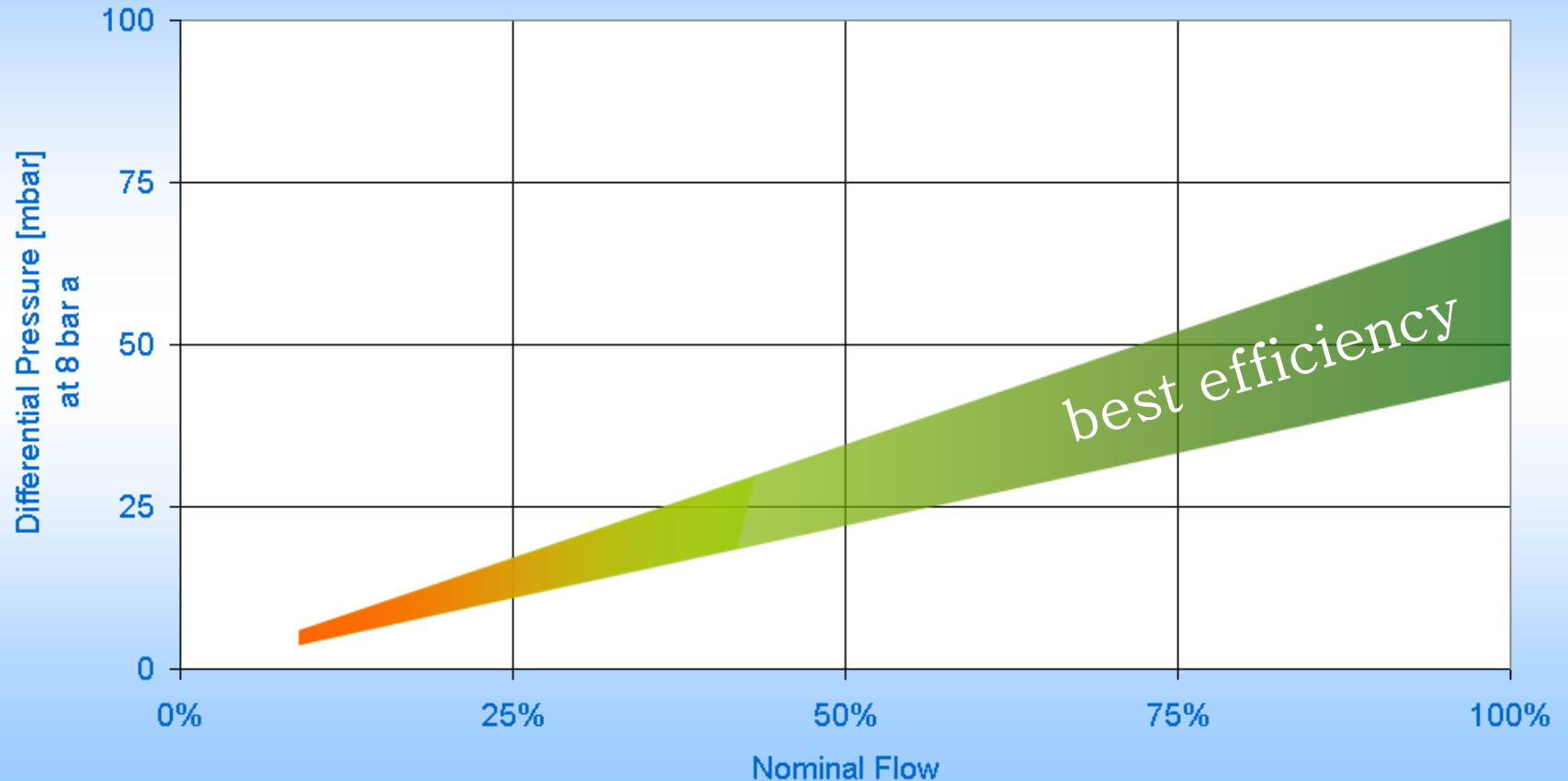
1) Differential pressure related to 8 bar (absolute) operating pressure

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

# Differential Pressure

## Cyclone Separator DF-C

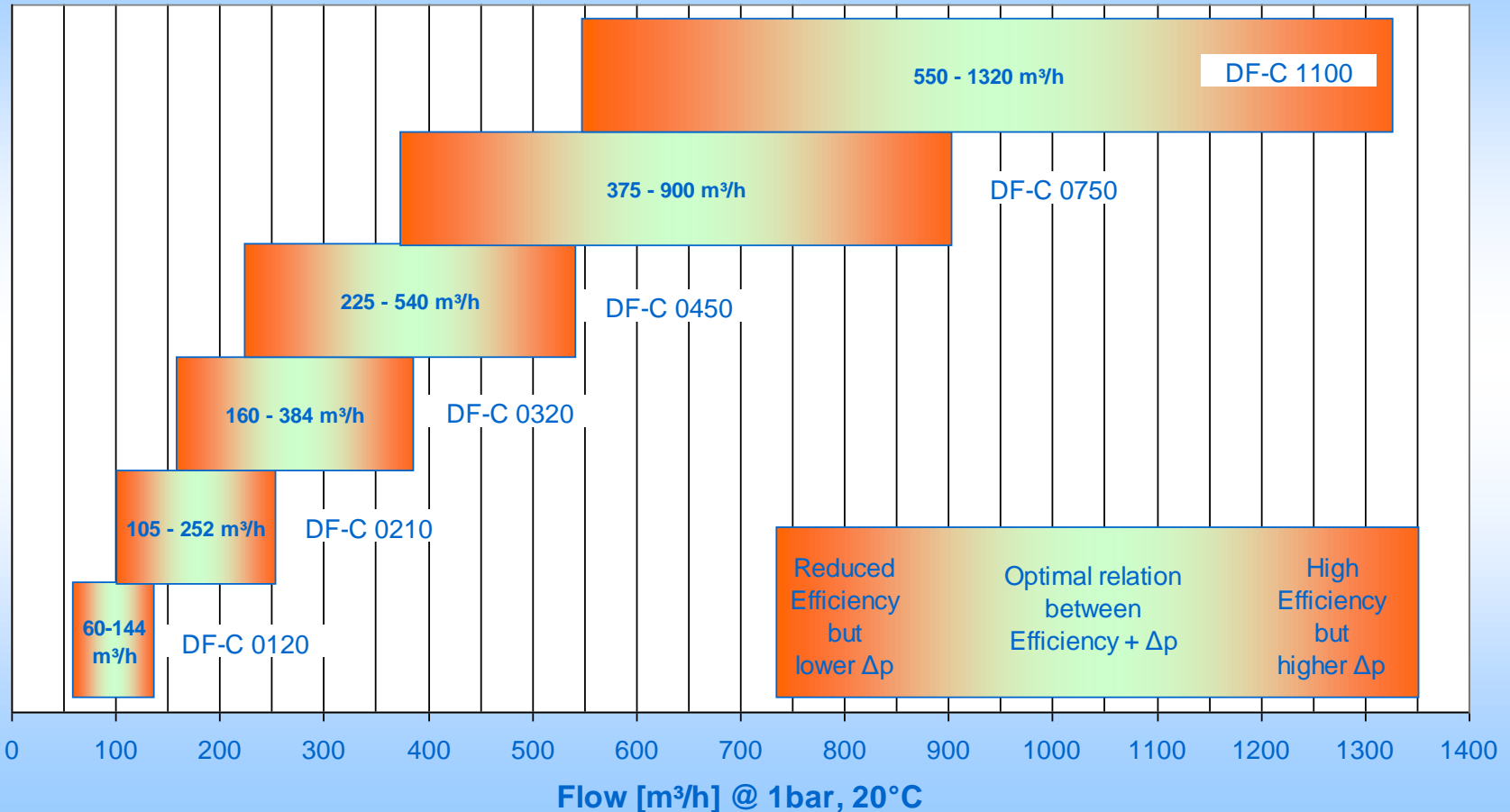
Differential pressure range over all types related to nominal flow



Low differential pressure across whole flow range

# DF-C Flow Range

## Cyclone Separator DF-C Flow Range

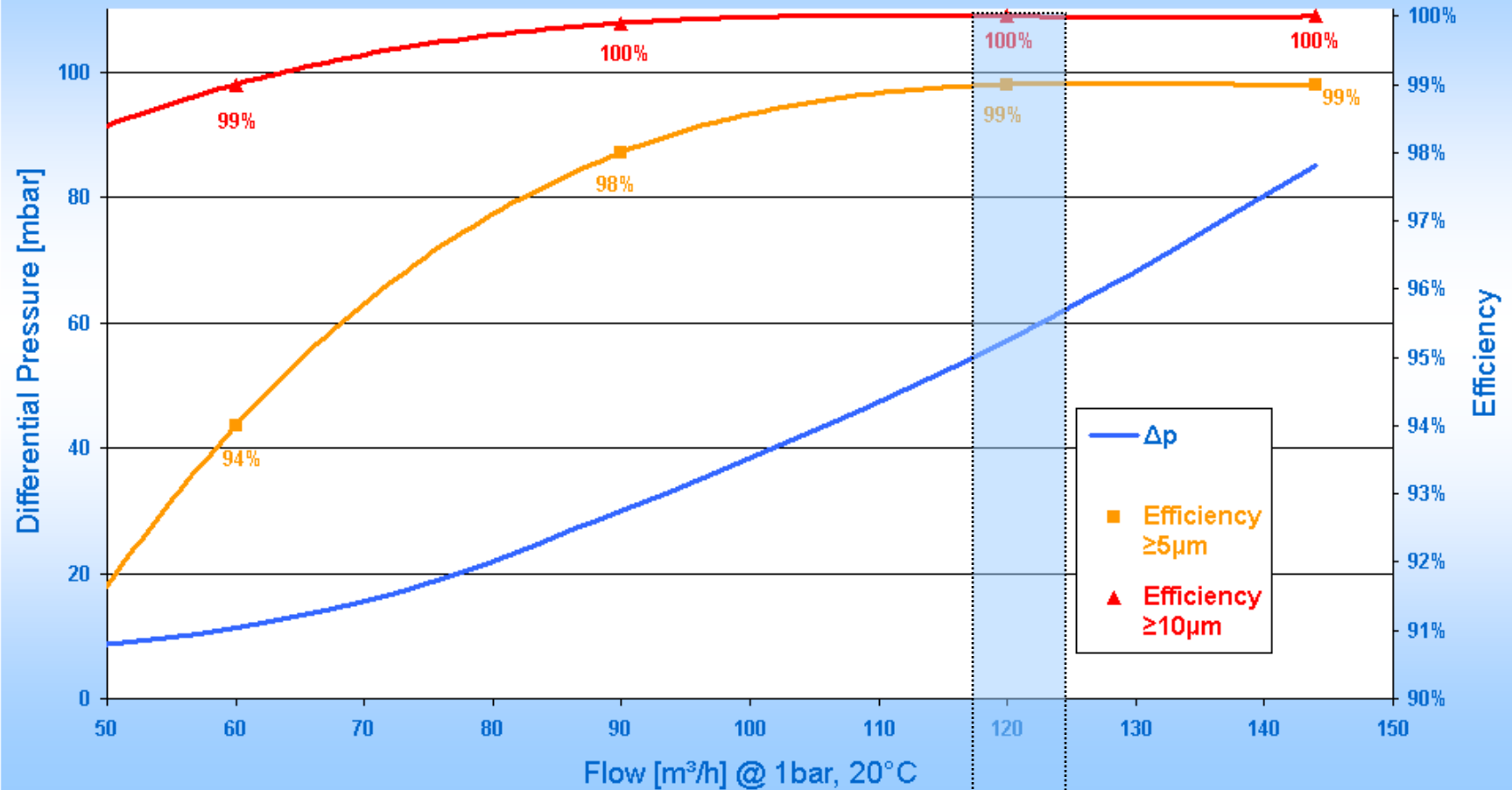


Very wide application area (depending on customer preference)

# Differential Pressure + Efficiency

DF-C 0120

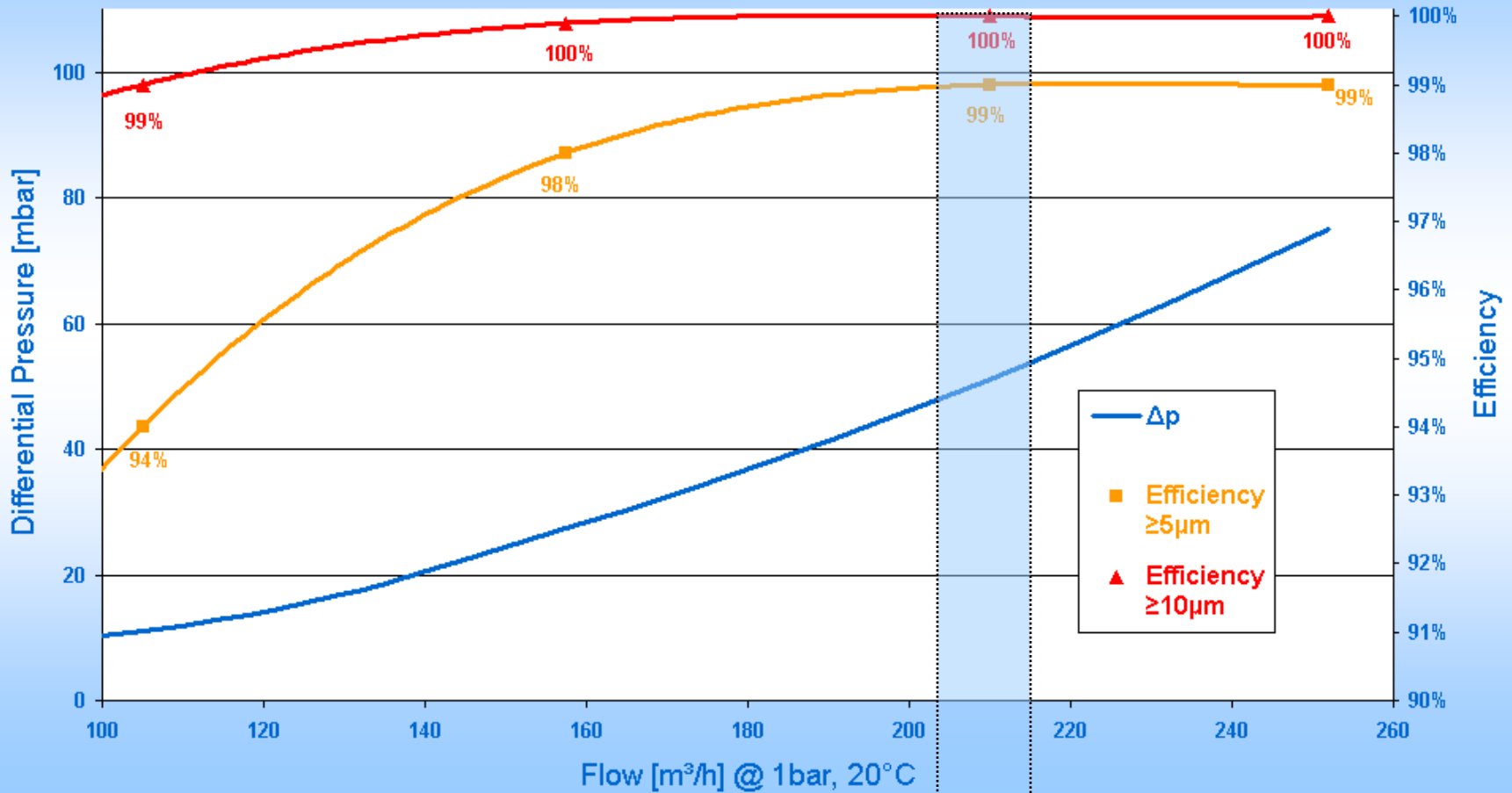
Differential Pressure + Efficiency related to volume flow



# Differential Pressure + Efficiency related to Flow

DF-C 0210

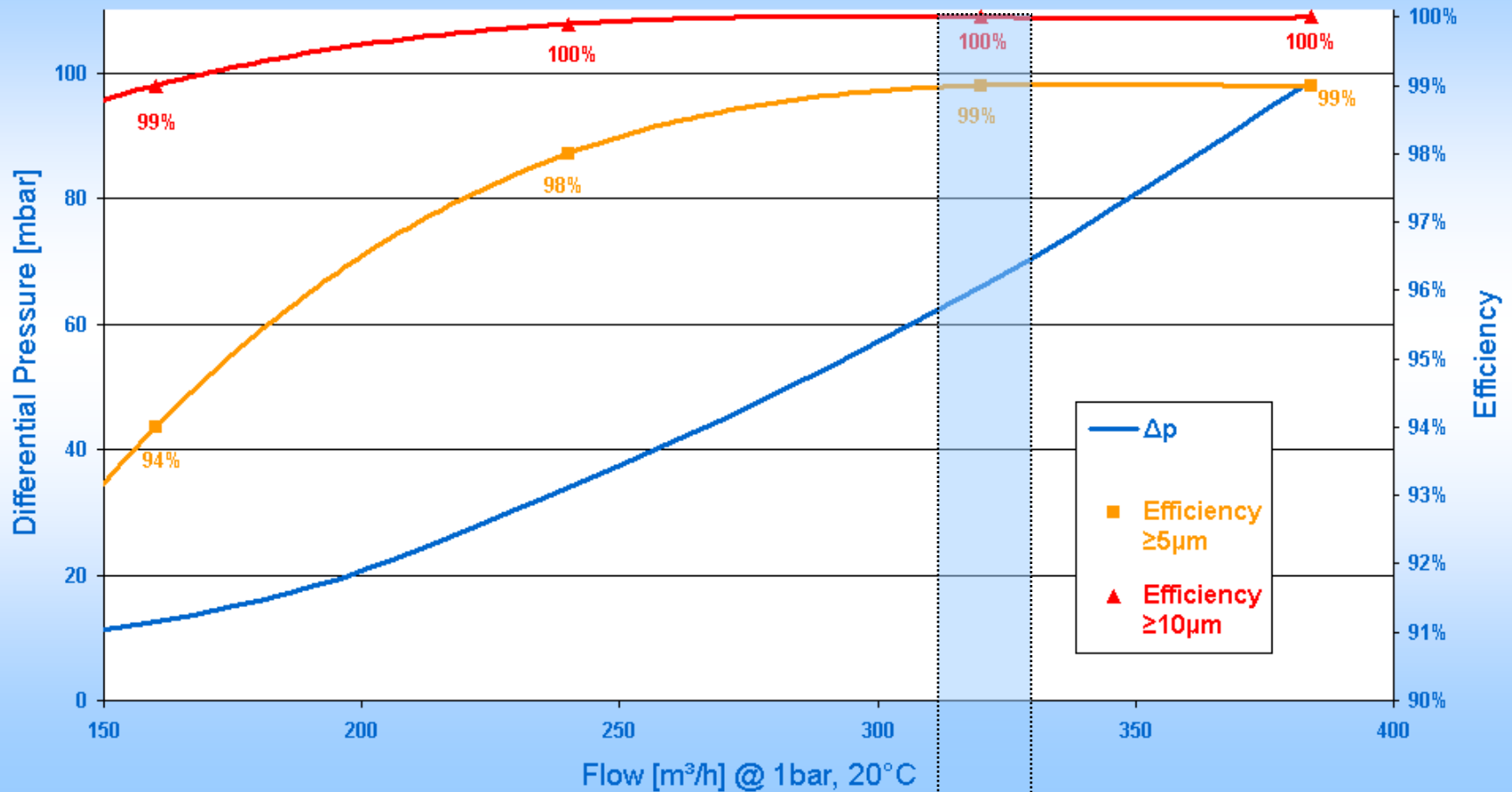
Differential Pressure + Efficiency related to volume flow



# Differential Pressure + Efficiency related to Flow

DF-C 0320

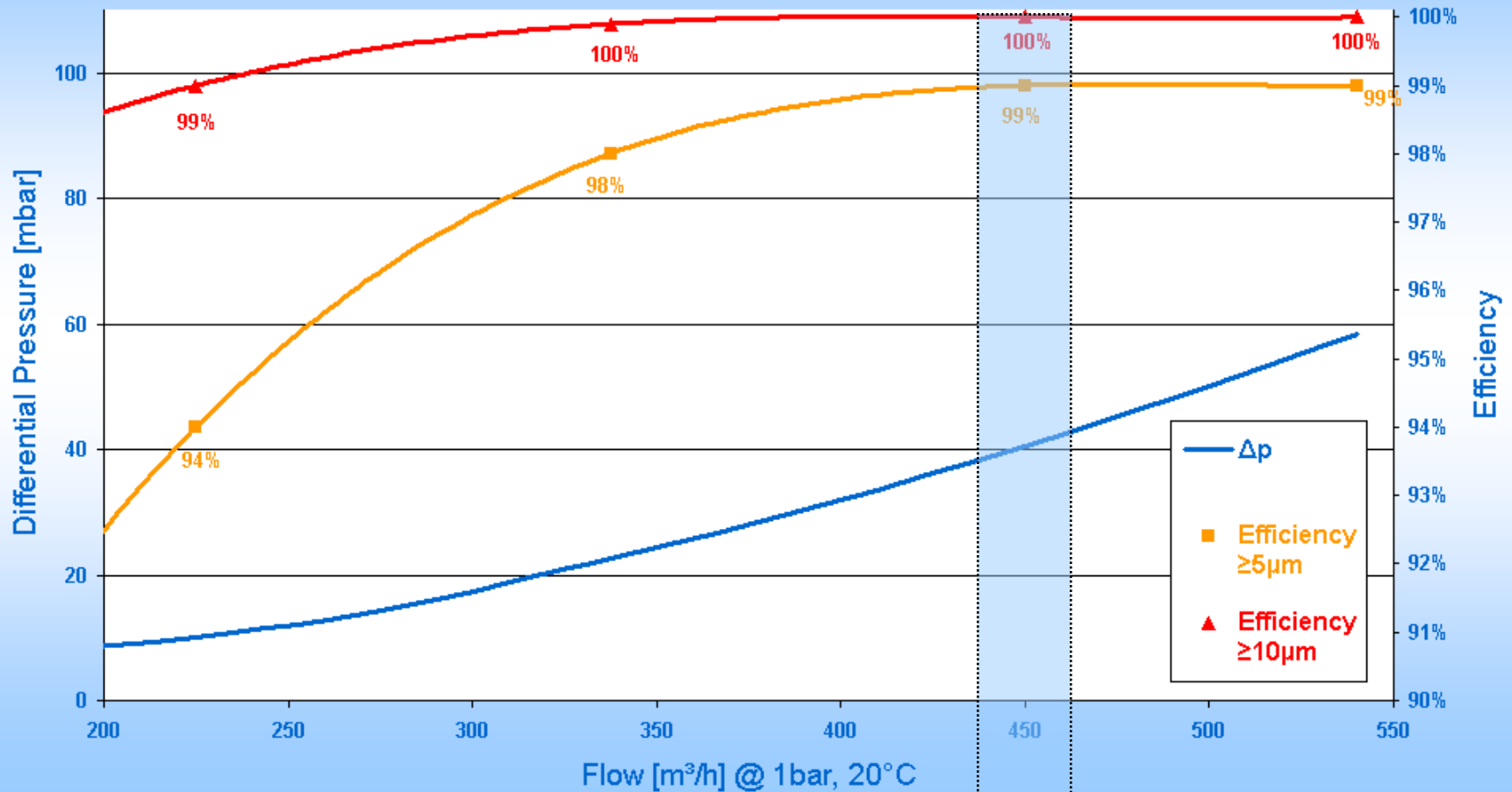
Differential Pressure + Efficiency related to volume flow



# Differential Pressure + Efficiency related to Flow

## DF-C 0450

Differential Pressure + Efficiency related to volume flow

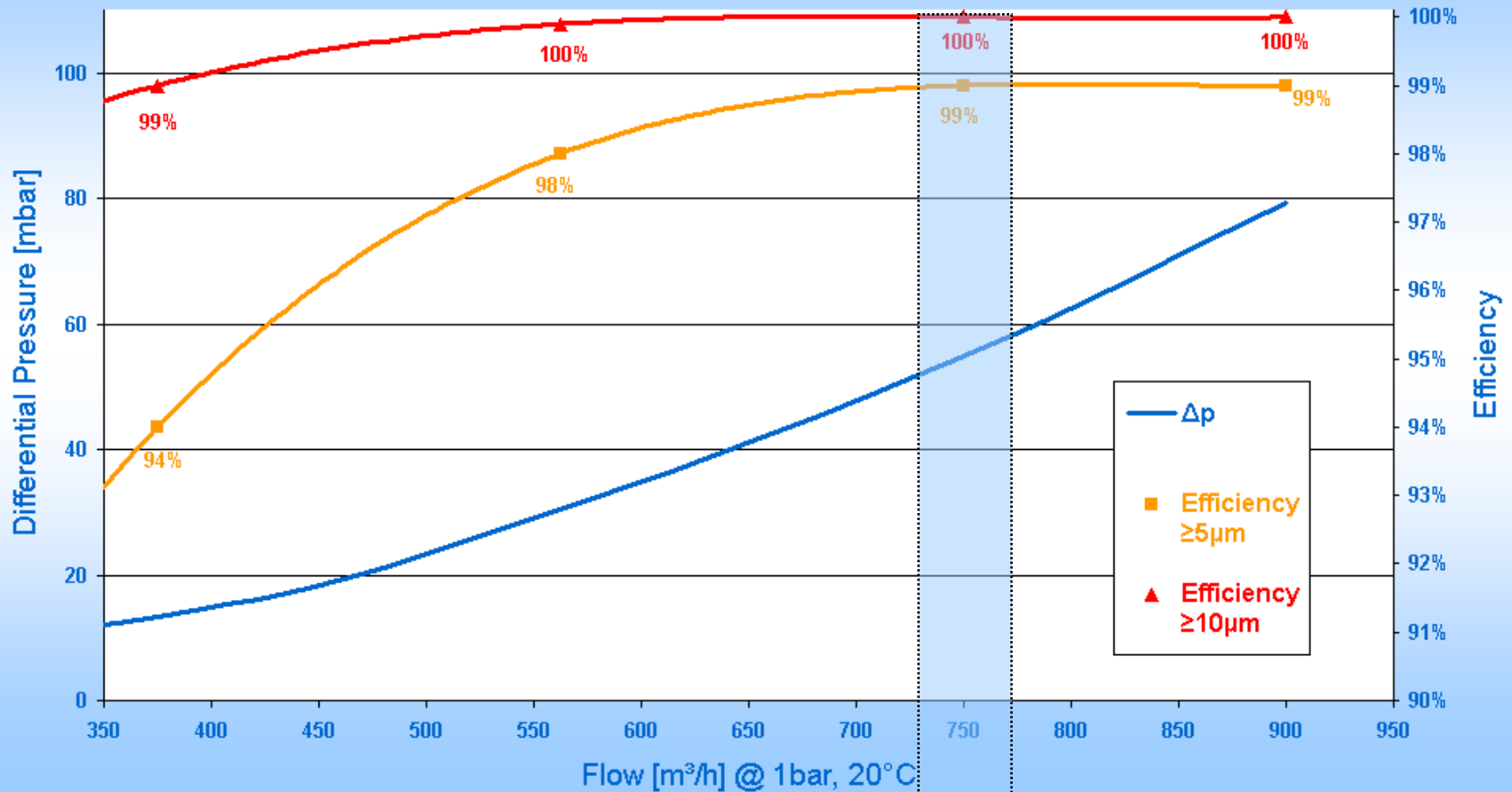


DF-C0450

# Differential Pressure + Efficiency related to Flow

DF-C 0750

Differential Pressure + Efficiency related to volume flow

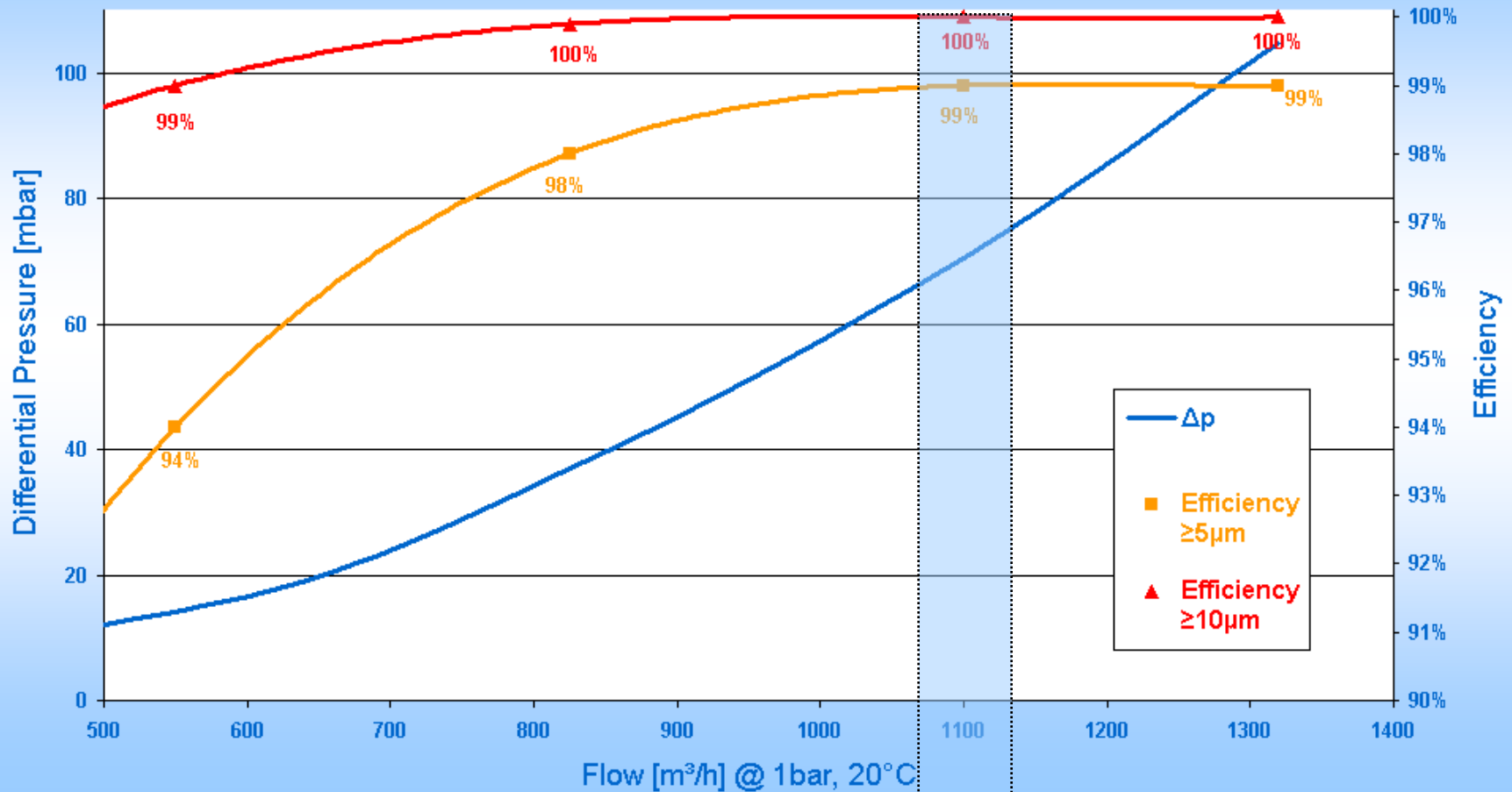


DF-C 0750

# Differential Pressure + Efficiency related to Flow

## DF-C 1100

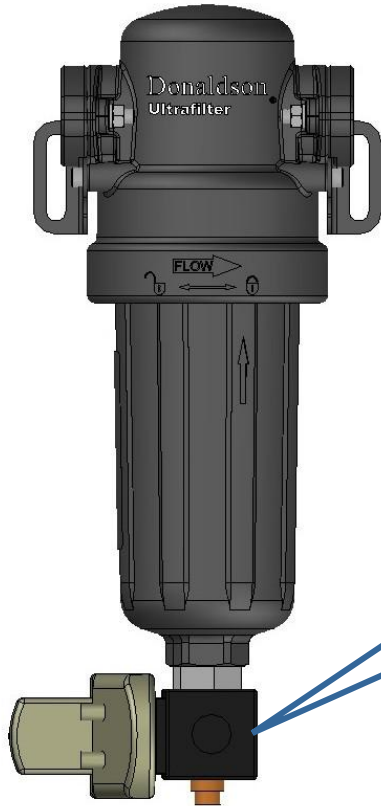
Differential Pressure + Efficiency related to volume flow



DF-C 1100

# Configuration Variants

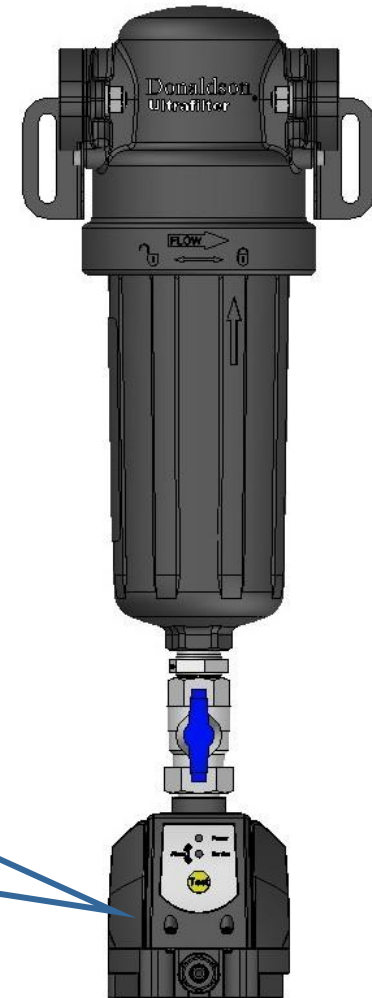
Standard



UFZ  
Timer-controlled  
solenoid valve drain

UFM-T  
Electronic drain w/o air  
loss

Superplus



# DF Nomenclature

