

Coalescing depth filter element for removal of water, oil aerosols, and solid particles from compressed air and gas with a retention rate validated according to ISO 12500-1.

Donaldson® Synteq™ XP filter elements are designed for high quality filtration of compressed air and gas in industrial and general process applications.

Synteq XP M/S element performance has been validated in accordance with ISO 12500-1, which assures that your application will receive compressed air quality as specified by ISO 8573-1.

High performance Synteq XP media provides multiple innovations in one product:

- Engineered blend of fibers with proprietary, resin-free bonding system
- Sturdy bi-component polyester fibers and micro-fine glass fibers bonded thermally
- Polyester fibers create a robust structure, effectively supporting the high retention rate of the glass fibers

Synteq XP combines the highest filtration performance with high stability, exceptional dirt-holding capacity and very good flow rates at low differential pressures.

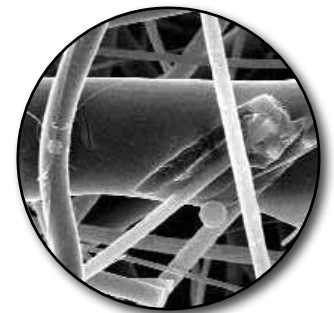
APPLICATIONS

Donaldson Synteq XP coalescing filter elements are designed and developed for the following industries and applications:

- Beverage
- Food
- Final filtration for control and process air
- Prefilter to protect adsorption dryers (M)
- Dust filter downstream applications (M)



**Synteq XP
Depth Filter Element**



**Scanning electron
microscope image of
Synteq XP filter media
cross section**

Operating Pressure psi	Conversion Factor fp
15	0.25
30	0.38
45	0.52
60	0.65
75	0.78
90	0.91
100	1.00
115	1.13
130	1.26
150	1.44
160	1.52
175	1.65
190	1.78
200	1.90
220	2.00
232	2.15

Element Type	Flow Rate 100 psi (cfm)*
2030	850
3030	1130
3050	1695

Sizing example for pressure which deviates from nominal pressure:

$V_{nom} = 1350 \text{ cfm}$, operating pressure = 130 psi

$V_{corr} = V_{nom}/f_p$

$V_{corr} = 1350 \text{ cfm}/1.26 = 1071 \text{ cfm}$

Calculated Size: Type 3030

* cfm related to 15 psi abs. and 68°F

FEATURES

Performance validated in accordance with ISO 12500-1	Reliable filtration of compressed air in accordance with air quality specifications of ISO 8573-1
Meets a broad range of application requirements	Flow range, filtration grades, efficiencies, and available options perfectly meet air purification requirements
Synteq XP binder-free filter media	High filtration surface area of low pressure drop and high dirt-holding capacity
Support sleeve made of stainless steel meshed grid	Protection of the filter media against pressure shock
Coalescing sleeve bound to outer SS support core	Flow area between element and housing guaranteed at any time: optimized drainage function by constant stable structure of the coalescence sleeve

BENEFITS

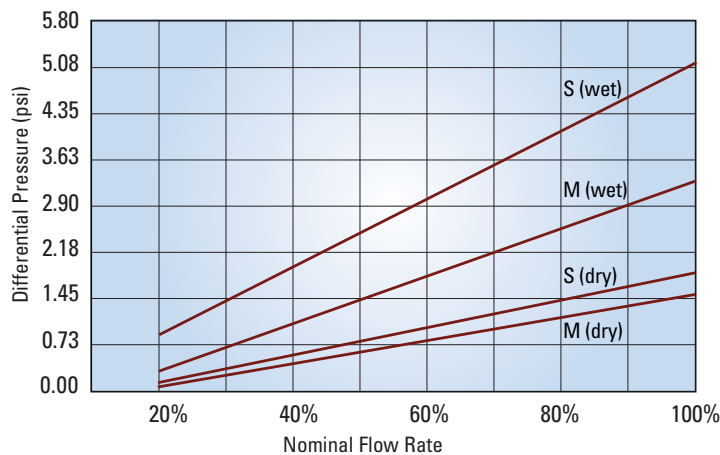
PRODUCT SPECIFICATIONS

Validation	Validation of high efficiency filters to ISO 12500-1
Residual oil content at an inlet concentration of 2.5 PPM	S = 0.005 PPM M = 0.004 PPM
Retention rate related to particles of 0.01 µm	S = 99.99999% M = 99.99998%
Oil Retention Rate According to ISO 12500-1	S = 99.8% M = 99.3%

MATERIALS

Filter Media	Proprietary blend of polyester and glass fibers, thermally bonded
Coalescing Sleeve	Polyester fleece
Bonding	Polyurethane
End Caps	Aluminum
Two O-Rings	Perbunan®*: silicone free and free of parting compounds
Inner and Outer Support Sleeves	304 Stainless Steel

Differential Pressure of a Synteq XP M/S Filter Elements
(includes filter housing in dry and wet condition at 8 bar absolute)



* Perbunan is a registered trademark of LANXESS Deutschland GmbH.



Donaldson Company, Inc.
Compressed Air and Process Filtration
PO Box 1299
Minneapolis, MN
55440-1299 U.S.A.

Tel 800-543-3634 (USA)
Tel 800-343-3639 (within Mexico)
Fax 770-448-3854
compressedair@donaldson.com
donaldson.com