

We Made it Once Again!

New Filter Element - Standard Redefined

EXAPOR[®]
///MAX3



We produce fluid power **solutions**

As usual with ARGO-HYTOS, the variety of variants is given

It makes no difference whether the desired size is a small filter unit for a steering gear application or a large filter system for an injection-moulding machine. Standard catalogue version or individual sizes precisely matched to the installation space. A wide range of products is available at ARGO-HYTOS.

Performance

The new EXAPOR® MAX 3 filter element generation drastically improves the standards that have been set to date in the areas of pressure loss, dirt holding capacity and flow fatigue resistance.

We have also significantly increased the power density of our new filter element. It is now possible to switch far more frequently to smaller filter elements, thus saving costs and installation space.

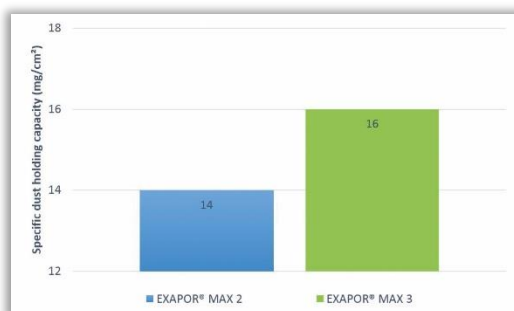
The new series will be available in the finenesses 5 µm, 10 µm and 16 µm.



Dirt holding capacity

increase of impressive 15%

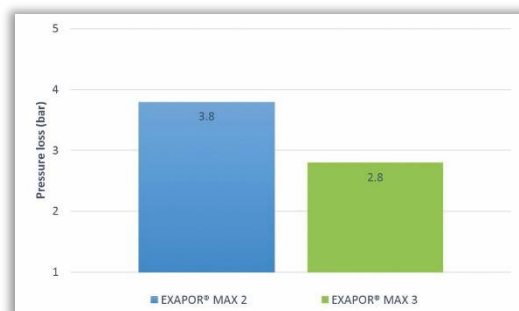
significantly improved service life and longer machine availability, saves cost and improves your system reliability



Pressure drop

significant reduction of more than 20%

less energy loss due to precise matching of the new nonwoven materials to the well-proven hybrid supporting fabric



Optical Appearance - Customer Logo



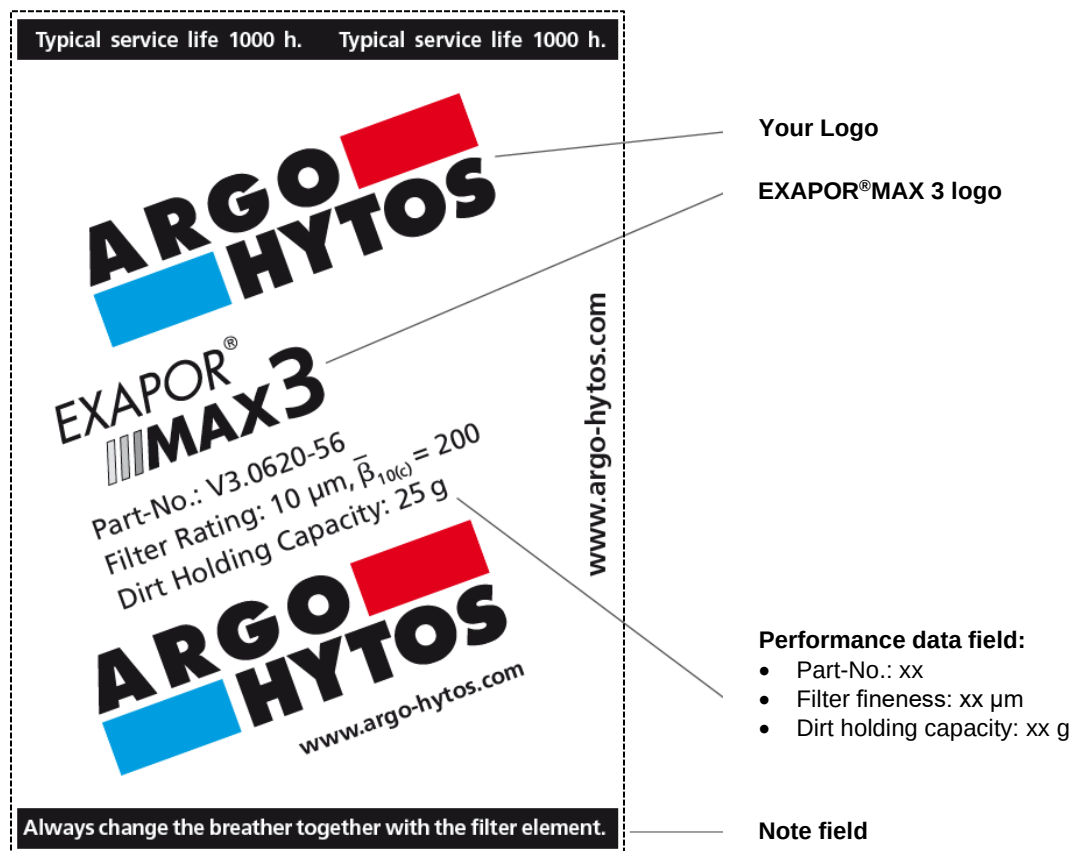
With the help of a new printing technology, full-surface, coloured imprints can now be realized at any time on customer request.

Almost anything is possible with the new technology in an exceptionally good print quality and colour strength. Operating conditions or installation instructions can also be displayed on the label surface.

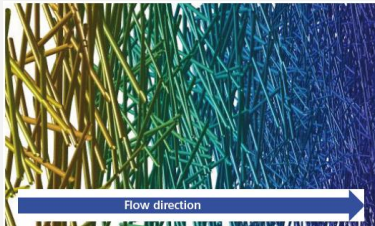
An additional great added value for the customer which in the past was frequently asked for but could unfortunately not be served at this time.

Contact us for your own layout!

Structure of the ARGO-HYTOS standard printing layout

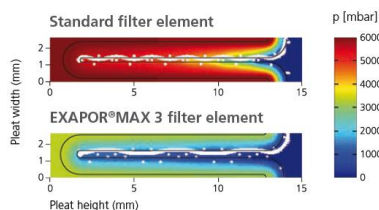


Characteristics / special features



Multiphase glass fibre filter media

For the first time, nonwovens with multiphase structure or so-called gradient structure are used. The precise adjustment of the individual filter materials results in particularly long maintenance intervals and low pressure losses.



Hybrid support or hybrid protective fabric

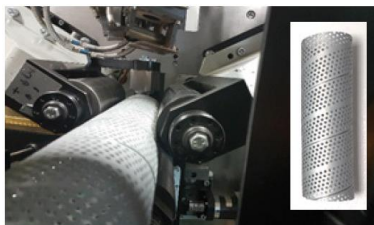
The hybrid support fabric used consists of plastic wires to improve the flow fatigue stability and stainless steel wires to support and keep open the pleats for an optimal inflow.

The special weaving technique creates an excellent pleat channel formation to reduce the pressure loss.



Longitudinal seam bonding

The complete embedding of the cut edges in the bond increases the mechanical stability and guarantees that the ends of the filter bellows are 100% tightly connected to each other. Loose threads, fibres or leaks are thus avoided.



Laser-welded perforated cores

The tubes are welded edge to edge. In contrast to wrap folded perforated cores, no dirt can be deposited on this connection.

In addition, the spiral-shaped welded seam increases the stability. This allows the sheet thickness to be reduced and the installation space to be better utilized.

Increased machine availability, longer maintenance intervals and lower operating costs - always on the safe side with EXAPOR®MAX 3 Filter Elements from ARGO-HYTOS.



Filter Finenesses

5 µm (c) $\beta_{5(c)}$	=	200
10 µm (c) $\beta_{10(c)}$	=	200
16 µm (c) $\beta_{16(c)}$	=	200

Benefit

Reliable oil cleanliness and permanent protection of sensitive components over the entire operating life.



Low Pressure Drop

Improvement of up to 15% compared to EXAPOR®MAX 2.

Benefit

Good cold start performance, even at low temperatures.

Lower energy consumption results in lower operating costs and resources.

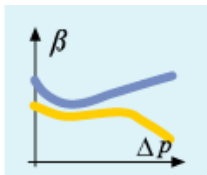


High Dirt Holding Capacity

Improvement of up to 20%.

Benefit

Longer maintenance intervals and thus improved productivity and economic efficiency.

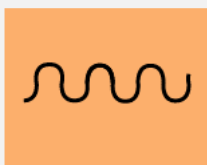


Excellent Pressure Stability

Return filters	>	10 bar
Pressure filters	>	20 bar

Benefit

Ensuring filtration stability by avoiding damage to the filter bellows.



High Flow Fatigue Strength

Withstand the flow fatigue tests (ISO 23181) without being damaged

0 ... 5 bar	>	10 ⁵ load cycles
0 ... 2 bar	>	10 ⁶ load cycles

Benefit

Guarantee of oil cleanliness even with strongly alternating flow loads.

Application examples



Did you know that ...

- if the operating pressure is increased by only 50%, the number of dirt particles in the oil must be reduced by a factor of 3 to avoid a deterioration in the lifetime of the components?
- even a filtration quotient of $\beta = 200$ corresponds to filtration efficiency of 99.5% for all dirt particles that are larger than the specified size, and an β -value of only 10 still corresponds to 90% efficiency?
- even oil sample bottles declared as "clean" can contain considerably more dirt particles than the examined oil, if it comes from hydraulic systems with good filtration?
- a lifetime of 1,000 service hours for a hydraulic filter corresponds to a mileage of about 60,000 km of a passenger car?

Summary

- ☑ Newly developed premium filter element series EXAPOR® MAX 3
- ☑ Increase of dirt capacity by up to 15%
- ☑ Increase of the service life in the customer application
- ☑ Reduction of pressure loss by up to 20%
- ☑ Excellent flow change resistance
- ☑ New optical appearance
- ☑ Individual customer labelling

Our other Filter Elements

EXAPOR® *Light*

⇒ for price-sensitive applications

PAPER +
SCREEN

⇒ paper for applications with low requirements
⇒ screen for applications with a need for low pressure losses

EXAPOR®
Spark Protect

⇒ for avoiding electrical discharges in the filter element

POLYESTER

⇒ for applications with long service life and frequent fluctuations

EXAPOR®
AQUA

⇒ for filtration combined with dewatering

ReFit

⇒ simple and direct replacement
⇒ high-value spare parts
⇒ retrofit elements

Please contact us for all your needs in hydraulics!

Robert Kern

Mech. Engineer FH STV

RPEQ, RPEng (Mech)

+61 (0)447 022 477

r.kern@argo-hytos.com

www.ahaus.com.au

www.argo-hytos.com

Next Newsletter in October ...

Mobile Oil Service Units