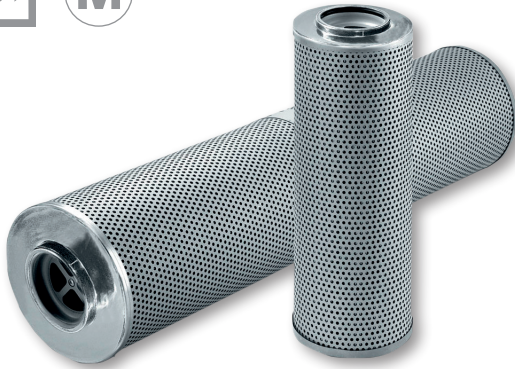


## Filter Elements

# EXAPOR®AQUA

For water separation



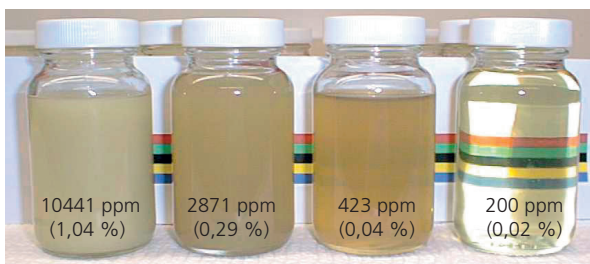
EXAPOR®AQUA Filter Elements



Oil Service Unit FAPC2



Off-line Filter Unit FNA1



Oil samples with varying water content

## Description

### Application

Quick and efficient dewatering of hydraulic and lubrication oils.

Water in hydraulic and lubrication oils may have the following causes:

- › Cooler breakage
- › Environment humidity
- › Spray-water
- › Fresh oil

Already small quantities of free water in oil can lead to acidification. Corrosion of surfaces at components can be the result. Due to free water, the oil characteristics change, e.g. decreased load-carrying capacity, reduced temperature resistance. In order to avoid economic damage, the oil must be protected against free water or existing water must be withdrawn as fast as possible.

Large water quantities can be withdrawn by oil change, flushing of the system or with dewatering units.

At systems with hygroscopic oils (materials that absorb water are described as hygroscopic) or with permanent water entry through seals (e.g. hydraulic excavator used in water constructions), ARGO-HYTOS off-line filters and filter units with EXAPOR®AQUA filter elements can be permanently installed in the system, in order to withdraw water. To withdraw remaining water quantities, e.g. after new filling, the ARGO-HYTOS EXAPOR®AQUA elements in portable off-line filter units also can be used during operation of the system.

EXAPOR®AQUA filter elements are applicable in different ARGO-HYTOS filter units. On request, also suction or return filter elements can be equipped with the EXAPOR®AQUA technology. Depending on the operating situation, the water absorption amounts to approx. 1500 ml / element. The combination of water absorbing filter layers with micro-filter material also allows the use of EXAPOR®AQUA in hydraulic and lubrication systems with high requirements to the oil cleanliness.

The efficiency of the EXAPOR®AQUA can be analyzed on-site. As long as a turbidity is visible in the cooled down oil, the water content is, in most cases, unacceptably high. If the cooled down oil sample appears clear, the water content usually lies in the permissible range. An exact measurement of the water content is made by an oil sample analysis in the laboratory (e.g. water content regulation with the Karl Fischer method in accordance to DIN 51777).

EXAPOR®AQUA Filter element designation	Water capacity per element at $v = 30 \text{ mm}^2/\text{s}$ / 139 SUS		Filter fineness	Dirt-holding capacity (values in g test dust ISO MTD according to ISO 16889)			Applicable in ARGO-HYTOS filter units
	ml	gal			l/min	gpm	
Y7.1560-03	1500	0.40	5 $\mu\text{m}$	380 g at	220	58.1	FN1 300, FNA 045, FNAPC 045, UM2 045, UMPCL2 045, UMPC2 045, MFNA1 045
Y7.1560-103	1400	0.37	3 $\mu\text{m}$	350 g at	170	44.9	FN1 300, FNA 045, FNAPC 045, UM2 045, UMPCL2 045, UMPC2 045, MFNA1 045
Y7.1220-13	370	0.10	5 $\mu\text{m}$	93 g at	40	10.6	FN1 040, FNS1 040, FA1 008, FA2 016, FA1HV 008, FA1HV 016, FAPC2 016, FNA1 008, FNA1 016, FNA1HV 008, FNA1HV 016, FNAPC1 016, FNA 014, MFNA1 016 (with filter element size V7.1220)
Y7.1220-113	340	0.09	3 $\mu\text{m}$	75 g at	40	10.6	FN1 040, FNS1 040, FA1 008, FA2 016, FA1HV 008, FA1HV 016, FAPC2 016, FNA1 008, FNA1 016, FNA1HV 008, FNA1HV 016, FNAPC1 016, FNA 014, MFNA1 016 (with filter element size V7.1220)
Y7.1230-53	550	0.15	5 $\mu\text{m}$	150 g at	60	15.9	FN 060, FNS 060, FNA 040
Y7.1230-153	520	0.14	3 $\mu\text{m}$	140 g at	60	15.9	FN 060, FNS 060, FNA 040