

This Newsletter is all about ...

FLUID MANAGEMENT



We produce fluid power **solutions**

Beside of reducing maintenance and servicing costs, an effective fluid management is a key factor in boosting the reliability, productivity and cost-effectiveness of the operation.

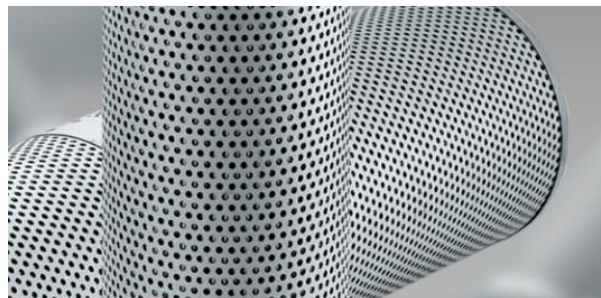
ARGO-HYTOS supplies application-oriented products for manual and automatic cleaning of hydraulic fluids, such as:

Off-Line Filters and Off-Line Filter Units
Filter Cooling Systems
Oil Service Units and Dewatering Systems

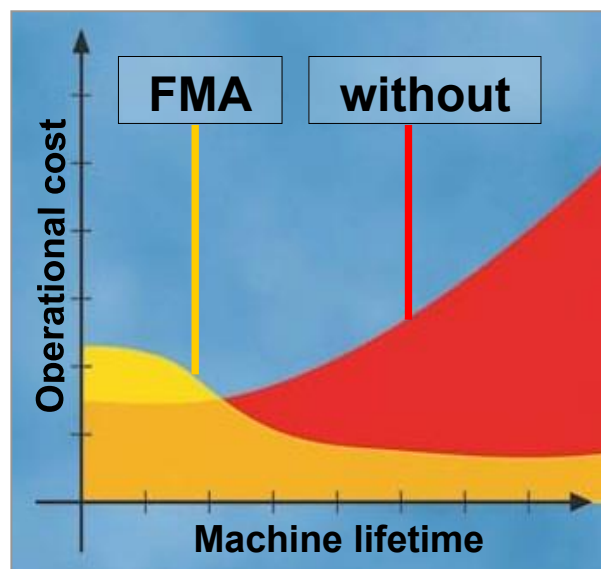
FMA ⇒ Fluid Management

We define Fluid Management (FMA) as extending the service life of the machine and reducing operating costs through preventive oil service.

- ✓ Filtration during filling
- ✓ Oil filtration during machine service
- ✓ Retrofitting of working machines with a bypass filtration system to improve the oil cleanliness class
- ✓ Dewatering of oil
- ✓ Oil condition monitoring

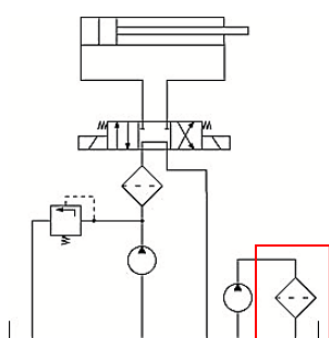


By improving the system cleanliness, the lifetime of the hydraulic or lubrication system can be extended.

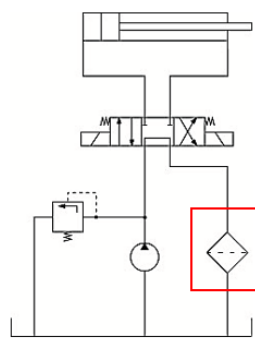


Type of system	Initial ISO Code	Target ISO Code	Lifetime extended by:
Hydraulic	-/19/17	-/14/11	x 4
Lube	-21/19	-/15/12	x 3

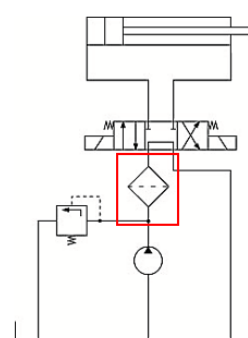
Off-Line Filters



Bypass

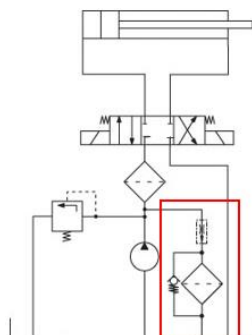


Return Line



Pressure Line
(max. 12 bar)

Off-Line Filters with Flow Control Valve

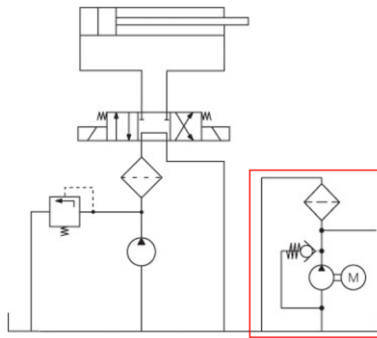


Pressure Line
(max. 320 bar)

	standard	with flow valve
Type	FN 040, FN 060, FN300	FNS 040, FNS 060
Q _{max}	650 lpm	1, 2 or 4 lpm
P _{max}	12 bar	320 bar
Filter finesses	3, 5, 10 µm, aqua	3, 5, 10 µm, aqua
Clogging indicator	optical / electrical	optical / electrical
Dirt holding capacity (ISO 16889, ISO-MTD)	up to 740 g	up to 145 g

Special versions on request

Stationary Off-Line Filter Units



Independent bypass system installed in machine to improve the oil cleanliness class.

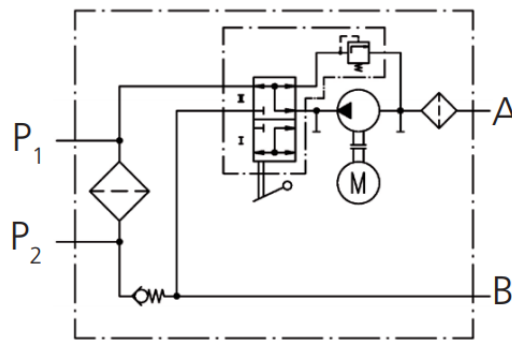
Applications

- Systems exposed to high pollution and/or complex systems with high oil purity requirements
- Test benches
- Injection moulding machines
- Presses

	<i>AC motor</i>	<i>DC motor</i>	<i>high viscosity</i>
Type	FNA 008, FNA 016	FNA 014	FNA 008
Q _{nom}	8 / 16 lpm	14 lpm	8 lpm
P _{max}	4 bar	4 bar	6 bar
Kinematic viscosity	15 - 200 mm ² /s (short term 400 mm ² /s)		1,500 mm²/s
Filter finesses	3, 5, 10 µm 3, 7 µm aqua		3, 5, 10 µm
Dirt holding capacity (ISO 16889, ISO-MTD)	270 to 490 g	280 g	270 g
V _{Motor}	3~ 400/460 V 50 Hz 1~ 230 V 50...60 Hz 1~ 110 V 50...60 Hz	12 VDC 24 VDC	3~ 400/460 V 50 Hz
Connections	IN 3/4" BSPP OUT 1/2" BSPP		IN 1" BSPP OUT 3/4" BSPP
Accessories	clogging indicator, dewatering filter element, other motor voltage, portable version		

Stationary Off-Line Filter Units

High Flow and Manual Valve to Bypass the Filter (pumping over)

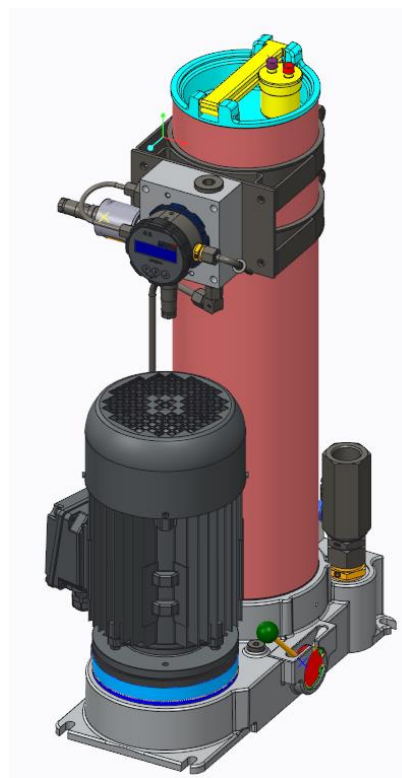


	with bypass valve
Type	FNA 045
Q _{nom}	45 lpm
P _{max}	6 bar
Kinematic viscosity	15 - 600 mm ² /s (short term 800 mm ² /s)
Filter finesses	3, 5, 10 µm
Dirt holding capacity (ISO 16889, ISO-MTD)	1,950 g
V _{Motor}	3~ 400/460 V 50 Hz 1~ 230 V 50...60 Hz 1~ 110 V 50...60 Hz
Connections	IN 1-1/4" BSPP OUT 1" BSPP
Accessories	clogging indicator, dewatering filter element

Stationary Off-Line Filter Units

With Oil Measurement

with OPCom II Particle Monitor and/or
LuBCos H2O (LuBCos H2O+II) Humidity Sensor



with oil measurement

Type	FNAPC 016 / 045
Q _{nom}	16 / 45 lpm
P _{max}	6 bar
Kinematic viscosity	300 mm ² /s
Filter finesses	3, 5, 10 µm
Dirt holding capacity (ISO 16889, ISO-MTD)	1,950 g
V _{Motor}	3~ 400/460 V 50 Hz 1~ 230 V 50...60 Hz 1~ 110 V 50...60 Hz

Portable and Mobile Oil Service Units



Permanent Off-Line Filtration
Oil Filtration during Machine Service
Filling Machine with filtered Oil



Portable and Mobile Oil Service Units

Optional with Particle Monitoring



	<i>standard</i>	<i>with particle monitoring</i>
Type	FA 008 / 016	FAPC 16
Q _{nom}	8 / 16 lpm	16 lpm
P _{max}	4 bar	
Kinematic viscosity	15 - 250 mm ² /s (short term 400 mm ² /s)	
Filter finesses	3, 5, 10 µm	3 µm
Dirt holding capacity (ISO 16889, ISO-MTD)	210 to 280 g	
Suction filter	280 µm	
V _{Motor}	1~ 230 V 50...60 Hz ; 1~ 110 V 50...60 Hz	
Suction/Return hose	DN 19 mm	
Clogging indicator	Optical (manometer)	
Particle monitor	-	OPCom II
Accessories	dewatering filter element, trolley for transportation	trolley for transportation

Mobile Oil Service Units

Optional with Oil Condition Monitoring



	<i>standard</i>	<i>with partice/ monitoring</i>
Type	UM 045	UMPC 045
Q _{nom}	45 lpm	
P _{max}	7 bar	
Kinematic viscosity	15 - 600 mm ² /s (short term 800 mm ² /s)	15 - 250 mm ² /s
Filter finesses	3, 5, 10 µm	3 µm
Dirt holding capacity (ISO 16889, ISO-MTD)	1,950 g	
Suction filter	280 µm	
V _{Motor}	3~ 400 V 50 Hz ; 1~ 230 V 50 Hz	
Suction/Return hose	DN 32 / 25 mm ; l = 2,7 m	
Clogging indicator	optical (manometer)	electrical (pressure switch)
Monitoring	-	OPCom II, LubCos H2O, LubCos H2O+II
Accessories	dewatering filter element	SD memory card, LAN cable transmisison, automatic switch off, built-in printer

UMPC (high performance) with built in printer



UMPC Lightline



<< same quality – less options – great value for a competitive price >>

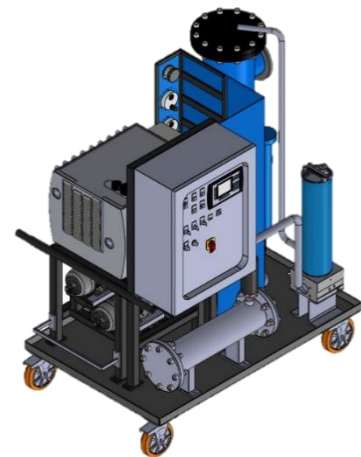
Dewatering System



- ⇒ Removing of dissolved water from hydraulic system
- ⇒ Additional off-line filtration

Applications

- large hydraulic and lubrication systems
- injection moulding machines
- presses
- mining, offshore, turbines
- paper mills
- sensitive applications



custom-built edition

	<i>standard</i>
Type	OPS 010
Q _{nom}	10 lpm
P _{max}	6 bar
Kinematic viscosity	15 - 750 mm ² /s
Filter finesses	3, 5 µm
Dewatering speed	0.9 lph ^{*)}
V _{Motor}	3~ 400 V 50/60 Hz
Clogging indicator	optical / electrical
Weight	approx. 160 kg

^{*)} for 200 l and water content of 12.000 ppm at start

Application Example



Hydraulic Power Packs



*Dewatering
Service Unit*



Wind Turbines





Retrofit Production Machine



Service & Maintenance



Material Handler with Dewatering Filter Element



Please contact us for customized solutions



Please contact us for technical enquiries or a quotation:

Robert Kern
Mech. Engineer FH STV
RPEQ, RPEng (Mech)

+61 (0)447 022 477
r.kern@argo-hytos.com

Next Newsletter in March ...

Explosion Protected Valves for Australia