



OffLine Filter OLF 15/30/45/60

Description

The OLF 15/30/45/60 series of filtration units are robust off-line filters for stationary applications in hydraulic and lubrication systems with a large fluid volume.

Features of the Dimicron elements used in these filters are a particularly high contamination retention capacity and an environmentally safe method of disposal (incinerable).

Applications

- Machine tools
- Plastic injection moulding machines

Advantages

- Improvement of component and system filter lifetime
- Greater machine availability
- Longer intervals between oil changes
- Very easy maintenance
- Elements have a high contamination retention capacity
- Environmentally safe disposal of elements (incinerable)

Technical specifications

	OLF-15	OLF-30	OLF-45	OLF-60
Filter element	N15DMxxx (1x)	N15DMxxx (2x)	N15DMxxx (3x)	N15DMxxx (4x)
Contamination retention capacity to ISO 4572	500 g	1000 g	1500 g	2000 g
Filtration performance data based on ISO 4572	$\beta_{2, 10, 20, 30} > 1000$ at $\Delta p = 2$ bar			
Permitted Δp across the element (bar)	5			
Material of housing	Stainless steel 1.4301			
Volume of housing in l	20	40	60	78
Max. operating pressure in bar	6			
Material of seals (standard)	NBR			
Weight of housing (kg)	11	15	24	28
Fluid temperature in °C	10 .. 80			
Technical details for motor-pump unit	15 l/min	30 l/min	45 l/min	60 l/min
Operating pressure of the pump (bar)	4.5 - 5.5			
Permitted suction pressure at suction port	-0.4 .. +0.5 bar			
Viscosity range with vane pump in mm ² /s	15 - 500			
Viscosity range with gear pump in mm ² /s	15 - 1000			
Viscosity range with centrifugal pump in mm ² /s	1 - 20			
Motor output				
Vane pump	370	750	1500	1500
Gear pump	370	750	1500	1500
Centrifugal pump	750	750	1500	1500
Weight of vane pump (kg)	7.4	13.5	19.5	19.5
Weight of gear pump (kg)	9.5	15	22	22
Weight of centrifugal pump (kg)	15	15	25	25
Material of pump seals (standard)	NBR			
Ambient temperature	-10 .. +40 °C			
Protection class	IP 54			

Model code

OLF -30/15 -S -N60 -N15DM002 -E/ -PKZ -V

Basic type

OLF = OffLine Filter, stationary
(with pressure gauge and drain valve)

Filter size and nominal flow rate

15 l/min	30 l/min	45 l/min	60 l/min	
15/15	X	X	X	1 filter element
30/15	30/30	X	X	2 filter elements
45/15	45/30	45/45	X	3 filter elements
60/15	60/30	60/45	60/60	4 filter elements

15/ Z ; 30/ Z ; 45/ Z ; 60/ Z = without pump

X = not available

Code for pump type

S = vane pump
G = gear pump
W = centrifugal pump
Z = without pump

Voltage

L = 115V - 1 Ph
M = 230V - 1 Ph*
W = 230V - 3 Ph*
C = 380V - 3 Ph
N = 400V - 3 Ph*
R = 415V - 3 Ph
G = 440V - 3Ph
O = 460V - 3Ph
B = 480V - 3Ph
S = 500V - 3Ph
P = 575V - 3Ph
X = other voltage, on request
L60,M60,... = operation at 60Hz
Z = without motor
Protection type: IP55
* Standard in Europe according to CENELEC HD472 S1 at 50Hz

Filter element

N15DM002 = DIMICRON® 2 µm absolute
N15DM010 = DIMICRON® 10 µm absolute
N15DM020 = DIMICRON® 20 µm absolute
N15DM030 = DIMICRON® 30 µm absolute
Z = without filter element

Clogging indicator

E = standard, pressure gauge
B = differential pressure indicator - visual (VM 2 BM.1)
C = differential pressure indicator - electrical (VM 2 C.0)
D3 = differential pressure indicator - visual/electrical (VM 2 D.0/-L220)
D4 = .../.../... (VM 2 D.0/-L24)
D5 = .../.../... (VM 2 LZ.1/-DB)
F = pressure switch - electrical

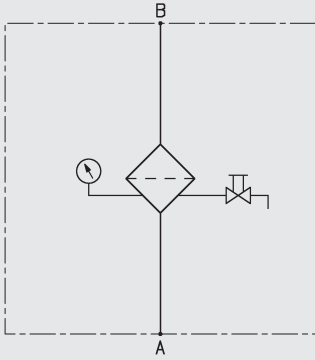
Supplementary details

PKZ = with on/off switch with motor circuit breaker
FA1 = with on/off switch with motor circuit breaker and cut-out when filter is clogged.
Requires neutral line. For voltages up to max. 240V, 1Ph, or max. 415V, 3Ph.
clogging indicator type C or D3 required.
FA2 = with on/off switch with motor circuit breaker and cut-out when filter is clogged.
Does not require neutral line. All voltages. Clogging indicator type C required.
V = with FPM seals
MP = Minimes test point before the filter for FCU incl. flow control valve

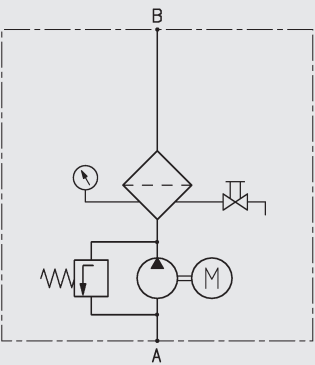
Note:
At 60 Hz operation, the flow rate increases by approx. 20%.

Hydraulic circuit diagram

OLF without motor-pump unit



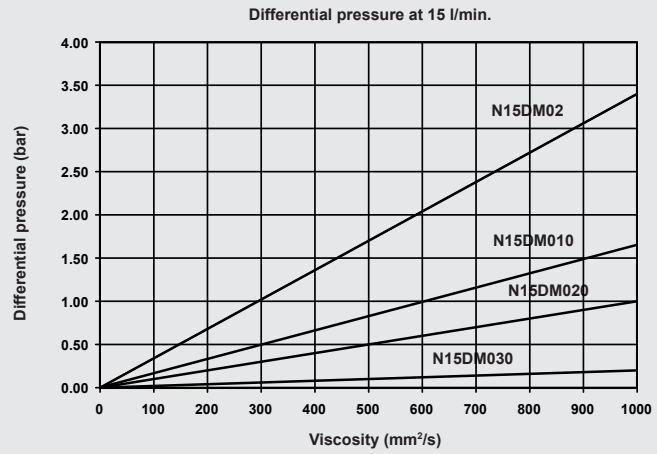
OLF with motor-pump unit



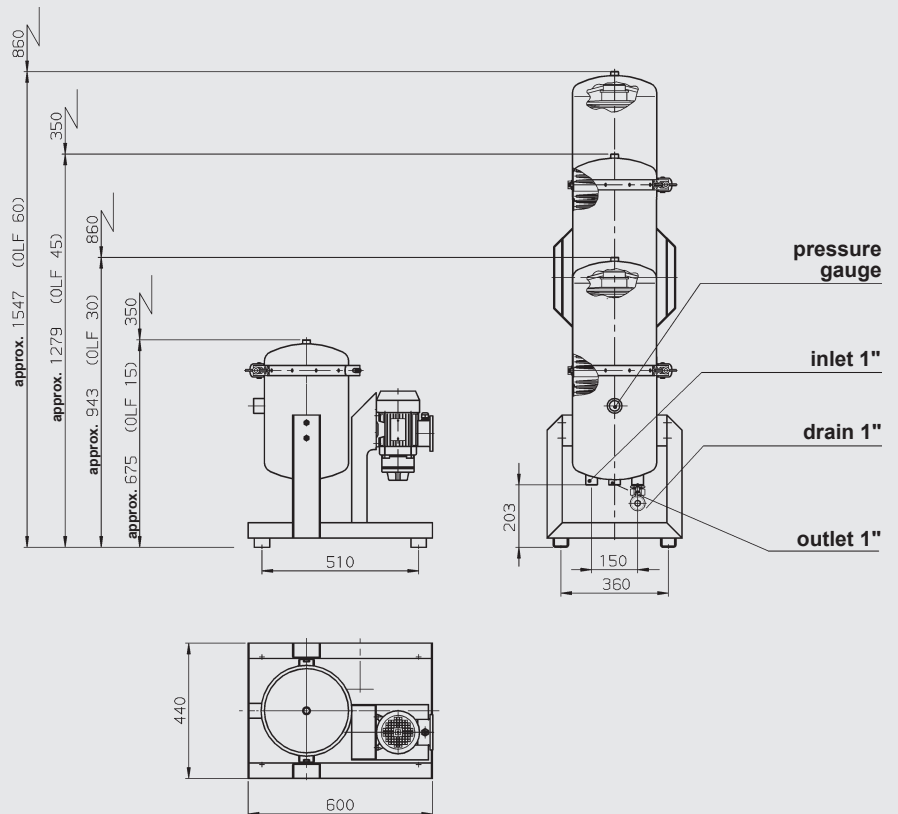
Connections

	Vane pump	Gear pump	Centrifugal pump
Inlet (OLF 15)	G 3/4	G 3/4	G 1
Inlet (OLF 30)	G 1 1/4	G 1	G 1
Inlet (OLF 45, 60)	G 1 1/4	G 1 1/2	G 1 1/4

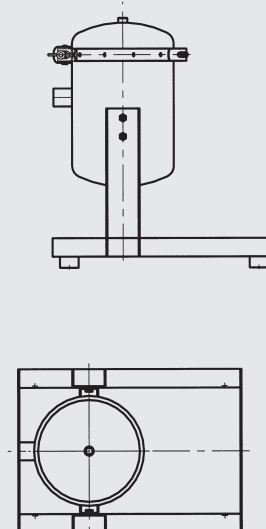
Element pressure drop



Dimensions



Example OLF-15/Z



Note

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

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