

RMF Systems

RMF Systems radial micro filter units are characterized by their extremely efficient filter elements which are rated to 0.5 micron.

Specially designed for industrial hydraulic installations the RMF Off-line filters are available in single or multiple housing configurations. The Off-line filter units can easily be mounted to new and existing hydraulic installations.

By means of an integrated motor/pump unit and an Off-line filter, the oil is pumped from the reservoir through the filter unit and after filtering the oil is then returned to the tank.



Economical

The hydraulic market accepts that 80% of mechanical failures are caused by contamination in the system. The RMF Water Absorbing Off-line filters attack this contamination at source and in addition to solid particles, these filters are also capable of removing large quantities of water from the oil. This prevents the catalytic reaction of water and solid particle contamination, resulting in extended useable oil life.

The application of RMF filters results in lower component failure rates, less down time and less system maintenance.

Water Absorbing

RMF Water absorbing filters are Off-line units that use special water absorbing spin-on filter elements as a pre-filter. The fluid is pumped through the pre-filter which removes most water and larger solid contamination, in the second stage the fluid passes through the RMF micro filter where final water removal takes place as well as solid removal down to 0.5 micron.

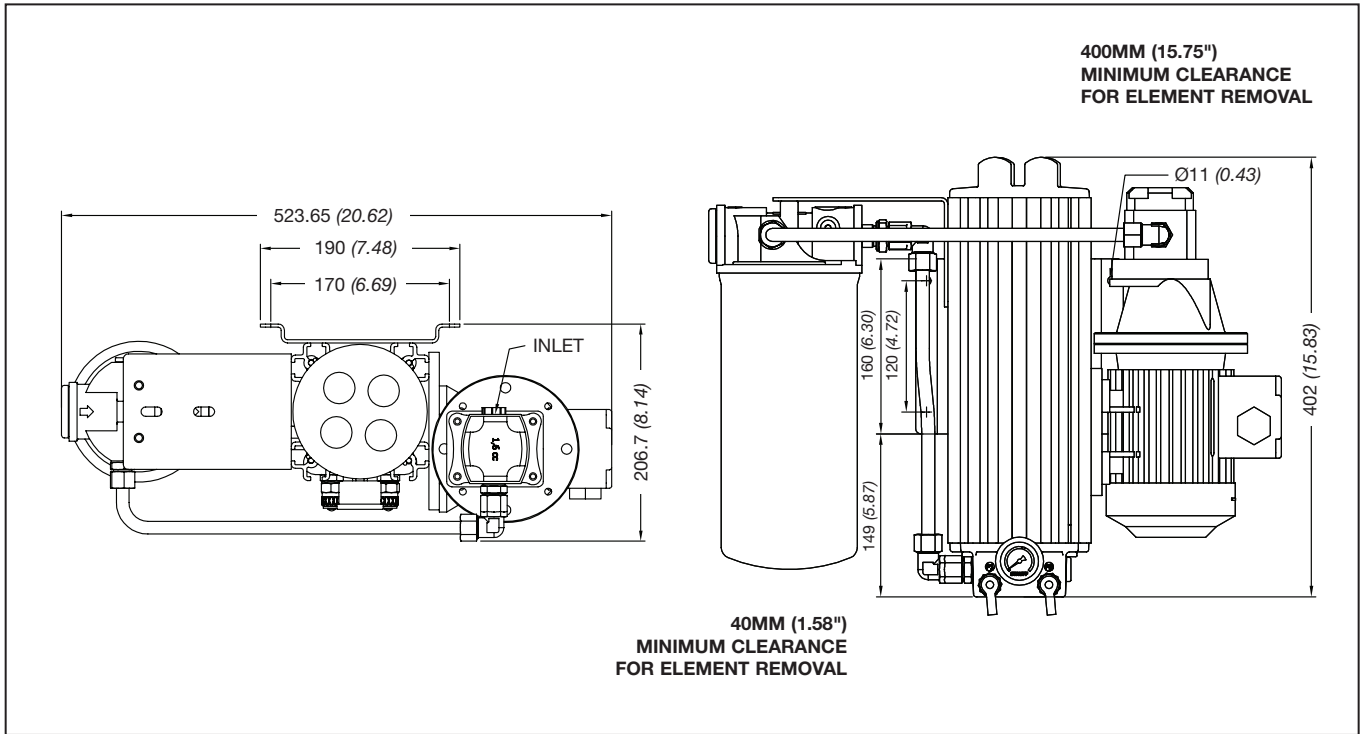
In recent years RMF Systems have developed a great deal of experience in cleaning and drying hydraulic and lubrication systems in the following markets:

- steel industry
- maritime industry
- petrochemical industry
- paper industry

Advantages

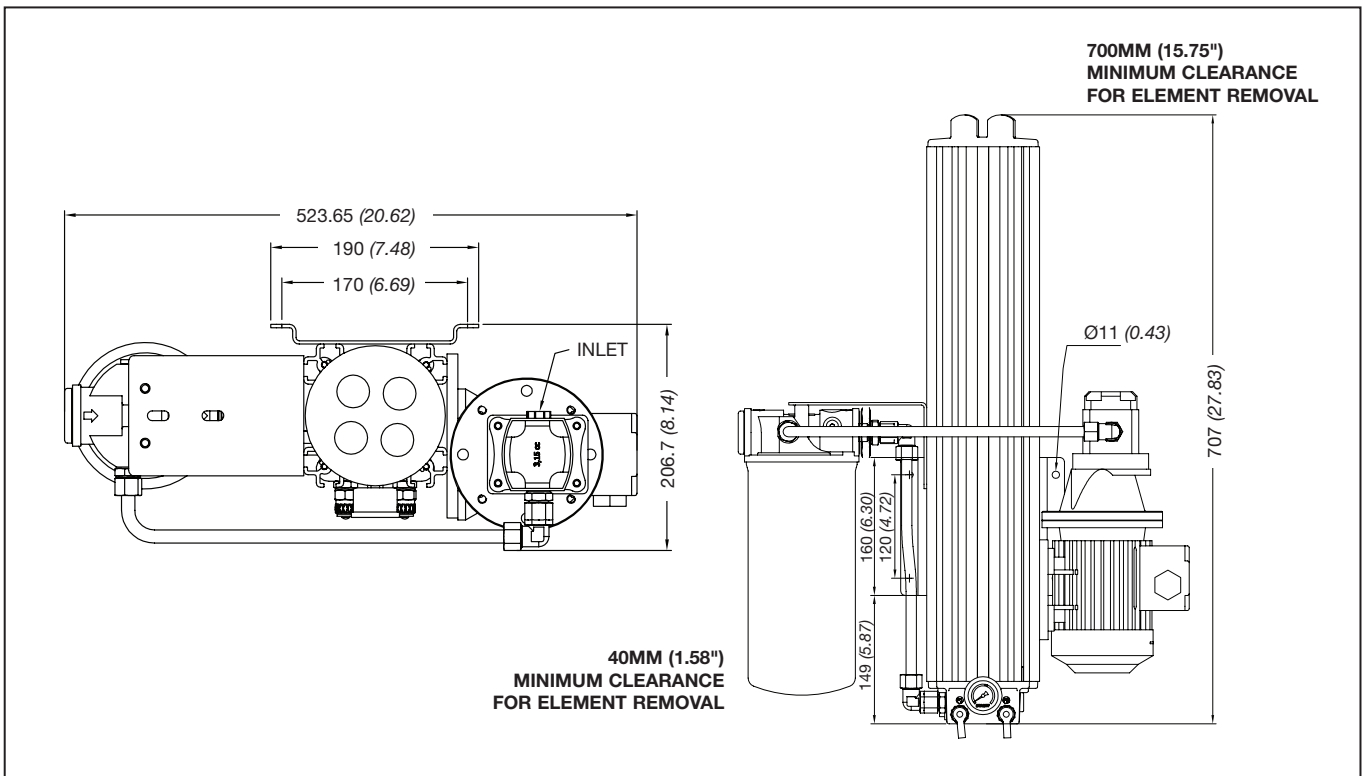
- Extremely clean oil due to the high filtration efficiency $\beta_2 \geq 2,330$
- Prevention of channel forming by radial filtration direction
- Increased flow capacity
- Increased dirt holding capacity
- Large water holding capacity
- Compact and easy-maintenance design
- Longer usage life for oil and components

Dimensions OLSW-1A-30



Dimensions in mm (inch)

Dimensions OLSW-1B-30

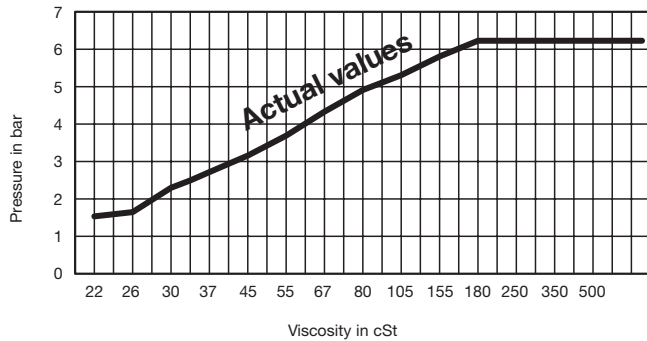


Dimensions in mm (inch)

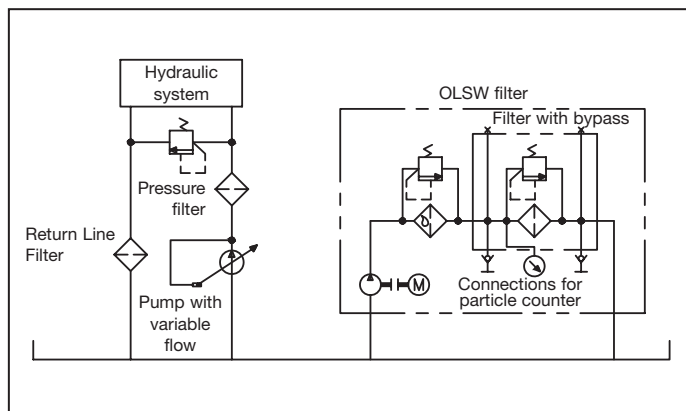
Technical Data OLSW

Type Filter	OLSW - 1A - 30 - H - B	OLSW - 1B - 30 - H - B
No. of filter housings	1	1
Material filter housings	Anodized Aluminum	
Seal material	Buna-N Standard	
Nominal Flow	2,1 l/min (0,6 US GPM)	4,2 l/min (1,1 US GPM)
By-pass opening pressure	6,2 bar (90 PSI at 0 PSI back pressure)	6,2 bar (90 PSI at 0 PSI back pressure)
Number of standard filter elements	1 pcs.	2 pcs.
Number of Pre-filter elements	1 pcs.	1 pcs.
Water absorbing capacity	650 ml (22 oz.)	800 ml (27 oz.)
Max pressure filter housing	20 bar (290 PSI)	
Max oil temperature	80°C (176°F)	
Max viscosity	160 cSt	
Indicator type	Gauge glycerine filled	
Connection pump suction	1/2" BSP female	1/2" BSP female
Diameter hose suction side	1/2"	
Filter return connection	1/2" BSP female	
Diameter hose return side	1/2"	
Dimensions (HxBxL)	400 x 360 x 330 mm (15.7 x 14.2 x 13")	710 x 410 x 320 mm (28 x 16 x 12.6")
Pump type	Gear pump	
Power supply E-motor	Various electrical power supplies possible	
Max system volume	1,350 liter (356 gal)	2,700 liter (713 gal)
Standard units for larger system volumes are also available		
Connection oil-analysis: P1 filter inlet side P2 filter outlet side	Test connector (M16x2) Red Test connector (M16x2)	

Δp / Viscosity for OLSW-Filter



System example Schematic Off-line filtration incl. water absorption



Water absorbing spin-on filter element

Ordering Code

OLSW - 1A - 30 - H - B - 0 - 01 - 0 - 0 - A

Basic Configuration	
OLSW	Off-Line Filter incl. water absorption (for industrial applications)

Housing Configuration				
Code	Single length	suitable for reservoir size	N° of elements standard	Pre-filter
1A	Single Housing Single Length	1350 l (357 gal)	1x1 pcs	1 pcs
1B	Single Housing Double Length	2700 l (713 gal)	1x2 pcs	1 pcs

Filter Element Length	
30	300 mm (standard)

Filter Material	
H	Cellulose 0,5µm (standard)
G01	1 micron microglass
G03	3 micron microglass
A05	5 micron microglass and polymer (water absorption)

Seal Material	
B	NBR (Buna-N®) (standard)
V	FPM (Viton)

E-motor Options	
Code	Type
0	230/400 VAC-50 Hz / 1360 r/min; 255/460 VAC-60 Hz / 1630 r/min (standard)
A	230 VAC-50 Hz / single phase 1360 r/min
C	110 VAC-50Hz / single phase
D	110 VAC-60Hz / single phase

Pre-Filter Elements	
Water absorption element	
A	SF6721-W (10 micron water absorbing, capacity 540 ml water)
Pre-filter elements (particles)	
0	without pre-filter element
B	SF6702-MG (inorganic glass fiber, 1 micron)
C	SF6704-MG (inorganic glass fiber, 3 micron)
D	SF6707-MG (inorganic glass fiber, 6 micron)
E	SF6731-MG (inorganic glass fiber, 12 micron)
F	SF6726-MG (inorganic glass fiber, 25 micron)
G	SF6721 (filter paper, 10 micron)
H	SF6711 (filter paper, 25 micron)
J	SF6791 (wire mesh, 125 micron)

Options	
0	No options

Clogging Indicator	
0	Pressure gauge 1 - 16 bar (standard)

Pump Options		
Code	50 Hz motor	Standard in
00	10C1,6X053G / 1,6 cc/rev.	
10	10C3,6X053G / 3,15 cc/rev.	
50	MLPD/G 108C / 0,8 cc/rev.	
Code	60 Hz motor	Standard in
01	10C1,25X053G / 1,25 cc/rev.	OLSW-1A
11	10C2,5X053G / 2,5 cc/rev.	OLSW-1B

See page F125 for motor specifications. For air driven motors, contact Stauff.

FILTRATION

Ordering Code Standard Filter Elements

Filter Element	
SRM-30HB	0.5 micron cellulose
SRM-30G01B	1 micron microglass
SRM-30G03B	3 micron microglass
SRM-30A05B	5 micron microglass and polymer

For more details, see page F143 ... F144.

SRM - 30HB - 1

Quantity	
1	1 pcs. filter element
15	box with 15 pcs. filter element

Ordering Code Pre-Filter Elements

Pre-Filter Elements	
SF6721-W	Spin-on filter element, water absorbing, 10 micron
SF6702-MG	Spin-on filter element, inorganic glass fiber, 1 micron
SF6704-MG	Spin-on filter element, inorganic glass fiber, 3 micron
SF6707-MG	Spin-on filter element, inorganic glass fiber, 6 micron
SF6731-MG	Spin-on filter element, inorganic glass fiber, 12 micron
SF6726-MG	Spin-on filter element, inorganic glass fiber, 25 micron
SF6721	Spin-on filter element, filter paper, 10 micron
SF6711	Spin-on filter element, filter paper, 25 micron
SF6791	Spin-on filter element, wire mesh, 125 micron

SF6721 - W