

Oil Treatment System OFWA

Flow capacity: 5 l/min to 16 l/min

1. Brief description

Safe, fully automatic filtration and water separation

- Use in industry, power stations and in shipping
- Filtration and water separation in one system
- Fully automatic operation
- Maximum effectiveness combined with long service times
- Mature technology and sturdy design
- High operational safety
- Residual water content less than 70 ppm free water content and thus significantly more efficient than conventional treatment systems
- Little space required thanks to compact design
- Low operating costs
- Low maintenance requirement
- Service-friendly and easy to use
- Global sales and service



2. Function

The OFWA is used for oil filtration and separation. The system is delivered in two parts (pump module/treatment module) for easier adaptation to the on-site conditions. The geared pump pumps the medium to the treatment stage, where the oil is filtered and separated. Separated water is detected by a probe and discharged automatically. The soiling of the treatment stage is monitored using the differential pressure. If the differential pressure reaches 1.5 bar, the main alarm appears (preliminary alarm:

1.3 bar) and the interior treatment element must be replaced. If it is not possible to replace the element despite the alarm message, the pressure continues to rise until the relief valve fitted to the pump opens the bypass. The oil then flows unfiltered past the treatment stage, and the engine filters are then responsible for filtration. In this case, the oil is no longer dewatered due to the bypass.

3. Purpose

Medium: Lubricating oil
 Viscosity: 5 ...68 cST (at 40 °C)
 Water content inlet: max. 1000 ppm
 Water content outlet: approx. 70 ppm free water content

4. Operating parameters

OFWA type	OFWA 1	OFWA 2	OFWA 3
Flow capacity [l/min] approx.	5	8	16
Ambient temperature [°C]	min. 2 - max. 55		
Operating temperature [°C]	min. 10 - max. 45		
Operating pressure [bar]	min. 0.7 - max. 6		
Pressure loss [bar]	max. 1.5		

5. Technical data

5.1 Electrical data/control			
KFWA type	OFWA 1	OFWA 2	OFWA 3
Power consumption [kW]	< 2	< 3	< 4
Control voltage	24V AC		
Protection class	min. IP54		
Operating mode	Start-stop		
Potential-free contacts	- Monitoring main switch - Monitoring motor protection switch - Water alarm - Differential pressure preliminary alarm - Differential pressure main alarm - Monitoring pump operation		
Colour of switch cabinet	RAL 7035		

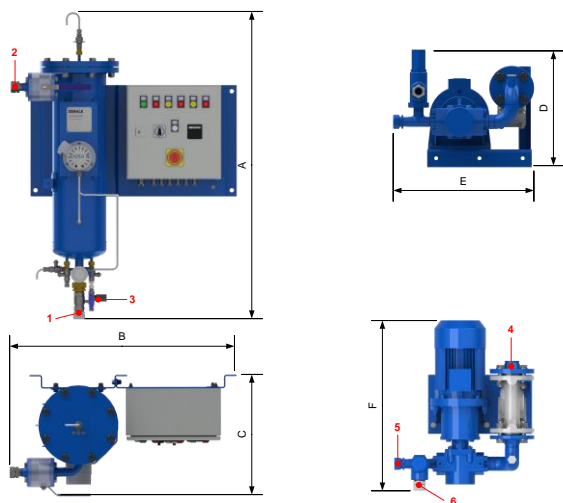
5.2 Tank	
Design pressure [bar]:	6
Design temperature [°C]:	100
Testing pressure [bar]:	9
Design code:	GL
Material:	Steel
Corrosion allowance [mm]:	1

5.3 Steel structure finishing	
Frame:	Sand-blasted SA 2½, coated
Pipes:	Sand-blasted SA 2½, coated
Outside of tank:	Sand-blasted SA 2½, coated
Inside of tank:	Sand-blasted SA 2½
Colour:	RAL 5019
(double coating comprising primer coat and top coat – dry layer thickness: 120 µm)	

6. Pump

OFWA type	OFWA 1	OFWA 2	OFWA 3
Flow capacity [l/min] approx.	5	8	16
Suction lift [m]	max. 2		
Pumping height [m]	min. 3		
Opening pressure relief valve [bar]	3		

7. Dimensions and main connections



OFWA type	OFWA 1	OFWA 2	OFWA 3
A	920	1190	1500
B	870	910	905
C	435	487	582
D	367	400	520
E	425	465	600
F	480	555	660
1	28x2	28x2	DN40
2	28x2	28x2	DN40
3	8x1	8x1	8x1
4	DN25	DN40	DN50
5	28x2	28x2	DN40
6	28x2	28x2	35x2

Dimensions in mm.

- 1 Inlet
- 2 Outlet
- 3 Water drain
- 4 Inlet
- 5 Outlet
- 6 Bypass

8. Order numbers

8.1 System			
Type	Volume flow [l/min] approx.	Electrical power supply	Order number
OFWA 1	5	400/440 VAC 50/60Hz	On request
OFWA 2	8	400/440 VAC 50/60Hz	On request
OFWA 3	16	400/440 VAC 50/60Hz	On request

8.2 Spare parts		
Type	Designation	Order number
OFWA 1	SPARE PARTS SET OFWA 1	72345245
OFWA 2	SPARE PARTS SET OFWA 2	72345246
OFWA 3	SPARE PARTS SET OFWA 3	72345247

9. Additional options

Deviating design (wall system), coating, voltage supply, volume flows and many other options available on request.