



OffLine Separator OLS 10

Description

The OffLine Separator OLS is a dewatering unit for hydraulic oils, light gear oil and with densities below 950 kg/m³.

The dewatering works according to the coalescence principle, with tiny oil droplets combining to form larger drops in the coalescing elements and then being separated from the oil by means of gravity.

The OLS is installed in the bypass flow, but it can also be used as a transfer unit, optionally with a pre-filter.

Applications

- Marine and offshore applications for sensitive systems such as rowing machines, drives and deck machinery
- Transfer lines to reduce downtime
- Turbine lubricating oil

Advantages

- Cost-effective and oil-saving dewatering
- Unlimited water separation, because no absorbent filter elements are used
- Stainless steel housing for the prevention of internal corrosion
- Simple connection as bypass flow unit possible

Technical Details

Hydraulic data	
Flow rate	5 l/min
Permitted fluids	Mineral oils to DIN 50524 Gear oils to DIN 51517, 51524
Fluid temperature	Mineral oil -10 to 80 °C
Permitted viscosity range	15 to 500 mm ² /sec (pump design S, G)
Operating pressure	Maximum 6 bar
Permitted pressure at inlet	-0.4 to 0.6 bar (with pump) 0.5 to 2 bar (without pump)
Permissible pressure at water drain	Unpressurized
Housing material	Stainless steel 1.4301
Seal material	NBR (FPM)
INLET connection	G 1"
OUTLET connection	G 1"
Connection, water drain	G ½"
Electrical data	
Supply voltage	See model code
Power consumption	Without heater ≈ 1 kW With heater max. 3 kW
External fuse required	16 amperes
Length of power cable	10 metres (only for options PKZ and FA2)
IP rating as per DIN 40050	IP 54
General data	
Ambient temperature	-40 to 70°C
Storage temperature range	10 to 40°C
Relative humidity	Max. 80%, non-condensing
Weight	Small drip tray ≈ 80 kg Large drip tray ≈ 150 kg

Model code

OLS **10** / **5** - **S** - **N** - **20** - **Z** - **BM** - **Z** - **Z** - **Z** / **V**

Basic model

OLS = OffLine Separator

Size

10 = Number of coalescing elements

Nominal flow rate

5 = 5 l/min

Pump type

Z = without pump

G = gear pump

S = vane pump

Supply voltage

B = 480 V - 3 Ph

C = 380 V - 3 Ph

G = 440 V - 3 Ph

L = 115 V - 1 Ph

M = 230 V - 1 Ph*

N = 400 V - 3 Ph*

O = 460 V - 3 Ph

P = 575 V - 3 Ph

S = 500 V - 3 Ph

R = 415 V - 3 Ph

W = 230 V - 3 Ph*

X = other voltage (on request)

L60, M60, ... = operation at 60 Hz

Z = without motor

*) Standard in Europe according to CENELEC HD472 S1 at 50 Hz

Element length

20 = coalescing element 20" – N20WRxxx

Pre-filter

1 = OLF 5/4 Toploader

Z = without

Clogging indicator

BM = differential pressure indicator – visual (VMxBM.1)

C = differential pressure indicator – electrical (VMxC.0)

Z = without

E = VMF 0.6KO (back pressure)

Heater

1 = 1 kW heater

2 = 2 kW heater

Z = without

Water drain

1 = automatic

Z = manual

Instrumentation

Z = without

Supplementary details

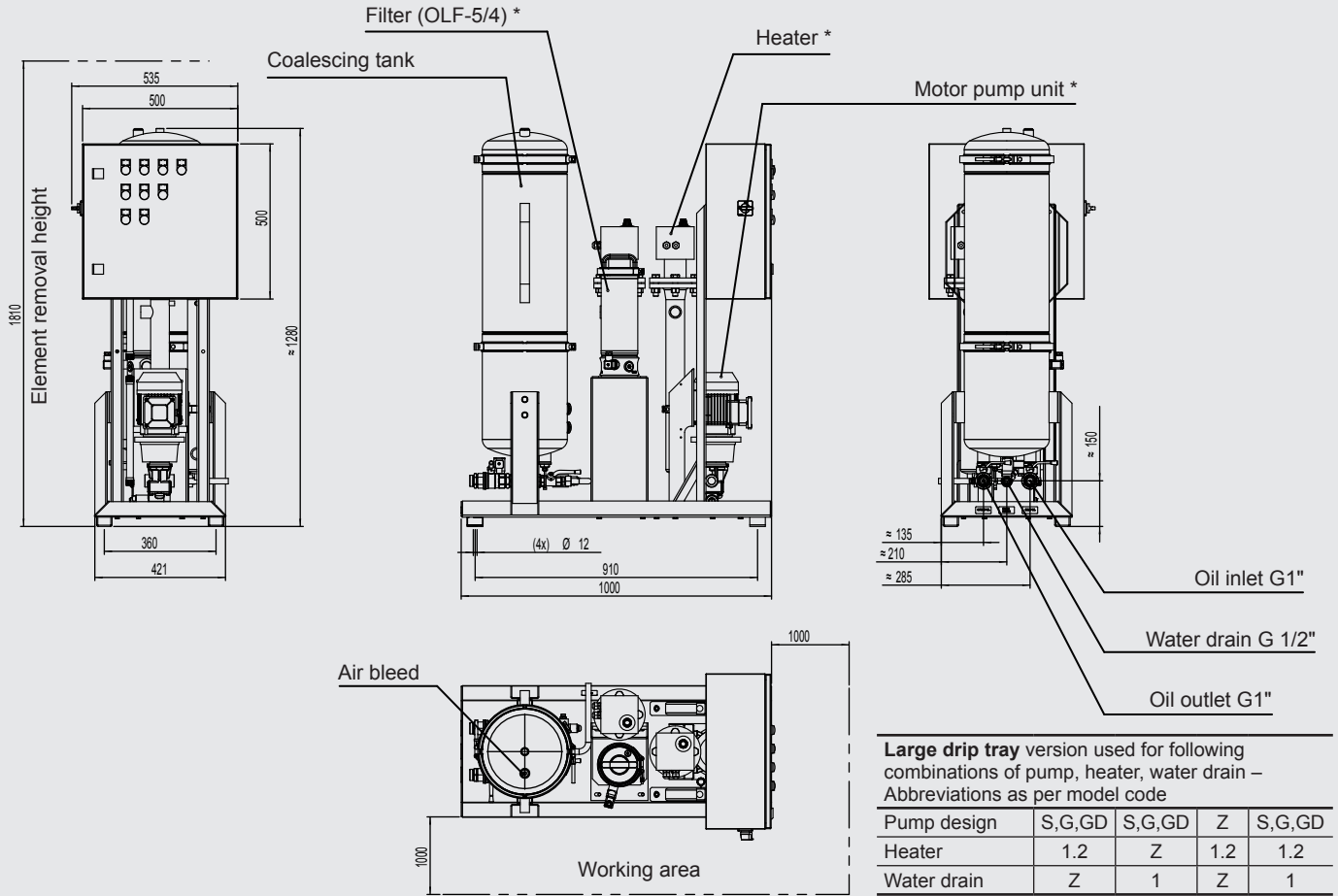
PKZ = on/ off switch with motor protection switch

FA2 = on/ - off switch with motor protection switch and switch-off when filter is clogged.

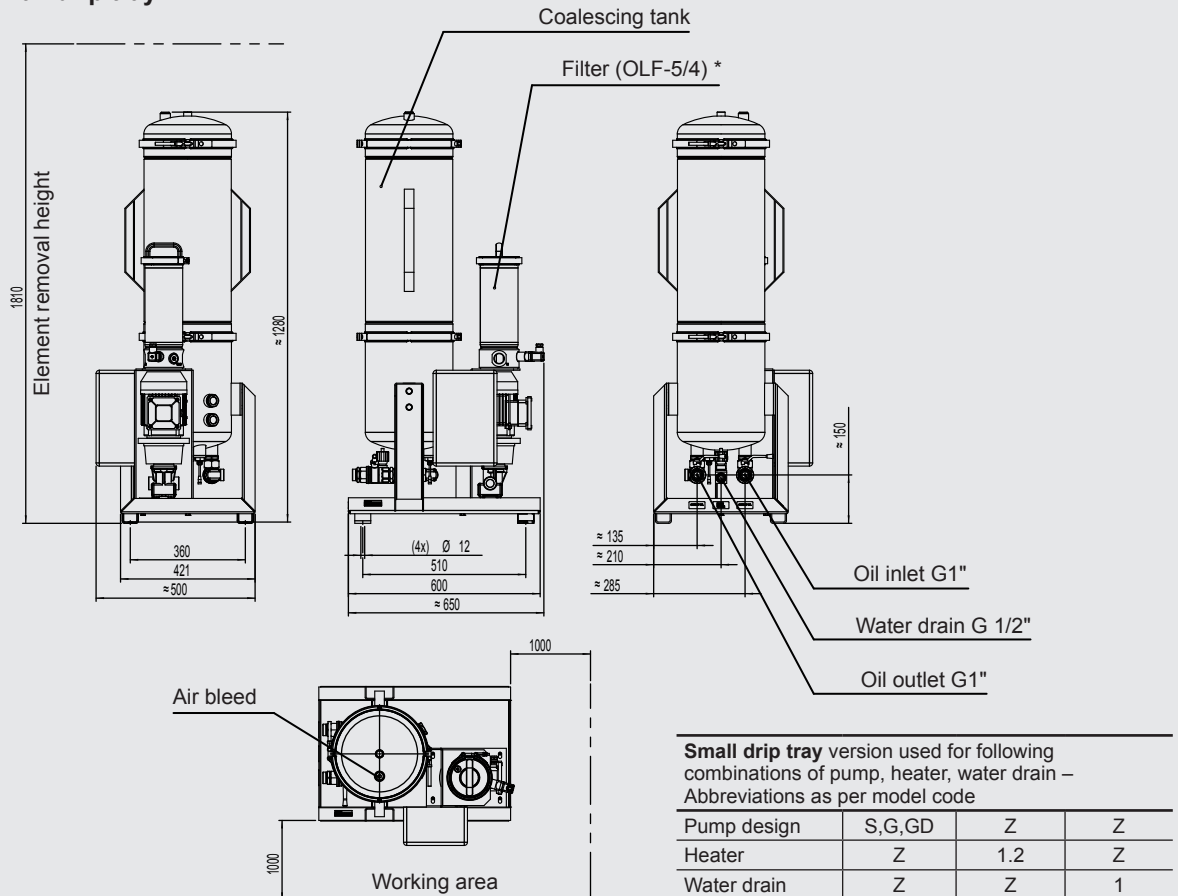
Does not require neutral line. All voltages. Clogging indicator type C required.

V = Viton (FPM) seals

Dimensions (all dimensions given in mm)
Dimensions depend on the version of the OLS:
Dimensions with large drip tray



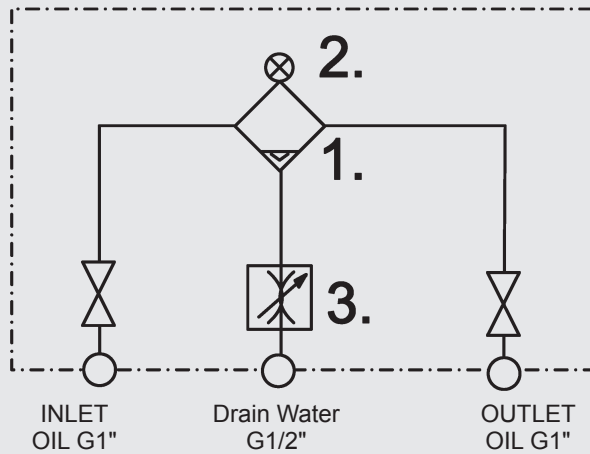
Dimensions with small drip tray



* Equipment optional, see model code

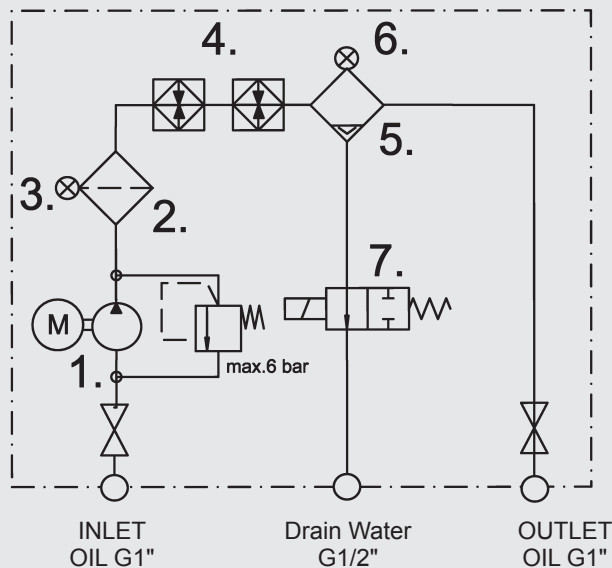
Hydraulic circuit diagram

OLS 10/5 (minimum equipment)



No.	Code
1.	Coalescing tank
2.	Coalescing tank clogging indicator (differential pressure 0.8 bar)
3.	Manual water drain

OLS 10/5 (maximum equipment without monitoring devices)



No.	Code
1.	Motor pump unit
2.	Pre-filter (OLF-5/4)
3.	Coalescing tank pre-filter (differential pressure 2 bar)
4.	Heater
5.	Coalescing tank
6.	Coalescing tank clogging indicator (differential pressure 0.8 bar)
7.	Automatic water drain

Items supplied

- OLS
- Operating and maintenance instructions

Elements

Coalescing element:

- 3277940 - N20WR005-1F (5 µm)
- The OLS 10 has 10 coalescing elements

Filter elements, pre-filter:

- 349494 - N5DM002 (2 µm)

Note

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

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

All technical details are subject to change.

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