



OffLine Separator OLS 10

Description

The OffLine Separator OLS is a dewatering unit for hydraulic oils and lightweight transmission oil with densities less than 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 steering engines, drives and deck machinery
- Transfer lines to reduce downtime
- Turbine lubricating oil
- General hydraulics and lubrication

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 data

Hydraulic specifications	
Nominal flow rate	5 and 15 l/min
Permitted fluids	Mineral oils to DIN 51524 Gear oils to DIN 51517, 51524
Fluid temperature	0 to 80 °C (ice formation is not permitted)
Permitted viscosity range	15 to 500 mm ² /s at 5 l/min, 15 to 200 mm ² /s at 15 l/min
Operating pressure	Maximum 6 bar, maximum 10 bar for coalescing housing alone
Permitted pressure at INLET OIL connection	-0.4 to 4.0 bar (with gear pump), 6 bar (without pump)
Permitted pressure at OUTLET OIL connection	2.8 bar with pre-filter, 4.8 bar without pre-filter
Permitted pressure at DRAIN WATER connection	0 bar
Housing material	Stainless steel
Sealing material	FKM
INLET Oil connection	ISO 8434-1 M36 x 2 (28L)
OUTLET Oil connection	ISO 8434-1 M36 x 2 (28L)
DRAIN WATER connection	ISO 8434-1 M26 x 1.5 (18L)
Electrical data	
Supply voltage	See model code
Power consumption	Max. 0.75 kW
External fuse required	16 amperes
Power cable, length	0.5 m for control type Premium, 10 m for control type Eco
Protection class according to DIN 40050	IP55
General data	
Ambient temperature	0 to 45 °C with electric control, -10 to 70 °C coalescing housing only
Weight	From 80 kg to 100 kg

Preferred models (with shorter delivery times)

Model code	Part no.
OLS 10/Z-Z-Z-Z-Z-Z-1-Z	4507636
OLS 10/Z-Z-Z-Z-Z-Z-2-Z	4507640
OLS 10/5-G-N-E-1-BM-Z-1-Z	4431897
OLS 10/5-G-N-P-1-D4-Z-2-Z	4396730
OLS 10/15-G-N-P-2-D4-Z-2-Z	4507642

Model code

OLS 10 / 5 - G - N - P - 1 - D4 - Z - 2 - Z

Basic model

OLS = OffLine Separator

Size

10 = Number of coalescing elements

Rated flow

5 = 5 l/min at maximum 500 mm²/s

15 = 15 l/min at maximum 200 mm²/s

Pump version

Z = no pump

O = with orifice, only for coalescing housing alone, see Fig. "Flow rate through orifice"

G = gear pump

Supply voltage

G = 440 V – 3 Ph

M = 230 V – 1 Ph

N = 400 V – 3 Ph

O = 460 V – 3 Ph

R = 415 V – 3 Ph

X = other voltage (on request)

Z = none, only for coalescing housing alone

Control type

Z = none, only for coalescing housing alone

E = Economy – see control type table

P = Premium – see control type table

Pre-filter

Z = no pre-filter (only for coalescing housing alone)

1 = pre-filter size 1 (only for flow rate 5 l/min)

2 = pre-filter size 2 (only for flow rate 15 l/min)

Clogging indicator

BM= visual differential pressure indicator (VMxBM.1), only for control type Economy

D4 = visual/electrical differential pressure indicator, only for control type Premium

Z = none, only for coalescing housing alone

Heater

Z = none

Water drain

Z = none

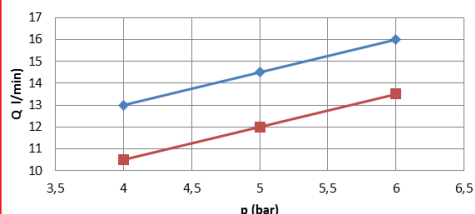
1 = manual

2 = automatic

Measurement equipment

Z = without

Flow rate through orifice



— v = 46 mm²/s
— v = 200 mm²/s

Scope of delivery

- OLS 10, ready for connection (without coalescing elements and pre-filter elements)
- Operating and maintenance instructions

Coalescing elements and pre-filter elements must be ordered separately and installed before operation on site.

Elements

Coalescing element:

– 3277940 – N20WR005-1F

– 3361569 – N20WR070-1F

The OLS 10 has 10 coalescing elements

Filter elements, pre-filter:

● Size 1

– 349494 – N5DM002

– 3068101 – N5DM005

– 3102924 – N5DM010

– 3023508 – N5DM020

● Size 2

– 1251590 – N15DM002

– 3252552 – N15DM005

– 3115180 – N15DM010

– 349576 – N15DM020

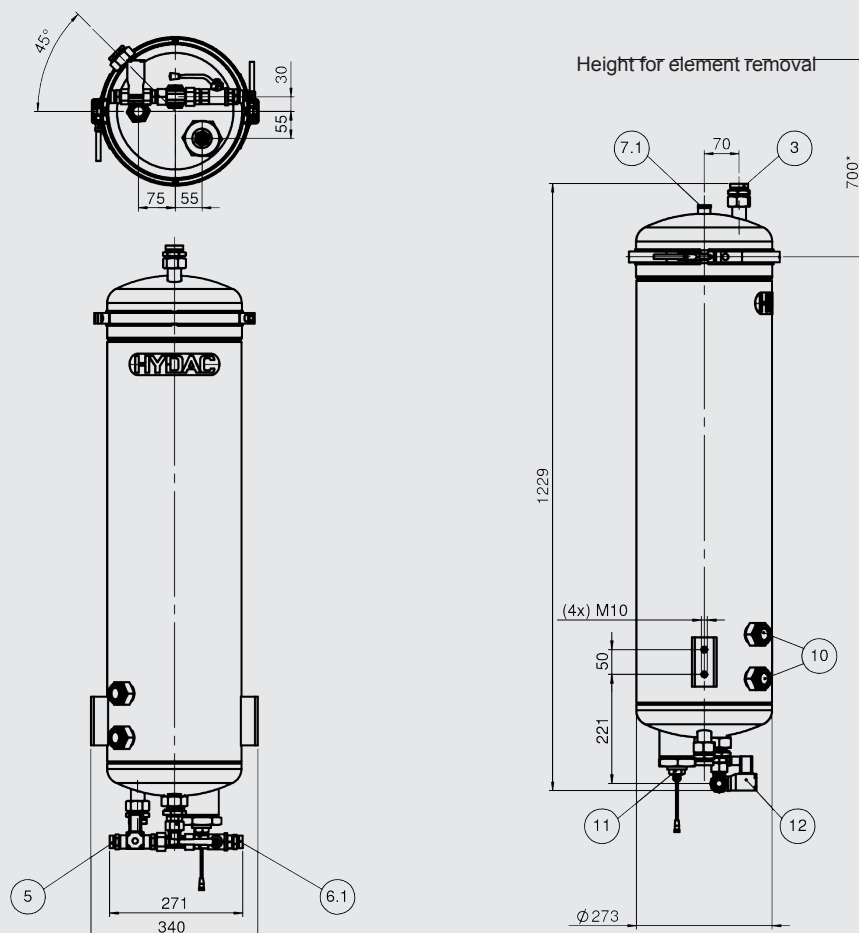
– 3048790 – N15DM0030

Control type

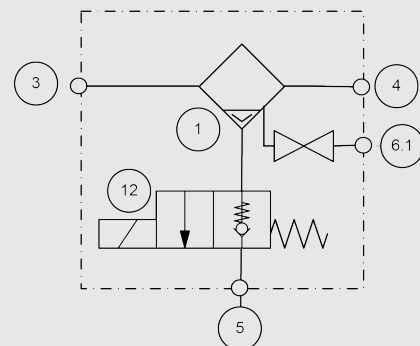
Choose between the following control types:

	Economy	Premium
Water drain	Manual	Automatic
Clogging indicators	Visual	Electrical
Remote control input on / off	x	√
Outlet "unit OK"	x	√
Outlet "unit active"	x	√
Timer control	x	√

Dimensions of OLS 10/Z with automatic drain



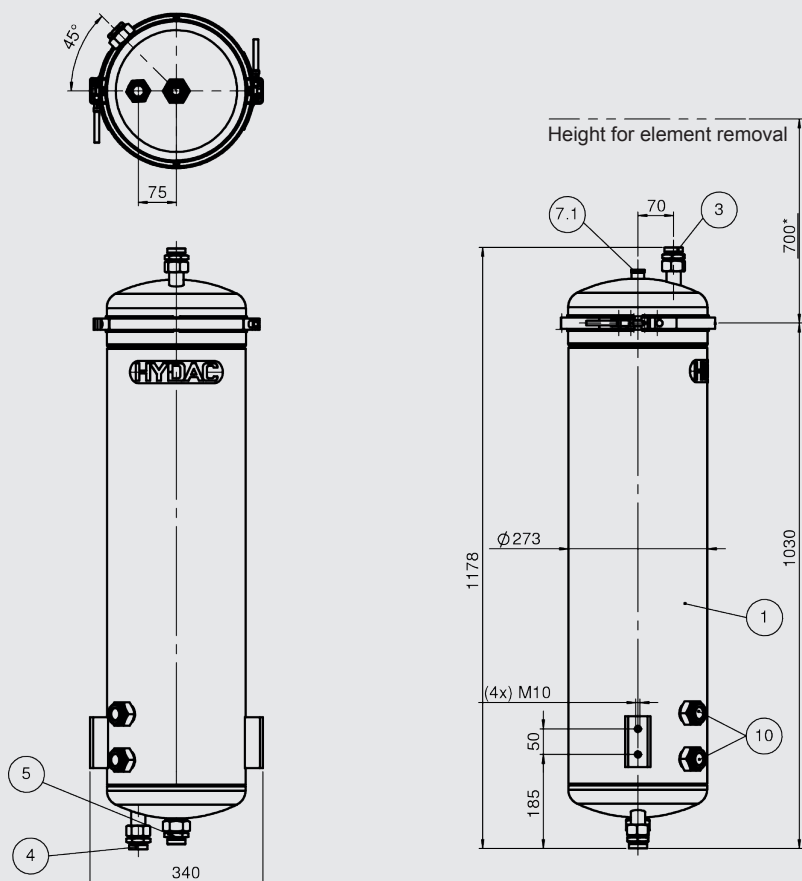
Hydraulic diagram



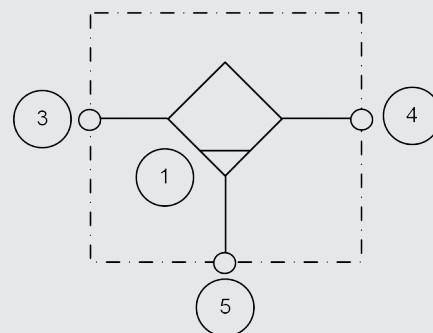
Legend

No.	Designation
1	Coalescing housing
3	INLET OIL (ISO 8434-1 M36x2)
4	OUTLET OIL (ISO 8434-1 M36x2)
5	DRAIN WATER (ISO 8434-1 M36x2)
6.1	DRAIN (drain, coalescing housing, ISO 8434-1 M26x1.5)
7.1	VENT (vent, coalescing housing)
10	View glass
11	Water sensor
12	2/2 directional valve

Dimensions of OLS 10/Z for manual drain



Hydraulic diagram



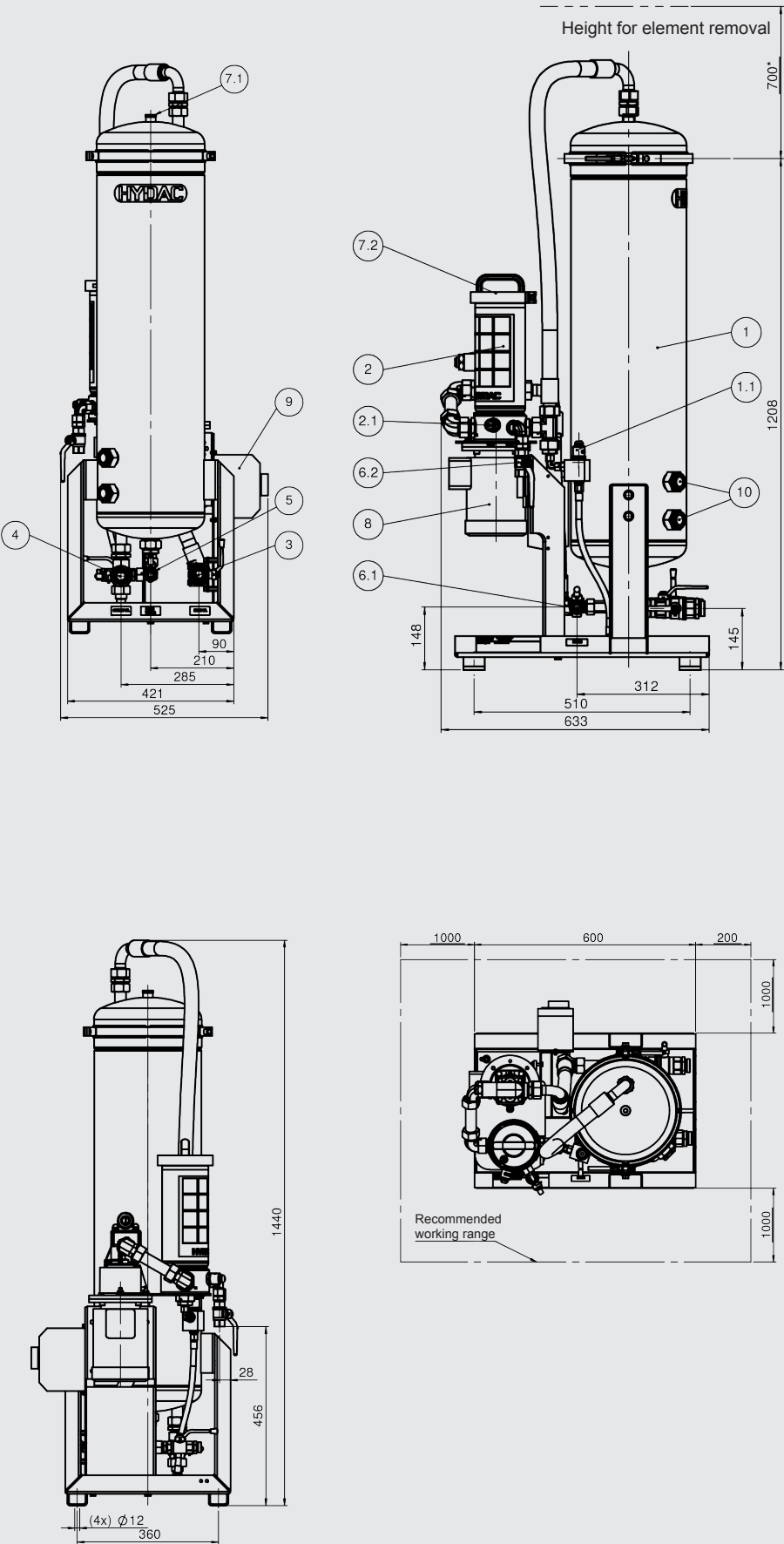
Legend

No.	Designation
1	Coalescing housing
3	INLET OIL (ISO 8434-1 M36x2)
4	OUTLET OIL (ISO 8434-1 M36x2)
5	DRAIN WATER (ISO 8434-1 M36x2)
7.1	VENT (vent, coalescing housing)
10	View glass

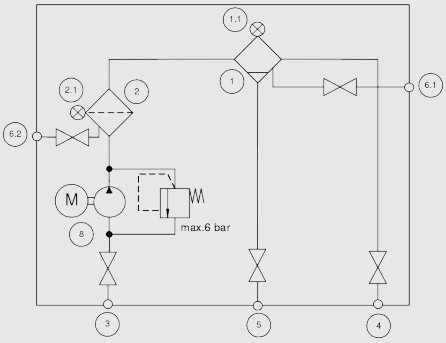
Accessories

- 3030479 oil drip pan
- OLS coalescing housing alone

Dimensions of OLS 10/5 Economy



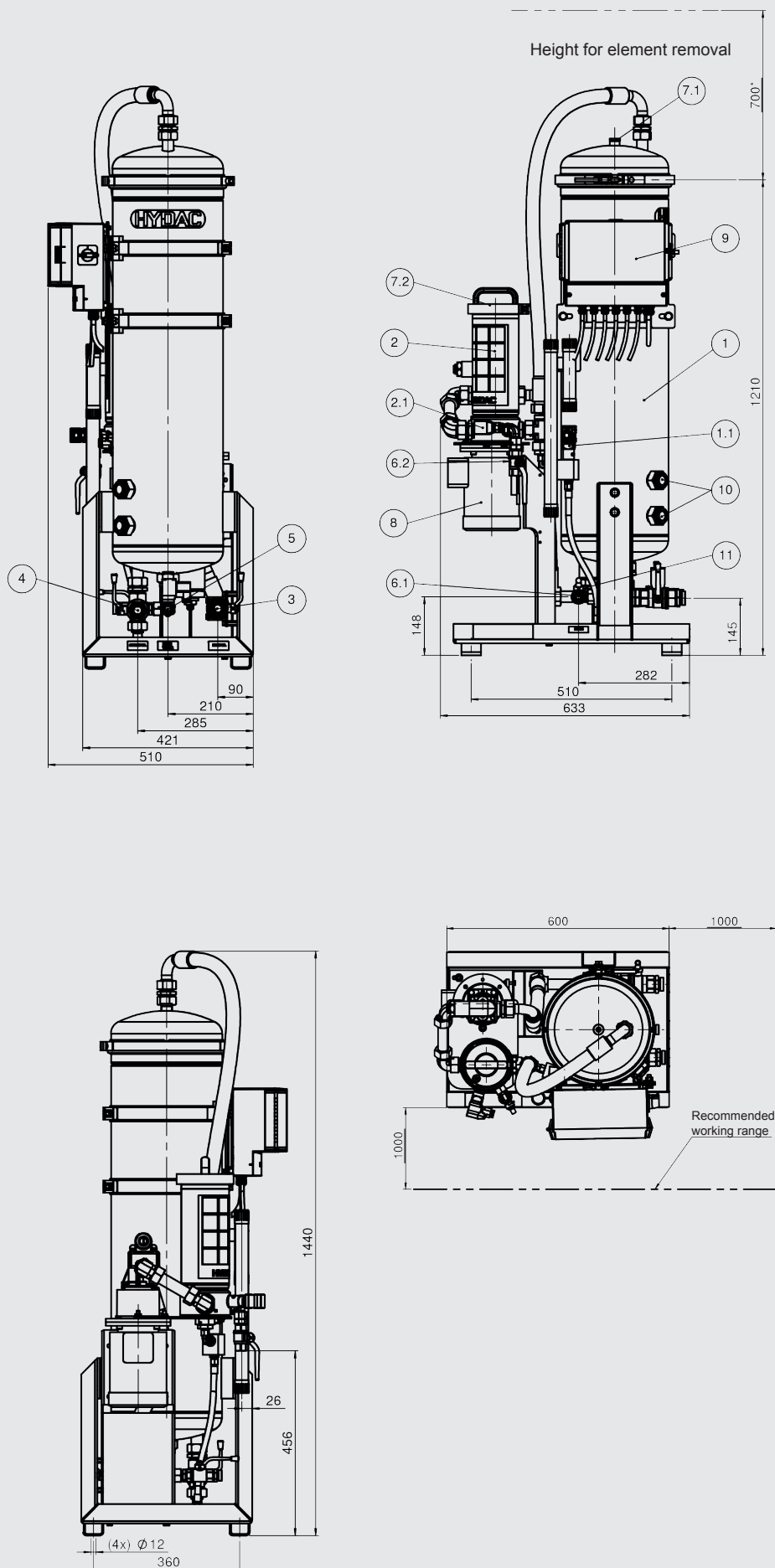
Hydraulic diagram



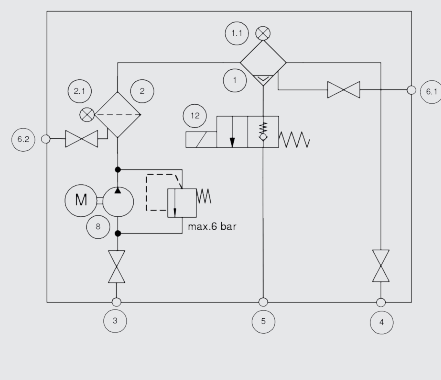
Legend

No.	Designation
1	Coalescing housing
1.1	Clogging indicator, coalescing element
2	Pre-filter housing
2.1	Clogging indicator, pre-filter element
3	INLET OIL (ISO 8434-1 M36x2)
4	OUTLET OIL (ISO 8434-1 M36x2)
5	DRAIN WATER (manual, ISO 8434-1 M26x1.5)
6.1	DRAIN (drain, coalescing housing, ISO 8434-1 M26x1.5)
6.2	DRAIN (drain, pre-filter housing, ISO 8434-1 M26x1.5)
7.1	VENT (vent, coalescing housing)
7.2	VENT (vent, pre-filter housing)
8	Motor pump unit
9	Electric control
10	View glass

Dimensions of OLS 10/5 Premium



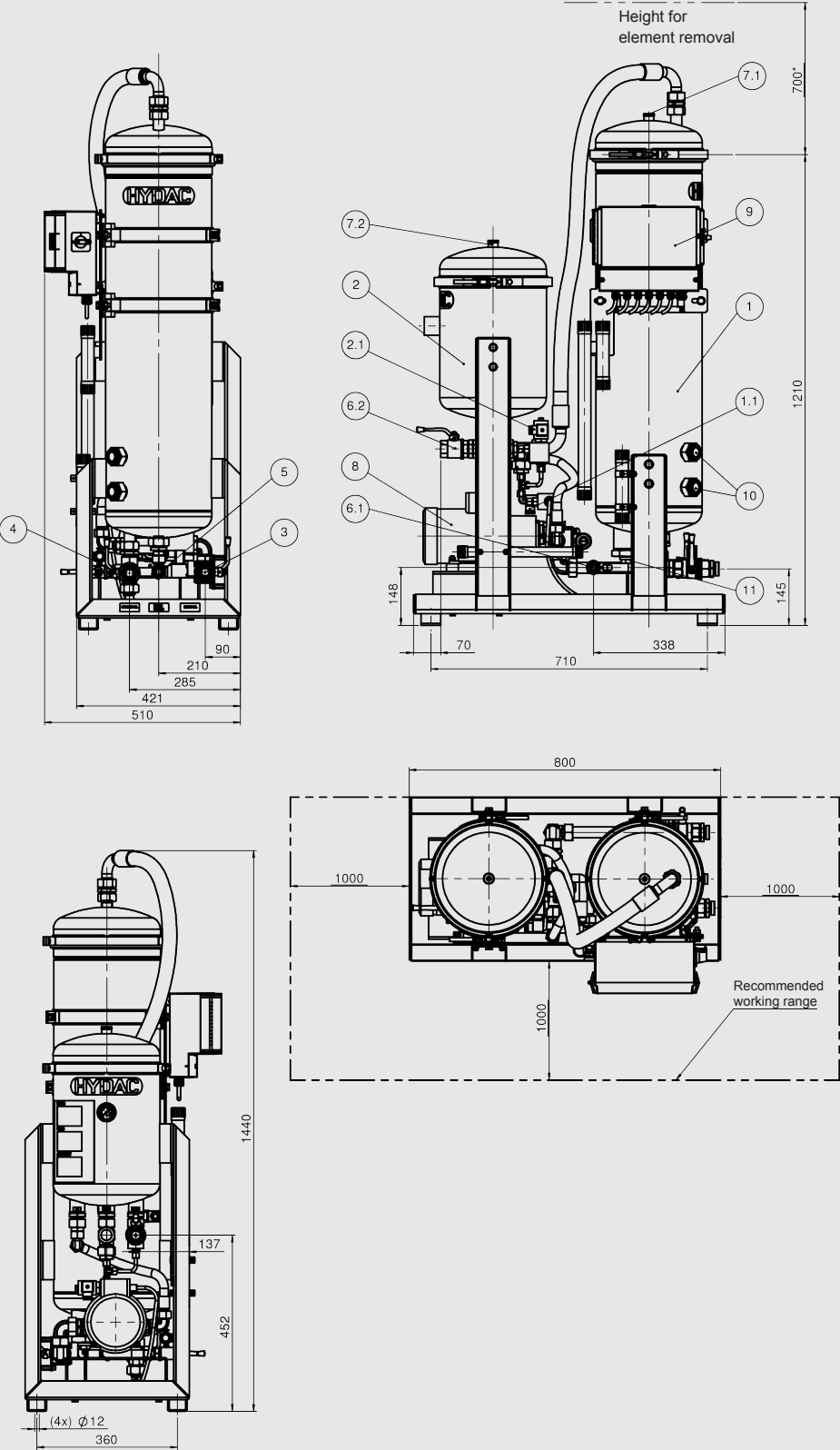
Hydraulic diagram



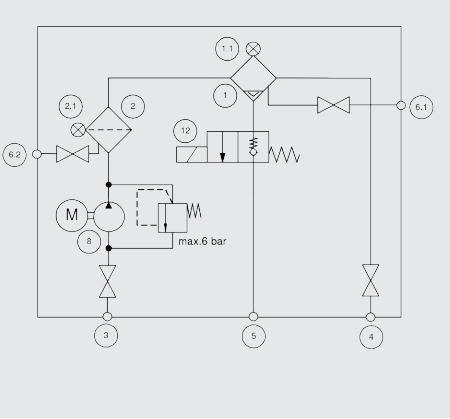
Legend

No.	Designation
1	Coalescing housing
1.1	Clogging indicator, coalescing element
2	Pre-filter housing
2.1	Clogging indicator, pre-filter element
3	INLET OIL (ISO 8434-1 M36x2)
4	OUTLET OIL (ISO 8434-1 M36x2)
5	DRAIN WATER (automatic, ISO 8434-1 M26x1.5)
6.1	DRAIN (drain, coalescing housing, ISO 8434-1 M26x1.5)
6.2	DRAIN (drain, pre-filter housing, ISO 8434-1 M26x1.5)
7.1	VENT (vent, coalescing housing)
7.2	VENT (vent, pre-filter housing)
8	Motor pump unit
9	Electric control
10	View glass
11	Water sensor
12	2/2 directional valve

Dimensions of OLS 10/15 Premium



Hydraulic diagram



Legend

No.	Designation
1.	Coalescing housing
1.1	Clogging indicator, coalescing element
2.	Pre-filter housing
2.1	Clogging indicator, pre-filter element
3.	INLET OIL (ISO 8434-1 M36x2)
4.	OUTLET OIL (ISO 8434-1 M36x2)
5.	DRAIN WATER (automatic, ISO 8434-1 M26x1.5)
6.1	DRAIN (drain, coalescing housing, ISO 8434-1 M26x1.5)
6.2	DRAIN (drain, pre-filter housing, ISO 8434-1 M36x2)
7.1	VENT (vent, coalescing housing)
7.2	VENT (vent, pre-filter housing)
8.	Motor pump unit
9.	Electric control
10.	View glass
11.	Water sensor
12.	2/2 directional valve

Note

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

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

Subject to technical modifications.

HYDAC FILTER SYSTEMS GMBH
Industriegebiet
D-66280 Sulzbach/Saar
Tel.: +49 (0) 6897/509-01
Fax: +49 (0) 6897/509-9046
www.hydac.com
filtersystems@hydac.com