

Garage light oil separators

Freestanding

Oleopator P Freestanding / Oleolift P Freestanding

Light oil separation

ACO Freestanding Oleopators P and Oleolifts P with a coalescence units are designed to remove petroleum substances (mineral oils, gasoline, light lubricants, etc.) contained in rainwater and technological wastewater. A sludge trap which is integrated into the tank also removes suspended solids. Pumps and additional accessories can be used with Oleolift units in applications where there is no gravity outlet.

Oleolift P Freestanding

Durable submersible pumps with metal impeller for high operational reliability and long product life

See more on page 14

Oleopator P Freestanding

ACO Freestanding Oleopator

See more on page 08



Content

Functional principle of light oil separation	04
The application scope	04
Function	05
The principle of self-activating sealing	05
Suitable for applications with a gravity discharge	07
Suitable applications	07
Accessibility	07
Oleopator P Freestanding	08
Suitable for applications where discharged water must be pumped	13
Suitable applications	13
Why backflow protection?	13
Oleolift P Freestanding	14
Accessories	20



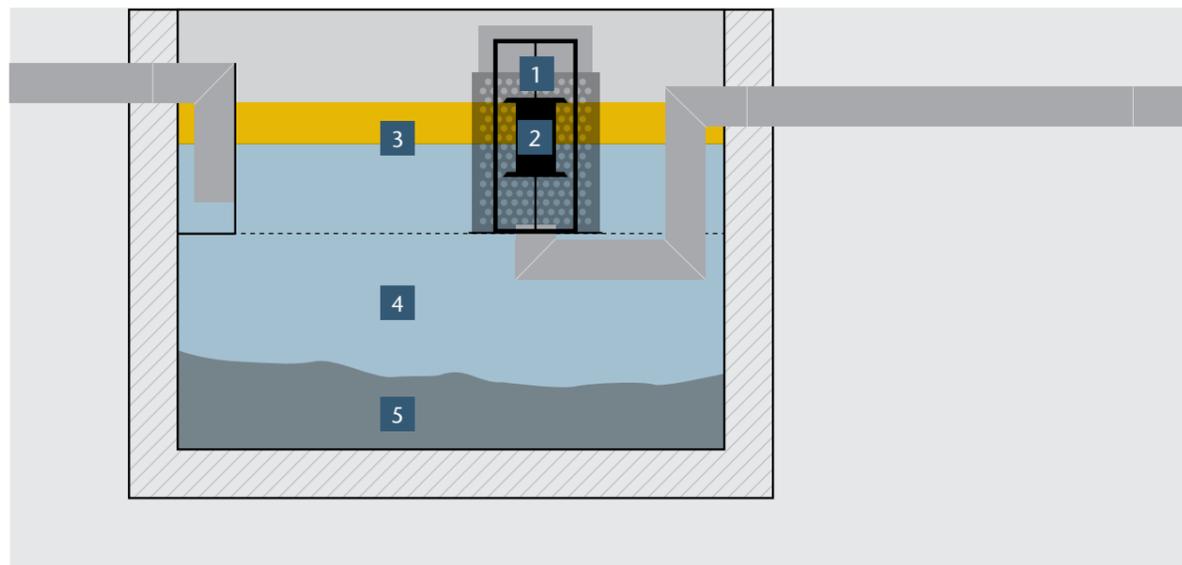
The right component

Newly available design of garage separators with integrated pumps. All-in-one solution.

NOTE: All pictures shown are for illustration purpose only!

Functional principle of light oil separation

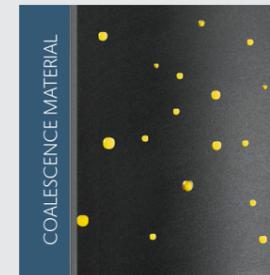
Wastewater containing light oils reaches the separation chamber (4) via the inlet. Sediments (e.g. sand) fall to the floor of the tank and collect in the sludge trap (5). Lighter liquids (e.g. oil or petrol), on the other hand, rise to the surface and separate out into the light oil layer (3). When using gravity based separation, Class 1 separators that use a coalescence element (1) on the liquid leaving the separator can achieve a residual oil content of 5 milligrams per litre.



The application scope

Suitable applications include gas stations, parking areas, parking lots, roadways, washing areas, car wash facilities, brush/portal washing systems, engine cleaning, workshops, vehicle recovery, scrap yards, transfer stations, tank pits, transformer stations

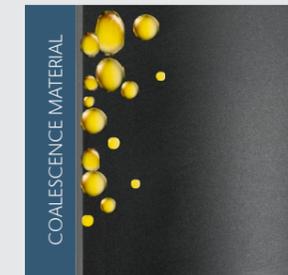
Function



Small oil droplets that are not separated because they have a different density to water bond with the oil-friendly coalescence element.



Oil droplets spread over the coalescence material, and additional oil droplets are adsorbed and the oil film continues to grow.

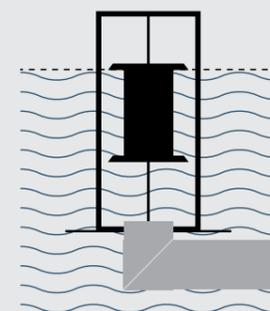


The adhesion of the oil film is exceeded. A large drop of oil begins to separate, floats upward and can therefore be separated.

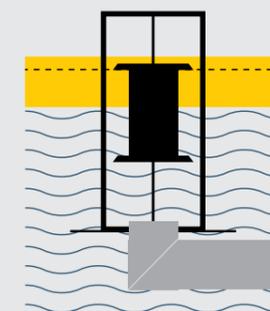
The principle of self-activating sealing

The substances which are held in the light oil layer (3) must not reach the sewer system. This means that the separator installation must have a self-activating sealing mechanism, which automatically closes separator outlets once the maximum storage quantity of light oils has been reached. This is done using a float (2) with a specific density,

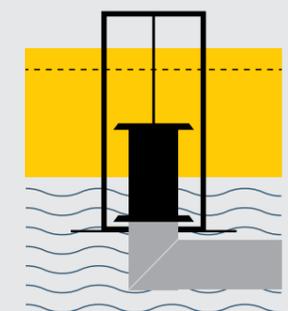
which drops lower and lower as the layer of light oils increases in size. Once the float closes off the inlet, no more wastewater can be discharged via the light oil separator. Only when the contents of the separator have been disposed of by an approved recycling company and it has been refilled with water, can the wastewater intake be started.



Operating condition without Light Liquid



Operating condition with accumulating Light Liquid



Maximum Light Liquid accumulation closes outlet via float switch



For applications
with a gravity discharge

Suitable applications

Due to its design, the ACO Freestanding Oleopator is an ideal solution for garages in shopping centers or residential houses where it can be installed in a suitable place (e.g. service room or in an underground shaft).

Accessibility

According to EN 858-1 Point 6.3.3, every light oil separator must be accessible. Accessibility is defined as a person being able to enter, see and reach all walls and components. The case insert system in the ACO Oleopator Freestanding unit ensures optimum accessibility: the unit's float is removed to enable the removal of the inserted float cage. This creates sufficient space for someone to access the separator.

Oleopator P Freestanding

Product benefits

- All nominal sizes tested by independent test institute (LGA) - test report
 - Optimum accessibility guaranteed for maintenance, cleaning and disposal thanks to removable cage component
 - Separator with float switch of plastic, tared for light liquids with density until 0.90 g/cm^3
 - Coalescence unit and float can be removed for cleaning without having to empty the separator
- Easy to clean coalescence unit - durable wire mesh material
 - With plastic cover and clamping ring
 - (cover version 2)
 - With ventilation connection DN 100
 - Ready for additional installation of cable bushings (e.g. alarm units, etc.)
 - Alarm device - optional accessories

Product Information

- Light oil separator according to DIN EN 858, Class I
- For freestanding installation in frost free rooms
- Manufactured of welded polyethylene in round or oval design
- With supporting cage and coalescence unit
- Inner parts made of PEHD
- Inlet and outlet with for respective pipe connection
- Ready for additional alarm set installation



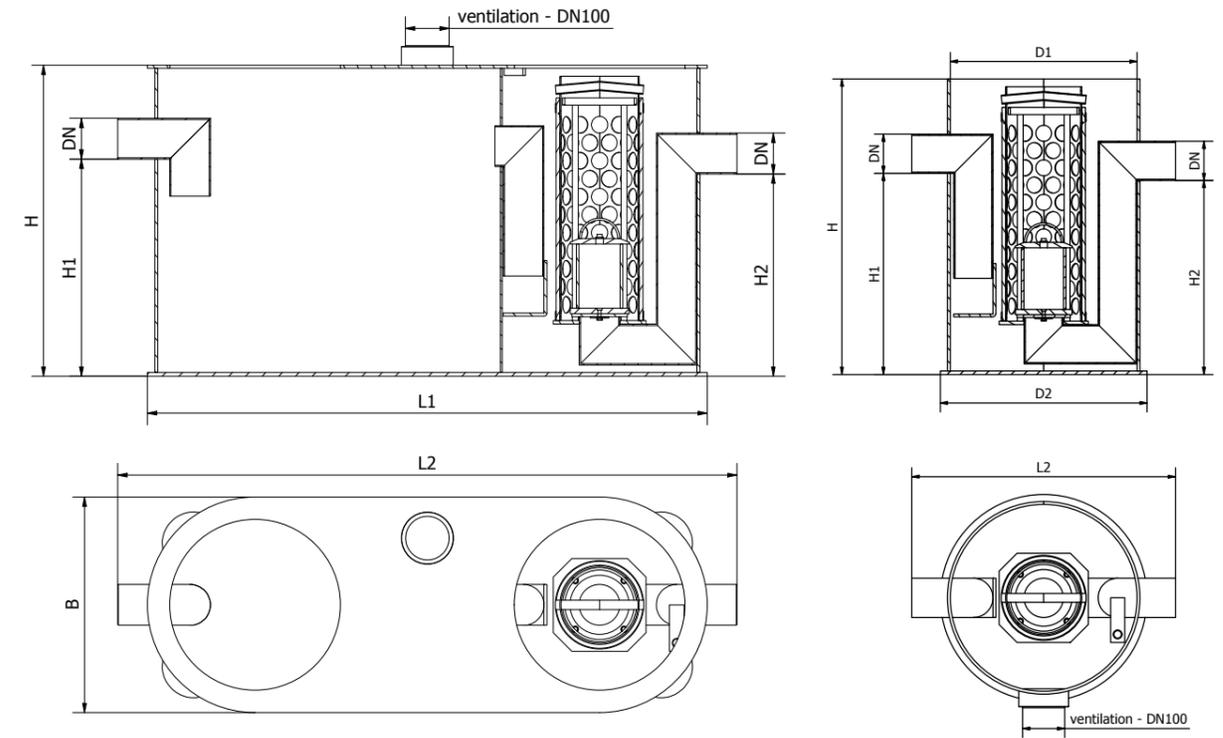
Cover solution



Cover - Version 1
Basic plastic cover with handle



Cover - Version 2
Durable plastic cover with handle, sealing and metal clamping ring



Oleopator P Freestanding

Product	Version 1 Art. Nr.	Version 2 Art. Nr.	Shape	DN inlet/ outlet (mm)	Sludge trap (l)	Oil storage (l)	Max. thickness of oil layer (mm)	Total capacity (l)	Weight (kg)
NS 3/0	418600.LC	418600.HC	round	DN100	0	60	311	115	27
NS 3/300	418601.LC	418601.HC	oval	DN100	300	60	311	385	70
NS 3/600	418602.LC	418602.HC	oval	DN100	600	60	311	750	110
NS 6/0	418603.LC	418603.HC	round	DN160	0	186	253	560	75
NS 6/600	418604.LC	418604.HC	oval	DN160	600	129	401	1140	155
NS 6/1200	418605.LC	418605.HC	oval	DN160	1200	208	401	1990	210
NS 10/0	418606.LC	418606.HC	round	DN160	0	186	253	560	75
NS 10/1000	418607.LC	418607.HC	round	DN160	1000	273	253	1590	137
NS 15/0	418608.LC		round	DN200	0	464	277	1340	177
NS 15/1500	418609.LC		round	DN200	1500	464	277	2400	220
NS 20/0	418610.LC		round	DN200	0	594	359	1540	195
NS 20/2000	418611.LC		round	DN200	2000	891	359	3410	325
NS 30/0	418612.LC		round	DN250	0	654	422	1500	225
NS 30/3000	418613.LC		round	DN250	3000	1513	422	6080	530

Product	H (mm)	H1 (mm)	H2 (mm)	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	B (mm)
NS 3/0	832	567	547	525	581	-	741	-
NS 3/300	890	587	547	-	-	1510	1670	581
NS 3/600	1120	817	777	-	-	2015	2175	581
NS 6/0	1159	740	720	1000	1080	-	1220	-
NS 6/600	1374	982	942	-	-	1910	2075	770
NS 6/1200	1444	1082	1042	-	-	2340	2475	870
NS 10/0	1159	740	720	1000	1080	-	1220	-
NS 10/1000	1772	1345	1325	1200	1280	-	1420	-
NS 15/0	1169	780	760	1500	1580	-	1720	-
NS 15/1500	1720	1380	1360	1500	1580	-	1720	-
NS 20/0	1379	770	750	1500	1580	-	1720	-
NS 20/2000	1780	1360	1340	1800	1880	-	2030	-
NS 30/0	1409	870	850	1500	1580	-	1720	-
NS 30/3000	2100	1620	1600	2200	2280	-	2430	-



For applications where
discharged water must
be pumped

Suitable applications

- When gravity discharge is not possible and water must be pumped to a different geodetical height.
- When backflow protection is needed.
- Suitable for multi-level garages (especially when carwash water disposal is required).

Why backflow protection?

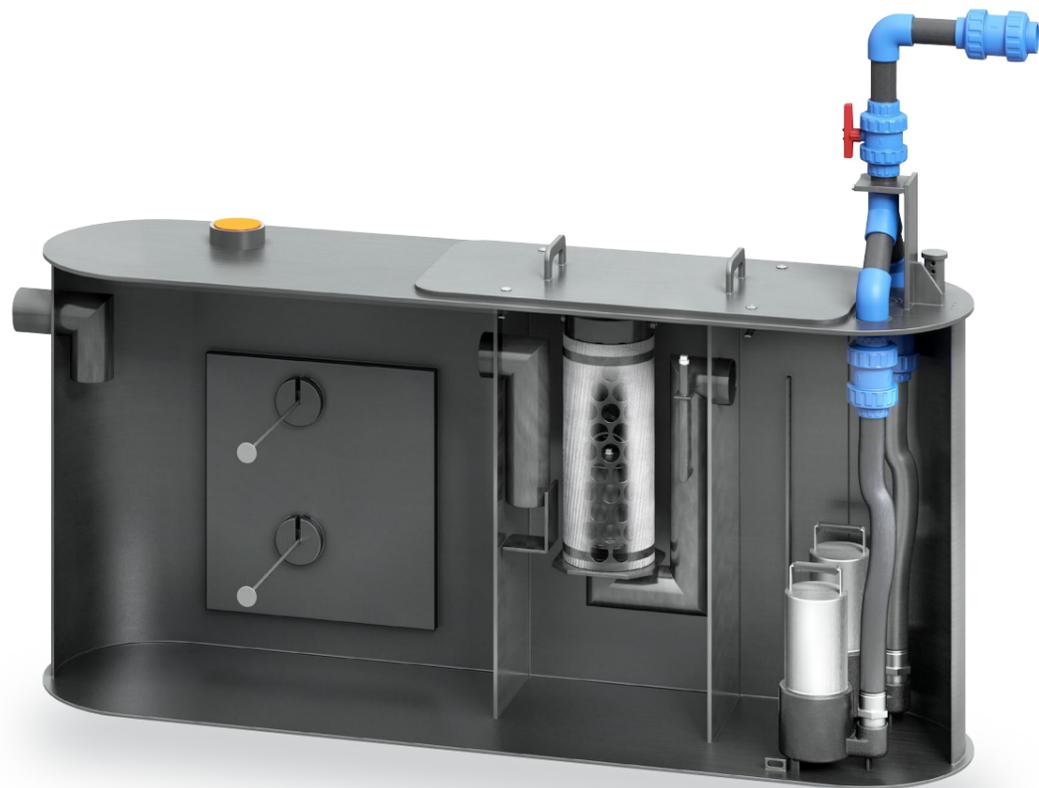
- Danger to the environment caused by escaping light liquids!
- Existing explicit requirements in DIN 1999-100 to protect against leakage!
- Prevent the economic consequences of leakage! (Excavated earth, special disposal of soil, operational failure)

Oleolift P Freestanding

Product benefits

- Durable submersible pumps with metal impeller for high operational reliability and long product lifetime
- All nominal sizes tested by independent test institute (LGA) - test report
- Optimum accessibility guaranteed for maintenance, cleaning and disposal thanks to removable cage component
- Separator with float switch of plastic, tared for light liquids with density until 0.90 g/cm³
- Coalescence unit and float can be removed for cleaning without having to empty the separator

- Easy to clean coalescence unit - durable wire mesh material
- With one or two practical plastic covers with lockers for all sections
- With ventilation connection DN 100
- Ready for additional installation of cable bushings (e.g. alarm units, etc.)
- Alarm device - optional accessories
- Durable submersible pumps with metal impeller secures high operational reliability and long lifetime



Product Information

- Light oil separator according to DIN EN 858, Class I
- For freestanding installation in frost free rooms
- Manufactured of welded polyethylene in round or oval design
- With supporting cage and coalescence unit
- Inner parts made of PEHD
- Inlet for respective pipe connection
- Outlet for clamping coupling
- Available in Mono or Duo pumps installations

Possible product configurations:

- Product is available in sizes NS 3, NS 6 and NS 10
- Four possible pumping heads available (5m, 10m, 15m, 20m) according to the installation requirements
- Separator is equipped with mono or duo pumps installation.

Duo pump installation:

- High operational reliability due to the inclusion of a redundant pump, which secures operation in case of failure of one pump.
- Equipped with a control unit, possible to run both pumps together. Control units can be mounted on both sides of the Oleolift or separately on a nearby wall.

Control unit secures:

- Alternation of pumps (prolonged lifetime)
- Possible synchronization function of both pumps
- Alarm signals output

Mono pump installation:

- Economic and simple design, controlled by one integrated float switch, without the control unit.
- Needs more regular maintenance checks due to only one pump being in operation (no redundancy).

IMPORTANT! Due to the absence of a redundant pump, this solution is a non-standard solution. A duo pump installation is recommended.

Pump solution



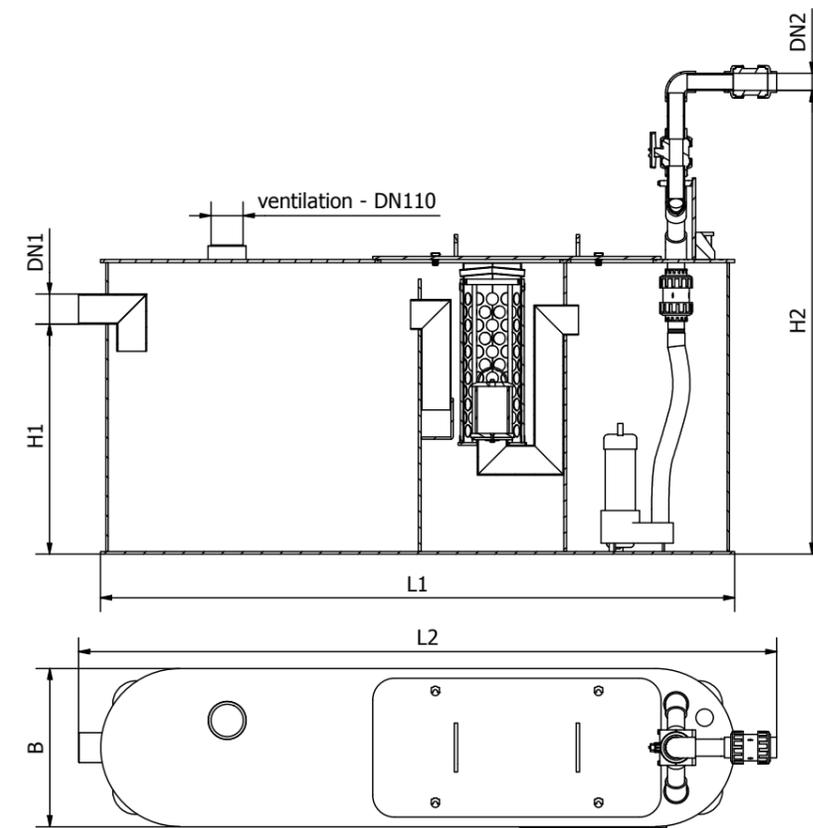
Duo pump
High operational reliability; equipped with a control unit



ACO Multicontrol Duo
Control unit for two-pump solution



Mono pump
Economic and simple design controlled by one float switch, without control unit



Oleolift P Freestanding Duo Pumps

Product	Pumping head ** (m)	Version 2	Shape	Sludge trap (l)	Oil storage (l)	Max. thickness of oil layer (mm)	Total capacity (l)	Weight (kg)
NS 3/300 Duo Pumps	1-5	418601.P206	oval	300	60	311	385	122
NS 3/300 Duo Pumps	5-10	418601.P211	oval	300	60	311	385	126
NS 3/300 Duo Pumps	10-20	418601.P220	oval	300	60	311	385	145
NS 3/600 Duo Pumps	1-5	418602.P206	oval	600	60	311	695	156
NS 3/600 Duo Pumps	5-10	418602.P211	oval	600	60	311	695	160
NS 3/600 Duo Pumps	10-20	418602.P220	oval	600	60	311	695	180
NS 6/600 Duo Pumps	1-5	418604.P206	oval	600	129	401	977	280
NS 6/600 Duo Pumps	5-10	418604.P211	oval	600	129	401	977	296
NS 6/600 Duo Pumps	10-20	418604.P220	oval	600	129	401	977	306
NS 6/1200 Duo Pumps	1-5	418605.P206	oval	1200	208	401	1600	310
NS 6/1200 Duo Pumps	5-10	418605.P211	oval	1200	208	401	1600	326
NS 6/1200 Duo Pumps	10-20	418605.P220	oval	1200	208	401	1600	336
NS 10/1000 Duo Pumps	1-5	418607.P206	oval	1000	273	253	1490	326
NS 10/1000 Duo Pumps	5-10	418607.P211	oval	1000	273	253	1490	326
NS 10/1000 Duo Pumps	10-20	418607.P220	oval	1000	273	253	1490	336

**Pumping head including all pressure losses in pressure line connected to the outlet of Oleolift. Pressure losses need to be considered and calculated carefully!

Product	H1 (mm)	H2 (mm)	DN1 inlet (mm)	DN2 outlet (m)	L1 (mm)	L2 (mm)	B (mm)	Pn (kW)	I (A)	U (V)
NS 3/300 Duo Pumps	845	1378	DN100	50	1613	1843	580	0,8	5,6	230
NS 3/300 Duo Pumps	845	1378	DN100	50	1613	1843	580	2,2	12,8/4,8	230*/400
NS 3/300 Duo Pumps	845	1378	DN100	50	1613	1843	580	3	7	400
NS 3/600 Duo Pumps	845	1382	DN100	50	2331	2561	580	0,8	5,6	230
NS 3/600 Duo Pumps	845	1382	DN100	50	2331	2561	580	2,2	12,8/4,8	230*/400
NS 3/600 Duo Pumps	845	1382	DN100	50	2331	2561	580	3	7	400
NS 6/600 Duo Pumps	980	1620	DN160	50	2455	2686	770	3	7	400
NS 6/600 Duo Pumps	980	1620	DN160	50	2455	2686	770	3	7	400
NS 6/600 Duo Pumps	980	1620	DN160	50	2455	2686	770	4,4	7	400
NS 6/1200 Duo Pumps	1082	1694	DN160	50	2720	2951	870	3	7	400
NS 6/1200 Duo Pumps	1082	1694	DN160	50	2720	2951	870	3	7	400
NS 6/1200 Duo Pumps	1082	1694	DN160	50	2720	2951	870	4,4	7	400
NS 10/1000 Duo Pumps	992	1624	DN160	80	2610	2832	1080	3	10	400
NS 10/1000 Duo Pumps	992	1624	DN160	50	2610	2832	1080	4,4	10	400
NS 10/1000 Duo Pumps	992	1624	DN160	80	2610	2832	1080	7,4	15,8	400

*230V on demand

Oleolift P Freestanding Mono Pump

Product	Pumping head ** (m)	Version 2	Shape	Sludge trap (l)	Oil storage (l)	Max. thickness of oil layer (mm)	Total capacity (l)	Weight (kg)
NS 3/300 Mono Pump	1-5	418601.P106	oval	300	60	311	385	101
NS 3/300 Mono Pump	5-10	418601.P111	oval	300	60	311	385	103
NS 3/300 Mono Pump	10-20	418601.P120	oval	300	60	311	385	112
NS 3/600 Mono Pump	1-5	418602.P106	oval	600	60	311	695	136
NS 3/600 Mono Pump	5-10	418602.P111	oval	600	60	311	695	138
NS 3/600 Mono Pump	10-20	418602.P120	oval	600	60	311	695	148
NS 6/600 Mono Pump	1-5	418604.P106	oval	600	129	401	977	258
NS 6/600 Mono Pump	5-10	418604.P111	oval	600	129	401	977	266
NS 6/600 Mono Pump	10-20	418604.P120	oval	600	129	401	977	271
NS 6/1200 Mono Pump	1-5	418605.P106	oval	1200	208	401	1600	288
NS 6/1200 Mono Pump	5-10	418605.P111	oval	1200	208	401	1600	296
NS 6/1200 Mono Pump	10-20	418605.P120	oval	1200	208	401	1600	301
NS 10/1000 Mono Pump	1-5	418607.P106	oval	1000	273	253	1490	291
NS 10/1000 Mono Pump	5-10	418607.P111	oval	1000	273	253	1490	291

**Pumping head including all pressure losses in pressure line connected to the outlet of Oleolift.
Pressure losses need to be considered and calculated carefully!

Product	H1 (mm)	H2 (mm)	DN1 inlet (mm)	DN2 outlet (m)	L1 (mm)	L2 (mm)	B (mm)	Pn (kW)	I (A)	U (V)
NS 3/300 Mono Pump	845	1378	DN100	50	1613	1843	580	0,4	2,8	230
NS 3/300 Mono Pump	845	1378	DN100	50	1613	1843	580	1,1	6,4	230
NS 3/300 Mono Pump	845	1378	DN100	50	1613	1843	580	1,5	3,5	400
NS 3/600 Mono Pump	845	1382	DN100	50	2331	2561	580	0,4	2,8	230
NS 3/600 Mono Pump	845	1382	DN100	50	2331	2561	580	1,1	6,4	230
NS 3/600 Mono Pump	845	1382	DN100	50	2331	2561	580	1,5	3,5	400
NS 6/600 Mono Pump	980	1620	DN160	50	2455	2686	770	1,5	3,5	400
NS 6/600 Mono Pump	980	1620	DN160	50	2455	2686	770	1,5	3,5	400
NS 6/600 Mono Pump	980	1620	DN160	50	2455	2686	770	2,2	3,5	400
NS 6/1200 Mono Pump	1082	1694	DN160	50	2720	2951	870	1,5	3,5	400
NS 6/1200 Mono Pump	1082	1694	DN160	50	2720	2951	870	1,5	3,5	400
NS 6/1200 Mono Pump	1082	1694	DN160	50	2720	2951	870	2,2	3,5	400
NS 10/1000 Mono Pump	992	1624	DN160	80	2610	2832	1080	1,5	5	400
NS 10/1000 Mono Pump	992	1624	DN160	50	2610	2832	1080	2,2	5	400

Every ACO product supports
the ACO system chain



-
- Roof, balcony and terrace drainage
 - Lifting systems
 - Line drainage
 - Storm water treatment
 - Attenuation systems
 - Water protection
 - Pipe systems
 - Backwater systems
 - Manhole covers
-



ACO Industries Tábor s.r.o.

Prumyslova 1158
391 01 Sezimovo Usti
Czech Republic

**ACO. creating
the future of drainage**

