

# LipuSmart-P-OAP Extension stage 3

## Product information for the product group

### ACO Product benefits

- Integrated backflow protection
- Only one vent stack necessary
  - For the LipuSmart-P NS 2, ACO recommends the on-site installation of 2 ventilation lines
- Compact installation dimensions: The pump technology can be flexibly installed on 3 sides
- Innovative overall system control via integration in the building control technology
- 4in1 – complete solution
- Optional Modbus connection
- Structural stability of the container stability verification according to German Standard DIN 19901

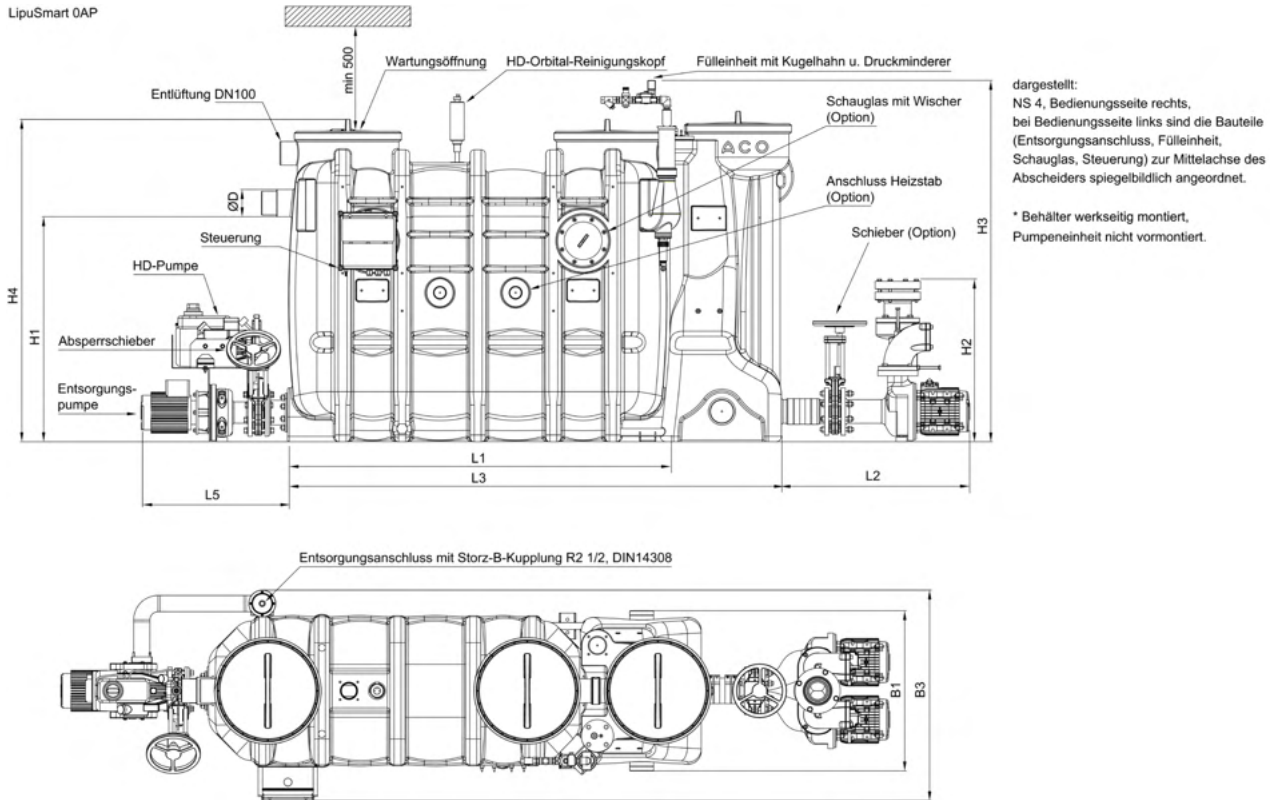
- Program-controlled, odour-free disposal and cleaning by means of direct suction and hydromechanical internal cleaning
- Disposal connection DN 65, mating flange with Storz coupling 75B and blind connector 2½"
- Fill unit with solenoid valve
- Bluetooth interface (LipuSmart App/Android)
- Disposal pump with free flow impeller for total delivery head above 6 metres



## Item Technical Data 3553.86.32

Nominal size	Nominal width	Contents			Key data			Weight		Operation side	
		Sludge trap	Grease store	Overall	Type	P2	To	Delivery head	Empty		Full
		[l]	[l]	[l]		[kW]	[l]	[m]	[kg]		[kg]
NS 3	DN 100	300	150	630	Pumpenset 1,5kW	1.5	155	9	318	948	left

**Dimensions**







**Nomi-  
nal size**




**Dimensions**



	L1	L2	L3	L5	H1	H2	H3	H4	B1	B3	D
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
NS 3	1450	800	1975	680	1055	753	1680	1500	742	930	110








**Accessories**







Description	Used with	Weight [kg]	PU [piece]	Item number
 <b>Flashing light</b>				0150.76.25
230V; Power consumption: 70 mA	Signalling unit with voltage-free fault reporting; LipuSmart-P; Multi-Max with signalling unit; LipuLift-P	0.5	1	0178.62.08







Description	Used with	Weight	PU	Item number
		[kg]	[piece]	
 <p><b>Grease layer thickness measuring device</b></p> <ul style="list-style-type: none"> <li>■ For electronic measurement of layer of grease</li> <li>■ Suitable for liquid and/or congealing grease</li> <li>■ Measuring device with plug and used connecting cable, length: 3 m</li> <li>■ With two voltage-free changeover contacts to display full warning (80%) and advance warning of fill level (50%)</li> <li>■ With visual display of fill level</li> <li>■ With heated probe rod to increase reliability of operation</li> <li>■ Operating voltage: 230VAC/5 VA</li> <li>■ Max consumption approx. 12W</li> </ul>	<ul style="list-style-type: none"> <li>■ LipuJet-P                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Oval NS 1 – 10</li> <li><input type="checkbox"/> Round NS 2 – 22,5</li> </ul> </li> <li>■ LipuJet-S                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Oval NS 1 – 10</li> <li><input type="checkbox"/> Round NS 2 – 20</li> </ul> </li> <li>■ LipuSmart-P                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Oval NS 1 – 10</li> </ul> </li> </ul>	2.8		3300.11.50
 <p><b>Heating rod</b></p>	<ul style="list-style-type: none"> <li>■ LipuSmart OA/OAP</li> </ul>	15.0		0155.35.28
 <p><b>ACO Ozone Generator</b></p> <ul style="list-style-type: none"> <li>■ ACO Ozone minimizes odors that can arise from grease separators, lifting plants and pumping stations</li> <li>■ Material: acid-resistant stainless steel</li> </ul> <p>Consists:</p> <ul style="list-style-type: none"> <li>■ ACO Ozone - ozone generator                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Size (L x W x H): 270 x 100 x 85 mm</li> <li><input type="checkbox"/> Nominal voltage 230 V / 50 Hz</li> <li><input type="checkbox"/> Degree of protection IP20</li> </ul> </li> <li>■ ACO Ozone pump - feed pump                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Size (L x W x H): 160 x 90 x 90 mm</li> <li><input type="checkbox"/> Integrated filter</li> <li><input type="checkbox"/> Nominal voltage 230 V / 50 Hz</li> <li><input type="checkbox"/> Degree of protection IP54</li> </ul> </li> <li>■ ACO Ozone bracket - wall bracket                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Size (L x W x H): 295 x 110 x 90 mm</li> </ul> </li> <li>■ Hoses</li> </ul>	<ul style="list-style-type: none"> <li>■ Grease separators, indoors</li> <li>■ Grease separators, outdoors</li> <li>■ Lifting stations</li> <li>■ Pumping stations</li> </ul>			7980.90.00

Description	Used with	Weight	PU	Item number
		[kg]	[piece]	
 <p><b>Grease layer thickness measuring device Multi Control</b></p> <ul style="list-style-type: none"> <li>■ To determine the disposal intervals of grease separators</li> <li>■ Suitable for liquid and/or harden fats</li> <li>■ Delineation with colour-touchpanel</li> <li>■ With integrated SD-card (4GB) for recording of the measuring process</li> <li>■ With headed sounding stick (temperature is adjustable) to increase the operation safety</li> <li>■ Three free of potential contacts for output of pre-alarm (adjustable), full-alarm (adjustable) and error</li> <li>■ Measuring stick with adjusting scale</li> <li>■ Delineation with plug-in cable connection, 3 m</li> <li>■ Service voltage: 100 240VAC 50/60 Hz, 2 A</li> <li>■ Power: ca. 43 W</li> </ul>	<ul style="list-style-type: none"> <li>■ LipuJet-P                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Oval NS 1 – NS 30</li> <li><input type="checkbox"/> Round NS 2 – NS 20</li> </ul> </li> <li>■ LipuJet-S                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Oval NS 1 – NS 10</li> <li><input type="checkbox"/> Round NS 2 – NS 20</li> </ul> </li> <li>■ LipuSmart-P                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Oval NS 1 – 10</li> </ul> </li> </ul>	2.7		3300.12.50
<p><b>Remote control</b></p> <ul style="list-style-type: none"> <li>■ For internal fitting or fitting in connection boxes</li> <li>■ Control line without protective conductor on-site                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Up to 50 m: 7 x 1.0 mm<sup>2</sup></li> <li><input type="checkbox"/> 50 – 200 m 7 x 1.5 mm<sup>2</sup></li> </ul> </li> </ul>				
	<p>Grease separator;</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> LipuJet-P OA/OAP/RA/RAP</li> <li><input type="checkbox"/> LipuJet-S OA/OAP/RA/RAP</li> <li><input type="checkbox"/> LipuMax-P-DA</li> <li><input type="checkbox"/> LipuSmart-P-OA/OAP</li> </ul> <p>; Starch separator Fapujet</p>	1.0		0150.59.89
	<ul style="list-style-type: none"> <li>■ Grease separators (incl. external makes)</li> </ul>	36.2		7980.80.00
<p><b>Smell neutralisation</b></p> <ul style="list-style-type: none"> <li>■ Lockable control cabinet                             <ul style="list-style-type: none"> <li><input type="checkbox"/> From stainless steel, material grade 304</li> <li><input type="checkbox"/> Ground surface</li> <li><input type="checkbox"/> With side ventilation slots</li> </ul> </li> <li>■ Integrated timer</li> <li>■ Incl. odour neutralisers: 9 l</li> <li>■ With dosing pump for reliable discharge</li> <li>■ Chemical resistant dosing hose</li> <li>■ Signal column for status monitoring</li> <li>■ PG gland for on-site connection</li> <li>■ Control cabinet dimensions: 380 x 600 x 210 mm (W x H x D)</li> <li>■ System ready to plug in                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Incl. cable: 1.5 m</li> </ul> </li> <li>■ 230 V socket to be produced on-site</li> </ul>				






Description	Used with	Weight	PU	Item number
		[kg]	[piece]	
 <p><b>Message system with GSM module</b></p> <ul style="list-style-type: none"> <li>Parameter via app (Android &amp; iOS)</li> <li>Mains-independent alarm via 12V lead-gel battery</li> <li>Optical and acoustic alarm message</li> <li>Freely configurable inputs                             <ul style="list-style-type: none"> <li>6 digital inputs with LED status display</li> <li>1 analogue</li> </ul> </li> <li>1 alarm output 12 V</li> <li>Alarm forwarding via SMS to mobile phones</li> <li>For mounting outside the hazardous area</li> <li>Housing: 192 x 150(with cable gland) x 100 mm (WxHxD)</li> <li>Protective doctor: IP54</li> <li>Operating voltage: 230 V/AC 50/60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>All grease separators</li> <li>Grease layer thickness measuring device</li> <li>Pre-tank plants</li> <li>Technical processing systems</li> <li>Quatrix-K backflow preventer type 3F</li> <li>Sinkamat-K (underfloor) duo</li> <li>Muli lifting units</li> <li>Pumping stations</li> <li>Installation sets</li> </ul>	2.0	1	0150.80.14
 <p><b>Connection cable antenna GSM</b></p> <ul style="list-style-type: none"> <li>Length incl. connections: approx. 15 m</li> <li>Cable type: RG58</li> <li>Connections: 1 x SMA plug (SMA/M) and 1 x SMA socket (SMA/F)</li> <li>Only one extension cable may be used per GSM module</li> <li>Usable in temperature range: -20°C to 85°C</li> </ul>	<ul style="list-style-type: none"> <li>GSM - Modul</li> </ul>			0150.83.86
 <p><b>Signalling unit</b></p> <ul style="list-style-type: none"> <li>Self-charging</li> <li>With floating contact</li> <li>Visual and acoustic</li> <li><b>Without</b> contact transmitter</li> <li>For mounting outside the potentially explosive atmosphere</li> <li>Dimensions: 175 x 125 x 75 mm W x H x D</li> <li>Protection type: IP65</li> <li>Operating voltage: 230 V/AC 50/60 Hz</li> <li>Ready to plug in with cable: 2 m</li> </ul>				
	<p>Faecal matter backflow automatic stop Quatrix-K type 3F; All Muli wastewater lifting plants; Upstream tank plant mono/duo; Muli-Max; Sinkamat –K/-KD; Sinkamat-Z; Sinkamat-Z (underfloor);</p> <ul style="list-style-type: none"> <li>Duo</li> </ul> <p>; LipuLift-P</p>	1.4	1	0150.26.73
 <p><b>Signal horn</b></p> <ul style="list-style-type: none"> <li>230V AC</li> <li>Power consumption: 30mA</li> <li>Ø62x85 mm (L/B x T)</li> <li>Protection: IP66</li> <li>95 dB(A)</li> </ul>	<ul style="list-style-type: none"> <li>Signalling unit with voltage-free fault reporting</li> <li>LipuSmart-P</li> <li>Muli-Max with signalling unit</li> <li>LipuLift-P</li> </ul>	0.3	1	0178.61.94

	Description	Used with	Weight [kg]	PU [piece]	Item number
	<b>Heating rod</b> <ul style="list-style-type: none"> <li>■ To liquefy grease layer</li> <li>■ Incl. control</li> <li>■ Electrical connector</li> <li>□ 400 V/50 Hz/6.0 kW</li> </ul>	<ul style="list-style-type: none"> <li>■ Grease separators</li> </ul>	15.0		7300.01.00
	<b>Connection box</b> <ul style="list-style-type: none"> <li>■ For evacuation connection and remote control</li> <li>■ Made from stainless steel, material grade 304</li> <li>■ Fixing: "On wall"</li> <li>■ Dimensions (width x height x depth): 500 x 500 x 160 mm</li> </ul>	<ul style="list-style-type: none"> <li>■ Grease separators</li> <li>■ Starch separators</li> <li>■ LipuLift-P-D/-DA/-DAP</li> </ul>	11.6		7601.80.20
	<b>In-wall frame</b> <ul style="list-style-type: none"> <li>■ Dimensions (width x height x depth): 565 x 565 x 15 mm</li> </ul>	<ul style="list-style-type: none"> <li>■ Connection box</li> <li>□ 7601.80.20</li> <li>■ LipuLift-P-D/-DA/-DAP</li> </ul>	1.2		7601.80.21
	<b>Storz coupling for swinging gas lines</b> <ul style="list-style-type: none"> <li>■ Storz coupling 75B</li> <li>■ For connection of the disposal vehicle pendulum gas line</li> <li>■ For pipe connection Rp 2 1/2" (female thread)</li> </ul>	<ul style="list-style-type: none"> <li>■ For installation in connection box art. no. 7601.80.22</li> </ul>	1.8		0155.32.09
	<b>Connection box</b> <ul style="list-style-type: none"> <li>■ For evacuation connection DN 80</li> <li>■ Made from stainless steel, material grade 304</li> <li>■ "On wall" version</li> <li>■ Door stop</li> <li>□ Choice of left or right</li> <li>□ Lockable door</li> <li>■ Dimensions (width x height x depth): 370 x 330 x 250 mm</li> </ul>	<ul style="list-style-type: none"> <li>■ Grease separators</li> <li>□ LipuMax-P-D/DM/DA</li> <li>□ LipuJet-P-OD/RD/SD/OM/OMP/RM/RMP</li> <li>□ LipuJet-S-OD/RD/SD/OM/OMP/RM/RMP</li> <li>■ Stach seperators FapuMax-P-DA</li> <li>■ Oil separators Coalisator-P</li> <li>■ LipuLift-P-D/-DA/-DAP</li> </ul>	10.4		7601.80.22
	<b>In-wall frame</b> <ul style="list-style-type: none"> <li>■ Stainless steel, material grade 304</li> <li>■ Dimensions (width x height x depth): 421 x 381 x 25 mm</li> </ul>	<ul style="list-style-type: none"> <li>■ Connection box</li> <li>□ 7601.80.22</li> <li>■ LipuLift-P-D/-DA/-DAP</li> </ul>	1.0		7601.80.23
	<b>Connection box</b> <ul style="list-style-type: none"> <li>■ For disposal connection, pendulum gas line (if necessary) and remote control</li> <li>■ From stainless steel, material grade 304</li> <li>■ "Surface mounted" version</li> <li>■ Glass beaded front</li> <li>■ Lockable door, left limit stop</li> <li>■ Dimensions W x H x D: 300 x 725 x 160 mm</li> </ul>	<ul style="list-style-type: none"> <li>■ Grease separator</li> <li>■ Starch separators</li> <li>■ LipuLift-P-D/-DA/-DAP</li> </ul>	10.0		7601.80.24

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<p><b>In-wall frame</b></p> <ul style="list-style-type: none"> <li>■ From stainless steel, material grade 304</li> <li>■ "In-wall" version</li> <li>■ Glass beaded front</li> <li>■ Dimension W x H x D:                             <ul style="list-style-type: none"> <li>□ 405 x 830 x 30 mm</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Connection box                             <ul style="list-style-type: none"> <li>□ 7601.80.24</li> </ul> </li> <li>■ LipuLift-P-D/-DA/-DAP</li> </ul>	2.1		7601.80.25
	<p><b>Coarse trap DN 100</b></p> <ul style="list-style-type: none"> <li>■ For installation in vertical pipes DN 100 going to grease separator</li> <li>■ Round shape with                             <ul style="list-style-type: none"> <li>□ Coupling socket seal (material SBR) on inlet and spigot on outflow</li> <li>□ Basket made from stainless steel, material grade 316 to retain coarse substances</li> <li>□ Odour-proof maintenance opening DN 450</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Grease separator LipuJet-P/LipuSmart-P                             <ul style="list-style-type: none"> <li>□ NS 1 – 4</li> </ul> </li> <li>■ Starch separator Fapujet-P-OAP                             <ul style="list-style-type: none"> <li>□ NS 0.5 – 1</li> </ul> </li> </ul>	9.7		3667.00.04
	<p><b>Coarse trap DN 150</b></p> <ul style="list-style-type: none"> <li>■ For installation in vertical pipes DN 150 going to grease separator</li> <li>■ Round shape with                             <ul style="list-style-type: none"> <li>□ Coupling socket seal (material SBR) on inlet and spigot on outflow</li> <li>□ Basket made from stainless steel, material grade 316 to retain coarse substances</li> <li>□ Odour-proof maintenance opening DN 450</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Grease separator LipuJet-P/LipuSmart-P                             <ul style="list-style-type: none"> <li>□ NS 5.5 – 10</li> </ul> </li> <li>■ Starch separator Fapujet-P-OAP                             <ul style="list-style-type: none"> <li>□ NS 2</li> </ul> </li> </ul>	12.6		3667.00.05
	<p><b>Hand membrane pump 1 1/2"</b></p> <ul style="list-style-type: none"> <li>■ For fixing to wall</li> <li>■ Incl. hose                             <ul style="list-style-type: none"> <li>□ Clear width: 48 x 80 mm</li> </ul> </li> <li>■ Incl. hose clamp                             <ul style="list-style-type: none"> <li>□ Clear width: 50 x 70 mm</li> <li>□ Width: 12 mm</li> <li>□ 2 pcses required</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Wastewater lifting plant</li> </ul>	14.4	1	0175.23.73
	<p><b>Connection ports ventilation</b></p> <ul style="list-style-type: none"> <li>■ Made of PE-HD</li> <li>■ DN70 (OD 75mm)</li> </ul>	<ul style="list-style-type: none"> <li>■ LipuSmart-P</li> </ul>			0155.34.16
	<p><b>Inlet socket DN 50</b></p> <ul style="list-style-type: none"> <li>■ Made of plastic</li> <li>■ For lateral input option</li> <li>■ For fitting on-site</li> </ul>	<ul style="list-style-type: none"> <li>■ Junior basement gully with backflow stop</li> <li>■ Basement gully DN 100</li> <li>■ Sinkamat-K (free-standing)</li> <li>■ LipuSmart-P</li> <li>■ Multi-Mini</li> </ul>	0.1	2	2410.00.04

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<b>Stop valve 1 1/2"</b> ■ For hand membrane pump	■ Wastewater lifting plant	1.0	1	0159.10.12
	<b>Three way valve 1 1/2"</b> ■ For hand membrane pump	■ Wastewater lifting plant	3.3	1	0159.10.14
	<b>Stop valve</b> ■ Made of cast iron ■ Slide plate, spindle made of stainless steel, material grade 304 ■ DN 100 ■ Length (L): 50 mm ■ Spindle path (H1 – H2): 365 – 465 mm ■ Hand wheel diameter: 200 mm ■ Incl. seals and fixing material	■ LipuSmart-P inlet pump unit	15.0		0155.34.18
	<b>Stop valve DN 80</b> ■ Made of cast iron ■ 8 screws and nuts ■ 1 DN 80 seal ■ Length: 180 mm	■ LipuSmart-P ■ Multi-Star MDP1/MWP1 ■ Multi-Star DDP 1/2	19.4	1	0154.51.93
	<b>Stop valve</b> ■ Made of cast iron ■ Penstock plate, spindle made from stainless steel, material grade 304				
	DN 100; Length (L): 50 mm; Spindle travel (H1 – H2): 365 – 465 mm; Manual wheel diameter: 200 mm	Grease separators for free-standing installation; Starch separator for free-standing installation	15.0		7602.00.12
	DN 150; Length (L): 60 mm; Spindle travel (H1 – H2): 478 – 639 mm; Manual wheel diameter: 200 mm	Grease separators for free-standing installation; Starch separator for free-standing installation	29.4		7604.00.12
	<b>Flange connection part</b> ■ Stainless steel, material grade 304 ■ Seal: NBR				
	DN 100; Length (L): 75 mm		6.5		7602.00.13
	DN 150; Length (L): 75 mm		10.0		7604.00.13



	Description	Used with	Weight [kg]	PU [piece]	Item number
	<p><b>Inlet valve DN 100</b></p> <ul style="list-style-type: none"> <li>Made of PVC</li> <li>110 mm push socket on both sides with rim sealing ring</li> <li>Overall dimensions: 176 x 330 mm (L x H)</li> </ul>	<ul style="list-style-type: none"> <li>Wastewater lifting plant</li> <li>Polyethylene grease separator</li> <li>Polyethylene starch separator</li> <li>Upstream tank plant                             <ul style="list-style-type: none"> <li>Typ 2 and 4</li> </ul> </li> <li>Lipumobil-P – Type 0.5</li> </ul>	3.1	1	0175.13.84
	<p><b>Inlet valve DN 150</b></p> <ul style="list-style-type: none"> <li>Made of PVC</li> <li>160 mm push socket on both sides with rim sealing ring</li> <li>Overall dimensions: 226 x 510 mm (L x H)</li> </ul>	<ul style="list-style-type: none"> <li>Wastewater lifting plant</li> <li>Polyethylene grease separator</li> <li>Polyethylene starch separator</li> <li>Upstream tank plant                             <ul style="list-style-type: none"> <li>Type 7 – Type 10</li> </ul> </li> </ul>	7.0	1	0175.13.85
	<p><b>Sealing ring</b></p> <ul style="list-style-type: none"> <li>As additional component for pressure line DN 80</li> <li>Clamping range: 88 - 93 mm</li> </ul>	<ul style="list-style-type: none"> <li>LipuSmart-P</li> <li>Powerlift installation kit DN 100</li> <li>Fäkablock II</li> <li>All Muli wastewater lifting plants</li> </ul>	0.3	1	0150.83.71
	<p><b>LipuSmart App</b></p> <ul style="list-style-type: none"> <li>Benefits for maintenance, monitoring and operation</li> <li>Checklists for setting up the grease separators and lifting system unit</li> <li>Grease separator protocol system</li> <li>Assurance of control settings</li> <li>Connection via Bluetooth interface</li> <li>Operating systems                             <ul style="list-style-type: none"> <li>Android</li> <li>IOS</li> </ul> </li> <li>Download:                             <ul style="list-style-type: none"> <li>Http://aco.me/lipusmartapp</li> <li>QR-code in the data sheet</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Control system for general system                             <ul style="list-style-type: none"> <li>LipuSmart-P-OA</li> <li>LipuSmart-P-OAP</li> </ul> </li> </ul>			Software
	<p><b>Operating Logbook</b></p> <ul style="list-style-type: none"> <li>Contents: Check-list and standard forms to document in-house monitoring, maintenance and disposal relating to the plant as required by DIN 4040-100</li> <li>Format: A4 with double filing rings</li> <li>Size: 60 pages</li> <li>Laid out to cover 5 years</li> </ul>	<ul style="list-style-type: none"> <li>Grease separator                             <ul style="list-style-type: none"> <li>For underground installation</li> <li>For free-standing installation</li> </ul> </li> </ul>	0.3		0150.45.23

You can find further accessories under → <https://www.buildingdrainage.aco/search/?q=3553.86.32>