

# Muli-Nova DDP

## Product information for the product group

### ACO Product benefits

- Tested in accordance with DIN EN 12050-1
- Freely selectable inlets
- Delivery heads of up to 30m possible
- 2 container sizes selectable (430/550l)
- Easy to maintain backflow preventer (patented)

### ■ Scope

- ☐ Multi-dwelling units
- ☐ Office buildings
- ☐ Industrial buildings
- ☐ Behind separators up to NS22,5 - in connection with air bubble injection
- ☐ Salt-laden backwash water from ion exchanger softening plants
- ☐ Wastewater containing chlorine from indoor swimming pools (0.3 – 1.0 mg/l chlorine content)

### ■ Polyethylene tank

- ☐ Bottom outlet/ connection manual membrane pump R 1 1/2'
- ☐ Inspection opening for easy maintenance, diameter: 250 mm
- ☐ Fastening set for buoyancy-proof anchorage
- ☐ DDP 1.x:
  - Horizontal inlet sockets 1x DN100, 1x DN150
  - Vertical inlet sockets: 1x DN100, 3x DN150, 1x DN100 (vent pipes)
- ☐ DDP 2.x:
  - Horizontal inlet sockets 3x DN150
  - Vertical inlet sockets: 1x DN100, 2x DN150, 1x DN200, 1x DN100 (vent pipes)
- ☐ In addition, freely selectable sockets per hole saw + seal

### ■ Discharge line connection

- ☐ Patented flap backflow preventer with lifting screw
- ☐ Drain valve for easier draining
- ☐ Special mounting adapter DN 80 for elastic connection of the discharge line with 108 - 114.3 mm outer pipe diameter (optional 88 - 93 mm)
- ☐ Connecting flange for stop valve DN 80

### ■ 2 pumps

- ☐ 3-phase motor: 400 V, 50 Hz
- ☐ Degree of protection IP 68
- ☐ Blockage-free free flow impeller
- ☐ 10 m connecting cable

### ■ Level switching

- ☐ Pneumatic level switching with 10 m control line
- ☐ Optional: Pressure transducer
- ☐ Optional: Air bubble injection (accessories) for measurement with pilot tube

### ■ Tested in accordance with DIN EN 12050-1

### ■ Approved delivery temperature up to 40 °C (short-term up to max. 65 °C)

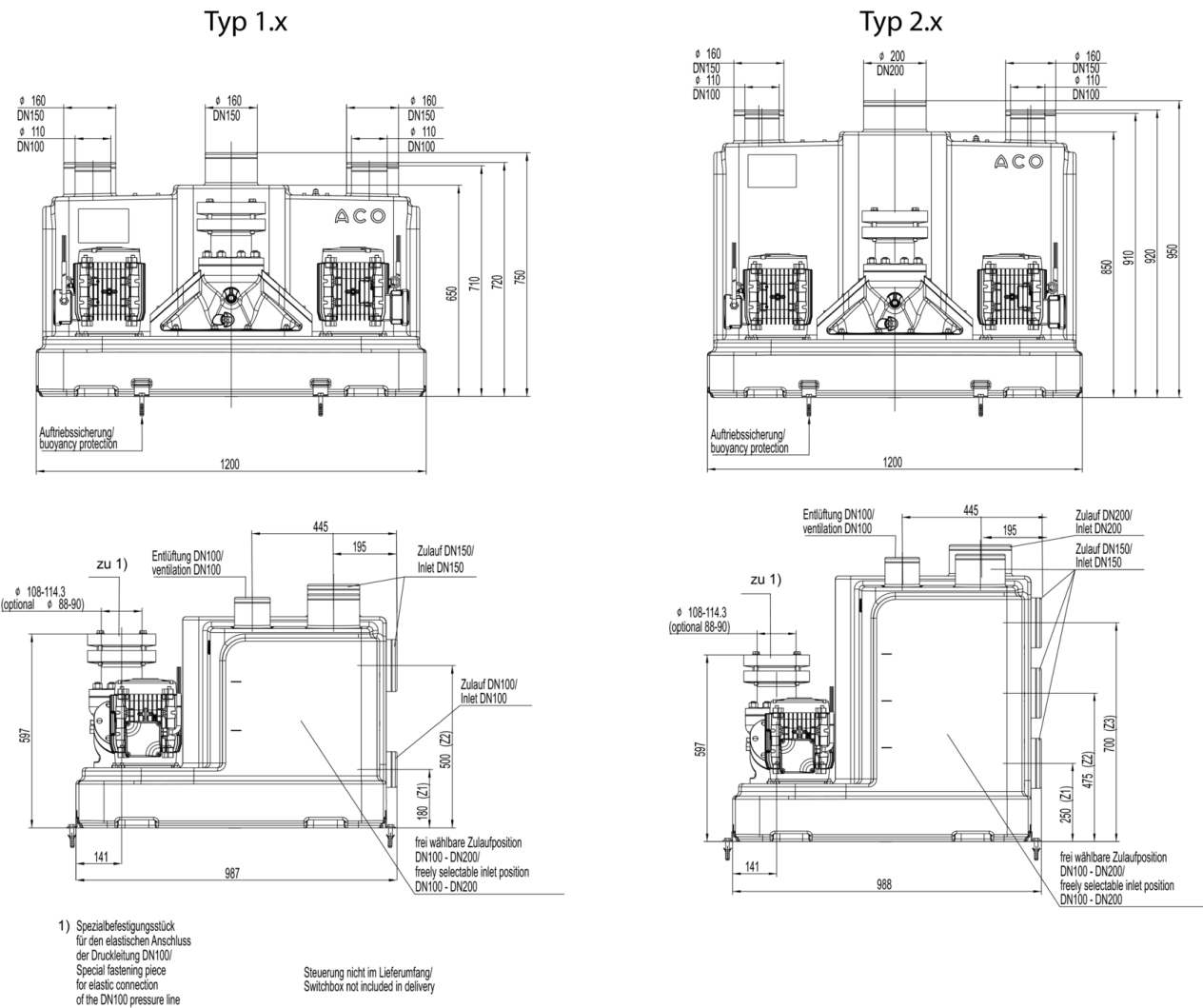
### ■ Control is not included in the scope of supply and must be ordered separately (see accessories)



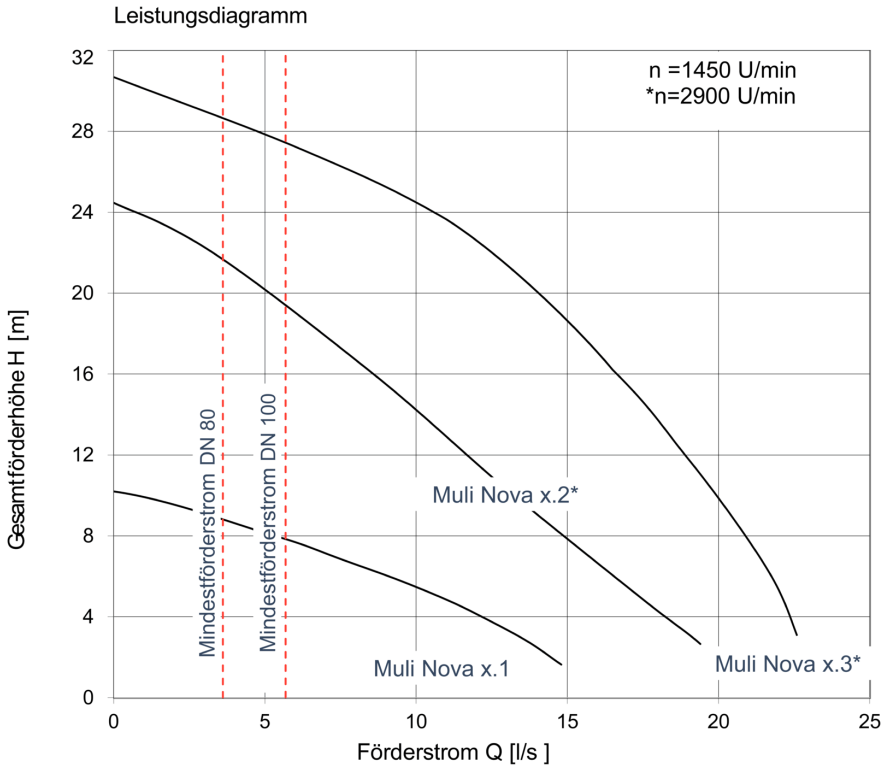
Item Technical Data 3016810

Type	Motor power		Key data			Usable volume			Total volume	Weight
	P1	P2	Power consumption	Voltage	Rev count	Inlet height Z1	Inlet height Z2	Top inlet	[l]	[kg]
	[kW]	[kW]	[A]	[V]	[r/min]	[l]	[l]	[l]		
Muli-Nova DDP 1.3	6.3	5.5	11.2	400	2900	100	275	345	430	130

Dimensions










Performance parameters













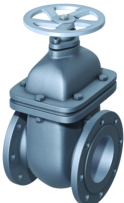


Type	Deliv- ery head	Delivery flow Q with overall delivery head H												Media tem- perature	
		2 m	4 m	6 m	8 m	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	Normal	Maxi- mum
		[m]	[l/s]	[l/s]	[l/s]	[l/s]	[l/s]	[l/s]	[l/s]	[l/s]	[l/s]	[l/s]	[l/s]	[°C]	[°C]
Muli- Nova DDP 1.3	2 – 31	22.3	22.1	21.9	21.0	19.9	19.0	17.8	16.4	15.2	13.9	12.2	10.8	40	60

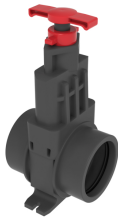

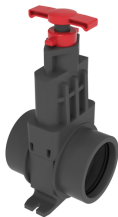

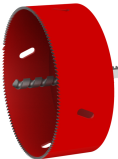
## Accessories




Description	Used with	Weight	PU	Item number
		[kg]	[piece]	
<ul style="list-style-type: none"> <li>■ For pumps up to 5,5 kW</li> <li>■ Plug and use with 1.5 m mains cable</li> <li>■ Operating voltage: 400 V</li> <li>■ Frequency: 50/60 Hz</li> <li>■ Control voltage: 230 V/AC</li> <li>■ Current consumption when idling: max 10 VA</li> <li>■ Temperature range: -20 to +60 °C</li> <li>■ IP 54 protection</li> </ul>		5.4		
 <p><b>Switching device, ACO Multi Control Duo Professional without Dynamic pressure bell</b> With Modbus RTU functionality for connection to the building management system; CEE 16 plug with phase-changing switch;</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Convertible to CEE 32 with item no. 0150.79.75 (5G4 with CEE 32 plug)</li> <li>; Without control cable; Mains-independent alarm via 9V rechargeable battery (85dBA, 5-6h)</li> </ul>	<ul style="list-style-type: none"> <li>Muli-Nova DDP;</li> <li><input type="checkbox"/> Muli-Nova x.1 / x.2</li> <li>; Muli-Max;</li> <li><input type="checkbox"/> Duo</li> <li>; Powerlift-P/Powerlift-P/F-H; Muli-Flex</li> </ul>			3014981
 <p><b>Switching device, ACO Multi Control Duo Professional without Dynamic pressure bell</b> With Modbus RTU functionality for connection to the building management system; CEE 32 plug with phase-changing switch; Without control cable; Mains-independent alarm via 9V rechargeable battery (85dBA, 5-6h)</p>	<ul style="list-style-type: none"> <li>Muli-Nova DDP;</li> <li><input type="checkbox"/> Muli-Nova x.3</li> </ul>			3017236
 <p><b>Switching device, ACO Multi Control Duo Advanced without Dynamic pressure bell</b> CEE 16 plug with phase-changing switch;</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Convertible to CEE 32 with item no. 0150.79.75 (5G4 with CEE 32 plug)</li> <li>; Without control line</li> </ul>	<ul style="list-style-type: none"> <li>Muli-Max;</li> <li><input type="checkbox"/> Duo</li> <li>; Powerlift-P / Powerlift-P/F-H; Muli-Flex;</li> <li>Muli-Nova DDP;</li> <li><input type="checkbox"/> Muli-Nova x.1 / x.2</li> </ul>			0178.63.94
 <p><b>Switching device, ACO Multi Control Duo Advanced without Dynamic pressure bell</b> CEE 32 plug with phase-changing switch; Without control line</p>	<ul style="list-style-type: none"> <li>Muli-Nova DDP;</li> <li><input type="checkbox"/> Muli-Nova x.3</li> </ul>			3017237

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; Powerlift-P / Powerlift-P/F-H; Sinkamat -K/-KD; Sinkamat-Z; Sinkamat-Z (underfloor);</p> <p>□ Duo</p> <p>; LipuLift-P</p>	1.4	1	0150.26.73

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<b>Connection and flood module set</b> <ul style="list-style-type: none"> <li>■ To report a leak caused for example by a pipe bursting</li> <li>■ For electrically conducting liquids</li> <li>■ With volt free contact</li> <li>■ Visible and audible alarms (approx. 80 dB)</li> <li>■ Dimensions (width x height x depth): 160 x 120 x 75 mm</li> <li>■ Protection level: IP 65</li> <li>■ Operating voltage: 230 V/AC 50/60 Hz</li> <li>■ Plug and use: 1.4 m</li> <li>■ Overflow indicator with 10 m cable</li> </ul>	<ul style="list-style-type: none"> <li>■ Triplex-K backflow stops <ul style="list-style-type: none"> <li>□ DN 100 – DN 150</li> </ul> </li> <li>■ Quatrix-K backflow stops</li> <li>■ All wastewater lifting plants</li> <li>■ All separators</li> </ul>	1.1	1	0150.78.97
		<ul style="list-style-type: none"> <li>■ Signalling unit</li> <li>■ Signalling unit with GSM module</li> </ul>	0.2		0150.58.14
	<b>Signal horn</b> <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>■ Pump stations with ACO MultiControl switching device</li> <li>■ Signalling unit with voltage-free fault reporting</li> <li>■ LipuSmart-P</li> <li>■ Multi-Max with signalling unit</li> <li>■ LipuLift-P</li> </ul>	0.3	1	0178.61.94
	<b>Flashing light</b>				
	230V; Power consumption: 40 mA; IP66	Pump stations with ACO MultiControl switching device; Signalling unit with voltage-free fault reporting; LipuSmart-P; Multi-Max with signalling unit; LipuLift-P	1.0	1	3028082
					3031321
	<b>Mounting for level measuring</b> <ul style="list-style-type: none"> <li>■ For the replacement of the pilot tube <ul style="list-style-type: none"> <li>□ e.g. with pressure transducer and float switch</li> </ul> </li> <li>■ Replaces the existing pilot tube</li> </ul>	<ul style="list-style-type: none"> <li>■ Wastewater lifting station <ul style="list-style-type: none"> <li>□ Muli-Nova</li> </ul> </li> </ul>			3018265
	<b>Air bubble injection</b> <ul style="list-style-type: none"> <li>■ To increase operational safety (where floating surfaces are generated e.g. grease separator)</li> <li>■ For pneumatic level switching</li> <li>■ Mini compressor <ul style="list-style-type: none"> <li>□ Connection: 230 V</li> <li>□ Plug and use</li> </ul> </li> <li>■ With T-screw-in connection</li> <li>■ With backflow valve</li> </ul>				
		Multi-Max; Powerlift-P; Muli-Flex	0.6		0150.25.45

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<b>pressure sensor</b> ■ 4–20 mA ■ For secure switching cable lengths > 12 m ■ 0–200 mbar				
	With cable for installation: 20 m	Control ACO Multi-Control Mono/Duo; LipuLift-P/LipuLift-PF; Powerlift-P/F-H; Multi-Flex	2.0		0178.63.88
	Cable for installation: 40 m	Control ACO Multi-Control Mono/Duo; LipuLift-P/LipuLift-PF; Powerlift-P/F-H; Multi-Flex	3.4		0178.63.87
	<b>Float switch</b> ■ Housing: PRE-ELEC PP ■ Degree of protection: IP68 ■ Switch voltage: 4-40 V ■ Switch current: 1-100 mA ■ Connection cable: 10m ■ Switch inclination: 10° ■ Protection class: II 1G Ex ia IIC T6 Ga	■ For faecal and non-faecal wastewater ■ MultiControl controls as float switches ■ MultiControl controls as additional High alarm float			0159.12.45
	<b>Safety barrier</b> ■ To separate Ex-risk and secure areas ■ Incl. housing	■ Pressure pick-off ■ Float switch with ATEX-certificate			0178.63.89
			0.5		
	<b>Sealing ring</b> ■ As additional component for pressure line DN 80 ■ Clamping range: 83 - 93 mm	■ LipuSmart-P ■ Powerlift installation kit DN 100 ■ Fäkablock II ■ All Muli wastewater lifting plants	0.3	1	0150.83.71
	<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>Inlet valve DN 100</b> ■ Made out of PVC ■ Spigot Ø110 on both sides for sleeveless pipe systems made of cast iron or plastic ■ Total dimensions: 176 x 360 mm (L x H)	■ Grease separator made of polyethylene ■ Starch separator made of polyethylene ■ Upstream tank systems type 2 and 4 ■ LipuMobil – type 0.5	5.9		0175.31.87
	<b>Inlet valve DN 100</b> ■ Made of PVC ■ 110 mm push socket on both sides with rim sealing ring ■ Overall dimensions: 176 x 330 mm (L x H)	■ Wastewater lifting plant ■ Polyethylene grease separator ■ Polyethylene starch separator ■ Upstream tank plant □ Typ 2 and 4 ■ LipuMobil-P – Type 0.5	3.1	1	0175.13.84

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<b>Inlet valve DN 150</b> ■ Made of PVC ■ 160 mm push socket on both sides with rim sealing ring ■ Overall dimensions: 226 x 510 mm (L x H)	■ Wastewater lifting plant ■ Polyethylene grease separator ■ Polyethylene starch separator ■ Upstream tank plant <input type="checkbox"/> Type 7 – Type 10	7.0	1	0175.13.85
	<b>Inlet valve DN 150</b> ■ Made out of PVC ■ Spigot Ø110 on both sides for sleeveless pipe systems made of cast iron or plastic ■ Total dimensions: 226 x 420 mm (L x H)	■ Grease separator made of polyethylene ■ Starch separator made of polyethylene ■ Upstream tank systems type 7 to 10	10.2		0175.31.88
	<b>Inlet valve DN 200</b> ■ Made out of PVC ■ Push socket 200 mm with lip sealing ring on both sides ■ Total dimensions: 264 x 637 mm (L x H)	■ Wastewater lifting plant <input type="checkbox"/> Multi-Star DDP 1/2 ■ Grease separator made of polyethylene <input type="checkbox"/> From NS 15	8.4	1	0170.20.83
		■ Wastewater lifting plant <input type="checkbox"/> Multi-Nova DDP			
	<b>Inlet seal DN 50</b> ACO inlet seal DN 50; For insertion of an additional inlet; For pipe with OD 50 mm; Drilling diameter 59 mm				3013641
	<b>Inlet seal DN 70</b> ACO inlet seal DN 70; For insertion of an additional inlet; For pipe with OD 75mm; Drilling diameter 86 mm				3014479
	<b>Inlet seal DN 100</b> ACO inlet seal DN 100; For insertion of an additional inlet; For pipe with OD 110mm; Drilling diameter 125 mm				3014478
	<b>Inlet seal DN 150</b> ACO inlet seal DN 150; For insertion of an additional inlet; For pipe with OD 160mm; Drilling diameter 175 mm				3014477
	<b>Inlet seal DN 200</b> ACO inlet seal DN 200; For insertion of an additional inlet; For pipe with OD 200mm; Drilling diameter 215 mm				3014476
		■ Wastewater lifting station <input type="checkbox"/> Multi-Nova			
	<b>Circular hole saw DN100 (110mm)</b> Diameter: 125mm; For inlet seal DN100 (110mm); <input type="checkbox"/> Item no. 3014478				3017098

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<b>Circular hole saw DN150 (160mm)</b> Diameter: 175mm; For inlet seal DN150 (160mm); <input type="checkbox"/> Item no. 3014477				3017099
	<b>Hand membrane pump 1 1/2"</b> <input checked="" type="checkbox"/> For fixing to wall <input checked="" type="checkbox"/> Incl. hose <input type="checkbox"/> Clear width: 48 x 80 mm <input checked="" type="checkbox"/> Incl. hose clamp <input type="checkbox"/> Clear width: 50 x 70 mm <input type="checkbox"/> Width: 12 mm <input type="checkbox"/> 2 pcs required	<input checked="" type="checkbox"/> Wastewater lifting plant	14.4	1	0175.23.73
	<b>Three way valve 1 1/2"</b> <input checked="" type="checkbox"/> For hand membrane pump	<input checked="" type="checkbox"/> Wastewater lifting plant	3.3	1	0159.10.14
	<b>Stop valve 1 1/2"</b> <input checked="" type="checkbox"/> For hand membrane pump	<input checked="" type="checkbox"/> Wastewater lifting plant	1.0	1	0159.10.12

You can find further accessories under → <https://www.buildingdrainage.aco/search/?q=3016810>