

# Muli-Flex – free standing installation

## Product information for the product group

### ACO Product benefits

- Tested according to EN 12050-1
- Depending on the pumps, it can be used for waste water with or without faeces
- Automatic pump coupling for tool-free assembly and disassembly
- Total tank volume: 380 liters

- Application:
  - Multiple family houses
  - Office buildings
  - Industrial buildings
  - Washrooms
  - Parking garages
  - Technical rooms
- With one or two pumps
- For installation in the base plate
- Tank from polyethylene
- Large inspection opening for easy maintenance: Ø 480 mm
- Tank dimensions (DxH): Ø800 x 1000 mm
- Pump traverse with double special ball non-return valve, tool-free disassembly/assembly of the pump via automatic surface-water coupling
- Connection inlet piping (minimum operating volume: 30 liters, maximum operation volume: 170 liters, inlet heights measured from bottom of the tank to the lower edge of the inlet pipe):
  - 1 x Inlet DN 100 Forsheda, inlet height 125 mm, operating volume = 30 l
  - 1 x Inlet DN 100 Forsheda, inlet height 195 mm, operating volume = 50 l
  - 1 x Inlet DN 100 spigot, inlet height 345 mm, operating volume = 100 l
  - 1 x Inlet DN 150 spigot, inlet height 370 mm, operating volume = 105 l
  - 2 x Inlet DN 100 spigot, inlet height 395 mm, operating volume = 115 l
  - 1 x Inlet DN 100 Forsheda, inlet height 545 mm, operating volume = 170 l

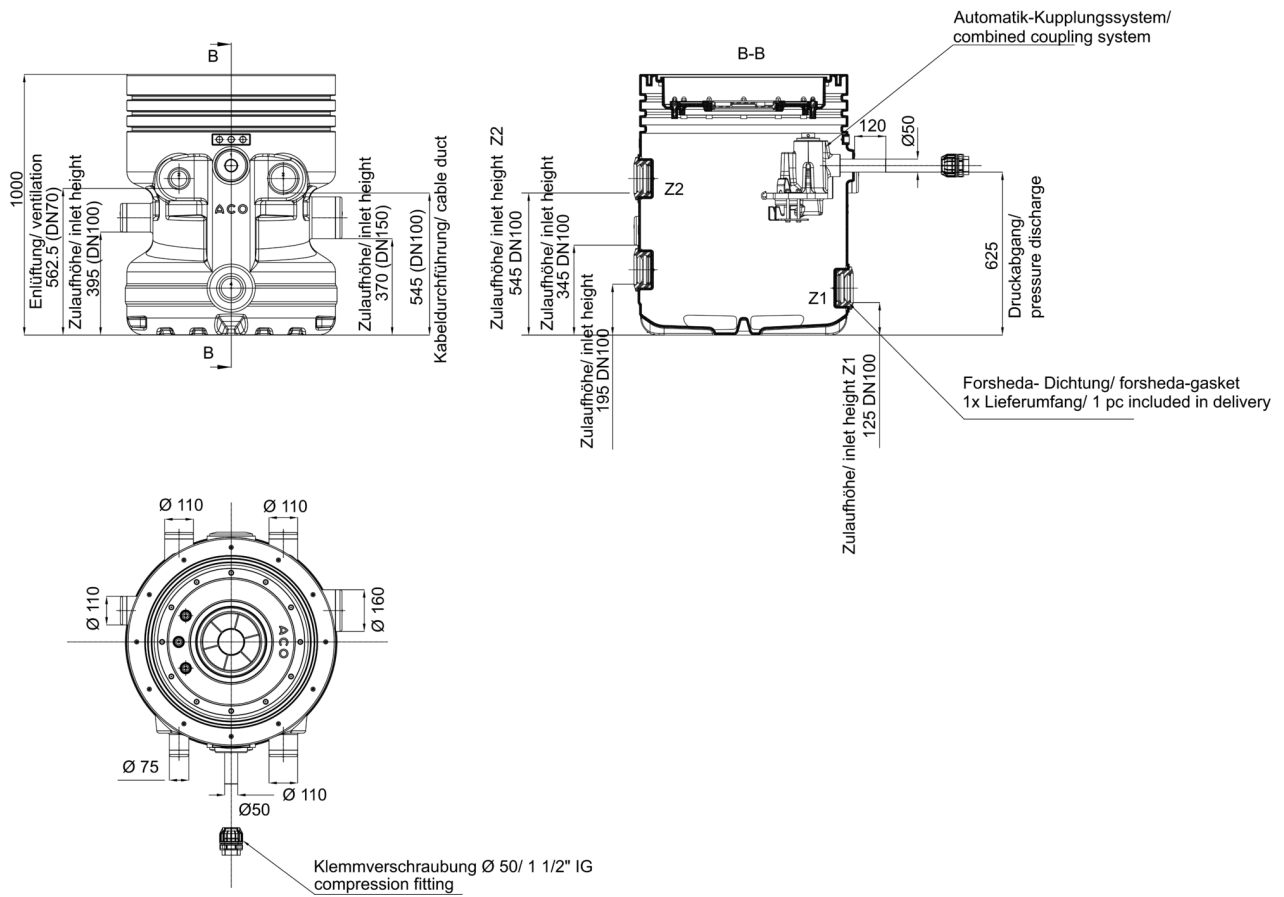
- Pressure pipe connection:
  - Pressure pipe outlet PE-HD: spigot DN 50 (Ø50 mm)
  - Compression fitting with adapter 1½" inner thread included
- Ventilation connection:
  - Spigot DN 70 (OD 75 mm) suitable for fitting plastic or cast iron pipes
  - Connecting height: 437,5 mm (measured from the upper edge of the floor to the lower edge of the inlet pipe)
- Additional connections:
  - Cable duct DN 100 (OD 110 mm), 545 mm (measured from the bottom of the tank to the lower edge of the inlet pipe)
  - Manual diaphragm pump R 1 ½"
  - Handmembranpumpe R 1 ½"
  - Bottom outlet for service/emergency discharge: 1"
- Total height: 1,000 mm



**Item Technical Data 1204.10.00**

Type	Medium	Version	Usable volume		Total volume	Weight
			Inlet height Z 1	Inlet height Z 2		
			[l]	[l]		
Muli-Flex	Waste water containing faeces	Mono/Duo	30	170	380	54

**Dimensions**









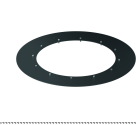




**Performance parameters**






**Type**






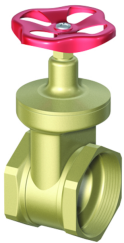


Muli-Flex

**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 incl. 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> </ul>	<p>Muli-Max;</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Duo-plants</li> </ul>		0178.63.80
	<p><b>Switching device, ACO Multi Control Duo Professional incl. 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> </ul>	<p>Muli-Max;</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Duo-plants</li> </ul>		0178.64.39
	<p><b>Switching device, ACO Multi Control Duo 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> </ul>	<p>Muli-Max;</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Duo</li> </ul>		0178.63.94
	<p><b>Pressure pick-up</b></p> <ul style="list-style-type: none"> <li>■ 4–20 mA</li> <li>■ For secure switching cable lengths &gt; 12 m</li> <li>■ 0–200 mbar</li> </ul>			
<p>With cable for installation: 20 m</p>	<p>Control ACO Multi-Control Mono/Duo; LipuLift-P/LipuLift-PF; Muli-Flex</p>	2.0		0178.63.88
	<p><b>Safety barrier</b></p> <ul style="list-style-type: none"> <li>■ To separate Ex-risk and secure areas</li> <li>■ Incl. housing</li> </ul>	<ul style="list-style-type: none"> <li>■ Pressure pick-off</li> <li>■ Float switch with ATEX-certificate</li> </ul>		
		0.5		0178.63.89

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<p><b>Air bubble injection</b></p> <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><input type="checkbox"/> Connection: 230 V</li> <li><input type="checkbox"/> Plug and use</li> </ul> </li> <li>■ With T-screw-in connection</li> <li>■ With backflow valve</li> </ul>				
		Muli-Max; Powerlift-P; Muli-Flex	0.6		0150.25.45
	<p><b>Adhesive flange for Muli-Flex</b></p> <ul style="list-style-type: none"> <li>■ For the connection of an on-site sealing membrane/vapour barrier</li> <li>■ Delivery incl. seal and fixing material</li> </ul>				620520
	<p><b>Sealing flange</b></p> <ul style="list-style-type: none"> <li>■ For installation in WU concrete (floor slab)</li> <li>■ Maximum groundwater level: 2 m</li> </ul>		5.6		620521
	<p><b>Delivery line set, AD 63 (ID 55)</b></p> <ul style="list-style-type: none"> <li>■ 7.5 m pressure line hose AD 63</li> <li>■ Glued transition sleeve 63/55- 1 1/2" AD</li> <li>■ Max. Pressure: 6 bar</li> <li>■ Temperature range: -10 to +55°C</li> </ul>	■ Muli-Flex			620522
	<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><input type="checkbox"/> 6 digital inputs with LED status display</li> <li><input type="checkbox"/> 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>	■ GSM - Modul			0150.83.86

Description	Used with	Weight	PU	Item number
		[kg]	[piece]	
 <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);  <input type="checkbox"/> Duo                      ; LipuLift-P</p>	1.4	1	0150.26.73
				
<p><b>Drill connection seal DN 110</b></p>		0.4		0150.27.07
 <p><b>Connection and flood module set</b></p> <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><input type="checkbox"/> 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
 <p><b>Float switch</b></p> <ul style="list-style-type: none"> <li>■ Housing: PRE-ELEC PP</li> <li>■ Degree of protection: IP68</li> <li>■ Switch voltage: 4-40 V</li> <li>■ Switch current: 1-100 mA</li> <li>■ Connection cable: 10m</li> <li>■ Switch inclination: 10°</li> <li>■ Protection class: II 1G Ex ia IIC T6 Ga</li> </ul>	<ul style="list-style-type: none"> <li>■ For faecal and non-faecal wastewater</li> <li>■ MultiControl controls as float switches</li> <li>■ MultiControl controls as additional High alarm float</li> </ul>			0159.12.45
 <p><b>Floater</b></p> <ul style="list-style-type: none"> <li>■ With 10 m cable</li> <li>■ For separate warning system/volt free fault reporting level</li> </ul>	<ul style="list-style-type: none"> <li>■ Signalling unit 0150.26.73</li> </ul>	0.5	1	0159.12.46

Description		Used with	Weight [kg]	PU [piece]	Item number
	<b>Signal horn</b> <ul style="list-style-type: none"> <li>■ Operating voltage: 12V DC</li> <li>■ Power consumption: 30 mA</li> <li>■ 62 x 62 x 85 mm (LxWxD)</li> <li>■ Degree of protection: IP66</li> <li>■ Noise level: 95 dB(A)</li> </ul>	<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>■ 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: 70 mA	Signalling unit with voltage-free fault reporting; LipuSmart-P; Multi-Max with signalling unit; LipuLift-P	0.5	1	0178.62.08
					0150.76.25
	<b>Hand membrane pump 1 1/2"</b> <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 pcs required</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Wastewater lifting plant</li> </ul>	14.4	1	0175.23.73
	<b>Three way valve 1 1/2"</b> <ul style="list-style-type: none"> <li>■ For hand membrane pump</li> </ul>	<ul style="list-style-type: none"> <li>■ Wastewater lifting plant</li> </ul>	3.3	1	0159.10.14
	<b>Stop valve 1 1/2"</b> <ul style="list-style-type: none"> <li>■ For hand membrane pump</li> </ul>	<ul style="list-style-type: none"> <li>■ Wastewater lifting plant</li> </ul>	1.0	1	0159.10.12
	<b>Compression fitting 50 x 63 mm</b>	<ul style="list-style-type: none"> <li>■ Multi-Flex</li> </ul>	0.8		0178.14.45
	<b>siphon</b>				
			0.7		0174.02.29

Description	Used with	Weight	PU	Item number
		[kg]	[piece]	
		1.3		0174.02.30

You can find further accessories under → <https://www.buildingdrainage.aco/search/?q=1204.10.00>