

# Muli-Star DDP

## Product information for the product group

### ACO Product benefits

- Low weight
- Different inlet heights
- CFD-optimised impeller
- High chemical resistance of all components
- Suitable for use downstream of grease separators
- Fast installation
- Ready to connect
- High usable volume – up to 185 l
- Adapted to door dimension: 780 mm

### ■ Areas of use

- ☐ Downstream of grease separators up to NS 15 – in conjunction with air bubble injection
- ☐ Multiple dwelling units
- ☐ Office buildings, hotels
- ☐ Hospitals

### ■ Tank made of polyethylene

- ☐ Bottom outlet R 1"
- ☐ Inspection opening for easy maintenance, diameter: 130 mm (DDP1), 130 mm and 250 mm (DDP2)
- ☐ Fixing set for buoyancy-proof anchorage
- ☐ Connection for manual diaphragm pump DN 50
- ☐ 2 horizontal inlet sockets, DN 150
- ☐ 2 horizontal inlet sockets, DN 150/DN 100
- ☐ 1 vertical inlet sockets DN 200/DN 150
- ☐ 1 vertical inlet sockets DN 100/DN 70 - 1 ventilation socket

### ■ Delivery line connection

- ☐ Special backflow valve with ball in the housing
- ☐ Y-branch pipe with vent and immobilising screw
- ☐ Special adapter DN 80 for elastic connection of the delivery line with 108 – 114.3 mm outside pipe diameter (optional 88 – 93 mm)
- ☐ Connecting flange for stop valve DN 80 PN 16

### ■ 2 pump units

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

### ■ Level switching

- ☐ Pneumatic level switching with 10 m control cable
- ☐ Optionally with air bubble injection (accessory)

### ■ Control

- ☐ Degree of protection IP 54
- ☐ 1.5 m cable and CEE plug (16A) – DDP x.1
- ☐ 1.5 m cable and CEE plug (32A) – DDP x.2
- ☐ Isolated group alarm and operation signal

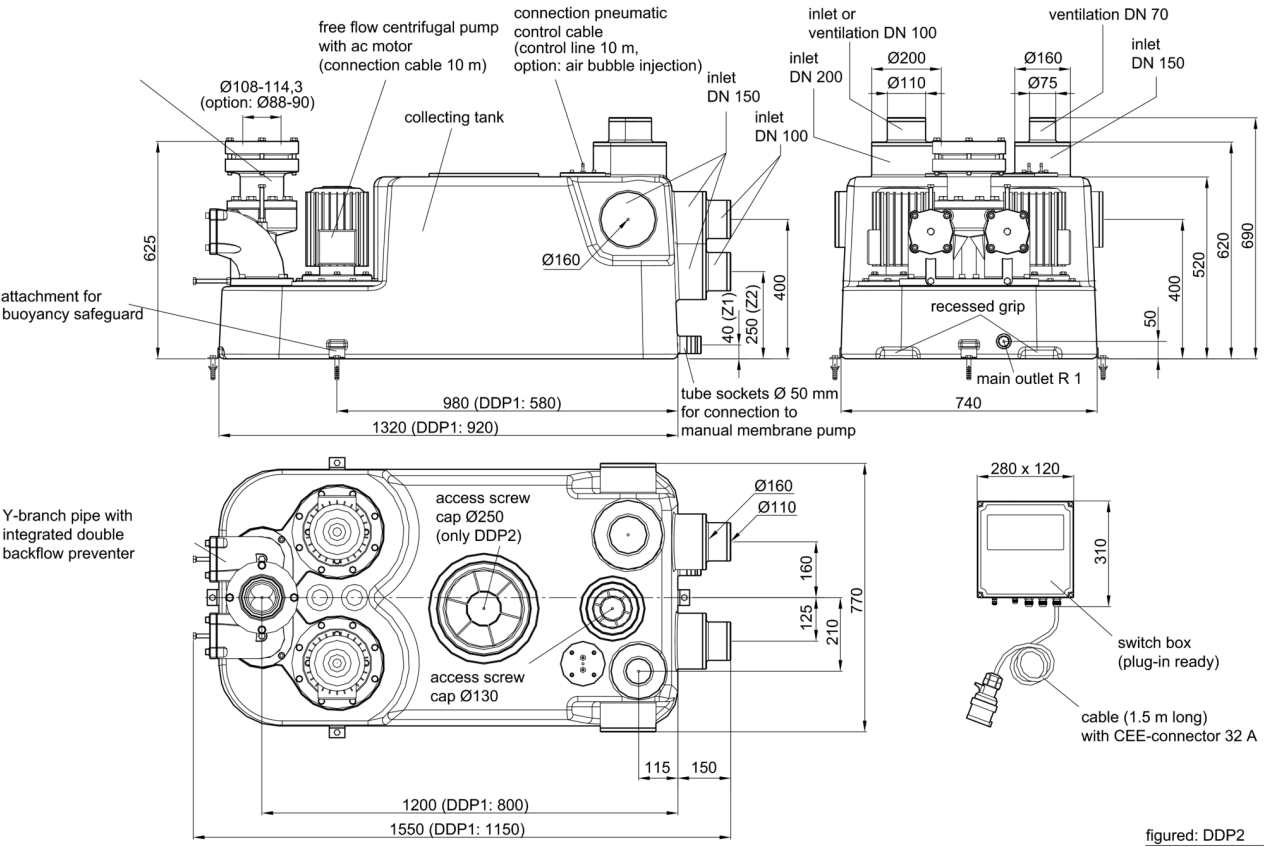
### ■ Tested to EN 12050-1



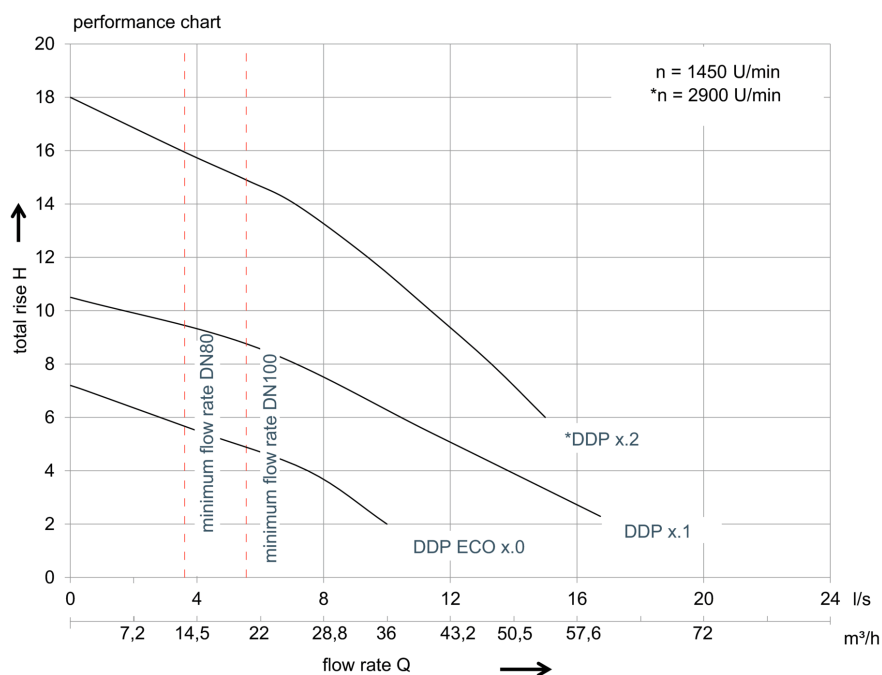
Item Technical Data 1202.00.04

Type	Motor power		Key data			Parti- cal size	Usable volume			Total volume	Weight
	P1	P2	Pow- er con- sumption	Voltage	Rev count		Inlet height Z1	Inlet height Z2	Top inlet		
Muli- Star DDP 2.1	1.83	1.5	5	400	1400	65	95	185	185	300	107

Dimensions












Performance parameters












Type	Delivery head	Delivery flow Q with overall delivery head H				Media temperature	
		4 m	6 m	8 m	10 m	Normal	Maximum
	[m]	[l/s]	[l/s]	[l/s]	[l/s]	[°C]	[°C]
Muli-Star DDP 2.1	4 – 9.5	14.44	11.0	7.5	1.5	40	65

## Accessories

Description	Used with	Weight	PU	Item number
		[kg]	[piece]	
<b>Message system with GSM module</b> <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
<b>Connection cable antenna GSM</b> <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
<b>Signalling unit</b> <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> 				
	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); <input type="checkbox"/> Duo ; LipuLift-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</li> <li>□ DN 100 – DN 150</li> <li>■ Quatrix-K backflow stops</li> <li>■ All wastewater lifting plants</li> <li>■ All separators</li> </ul>	1.1	1	0150.78.97
	<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>■ 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>Air bubble injection</b>				
	<ul style="list-style-type: none"> <li>■ For retro-fitting on Multi-Mini and Multi-Star DDP wastewater lifting plants</li> <li>■ With compressor and connectors</li> <li>■ To increase operational safety</li> <li>■ To deal with generation of floating layers (wastewater containing grease)</li> </ul>	<ul style="list-style-type: none"> <li>■ Multi-Star DDP</li> <li>■ Multi-Mini</li> </ul>	1.9		0154.81.27
	<b>Stop valve DN 80</b>				
	<ul style="list-style-type: none"> <li>■ Made of cast iron</li> <li>■ 8 screws and nuts</li> <li>■ 1 DN 80 seal</li> <li>■ Length: 180 mm</li> </ul>	<ul style="list-style-type: none"> <li>■ LipuSmart-P</li> <li>■ Multi-Star MDP1/MWP1</li> <li>■ Multi-Star DDP 1/2</li> </ul>	19.4	1	0154.51.93

	Description	Used with	Weight	PU	Item number
			[kg]	[piece]	
	<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>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
	<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 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 □ Type 7 – Type 10	7.0	1	0175.13.85
	<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 □ Muli-Star DDP 1/2 ■ Grease separator made of polyethylene □ From NS 15	8.4	1	0170.20.83
	<b>Hand membrane pump 1 1/2"</b> ■ For fixing to wall ■ Incl. hose □ Clear width: 48 x 80 mm ■ Incl. hose clamp □ Clear width: 50 x 70 mm □ Width: 12 mm □ 2 pcs required	■ Wastewater lifting plant	14.4	1	0175.23.73
	<b>Three way valve 1 1/2"</b> ■ For hand membrane pump	■ Wastewater lifting plant	3.3	1	0159.10.14

Description		Used with	Weight [kg]	PU [piece]	Item number
	<b>Stop valve 1 1/2"</b>				
	■ For hand membrane pump	■ Wastewater lifting plant	1.0	1	0159.10.12

You can find further accessories under → <https://www.buildingdrainage.aco/search/?q=1202.00.04>