

MD.12.1.4 1x230V 10M

Grundfos pump 97901096



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<https://www.lenntech.com/grundfos/MULDOUB/97901096/MD-12-1-4.html>

info@lenntech.com

tel. +31 152 610 900

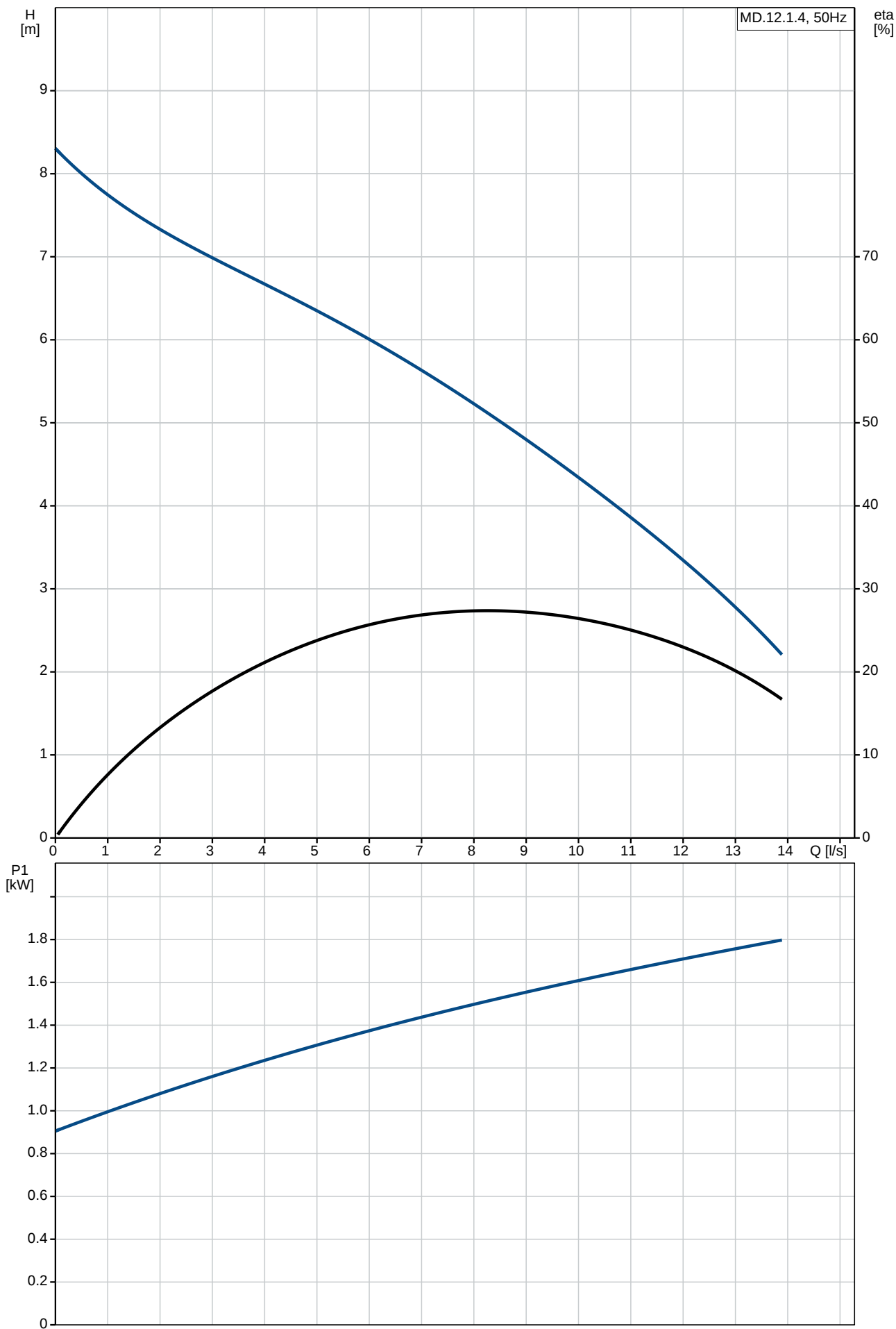
fax. +31 152 616 289

Position	Qty.	Description
	1	MD.12.1.4  Note! Product picture may differ from actual product Product No.: On request Supplied as complete unit ready for installation, the Multilift consist of a fully integrated collecting tank with two pumps and submersible motors, non-return valve with integrated Y-branch pipe, discharge adapter with flexible connection piece DN100 mounted on the collecting tank and a pre-wired Controller incl. a level sensor. The fully integrated collecting tank has all necessary ports for the connection of inlet pipe, discharge pipe, vent pipe and a manually operated diaphragm pump (accessory). The collecting tank contains 8 inlet sockets around it's shape. The back inlet DN100 is placed on a patented inlet disk to connect all inlet pipe levels (centre) between 180 and 315mm stepless. DN100 and DN50 inlet sockets on each side. 2 x DN150, DN50 sockets on the top of the tank. Multilift corrosion free polyethylen collecting tanks are gas- and odour-proof as well as watertight , reduction of residual water and less sedimentation by chamfered bottom design. Pumps with Vortex impeller and a maintenance free submersible motors, oil chamber with physiological harmless oil filling between two shaft seals. Direction of rotation can be observed from outside over the shaft below the eye bolt. An LC221 controller with microprocessor is equipped with display for full monitoring possibilities. The pump and sensor are connected to the controller with 4m or 10m cable and tube length. The power supply cable is 1,5m with plug (incl. phase inverter for 3 phase motor) Contactless, piezo resistive pressure sensor pluggable inside the cabinet, monitored by controller, accurate to the millimetre shown on display. Blockage free pressure tube inside the tank without movable parts inside wastewater. The controller offer thermal motor protection and monitoring of pump operation. The thermal motor protection consists of thermal switches in the winding. Controller functions: • on/off, regular and failure changeover of two wastewater pumps based on a continuous signal from a piezo-resistive sensor • motor protection via motor-protective circuit breaker and/or current measurement as well as connection of thermal switches. • dry running motor protection via run-time limitation with a following emergency operation • 24h automatic test runs during long periods of inactivity • setting of delay times: - stopping delay (time from the stop level is reached till the pumped is stopped) - starting delay (time from the start level is reached till the pumped is started) - alarm delay (time from a fault appears till an alarm is indicated) to prevents short-time high-level alarm in case of temporary high inflow to the tank. • automatic current measurement for alarm indications

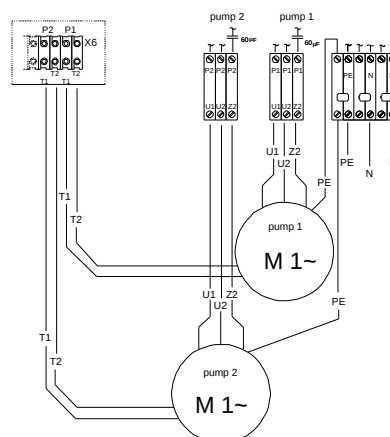
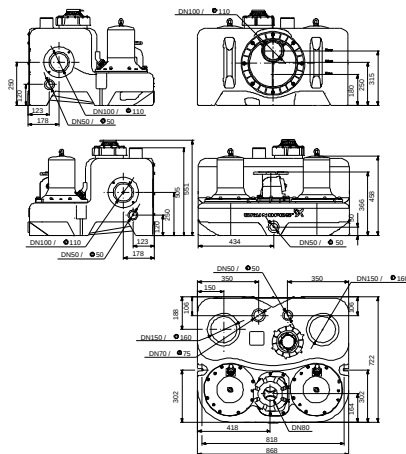
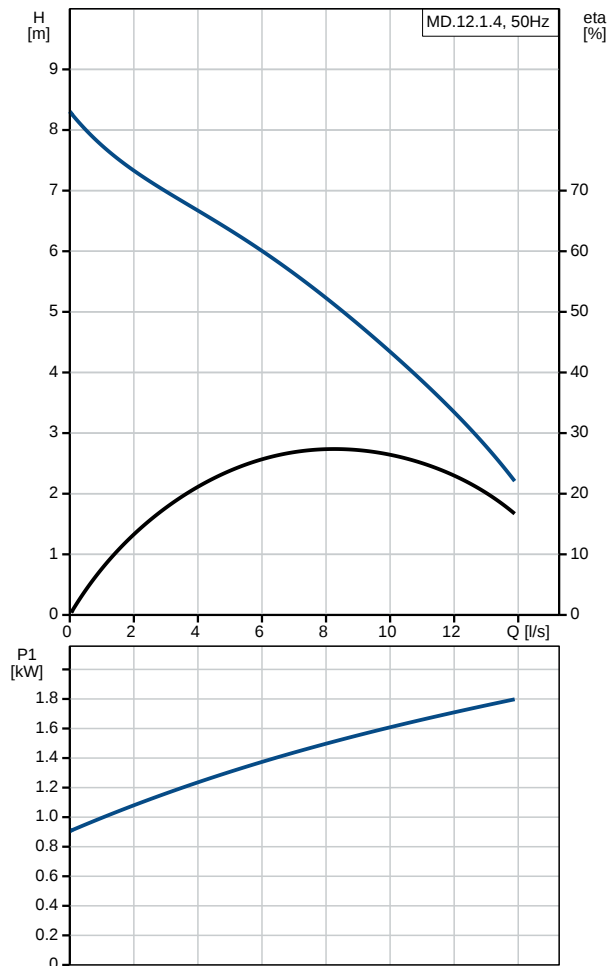
Position	Qty.	Description
		• operating indication of: - operating mode (auto, manual) - operating hours - impulses (number of starts) - highest measured motor current • alarm indication of: - pump status (running, fault) - phase-sequence fault and missing phase - thermal-switch failure - high-water alarm - time for service/maintenance (selectable). • selection of automatic alarm resetting • fault log of up to 20 alarms • selection between different start levels • selection of connected sensor type • calibration of sensor (preset) • selection of maintenance interval (0, 3, 6 or 12 months). As standard, the LC 221 has 6 potential-free outputs for: – pump running – pump failure – high water-level alarm – common fault. 6 digital inputs for the following functions: – connecting a pressure sensor board (pre-assembled) – connecting an analogue sensor (4-20mA or 0-5V) – connecting up to four level switches or pressure switches instead of analogue sensor – connecting a separate level switch to be used for flood detection outside the Multilift. Lifting stations are often installed in a sump inside the basement - the lowest point in the building. In case of e.g. groundwater inflow or water pipe burst, an alarm will be indicated by the controller. – connecting an external alarm reset – connecting the thermal switch of the motor. The Multilift range is designed due to the standard EN12050-1, approved and monitored by external institute LGA. Further approvals are VDE, GHOST, CB, EMV Controls: Type of control box: LC221.2 Liquid: Liquid temperature range: 0 °C .. 40 °C Density: 998.2 kg/m³ Technical: Type of impeller: VORTEX Maximum particle size: 50 mm Approvals on nameplate: EN 12050-1 Valve type: FLAP VALVE Materials: Impeller: LURANYL Tank: LDPE Gasket: NBR Installation: Pump outlet: 80 Electrical data: Power input - P1: 2 x 1.9 kW Rated power - P2: 2 x 1.4 kW Mains frequency: 50 Hz Rated voltage: 1 x 230 V

Position	Qty.	Description
		Voltage tolerance: +10/-14 % Max starts per. hour: 60 Rated current: 2 X 9,0 A Cos phi - power factor: 0.93 Rated speed: 1430 rpm Motor efficiency at full load: 71.4 % Capacitor size - run: 60 µF Number of poles: 4 Start. method: direct-on-line Enclosure class (IEC 34-5): IP68 Insulation class (IEC 85): F Type of cable plug: CEE 2P+PE Mains cable: 1.5 m Tank: Total volume of tank(s): 130 l Total effective volume of collecting tank at 180 mm inlet: 49 l Total effective volume of collecting tank at 250 mm inlet: 69 l Total effective volume of collecting tank at 315 mm inlet: 86 l Others: Net weight: 119 kg

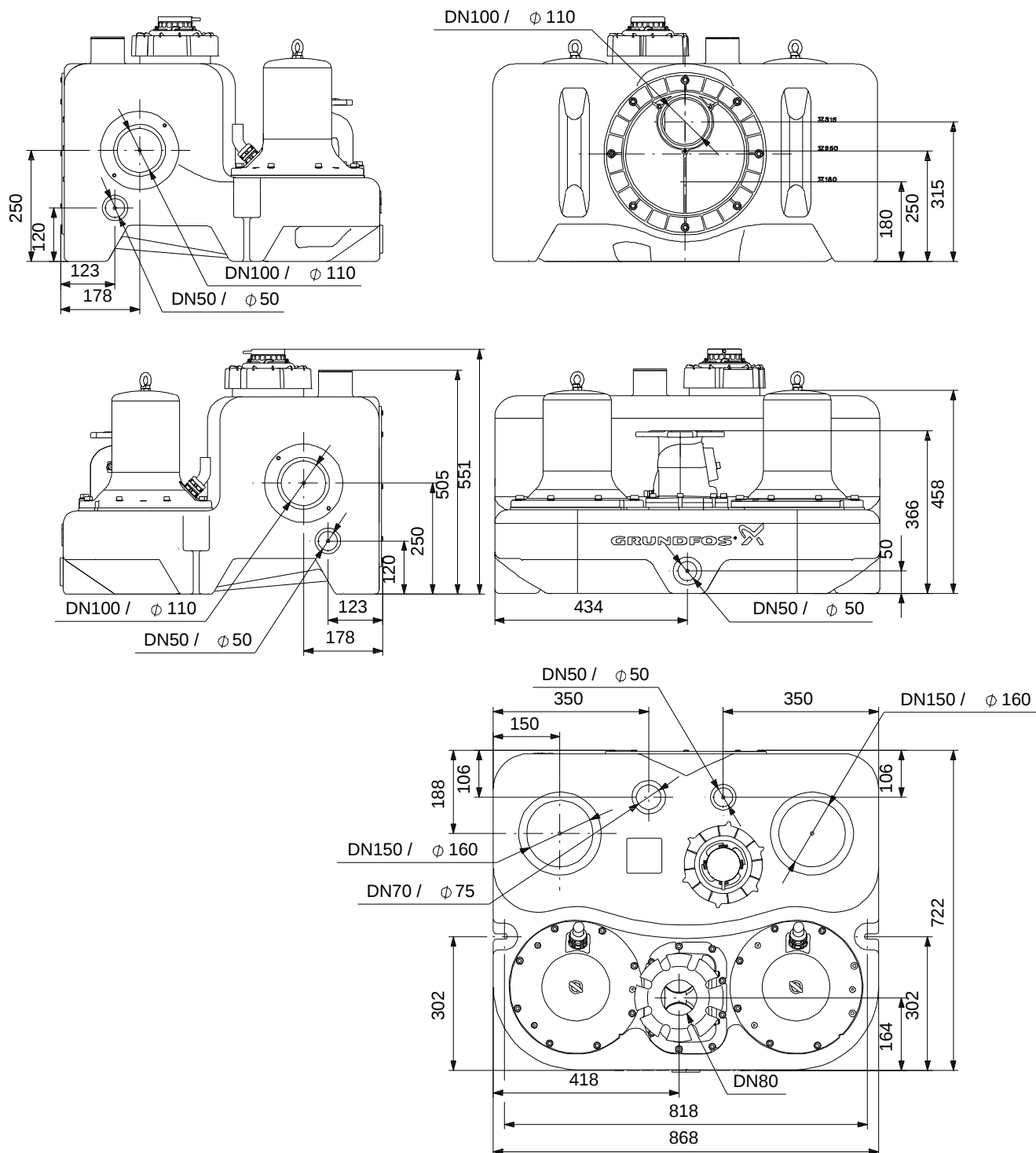
On request MD.12.1.4 50 Hz



Description	Value
General information:	
Product name:	MD.12.1.4
Product No:	On request
EAN number:	On request
Technical:	
Max flow:	13.9 l/s
Head max:	8.3 m
Type of impeller:	VORTEX
Maximum particle size:	50 mm
Approvals on nameplate:	EN 12050-1
Valve type:	FLAP VALVE
Materials:	
Impeller:	LURANYL
Tank:	LDPE
Gasket:	NBR
Installation:	
Pump outlet:	80
Liquid:	
Liquid temperature range:	0 °C .. 40 °C
Density:	998.2 kg/m ³
Electrical data:	
Power input - P1:	2 x 1.9 kW
Rated power - P2:	2 x 1.4 kW
Mains frequency:	50 Hz
Rated voltage:	1 x 230 V
Voltage tolerance:	+10/-14 %
Max starts per. hour:	60
Rated current:	2 X 9,0 A
Cos phi - power factor:	0.93
Rated speed:	1430 rpm
Motor efficiency at full load:	71.4 %
Capacitor size - run:	60 µF
Number of poles:	4
Start. method:	direct-on-line
Enclosure class (IEC 34-5):	IP68
Insulation class (IEC 85):	F
Motor protec:	BIMETAL THERMAL SWITCH
Thermal protec:	BIMETAL THERMAL SWITCH
Motor cable:	10 m
Cable type:	H07 RN-F
Type of cable plug:	CEE 2P+PE
Mains cable:	1.5 m
Cable size:	4X1,5+2X1
Mains cable:	H05 VV-F
Controls:	
Type of control box:	LC221.2
Operation mode:	S3-50%,1MIN
Tank:	
Total volume of tank(s):	130 l
Total effective volume of collecting tank at 180 mm inlet:	49 l
Total effective volume of collecting tank at 250 mm inlet:	69 l
Total effective volume of collecting tank at 315 mm inlet:	86 l
Others:	
Net weight:	119 kg



On request MD.12.1.4 50 Hz



Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

Exploded view



Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Disclaimer: The information about the Grundfos pump in this document may be outdated.

Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

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info@lenntech.com

<https://www.lenntech.com>

tel. +31 152 610 900

fax. +31 152 616 289