A global business

With more than 18,500 employees and an annual production of some 16 million pump units a year, Grundfos is one of the world’s leading pump manufacturers. Across all continents, 80 companies in 55 countries help to bring pumps to every corner of the world, from supplying drinking water to Antarctic expeditions, irrigation of Dutch tulips, groundwater monitoring beneath waste heaps in Germany, to air-conditioning in Egyptian hotels.

Efficient, sustainable products
Grundfos is constantly striving to make its products more user-friendly and reliable - and also more energy-saving and efficient so both users and the environment benefit from the improvements.
Grundfos pumps are equipped with ultramodern electronics, allowing them to regulate the output according to current needs. This ensures convenience for the user, as well as saves a lot of energy.

Research and development
In order to maintain the leading position, Grundfos constantly focuses on customer-oriented research and development; customers are consulted when new products are developed or when established products are improved.
Research and development make use of the latest technology within the pump industry, collaborating with universities and higher education institutions in search of new and better solutions for the design and function of the products.

Corporate values
The Grundfos Group is based on values such as sustainability, openness, trustworthiness, responsibility, and also on partnership with clients, suppliers and the society around us, with a focus on humanity that concerns our own employees as well as the many millions who benefit from water that is procured, utilised and removed as wastewater with the help of Grundfos pumps.
**UPS Series 200**
Circulator pumps, canned-rotor type

**Technical data**
- Flow rate: max. 70 m³/h
- Head: max. 18 m
- Liquid temperature: -10 to +120 °C
- Operating pressure: max. 10 bar

**Applications**
- Heating systems
- Domestic hot-water systems
- Cooling and air-conditioning systems

**Features and benefits**
- Maintenance-free
- Built-in thermal switch
- Low noise level
- Low energy consumption
- Single-phase with built-in protection module
- Wide range

**Options**
- Protection module
- Relay module with fault signal or operating output
- Bronze pump housing
- Twin-head versions

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**MAGNA3**
Circulator pumps, canned-rotor type - electronically controlled

**Technical data**
- Flow rate: max. 150 m³/h
- Head: max. 18 m
- Liquid temperature: -10 to +110 °C
- Operating pressure: max. 16 bar

**Applications**
- Heating systems
- Domestic hot-water systems
- Air-conditioning and cooling systems
- Geothermal and solar systems

**Features and benefits**
- Low energy consumption; all MAGNA3 pumps comply with the EuP 2015 requirements.
- FLOW ADAPT control mode, i.e. a combination of the well-known AUTO ADAPT mode and a new FLOW LIMIT function
- Operating log
- Heat energy monitor
- Multipump function
- Differential-temperature control

**Options**
- Stainless-steel pump housing
- Twin-head versions
- Wireless remote control by means of Grundfos GO

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**TP**
In-line circulator pumps, close-coupled type

**Technical data**
- Flow rate: max. 4,600 m³/h
- Head: max. 170 m
- Liquid temperature: -25 to +150 °C
- Operating pressure: max. 25 bar

**Applications**
- Heating systems
- District heating plants
- Local heating plants
- Domestic hot-water systems
- Cooling and air-conditioning systems
- District cooling plants
- Water supply systems

**Features and benefits**
- Compact design with small footprint
- Wide range
- Standard IE3 motor
- Service-friendly, top pull-up design
- Various types of shaft seals depending on liquid, temperature and pressure

**Options**
- Bronze pump housing
- Bronze impeller
- Stainless-steel impeller
- Twin-head versions
- IE4 motor up to 45 kW
TPE3, TPE3 D
In-line circulator pumps - electronically controlled

Technical data
Flow rate: max. 78 m³/h
Head: max. 25 m
Liquid temperature: -25 to +120 °C
Operating pressure: max. 16 bar.

Applications
• Heating and cooling systems
• District heating plants
• Domestic hot-water systems.

Features and benefits
• Low energy consumption
• Simple installation
• TFT colour display
• Factory-fitted differential-pressure and temperature sensor
• AUTOADAPT, FLOWLIMIT, FLOWADAPT
• Differential-pressure or differential-pressure control with 2 sensors
• Fitted with motor equivalent to IE4.

Options
• Wireless remote control by means of Grundfos GO
• Communication via LON, PROFIBUS DP, Modbus RTU/TCP, GSM/GPRS, GRM, BACnet IP/MS/TP or PROFINET IO
• Twin-head versions with built-in alternation/standby/cascade function.

NB, NBG
Single-stage standard pumps

Technical data
Flow rate: max. 1000 m³/h
Head: max. 160 m
Liquid temperature: -25 to +140 °C
Operating pressure: max. 25 bar.

Applications
• District heating plants
• Heating systems for blocks of flats
• Air-conditioning systems
• Cooling systems
• Washdown systems
• Other industrial systems.

Features and benefits
• Standard dimensions according to EN and ISO standards
• Compact design
• Flexible pump range
• Standard motor
• EN 12756 shaft seal.

NK, NKG
Single-stage standard pumps according to EN 733, ISO 2858 and ISO 5199

Technical data
Flow rate: max. 1170 m³/h
Head: max. 160 m
Liquid temperature: -25 to +140 °C
Operating pressure: max. 25 bar.

Applications
• District heating plants
• Water supply systems
• Air-conditioning systems
• Cooling system
• Washdown system
• Firefighting systems
• Other industrial systems.

Features and benefits
• Standard dimensions according to EN and ISO standards
• Robust design
• Standard motor
• EN 12756 shaft seal.
HS
Horizontal split case pumps

Technical data
Flow rate: max. 2,500 m³/h
Head: max. 148 m
Liquid temperature: -12 to +100 °C
Operating pressure: max. 16 bar.

Applications
- Water supply systems
- Air-conditioning systems
- Cooling systems
- Irrigation systems
- Other industrial systems
- District heating systems.

Features and benefits
- Robust between-bearing design
- Double suction to reduce axial forces
- Double volute casing to reduce radial load
- Removable bearing housing for easy maintenance
- Many variants available
- Flange dimensions according to EN 1092-2 (DIN 2501).

Options
- Cast-iron housing
- Stuffing box
- Stainless-steel impeller.

Fire DNF, Fire HSEF
Fire pump sets

Technical data
With electric motor
Flow rate: 250-4500 gpm
Head: max. 182 psi

With diesel engine
Flow rate: 250-4000 gpm
Head: max. 212 psi
Liquid temperature: 5 to 40 °C.

Applications
- Fire pump sets for firefighting systems.

Features and benefits
- With electric motor or diesel engine
- FM-approved and UL-listed
- Simple installation and easy maintenance
- Designed for superior functionality and performance reliability.

MTR, MTH, SPK
Multistage centrifugal immersible pumps

Technical data
Flow rate: max. 85 m³/h
Head: max. 238 m
Liquid temperature: -10 to +90 °C
Operating pressure: max. 25 bar.

Applications
- Machine tools
- Components washing machines
- Chiller units
- Industrial washing machines
- Filter and conveyor systems
- Temperature control
- Boiler feed
- General pressure boosting.

Features and benefits
- Flexible installation length
- Wide range
- Reliability
- Service-friendly
- Simple installation
- Space-saving
- High efficiency.
MTA

Single-stage coolant pump

Technical data
Flow rate: max. 355 l/min
Head: max. 13.5 m
Liquid temperature: 0 to 60 °C.

Applications
• Machine tools
• Filter and conveyor systems.

Features and benefits
• High-efficiency motor and hydraulic
• Wide range
• Flexible installation length
• Reliability
• No shaft seal
• Semi-open impeller
• Easy installation.

MTS

High-pressure pumps for tank top installation

Technical data
Flow rate: max. 850 l/min
Head: max. 120 bar
Liquid temperature: 0 to 80 °C
Operating pressure: max. 130 bar.

Applications
Pumping of coolants in machine tool applications, such as:
• deep-hole drilling
• grinding
• cutting.

Features and benefits
• High efficiency
• Wear-resistant
• Compact design
• Low noise level/pulsation.

Options
• Dry installation
• Mechanical shaft seal
• Variety of connections.

MTB

Single-stage centrifugal end-suction pumps with semi-open impeller

Technical data
Flow rate: max. 90 m³/h
Head: max. 47 m
Liquid temperature: -10 to +90 °C
Operating pressure: max. 16 bar.

Applications
• Machine centers
• Coolant systems
• Filtration plants
• Grinding machines
• Parts cleaning systems
• Other industrial applications where semi-open impellers are needed.

Features and benefits
• Standard dimension according to EN and ISO standards
• Compact design
• Semi-open impeller/effective solid handling
• Standard IE2 motor.
DDE
Digital diaphragm dosing pumps

Technical data
Capacity, Q: max. 15 l/h
Pressure, p: max. 10 bar
Turn-down ratio: 1:1000
Liquid temperature: max. 45 °C.

Applications
- Digital Dosing for basic applications.
- Water and wastewater treatment
- Swimming pool water
- Cooling tower
- Chemical industry
- Car wash
- Irrigation.

Features and benefits
- Internal stroke-speed and frequency control with stepper motor
- Only two models from 0.006 to 15 l/h
- Smooth continuous dosing
- Always full stroke length
- Flexible mounting plate
- Capacity adjustment knob
- Manual control (0.1 - 100 %)
- Pulse control (1:n)
- External stop and empty-tank input
- Power supply 100-240 V, 50/60 Hz.

DME
Digital diaphragm dosing pumps

Technical data
Capacity, Q: max. 940 l/h
Pressure, p: max. 10 bar
Liquid temperature: max. 50 °C.

Applications
- Water and wastewater treatment
- Process plants
- Filtration systems
- Paper production
- Food and beverage industry.

Features and benefits
- Capacity setting in ml/h or l/h
- Internal stroke-speed and frequency control with brushless DC motor
- Front- or side-fitted control panel with display
- Control panel lock
- 4-20 mA control
- Pulse/timer-based batch control
- Anti-cavitation function
- Easy calibration function
- Diaphragm leakage sensor.

Options
- Fieldbus communication module.

DDI
Digital diaphragm dosing pumps

Technical data
Capacity, Q: max. 150 l/h
Pressure, p: max. 10 bar
Liquid temperature: max. 50 °C.

Applications
- Water and wastewater treatment
- Process plants
- Paper production
- Food and beverage industry.

Features and benefits
- Internal stroke-speed and frequency control with brushless DC-motor Capacity setting in ml/h or l/h
- Smooth dosing through variable speed
- Reliable dosing of viscous liquids
- Side-fitted control panel
- Manual/pulse control
- 4-20 mA control
- Easy calibration
- Pioneering system for flow and pressure monitoring in the dosing head (control variant AF)
- PROFIBUS interface (control variant AP).
DDC
Digital diaphragm dosing pumps

Technical data
Capacity, Q: max. 15 l/h
Pressure, p: max. 10 bar
Turn-down ratio: 1:1000
Liquid temperature: max. 45 °C.

Applications
Optimum price-performance ratio.
- Water and wastewater treatment
- Boiler feed water
- Swimming pool water
- Cooling tower
- Chemical industry.

Features and benefits
- Internal stroke-speed and frequency control with stepper motor
- Flexible control cube and mounting plate
- Click wheel and graphical display
- Capacity setting in ml/h, l/h, or gph
- Manual, pulse and 0/4-20 mA control
- 2 relay outputs
- Smooth dosing of degassing liquids
- Slow mode
- Power supply 100-240 V, 50/60 Hz.

DDA
Digital diaphragm dosing pumps

Technical data
Capacity, Q: max. 30 l/h
Pressure, p: max. 16 bar
Turn-down ratio: 1:3000 or 1:1000
Liquid temperature: max. 45 °C.

Applications
High-end solution
- Water and wastewater treatment
- Process water
- Food and beverage industry
- Ultrafiltration and reverse osmosis
- Pulp and paper industry.

Features and benefits
- Internal stroke-speed and frequency control
- Manual, pulse and 0/4-20 mA control
- Batch, timer cycle, timer week control
- FlowControl with selective fault diagnosis, pressure monitoring
- Integrated flow measurement and AutoFlowAdapt
- 0/4-20 mA and 2 relay outputs
- Auto deaeration
- Power supply 100-240 V, 50/60 Hz.

Options
- E-box for PROFIBUS or Modbus.

DMX
Motor-driven diaphragm dosing pumps

Technical data
Capacity, Q: max. 4000 l/h (pump with two heads: 2 x 2000 l/h)
Pressure, p: max. 10 bar
Liquid temperature: max. 50 °C.

Applications
- Drinking-water treatment
- Wastewater treatment (settlement/sludge treatment)
- Pulp and paper industry
- Textile industry
- Industrial water and wastewater treatment
- Cooling tower.

Features and benefits
- Robust design
- Stroke-length adjustment.

Options
- Frequency converter (PROFIBUS, PROFINET, 4-20 mA control, alarm signals)
- Pulse control (control variant AR)
- Analog control (control variant AR)
- Level input from storage tank (control variant AR)
- With ATEX approval (DMX 226).
DMH
Hydraulic piston diaphragm dosing pump

Accessories for dosing pumps and systems

**Technical data**
- **Capacity, Q:** max. 1500 l/h (pump with two heads: 2 x 1500 l/h)
- **Pressure, p:** max. 200 bar
- **Liquid temperature:** max. 90 °C.

**Applications**
- Oil refinery industry
- Heavy-duty applications
- Pulp/paper and textile industries
- Cooling tower, power plants
- Industrial water and wastewater treatment.

**Features and benefits**
- Designed for heavy-duty operation
- Stroke-length adjustment
- Long life due to piston diaphragm technology
- Full PTFE diaphragm.

**Options**
- Frequency converter (PROFIBUS, PROFINET, 4-20 mA control, alarm signals)
- Available with API 675 approval
- Available with ATEX approval
- Servo motor for stroke-length adjustment.

CMBE
Frequency-controlled booster systems

**Technical data**
- **Flow rate:** max. 7.6 m³/h
- **Head:** max. 99 m
- **Liquid temperature:** 0 to 60 °C
- **Operating pressure:** max. 10 bar.

**Applications**
- Single-family houses
- Two-family houses
- Cluster homes
- Blocks of flats
- Schools
- Small hotels/guest houses
- Small office buildings.

**Features and benefits**
- Constant pressure via integrated speed control
- Compact construction
- Robust, stainless steel
- Easy installation
- Dry-running protection
- Low noise level, 55 dB(A)
- Available with inlet pressure switch that meets DIN 1988-500
- Low energy consumption.
CM, CME, CMV
Multistage centrifugal pumps

Technical data
Flow rate: max. 36 m³/h
Head: max. 130 m
Liquid temperature: -30 to +120 °C
Operating pressure: max. 16 bar.

Applications
- Washing and cleaning
- Water treatment
- Temperature control
- Pressure boosting.

Features and benefits
- Compact design
- Modular design
- Very low noise level down to 50 dB(A).

Options
- Customised products
- Built-in or stand-alone
- Variable frequency drive.
- Available as a self-priming variant with a suction lift of up to 8 metres.

CR, CRI, CRN
Multistage centrifugal pumps

Technical data
Flow rate: max. 180 m³/h
Head: max. 330 m
Liquid temperature: -40 to +180 °C
Operating pressure: max. 33 bar.

Applications
- Washing systems
- Cooling and air-conditioning systems
- Water supply systems
- Water treatment systems
- Firefighting systems
- Industrial plants
- Boiler feed systems.

Features and benefits
- Reliability
- High efficiency
- Service-friendly
- Space-saving
- Suitable for slightly aggressive liquids.

Options
- Dry-running protection and motor protection via LiqTec.

CR, CRN high pressure
Multistage centrifugal pumps

Technical data
Flow rate: max. 180 m³/h
Head: max. 480 m
Liquid temperature: -30 to +120 °C
Operating pressure: max. 50 bar.

Applications
- Water systems
- Water treatment systems
- Industrial plants
- Boiler feed systems.

Features and benefits
- Reliability
- High pressures
- Service-friendly
- Space-saving
- Suitable for slightly aggressive liquids
- Single-pump solution enabling high pressure.

Options
- Dry-running protection and motor protection via LiqTec.
CRT
Multistage centrifugal pumps

Technical data
Flow rate: max. 22 m³/h
Head: max. 250 m
Liquid temperature: -20 to +120 °C
Operating pressure: max. 25 bar.

Applications
• Process-water systems
• Washing in cleaning systems
• Seawater systems
• Pumping of acids and alkalis
• Ultra-filtration systems
• Reverse osmosis systems
• Swimming baths.

Features and benefits
• High corrosion resistance
• Reliability
• High efficiency
• Service-friendly
• Space-saving.

Options
• Dry-running protection and motor protection via LiqTec.

Hydro MPC
Turnkey booster system with CR, CRI, CRIE pumps for transfer and pressure boosting of water

Technical data
Flow rate: max. 1080 m³/h
Head: max. 155 m
Liquid temperature: 0 to 60 °C
Operating pressure: max. 16 bar.

Applications
• Water supply systems
• Irrigation systems
• Industrial plants
• Commercial buildings.

Features and benefits
• 2-6 pumps in cascade
• Easy installation and startup
• Large user-friendly display
• Energy-optimised control
• Data communication
• Perfect constant pressure
• Application-optimised software.

Hydro Multi-S
Fixed-speed booster system with CR, CM or CMV pumps

Technical data
Flow rate: max. 72 m³/h
Head: max. 103 m
Liquid temperature: 5 to 60 °C
Operating pressure: max. 16 bar.

Applications
• Blocks of flats
• Hotels
• Schools.

Features and benefits
• 2-3 pumps in cascade
• Plug-and-pump solution
• Simple and robust design
• Easy to service and maintain.
Hydro Multi-B

Turnkey booster system with CM, CME pumps for pressure boosting of water in buildings

Technical data
- Flow rate: max. 108 m³/h
- Head: max. 125 m
- Liquid temperature: 0 to 60 °C
- Operating pressure: max. 16 bar

Applications
- Blocks of flats
- Hotels
- Hospitals
- Schools
- Office buildings

Features and benefits
- 2-3 pumps in cascade
- Plug-and-pump solution
- Simple interface for control
- Energy-optimised control
- Data communication
- Perfect constant pressure
- Small footprint

BMP

Piston pumps for liquid transfer under high pressure

Technical data
- Flow rate: max. 10.2 m³/h
- Head: max. 1630 m
- Liquid temperature: 3 to 50 °C
- Operating pressure: max. 160 bar

Applications
- Cleaning/washing
- Injecting
- Misting
- Processing
- Desalination of brackish water and seawater

Features and benefits
- High efficiency
- Small, lightweight pump
- Generates insignificant pulsations in the outlet line
- No preventive maintenance required
- Long service life
- Few wear parts
- Wide speed control range
- Extreme recirculation capability without overheating (up to 90 %)
- Lubricated by the pumped liquid
- Compact design

BM

4", 6", 8" booster modules

Technical data
- Flow rate: max. 265 m³/h
- Head: max. 430 m
- Liquid temperature: 0 to 40 °C
- Operating pressure: max. 60 bar

Applications
- Reverse osmosis systems
- Water supply systems
- Water treatment systems
- Industrial plants
- High-rise buildings

Features and benefits
- High-pressure boosting
- Various material versions
- Low noise level
- Simple installation
- Modular design
- Compact design
- Leakage-free
- In-line
BMShs, BMST, BMSX

High-pressure booster systems

Technical data
- Flow rate: max. 120 m³/h
- Head: max. 820 m
- Liquid temperature: 0 to 40 °C
- Operating pressure: max. 82 bar

Applications
- Reverse osmosis systems
- Water supply systems
- Water treatment systems
- Industrial plants

Features and benefits
- High-pressure boosting
- High-pressure/high-flow
- Low-energy consumption
- Simple installation
- Compact design
- Modular design
- Leakage-free
- Small footprint
- Low weight
- VFD self-test at startup
- Overload protection
- Low noise level

Options
- Permanent-magnet high speed
- Asynchronous high-speed motor

BMhp, BMShp

High-pressure booster systems

Technical data
- Flow rate: max. 310 m³/h
- Head: max. 110 m
- Liquid temperature: 0 to 40 °C
- Inlet pressure: max. 80 bar
- Operating pressure: max. 82 bar

Applications
- The BMhp booster module is the optimum solution for these applications:
- Sealless pumps
- Pumps capable of handling high system pressures
- High heads
- Quiet operation
- A minimum of maintenance
- Reverse osmosis systems
- Water supply systems
- Water treatment systems
- Industrial plants

Features and benefits
- High flow
- High inlet pressure
- Simple installation

Options
- MGE motor
- MG motor

SQ, SQE

3" submersible pumps

Technical data
- Flow rate: max. 9 m³/h
- Head: max. 237 m
- Liquid temperature: 0 to 40 °C
- Installation depth: max. 150 m

Applications
- Domestic water supply systems
- Groundwater supply to waterworks
- Irrigation in horticulture and agriculture
- Groundwater lowering
- Industrial applications

Features and benefits
- Integrated dry-running protection
- Overload protection
- Overtemperature protection
- Over- and undervoltage protection
- Protection against upthrust
- Wear resistance
- Soft start
- High efficiency

Options
- SQE can be protected, monitored and controlled by the CU 300 and CU 301.
**SP A, SP, SP-G**

4", 6", 8", 10", 12" submersible pumps

**Technical data**
- Flow rate: max. 470 m³/h
- Head: max. 670 m
- Liquid temperature: 0 to 60 °C
- Installation depth: max. 600 m.

**Applications**
- Groundwater supply to waterworks
- Irrigation in horticulture and agriculture
- Groundwater lowering
- Pressure boosting
- Industrial applications
- Fountains
- Mining
- Offshore.

**Features and benefits**
- High efficiency
- Stainless steel components throughout and replaceable wear parts for long service life
- Sand content up to 150 g/m³.

**Options**
- A wide range of accessories
- Grundfos GO wireless remote control
- Complete range of zinc anodes for SP
- Complete range of flow sleeves for SP
- Available in 3 grades of stainless steel, EN 1.4301, EN 1.4401 or EN 1.4539
- Motor protection via MP 204.

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**SQE-NE, SP-NE**

Remediation and sampling pumps

**Technical data**
- Flow rate: max. 22 m³/h
- Head: max. 215 m
- Liquid temperature: 0 to 40 °C
- Installation depth: max. 600 m.

**Applications**
- Pumping contaminated groundwater
- Sampling
- Remedial pumping.

**Features and benefits**
- SQE-NE: See SQE
- SP-NE: See SP.

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**SQFlex**

Renewable-energy based water supply systems

**Technical data**
- Flow rate: max. 90 m³/day
- Head: max. 200 m
- Liquid temperature: 0 to 40 °C
- Supply voltage: 30-300 VDC, 1 x 90-240 V, 50/60 Hz
- Installation depth: max. 150 m.

**Applications**
- Villages, schools, hospitals, single-family houses
- Farms and greenhouses
- Game parks and game farms
- Conservation areas.

**Features and benefits**
- Energy supply from solar modules, wind turbine, generator or batteries
- Simple installation
- Reliable water supply
- Virtually no maintenance
- Expansion possibilities
- Cost-efficient pumping
- Dry-running protection.
MGFlex

Renewable-energy based motors and water supply systems

Technical data
- Power input (P1) of 40 to 880 W and 60 to 1730 W
- Motor speed of 1000 to 3600 min⁻¹
- Maximum input current of 4.6 and 8.9 A.
- 30-300 VDC
- 1 x 90-240 VAC, 50/60 Hz
- The MGFlex motor can be mounted on Grundfos CR and MTR (as float pump) pumps.

Applications
The Grundfos solar surface pump system is designed for renewable energy supply. Powered by a solar panel, the system is especially suitable for supplying water in applications such as:
- Irrigation
- Watering of livestock
- Pressure boosting
- Floating pump
- Recirculation of swimming-pool water (OEM).

Features and benefits
- Maximum power point tracking, MPPT
- Overvoltage and undervoltage protection
- Wide voltage range
- Overload protection
- Overtemperature.

RSI

Renewable solar inverter for three-phase pumps

Technical data
- Input voltage: 530-750 VDC
- Output voltage: 380 VAC
- 220 VAC
- Motor sizes from 1.5 kW to 9 kW.

Applications
RSI is an off-grid solar inverter converting the DC power output from the solar panel to AC power supply for pump operation.

The RSI can be used in both new and existing installations, but the pump and motor must be suitable for use with frequency converters.

The list below shows the Grundfos pump types for which the RSI is designed:
- CR
- SP.

Features and benefits
- Maximum power point tracking, MPPT
- Overvoltage and undervoltage protection
- Overload protection
- Overcurrent protection
- Overtemperature protection of inverter
- Operation history memory.

Solar modules

Solar modules for pumps and systems that rely on a renewable-energy source

Technical data
- Peak power: 80-250 W
- Voltage (Ump): 17 VDC.

Applications
Grundfos solar modules are suitable for the SQFlex, MGFlex and RSI water supply systems based on renewable energy sources. Each solar module is equipped with plugs and sockets (plugs and cables are accessories for some models) for easy connection of several modules in parallel or series. The solar modules must be mounted on a support structure, tilted at an angle ensuring optimum utilisation of the solar energy.

Warranties
Power output:
- 25 years limited warranty of 80 % power output.
- 12 years limited warranty of 90 % power output.

Workmanship: 2 years.
**CU 200, CIU 273, IO50, IO101, IO102**
Renewable-energy controllers

**Technical data**
- 30-300 VDC
- 1 x 90-240 VAC, 50/60 Hz.

**Applications**
- SQFlex
  - CU 200: monitoring and tank level control
  - CIU 273: monitoring, tank level control and Grundfos Remote Management
  - SQFlex and MGFlex
  - IO50: on/off control
  - IO101: on/off control and generator backup
  - IO102: on/off control and wind turbine.

**Features and benefits**
- Easy installation
- Status indication (CU 200, CIU 273)
- Fault indication (CU 200, CIU 273)
- Automatic AC to DC switch (IO 101)
- Automatic pump operation (CU 200, CIU 273).

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**JPC PT, JPA PT, JPD PT**
Self-priming jet pumps and boosters

![Graph](image)

**Technical data**
- Flow rate: max. 1000 m³/h
- Head: max. 160 m
- Liquid temperature: -25 to +140 °C
- Operating pressure: max. 25 bar.

**Applications**
- Single- or two-family households
- Summer houses and weekend cottages.

**Features and benefits**
- Self-priming
- Robust design
- Corrosion-free materials
- Constant water supply
- Automatic start-stop.

---

**Scala**
Single-stage standard pumps - electronically controlled

![Graph](image)

**Technical data**
- Flow rate: max. 4 m³/h
- Head: max. 45 m
- Liquid temperature: 45 to 55 °C
- Operating pressure: max. 10 bar.

**Applications**
- Pressure boosting of mains water
- Pressure boosting of water from roof tanks
- Pressure boosting of water from break tanks
- Pressure boosting of water from ground water
- Water supply from shallow wells (less than 8 m).

**Features and benefits**
- Adjustable constant pressure
- Low noise, less than 47 dB(A) in typical use
- Compact
- Robust and reliable
- Easy installation and self-priming
- Dry-running protection.
Unilift, KPC
Submersible drainage and fluent pumps

Technical data
Flow rate: max. 31 m³/h
Head: max. 17 m
Liquid temperature: 0 to 55 °C
Installation depth: max. 10 m.

Applications
• Drainage of flooded cellars
• Pumping of domestic wastewater
• Groundwater lowering
• Emptying of swimming pools and excavations
• Emptying of drain wells
• Emptying of tanks and reservoirs.

Features and benefits
• Simple installation
• Service- and maintenance-free.

Options
• Unilift CC is suitable for low suction
• Unilift CC has an optional horizontal outlet
• Unilift AP35/50 and AP35B/50B have a vortex impeller
• Unilift AP35B and AP50B have auto-coupling and horizontal outlet
• KPC 24/7 is suitable for continuous operation in applications such as fish ponds.

DW
Contractor pumps

Technical data
Flow rate: max. 83 l/s
Head: max. 100 m
Liquid temperature: 0 to 40 °C

Applications
• Tunnels
• Quarries
• Gravel pits
• Fish ponds
• Building sites.

Features and benefits
• Corrosion resistant due to use of aluminium and stainless-steel parts
• Extremely hard-wearing due to specially selected materials
• Simple installation
• Service-friendly
• Protection against abrasive particles
• Plug-and-pump: no special equipment required
• Motor protection for longer life.

DWK
Heavy-duty dewatering pumps

Technical data
Flow rate: max. 120 l/s
Head: max. 102 m
Liquid temperature: 0 to 40 °C

Applications
Dewatering
• Construction sites
• Excavation sites
• Tunnels
• Mines.
Draining
• Underground building pits
• Industrial pits
• Stormwater pits.

Features and benefits
• Durability
• Ductile/high-chrome impeller
• Easy to operate
• High efficiency
• Compact design
• High-pressure capabilities.
DPK
Submersible drainage pumps

Technical data
Flow rate: max. 45 l/s
Head: max. 51 m
Liquid temperature: 0 to 40 °C

Applications
- Underground building pits
- Industrial pits
- Stormwater pits.

Features and benefits
- High-pressure capabilities
- Flexible installation
- Easy to service and maintain.

Options
- Different outlet connections
- Auto-coupling system
- Monitoring unit.

DP, EF
Drainage and effluent pumps

Technical data
Flow rate: max. 12.8 l/s (46 m³/h)
Head: max. 25 m
Liquid temperature: 0 to 40 °C
Outlet diameter: Rp 2 to DN 65.

Applications
- Drainage
- Effluent
- Wastewater
- Process water.

Features and benefits
- Cable plug connection
- Unique clamp connection
- Single-channel and vortex impellers
- Solids passage up to 85 mm
- Unique cartridge shaft seal
- Modular design
- Minimum downtime.

Options
- Control and protection systems
- Motor operation control
- AUTOADAPT functions.

SEG
Grinder pumps

Technical data
Flow rate: max. 5 l/s
Head: max. 47 m
Liquid temperature: 0 to 40 °C.

Applications
- Pumping of wastewater with toilet waste through pipes of Ø 40 and up.

Features and benefits
- Service-friendly
- Installation on foot or auto-coupling
- Continuous operation with fully submerged pump
- Built-in motor protection
- SmartTrim
- Improved grinder system
- Totally sealed cable plug.

Options
- Wide range of accessories
- Monitoring and control of one or several pumps
- AUTOADAPT functions.
**S pumps**

Supervortex pumps, single- or multi channel impeller pumps

**Technical data**

- Flow rate: max. 2,500 l/s
- Head: max. 116 m
- Liquid temperature: 0 to 40 °C
- Outlet diameter: DN 80-800
- Particle size: max. ø 145.

**Applications**

- Transfer of wastewater
- Transfer of raw water
- Pumping of sludge-containing water
- Pumping of industrial effluent.

**Features and benefits**

- SmartTrim
- Operation with/without cooling jacket
- Submerged or dry installation
- Different types of impellers
- Built-in motor protection.

**Options**

- Control and protection systems
- External cooling water
- External seal flush system
- Sensors for monitoring of pump conditions
- Various cast stainless-steel versions available.

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**KPL, KWM**

Propeller and mixed-flow pumps for column installation

**Technical data**

- Flow rate: max. 9,200 l/s
- Head: max. 25 m
- Liquid temperature: 0 to 40 °C.

**Applications**

- Flood and stormwater control
- Large volume drainage/irrigation
- Raw-water intake
- Transfer of liquids in large-scale municipal sewage treatment plants
- Circulation of large quantities of water.

**Features and benefits**

- Patented Turbulence Optimizer™ reducing turbulence and increasing efficiency
- World class total efficiency in a compact and lightweight design.
- Self-cleaning hydraulic reducing the risk of jamming and clogging.

**Options**

- Control and protection systems
- Sensors for monitoring of pump conditions.
- Material variants
- Low, medium and high voltage motors up to 10,000 V.

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**SL1/SLV and SE1/SEV**

Heavy-duty submersible pumps

**Technical data**

- Flow rate: max. 280 l/s (1008 m³/h)
- Head: max. 71.3 m
- Free passage: 50-160 mm
- pH range: 0-14
- Outlet diameter: DN 65-300.

**Applications**

- Drainage water and surface water
- Domestic and municipal wastewater
- Industrial wastewater
- Process and cooling water.

**Features and benefits**

- Service friendly (smartdesign)
- Reliable and energy efficient (Grundfos blueflux®)
- Intelligent solution (AUTOADAPT)
- S-tube® or Supervortex impellers.

**Options**

- Control and protection systems
- Motor control
- Built-in sensors for pump monitoring
- Various cast stainless-steel versions available
- Ideal for pumping stations.
Dedicated Controls

Pump controllers

Technical data

Supply voltage: 1 x 230, 3 x 230, 3 x 400 V, 50/60 Hz.

Applications

Dedicated Controls are suitable in wastewater applications for emptying wastewater pits (up to six pumps).

- Pressurised pumping stations
- Network pumping stations
- Commercial buildings.

Features and benefits

- Automatic energy optimization
- Easy installation and configuration
- Configuration wizard
- Electrical overview
- Advanced data communication
- Advanced alarm and warning priority
- Supports several languages
- Daily emptying
- Mixer control or flush valve
- User-defined functions
- Anti-blocking
- Start level variation
- Advanced pump alternation with pump groups
- SMS scheduling
- Communication to SCADA, BMS, GRM or cell phone.

Optional

- Available as ready-made control panels or as modules for local assembly.

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MS

Stainless-steel 4" and 6" submersible motors

Technical data

Motor sizes

4": 0.37 - 7.5 kW
6": 5.5 - 30 kW.

Applications

The Grundfos MS submersible motors can be fitted on all Grundfos SP A, SP pumps and can be used in the high-pressure booster modules, type BM and BMB.

Features and benefits

- Liquid temperature: 0-60 °C
- Overtemperature protection via power cable by means of a built-in Tempcon temperature transmitter.
- Standardised NEMA flange and shaft end
- Mechanical shaft seal, ceramic/carbon or SiC/SiC
- Completely encapsulated in stainless steel
- Canned type submersible motor, all surfaces in contact with the liquid are made of stainless steel
- Liquid-cooled and has liquid-lubricated bearings.

Options

- Material variants EN 1.4301 and EN 1.4539.
- Motor protection by means of MP204
- Variable speed option.

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MMS

Stainless-steel 6", 8", 10", 12" rewindable submersible motors

Technical data

Motor sizes

6": 3.7 - 37 kW
8": 22-110 kW
10": 75-190 kW
12": 147-250 kW.

Applications

The Grundfos MMS submersible rewindable motors can be fitted on all Grundfos SP and SP-G pumps.

Features and benefits

- Liquid temperature: 0-50 °C
- Easily rewound
- Protection against upthrust
- High efficiency
- 6" and 8" have standardised NEMA flange and shaft end
- Mechanical shaft seal, ceramic/carbon or SiC/SiC
- PVC or PE/PA windings.

Options

- Material variants EN 1.4301, EN 1.4401 and EN 1.4539.
- Overtemperature protection via Pt100/ Pt1000.
LiqTec

Control and monitoring units

Applications
- Monitoring and protection of pumps and processes.

Features and benefits
- Protection against dry running
- Protection against liquid temperatures exceeding 130 °C ± 5 °C
- Protection against too high motor temperatures
- Manual or automatic restarting possible from a remote PC
- Simple installation: plug-and-play technology
- Robust sensor.

CUE

Frequency converters for three-phase pumps

Technical data
- Mains voltage:
  1 x 200-240 V
  2 x 200-240 V
  3 x 380-500 V
  3 x 525-600 V
  3 x 575-690 V.

Applications
Adjustment of the pump performance to the demand. Together with sensors, the CUE offers these control modes:
- Proportional differential pressure
- Constant differential pressure
- Constant pressure
- Constant pressure with stop function
- Constant level
- Constant level with stop function
- Constant flow rate
- Constant temperature.
The CUE can also be controlled by an external signal or via GENbus.

Features and benefits
- Adjustment of the pump performance to the demand, thus saving energy.
- Easy installation, as the CUE is designed for Grundfos pumps.
- Short-circuit-protected output; no motor-protective circuit breaker required.
- Fault indication via display and a relay, if fitted.
- External setpoint influence via three programmable inputs.

MP 204, CU 300, CU 301

Control and monitoring units

Applications
Monitoring and protection of pump installations.

Features and benefits
- Protection against dry running and too high motor temperature
- Constant monitoring of pump energy consumption.

Options
- Connection to large control systems via bus communication
- Connection of sensors enabling control based on sensor signals.
- Wireless remote control by means of Grundfos GO.
Control MPC

Control and monitoring units

Technical data
- Control of up to six identical pumps in parallel
- Motors from 0.37 - 75 kW can be connected (on request up to 315 kW)
- Enclosure class: IP65.

Applications
- Heating systems
- Air-conditioning systems
- Cooling systems
- Booster systems
- Industrial processes
- Water supply systems.

The Control MPC is designed for these pump types:
- CR, CRE, CRI, CRIE, CRN, CRNE
- NB, NBE, NBG, NBGE
- NK, NKE, NKQ, NKG
- TP
- TPE Series 1000
- TPE Series 2000
- HS
- SP
- MAGNA, UPE Series 2000.

Features and benefits
- Easy installation and startup
- Simple control
- Application-optimised software
- Modular solution with possibility of expansion
- Data communication via Ethernet, LON, PROFINET, etc.

Control MPC Series 2000

Control and monitoring units for Series 2000 pumps

Technical data
- Control of up to six Grundfos MAGNA, UPE, TPE Series 2000 pumps of identical pump type and size.
- Supply voltage: 1 x 100-240 V.
- All motor sizes can be connected.
- Enclosure class: IP54.

Applications
- Heating systems
- Air-conditioning systems.

Features
- Optimal adjustment of the performance to the demand by closed-loop control of these parameters:
  - Proportional differential pressure
  - Constant differential pressure
  - Differential pressure, remote*
  - Flow rate*
  - Temperature*
  - Temperature difference*.
- * External sensor required.

CIM/CIU

Fieldbus communication interfaces

Technical data
The CIM/CIU interfaces enable the connection of Grundfos electronic products to standard fieldbus networks. CIM can be installed as an add-on module in many E-pumps and CU 323, 352, 354 and 362. For other products, use the CIU box with internal power supply.

Applications
- Heating systems
- Cooling systems
- Booster systems
- Industrial processes
- Water supply systems
- Wastewater pumping systems
- Dosing and disinfection.

The following product ranges are supported:
- MAGNA/UPE series
- CRE, CRNE, CRIE, MTR, CRE, MBE, NBE, NK, TPE Series 1000, 2000, CUE
- Hydro MPC, Control MPC, Multi-E, Multi-B*
- MP 204*
- Dedicated Controls*
- SEG AUTOADAPT*
- DDA Dosing*
- Demand-driven distribution*.
- * Not supported by all CIM, CIU types.

Features
- Available with GENbus, BACnet MS/TP, BACnet IP, LON, Modbus RTU, PROFINET DP, COM/1, GSM/GPRS and Ethernet for PROFINET IO and Modbus TCP
- Modular design
- Based on standard functional profiles.
**Grundfos GO**
Remote control app for use with Grundfos MI 202, MI 204 and MI 301

**Technical data**
Grundfos MI 202 and MI 204 for iPod and iPhone.
Grundfos MI 301 for Android.
Pump communication: IR and radio.

**Applications**
Wireless communication with Grundfos products for status information and control.
The following Grundfos product types are supported:
• MAGNA
• UPE
• CRE, CRIE, CRNE, CME
• MTRE, SPKE, CRKE
• TPE, TPED
• NBE, NKE
• Hydro Multi-E
• SEG, AUTOADAPT
• CU 300
• CU 301
• IO 351
• MP 204
• CU3.

**Features and benefits**
• Intuitive user interface with context related help
• Product dashboard for quick overview
• Quick pump setup, monitoring and fault finding
• Installation report in PDF format
• Product info from Grundfos Product Center
• Find replacement pump
• Product catalogue.

**PACO KP**
Horizontal split case pumps

**Technical data**
Flow rate: max. 2,500 m³/h
Head: max. 148 m
Liquid temperature: -12 to +100 °C
Operating pressure: max. 16 bar.

**Applications**
• Water supply systems
• Air-conditioning systems
• Cooling systems
• Irrigation systems
• Other industrial systems
• District heating systems.

**Features and benefits**
• Robust between-bearing design
• Double suction to reduce axial forces
• Double volute casing to reduce radial load
• Removable bearing housing for easy maintenance
• Many variants available
• Flange dimensions according to EN 1092-2 (DIN 2501).

**Options**
• Cast-iron housing
• Stuffing box
• Stainless-steel impeller.

**PACO LF**
Single-stage standard pumps

**Technical data**
Flow rate: max. 1,170 m³/h
Head: max. 160 m
Liquid temperature: -25 to +140 °C
Operating pressure: max. 25 bar.

**Applications**
• District heating plants
• Water supply systems
• Air-conditioning systems
• Cooling system
• Washdown system
• Firefighting systems
• Other industrial systems.

**Features and benefits**
• Standard dimensions according to EN and ISO standards
• Robust design
• Standard motor
• EN 12756 shaft seal.
TENTANG TBA

TBA resmi ditunjuk oleh Grundfos Indonesia untuk melayani pasar di wilayah Timur Jakarta sampai ke Bekasi, Cikarang, Karawang, Cikampek dan hingga ke Cirebon. Grundfos merasa bahwa ada kebutuhan untuk lebih dekat dengan pelanggan di timur Jakarta.

Pengalaman lebih dari 26 tahun

Dealer Resmi Grundfos yang terletak di Timur Jakarta

Penyediaan pompa dan sistem yang tepat
Dengan semakin dekat dengan pelanggan, TBA berharap untuk dapat memberikan pelanggan Grundfos layanan yang layak mereka dapatkan, dari penyediaan pompa dan sistem yang tepat, melayani dan memelihara sistem untuk beroperasi pada kinerja yang optimal. Hal ini akan dilakukan melalui Grundfos “Energy Check” yang dilakukan oleh tim ahli pompa dan sistem di TBA.
FILOSOFI BISNIS
Filosof i bisnis kami lahir dari pemahaman dan harapan untuk menjadi yang terbaik di bidang pompa dan solusi perpompaan. TBA senantiasa mencerminkan nilai-nilai lu uruh sebagai bagian dari budaya perusahaan.

Kepercayaan
Kami melihat kepercayaan adalah salah satu nilai yang sangat penting, kami wajib dan selalu memenuhi setiap kesepakatan kerja.

Kejujuran
Kejujuran adalah nilai luhur yang kami anut dalam seluruh proses bisnis kami. Kami harus menyampaikan data, informasi, hasil analisis dan realisasi hasil kerja secara aktual.

Komunikatif
Komunikasi adalah kunci untuk menciptakan pemahaman antara kami dengan mitra. Sebab itu kami selalu menyampaikan informasi dengan jelas sesuai dengan etika profesional.

VISI
Menjadi mitra yang profesional dan dapat diandalkan di bidang pompa dan solusi perpompaan yang didukung oleh personil yang profesional dan produk yang berkualitas.

MISI
- Memberikan pelanggan solusi yang terbaik dan yang paling inovatif untuk pompa dan instalasi pompa.
- Memberikan kontribusi untuk kampanye penghematan energi dan menyediakan bagi pelanggan pengunaan energi yang optimal dan mengurangi biaya operasional terutama pada pompa dan sistem perpompaan.
- Menyediakan servis dan kualitas terbaik dalam bidang pompa dan solusi perpompaan.
- Meningkatkan pertumbuhan perusahaan dan kondisi keuangan yang sehat untuk mampu memberikan kejutan kepada karyawan, manajemen dan pemegang saham.

SUMBER DAYA MANUSIA
Tim kami memiliki komitmen tinggi untuk memenuhi kebutuhan pelanggan dengan keahlian yang mereka miliki. Kami mempunyai tenaga ahli yang sangat berpengalaman dari berbagai disiplin ilmu untuk memaksimalkan kualitas produk serta jasa yang akan kami berikan.

Kami percaya bahwa TBA dapat memenuhi harapan pelanggan saat ini dan dimasa mendatang. Kualitas sumber daya manusia TBA terus ditingkatkan dengan pelatihan yang selalu diberikan secara rutin dari pihak Grundfos dan dari tim ahli internal yang telah berpengalaman lebih dari 20 tahun. Kualitas tim kami harus berkembang sejalan dengan perkembangan perusahaan dan pada gilirannya mampu memberikan pelayanan terbaik kepada para pelanggan.