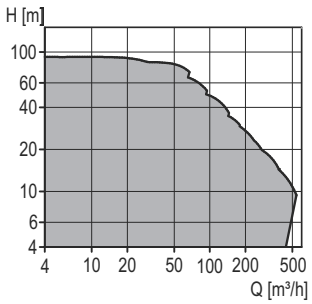
NBE, NBGE

Single-stage standard pumps - electronically controlled



Technical data

Flow rate:	max. 420 m^3/h
Head:	max. 90 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

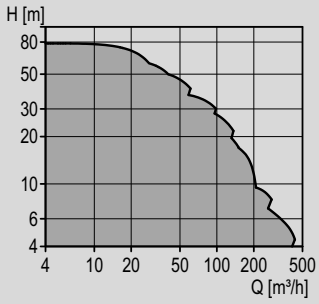
- Standard dimensions according to EN and ISO standards
- Compact design
- Flexible pump range
- EN 12756 shaft seal.

Options

- Wireless remote control by means of Grundfos GO Remote
- Communication via GENIbus, LONWorks, PROFIBUS DP, Modbus RTU, 3G/4G cellular, GRM GiC 3G/4G, BACnet MS/TP, PROFINET, Modbus TCP, BACnet IP, EtherNet/IP, GRM IP.

NBE, NKE series 2000

Single-stage standard pumps according to EN 733 and ISO 5199, electronically controlled



Technical data

Flow rate:	max. 550 m^3/h
Head:	max. 80 m
Liquid temperature:	-25 to +140 °C
Operating pressure:	max. 10 bar

Applications

- Heating systems
- Hot-water recirculation
- Cooling and air-conditioning systems.

Features and benefits

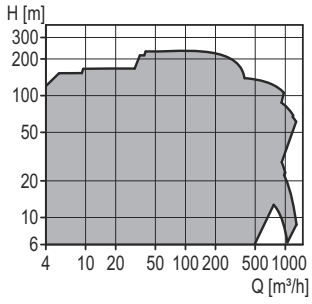
- Low energy consumption
- Adaptation to existing operating conditions
- Simple installation
- Factory-fitted differential-pressure sensor
- Fitted with IE5 motors up to 11 kW.

Options

- Wireless remote control by means of Grundfos GO Remote
- Communication via GENIbus, LONWorks, PROFIBUS DP, Modbus RTU, 3G/4G cellular, GRM GiC 3G/4G, BACnet MS/TP, PROFINET, Modbus TCP, BACnet IP, EtherNet/IP, GRM IP.

NK, NKG

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



Technical data

Flow rate:	max. 2300 m^3/h
Head:	max. 230 m
Liquid temperature:	-25 to +140 (+200) °C
Operating pressure:	max. 25 bar

Applications

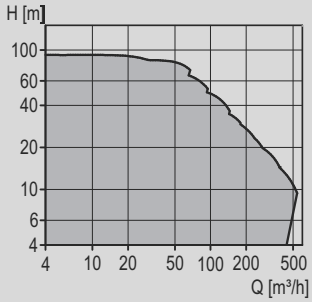
- District heating plants
- Water supply systems
- Air-conditioning systems
- Cooling systems
- Washdown systems
- Firefighting systems
- Other industrial systems.

Features and benefits

- Standard dimensions according to EN and ISO standards
- Robust design
- Standard motor
- EN 12756 shaft seal.

NKE, NKGE

Single-stage standard pumps according to EN 733, ISO 2858 and ISO 5199 - electronically controlled



Technical data

Flow rate:	max. 550 m^3/h
Head:	max. 90 m
Liquid temperature:	-25 to +140 °C
Operating pressure:	max. 25 bar

Applications

- District heating plants
- Water supply systems
- Air-conditioning systems
- Cooling systems
- Washdown systems
- Other industrial systems.

Features and benefits

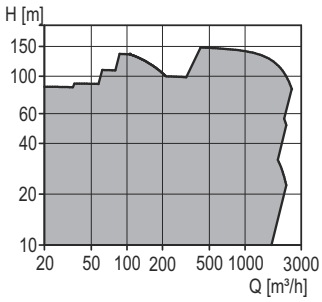
- Standard dimensions according to EN and ISO standards
- Robust design
- EN 12756 shaft seal.

Options

- Wireless remote control by means of Grundfos GO Remote
- Communication via GENIbus, LONWorks, PROFIBUS DP, Modbus RTU, 3G/4G cellular, GRM GiC 3G/4G, BACnet MS/TP, PROFINET, Modbus TCP, BACnet IP, EtherNet/IP, GRM IP.

HS

Horizontal split case pumps



Technical data

Flow rate:	max. 2,500 m^3/h
Head:	max. 148 m
Liquid temperature:	-12 to +100 °C
Operating pressure:	max. 16 bar

Applications

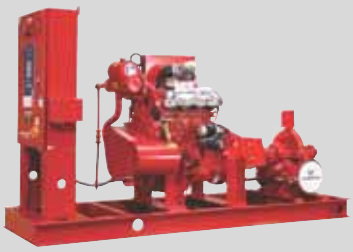
- Water supply systems
- Air-conditioning systems
- Cooling systems
- Irrigation systems
- Other industrial systems
- District heating systems.

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).

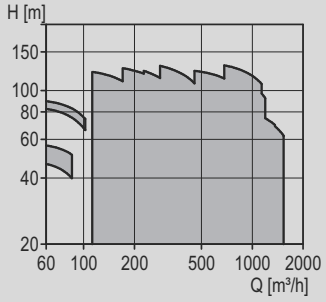
Options

- 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

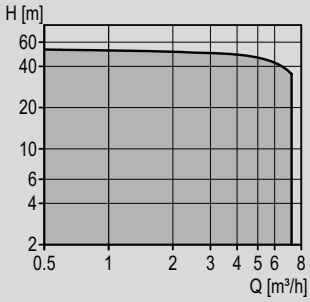
- Fire pump sets for firefighting systems.

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.

RCME

Rainwater harvesting system with buffer tank, CME Booster and feed pump



Technical data

Flow rate:	max. 6 m^3/h
Head:	max. 50 m
Liquid temperature:	3 to 40 °C
Operating pressure:	max. 10 bar

Applications

- Rainwater harvesting
- Cleaning systems
- Washing machines
- Toilet flushing
- Garden irrigation.

Features and benefits

- Compact solution
- High reliability
- Simple installation
- User-friendly operating panel
- Digital outputs for BMS system.

Rainwater control

Control and monitoring unit for rainwater harvesting

Technical data

Supply voltage:	3 x 400 V
Enclosure class:	IP54

All motor sizes can be connected.

Applications

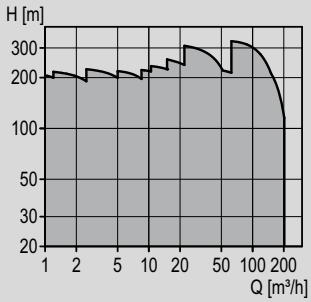
- Rainwater harvesting
- Cleaning systems
- Washing machines
- Toilet flushing
- Garden irrigation.

Features and benefits

- Easy installation and startup
- Simple control
- Application-optimised software
- User-friendly operating panel
- Fully scalable for pump and tank(s)
- Digital outputs for BMS system.

CR, CRI, CRN

Multistage centrifugal pumps



Technical data

Flow rate:	max. 200 m^3/h
Head:	max. 330 m
Liquid temperature:	-40 to +180 °C
Operating pressure:	max. 40 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

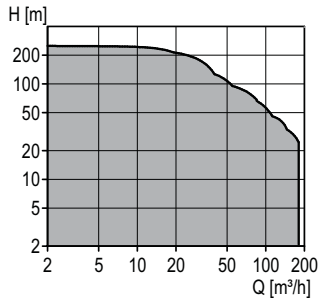
- Reliability
- High efficiency
- Service-friendly
- Space-saving
- Suitable for slightly aggressive liquids.

Options

- Dry-running protection and motor protection via LiqTec.

CRE, CRIE, CRNE

Multistage centrifugal pumps - electronically controlled



Technical data

Flow rate:	max. 180 m^3/h
Head:	max. 250 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

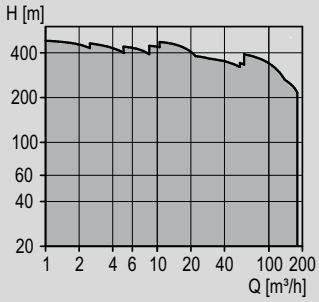
- Wide range
- Reliability
- In-line design
- High efficiency
- Service-friendly
- Space-saving
- Many control facilities.

Options

- Wireless remote control by means of Grundfos GO Remote.

CR, CRN high pressure

Multistage centrifugal pumps



Technical data

Flow rate:	max. 180 m^3/h
Head:	max. 480 m
Liquid temperature:	-30 to +120 °C
Operating pressure:	max. 50 bar

Applications

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

Features and benefits

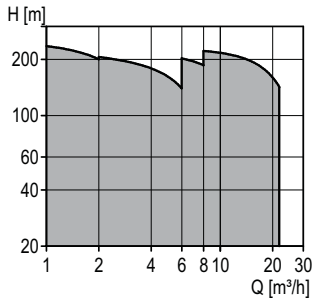
- Reliability
- High pressures
- Service-friendly
- Space-saving
- Suitable for slightly aggressive liquids
- Single-pump solution enabling high pressure.

Options

- Dry-running protection and motor protection via LiqTec.

CRT

Multistage centrifugal pumps



Technical data

Flow rate:	max. 22 m^3/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
- Ultrafiltration systems
- Reverse osmosis systems
- Swimming baths.

Features and benefits

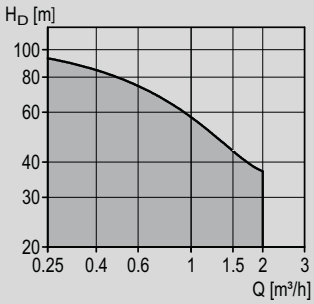
- High corrosion resistance
- Reliability
- High efficiency
- Service-friendly
- Space-saving.

Options

- Dry-running protection and motor protection via LiqTec.

CR DW

Ejector pumps



Technical data

Operating pressure:	max. 16 bar
Ambient temperature:	max. 40 °C
Liquid temperature:	max. 40 °C

Applications

Minor water-supply systems

- irrigation in agriculture and horticulture
- liquid transfer on farms with own well
- weekend cottages.

Features and benefits

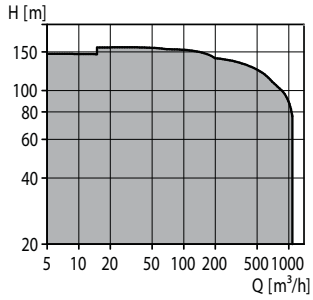
- Four sizes and two material versions. One with all wetted parts made of stainless steel
- Suitable for wells down to 90 m
- Service-friendly
- Pump head and base made of electro-plated cast iron.

Options

- Hose kit for simple change from CPE/CPES to CR DW.

Hydro MPC

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



Technical data

Flow rate:	max. 1080 m^3/h
Head:	max. 155 m
Liquid temperature:	0 to 60 °C
Operating pressure:	max. 16 bar

Applications

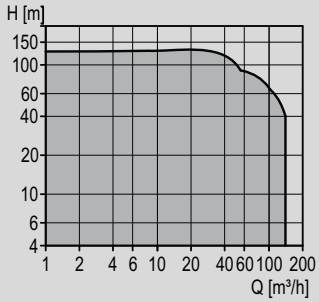
- Water supply systems
- Irrigation systems
- Industrial plants
- Commercial buildings.

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-E

Turnkey booster system with CRE, CRIE or CME pumps for pressure boosting of water in buildings



Technical data

Flow rate:	max. 140 m^3/h
Head:	max. 133 m
Liquid temperature:	0 to 60 °C
Operating pressure:	max. 16 bar.

Applications

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

Features and benefits

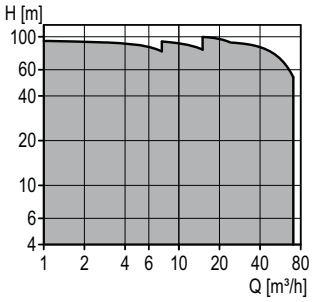
- 2-4 pumps in cascade
- Plug-and-pump solution
- Easy to control
- Low energy consumption
- Data communication
- Multimaster function
- Perfect constant pressure.

Options

- Wireless remote control by means of Grundfos GO Remote.

Hydro Multi-S

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



Technical data

Flow rate:	max. 72 m^3/h
Head:	max. 103 m
Liquid temperature:	5 to 60 °C
Operating pressure:	max. 16 bar

Applications

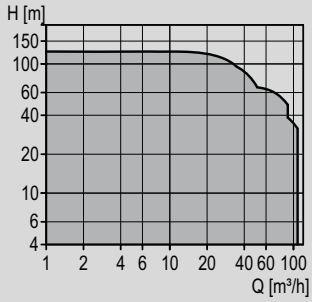
- Blocks of flats
- Hotels
- Schools.

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 m^3/h
Head:	max. 125 m
Liquid temperature:	0 to 60 °C
Operating pressure:	max. 16 bar

Applications

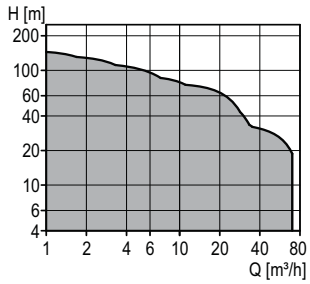
- Blocks of flats
- Hotels
- Hospitals
- Schools
- Office buildings.

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.

Hydro Solo-E

Turnkey booster system with CRE pumps for pressure boosting of water in buildings



Technical data

Flow rate:	max. 70 m^3/h
Head:	max. 149 m
Liquid temperature:	0 to 70 °C
Operating pressure:	max. 16 bar

Applications

- Single-family houses
- Cottages
- Farms
- Process water
- Irrigation.

Features and benefits

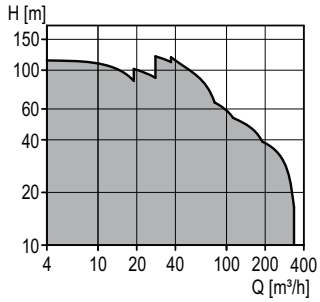
- Plug-and-pump solution
- Easy to control
- Low energy consumption
- Data communication
- Perfect constant pressure.

Options

- Wireless remote control by means of Grundfos GO Remote.

BMhp, BMShp

High-pressure booster systems



Technical data

Flow rate:	max. 310 m^3/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

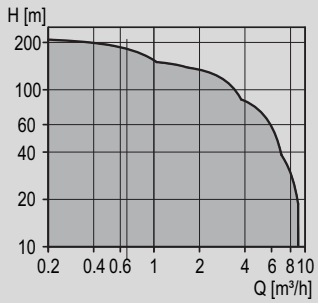
- High flow
- High inlet pressure
- Simple installation.

Options

MGE motor
MG motor.

SQ, SQE

3" submersible pumps



Technical data

Flow rate:	max. 9 m^3/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

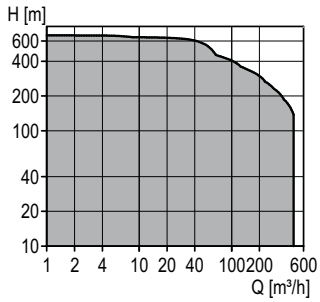
- Integrated dry-running protection
- Overload protection
- Overtemperature protection
- Over- and undervoltage protection
- Protection against upthrust
- Wear resistance
- Soft start
- High efficiency.

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 m^3/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

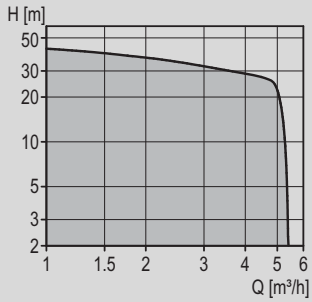
- High efficiency
- Stainless steel components throughout and replaceable wear parts for long service life
- Sand content up to 150 g/m^3.

Options

- A wide range of accessories
- Grundfos GO Remote, 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.

JP

Self-priming jet pumps for small-scale water supply



Technical data

Flow rate:	max. 5 m^3/h
Head:	max. 48 m
Liquid temperature:	0 to 40 °C (S1) / 60 °C (S3)
Suction lift:	max. 8 m
Operating pressure:	max. 6 bar

Applications

- Households
- Garden irrigation
- Car wash
- Small-scale agriculture and horticulture
- Light commercial applications
- Pool cleaning (AISI 316 variant only).

Features and benefits

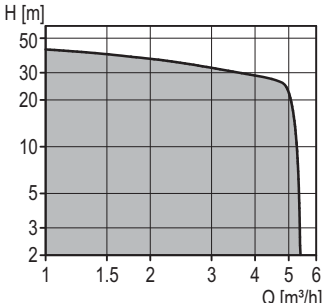
- Self-priming, featuring a suction lift of up to 8 m
- Robust design and corrosion-free materials for a long lifetime
- Lifting handle for easy moving.

Options

- AISI 316 variant for pool cleaning.

JP Booster with pressure tank

Self-priming jet booster for small-scale water supply



Technical data

Flow rate:	max. 5 m^3/h
Head:	max. 48 m
Liquid temperature:	0 to 40 °C (S1) / 60 °C (S3)
Suction lift:	max. 8 m
Operating pressure:	max. 6 bar

Applications

- Single- and two-family houses
- Garden irrigation
- Car wash
- Small-scale agriculture and horticulture
- Light commercial applications

Features and benefits

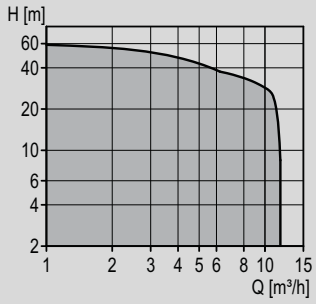
- Self-priming
- Automatic start/stop according to consumption
- Pressure gauge
- Pressure tanks reduce starts and stops
- Reduced waterhammer in the pipes.

Options

- Vertical pressure tank
- Horizontal pressure tank.

JPC, JPA

Self-priming jet pumps and boosters



Technical data

Flow rate:	max. 10.5 m^3/h
Head:	max. 61 m
Suction lift:	max. 8 m
Liquid temperature:	0 to 35 °C
Operating pressure:	max. 7.5 bar

Applications

- Gardens
- Hobby activities
- Agriculture
- Horticulture.

Features and benefits

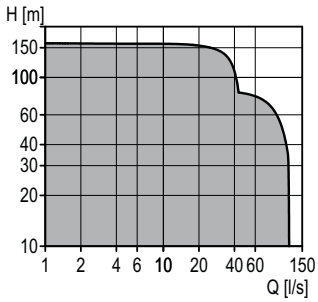
- Self-priming
- Strong suction capacity
- Handle small sandy impurities with ease
- Built-in thermal protection.

Options

- Available with a pressure manager for automatic start-stop and added protective functions
- Available with a pressure tank to minimise the number of starts
- Available with a pressure switch.

DWK

Heavy-duty dewatering pumps



Technical data

Flow rate:	max. 120 l/s
Head:	max. 160 m
Liquid temperature:	0 to 40 °C

Applications

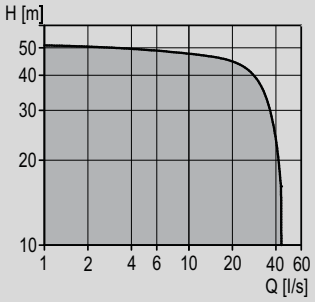
Dewatering
- Construction sites
- Excavation sites
- Tunnels
- Mines
- Draining
- Underground building pits
- Industrial pits
- Stormwater pits.

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

Draining
- Underground building pits
- Industrial pits
- Stormwater pits.

Features and benefits

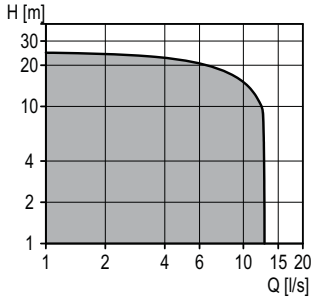
- High-pressure capabilities
- Flexible installation
- Easy to service and maintain.

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 m^3/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 65 mm
- Unique cartridge shaft seal
- Modular design
- Minimum downtime.

Options

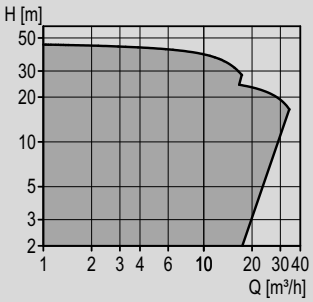
- $AUTO_{ADAPT}$ functions
- Available in explosion-proof version
- A wide range of customised solutions available.

Related products and solutions

- "Control DC"
- Pumping stations; "PS.R", "PS.W" and "PS.G".

SEG

Grinder pumps



Technical data

Flow rate:	max. 9.44 l/s
Head:	max. 47 m
Liquid temperature:	0 to 40 °C

Applications

- Pumping of wastewater with toilet waste through pipes of ∅ 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

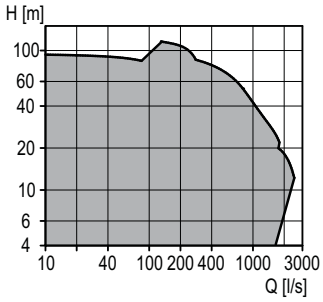
- Wide range of accessories
- Monitoring and control of one or several pumps
- AUTO$_{ADAPT}$ functions
- Available in explosion-proof versions
- A wide range of customised solutions available.

Related products and solutions

- "Control DC"
- Pumping stations; "PS.R", "PS.W" and "PS.G".

S pumps

Supervortex pumps, single- or multichannel 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. ∅ 145

Applications

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

Features and benefits

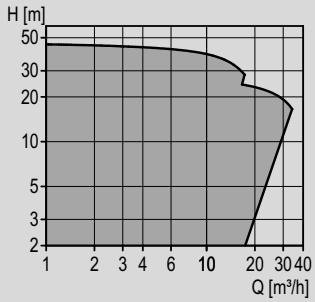
- SmartTrim
- Operation with or without cooling jacket
- Submerged or dry installation
- Different types of impellers
- Built-in motor protection.

Options

- Control and protection systems
- External cooling water
- External seal flush system
- Sensors for monitoring of pump conditions
- Various cast stainless-steel versions available
- Available in explosion-proof versions
- A wide range of customised solutions available.

KPL, KPG, 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 and irrigation
- Raw-water intake
- Transfer of liquids in large-scale municipal sewage treatment plants
- Circulation of large quantities of water.

Features and benefits

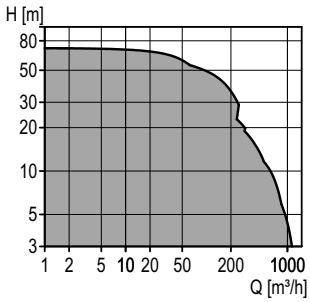
- Patented Turbulence Optimizer™ reducing turbulence and increasing efficiency
- World class total efficiency in a compact and lightweight design.
- Self-cleaning hydraulics reducing the risk of jamming and clogging
- Available with a wide range of sensors
- A wide range of customised solutions available.

Related products and solution

- "SRG" recirculation pumps (for lower flow rates)
- "Control DC"
- "CUE" frequency converters (available up to 250 kW).

SE, SL

Heavy-duty submersible pumps



Technical data

Flow rate:	max. 305 l/s (1100 m^3/h)
Head:	max. 71.3 m
Free passage:	50-125 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
- Intelligent solution (AUTO$_{ADAPT}$)
- S-tube® or SuperVortex impellers
- Available with built-in sensors and in explosion-proof versions
- A wide range of customised solutions available.

Related products and solutions

- Grundfos "Control DC"
- Pumping stations; "PS.R", "PS.W" and "PS.G".
- "CUE" frequency converters (available up to 250 kW)

CU 100

Small pump control units

Technical data

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

Applications

The control unit CU 100 is designed for the starting, operation and protection of small pumps.
The control unit is suitable for the following operating currents:

- Single-phase: up to 9 A
- Three-phase: up to 5 A.

Features and benefits

- Control of one pump.
- Start-stop by means of a float switch or manual start-stop.
- Several variants for single- and three-phase pumps.
- Single-phase control units are supplied with capacitors and with or without float switch.
- Three-phase control units are supplied with a float switch.
- IP54 cabinet with screwed metric cable entries.

LC, LCD

Pump controllers with pneumatic signal, float switch or electrodes

Technical data

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

Applications

- Pumping stations
- Filling and emptying of tanks.

Features and benefits

- Control of one, LC, or two pumps, LCD
- Automatic alternating operation, LCD
- Automatic test run preventing shaft seals from seizing up during long periods of inactivity
- Water hammer protection
- Starting delay after power failure
- Stop delays
- Automatic alarm reset, if required
- Automatic restart, if required
- Liquid level indication
- High-level alarm
- Motor overload protection relay
- Protection against motor overheating via input from PTC resistor or thermal switch.

Optional

- SMS modem with built-in hour and start counter (information on mobile phone)
- Hours counter
- Start counter
- Signal lamp
- Acoustic signal
- External main switch.