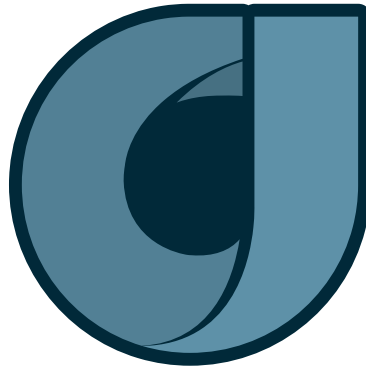


# GRUNDFOS PUMPS





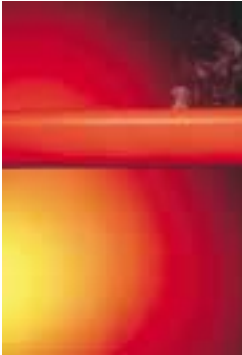
**COEBSA**

GRUNDFOS PUMPS

Bombas de turbina verticales

## **PUMPS FOR ALL PURPOSES**

No matter for which purpose an efficient and energy-saving pump solution is required, Grundfos offers a high-quality solution.



*Heating and hot water service systems*

Circulator pumps for circulation of hot water in central and district heating systems and circulation in domestic hot water service systems.



*Cooling and air-conditioning systems*

Circulator pumps for circulation of cold water and other liquids in cooling and air-conditioning systems.



*Industrial applications*

A wide range of multistage pumps for the transfer of water, cooling lubricants and other liquids in industrial and process systems.



*Pressure boosting and liquid transfer.*

Vertical and horizontal, centrifugal pumps and pressure boosting systems for liquid transfer and boosting of hot and cold water.



*Groundwater supply*

Submersible pumps for groundwater supply, irrigation and groundwater lowering.



### *Domestic water supply*

Submersible pumps, jet pumps, multi-stage centrifugal pumps and compact systems for water supply in homes, gardens and hobby applications.



### *Sewage and wastewater*

Drainage, effluent and sewage pumps for a wide range of applications in building services as well as transfer of raw sewage in municipal sewage systems.



### *Environmental applications*

Purpose-built submersible pumps for remedial pumping of contaminated groundwater and for groundwater sampling for water quality analyses.



### *Dosing*

Dosing pumps for wastewater treatment systems, swimming pools and industry.

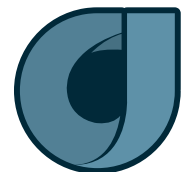


### *Renewable energy systems*

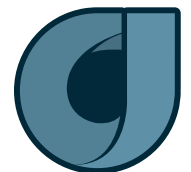
Renewable-energy based water supply systems suitable for remote locations not connected to the electricity supply grid.

## PRODUCT AND APPLICATION OVERVIEW

Product name	Page	Product type	Application									
			Heating and hot water service systems	Cooling and air-conditioning systems	Industrial applications	Pressure boosting and liquid transfer	Groundwater supply	Domestic water supply	Sewage and wastewater	Environmental applications	Dosing	Renewable energy systems
GRUNDFOS ALPHA	8	Circulator pumps, canned-rotor type	●	●								
GRUNDFOS COMFORT	8		●	●								
UPS Series 100	8		●	●								
UPS Series 200	8		●	●								
UPE Series 2000	9		●									
TP	9	Circulator pumps, close-coupled type	●	●								
LM, LP, CLM	9	Single-stage centrifugal pumps	●	●	●	●						
TPE Series 2000	10		●	●								
TPE, LME, LPE, CLME	10		●	●	●	●						
Delta Control 2000	11	Controllers	●	●								
NM, NP, DNM, DNP	11	Single-stage standard pumps	●	●	●	●						
NB, NBG	12		●	●	●	●						
NK, NKG	12		●	●	●	●						
NME, NPE, DNME, DNPE	12		●	●	●	●						
NBE	13		●	●	●	●						
NKE	13		●	●	●	●						
SPK, CHK, MTH, CRK, MTR, MTA	13	Multistage centrifugal pumps			●							
SPKE, CRKE	14				●							
DME, DMS, DMM	14	Dosing pumps, diaphragm type			●						●	
GP	15	Swimming-pool pumps			●							
WPU	15	Whirlpool pump units			●							
CHI, CHIU	15	Multistage centrifugal pumps		●	●	●				●		
CHIE	16			●	●	●				●		



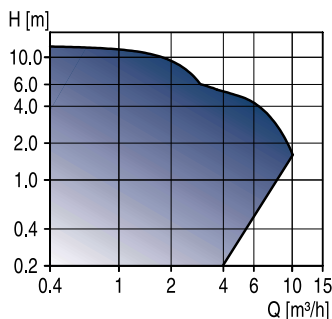
Product name	Page	Product type	Application									
			Heating and hot water service systems	Cooling and air-conditioning systems	Industrial applications	Pressure boosting and liquid transfer	Groundwater supply	Domestic water supply	Sewage and wastewater	Environmental applications	Dosing	Renewable energy systems
CR, CRI, CRN	16	Multistage centrifugal pumps		●	●	●		●		●		
CRT	17				●	●				●		
CV, CPV, CPH	17			●	●	●						
CRE, CRIE, CRNE	18			●	●	●		●		●		
Hydro Booster sets	18	Pressure boosting systems			●	●		●				
Control 2000	18	Controllers			●	●						
BM, BMB	19	Booster modules			●	●						
BMQ, BMQE-NE	19					●	●					
BME, BMET	19	High-pressure booster modules			●	●						
SQ, SQE	20	3" submersible pumps					●	●				
SP, SP-G	20	4"-6"-8"-10"-12" submersible pumps					●	●				
SQE-NE, SP-NE, MP 1	21	Environmental pumps								●		
SQFlex	22	Water supply systems										●
JP	22	Self-priming jet pumps						●				
CH, CHN	23	Multistage centrifugal pumps			●	●		●				
MQ	23					●		●				
CHV	23				●	●		●				
CHV booster	24	Pressure boosting systems			●	●		●				
Tanks	24	Diaphragm and bladder tanks			●			●				
KP, AP - stainless steel	24	Drainage pumps							●			
AP, APG - cast iron	25	Effluent and sewage pumps							●			
DW	25	Contractor pumps							●			
Lifting stations	25	Complete pumping stations							●			
S, SA, SEN pumps	26	Effluent and sewage pumps							●			





**GRUNDFOS ALPHA**  
**UPS, UP Series 100**

Circulator pumps, canned-rotor type



**Technical data**

Flow, Q: max. 10 m<sup>3</sup>/h  
Head, H: max. 12 m  
Liquid temp.: -25°C to +110°C  
Operat. pres.: max. 10 bar

**Applications**

- Circulation of hot or cold water in
- Heating systems
  - Domestic hot water systems
  - Cooling and air-conditioning systems

**Features and benefits**

- Maintenance-free
- Low-noise
- Low-energy
- Wide range

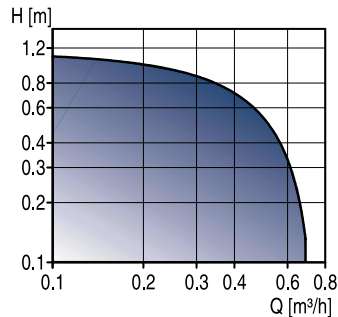
**Optional**

- Automatic performance adjustment
- Simple installation - external plug for electrical connection.
- Single-speed or 2- or 3-speed performance adjustment
- Twin-head versions



**GRUNDFOS COMFORT**  
**UP-N, UP-B Series 100**

Circulator pumps, canned-rotor type



**Technical data**

Flow, Q: max. 0.68 m<sup>3</sup>/h  
Head, H: max. 1.1 m  
Liquid temp.: +2°C to +95°C  
Operat. pres.: max. 10 bar

**Applications**

- Circulation of hot or cold water in
- Domestic hot water recirculation
  - Heating systems
  - Domestic hot water systems
  - Cooling and air-conditioning systems

**Features and benefits**

- Maintenance-free
- Low-noise
- Low-energy
- Wide range
- Corrosion-resistant stainless steel, brass pump housing

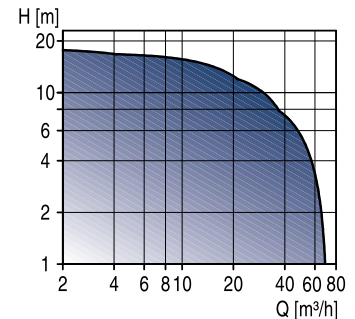
**Optional**

- 24-hour timer
- Adjustable thermostat



**UPS Series 200**

Circulator pumps, canned-rotor type.



**Technical data**

Flow, Q: max. 0.70 m<sup>3</sup>/h  
Head, H: max. 18 m  
Liquid temp.: -10°C to +120°C  
Operat. pres.: max. 10 bar

**Applications**

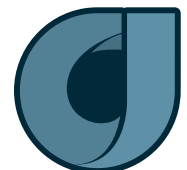
- Circulation of hot or cold water in
- Heating systems
  - Domestic hot water systems
  - Cooling and air-conditioning systems

**Features and benefits**

- Maintenance-free
- Built-in thermal switch
- Low-noise
- Low-energy
- Single-phase with built-in protection module
- Wide range

**Optional**

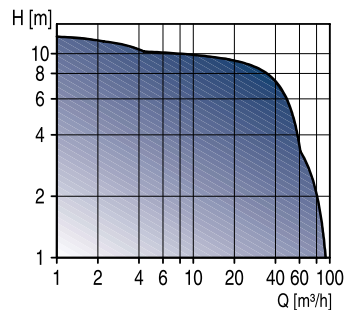
- Maintenance-free
- Built-in thermal switch
- Low-noise
- Low-energy
- Single-phase with built-in protection module
- Wide range





**GRUNDFOS MAGNA**  
**UPE Series 2000**

Circulator pumps, canned-rotor type - electronically controlled



**Technical data**

Flow, Q: max. 90 m<sup>3</sup>/h  
Head, H: max. 12 m  
Liquid temp.: +15°C to +110°C  
Operat. pres.: max. 10 bar

**Applications**

Circulation of hot water in  
▪ Heating systems in blocks of flats, schools, hospitals, hotels, industry etc.

**Features and benefits**

- Low-noise
- Low-energy
- Wide range
- Automatic performance adjustment
- Simple installation - no extra equipment or fittings required
- Safe selection

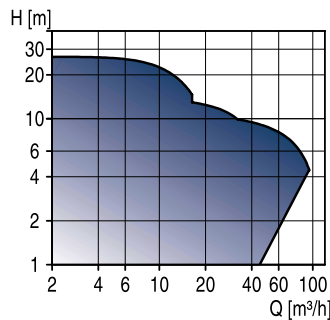
**Optional**

- Bronze pump housing
- Twin-head versions
- Wireless remote control, R100
- Communication via GENbus or LON



**TP**

Circulator pumps, close-coupled type



**Technical data**

Flow, Q: max. 0.95 m<sup>3</sup>/h  
Head, H: max. 27 m  
Liquid temp.: -25°C to +140°C  
Operat. pres.: max. 16 bar

**Applications**

Circulation of hot or cold water in  
▪ Heating systems  
▪ District heating plants  
▪ Local heating plants  
▪ Domestic hot water systems  
▪ Cooling and air-conditioning systems

**Features and benefits**

- Compact design
- Wide range
- Standard motor
- Service-friendly
- Various types of shaft seals depending on liquid, temperature and pressure

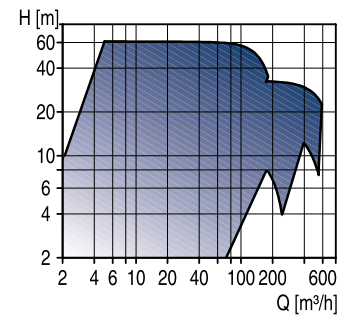
**Optional**

- Bronze pump housing
- Twin-head versions



**LM, LP, CLM**

Single-stage centrifugal pumps



**Technical data**

Flow, Q: max. 600 m<sup>3</sup>/h  
Head, H: max. 60 m  
Liquid temp.: -40°C to +140°C  
Operat. pres.: max. 20 bar

**Applications**

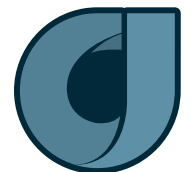
The pumps are suitable for liquid transfer in  
▪ District heating plants  
▪ Cooling and air-conditioning systems  
▪ Industrial plants

**Features and benefits**

- Adaptable to any application and performance
- DIN 24 960 shaft seal
- Wide range
- Standard motor
- Service-friendly

**Optional**

- Various types of shaft seals depending on liquid, temperature and pressure
- Twin-head versions
- Bronze impeller (CLM only)

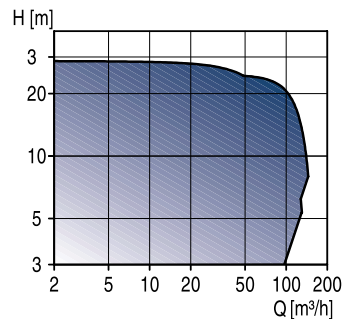






## TPE Series 2000

Single-stage, centrifugal pumps - electronically controlled



### Technical data

Flow, Q: max. 130 m<sup>3</sup>/h  
 Head, H: max. 28 m  
 Liquid temp.: -25°C to +140°C  
 Operat. pres.: max. 16 bar

### Applications

- Circulation of hot or cold water in
- Heating systems
  - Domestic hot water systems
  - Cooling and air-conditioning systems

### Features and benefits

- Low-energy
- Adaptation to existing operating conditions
- Simple installation

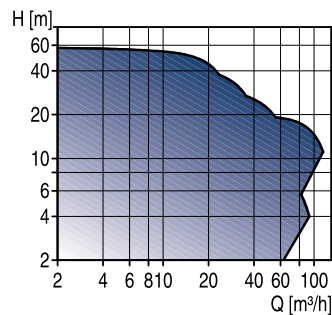
### Optional

- Parallel operation
- Wireless remote control, R100
- Communication via GENibus or LON



## LME, LPE, CLME, TPE

Single-stage, centrifugal pumps - electronically controlled



### Technical data

Flow, Q: max. 160 m<sup>3</sup>/h  
 Head, H: max. 60 m  
 Liquid temp.: -25°C to +140°C  
 Operat. pres.: max. 16 bar

### Applications

- The pumps are suitable for liquid transfer in
- District heating plants
  - Cooling and air-conditioning systems
  - Industrial plants

### Features and benefits

- Low-energy
- Adaptation to existing operating conditions
- Simple installation
- Many control facilities
- Wireless remote control, R100
- Communication via GENibus or LON



## R100

Wireless remote control

### Applications

- All pumps designed for wireless communication

### Features and benefits

- Simple and quick installation of the pump
- Reading out of various operating and fault signals
- Printing out of status information.



**PMU 2000, PCU 2000**

Pump controllers

### Applications

#### PMU 2000

- Parallel connection of up to eight pumps
- Central reading out of various status information

#### PCU 2000

- Fault indication for each pump
- External setpoint influence
- Start/stop of system

### Features and benefits

- Communication via BUS
- Simple and quick installation



**Delta Control 2000**

Pump controllers

### Technical data

No. of pumps:	max. 4
Power output:	75 kW
Encl. class:	IP 54

### Applications

- Delta Control 2000 are used for parallel connection of pumps in
- Heating systems
  - Cooling and air-conditioning systems

### Features and benefits

- Complete control panel

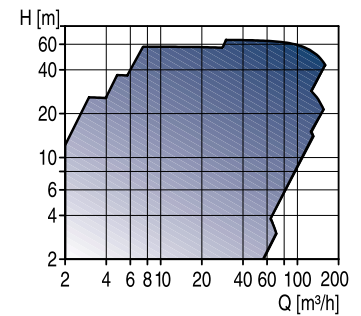
### Optional

- External communication



**NM, NP, DNM, DNP**

Single-stage standard pumps



### Technical data

Flow, Q:	max. 600 m <sup>3</sup> /h
Head, H:	max. 62 m
Liquid temp.:	-25°C to +140°C
Operat. pres.:	max. 1.6 bar

### Applications

The pumps are suitable for liquid transfer in

- Washing systems
- District heating plants
- Cooling and air-conditioning systems
- Industrial plants

### Features and benefits

- Standard dimensions according to ISO or DIN standards
- Compact design
- Flexible pump range
- Standard motor
- Adaptable to any application and performance
- DIN 24 960 shaft seal

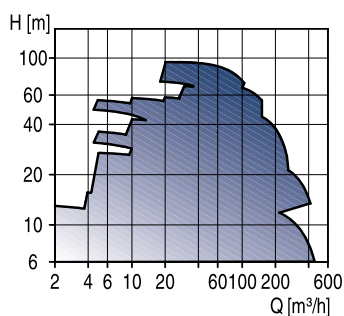
### Optional

- Various types of shaft seal depending on liquid, temperature and pressure



**NB, NBG**

Single-stage standard pumps



**Technical data**

Flow, Q: max. 460 m<sup>3</sup>/h  
 Head, H: max. 96 m  
 Liquid temp.: -10°C to +140°C  
 Operat. pres.: max. 16 bar

**Applications**

The pumps are suitable for liquid transfer in

- 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
- Adaptable to any application and performance
- DIN 24 960 shaft seal

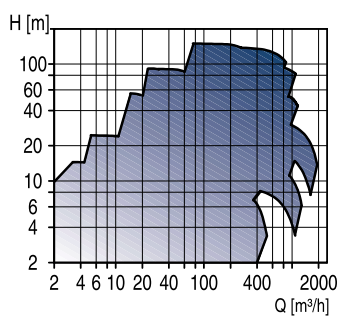
**Optional**

- Various types of shaft seal depending on liquid, temperature and pressure
- Cast iron or bronze impeller



**NK, NKG**

Single-stage standard pumps



**Technical data**

Flow, Q: max. 2000 m<sup>3</sup>/h  
 Head, H: max. 150 m  
 Liquid temp.: -10°C to +140°C  
 Operat. pres.: max. 16 bar

**Applications**

The pumps are suitable for liquid transfer in

- District heating
- Water supply
- Airconditioning
- Cooling plants
- Industry
- Fire fighting
- Environment engineering

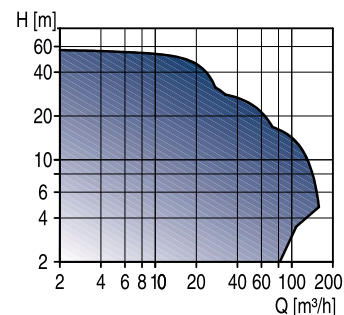
**Features and benefits**

- Standard dimensions according to EN or ISO standards
- Wide range
- Robust design
- Heavy-duty
- Flexible motor range



**NME, NPE, DNME, DNPE**

Single-stage standard pumps - electronically controlled



**Technical data**

Flow, Q: max. 157 m<sup>3</sup>/h  
 Head, H: max. 57 m  
 Liquid temp.: -25°C to +140°C  
 Operat. pres.: max. 16 bar

**Applications**

The pumps are suitable for liquid transfer in

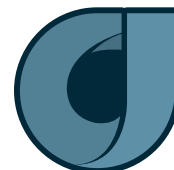
- Washing systems
- District heating plants
- Cooling and air-conditioning systems
- Industrial plants

**Features and benefits**

- Standard dimensions according to ISO or DIN standards
- Compact design
- Flexible range
- Standard motor
- Adaptable to any application and performance
- Many control facilities
- DIN 24 960 shaft seal

**Optional**

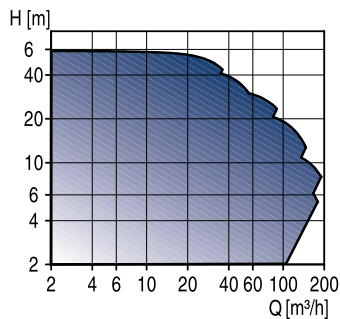
- Various types of shaft seal depending on liquid, temperature and pressure
- Wireless remote control, R100





## NBE

Single-stage standard pumps - electronically controlled



### Technical data

Flow, Q: max. 189 m<sup>3</sup>/h  
 Head, H: max. 58 m  
 Liquid temp.: -10°C to +140°C  
 Operat. pres.: max. 16 bar

### Applications

The pumps are suitable for liquid transfer in

- Washing systems
- Water supply systems
- District heating plants
- Cooling and air-conditioning systems
- Industrial plants

### Features and benefits

- Standard dimensions according to EN standards
- Compact design
- Adaptable to any application and performance
- DIN 24 960 shaft seal
- Many control facilities

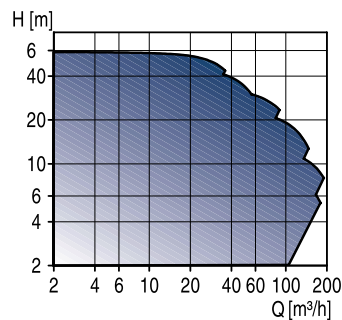
### Optional

- Various types of shaft seal depending on liquid, temperature and pressure
- Cast iron or bronze impeller
- Wireless remote control, R100



## NKE

Single-stage standard pumps - electronically controlled



### Technical data

Flow, Q: max. 190 m<sup>3</sup>/h  
 Head, H: max. 59 m  
 Liquid temp.: -40°C to +160°C  
 Operat. pres.: max. 16 bar

### Applications

The pumps are suitable for liquid transfer in

- Washing systems
- Water supply systems
- District heating plants
- Cooling and air-conditioning systems
- Industrial plants

### Features and benefits

- Standard dimensions according to DIN standards
- Wide range
- Robust design
- Heavy-duty
- Many control facilities

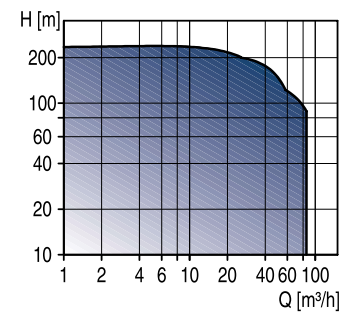
### Optional

- Wireless remote control, R100



## SPK, CHK, MTH, CRK, MTR, MTA

Multistage centrifugal immersible pumps



### Technical data

Flow, Q: max. 85 m<sup>3</sup>/h  
 Head, H: max. 238 m  
 Liquid temp.: -20°C to +90°C  
 Operat. pres.: max. 25 bar

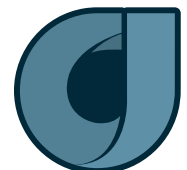
### Applications

The pumps are suitable for liquid transfer in

- Spark machine tools
- Grinding machines
- Machining centres
- Cooling units
- Industrial washing machines
- Filtering systems
- Lathes
- Swarf conveyors

### Features and benefits

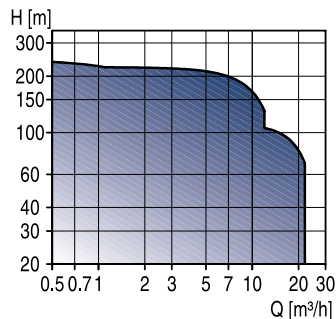
- Flexible installation length
- Wide range
- Reliable
- Service friendly
- Simple installation





### SPKE, CRKE

Multistage centrifugal immersible pumps - electronically controlled



#### Technical data

Flow, Q: max. 22 m<sup>3</sup>/h  
 Head, H: max. 245 m  
 Liquid temp.: -10°C to +90°C  
 Operat. pres.: max. 25 bar

#### Applications

- The pumps are suitable for
- Boiler feeding
  - Pumping of cooling lubricants
  - Water treatment

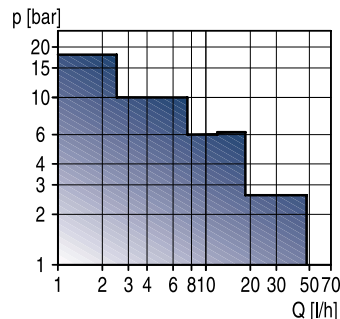
#### Features and benefits

- Wide range
- Reliability
- Wireless remote control, R100



### DME, DMS

Compact diaphragm dosing pumps



#### Technical data

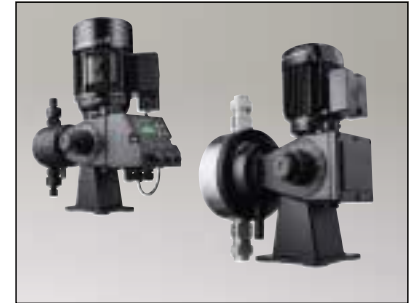
Capacity, Q: max. 48 l/h  
 Pressure, p: max. 18 bar  
 Liquid temp.: max. +50°C

#### Applications

Injection of chemicals in water and waste water treatment systems, washing systems, swimming pools and process plants

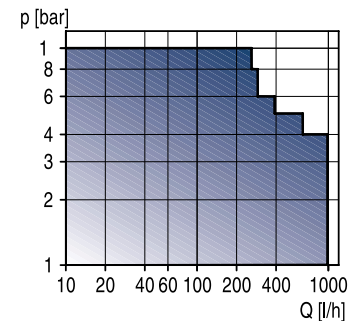
#### Features and benefits

- Precise capacity setting directly in ml or l
- Stepper or synchronous motor drive
- Full diaphragm control
- Stroke speed or -frequency capacity control
- Operation panel with display and one-touch buttons
- Front- or side-fitted operation panel
- Manual/pulse control
- Control panel lock
- 4-20 mA control
- Pulse-/Timer- based batch control
- Anti-cavitation function
- Easy calibration function
- Fieldbus communication module (option)



### DMM

Motor-driven diaphragm dosing pumps



#### Technical data

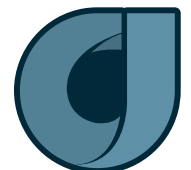
Capacity, Q: max. 990 l/h  
 Pressure, p: max. 10 bar  
 Liquid temp.: max. +50°C

#### Applications

Injection of chemicals in water and waste water treatment systems, washing systems, swimming pools and process plants

#### Features and benefits

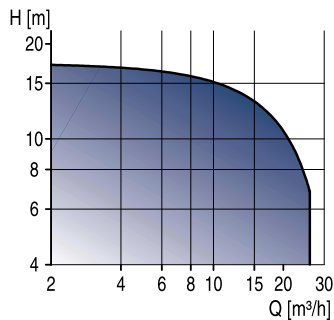
- Sturdy design
- Stroke length capacity control
- Leakage-free
- Motor control option with display and one-touch buttons and following control options:
  - Pulse control
  - Pulse division/multiplication
  - Analog 0/4-20 mA control





## GP

Swimming-pool pumps



### Technical data

Flow, Q: max. 26 m<sup>3</sup>/h  
 Head, H: max. 17.5 m  
 Liquid temp.: -0°C to +40°C  
 Operat. pres.: max. 3 bar

### Applications

The pumps are suitable for

- Circulation of swimming-pool water in small and medium sized swimming-pools

### Features and benefits

- Built-in motor protection
- Stainless steel shaft
- Low sound level
- Self-priming down to 2 m
- Corrosion resistant materials
- No need for special service tools
- Quick and easy to repair

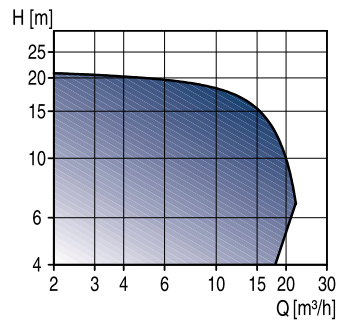
### Optional

- Integrated heating unit
- Level sensor
- Control panels



## WPU

Whirlpool pump units



### Technical data

Flow, Q: max. 22 m<sup>3</sup>/h  
 Head, H: max. 21 m  
 Liquid temp.: -0°C to +40°C  
 Operat. pres.: max. 2.5 bar

### Applications

The pumps are suitable for

- Spa and whirlpool baths
- Therapeutic baths

### Features and benefits

- Wide operating range
- All-in-one, compact and robust design
- Programming and monitoring via PC
- Connection for external control panel
- Speed controlled motor provides advanced water pulsation
- Dry-running and thermal overload protection
- Excess heat from motor cooling directed to bath water

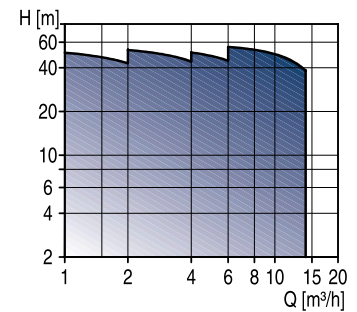
### Optional

- Integrated heating unit
- Level sensor
- Control panels



## CHI, CHIU

Multistage centrifugal pumps



### Technical data

Flow, Q: max. 14 m<sup>3</sup>/h  
 Head, H: max. 57 m  
 Liquid temp.: -15°C to +110°C  
 Operat. pres.: max. 10 bar

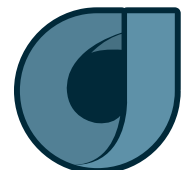
### Applications

The pumps are suitable for liquid transfer in

- Water treatment
- Industrial washing and dishwashing machines
- Pressure boosting of process water
- Heating and cooling in industrial processes
- Air-conditioning
- Airwashing, moisturization, humidification (softened water)
- Water supply and pressure boosting (potable water, also slightly chlorinated)

### Features and benefits

- Compact design
- Wide range
- Suitable for slightly aggressive liquids
- Low noise
- Leakage-free (CHIU only)

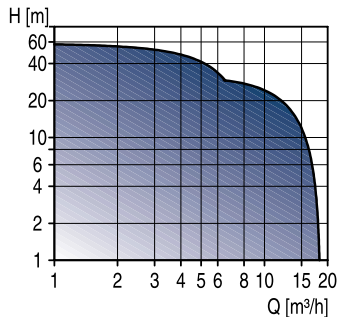






## CHIE

Multistage centrifugal pumps - electronically controlled



### Technical data

Flow, Q: max. 18 m<sup>3</sup>/h  
 Head, H: max. 58 m  
 Liquid temp.: -15°C to +110°C  
 Operat. pres.: max. 10 bar

### Applications

The pumps are suitable for liquid transfer in

- Cooling systems
- Industrial washing systems
- Aquafarms
- Fertilizer systems
- Dosing systems
- Industrial plants

### Features and benefits

- Compact design
- Wide range
- Suitable for slightly aggressive liquids
- Many control facilities

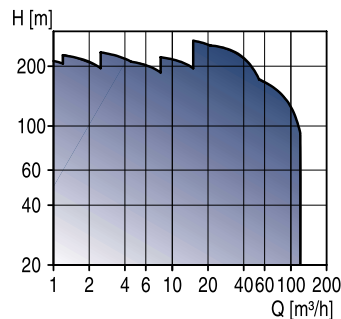
### Optional

- Wireless remote control, R100



## CR, CRI, CRN

Multistage centrifugal pumps



### Technical data

Flow, Q: max. 120 m<sup>3</sup>/h  
 Head, H: max. 270 m  
 Liquid temp.: -40°C to +180°C  
 Operat. pres.: max. 30 bar

### Applications

The pumps are suitable for liquid transfer in

- Washing systems
- Cooling and air-conditioning systems
- Water supply systems
- Water treatment systems
- Fire fighting systems
- Industrial plants
- Boiler feeding systems

### Features and benefits

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

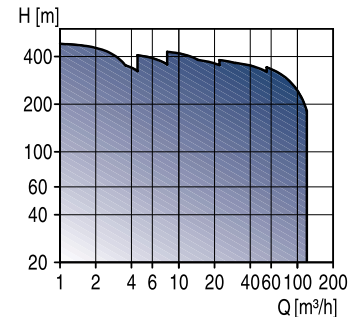
### Optional

- Dry-running protection and motor protection via LiqTec



## CR, CRN high pressure

Multistage centrifugal pumps



### Technical data

Flow, Q: max. 120 m<sup>3</sup>/h  
 Head, H: max. 480 m  
 Liquid temp.: -30°C to +120°C  
 Operat. pres.: max. 50 bar

### Applications

The pumps are suitable for liquid transfer in

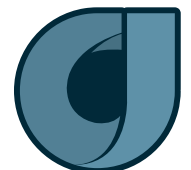
- Washing systems
- Water treatment systems
- Industrial plants
- Boiler feeding systems

### Features and benefits

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

### Optional

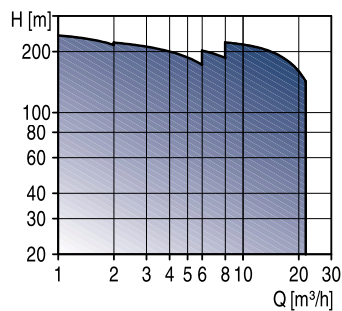
- Dry-running protection and motor protection via LiqTec





## CRT

Multistage centrifugal pumps



### Technical data

Flow, Q: max. 26 m<sup>3</sup>/h  
 Head, H: max. 270 m  
 Liquid temp.: -20°C to +120°C  
 Operat. pres.: max. 25 bar

### Applications

The pumps are suitable for liquid transfer in

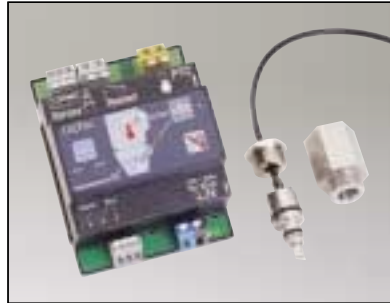
- Process water systems
- Washing in cleaning systems
- Sea water systems
- Pumping of acids and alkalis
- Ultra filtration systems
- Reverse osmosis systems
- Swimming baths

### Features and benefits

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

### Optional

- Dry-running protection and motor protection via LiqTec



## LiqTec

Control and monitoring unit

### Applications

- Monitoring and protection of pumps and processes

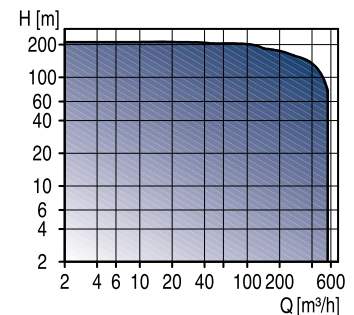
### Features and benefits

- Protection against dry running and too high motor temperatures
- Manual or automatic restarting possible from a remote PC
- Simple installation - plug and play technology
- Robust sensor



## CV, CPV, CPH

Multistage centrifugal pumps



### Technical data

Flow, Q: max. 560 m<sup>3</sup>/h  
 Head, H: max. 200 m  
 Liquid temp.: -15°C to +120°C  
 Operat. pres.: max. 20 bar

### Applications

The pumps are suitable for liquid transfer in

- Washing systems
- Cooling and air-conditioning systems
- Water supply systems
- Water treatment systems
- Fire fighting systems
- Industrial plants
- Boiler feeding systems

### Features and benefits

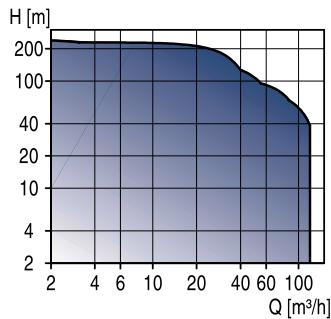
- Low-speed (4-pole motors)
- Heavy-duty
- Low-noise
- Vertical and horizontal installation.





**CRE, CRIE, CRNE**

Multistage centrifugal pumps



**Technical data**

Flow, Q: max. 120 m<sup>3</sup>/h  
 Head, H: max. 240 m  
 Liquid temp.: -30°C to +150°C  
 Operat. pres.: max. 30 bar

**Applications**

- The pumps are suitable for liquid transfer in
- Washing systems
  - Cooling and air-conditioning systems
  - Water supply systems
  - Water treatment systems
  - Fire fighting systems
  - Industrial plants
  - Boiler feeding systems

**Features and benefits**

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

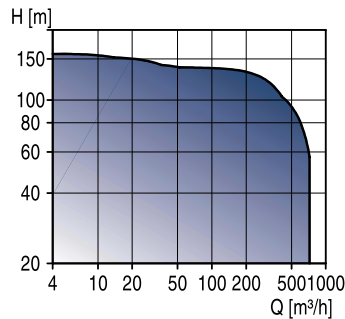
**Optional**

- Wireless remote control, R100



**Hydro 2000, Hydro 1000  
 Hydro Solo, Hydro Multi-E**

Control and monitoring unit



**Technical data**

Flow, Q: max. 720 m<sup>3</sup>/h  
 Head, H: max. 160 m  
 Liquid temp.: 0°C to +70°C  
 Operat. pres.: max. 16 bar

**Applications**

- Hydro 2000 are suitable for pressure boosting in
- Water supply systems
  - Irrigation systems
  - Water treatment systems
  - Fire fighting systems
  - Industrial plants

**Features and benefits**

- Constant pressure
- Simple installation
- Low-energy
- Wide range

**Optional**

- External communication, Control 2000



**Control 2000**

Multistage centrifugal pumps

**Applications**

Control 2000 is suitable for parallel connection of pumps in

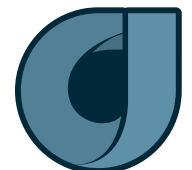
- Water supply systems
- Irrigation systems
- Water treatment systems
- Fire fighting systems
- Industrial plants

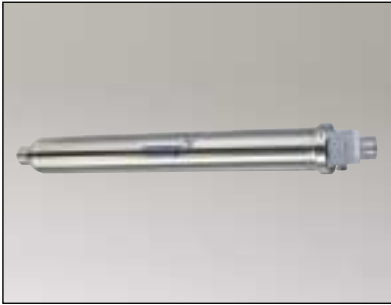
**Features and benefits**

- Complete control panel

**Optional**

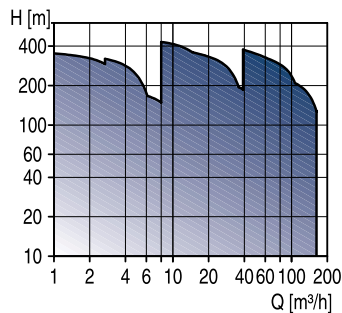
- External communication





### BM, BMB

4"-6"-8" booster modules



#### Technical data

Flow, Q: max. 260 m<sup>3</sup>/h  
 Head, H: max. 470 m  
 Liquid temp.: 0°C to +40°C  
 Operat. pres.: max. 80 bar

#### Applications

The booster modules are suitable for pressure boosting in

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

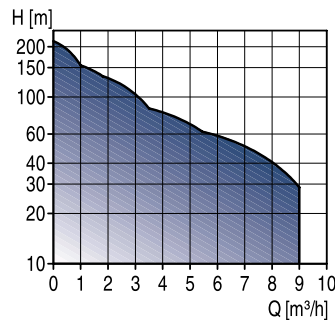
#### Features and benefits

- Various material versions
- Low-noise
- Simple installation
- Modular design
- Compact design
- Leakage-free



### BMQ, BMQE-NE

3" booster modules



#### Technical data

Flow, Q: max. 9 m<sup>3</sup>/h  
 Head, H: max. 215 m  
 Liquid temp.: 0°C to +40°C  
 Operat. pres.: max. 30 bar

#### Applications

The booster modules are suitable for pressure boosting in

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

#### Features and benefits

- Simple installation
- Modular design
- Compact design
- Integrated dry-running protection
- Soft start
- Over- and undervoltage protection

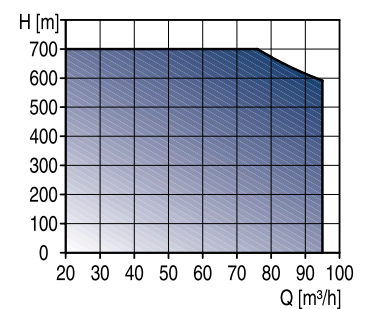
#### Optional

- BMQE-NE can be protected, monitored and controlled via CU 300/R100



### BME, BMET

High-pressure booster systems



#### Technical data

Flow, Q: max. 95 m<sup>3</sup>/h  
 Head, H: max. 700 m  
 Liquid temp.: 0°C to +40°C  
 Operat. pres.: max. 70 bar

#### Applications

The booster systems are suitable for pressure boosting in

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

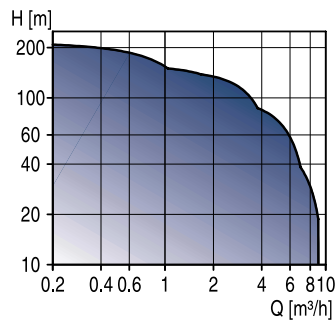
#### Features and benefits

- High-pressure/high-flow
- Low-energy
- Simple installation
- Compact design



## SQ, SQE

3" submersible pumps



### Technical data

Flow, Q: max. 9 m<sup>3</sup>/h  
 Head, H: max. 210 m  
 Liquid temp.: 0°C to +40°C  
 Operat. pres.: max. 150 bar

### Applications

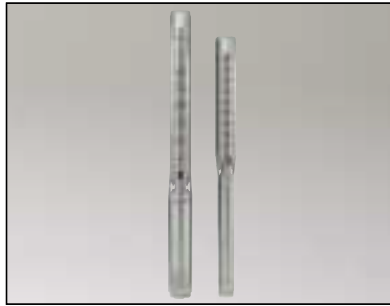
- The pumps are suitable for
- Domestic water supply
  - Groundwater supply to waterworks
  - Irrigation in horticulture and agriculture
  - Groundwater lowering
  - Industrial applications

### Features and benefits

- Integrated dry-running protection
- Soft start
- Over- and undervoltage protection
- High efficiency
- Leakage-free

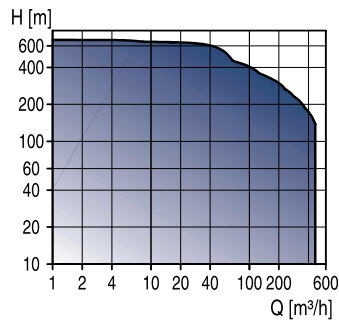
### Optional

- SQE can be protected, monitored and controlled via CU 300/R100



## SP A, SP, SP-G

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



### Technical data

Flow, Q: max. 470 m<sup>3</sup>/h  
 Head, H: max. 670 m  
 Liquid temp.: 0°C to +60°C  
 Operat. pres.: max. 600 bar

### Applications

- The pumps are suitable for
- Groundwater supply to waterworks
  - Irrigation in horticulture and agriculture
  - Groundwater lowering
  - Pressure boosting
  - Industrial applications

### Features and benefits

- High efficiency
- Long service life as all components are stainless steel
- Motor protection via CU 3

### Optional

- Data can be monitored and controlled via CU 3/R100



## MS motors

Stainless steel 4" and 6" submersible motors.

### Motor sizes

4" motor: 0.37 to 7.5 kW  
 6" motor: 5.5 to 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

- Overprotection by means of a built-in Temprocon temperature transmitter
- Standardized NEMA head and shaft end
- Completely encapsulated in stainless steel
- Liquid cooled and has liquid lubricated bearings

### Optional

- Material variants available



### MMS motors

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

### Motor sizes

6" motor:	3.7 to 37 kW
8" motor:	22 to 100 kW
10" motor:	75 to 190 kW
12" motor:	147 to 250 kW

### Applications

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

### Features and benefits

- Wide range of rewindable motors
- Easily rewinded
- Protection against upthrust
- High efficiency
- 6" and 8" have standardized NEMA head and shaft end.

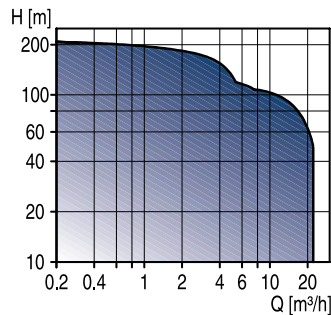
### Optional

- Material variants available
- PA windings
- Mechanical shaft seal SiC/SiC
- Overtemperature protection via Pt100



### SQE-NE, SP-NE

Environmental pumps



### Technical data

Flow, Q:	max. 22 m <sup>3</sup> /h
Head, H:	max. 215 m
Liquid temp.:	0°C to +40°C
Instal. depth:	max. 600 bar

### Applications

- The pumps are suitable for
- Pumping up contaminated groundwater
  - Sampling
  - Remedial pumping

### Features and benefits

#### SQE-NE

- Same features and benefits as SQE

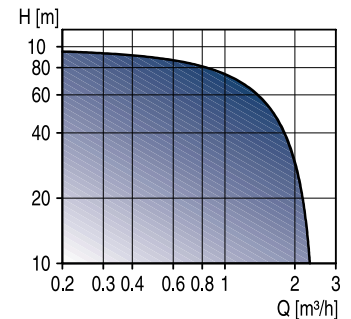
#### SP-NE

- Same features and benefits as SP



### MP 1

Environmental pumps



### Technical data

Flow, Q:	max. 2.4 m <sup>3</sup> /h
Head, H:	max. 95 m
Liquid temp.:	0°C to +35°C

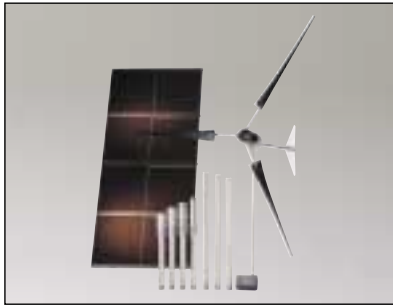
### Applications

The pumps are suitable for

- Sampling

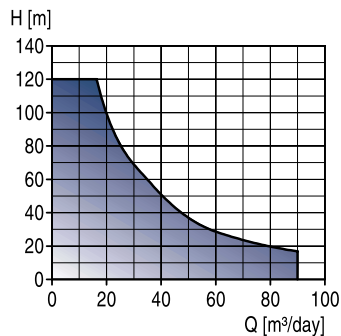
### Features and benefits

- Compact design
- Fit into 50 mm boreholes



## SQFlex

Renewable-energy based water supply systems



### Technical data

Flow, Q: max. 90 m<sup>3</sup>/day  
 Head, H: max. 120 m  
 Liquid temp.: max 0°C to +40°C  
 Voltage supply: 30-300 VDC or 1 x 90-240 V, 50/60 Hz  
 Instal. depth: max. 150 bar

### Applications

The SQFlex systems are suitable for remote locations, such as:

- Villages, schools, hospitals, single-family houses
- Farms and irrigation of greenhouses
- Game parks and game farms
- Conservation areas

### Features and benefits

- Energy supply: Solar modules, wind turbine, generator or batteries
- Simple installation
- Reliable water supply
- Virtually no maintenance
- Expansion possibilities
- Cost-efficient pumping
- Dry-running protection



## CU 3, 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
- Reading out of operating data via R100

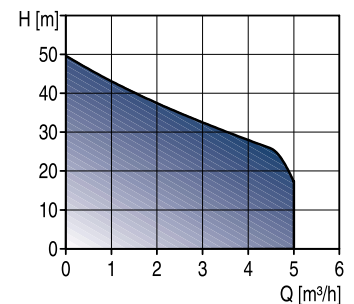
### Optional

- Connection to large control systems via bus-communication
- Connection of sensors enabling control based on sensor signals



## JP

Self-priming jet pumps



### Technical data

Flow, Q: max. 5 m<sup>3</sup>/h  
 Head, H: max. 48 m  
 Liquid temp.: 0°C to +55°C  
 Operat. pres.: max. 6 bar

### Applications

The pumps are suitable for liquid transfer in

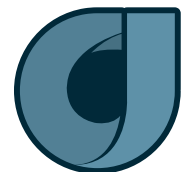
- Households
- Gardens
- Hobby activities
- Agriculture
- Horticulture
- Small industries

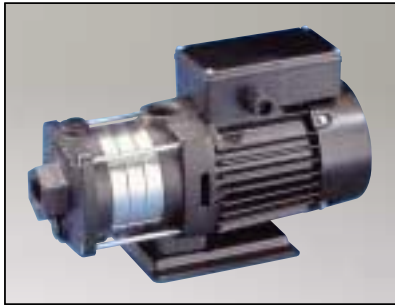
### Features and benefits

- Self-priming
- Stable operation even in case of air pockets in the liquid

### Optional

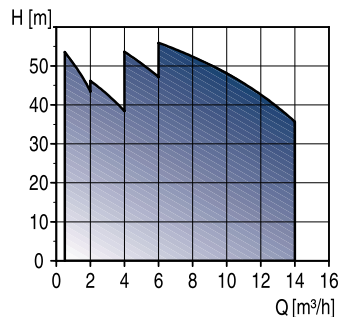
- Automatic start/stop when equipped with Presscontrol
- Booster sets for small-scale water supply





## CH, CHN

Multistage centrifugal pumps



### Technical data

Flow, Q: max. 14 m<sup>3</sup>/h  
 Head, H: max. 55 m  
 Liquid temp.: 0°C to +90°C  
 Operat. pres.: max. 10 bar

### Applications

The pumps are suitable for liquid transfer in

- Pressure boosting
- Domestic water supply
- Cooling systems
- Air-conditioning systems
- Horticultural irrigation
- Small industrial water supply systems

### Features and benefits

- Compact design
- Robust design
- Full stainless steel design (CHN only)
- Low noise

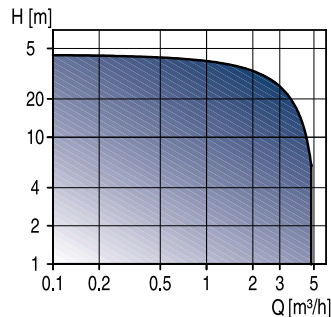
### Optional

- Booster sets for domestic water supply
- Automatic start/stop when equipped with Presscontrol



## MQ

Multistage centrifugal self-priming pumps



### Technical data

Flow, Q: max. 5 m<sup>3</sup>/h  
 Head, H: max. 48 m  
 Liquid temp.: 0°C to +35°C  
 Operat. pres.: max. 7.5 bar

### Applications

The pumps are suitable for liquid transfer in

- Private homes
- Holiday cottages
- Farms
- Green houses

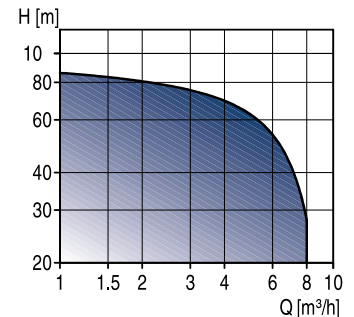
### Features and benefits

- All-in-one pressure booster unit
- Easy to install
- Easy to operate
- Self-priming
- Dry-running protection with automatic reset
- Low noise
- Maintenance free



## CHV

Multistage centrifugal pumps



### Technical data

Flow, Q: max. 8 m<sup>3</sup>/h  
 Head, H: max. 93 m  
 Liquid temp.: 0°C to +90°C  
 Operat. pres.: max. 12 bar

### Applications

The pumps are suitable for liquid transfer in

- Pressure boosting
- Domestic water supply
- Cooling systems
- Air-conditioning systems
- Horticultural irrigation
- Small industrial water supply systems

### Features and benefits

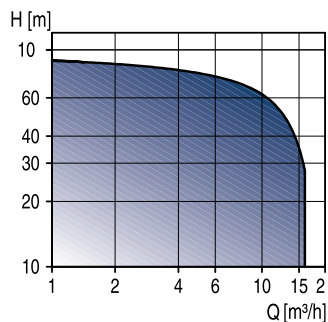
- Compact design
- Robust design
- Low noise
- Space-saving





**CHV booster**

Vertical pressure booster systems



**Technical data**

Flow, Q: max. 16 m<sup>3</sup>/h  
 Head, H: max. 93 m  
 Liquid temp.: 0°C to +40°C  
 Operat. pres.: max. 10 bar

**Applications**

The booster systems are suitable for pressure boosting in

- Small waterworks
- Small blocks of flats
- Hotels
- Stores
- Light industry
- Hospitals
- Schools
- Large houses

**Features and benefits**

- One- or two-pump system
- User-friendly controllers
- Reliability
- High efficiency
- Service-friendly

**Optional**

- Overpressure protection
- Dry-running protection



**Tanks**

Diaphragm and bladder tanks

**Technical data**

Tank size: 19-1000 l  
 Liquid temp.: max. +70°C  
 Operat. pres.: max. 7 bar

**Applications**

The diaphragm and bladder tanks are used in

- Water supply systems in housing
- Pressure boosting systems in housing
- Agriculture
- Horticulture
- Industrial systems

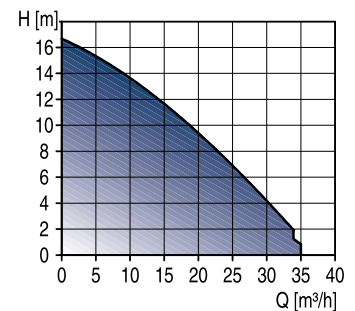
**Features and benefits**

- Optimal water supply
- Reduced number of pump starts
- Ideal for drinking water



**KP, AP, AP35B, AP50B - stainless steel**

Drainage pumps



**Technical data**

Flow, Q: max. 35 m<sup>3</sup>/h  
 Head, H: max. 18 m  
 Liquid temp.: 0°C to +55°C  
 Operat. pres.: max. ø50 mm

**Applications**

The pumps are suitable for

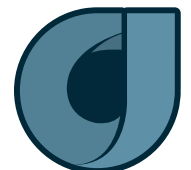
- Drainage of flooded cellars
- Pumping of household wastewater
- Groundwater lowering
- Emptying of swimming pools and excavations
- Drainage of drain wells
- Emptying of tanks and reservoirs

**Features and benefits**

- Simple installation
- Service- and maintenance-free

**Optional**

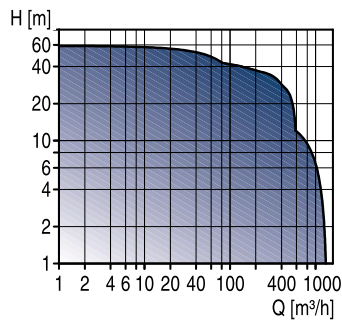
- AP35B and AP50B are suitable for installation on auto-coupling





## AP, APG - cast iron

Effluent and sewage pumps



### Technical data

Flow, Q: max. 1320 m<sup>3</sup>/h  
 Head, H: max. 67 m  
 Liquid temp.: 0°C to +40°C  
 Operat. pres.: max. ø130 mm

### Applications

The pumps are suitable for

- Pumping large quantities of effluent and sewage water
- Liquid transfer in general

### Features and benefits

- Wide range
- Service-friendly
- Wide field of applications
- Various types of impellers

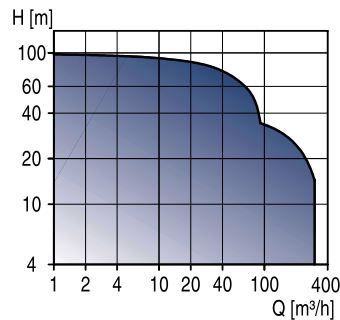
### Optional

- Various fittings
- Controllers for level control monitoring and protection of the pumps.



## DW

Contractor pumps



### Technical data

Flow, Q: max. 360 m<sup>3</sup>/h  
 Head, H: max. 100 m  
 Liquid temp.: 0°C to +40°C

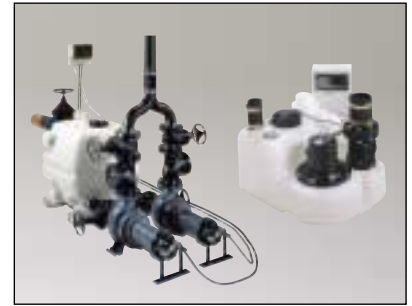
### Applications

The pumps are suitable for liquid transfer in

- Tunnels
- Mines
- Quarries
- Gravel pits
- Fish ponds
- Building sites

### Features and benefits

- Extremely hard-wearing due to specially selected materials
- Simple installation
- Service-friendly



## Lifting stations

Complete pumping stations

### Applications

The lifting stations are suitable for use in

- Single- and multi-family houses
- Weekend cottages and summer houses
- Restaurants
- Small hotels
- Sewage systems in the open country
- Percolation systems

### Features and benefits

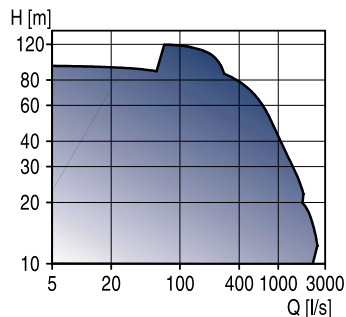
- Ready for installation
- Maintenance-free
- Flexible pipe connection





## S pumps

Supervortex pumps, single- or multi-channel impeller pumps



### Technical data

Flow, Q: max. 2500 l/s  
(9000 m<sup>3</sup>/h)  
Head, H: max. 120 m  
Liquid temp.: 0°C to +40°C  
Discharger diameter: DN 80 to DN 800

### Applications

The pumps are suitable for the following applications

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

### Features and benefits

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

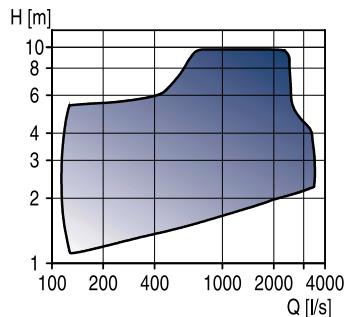
### Optional

- Control and protection systems
- External cooling water
- External seal flush system



## SA pumps

Submersible axial-flow pumps



### Technical data

Flow, Q: max. 3500 l/s  
(12600 m<sup>3</sup>/h)  
Head, H: max. 9 m  
Liquid temp.: 0°C to +40°C  
Column pipe diameter: 700 to 1400 mm

### Applications

The pumps are suitable for the following applications

- Transfer of raw water
- Pumping of water from sewage treatment plants
- Storm water pumping
- Irrigation
- Pumping of water in marine installations
- Industrial applications

### Features and benefits

- High efficiency stainless steel propeller
- Totally submerged installations
- Built-in motor protection
- Flexibility of installation

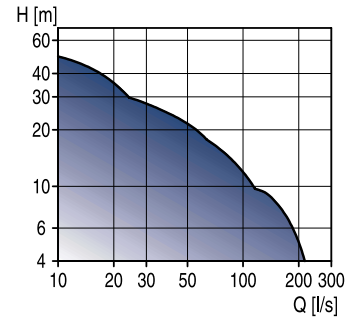
### Optional

- Control and protection systems
- Motor operation control



## SEN

Submersible stainless steel pumps



### Technical data

Flow, Q: max. 215 l/s  
(774 m<sup>3</sup>/h)  
Head, H: max. 50 m  
Liquid temp.: 0°C to +40°C  
Discharger diameter: DN 80 to DN 250

### Applications

The pumps are suitable for the following applications

- Transfer of wastewater and raw water
- Pumping of highly aggressive liquids
- Pulp and paper industries

### Features and benefits

- Smart Trim
- Operation with/without cooling jacket
- Submerged or dry installation
- Different types of impellers
- Built-in motor protection
- Various executions in stainless steel
- Liquids with a pH value between 2 and 14

### Optional

- Control and protection systems
- External cooling water
- External seal flush system

