

GROUNDWATER PRODUCTS





FEATURES/BENEFITS:

SQ:

- Rugged Design
- 1/3 - 1.5 Hp Integral Motors
- Good Sand Handling Capabilities
- High Motor and Pump Efficiencies
- Built-in Dry-Run Protection
- Overload / Locked Rotor Protection
- Overvoltage / Undervoltage Protection
- Over Temperature Protection
- No Control Box Required
- Soft-Start
- Multiple Frequency Input (50 - 60 Hz)
- Two Voltage Variants:
 - 1 x 100 - 115V
 - 1 x 200 - 230V
- Pump and Motor Can Be Separated
- High Starting Torque (Even at Low Voltages)
- Easy to Install
- Serviceable Pump and Motor
- Replaceable Motor Lead

SQE:

ALL OF THE SQ FEATURES, PLUS:

- Constant Pressure Regulation
- Advanced Communication
- Telephone Modem Surveillance
- Pump Status Readout Through Drop Cable (While Pump is Installed in the Well)
- Failure Analysis Stores Failure Data
- Parameters Programmable by the R100
- Programmable Speed Change
- Multiple Pump Curves With One Unit
- Sensor Connection (3 Signals)

SQE-NE:

ALL OF THE FEATURES OF THE SQE, BUT DESIGNED FOR ENVIRONMENTAL APPLICATIONS:

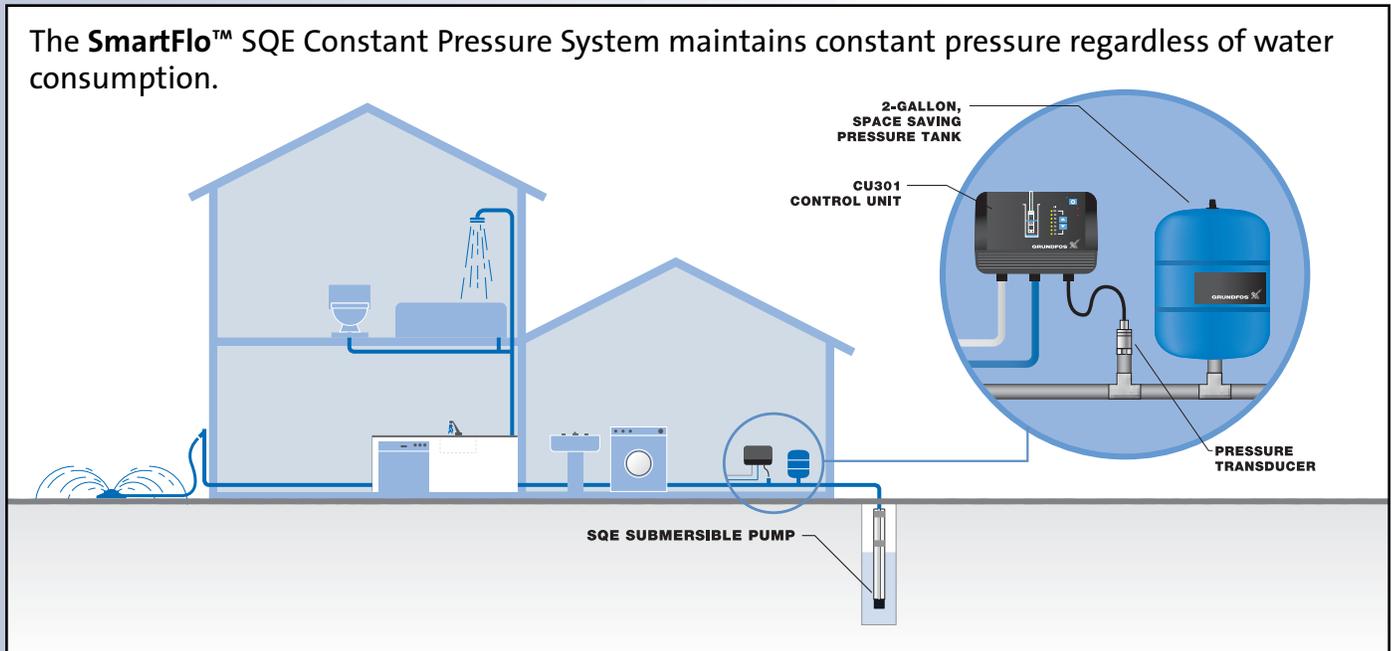
- All 316 SS Construction
- Inert Composites for Environmental Applications



Drinking Water System Components
ANSI/NSF 61
(65 GM)

GRUNDFOS SMARTFLO™ SQE CONSTANT PRESSURE SYSTEM

THE EASIEST AND MOST COMPLETE CONSTANT PRESSURE SYSTEM ON THE MARKET TODAY.



SmartFlo™
SQE CONSTANT PRESSURE SYSTEM



EASY TO SELL:

- No water pressure problems means your customers will always have a reliable water supply.
- Soft-start and soft-stop eliminates annoying power surge and water hammer.
- Overload and over-heating protection to ensure long life under adverse operating conditions.
- Built-in dry run protection to prevent damage to pump and motor.
- Utilizes a small, space saving, pressure tank.
- Easy servicing.
- User friendly control unit.

EASY TO INSTALL:

- The system consists only of the SQE Pump, the CU 301 Control Box, Pressure Sensor and a 2-Gallon pressure tank.
- No extra components or parts needed.
- No extra connections or plugs needed.
- Easy to size and set up.
- Compact and lightweight design makes it easy to handle and transport.
- No separate starter box or motor protection required.

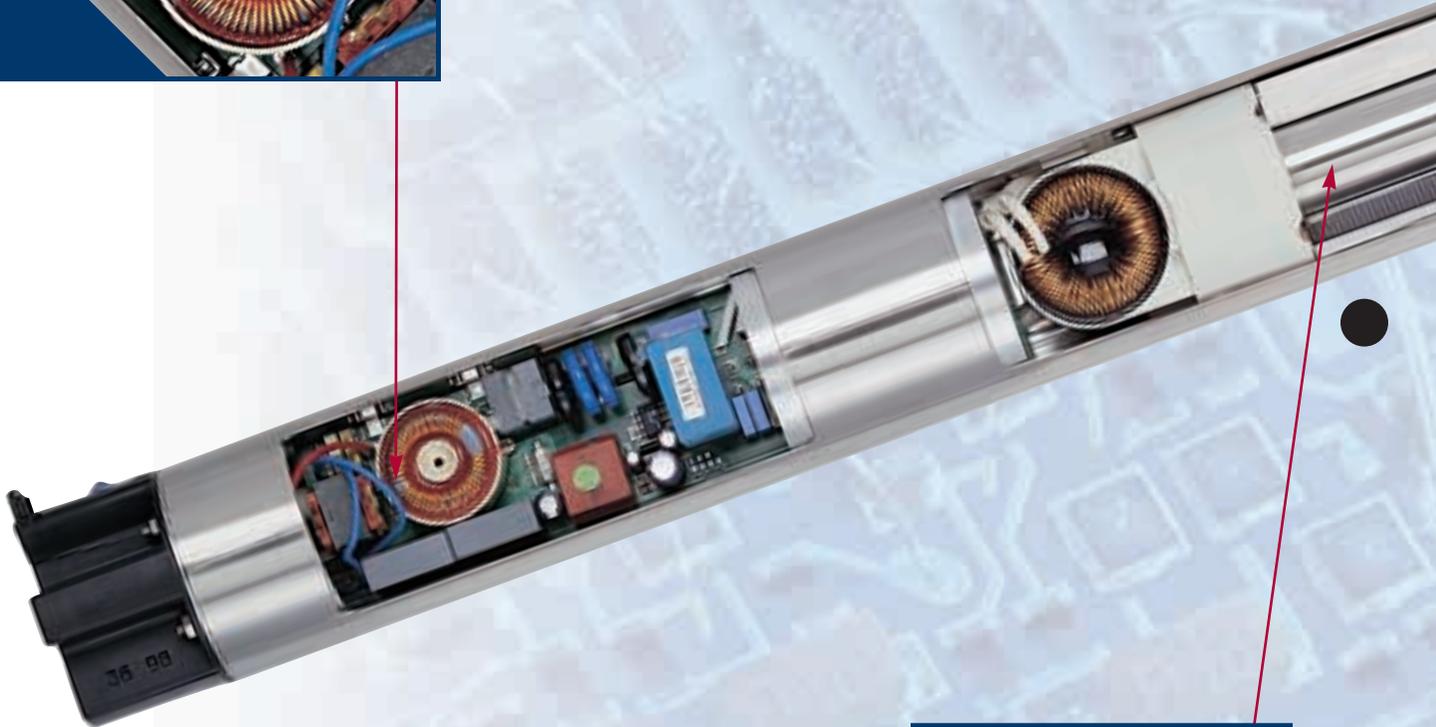
EASY TO OPERATE:

- With the CU 301 control box all you have to do is set the desired pressure and walk away.



ADVANCED ELECTRONICS

By combining advanced electronics, permanent-magnet motors, and Grundfos' own micro-frequency converter, we are now able to control and communicate with pumps in ways never before possible. A few of the features that come out of this combination are Constant Pressure Control, Soft-Start and integrated Dry-Run Protection.



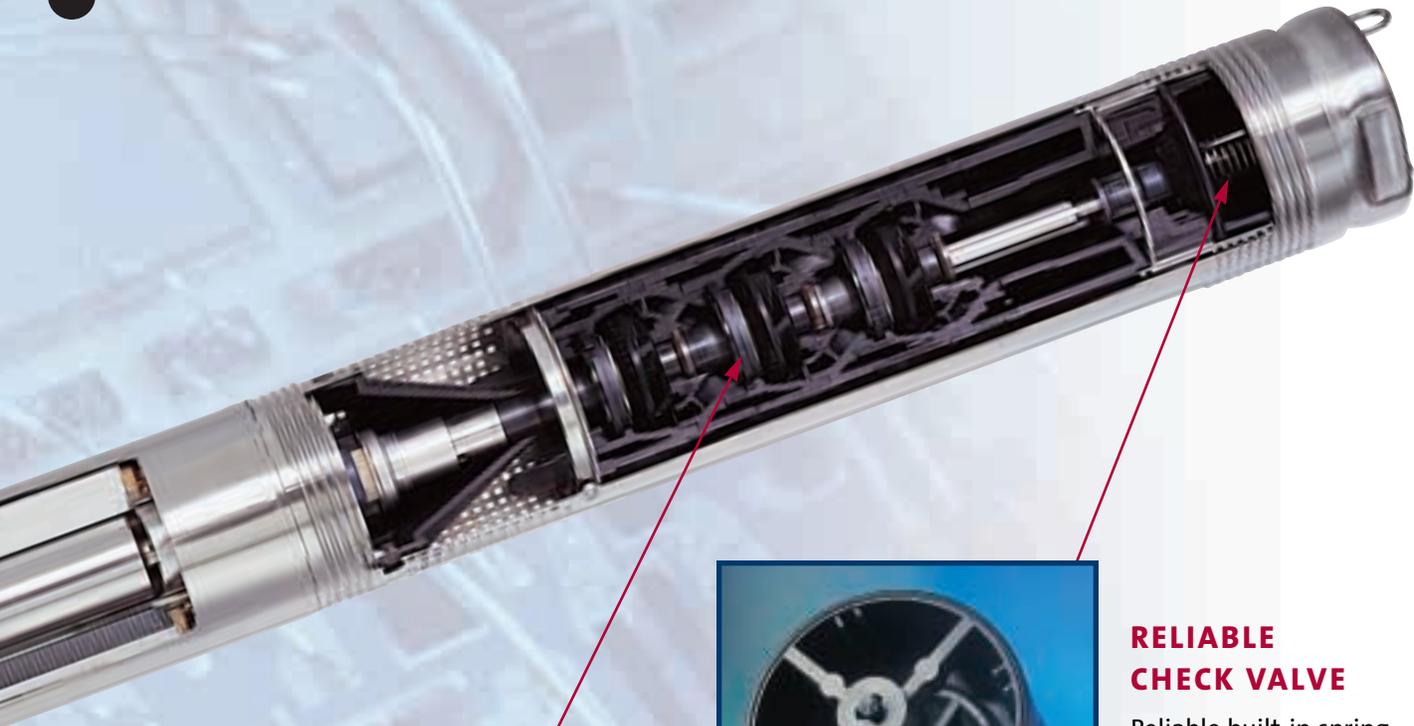
PERMANENT-MAGNET MOTOR

The SQ and SQE motors are based on a permanent-magnet rotor which produces high efficiency output within a wide load range. The high and flat efficiency curve of the permanent-magnet motor allows us to cover a wide power range with the same motor, as compared to conventional AC motors. For SQE pumps, this means three motors to cover the horsepower range from 1/3 to 1.5 Hp.





RUGGED BY DESIGN



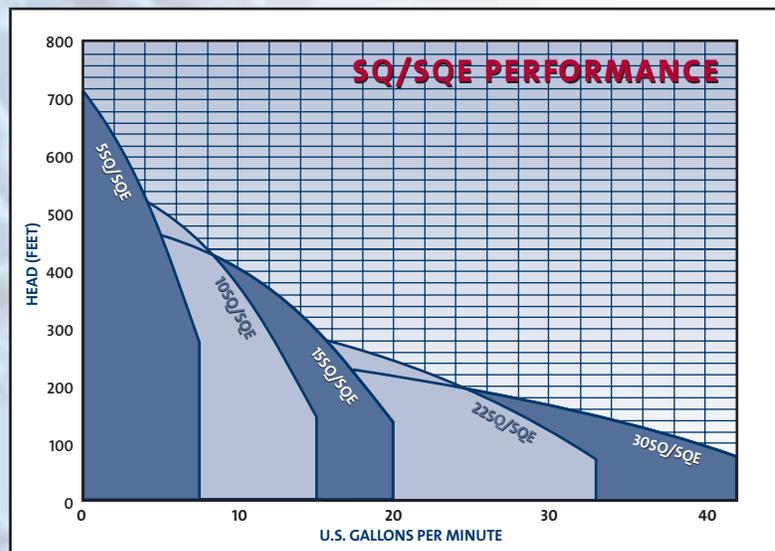
RELIABLE CHECK VALVE

Reliable built-in spring loaded check valve lets you operate the pump in any position from vertical to horizontal.



RUGGED DESIGN

The SQ/SQE pump design uses “floating” impellers. Each impeller has its own tungsten carbide/ceramic bearing. This design and the high quality of materials make the pump very wear resistant.



GRUNDFOS 4-INCH SUBMERSIBLES



Grundfos' 4" submersibles feature corrosion-resistant stainless steel construction and are designed to provide years of trouble-free performance.

With built-in sand bearing protection, the 4" submersible can handle the sandy conditions often found in domestic wells. Built-in, jam-free check valves and special upthrust protection guarantee smooth running, fail-safe operation. A user friendly cable guard aids in ease of installation.

Grundfos 4" submersibles are available with a rugged Grundfos submersible motor manufactured of stainless steel. The two units together result in a quality pumping unit built to last.



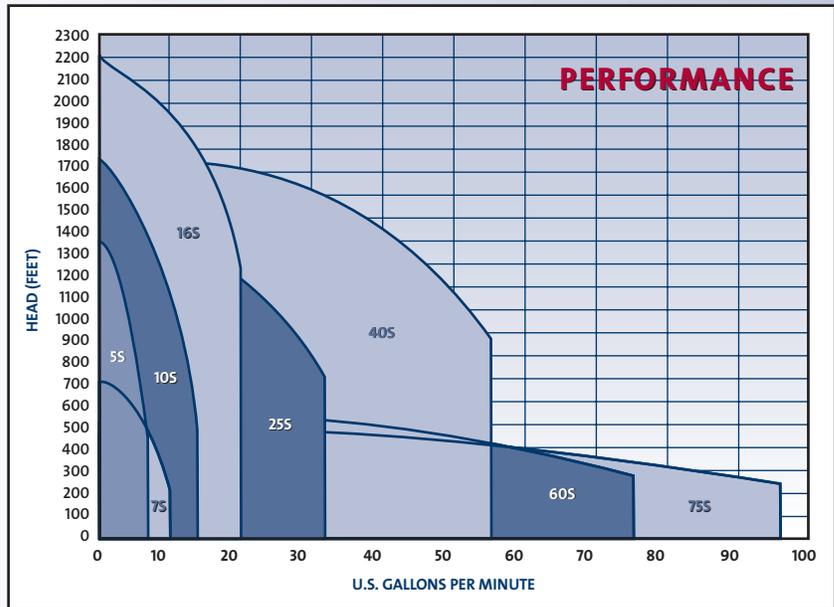
Radial Thrust Top Bearing handles sand and increases pump life.



The Redi-Flo4®, constructed of stainless steel and virgin Teflon® is designed for environmental monitoring and clean-up operations.



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GRUNDFOS 6, 8 AND 10-INCH SUBMERSIBLES



Grundfos large submersible pumps are designed to reduce operating costs and improve efficiencies. The new high efficiency line is designed to deliver during periods of high demand with better efficiencies and fewer losses, to reduce your overall “cost of ownership”.

Built with the same high-quality, corrosion-resistant stainless steel components as other Grundfos groundwater products, these pumps feature a state-of-the-art impeller design which allows for outstanding performance at depths over 2000 feet.

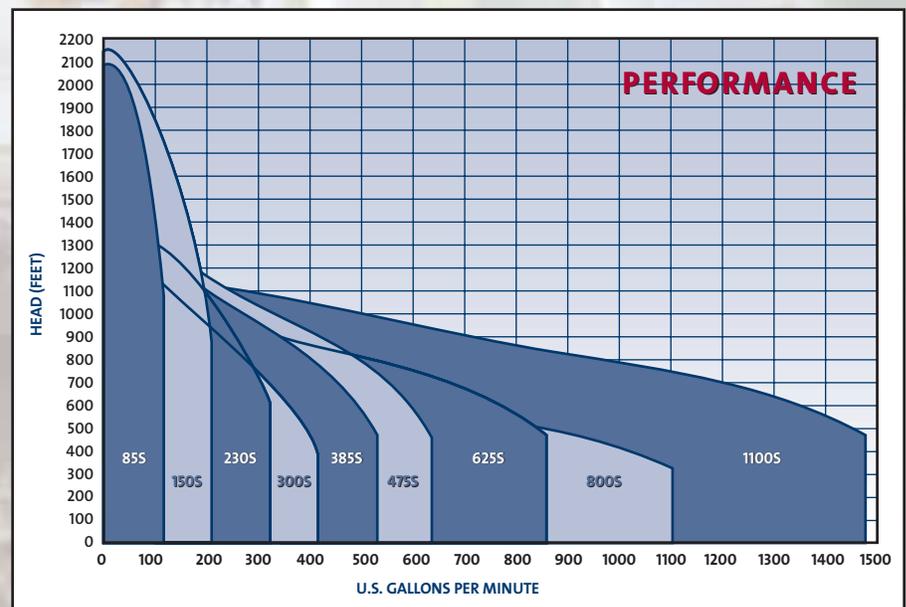
This new line of submersibles is also “smart”. Incorporated into the design is the revolutionary CU3 control system which automatically monitors your pump's performance.

Grundfos 6", 8" and 10" submersibles are available with a rugged Grundfos submersible motor. Manufactured of stainless steel, the two units together result in a quality pumping unit built to last.



FEATURES/BENEFITS:

- **High efficiencies** – Due to less horsepower utilized, operating costs drop significantly.
- **Built-in check valve** – Protects pump from water hammer.
- **Built-in upthrust protection** – Protects the pump during periods of high demand.
- **Quality construction** – Built of rugged, corrosion-resistant stainless steel.



GRUNDFOS CU3 CONTROL SYSTEM



The CU3 is an electronic control system which monitors the overall performance of your pump's motor, machines, cables and cable joints, up to and including 400 A at 50 and 60 Hz.

Working in conjunction with a Grundfos pump, the technologically advanced CU3 monitors insulation resistance before start-up; motor temperature (for motors with built-in temperature sensor); motor current consumption and phase asymmetry; voltage supply; phase sequence; installation; operating hours and power consumption.



THE CU3 OFFERS PROTECTION AGAINST:

- Dry-run
- Overload
- Operation against a closed valve/frozen discharge pipe
- Insufficient liquid circulation past the motor
- High temperatures
- Deposits on the motor
- Under/Overvoltage
- Phase asymmetry (current unbalance)
- Incipient motor failure
- Motor overheating
- Motor burn-out



Grundfos also has a complete line of pump panels, making your installation fast and easy.

OPTIONS FOR THE CU3:

With the use of a Grundfos R100 infra-red remote control, you can monitor your pump's operational data including: current, voltage, running hours, power input, energy consumption and fault indications. The R100 remote control can be configured to meet exact specifications and is capable of monitoring an entire pumping system independently, keeping maintenance to a minimum.



A printer is also available to allow for the R100 data to be downloaded directly for quick output of current data.

GRUNDFOS MQ PUMPS ALL-IN-ONE HOME WATER SUPPLY SYSTEM

The Grundfos MQ is a compact all-in-one pressure boosting unit, designed for domestic water supply and other boosting or lift applications. The MQ is a compact and reliable, easy-to-install pump, with many standard features.

The MQ is a self-priming multi-stage centrifugal pump. It self-primers from a well depth of down to 25 feet within a maximum time of 5 minutes. The MQ pump is also ideal for pressure boosting from water storage tanks or from city water supply (maximum 45 psi inlet pressure).

The MQ pump is built for long life, trouble-free operation. It is made from weatherproof, corrosion-resistant materials and can be placed outdoors.

UNIQUE USER BENEFITS

“Whisper quiet operation,” the MQ is specially designed for use in domestic applications where low noise is a major consideration. The pump is cooled by the pumped water which eliminated the need for a noisy cooling fan. Because the pump is self-cooling, you don’t need to have free space around the pump for cooling purposes.

The MQ “anti-cycling” feature prevents the pump from continuously starting and stopping when you have a dripping tap or minor leak in the system.



PROTECTIVE FEATURES

The MQ pump has built-in dry-run protection. If the pump runs dry, the pump automatically stops. It will then attempt to restart every half hour for a maximum of 24 hours until water is available from the source.

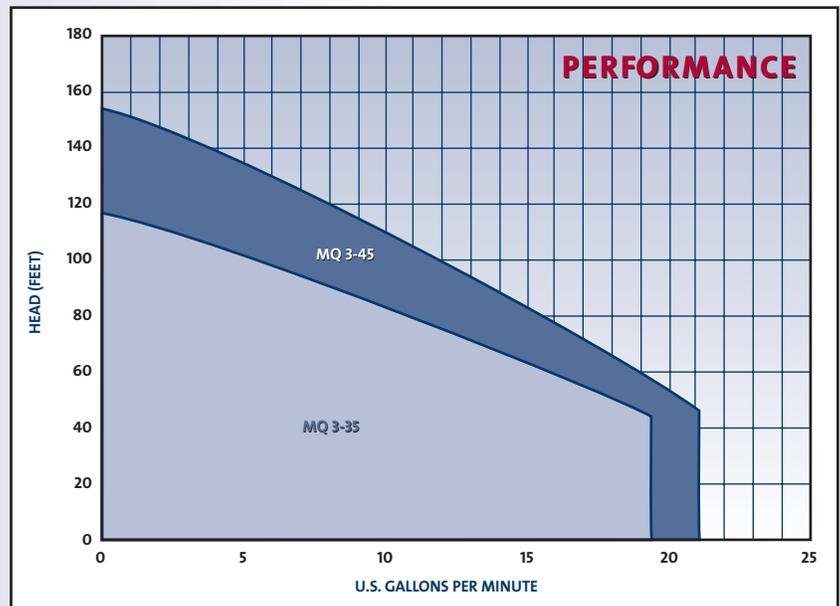
If more than 24 hours pass without water, the pump must be restarted manually. The auto reset function can also be disabled.

The MQ pump also has built-in thermal protection. If the pump overheats it immediately stops. After a 30-minute cooling-down period, the pump will automatically restart.

The MQ has an easy accessible priming plug for filling the pump with water before start. It also has a drain plug to prevent the pump from freezing.

FEATURES/BENEFITS:

- Easy to select
- Easy to install
- Easy to operate
- Self-priming down to a depth of 25 ft (8 m)
- Low noise
- Anti-cycling feature
- Dry-run protection
- Corrosion-free – suitable for potable water
- User-friendly control panel
- Tough and reliable
- Space-saving – no tank required
- Use anywhere: homes, cottages, farms, greenhouses and more



GRUNDFOS BASIC LINE JET PUMPS

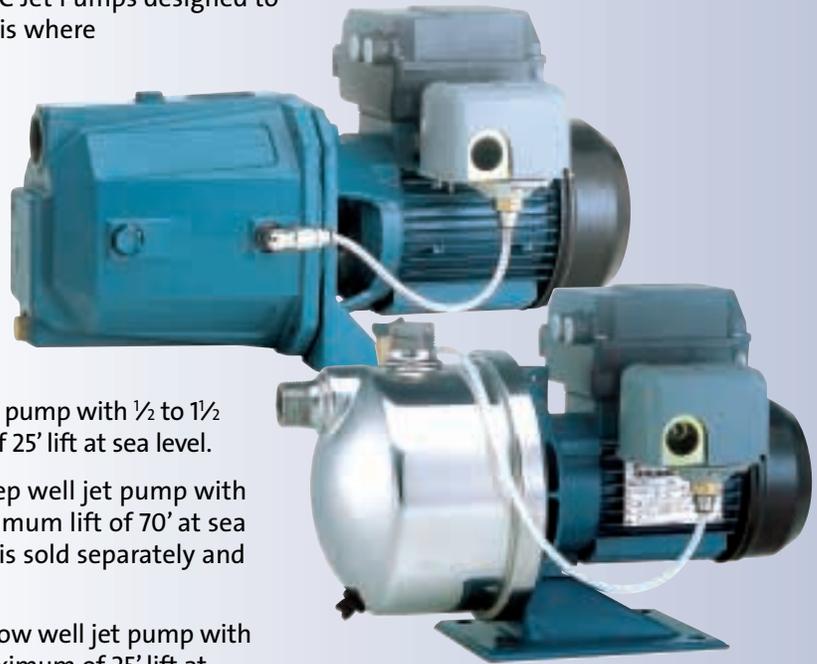
The Grundfos Basic Line Jet Pumps are a line of IEC Jet Pumps designed to be competitive, with high-end performance. This is where quality meets economy. We offer three different models of pumps to meet all of your application needs.

All models are built with a rugged high efficiency IEC motor (comparable to TEFC) with built-in thermal protection. They also come equipped with a pre-wired Square D pressure switch and all models use durable engineered composite impeller/ guide vane assembly.

The Model JPF is a rugged cast-iron shallow well jet pump with ½ to 1½ HP models. All pumps are capable of a maximum of 25' lift at sea level.

The Model JDF is a rugged cast-iron dedicated deep well jet pump with ½ and ¾ HP models. The JDF is capable of a maximum lift of 70' at sea level with a properly selected ejector. The ejector is sold separately and is sized according to your application needs.

The Model JPS is a durable 304 stainless steel shallow well jet pump with ½ and 1 HP models. All pumps are capable of a maximum of 25' lift at sea level.



FEATURES/BENEFITS:

- Complete range of shallow and deepwell jet pumps.
- I.E.C. motors for better efficiency, longer life, and quiet operation.
- Corrosion resistant composite components; impeller, ejector and diffuser.
- Rugged Cast Iron (models JPF and JDF) for durability and strength.
- Stainless Steel construction (model JPS) for superior corrosion protection.
- Built-in Thermal Overload for motor protection.
- Clean out port (JPF models only) for easy ejector service.



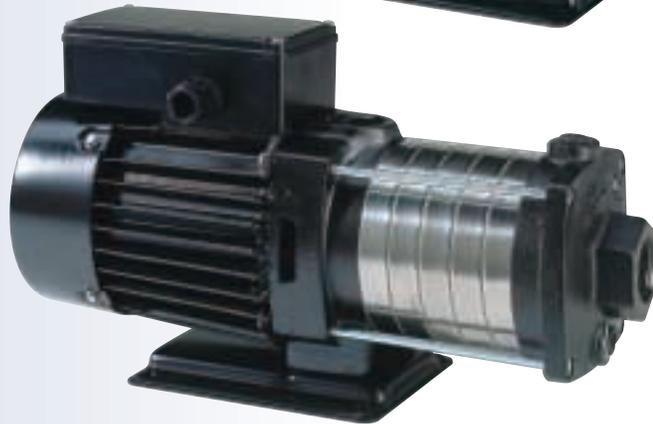
The Grundfos CH pump models are a line of horizontal multi-stage booster pumps. The CH pumps are designed for a wide range of applications, including pressure boosting for homes, agricultural and commercial uses. The CH is also well-suited for your basic water transfer needs.

The CH is a durable high efficiency pump that uses all stainless steel impellers and chambers to provide you with years of trouble free service. The CH pumps are built with a robust Grundfos TEFC motor with built-in thermal protection.

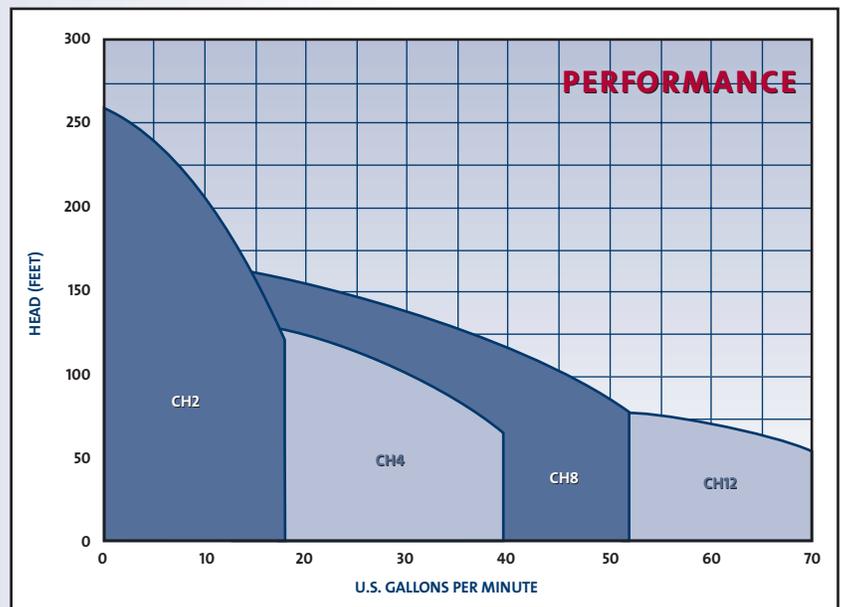
We offer 4 different models with flow ranges up to 70 GPM and heads up to 260 Ft. With the many different models to choose you will surely find a pump to meet your application needs.

FEATURES/BENEFITS:

- Stainless Steel Fitted Construction for a broad application range
- Horizontal Design making it easy to install in small places or where you need low clearances
- Standard Grundfos components give you quick delivery and price competitiveness
- Grundfos, extended shaft TEFC motor design is matched for pump to give you long life.



Also available in all 304SS construction.



GRUNDFOS GROUNDWATER PRODUCTS

MODELS	WELL SIZE	HP RANGE	DISCHARGE SIZE	FLOW RANGE GPM	HEADS TO: (FT.)
SQ/SQE					
5SQ/SQE	3"	1/3 - 1	1"	1.5 - 8	710
10SQ/SQE	3"	1/3 - 1 1/2	1 1/4"	3 - 15	560
15SQ/SQE	3"	1/3 - 1 1/2	1 1/4"	4 - 20	470
22SQ/SQE	3"	1/3 - 1 1/2	1 1/2"	7 - 33	320
30SQ/SQE	3"	1/2 - 1 1/2	1 1/2"	8 - 42	260
4" SUBMERSIBLES					
5S	4"	1/3 - 3	1"	1.2 - 7	1360
7S	4"	1/3 - 1 1/2	1"	3 - 10	700
10S	4"	1/3 - 5	1 1/4"	5 - 14	1740
16S	4"	1/2 - 10	1 1/4"	10 - 20	2220
25S	4"	1/2 - 10	1 1/2"	18 - 32	1560
40S	4"	1 - 20	2"	24 - 55	1900
60S	4"	2 - 10	2"	40 - 75	570
75S	4"	2 - 10	2"	45 - 95	510
6", 8" AND 10" SUBMERSIBLES					
85S	6"	1 1/2 - 50	3"	18 - 118	2090
150S	6"	2 - 75	3"	30 - 220	2145
230S	6"	7 1/2 - 75	3"	45 - 320	1440
300S	6"	7 1/2 - 75	3" & 4"	60 - 410	1220
385S	8"	7 1/2 - 100	4"	75 - 550	1280
475S	8"	10 - 125	6"	95 - 680	1340
625S	10"	15 - 150	6"	125 - 850	990
800S	10"	20 - 125	6"	160 - 1080	780
1100S	10"	30 - 250	6"	220 - 1400	1140
BASIC LINE JET PUMPS					
JPF/JDF	3"	1/2 - 1	1" x 1"	1 - 20	200
JPS	3"	1/2 - 1	1" x 1"*	1 - 30	158
MQ BOOSTER SYSTEM					
MQ3-35	2"	3/4	1" x 1"*	1/2 - 19	118
MQ3-45	2"	1	1" x 1"*	1/2 - 21	155
CH MULTI-STAGE BOOSTER					
CH2	2"	1/2 - 1	1" x 1"	1 - 18	260
CH4	2"	1/2 - 1 1/2	1 1/4" x 1"	2 - 40	173
CH8	2"	3/4 - 1 1/2	1 1/2" x 1 1/4"	3 - 53	170
CH12	2"	1/2 - 2	1 1/2" x 1 1/2"	5 - 70	150

* denotes Male NPT

Contact:

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