The CR range from Grundfos

Innovation Inside the CR

Traditional methods provide many water solvers depending upon their needs and demands. But Grundfos’ CR offers a new motor-to-booster maximum performance. The CR motor is so designed and made so powerful that the energy required to the motor is delivered to the system efficiently. In other words, the CR is the perfect solution for boosting the efficiency of a water system.

EPA ENERGY EFFICIENCY CRITERIA

Innovation is an integrated feature of all our products. To many, innovation is just a buzzword. At Grundfos, innovation is the essence of our business.

INNOVATION 2012

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The CR range from Grundos
Innovation Inside the CR

1. Capacity: Grundfos CR pumps provide many water solutions depending upon the applications in industrial and residential settings. Thanks to its motor and pump power performance, the CR is not on the market. The patented Grundfos LiqTec™ system eliminates the risk of breakdowns due to dry running. If there is no liquid in the pump, the LiqTec will immediately stop it.

2. Dry-running sensor: The CR comes in 13 hydraulic sizes and hundreds of pres- sure stages, allowing a wide range of options for all types of industry and building applications. The pump, motor, frequency converter, PID controller and sensor are perfectly matched, tested and configured at the factory, which greatly facilitates the subsequent installation of the system integration. They come with an integrated frequen- cy converter, which has E-pump functionality.

3. E-PUMP AVAILABILITY: Grundfos CRE-pumps offer all the advantages of a total solution: a pump and motor with an integrated frequency converter, controller and sensor. Grundfos CRE-pumps are your all-in-one energy saving solution for all types of industry and building applications.

4. COOL AND CONVINCING: Grundfos multi-stage pumps: CRE/CRNE/CRIE.

5. Motor: Grundfos provides many motor solutions depending upon the motor efficiency. Grundfos motors are specifically designed to handle the challenges of high performance applications. The ML motors provide superior reliability and the lowest possible cost of ownership to customers worldwide.

6. In the case of pumps supplied with Grundfos ML motors, the complete dedication to quality and service for all pump applications — new or existing Grundfos pumps.


E-PUMP AVAILABILITY

1. Remote control and monitoring via bus interface
2. Dedicated functions for variable frequency drives
3. Automatic setting of rotation direction during installation
4. Start-up installation guide
5. Frequency converter, controller and sensor.

FEATURES

1. Motors: 3-phase, 3x460-480V+/-10%, 60 Hz, 1.0-10 Hp
2. Backlash: 0.5-1.5 Hp for 4-pole motors
3. Type: 2-pole motors and 0.33-1.0 Hp for 4-pole motors
4. Control: R100 control
5. Enclosure Class: TEFC, IP55

APPLICATIONS

1. Domestic water supply
2. Sanitary and hazardous areas
3. Food and beverage
4. Process and power ranges outside the E-pump range.

EQUIPMENT

1. Enclosure: NEMA 1 / NEMA 12
2. Voltage: 3-phase, 3x525-690+/-10%, 60Hz, 15-300 Hp
3. Frequency: 3-phase, 3x200-240+/-10%, 60Hz, 1.0-60 Hp
4. Temperature: 3-phase, 3x525-600+/-10%, 60Hz, 1-10 Hp
5. Contact pressure: 3-phase, 3x208-230V+/-10%, 60

* Grundfos ML motors are not available in Canada.
UPSSIZING ENERGY EFFICIENCY

GRUNDfos CR SOLUTIONS

1. **Expandable**
   - **Reasons:**
     - The CR range from Grundfos offers an economical way to upgrade existing systems to meet growing needs.
     - It offers the capability to increase system performance without replacing the entire system.

2. **Choices:**
   - **Material:**
     - The CR range is available in four different materials: AISI 304/316, carbon steel, cast iron, and stainless steel.
   - **Dimensions:**
     - The CR range is available in a wide range of sizes to meet various customer requirements.
   - **Applications:*
     - **E-Pump availability:**
       - E-Pump availability is perfect for applications requiring easy access to the pump and motor.
     - **CUE availability:**
       - CUE availability is ideal for applications requiring a space-saving installation.

3. **Benefits:**
   - **Energy efficiency:**
     - The CR range provides a major energy-saving potential, reducing operational costs.
   - **Reliability:**
     - The CR range offers superior reliability and the lowest possible cost of ownership to customers worldwide.
   - **Innovation:**
     - The CR range is a result of Grundfos’s commitment to innovation, driving the development of new technologies and solutions.

4. **Conclusion:**
   - The CR range from Grundfos is the most extensive in-line pump program on the market, matching customer requirements with the right pump for the job.
   - Grundfos provides superior reliability and the lowest possible cost of ownership to customers worldwide.

---

**GRUNDfos CRE-Pump Features**

- **Remote control and monitoring via bus interface and advanced features and functionality**
- **Factory configured and tested units**
- **Compact plug-and-pump solution**
- **GRUNDfos CRE-pumps offer all the advantages of a total integrated solution for all types of industry and building applications.**
- **A Smart Way to Save**
  - **User-friendly**
  - **Range**
    - **Enclosure Class:**
      - NEMA 1 / NEMA 12
    - **Pumps:**
      - 1-phase, 1x208-230V+/-10%, 60Hz, 0.5-1.5 Hp for 2-pole motors
      - 2-pole motors
    - **Motors:**
      - TEFC, IP55
    - **PID controller:**
      - Communication speeds: 4 to 20 mA 4 to 20 mA, 100 to 1200 Hz, 0 to 5 VDC, 0 to 10 VDC
  - **E-Pump Availability**
    - Remote control and monitoring via bus interface and advanced features and functionality
  - **CUE Availability**
    - Remote control and monitoring via bus interface

**GRUNDfos CUE Features**

- **Remote control and monitoring via bus interface**
- **Dedicated functions for E-pump functionality**
- **Integrated display with an easy-to-use R100 style menu**
- **Automatic setting of rotation direction during installation**
- **Start-up installation guide**
- **E-pump functionality**
- **A CUE solution is ideal for installations where an integrated solution is not desirable or not feasible.**
- **A CUE solution offers you a space-saving installation, the freedom of choice, and speed-control functionality with exactly the same results**

---

**FOOTNOTE:**

*Grundfos ML motors are not available in Canada.
The complete Grundfos CR range: The last word in multi-stage pump technology

Grundfos was the first pump manufacturer ever to create a multi-stage in-line pump. Known as the CR pump, this innovative design has inspired followers all over the world. Even so, continuous development and innovation ensure that the CR range, including our new extra-large CR featured on pages 6 and 7, remains at the top of the list. The CR range lets you choose pumps which exactly match your system demands.

Choosing the right pump can be difficult. It may be easy enough to find a pump that will do the job, but it gets trickier when you want an exact match. There are many good reasons to avoid non-compliance with energy consumption at the top of the list. The CR range has all those pumps covered. The CR range has the right pump for the job.

To meet the growing demand of customers looking for a pump to solve their highest energy consumption system issues, Grundfos has developed CR, the world’s first extra-large pump. With a maximum flow of nearly 630 gpm, the CR offers extended efficiency to meet your highest flow system demands. The CR(N) 120 and CR(N) 150 are the new extra-large CR designed to solve your highest flow system demands.

The CR(N) 120 and CR(N) 150

The CR(N) 120 and CR(N) 150 are the new extra-large CR designed to solve your highest flow system demands.

- Max. working pressure (psi) 435
- Nominal flow rate (US GPM) 750
- Cool Rodriguez
- Temperature range (°F) -22 to +250
- Temperature range (°C) -30 to +120
- Motor power (HP) 7 1/2 - 60
- Max. pump pressure (H\[ft\]) 300
- Motor power (kW) 5 - 30
- Max. pump efficiency (%) 95
- Motor power (kW) 8 - 40
- Max. pump pressure (H\[ft\]) 250
- Motor power (kW) 12 - 50
- Max. pump efficiency (%) 80
- Motor power (kW) 15 - 60

The CR range has the right pump for the job.

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CR Product Range

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow range (US GPM)</th>
<th>Motor power (HP)</th>
<th>Max. working pressure (psi)</th>
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<th>Max. pump pressure (H[ft])</th>
<th>Max. pump efficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRN</td>
<td>0.5 - 5.7</td>
<td>1/3 - 2</td>
<td>360</td>
<td>8</td>
<td>35</td>
<td>3</td>
</tr>
<tr>
<td>CRNE</td>
<td>1 - 12.8</td>
<td>1/3 - 3</td>
<td>360</td>
<td>8</td>
<td>35</td>
<td>4</td>
</tr>
<tr>
<td>CRE</td>
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Extra-large CR Pumps for your extra-large system demands CR(N) 120 and CR(N) 150

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The CR range has the right pump for the job

Choosing the right pump can be difficult. A map showing all possible pumps that will accomplish the right mission makes it easy to select right first time. We know this, because we asked you first! Read on to learn about our comprehensive CR range!

Grundfos was the first pump manufacturer ever to create a multi-stage in-line pump, the CR pump. Known as the CR pump, this innovative design has inspired followers all over the world. Even so, continuous development and innovation ensure that the CR range remains the top of its field.

The CR range has the right solution for your system demands, see pages 12 and 13.

Choosing the right pump can be difficult. It may be easy enough to find a pump that will meet your needs, but how do you know the best configuration to meet your exact system demands. With a maximum flow of nearly 800 gpm, the scope of the CR(N) range is enormous. With 13 hydraulic sizes, four basic materials and over one million possible configurations, for more information on the many options to provide you with the best match. There are many good reasons to avoid over-capacity, with energy conservation at the top of the list. The CR range lets you choose pumps which exactly match your system demands.

The last word in multi-stage CR range, including our new extra-large CR featured on pages 6 and 7.

The CR range now provides the pump industry with the most comprehensive flow range on the market today. When coupled with CR reliability, the extra-large CR rounds out the range with a high flow solution second-to-none. With a maximum flow of nearly 800 gpm, the scope of the CR(N) range is enormous. With 13 hydraulic sizes, four basic materials and over one million possible configurations, for more information on the many options to provide you with the best match. There are many good reasons to avoid over-capacity, with energy conservation at the top of the list. The CR range lets you choose pumps which exactly match your system demands.

Extra-large CR Pumps for your extra-large system demands CR(N) 120 and CR(N) 150
The complete Grundfos CR range:  The last word in multi-stage pump technology

Grundfos was the first pump manufacturer ever to create a multi-stage in-line pump. To meet the growing demand of customers needing a pump for the most exacting demands, Grundfos developed and launched an extra-large CR range.

The CR range has the right pump for the job

Choosing the right pump can be difficult. It may be easy enough to find a pump that will do the job, but it gets trickier when you want to know which pump is the right one. Most good reasons to avoid over-capacity, with energy conservation at the top of the list. The CR range has the pump you are looking for.

The CR is available in 13 hydraulic sizes, four basic materials and over one million possible configurations. For more information on the many options to provide you with the right solution for your system demands, see pages 12 and 13.

Extra-large CR Pumps for your extra-large system demands CR(N) 120 and CR(N) 150

To meet the growing demand of customers needing a pump for the most exacting demands, Grundfos developed and launched an extra-large CR range. With a maximum flow of nearly 800 gpm, the CR range can meet the most exacting demands. Grundfos’ complete CR range offers extended efficiency to meet your high-flow system demands.

Grundfos was the first pump manufacturer ever to create a multi-stage in-line pump. To meet the growing demand of customers needing a pump for the most exacting demands, Grundfos developed and launched an extra-large CR range.

Grundfos CR remains unmatched.
At Grundfos, innovation is about making things better, and even bigger if that is what our customers require! To that end, the CR and CRN 120 and 150 provide extended flow ranges at the best possible efficiencies up to 100 Hp.

Superior reliability

Unmatched cost efficiency

The most extensive range on the market

Performance curves and technical data

The new generation of Grundfos CR pumps features a full range of sizes and limitless scope for combinations to suit your specific needs.
Reliability in real life

The CR is well known for its reliability. And rightly so. The CR design has all the durability that customers expect from a high-quality multistage pump — and then some. We have added unique features to ensure unsurpassed reliability: dry-running protection, a unique cartridge seal, and a full-titanium variant.

The virtually endless range of standard and customized CR pumps means that you can find the right CR to provide reliable operation for most any requirement.

Superior dry-running protection
Dry running is the most common cause of pump failure. In most pumps, the shaft seal and bearings will burn out almost immediately if liquid stops flowing in the pump.

The Grundfos CR is different. As part of our constant dedication to innovation, we have tested new and alternative materials to bring you the best possible solution.

This means that we can equip CR pumps with a shaft seal and bearing system that can withstand extreme heat and friction for longer periods of time. This makes them more forgiving if the pump does run dry.

Grundfos LiqTec™ checks for liquid 24 hours a day
For those who need to avoid dry-running altogether, the Grundfos LiqTec is the answer. Available with all CR pumps, the LiqTec is plug-and-play technology at its very best. Ever vigilant, the LiqTec constantly checks that there is liquid in the pump. If there isn’t, it stops the pump immediately.

It’s reliable. 

And we can prove it.

In the event of dry running, the Grundfos LiqTec™ immediately shuts down the pump before damage occurs.
With unfailing attention to reliability, Grundfos engineers have designed an innovative cartridge seal that can be replaced within minutes — just one of the remarkable benefits it offers.

Unique cartridge seal design
The seal used in the CR line combines the best features of standard seals, wrapped up in an ingenious cartridge design. All of these ensure extra reliability.

The durable seal is made from hardwearing materials which prevent downtime and extend the lifetime of the seal. All axial movement has been eliminated, preventing wear of the shaft and rubber parts – a problem for traditional seals. The cartridge seal is a balanced type seal, which makes it less sensitive to pressure.

We know, however, that even the best of materials are subject to wear. That is why the innovative team at Grundfos sets out to eliminate the small, yet crucial, factors that can have a negative impact on pump reliability. Many of these have to do with handling, assembly and service.

The cartridge design ensures that the seal components will never be assembled incorrectly, the spring will never be incorrectly preloaded, and that sensitive surfaces will never be subjected to greasy fingers or dirt. These factors are common causes of short seal life in other pumps.

The cartridge design also enables rapid replacement when the seal ultimately does need changing. All in all, downtime is minimized, which translates into significant savings for your business.

Spacer coupling minimizes downtime too
Minimizing downtime is part of a reliable operation. That is why Grundfos has eliminated a major nuisance for owners of large pumps. Now, it is no longer necessary to remove heavy motors to replace the seal. With the innovative spacer coupling, motors 15 hp and larger can be left in place during seal replacement.

The cartridge design allows you to replace the seal in minutes without special tools and without dismantling the pump.
Reduce the real costs

Electricity is the most expensive part of any pump—a simple fact that is often overlooked when pumps and prices are compared.

It may be surprising that the purchase price and maintenance costs account for less than 15% of the total lifetime cost of a pump. Electricity accounts for a staggering 85% or more of the total costs. So if you want to save money, that’s where you should look.

The Grundfos CR makes a real difference; the table below shows just how much electricity a CR can save you annually.

These savings will continue for years and years – for every pump you own. Its low lifetime cost makes a CR pump a very sensible investment.

*The table at right shows the unique efficiency of the Grundfos CR range.*

Let’s talk money.

How much difference does a CR make?

<table>
<thead>
<tr>
<th>Application type</th>
<th>Typical duty point</th>
<th>Operating hours per day</th>
<th>Average kWh reduction per year with CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply</td>
<td>350 gpm @ 85 psi</td>
<td>24 hours</td>
<td>18,500 kWh</td>
</tr>
<tr>
<td>Boiler feed</td>
<td>175 gpm @ 225 psi</td>
<td>15 hours</td>
<td>12,700 kWh</td>
</tr>
<tr>
<td>Water treatment</td>
<td>10 gpm @ 225 psi</td>
<td>15 hours</td>
<td>3,200 kWh</td>
</tr>
<tr>
<td>Industrial washing and cleaning</td>
<td>25 gpm @ 225 psi</td>
<td>5 hours</td>
<td>1,600 kWh</td>
</tr>
<tr>
<td>General industrial pump task</td>
<td>25 gpm @ 145 psi</td>
<td>10 hours</td>
<td>2,200 kWh</td>
</tr>
</tbody>
</table>
Efficiency saves money year after year

Getting the best possible overall efficiency out of your pump makes financial sense. The narrow interval between CR pump sizes allows you to eliminate the efficiency drop associated with over-sized pumps.

By minimizing the difference between pump capacity and the required pressure and volume, you get a pump which runs as close to its optimum duty point as possible. That makes it as cost-efficient as possible.

The result of years of Grundfos development work is a 10% increase in pump efficiency. This translates into a power reduction of 15-20% for the CR pumps. When pumps are in operation many hours a day, such improvements provide substantial savings – year in and year out.

1

Internal leakage caused by pressure differentials within the pump was minimized. Tests have shown that an impeller seal clearance gap of just 0.016” between the impeller and the chamber causes a 5% drop in efficiency. When liquid seeps out into the pump, precious energy is wasted on circulating that liquid. Grundfos uses a floating seal ring between chambers, providing a nearly perfect seal.

2

An enhanced impeller design reduces eddy flow and friction losses. We developed a highly specialized laser-welding technology which brings you impellers of truly superior design and construction.

3

State-of-the-art production technology guarantees the best possible results and gives CR pumps the final edge. At Grundfos, we develop our own tools and processes to ensure a perfect match between what we want to do and the tools we use to do it. The final outcome is products with near-perfect geometries and tolerances, reflecting the care that has gone into the research and development stages.

Good things come in threes

Grundfos achieved a 10% increase in pump efficiency through three innovative improvements to the impeller and seal. These improvements also mean a smaller motor can often be used to power the pump—and that equals savings on both initial investment and running costs.
We’ve got solutions — wide-ranging, specific to your needs and superior in reliability

From magnetic drives or air-cooled shaft seal chambers and double shaft seals to special pumps for high-pressure performance and aggressive liquids, there is a CR for your unique requirements.

Our custom solutions engineering department works exclusively to custom design pumps for industry. Every day Grundfos customers order pumps that will handle:

- extreme temperatures
- extreme pressures
- aggressive/hazardous liquids
- vaporous liquids
- low NPSH level
- belt drive
- paints
- varnishes
- high viscosity liquids
- explosive liquids
- horizontal mounting
- paints
- varnishes
- high viscosity liquids
- explosive liquids
- horizontal mounting

The CR range is available in four different basic materials:

<table>
<thead>
<tr>
<th>What can you pump with a CR?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aggressive or corrosive liquids</strong></td>
</tr>
<tr>
<td>Seawater, hypochlorites, hydrochloric acid,</td>
</tr>
<tr>
<td>ferric chloride, nitric acid, chromic acid,</td>
</tr>
<tr>
<td>phosphoric acid</td>
</tr>
<tr>
<td><strong>Abrasive liquids</strong></td>
</tr>
<tr>
<td>Metasilicate-containing cleaning agents,</td>
</tr>
<tr>
<td>abrasive alkaline cleaners, phosphates</td>
</tr>
<tr>
<td><strong>Toxic or explosive liquids</strong></td>
</tr>
<tr>
<td>Trichlorethylene, toluene, petroleum,</td>
</tr>
<tr>
<td>ethyl alcohol, methyl alcohol</td>
</tr>
<tr>
<td><strong>High-viscosity liquids</strong></td>
</tr>
<tr>
<td>Glycols, carboxylates (for cooling),</td>
</tr>
<tr>
<td>lubricating oils, rapeseed oil</td>
</tr>
<tr>
<td><strong>Hardening liquids</strong></td>
</tr>
<tr>
<td>Water-based paint, glue, vegetable oils</td>
</tr>
<tr>
<td><strong>Crystallizing liquids</strong></td>
</tr>
<tr>
<td>Glycol additives, naphthalene, sugar</td>
</tr>
<tr>
<td>products (e.g., dextran), salts</td>
</tr>
<tr>
<td><strong>High pressures</strong></td>
</tr>
<tr>
<td>Water treatment, cleaning/washing</td>
</tr>
<tr>
<td><strong>Extreme temperatures</strong></td>
</tr>
<tr>
<td>Petrochemicals, oils, boiler feed, secondary</td>
</tr>
<tr>
<td>coolants</td>
</tr>
</tbody>
</table>

CR
AISI 304 stainless steel
with a cast iron top and base

CRI
AISI 304 stainless steel throughout

CRN
AISI 316 stainless steel throughout

CRT
Titanium throughout
Grundfos CR has the most extensive range on the market, but standard pump ranges can’t match all conceivable applications. Customers needing a non-standard solution are able to pick and choose pump elements or “modules” to cover nearly any situation.

Working in close cooperation with you, our skilled specialists carefully analyze the situation to make sure the solution fully meets your expectations. If you do not find a suggestion to suit your particular problem in our brochure, contact Grundfos with your requirements, and we will do everything we can to provide a solution.

**Full range of motor variants available**
While the standard range of Grundfos motors will cover most application demands, customized solutions are available for special needs. Contact Grundfos if you have specific requirements. Integrated variable frequency drives (“smart” pumps) are included in our standard range of pumps.

**Specialized seals for unique situations**
Most pumps are used for watery liquids at temperatures below +248°F (+120°C) and pressures lower than 362 psi (25 bar). When the pumped liquid goes beyond these limits, special solutions are required, and our modular approach offers wide-ranging solutions to handle the challenge.

**Grundfos CRN MAGdrive solution**
Grundfos CRN MAGdrive solution eliminates the need for shaft seals via a patent pending magnetic-drive system where the power from the motor is transmitted to the pump by magnetic force. Combined with a hermetically-sealed liquid end, the pump is totally leak free, and offers the best solution for pumping dangerous, aggressive, or volatile liquids.

**Rugged pump modules**
The CR range is available in 13 flow sizes and various grades of corrosion-resistant stainless steel, as well as corrosion-free titanium. Contact Grundfos for help in selecting the right CR components for your customized pump.

**Motor options**
- Special supply voltages and protection methods
- Non-standard motor size (e.g. for pumping high or low viscosities)
- Explosion-proof, dust ignition-proof
- For extreme temperatures, humidity, or altitudes
- Specific approval requirements
- Non-Grundfos motor

**Shaft seal options**
- Chemical resistant O-rings for aggressive chemicals
- Special seal face or LiqTec™ run-dry sensor to protect against dry running
- Balanced high-pressure shaft seal for 362 to 580 psi
- Air-cooled shaft seal system for extreme high temperatures
- Double shaft seal with pressure chamber for pumping explosive or poisonous liquids

**Pump options**
- Horizontal position for height limitations
- Low NPSH pumps
- High-pressure pumps
- Special surface treatments or approvals
- Pumps for extreme temperatures
- Silicone-free pumps
- Corrosion-free titanium CRT pumps for seawater or highly corrosive liquids
- Wide variety of connections
### The complete Grundfos CR range: The last word in multi-stage pump technology

Grundfos was the first pump manufacturer ever to create a multi-stage in-line system. In 1954, Grundfos was the first pump manufacturer ever to create a multi-stage in-line system. The CR pump, known as the CR pump, was created by the Grundfos CR range. The CR pump was created by the Grundfos CR range. The Grundfos CR range was the first pump manufacturer ever to create a multi-stage in-line system. The Grundfos CR range was the first pump manufacturer ever to create a multi-stage in-line system.

The CR range has the right pump for the job

Choosing the right pump for the job is crucial. A multi-stage in-line pump that was designed for a specific application is the best choice. The CR range is a good reason to avoid over-sizing, with energy consumption at the top of the list. The CR pump is designed to be a multi-stage in-line system. The CR pump is designed to be a multi-stage in-line system.

The CR range is available in 13 hydraulic sizes, four basic materials and over one million system configurations. For more information on the many options to provide you with the right solution, visit our website.

### Extra-large CR Pumps for your extra-large system demands CR(N) 120 and CR(N) 150

To meet the growing demand of customers requiring a pump to handle higher flow rates for vast system demands, Grundfos created the new extra-large CR pumps.

With a maximum flow of nearly 800 gpm, the CR(N) 120 and CR(N) 150 pumps provide the most comprehensive range of extra-large pumps. Whereas other pumps struggle to meet the large flow CR pumps face, the new extra-large CR pumps are built to handle the large flow.

The new extra-large CR pumps are built to handle the large flow.

- **Hydraulic sizes:** 13
- **Materials:** 4
- **System configurations:** Over one million
- **Flow ranges:** CR: 0.5 - 23.8 US GPM; CRE: 1.5 - 23.8 US GPM
- **Pressure ranges:** CR: 1 - 125 psi; CRE: 1 - 155 psi
- **Efficiency:** CR: 35 - 70%; CRE: 49 - 96%

<table>
<thead>
<tr>
<th>Model</th>
<th>Hydraulic Size</th>
<th>Motor Power</th>
<th>Pressure Range</th>
<th>Flow Range</th>
<th>Efficiency</th>
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<td>13</td>
<td>1/3 - 15 HP</td>
<td>150/300 lb</td>
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<td>57 - 98%</td>
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<td>CR(N) 150</td>
<td>13</td>
<td>1/3 - 25 HP</td>
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<td>0 - 210 US GPM</td>
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The new extra-large CR pumps are built to handle the large flow.

- **Spares and service:** Available upon request
- **Installation:** Standard installation
- **Temperature range:** –40 to +250 °F
- **Applications:** Suitable for industrial applications

### Technical Specifications

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Innovation Inside the CR

UPSIZING ENERGY EFFICIENCY

GRUNDFOS CR SOLUTIONS

The CR range from Grundfos

The CR range offers many water solutions depending upon the market requirements. Grundfos has its own motor range to maximize performance. The CR range pump lines also offer high reliability and lower maintenance costs. The entire range is in the category of light-duty pumps suitable for the ENG supply. It provides superior reliability and the lowest possible costs.

The engine along with an integrated variable frequency drive provides many motor solutions depending upon the application and demand. In addition, Grundfos makes its own motors to ensure maximum performance. The ML frequency converter, which has E-pump functionality, ensures safe handling and enables easy service and access.

The pump, motor, frequency converter, PID controller and differential pressure sensor.

Grundfos CRE-pumps are your all-in-one energy saving solution: a pump and motor with an integrated frequency converter. The Grundfos CUE is your ideal solution: a wall-mounted motor, frequency converter and a 10” touchscreen display providing an overview of the entire system solution.

CUE AVAILABILITY

Remote control and monitoring via bus interface

Integrated display with an easy-to-use R100 style menu

Automatic setting of rotation direction during installation

Start-up installation guide

Troubleshooting guide

A CUE solution can be used for Grundfos fixed-speed pumps, new or existing Grundfos pumps.

FOOTPRINT AND FUNCTIONALITY

The CUE solution can be a pump solution, a small motor solution or both. The Grundfos CUE solution can be used for Grundfos fixed-speed pumps.

The CUE solution can be used for any industry, such as, food and beverage, water treatment, wastewater, and hazardous areas.

A CUE solution offers you a smart way to upgrade an existing Grundfos pump to a variable-speed pump.

A Smart Way to Save

A Smart Way to Save

— Grundfos CR range is proud of its wide-ranging energy savings, controlled and accurate.

E-PUMP AVAILABILITY

Remote control and monitoring via bus interface

Advanced features and functionality

Easy installation and commissioning

Limited on-site settings

Factory configured and tested units

Compact plug-and-pump solution

An E-pump solution constitutes the ideal variable-speed solution for all types of industry and building applications. An E-pump solution is a pump and motor with an integrated frequency converter, which has E-pump functionality. The pump, motor, frequency converter, PID controller and differential pressure sensor.

A CUE solution can be used for Grundfos fixed-speed pumps, new or existing Grundfos pumps.

GRUNDFOS CUE

Remote control and monitoring via bus interface

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Start-up installation guide

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