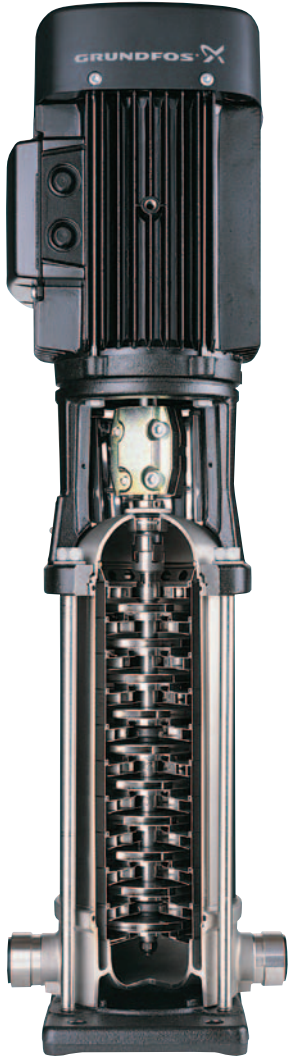


Grundfos CR and the advantages of MULTISTAGE PUMPING



The CR standard line-up includes 11 model ranges in four material configurations. In addition, custom-built solutions amount to more than one million possible configurations.

Grundfos is one of the world's largest pump manufacturers, and we built the world's first vertical inline multistage pump: Grundfos CR. The CR brought with it many new benefits. There are still many single-stage (one impeller) pumps that run at a fixed speed, but technical data shows that the older technology single-stage pumps cannot compete with today's CR multistage pump in terms of efficiency and reliability.

A single Grundfos CR multistage pump (multiple impellers) can take the place of a larger single-stage pump or multiple single-stage pumps connected in series. The CR will often cost less initially and most likely will provide substantial energy savings over the life of the pump.

CR multistage advantages

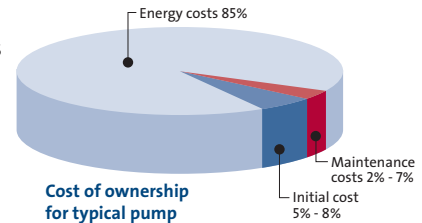
- Highest pump efficiencies in the industry.
- Highly reliable and service friendly.
- Widest range on the market.
- Vertical design with small footprint saves considerable space.

Unsurpassed CR efficiency

Grundfos allocates the largest share of profits to R&D of any pump company, and we've worked to make the CR the world's most efficient and reliable pump of its kind.

Up to 85% of the cost of owning a pump goes toward energy to run it. With a pump

or multiple pumps running many hours per day, CR offers substantial cost savings.



We've learned that gains in pump efficiency can be achieved through a combination of small, innovative design refinements. Thus a smaller motor may be used to power the pump, resulting in lower initial investment and running costs.

A narrow interval between many CR sizes helps eliminate the efficiency drop associated with oversized pumps. A pump that runs close to its optimum duty point saves energy costs year after year.

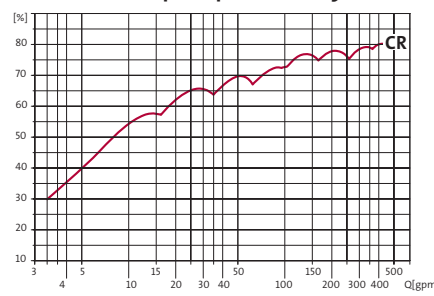
Superior CR reliability

CR is faithfully reliable and service friendly, too. The cartridge shaft seal minimizes downtime for repairs if and when the seal does need replacing. CR has an optional pump accessory, the LiqTec™ dry-running sensor, that constantly checks for liquid in the pump, and if it runs dry, shuts it down before damage can occur.

CR's wide range offers choices

We offer the widest range on the market, and we know a standard pump range will not address every possible application. CR is available in over a million possible custom configurations.

Grundfos CR pump efficiency



Industry OEMs benefit from partnership with Grundfos

Grundfos cooperation

Excellent customer service is part of the Grundfos package. We find that by pooling your expertise with ours we can identify and implement the most successful solutions.

Grundfos know-how

Our pumps are designed to be user-friendly, and if you should have a question, we've got it covered: our U.S. headquarters is home to knowledgeable product managers, product specialists, and applications engineers, as well as the state-of-the-art training facility where we share our knowledge. We also provide highly regarded technical documentation.

Grundfos solutions

Even though CR offers the widest standard range on the market, you can also choose from a million possible custom combinations of shaft seal solutions, motors, materials, features and options. We even offer solutions for pumping difficult liquids, such as our corrosion-free, all-titanium CR.

Jointly with our customers, we test our solutions, both under extreme conditions and the environment where the pump will be used.

Boiler feed solutions

Boiler feed systems demand special requirements for scale, pressure, temperature,

inlet conditions, and more. Grundfos CR multistage pumps come in a Low NPSH version designed to greatly reduce the risk of cavitation in difficult suction conditions and to minimize tank height requirements.

High temperatures

For boiler feed applications it's important that pumps be able to handle liquid temperatures over the standard limit of 248°F (120°C) without damage to the shaft seal. We offer special shaft seal solutions including the CR Cool-Top™ — a CR pump with a standard mechanical shaft seal protected from overheating by an air-cooled chamber. These pumps can withstand liquid temperatures of up to 356°F (180°C).

High pressures

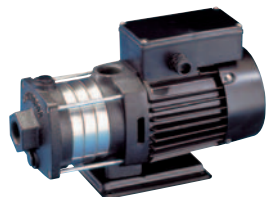
CR is also available in a high pressure version built to withstand very high system pressures over 362 psi (25 bar) up to 725 psi (50 bar) — the highest pressures of any centrifugal pump on the market.

Multistage machine tool and horizontal multistage pumps

Grundfos immersible pumps and horizontal multistage pumps are built with the same commitment to reliability and efficiency as Grundfos CR.



Our wide range of "smart" pumps with integrated variable frequency drives offer optimum energy efficiency even with fluctuating demand.



L-CR-SL-016 6/05 (US)
 Subject to alterations

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