

WHEN CUSTOMISATION, MODULARITY, AND RELIABILITY **ARE KEY**



A SMALL PUMP WITH GIGANTIC POTENTIAL

It was once said that great things come in small packages. When you meet the Grundfos CM/CME pump for the first time, you'll certainly agree. This horizontal multistage pump has been created with compactness and modularity as two of its central features. Add reliability and quiet operation to the mix, and another innovative pump solution from Grundfos is born.

The Grundfos CM/CME is designed to be used in a variety of applications. These include

- Washing and cleaning
- Temperature control
- Water treatment
- Chemical and pharmaceutical industries
- And more...

Three main models are offered with a number of variants available thanks to a series of optional components. These main models are constructed in:

- Cast iron (Type A)
- AISI 304/DIN 1.4301 (Type I)
- AISI 316/DIN 1.4401 (Type G)



Water treatment



Chemical and Pharmaceutical industries



Pressure boosting



Temperature control



Washing and cleaning

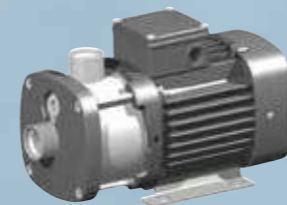
THE CM/CME ABBREVIATION DERIVES FROM THE MOST BASIC DESCRIPTION OF THE PUMP:

Centrifugal Modular. The pump is basically composed of a series of interchangeable modules, all of which have been designed to work together seamlessly, whatever the application.

The CM/CME pump is primarily used as a built-in pump in OEM solutions. Its compactness and flexibility make it an optimal solution for installation and interaction with other components in a larger product. It can also be used as a system pump, connected in complete system solutions or even as a stand-alone pump.

Wide temperature range

Thanks to the numerous configuration possibilities and range of materials, the Grundfos CM/CME pump can operate over a wide range of temperatures: from -30°C to 120°C. If you require different pumps for different applications, this flexibility and streamlining helps keep maintenance and spare parts costs to a minimum.



CM 1-3-G



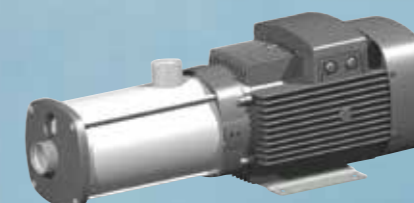
CM 5-2-I



CM 3-8-A



CM 5-4-I



CM 10-8-G



CME 3-2-1



CM 3-3-I



CM 5-8-A



CM 3-2-A

ALL YOU'VE EVER WANTED, IN A SIZE YOU APPRECIATE

Innovation is at the heart of all Grundfos product solutions. And the Grundfos CM/CME pump is no exception. But innovation sometimes requires more than marching to the beat of your own drum. We have listened to customer feedback and have incorporated this into the product.

Compactness

Certain dimensions have been reduced by more than 30% compared to corresponding pumps without compromising the overall pump performance.

The Grundfos CM5-4 features for example dimensions that take up less physical space:

- Width: reduced by over 30%
- Height: reduced by almost 25%
- Length: reduced by almost 10%.

Reducing the pump dimensions was only possible due to the use of advanced processes and technologies.

Reliability

The Grundfos CM/CME has high reliability built in. A well-defined and rock-solid clamping of the pump impellers combined with a NORD-LOCK washer at the other end of the pump stack creates a robust and reliable design.

And what is more, industry-wide problems with shaft seals sticking where SIC-SIC seal faces are used have been eliminated. The new CM/CME solution builds on both the implementation of a rotation stop on the stationary ring and the presence of different surfaced finishings on the stationary and the rotating ring.

New CM selfprimer

The CM pumps now also come in a self-priming variant. The CM self-priming pumps can create a suction lift of up to 8 metres in less than 5 minutes when the pump is installed and commissioned correctly.

Flexibility

The Grundfos CM/CME pumps are designed for use in a variety of applications, including:

- **Washing and cleaning**
 - Degreasing and washing of production equipment
 - Washing machines
 - Mobile washing units
 - Units for CIP (Cleaning In Place)
- **Temperature control**
 - Electronic data processing
 - Laser equipment
 - Industrial refrigeration
 - Heating and cooling in industrial processes
- **Water treatment**
 - Reverse osmosis
 - Ultra-filtration systems
 - Softening, ionising, demineralising systems
 - Dead-end filtration
- **Chemical and Pharmaceutical industries**
 - Distilling systems
 - Dosing/Mixing
 - Evaporation
 - Liquid boosting and transfer

Flexible range of connections

A flexible range of connections ensures that the customer can utilise the connection systems in his or the end-user's solution. This provides an excellent flexibility and simplicity, creating a customised solution without the normal waiting time.

Connections include:

- Standard thread NPT or Rp
- A combination flange with your choice of flange in DIN, JIS and ANSI standards
- A PJE connection, particularly well-suited for high-pressure applications
- A Tri-clamp solution

New E-motors

- CME now with the state-of-the-art E-drive, featuring IE4 efficiency incl. VFD.
- The compact CME design is now available with up to 2.2 kW with many new features which enable tailor-made operation and customer benefits. The new design is also even more reliable.
- From August 2016, also available above 2.2kW.



Materials

Different materials suit different applications. The modular concept of the Grundfos CM/CME pump allows you to select the material that best suits your needs.

Cast iron

Solid and reliable, it is perfect for washing and cleaning, pressure boosting and chillers.

AISI 304/DIN 1.4301 stainless steel

AISI304 stainless steel is the perfect choice for water and non-corrosive liquids used in water treatment, temperature control, pressure boosting, and washing and cleaning.

AISI 316/DIN 1.4401 stainless steel

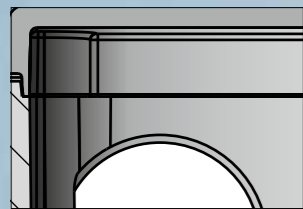
AISI 316 stainless steel offers high corrosion protection against aggressive liquids used in chemical, pharmaceutical, food & beverage and water treatment applications.

Quiet operation

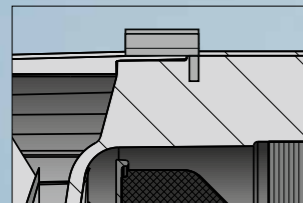
CM/CME pumps are often used in small spaces where loud operation is undesirable. Aside from sounding better, quiet operation eliminates the need for extra insulation around the product.



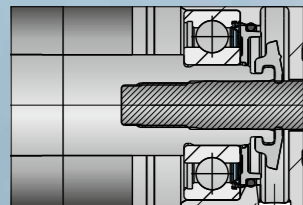
THE DETAILS MAKE THE DIFFERENCE



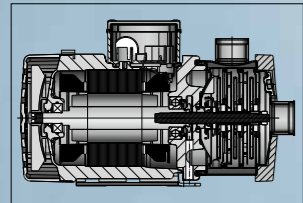
The broad motor programme is available for global usage. It contains both single- and three-phase motors, including E-versions and a wall-mounted VFD solution. Grundfos motors are or can be directly protected by Klixon, PTC and PT100 or by the frequency drive itself. The motor is IP55 as standard, and we also have a solution for condensing environments.



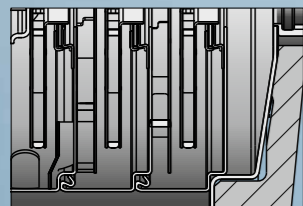
Installation indicator
A standard feature on all three-phase CM/CME pumps. It shows whether the motor has been connected properly. Remember: Your installation runs better when the pump rotates in the right direction.



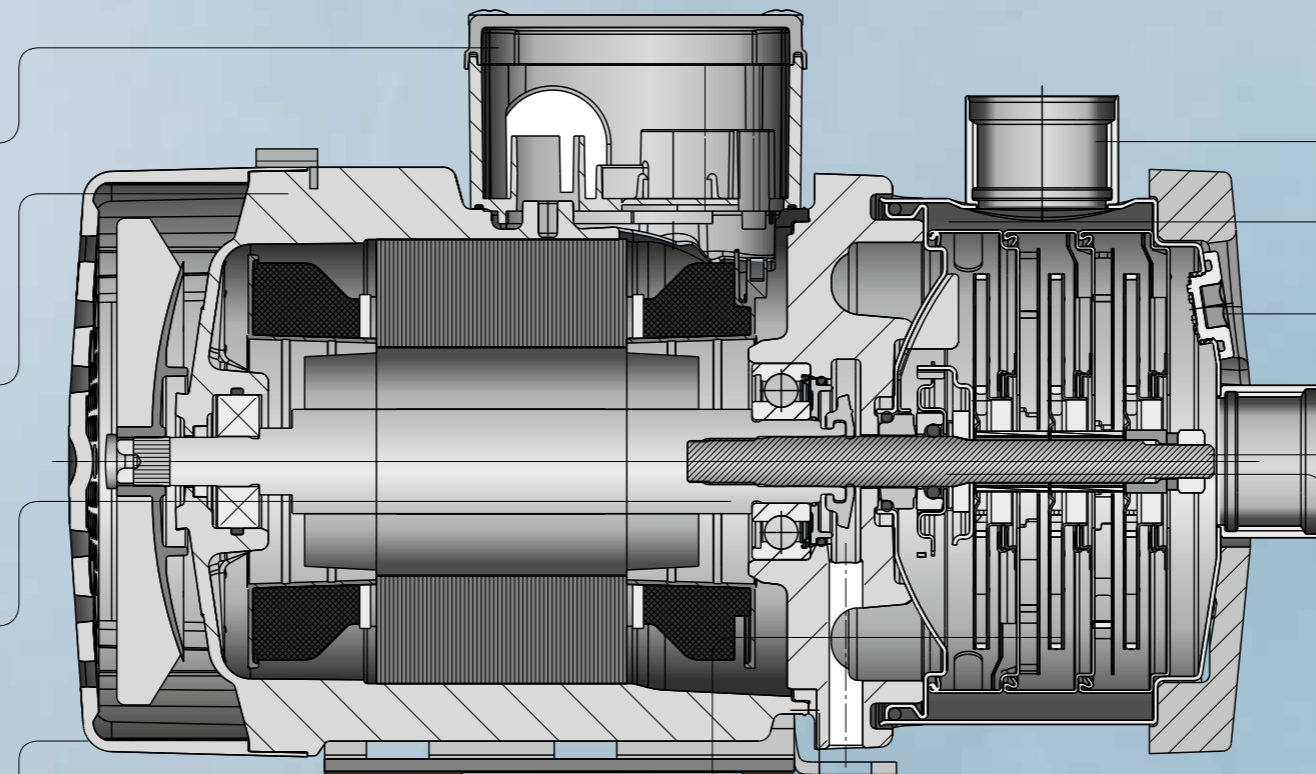
A double protection device for our motor bearings is in place to minimise maintenance. Remember: You can rely on Grundfos for top performance, even in harsh environments.



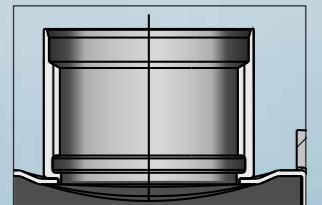
Our goal of compact and easy handling is realised with the new CM/CME pump design. Remember: Compactness allows the CM/CME pump to fit in everywhere.



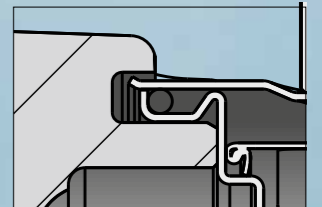
Stainless steel hydraulics across the entire range provide the highest performance in the long term. Pump variants are available in AISI 304/ DIN 1.4301 and AISI 316/DIN 1.4401 stainless steel.



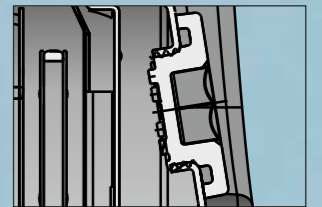
The suction and discharge ports are designed to withstand corrosive liquids. NPT and RP threading are standard, facilitating the use of a wide range of threaded flange and clamp adapters. Remember prepared for O-ring: However you prefer to put things together, Grundfos makes it easy.



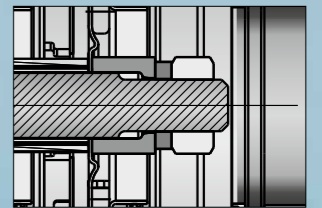
Our sleeve O-ring assembly device features a safe and simple design for temperatures from -30°C to $+120^{\circ}\text{C}$. Remember that Grundfos CM/CME pumps can handle both cooling and heating applications.



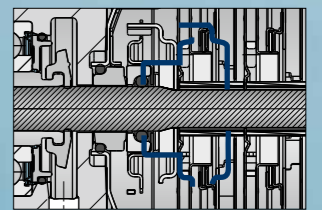
The Grundfos filling and draining plug is sealed by an O ring which eliminates leakage.



A highly reliable combination of joint elements keeps the pump in shape and enables assembly and disassembly from the pump side only. And scheduled service is easy and fast.



A unique O-ring shaft seal is designed to provide excellent dry running, non-sticking capabilities. Remember: Under tough conditions, Grundfos CM/CME provides extra high reliability.



From end to end, Grundfos' proven quality and attention to detail is the difference between Grundfos CM/CME and competing pump solutions.

Power
0.25 - 7.5 kW
0.3 Hp - 10 Hp

Flow
50Hz
1m³/h - 25m³/h

60Hz
1m³/h - 30m³/h
4.4gpm - 132gpm

Temp
 -30°C - $+120^{\circ}\text{C}$
 -22°F - $+248^{\circ}\text{F}$

Pressure
Head: 12 bar/174 PSI
System pressure: 16 bar/232 PSI

PRODUCT RANGE

Stages	50 Hz	60 Hz	Shaft seal	50 Hz	60 Hz		50/60 Hz	Electronically speed-controlled motor		
	Material	Material		Voltage	Voltage		Voltage	Voltage		
	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A
CM5-2

PRODUCT RANGE

Stages	50 Hz	60 Hz	Shaft seal	50 Hz	60 Hz		50/60 Hz	Electronically speed-controlled motor		
	Material	Material		Voltage	Voltage		Voltage	Voltage		
	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A	CM-A
CM5-3	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .

•¹ Not available after Oct 2016

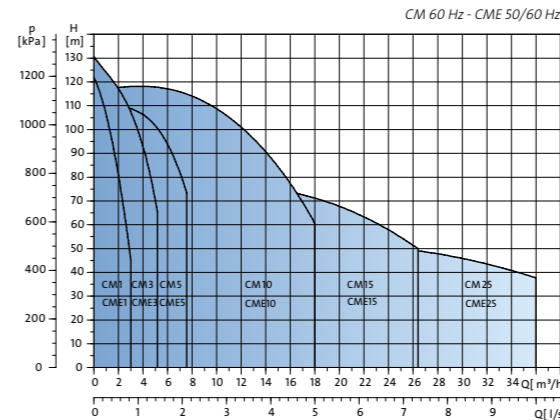
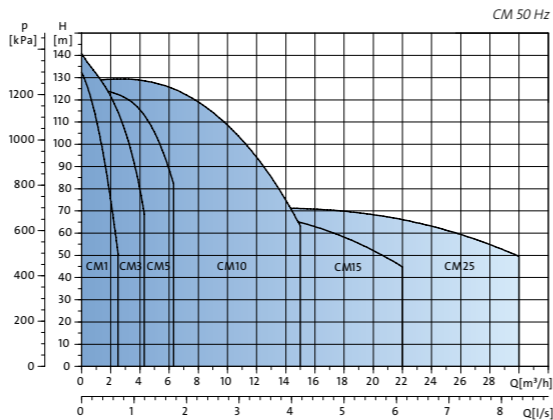
•² Available from August 2016

•¹ Not available after Oct 2016

•² Available from August 2016

PERFORMANCE CURVES

Please see curves showing the CM range. For CME range details, see the opposite page.



ACCESSORIES

	Description
	Adapter for JIS Flexible adapter according to all three standards (DIN, JIS, ANSI).
	Adapter for Tri-clamp Hygienic Tri-clamp connection design with a sanitary coupling for use in the pharmaceutical and food and beverage industry. The connection is in accordance with EN/DIN 32676.
	Adapter for VICTAULIC PJE couplings are designed for use in a wide range of industrial applications.
	CIM modules The CIM modules enable communication of operating data, such as measured values, alarm information and setpoints, between CME pumps and a building management system (BMS/SCADA). The unit is installed directly inside the pump on MGE motors from model H and later
	New Grundfos GO remote control for E-pumps Used for wireless communication with the pumps. Grundfos GO is available in various variants. For more information please contact Grundfos
	Potentiometer for CME (product number: 625468) Used for setpoint setting and start/stop of the CME pump.
	CIU communication interface unit for CME The CIU units enable communication of operating data, such as measured values and setpoints, between CME pumps and a building management system. The CIU unit incorporates a 24-240 VAC/VDC power supply module and a CIM module. It can either be mounted on a DIN rail or on a wall.



CM pumps are always part of a bigger picture. Grundfos offers a full range of accessories to support the CM range. Here are a few selected examples – the complete range can be found on Grundfos Product Center.

ONLINE SUPPORT

THE GRUNDFOS PRODUCT CENTER

The Grundfos Product Center is a new online tool that helps you choose the right pump for installation or replacement, and find information about pumps you already have.

The tool lets you size pumps, browse the Grundfos product catalogue, find appropriate replacement pumps, and find pumps for handling specific liquids. For each pump, the Product Center gives you all the information you need – including pump curves, technical specs, CAD drawings, available spare parts, installation videos, and other documentation – all in one place on the pump's product page.

The Grundfos Product Center features a streamlined design that makes finding what you need quick and easy. For ultra-fast sizing, try the “Quick Size” function. Just enter values for head and flow, and the Product Center does the rest. But the Product Center is also about searching your way. Prefer to size by application? No problem. Need to size by pump design or pump family? You can do that too.

As a registered Grundfos Product Center user, you can quickly access recent and saved items – including complete projects – straight from the main page. And the entire system is optimized for viewing on mobile devices, so you can access it on the go from your smartphone or tablet device.

The Grundfos Product Center. It's all of Grundfos in the palm of your hand.



THE GRUNDFOS CM/CME PUMP

When customisation, modularity, and reliability are key, turn to the new Grundfos CM/CME pump. This horizontal multistage pump is a compact, modular, reliable and quiet pump solution from Grundfos.

The Grundfos CM/CME is designed to be used in a variety of applications including

- Washing and cleaning
- Temperature control
- Water treatment
- Chemical and pharmaceutical industries
- And more...

Three main models are offered with a number of variants available through optional components. These main models are constructed in:

- Cast iron ASTM A48: Class 30B/EN-JL 1030
- AISI304/DIN 1.4301 Stainless Steel
- AISI316/DIN 1.4401 Stainless Steel.