

GRUNDFOS CM

Horizontal multi-stage pumps up to 8.4 HP

**When customization, modularity,
and reliability are key**



BE > THINK > INNOVATE >

GRUNDFOS 

A small pump with gigantic potential

It was once said that great things come in small packages. The new Grundfos CM is proof positive. 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.

Flexibility

While each Grundfos CM pump is individually created, the pump family is designed to be used in a variety of applications, including:

- **Washing & cleaning**
Degreasing and washing of production equipment
Washing machines
- **Temperature control**
Electronic data processing
Heating and cooling in industrial processes
- **Water treatment**
Reverse osmosis
Ultra-filtration systems
- **Chemical and Pharmaceutical industries**
Distilling systems
Dosing / mixing
- **Building Services**
Water circulation / pressure boosting
Chillers
- **Irrigation**
Agriculture and horticulture
General water service



Materials

Different materials are better suited for different applications. The modular concept of the Grundfos CM pump allows you to select the material that best suits your needs.

Cast iron (type A)

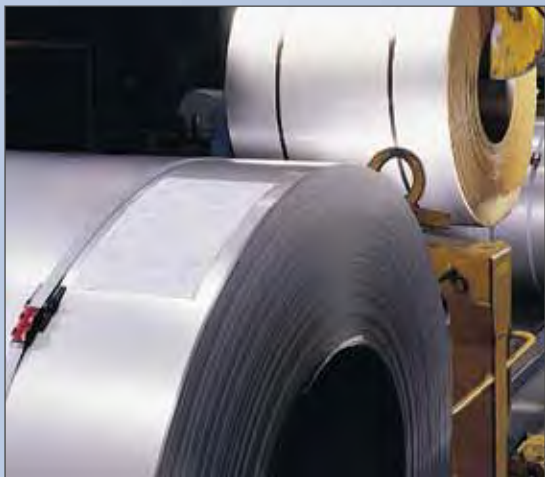
Solid & reliable, it is perfect for washing and cleaning, pressure boosting, and chillers.

AISI 304/DIN 1.4301 stainless steel (type I)

The perfect choice for water and non-corrosive liquids used in water treatment, temperature control, pressure boosting, and washing & cleaning.

AISI 316/DIN 1.4401 stainless steel (type G)

Offers a high degree of corrosion protection against aggressive liquids used in chemical, pharmaceutical, food & beverage, and water treatment applications.



All you’ve ever wanted, in a size you appreciate

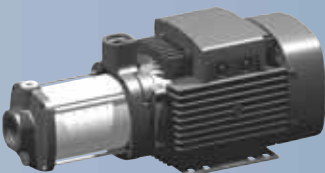
Innovation is at the heart of all Grundfos product solutions. And the Grundfos CM pump is no exception. But innovation sometimes requires more than marching to the beat of your own drum. We’ve listened to customers’ feedback and have incorporated this into the product.

The CM 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, in any application. The CM pump is primarily used as a build-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 as a stand-alone pump.

Wide temperature range

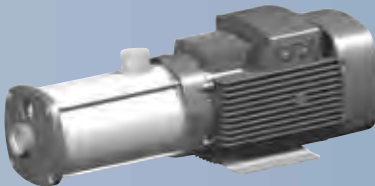
Thanks to the numerous configuration possibilities and range of materials, the Grundfos CM pump can operate over a wide range of temperatures: from -22 °F to 248 °F. If you require different pumps for different applications, this flexibility and streamlining helps keep maintenance and spare parts costs to a minimum.



CM 5-8-A



CM 5-2-I



CM 10-8-G



CME 3-2-A

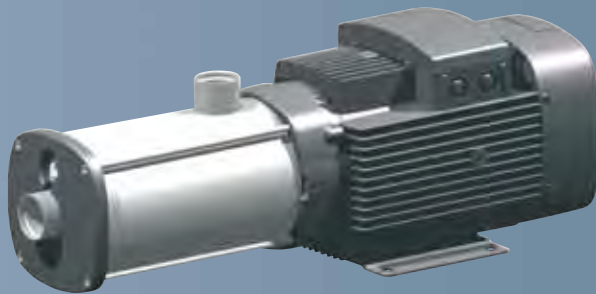
Quiet operation

CM 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.

Compactness

Certain dimensions have been reduced by more than 30% compared to corresponding pumps. And the reduction in size is at no loss in performance.

These achievements have been made possible due to use of advanced processes and technologies in the design of the CM.



Reliability

The Grundfos CM has high reliability, built-in. Clamping of the pump’s impellers has been greatly improved by implementing a new stop ring to form a well-defined base. Combining this feature with a Nordlock® washer at the other end of the pump stack creates a robust and reliable design.

What’s more, industry-wide problems with sticking of shaft seals where SIC-SIC seal faces are used have been eliminated. The new CM solution builds on both the implementation of a rotation stop on the stationary ring and the presence of different surface finishing on the stationary and the rotating ring.

CME provides integrated continuous variable speed control

The CM is available with variable speed functionality offering total control of the pumping system while providing even more flexibility and as much as 80% reduction in energy costs.

Adaptation of performance through frequency controlled speed offers benefits including:

- Energy savings
- Increased comfort
- Control and monitoring of the application and pump performance

The details make the difference

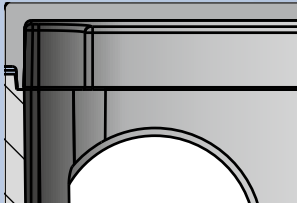
From end to end, Grundfos’ well-known quality and attention to detail make the difference between Grundfos CM and other pump brands.

Power
0.3 Hp - 8.4 Hp
0.25 - 6.3 kW

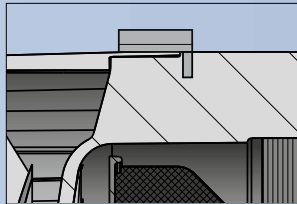
Q/H
1 GPM - 160 GPM
0.2 m³/h - 36 m³/h

Temp
-22 °F - +248 °F
-30 °C - +120 °C

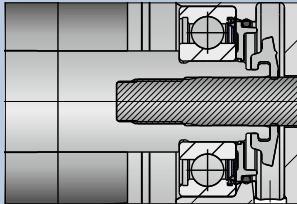
Pressure
174 PSI / Head 12 bar
232 PSI / System pressure 16 bar



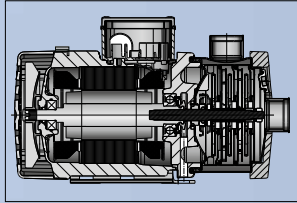
The broad motor program
contains both single- and three-phase motors, including E-versions and a wall mounted VFD solution. Grundfos motors are, or can be directly protected by Klixon, PTC and PT100, or by the frequency drive itself. Standard IP54 or IP55 protection can also be provided upon request. Remember: We can meet all your motor needs!



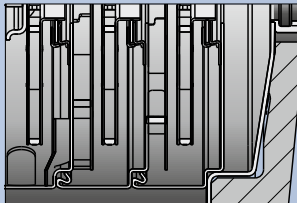
Installation indicator
is a standard feature on all three-phase CM pumps. It shows whether or not the motor has been connected properly. Remember: Your installation runs better when the pump rotates in the correct direction.



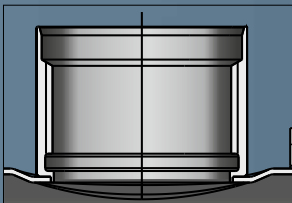
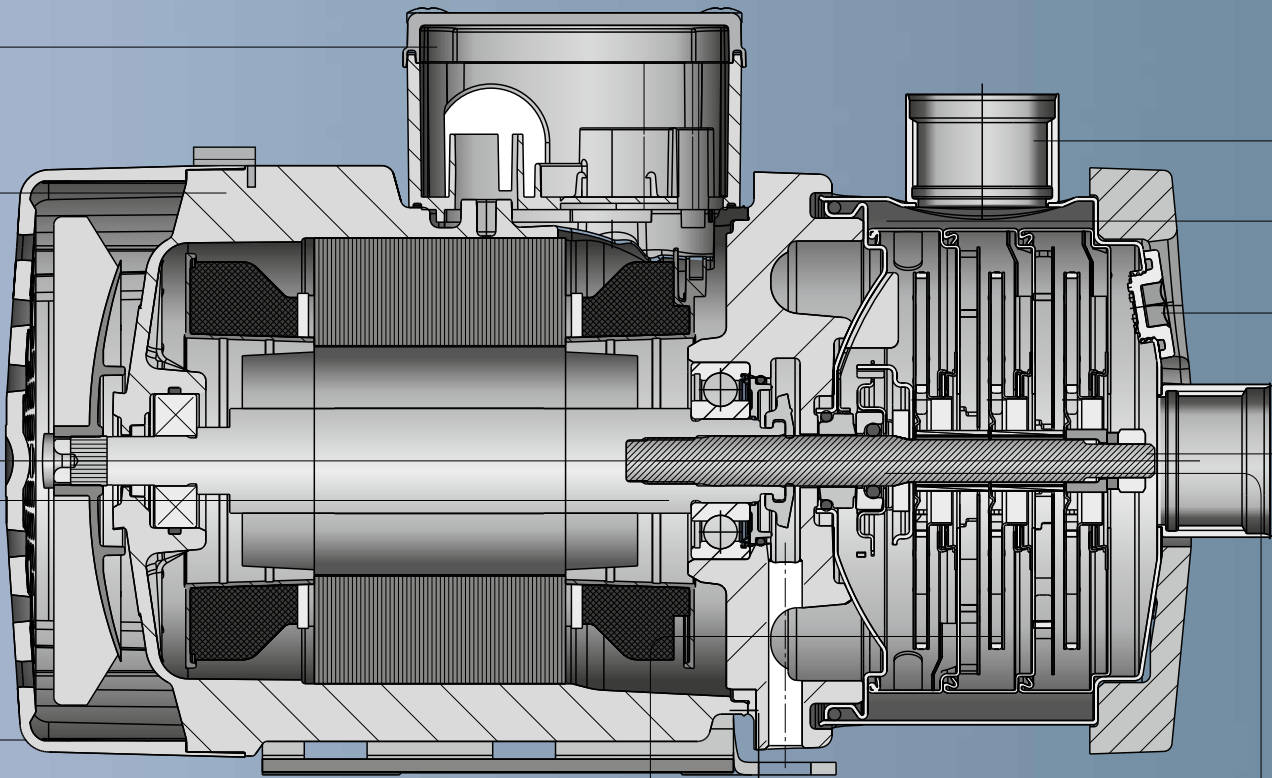
A double protection device
for motor bearings is in place to keep maintenance to a minimum. Remember: You can rely on Grundfos for top performance, even within harsh environments.



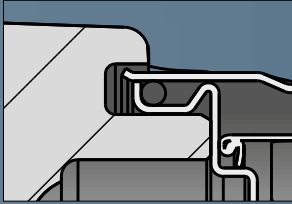
Our goal of compactness and easy handling
comes to life in the new CM pump's design. Remember: Compactness allows the CM pump to fit in everywhere.



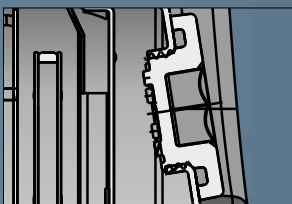
Stainless steel hydraulics
across the entire range provides the highest performance in the long term. Pump variants are available in AISI 304/ DIN 1.4301 and AISI 316/ DIN 1.4401 stainless steel.



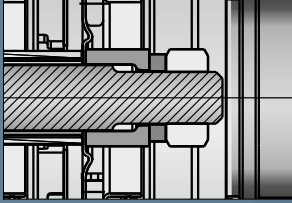
The suction and discharge ports
are designed to withstand corrosive liquids. NPT and RP threading are standard. This allows a wide range of threaded flange and clamp adapters to be used with ease. Remember: However you prefer to put things together, Grundfos makes it easy.



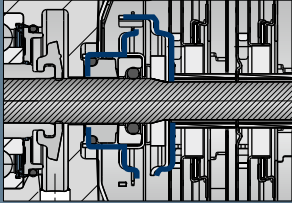
Our sleeve O-ring
assembly device features a safe and simple design for temperatures from -22 to +248 °F. Remember: Grundfos CM can handle applications from chilling to heating.



The Grundfos filling and draining plug
in stainless steel is sealed by an o-ring. Remember: Leakage is eliminated effortlessly.

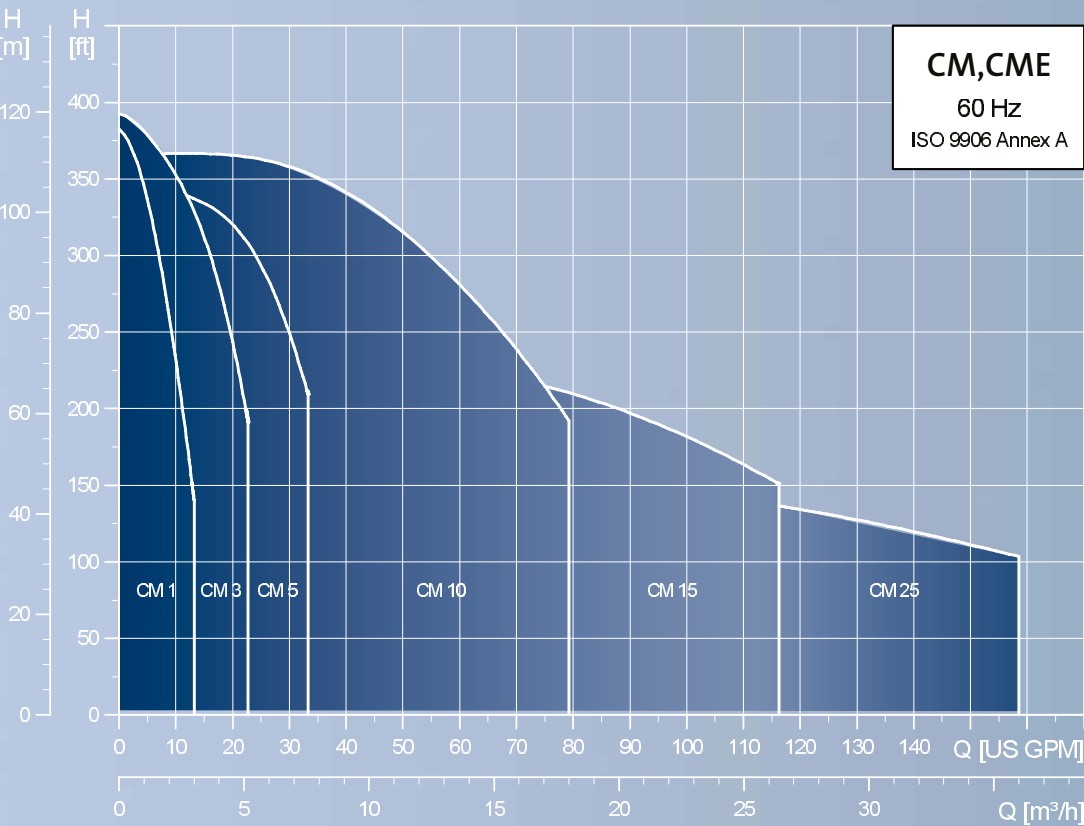


A highly reliable combination of joint elements
keeps the pump in shape, and makes assembly and disassembly possible from the pump side only. Remember: Scheduled service takes place easily and quickly.



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

Performance curves



Standard range options

Pump types	60 Hz							Electronically speed-controlled pump	
	Material			Shaft seal		Voltage			Voltage
	CM-A (cast iron)	CM-1 (AISI 304/ DIN 1.4301)	CM-G (AISI 316/ DIN 1.4401)	AQOE	AQOV	AQOK	1 x 115/230 V	3 x 208 230/440-480 V	3 x 575 V
CM 1-2, 1-3, 1-4, 1-5	•	•	•	•	•	•	•	•	•
CM 1-6, 1-7, 1-8			•	•	•	•	•	•	•
CM 1-9			•	•	•	•	•	•	
CM 3-2, 3-3, 3-4, 3-5	•	•	•	•	•	•	•	•	•
CM 3-6, 3-7, 3-8			•	•	•	•	•	•	
CM 3-9			•	•	•	•		•	
CM 5-2, 5-3	•	•	•	•	•	•	•	•	•
CM 5-4	•	•	•	•	•	•	•	•	
CM 5-5	•	•	•	•	•	•		•	
CM 5-6, 5-7			•	•	•	•		•	
CM 5-8			•	•	•	•			
CM 10-1	•	•	•	•	•	•	•	•	•
CM 10-2, 10-3	•	•	•	•	•	•		•	
CM 10-4, 10-5			•	•	•	•		•	
CM 15-1, 15-2, 15-3, 25-1, 25-2	•	•	•	•	•	•		•	

Please see above curve showing the CM range. We also offer CME, which you can find more information about above and on pages 3, 7.

Options & Accessories

	Description
	CME CME pumps can solve application problems or save energy in a variety of pump installations. And they can be installed instead of a non-controlled standard pump at no extra cost. All that is required is the mains connection and the fitting of the E- pump in the pipe system, and the pump is ready for operation.
	LiqTec for CM Protects against dry-running and temperatures exceeding 266 °F. If connected to the motor PTC sensor, LiqTec also monitors the motor temperature.
	Remote control, R100 Used for wireless communication with the CME pump. Communication takes place via IR.
	Adapter for PJE PJE couplings are designed for use in a wide range of industrial applications.
	Adapter for Tri-clamp Tri-clamp connection is of hygienic design with a sanitary coupling for use in the pharmaceutical and food and beverage industries. The connection is in accordance with EN/DIN 32676.
	Adapter for ANSI, DIN, JIS. Flexible adapter in accordance with all three standards (ANSI, DIN, JIS).

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 WebCAPS.

ALL THE INFORMATION YOU NEED IS ONLINE

Grundfos WebCAPS is an online product selection tool, but it offers much more than that. The site compiles all the product-related information you could ever need.

What you can find in WebCAPS

- Catalog** - includes all products available in your region, complete with technical information, drawings, descriptions, performance curves, etc.

Literature - find everything from data booklets to installation and operating instructions to product brochures.

Service - the place to find service instructions (including video tutorials), service parts lists, assembly drawings, etc.
- Sizing** - enter your system requirements for instant recommendation. Includes Life Cycle Cost calculations.

Replacement - enter the make and model of your old pump for an instant replacement recommendation.

CAD drawings - download DXF and DWG files as required.



THE GRUNDFOS CM PUMP

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

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

- Washing & cleaning
- Temperature control
- Water treatment
- Chemical and Pharmaceutical industries
- Building Services
- Irrigation

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.

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