

The **Grundfos CMB** stainless steel fixed speed pressure booster pumps are designed for pumping clean water from a cold water storage tank.

Typical applications include:

- Boosting to pressurised hot and cold water systems in domestic and light commercial premises.
- Irrigation systems with above ground storage tank.

The Grundfos CM pump has replaced the CH and CHI ranges of horizontal multistage end suction pumps. CMB packaged models provide a compact, professional and reliable solution for pressure boosting applications. CMB pumps are supplied complete with a pre wired **PM2 Pressure Manager**.

The **PM2 Pressure Manager** has many functionality features which are listed overleaf.

CMB booster pumps are factory commissioned and require only to be connected to an electrical supply and a cold water storage tank.

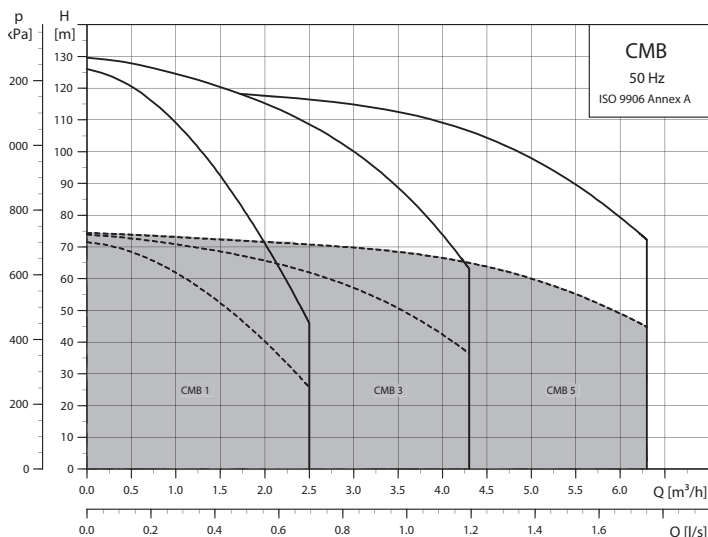
OPERATION

The **Grundfos CMB** fixed speed pump operates within the flow and pressure range of the selected pump. When the **PM2 Pressure Manager** is set in default mode, the pump set will automatically switch on when flow is required. The unit will operate at a duty dictated by the system conditions and then switch off at a no flow condition.

The pump operates best when supplying water to a solenoid type valve where positive open and closed discharge conditions prevail. The PM2, however, has a built in 100ml vessel to minimise the number of stop/starts.

Should the unit operate to a tank operated ball valve or where leakage may occur, then it is preferable to install a small 8L expansion vessel in the discharge pipe work. There is no need for a NRV as this is integrated into the PM2. The PM2 enables a stop/start differential of 1Bar when using the inclusive dip switches.

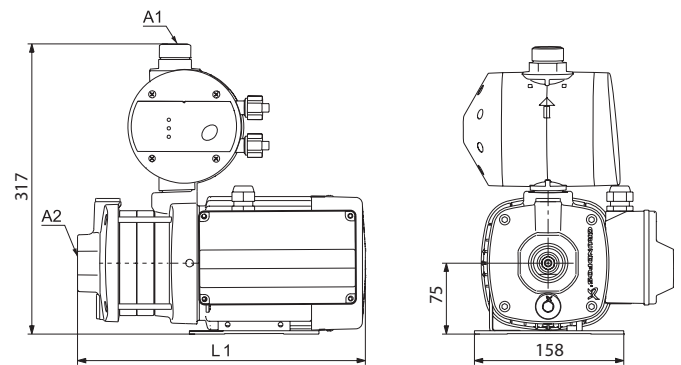
PUMP PERFORMANCE



FEATURES

- Fixed speed pump operation
- Compact pump unit
- Stainless Steel
- Built-in motor protection
- Low noise
- Operation and alarm fault indication on PM2
- WRAS Approved pumps
- Fitted with 1.50m of supply cable - no plug

DIMENSIONS (mm) & WEIGHTS



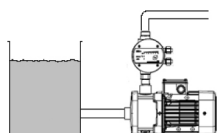
| RANGE | CMB 1-6 | CMB 3-4 | CMB 3-6 | CMB 5-5 |
|-------|---------|---------|---------|----------|
| A1 | 1" BSPF | 1" BSPF | 1" BSPF | 1" BSPF |
| A2 | 1" BSPF | 1" BSPF | 1" BSPF | 1¼" BSPF |
| L1 | 377 | 323 | 417 | 381 |
| Kg | 15.8 | 14.9 | 17.2 | 17.7 |

PUMPED LIQUIDS

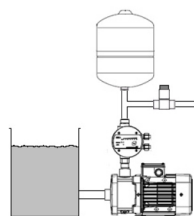
Potable water, rain water or other clean, thin, non-aggressive liquids not containing solid particles or fibres.

APPLICATIONS

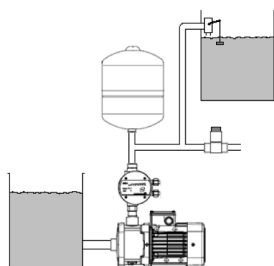
The CMB must be used in conjunction with a cold water storage tank in accordance with the Water Byelaws Regulations. The storage tank can be mounted on the same level as the pump, or if required remotely above the pump.



Basic arrangement CM with PM2, for system without leaks. Pressure reducing valve can regulate outlet pressure.



Arrangement with 8 Litre optional pressure vessel and pressure reducing valve to regulate outlet pressure to system.



Transfer with pressurised water supply application. CM with PM2 and optional 8L pressure vessel.

PM2 FUNCTIONALITY

The PM2 provides a significant number of useable features, as indicated below. Some features are only enabled by internal DIP switches.

DESCRIPTION

Cut-in pressure
Power-on indication
Pump-running indication
Dry-running protection
Pressure gauge (reading)
Leakage detection
Pipe burst indication
Auto restart
Settings for operation with diaphragm tank possible

CMB PM2

Adjustable

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INSTALLATION

1. The pump with controls should be sited in a dry, well ventilated but frost-free position where it will not be subjected to extremes of temperature.
2. The pump should be installed on a solid surface to adequately support its weight, and to help reduce noise and vibration.
3. The environment should be non-aggressive and the atmosphere non-explosive.
4. Attention should be given to the possibility of water leakage from the unit during commissioning or service activities, in order to prevent possible damage to the surrounding area.

It is not recommended to fit the CMB in a loft or attic space.

Minimal maintenance of the pump is required. Periodically check the 8 litre pressure vessel pre-charge pressure.

TECHNICAL DATA: CMB PUMPS

| | |
|--------------------------|-------------------------|
| Mains voltage: | 1 x 220-240 V, 50/60 Hz |
| Voltage tolerances: | -5%/+5% |
| Enclosure / Class | IP55 / Class F |
| Casing pressure: | 10 bar max |
| Liquid temperature: | 0°C to +40°C |
| Ambient air temperature: | 0°C to +50°C |
| Sound pressure level: | < 70 dB(A) |

ELECTRICAL DATA CM

240V 1ph 50Hz

| PUMP MODEL | PRODUCT CODE | FULL LOAD CURRENT (A) | MOTOR SHAFT POWER P2 (W) |
|------------|--------------|-----------------------|--------------------------|
| CMB 1-6 | 97755516 | 2.8 | 500 |
| CMB 3-4 | 97755524 | 2.8 | 500 |
| CMB 3-6 | 97755542 | 4.0 | 670 |
| CMB 5-5 | 97755588 | 5.0 | 900 |

NOTE: The above pumps have been selected as stock units. There are smaller alternative models available but on extended lead times. For further information please call your Sales Office.

REPLACEMENT CODES AND ACCESSORIES

| | |
|--------------------------------|----------|
| Pressure Manager PM2 | 96848738 |
| CM1-6 X R I E AVBE CAAN | 97682808 |
| CM3-4 X R I E AVBE CAAN | 97682809 |
| CM3-6 X R I E AVBE CAAN | 97682812 |
| CM5-5 X R I E AVBE CAAN | 97682814 |
| 8 Litre pressure vessel (G1") | 96526321 |
| 12 Litre pressure vessel (G1") | 96528336 |
| 18 Litre pressure vessel (G1") | 96528337 |
| 24 Litre pressure vessel (G1") | 96528339 |