



## Construction

Close coupled electric submersible pumps.

**GMC:** with single-channel impeller.

**GMV:** with free-flow (vortex) impeller.

Double mechanical shaft seal with interposed oil chamber, to protect against dry-running.

## Applications

For domestic or industrial waste water, dirty water with solids up to 45 mm grain size, for liquids which are compatible with the pump materials.

## Operating conditions

Liquid temperature up to 35 °C.

pH value: 6-11.

Maximum immersion depth: 10 m (with suitable cable length).

Continuous duty (with submerged motor).

## Motor

2-pole induction, 50 Hz (n = 2900 rpm).

**GMC, GMV:** three-phase 230 V  $\pm$  10%;  
three-phase 400 V  $\pm$  10%;  
2 built-in thermal protectors to be connected to a control box.

Cable: 4x1,5 mm<sup>2</sup>+ 2x0,5 mm<sup>2</sup>, length 10 m.

**GMCM, GMVM:** single-phase 230 V  $\pm$  10%.

With float switch, built-in thermal protector and built-in capacitor.

Cable: H07RN-F, 3x1,5 mm<sup>2</sup>, length 10 m, with plug (CEI - UNEL 47166).

Insulation class F. Protection IP X8.

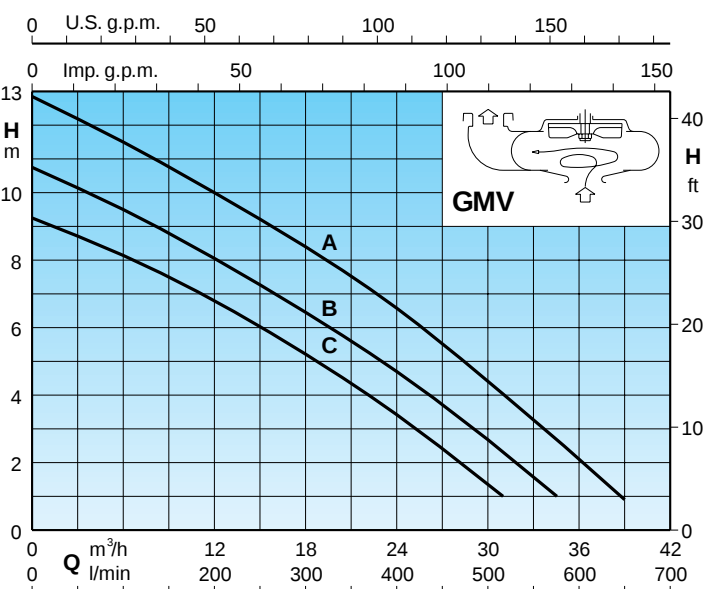
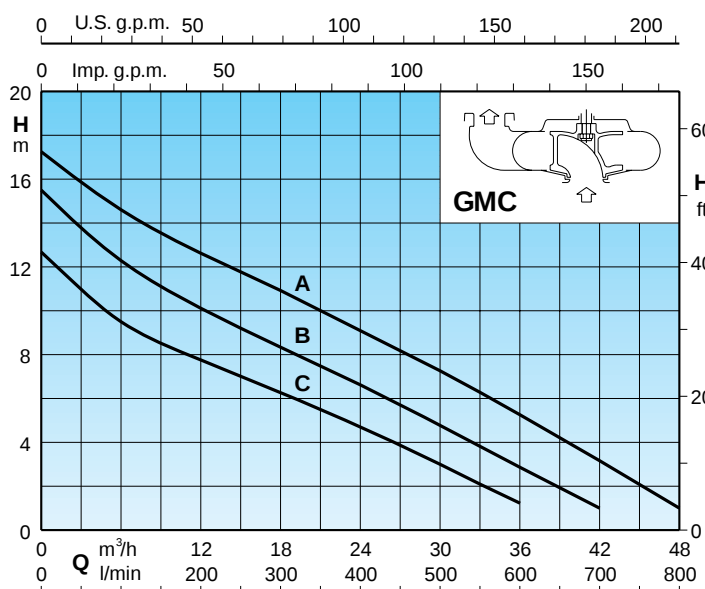
Triple impregnation, humidity-proof winding.

Constructed in accordance with: EN 60 335-2-41.

## Materials

| Component              | Material                                    |
|------------------------|---------------------------------------------|
| Pump casing            | Cast iron GJL 200 EN 1561                   |
| Casing cover           |                                             |
| Impeller               |                                             |
| Motor housing          |                                             |
| Motor cover            |                                             |
| Shaft                  | Chrome steel 1.4016 EN 10088 (AISI 430)     |
| Mechanical seal: Upper | Carbon, ceramic, NBR                        |
| Lower                  |                                             |
| Seal lubrication oil   | Oil for food machinery and pharmaceutic use |

## Characteristic curves n $\approx$ 2900 rpm



### Performance $n \approx 2900$ rpm

| 3~              | 230 V | 400 V | 1~               | 230 V | P <sub>1</sub> | P <sub>2</sub> | Q   | m <sup>3</sup> /h | 6    | 12   | 18  | 24  | 30  | 36  | 42  | 48  |
|-----------------|-------|-------|------------------|-------|----------------|----------------|-----|-------------------|------|------|-----|-----|-----|-----|-----|-----|
|                 | A     | A     |                  | A     | kW             | kW             | HP  | l/min             | 100  | 200  | 300 | 400 | 500 | 600 | 700 | 800 |
| <b>GMC 50CE</b> | 3,3   | 1,9   | <b>GMCM 50CE</b> | 4,5   | 1,1            | 0,75           | 1   | <b>H m</b>        | 9,5  | 8    | 6,5 | 5   | 3   | 1   |     |     |
| <b>GMC 50BE</b> | 4,8   | 2,7   | <b>GMCM 50BE</b> | 6,5   | 1,5            | 1,1            | 1,5 |                   | 12,5 | 10   | 8,5 | 6,5 | 5   | 3   | 1   |     |
| <b>GMC 50AE</b> | 6,6   | 3,8   |                  |       |                | 1,5            | 2   |                   | 14,5 | 12,5 | 11  | 9   | 7,5 | 5,5 | 3   | 1   |

| 3~              | 230 V | 400 V | 1~               | 230 V | P <sub>1</sub> | P <sub>2</sub> | Q   | m <sup>3</sup> /h | 6    | 12  | 18  | 24  | 30  | 31  | 35  | 39  |
|-----------------|-------|-------|------------------|-------|----------------|----------------|-----|-------------------|------|-----|-----|-----|-----|-----|-----|-----|
|                 | A     | A     |                  | A     | kW             | kW             | HP  | l/min             | 100  | 200 | 300 | 400 | 500 | 516 | 583 | 650 |
| <b>GMV 50CE</b> | 3,3   | 1,9   | <b>GMVM 50CE</b> | 4,5   | 1,1            | 0,75           | 1   | <b>H m</b>        | 8    | 7   | 5   | 3,5 | 1,5 | 1   |     |     |
| <b>GMV 50BE</b> | 4,8   | 2,7   | <b>GMVM 50BE</b> | 6,5   | 1,5            | 1,1            | 1,5 |                   | 9,5  | 8   | 6,5 | 4,5 | 2,5 | 2,3 | 1   |     |
| <b>GMV 50AE</b> | 6,6   | 3,8   |                  |       |                | 1,5            | 2   |                   | 11,5 | 10  | 8,5 | 6,5 | 4,3 | 4   | 2,5 | 1   |

P<sub>1</sub> Max. power input.

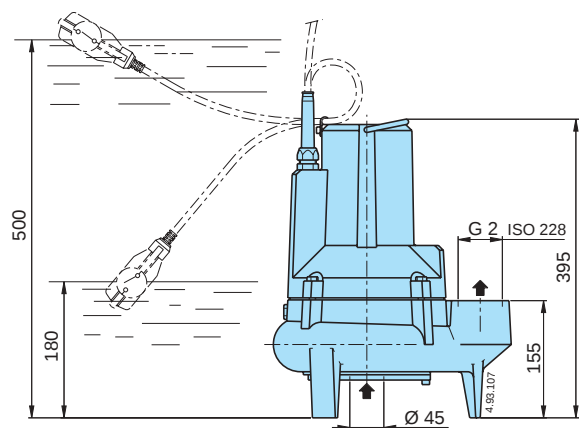
H Total head in m.

Density  $\rho = 1000$  kg/m<sup>3</sup>.

Kinematic viscosity  $\nu = \max 20$  mm<sup>2</sup>/sec.

P<sub>2</sub> Rated motor power output.

### Dimensions and weights



|                  | kg   |
|------------------|------|
| <b>GMC 50CE</b>  | 28   |
| <b>GMC 50BE</b>  | 29   |
| <b>GMC 50AE</b>  | 30,5 |
| <b>GMCM 50CE</b> | 28   |
| <b>GMCM 50BE</b> | 29,5 |

|                  | kg   |
|------------------|------|
| <b>GMV 50CE</b>  | 27   |
| <b>GMV 50BE</b>  | 28   |
| <b>GMV 50AE</b>  | 29,5 |
| <b>GMVM 50CE</b> | 27   |
| <b>GMVM 50BE</b> | 28,5 |

