



### Construction

Close-coupled electric submersible pumps.

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

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

Double mechanical 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 GMC and 50 mm for GMV, 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 motor, 60 Hz ( $n \approx 3450$  rpm).

**GMC, GMV:** three-phase 220 V.

three-phase 380 V.

2 built-in thermal protector to be connected to a control box.

Cable: 4G1.5 mm<sup>2</sup> + 2x0.5 mm<sup>2</sup>, length 10 m.

**GMCM, GMVM:** single-phase 220 V, with float switch,

built-in thermal protector and built-in capacitor.

Cable: H07RN8-F, 3G1.5 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 60335-2-41.

### Other features on request

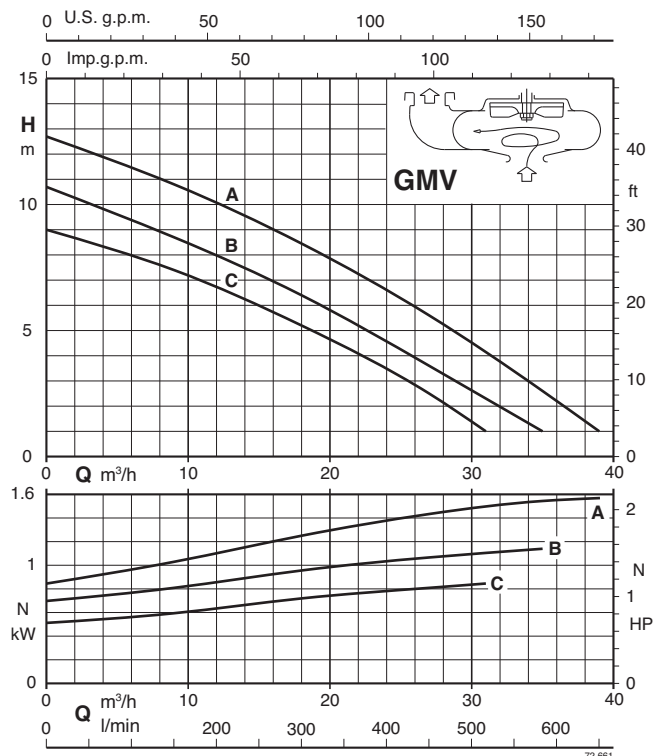
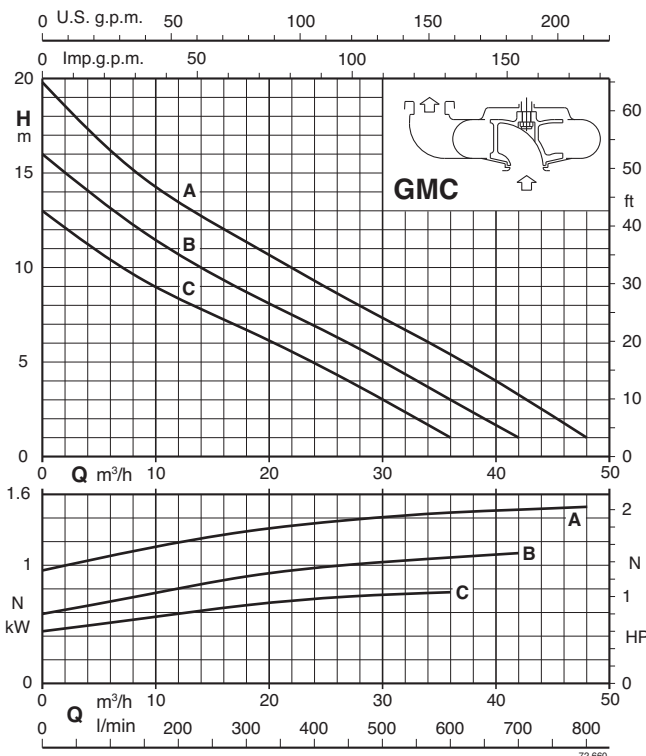
- Other voltages.

- Motor suitable for operation with frequency converter.

### Materials

Components	Material
Pump casing	Cast iron GJL 200 EN 1561
Casing cover	Cast iron GJL 200 EN 1561
Impeller	Cast iron GJL 200 EN 1561
Motor housing	Cast iron GJL 200 EN 1561
Motor cover	Cast iron GJL 200 EN 1561
Shaft	Chrome steel AISI 430
Mechanical seal: Upper	Carbon, ceramic, NBR
Lower	Silicon carbide, silicon carbide, NBR
Seal lubrication oil	Oil for food machinery and pharmaceutical use

### Characteristic curves $n \approx 3450$ rpm



### Performance n ≈ 3450 rpm

3~	220 V 380 V			1~	220 V		P <sub>2</sub>		Q	H m								
	A	A	IA/IN		A	IA/IN	kW	HP		m <sup>3</sup> /h	6	12	18	24	30	36	42	48
GMC 50CE-60 GMC 50-65C-60	4,1	2,4	3,2	GMCM 50CE-60 GMCM 50-65C-60	5,4	3,1	0,75	1	H m	100	200	300	400	500	600	700	800	
GMC 50BE-60 GMC 50-65B-60	5,6	3,2	3,2	GMCM 50BE-60 GMCM 50-65B-60	7,5	3,2	1,1	1,5		13	10,5	8,5	6,5	5	3	1		
GMC 50AE-60 GMC 50-65A-60	8	4,6	3,3				1,5	2		16	13,5	11	9	7,5	5,5	3	1	

3~	220 V 380 V			1~	220 V		P <sub>2</sub>		Q	H m							
	A	A	IA/IN		A	IA/IN	kW	HP		m <sup>3</sup> /h	6	12	18	24	30	31	35
GMV 50CE-60 GMV 50-65C-60	4,1	2,4	3,2	GMVM 50CE-60 GMVM 50-65C-60	5,4	3,1	0,75	1	H m	100	200	300	400	500	516	583	650
GMV 50BE-60 GMV 50-65B-60	5,6	3,2	3,2	GMVM 50BE-60 GMVM 50-65B-60	7,5	3,2	1,1	1,5		9,5	8	6,5	4,5	2,5	2,3	1	
GMV 50AE-60 GMV 50-65A-60	8	4,6	3,3				1,5	2		11,5	10	8,5	6,5	4,3	4	2,5	1

IA/IN = D.O.L. starting current / Rated current.

H Total head in m.

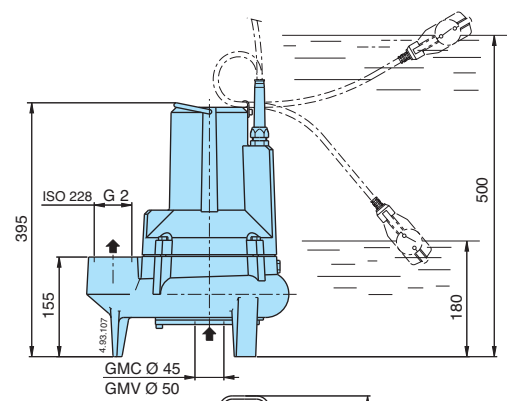
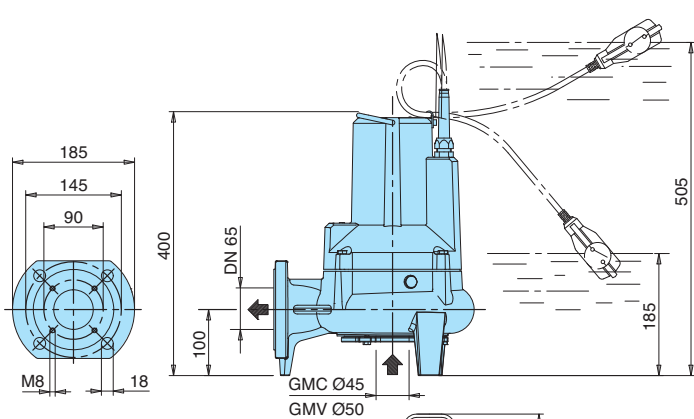
Density ρ = 1000 kg/m<sup>3</sup>.

Kinematic viscosity ν = max 20 mm<sup>2</sup>/sec.

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

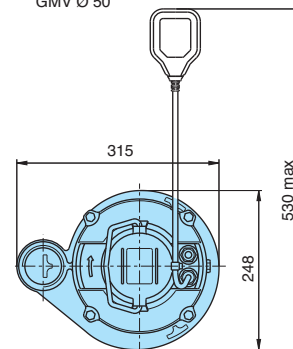
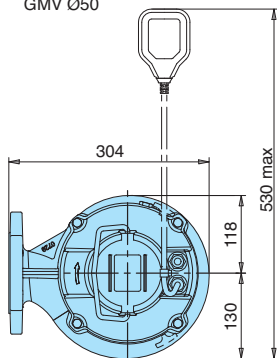
Tolerances according to UNI EN ISO 9906:2012.

### Dimensions and weights



	kg
GMV 50-65C-60	29
GMV 50-65B-60	30
GMV 50-65A-60	31,5
GMVM 50-65C-60	29
GMVM 50-65B-60	30,5

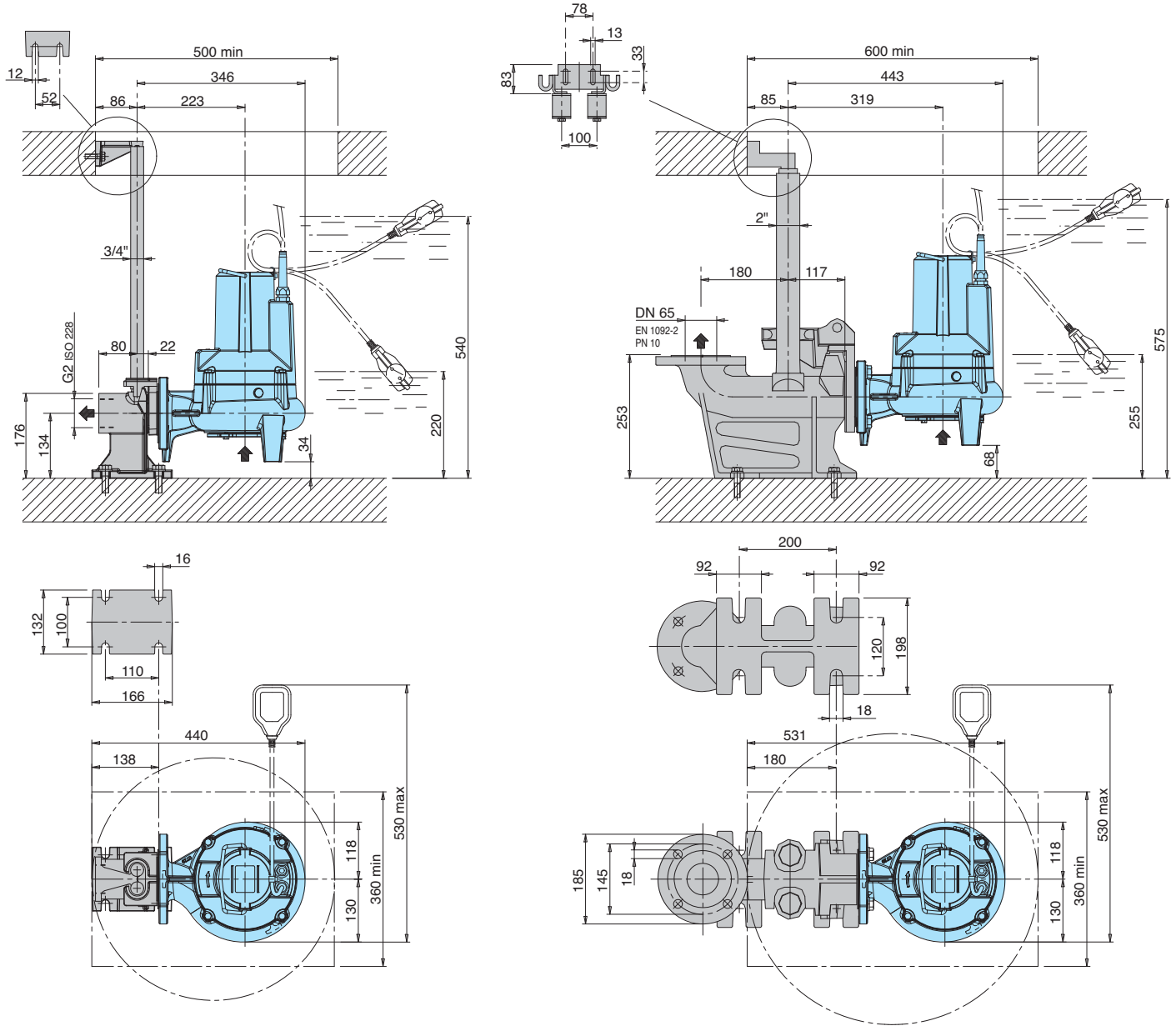
	kg
GMC 50-65C-60	30
GMC 50-65B-60	31
GMC 50-65A-60	32,5
GMCM 50-65C-60	30
GMCM 50-65B-60	31,5



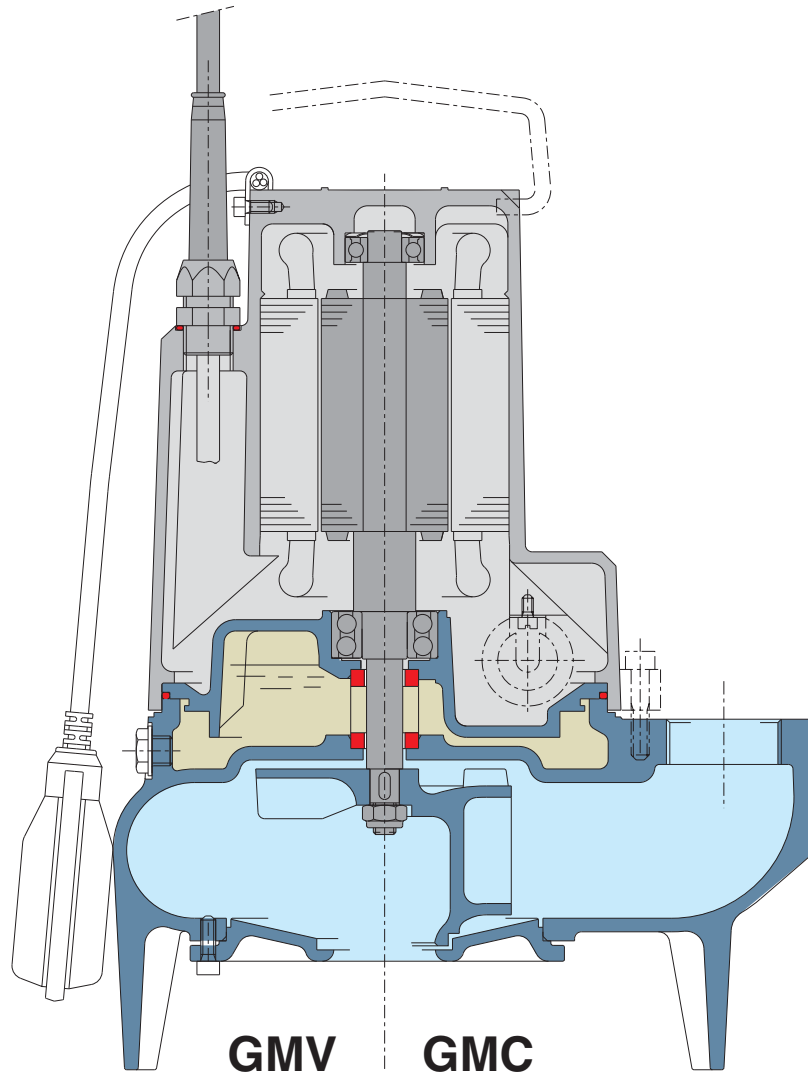
	kg
GMV 50CE-60	27
GMV 50BE-60	28
GMV 50AE-60	29,5
GMVM 50CE-60	27
GMVM 50BE-60	28,5

	kg
GMC 50CE-60	28
GMC 50BE-60	29
GMC 50AE-60	30,5
GMCM 50CE-60	28
GMCM 50BE-60	29,5

### Dimensions with duck foot coupling



### Features



#### Safety

The double mechanical seal with oil chamber ensures safe separation separating the motor from water and providing further protection against accidental operation when dry.

#### Reliability

The lower double ball bearing ensures high reliability under all operating conditions.

#### High security

The three-phase motors are equipped with integrated thermistors, which provide the motor with thermal protection. The motor cable is pre-wired to enable the user to connect directly to a control panel, providing easier installation.

#### Flexible installation

The availability of the pump casing with horizontal or vertical flanged ports allows the installation of pumps in all pits and wells, both small and large sizes. Installation is also possible with a duck foot coupling.