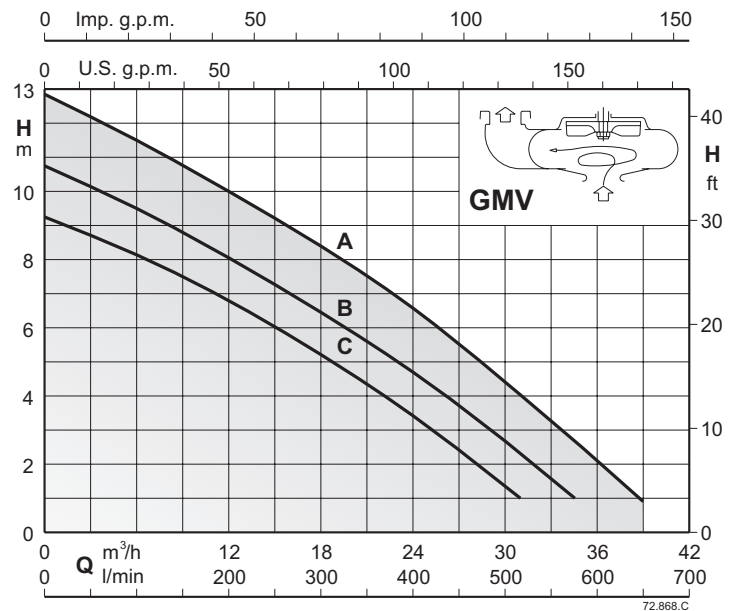
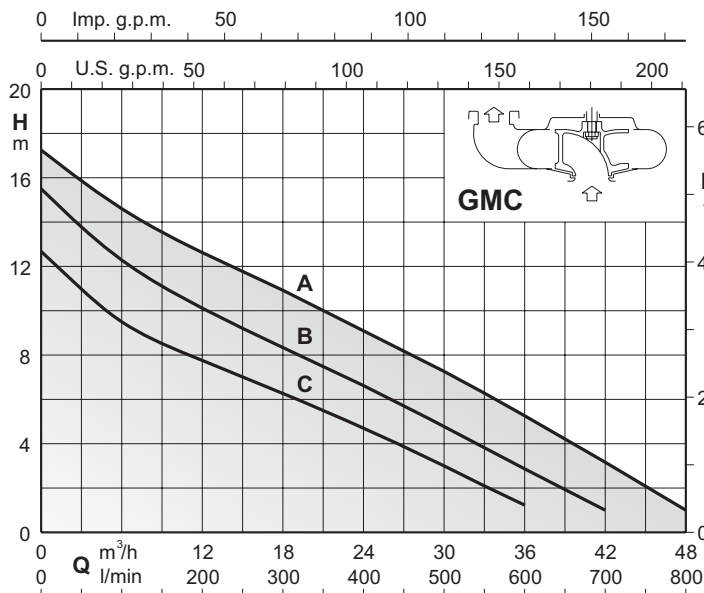


# GM 50



Coverage chart  $n \approx 2900$  rpm



Submersible sewage and drainage pumps

### Construction

Close coupled electric submersible pumps.

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

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

Double seal on the shaft, with interposed oil chamber, protected against dry running.

### Applications

For civil and industrial wastewater that is not aggressive to the pump materials, for dirty water even with solids with a diameter of 45 mm for GMC and 50 mm for GMV.

### Operating conditions

Maximum liquid temperature: 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, 50Hz ( $n \approx 2900$  1/min).

**GMC, GMV:** three-phase 230V  $\pm$  10%  
400V  $\pm$  10%

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

H07RN-F cable, 4G1.5 mm<sup>2</sup>+2x0.5 mm<sup>2</sup>, length 10 m, without plug.

**GMCM, GMVM:** single-phase 230V  $\pm$  10%  
with float switch and thermal protector.

Incorporated capacitor

H07RN-F cable, 3G1.5 mm<sup>2</sup>, length 10 m, with CEI-UNEL 47166 plug.

Insulation class F.

Protection IP X8 (for continuous immersion).

Triple impregnation humidity-proof dry winding

Constructed in accordance with EN 60034-1, EN 60335-1, EN 60335-2-41.

### Special features on request

Other voltages.

Frequency 60 Hz (as per 60 Hz data sheet).

Motor suitable for operation with frequency converter.

### Designation

Example: GMCM 50-65C

GM = Series

C = with single-channel impeller. V Free-flow impeller (vortex impeller)

M = Single-phase (without three-phase indication)

50 = Delivery port diameter in mm

65 = Delivery port diameter in mm (value for flanged pumps only)

C = Impeller diameter

### Materials

Components	Materials
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	Steel 1.4104 EN 10088 (AISI 430F)
Upper mechanical seal	Ceramic / Carbon / NBR
Lower mechanical seal	Silicon carbide / Silicon carbide / NBR
Seal lubrication oil	Oil for food/pharmaceutical machinery

## Coverage chart n ≈ 2900 rpm

### Three-phase

Model	400V P2			Q = Flow								
				m³/h	0	6	12	18	24	30	36	42
	A	kW	HP	l/min	100	200	300	400	500	600	700	800
H (m) = Total head												
GMC 50/CE	1,9	0,75	1	12,8	9,5	8	6,5	5	3	1	-	-
GMC 50-65C	1,9	0,75	1	12,8	9,5	8	6,5	5	3	1	-	-
GMC 50/BE	2,7	1,1	1,5	15,5	12,5	10	8,5	6,5	5	3	1	-
GMC 50-65B	2,7	1,1	1,5	15,5	12,5	10	8,5	6,5	5	3	1	-
GMC 50/AE	3,8	1,5	2	17,3	14,5	12,5	11	9	7,5	5,5	3	1
GMC 50-65A	3,8	1,5	2	17,3	14,5	12,5	11	9	7,5	5,5	3	1

### Single-phase

Model	230V Capacitor			P2		P1	Q = Flow							
							m³/h	0	6	12	18	24	30	36
	A	Vc	uf	kW	HP	kW	l/min	100	200	300	400	500	600	700
H (m) = Total head														
GMCM 50/CE	4,5	450	16	0,75	1	1,1	12,8	9,5	8	6,5	5	3	1	-
GMCM 50-65C	4,5	450	16	0,75	1	1,1	12,8	9,5	8	6,5	5	3	1	-
GMCM 50/BE	6,5	450	25	1,1	1,5	1,5	15,5	12,5	10	8,5	6,5	5	3	1
GMCM 50-65B	6,5	450	25	1,1	1,5	1,5	15,5	12,5	10	8,5	6,5	5	3	1

### Three-phase

Model	400V P2			Q = Flow								
				m³/h	0	6	12	18	24	30	35	39
	A	kW	HP	l/min	100	200	300	400	500	583	650	
H (m) = Total head												
GMV 50/CE	1,9	0,75	1	9,2	8	7	5	3,5	1,5	-	-	
GMV 50-65C	1,9	0,75	1	9,2	8	7	5	3,5	1,5	-	-	
GMV 50/BE	2,7	1,1	1,5	10,7	9,5	8	6,5	4,5	2,5	1	-	
GMV 50-65B	2,7	1,1	1,5	10,7	9,5	8	6,5	4,5	2,5	1	-	
GMV 50/AE	3,8	1,5	2	12,9	11,5	10	8,5	6,5	4,3	2,5	1	
GMV 50-65A	3,8	1,5	2	12,9	11,5	10	8,5	6,5	4,3	2,5	1	

### Single-phase

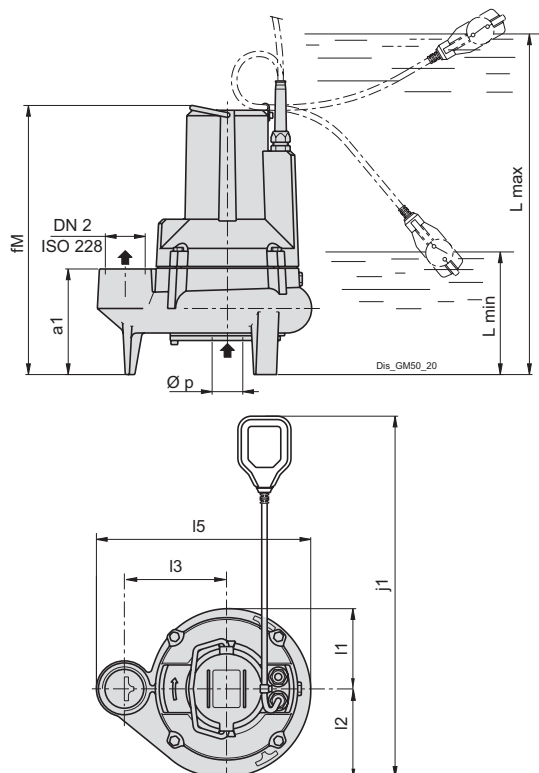
Model	230V Capacitor			P2		P1	Q = Flow						
							m³/h	0	6	12	18	24	30
	A	Vc	uf	kW	HP	kW	l/min	100	200	300	400	500	583
H (m) = Total head													
GMVM 50/CE	4,5	450	16	0,75	1	1,1	9,2	8	7	5	3,5	1,5	-
GMVM 50-65C	4,5	450	16	0,75	1	1,1	9,2	8	7	5	3,5	1,5	-
GMVM 50/BE	6,5	450	25	1,1	1,5	1,5	10,7	9,5	8	6,5	4,5	2,5	1
GMVM 50-65B	6,5	450	25	1,1	1,5	1,5	10,7	9,5	8	6,5	4,5	2,5	1

P1: Maximum power input.

P2: Rated motor power output.

Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ . Total head in m

## Dimensions and weights



TYPE	ISO 228	mm							kg
		a1	fM	l1	l2	l5	l5	p	
GMV 50/CE	G 2	155	395	118	130	150	315	45	26.5
GMV 50/BE	G 2	155	395	118	130	150	315	45	27.5
GMV 50/AE	G 2	155	395	118	130	150	315	45	29.1

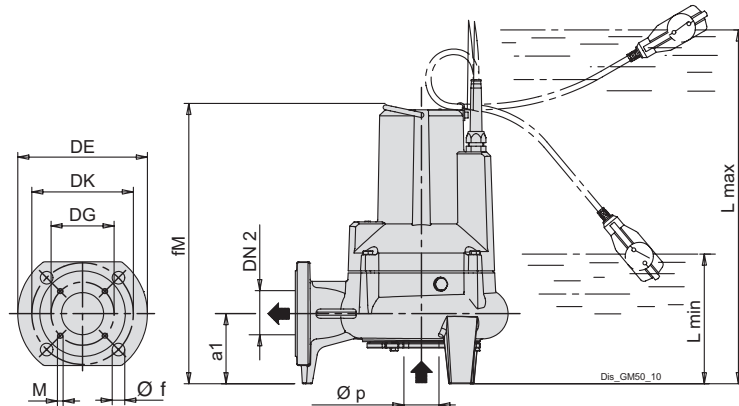
TYPE	ISO 228	mm									kg	
		a1	fM	j1	l1	l2	l5	l5	Lmax	Lmin		p
GMVM 50/CE	G 2	155	395	530	118	130	150	315	500	180	45	27.2
GMVM 50/BE	G 2	155	395	530	118	130	150	315	500	180	45	29

TYPE	ISO 228	mm							kg
		a1	fM	l1	l2	l5	l5	p	
GMC 50/CE	G 2	155	395	118	130	150	315	45	27.3
GMC 50/BE	G 2	155	395	118	130	150	315	45	28.6
GMC 50/AE	G 2	155	395	118	130	150	315	45	30.2

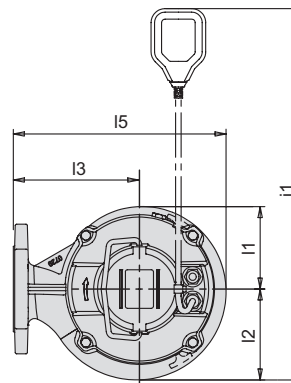
TYPE	ISO 228	mm									kg	
		a1	fM	j1	l1	l2	l5	l5	Lmax	Lmin		p
GMCM 50/CE	G 2	155	395	530	118	130	150	315	500	180	45	28
GMCM 50/BE	G 2	155	395	530	118	130	150	315	500	180	45	31

weights With cable length: 10 m

## Dimensions and weights



DN	DE	DK	N.	Ø f	DG	N.	M
65	185	145	4	18	118	4	M8



TYPE	DN2	mm								kg Weight
		a1	fM	h2	l1	l2	l5	l5	p	
GMV 50-65C	65	100	400	-	118	130	180	304	50	27.2
GMV 50-65B	65	100	400	180	118	130	180	304	50	28.1
GMV 50-65A	65	100	400	180	118	130	180	304	50	29.8

TYPE	DN2	mm										kg Weight	
		a1	fM	h2	j1	l1	l2	l5	l5	Lmax	Lmin		p
GMVM 50-65C	65	100	400	180	530	118	130	180	304	505	85	50	29.4
GMVM 50-65B	65	100	400	180	530	118	130	180	304	505	85	50	29.7

TYPE	DN2	mm								kg Weight
		a1	fM	h2	l1	l2	l5	l5	p	
GMC 50-65C	65	100	400	180	118	130	180	304	45	28
GMC 50-65B	65	100	400	180	118	130	180	304	45	29.1
GMC 50-65A	65	100	400	180	118	130	180	304	45	30.7

TYPE	DN2	mm										kg Weight	
		a1	fM	h2	j1	l1	l2	l5	l5	Lmax	Lmin		p
GMCM 50-65C	65	100	400	180	530	118	130	180	304	505	85	45	28.7
GMCM 50-65B	65	100	400	180	530	118	130	180	304	505	85	45	30.6

weights With cable length: 10 m

# GM 50



## Dimensions with duck foot coupling

