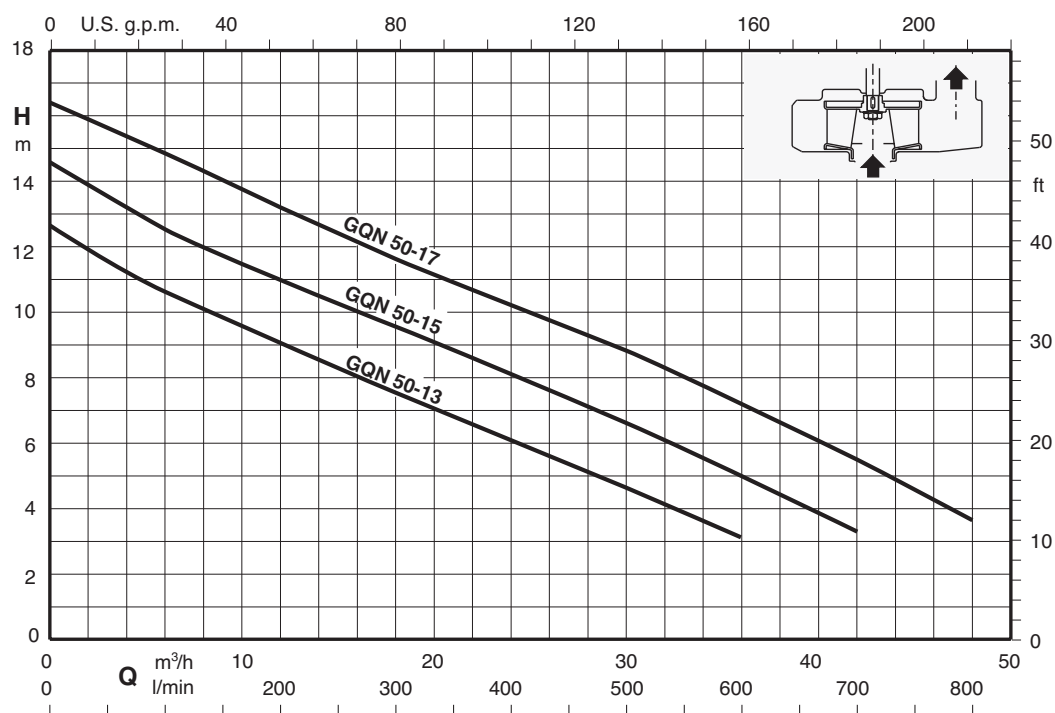


GQN

(patented system)

 calpeda®
Coverage chart $n \approx 2900$ rpm

Submersible sewage and drainage pumps

Construction

Single-impeller submersible pumps, (with two-passage) with channels impeller and vertical threaded delivery port (G 2").

Double mechanical shaft seal with interposed oil chamber, to protect 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 50 mm.

Emptying of flooded rooms or tanks.

Water extraction from ponds, flowing streams, or pits for rainwater collection.

Operating conditions

Maximum liquid temperature: 35 °C

pH value: 6-11.

Immersion depth: 5 m max

Minimum immersion depth: 275 mm.

Continuous duty (with submerged motor).

Motor

2-pole induction motor, 50Hz (n ≈ 2900 1/min).

GQN: three-phase 230V ± 10%

400V ± 10%

Cable: H07RN-F, 4G1 mm², length 10 m, without plug.

GQNM: single-phase 230V ± 10%

with float switch and thermal protector.

Incorporated capacitor

Cable: H07RN-F, 3G1 mm², length 10 m, with plug CEI-UNEL 47166.

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).

Cable length 20 m.

Motor suitable for operation with frequency converter.

Three-phase pumps with incorporated float switch.

Designation

Example: GQNM 50-15

GQ = Series

N = channels impeller

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

50 = Free passage diameter in mm

15 = Total head in m indoors

Materials

Components	Materials
Pump casing	Cast iron GJL 200 EN 1561
Impeller	Cast iron GJL 200 EN 1561
motor jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Jacket cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Casing cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Handle	Polypropylene (with frame made of 1.4301 EN 10088 (AISI 304))
Shaft	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Upper mechanical seal	Ceramic / Carbon / NBR
Lower mechanical seal	Ceramic / Carbon / NBR
Seal lubrication oil	Oil for food/pharmaceutical machinery



Coverage chart n ≈ 2900 rpm

Three-phase

Model				Q = Flow													
				m³/h	0	3	6	12	18	24	30	36	42	48			
				l/min		50	100	200	300	400	500	600	700	800			
				H (m) = Total head													
				A	kW	HP											
GQN 50-13				2,3	0,9	1,2		12,7	11,6	10,6	8,9	7,7	6,3	4,7	3,1	-	-
GQN 50-15				3,3	1,1	1,5		14,7	13,5	12,6	10,9	9,6	8,3	6,7	5	3,2	-
GQN 50-17				4,5	1,5	2		16,4	15,7	14,9	13,2	11,7	10,3	8,9	7,3	5,5	3,6

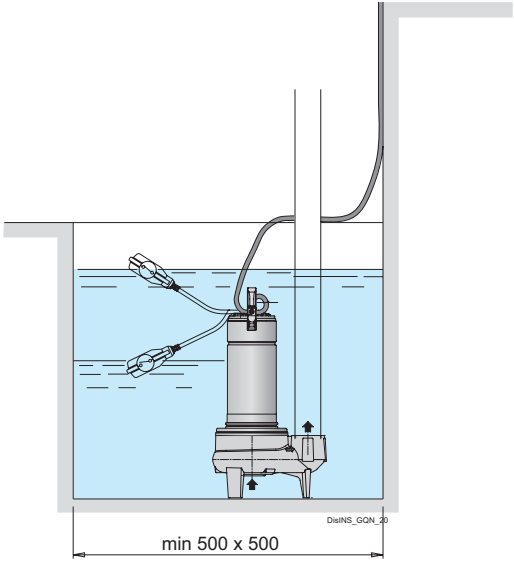
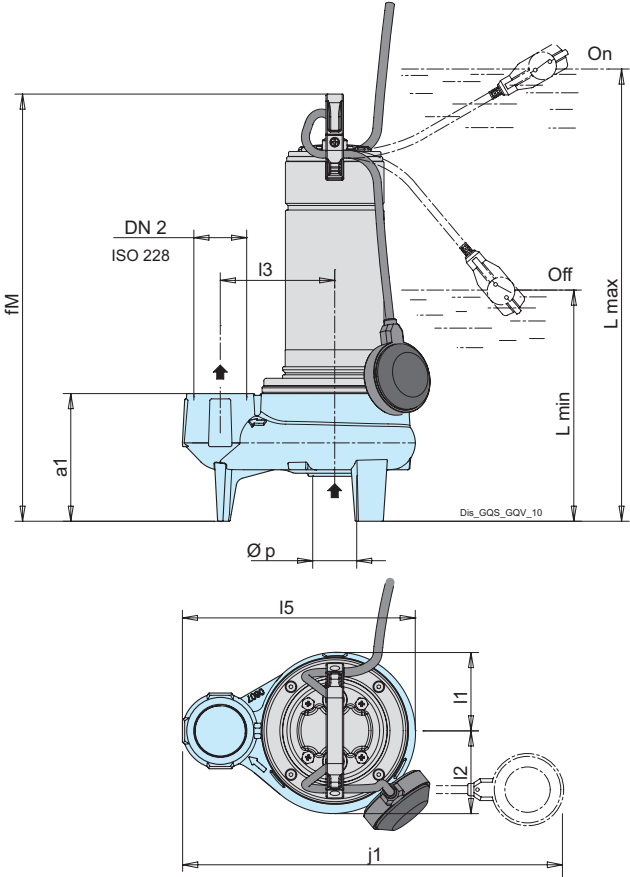
Single-phase

							Q = Flow										
							m³/h	0	3	6	12	18	24	30	36	42	48
									l/min	50	100	200	300	400	500	600	700
Model	230V	Capacitor		P2		P1											
	A	Vc	uf	kW	HP	kW	H (m) = Total head										
GQNM 50-13	6,6	450	25	0,9	1,2	1,45		12,7	11,6	10,6	8,9	7,7	6,3	4,7	3,1	-	-
GQNM 50-15	8,4	450	30	1,1	1,5	1,8		14,7	13,5	12,6	10,9	9,6	8,3	6,7	5	3,2	-
GQNM 50-17	12	450	35	1,5	2	2,2		16,4	15,7	14,9	13,2	11,7	10,3	8,9	7,3	5,5	3,6

P2: Rated motor power output.
P1: Maximum power input.
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

Installation examples



TYPE	DN2	a1	fM	j1	mm						kg
					l1	l2	l3	l5	p		Weight
GQN 50-13	G 2 (DN50)	152.5	493	452	92	104	130	272	50		16.4
GQN 50-15	G 2 (DN50)	152.5	513	452	92	104	130	272	50		18.2
GQN 50-17	G 2 (DN50)	152.5	513	452	92	104	130	272	50		19

TYPE	DN2	a1	fM	j1	l1	l2	l3	l5	Lmax	Lmin	p	kg
												Weight
GQNM 50-13	G 2 (DN50)	152.5	493	452	92	104	130	272	568	308	50	18.5
GQNM 50-15	G 2 (DN50)	152.5	513	452	92	104	130	272	588	328	50	19.6
GQNM 50-17	G 2 (DN50)	152.5	543	452	92	104	130	272	618	358	50	22.3

weights With cable length: 10 m

Examples of installations

