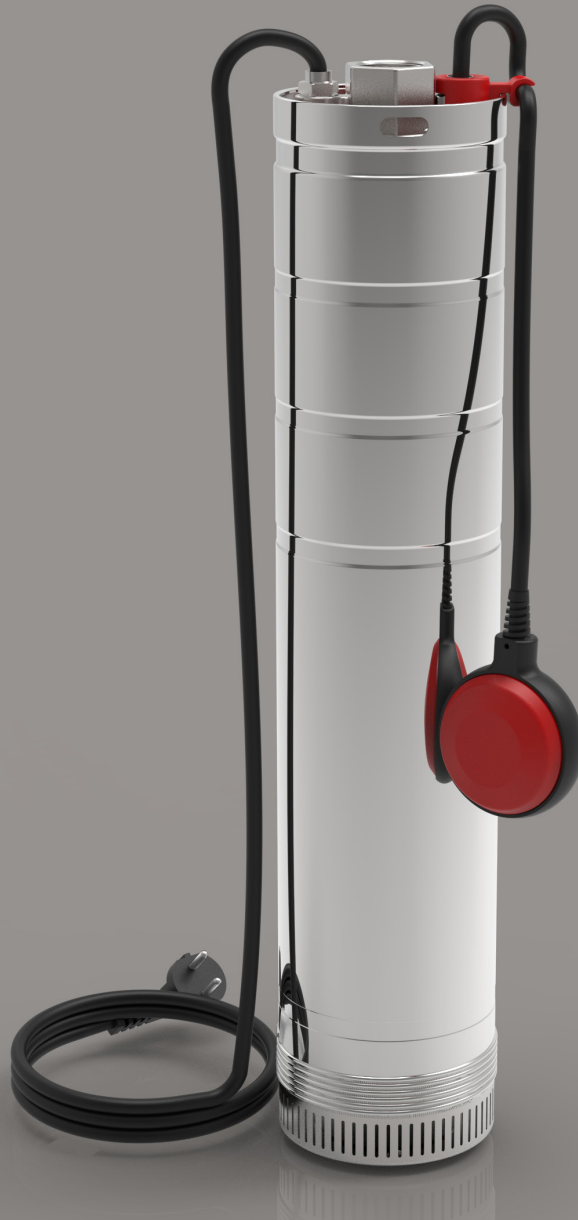


FROG

50 Hz - 60 Hz



**5" SUBMERSIBLE MONOBLOCK
ELECTROPUMPS**



Made in Italy



TECHNICAL SPECIFICATIONS

POWERS

3 m³/h: from 0,6 Hp to 2 Hp single-phase / three-phase 50 Hz
from 0,8 Hp to 2 Hp single-phase / three-phase 60 Hz
5 m³/h: from 0,8 Hp to 2 Hp single-phase / three-phase 50 Hz
from 1,2 Hp to 2 Hp single-phase / three-phase 60 Hz

VOLTAGE

Single-phase: 230 V / 50 Hz - 220 V / 60 Hz
Three-phase: 230/400 V / 50 Hz - 220/380 V / 60 Hz

CONSTRUCTION FEATURES

CONNECTION SYSTEM by means of connector.

HEAD WITH MICRO-CAST PUMP OUTLET made in AISI 304 stainless steel and equipped with a vent valve.

ASYNCHRONOUS MOTOR COOLED BY PUMPED LIQUID

INTERNAL MOTOR TUBE made in AISI 316L (Low carbon) stainless steel, ensuring excellent corrosion resistance.

EXTERNAL SLEEVE made in 304L stainless steel (Low carbon) to avoid possible corrosions of the welding.

DOUBLE MECHANICAL SEAL with interposed oil chamber.

B-CLASS CAPACITOR, meeting long-lasting features (three times compared to a standard one).

IMPELLERS AND DIFFUSERS made in techno-polymer:

- higher performance;
- higher resistance to sand.

INTAKE FILTER made in 304 stainless steel.

REMOVABLE CABLE CONNECTOR H07RN-F type with resin-sealed cable gland system to ensure a perfect watertight seal.

AUTOMATIC VERSIONS WITH REMOVABLE FLOAT SWITCH for applications at great depths (40 m). The float switch is connected via a resin-sealed cable gland system.

100% TESTED, all the electropumps are electrically and hydraulically tested at the end of the line.

OPERATING LIMITS

PROTECTION

IP 68

INSULATION CLASS

F

VOLTAGE TOLERANCE

-10% / +10%

PUMPED LIQUID TEMPERATURE

0°C - 35°C

MAX. STARTS / HOUR

40

MAX. AMOUNT OF SAND TOLERATED IN WATER

50 g/m³

MAX. IMMERSION DEPTH

40m

SINGLE-PHASE VERSION

Featuring a condenser with overload protection and automatic resetting system.

3-20S, 5-20S, 3-20S6, 5-20S6 AND THREE-PHASE SERIES

Not feature overload protection.

VERSIONS UPON REQUEST

Different thrust load

Different voltage

Version with KTW, WRAS, ACS type-approved cable

Versions with or without float switch

External capacitor (*minimum quantity required*)

ACCESSORIES

Cable lengths: 10 m or 20 m

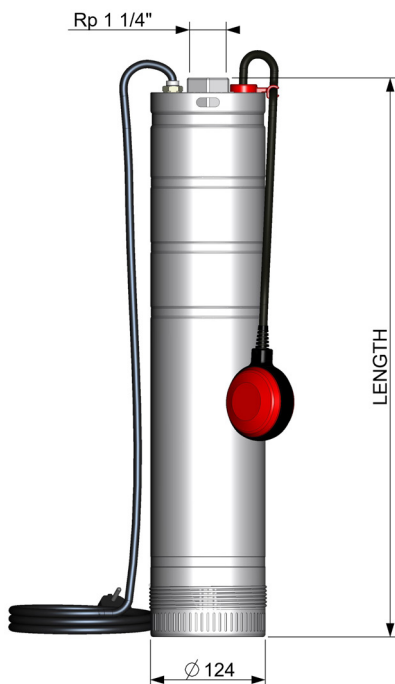
Sacrificial anode

Float switch with removable connector

FROG disassembly kit

Electrical plug of different standards

DIMENSIONS



MODELS

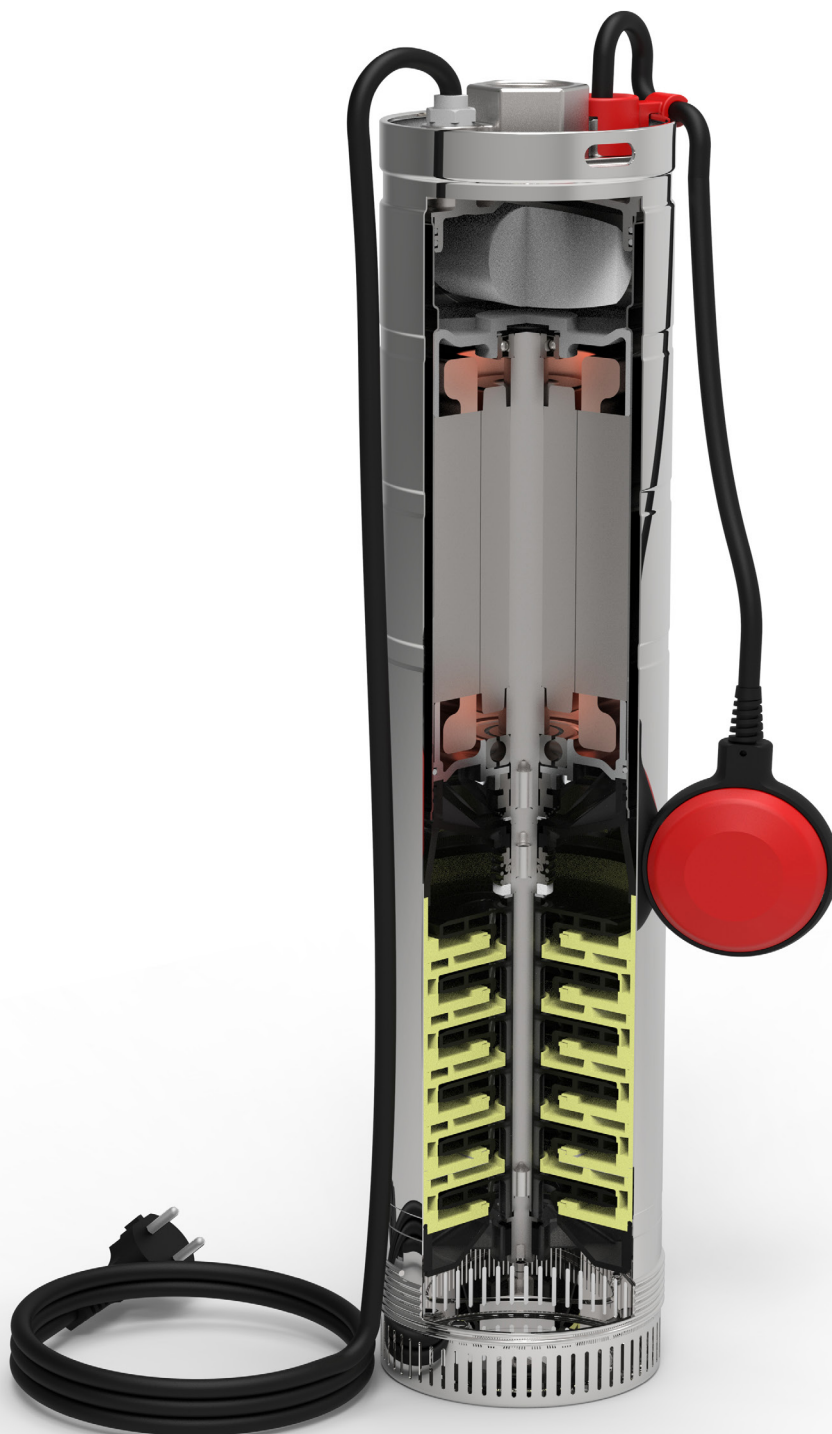
50Hz Model		60Hz Model		Dimension			Cable Length [m]
Single-phase 230 V	Three-phase 230/400 V	Single-phase 220 V	Three-phase 220/380 V	Length [mm]	Single-phase Weight [kg]	Three-phase Weight [kg]	
FROG 3 - 06S	FROG 3 - 06T	-	-	439	9,1	9,3	10
FROG 3 - 08S	FROG 3 - 08T	FROG 3 - 08S6	FROG 3 - 08T6	495	11,6	11,8	
FROG 3 - 10S	FROG 3 - 10T	FROG 3 - 10S6	FROG 3 - 10T6	521	11,9	12,1	
FROG 3 - 12S	FROG 3 - 12T	FROG 3 - 12S6	FROG 3 - 12T6	590	13,8	14	
FROG 3 - 15S	FROG 3 - 15T	FROG 3 - 15S6	FROG 3 - 15T6	616	14	14,2	
FROG 3 - 20S	FROG 3 - 20T	FROG 3 - 20S6	FROG 3 - 20T6	698	16,7	16,9	
FROG 5 - 08S	FROG 5 - 08T	-	-	469	11,3	11,5	
FROG 5 - 12S	FROG 5 - 12T	FROG 5 - 12S6	FROG 5 - 12T6	515	12,9	13,1	
FROG 5 - 15S	FROG 5 - 15T	FROG 5 - 15S6	FROG 5 - 15T6	541	13,3	13,5	
FROG 5 - 20S	FROG 5 - 20T	FROG 5 - 20S6	FROG 5 - 20T6	620	15,9	16,1	

BUILT-IN AUTOMATICAL VENT VALVE

- incorporated in the upper head to ensure the priming of the electropump under any condition.

FLOAT SWITCH WITH “PLUG IN & PLUG OUT” SYSTEM

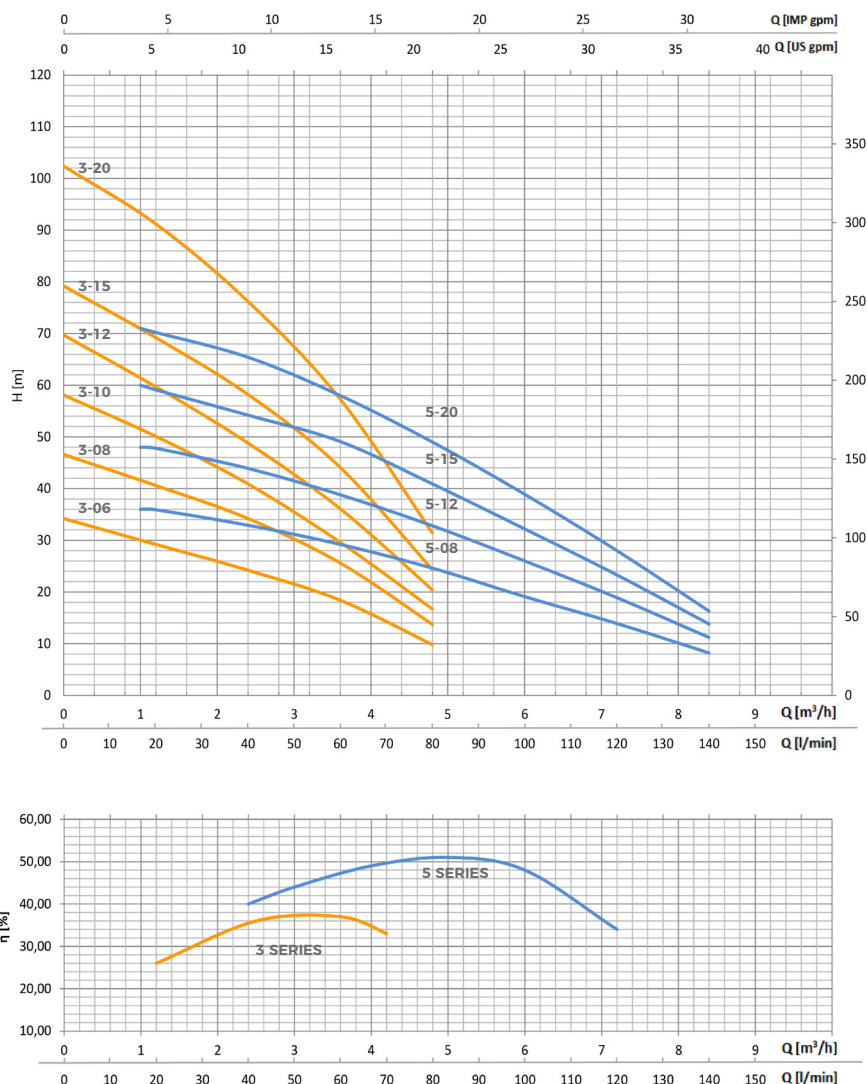
- Guarantees a perfect sealing
- Gives the option of using/selling the electropump with or without float switch just connecting or disconnecting it
- Reduces stock because electropump can be bought with or without float switch
- Allows a fast and safe maintenance because superior pump side can be completely removed



SCAN TO
see how to install the
float switch correctly.



OPERATING CURVES FROG - 50Hz



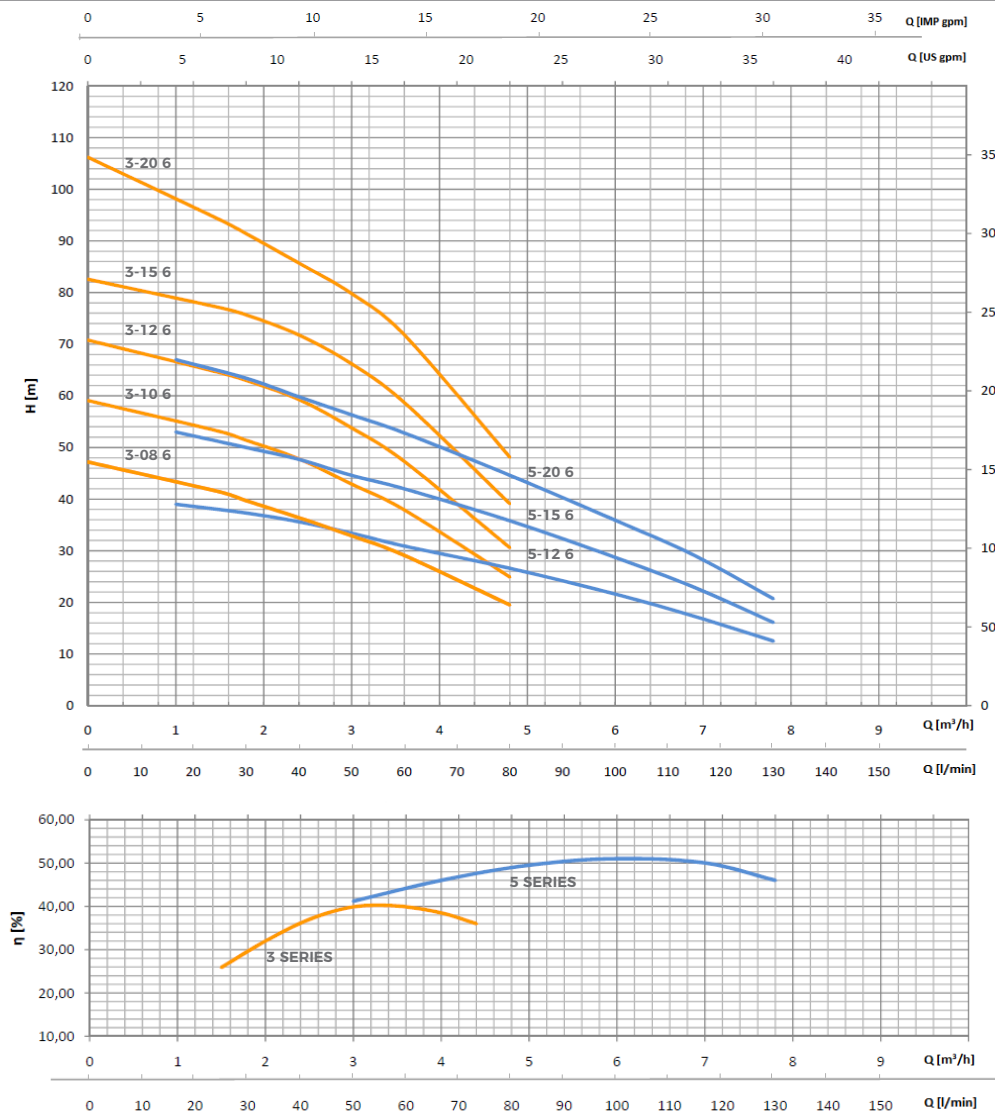
HYDRAULIC PERFORMANCE TABLE FROG - 50Hz

Type		P ₂		N. of Stage	Q (Flow Rate)								
Single-phase 230 V	Three-phase 230/400 V	[Hp]	[kW]		[l/min]	0	20	40	60	80	100	120	140
					[m³/h]	0	1,2	2,4	3,6	4,8	6	7,2	8,4
					H (Total Head) [m]								
FROG 3 - 06S	FROG 3 - 06T	0,6	0,45	3	34,2	29,2	24,2	18,4	9,8	-	-	-	
FROG 3 - 08S	FROG 3 - 08T	0,8	0,6	4	46,6	40,6	34,2	25,6	13,7	-	-	-	
FROG 3 - 10S	FROG 3 - 10T	1	0,75	5	58,1	50,1	40,9	29,6	16,7	-	-	-	
FROG 3 - 12S	FROG 3 - 12T	1,2	0,9	6	69,7	59,7	48,8	36,1	20,4	-	-	-	
FROG 3 - 15S	FROG 3 - 15T	1,5	1,1	7	79,2	69,2	58,2	44,1	24,3	-	-	-	
FROG 3 - 20S	FROG 3 - 20T	2	1,5	9	102,4	91,2	76,2	57,3	31,4	-	-	-	
FROG 5 - 08S	FROG 5 - 08T	0,8	0,6	3	37,2	35,9	32,9	29,2	24,6	19,1	13,9	8,2	
FROG 5 - 12S	FROG 5 - 12T	1,2	0,9	4	49,6	47,8	43,9	38,8	32,8	26	18,9	11,2	
FROG 5 - 15S	FROG 5 - 15T	1,5	1,1	5	61,5	59,1	54,2	49,1	40,9	32,2	23,3	13,8	
FROG 5 - 20S	FROG 5 - 20T	2	1,5	6	74,4	70,2	65,4	58	49	38,9	28	16,3	

ELECTRICAL DATA FROG - 50Hz

Type	P _i [kW] (Max Absorbed Power)	I [A] (Max Absorbed Current)	Capacitor 450 V [μF]	Type	P _i [kW] (Max Absorbed Power)	I [A] (Max Absorbed Current)	
						230 V	400 V
Single-phase 230 V				Three-phase 230/400 V			
FROG 3 - 06S	0,81	3,7	20	FROG 3 - 06T	0,82	2,4	1,4
FROG 3 - 08S	1	5,1	25	FROG 3 - 08T	1,04	2,9	1,9
FROG 3 - 10S	1,22	5,7	25	FROG 3 - 10T	1,3	3,8	2,2
FROG 3 - 12S	1,4	6,5	35	FROG 3 - 12T	1,32	4,5	2,6
FROG 3 - 15S	1,65	7,6	35	FROG 3 - 15T	1,51	4,8	2,9
FROG 3 - 20S	2,15	9,8	40	FROG 3 - 20T	2,05	5,7	3,5
FROG 5 - 08S	1,1	5,2	25	FROG 5 - 08T	1,12	4	2,1
FROG 5 - 12S	1,32	6,4	35	FROG 5 - 12T	1,29	4,4	2,5
FROG 5 - 15S	1,7	8	35	FROG 5 - 15T	1,64	4,9	3
FROG 5 - 20S	1,95	9,4	40	FROG 5 - 20T	1,92	5,7	3,7

OPERATING CURVES FROG - 60Hz



HYDRAULIC PERFORMANCE TABLE FROG - 60Hz

Type		P ₂		N. of Stage	Q (Flow Rate)										
Single-phase 220 V	Three-phase 220/380 V	[Hp]	[kW]		[l/min]	0	25	30	40	50	60	80	100	115	130
					[m³/h]	0	1,5	1,8	2,4	3	3,6	4,8	6	6,9	7,8
					H (Total Head) [m]										
FROG 3-08S6	FROG 3-08T6	0,8	0,6	4	47,2	41,4	39,7	36,4	32,9	29,1	19,5	-	-	-	
FROG 3-10S6	FROG 3-10T6	1	0,75	5	59,1	53,1	51,4	47,8	42,9	37,9	24,9	-	-	-	
FROG 3-12S6	FROG 3-12T6	1,2	0,9	6	70,8	64,5	63	59,3	53,8	47,3	30,6	-	-	-	
FROG 3-15S6	FROG 3-15T6	1,5	1,1	7	82,6	77,1	75,1	71,8	66,2	58,7	39,1	-	-	-	
FROG 3-20S6	FROG 3-20T6	2	1,5	9	106,2	94,1	91,4	85,7	79,8	71,8	48,1	-	-	-	
FROG 5-12S6	FROG 5-12T6	1,2	0,9	4	45,4	42,6	37,3	35,6	33,4	30,9	26,6	21,6	17,3	12,5	
FROG 5-15S6	FROG 5-15T6	1,5	1,1	5	56,7	53,8	50	47,7	44,6	42	35,8	28,7	22,9	16,1	
FROG 5-20S6	FROG 5-20T6	2	1,5	6	68	66,2	63,4	59,8	56,3	52,8	44,6	35,9	29,1	20,7	

ELECTRICAL DATA FROG - 60Hz

Type	P ₁ [kW] (Max Absorbed Power)	I [A] (Max Absorbed Current)	Capacitor 450 V [μF]	Type	P ₁ [kW] (Max Absorbed Power)	I [A] (Max Absorbed Current)	
						220 V	380 V
Single-phase 220 V				Three-phase 220/380 V			
FROG 3-08S6	1,05	4,8	25	FROG 3-08T6	1,06	2,9	1,7
FROG 3-10S6	1,24	5,9	25	FROG 3-10T6	1,31	3,6	2,1
FROG 3-12S6	1,42	7,1	35	FROG 3-12T6	1,37	3,9	2,3
FROG 3-15S6	1,67	8	35	FROG 3-15T6	1,56	4,4	2,6
FROG 3-20S6	2,16	10,1	40	FROG 3-20T6	2,08	5,4	3,2
FROG 5-12S6	1,34	6,3	35	FROG 5-12T6	1,31	3,6	2,1
FROG 5-15S6	1,72	7,3	35	FROG 5-15T6	1,67	4,4	2,6
FROG 5-20S6	1,91	9,7	40	FROG 5-20T6	1,89	4,9	2,9



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EDIT: BROCHURE FROG EN/MAR/2026