



### TECHNICAL DATA

**Operating range:**

from 1 to 16 m<sup>3</sup>/h, with head up to 10.2 metres.

**Liquid temperature range:**

from 0 °C to +35 °C for domestic use.

**Pumped liquid:** dirty water without fibres.

**Particle size for free passage of solids through the suction grid:**

NOVA 180 - NOVA 200                    5 mm.  
NOVA 300 - NOVA 600                    10 mm.

**Minimum draught depth:**

NOVA 180 A                                    77 mm  
NOVA 180 NA - NOVA 200                8 mm  
NOVA 300                                        85 mm  
NOVA 600 A                                    175 mm  
NOVA 600 NA                                  38 mm

**Max. immersion depth:** 7 metres.

**Maximum dry run time:** 1 minute.

**Protection class:** IP 68.

**Insulation class:** F.

### APPLICATIONS

The submersible pump of the NOVA range is suitable for automatically operated fixed domestic applications for draining basements and garages that are subject to flooding.

Thanks to its compact, easy to handle shape, it may also be used as a portable pump for emergencies such as lifting water from tanks or rivers, emptying swimming pools, fountains, excavations, and pedestrian subways. It is also ideal for gardening, and hobby applications in general.

The level switch allows fixed installation, ensuring automatic operation.

Version with special stainless steel pump shaft also available (SV).

### CONSTRUCTION FEATURES OF THE PUMP

Hydro resistant technopolymer pump body, cover, and suction grid.

Stainless steel motor, roto shaft, and bolts and screws.

Threefold seal with interposed rings with oil pre-chamber.

### CONSTRUCTION FEATURES OF THE MOTOR

Submersible type continuous duty asynchronous motor.

Stator enclosed in airtight stainless casing, with an outer cover that protects the wiring and the capacitor.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with local regulations.

Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

Standard voltage:	single-phase	220-240 V / 50 Hz
	three-phase	400 V / 50 Hz

Standard cables for the single-phase version:

5 metre H05 RN-F for	NOVA 180 M-A
	NOVA 300 M-A
	NOVA 600 M-A

10 metre H05 RN-F for	NOVA 180 M-A
	NOVA 200 M-NA

10 metre H07 RN-F for	NOVA 600 M-A
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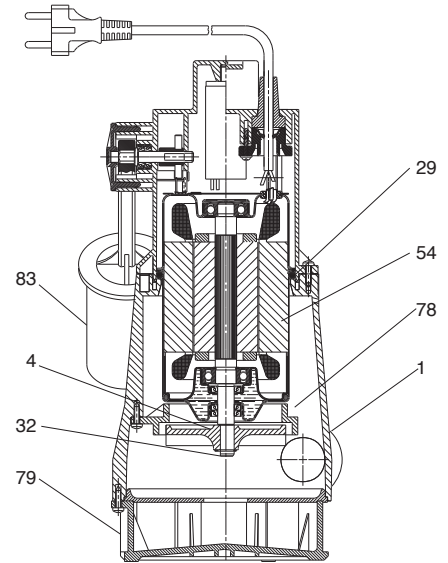
Standard plug for the single-phase version: SCHUKO CEE 7 - VII - UNEL 47166-68

Standard cables for the three-phase version: 5 metres H07 RN-F

### MATERIALS

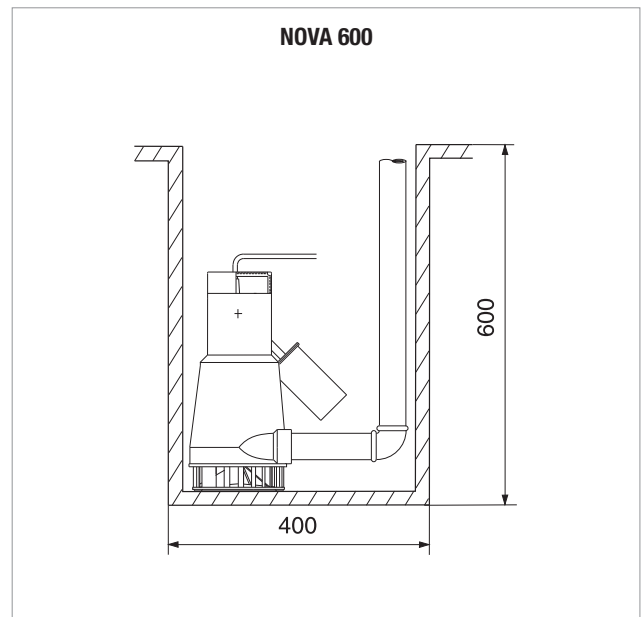
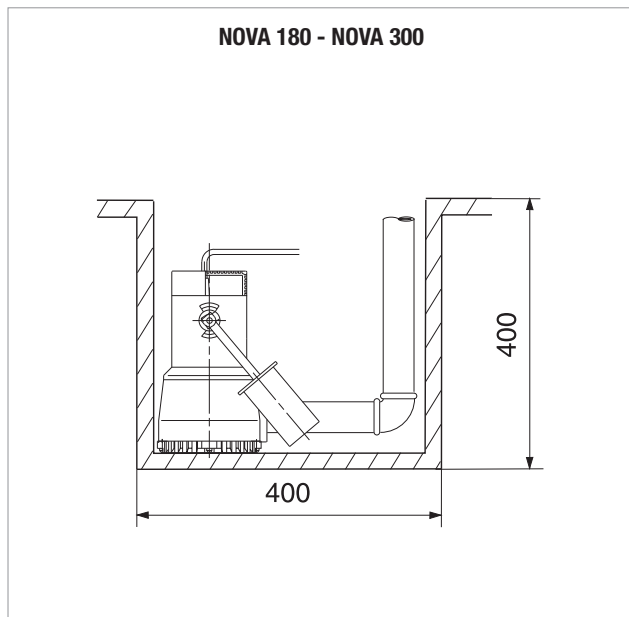
N.	PARTS*		MATERIALS
1	PUMP BODY		TECHNOPOLYMER
4	IMPELLER		TECHNOPOLYMER
29	OR RING		NBR
32	STOP RING		12E - UNI 7435 RUST-PROOF
54	MOTOR	CASE	AISI 304 STAINLESS STEEL X5 CrNi 1810 - UNI 6900/71
		ROTOR SHAFT	AISI 416 STAINLESS STEEL X12 CrS13 - UNI 6900/71 FOR SV VERSION SHAFT IN AISI 431 STAINLESS STEEL
78	ADJUSTMENT RING		TECHNOPOLYMER
79	SUCTION GRID		TECHNOPOLYMER
83	FLOAT		TECHNOPOLYMER

\* In contact with the liquid



MODEL	WITH FLOAT (A)	WITHOUT FLOAT (NA)
NOVA 180	YES	YES
NOVA 200	NO	YES
NOVA 300	YES	NO
NOVA 600	YES	YES

### MINIMUM WELL SIZE FOR AUTOMATIC OPERATION FIXED INSTALLATION:



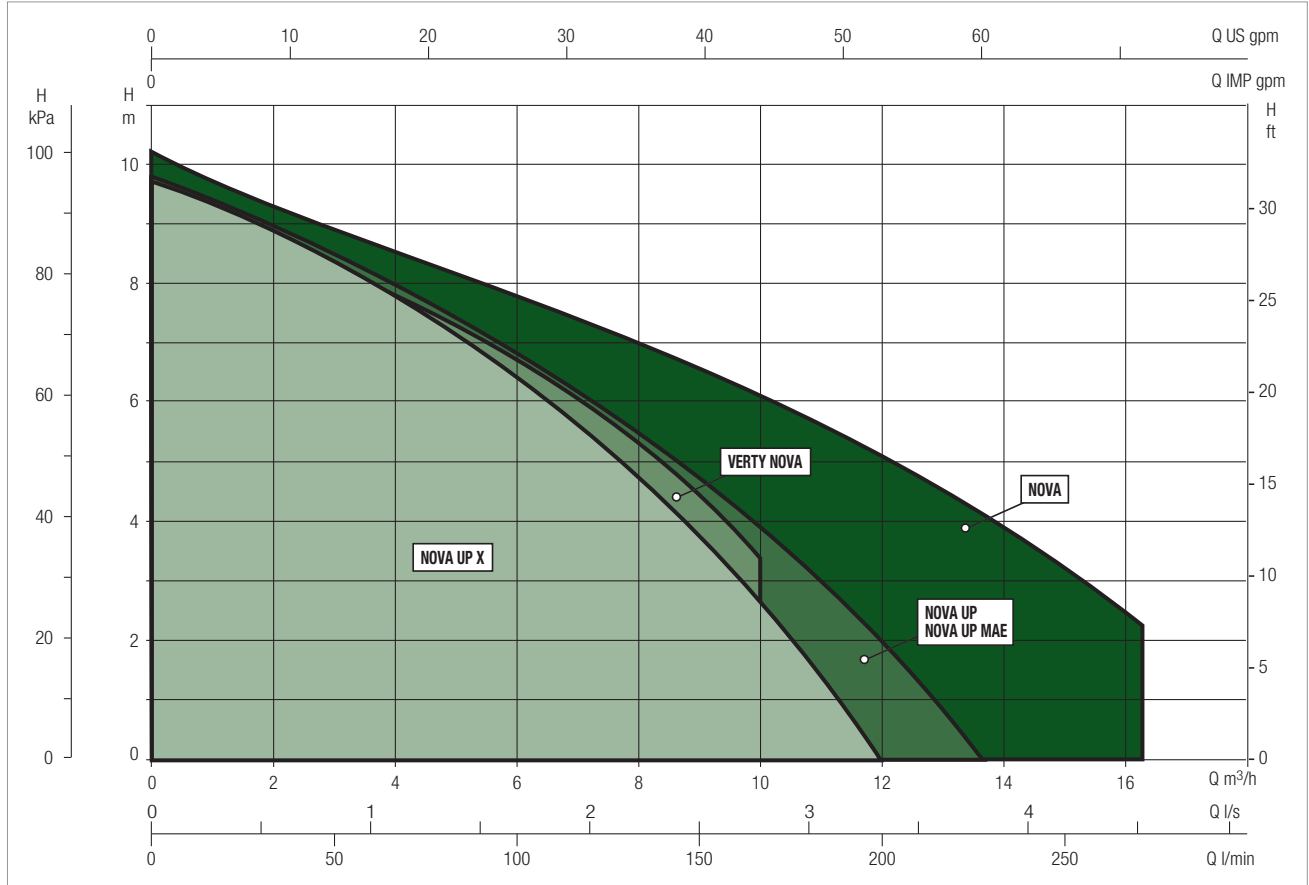
# NOVA RANGE

## SUBMERSIBLE PUMPS

### PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

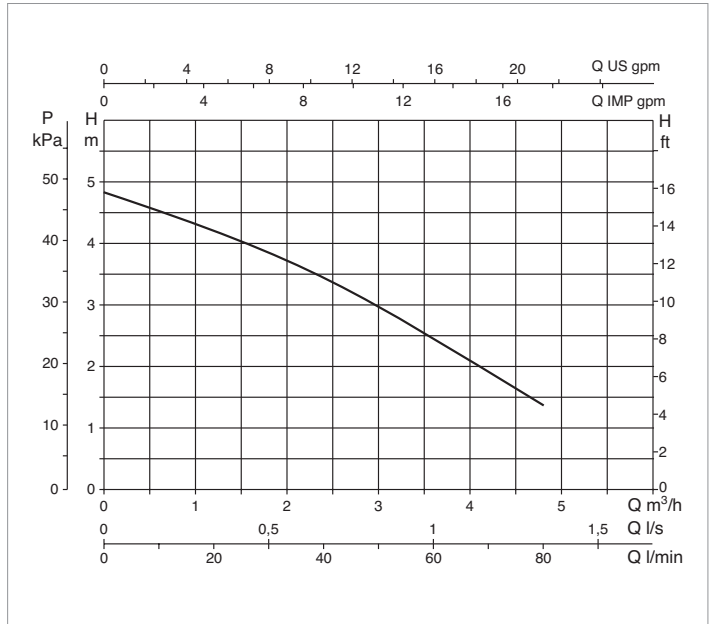
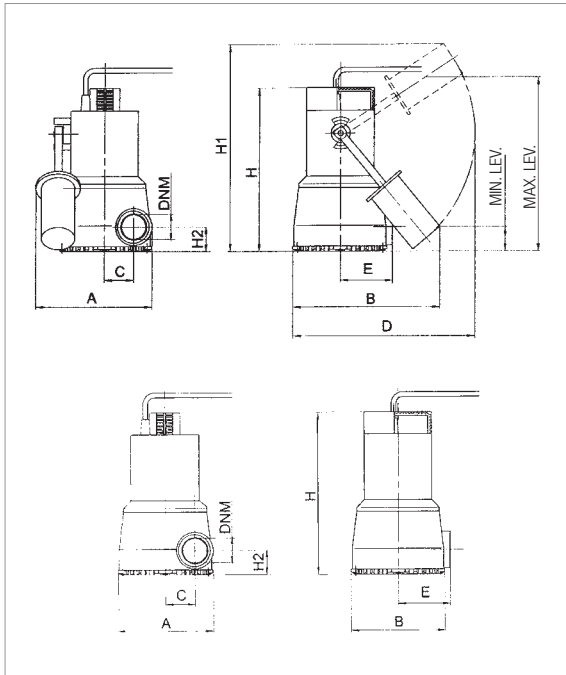


### SELECTION TABLE - NOVA

MODEL	Q= m <sup>3</sup> /h	0	1	2	3	4.5	5	6	7	7.5	9	10	12	13.5	15	
	Q=l/min	0	16.6	33.3	50	75	83.3	100	116.6	125	150	166.6	200	225	250	
NOVA 180 M	H (m)	4.95	4.45	3.9	3.15	1.7	1.15									
NOVA 300 M		7.18	6.7	6.23	5.8	5.2	5	4.6	4.2	4	3.42	3	2.2			
NOVA 600 M-T		10.2	9.7	9.3	8.9	8.3	8.1	7.8	7.4	7.2	6.6	6.1	5	4.1	3.1	

# NOVA 180 - CLEAN WATER DRAINING SUBMERSIBLE PUMPS FOR DOMESTIC USE

Liquid temperature range: from 0 °C to +35 °C for domestic use



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

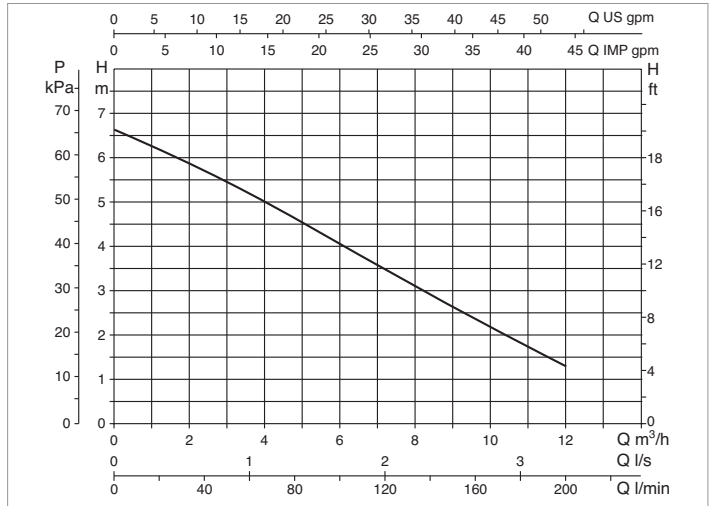
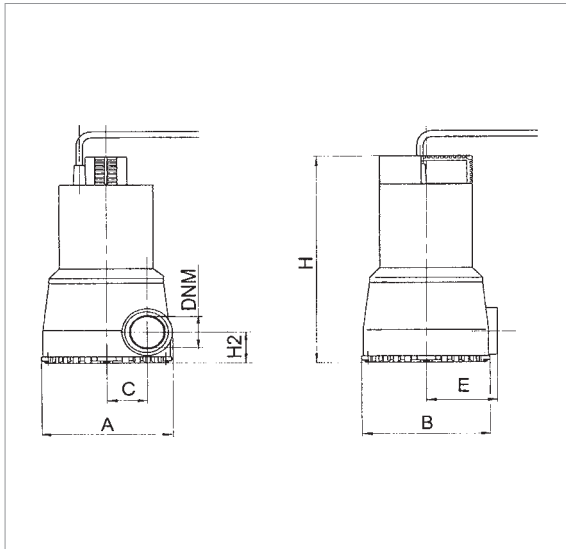
MODEL	ELECTRICAL DATA						
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		I <sub>n</sub> A	CAPACITOR	
			kW	HP		μF	Vc
NOVA 180 M-A	1 x 220 - 240V ~	0.19	0.2	0.28	0.9	5	450
NOVA 180 M-A - SV*	1 x 220 - 240V ~	0.19	0.2	0.28	0.9	5	450
NOVA 180 M-NA - SV*	1 x 220 - 240V ~	0.19	0.2	0.28	0.9	5	450

A: Automatic with float - NA: Non-automatic, without float  
 \* With special stainless steel pump shaft

MODEL	A	B	C	D	E	H	H1	H2	LEV. MIN.	LEV. MAX.	DNM GAS	PACKING DIMENSIONS			CABLE	VOLUME (m <sup>3</sup> )	WEIGHT kg
												L/A	L/B	H			
NOVA 180 M-A	181	235	46	296	82	253	345	38	77	277	1 <sup>1/2</sup> "	287	202	320	5 mt.	0.019	4.6
NOVA 180 M-NA	148	148	46	-	82	253	-	38	-	-	1 <sup>1/2</sup> "	287	202	320	10 mt.	0.019	4.6
NOVA 180 M-A SV*	181	235	46	296	82	253	345	38	77	277	1 <sup>1/2</sup> "	287	202	320	5 mt.	0.019	4.6
NOVA 180 M-NA SV*	148	148	46	-	82	253	-	38	-	-	1 <sup>1/2</sup> "	287	202	320	10 mt.	0.019	4.5

# NOVA 200 / NOVA 300 - CLEAN WATER DRAINING SUBMERSIBLE PUMPS FOR DOMESTIC USE

Liquid temperature range: from 0 °C to +35 °C for domestic use

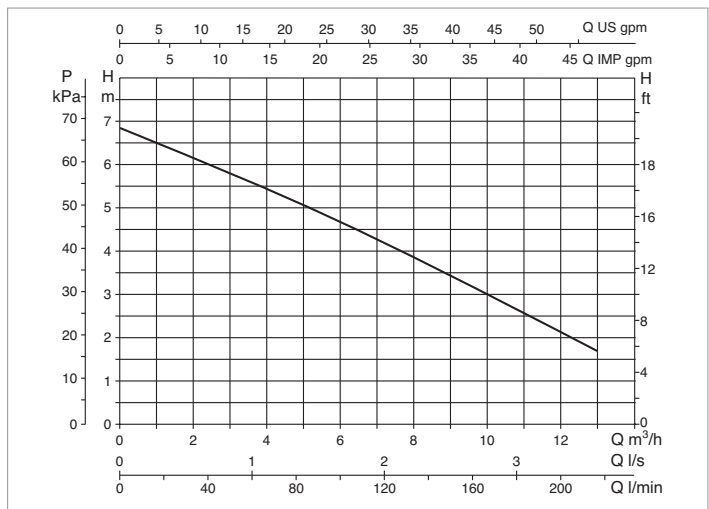
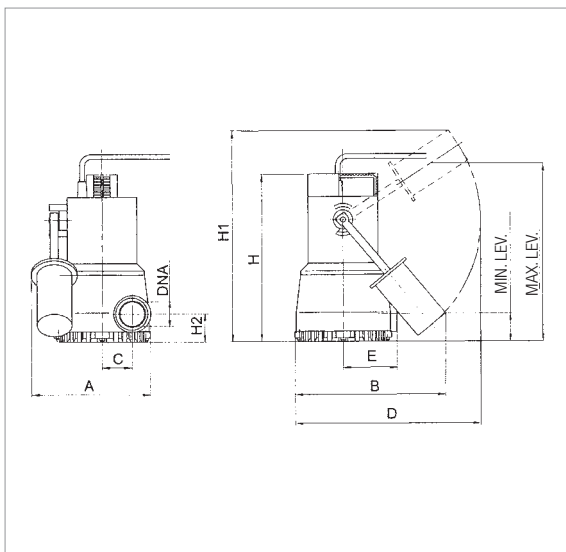


The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	POWER INPUT 50 Hz	P1 MAX kW	ELECTRICAL DATA				
			P2 NOMINAL		In A	CAPACITOR	
			kW	HP		μF	Vc
NOVA 200 M-NA - SV*	1 x 220 - 240 V ~	0.35	0.22	0.3	1.5	8	450

NA: Non-automatic, without float  
\* With special stainless steel pump shaft

MODEL	A	B	C	D	E	H	H1	H2	LEV. MIN.	LEV. MAX.	DNM GAS	PACKING DIMENSIONS			CABLE	VOLUME (m <sup>3</sup> )	WEIGHT kg
												L/A	L/B	H			
NOVA 200 M-NA - SV*	148	148	46	-	82	253	-	38	-	-	1 <sup>3/8</sup> "	287	202	320	10 mt.	0.019	4.5



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

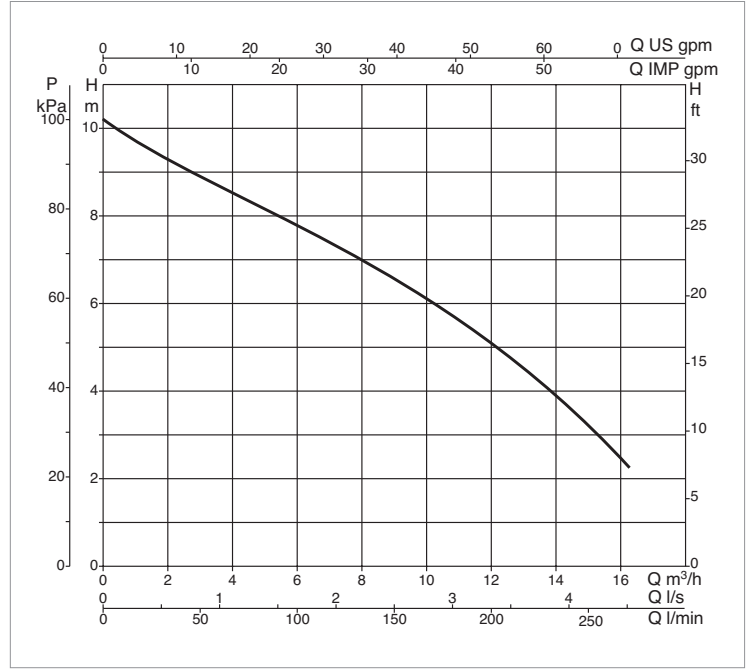
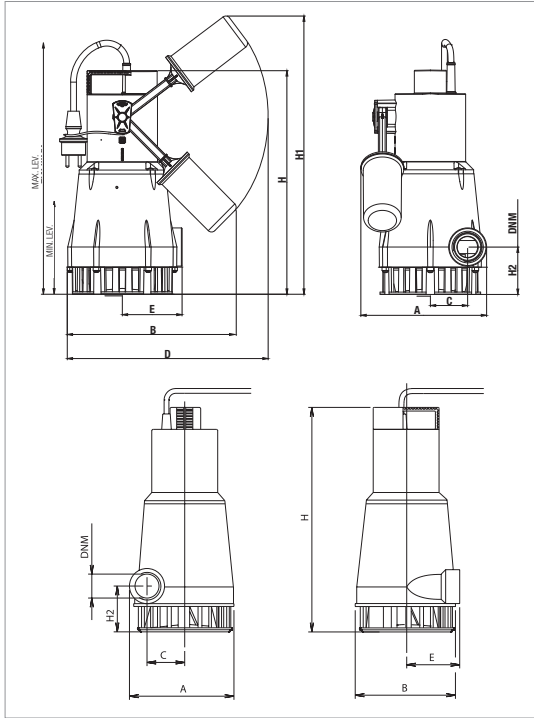
MODEL	POWER INPUT 50 Hz	P1 MAX kW	ELECTRICAL DATA				
			P2 NOMINAL		In A	CAPACITOR	
			kW	HP		μF	Vc
NOVA 300 M-A	1 x 220 - 240 V ~	0.35	0.22	0.3	1.6	8	450
NOVA 300 M-A - SV*	1 x 220 - 240 V ~	0.35	0.22	0.3	1.6	8	450

A: Automatic with float - NA: Non-automatic, without float  
\* With special stainless steel pump shaft

MODEL	A	B	C	D	E	H	H1	H2	LEV. MIN.	LEV. MAX.	DNM GAS	PACKING DIMENSIONS			CABLE	VOLUME (m <sup>3</sup> )	WEIGHT kg
												L/A	L/B	H			
NOVA 300 M-A	181	235	46	296	82	262	354	47	85	285	1 <sup>3/8</sup> "G	287	202	320	5 mt.	0.019	4.6
NOVA 300 M-A - SV*	181	235	46	296	82	262	354	47	85	285	1 <sup>3/8</sup> "G	287	202	320	10 mt.	0.019	4.6

# NOVA 600 - CLEAN WATER DRAINING SUBMERSIBLE PUMPS FOR DOMESTIC USE

Liquid temperature range: from 0 °C to +35 °C for domestic use



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA						
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR	
			kW	HP		µF	Vc
NOVA 600 M-A	1 x 220 - 240 V ~	0.80	0.55	0.75	3.4	14	450
NOVA 600 T-NA	3 x 400 V ~	0.80	0.55	0.75	1.6	-	-
NOVA 600 M-A - SV*	1 x 220 - 240 V ~	0.80	0.55	0.75	3.4	14	450
NOVA 600 M-NA - SV*	1 x 220 - 240 V ~	0.80	0.55	0.75	3.4	14	450
NOVA 600 T-NA - SV*	3 x 400 V ~	0.80	0.55	0.75	1.6	-	-

A: Automatic with float - NA: Non-automatic, without float  
\* With special stainless steel pump shaft

MODEL	A	B	C	D	E	H	H1	H2	LEV. MIN.	LEV. MAX.	DNM GAS	PACKING DIMENSIONS			CABLE	VOLUME (m <sup>3</sup> )	WEIGHT kg
												L/A	L/B	H			
NOVA 600 M-A	193	235	56	296	90	334	443	73	190	390	1 1/2"	287	202	431	5 mt.	0.025	7
NOVA 600 (M-T)-NA	162	160	56	-	90	334	-	73	-	-	1 1/2"	287	202	431	10 mt.	0.025	6.7
NOVA 600 M-A - SV*	193	235	56	296	90	334	443	73	190	390	1 1/2"	287	202	431	5 mt.	0.025	7
NOVA 600 (M-T)-NA SV*	162	160	56	-	90	334	-	73	-	-	1 1/2"	287	202	431	10 mt.	0.025	6.7