



US

# esybox DIVER

7" ELECTRONIC MULTISTAGE SUBMERSIBLE PUMPS WITH INVERTER





### TECHNICAL DATA

**Flow rate maximum:** 31.7 gpm (7.2 m³/h)

**Head up to:** 180 ft (55 m)

**Maximum immersion depth:** 39 ft (12 m) standard version

**Type of pumped liquid :** Clean, free from solid or abrasive substances, non-viscous, non-aggressive, non-crystallized and chemically neutral

**Free passage:** 0.08" (2 mm)

**Minimum suction depth:** 4.33" (110 mm)

**Minimum level of water:** 1.38" (35 mm)

**Liquid temperature range:** from 32°F to 131°F (+0°C to +55°C)

**Minimum and maximum ambient temperature:** < 32°F to 122°F (0°C / +50°C)

**Maximum immersion depth:** 49 ft (15 m)

**Adjustable constant pressure:** pre-set 43 psi, adjustable from 14 to 80 psi

(pre-set 3 bar, adjustable from 1 to 5,5 bar)

**Outlet connection:** Threated 1" 1/4 NPT

**Pump maximum diameter :** 185 mm

**Impeller/s material:**

Technopolymer / AISI 304 Stainless steel

**Maximum number of starts:** 60/h

**Protection class:** IP 68

**Non-stop service:** yes

**Motor insulation class:** F

**Power cable (m) and plug:** 49 ft (15 m) with NEMA 6/15P plug

**Single phase power input:** 230 V 50/60 Hz

**Possible type of installation:** Fixed, horizontal or vertical. Submerged or semi-submerged. It can be installed on the surface, under the water level, or outside in a vertical position with the DOC68 accessory (supplied separately).

**Special versions on request:**

X version with threaded inlet for Floating Intake hose

**Certification:**

CSA C22.2 No. 108-14- 5th Ed. – Liquid Pumps.

UL 778 6th Ed. – Motor Operated Water Pumps

NSF 61 Drinking Water & NSF 372 Drinking Water - Low Lead Content

7" multi-stage electronic pump with variable frequency drive for clean water designed for use in wells, cisterns or tanks. Usable submerged, partially submerged or on the surface (with the appropriate accessory). It is suitable for pressurization, reuse of rainwater and activities. gardening and irrigation in domestic and residential environments. The pump can also be installed horizontally. Equipped with PLC (PowerLine Communication) and Wi-Fi technology. If combined with an identical pump two Esydivers can work in twin mode one in place of the other or in support mode when the system requests are higher than what can be supplied by a single pump. Available in version X with 1 "union and kit X which includes the 3.3 ft / 1 meter suction pipe and float to prevent the suction of impurities from the bottom. The entire pump is IP 68 certified. With the DOC68 accessory (supplied separately) it becomes an IP 68 surface pump to be used under the leaf. Certified version for drinking water available on request.

### CONSTRUCTION FEATURES OF THE PUMP

Technopolymer pump body to resist corrosion and oxidation. Integrated non-return valve. Integrated debris filter. Overpressure valve to resist the formation of ice and protect from water hammer. On the pump body there is a air-vent valve that improves priming during the first installation or in the event of emptying the tank/ well, and a stainless steel handle to move the pump. Integrated 0,04 liter expansion vessel sized to prevent the pump from cycling in the event of small leaks and to compensate for water hammer. No maintenance or recharging is required. The coupling between the three impellers in technopolymer, the floating ring and the smoothing disc both in stainless steel allow a limited wear of the hydraulics and a more precise alignment of the components. Suction height can be adjusted using the appropriate accessory (included): 1.4" 1.6" 2.4" 3.2" (3.5, 4, 6 or 8 cm).

### CONSTRUCTION FEATURES OF THE MOTOR

High efficiency Permanent Magnet submersible motor cooled by the pumped liquid. hydraulic side of the motor shaft in AISI 303 stainless steel. Double mechanical seal in oil chamber where the seal on the motor side is subjected only to submersible pressure 14 psi (1 bar), while the other side is subjected to operating pressure up to 80psi (5.5 bar) ensuring that the pump is watertight. Start-up capacitor and integrated anti-overheating motor thermal protection. Quick coupling/release cable to facilitate installation inside tanks or cisterns. Tear-off power cable connection.

### FEATURES OF THE ELECTRONIC

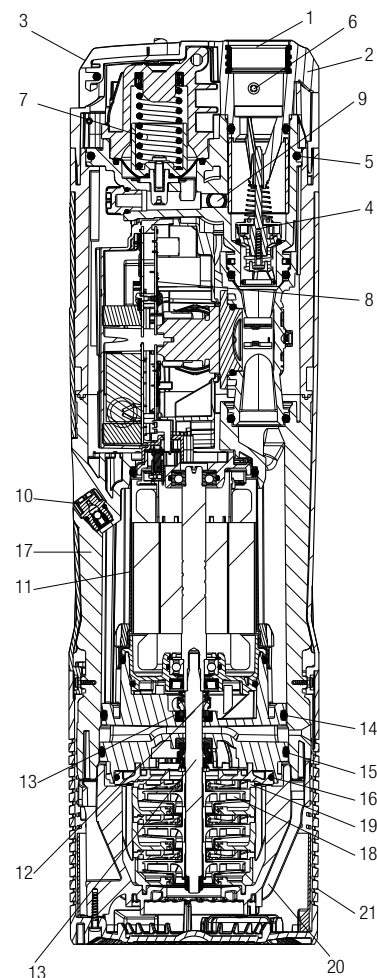
The electronic operation allows the pump to start and stop autonomously it is able to keep the working pressure adjustable from 14 to 80 psi (1 to 5.5 bar), the variable frequency drive for operation according to the system requirements and protects against dry running. NFC (Near Field Communication) pocket for the use of a float sensor (supplied separately) which can be connected without opening the pump maintaining a watertight seal. Thanks to the PLC communication technology, the pump transmits data through the power cable to the DConnect Box 2.

### DCONNECT BOX 2

Thanks to the DConnect Box 2 and the DConnect app it is possible to check and manage the system pressure, alarms and the amount of residual water in the tank directly from your smartphone or tablet. DConnect Box 2 supplied as standard.

### MATERIALS

N°	PARTS	MATERIALS
1	INSERT	BRASS
2	COVER	TECHNOPOLYMER
3	HANDLE	AISI 304
4	CHECK VALVE	TECHNOPOLYMER/NBR/FERRITE/AISI302
5	OR	NBR
6	OVERPRESSURE VALVE	TECHNOPOLYMER/BRASS
7	VESSEL WITH SPRING AND MEMBRANE	TECHNOPOLYMER/AISI304/EPDM70
8	PCB	--
9	PRESSURE SWITCH	TECHNOPOLYMER/BRASS
10	VENTING VALVE	TECHNOPOLYMER/AISI420/NBR
11	MOTOR SLEEVE	AISI 304
12	MOTOR SHAFT	AISI 303
13	DOUBLE MECHANICAL SEALS	RESIN IMPREGNATED CARBON/AISI304/AISI302/NBR
14	OR	NBR
15	OR	NBR
16	OR	NBR
17	MOTOR BODY	TECHNOPOLYMER
18	IMPELLER	TECHNOPOLYMER/AISI304
19	DIFFUSER	TECHNOPOLYMER
20	PUMP BODY	TECHNOPOLYMER
21	FILTER	TECHNOPOLYMER

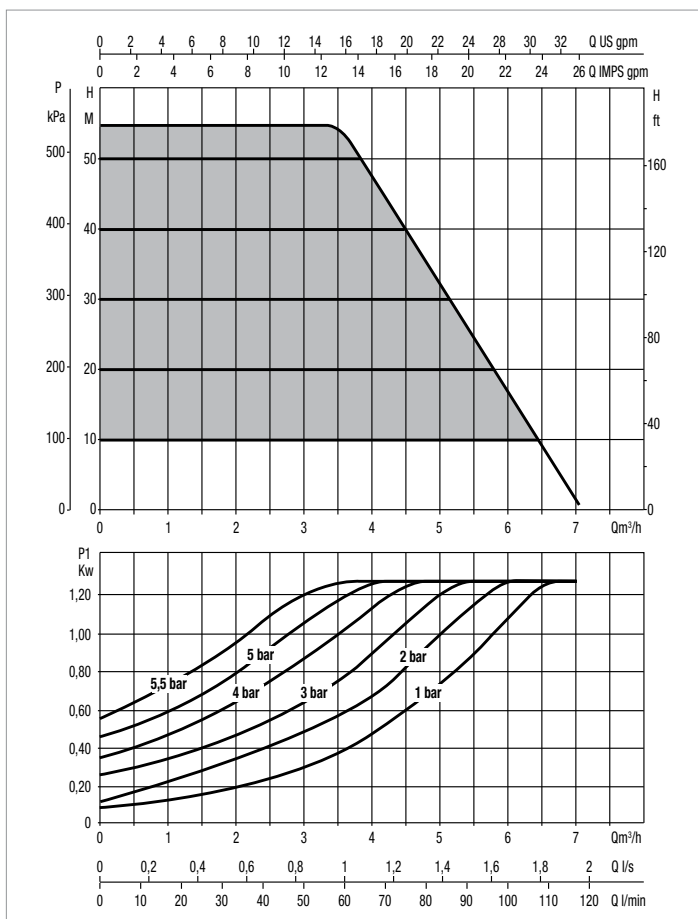
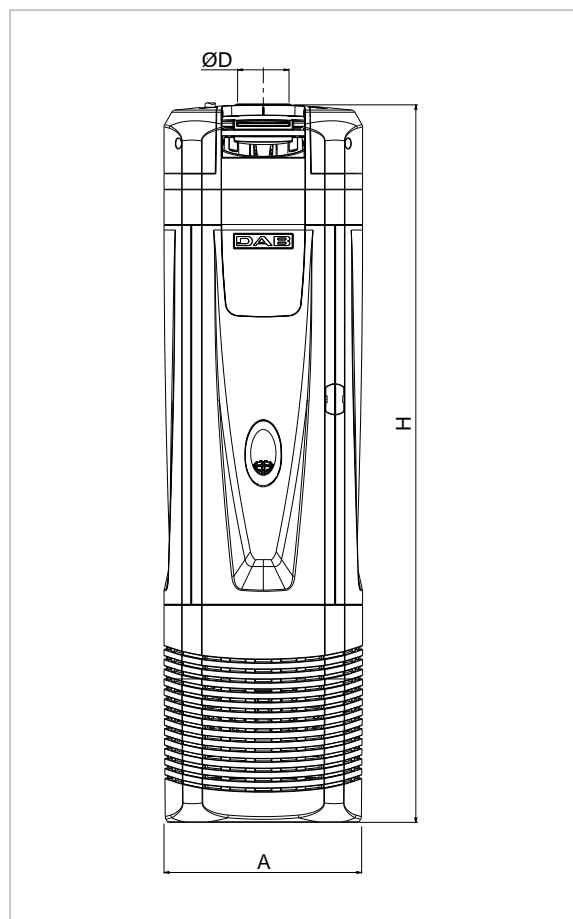


### PERFORMANCE AT 60 HZ

MODEL	ELECTR. DATA		HYDRAULIC DATA									
	P2 NOMINAL		Q=gpm	0	4	8	12	16	20	24	28	31
	kW	HP	Q=l/min	0	15.14	30.28	45.42	60.57	75.71	90.85	106	117
ESYBOX DIVER	0.95	1.3	H ft	180	180	180	180	173	130	82	37.3	2.1
			H m	55	55	55	55	52.7	39.6	24.9	11.3	0.64

### ELECTRICAL DATA AND DIMENSIONS

MODEL	ELECTRICAL DATA					A	Ø D	H	DNM	PACKING DIMENSIONS			PACKING VOLUME	Q.TY X PALLET	WEIGHT
	POWER INPUT 60 Hz	P1 kW	P2 NOMINAL		In A					L/A	L/B	H			
			kW	HP											
ESYBOX DIVER	1 x 220-240 V ~	1.3	0.95	1.3	5.5	185 mm	1" 1/4	611 mm	32 mm	740 mm	230 mm	300 mm	0.05106 m³	15	17 Kg
						7.28"	1" 1/4	24.05"	1.26"	29.1"	9.05"	11.8"	1.803 ft³		37.5 lbs



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

