

# esybox LINE

Presentation





# TOPICS

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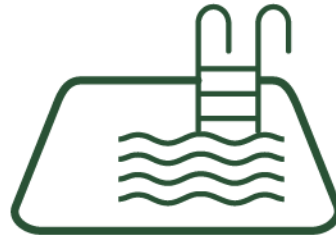
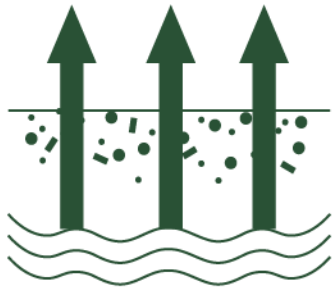
- Field of Application
- Technical Features and Installation
- Product Range

# esybox LINE





# esybox MAX



# esybox MAX



# FIELD OF APPLICATION



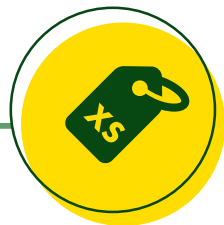
Civil, Residential, Commercial  
Buildings



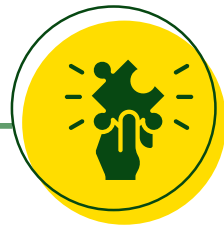
# It's EASY



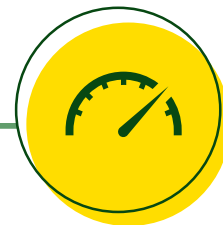
**TRANSPORTATION**



**HANDLING**



**MODULAR  
DESIGN**



**ASSEMBLY AND  
INSTALLATION**



**CONNECTIVITY**



# Modular Design

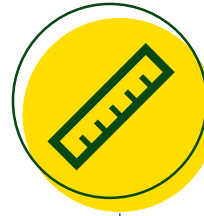


TRANSPORTATION



HANDLING

Size



375 x 750 x 375 mm

1/3

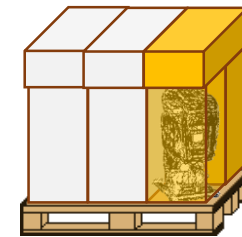
Stand.

Weight



30 Kg

Packaging



6 PCs/pallet



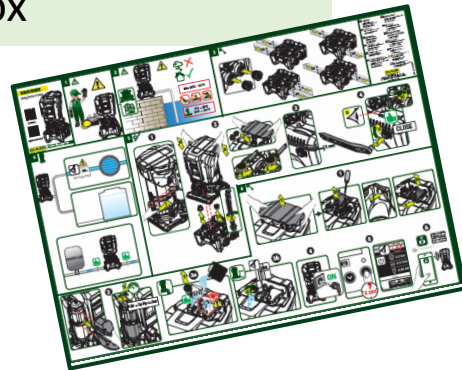




# Fast Assembly and Installation

TECHNICAL  
COMPARTMENT

- Quick Guide
- Blanking plug holders
- Golfare with o-ring
- Priming plug
- Terminal box



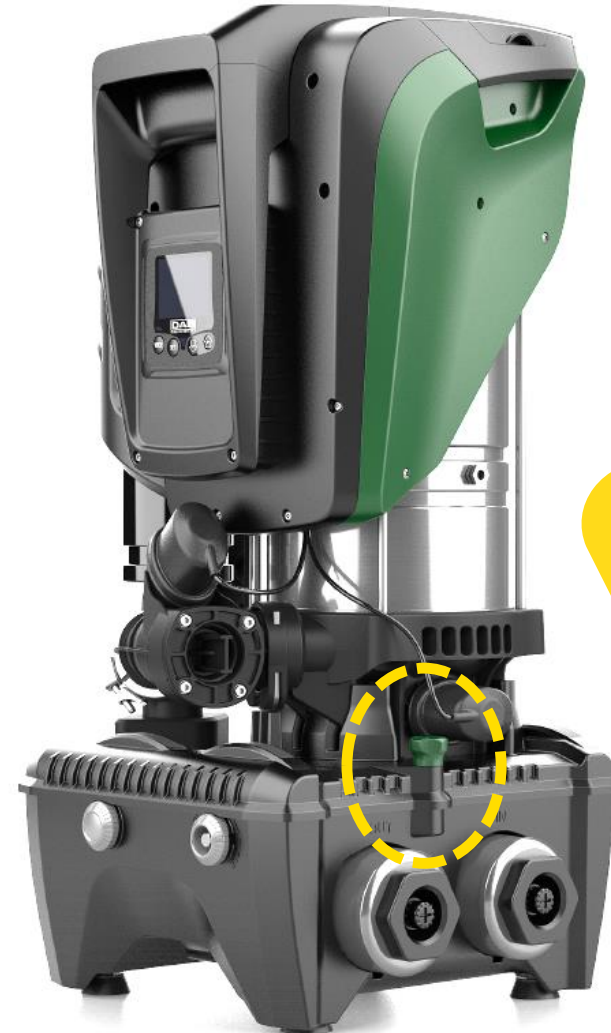
ERGONOMIC  
HANDLES



# Fast Assembly and Installation



FAST  
CONNECTION  
TOOL



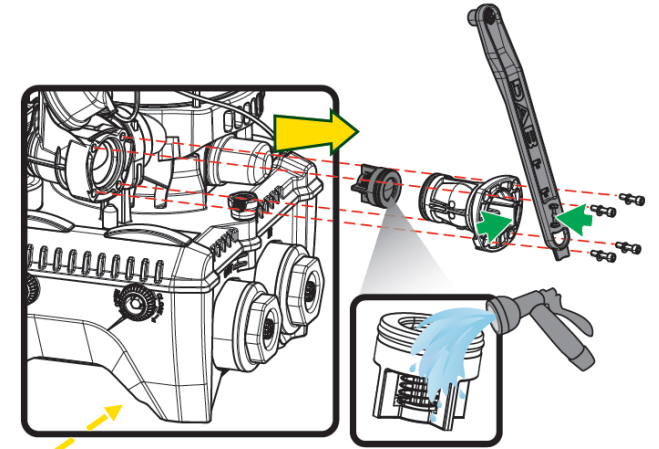
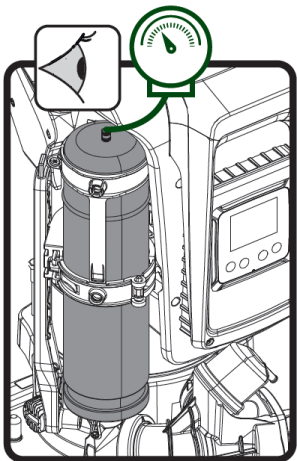
SAFETY  
LOCK  
SYSTEM





# Components Easy Maintenance

2 L  
EXPANSION  
VESSEL



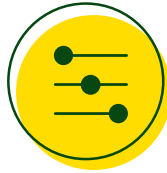
NRV

2 PRESSURE SENSORS





# Modular Design ALL INTEGRATED



VFD



2  
pressure  
sensors



NRV



2L  
expansion  
vessel

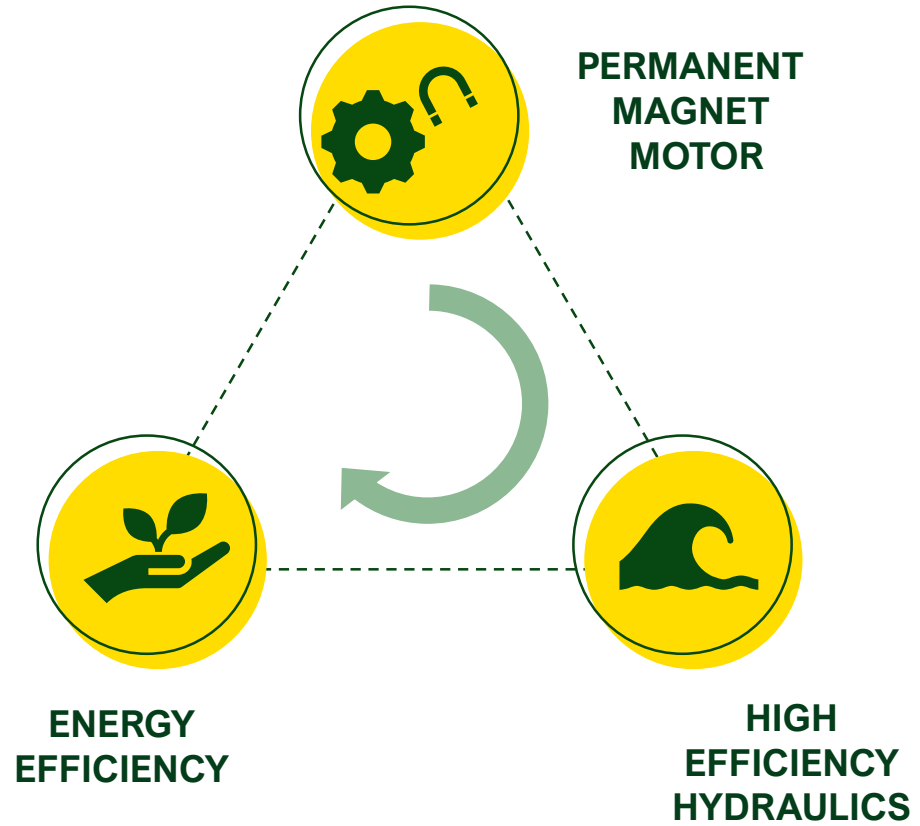


Pump





# Components Comfort





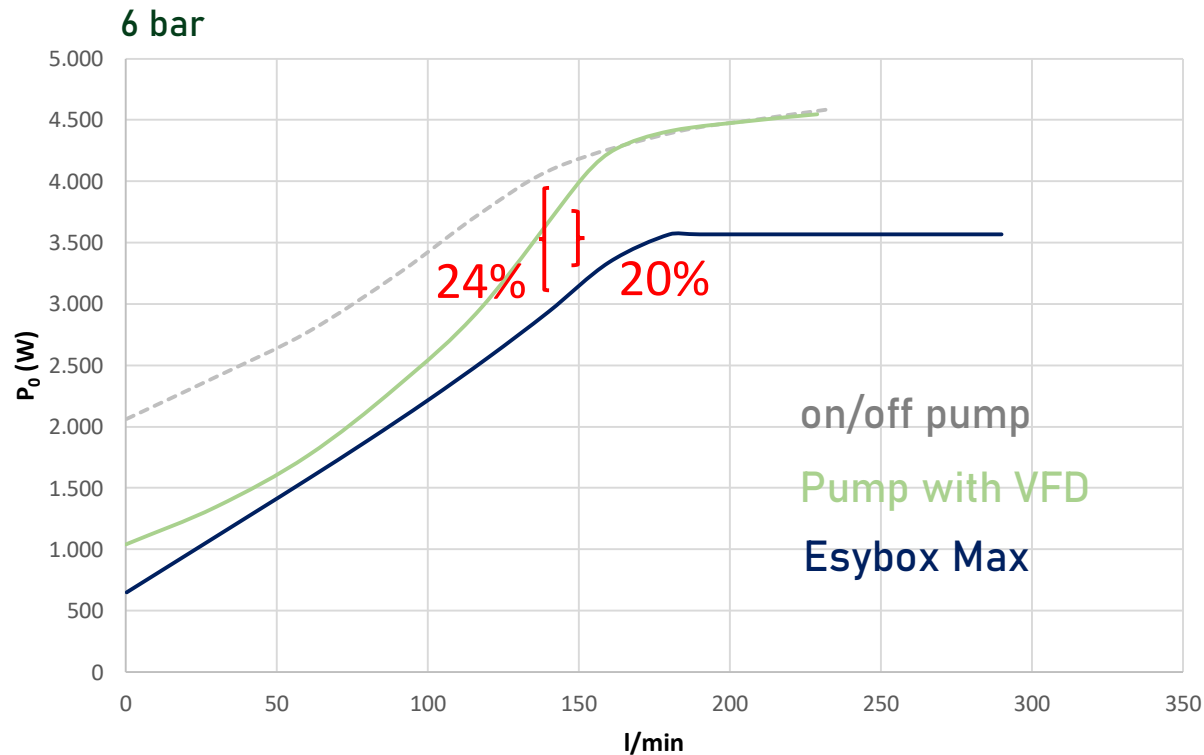
# Comfort Energy Saving



PERMANENT  
MAGNET  
MOTOR



HIGH  
EFFICIENCY  
HYDRAULICS



	pump with VFD	on/off pump
Daily	2.8 kWh	12.2 kWh
Year	1.038 kWh	4.461 kWh

# Comfort Silence



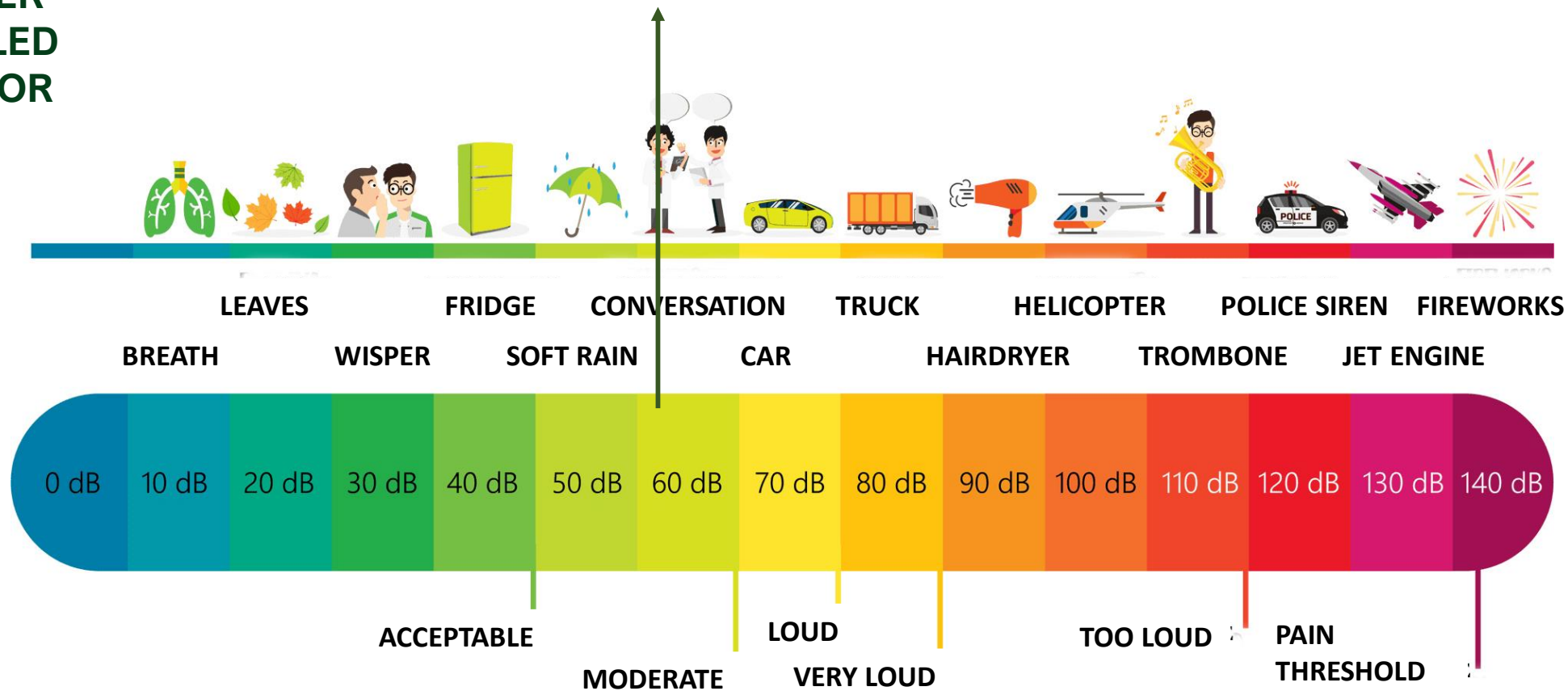
**WATER  
COOLED  
MOTOR**



## ESYBOX MAX

A little more than a **conversation**

**63 dB** (50 l/min @ 6 bar)



# Modular Design

**ESYBOX MAX**

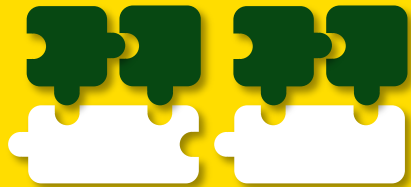
**ESYDOCK MAX**



**2x ESYBOX MAX**  
1x 2 ESYDOCK MAX



**3x ESYBOX MAX**  
1x 3 ESYDOCK MAX



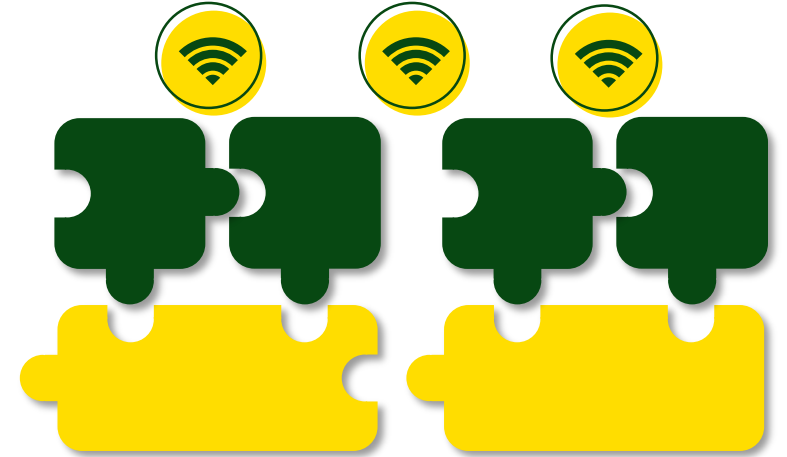
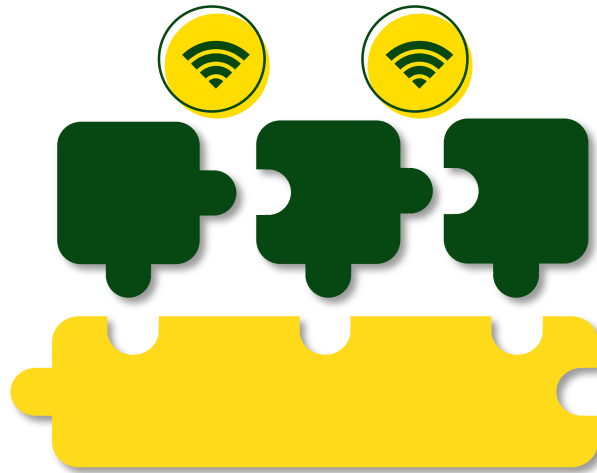
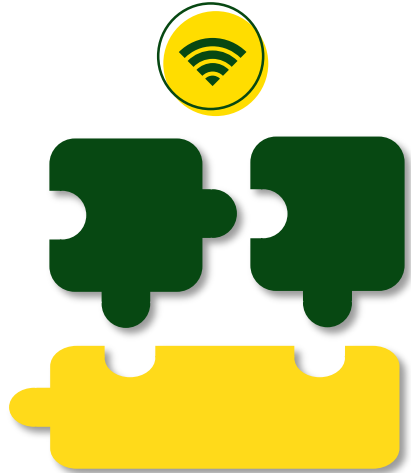
**4x ESYBOX MAX**  
2x 2 ESYDOCK MAX







# Booster Set On Site Assembly



...just one person!



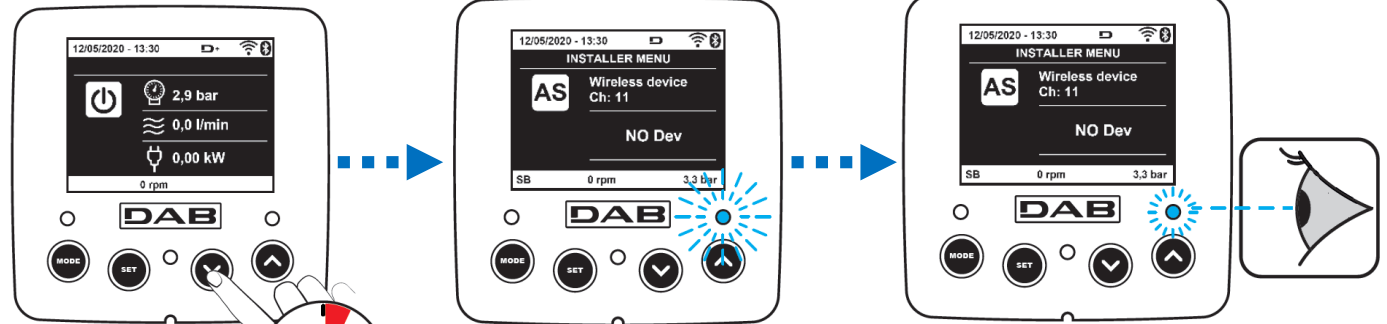
# Networking

## WIRELESS Communication

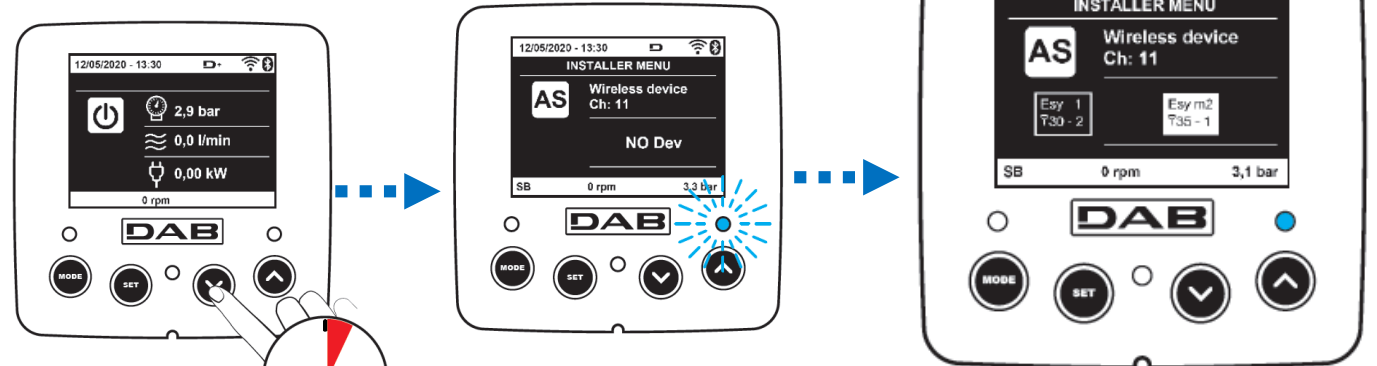


2 ESyBOX MAX

First: Pump 1



Then: Pump 2





# Networking

## *WiFi & Bluetooth*

### WiFi

## LOCAL Connection



### Bluetooth

## LOCAL Connection



**D+CONNECT**



# Networking

## *WiFi & Bluetooth*



*WiFi*



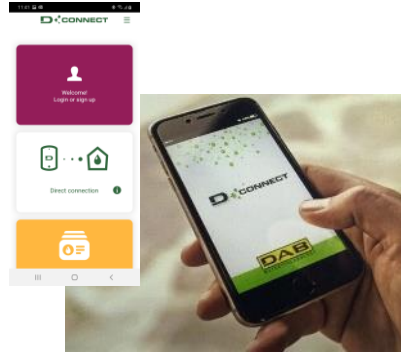
## REMOTE Connection



**D** +  **CONNECT**

# Control The Esybox Max with The App

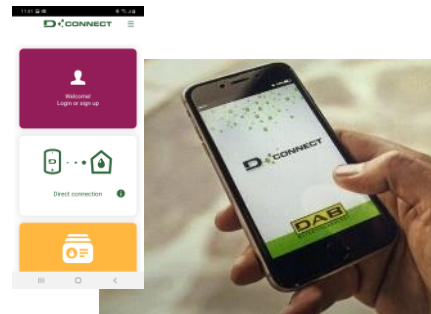
## LOCAL Connection (point-to-point)



You can

- locally manage the pump through the App
- update the Firmware of the pump without an Internet Connection

## REMOTE Connection



You can

- manage the pump remotely through the App
- DConnect Sign-In and Internet access are needed

# Networking

## Wireless Communication



**ESy I/O**



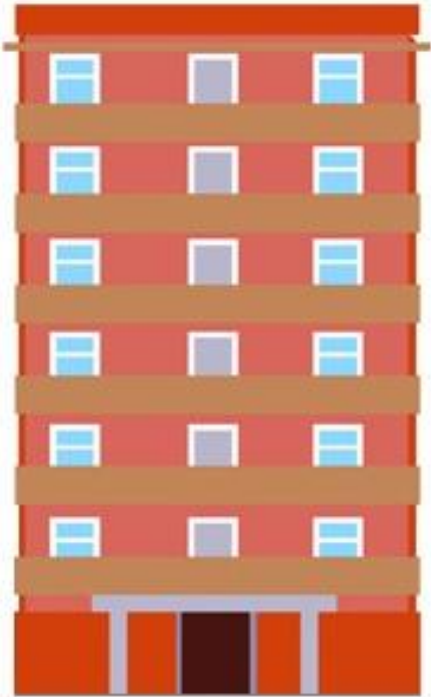
**extension  
module**

- **4** digital inputs  
floater  
pressure switch
- **1** analogue input  
remote pressure sensor
- **2** outputs  
alarm  
start/stop
- **1** port for the  
MODBUS RTU



# EASY to Choose

1



20 apartments  
up to 14 floors

**ESYBOX MAX 85/120 T**

20 apartments  
up to 8 floors

**ESYBOX MAX 60/120 T**

20 apartments  
up to 8 floors

**ESYBOX MAX 60/120 M**



**Q MAX = 17.4 m<sup>3</sup>/h**  
290 l/min



## EASY to Remember

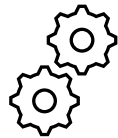
IPX5



**Vertical Installation  
with Docking Station**



**Not Self-priming**



**2" F**

**Reductions 1"  $\frac{1}{4}$  for single docking station**



# The Range

1  
PUMP  
SOLUTION



2  
PUMP  
SOLUTION



3  
PUMP  
SOLUTION



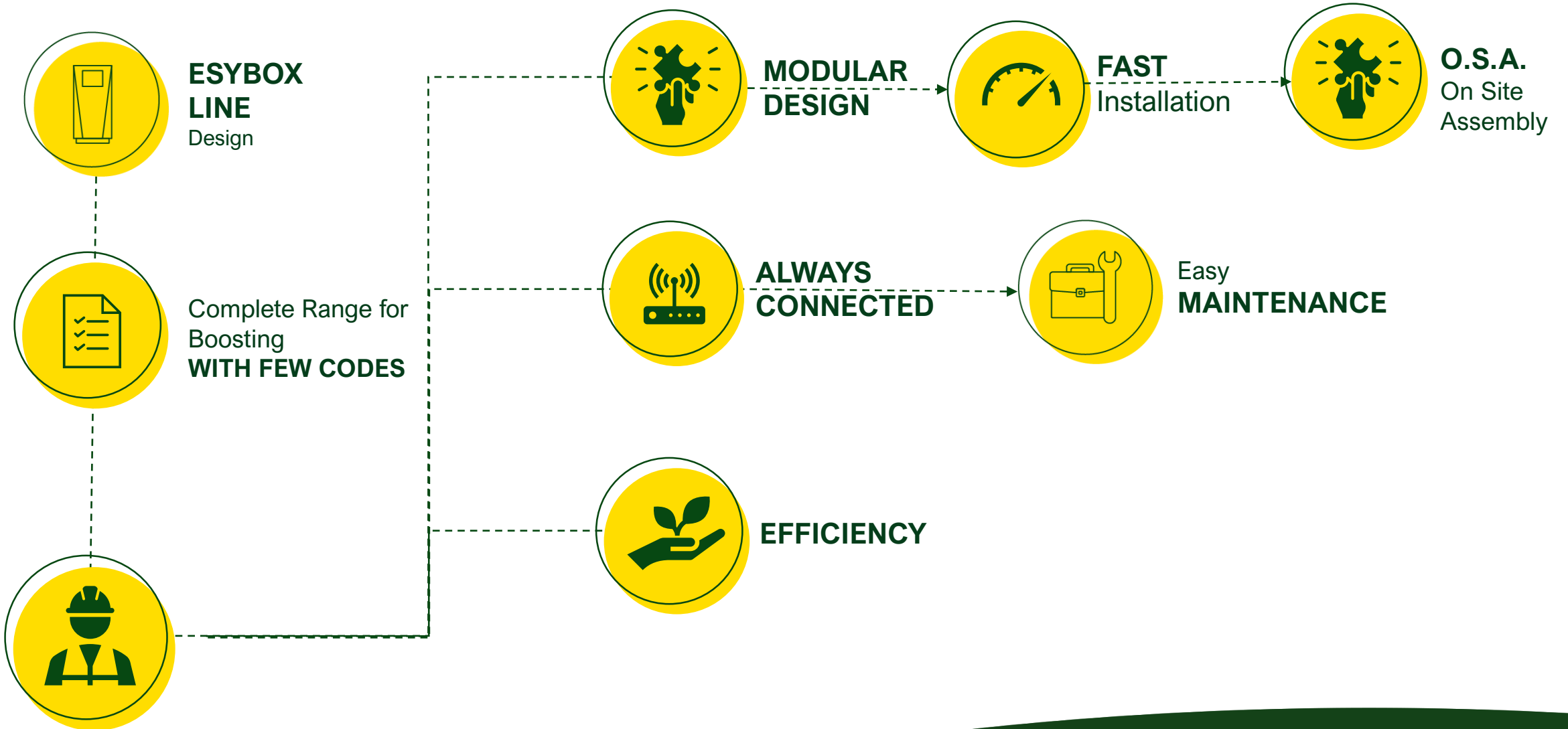


# Why Eskybox Max?

	2 KVC AD 85/120 T	2 ESKYBOX MAX 85/120
	Weight: 95 kg with e.v. Dimension: 560x1130x830 with e.v. IP44 Not removable basement	Weight: 30+30+18 = 78 kg <b>10%</b> Stand. Dimension: 800x380x750 <b>1/3</b> Stand. IPX5 Docking Station
booster set	Up to 4 pumps + 4 VFD	Up to 4 pumps with integrated VFD
		Wireless; WiFi; Bluetooth 
motor	not permanent magnet motor; air cooled	permanent magnet motor; water cooled
noise level (@ 6 bar)	69 dB	63 dB
temperature	Liquid: +40 °C; Ambient: +50 °C	Liquid: +50 °C; Ambient: +55 °C



# In Pills...





# REFERENCES

<https://dabpumps.com/en/dab-references>

**ESYBOX MAX LUNGO LA COSTA BELGA**



**DOVE:** Blankenberge si affaccia sul Mare del Nord, ed è una delle mete turistiche più amate e frequentate delle Fiandre, soprattutto nei fine settimana e durante le vacanze estive.

**VENDITORE:** SAX  
SAX, del gruppo SLS, con le sue 15 filiali, è una delle società principali del Belgio nord-occidentale nell'ambito del sanitario e di HVAC (riscaldamento, ventilazione e condizionamento dell'aria)

**CONTRAENTE:** Thermo

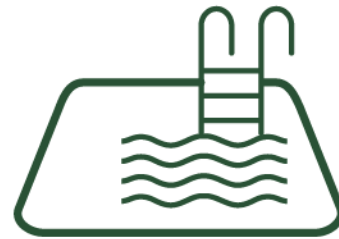
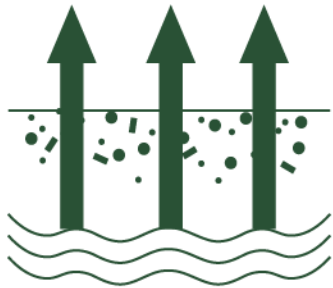


# ESYBOX MAX





# ESYBOX DIVER and DTRON



# New Range

ON-OFF pumps

DTRON 2



DTRON 3



VFD pump

ESYBOX DIVER



# FIELD OF APPLICATION



**WATER  
BOOSTING**



**GARDENING &  
IRRIGATION**



**RAIN WATER  
REUSE**



**GROUND  
WATER**

NOW

EASY INSTALLATION



BEFORE





# FEATURES



\* The installation of an additional expansion vessel is always suggested

**EASY MAINTENANCE**

**ALL BUILT-IN**



**ELECTRONIC BOARD**

**PRESSURE SENSOR**

**NON RETURN VALVE**

**FLOW SENSOR**



**40 cm<sup>3</sup> SPRING EXPANSION VESSEL\***

No maintenance needed

# FEATURES



## IMPROVEMENTS



### IMPROVED SEALING

Double mechanical seal in oil chamber



### IMPROVED HYDRAULICS

AISI wear ring



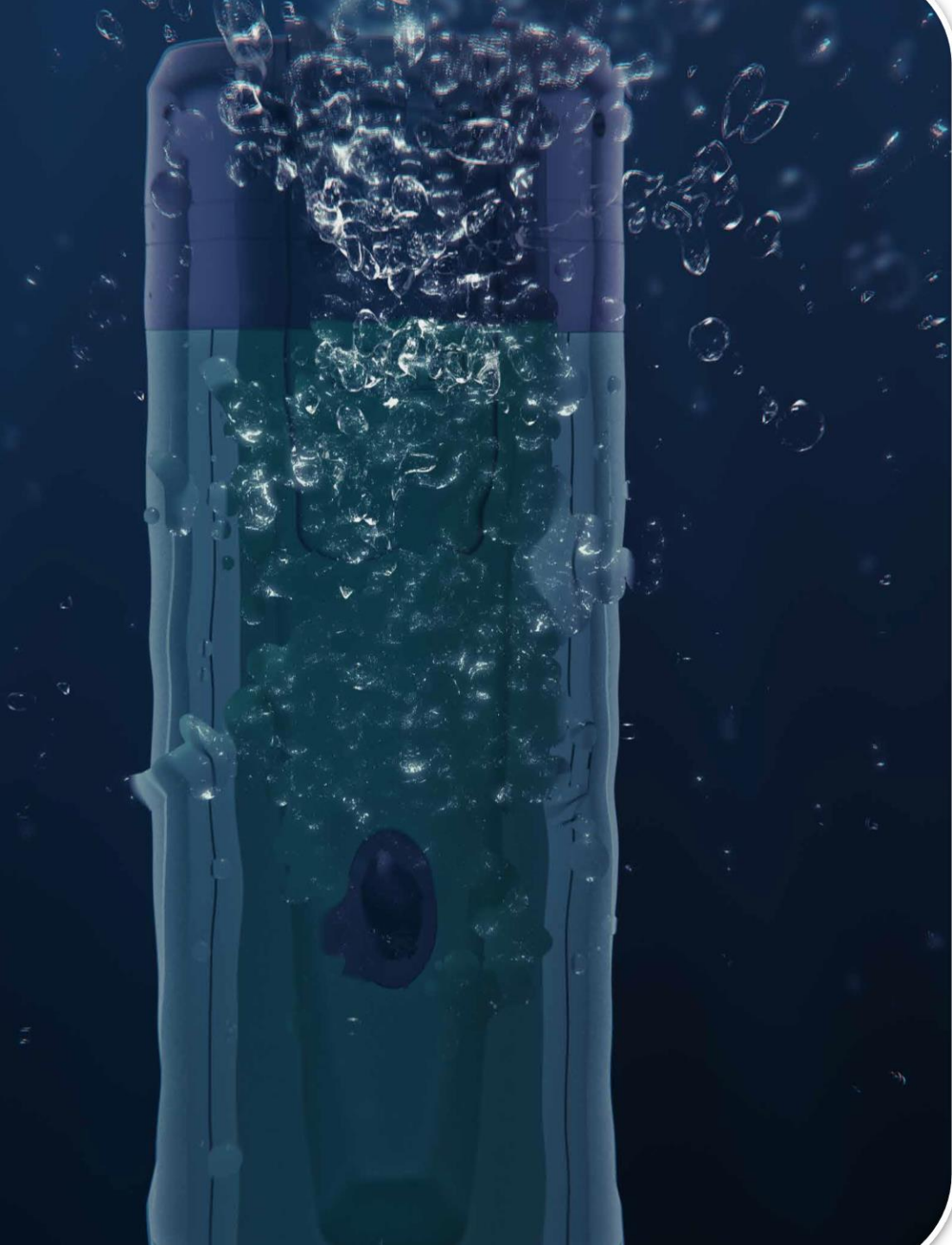
### RESISTANCE TO LOW TEMPERATURES

Over-pressure valve against water hammers and fractures caused by icing  
max liquid T = 50°C



### NOT COMPLETELY IMMERSED INSTALLATION

Water-cooled motor



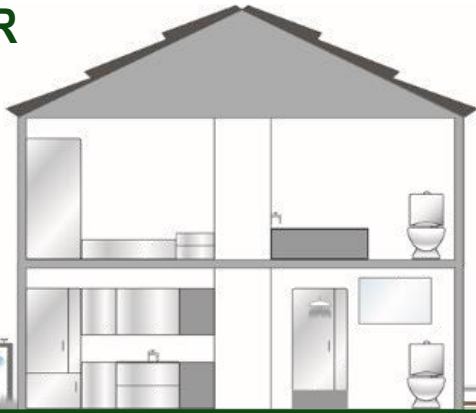
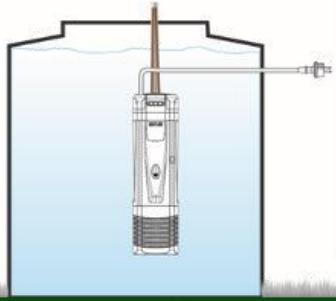
## INSTALLATION

- **MAX IMMERSION DEPTH: 12 m**  
Thanks to the 15 m cable
- **MAX OPERATION DEPTH: 15 m**
- **TYPES OF INSTALLATION:**
  - Fixed, horizontal or vertical
  - Submerged or semi-submerged
  - Outside in a vertical position with the DOC68 accessory

# INSTALLATION



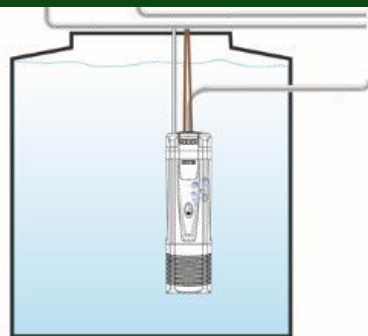
RAIN WATER



GARDENING and IRRIGATION



GROUNDWATER



DOMESTIC BOOSTING

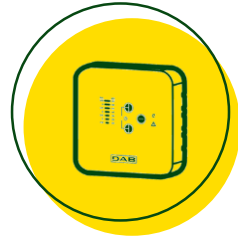
DRINKING WATER



# DTRON 3

***THE FIRST SUBMERSIBLE PUMPS  
WITH EXTERNAL DISPLAY***





## EXTERNAL CONTROLLER PROVIDED BY DEFAULT: **COM BOX**



SET THE CUT-IN PRESSURE



VISUALIZE ALARMS



RESET SYSTEM



POWER LINE COMMUNICATION

# COM BOX

**CUT-IN**  
Default: 2.5 bar

bar	psi
4.5	65
4	58
3.5	51
3	44
2.5	36
2	29
1.5	22

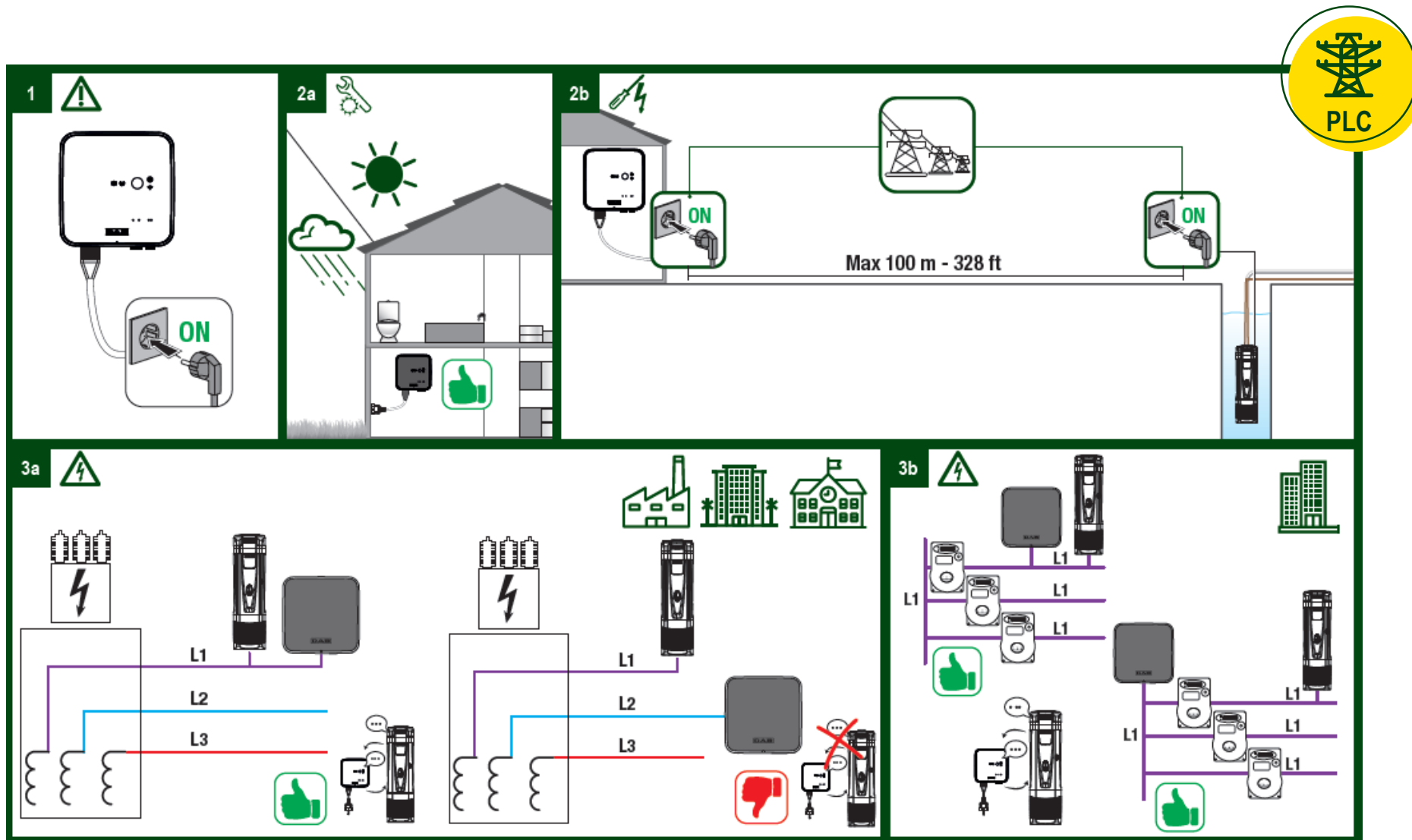
Manual mode

Anti-dryrun

Anti-cycling

Motor status

General alarm





# ESYBOX DIVER

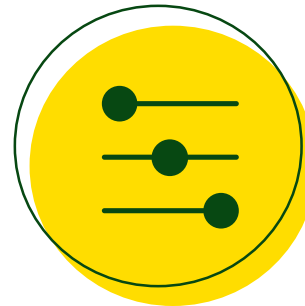


***THE BRAND NEW MEMBER  
OF THE ESYBOX LINE***



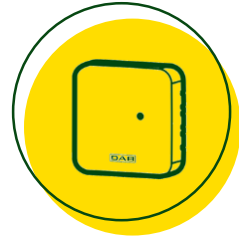
## PERMANENT-MAGNET MOTOR

Excellent performance, high efficiency and low noise



## INVERTER

Reliable and money-saving



## EXTERNAL CONTROLLER PROVIDED BY DEFAULT: **DCONNECT BOX 2**



**D**CONNECT



INTEGRATED WI-FI



I/O: 1 INPUT AND 1 OUTPUT

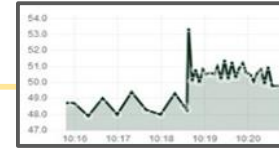
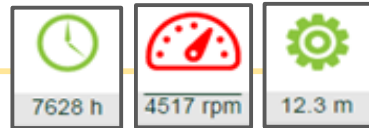


POWER LINE COMMUNICATION

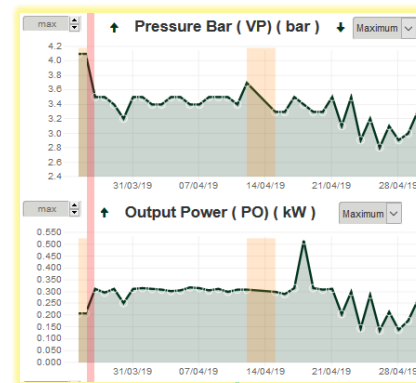
## PARAMETERS SETTING



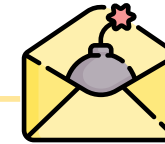
## CONTINUOUS MONITORING



## DATA LOG & GRAPHICS



## REAL TIME ALARMS EMAIL



**LATEST ERROR**

DryRun (BL)

Status ▼

<b>PUMP STATUS</b>  StandBy	<b>SYSTEM STATUS</b>  System OK	<b>PRESSURE BAR (VP)</b>  4 bar	<b>OUTPUT POWER (PO)</b>  0 kW
<b>FLOW LITER (VF)</b>  0 l/min	<b>TOTAL DELIVERED FLOW MC (FCt)</b>  51.341 mc	<b>PARTIAL DELIVERED FLOW MC (FCp)</b>  51.341 mc	<b>ROTATING SPEED (RS)</b>  0 rpm
<b>PUMP PHASE CURRENT (C1)</b>  0 A	<b>HEATSINK TEMPERATURE C (TE)</b>  22 °C	<b>PUMP POWER ON HOURS (HO)</b>  5338 h	<b>PUMP RUN HOURS (HO)</b>  182 h
<b>LAST ERROR OCCURRENCE</b>  7	<b>LAST ERROR TIME POWER ON</b>  500 h	<b>START NUMBER</b>  14975	



**DCONNECT APP**

# OPTIONALS



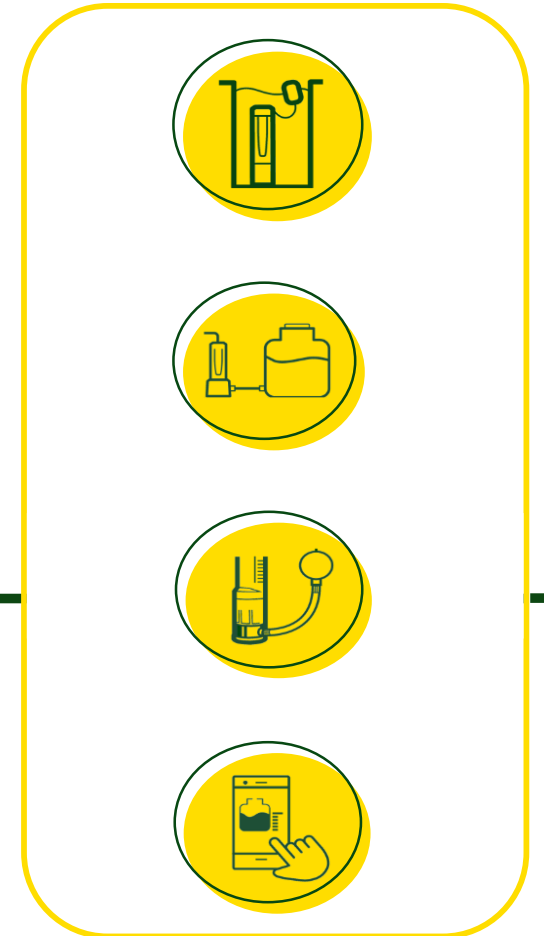
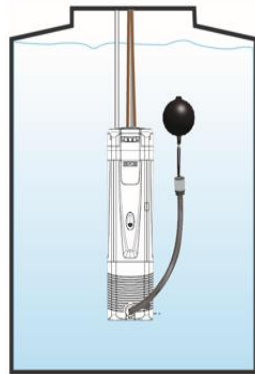
***THE EVOLUTION OF SUBMERSIBLE PUMPS***

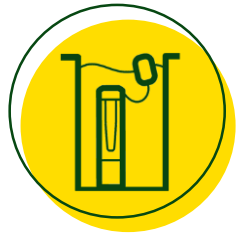
Advantages

# FLEXIBLE INSTALLATION with optionals



**X VERSION +  
SUCTION KIT with  
FLOATING BALL**





Optional

## FLOAT SWITCH

Any direct contact between the water and the electric parts will be avoided.





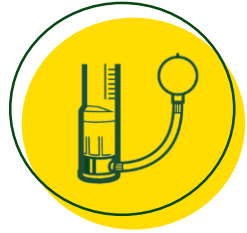
Optional

## DOC 68

The pump can be placed outside the tank, and it works as a booster with a IP68 class protection (*not self-priming*)







Optional

## SUCTION KIT X

Thanks to the floating ball, the pump can draw clean water from the upper part of the tank.





Optional

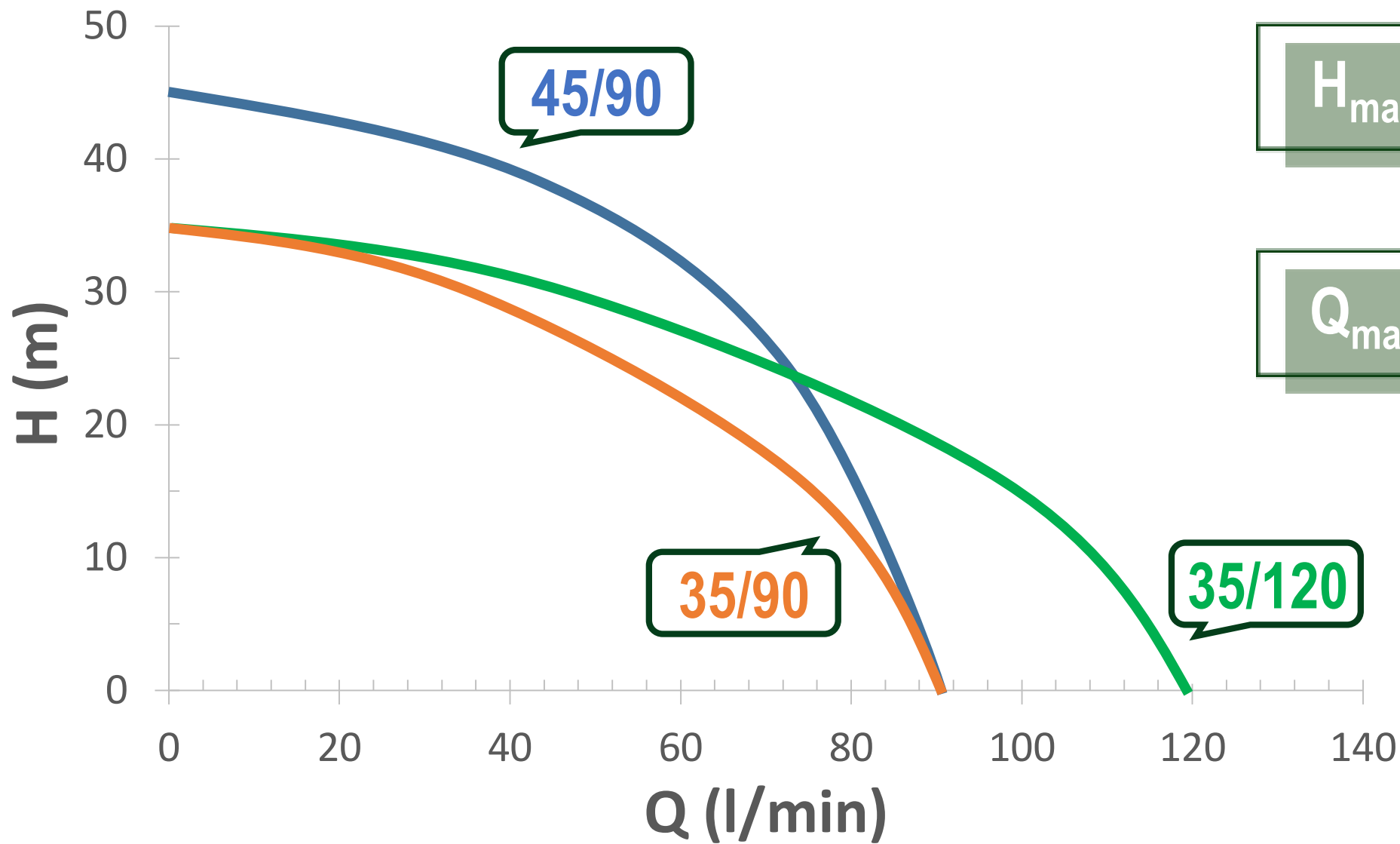
## WATER LEVEL READER



Any direct contact between the water and the electric parts will be avoided.



# DTRON 2-3



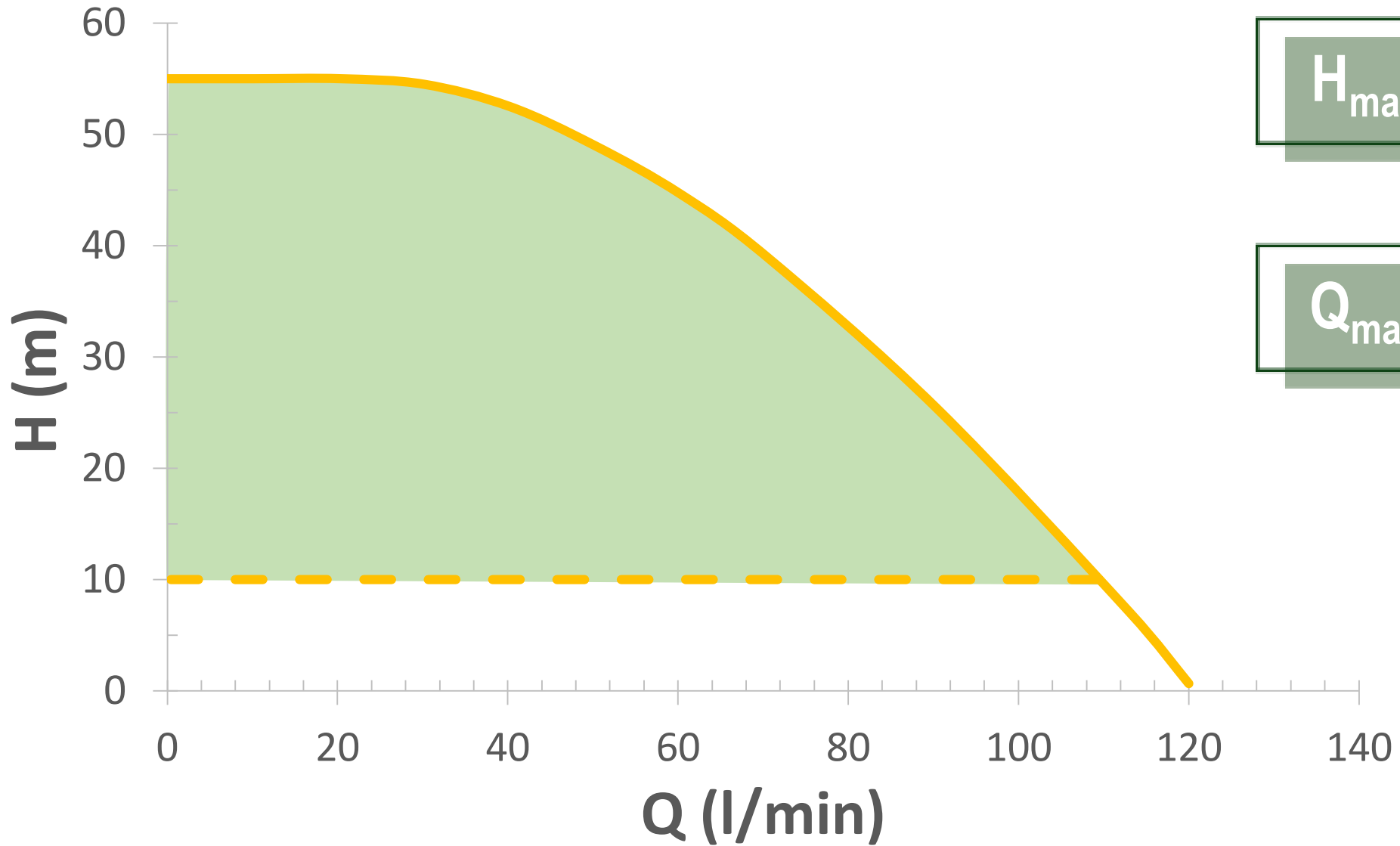
$H_{max}$

**45  
m**

$Q_{max}$

**120  
l/min**

# esybox DIVER



$H_{max}$

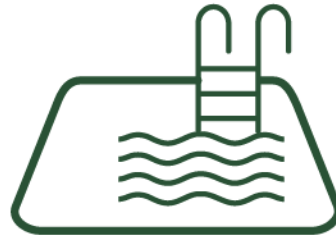
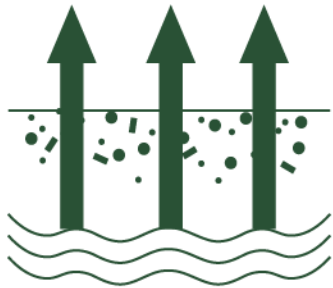
**55**  
**m**

$Q_{max}$

**120**  
**l/min**



# esybox & esybox mini<sup>3</sup>





# Application Field



Esybox line, complete line of electronic booster pump solutions that redefines the rules of residential water pressurization. Designed to create a modular and flexible solution that meets a wide range of applications: from a small residence to a large complex of apartment



# esybox

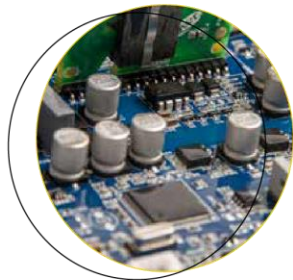
TECHNICAL COMPARTMENT



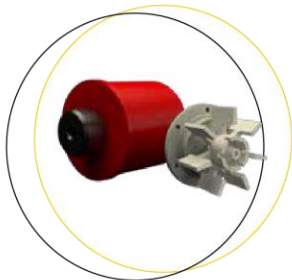
EXPANSION TANK



INVERTER



PRESSURE AND FLOW SENSOR



MOTOR



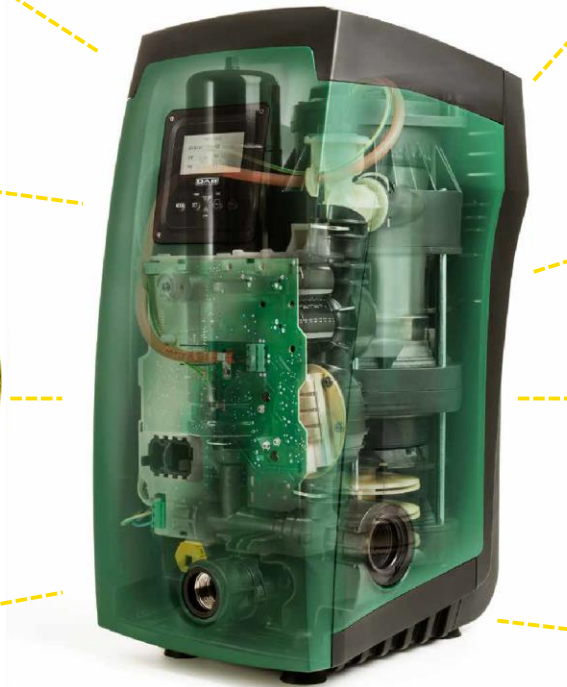
NON-RETURN-VALVE



CONNECTIONS

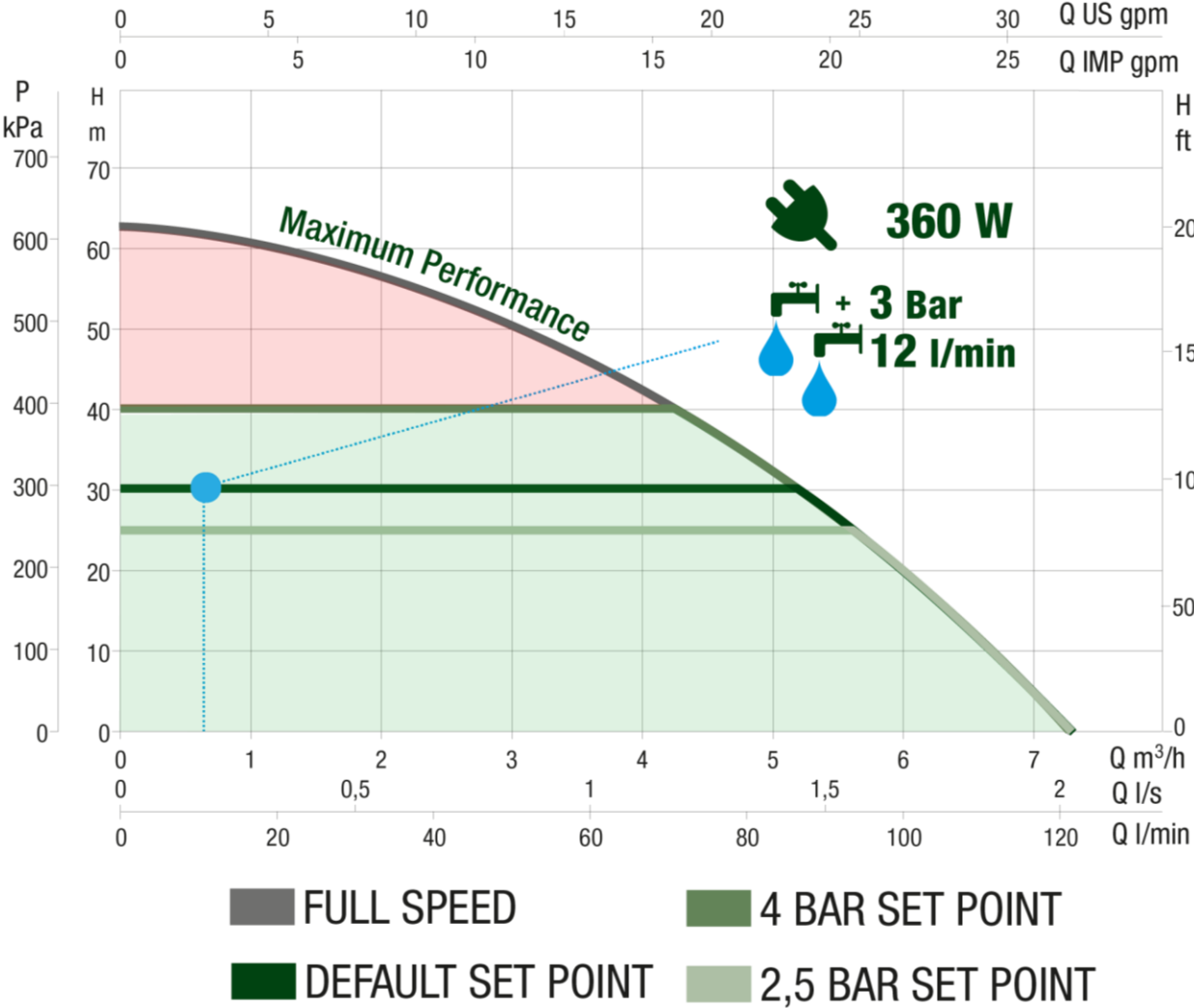


ANTI-VIBRATION FEET

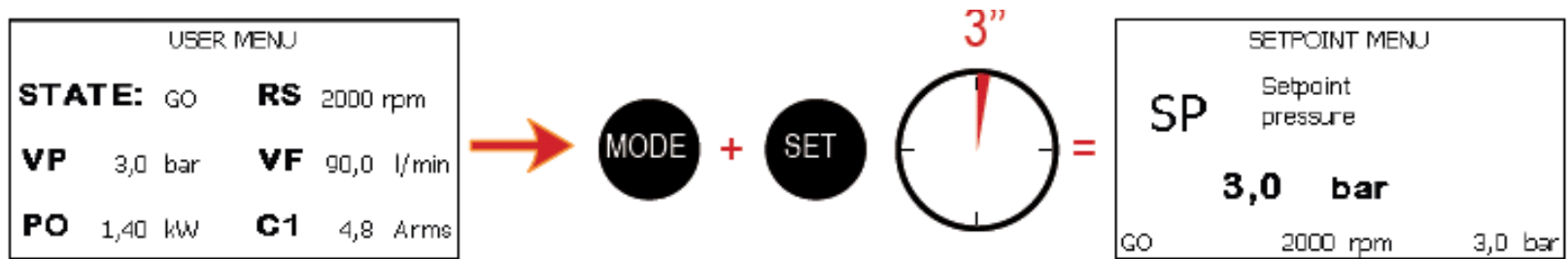




# Why is the VFD important?



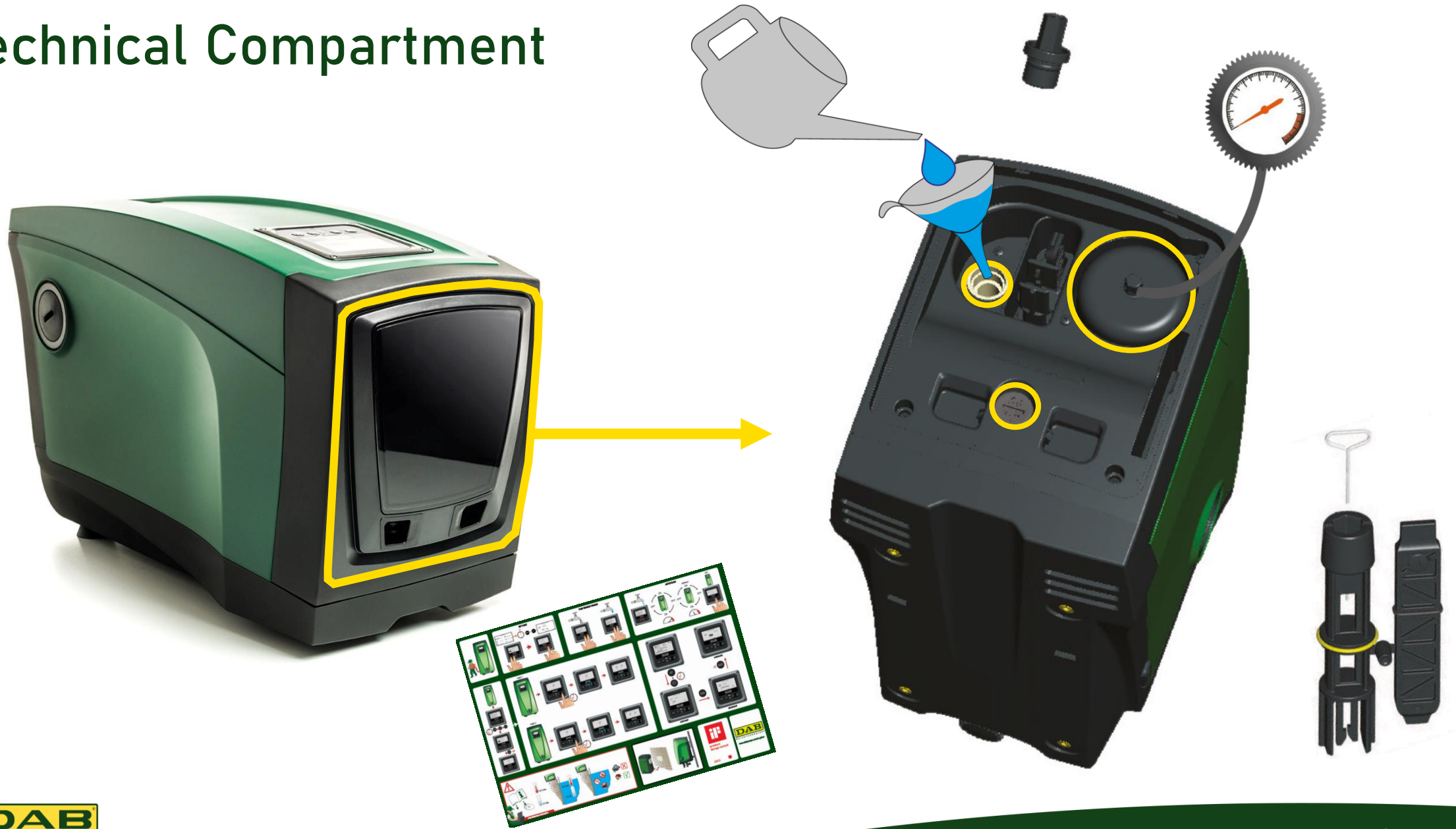
# Set Point



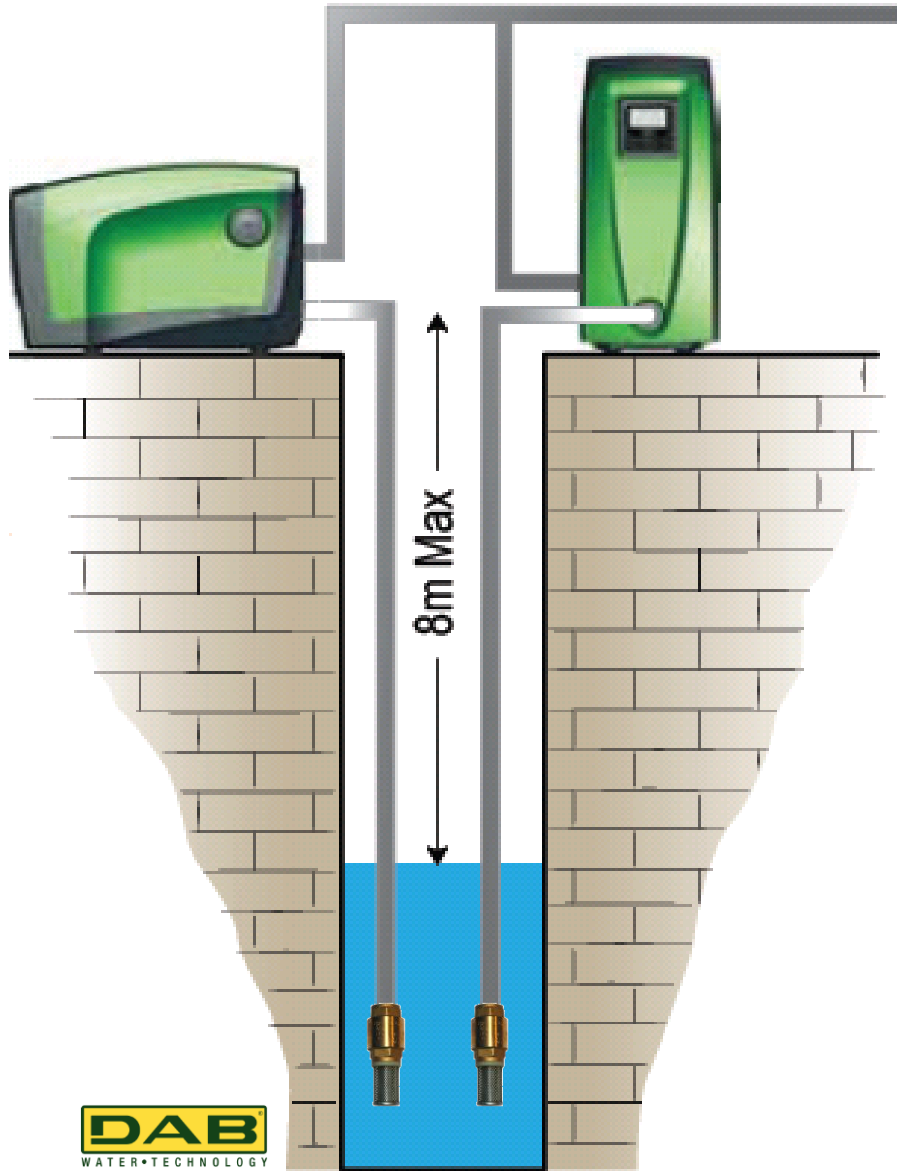
To set the value press



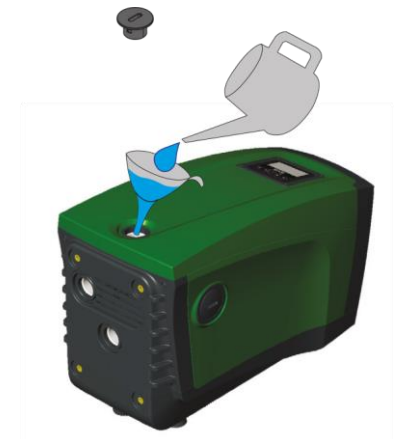
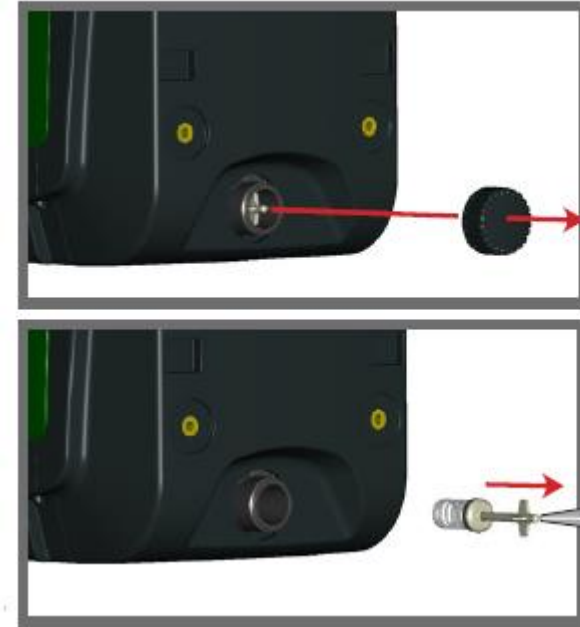
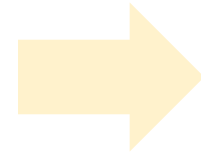
# Technical Compartment



# Self-priming

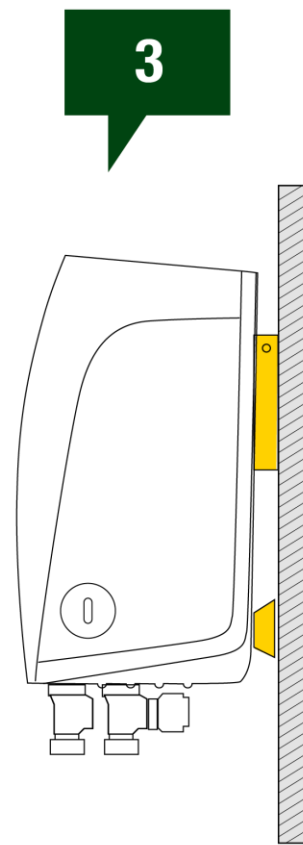
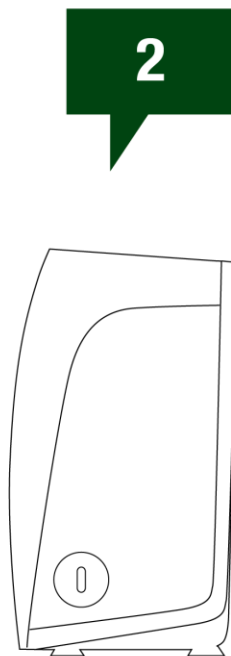
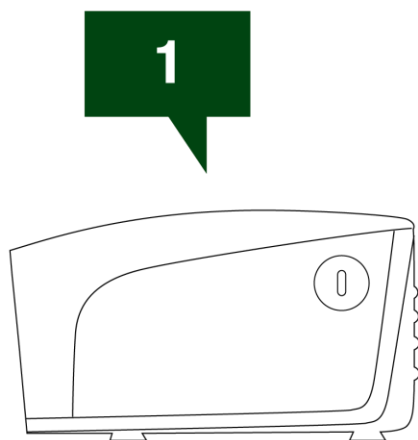


IT'S E(A)SY!

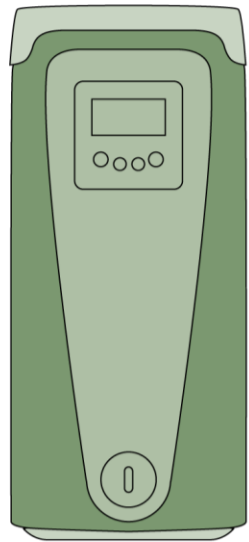
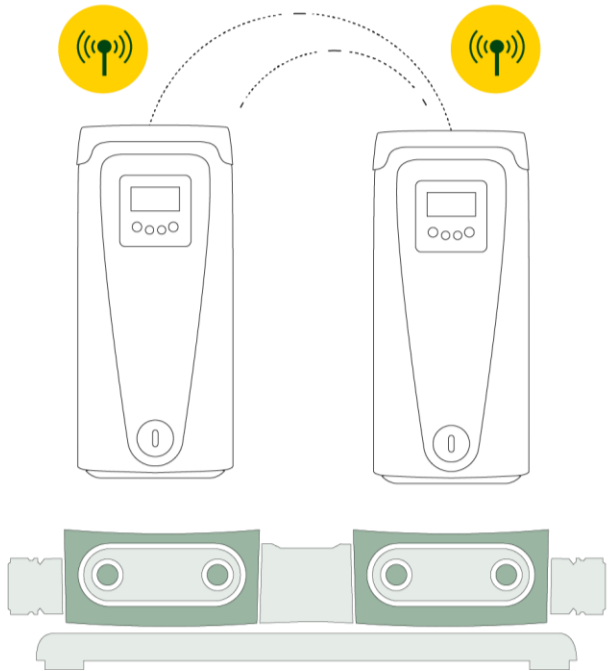


# Installation

È  
E(A)SY



# Wireless Communication



Up to  
4 PUMPS  
**esybox**

# Fast Connection Docking Stations

## ESyDOCK



Less space

Flexible Installation

Easy maintenance and replacement



## ESyTWIN



Less space and higher hydraulic performance



Flexible Installation



Easy maintenance and replacement





# Water Reservoir

## ESyTANK

480 litre tank provided with esydock for quick installation. It is suitable for potable water and is equipped with filling valve from the water supply (complies with UNI EN 1717), with overflow system, suction hose with bottom valve and discharge hose.



X4



# Against Beetles



## ESyGRID



## ESyCOVER

### Exterior Installation



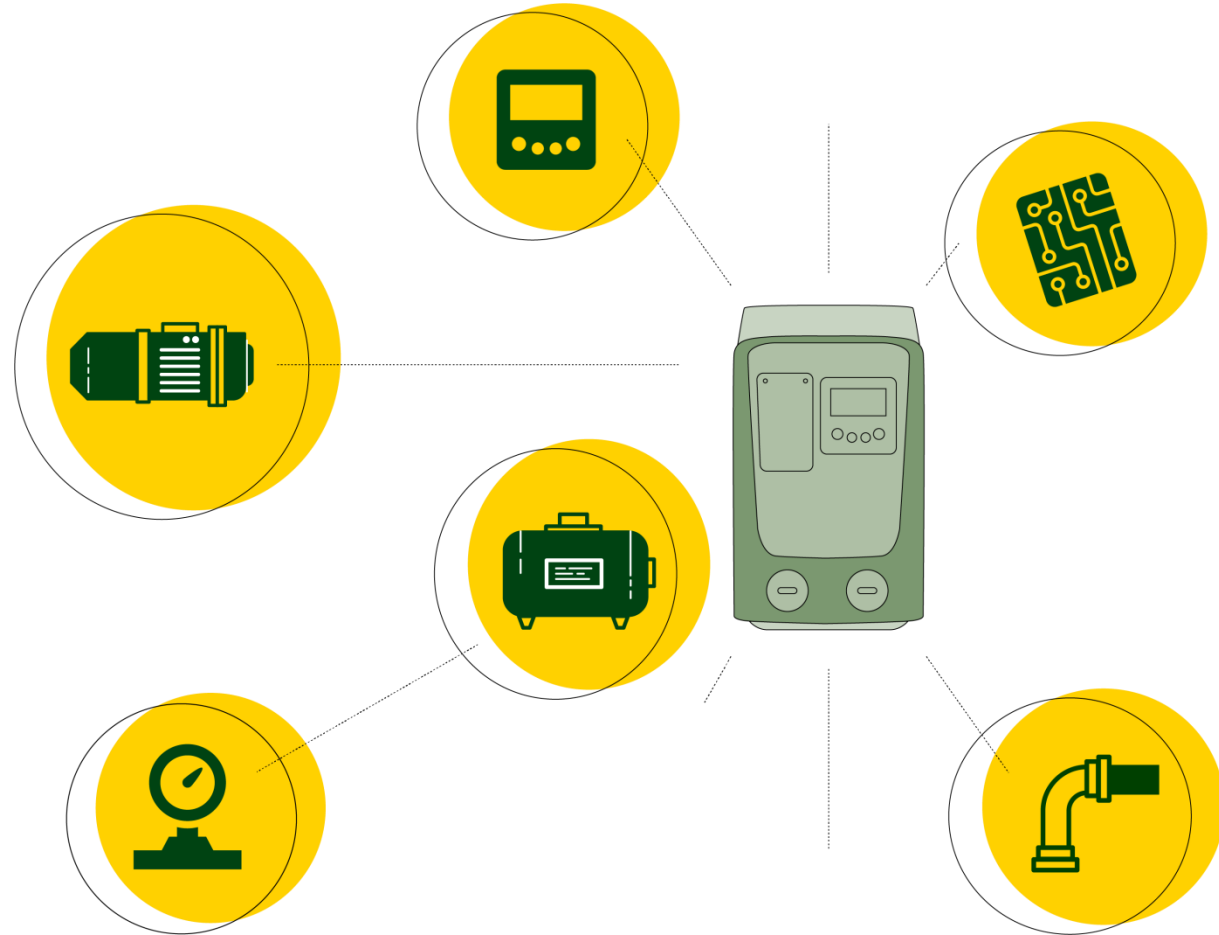
### On The Wall Installation

## ESyWALL



# esybox mini<sup>3</sup>

ALL-IN-ONE  
SOLUTION



# Technical Features



**P<sub>1</sub> MAX** = 0.85 kW  
1x220/240 V 50/60 Hz



**H MAX** = 7.5 bar  
55 m



**Q MAX** = 4.8 m<sup>3</sup>/h  
80 l/min



**1" F**  
**NO** docking station

# esybox mini<sup>3</sup>



**Priming** < 5 min at 8 m



**Max liquid T** = 40 °C

**Max environment T** = 50 °C

**Storage environment T** = -10÷60 °C



**Weight** = 14 kg



**D CONNECT**  
BOX / BOX 2  
**Wireless**

# Technical Features

# esybox



**P<sub>1</sub> MAX = 1.5 kW**  
1x220/240 V 50/60 Hz



**H MAX = 8 bar**  
65 m



**Q MAX = 7.2 m<sup>3</sup>/h**  
125 l/min



**1" F** *without the docking station*  
**1" 1/4** *with the docking station*



**Priming < 5 min at 8 m**



**Max liquid T = 40 °C**

**Max environment T = 50 °C**

**Storage environment T = -10÷60 °C**



**Weight = 24,8 kg**



**D CONNECT**  
**BOX / BOX 2**  
**Wireless**

# ESYBOX

Hmax

65 m

Qmax

120 l/min



DA 5 A 7  
APPARTAMENTI  
FINO A 5 PIANI



# ESYBOX mini<sup>3</sup>

X4



Hmax

55 m

Qmax

80 l/min






CASA CON GIARDINO  
FINO A 3 PIANI

# More than one **esybox**






15 APARTMENTS  
UP TO 6 FLOORS

  $H = 20 \div 60 \text{ m}$   
  $Q = 0 \div 11 \text{ m}^3/\text{h}$   
  $P = 3.1 \text{ kW}$



50 APARTMENTS  
UP TO 6 FLOORS

  $H = 20 \div 60 \text{ m}$   
  $Q = 0 \div 22 \text{ m}^3/\text{h}$   
  $P = 6.2 \text{ kW}$



**THANK YOU**

<https://esyboxline.com/esybox-max/>