

Submersible multi-stage pumps designed to pump AdBlue®



### PERFORMANCE RANGE

- Flow rate up to **70 l/min** (4.2 m<sup>3</sup>/h)
- Head up to **27 m**

### APPLICATION LIMITS

- **3 metres** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C**
- Suction down to **25 mm** above ground level
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

The pump is complete with:

- **5 metres** long power cable with H07BN4-F coating
- complete connector with flap-check valve

EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY



### INSTALLATION AND USE

Multistage submersible pumps **TOP MULTI 1-AD** are designed to pump clean liquid, which is defined according to standard ISO 22241 as AUS 32 (Aqueous Urea Solution 32.5%).

This liquid is equivalent to other commercial trademarks known as:

- **AdBlue®** (trademark registered by Verband der Automobilindustrie VDA);
- **DEF** (Diesel Exhaust Fluid);
- **Arla 32** (Agente Redutor Liquido de Óxido de Nitrogênio Automotivo).

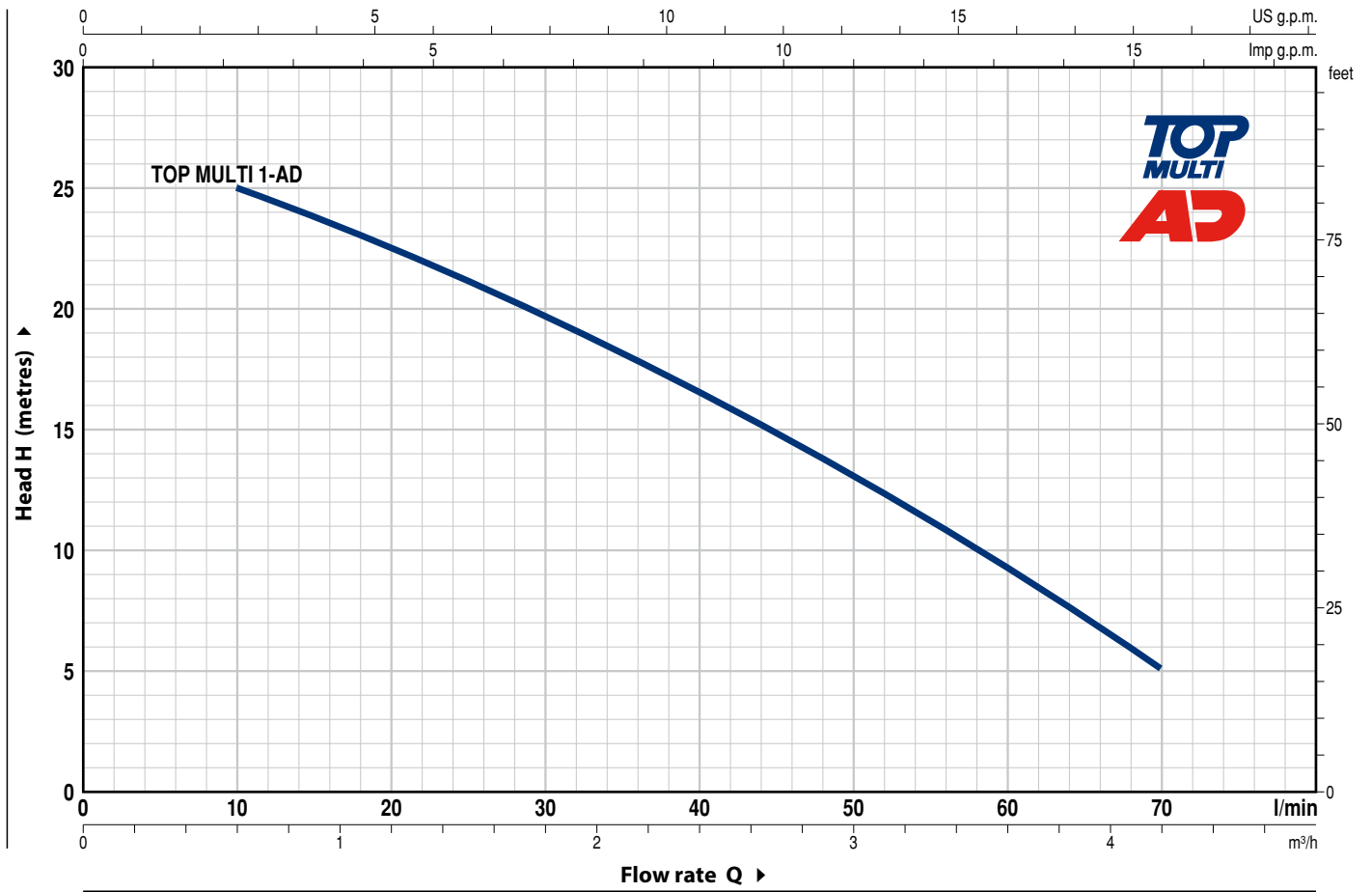
Multistage submersible pumps **TOP MULTI-AD** are designed using materials compliant to this liquid; their use is subjected to local laws and directives.

### OPTIONS AVAILABLE ON REQUEST

- Other voltages or 60 Hz frequency

**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

**50 Hz n= 2900 min<sup>-1</sup>**



| MODEL                 | POWER (P <sub>2</sub> ) |      | Q               | 0  | 0.6 | 1.2  | 1.8  | 2.4  | 3.0 | 3.6 | 4.2 |
|-----------------------|-------------------------|------|-----------------|----|-----|------|------|------|-----|-----|-----|
|                       | kW                      | HP   |                 | 0  | 10  | 20   | 30   | 40   | 50  | 60  | 70  |
| Single-phase          |                         |      |                 |    |     |      |      |      |     |     |     |
| <b>TOP MULTI 1-AD</b> | 0.37                    | 0.50 | <b>H metres</b> | 27 | 25  | 22.5 | 19.5 | 16.5 | 13  | 9   | 5   |

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

# TOP MULTI-AD

## POS. COMPONENT

## CONSTRUCTION CHARACTERISTICS

|   |                           |  |
|---|---------------------------|--|
| 1 | <b>DELIVERY BODY</b>      | Glass fibre reinforced technopolymer complete with threaded delivery port in compliance with ISO 228/1 |
| 2 | <b>SUCTION FILTER</b>     | Glass fibre reinforced technopolymer   |
| 3 | <b>STAGE CASING</b>       | Glass fibre reinforced technopolymer   |
| 4 | <b>IMPELLER</b>           | Noryl FE1520PW   |
| 5 | <b>DIFFUSER</b>           | Noryl FE1520PW complete with anti-wear ring  |
| 6 | <b>VANE DIFFUSER</b>      | Glass fibre reinforced technopolymer   |
| 7 | <b>MOTOR CASING</b>       | Stainless steel AISI 304   |
| 8 | <b>MOTOR CASING PLATE</b> | Stainless steel AISI 304   |
| 9 | <b>MOTOR SHAFT</b>        | Stainless steel AISI 431   |

## 10 SHAFT WITH DOUBLE SEAL

| <i>Seal</i>  | <i>Shaft</i>    | <i>Materials</i>       |                        |                  |               |
|--------------|-----------------|------------------------|------------------------|------------------|---------------|
| <i>Model</i> | <i>Diameter</i> | <i>Stationary ring</i> | <i>Rotational ring</i> | <i>Elastomer</i> | <i>Metals</i> |
| STA-12R SGE  | Ø 12 mm         | Silicon carbide        | Graphite               | EPDM             | AISI 304      |

## 11 LIP SEAL Ø 12 x Ø 19 x H 5 mm

## 12 BEARINGS 6201 ZZ - C3E / 6201 ZZ - C3E

## 13 CAPACITOR

| <i>Capacitance</i>               | <i>(110 V)</i> |
|----------------------------------|----------------|
| (230 V or 240 V)<br>10 µF 450 VL | 16 µF 250 VL   |

## 14 ELECTRIC MOTOR

**TOP MULTI 1-AD:** single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.

- Insulation: class F
- Protection: IP X8

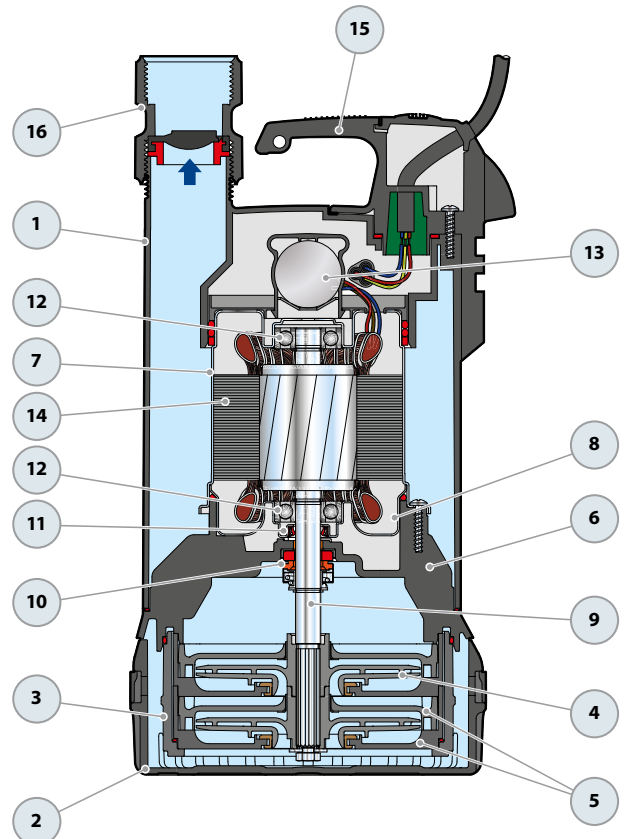
## 15 HANDLE ASSEMBLY (resin sealed)

Complete with **5 metres** long "H07BN4-F" power cable

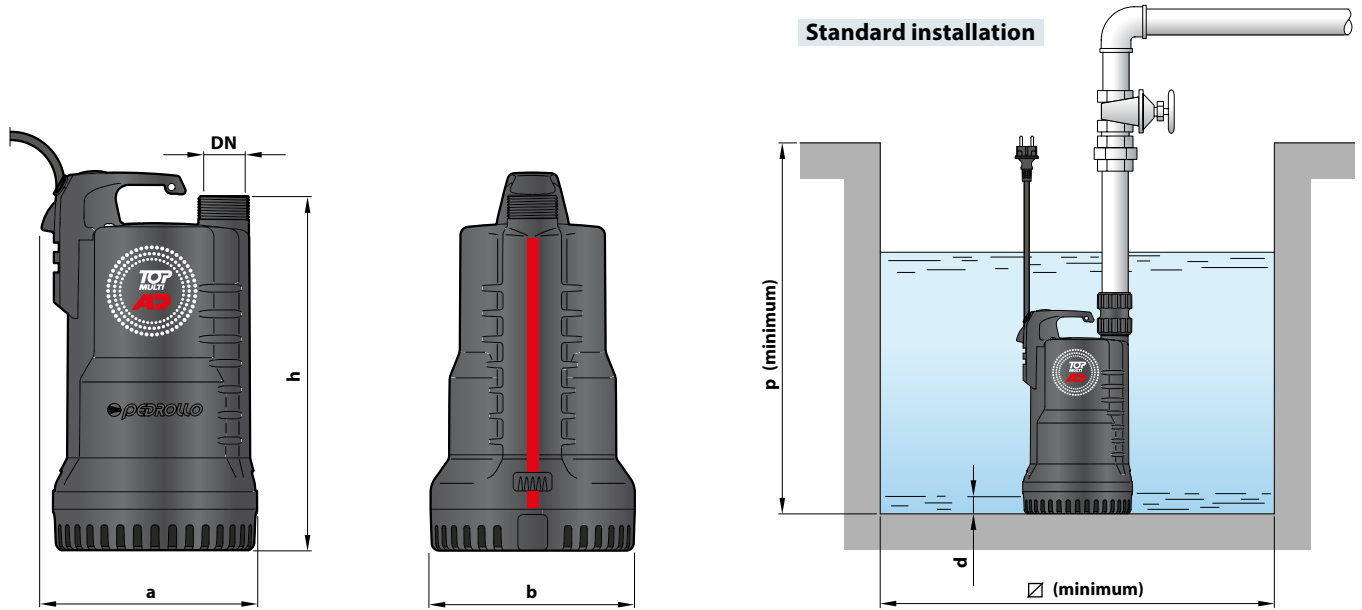
## 16 PIPE COUPLING

Threaded 1¼" in compliance with ISO 228/1, complete with flap-check valve

(Included in the equipment)



## DIMENSIONS AND WEIGHT



| MODEL          | PORT<br>DN | N.<br>STAGES | DIMENSIONS mm |     |     |    |     | kg  |
|----------------|------------|--------------|---------------|-----|-----|----|-----|-----|
|                |            |              | a             | b   | h   | d  | ∅   |     |
| Single-phase   | DN         |              |               |     |     |    |     |     |
| TOP MULTI 1-AD | 1¼"        | 2            | 180           | 170 | 295 | 25 | 220 | 5.8 |

## ABSORPTION

| MODEL          | VOLTAGE      |       |       |
|----------------|--------------|-------|-------|
|                | Single-phase | 230 V | 240 V |
| TOP MULTI 1-AD | 2.0 A        | 1.9 A | 4.0 A |

## PALLETIZATION

| MODEL          | GROUPAGE | CONTAINER |
|----------------|----------|-----------|
| Single-phase   | n. pumps | n. pumps  |
| TOP MULTI 1-AD | 60       | 100       |