

# DTron

SUBMERSIBLE PUMPS





### TECHNICAL DATA

**Flow rate maximum:** 7,5 m<sup>3</sup>/h  
**Head up to:** 45 m  
**Maximum immersion depth:** 7/12 m  
**Type of pumped liquid:** Clean, free from solid or abrasive substances, non-viscous, non-aggressive, non-crystallized and chemically neutral  
**Free passage:** 2 mm  
**Minimum suction depth:** 110 mm  
**Minimum level of water:** 35 mm  
**Liquid temperature range:** from +0°C to +50°C  
**Minimum and maximum ambient temperature:** <0°C / +50°C  
**Maximum immersion depth:** 15 m  
**Set cut-in:** 2,4 bar (±0,2)  
**Flanges, thread:** Filettata da 1" 1/4  
**Pump maximum diameter:** 185 mm  
**Impeller/s material:** Technopolymer/ AISI 304 stainless steel  
**Maximum number of starts:** 60/h  
**Non-stop service:** yes  
**Protection class:** IP 68  
**Motor insulation class:** F  
**Power cable (m) and plug:** 10/15 m with plug  
**Single phase power input:** 230 V 50 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 suction kit for suction at a higher level.  
Version for drinking water certified WRAS, ACS, NSF NSF 61 and 372.  
Surface version (the DOC68 accessory is required)  
**Certification:**  
WRAS, ACS, NSF 61 and 372 (only model for drinking water)

DTron3 is a 7" submersible electronic multi-impellers pump for clean water designed for use in wells and tanks. It can be used submerged, partially submerged or on the surface (with the appropriate accessory). It is suitable for use in domestic and residential environments for pressurization, rainwater reuse, gardening and irrigation activities. The pump can be installed even horizontally. Equipped with PLC (PowerLine Communication) technology which allows to communicate with the external controller Com Box supplied as standard. The pump is also available in version X with 1" inlet and kit X which includes 1 meter suction hose and float to prevent the suction of impurities from the bottom. The entire pump is classified IP 68, with the DOC68 accessory (supplied separately) it becomes an IP 68 surface pump to be used under the level of the water. On request a certified version for drinking water is available. Integrated expansion vessel, no additional expansion vessel is required.

### CONSTRUCTION FEATURES OF THE PUMP

Technopolymer pump body to resist corrosion and oxidation. Integrated check valve. Integrated debris filter. Overpressure valve to resist to the formation of ice in the piping and to 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. Technopolymer handle to move the pump. Integrated 0,04 liter expansion vessel sized to prevent the pump from cycling in the event of small leakages and to compensate in case of water hammer. No maintenance or recharging is required for the integrated vessel. 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. Suction height can be adjusted using the appropriate accessory (included): 3,5 - 4 - 6 or 8 cm.

### CONSTRUCTION FEATURES OF THE MOTOR

Asynchronous submersible water cooling motor. The hydraulic side of the motor shaft is in AISI 303 stainless steel. Double mechanical seal in oil chamber ensuring the pump watertight. Capacitor and integrated anti-overheating motor for thermal protection. Quick coupling/release cable to facilitate installation inside tanks. Anti tear-off power cable connection.

### FEATURES OF THE ELECTRONIC

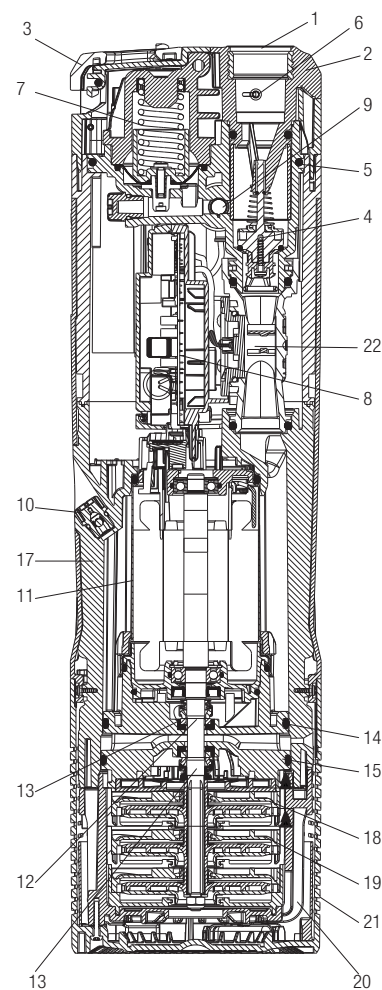
The electronic operation allows the pump to start and stop autonomously, by the system requirements and protects against dry run. NFC (Near Field Communication) pocket for the use of a float sensor (supplied separately) connectable without opening the pump. Thanks to PLC communication technology, the pump transmits data throughout the power line. The controller Com Box (included) allows to set the cut-in pressure and to control the alarms. The ANTI-CYCLING protection intervenes in case of leakages in the systems.

# DTRON 3

## SUBMERSIBLE PUMPS

### MATERIALS

| N° | PARTS                           | MATERIALS                                    |
|----|---------------------------------|----------------------------------------------|
| 1  | INSERT                          | BRASS                                        |
| 2  | COVER                           | TECHNOPOLYMER                                |
| 3  | HANDLE                          | TECHNOPOLYMER                                |
| 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/CAPACITOR                   | --                                           |
| 9  | PRESSURE SENSOR                 | TECHNOPOLYMER/BRASS                          |
| 10 | FLOW SENSOR                     | TECHNOPOLYMER                                |
| 11 | VENTING VALVE                   | TECHNOPOLYMER/AISI420/NBR                    |
| 12 | MOTOR SLEEVE                    | AISI 304                                     |
| 13 | MOTOR SHAFT                     | AISI 303                                     |
| 14 | DOUBLE MECHANICAL SEALS         | RESIN IMPREGNATED CARBON/AISI304/AISI302/NBR |
| 15 | OR                              | NBR                                          |
| 17 | OR                              | NBR                                          |
| 18 | MOTOR BODY                      | TECHNOPOLYMER                                |
| 19 | IMPELLER                        | TECHNOPOLYMER/AISI304                        |
| 20 | DIFFUSER                        | TECHNOPOLYMER                                |
| 21 | PUMP BODY                       | TECHNOPOLYMER                                |
| 22 | FILTER                          | TECHNOPOLYMER                                |



# DTRON 3

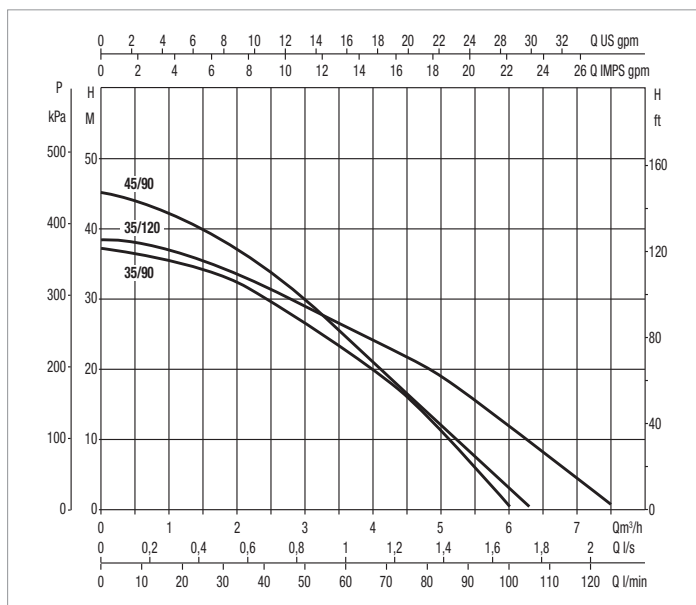
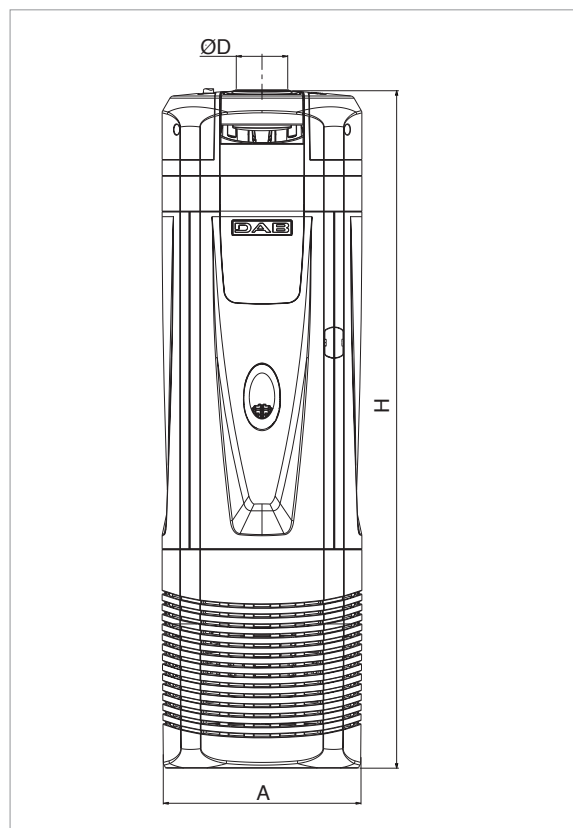
## SUBMERSIBLE PUMPS

### PERFORMANCE AT 50 HZ

| MODEL           | ELECTR. DATA |     | HYDRAULIC DATA |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |
|-----------------|--------------|-----|----------------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
|                 | P2 NOMINAL   |     | Q=m³/h         | 0    | 0,7  | 1,2  | 1,8  | 2,4  | 3    | 3,6  | 4,2  | 4,8  | 5,4  | 6    | 6,3 | 6,6 | 7,3 | 7,5 |
|                 | kW           | HP  | Q=l/min        | 0    | 11   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 105 | 110 | 122 | 125 |
| DTRON3 35/90    | 0,52         | 0,7 | H<br>(mt)      | 37,0 | 35,9 | 35,0 | 33,0 | 30,0 | 26,7 | 22,7 | 18,5 | 13,4 | 7,6  | 0,6  |     |     |     |     |
| DTRON3 45/90    | 0,6          | 0,8 |                | 45,0 | 43,0 | 41,2 | 38,0 | 34,2 | 29,7 | 24,7 | 20,0 | 15,0 | 9,0  | 2,5  | 0,6 |     |     |     |
| DTRON3 35/120   | 0,6          | 0,8 |                | 38,0 | 37,6 | 36,3 | 34,0 | 31,5 | 28,9 | 26,0 | 23,2 | 20,0 | 16,3 | 12,0 | 9,8 | 7,5 | 2,2 | 0,7 |
| DTRON3 X 35/90  | 0,52         | 0,7 |                | 37,0 | 35,9 | 35,0 | 33,0 | 30,0 | 26,7 | 22,7 | 18,5 | 13,4 | 7,6  | 0,6  |     |     |     |     |
| DTRON3 X 45/90  | 0,6          | 0,8 |                | 45,0 | 43,0 | 41,2 | 38,0 | 34,2 | 29,7 | 24,7 | 20,0 | 15,0 | 9,0  | 2,5  | 0,6 |     |     |     |
| DTRON3 X 35/120 | 0,6          | 0,8 |                | 38,0 | 37,6 | 36,3 | 34,0 | 31,5 | 28,9 | 26,0 | 23,2 | 20,0 | 16,3 | 12,0 | 9,8 | 7,5 | 2,2 | 0,7 |

### ELECTRICAL DATA AND DIMENSIONS

| MODEL           | ELECTRICAL DATA      |          |            |     |         | A   | Ø D    | H   | DNM | PACKING DIMENSIONS |     |     | PACKING VOLUME<br>m³ | Q.TY<br>X<br>PALLET | WEIGHT<br>Kg |
|-----------------|----------------------|----------|------------|-----|---------|-----|--------|-----|-----|--------------------|-----|-----|----------------------|---------------------|--------------|
|                 | POWER INPUT<br>50 Hz | P1<br>kW | P2 NOMINAL |     | In<br>A |     |        |     |     | L/A                | L/B | H   |                      |                     |              |
|                 |                      |          | kW         | HP  |         |     |        |     |     |                    |     |     |                      |                     |              |
| DTRON3 35/90    | 1 x 220-240 V ~      | 0,75     | 0,52       | 0,7 | 3,4     | 185 | 1" 1/4 | 651 | 32  | 780                | 230 | 300 | 0,05382              | 15                  | 11,6         |
| DTRON3 45/90    | 1 x 220-240 V ~      | 0,93     | 0,6        | 0,8 | 4,2     | 185 | 1" 1/4 | 651 | 32  | 780                | 230 | 300 | 0,05382              | 15                  | 11,6         |
| DTRON3 35/120   | 1 x 220-240 V ~      | 0,9      | 0,6        | 0,8 | 4       | 185 | 1" 1/4 | 651 | 32  | 780                | 230 | 300 | 0,05382              | 15                  | 11,6         |
| DTRON3 X 35/90  | 1 x 220-240 V ~      | 0,75     | 0,52       | 0,7 | 3,4     | 185 | 1" 1/4 | 651 | 32  | 780                | 230 | 300 | 0,05382              | 15                  | 11,7         |
| DTRON3 X 45/90  | 1 x 220-240 V ~      | 0,93     | 0,6        | 0,8 | 4,2     | 185 | 1" 1/4 | 651 | 32  | 780                | 230 | 300 | 0,05382              | 15                  | 11,7         |
| DTRON3 X 35/120 | 1 x 220-240 V ~      | 0,9      | 0,6        | 0,8 | 4       | 185 | 1" 1/4 | 651 | 32  | 780                | 230 | 300 | 0,05382              | 15                  | 11,7         |



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Curve tolerance according to ISO 9906.

# DAB

P U M P S S E L E C T O R

## On-line selection tool



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