DTRON 3

SUBMERSIBLE PUMPS

TECHNICAL DATA

Flow rate maximum: 7,5 m^3/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: 2,5 bar, adjustable from 1,5 to 3,5 bar
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" inlate 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

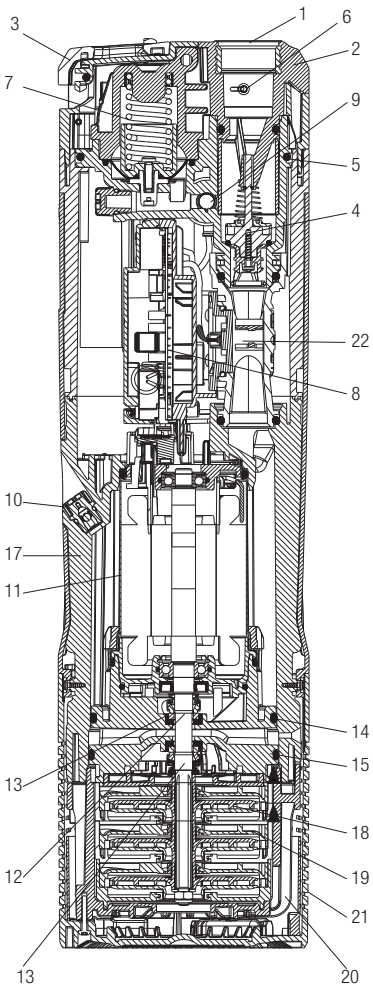
Asynchronous submersible water cooling motor. The hydraulic side of the motor shaft is in AISI 303 stainless steel. Double mechanical seal in oil chamber ensuring the pump watertight. Capacitor and integrated anti-overheating motor for thermal protection. Quick coupling/release cable to facilitate installation 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 Communition) 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 from 1,5 to 3,5 bar and to control the alarms. The ANTI-CYCLING protection intervines in case of leakages in the systems.
DConnect Box 2 available as accessory. Thanks to 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.

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



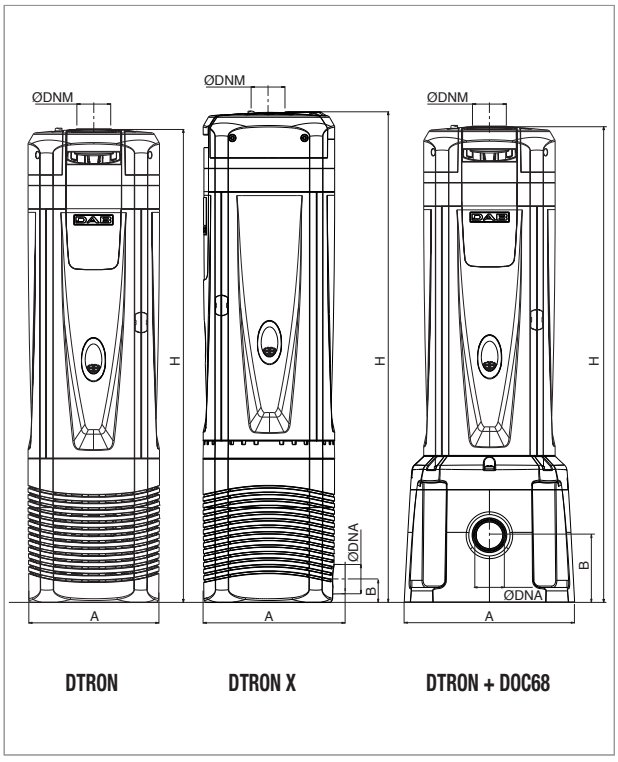
PERFORMANCE AT 50 HZ

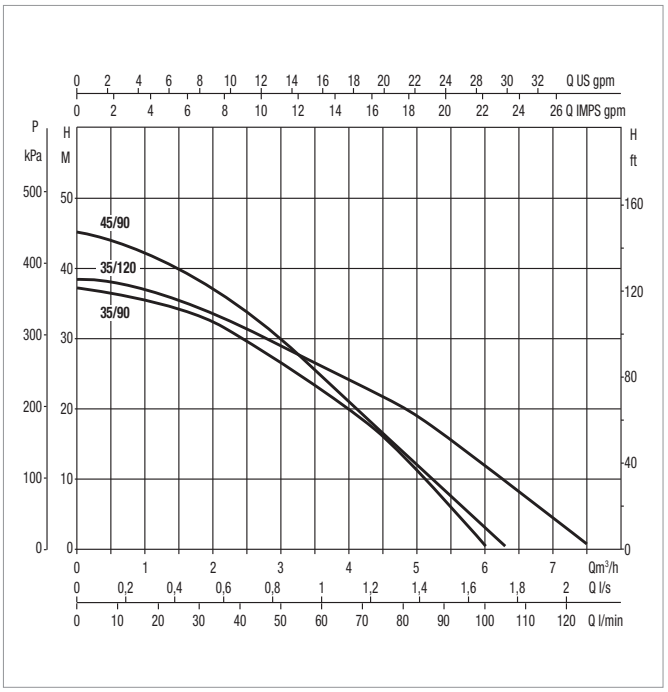
MODEL	ELECTR. DATA		HYDRAULIC DATA															
	P2 NOMINAL		Q=m³/h	0	0,7	1,2	1,8	2,4	3	3,6	4,2	4,8	5,4	6	6,3	6,6	7,3	7,5
	kW	HP	Q=l/min	0	11	20	30	40	50	60	70	80	90	100	105	110	122	125
DTRON3 35/90	0,52	0,7	H (mt)	37,0	35,9	35,0	33,0	30,0	26,7	22,7	18,5	13,4	7,6	0,6				
DTRON3 45/90	0,6	0,8		45,0	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
DTRON3 35/90 + DOC 68	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 45/90 + DOC 68	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 + DOC 68	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	B	H	Ø DNM	Ø DNA	PACKING DIMENSIONS			PACKING VOLUME m³	Q.TY X PALLET	WEIGHT Kg
	POWER INPUT 50 Hz	P1 kW	P2 NOMINAL		In 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	-	651	1" 1/4	-	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	-	651	1" 1/4	-	780	230	300	0,05382	15	11,6
DTRON3 35/120	1 x 220-240 V ~	0,9	0,6	0,8	4	185	-	651	1" 1/4	-	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	195	32	676	1" 1/4	1"	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	195	32	676	1" 1/4	1"	780	230	300	0,05382	15	11,7
DTRON3 X 35/120	1 x 220-240 V ~	0,9	0,6	0,8	4	195	32	676	1" 1/4	1"	780	230	300	0,05382	15	11,7
DTRON3 35/90 + DOC 68	1 x 220-240 V ~	0,75	0,52	0,7	3,4	235	92	658	1" 1/4	1" 1/4	382*	306*	178*	0,0208*	30*	3*
DTRON3 45/90 + DOC 68	1 x 220-240 V ~	0,93	0,6	0,8	4,2	235	92	658	1" 1/4	1" 1/4	382*	306*	178*	0,0208*	30*	3*
DTRON3 35/120 + DOC 68	1 x 220-240 V ~	0,9	0,6	0,8	4	235	92	658	1" 1/4	1" 1/4	382*	306*	178*	0,0208*	30*	3*

*Data referred to the DOC68 accessory only





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.

60216937 - 09/2023