

# DTRON

SUBMERSIBLE PUMPS





### TECHNICAL DATA

**Flow rate maximum:** 32.1 gpm (7.3 m<sup>3</sup>/h)

**Head up to:** 147 ft (45 m)

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

**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 122°F (+0°C to +50°C)

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

**Maximum immersion depth:** 15 m

**Set cut-in:** 34.8 psi 2.4 bar (+0.2)

**Flanges, thread:** Thread 1" 1/4 NPT

**Pump maximum diameter:** 7.28" (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:** 49ft (15 m) with plug

**Single phase power input:** 115 V 60 Hz single phase

**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.

Surface version (the DOC68 accessory is required)

#### Certification:

CSA, CSAus, NSF 61 and 372 (only model for drinking water)

DTron2 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. It is also available in version X with 1" inlet and kit X which includes 3.2 ft (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 that can be used under the level of the water. On request a certified version for drinking water is available. The expansion vessel is integrated, no external 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): 1.4" - 1.6" - 2.4' or 3.2" (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 ensure 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

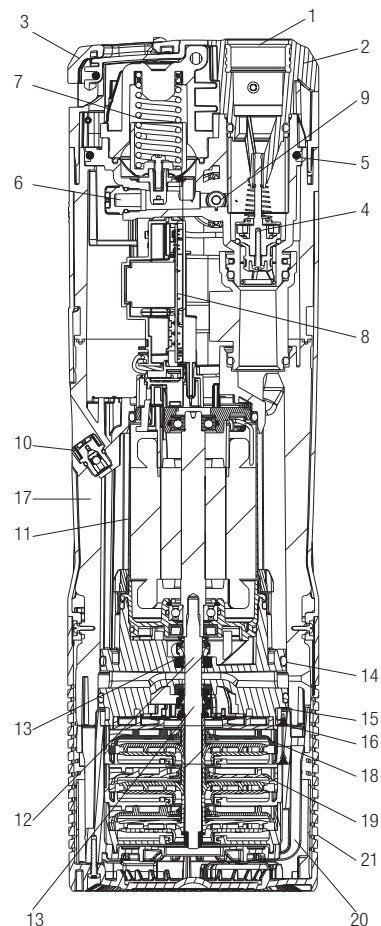
The electronic operation allows the pump to start and stop autonomously by the system requirements and protects against the dry run. NFC (Near Field Communication) pocket for the use of a floater sensor (supplied separately) which can be connected without opening the pump and so maintaining a watertight seal. The ANTI-FLOOD protection intervenes in the event of a malfunction of the shutter. The ANTI-BURPING protection protects the pump from false starts in the event of gurgling water.

# DTRON 2

## 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 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



# DTRON 2

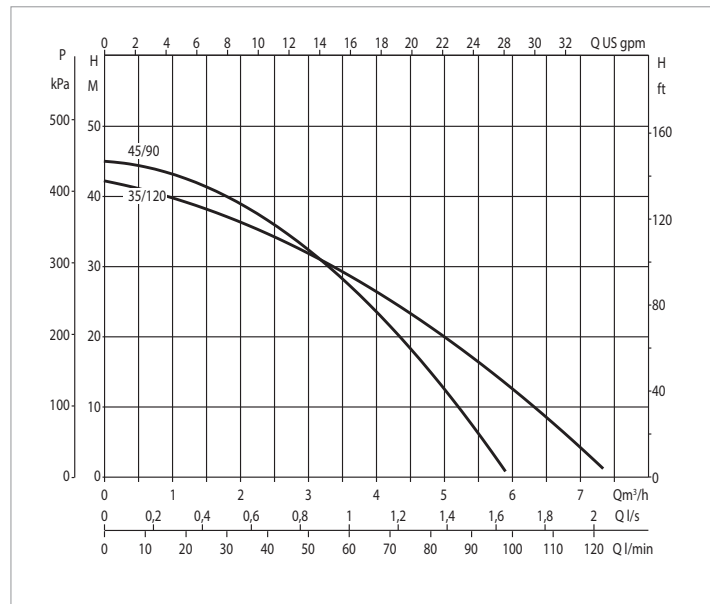
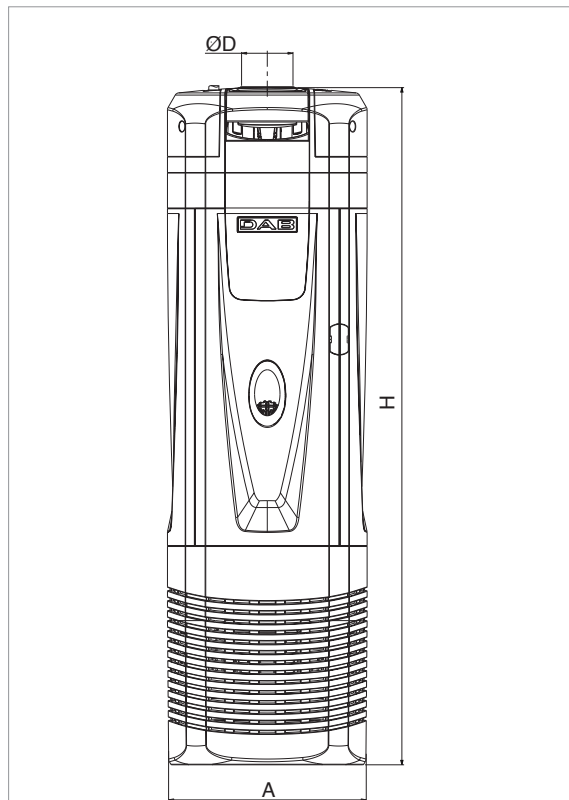
## SUBMERSIBLE PUMPS

### PERFORMANCE AT 60 HZ

MODEL	ELECTR. DATA		HYDRAULIC DATA																	
	P2 NOMINAL		Q=m³/h	0	0.46	0.92	1.38	1.84	2.3	2.76	3.22	3.68	4.14	4.6	5.06	5.52	5.98	6.44	6.9	7.36
	kW	HP	Q=gpm	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
DTRON2 45/90	0.6	0.8	H ft	147	143	138	132	124	115	104	92	79	66	53	39	25	12			
			H m	44.8	43.6	42.1	40.2	37.8	35.1	31.7	28.0	24.1	20.1	16.2	11.9	7.6	3.7			
DTRON2 35/120	0.6	0.8	H ft	125	124	122	117	111	105	98	92	85	77	69	60	52	41	30	18	8
			H m	38.1	37.8	37.2	35.7	33.8	32.0	29.9	28.0	25.9	23.5	21.0	18.3	15.8	12.5	9.1	5.5	2.4
DTRON2 X 45/90	0.6	0.8	H ft	147	143	138	132	124	115	104	92	79	66	53	39	25	12			
			H m	44.8	43.6	42.1	40.2	37.8	35.1	31.7	28.0	24.1	20.1	16.2	11.9	7.6	3.7			
DTRON2 X 35/120	0.6	0.8	H ft	125	124	122	117	111	105	98	92	85	77	69	60	52	41	30	18	8
			H m	38.1	37.8	37.2	35.7	33.8	32.0	29.9	28.0	25.9	23.5	21.0	18.3	15.8	12.5	9.1	5.5	2.4

### ELETRICAL & DIMENSIONAL DATA

MODEL	ELECTRICAL DATA					A inch (mm)	Ø D inch (mm)	H inch (mm)	DNM inch (mm)	PACKING DIMENSIONS			PACKING VOLUME ft³ (m³)	QTY per PALLET	WEIGHT LBS (Kg)
	POWER INPUT 60 Hz	P1 kW	P2 NOMINAL		In A					L/A inch (mm)	L/B inch (mm)	H inch (mm)			
			kW	HP											
DTRON2 45/90	1 x 110-127 V ~	1.09	0.6	0.8	10.8	7.28"	1" 1/4	24.05"	1.26"	29.14"	9.06"	11.81"	1.8032	15	25.13
	1 x 220-240 V ~	0.92	0.6	0.8	4.2	(185)	NPT	(611)	(32)	(740)	(230)	(300)	0.05106		(11.4)
DTRON2 35/120	1 x 110-127 V ~	1.04	0.6	0.8	10.4	7.28"	1" 1/4	24.05"	1.26"	29.14"	9.06"	11.81"	1.8032	15	25.13
	1 x 220-240 V ~	0.9	0.6	0.8	4.0	(185)	NPT	(611)	(32)	(740)	(230)	(300)	0.05106		(11.4)
DTRON2 X 45/90	1 x 110-127 V ~	1.09	0.6	0.8	10.8	7.28"	1" 1/4	24.05"	1.26"	29.14"	9.06"	11.81"	1.8032	15	25.13
	1 x 220-240 V ~	0.92	0.6	0.8	4.2	(185)	NPT	(611)	(32)	(740)	(230)	(300)	0.05106		(11.4)
DTRON2 X 35/120	1 x 110-127 V ~	1.04	0.6	0.8	10.4	7.28"	1" 1/4	24.05"	1.26"	29.14"	9.06"	11.81"	1.8032	15	25.13
	1 x 220-240 V ~	0.9	0.6	0.8	4.0	(185)	NPT	(611)	(32)	(740)	(230)	(300)	0.05106		(11.4)



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.

# DTRON 3

## SUBMERSIBLE PUMPS



### TECHNICAL DATA

**Flow rate maximum:** 32.1 gpm (7.3 m<sup>3</sup>/h)

**Head up to:** 147 ft (45 m)

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

**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 122°F (+0°C to +50°C)

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

**Maximum immersion depth:** 15 m

**Set cut-in:** 34.8 psi 2.4 bar (+-0.2)

**Flanges, thread:** Thread 1" 1/4 NPT

**Pump maximum diameter:** 7.28" (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:** 49ft (15 m) with plug

**Single phase power input:** 115 V 60 Hz single phase

**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.

Surface version (the DOC68 accessory is required)

#### Certification:

CSA, CSAus, 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" inlets and kit X which includes 3.2 ft (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 an 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): 1.4" - 1.6" - 2.4" or 3.2" (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

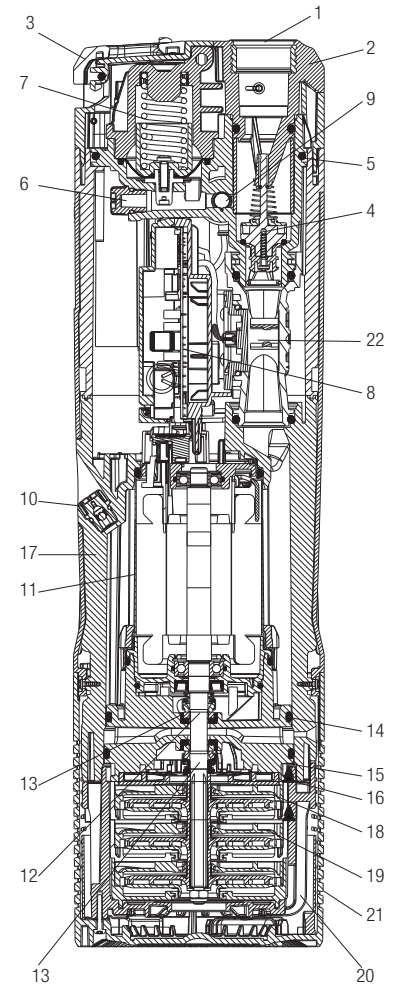
The electronic operation allows the pump to start and stop autonomously, by the system requirements and protects against dry run. NFC (Near Field Communication) pocket for the use of a float sensor (supplied separately) connectable without opening the pump. Thanks to PLC communication technology, the 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-BURPING protection protects the pump from false starts in the event of gurgling water. The ANTI-LEAKAGE 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
16	OR	NBR
17	OR	NBR
18	MOTOR BODY	TECHNOPOLYMER
19	IMPELLER	TECHNOPOLYMER/AISI304
20	DIFFUSER	TECHNOPOLYMER
21	PUMP BODY	TECHNOPOLYMER
22	FILTER	TECHNOPOLYMER

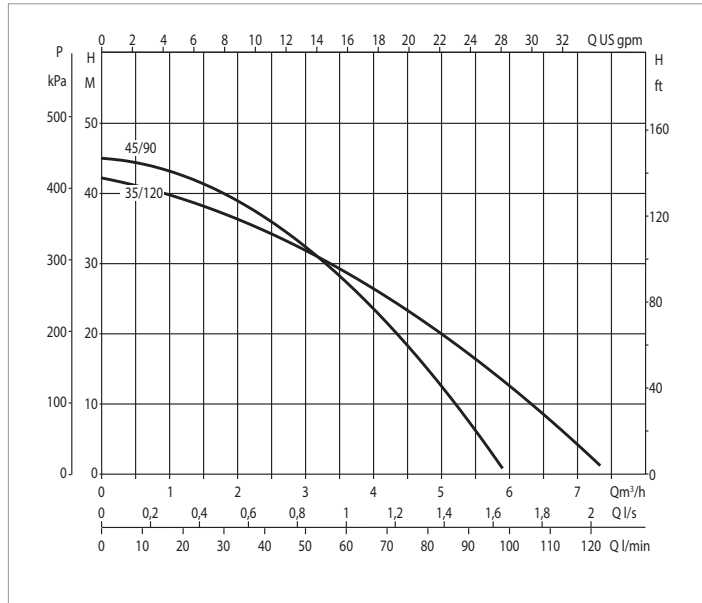
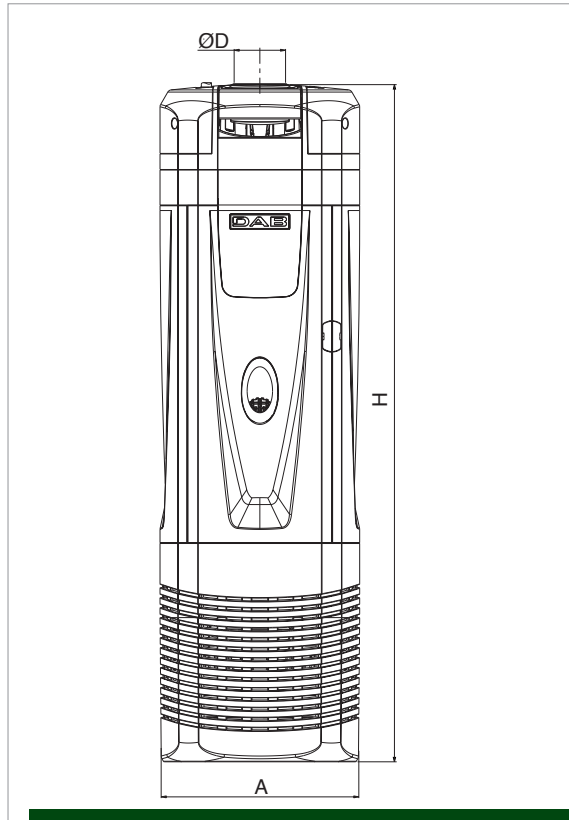


### PERFORMANCE AT 60 HZ

MODEL	ELECTR. DATA		HYDRAULIC DATA																	
	P2 NOMINAL		Q=m³/h	0	0.46	0.92	1.38	1.84	2.3	2.76	3.22	3.68	4.14	4.6	5.06	5.52	5.98	6.44	6.9	7.36
	kW	HP	Q=gpm	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
DTRON3 45/90	0.6	0.8	H ft	147	143	138	132	124	115	104	92	79	66	53	39	25	12			
			H m	44.8	43.6	42.1	40.2	37.8	35.1	31.7	28.0	24.1	20.1	16.2	11.9	7.6	3.7			
DTRON3 35/120	0.6	0.8	H ft	125	124	122	117	111	105	98	92	85	77	69	60	52	41	30	18	8
			H m	38.1	37.8	37.2	35.7	33.8	32.0	29.9	28.0	25.9	23.5	21.0	18.3	15.8	12.5	9.1	5.5	2.4
DTRON3 X 45/90	0.6	0.8	H ft	147	143	138	132	124	115	104	92	79	66	53	39	25	12			
			H m	44.8	43.6	42.1	40.2	37.8	35.1	31.7	28.0	24.1	20.1	16.2	11.9	7.6	3.7			
DTRON3 X 35/120	0.6	0.8	H ft	125	124	122	117	111	105	98	92	85	77	69	60	52	41	30	18	8
			H m	38.1	37.8	37.2	35.7	33.8	32.0	29.9	28.0	25.9	23.5	21.0	18.3	15.8	12.5	9.1	5.5	2.4

### ELETRICAL & DIMENSIONAL DATA

MODEL	ELECTRICAL DATA					A inch (mm)	Ø D inch (mm)	H inch (mm)	DNM inch (mm)	PACKING DIMENSIONS			PACKING VOLUME ft³ (m³)	QTY per PALLET	WEIGHT LBS (Kg)
	POWER INPUT 60 Hz	P1 kW	P2 NOMINAL		In A					L/A inch (mm)	L/B inch (mm)	H inch (mm)			
			kW	HP											
DTRON3 45/90	1 x 110-127 V ~	0.99	0.6	0.8	9.2	7.28"	1" 1/4	25.63"	1.26"	30.71"	9.06"	11.81"	1.9006	15	25.57 (11.6)
	1 x 220-240 V ~	0.92	0.6	0.8	4.1	(185)	NPT	(651)	(32)	(780)	(230)	(300)	0.05382		
DTRON3 35/120	1 x 110-127 V ~	0.98	0.6	0.8	9.0	7.28"	1" 1/4	25.63"	1.26"	30.71"	9.06"	11.81"	1.9006	15	25.57 (11.6)
	1 x 220-240 V ~	0.90	0.6	0.8	4.0	(185)	NPT	(651)	(32)	(780)	(230)	(300)	0.05382		
DTRON3 X 45/90	1 x 110-127 V ~	0.99	0.6	0.8	9.2	7.28"	1" 1/4	25.63"	1.26"	30.71"	9.06"	11.81"	1.9006	15	25.57 (11.6)
	1 x 220-240 V ~	0.92	0.6	0.8	4.1	(185)	NPT	(651)	(32)	(780)	(230)	(300)	0.05382		
DTRON3 X 35/120	1 x 110-127 V ~	0.98	0.6	0.8	9.0	7.28"	1" 1/4	25.63"	1.26"	30.71"	9.06"	11.81"	1.9006	15	25.57 (11.6)
	1 x 220-240 V ~	0.92	0.6	0.8	4.0	(185)	NPT	(651)	(32)	(780)	(230)	(300)	0.05382		



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

## Product Selection on-line



 **DAB PUMPS LTD.**  
6 Gilbert Court  
Newcomen Way  
Severalls Business Park  
Colchester  
Essex  
CO4 9WN - UK  
[salesuk@dwtgroup.com](mailto:salesuk@dwtgroup.com)  
Tel. +44 0333 777 5010

 **DAB PUMPS IBERICA S.L.**  
Calle Verano 18-20-22  
28850 - Torrejón de Ardoz - Madrid  
Spain  
[Info.spain@dwtgroup.com](mailto:Info.spain@dwtgroup.com)  
Tel. +34 91 6569545  
Fax: + 34 91 6569676

 **DAB PUMPS SOUTH AFRICA (PTY) LTD**  
Twenty One industrial Estate,  
16 Purlin Street, Unit B, Warehouse 4  
Olifantsfontein -1666 - South Africa  
[info.sa@dwtgroup.com](mailto:info.sa@dwtgroup.com)  
Tel. +27 12 361 3997

 **DAB PUMPS BV**  
"Hofveld 6 C1  
1702 Groot Bijgaarden - Belgium  
[info.belgium@dwtgroup.com](mailto:info.belgium@dwtgroup.com)  
Tel. +32 2 4668353

 **DAB PUMPS HUNGARY KFT.**  
H-8800  
Nagykanizsa, Buda Ernő u.5  
Hungary  
Tel. +36 93501700

 **DAB PUMPS (QINGDAO) CO. LTD.**  
No.40 Kaituo Road, Qingdao Economic & Technological  
Development Zone  
Qingdao City, Shandong Province - China  
PC: 266500  
[sales.cn@dwtgroup.com](mailto:sales.cn@dwtgroup.com)  
Tel. +86 400 186 8280  
Fax +86 53286812210

 **DAB PUMPS POLAND Sp. z o.o.**  
Ul. Janka Muzykanta 60  
02-188 Warszawa - Poland  
[polska@dabpumps.com.pl](mailto:polska@dabpumps.com.pl)

 **DAB PUMPS B.V.**  
Albert Einsteinweg, 4  
5151 DL Drunen - Nederland  
[info.netherlands@dwtgroup.com](mailto:info.netherlands@dwtgroup.com)  
Tel. +31 416 387280  
Fax +31 416 387299

 **OOO DAB PUMPS**  
Novgorodskaya str. 1, block G  
office 308, 127247, Moscow - Russia  
[info.russia@dwtgroup.com](mailto:info.russia@dwtgroup.com)  
Tel. +7 495 122 0035  
Fax +7 495 122 0036

 **DAB PUMPS DE MÉXICO, S.A. DE C.V.**  
Av Amsterdam 101 Local 4  
Col. Hipódromo Condesa,  
Del. Cuauhtémoc CP 06170  
Ciudad de México  
Tel. +52 55 6719 0493

 **DAB PUMPEN DEUTSCHLAND GmbH**  
Tackweg 11  
D - 47918 Tönisvorst - Germany  
[info.germany@dwtgroup.com](mailto:info.germany@dwtgroup.com)  
Tel. +49 2151 82136-0  
Fax +49 2151 82136-36

 **DAB PUMPS INC.**  
3226 Benchmark Drive  
Ladson, SC 29456 - USA  
[info.usa@dwtgroup.com](mailto:info.usa@dwtgroup.com)  
Tel. 1- 843-797-5002  
Fax 1-843-797-3366

 **DAB PUMPS OCEANIA PTY LTD**  
426 South Gippsland Hwy,  
Dandenong South VIC 3175 - Australia  
[info.oceania@dwtgroup.com](mailto:info.oceania@dwtgroup.com)  
Tel. +61 1300 378 677