PULSAR DRY

5” SUBMERSIBLE MONOBLOC MULTISTAGE PUMPS

TECHNICAL DATA

Operating range: from 0,9 to 7,2 m^3/h with head of up to 86 metres.
Pumped liquid: clean, free of solids and abrasives, non-aggressive.
Max percentage of sand in water: 50 g/m^3.
Liquid temperature range: from 0 °C to +40 °C.
Maximum immersion depth: 20 metres.
Motor protection class: IP 68.
Motor protection rating: F.
Maximum working pressure: 10 bar.
Installation: fixed or portable, vertical or horizontal position.
Operation: manual or automatic
(continuous duty with totally submerged pump).
Discharge and suction port diameters: 1”1/4 GAS.
Pump maximum diameter: 138 mm.

APPLICATIONS

PULSAR DRY electric pumps are utilised for lifting and pressurizing clear water from first water collection tanks or cisterns, and are capable of distributing pressurised water to domestic installations, small agricultural plants, and sprinkler systems for lawns and vegetable gardens. Thanks to its particularly silent operation, the pump is suitable for the creation of pressurization assemblies for installation in environments without aeration or prone to flooding.

CONSTRUCTION FEATURES OF THE PUMP

Multistage monobloc submersible or surface pump with hydraulic section below the motor, which is cooled by the pumped liquid. Impellers, diffusers, strainer and oil sump in abrasion-proof thermoplastic material. Outer liner, pump body, stator sleeve, upper head with delivery connection and closing ring in AISI 304 stainless steel. Upper and lower bearing support in pressed anti-dezincification brass. Rotor shaft extension in AISI 304 stainless steel. Elastomers in NBR. Stainless steel screws. Double mechanical seal with interposed oil chamber, in ceramic/carbon on the motor side, and silicon carbide/silicon carbide on the pump side. The seal system adopted ensures watertight sealing of the motor and good performance of the mechanical seal even in the event of short term dry operation.

CONSTRUCTION FEATURES OF THE MOTOR

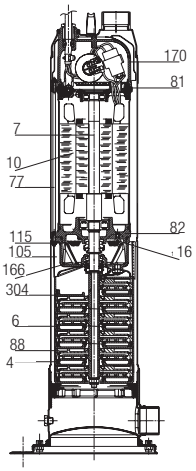
Submersible type continuous duty asynchronous motor. Stator enclosed in airtight casing made of AISI 304 stainless steel and covered by an outer protection that protects the wiring and the capacitor. Rotor running on ball bearings, oversized to ensure low noise and durability. The single-phase version has built-in thermal-amperometric protection and permanently connected capacitor. For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations. Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

Motor protection class: IP 68
Insulation class: F
Standard voltages: Single-phase 220/240 V - 50 Hz.
Three-phase 400 V - 50 Hz.
Standard cables: 15 m cable type H07 RN-F; single-phase version complete with SCHUKO CEE 7-VII-UNEL 47166-68 plug.
The single-phase version can be supplied with or without float switches for automatic operation.

MATERIALS

N.	PART*	MATERIALS
4*	IMPELLER	TECHNOPOLYMER
6*	DIFFUSER	TECHNOPOLYMER
7*	SHAFT WITH ROTOR	AISI 304 (part in contact with the pumped liquid)
10*	MOTOR CASING WITH WOUND STATOR	AISI 304
16*	COMPLETE UPPER MECHANICAL SEAL	NBR/CERAMIC/CARBON
16b	COMPLETE LOWER MECHANICAL SEAL	NBR/SILICON/CARBON
77*	OUTER LINER	AISI 304
81*	UPPER BEARING SUPPORT	PRESSED BRASS
82*	LOWER BEARING SUPPORT	PRESSED BRASS
98*	DIFFUSER HOUSING	TECHNOPOLYMER
105*115	SUMP	TECHNOPOLYMER
170*	SEAL LUBRICATION FLUID	ESSO MARCOL 172 OIL
304*	WIRING COMPARTMENT COVER	TECHNOPOLYMER
	REAR DISC	TECHNOPOLYMER

* In contact with the pumped liquid.



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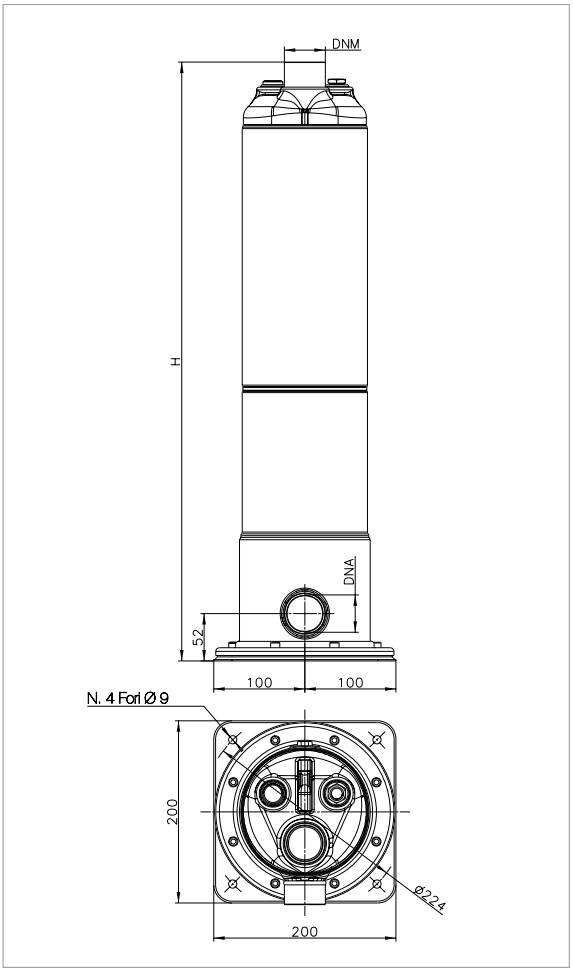
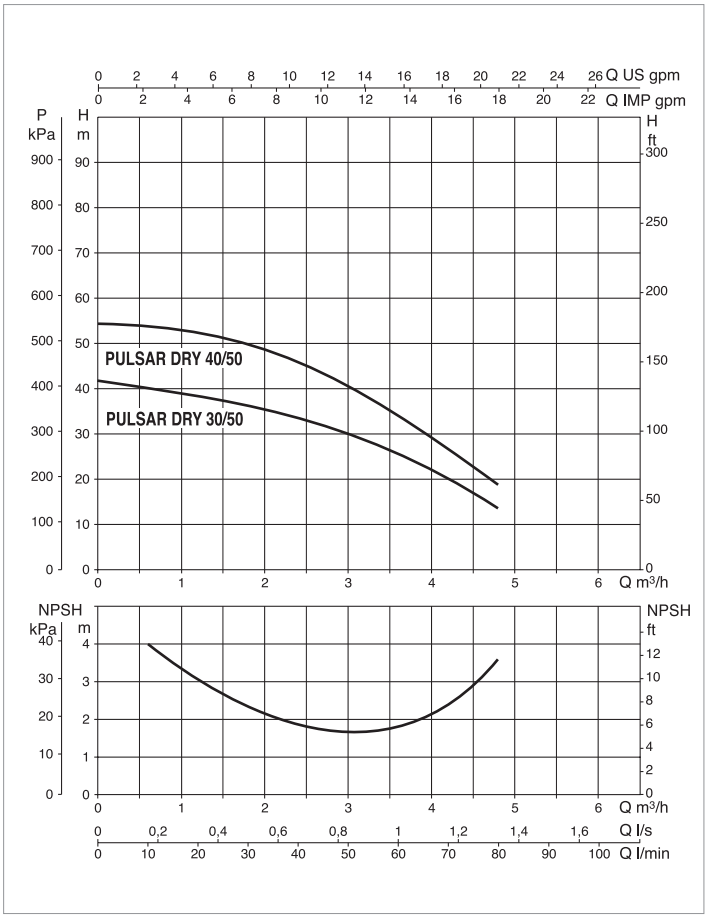
PERFORMANCE AT 50 Hz

MODEL	ELECTRICAL DATA		HYDRAULIC DATA							
	P2 NOMINAL		Q=m³/h	0	1,2	2,4	3,6	4,8	6	7,2
	kW	HP	Q=l/min	0	20	40	60	80	100	120
PULSAR DRY 30/50	0,55	0,75	H (m)	42	38,2	33,8	24,8	13,5	-	-
PULSAR DRY 40/50	0,75	1		56	51	45	33	18	-	-

ELECTRICAL DATA AND DIMENSIONS

MODEL	ELECTRICAL DATA					H mm	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								
PULSAR DRY 30/50 M-NA	1x230 V~	0,94	0,55	0,75	4,4	562	690	220	165	0,037	20	16,7
PULSAR DRY 30/50 T-NA	3x230 V~	0,87	0,55	0,75	2,85	562	690	220	165	0,037	20	17,3
PULSAR DRY 30/50 T-NA	3x400 V~	0,87	0,55	0,75	1,65	562	690	220	165	0,037	20	17,3
PULSAR DRY 40/50 M-NA	1x230 V~	1,12	0,75	1	5,2	562	690	220	165	0,037	20	17
PULSAR DRY 40/50 T-NA	3x230 V~	1,03	0,75	1	3,2	562	690	220	165	0,037	20	17,5
PULSAR DRY 40/50 T-NA	3x400 V~	1,03	0,75	1	1,85	562	690	220	165	0,037	20	17,5





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.

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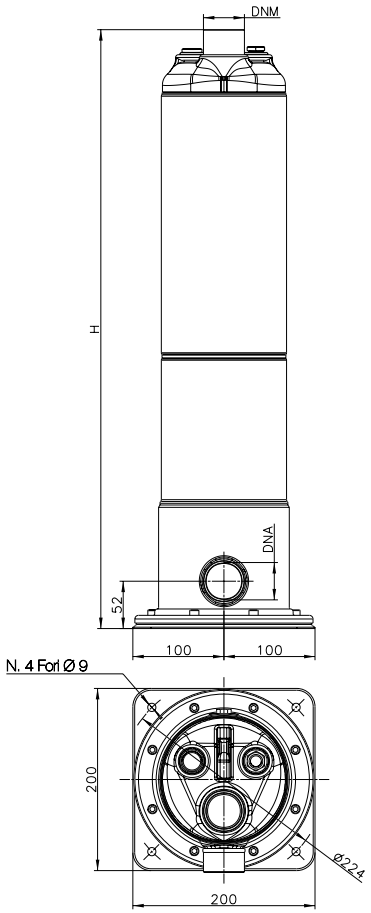
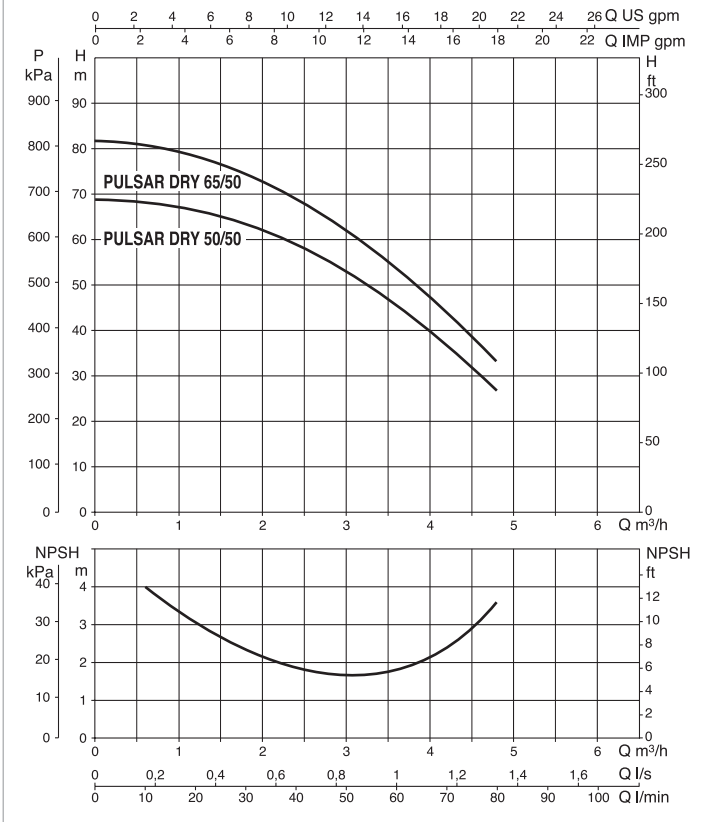
PERFORMANCE AT 50 Hz

MODEL	ELECTRICAL DATA		HYDRAULIC DATA							
	P2 NOMINAL		Q=m³/h	0	1,2	2,4	3,6	4,8	6	7,2
	kW	HP	Q=l/min	0	20	40	60	80	100	120
PULSAR DRY 50/50	1	1,36	H (m)	72	65,5	58	43,6	24,5	-	-
PULSAR DRY 65/50	1,2	1,6		86	78,5	70	52,8	29	-	-

ELECTRICAL DATA AND DIMENSIONS

MODEL	ELECTRICAL DATA					H mm	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								
PULSAR DRY 50/50 M-NA	1x230 V~	1,45	1	1,36	6,5	630	690	220	165	0,037	20	18
PULSAR DRY 50/50 T-NA	3x230 V~	1,35	1	1,36	4,15	630	690	220	165	0,037	20	18,5
PULSAR DRY 50/50 T-NA	3x400 V~	1,35	1	1,36	2,4	630	690	220	165	0,037	20	18,5
PULSAR DRY 65/50 M-NA	1x230 V~	1,70	1,2	1,6	7,8	657	690	220	165	0,037	9	19
PULSAR DRY 65/50 T-NA	3x230 V~	1,60	1,2	1,6	5	657	690	220	165	0,037	9	19,5
PULSAR DRY 65/50 T-NA	3x400 V~	1,60	1,2	1,6	2,9	657	690	220	165	0,037	9	19,5





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PULSAR DRY

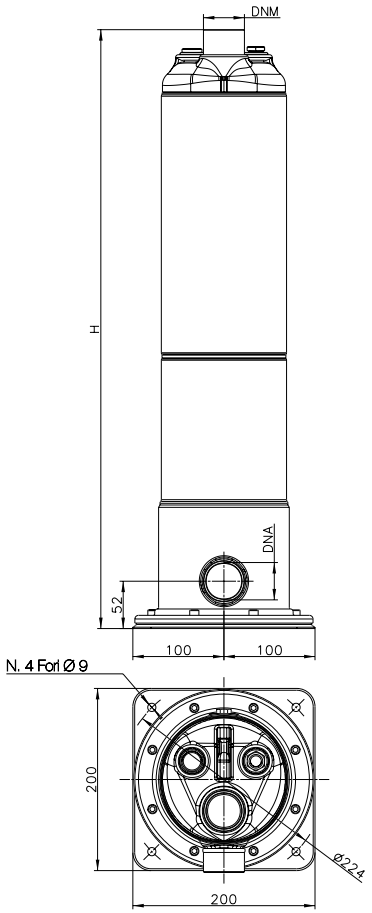
5" SUBMERSIBLE MONOBLOC MULTISTAGE PUMPS

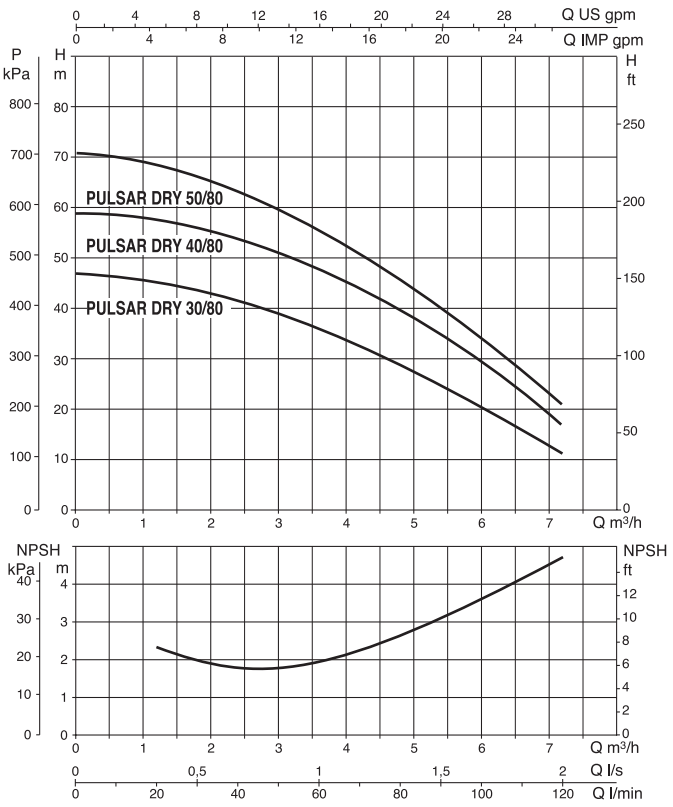
PERFORMANCE AT 50 Hz

MODEL	ELECTRICAL DATA		HYDRAULIC DATA							
	P2 NOMINAL		Q=m³/h	0	1,2	2,4	3,6	4,8	6	7,2
	kW	HP	Q=l/min	0	20	40	60	80	100	120
PULSAR DRY 30/80	0,75	1	H (m)	51	48,2	44,8	39,2	32,4	23,5	13
PULSAR DRY 40/80	1	1,36		64	61	56,8	50	41,5	30,5	16,2
PULSAR DRY 50/80	1,2	1,6		77	73,2	68	60	50	37	19,6

ELECTRICAL DATA AND DIMENSIONS

MODEL	ELECTRICAL DATA					H mm	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								
PULSAR DRY 30/80 M-NA	1x230 V~	1,12	0,75	1	5,2	562	690	220	165	0,037	20	17
PULSAR DRY 30/80 T-NA	3x230 V~	1,03	0,75	1	3,2	562	690	220	165	0,037	20	17,5
PULSAR DRY 30/80 T-NA	3x400 V~	1,03	0,75	1	1,85	562	690	220	165	0,037	20	17,5
PULSAR DRY 40/80 M-NA	1x230 V~	1,5	1	1,36	6,5	630	690	220	165	0,037	20	18
PULSAR DRY 40/80 T-NA	3x230 V~	1,4	1	1,36	4,15	630	690	220	165	0,037	20	18,5
PULSAR DRY 40/80 T-NA	3x400 V~	1,4	1	1,36	2,4	630	690	220	165	0,037	20	18,5
PULSAR DRY 50/80 M-NA	1x230 V~	1,8	1,2	1,6	7,8	657	690	220	165	0,037	9	19
PULSAR DRY 50/80 T-NA	3x230 V~	1,75	1,2	1,6	5	657	690	220	165	0,037	9	19,5
PULSAR DRY 50/80 T-NA	3x400 V~	1,64	1,2	1,6	2,9	657	690	220	165	0,037	9	19,5





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