DIVER - DIVER HF

5" SUBMERSIBLE MONOBLOC MULTISTAGE PUMPS

TECHNICAL DATA

Operating range: from 0,6 to 12 m^3/h with head up to 96 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 +35 °C.
Max. immersion depth: 20 m.
Discharge port diameter: 1" 1/4 GAS.
Power supply tolerance: +6 % / -10 %.
Max. starts: 20/h.
Motor protection class: IP 68.
Motor protection rating: F.
Installation: in wells, tanks and cisterns, vertical position.
Special executions on request:
alternative voltages and/or frequencies.
Automatic version available with float switch.

APPLICATIONS

DIVER electric pumps are utilised for lifting clear water from boreholes, first water collection tanks or cisterns, wells or water courses, and are capable of distributing pressurised water to domestic installations, small agricultural plants, and sprinkler systems for lawns and vegetable gardens.
The pump has a very silent operation, and can be installed inside boreholes and tanks, thus avoiding all the potential problems connected with suction and unpriming.

CONSTRUCTION FEATURES OF THE PUMP

Multistage monobloc submersible pump with hydraulic section below the motor, which is cooled by the pumped liquid. Impellers and diffusers made of fibreglass reinforced Noryl, with wear-resistant stainless steel thrust ring. Outer liner, stator sleeve, upper head with delivery connection and closing ring in AISI 304 stainless steel. Canned-type stator. Supports in cast iron. Rotor shaft extension in AISI 304 stainless steel. Lip seal on the motor side, and silicon carbide/silicon carbide seal on the pump side.

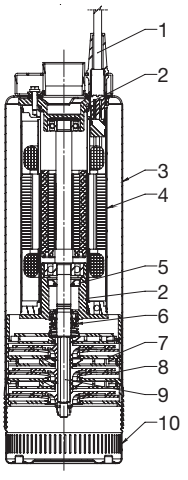
CONSTRUCTION FEATURES OF THE MOTOR

Submersible asynchronous two-pole motor, made entirely of stainless steel, dry design with external cooling by means of the pumped liquid. Canned-type AISI 304L stator.
Squirrel cage rotor running on ball bearings, oversized to ensure silent operation, reliability and durability.
The single-phase version can be supplied with CONTROL BOX on request.
Overload protection to be provided by the user for the three-phase version.
Automatic version available with float switch.
Available on request with support base and lateral suction (DRY).

Protection class: IP 68
Insulation class: F
Standard voltage: single-phase 230 V / 50 Hz.
three-phase 400 V / 50 Hz
Power cable: Removable H07RN-F power cable, length 10 m.

MATERIALS

N.	PART*	MATERIALS
1	CABLE	H07RN-F CEI 20-19
2	SUPPORT	BRASS PCuZn40Pb2 UNI 5705
3	OUTER LINER	AISI 304 STAINLESS STEEL X5CrNi1810 UNI 10088-3
4	STATOR	AISI 304 STAINLESS STEEL X5CrNi1810 UNI 10088-3
5	LIP SEAL	NBR 70
6	MECHANICAL SEAL	SiC/SiC
7	DIFFUSER	TECHNOPOLYMER
8	IMPELLER	TECHNOPOLYMER
9	SHAFT WITH ROTOR	AISI 304 STAINLESS STEEL X5CrNi1810 UNI 10088-3
10	STRAINER	AISI 304 STAINLESS STEEL X5CrNi1810 UNI 10088-3



DIVER

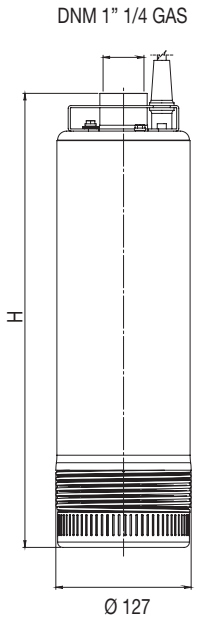
5" SUBMERSIBLE MONOBLOC MULTISTAGE PUMPS

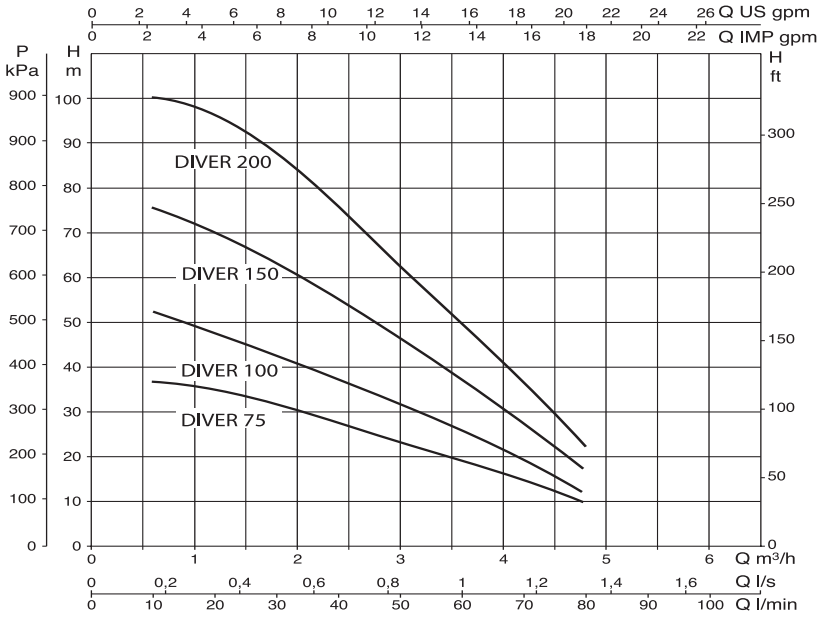
PERFORMANCE AT 50 Hz

MODEL	ELECTRICAL DATA		HYDRAULIC DATA									
	P2 NOMINAL		Q=m³/h	0	0,6	1,2	1,8	2,4	3	3,6	4,2	4,8
	kW	HP	Q=l/min	0	10	20	30	40	50	60	70	80
DIVER 75	0,55	0,75	H (m)	39	35	33	30	26	22	18	14	9
DIVER 100	0,75	1		55	50	45	41	35	30	25	18	11
DIVER 150	1	1,5		80	72	67	60	52	45	35	26	16
DIVER 200	1,5	2		101	96	90	85	70	60	47	35	21

ELECTRICAL DATA AND DIMENSIONS

MODEL	ELECTRICAL DATA							Ø mm	H mm	PACKING DIMENSIONS			VOLUME PACKING m³	Q.TY X PALLET	WEIGHT kg
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR				L/A	L/B	H			
			kW	HP		µF	Vc								
DIVER 75 M	1x230 V~	0,85	0,55	0,75	4,6	16	450	127	427	625	230	170	0,024	35	10
DIVER 75 T-NA	3x230 V~	0,8	0,55	0,75	2,9	-	-	127	427	625	230	170	0,024	35	10
DIVER 75 T-NA	3x400 V~	0,8	0,55	0,75	1,7	-	-	127	427	625	230	170	0,024	35	10
DIVER 100 M	1x230 V~	1,1	0,75	1	5,9	20	450	127	482	625	230	170	0,024	35	11,7
DIVER 100 T-NA	3x230 V~	1,2	0,75	1	4,2	-	-	127	482	625	230	170	0,024	35	11,7
DIVER 100 T-NA	3x400 V~	1,2	0,75	1	2,4	-	-	127	482	625	230	170	0,024	35	11,7
DIVER 150 M	1x230 V~	1,6	1	1,5	7,8	30	450	127	550	625	230	170	0,024	35	13,1
DIVER 150 T-NA	3x230 V~	1,55	1	1,5	5,7	-	-	127	550	625	230	170	0,024	35	13,1
DIVER 150 T-NA	3x400 V~	1,55	1	1,5	3,3	-	-	127	550	625	230	170	0,024	35	13,1
DIVER 200 M-A	1x230 V~	2,3	1,5	2	10,7	35	450	127	648	710	220	160	0,025	35	15,8
DIVER 200 T-NA	3x230 V~	2,15	1,5	2	8,5	-	-	127	648	710	220	160	0,025	35	15,8
DIVER 200 T-NA	3x400 V~	2,15	1,5	2	4,9	-	-	127	648	710	220	160	0,025	35	15,8





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.

DIVER HF (HIGH FLOW)

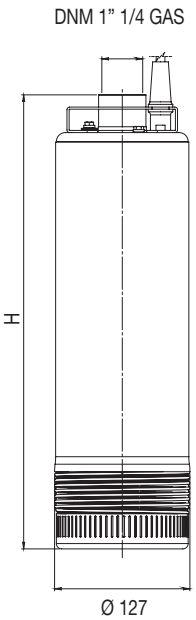
5" SUBMERSIBLE MONOBLOC MULTISTAGE PUMPS

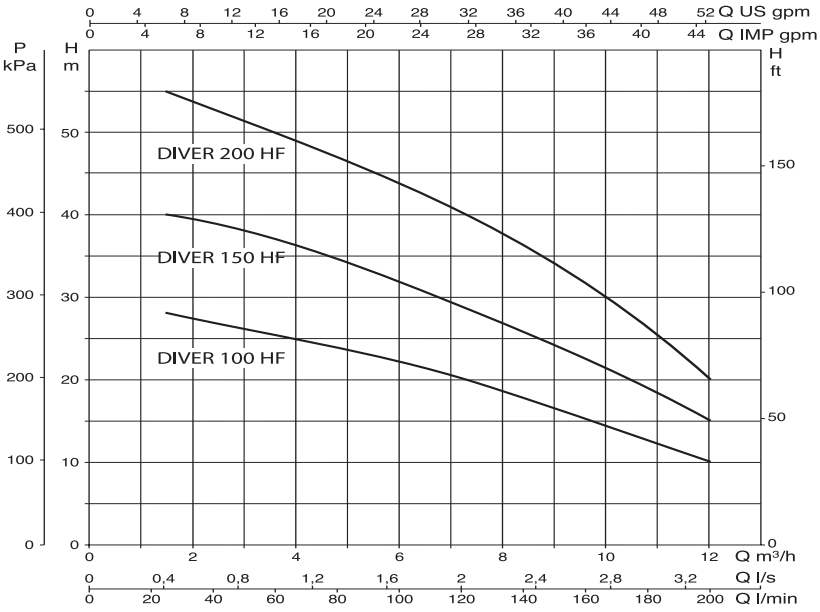
PERFORMANCE AT 50 Hz

MODEL	ELECTRICAL DATA		HYDRAULIC DATA									
	P2 NOMINAL		Q=m³/h	0	1,5	3	4,5	6	7,5	9	10,5	12
	kW	HP	Q=l/min	0	25	50	75	100	125	150	175	200
DIVER 100 HF	0,75	1	H (m)	30	28	26	24	22	20	16	13	10
DIVER 150 HF	1	1,5	H (m)	42	40	38	35	32	28	24	20	15
DIVER 200 HF	1,5	2		59	55	51	48	44	39	34	28	20

ELECTRICAL DATA AND DIMENSIONS

MODEL	ELECTRICAL DATA							Ø mm	H mm	PACKING DIMENSIONS			PACKING VOLUME m³	Q.TY X PALLET	WEIGHT kg
	POWER INPUT 50 Hz	P1 kW	P2 NOMINAL		In A	CAPACITOR				L/A	L/B	H			
			kW	HP		µF	Vc								
DIVER 100 HF M	1x230 V~	1,1	0,75	1	6,2	20	450	127	459	625	230	170	0,024	35	11,5
DIVER 100 HF T-NA	3x230 V~	1,2	0,75	1	4,3	-	-	127	459	625	230	170	0,024	35	11,5
DIVER 100 HF T-NA	3x400 V~	1,2	0,75	1	2,5	-	-	127	459	625	230	170	0,024	35	11,5
DIVER 150 HF M	1x230 V~	1,7	1	1,5	8,1	30	450	127	523	625	230	170	0,024	35	13
DIVER 150 HF T-NA	3x230 V~	1,8	1	1,5	6	-	-	127	523	625	230	170	0,024	35	13
DIVER 150 HF T-NA	3x400 V~	1,8	1	1,5	3,5	-	-	127	523	625	230	170	0,024	35	13
DIVER 200 HF M	1x230 V~	2,15	1,5	2	10,8	35	450	127	608	710	220	160	0,025	35	15,5
DIVER 200 HF T-NA	3x230 V~	2,1	1,5	2	8,5	-	-	127	608	710	220	160	0,025	35	15,5
DIVER 200 HF T-NA	3x400 V~	2,1	1,5	2	4,9	-	-	127	608	710	220	160	0,025	35	15,5





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.