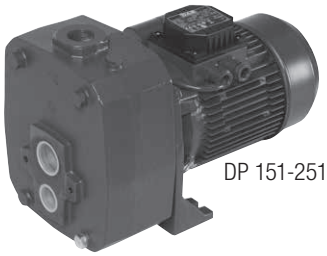
DP

PUMPS FOR DEEP SUCTION



DP 82-102



DP 151-251

TECHNICAL DATA

Operating range: up to 4.3 m^3/h
Liquid quality requirements: clean, free from solid or abrasive contaminants, non-viscous, non-aggressive, uncrystallised and chemically neutral, close to the properties of water
Liquid temperature range:
from 0°C to +35°C for domestic use (EN 60335-2-41)
for other use: from 0°C to +40°C
Maximum ambient temperature: +40°C
Maximum operating pressure:
DP 82 - DP 102 6 bar (600 kPa)
DP 151 - DP 251 8 bar (800 kPa)
Installation: fixed in a horizontal position
Special executions on request: alternative voltages and/or frequencies
Motor protection rating: IP 44
Terminal block protection rating: IP 55
Insulation class: F
Standard input voltage: single phase 220-240 V / 50 Hz
three phase 230-400 V / 50 Hz

APPLICATIONS

Self priming centrifugal pump for suction up to 27 metres, reached by using the ejector to be inserted in wells from 4" in diameter or larger. Used for water supply in large country homes and small farms.

CONSTRUCTIONAL FEATURES OF THE PUMP

Pump: Cast-iron pump body and motor support. Impeller and diffuser in technopolymer.
Stainless steel wear ring. Carbon/ceramic mechanical seal.
Ejector: Body in cast iron Venturi tube in technopolymer A and nozzle in brass
The ejector is available in three models (E 20 - E 25 - E 30) depending on the performance required.

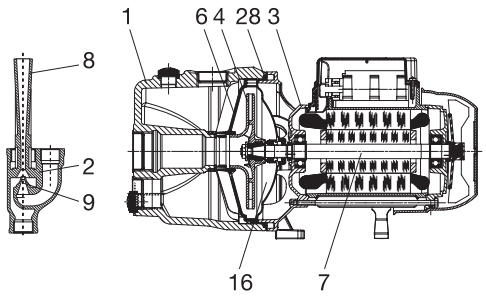
CONSTRUCTIONAL FEATURES OF THE MOTOR

Rotor mounted on oversized greased-for-life ball bearings. Incorporated thermo-amperometric protection and permanently inserted capacitor in the single phase version. It is recommended to use remote overload protection for three phase motors, in compliance with current legislation. Manufactured pursuant to CEI 61-69 (EN 60335-2-41).

MATERIALS

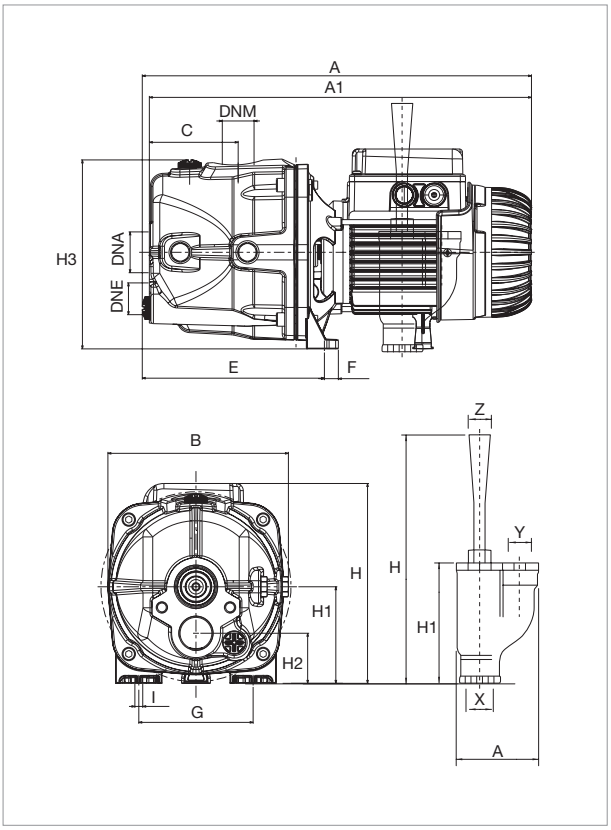
N°	PARTS*	MATERIALS
1	PUMP BODY	200 UNI ISO 185 CAST IRON
2	EJECTOR BODY	200 UNI ISO 185 CAST IRON
3	FRAME	200 UNI ISO 185 CAST IRON
4	IMPELLER	TECHNOPOLYMER
6	DIFFUSER	TECHNOPOLYMER
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12 CRS13 UNI 6900/71 (DP 82 - DP 102) AISI 303 STAINLESS STEEL X10CRNIS 1809 UNI 6900/71 (DP 151 - DP 251)
8	VENTURI PIPE	TECHNOPOLYMER
9	NOZZLE	BRASS
16	MECHANICAL SEAL	CARBON/CERAMIC
28	OR GASKET	NBR RUBBER

* In contact with liquid



DP 82 - DP 102 - PUMPS FOR DEEP SUCTION

Liquid temperature range pumped: from 0 °C to +35 °C - **Maximum ambient temperature:** +40°C



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

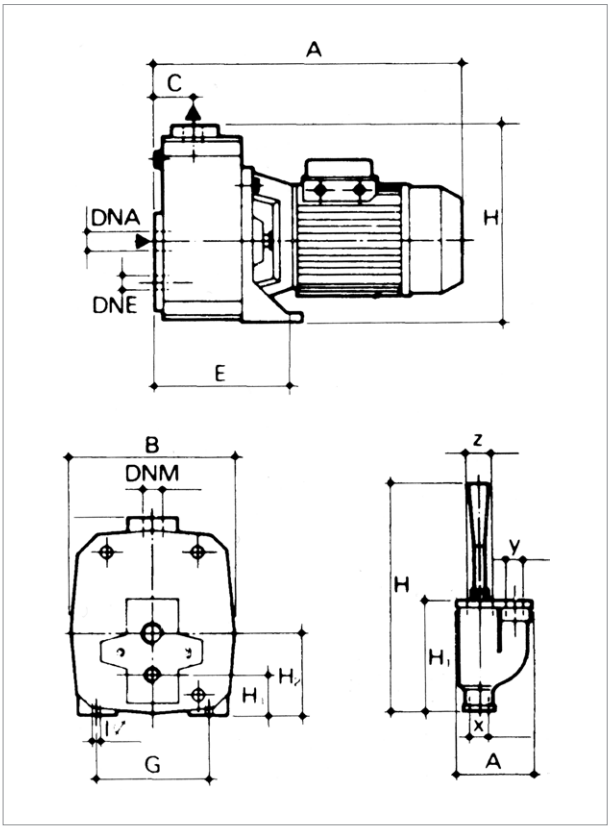
HYDRAULIC DATA (n ~ 2800 1/min.)								
TYPE PUMP	TYPE EJECTOR	DEEP SUCTION	Discharge pressure in bar					
			1,5	2	2,5	3	3,5	4
			Capacity table in l/h					
DP 82 M - T	E 25	9	1813	1080	446	33	–	–
		12	1426	225	–	–	–	–
		15	900	326	–	–	–	–
	E 30	9	1753	1286	812	524	261	12
		12	1345	965	608	329	162	0
		15	1166	761	452	228	45	–
DP 102 M - T	E 25	9	2386	1756	1097	515	126	–
		12	1930	1190	536	87	–	–
		15	1459	773	252	–	–	–
	E 30	12	–	1240	872	566	329	156
		15	–	1028	701	449	255	96
		18	–	785	527	302	150	15
		21	–	635	374	180	39	–

MODEL	ELECTRICAL DATA							
	POWER SUPPLY 50 Hz	MOTOR TYPE	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR	
				kW	HP		µF	Vc
DP 82 M	1x220-240 V ~	-	0,73	0,6	0,8	3,4	12,5	450
DP 82 T	3x230-400 V ~	-	0,73	0,6	0,8	2,6/1,5	–	–
DP 102 M	1x220-240 V ~	-	0,79	0,75	1	3,8	16	450
DP 102 T	3x230-400 V ~	IE3	0,9	0,75	1	3,3/1,9	–	–
DP 102 T	3x230-400 V ~	IE2	0,64	0,75	1	2,6/1,5	–	–

MODEL	A	A1	B	C	E	F	G	H	H1	H2	H3	I Ø	DNA GAS	DNM GAS	DNE GAS	EJECTOR						PACKING DIMENSIONS			VOLUME (mc)	GROSS WEIGHT Kg
																A	H	H1	X	Y	Z	L/A	L/B	H		
DP 82 M - T	377	371	175	86	177	13	111	194	94	49	179	9	1 ¼"	1"	1"	97	295	143	1" G	1" G	1 ¼" G	480	240	240	0,03	10,7
DP 102 M - T	398	392	175	86	177	13	111	203	94	49	179	9	1 ¼"	1"	1"	97	295	143	1" G	1" G	1 ¼" G	480	240	240	0,03	13

DP 151 - DP 251 - PUMPS FOR DEEP SUCTION

Liquid temperature range pumped: from 0 °C to +35 °C - Maximum ambient temperature: +40°C



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

HYDRAULIC DATA (n ~ 2800 1/min.)											
TYPE PUMP	TYPE EJECTOR	DEEP SUCTION	Discharge pressure in bar								
			3	3,5	4	4,5	5	5,5	6	6,5	7
			Capacity table in l/h								
DP 151 M - T	E 20	9	3470	2890	2220	1500	750	–	–	–	–
		12	3110	2510	1850	1100	300	–	–	–	–
		15	2710	2100	1380	640	–	–	–	–	–
		18	2360	1700	950	–	–	–	–	–	–
	E 25	15	2800	2330	1830	1350	900	520	–	–	–
		18	2530	2050	1550	1090	680	300	–	–	–
		21	2280	1800	1300	860	470	–	–	–	–
	E 30	21	1820	1650	1410	1160	910	700	520	–	–
		24	1680	1520	1260	1020	780	580	420	–	–
		27	1550	1360	1110	880	680	490	330	–	–
DP 251 M - T	E 20	9	4300	3600	2900	2180	1400	640	–	–	–
		12	3750	3140	2540	1700	940	–	–	–	–
		15	–	2780	2040	1300	500	–	–	–	–
		18	–	2340	1610	820	–	–	–	–	–
	E 25	15	–	2920	2400	1900	1400	950	570	–	–
		18	–	2600	2110	1620	1150	720	360	–	–
		21	–	2350	1850	1350	900	510	–	–	–
		24	–	2050	1550	1080	660	300	–	–	–
	E 30	21	–	–	1710	1480	1220	980	770	590	420
		24	–	–	1580	1330	1080	850	670	490	330
		27	–	–	1440	1200	950	750	560	400	250

MODEL	ELECTRICALDATA							
	POWER SUPPLY 50 Hz	MOTOR TYPE	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR	
				kW	HP		µF	Vc
DP 151 M	1x220-240 V ~	–	1,56	1,1	1,5	7	31,5	450
DP 151 T	3x230-400 V ~	IE3	1,5	1,1	1,5	5,4 /3,1	–	–
DP 151 T	3x230-400 V ~	IE2	1,45	1,1	1,5	4,7 /2,7	–	–
DP 251 M	1x220-240 V ~	–	1,84	1,85	2,5	8,3	40	450
DP 251 T	3x230-400 V ~	IE3	1,7	1,85	2,5	5,7/3,3	–	–
DP 251 T	3x230-400 V ~	IE2	1,78	1,85	2,5	6,6/3,8	–	–

MODEL	A	B	C	E	G	H	H1	H2	I Ø	DNA GAS	DNM GAS	DNE GAS	EJECTOR						PACKING DIMENSIONS			VOLUME (mc)	GROSS WEIGHT Kg
													A	H	H1	X	Y	Z	L/A	L/B	H		
DP 151 M-T	388	210	50	197	145	155	52	108	11	1¼"	1"	1"	97	295	143	1" G	1" G	1¼"G	427	246	307	0,03	28
DP 251 M	462	210	50	197	145	155	53	108	11	1¼"	1"	1"	97	295	143	1" G	1" G	1¼"G	522	246	307	0,04	32,5
DP 251 T	388	210	50	197	145	155	53	108	11	1¼"	1"	1"	97	295	143	1" G	1" G	1¼"G	427	246	307	0,03	27,9

50250098 - 05/2021

DAB PUMPS reserve the right to make modifications without prior notice