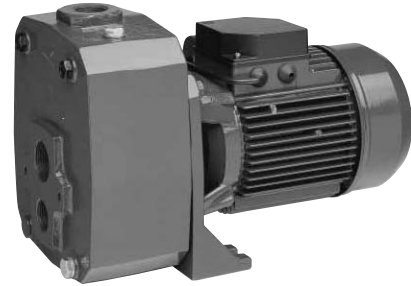


DP

FOR DEEP SUCTION



DP 81-100



DP 151-251

GENERAL DATA

Applications

Self-priming centrifugal pump for suction up to 27 metres, reached by means of an ejector to be inserted in wells with a diameter of 4" or over. For use in supplying water to farmhouses and in small-scale agriculture.

Constructional features of the pump

Pump: Cast iron pump body and motor support. Technopolymer impeller and diffuser. Stainless steel pressure disc. Carbon/ceramic mechanical seal.

Ejector: Cast iron body. Technopolymer A Venturi tube and brass nozzle.
The ejector is available in three models (E20 - E25 - E30) to be chosen according to performance requirements.

Constructional features of the motor

Induction motor, closed and cooled with external ventilation.

Rotor mounted on oversized greased sealed-for-life ball bearings.

Built-in thermal and current overload protection and a capacitor permanently in circuit in the single-phase version.

Three-phase motors should be protected with a suitable overload protection complying with the regulations in force.

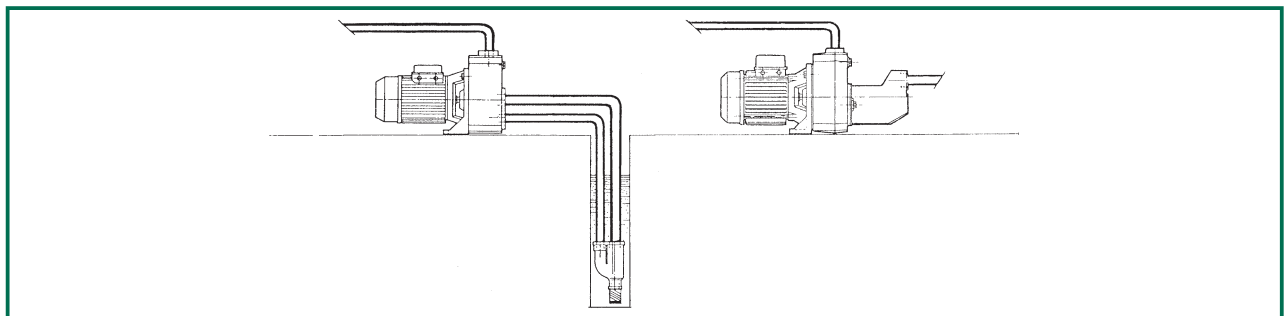
Manufactured according to CEI 61-69 standards (EN 60335-2-41).

Motor protection: IP 44

Terminal box protection: IP 55

Insulation class: F

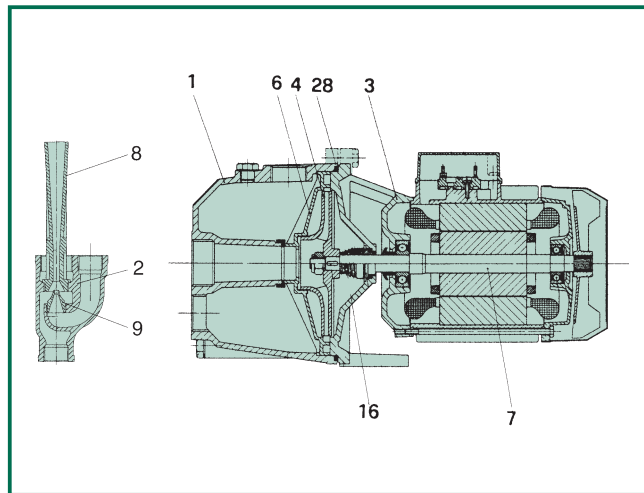
Standard voltage:	single-phase	220-240 V/50 Hz
	three-phase	230-400 V/50 Hz



TECHNICAL DATA

N.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 200 UNI ISO 185
2	EJECTOR BODY	CAST IRON 200 UNI ISO 185
3	SUPPORT	CAST IRON 200 UNI ISO 185
4	IMPELLER	TECHNOPOLYMER
6	DIFFUSER	TECHNOPOLYMER
7	SHAFT WITH ROTOR	STAINLESS STEEL AISI 416 X12 CrS13 UNI 6900/71 (DP 80 - DP 100) STAINLESS STEEL AISI 303 X10CrNiS 1809 UNI 6900/71 (DP 151 - DP 251)
8	VENTURI TUBE	TECHNOPOLYMER
9	NOZZLE	BRASS
16	MECHANICAL SEAL	CARBON/CERAMIC
28	OR GASKET	NBR RUBBER

* In contact with the liquid.

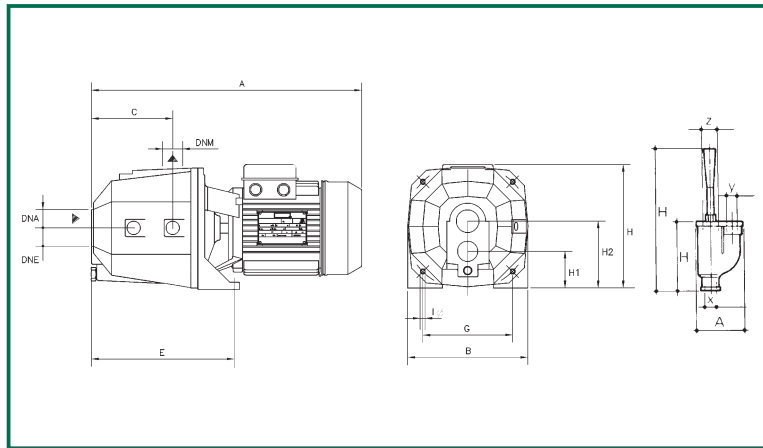


- Operating range: up to 4.3 m³/h.
- Liquid quality requirements: clean, free from solids or abrasive substances, non viscous, non aggressive, non crystallized, chemically neutral, close to the characteristics of water.
- Liquid temperature range: from 0°C to +35°C for domestic use (EN 60335-2-41)
from 0°C to +40°C for other uses
- Maximum ambient temperature: +40°C
- Maximum operating pressure: DP 81 - DP 100 6 bar (600 kPa)
DP 151 - DP 251 8 bar (800 kPa)
- Installation: fixed in a horizontal position
- Special executions on request: other voltages and/or frequencies

Liquid temperature range: from 0 °C to +35°C

Maximum ambient temperature: +40°C

DP 81 - DP 100



HYDRAULIC DATA (n ≈ 2800 1/min)							
PUMP TYPE	EJECTOR TYPE	SUCTION DEPTH	Delivery pressure in bar				
			1,5	2	2,5	3	3,5
DP 81	E 25	9	2140	1410	730	-	-
		12	1730	1000	400	-	-
		15	1220	580	-	-	-
	E 30	9	1790	1340	950	620	360
		12	1500	1100	740	460	250
		15	1260	880	570	320	-
DP 100	E 25	9	2580	1870	1120	470	-
		12	1990	1400	720	-	-
		15	1400	950	380	-	-
	E 30	12	1770	1350	980	650	400
		15	1500	1120	775	500	280
		18	1260	910	600	350	150
		21	-	720	450	250	-

MODEL	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNM	DNE	EJECTOR					PACKING DIMENSIONS			VOL. m ³	WEIGHT Kg	
													A	H	H1	x	y	z	L/A	L/B			H
DP 81	365	180	90	202	140	9,5	225	47	92	1 1/4" G	1" G	1" G	97	295	143	1" G	1" G	1 1/4" G	452	218	257	0,025	13
DP 100	385	180	90	202	140	9,5	225	47	92	1 1/4" G	1" G	1" G	97	295	143	1" G	1" G	1 1/4" G	492	224	277	0,030	15,7

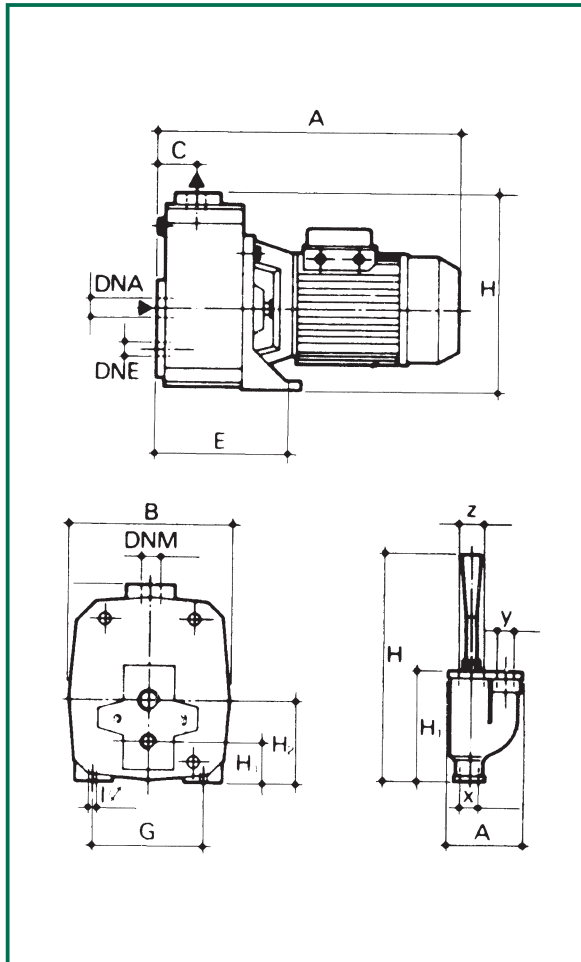
MODEL	ELECTRICAL DATA						
	VOLTAGE 50 Hz	P1 MAX kW	P2 NOMINAL kW	HP	In A	CAPACITOR μF Vc	
DP 81 M	1x220-240 V ~	0,69	0,44	0,6	3,2	12,5	450
DP 81 T	3x230-400 V ~	0,66	0,44	0,6	2,6-1,5	-	-

MODEL	ELECTRICAL DATA						
	VOLTAGE 50 Hz	P1 MAX kW	P2 NOMINAL kW	HP	In A	CAPACITOR μF Vc	
DP 100 M	1x220-240 V ~	0,79	0,75	1	3,8	16	450
DP 100 T	3x230-400 V ~	0,74	0,75	1	2,6-1,5	-	-

Liquid temperature range: from 0 °C to +35°C

Maximum ambient temperature: +40°C

DP 151 - 251



HYDRAULIC DATA (n \approx 2800 1/min)											
PUMP TYPE	EJECTOR TYPE	SUCTION DEPTH	Delivery pressure in bar								
			3	3,5	4	4,5	5	5,5	6	6,5	7
Flow table in l/h											
DP 151	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	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	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNM	DNE	EJECTOR						PACKING DIMENSIONS			VOL. m ³	WEIGHT Kg
													A	H	H1	x	y	z	L/A	L/B	H		
DP 151	388	210	50	197	145	11	255	53	108	1 1/4" G	1" G	1" G	97	295	143	1" G	1" G	1 1/4" G	427	246	307	0,3	28,5
DP 251 M	462	210	50	197	145	11	255	53	108	1 1/4" G	1" G	1" G	97	295	143	1" G	1" G	1 1/4" G	522	246	307	0,4	32,5
DP 251 T	388	210	50	197	145	11	255	53	108	1 1/4" G	1" G	1" G	97	295	143	1" G	1" G	1 1/4" G	427	246	307	0,3	27,9

MODEL	ELECTRICAL DATA						
	VOLTAGE 50 Hz	P1 MAX kW	P2 NOMINAL kW	HP	In A	CAPACITOR μ F Vc	
DP 151 M	1x220-240 V ~	1,56	1,1	1,5	7	31,5	450
DP 151 T	3x230-400 V ~	1,45	1,1	1,5	4,7-2,7	-	-

MODEL	ELECTRICAL DATA						
	VOLTAGE 50 Hz	P1 MAX kW	P2 NOMINAL kW	HP	In A	CAPACITOR μ F Vc	
DP 251 M	1x220-240 V ~	1,84	1,85	2,5	8,3	40	450
DP 251 T	3x230-400 V ~	1,78	1,85	2,5	5,6-3,2	-	-