

## OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304



Open impeller centrifugal electric pumps in AISI 304 stainless steel.

### APPLICATIONS

- Washing vegetables, meat, fish, molluscs
- Industrial washing plants at cycle end
- Washing and surface finishing of metal pieces, boxes, washing bottles, vases, glass containers, crates, baskets
- Dishwashers, glasswashers, cupwashers for communities
- Painting booths
- Moving, evacuation, transfer of liquids

### TECHNICAL DETAILS

- Strong construction
- Small dimensions
- Silent

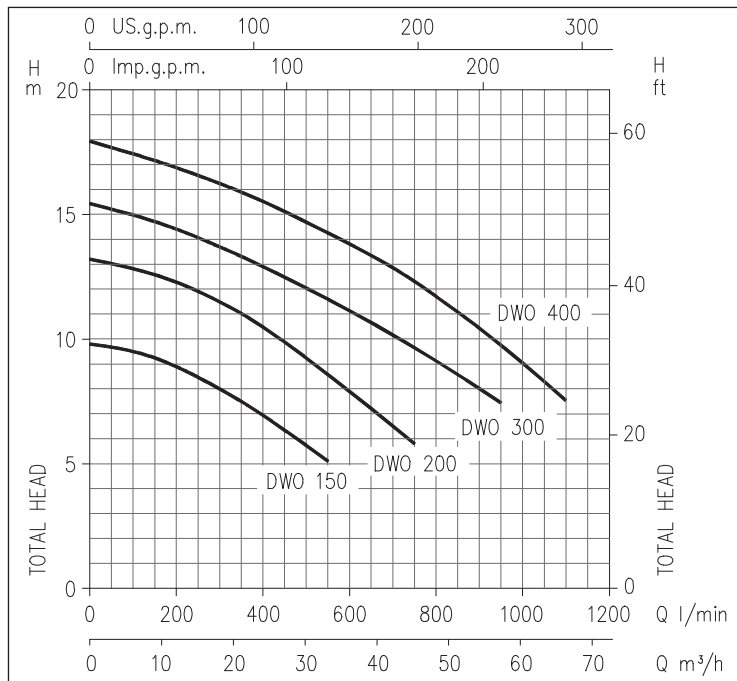
### TECHNICAL DATA

- Maximum working pressure: 8 bar
- Maximum temperature of the liquid: 90°C
- Max. solids size for passage: 19 mm
- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- IP55 Protection rating
- 230V ± 10%, 50Hz single phase voltage  
230/400V ±10% 50Hz three phase voltage
- Permanent capacitor inserted and thermo-amperometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version
- G1½ suction connection for DWO 300-400, G2 for the rest of the range
- G2 discharge connection

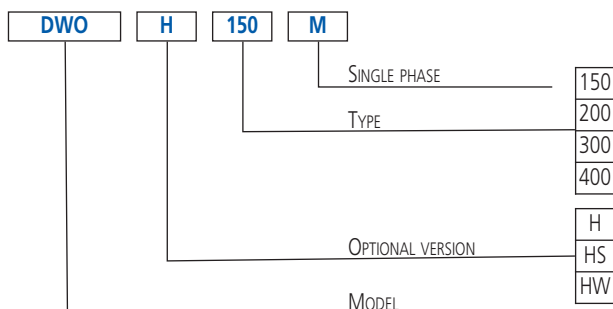
### MATERIALS

- Pump body, seal housing disc, impeller and shaft in AISI 304
- Support and motor casing in aluminium
- Mechanical sealing in:
  - Ceramic/Carbon/NBR (standard)
  - Ceramic/Carbon/FPM (H version )
  - SiC/SiC/FPM (HS version)
  - Tungsten carbide/Tungsten carbide/FPM (HW version)

### PERFORMANCE CURVES (according to ISO 9906 Attachment A)



### IDENTIFICATION CODE



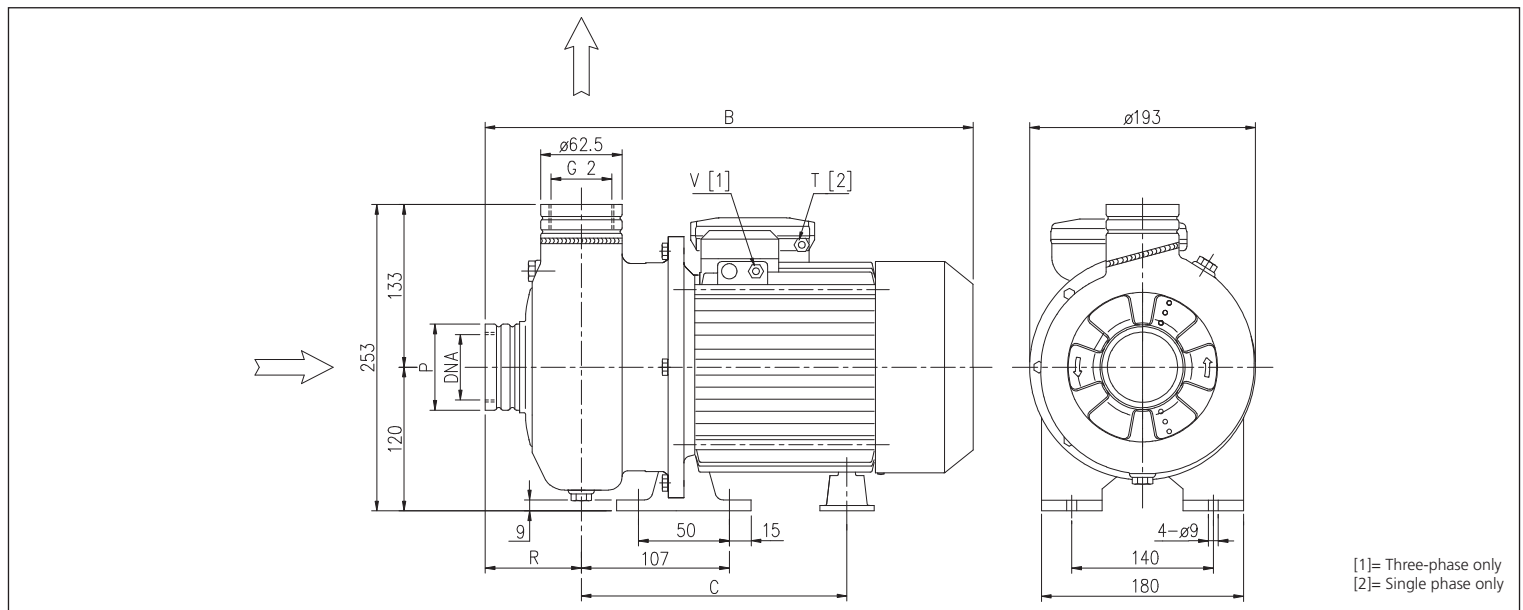
## OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

### PERFORMANCE TABLE

230V single phase	Model 230/400V three-phase	P <sub>2</sub>		Q=Flow rate								
		[HP]	[kW]	l/min m <sup>3</sup> /h	100	200	300	400	550	750	950	1100
				H=Head [m]								
DWO 150 M	DWO 150	1,5	1,1	9,5	8,9	7,9	6,9	5,1	-	-	-	-
DWO 200 M	DWO 200	2	1,5	12,7	12,3	11,5	10,5	8,6	5,8	-	-	-
-	DWO 300	3	2,2	15,0	14,5	13,8	12,9	11,7	9,7	7,5	-	-
-	DWO 400	4	3	17,5	16,9	16,3	15,6	14,3	12,4	9,8	7,6	-

### DIMENSIONS

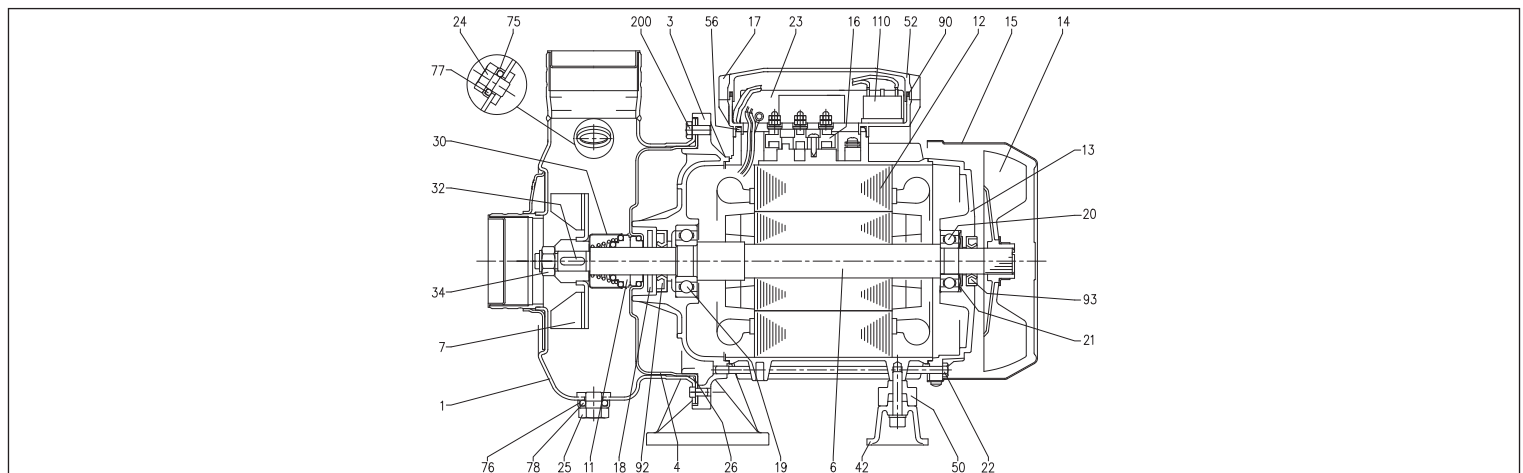


### DIMENSIONS TABLE

Model	Dimensions [mm]							Weight [kg]	
	B	C	R	Ø P	V	T	Ø DNA	[2]	[1]
DWO 150	364	198,5	74	62,5	PG11	PG13,5	G2	13,6	12,6
DWO 200	364	198,5	74	62,5	PG11	PG13,5	G2	15,7	14,4
DWO 300	390	215,5	78	80	PG13,5	-	G2½	-	16,9
DWO 400	415	240,5	78	80	PG13,5	-	G2½	-	20,0

[1]= Three-phase only  
[2]= Single phase only

### SECTIONAL VIEW



## OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS

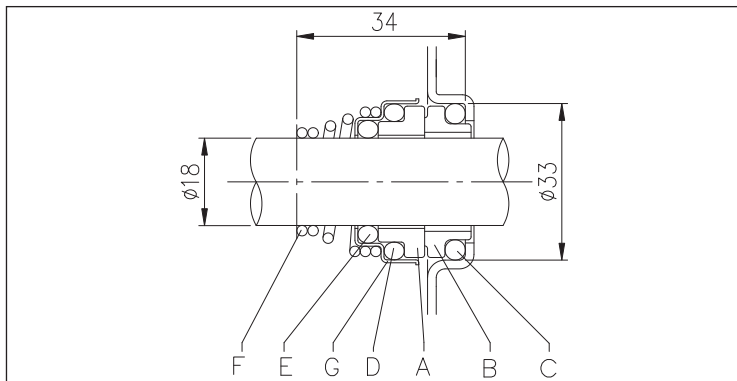
in AISI 304

### MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
1	Pump body	EN 1.4301 (AISI 304)	25	Drain plug	AISI 303
3	Motor support	Aluminium	26	O-Ring	NBR
4	Seal housing disc	EN 1.4301 (AISI 304)	30	Spray protector washer	EN 1.4301 (AISI 304)
6	Shaft	EN 1.4301 (AISI 304) Part in contact with the liquid	32	Key	EN 1.4301 (AISI 304)
7	Impeller	EN 1.4301 (AISI 304)	34	Impeller nut	EN 1.4301 (AISI 304)
11	Mechanical seal	Carbon/Ceramic/NBR	42	Foot	Aluminium
12	Motor case	-	50	Foot spacer	-
13	Motor cover	Aluminium	52	Capacitor-holder box	Polypropylene
14	Fan	Polypropylene	56	Terminal box cover gasket [1]	NBR
15	Fan cover	Galvanised Fe P04	75	Washer	EN 1.4301 (AISI 304)
16	Terminal box	-	76	Washer	EN 1.4301 (AISI 304)
17	Terminal box cover [1]	Aluminium	77	O-Ring	NBR
18	Spray protector ring	NBR	78	O-Ring	NBR
19	Bearing (pump side)	-	90	Terminal box cover box gasket [2]	NBR
20	Bearing (motor side)	-	92	Sealing ring	-
21	Adjusting ring	Steel C70	93	Sealing ring	-
22	Tie-rod	Galvanised Fe 42	110	Motorprotector [2]	-
23	Capacitor [2]	-	200	Screw (pump body)	A2 UNI7323 stainless steel
24	Filler cap	AISI 303			

[1]= Three-phase only  
[2]= Single phase only

### MECHANICAL SEAL standard



### MATERIALS TABLE

Ref.	Name	Material
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

### SPECIAL MECHANICAL SEALS (on request)

Name	H version	Material HS version	HW version
Fixed Part	Carbon	SiC	Tungsten Carbide
Rotating Part	Ceramic	SiC	Tungsten Carbide
Elastomers	FPM	FPM	FPM
Spring	AISI 316	AISI 316	AISI 316
Structure/Frame	AISI 304	AISI 316	AISI 304

### ELECTRIC DATA TABLE

Model		P <sub>2</sub>		Single phase Capacitor		P <sub>1</sub>		Absorbed Current [A]		
230V single phase	230/400V three-phase	[HP]	[kW]	$\mu$ F	V <sub>c</sub>	Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase 230V	Three phase 400V
DWO 150 M	DWO 150	1,5	1,1	31,5	450	1,36	1,25	6,8	4,4	2,5
DWO 200 M	DWO 200	2	1,5	40	450	2,05	2,0	9,0	6,1	3,5
-	DWO 300	3	2,2	-	-	-	2,7	-	8,3	4,8
-	DWO 400	4	3	-	-	-	3,7	-	11,0	6,4