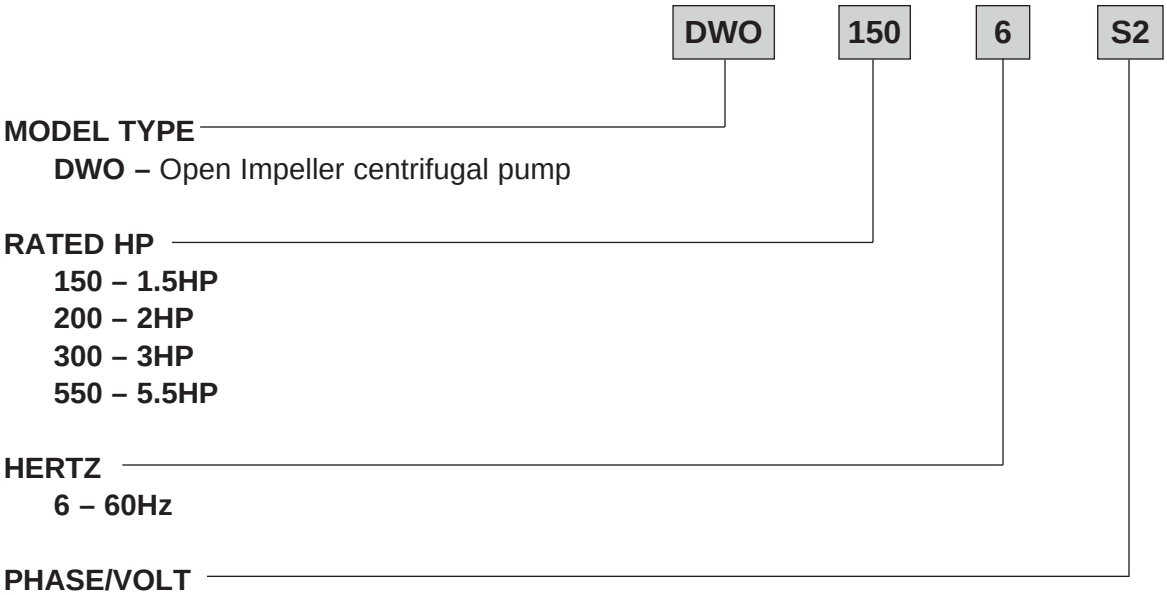
Model DWO EBARA Stainless Steel Open Impeller Centrifugal Pumps

Contents

Item No.	Specifications	Selection Chart	Performance Curve	Pump Dimensions	Sectional View	Motor Data
DWO1506	702	703	704	708	709	713
DWO2006			705			
DWO3006			706			
DWO5506			707			

Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Model Designation



MODEL TYPE

DWO – Open Impeller centrifugal pump

RATED HP

150 – 1.5HP
200 – 2HP
300 – 3HP
550 – 5.5HP

HERTZ

6 – 60Hz

PHASE/VOLT

S2 – single phase, 230 Volt
T2– three phase, 230/460 Volt

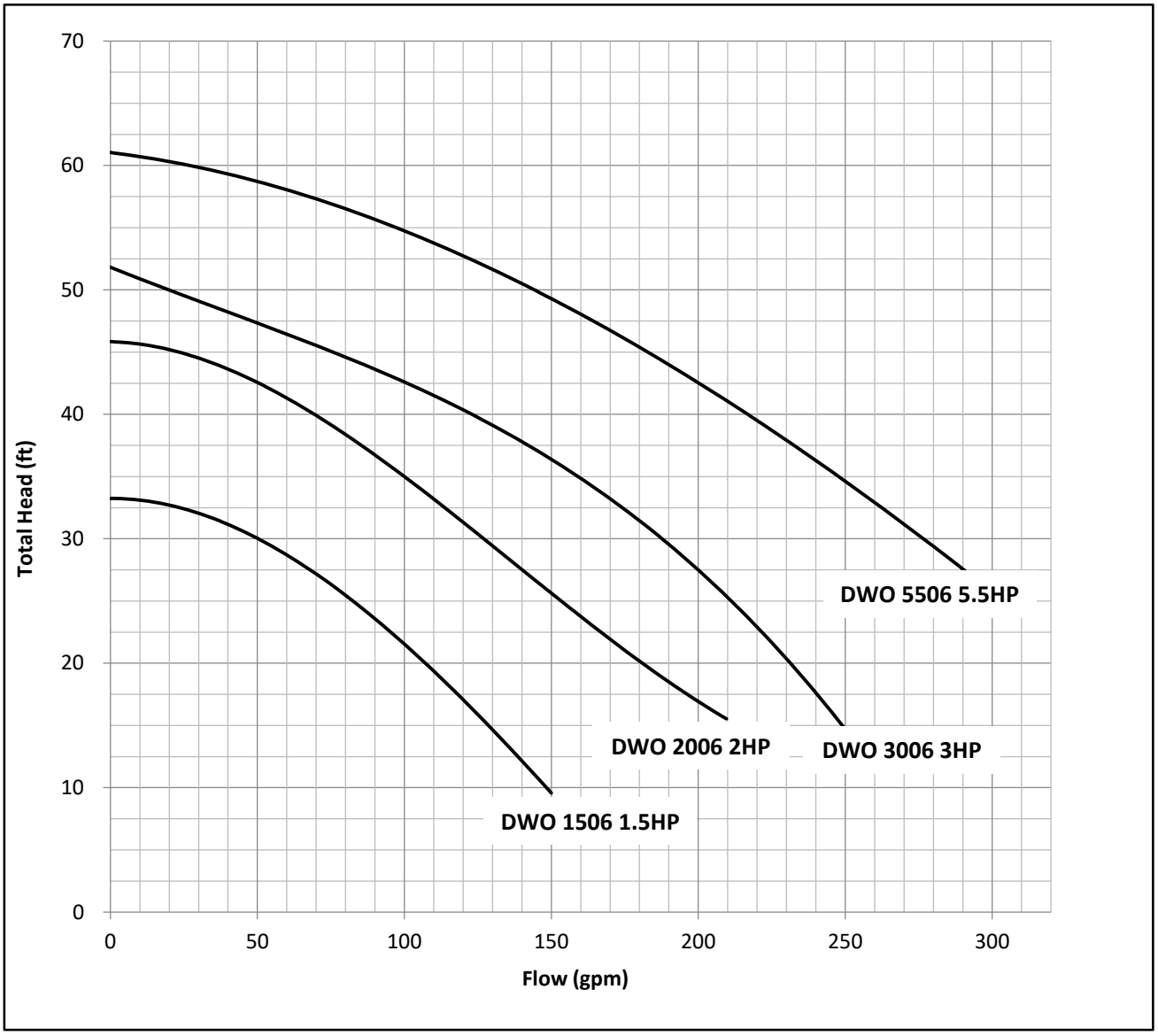
Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Specifications

	Standard	Optional
Size		
Suction	2- 2 1/2" NPT Female Thread	
Discharge	2" NPT Female Thread Suction and discharge nozzle equipped with external hose barb connection 2" nozzle – 2 7/16" O.D. 2 1/2" nozzle – 3 1/8" O.D.	
Range of HP	1.5 HP to 5.5 HP	
Range of Performance		
Capacity	25 to 290 GPM at 3450 RPM	
Head	35 to 65 feet at 3450 RPM	
Liquid handled		
Type of liquid	Clean water and semi-dirty water	
Solids	3/4" Spherical (2% by concentration)	
Temperature	23 F (-5 C) to 194 F (90 C)	
Working pressure	Maximum: 116 PSI (8 Bar)	
Materials		
Casing	AISI 304 Stainless Steel	
Impeller (Open)	AISI 304 Stainless Steel	
Shaft	AISI 304 Stainless Steel	
Bracket	Aluminum	
Shaft Seal	Carbon/Ceramic/NBR	Consult factory for optional seal types
Direction of Rotation	Clockwise when viewed from motor end	
Motor	Insulation Class F	
Type	TEFC/IP55	
Speed	60 Hz, 3450 RPM (2 poles)	
HP rating	1.5HP - 5.5HP	
Voltage		
Single Phase	230	
Three Phase	230/460V	
Motor Casing	Aluminum	
Motor Protection	Built-in overload protection (single phase) User provided (three phase)	
Bearing	Ball Bearing	

Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

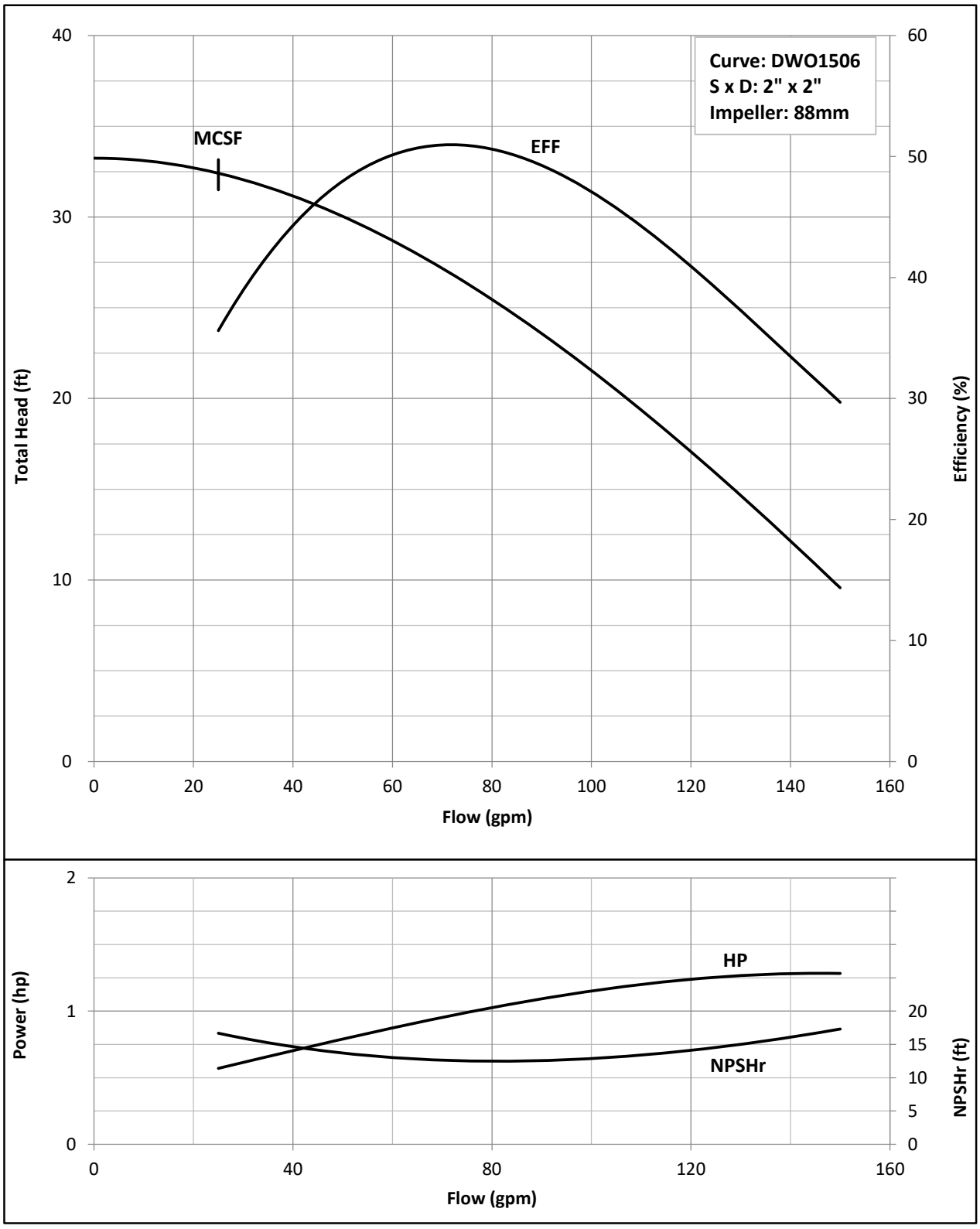
Selection Chart



Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Performance Curve

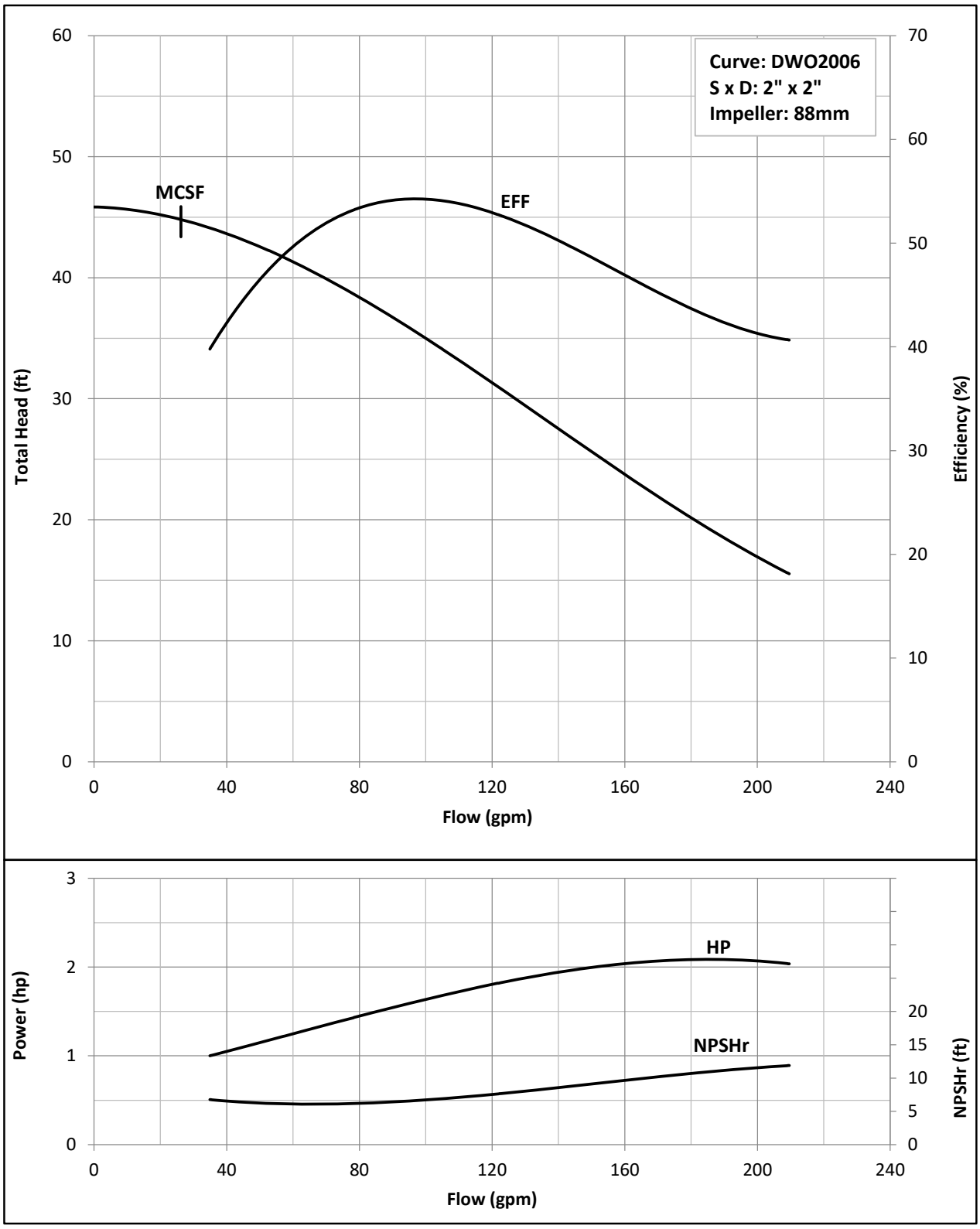
DWO 1506 1.5HP — **Nominal Speed: 3450 RPM**



Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Performance Curve

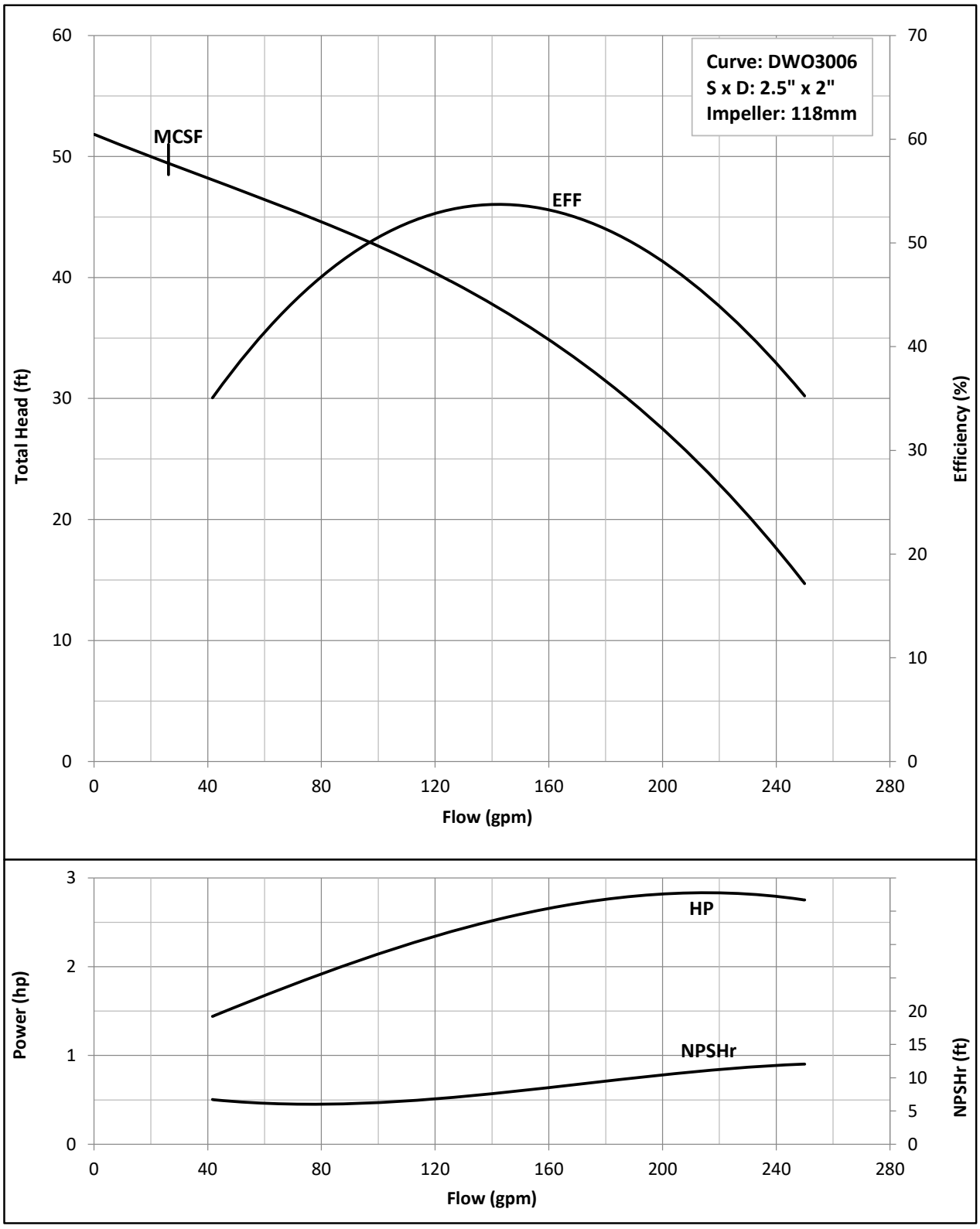
DWO 2006 2HP — **Nominal Speed: 3450 RPM**



Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Performance Curve

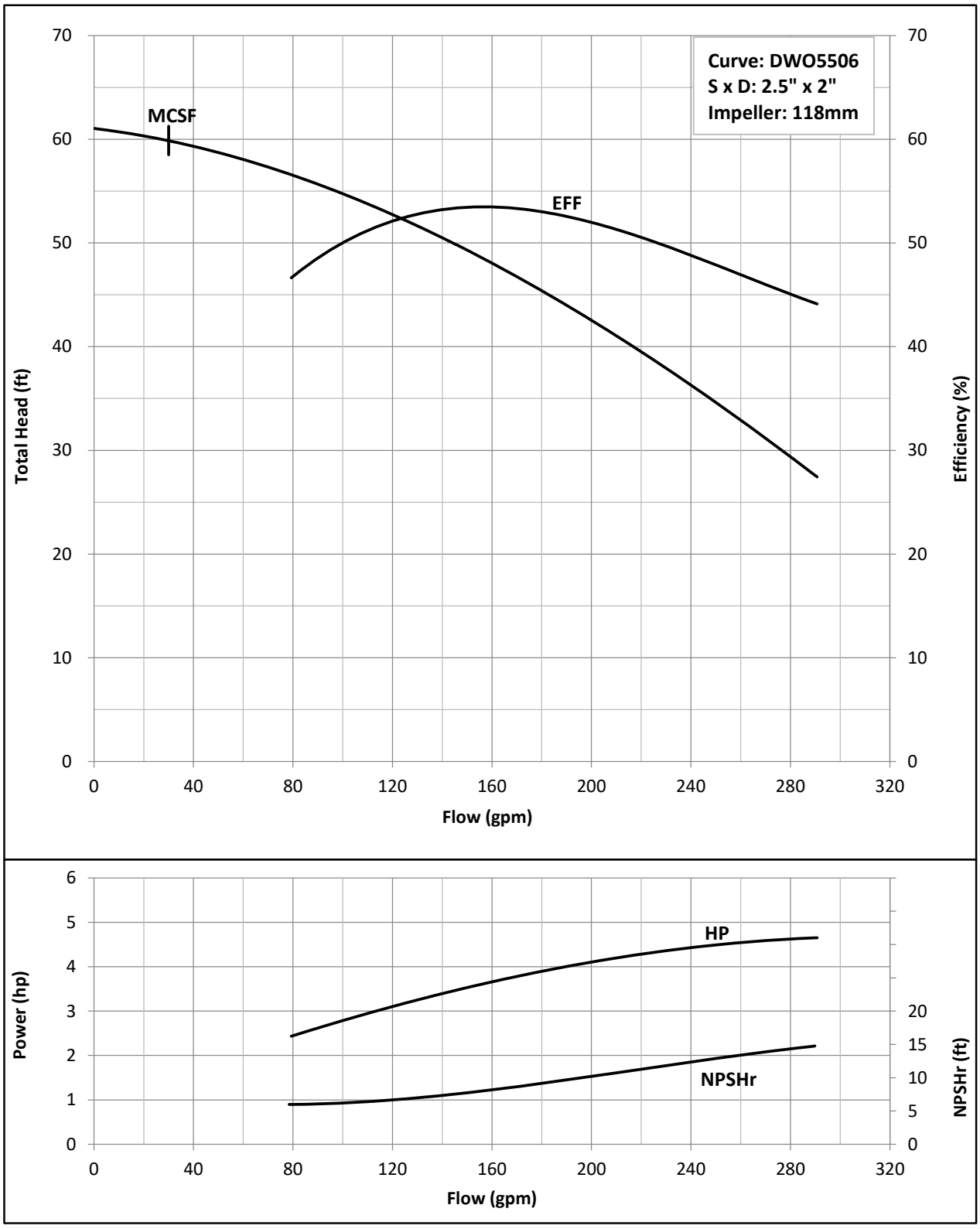
DWO 3006 3HP — **Nominal Speed: 3450 RPM**



Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

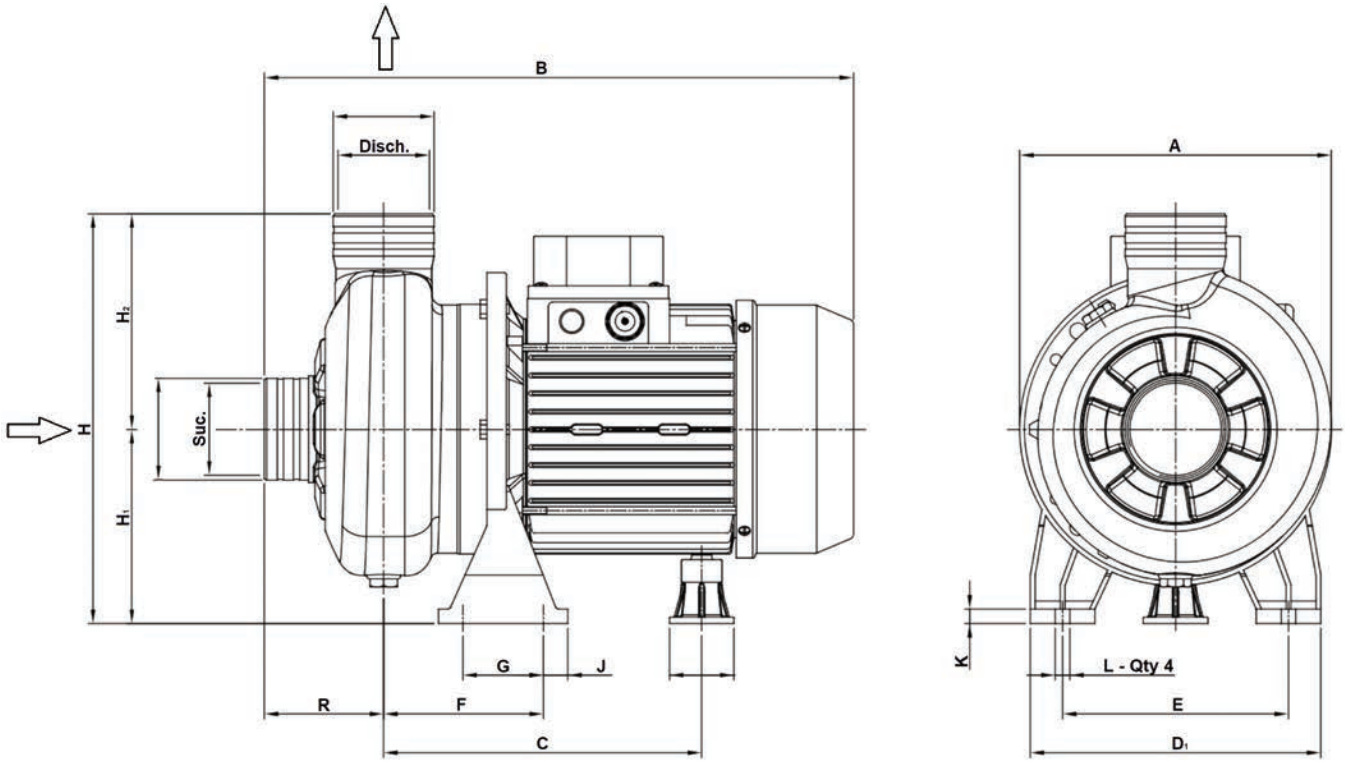
Performance Curve

DWO 5506 5.5HP — **Nominal Speed: 3450 RPM**



Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Dimensions



Dimensions: inch

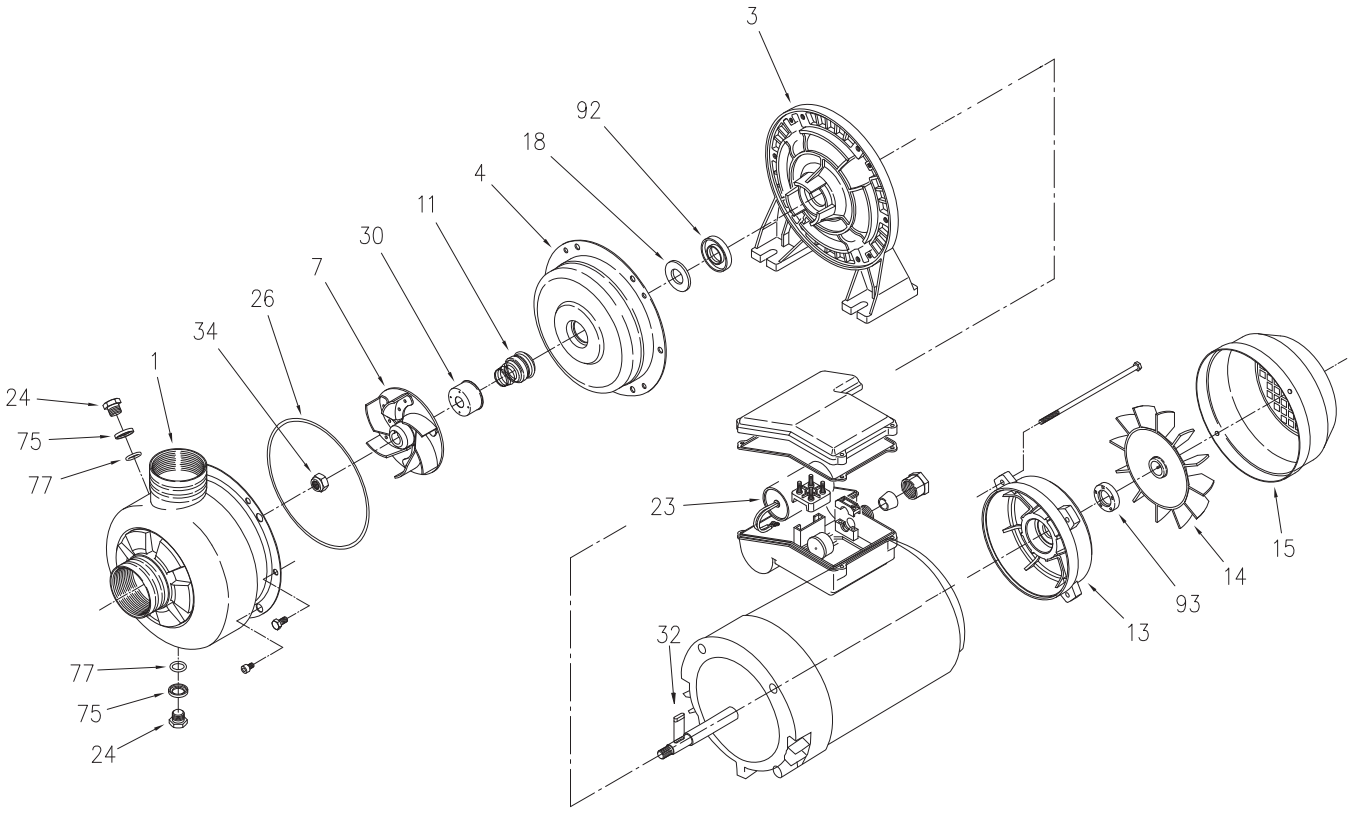
MODEL	HP	SIZE		PUMP & MOTOR														Weight Lbs 1 phase/3 phase
		Suc.	Disch.	A	B	C	D_1	E	F	G	H	H_1	H_2	J	K	L	R	
DWO1506	1.5	2" NPT	2" NPT	$7\frac{5}{8}$	$14\frac{3}{8}$	$7\frac{7}{8}$	$7\frac{1}{8}$	$5\frac{1}{2}$	$3\frac{7}{8}$	2	10	$4\frac{3}{4}$	$5\frac{1}{4}$	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$2\frac{7}{8}$	36/34
DWO2006	2	2" NPT	2" NPT	$7\frac{5}{8}$	$14\frac{3}{8}$	$7\frac{7}{8}$	$7\frac{1}{8}$	$5\frac{1}{2}$	$3\frac{7}{8}$	2	10	$4\frac{3}{4}$	$5\frac{1}{4}$	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$2\frac{7}{8}$	42/38
DWO3006	3	2.5" NPT	2" NPT	$7\frac{5}{8}$	$15\frac{3}{8}$	$8\frac{1}{2}$	$7\frac{1}{8}$	$5\frac{1}{2}$	$3\frac{7}{8}$	2	10	$4\frac{3}{4}$	$5\frac{1}{4}$	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$3\frac{1}{8}$	45
DWO5506	5.5	2.5" NPT	2" NPT	$7\frac{5}{8}$	20	$10\frac{5}{8}$	$7\frac{1}{8}$	$5\frac{1}{2}$	$3\frac{7}{8}$	2	10	$4\frac{3}{4}$	$5\frac{1}{4}$	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$3\frac{1}{8}$	72

Dimensions: mm

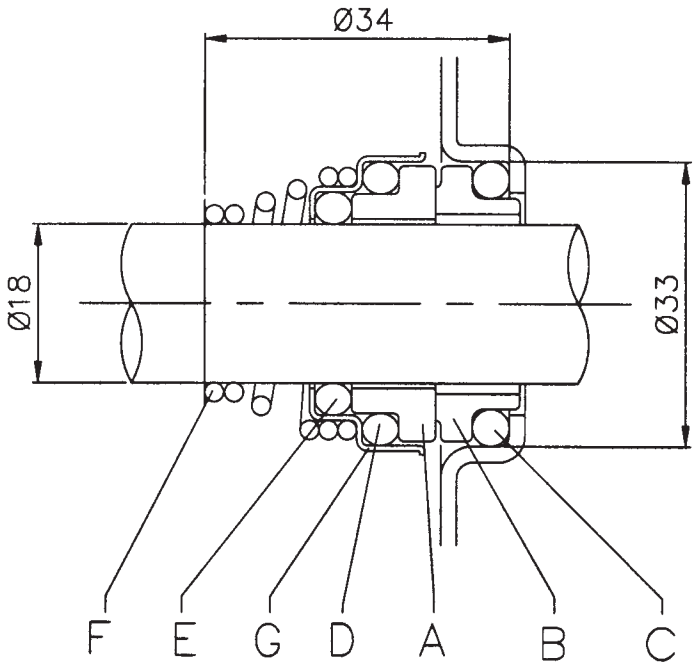
MODEL	HP	SIZE		PUMP & MOTOR														Weight kg 1 phase/3 phase
		Suc.	Disch.	A	B	C	D_1	E	F	G	H	H_1	H_2	J	K	L	R	
DWO1506	1.5	2" NPT	2" NPT	193	364	198.5	180	140	99	50	253	120	133	15	9	9	74	13.6/12.6
DWO2006	2	2" NPT	2" NPT	193	364	198.5	180	140	99	50	253	120	133	15	9	9	74	15.7/14.4
DWO3006	3	2.5" NPT	2" NPT	193	390	215.5	180	140	99	50	253	120	133	15	9	9	78	16.9
DWO5506	5.5	2.5" NPT	2" NPT	193	508	268.5	180	140	99	50	253	120	133	15	9	9	78	33

Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Exploded view



Location No.	Part Name	Material	No. for 1 Unit
1	Casing	304 Stainless Steel	1
3	Motor bracket	Aluminum	1
4	Casing cover	304 Stainless Steel	1
7	Impeller	304 Stainless Steel	1
11	Mechanical seal	Carbon/Ceramic/NBR	1
14	Fan	Polypropolene	1
15	Fan cover	Steel	1
18	Splash Ring	–	1
23	Capacitor	Single phase only	1
24	Priming plug/Drain plug	303 Stainless Steel	2
26	O-ring	NBR	2
30	Mechanical Seal Protector	304 Stainless Steel	1
32	Key	304 Stainless Steel	1
34	Impeller nut	304 Stainless Steel	1
75	Washer	304 Stainless Steel	2
77	O-ring	NBR	2
92	Lip seal (Pump side)	–	1
93	Lip seal (Fan side)	–	1

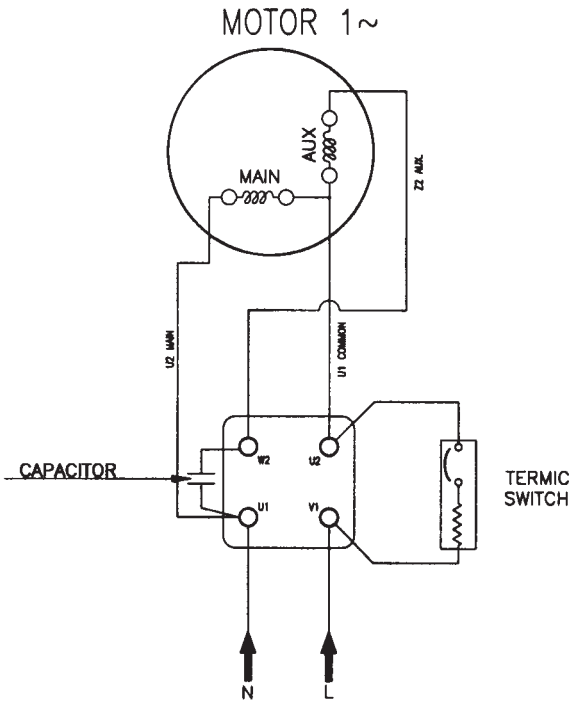


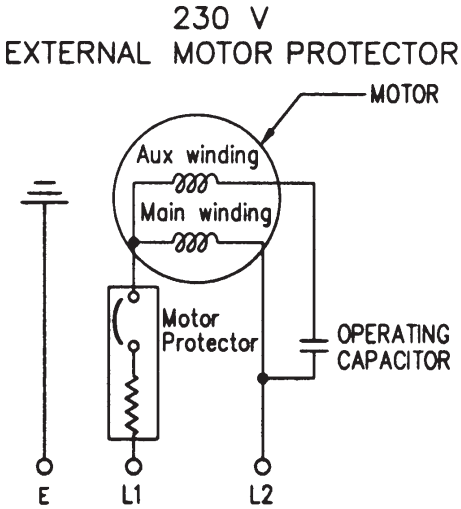
REF.	PART NAME	MATERIAL
A	Rotary Seal Ring	Ceramic
B	Stationary Seal Ring	Carbon graphite
C	O-ring	NBR
D	O-ring	NBR
E	O-ring	NBR
F	Self driving spring	AISI 316
G	Frame	AISI 304

Model DWO **EBARA Stainless Steel Open Impeller Centrifugal Pumps**

Wiring Diagram

Single Phase



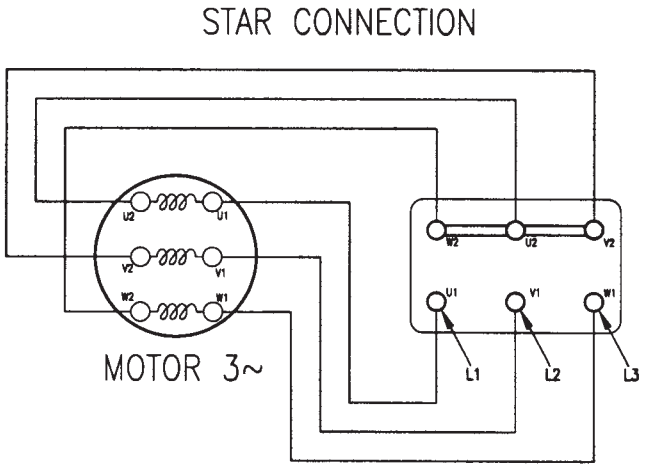


Wiring Diagram

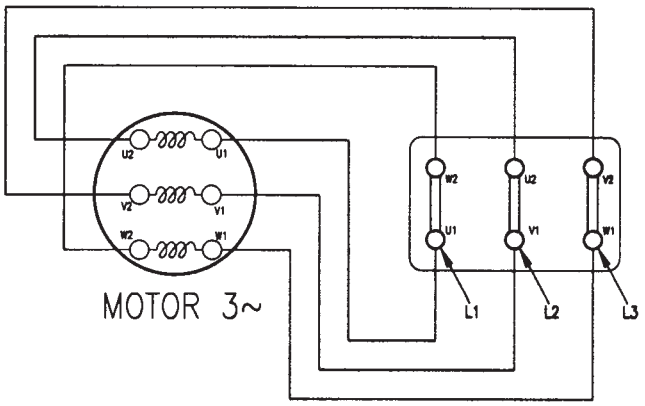
Three Phase

1.5HP, 2HP, and 5.5HP motors:

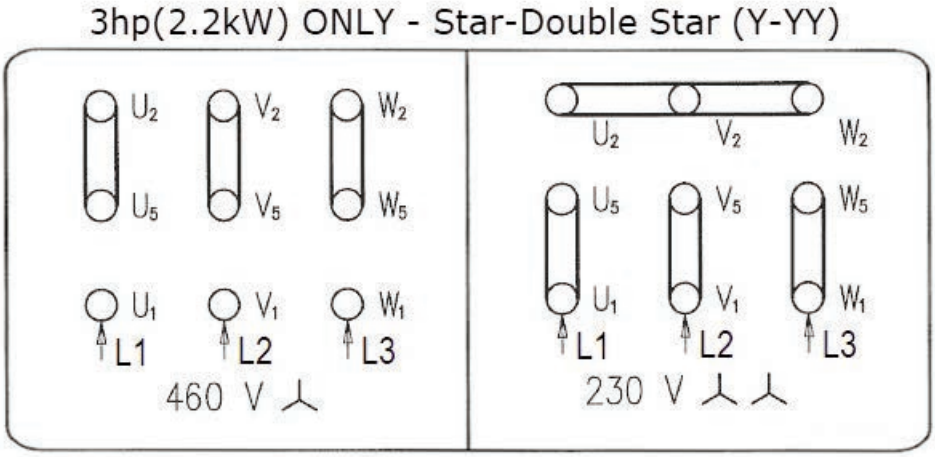
460V



230V



3HP motor only:



Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Electrical Data

Hz	Poles	Phase	Output (HP)	Voltage (V)	Applicable Model
60	2	Single	1.5 to 2	230	DWO

Name-Plate Rating	MOTOR MODEL		1506	2006			
	Output	HP	1.5	2			
		kW	1.1	1.5			
	Phase		1	1			
	Poles		2	2			
	Volts		230	230			
	Amperes		7.2	9.8			
	Speed		3450	3450			
	Insulation Class		F	F			
Number Starts Per Hour			20	20			
Voltage Tolerance %			±6%				

Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Electrical Data

Hz	Poles	Phase	Output (HP)	Voltage (V)	Applicable Model
60	2	Three	1.5 to 5.5	230	DWO

Name-Plate Rating	MOTOR MODEL		1506	2006	3006	5506	
	Output	HP	1.5	2	3	5.5	
		kW	1.1	1.5	2.2	4	
	Phase		3	3	3	3	
	Poles		2	2	2	2	
	Volts		230	230	230	230	
	Amperes		3.9	5.4	8.0	13.5	
	Speed		3450	3450	3450	3450	
	Insulation Class		F	F	F	F	
Number Starts Per Hour			20	20	20	20	
Voltage Tolerance		%	±6%				

Model DWO — EBARA Stainless Steel Open Impeller Centrifugal Pumps

Electrical Data

Hz	Poles	Phase	Output (HP)	Voltage (V)	Applicable Model
60	2	Three	1.5 to 5.5	460	DWO

Name-Plate Rating	MOTOR MODEL		1506	2006	3006	5506	
	Output	HP	1.5	2	3	5.5	
		kW	1.1	1.5	2.2	4	
	Phase		3	3	3	3	
	Poles		2	2	2	2	
	Volts		460	460	460	460	
	Amperes		2.4	3.2	3.9	7.8	
	Speed		3450	3450	3450	3450	
	Insulation Class		F	F	F	F	
Number Starts Per Hour			20	20	20	20	
Voltage Tolerance		%	±6%				