

Model No.	Specifications	Selection Chart	Performance Curve	Dimensions		Sectional View
				Pump	Motor Data	
50DWU6.4S	203	204	211	215	217	216
50DWU6.75S						
50DWU6.4S2						
50DWU6.75S2						
50DWU61.1S2			212			
50DWU61.5S2						
50DWU6.4			211			
50DWU6.75						
50DWU61.1			212			
50DWU61.5						
50DWFU6.4S	203	204	211	215	217	216
50DWFU6.75S						
50DWFU6.4S2						
50DWFU6.75S2						
50DWFU61.1S2			212			
50DWFU61.5S2						
50DWFU6.4			211			
50DWFU6.75						
50DWFU61.1			212			
50DWFU61.5						
50DWXU6.4S	207	208	213	215	217	216
50DWXU6.75S						
50DWXU6.4S2						
50DWXU6.75S2						
50DWXU61.1S2			214			
50DWXU61.5S2						
50DWXU6.4			213			
50DWXU6.75						
50DWXU61.1			214			
50DWXU61.5						
50DWXFU6.4S	207	208	213	215	217	216
50DWXFU6.75S						
50DWXFU6.4S2						
50DWXFU6.75S2						
50DWXFU61.1S2			214			
50DWXFU61.5S2						
50DWXFU6.4			213			
50DWXFU6.75						
50DWXFU61.1			214			
50DWXFU61.5						

Dominator Contents

EBARA Submersible Stainless Steel Sewage Pumps

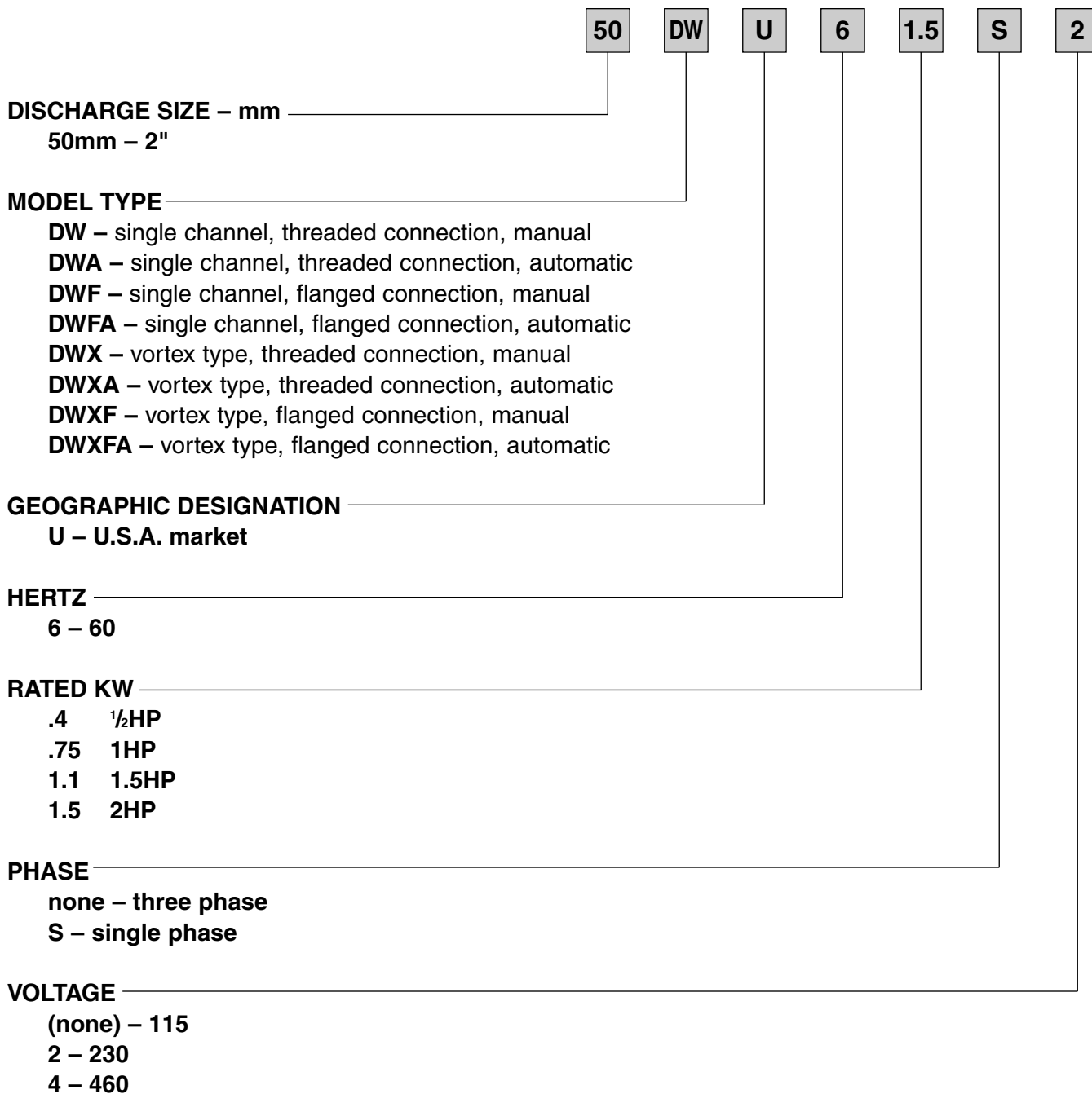
Model No.	Specifications	Selection Chart	Performance Curve	Dimensions		Sectional View
				Pump	Motor Data	
50DWAU6.4S	205	206	211	215	217	216
50DWAU6.75S						
50DWAU6.4S2						
50DWAU6.75S2						
50DWAU61.1S2			212			
50DWFAU6.4S	205	206	211	215	217	216
50DWFAU6.75S						
50DWFAU6.4S2						
50DWFAU6.75S2						
50DWFAU61.1S2			212			
50DWXAU6.4S	209	210	213	215	217	216
50DWXAU6.75S						
50DWXAU6.4S2						
50DWXAU6.75S2						
50DWXAU61.1S2			214			
50DWXFAU6.4S	209	210	213	215	217	216
50DWXFAU6.75S						
50DWXFAU6.4S2						
50DWXFAU6.75S2						
50DWXFAU61.1S2			214			



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Model Designation



***Note:** The Model DWU, DWXU is listed by the Canadian Standards Association (CSA) as certified.



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Specifications

Model DWU

DWFU

Manual Operation Pumps

	Standard	Optional
Discharge Size	2 inch	
Range of HP	1/2 HP to 2 HP	
Range of Performance	Capacity 8 to 210 GPM Head 8 to 65 feet	
Limitation Maximum Water Temperature	104°F (40°C)	
Synchronous Speed	3600 RPM	
Materials Casing Impeller Shaft Motor Frame Fastener	304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel	
Mechanical Seal Material – Upper Side Material – Lower Side Impeller Type Bearing Motor Single Phase Three Phase Motor Protection Accessories	Double Mechanical Seal Carbon/Ceramic Silicon Carbide/Silicon Carbide Single Channel Sealed Ball Bearing Air-filled, Insulation Class F 115 V (1/2, 1HP), 230V 230V, 460V Built-in Overload Protection (Single phase models) Submersible Cable 20 ft.	QDC System
<p>*Note: 2HP units have a cast iron intermediate bracket. The Model DWU, DWXU is listed by the Canadian Standards Association (CSA) as certified.</p>		



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

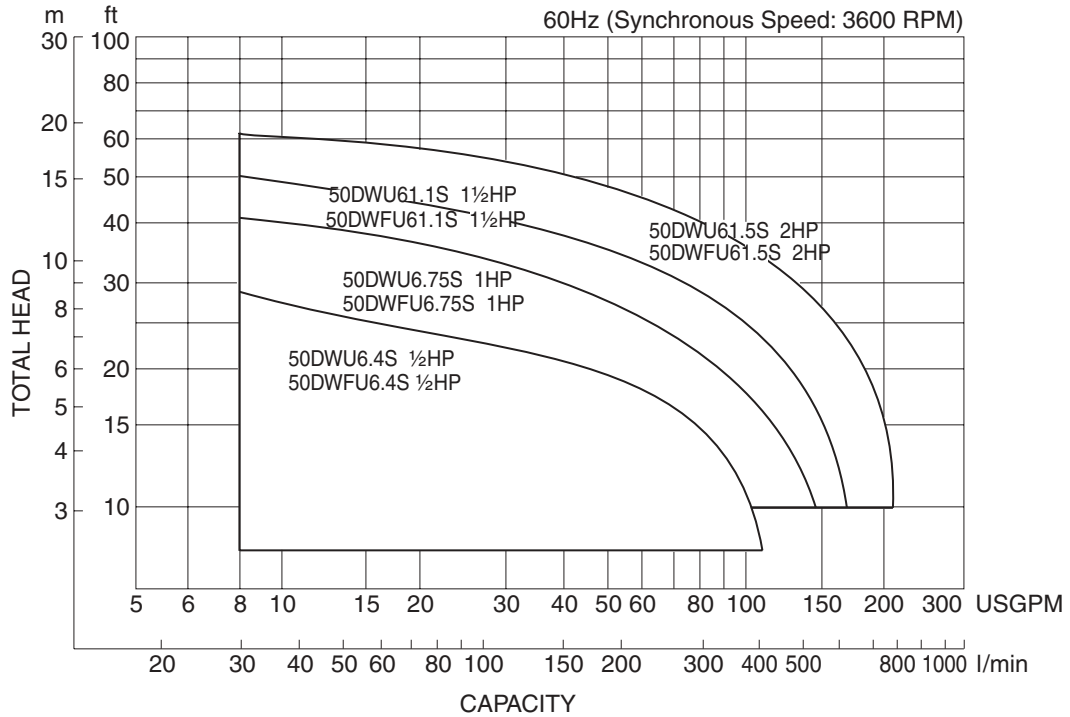
Selection Chart

Model DWU

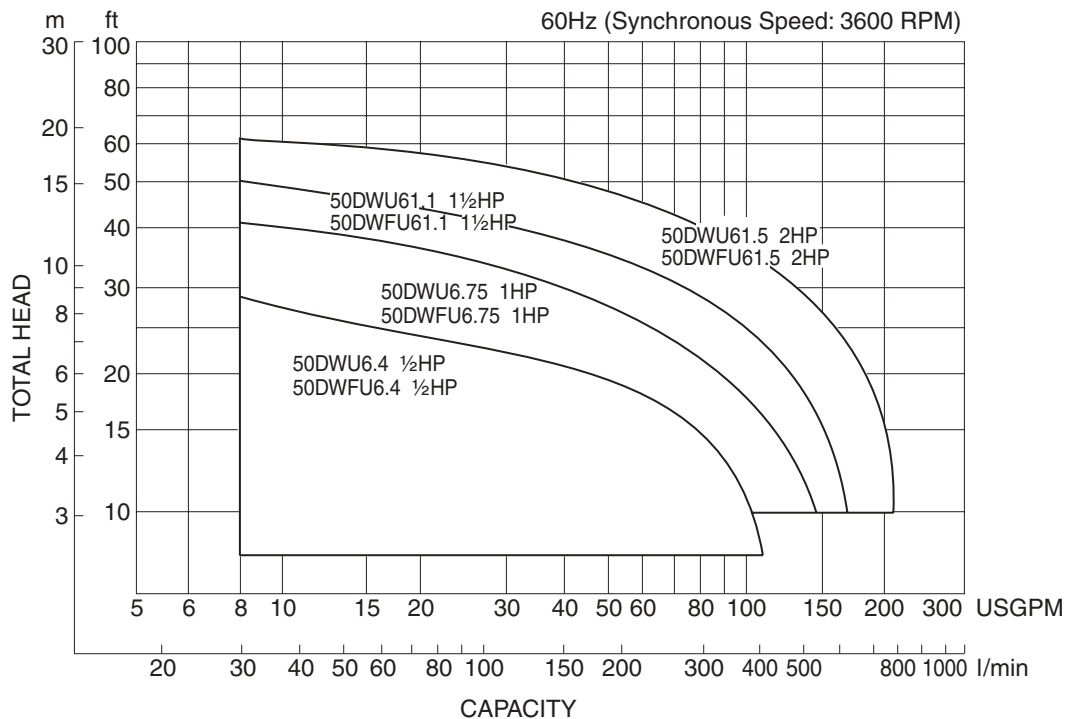
DWFU

Manual Operation Pumps

Single Phase



Three Phase



Dominator EBARA Submersible Stainless Steel Sewage Pumps

Specifications

**Model DWAU
DWFAU**

Automatic Operation Pumps

	Standard	Optional
Discharge Size	2 inch	
Range of HP	1/2 HP to 1 1/2 HP	
Range of Performance	Capacity 8 to 180 GPM Head 8 to 55 feet	
Limitation Maximum Water Temperature	104°F (40°C)	
Synchronous Speed	3600 RPM	
Materials Casing Impeller Shaft Motor Frame Fastener	304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel	
Mechanical Seal Material – Upper Side Material – Lower Side Impeller Type Bearing Motor Single Phase Motor Protection Accessories	Double Mechanical Seal Carbon/Ceramic Silicon Carbide/Silicon Carbide Single Channel Sealed Ball Bearing Air-filled, Insulation Class F 115 V (1/2, 1HP), 230V Built-in Overload Protection (Single phase models) Submersible Cable 20 ft.	QDC System
*Note: The Model DWU, DWXU is listed by the Canadian Standards Association as certified.		



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

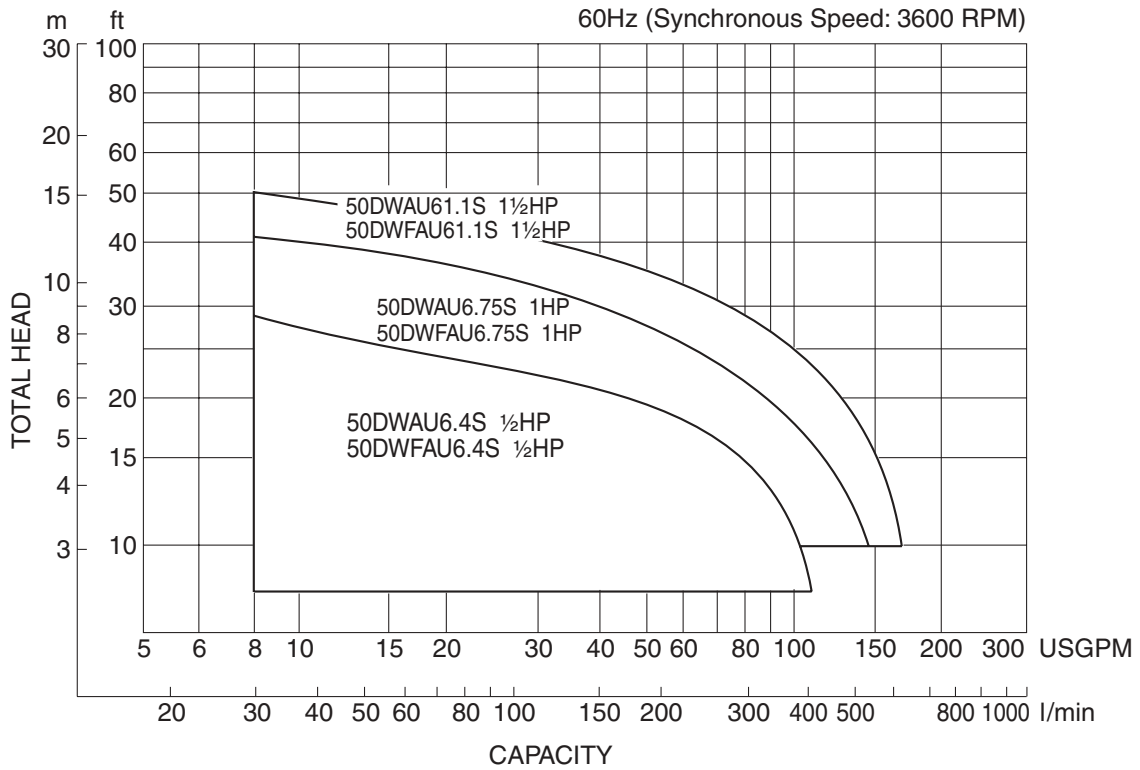
Selection Chart

Model DWAU

DWFAU

Automatic Operation Pumps

Single Phase



Dominator EBARA Submersible Stainless Steel Sewage Pumps

Specifications

Model DWXU

DWXFU

Manual Operation Pumps

	Standard	Optional
Discharge Size	2 inch	
Range of HP	1/2 HP to 2 HP	
Range of Performance	Capacity 8 to 185 GPM Head 8 to 45 feet	
Limitation Maximum Water Temperature	104°F (40°C)	
Synchronous Speed	3600 RPM	
Materials Casing Impeller Shaft Motor Frame Fastener	304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel	
Mechanical Seal Material – Upper Side Material – Lower Side Impeller Type Bearing Motor Single Phase Three Phase Motor Protection Accessories	Double Mechanical Seal Carbon/Ceramic Silicon Carbide/Silicon Carbide Vortex Sealed Ball Bearing Air-filled, Insulation Class F 115 V (1/2 HP, 1HP), 230V 230V, 460V Built-in Overload Protection (Single phase models) Submersible Cable 20 ft.	QDC System
<p>*Note: 2HP units have a cast iron intermediate bracket. The Model DWU, DWXU is listed by the Canadian Standards Association as certified.</p>		



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

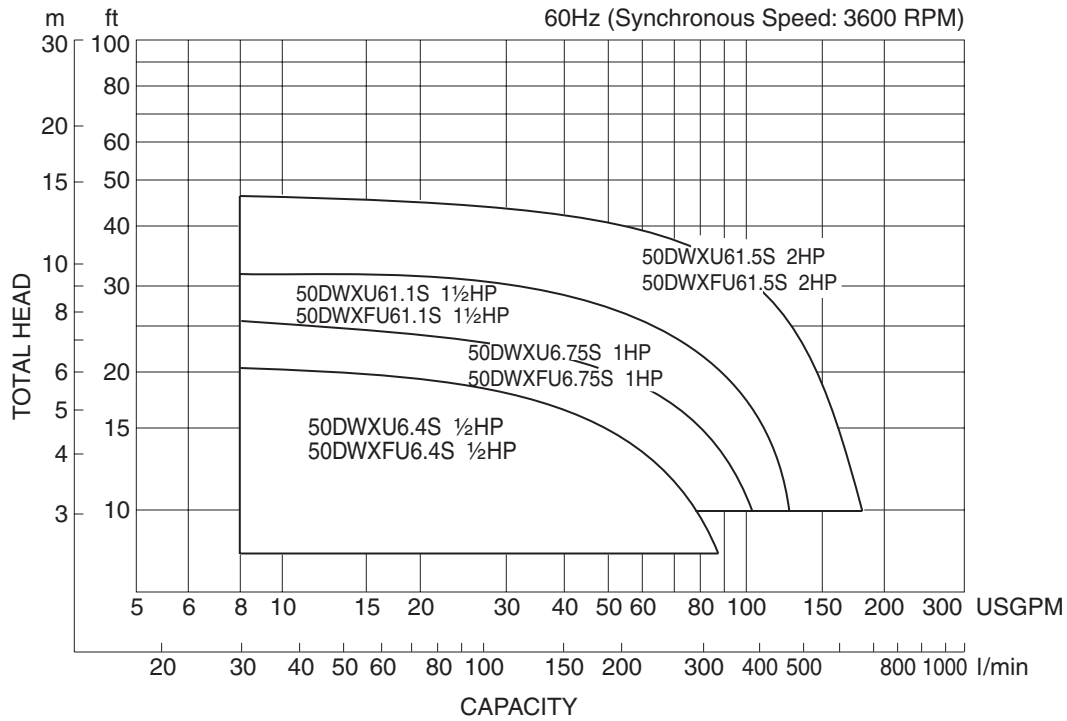
Selection Chart

Model DWXU

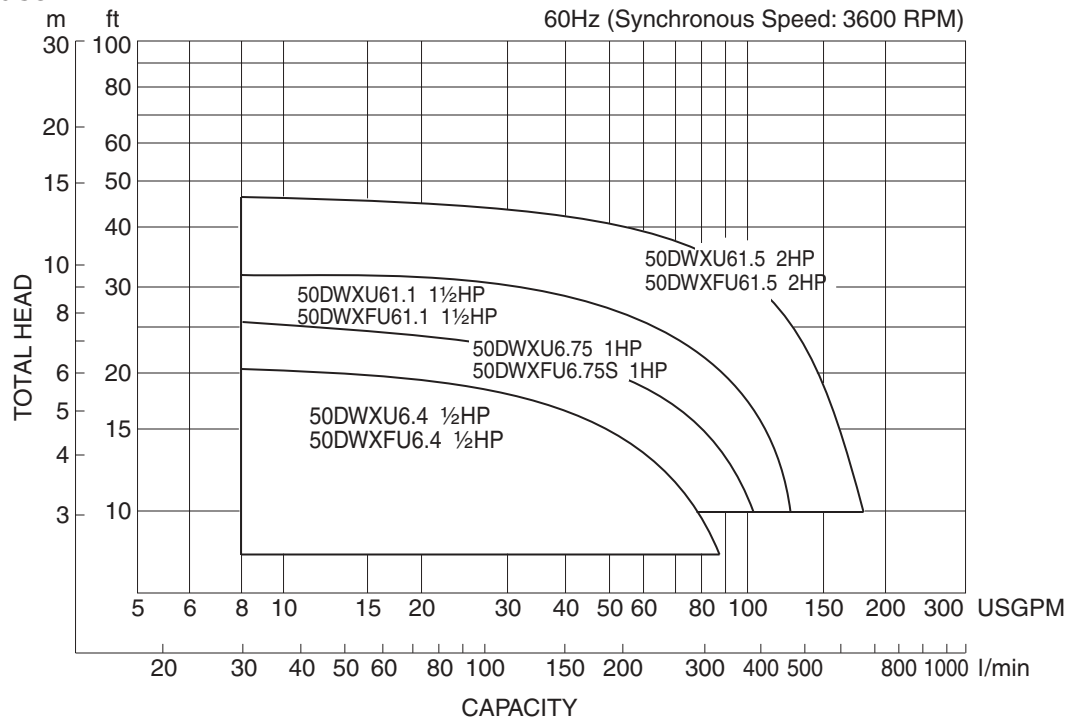
DWXFU

Manual Operation Pumps

Single Phase



Three Phase



Dominator EBARA Submersible Stainless Steel Sewage Pumps

Specifications

**Model DWXAU
DWXFAU**

Automatic Operation Pumps

	Standard	Optional
Discharge Size	2 inch	
Range of HP	1/2 HP to 1 1/2 HP	
Range of Performance	Capacity 8 to 140 GPM Head 8 to 32 feet	
Limitation Maximum Water Temperature	104°F (40°C)	
Synchronous Speed	3600 RPM	
Materials Casing Impeller Shaft Motor Frame Fastener	304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel 304L Stainless Steel	
Mechanical Seal Material – Upper Side Material – Lower Side Impeller Type Bearing Motor Single Phase Motor Protection Accessories	Double Mechanical Seal Carbon/Ceramic Silicon Carbide/Silicon Carbide Vortex Sealed Ball Bearing Air-filled, Insulation Class F 115 V (1/2, 1HP), 230V Built-in Overload Protection (Single phase models) Submersible Cable 20 ft.	QDC System
*Note: The Model DWU, DWXU is listed by the Canadian Standards Association as certified.		



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

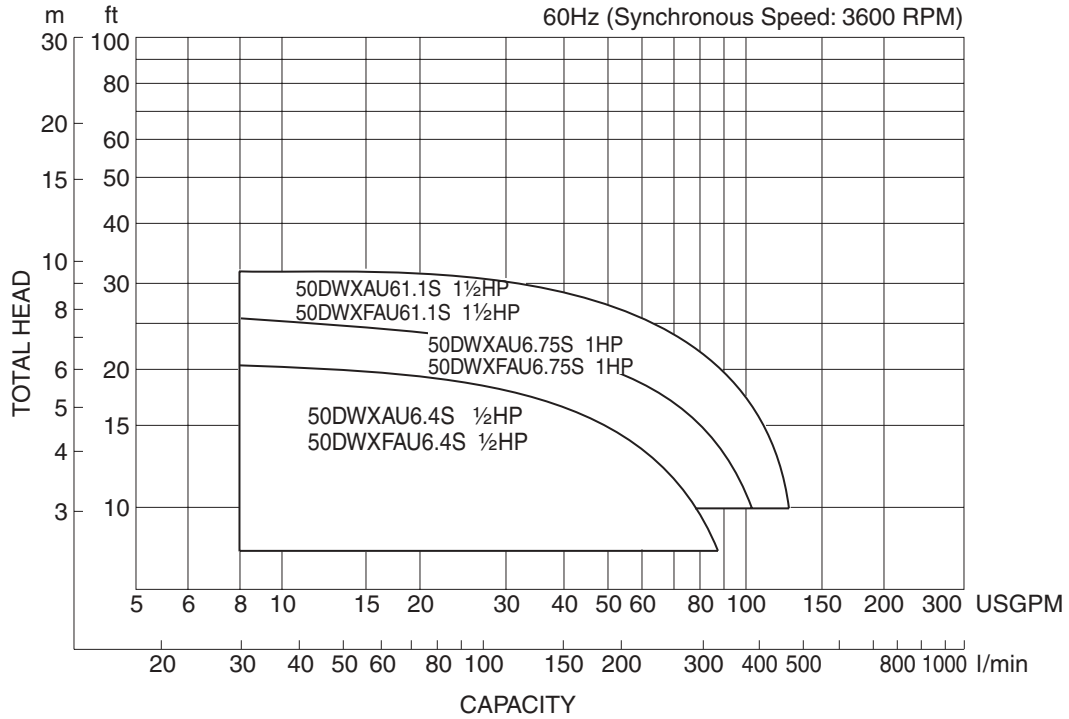
Selection Chart

Model DWXAU

DWXFAU

Automatic Operation Pumps

Single Phase



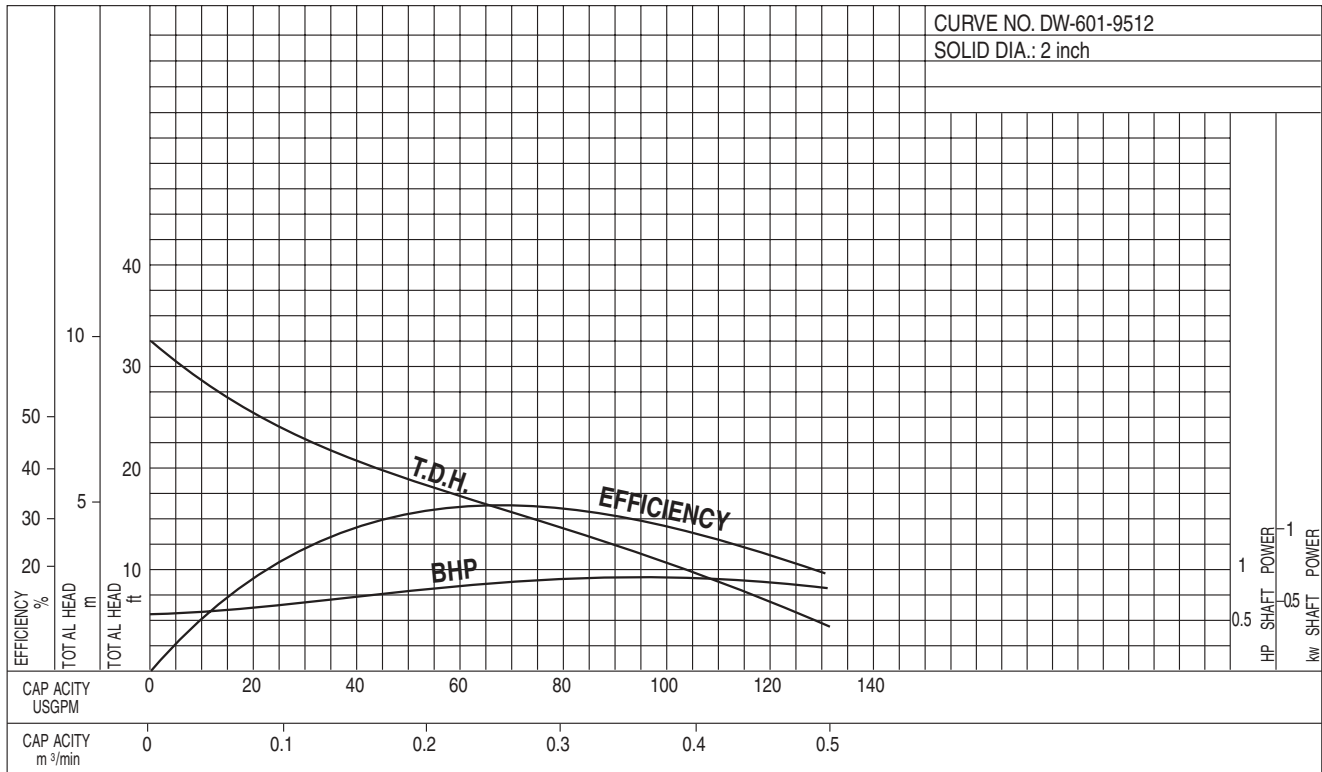
Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Performance Curves

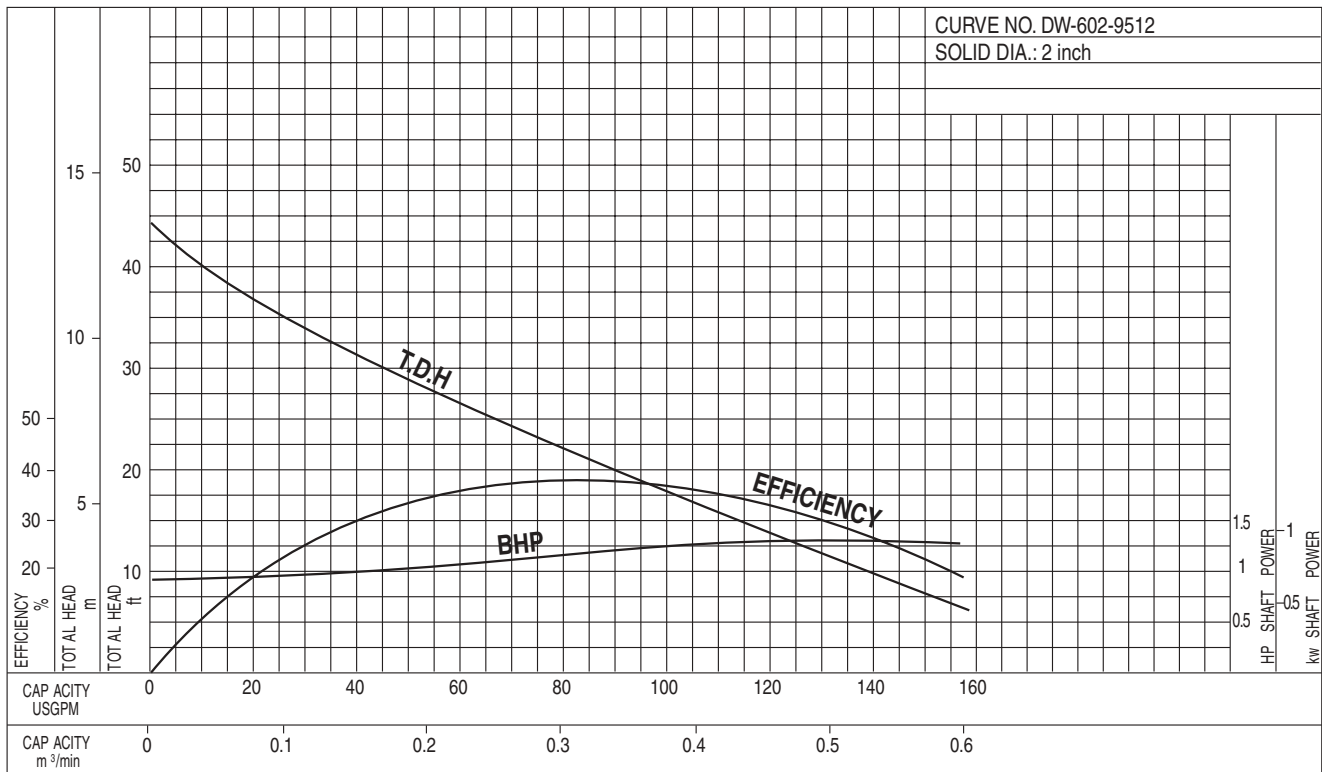
50DW6.4 (1/2HP) Synchronous Speed: 3600 RPM

2 inch Discharge



50DW6.75 (1HP) Synchronous Speed: 3600 RPM

2 inch Discharge



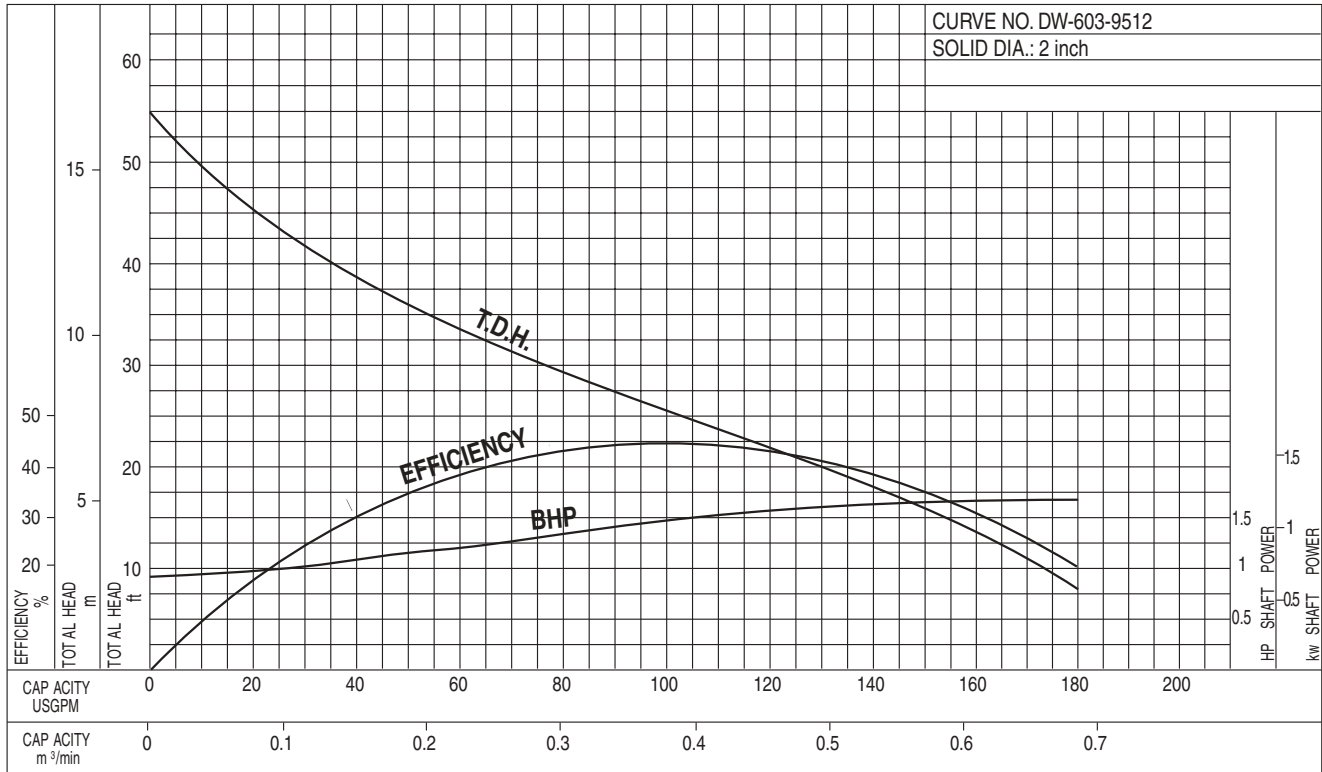
Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Performance Curves

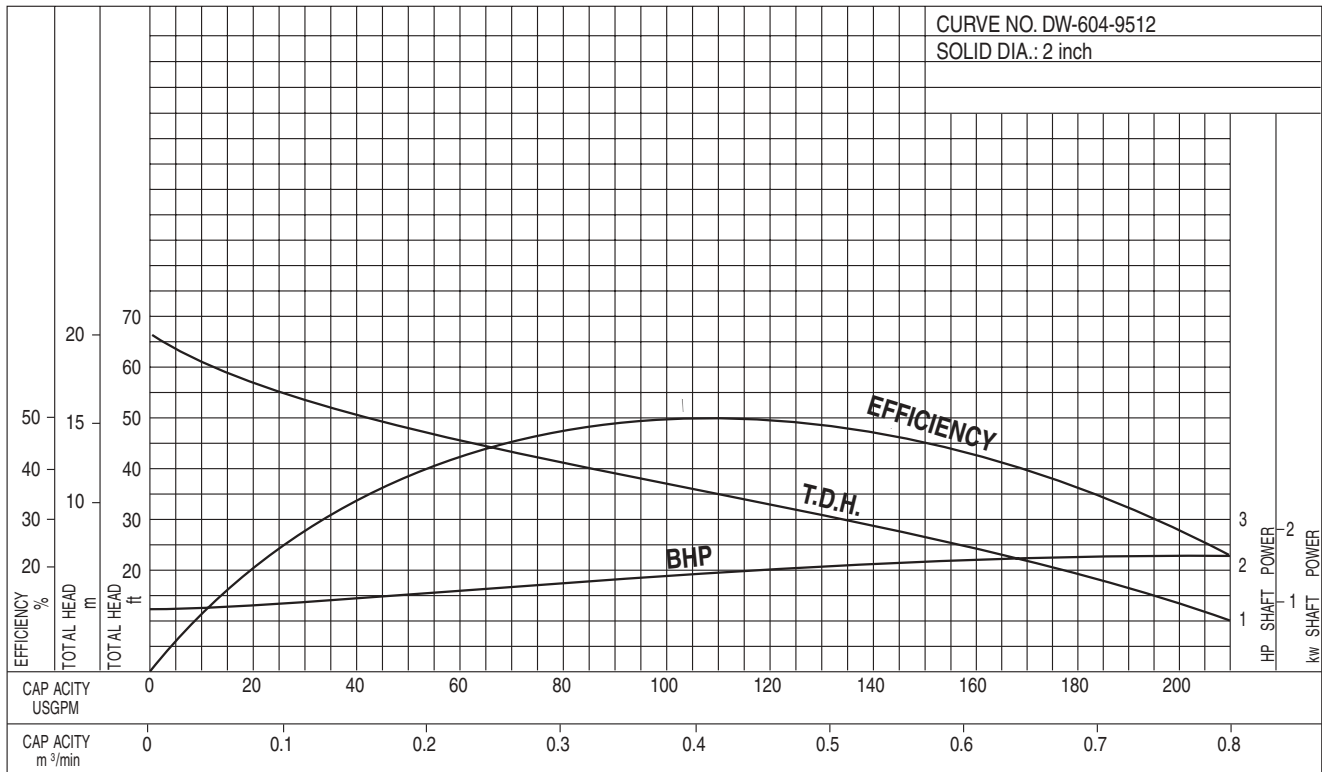
50DW61.1 (1½HP) Synchronous Speed: 3600 RPM

2 inch Discharge



50DW61.5 (2HP) Synchronous Speed: 3600 RPM

2 inch Discharge



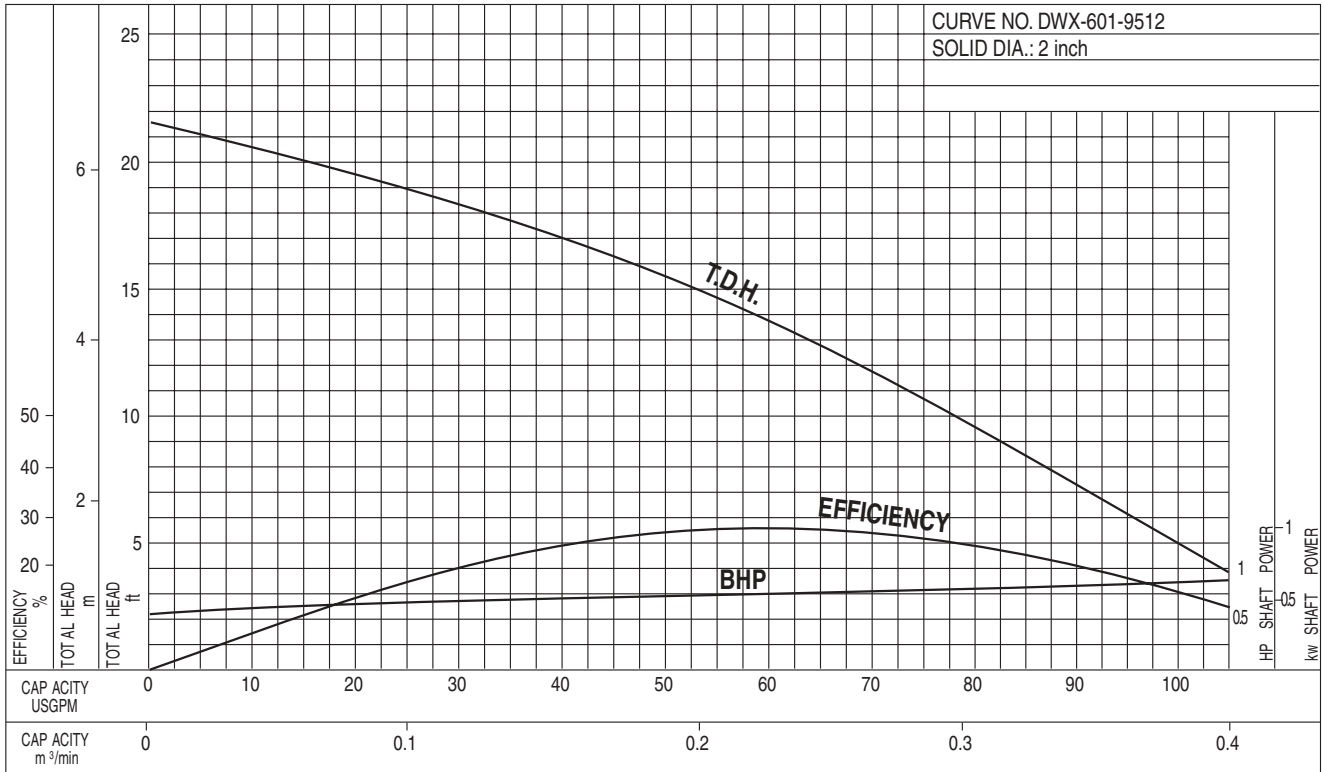
Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Performance Curves

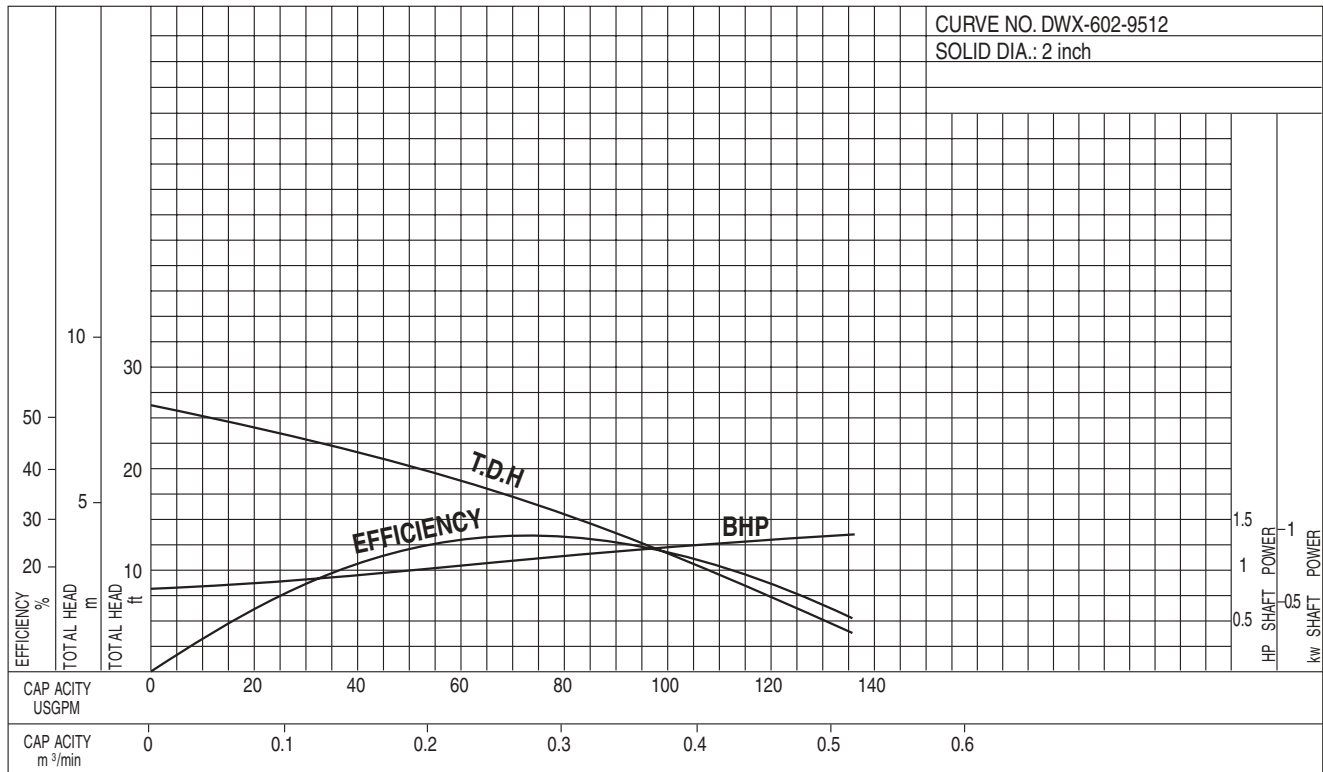
50DWX6.4 (1/2HP) Synchronous Speed: 3600 RPM

2 inch Discharge



50DWX6.75 (1HP) Synchronous Speed: 3600 RPM

2 inch Discharge



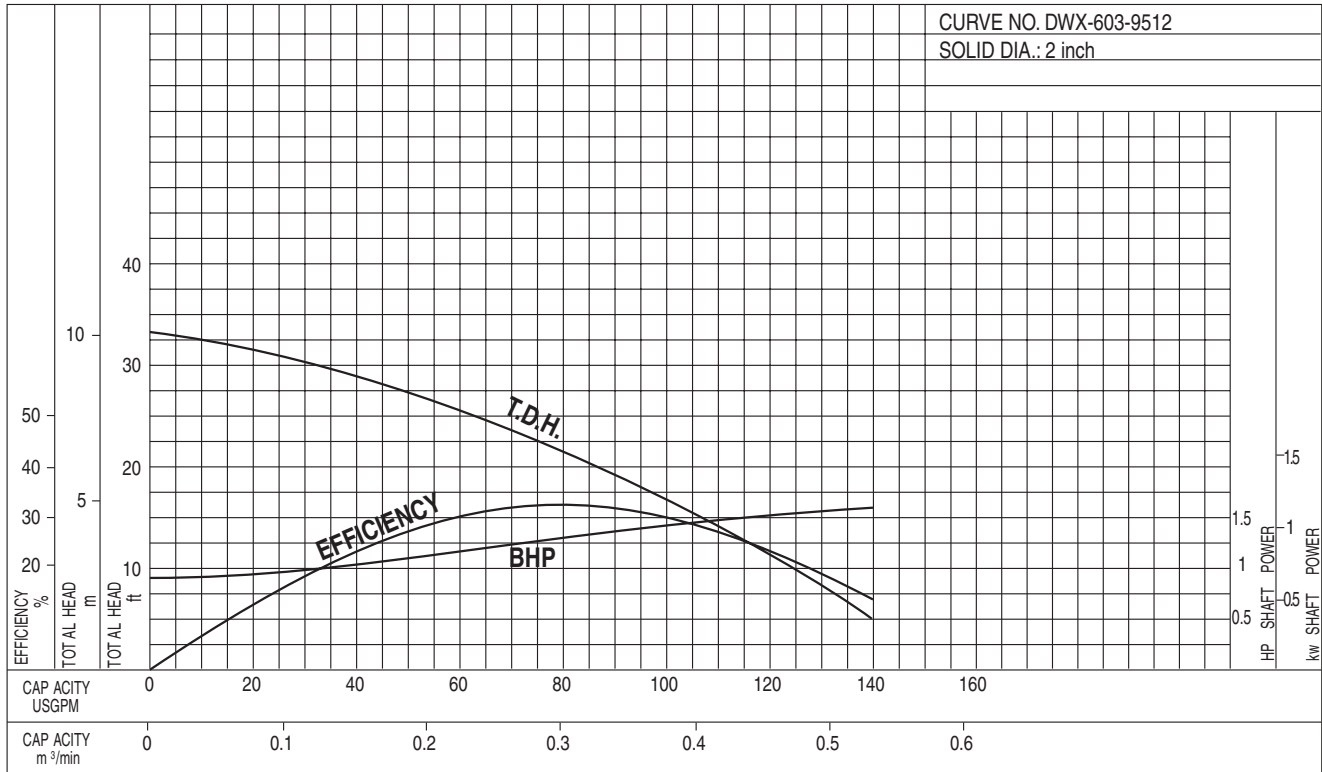
Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Performance Curves

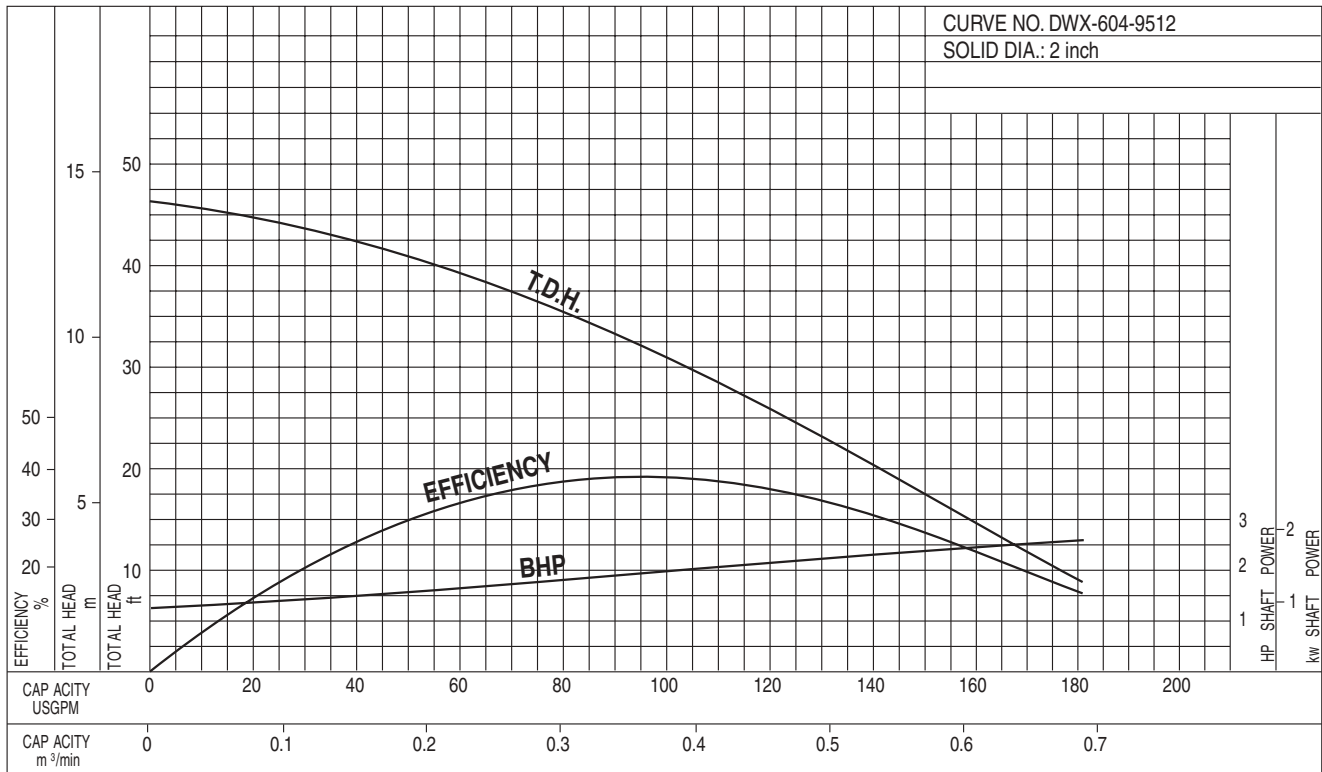
50DWX61.1 (1½HP) Synchronous Speed: 3600 RPM

2 inch Discharge



50DWX61.5 (2HP) Synchronous Speed: 3600 RPM

2 inch Discharge



Dominator

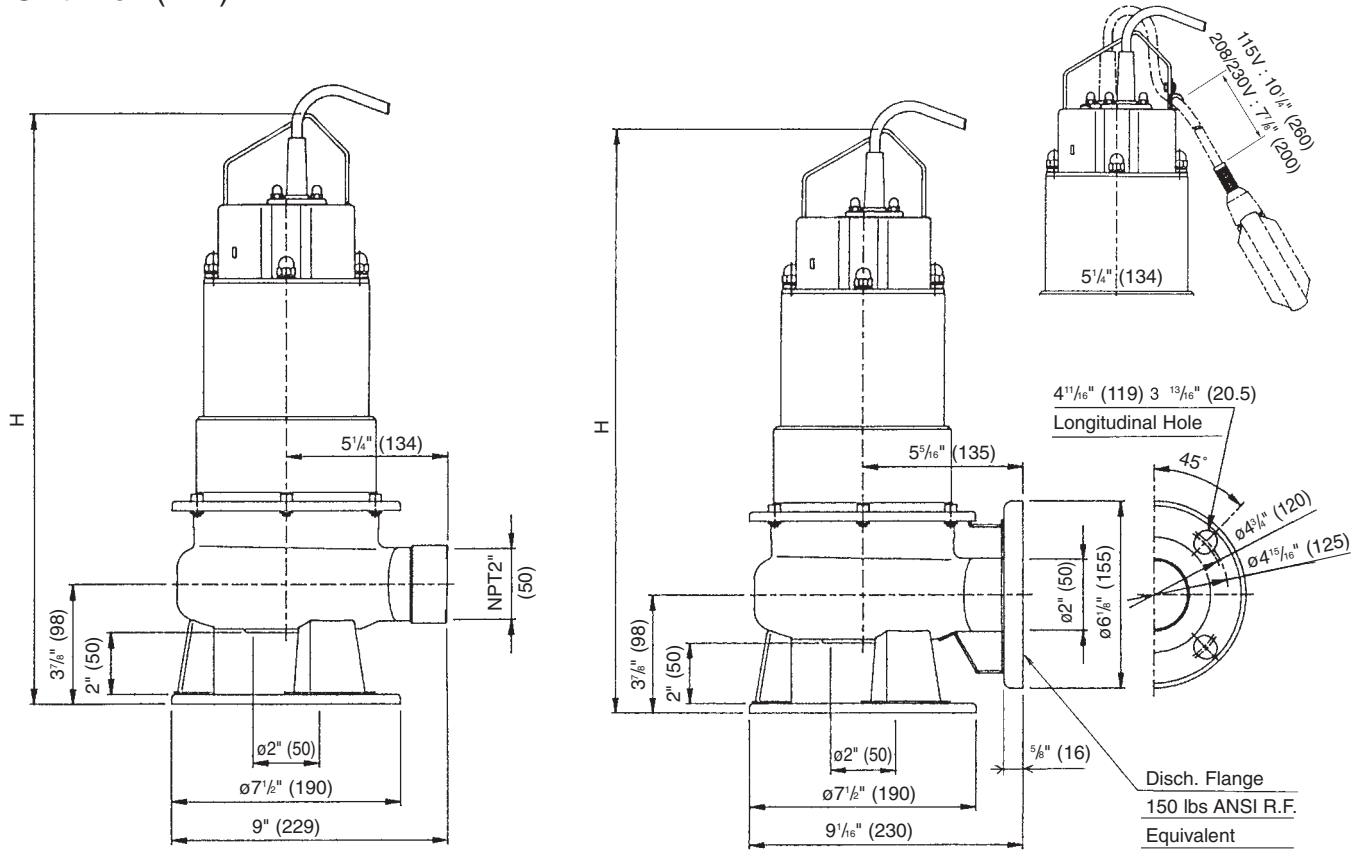
EBARA Submersible Stainless Steel Sewage Pumps

Dimensions

Model DWU, DWXU

Automatic/Manual Operation Pumps

Unit: inch (mm)



Phase	Size ø	Output		Pump H (mm)	Weight – Lbs (kg) Threaded	Weight – Lbs (kg) Flanged
		kw	HP			
Single	2" (50mm)	0.4	1/2	21 5/8 (550)	35 (16)	37 (17)
		0.75	1	22 13/16 (580)	40 (18)	42 (19)
		0.4	1/2	19 1/8 (485)	35 (16)	37 (17)
		0.75	1	20 1/4 (515)	40 (18)	42 (19)
		1.1	1 1/2	20 1/4 (515)	44 (20)	46 (21)
		1.5	2	24 (610)	51 (23)	53 (24)
Three	2" (50mm)	0.4	1/2	19 1/8 (485)	33 (15)	35 (16)
		0.75	1	19 1/8 (485)	35 (16)	37 (17)
		1.1	1 1/2	20 1/4 (515)	40 (18)	42 (19)
		1.5	2	20 1/4 (515)	44 (20)	46 (21)

Dominator

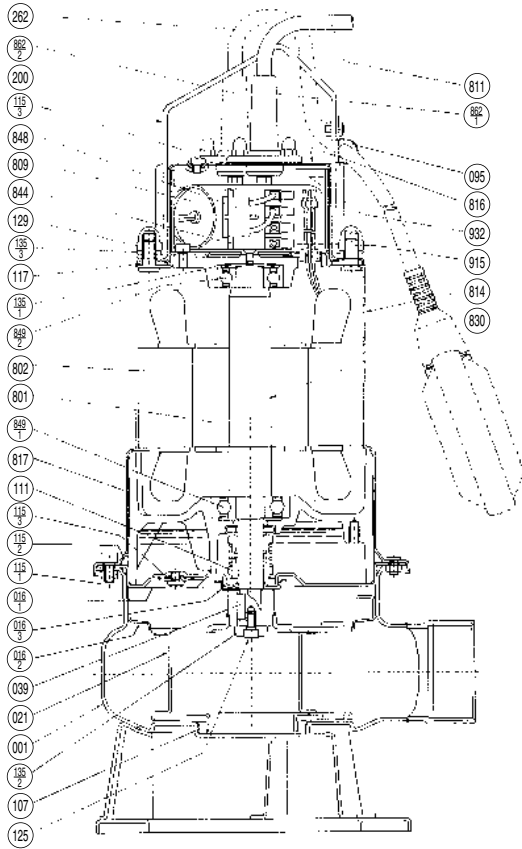
EBARA Submersible Stainless Steel Sewage Pumps

Sectional View

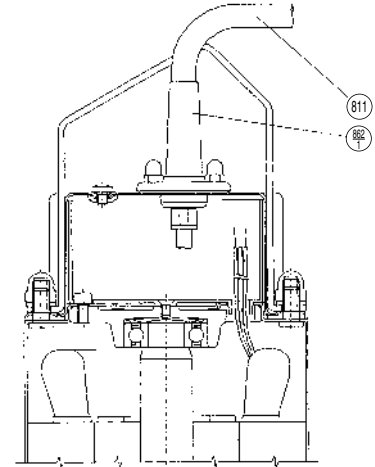
Model DW(F)U, DWX(F)U Manual Type

Model DW(F)AU, DWX(F)AU Automatic Type

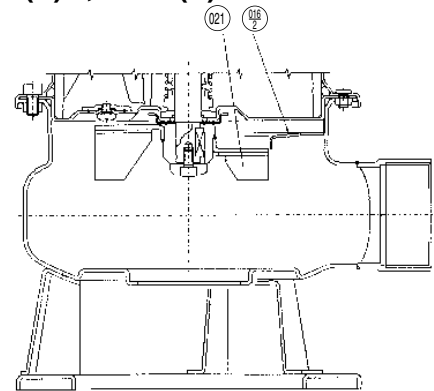
DW(F)U, DW(F)AU Single Phase Motor



Three Phase Motor



DWX(F)U, DWX(F)AU



Part No.	Part Name	Material	ASTM, AISI Code	No. for 1 Unit
†001	Casing	304 SS	AISI 304	1
016-1	Casing Cover	304 SS	AISI 304	1
016-2	Disk	304 SS	AISI 304	1
016-3	Seal Support	304 SS	AISI 304	1
†021	Impeller	304 SS	AISI 304	1
039	Key	304 SS	AISI 304	1
095	Float Switch Stay	—		1
107	Casing Ring	Viton		1
†111	Mechanical Seal	—		1 Set
115-1	O-ring	Viton		1
115-2	O-ring	Viton		1
115-3	O-ring	Viton		3
117	Gasket	Viton		1
125	Impeller Bolt	304 SS	AISI 304	1
129	Nut	304 SS	AISI 304	4
135-1	Washer	304 SS	AISI 304	1
135-2	Washer	304 SS	AISI 304	1
135-3	Washer	304 SS	AISI 304	4

Part No.	Part Name	Material	ASTM, AISI Code	No. for 1 Unit
200	Lifting Hanger	304 SS	AISI 304	1
262	Float Switch	—		1
801	Rotor	—		1
802	Stator	—		1
†809	Capacitor	—		1
811	Submersible Cable	—		1
814	Motor Frame	304 SS	AISI 304	1
816	Bracket	304 SS	AISI 304	1
817	Bracket	304 SS	AISI 304	1
830	Shaft	304 SS	AISI 304	1
844	Motor Protector Bracket	Plastic		1
848	Motor Protector	—		1
849-1	Ball Bearing	—		1
849-2	Ball Bearing	—		1
862-1	Cable Connector	Rubber (NBR)		1
862-2	Cable Connector	Rubber (NBR)		1
915	External Terminal	—		1
932	Capacitor Holder	Nylon		1

† Spare parts available plus motor assembly



Model DW(X)U, DW(X)AU, DW(X)FU, DW(X)FAU

Output		Phase	Rating			Locked Rotor Current A	Insulation Class	Overload Protection	Cable					Performance Data at Rating Point		Resistance at 20°C Ohms	* Symbols
HP	kW		Voltage V	Current A	Speed R.P.M.				Type	No. of Cond	mm ²	AWG	Length Ft	Efficiency %	Power Factor %		
1/2	0.4	Single	115	8.3	3350	33.7	F	Built-In Auto Cut	SOW-A	3	1.25	#16	20	63.3	98.0	0.67	EI
			230	4.4	3350	10.7					62.3	95.8		2.44	EI		
1	0.75		115	11.1	3375	46.8					2.0	#14		74.6	99.0	0.50	EI
			230	6.1	3375	28.5					72.8	94.3		1.54	EI		
1 1/2	1.1		230	6.5	3380	36.8					1.25	#16		77.6	96.3	1.11	EI
2	1.5		230	8.84	3479	66.0					2.0	#14		79.5	96.0	0.62	EI
1/2	0.4	Three	230	3.0	3425	23.0	F	Built-In Thermal Switch	SOW-A	4	1.25	#16	20	76.5	62.0	4.15	EI
			460	1.28	3450	9.9								76.8	70.0	20.0	EI
1	0.75		230	3.75	3475	32.3								80.4	75.9	2.82	EI
			460	1.9	3475	18.7								81.0	76.7	12.9	EI
1 1/2	1.1		230	4.76	3500	47.0								81.7	75.9	1.94	EI
			460	2.34	3475	24.4								82.6	75.4	7.36	EI
2	1.5		230	7.0	3475	68.7								81.8	75.1	1.30	EI
			460	3.2	3475	32.5								82.0	81.3	5.52	EI



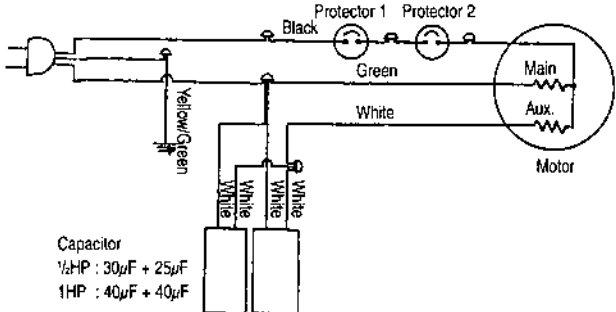
Dominator

EBARA Submersible Stainless Steel Sewage Pumps

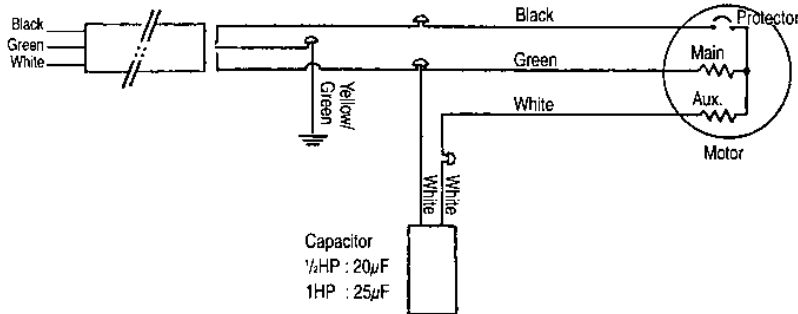
Motor Wiring Diagram

Manual Operation Type (Single Phase)

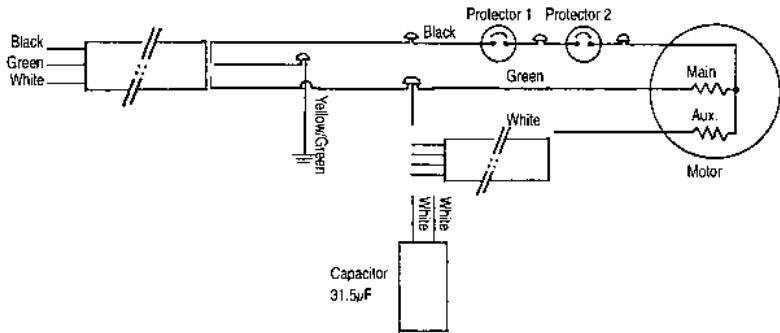
- Output 1/2 to 1 HP (0.4kw to 0.75kw)
115V



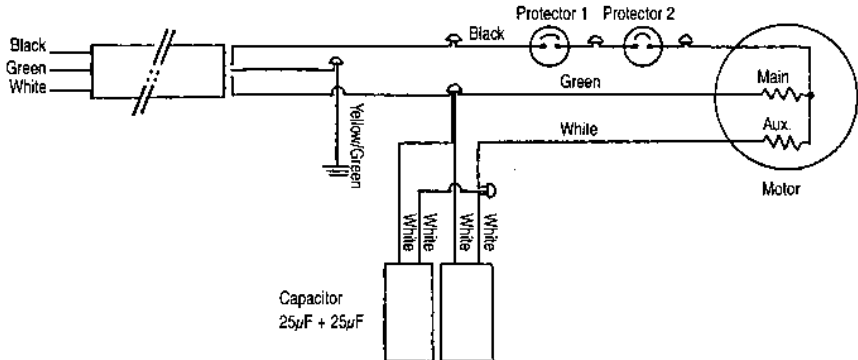
- Output 1/2 to 1 HP (0.4kw to 0.75kw)
230V



- Output 1 1/2HP (1.1kw)
230V



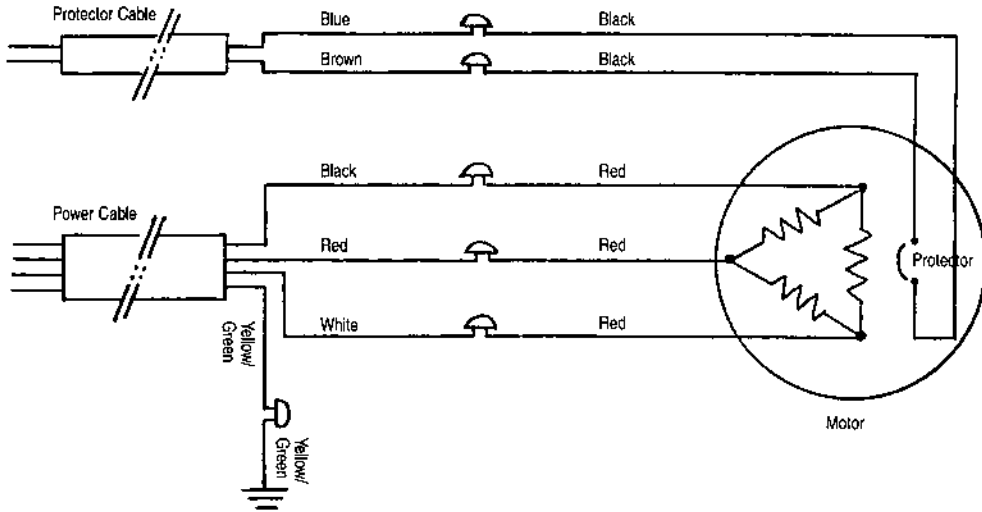
- Output 2HP (1.5kw)
230V



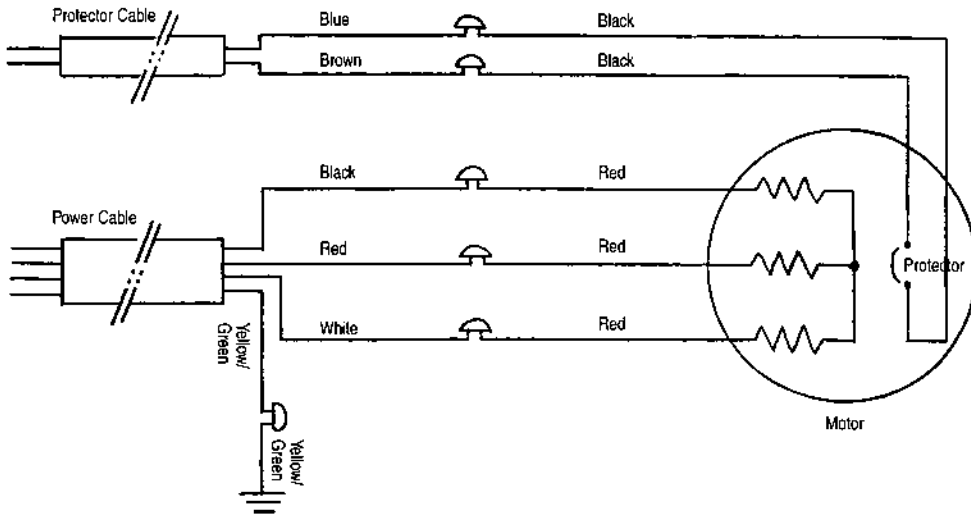
Motor Wiring Diagram

Manual Operation Type (Three Phase)

230V



460V



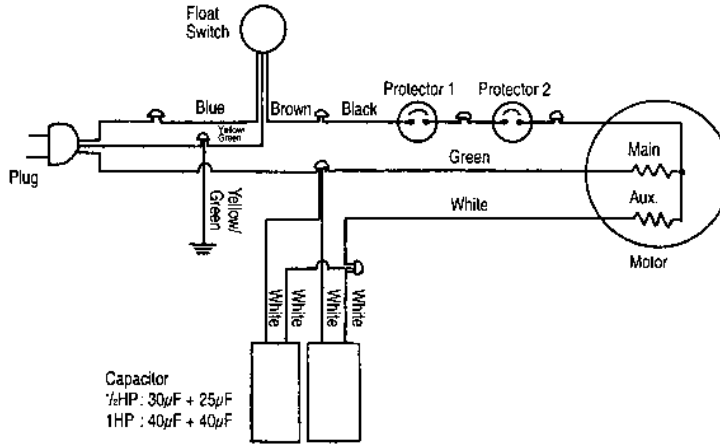
Dominator

EBARA Submersible Stainless Steel Sewage Pumps

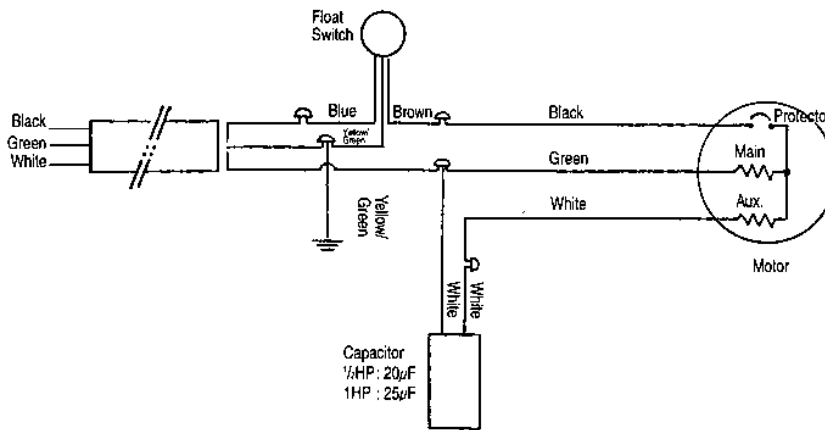
Motor Wiring Diagram

Automatic Operation Type (Single Phase)

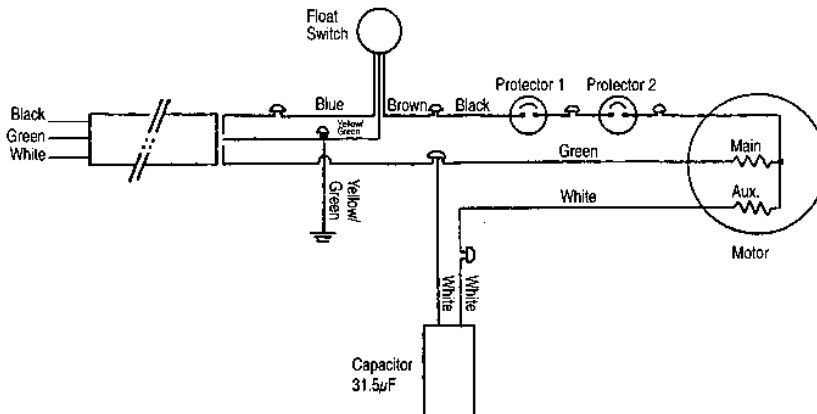
- Output 1/2 to 1 HP (0.4kw to 0.75kw)
115V



230V



- Output 1 1/2HP (1.1kw)
230V



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Electrical Data

Model DW(X)U, DW(X)FU

1/2 to 1 HP, 60Hz, Single Phase, 115V

Name- Plate Rating	Item No.					
	Output (HP)		1/2	1		
	Phase		1	1		
	Poles		2	2		
	Volts		115	115		
	Amperes		8.3	11.1		
	Speed		3350	3375		
	Insulation Class		F	F		
Capacitor μ F	Start					
	Run		55	80		
No Load Test	Amperes		1.36	2.90		
	Watts		284	300		
Resistance at 20°C OHMS	Main Coil		0.66	0.495		
	Aux. Coil		1.973	1.183		
100% Load	Current	Amp.	5.3	8.8		
	Efficiency	%	63.3	74.6		
	Power Factor	%	98.0	99.0		
	Speed	RPM	3490	3435		
Locked Rotor Torque		%	145	75.5		
Locked Rotor Current		Amp.	33.7	46.8		
Vibration		Micron				
Noise		Phon (50 cm)				
Number Starts Per Hour			20	20		
Design Standard			NEMA			
Voltage Tolerance			±5			
Frequency Tolerance			±5			
(Ref. data Mfr's Symbols)			EI	EI		



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Electrical Data

Model DW(X)U, DW(X)FU

1/2 to 2 HP, 60Hz, Single Phase, 208/230V

Item No.						
Name- Plate Rating	Output (HP)	1/2	1	1 1/2	2	
	Phase	1	1	1	1	
	Poles	2	2	2	2	
	Volts	230	230	230	230	
	Amperes	4.4	6.1	6.5	8.84	
	Speed	3350	3375	3380	3479	
	Insulation Class	F	F	F	F	
	Capacitor μ F	Start				
Run		20	25	31.5	45	
No Load Test	Amperes	1.65	2.22	2.40	2.73	
	Watts	293	330	370	420	
Resistance at 20°C OHMS	Main Coil	2.38	1.54	1.11	0.62	
	Aux. Coil	5.11	3.47	2.34	1.30	
100% Load	Current Amp.	2.73	4.75	6.40	8.8	
	Efficiency %	62.3	72.8	77.6	79.5	
	Power Factor %	95.8	94.3	96.3	96.0	
	Speed RPM	3490	3460	3440	3440	
Locked Rotor Torque	%	151	67	58	55	
Locked Rotor Current	Amp.	10.7	28.5	36.8	66	
Vibration	Micron					
Noise	Phon (50 cm)					
Number Starts Per Hour		20	20	20	20	
Design Standard		NEMA				
Voltage Tolerance	%	± 5				
Frequency Tolerance	%	± 5				
(Ref. data Mfr's Symbols)		EI	EI	EI	EI	



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Electrical Data

Model DW(X)U, DW(X)FU

1/2 to 2HP, 60Hz, Three Phase, 208/230V

		Item No.						
Name- Plate Rating	Output (HP)	1/2	1	1 1/2	2			
	Phase	3	3	3	3			
	Poles	2	2	2	2			
	Volts	230	230	230	230			
	Amperes	3.00	3.75	4.76	7.00			
	Speed	3425	3475	3500	3475			
	Insulation Class	F	F	F	F			
	Capacitor μ F	Start	—	—	—	—		
Run		—	—	—	—			
No Load Test	Amperes	1.64	1.87	2.68	3.78			
	Watts	122	146	165	238			
Resistance at 20°C OHMS	Coil	4.15	2.82	1.94	1.30			
100% Load	Current Amp.	1.99	3.14	4.50	6.06			
	Efficiency %	76.5	80.4	81.7	81.8			
	Power Factor %	62.0	75.9	75.9	75.1			
	Speed RPM	3530	3510	3480	3510			
Locked Rotor Torque	%	592	500	440	415			
Locked Rotor Current	Amp.	23.0	32.3	47.0	68.7			
Vibration	Micron							
Noise	Phon (50 cm)							
Number Starts Per Hour		20	20	20	20			
Design Standard		NEMA						
Voltage Tolerance	%	±5						
Frequency Tolerance	%	±5						
(Ref. data Mfr's Symbols)		EI	EI	EI	EI			



Dominator

EBARA Submersible Stainless Steel Sewage Pumps

Electrical Data

Model DW(X)U, DW(X)FU

1/2 to 2HP, 60Hz, Three Phase, 460V

		Item No.						
Name- Plate Rating	Output (HP)	1/2	1	1 1/2	2			
	Phase	3	3	3	3			
	Poles	2	2	2	2			
	Volts	460	460	460	460			
	Amperes	1.28	1.90	2.34	3.20			
	Speed	3450	3475	3475	3475			
	Insulation Class	F	F	F	F			
	Capacitor μ F	Start	—	—	—	—		
Run		—	—	—	—			
No Load Test	Amperes	0.63	0.91	1.35	1.37			
	Watts	111	140	171	214			
Resistance at 20°C OHMS	Coil	20.0	12.9	7.36	5.52			
100% Load	Current Amp.	0.877	1.52	2.23	2.86			
	Efficiency %	76.8	81.0	82.6	82.0			
	Power Factor %	70.0	76.7	75.4	81.3			
	Speed RPM	3525	3505	3515	3505			
Locked Rotor Torque	%	549	475	584	546			
Locked Rotor Current	Amp.	9.9	18.7	24.4	32.5			
Vibration	Micron							
Noise	Phon (50 cm)							
Number Starts Per Hour		20	20	20	20			
Design Standard		NEMA						
Voltage Tolerance	%	±5						
Frequency Tolerance	%	±5						
(Ref. data Mfr's Symbols)		EI	EI	EI	EI			



Mechanical Sectional View

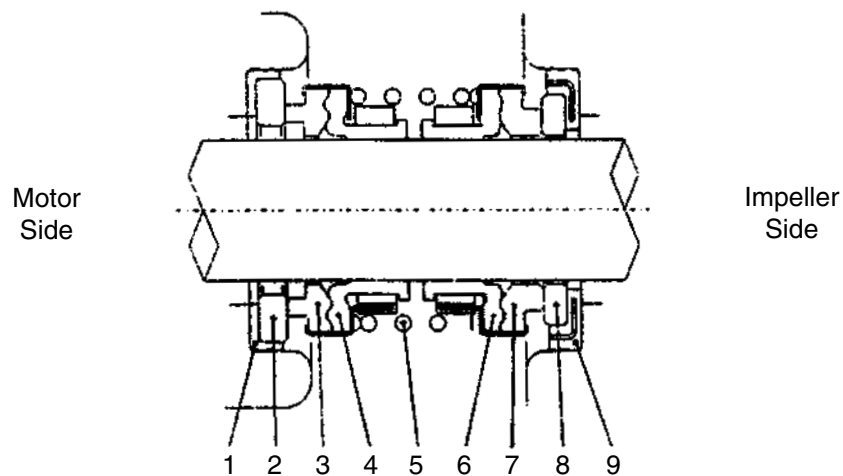
Since the mechanical seal is the most critical part of submersible pumps, EBARA provides the most reliable mechanical seal available for submersible pumps.

DOUBLE MECHANICAL SEALS with SUPER-HARD seal face are provided on all EBARA “D Series” submersible pumps.

The double mechanical seal in oil chamber provides long life and friction-free sealing of the motor shaft.

Typical construction and materials are as follows:

- **Type Eagle ED560-15**

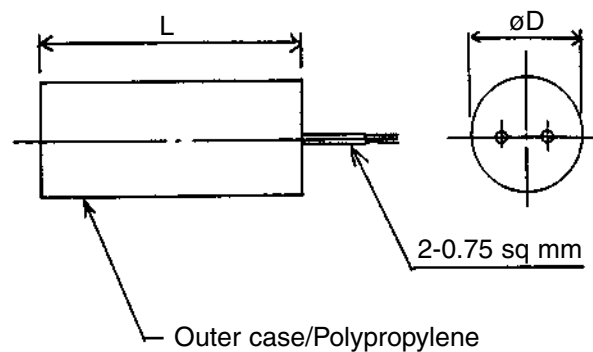


No.	Part Name	Material
1	Rubber seat	Rubber (NBR)
2	Stationary ring	Ceramic
3	Rotary ring	Graphite
4	Rotary seal	Rubber (NBR)
5	Coil Spring	AISI 304 stainless steel
6	Rotary seal	Rubber (NBR)
7	Rotary ring	Silicon carbide
8	Stationary ring	Silicon carbide
9	Rubber seat	Viton

Mechanical Seal and Ball Bearing

Model	Output		Mechanical Seal	Lubricating Oil		Ball Bearing		
	HP	kW	Type	Capacity		Name	Bottom	Top
				Ozs	CC			
DWU-DWFU	1/2	0.4	Eagle ED560-15	14	385	White Mineral Oil	6303 2Z	6203 2Z
DWXU-DWXFU	1	0.75	Eagle ED560-15	14	385	Esso Marcol 172	6303 2Z	6203 2Z
	1 1/2	1.1	Eagle ED560-15	14	385		6303 2Z	6203 2Z
	2	1.5	Eagle ED560-15	14	385		6303 2Z	6203 2Z

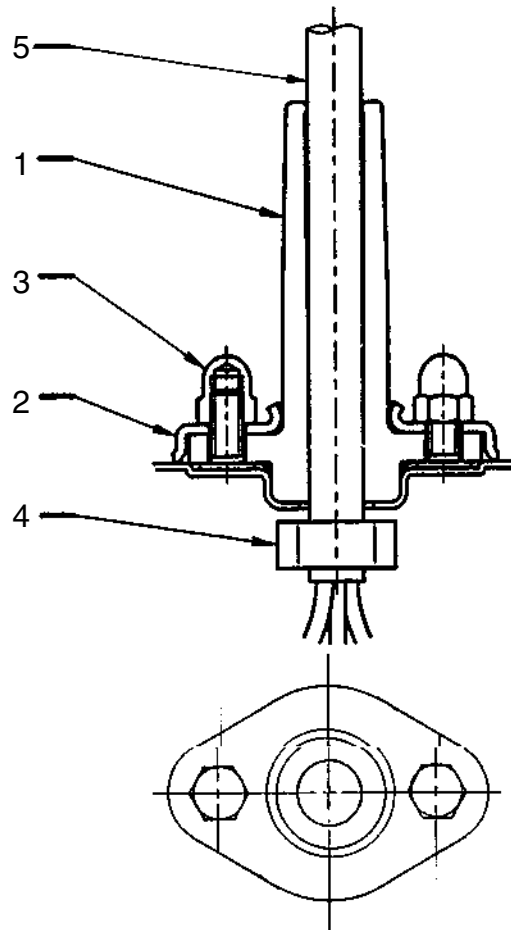
Capacitor



Phase	Output		Voltage (V)	Specification			Dimension		Remarks
	kW	HP		Capacity (μF)	Rated Voltage (V)	Max. Temp. ($^{\circ}\text{F}$)	D	L	
Single	0.4	1/2	115	25	250	185	1 ⁷ / ₁₆	2 ⁷ / ₈	
				30	250	185	1 ⁹ / ₁₆	2 ⁷ / ₈	
	0.75	1	115	20	450	185	1 ⁹ / ₁₆	2 ⁷ / ₈	
				40	250	185	1 ⁷ / ₁₆	3 ¹³ / ₁₆	Use 2 pcs.
	230	25	450	185	1 ⁷ / ₁₆	3 ¹³ / ₁₆			
	1.1	1 1/2	230	31.5	450	185	1 ⁹ / ₁₆	3 ¹³ / ₁₆	
1.5	2	230	20	450	185	1 ⁹ / ₁₆	2 ⁷ / ₈		
			25	450	185	1 ⁷ / ₁₆	3 ¹³ / ₁₆		

Details of Cable Entry

Based on their years of experience, EBARA now provides the most dependable cable entry construction of any submersible pump. Its features are as follows:



Part No.	Part Name	Material	ASTM, AISI Code	Remarks
1	Cable Connector	Rubber (NBR)		
2	Flange	304SS	AISI 304	
3	Cap Nut	304SS	AISI 304	Size: M5
4	Cable Stopper	Steel	A283 Grade D	
5	Submersible Cable	—		SOW-A
	for Float Switch	—		H05RN-F

Maximum Submergence of Pumps

EBARA submersible pumps shall be capable of continuous submergence underwater without loss of watertight integrity to the following depths:

Model	Operation	Maximum Submergence
DWU DWFU DWXU DWXFU	Manual Operation	33 ft.
DWAU DWFAU DWXAU DWXFAU	Automatic Operation (A)	33 ft.



