

Contents

Model

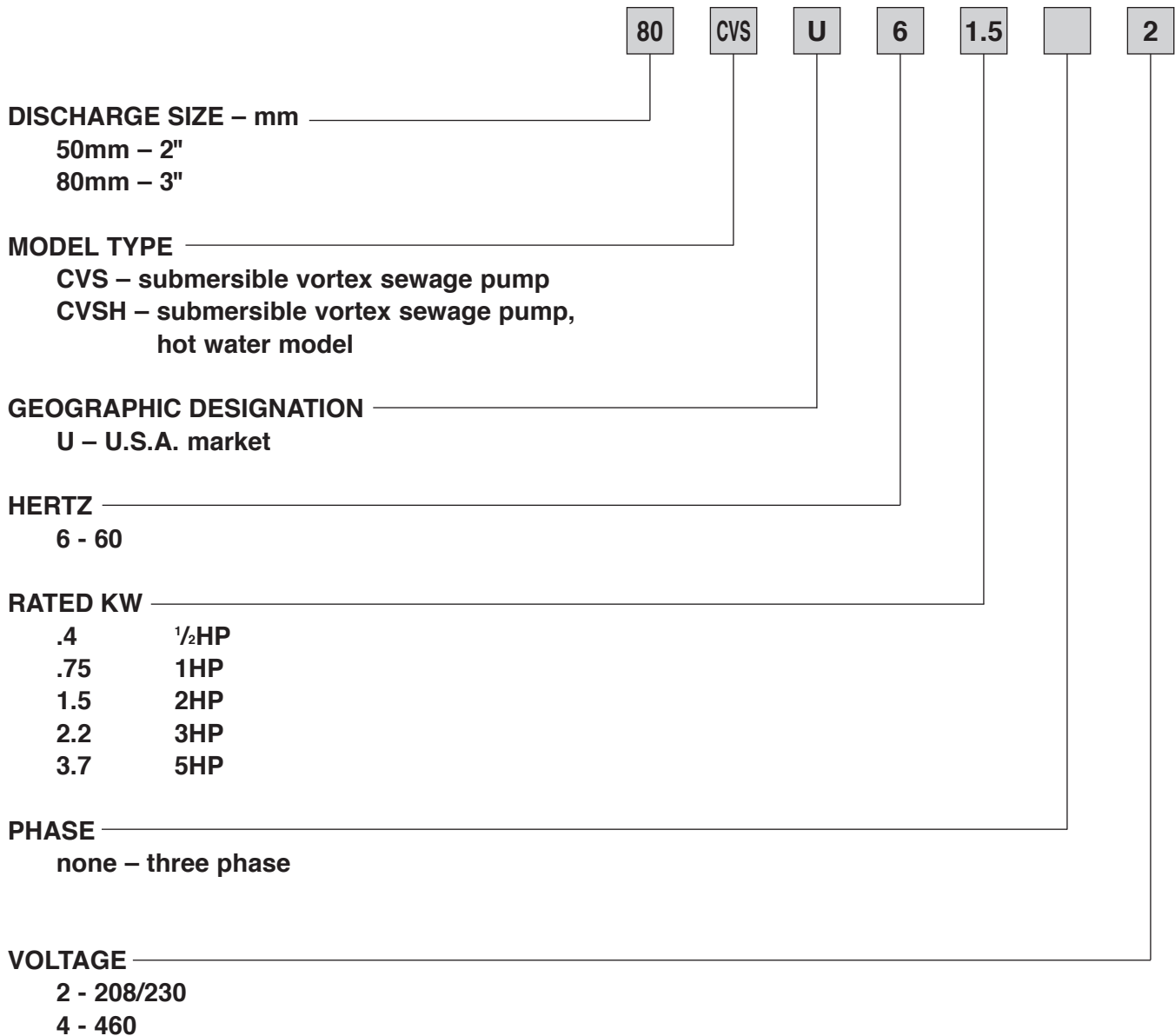
50CVSHU6.4
50CVSHU6.75
50CVSHU61.5
80CVSHU6.75
80CVSHU61.5
80CVSU62.2
80CVSHU62.2
80CVSU63.7
80CVSHU63.7

Section	Page
Specifications	1102
Selection Chart	1103
Performance Curves	1106
Dimensions	1110
Sectional View	1116
QDC Information	1400
Motor Data	1500
motor electrical specifications	
cable data	
wiring diagrams	
motor electrical data	

Model CVSU

EBARA PRO Cast Vortex Sewage Pumps

Model Designation

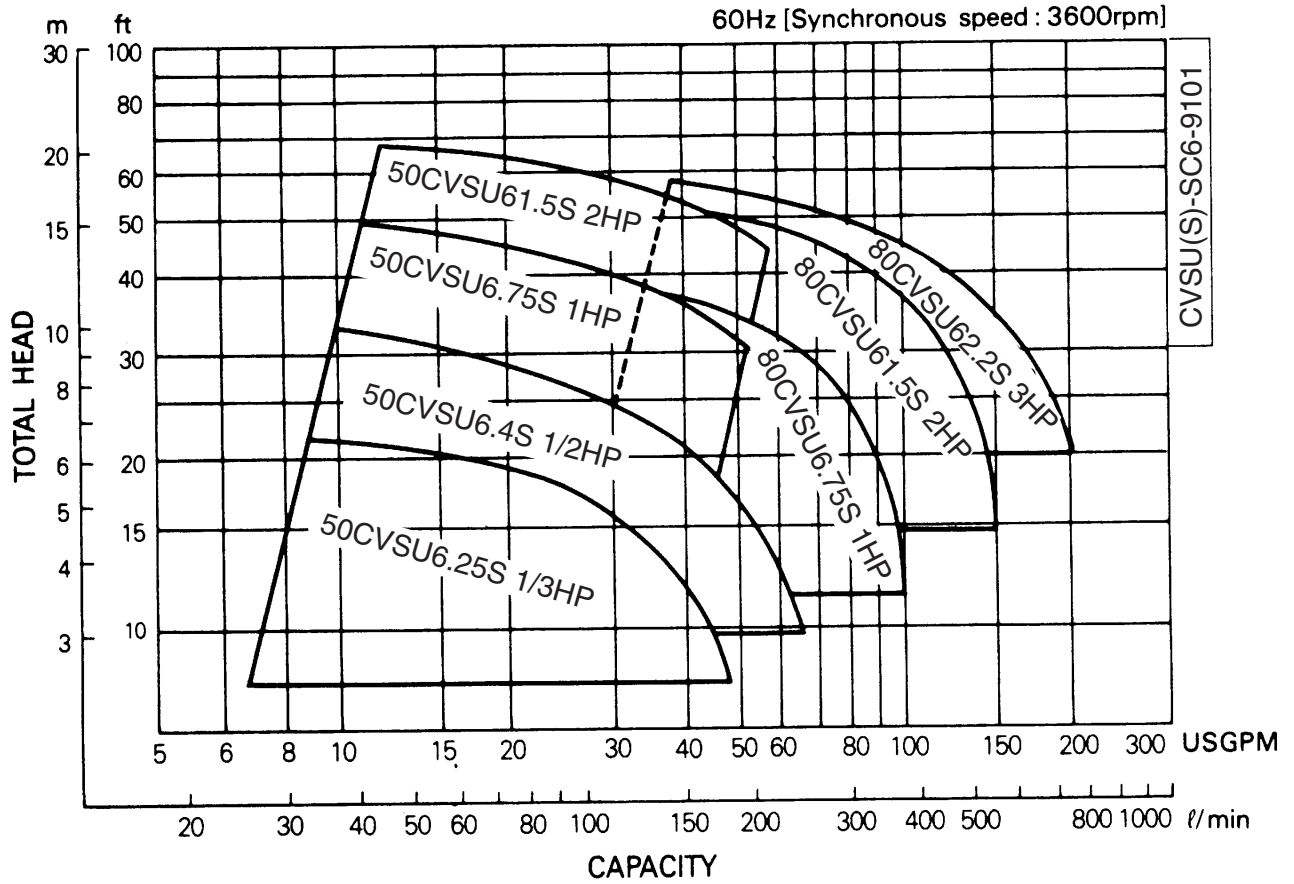


Specifications

	Standard	Optional
Size	3 inch	
Range of HP	3 HP to 5 HP	
Range of Performance	Capacity 29 to 240 GPM Head 20 to 80 feet	
Limitation Maximum Water Temperature	122°F (50°C)	
Synchronous Speed	3600 RPM	
Materials Casing Impeller Shaft Motor Frame Fastener	Cast Iron Cast Iron 403 Stainless Steel Cast Iron 304 Stainless Steel	
Mechanical Seal Material – Upper Side Material – Lower Side Impeller Type Bearing Motor Three Phase Service Factor Motor Protection Submersible cable Accessories	Double Mechanical Seal Carbon/Ceramic Silicon Carbide/Silicon Carbide Semi-open recessed vortex Prelubricated Ball Bearing Air-filled, Insulation Class F 208/230, 460V 1.15 Built-in Auto Cut - overload, out of phase, single phasing protection 33 ft. Cast iron discharge elbow	66 ft. QDC System



Three phase



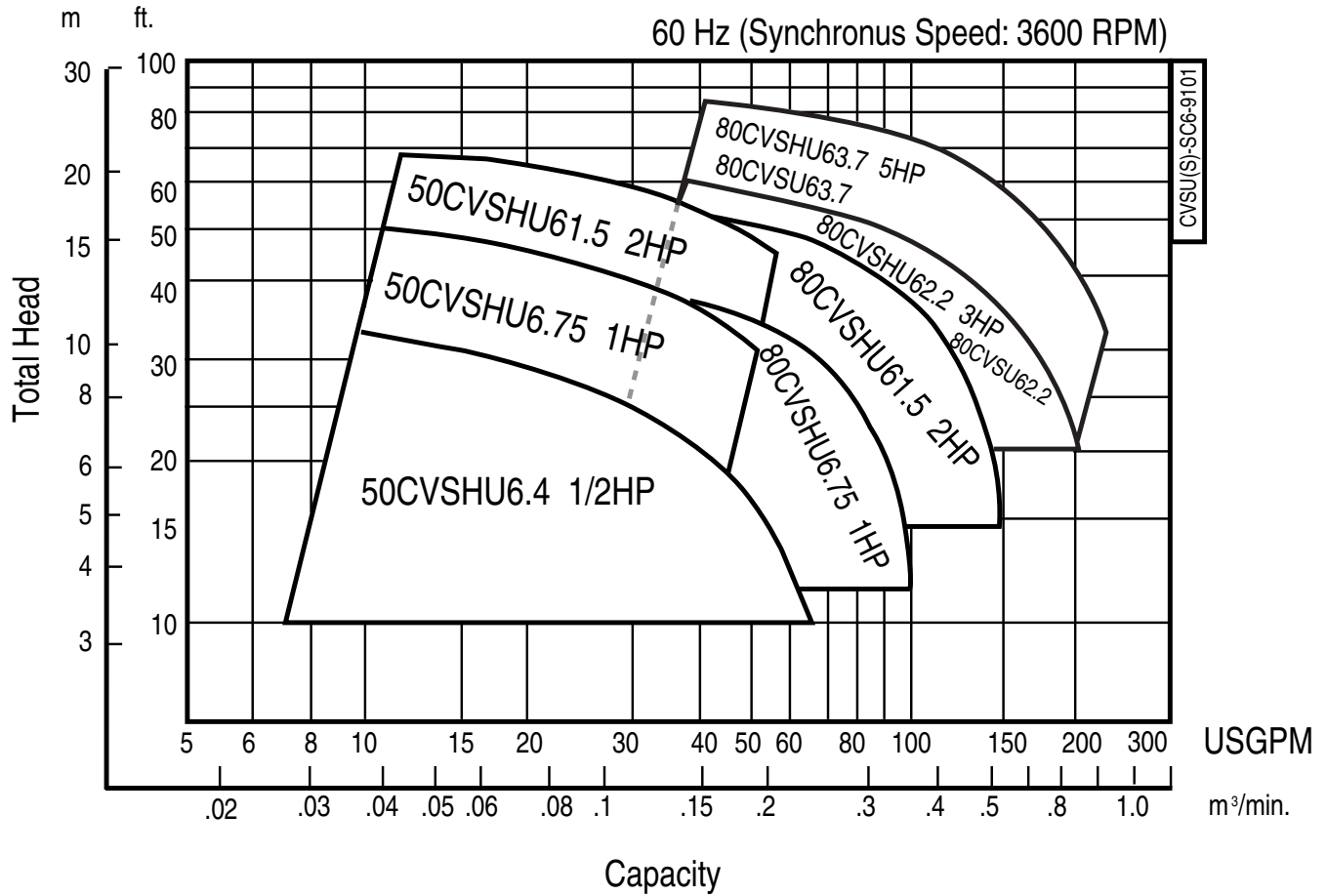
Model CVSHU – Hot Water Pumps Specifications

EBARA PRO Cast Vortex Sewage Pumps

	Standard	Optional
Size	2, 3 inch	
Range of HP Range of Performance	1/2 HP to 5 HP Capacity 5 to 240 GPM Head 10 to 75 feet	
Limitation Maximum Water Temperature	158°F (70°C) 1/2, 1 HP 176°F (80°C) 2 to 5 HP 200°F (93°C) Operation is limited to 10 minutes	
Synchronous Speed	3600 RPM	
Materials Casing Impeller Shaft Motor Frame Fastener	Cast Iron Cast Iron 403 Stainless Steel Cast Iron 304 Stainless Steel	
Mechanical Seal Material – Upper Side Material – Lower Side Impeller Type Bearing Motor Three Phase Service Factor Motor Protection Submersible cable Accessories	Double Mechanical Seal Silicon Carbide/Silicon Carbide Silicon Carbide/Silicon Carbide Semi-open recessed vortex Prelubricated Ball Bearing Air-filled, Insulation Class H, F 208/230V, 460V 1.15 Built-in Overload Protection 33 ft. Cast iron companion flange with NPT thread (2", 1/2 to 2HP) Cast iron discharge elbow (3", 1 to 5HP)	66 ft. QDC System



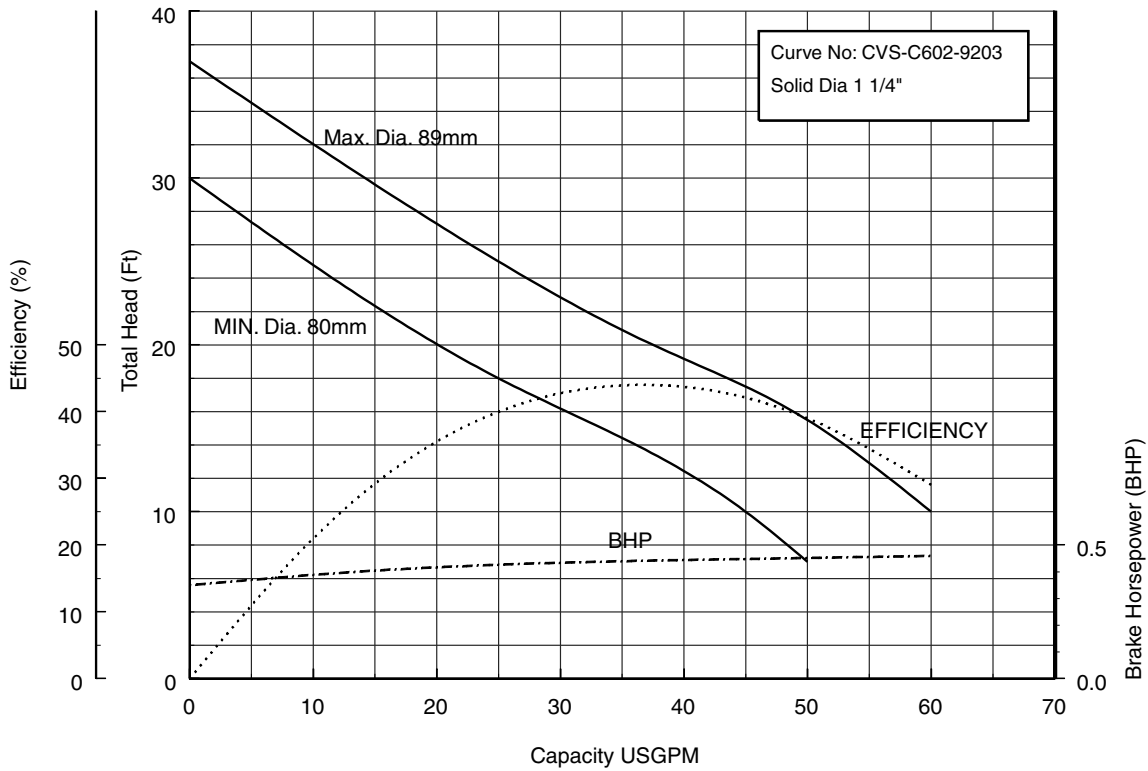
Three phase



50CVSH6.4 (1/2HP)

Synchronous Speed: 3600 RPM

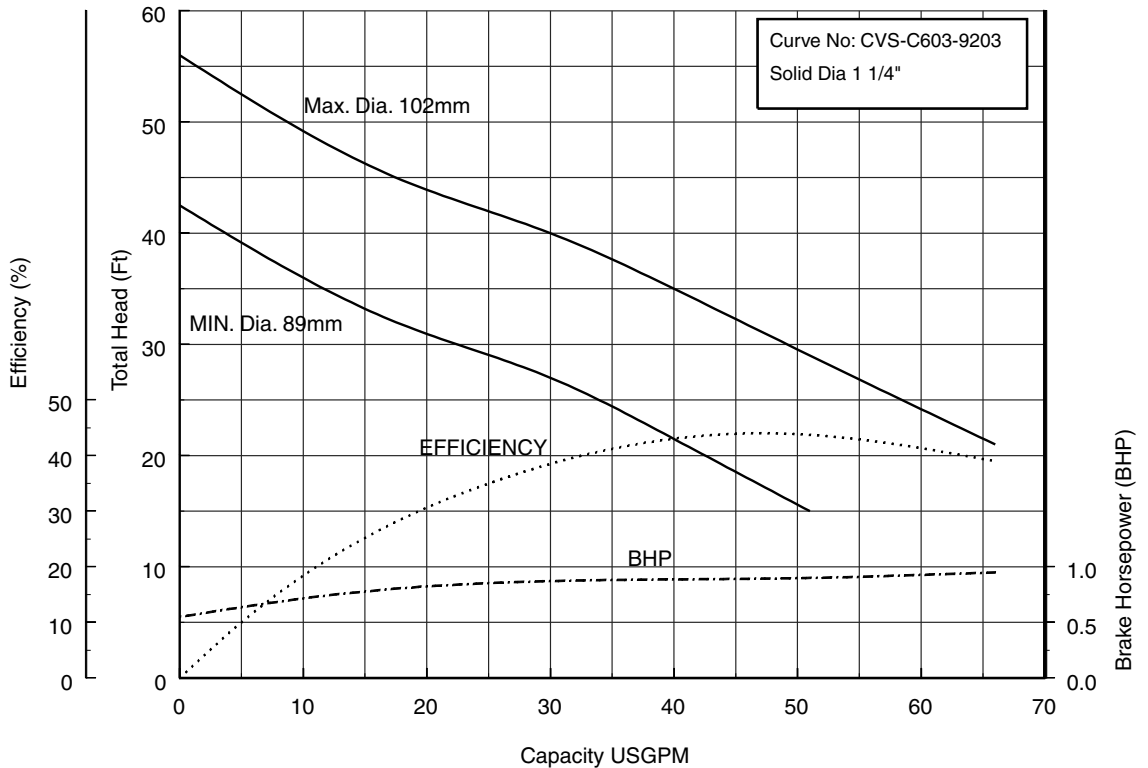
2 inch Discharge



50CVSH6.75 (1HP)

Synchronous Speed: 3600 RPM

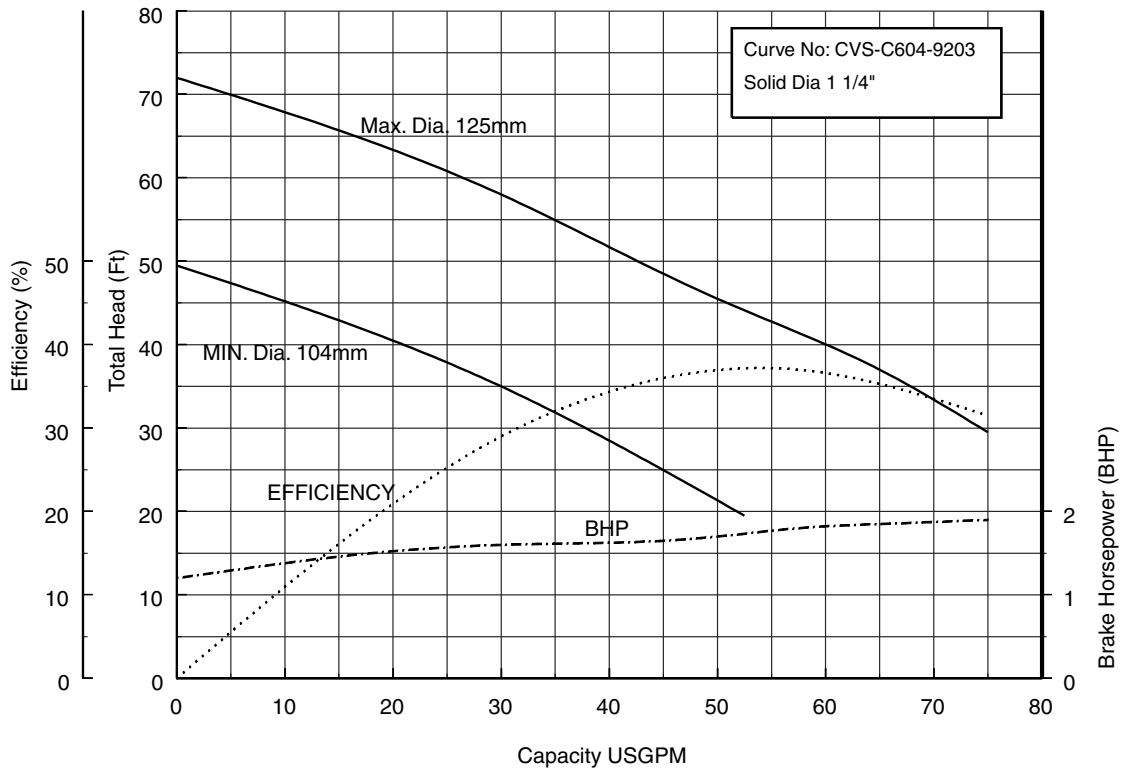
2 inch Discharge



50CVSH61.5 (2HP)

Synchronous Speed: 3600 RPM

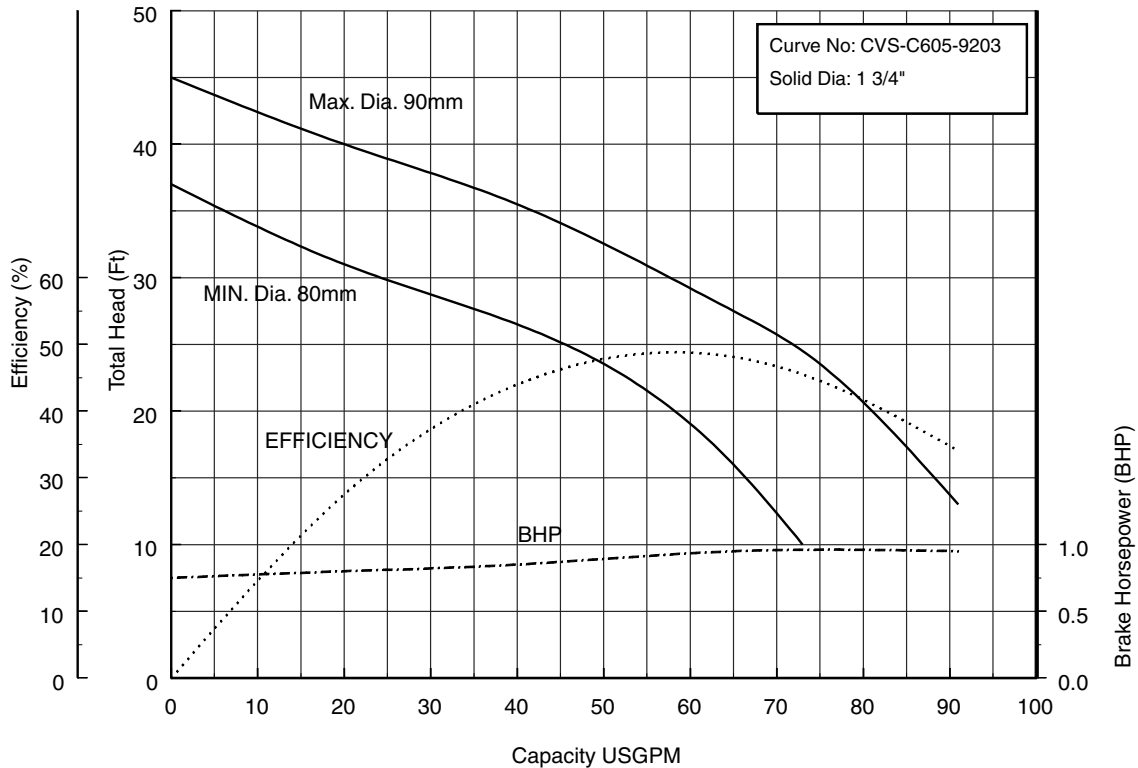
2 inch Discharge



80CVSH6.75 (1HP)

Synchronous Speed: 3600 RPM

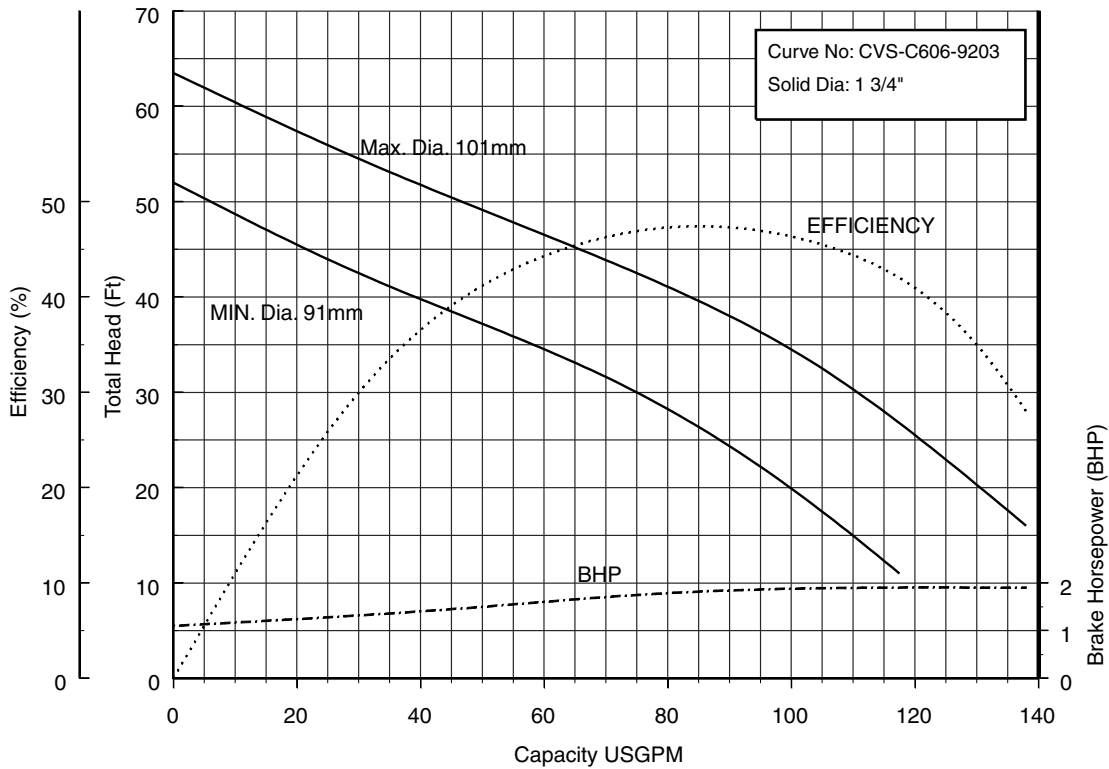
3 inch Discharge



80CVSH61.5 (2HP)

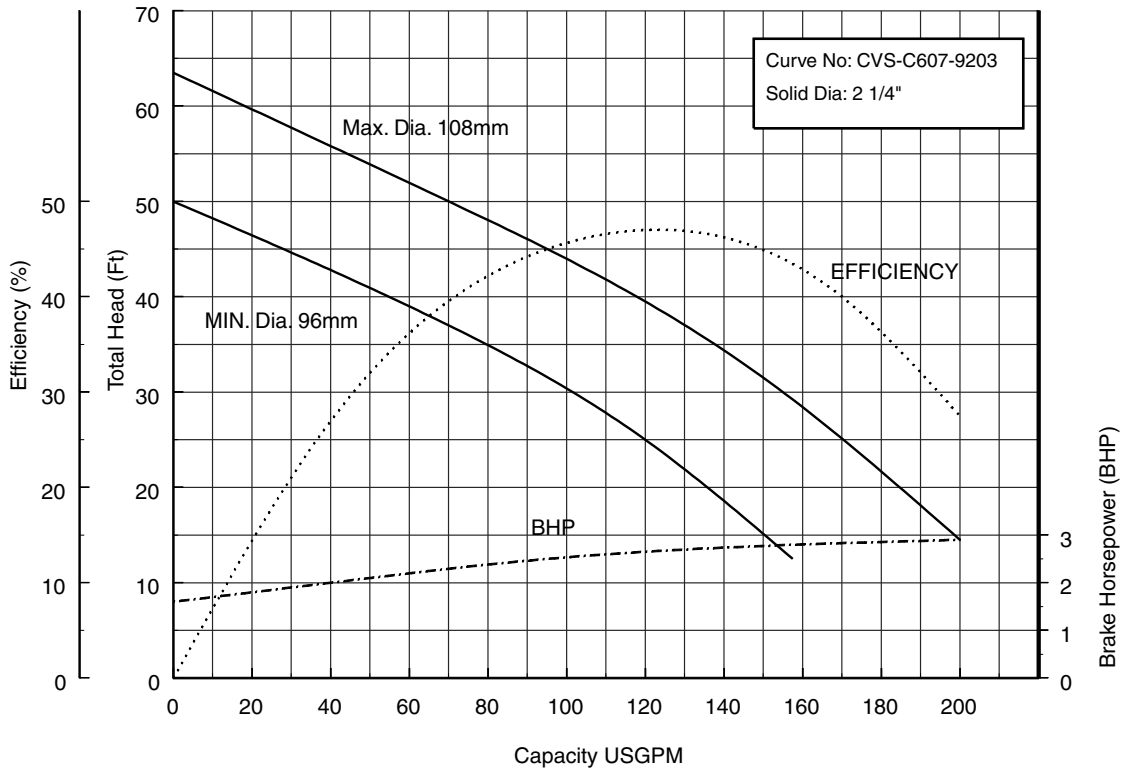
Synchronous Speed: 3600 RPM

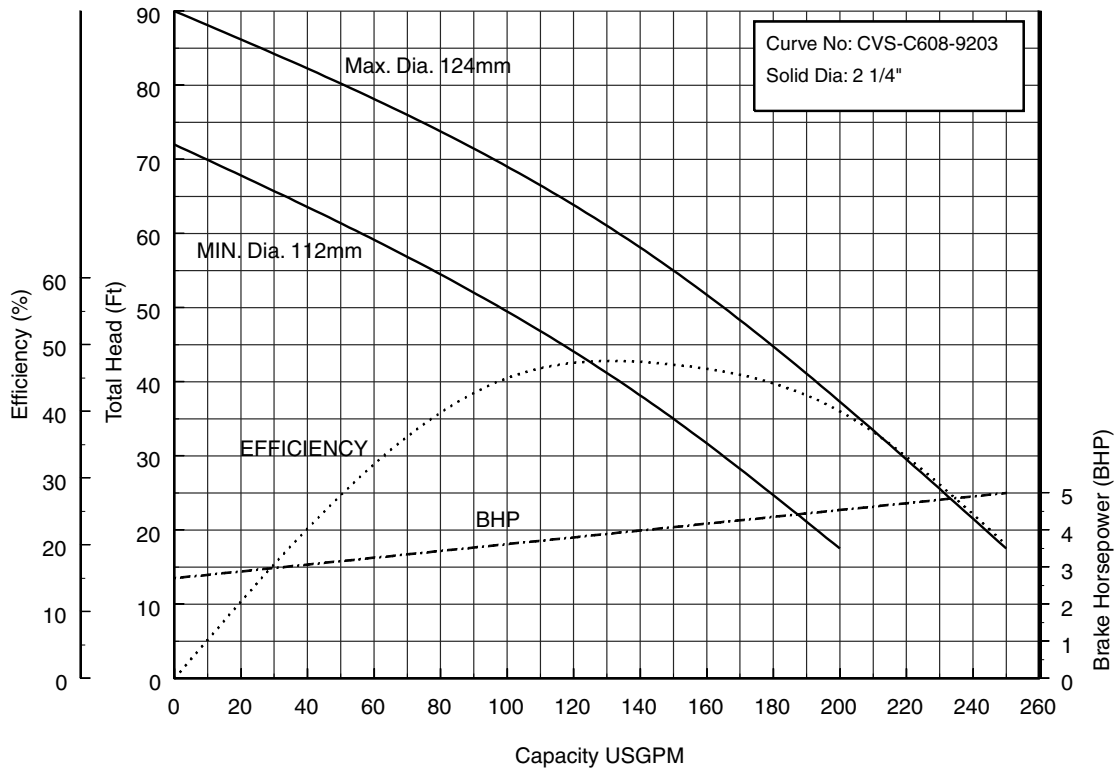
3 inch Discharge



80CVS62.2 80CVSH62.2 (3HP) Synchronous Speed: 3600 RPM

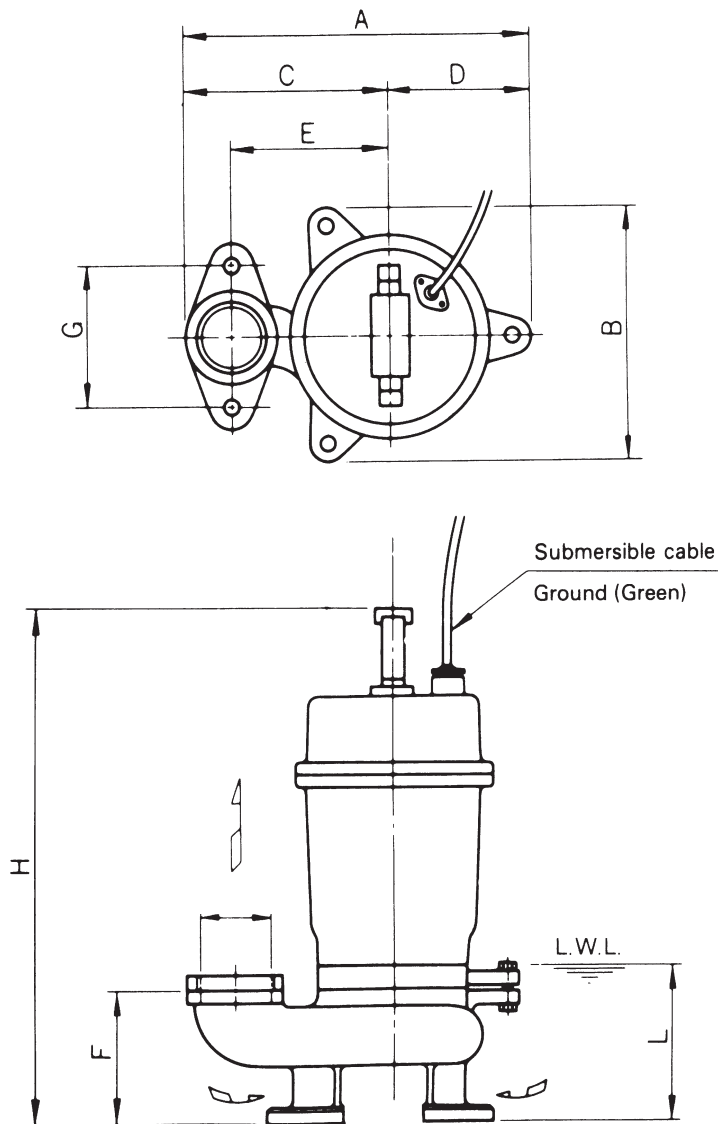
3 inch Discharge





Dimensions

Hot Water Pumps
50CVSHU, 1/2 to 2HP



Dimensions: inch

PHASE	SIZE _d	MODEL	OUTPUT		PUMP & MOTOR									WEIGHT Lb
			kW	HP	A	B	C	D	E	F	G	H	L	
THREE	2	50CVSHU6.4	0.4	1/2	9 ⁷ / ₁₆	6 ⁵ / ₁₆	5 ¹³ / ₁₆	3 ⁹ / ₁₆	4 ⁵ / ₁₆	3 ¹ / ₄	3 ³ / ₄	15 ⁷ / ₁₆	4 ⁷ / ₈	31
		50CVSHU6.75	0.75	1	9 ¹³ / ₁₆	6 ³ / ₄	6 ⁷ / ₁₆	3 ³ / ₈	4 ¹⁵ / ₁₆	3 ¹ / ₄	3 ³ / ₄	15 ⁵ / ₈	4 ¹ / ₈	42
		50CVSHU61.5	1.5	2	9 ¹³ / ₁₆	6 ³ / ₄	6 ⁷ / ₁₆	3 ³ / ₈	4 ¹⁵ / ₁₆	3 ¹ / ₄	3 ³ / ₄	17 ⁵ / ₁₆	4 ¹ / ₈	60

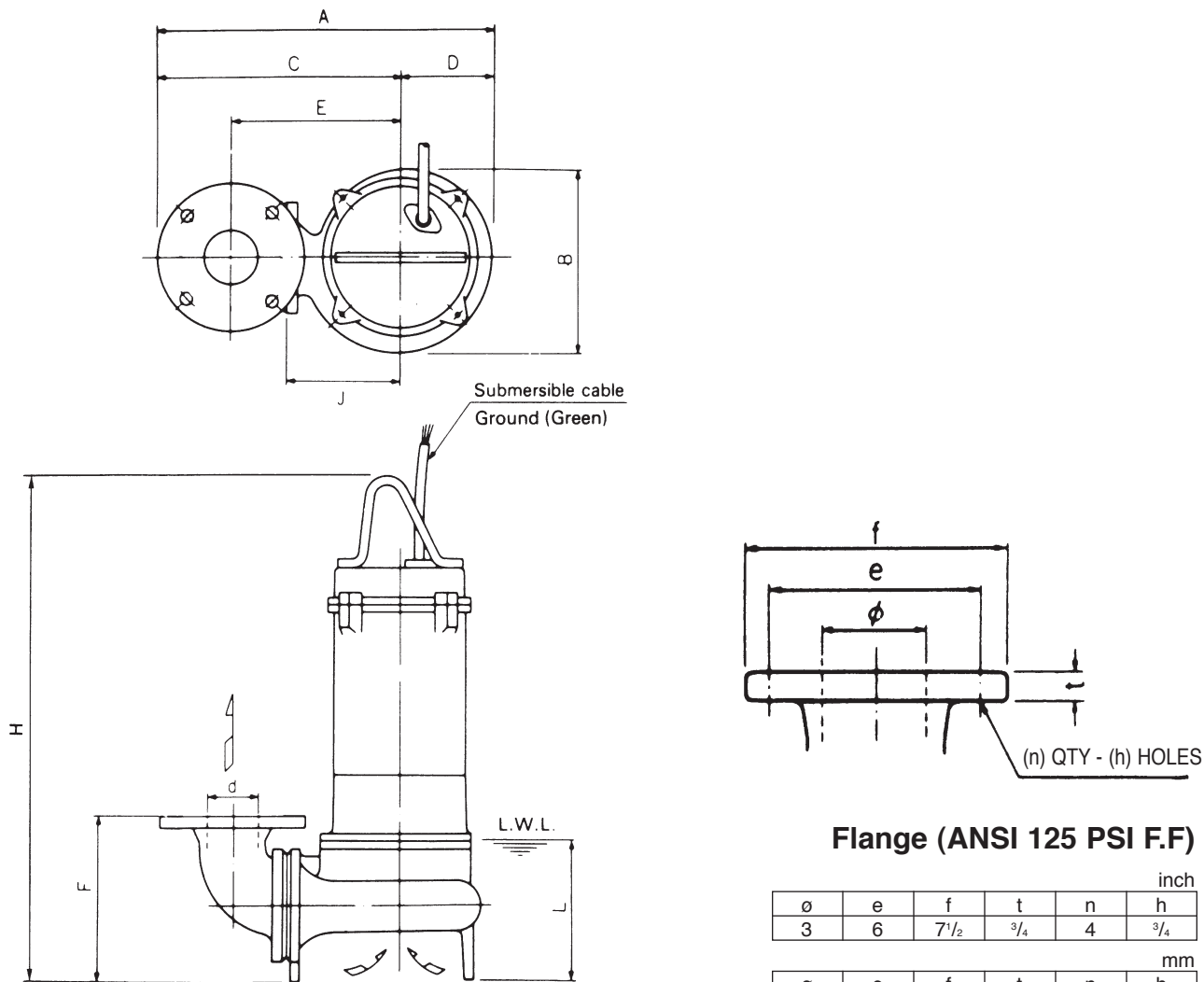
Dimensions: mm

PHASE	SIZE _d	MODEL	OUTPUT		PUMP & MOTOR									WEIGHT kg
			kW	HP	A	B	C	D	E	F	G	H	L	
THREE	50	50CVSHU6.4	0.4	1/2	239	160	148	91	110	83	96	392	105	14
		50CVSHU6.75	0.75	1	249	171	163	86	125	83	96	391	105	19
		50CVSHU61.5	1.5	2	249	171	163	86	125	83	96	440	105	27



Dimensions

Hot Water Pumps
80DVSHU, 1 to 5 HP



Flange (ANSI 125 PSI F.F)

inch					
ø	e	f	t	n	h
3	6	7 ¹ / ₂	³ / ₄	4	³ / ₄
mm					
ø	e	f	t	n	h
80	152	191	19	4	19

Dimensions: inch

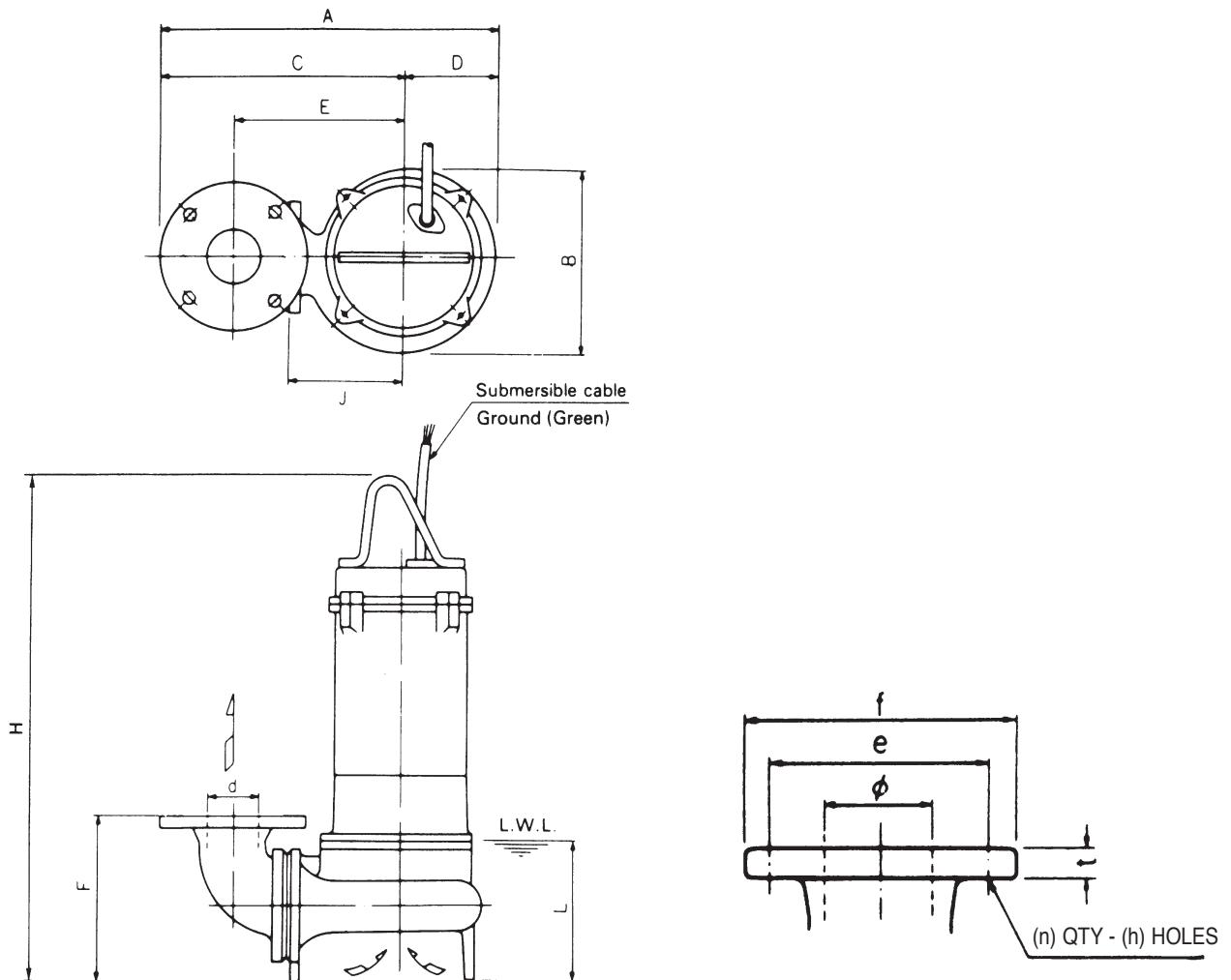
PHASE	SIZE d	MODEL	OUTPUT		PUMP & MOTOR									WEIGHT Lb
			kW	HP	A	B	C	D	E	F	H	J	L	
THREE	3	80CVSHU6.75	0.75	1	16 ³ / ₁₆	8	12 ⁵ / ₁₆	3 ⁷ / ₈	8 ¹¹ / ₁₆	7 ³ / ₁₆	18 ³ / ₈	5 ¹¹ / ₁₆	4 ¹⁵ / ₁₆	57
		80CVSHU61.5	1.5	2	16 ³ / ₁₆	8	12 ⁵ / ₁₆	3 ⁷ / ₈	8 ¹¹ / ₁₆	7 ³ / ₁₆	20 ⁷ / ₁₆	5 ¹¹ / ₁₆	4 ¹⁵ / ₁₆	77
		80CVSHU62.2	2.2	3	17 ³ / ₈	12 ¹⁵ / ₁₆	12 ¹⁵ / ₁₆	4 ¹ / ₂	9 ¹ / ₄	8 ¹ / ₈	25 ⁷ / ₈	6 ⁵ / ₁₆	6 ¹ / ₈	112
		80CVSHU63.7	3.7	5	17 ³ / ₈	12 ¹⁵ / ₁₆	12 ¹⁵ / ₁₆	4 ¹ / ₂	9 ¹ / ₄	8 ¹ / ₈	27 ³ / ₁₆	6 ⁵ / ₁₆	6 ¹ / ₈	132

Dimensions: mm

PHASE	SIZE d	MODEL	OUTPUT		PUMP & MOTOR									WEIGHT kg
			kW	HP	A	B	C	D	E	F	H	J	L	
THREE	80	80CVSHU6.75	0.75	1	411	203	313	98	220	183	467	145	125	26
		80CVSHU61.5	1.5	2	411	203	313	98	220	183	519	145	125	35
		80CVSHU62.2	2.2	3	442	328	328	114	235	206	658	160	155	51
		80CVSHU63.7	3.7	5	442	328	328	114	235	206	691	160	155	60

Dimensions

80CVSU, 3 to 5 HP



Flange (ANSI 125 PSI F.F)

inch					
ø	e	f	t	n	h
3	6	7 ¹ / ₂	³ / ₄	4	³ / ₄
mm					
ø	e	f	t	n	h
80	152	191	19	4	19

Dimensions: inch

PHASE	SIZE d	MODEL	OUTPUT		PUMP & MOTOR									WEIGHT Lb
			kW	HP	A	B	C	D	E	F	H	J	L	
THREE	3	80CVSU62.2	2.2	3	17 ³ / ₈	12 ¹⁵ / ₁₆	12 ¹⁵ / ₁₆	4 ¹ / ₂	9 ¹ / ₄	8 ¹ / ₈	28 ⁵ / ₈	6 ⁵ / ₁₆	6 ¹ / ₈	112
		80CVSU63.7	3.7	5	17 ³ / ₈	12 ¹⁵ / ₁₆	12 ¹⁵ / ₁₆	4 ¹ / ₂	9 ¹ / ₄	8 ¹ / ₈	28 ⁵ / ₈	6 ⁵ / ₁₆	6 ¹ / ₈	132

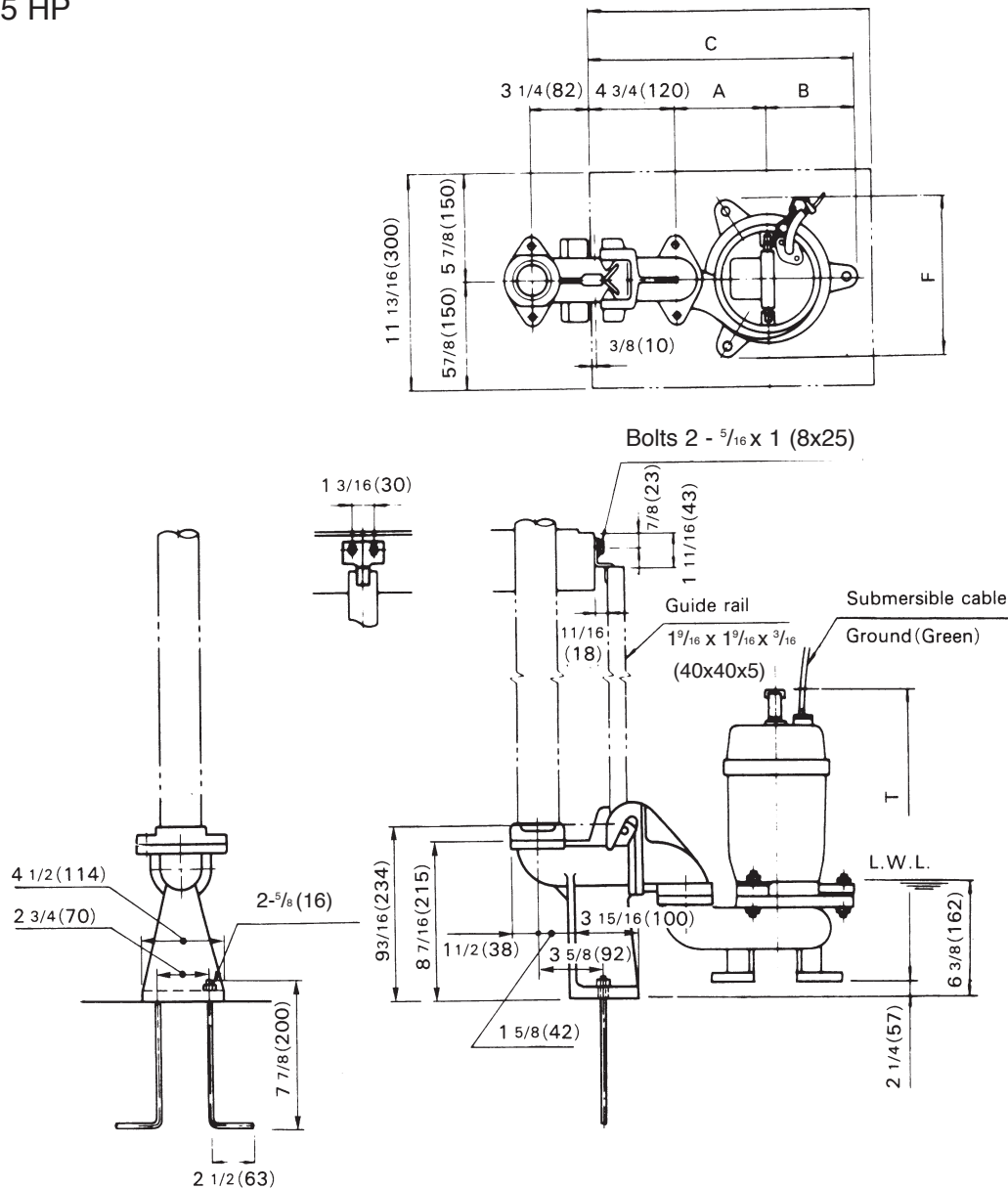
Dimensions: mm

PHASE	SIZE d	MODEL	OUTPUT		PUMP & MOTOR									WEIGHT kg
			kW	HP	A	B	C	D	E	F	H	J	L	
THREE	80	80CVSU62.2	2.2	3	442	328	328	114	235	206	727	160	155	51
		80CVSU63.7	3.7	5	442	328	328	114	235	206	727	160	155	60

Dimensions

Hot Water Pumps with Quick Discharge Connector
50DVSHU, 1/2 to 5 HP

Minimum dimensions of manhole
15 3/4 (400)



Dimensions: inch

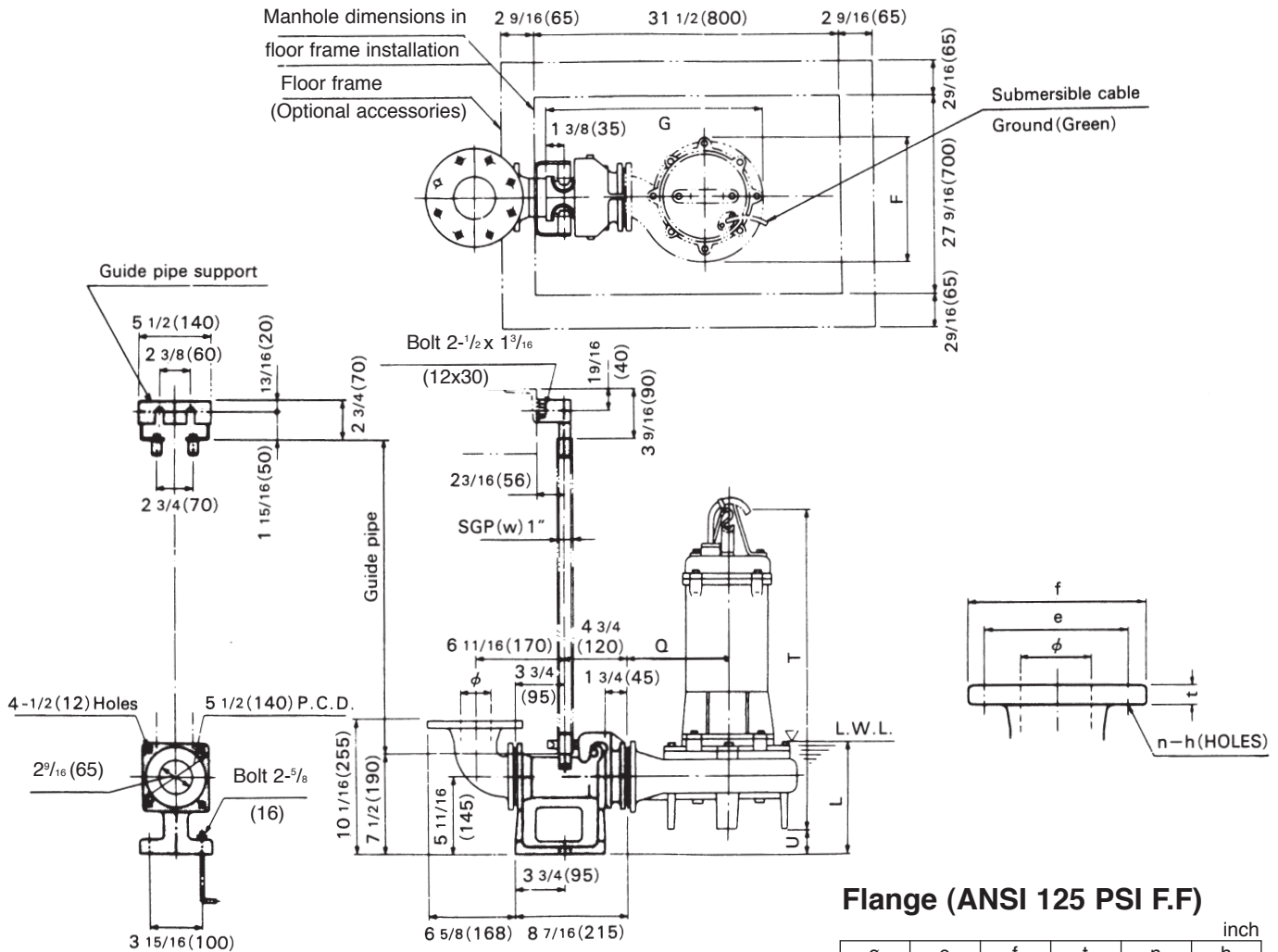
PHASE	SIZE Ø	PUMP MODEL	OUTPUT		Q.D.C. MODEL	PUMP & MOTOR					WEIGHT Lb	
			kW	HP		A	B	C	F	T	PUMP	Q.D.C.
THREE	2	50CVSHU6.4	0.4	1/2	LS50	4 9/16	3 9/16	12 5/8	6 5/16	15 7/16	31	20
		50CVSHU6.75	0.75	1	LS50	4 15/16	3 3/8	13 1/16	6 3/4	15 3/8	42	20
		50CVSHU61.5	1.5	2	LS50	4 15/16	3 3/8	13 1/16	6 3/4	17 5/16	60	20

Dimensions: mm

PHASE	SIZE Ø	PUMP MODEL	OUTPUT		Q.D.C. MODEL	PUMP & MOTOR					WEIGHT kg	
			kW	HP		A	B	C	F	T	PUMP	Q.D.C.
THREE	50	50CVSHU6.4	0.4	1/2	LS50	110	91	321	160	392	14	9
		50CVSHU6.75	0.75	1	LS50	125	86	331	171	391	19	9
		50CVSHU61.5	1.5	2	LS50	125	86	331	171	440	27	9

Dimensions

Hot Water Pumps with Quick Discharge Connector
80DVSHU, 1 to 5 HP



Flange (ANSI 125 PSI F.F)

inch					
ø	e	f	t	n	h
3	6	7 1/2	3/4	4	3/4

mm					
ø	e	f	t	n	h
80	152	191	19	4	19

Dimensions: inch

PHASE	SIZE ø	PUMP MODEL	OUTPUT		Q.D.C. MODEL	PUMP & MOTOR						WEIGHT Lb	
			kW	HP		F	G	L	Q	T	U	PUMP	Q.D.C.
THREE	3	80CVSHU6.75	0.75	1	LM65	8	15 11/16	7 3/4	5 11/16	18 3/8	2 13/16	57	31
		80CVSHU61.5	1.5	2	LM65	8	15 11/16	7 3/4	5 11/16	20 7/16	2 13/16	77	31
		80CVSHU62.2	2.2	3	LM65	12 15/16	16 7/8	8 1/16	6 5/16	25 7/8	1 15/16	112	31
		80CVSHU63.7	3.7	5	LM65	12 15/16	16 7/8	8 1/16	6 5/16	27 3/16	1 15/16	132	31

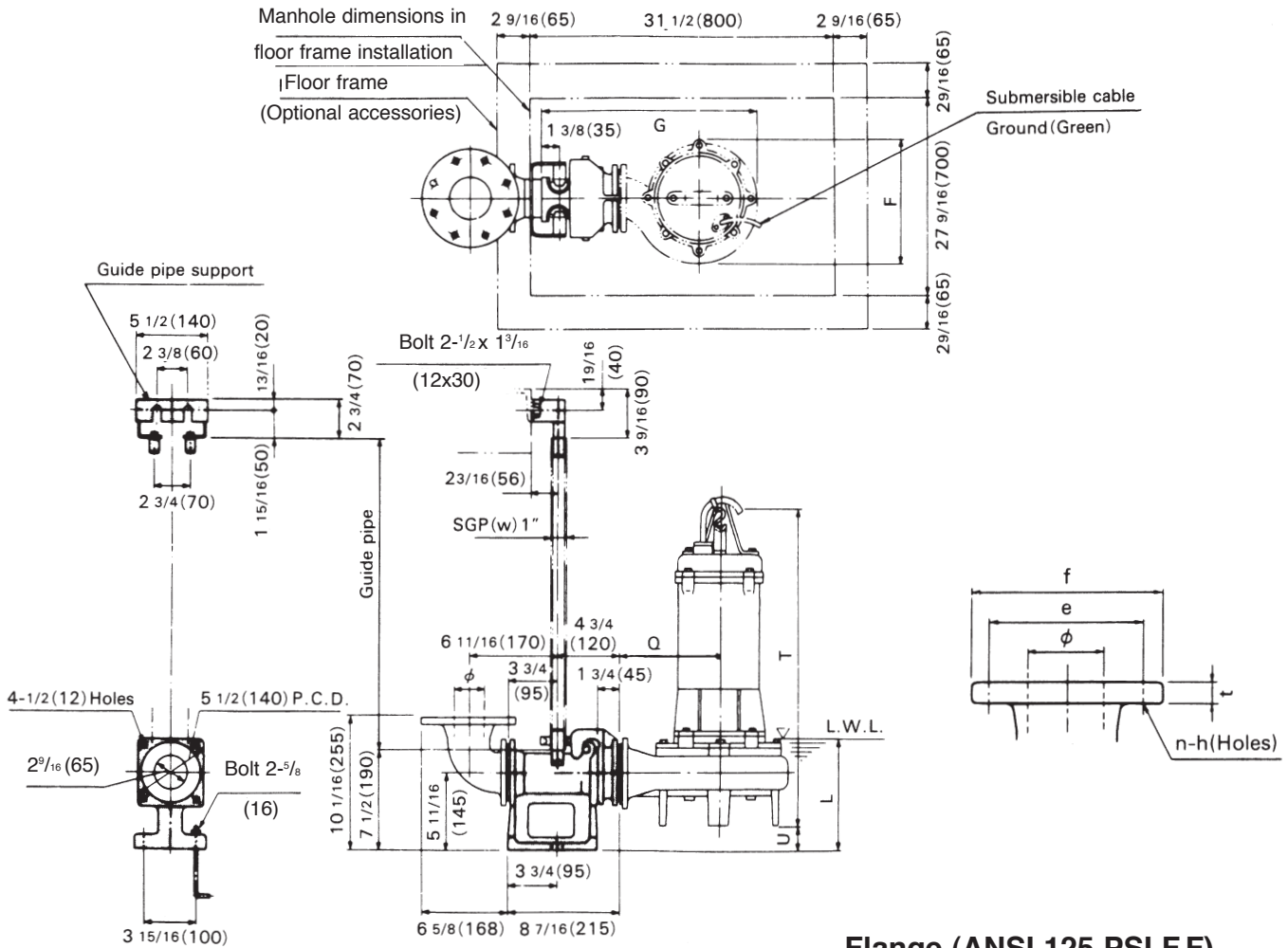
Dimensions: mm

PHASE	SIZE ø	PUMP MODEL	OUTPUT		Q.D.C. MODEL	PUMP & MOTOR						WEIGHT kg	
			kW	HP		F	G	L	Q	T	U	PUMP	Q.D.C.
THREE	80	80CVSHU6.75	0.75	1	LM65	203	398	197	145	467	72	26	14
		80CVSHU61.5	1.5	2	LM65	203	398	197	145	519	72	35	14
		80CVSHU62.2	2.2	3	LM65	328	429	204	160	658	49	51	14
		80CVSHU63.7	3.7	5	LM65	328	429	204	160	691	49	60	14

Model CVSU Dimensions

EBARA PRO Cast Vortex Sewage Pumps

80CVSU, 3 to 5 HP with Quick Discharge Connector



Flange (ANSI 125 PSI F.F)

inch					
ø	e	f	t	n	h
3	6	7 1/2	3/4	4	3/4
mm					
ø	e	f	t	n	h
80	152	191	19	4	19

Dimensions: inch

PHASE	SIZE ø	PUMP MODEL	OUTPUT		Q.D.C. MODEL	PUMP & MOTOR					WEIGHT Lb		
			kW	HP		F	G	L	Q	T	U	PUMP	Q.D.C.
THREE	3	80CVSU62.2	2.2	3	LM65	12 15/16	16 7/8	8 1/16	6 5/16	28 5/8	1 15/16	112	31
		80CVSU63.7	3.7	5	LM65	12 15/16	16 7/8	8 1/16	6 5/16	28 5/8	1 15/16	132	31

Dimensions: mm

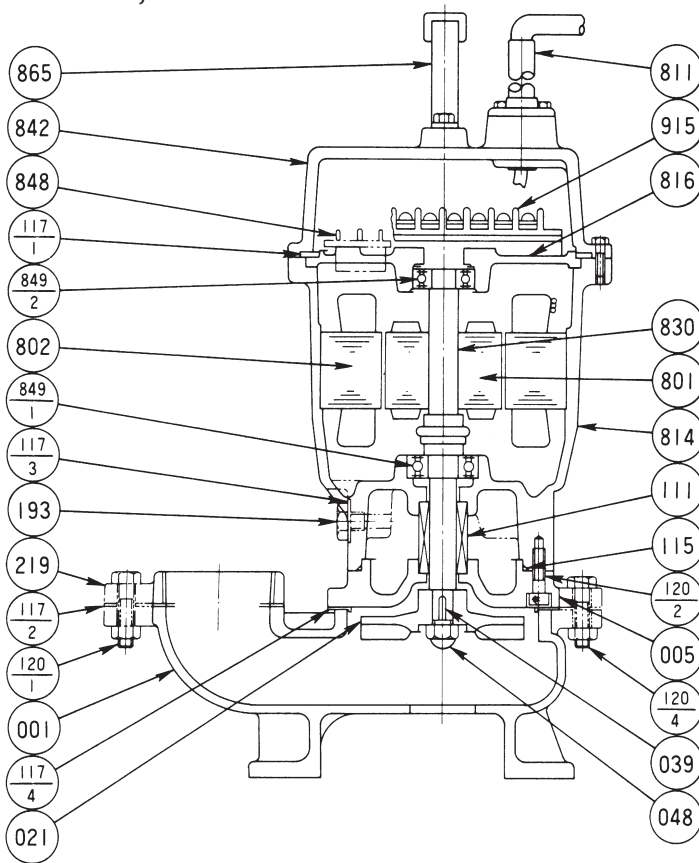
PHASE	SIZE ø	PUMP MODEL	OUTPUT		Q.D.C. MODEL	PUMP & MOTOR					WEIGHT kg		
			kW	HP		F	G	L	Q	T	U	PUMP	Q.D.C.
THREE	80	80CVSU62.2	2.2	3	LM65	328	429	204	160	727	49	51	14
		80CVSU63.7	3.7	5	LM65	328	429	204	160	727	49	60	14

Model CVSHU
Sectional View

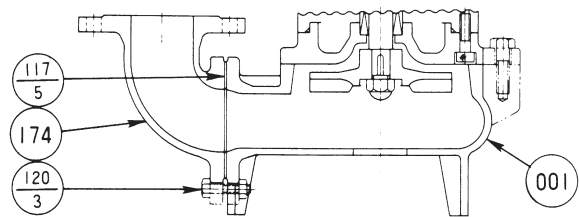
EBARA PRO Cast Vortex Sewage Pumps

Hot Water Pumps
1/2 to 5 HP

50CVSU, CVSHU



80CVSU, CVSHU



PART NO.	PART NAME	MATERIAL	ASTM, AISI CODE	NO. FOR 1 UNIT
001	CASING	CAST IRON	A48 Class 30	1
005	INTERMEDIATE CASING	CAST IRON	A48 Class 30	1
021	IMPELLER	CAST IRON	A48 Class 30	1
039	KEY	420 STAINLESS	AISI420	1
048	IMPELLER NUT	STEEL	A283 Grade D	1
†111	MECHANICAL SEAL	—		1
†115	O-RING	RUBBER (NBR)		1
†117-1	GASKET	RUBBER (NBR)		1
†117-2	GASKET	RUBBER (CR or NBR)		1
†117-3	GASKET			1
†117-4	GASKET	RUBBER (NR)		1
†117-5	GASKET			1
120-1	BOLT	304 STAINLESS	AISI304	2
120-2	BOLT	304 STAINLESS	AISI304	3 or 4
120-3	BOLT	304 STAINLESS	AISI304	4
120-4	BOLT	304 STAINLESS	AISI304	3 or 4

PART NO.	PART NAME	MATERIAL	ASTM, AISI CODE	NO. FOR 1 UNIT
174	DISCHARGE ELBOW	CAST IRON	A48 Class 30	1
193	OIL PLUG	316 STAINLESS	AISI 304	1
219	COMPANION FLANGE	CAST IRON	A48 Class 30	1
801	ROTOR	—		1
802	STATOR	—		1
811	SUBMERSIBLE CABLE	—		1
814	MOTOR FRAME	CAST IRON	A48 Class 30	1
816	BRACKET	CAST IRON	A48 Class 30	1
830	SHAFT	403 STAINLESS	AISI403	1
842	MOTOR COVER	CAST IRON	A48 Class 30	1
848	MOTOR PROTECTOR	—		1
†849-1	BALL BEARING	—		1
†849-2	BALL BEARING	—		1
865	HANDLE	304 STAINLESS	AISI304	1
915	EXTERNAL TERMINAL	—		1

Motors are purchased as a complete unit.
Parts No. 915 is not installed for CVSHU.

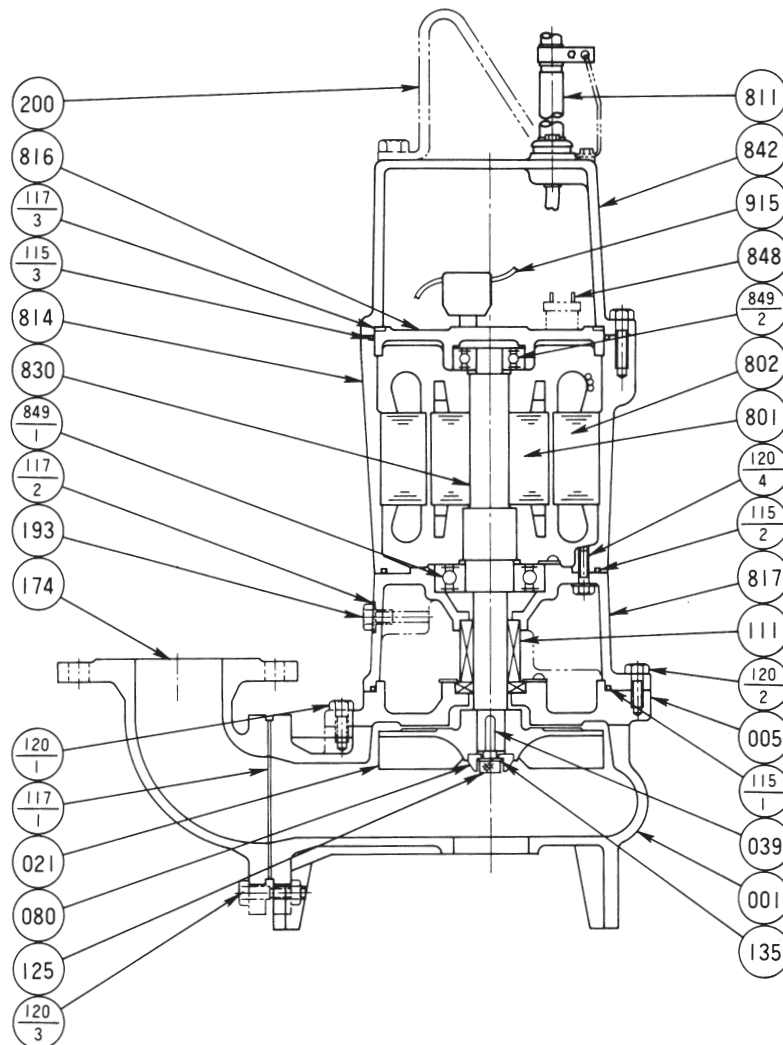
†: Recommended spare parts.

Model CVSU

EBARA PRO Cast Vortex Sewage Pumps

Sectional View

Hot Water Pumps
3 to 5 HP



Motors are purchased as a complete unit.
Parts No. 915 is not installed for CVSHU.

PART NO.	PART NAME	MATERIAL	ASTM, AISI CODE	NO. FOR 1 UNIT	PART NO.	PART NAME	MATERIAL	ASTM, AISI CODE	NO. FOR 1 UNIT
001	CASING	CAST IRON	A48 Class 30	1	135	WASHER	304 STAINLESS	AISI304	1
005	INTERMEDIATE CASING	CAST IRON	A48 Class 30	1	174	DISCHARGE ELBOW	CAST IRON	A48 Class 30	1
021	IMPELLER	CAST IRON	A48 Class 30	1	193	OIL PLUG	316 STAINLESS	AISI316	1
039	KEY	420 STAINLESS	AISI420	1	200	LIFTING HANGER	STEEL	A283 Grade D	1
080	BUSHING	STEEL	A283 Grade D	1	801	ROTOR	—	—	1
†111	MECHANICAL SEAL	—	—	1	802	STATOR	—	—	1
†115-1	O-RING	RUBBER (NBR)	—	1	811	SUBMERSIBLE CABLE	—	—	1
†115-2	O-RING	RUBBER (NBR)	—	1	814	MOTOR FRAME	CAST IRON	A48 Class 30	1
†115-3	O-RING	RUBBER (NBR)	—	2	816	BRACKET	CAST IRON	A48 Class 30	1
†117-1	GASKET	—	—	1	817	BRACKET	CAST IRON	A48 Class 30	1
†117-2	GASKET	—	—	1	830	SHAFT	403 STAINLESS	AISI403	1
†117-3	GASKET	RUBBER (NBR)	—	1	842	MOTOR COVER	CAST IRON	A48 Class 30	1
120-1	BOLT	304 STAINLESS	AISI304	4	848	MOTOR PROTECTOR	—	—	1
120-2	BOLT	304 STAINLESS	AISI304	4	†849-1	BALL BEARING	—	—	1
120-3	BOLT	304 STAINLESS	AISI304	4	†849-2	BALL BEARING	—	—	1
120-4	BOLT	304 STAINLESS	AISI304	4	915	EXTERNAL TERMINAL	—	—	1
125	BOLT	304 STAINLESS	AISI304	1					

†: Recommended spare parts.