

Model CVU**EBARA PRO Cast Vortex Sewage Pumps****Contents****Model**

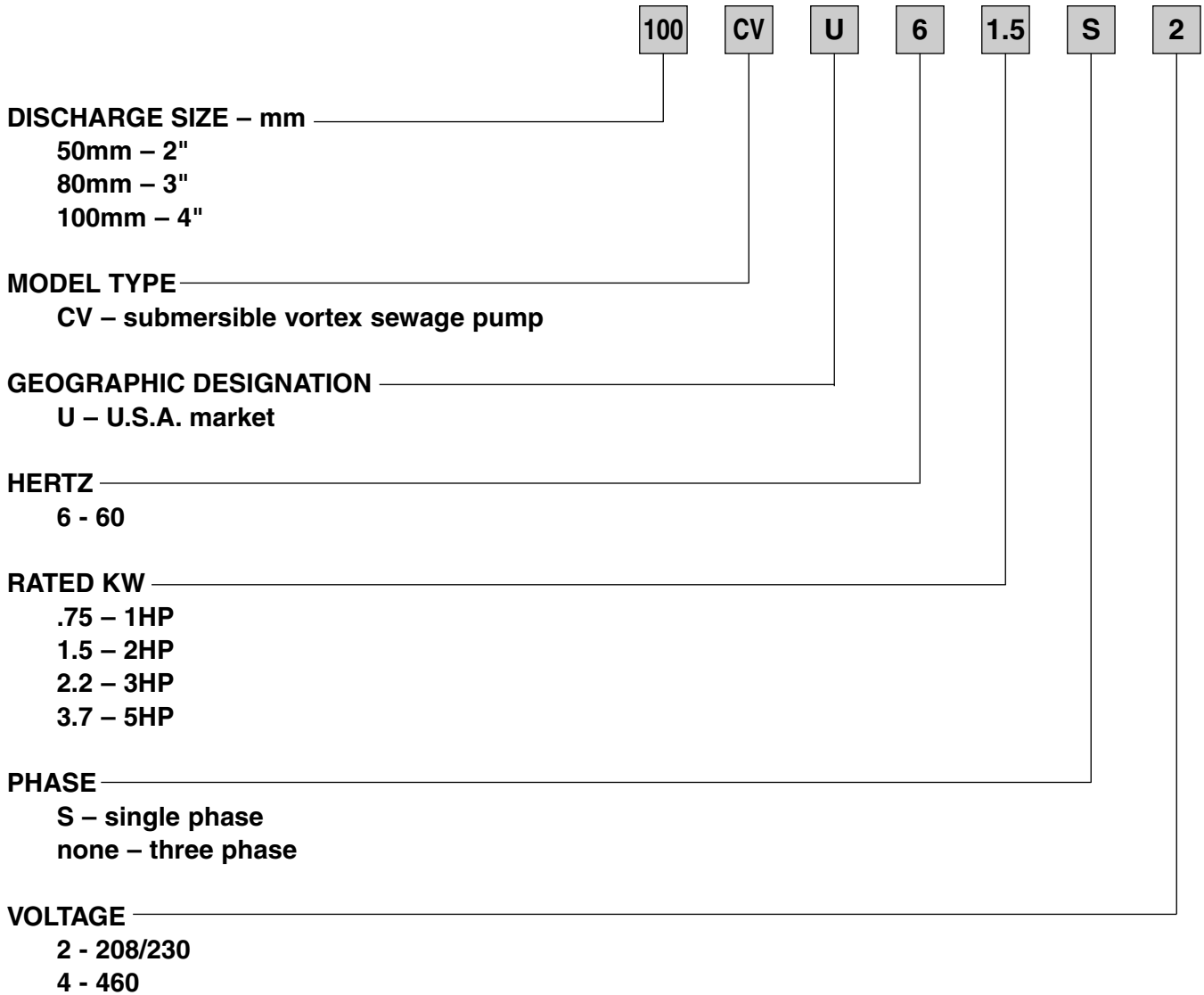
50CVU6.75S
 50CVU6.75
 50CVU61.5S
 50CVU61.5
 50CVU62.2S
 80CVU61.5S
 80CVU61.5
 80CVCU62.2S
 80CVBU62.2S
 80CVBU63.7S
 80CVCU63.7S
 100CVU63.7S

Section	Page
Specifications	1502
Selection Chart	1503
Performance Curves	1504
Dimensions	1509
Sectional View	1513
QDC Information	1900
Motor Data	2000
motor electrical specifications	
cable data	
wiring diagrams	
motor electrical data	

Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Model Designation



Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Specifications

	Standard	Optional
Size	2, 3, 4 inch	
Range of HP	1 to 2 HP Three Phase 1 to 5 HP Single Phase	
Range of Performance	Capacity 16 to 430 GPM Head 9 to 66 feet	
Limitation Maximum Water Temperature	104°F (40°C)	
Synchronous Speed	1800 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 Single Phase Three Phase Service Factor Motor Protection Single Phase Three Phase Accessories	Double Mechanical Seal Carbon/Ceramic Silicon Carbide/Silicon Carbide Recessed Vortex Impeller Prelubricated Ball Bearing Air-filled, Insulation Class F 208/230V 208/230/460V 1.15 Built-in Auto Cut - overload, no load, out of phase, and single phasing protection Submersible cable 33 ft.	66 ft. QDC System



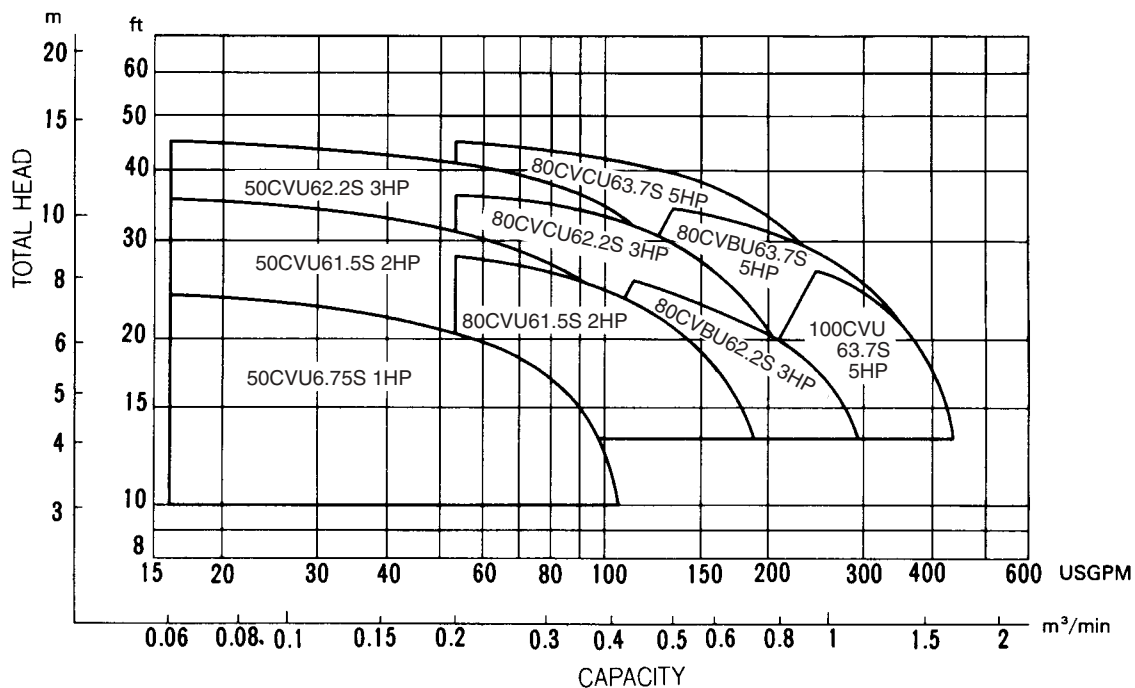
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Selection Chart

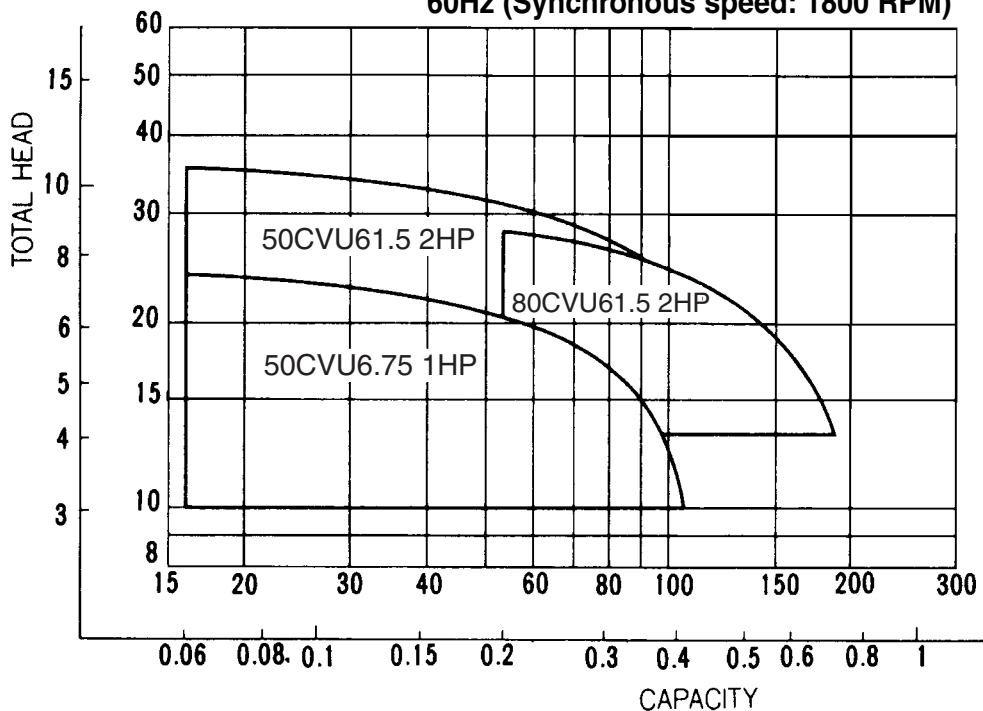
Single Phase

60Hz (Synchronous speed: 1800 RPM)



Three Phase

60Hz (Synchronous speed: 1800 RPM)



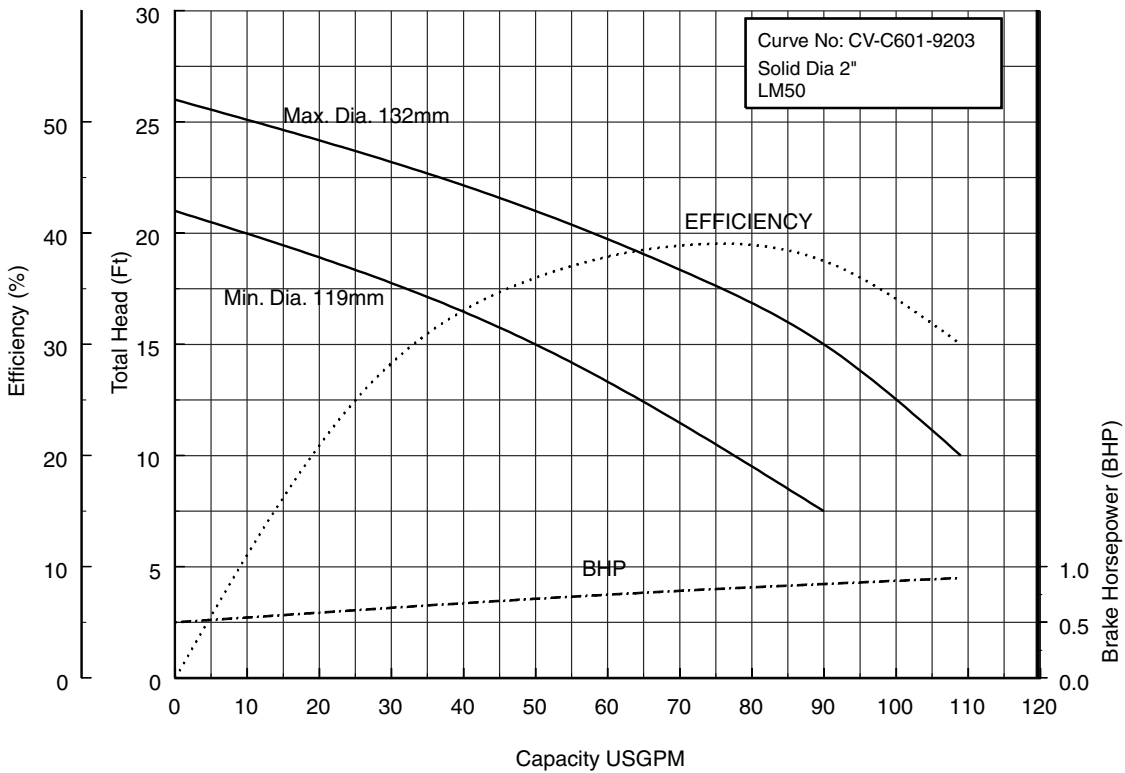
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Performance Curves

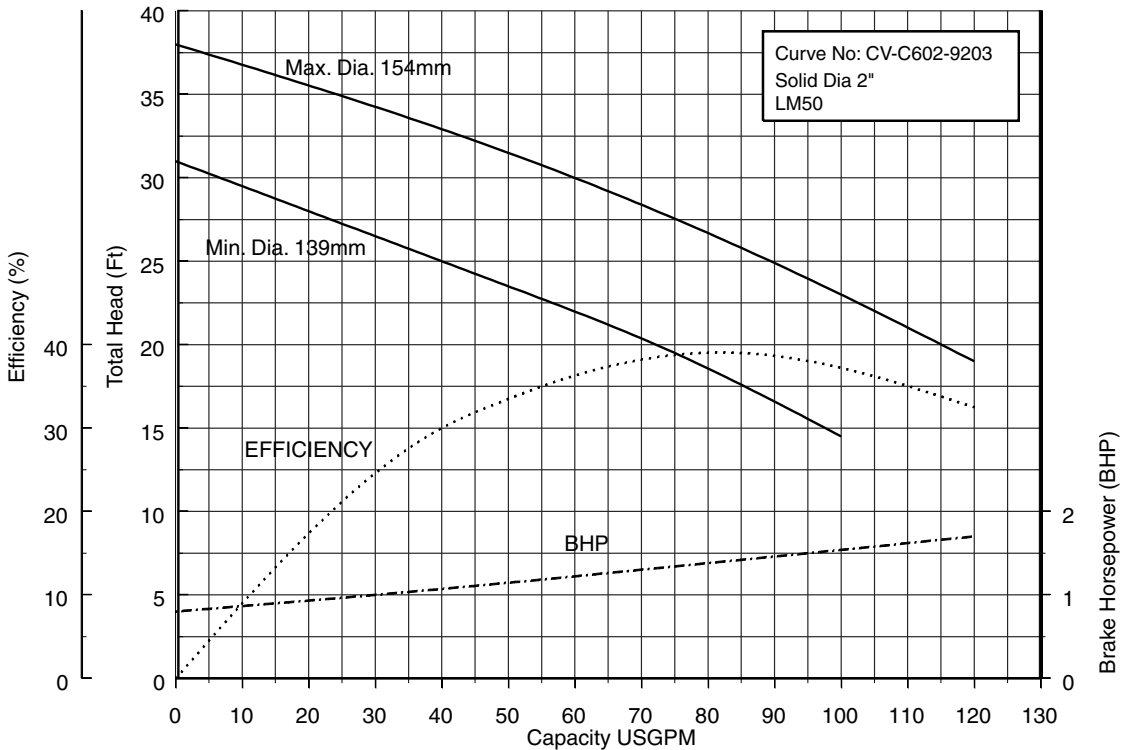
50CV6.75S 50CV6.75 (1HP) Synchronous Speed: 1800 RPM

2 inch Discharge



50CV61.5S 50CV61.5 (2HP) Synchronous Speed: 1800 RPM

2 inch Discharge



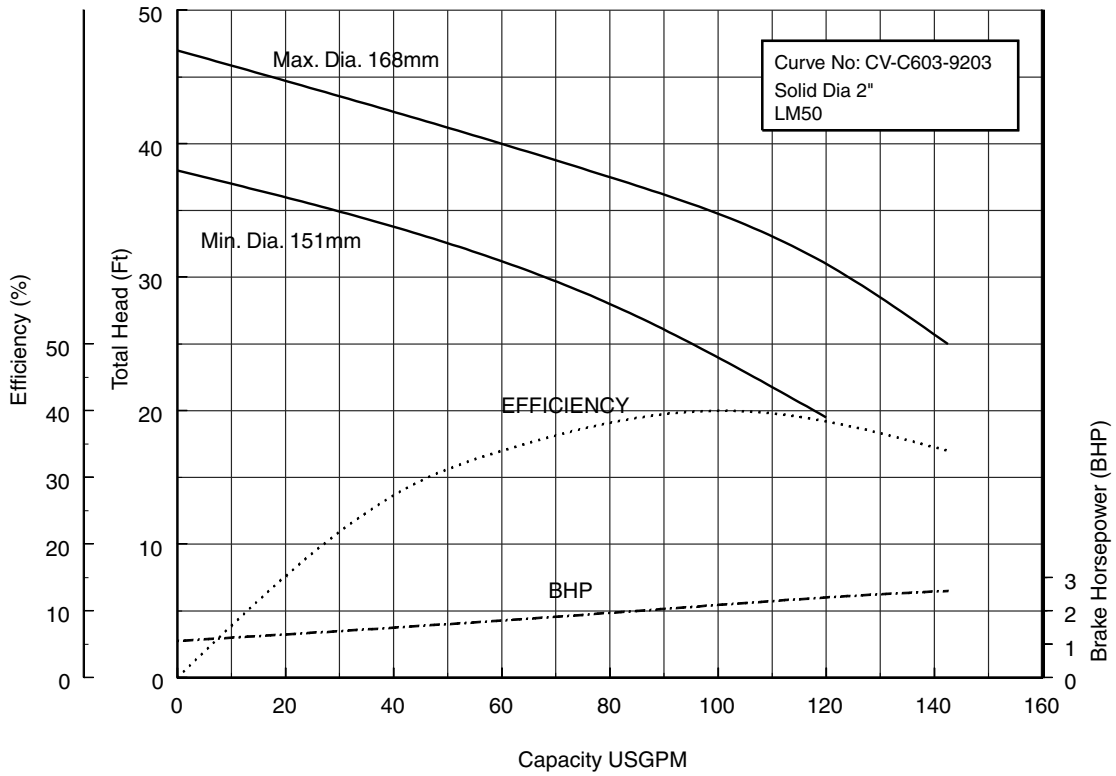
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Performance Curves

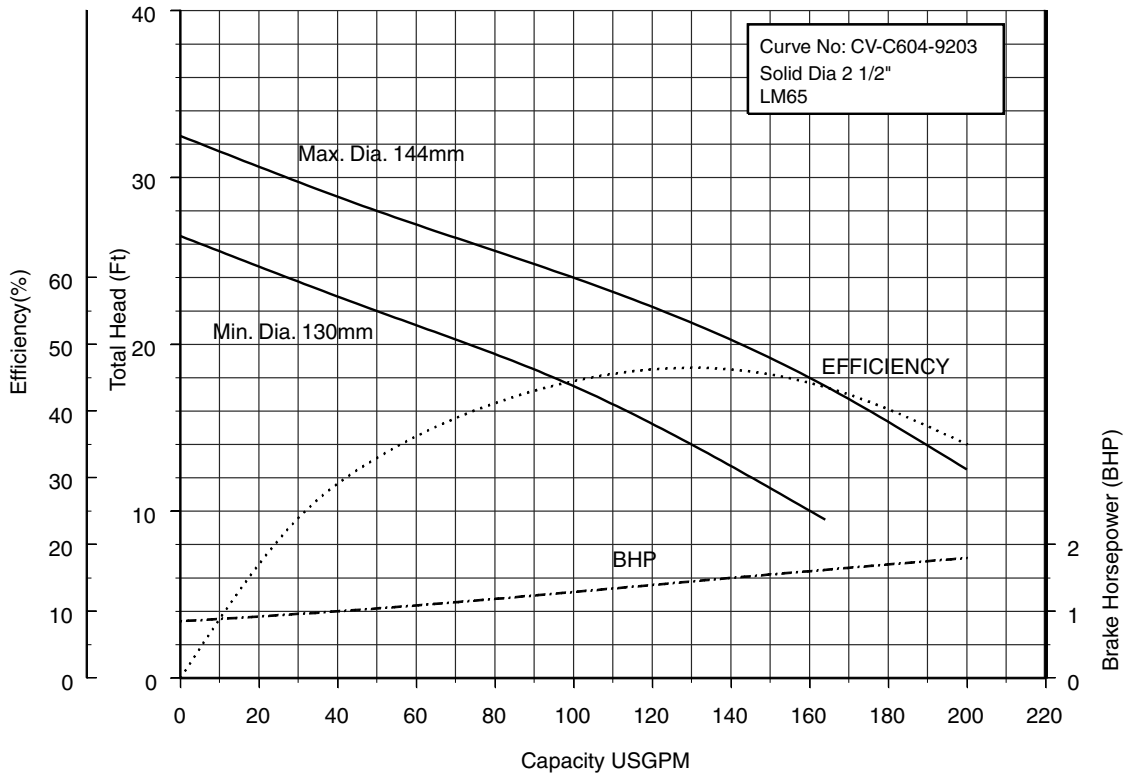
50CV62.2S (3HP) Synchronous Speed: 1800 RPM

2 inch Discharge



80CV61.5S 80CV61.5 (2HP) Synchronous Speed: 1800 RPM

2, 3 inch Discharge



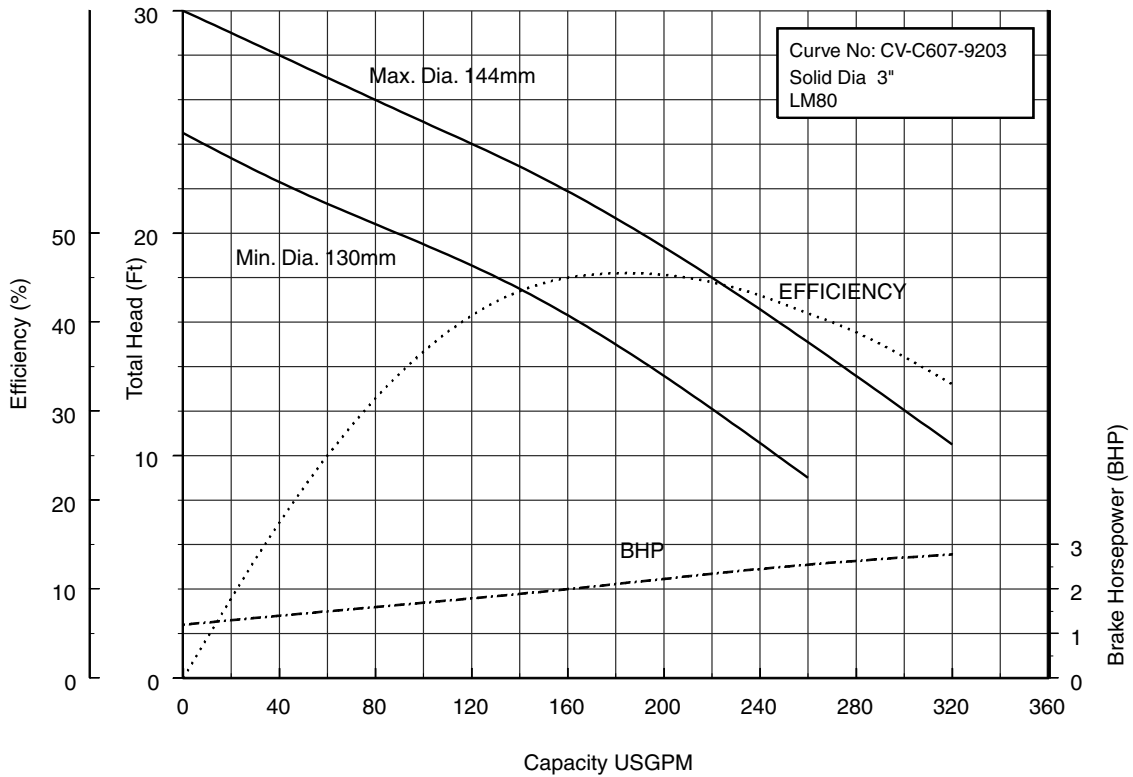
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Performance Curves

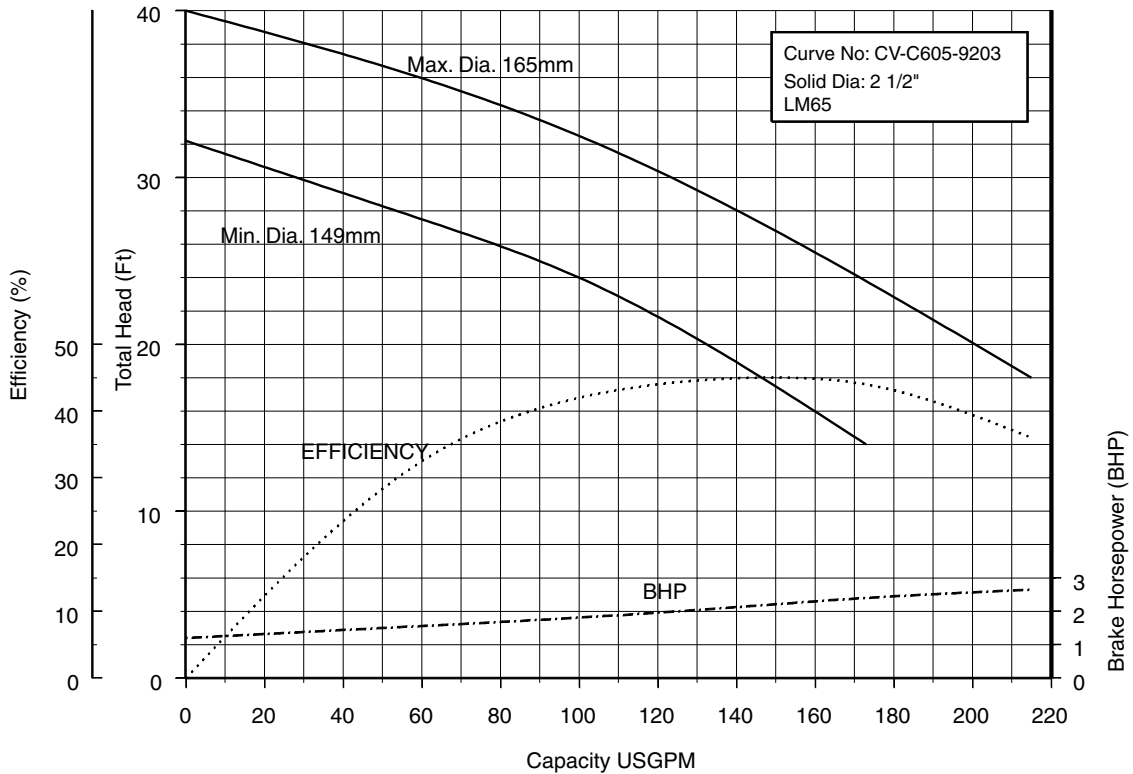
80CVB62.2S (3HP) Synchronous Speed: 1800 RPM

3, 4 inch Discharge



80CVC62.2S (3HP) Synchronous Speed: 1800 RPM

2, 3 inch Discharge



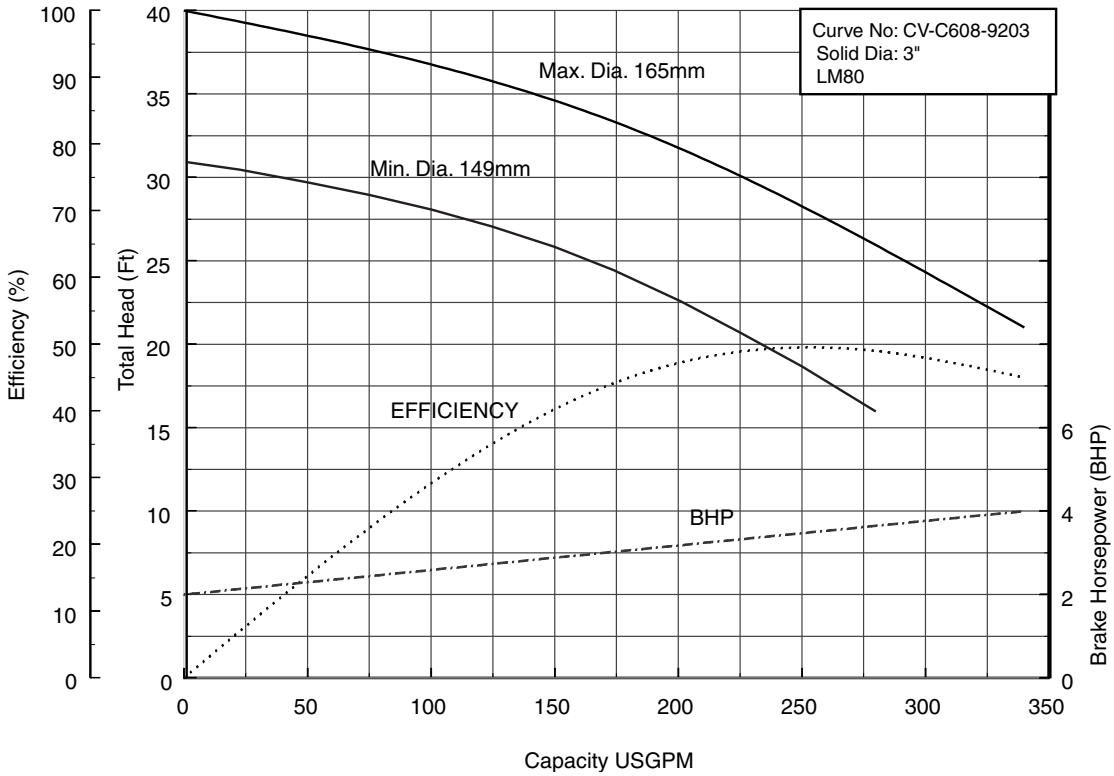
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Performance Curves

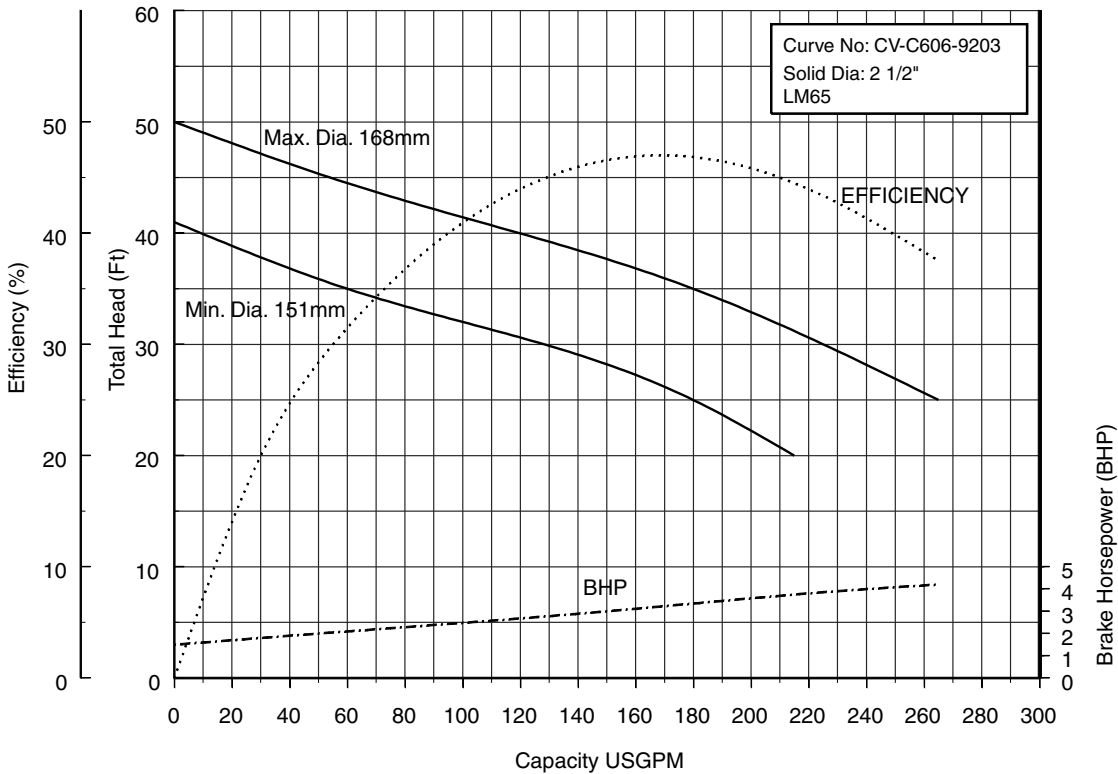
80CVB63.7S (5HP) Synchronous Speed: 1800 RPM

3, 4 inch Discharge



80CVC63.7S (5HP) Synchronous Speed: 1800 RPM

2, 3 inch Discharge



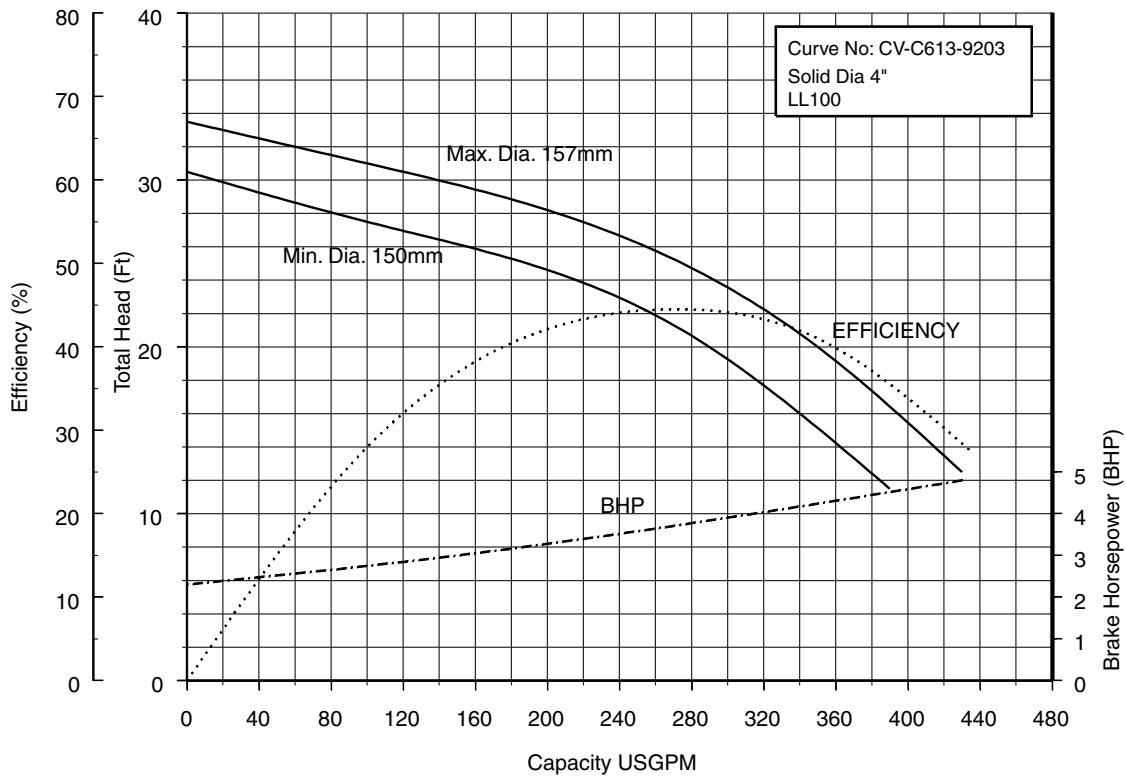
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Performance Curves

100CV63.7S (5HP) Synchronous Speed: 1800 RPM

3, 4 inch Discharge



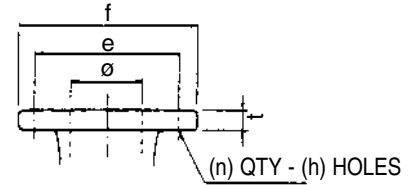
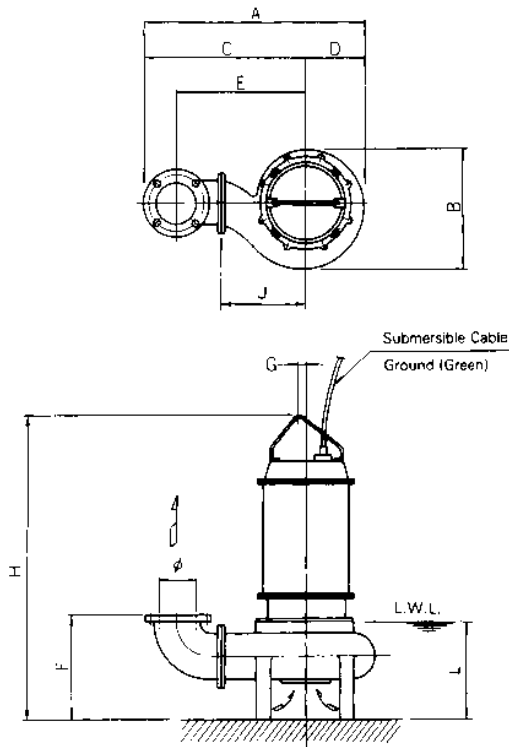
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Dimensions

Model CVU, Single and Three Phase

50CVU, 1 to 3HP
 80CVU, 2 to 5 HP
 100CVU, 5HP



Flange (ANSI 125 PSI F.F)

inch					
ø	e	f	t	n	h
2	4 ³ / ₄	6	⁵ / ₈	4	³ / ₄
3	6	7 ¹ / ₂	³ / ₄	4	³ / ₄
4	7 ¹ / ₂	9	¹⁵ / ₁₆	8	³ / ₄

mm					
ø	e	f	t	n	h
50	121	152	16	4	19
80	152	191	19	4	19
100	191	229	24	8	19

Dimensions: inch

PHASE	SIZE ø	MODEL	OUTPUT		PUMP & MOTOR										WEIGHT Lb
			KW	HP	A	B	C	D	E	F	G	H	J	L	
SINGLE	2	50CVU6.75S	0.75	1	13 ¹⁵ / ₁₆	7 ¹¹ / ₁₆	10 ⁹ / ₁₆	3 ⁷ / ₈	7 ¹ / ₁₆	7 ⁵ / ₁₆	1 ³ / ₁₆	22 ⁵ / ₁₆	4 ¹⁵ / ₁₆	6 ¹ / ₂	57
		50CVU61.5S	1.5	2	15 ³ / ₄	9 ⁹ / ₈	11 ¹ / ₁₆	4 ¹¹ / ₁₆	8 ¹ / ₁₆	7 ⁵ / ₁₆	¹³ / ₁₆	23	5 ⁷ / ₈	6 ⁵ / ₈	86
		50CVU62.2S	2.2	3	15 ³ / ₄	9 ⁹ / ₈	11 ¹ / ₁₆	4 ¹¹ / ₁₆	8 ¹ / ₁₆	7 ⁵ / ₁₆	¹³ / ₁₆	27 ³ / ₁₆	5 ⁷ / ₈	6 ⁷ / ₈	110
	2/3	80CVU61.5S	1.5	2	17 ¹¹ / ₁₆	8 ⁷ / ₈	13 ¹ / ₁₆	4 ¹¹ / ₁₆	9 ¹ / ₄	8 ¹³ / ₁₆	¹³ / ₁₆	24 ⁷ / ₁₆	6 ⁵ / ₁₆	8 ¹ / ₁₆	95
		80CVU62.2S	2.2	3	17 ¹¹ / ₁₆	8 ⁷ / ₈	13 ¹ / ₁₆	4 ¹¹ / ₁₆	9 ¹ / ₄	8 ¹³ / ₁₆	¹³ / ₁₆	28 ⁹ / ₁₆	6 ⁵ / ₁₆	8 ⁵ / ₁₆	119
		80CVU63.7S	3.7	5	17 ¹¹ / ₁₆	8 ⁷ / ₈	13 ¹ / ₁₆	4 ¹¹ / ₁₆	9 ¹ / ₄	8 ¹³ / ₁₆	¹³ / ₁₆	30 ³ / ₈	6 ⁵ / ₁₆	8 ⁵ / ₁₆	139
		80CVBU62.2S	2.2	3	18 ⁹ / ₁₆	9 ¹⁵ / ₁₆	13 ⁵ / ₈	4 ¹⁵ / ₁₆	9 ¹³ / ₁₆	10	1	30 ⁷ / ₁₆	6 ⁷ / ₈	10 ⁹ / ₁₆	137
		80CVBU63.7S	3.7	5	18 ⁹ / ₁₆	9 ¹⁵ / ₁₆	13 ⁵ / ₈	4 ¹⁵ / ₁₆	9 ¹³ / ₁₆	10	1	32 ¹ / ₄	6 ⁷ / ₈	10 ⁹ / ₁₆	143
		100CVU63.7S	3.7	5	23 ³ / ₁₆	12 ¹ / ₈	17 ¹ / ₈	6 ¹ / ₁₆	12 ⁵ / ₈	12	1	34 ⁷ / ₁₆	8 ⁷ / ₁₆	12 ³ / ₈	176
THREE	2	50CVU6.75	0.75	1	13 ¹⁵ / ₁₆	7 ¹¹ / ₁₆	10 ¹ / ₁₆	3 ⁷ / ₈	7 ¹ / ₁₆	7 ⁵ / ₁₆	1 ³ / ₁₆	23 ¹ / ₁₆	4 ¹⁵ / ₁₆	6 ¹ / ₂	53
		50CVU61.5	1.5	2	15 ³ / ₄	9 ⁹ / ₈	11 ¹ / ₁₆	4 ¹¹ / ₁₆	8 ¹ / ₁₆	7 ⁵ / ₁₆	¹³ / ₁₆	26 ³ / ₈	5 ⁷ / ₈	6 ⁵ / ₈	95
	2/3	80CVU61.5	1.5	2	17 ¹¹ / ₁₆	8 ⁷ / ₈	13 ¹ / ₁₆	4 ¹¹ / ₁₆	9 ¹ / ₄	8 ¹³ / ₁₆	¹³ / ₁₆	27 ¹³ / ₁₆	6 ⁵ / ₁₆	8 ¹ / ₁₆	104

Dimensions: mm

PHASE	SIZE ø	MODEL	OUTPUT		PUMP & MOTOR										WEIGHT kg
			KW	HP	A	B	C	D	E	F	G	H	J	L	
SINGLE	50	50CVU6.75S	0.75	1	354	195	258	98	180	185	30	567	125	165	26
		50CVU61.5S	1.5	2	400	238	281	119	205	185	20	584	150	168	39
		50CVU62.2S	2.2	3	400	238	281	119	205	185	20	690	150	175	50
	50/80	80CVU61.5S	1.5	2	450	225	331	119	235	224	20	620	160	204	43
		80CVU62.2S	2.2	3	450	225	331	119	235	224	20	726	160	211	54
		80CVU63.7S	3.7	5	450	225	331	119	235	224	20	772	160	211	63
		80CVBU62.2S	2.2	3	471	252	346	125	250	254	25	773	175	258	62
		80CVBU63.7S	3.7	5	471	252	346	125	250	254	25	819	175	258	65
		100CVU63.7S	3.7	5	589	308	435	154	320	305	25	875	215	314	80
THREE	50	50CVU6.75	0.75	1	354	195	256	98	180	185	30	586	125	165	24
		50CVU61.5	1.5	2	400	238	281	119	205	185	20	670	150	168	43
	50/80	80CVU61.5	1.5	2	450	225	331	119	235	224	20	706	160	204	47

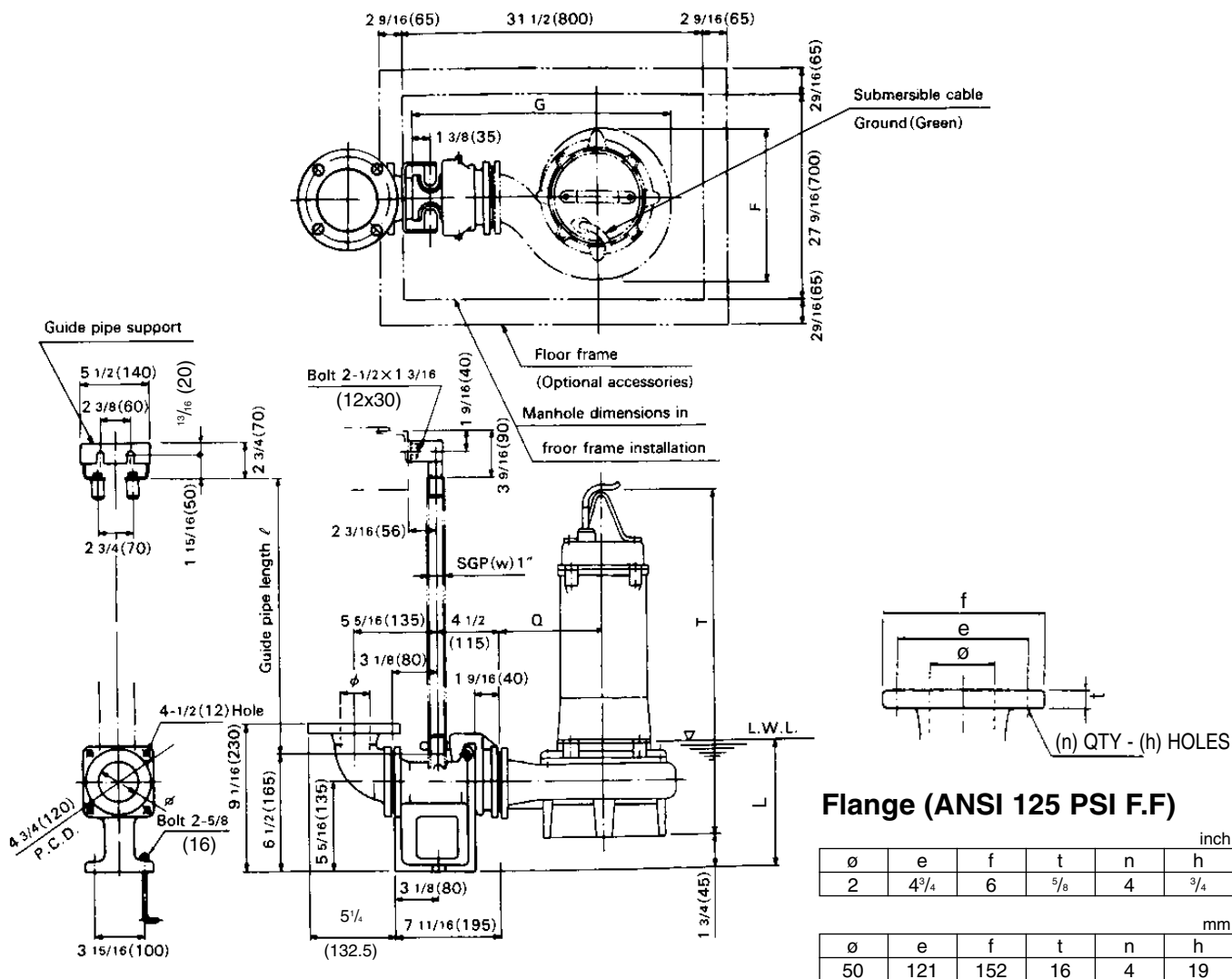


Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Dimensions

Model CVU, with Quick Discharge Connector, Single and Three Phase
50CVU, 1 to 3HP



Dimensions: inch

PHASE	SIZE ø	MODEL	OUTPUT		QDC MODEL	PUMP & MOTOR					WEIGHT Lb	
			kW	HP		F	G	L	Q	T	PUMP	Q.D.C.
SINGLE	2	50CVU6.75S	0.75	1	LM50	7 ¹ / ₁₆	14 ³ / ₈	8 ¹ / ₄	4 ¹⁵ / ₁₆	22 ⁵ / ₁₆	57	24
		50CVU61.5S	1.5	2	LM50	8 ⁹ / ₁₆	16 ¹ / ₄	8 ³ / ₈	5 ⁷ / ₈	23	86	24
		50CVU62.2S	2.2	3	LM50	8 ⁹ / ₁₆	15 ⁵ / ₈	8 ¹¹ / ₁₆	5 ⁷ / ₈	27 ³ / ₁₆	110	24
THREE	2	50CVU6.75	0.75	1	LM50	7 ¹ / ₁₆	14 ³ / ₈	8 ¹ / ₄	4 ¹⁵ / ₁₆	23 ³ / ₁₆	53	24
		50CVU61.5	1.5	2	LM50	8 ⁹ / ₁₆	16 ¹ / ₄	8 ³ / ₈	5 ⁷ / ₈	26 ³ / ₈	95	24

Dimensions: mm

PHASE	SIZE ø	MODEL	OUTPUT		QDC MODEL	PUMP & MOTOR					WEIGHT Lb	
			kW	HP		F	G	L	Q	T	PUMP	Q.D.C.
SINGLE	50	50CVU6.75S	0.75	1	LM50	179	365	210	125	567	26	11
		50CVU61.5S	1.5	2	LM50	217	413	213	150	584	39	11
		50CVU62.2S	2.2	3	LM50	217	384	220	150	690	50	11
THREE	50	50CVU6.75	0.75	1	LM50	179	365	210	125	586	24	11
		50CVU61.5	1.5	2	LM50	217	413	213	150	670	43	11



Model CVU

EBARA PRO Cast Vortex Sewage Pumps

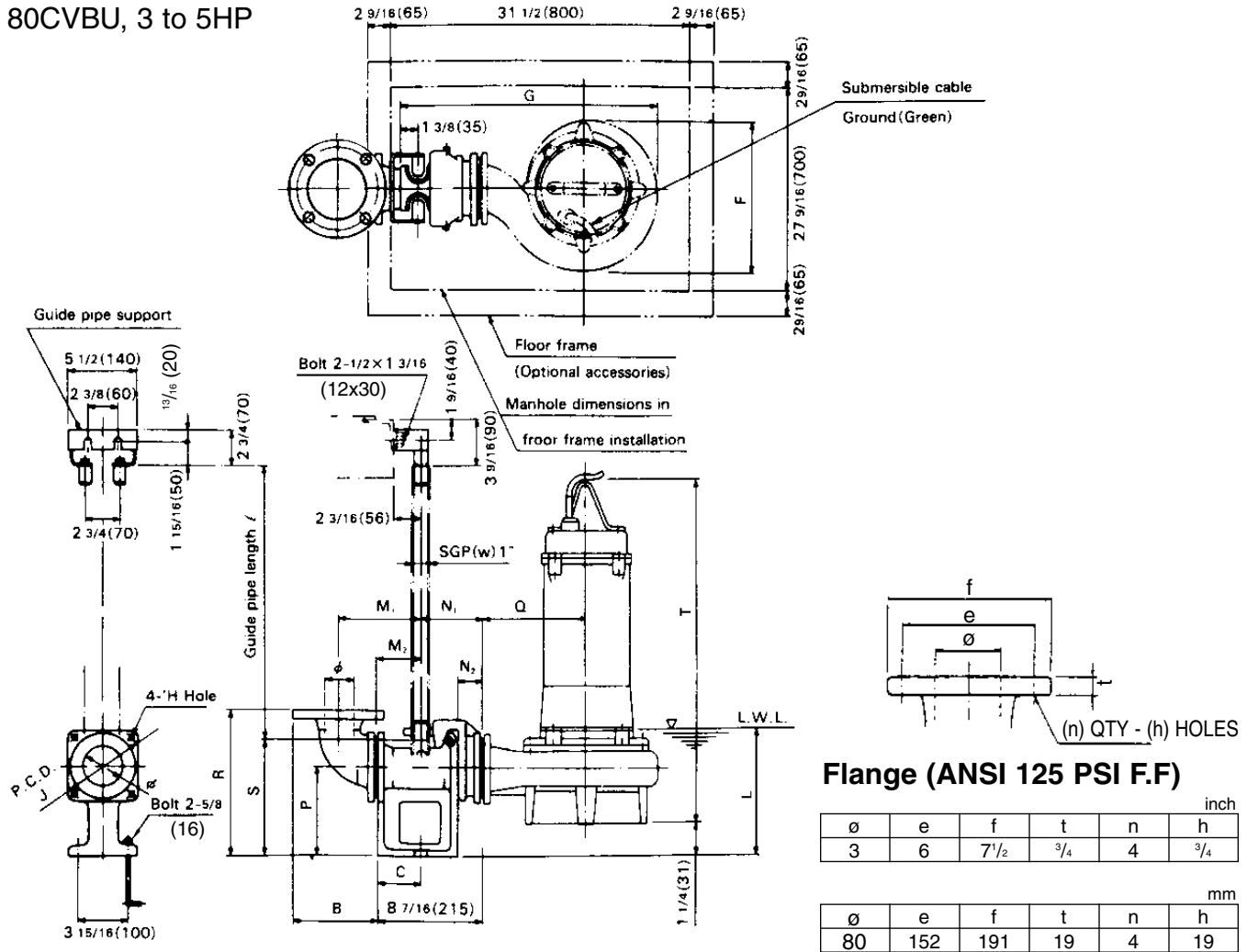
Dimensions

Model CVU, with Quick Discharge Connector, Single and Three Phase

80CVU, 2HP

80CVCU, 3 to 5HP

80CVBU, 3 to 5HP



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		QDC MODEL	QDC										PUMP & MOTOR					WEIGHT Lb		
			KW	HP		B	C	H	J	M ₁	M ₂	N ₁	N ₂	P	R	S	F	G	L	Q	T	PUMP	QDC
SINGLE	2/3	80CVU61.5S	1.5	2	LM65	6	3 3/4	1/2	5 1/2	6 11/16	3 3/4	4 3/4	1 3/4	5 11/16	10 1/16	7 1/2	8 7/8	16 7/8	9 1/4	6 5/16	24 7/16	95	31
		80CVCU62.2S	2.2	3	LM65	6	3 3/4	1/2	5 1/2	6 11/16	3 3/4	4 3/4	1 3/4	5 11/16	10 1/16	7 1/2	8 7/8	16 7/8	9 1/2	6 5/16	28 9/16	119	31
		80CVCU63.7S	3.7	5	LM65	6	3 3/4	1/2	5 1/2	6 11/16	3 3/4	4 3/4	1 3/4	5 11/16	10 1/16	7 1/2	10 3/4	19	9 1/2	6 7/8	30 3/8	139	31
	80CVBU62.2S	2.2	3	LM80	6 5/8	3 9/16	9/16	6 1/8	6 1/2	3 9/16	4 15/16	1 15/16	6 7/8	11 1/4	9 1/16	9 13/16	18 7/8	11 3/8	6 7/8	30 7/16	137	37	
THREE	2/3	80CVU61.5	1.5	2	LM65	6	3 3/4	1/2	5 1/2	6 5/16	3 3/4	4 3/4	1 3/4	5 11/16	10 1/16	7 1/2	8 7/8	16 7/8	9 1/4	6 5/16	27 3/16	104	31

Dimensions: mm

PHASE	SIZE ø	PUMP MODEL	OUTPUT		QDC MODEL	QDC										PUMP & MOTOR					WEIGHT kg		
			KW	HP		B	C	H	J	M ₁	M ₂	N ₁	N ₂	P	R	S	F	G	L	Q	T	PUMP	QDC
SINGLE	50/80	80CVU61.5S	1.5	2	LM65	153	95	12	140	170	95	120	45	145	255	190	225	428	235	160	620	43	14
		80CVCU62.2S	2.2	3	LM65	153	95	12	140	170	95	120	45	145	255	190	225	428	242	160	726	54	14
		80CVCU63.7S	3.7	5	LM65	153	95	12	140	170	95	120	45	145	255	190	273	482	242	175	772	63	14
	80CVBU62.2S	2.2	3	LM80	168	90	15	155	165	90	125	50	175	285	230	249	460	289	175	773	62	17	
THREE	50/80	80CVU61.5	1.5	2	LM65	153	95	12	140	160	95	120	45	145	255	190	225	428	235	160	706	47	14

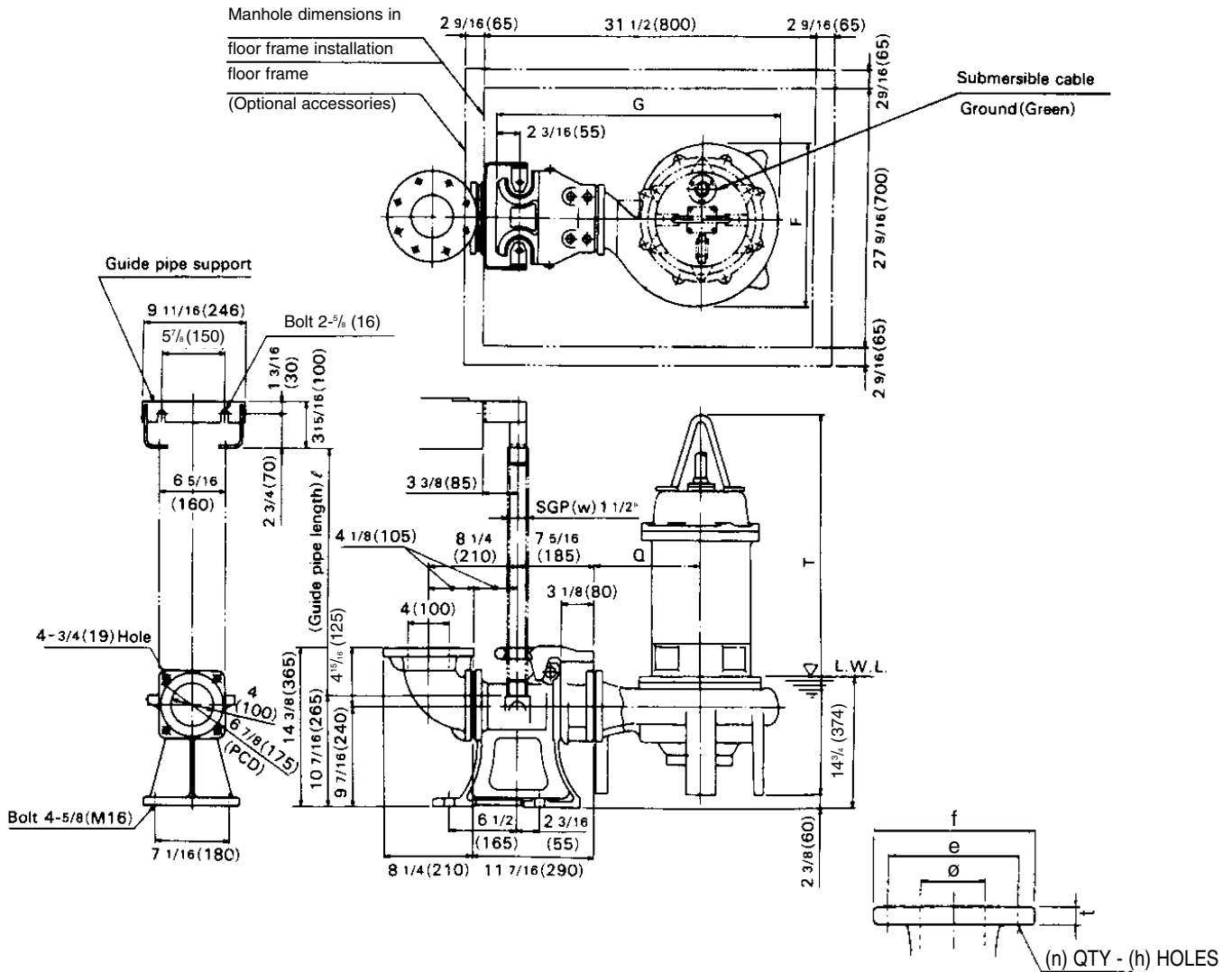


Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Dimensions

**Model CVU, with Quick Discharge Connector, Single Phase
100CVU 5HP**



Flange (ANSI 125 PSI F.F)

inch					
ø	e	f	t	n	h
4	7 1/2	9	15/16	8	3/4

mm					
ø	e	f	t	n	h
100	191	229	24	8	19

Dimensions: inch

PHASE	SIZE ø	MODEL	OUTPUT		QDC MODEL	PUMP & MOTOR				WEIGHT Lb	
			KW	HP		F	G	Q	T	PUMP	Q.D.C.
SINGLE	3/4	100CVU63.7S	3.7	5	LL100	12 1/8	24	8 7/16	34 7/16	176	101

Dimensions: mm

PHASE	SIZE ø	MODEL	OUTPUT		QDC MODEL	PUMP & MOTOR				WEIGHT kg	
			KW	HP		F	G	Q	T	PUMP	Q.D.C.
SINGLE	80/100	100CVU63.7S	3.7	5	LL100	308	609	215	875	80	46



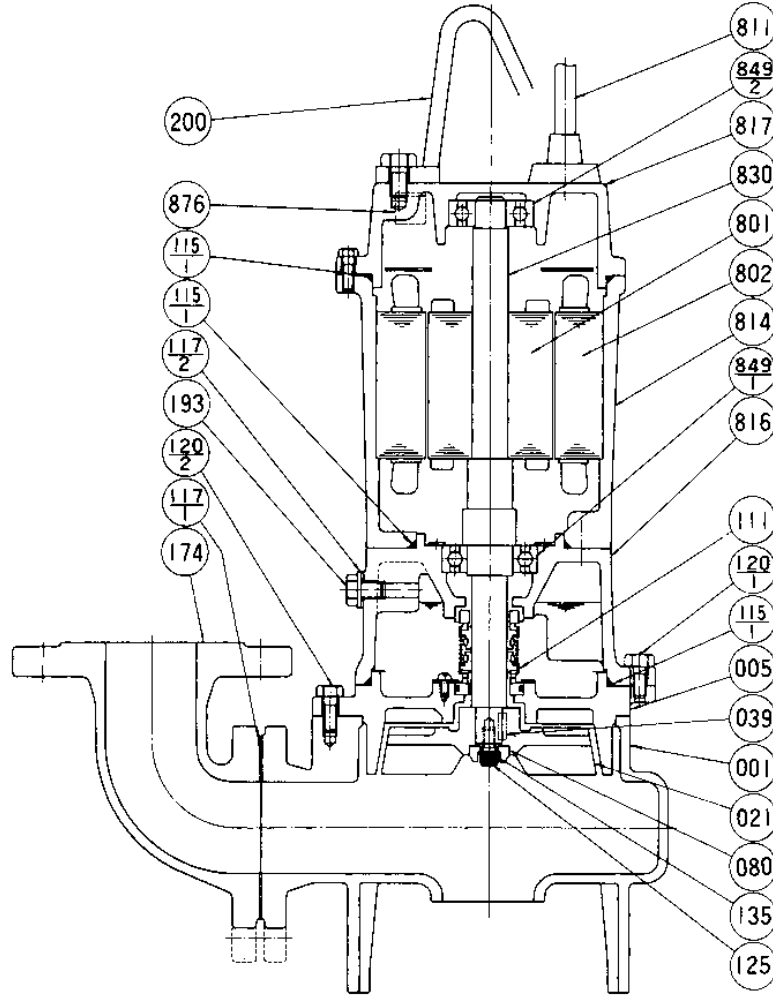
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Sectional View

Single Phase

1 to 5HP



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
†080	BUSHING	STEEL	A283 Grade D	1
†111	MECHANICAL SEAL	—		1 SET
†115-1	O-RING	RUBBER (NBR)		1
†115-2	O-RING	RUBBER (NBR)		1
†115-3	O-RING	RUBBER (NBR)		1
†117-1	GASKET			1
†117-2	GASKET			1
120-1	BOLT	304 STAINLESS	AISI304	4
120-2	BOLT	304 STAINLESS	AISI304	4 or 8
125	BOLT	304 STAINLESS	AISI304	1

PART NO.	PART NAME	MATERIAL	ASTM, AISI CODE	NO. FOR 1 UNIT
135	WASHER	304 STAINLESS	AISI304	1
174	DISCHARGE ELBOW	CAST IRON	A48 Class 30	1
193	OIL PLUG	316 STAINLESS	AISI316	1
200	LIFTING HANGER	STEEL	A283 Grade D	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
817	BRACKET	CAST IRON	A48 Class 30	1
830	SHAFT	403 STAINLESS	AISI403	1
†849-1	BALL BEARING	—		1
†849-2	BALL BEARING	—		1
876	MOTOR PROTECTOR	—		1

Motors are purchased as a complete unit

†: Recommended spare parts

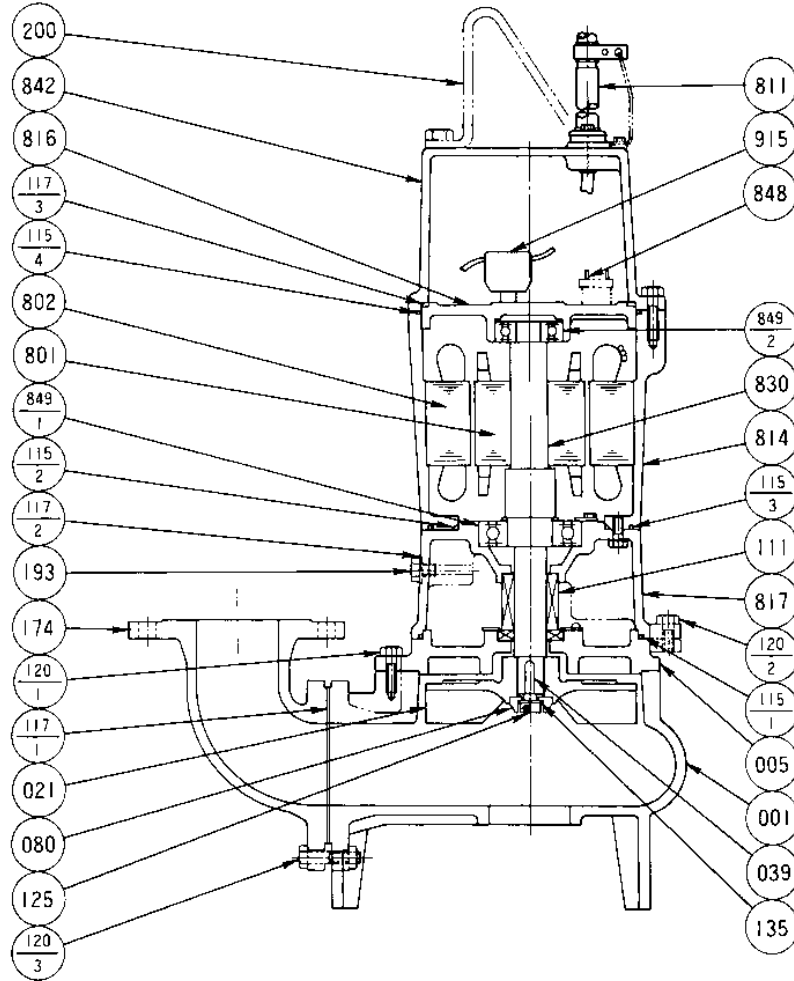
Model CVU

EBARA PRO Cast Vortex Sewage Pumps

Sectional View

Three Phase

1 to 5HP



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
†080	BUSHING	STEEL	A283 Grade D	1
†111	MECHANICAL SEAL	—		1 SET
†115-1	O-RING	RUBBER (NBR)		1
†115-2	O-RING	RUBBER (NBR)		1
†115-3	O-RING	RUBBER (NBR)		1
†115-4	O-RING	RUBBER (NBR)		1
†117-1	GASKET			1
†117-2	GASKET			1
†117-3	GASKET	RUBBER (NBR)		1
120-1	BOLT	304 STAINLESS	AISI304	4 or 8
120-2	BOLT	304 STAINLESS	AISI304	4
120-3	BOLT	304 STAINLESS	AISI304	4
125	BOLT	304 STAINLESS	AISI304	1

PART NO.	PART NAME	MATERIAL	ASTM, AISI CODE	NO. FOR 1 UNIT
135	WASHER	304 STAINLESS	AISI304	1
174	DISCHARGE ELBOW	CAST IRON	A48 Class 30	1
193	OIL PLUG	316 STAINLESS	AISI316	1
200	LIFTING HANGER	STEEL	A283 Grade D	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
817	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
915	EXTERNAL TERMINAL	—		1

Motors are purchased as a complete unit

†: Recommended spare parts



EBARA Fluid Handling

rev. 08/01

CALL 1-800-577-8111 FOR SALES AND SUPPORT