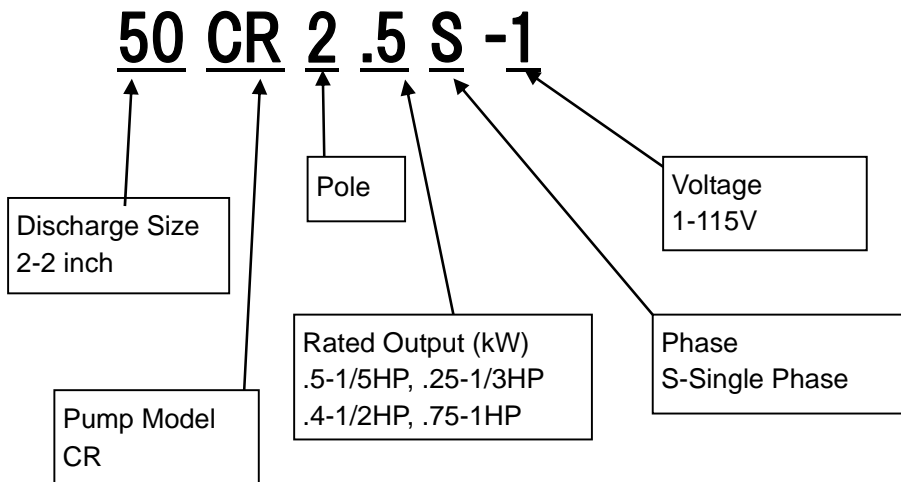


MODEL DESIGNATION

◆ Motor model



SPECIFICATIONS

Model : 50CR

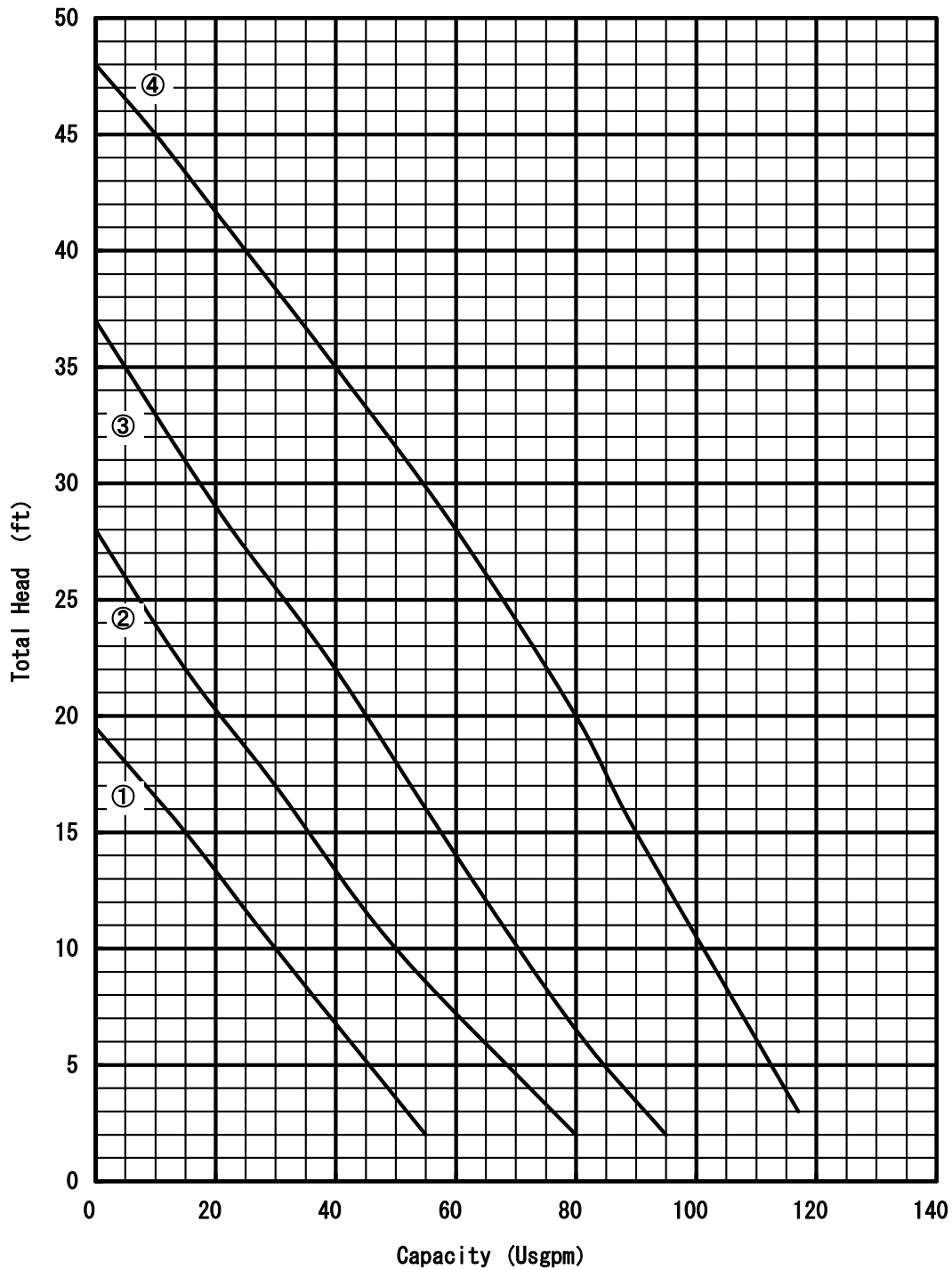
	STANDARD	OPTIONAL
Discharge Size	2 inch	
Solid Size	1 1/4 inch (35mm)	
Range of HP	1/5, 1/3, 1/2, 1 HP	
Range of Performance	Capacity Up to 115(Usgpm) Total Head 2 to 48(ft)	
Limitation		
Type of Liquid Handled	Sewage, Waste water	
Minimum Water Temperature	32 °F (0°C)	
Maximum Water Temperature	104 °F (40°C)	
Motor	Insulation Class E, Single Phase	
Voltage / Hz	115V 60Hz	
Synchronous Speed	3600 RPM	
Impeller Type	Vortex Impeller	
Material		
Pump Housing	Poly Amide Fiber Reinforced Resin	
Impeller	Poly Amide Fiber Reinforced Resin	
Shaft	420J2 Stainless Steel	
Motor Frame	304 Stainless Steel	
Fastener	304 Stainless Steel	
Mechanical Seal Materials	Double Mechanical seal	
Upper Side	Ceramic / Carbon	
Lower Side	Silicon Carbide / Silicon Carbide	
Bearing		
Upper Side	Single Deep Groove Ball Bearing (AC Bearing)	
Lower Side	Single Deep Groove Ball Bearing	
Motor Protection	Built-in Micro Thermal Protector	
Accessory	Submersible Cable Type STW 1/5HP: 20ft, 1/3-1HP: 32ft	Longer Cable Guide Rail

SPECIFICATIONS (OPERATING CONDITION)

- Applied Water quality

Temperature	0-104 °F, 0-40°C
pH	6 - 9
Electric Conductivity	100mS/m or less
DO (Dissolved Oxygen)	1 – 4 mg (O ₂)/ℓ
Chlorine Iron	1,000 mg/ℓ or less
SS	3,000 mg/ℓ or less
BOD, COD	1,000 mg/ℓ or less

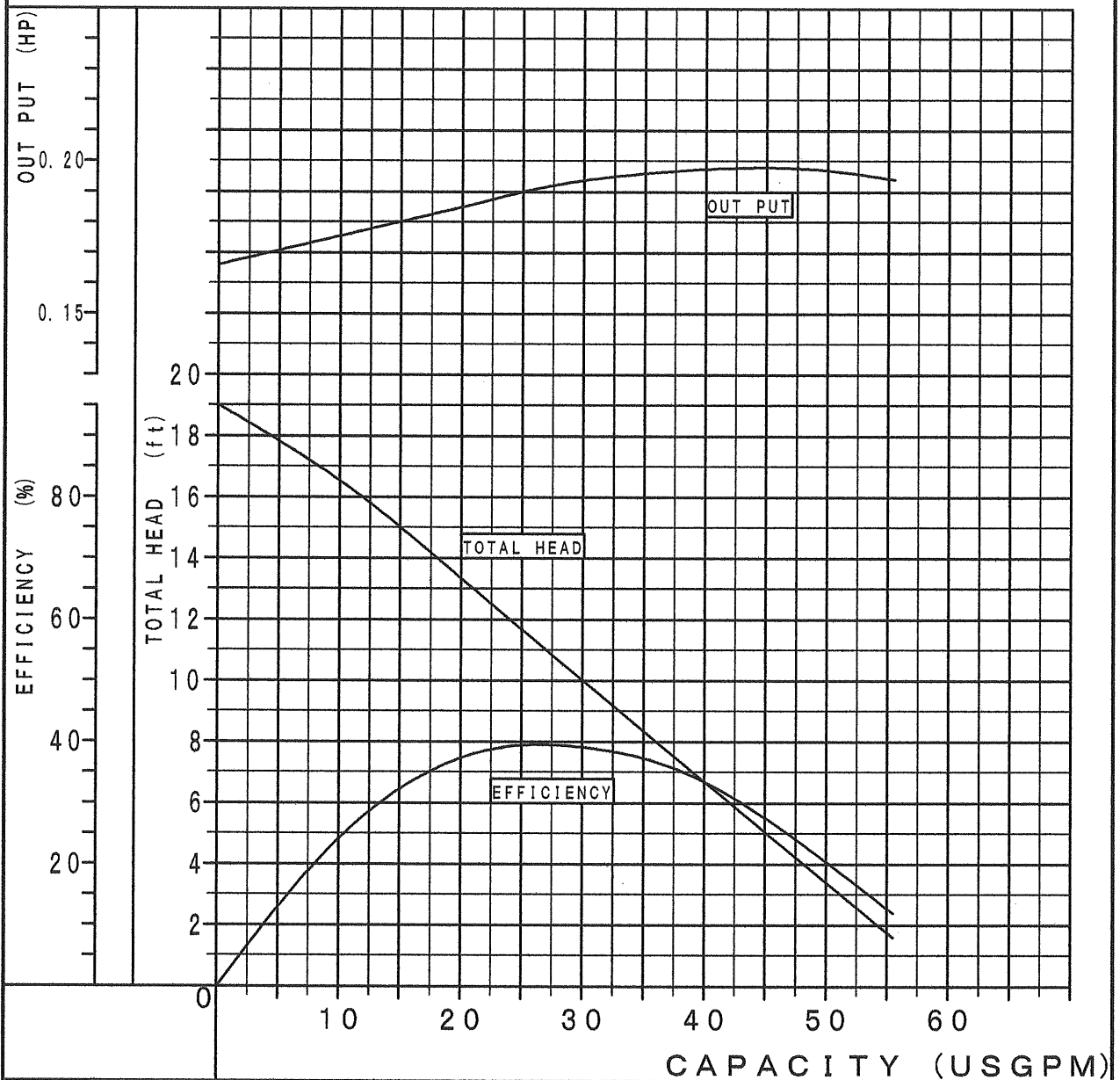
Performance Curve (Family Curve)



- ① 50CR2.15 ② 50CR2.25 ③ 50CR2.4 ④ 50CR2.75

MODEL : 50CR2. 15S

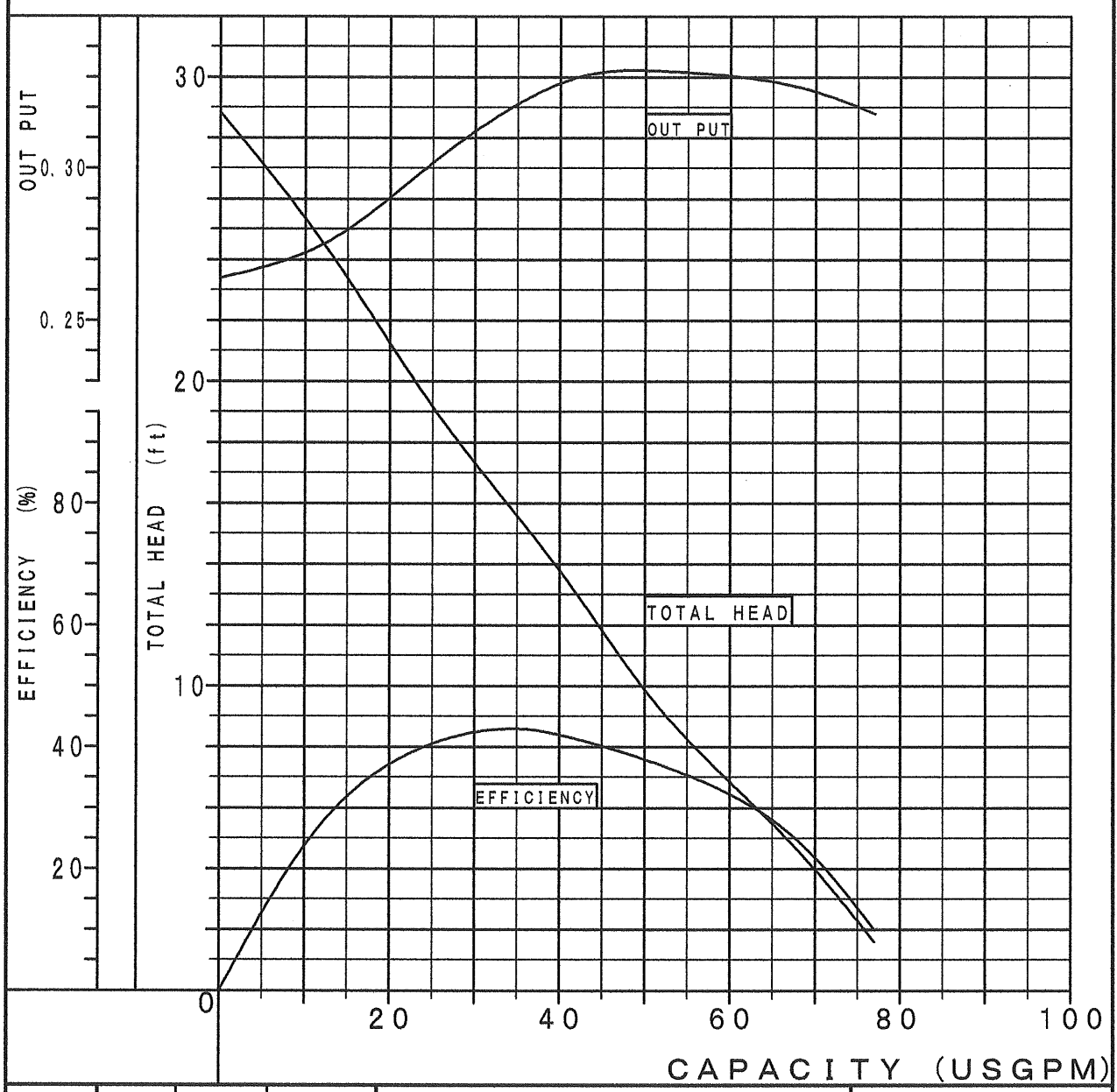
BORE	OUT PUT		POLES	RPM	PHASE	VOLTAGE	HZ	RATED AMPERAGE	STARTING AMPS	STARTING METHOD	INS. CLASS	SOLIDS DIA.
	HP	kW										
2" (50mm)	1/5	0.15	2	3358	1	115	60	3.0	10.41	Capacitor Run	E	1/4" (35mm)



			TITLE	DWG No.
			PERFORMANCE CURVE	Y31941

MODEL : 50CR2. 25S

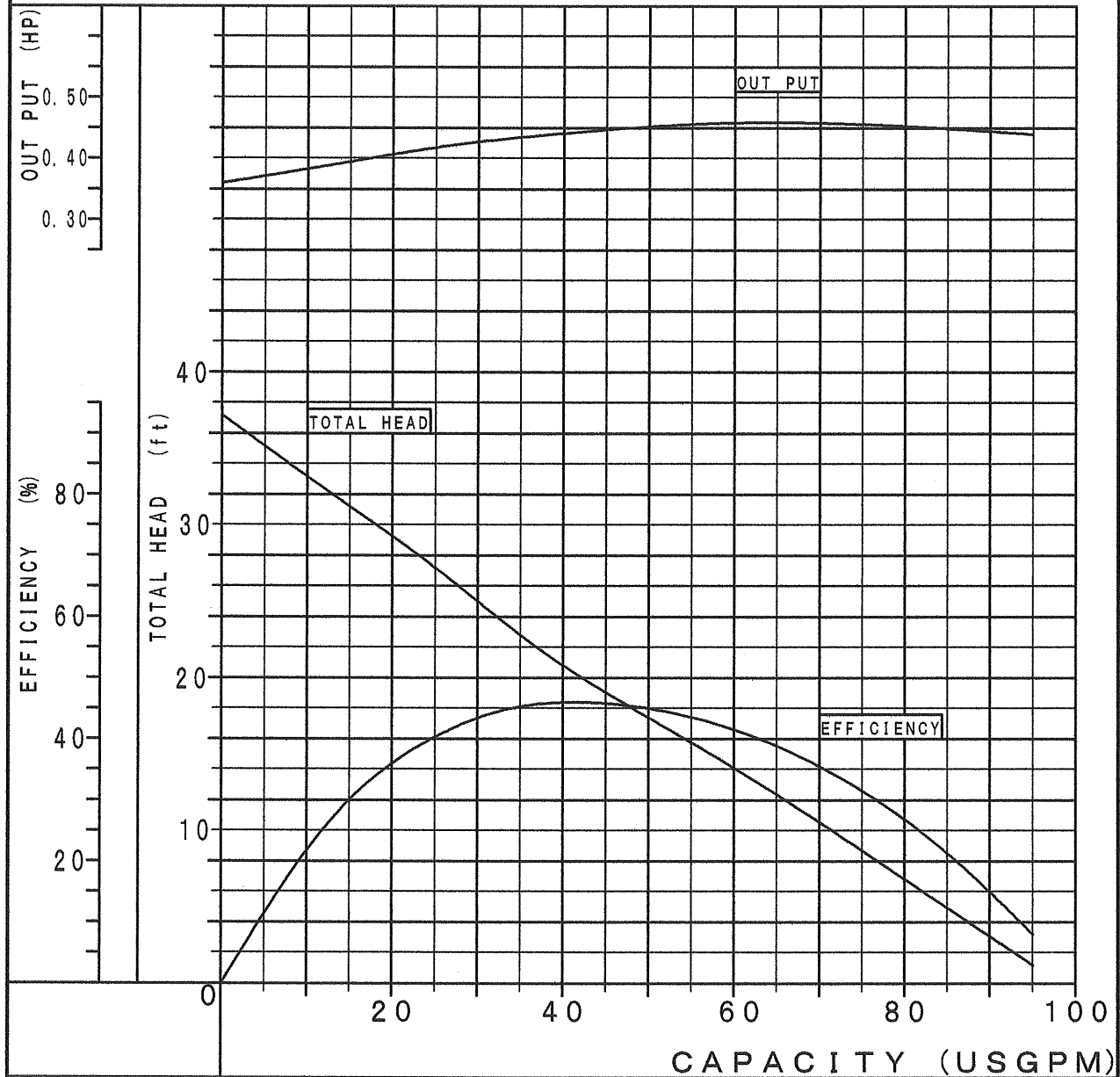
BORE	OUT PUT		POLES	RPM	PHASE	VOLTAGE	HZ	RATED AMPERAGE	STARTING AMPS	STARTING METHOD	INS. CLASS	SOLIDS DIA.
	HP	kW										
2" (50mm)	1/3	0.25	2	3358	1	115	60	4.4	20.20	Capacitor Run	E	1 1/4" (35mm)



			TITLE	DWG No.
			PERFORMANCE CURVE	Y31942

MODEL : 50CR2. 4 S

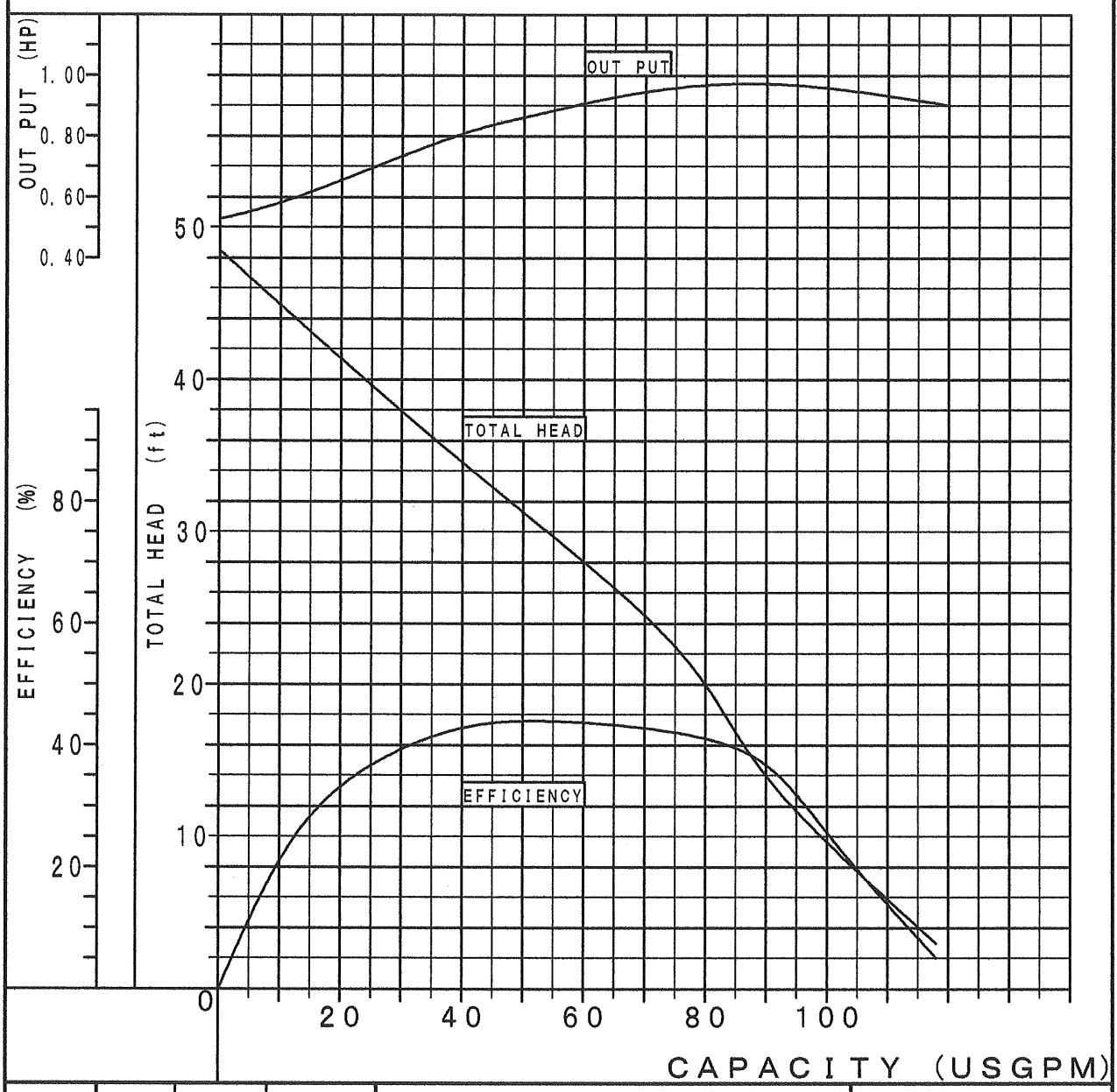
BORE	OUT PUT		POLES	RPM	PHASE	VOLTAGE	HZ	RATED AMPERAGE	STARTING AMPS	STARTING METHOD	INS. CLASS	SOLIDS DIA.
	HP	kW										
2" (50mm)	1/2	0.4	2	3453	1	115	60	5.5	29.90	Capacitor Run	E	1 1/4" (35mm)



			TITLE	DWG No.
			PERFORMANCE CURVE	Y31943

MODEL : 50CR2. 75S

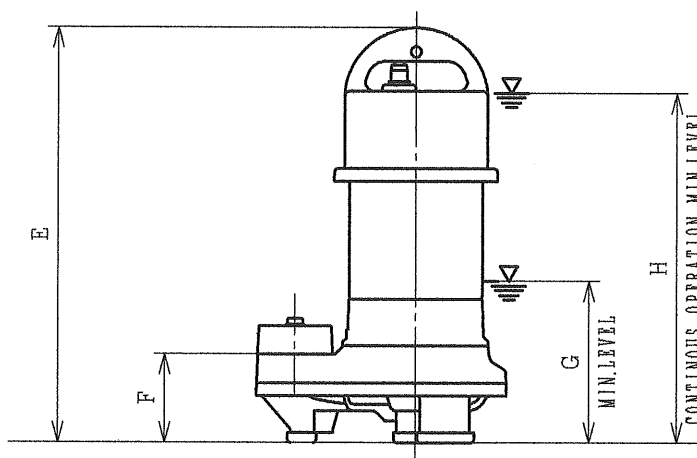
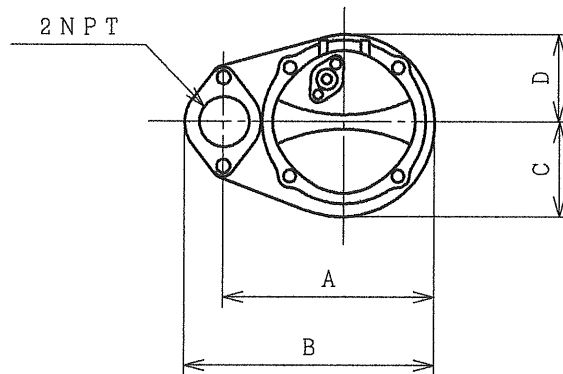
BORE	OUT PUT		POLES	RPM	PHASE	VOLTAGE	HZ	RATED AMPERAGE	STARTING AMPS	STARTING METHOD	INS. CLASS	SOLIDS DIA.
	HP	kW										
2" (50mm)	1	0.75	2	3431	1	115	60	10.0	41.90	Capacitor Run	E	1 1/4" (35mm)



			TITLE	DWG No.
			PERFORMANCE CURVE	Y31944

FLANGE CONNECTION TYPE PUMP DIMENSION
CONNECTION TYPE F50

MODEL	HP (kW) OUTPUT	A	B	C	D	E	F	G	H
50CR2.15S	1/5 (0.15)	6.65	8.11	2.95	2.72	14.96			
50CR2.25S	1/3 (0.25)	7.99	9.45	3.58	3.31	15.51	3.94	5.91	12.99
50CR2.4S	1/2 (0.4)	7.99	9.45	3.58	3.31	15.51	4.09	6.10	13.19
50CR2.75S	1 (0.75)								



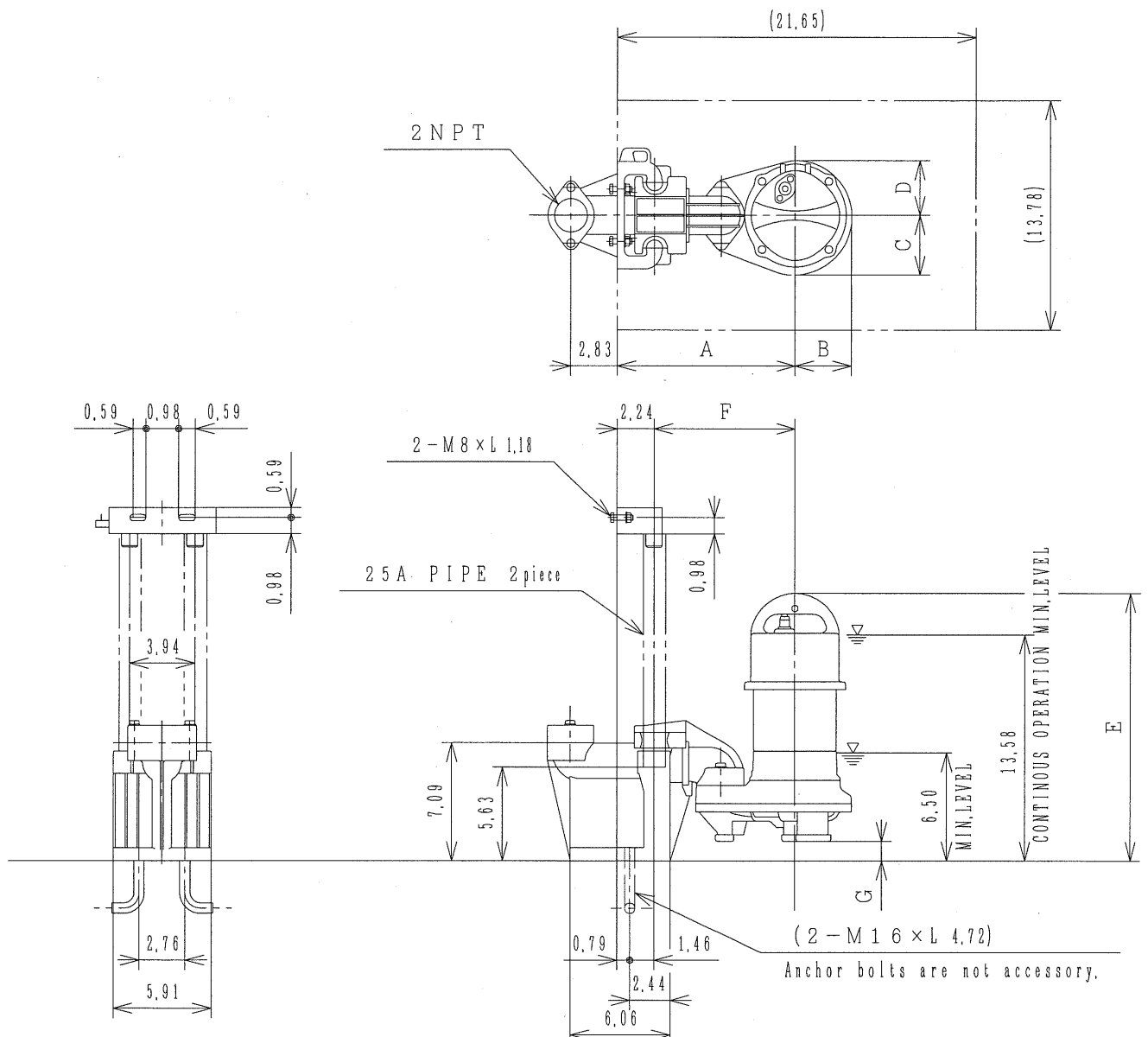
(Note) Limit operation to maximum 30 minutes in the event of operating the pump at the minimum water level.
Secure designated continuous operation minimum water level in the event of continuous operation.

				TITLE	DWG No.
				PUMP DIMENSION	AP9994

AUTOMATIC CONNECTION TYPE PUMP DIMENSION
CONNECTION TYPE P50RL

MODEL	HP (kW) OUTPUT	A	B	C	D	E	F	G
50CR2.15S	1/5 (0.15)	10.08	2.83	2.95	2.72	15.55	7.83	0.59
50CR2.25S	1/3 0.25	10.79	3.46	3.58	3.31	16.10	8.54	

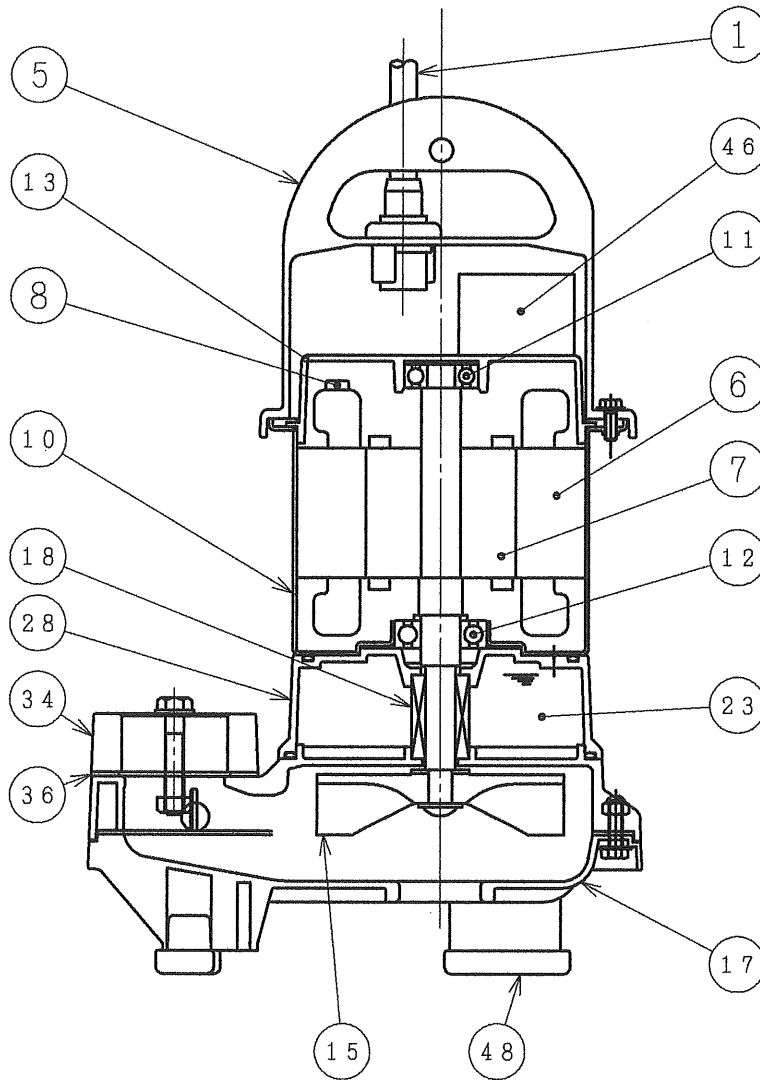
MODEL	HP (kW) OUTPUT	A	B	C	D	E	F	G
50CR2.4S	1/2 (0.4)	10.79	3.46	3.58	3.31	16.10	8.54	0.43
50CR2.75S	1 0.75							



(Note) Limit operation to maximum 30 minutes in the event of operating the pump at the minimum water level. Secure designated continuous operation minimum water level in the event of continuous operation.

				TITLE	PUMP DIMENSION	DWG No.	AV0528
--	--	--	--	-------	----------------	---------	--------

MODEL	HP (kW) OUT PUT
50CR2.15S	1/5 (0.15)
50CR2.25	1/3 (0.25)
50CR2.4S	1/2 (0.4)



TITLE

PUMP SECTION

DWG No.

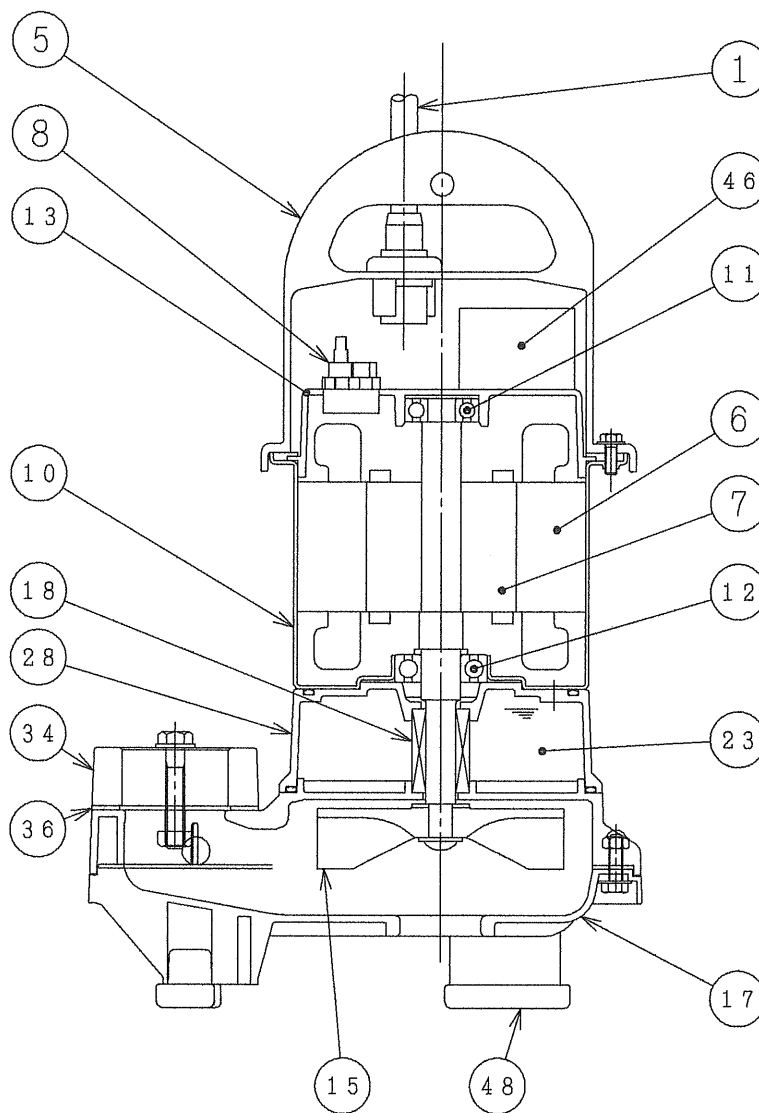
AV0524

50CR2. 25S-1, 50CR2. 4S-1, 50CR2. 75S-1

No.	Denomination	Material
1	Cable(power)	STW
5	Motor cover	PPS
6	Stator	_____
7	Rotor	Shaft=Stainless steel (AISI 420)
8	Thermal protector	_____
10	Stator housing	Stainless steel (AISI 304)
11	Ball bearing(upper)	AC6201ZZC3
12	Ball bearing(lower)	6203ZZC3
13	Bearing holder	Aluminium alloy die casting
15	Impeller	PA-G30
17	Pump housing	PA-G40
18	Mechanical seal	Upper Ceramic/Carbon Lower SiC/SiC
23	oil	Turbine oil#32
28	Mechanical seal housing	PA-G40
34	Flange	Synthetic resin (PP)
36	Flange packing	NBR
46	Capacitor	_____
48	Stand cap	NBR

				TITLE	DWG No.
			.	MATERIALS LIST	AV0522
			.		
			.		

MODEL	HP (kW) OUT PUT
50CR2.75S1	(0.75)



TITLE

PUMP SECTION

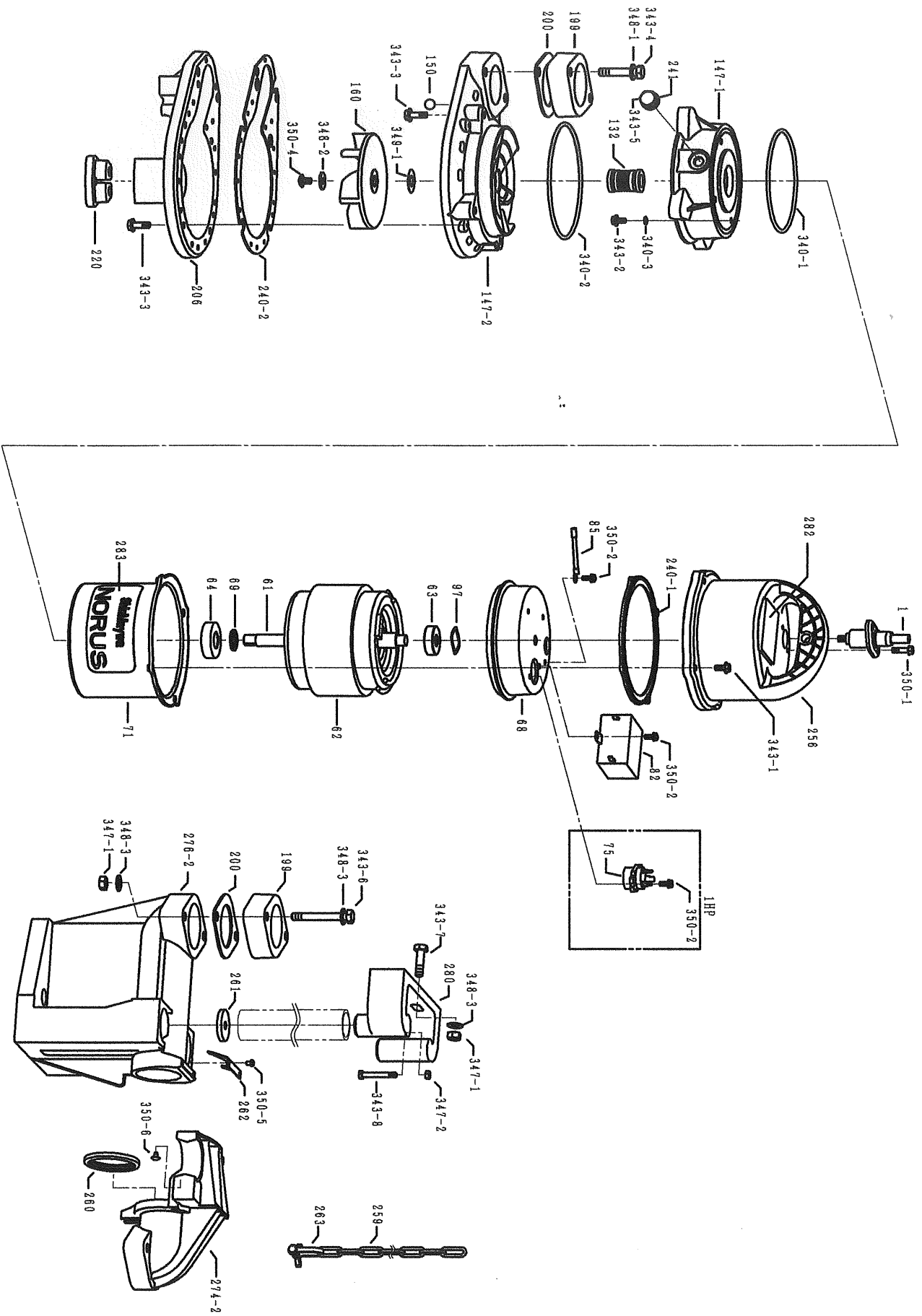
DWG No.

AV0523

50CR2. 15S-1

No.	Denomination	Material
1	Cable (power)	STW
5	Motor cover	PPS
6	Stator	_____
7	Rotor	Shaft=Stainless steel (AISI 420)
8	Thermal protector	_____
10	Stator housing	Stainless steel (AISI 304)
11	Ball bearing (upper)	AC6201ZZC3
12	Ball bearing (lower)	6201ZZC3
13	Bearing holder	Aluminium alloy die casting
15	Impeller	PA-G30
17	Pump housing	PA-G30
18	Mechanical seal	Upper Ceramic/Carbon Lower SiC/SiC
23	oil	Turbine oil#32
28	Mechanical seal housing	PA
34	Flange	Synthetic resin (PP)
36	Flange packing	NBR
46	Capacitor	_____
48	Stand cap	NBR

			TITLE	DWG No.
		.	MATERIALS LIST	AV0521
		.		
		.		



Parts List

No.	Part name	Part No.	Qty				Note
			50CR2.15S-1	50CR2.25S-1	50CR2.4S-1	50CR2.75S-1	
1	Power Cable	BL7369-A	1				
		L16590-E		1	1	1	
61	Rotor Assy	C45725-A	1				
		C45585-A		1			
		C45585-C			1		
		C60381-A				1	
62	Stator Assy	C45725-D	1				
		C60274-A		1			
		C60274-C			1		
		C60381-B				1	
63	Upper Bearing	S45702-A	1	1	1	1	
64	Lower Bearing	S63123-M	1				
		S63123-A		1	1	1	
68	Upper Bearing Holder	BL4580-A	1				
		C45630-A		1	1	1	
69	Bearing Plate	A81578-C		1	1	1	
71	Stator Casing	BL1896-A	1				
		BL3691-A		1	1	1	
75	Protector	SY3387-A				1	
82	Capacitor	AN7098-A	1				
		AN5679-A		1	1	1	
85	Earth Cable	P61441-A	1	1	1	1	
97	Wave Washer	A81592-D	1	1	1	1	
132	Mechanical Seal	1S4606-A	1				
		2S8608-A		1	1	1	
147-1	Mechanical Seal Bracket	BL1893-B	1				
		C45511-B		1	1	1	
147-2	Upper Pump Housing	C44846-A	1				
		D52749-A		1	1	1	
150	Ball	P62190-A		1	1	1	
160	Impeller	C82938-A	1				
		C82937-A		1			
		C82911-A			1		
		C82907-A				1	
199	2NPT Flange	L16520-B	1	1	1	1	
200	Gasket	A54639-A	1	1	1	1	
206	Lower Pump Housing	C44847-A	1				
		D52743-A		1			
		D52751-A			1	1	
220	Stand Cap	BL4350-A	1	1	1	1	
240-1	Motor Gasket	BL8940-A	1				
		BL8457-A		1	1	1	
240-2	Pump Housing Gasket	BL1895-A	1				
		BL4154-A		1	1	1	
241	Gasket	A76511-A	1	1	1	1	
256	Motor Cover	C60083-A	1				
		C46897-A		1	1	1	
259	Chane	P62114-A	1	1	1	1	
260	Slide Gasket	P71031-A	1	1	1	1	
261	Gasket	P62136-A	1	1	1	1	
262	Plate	AN6792-A	1	1	1	1	
263	U Hook	P62135-A	1	1	1	1	
274-2	Slide	D52887-A	1	1	1	1	
276-2	Connection	D52886-A	1	1	1	1	
280	Guide Holder	C82945-A	1	1	1	1	
282	Name Plate						Can not sell
283	NORUS Mark						Can not sell

340-1	O Ring	AN0525-A	1				
		AN0525-C		1	1	1	
340-2		AN0525-B	1				
		AN0525-D		1	1	1	
340-3		1A-P5	4	4	4	4	
343-1	Flange Bolt	AP7404-A	4	4	4	4	
343-2	Flange Bolt	AN7164-A	4	4	4	4	
343-3	Screw	AN0631-A	9				
		AN6274-A		10	10	10	
343-4	Bolt	111S0855	2				
		111S0845		2	2	2	
		111S1016	1	1	1	1	
		111S0865	2	2	2	2	
		111S0830	2	2	2	2	
		111S0540	1	1	1	1	
343-8							
347-1	Nut	151S0800	4	4	4	4	
347-2		151S0500	1	1	1	1	
347-3		157S0500		4	4	4	
348-1	Washer	161S0800	2	2	2	2	
348-2		P60624-B	1	1	1	1	
348-3		161S0800	6	6	6	6	
349-1			P60561-D		1		
		AN4497-A			1	1	
350-1	Screw	AN7008-A	2	2	2	2	
350-2			127P0410	2			
			127P0412		2	2	4
350-4	Impeller Bolt	P64390-A	1	1			
		P64390-B			1	1	
350-5	Screw	P62247-A	2	2	2	2	
350-6		P62246-A	4	4	4	4	