

NO. A-20029-1

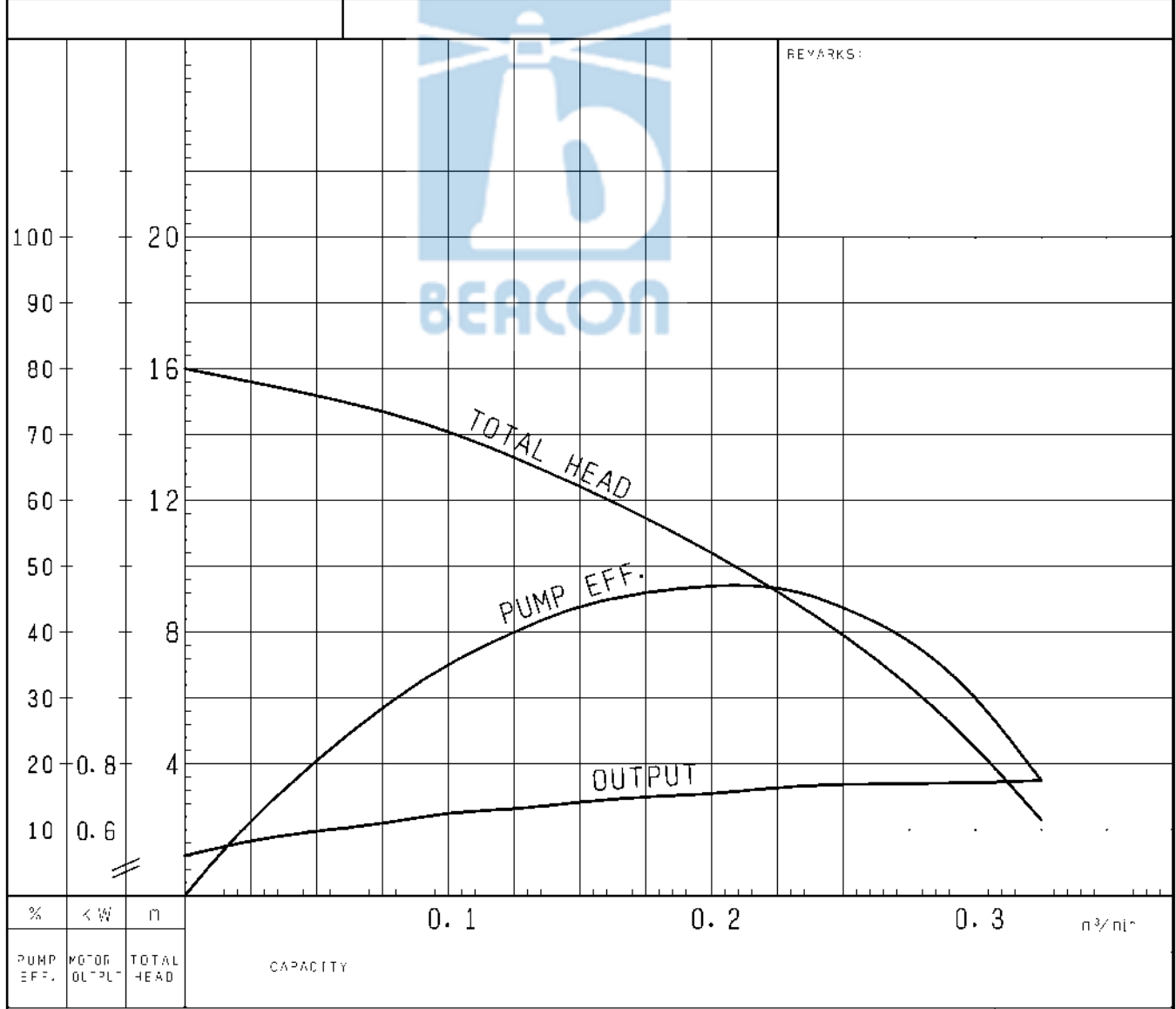
# PUMP PERFORMANCE CURVES

TYPE Submersible Centrifugal Effluent Pump	MODEL 50SF (A/W) 2.75 -53	FREQUENCY 50 Hz
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CUSTOMER'S NAME \_\_\_\_\_

EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

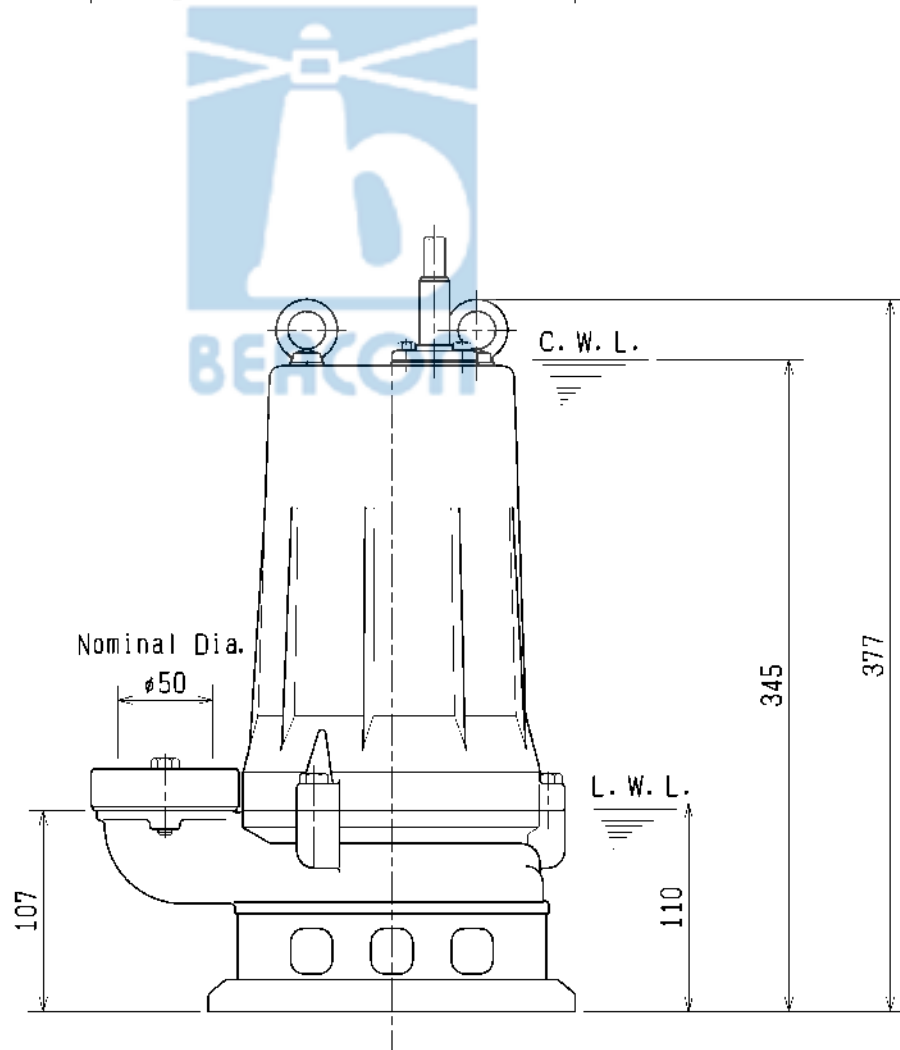
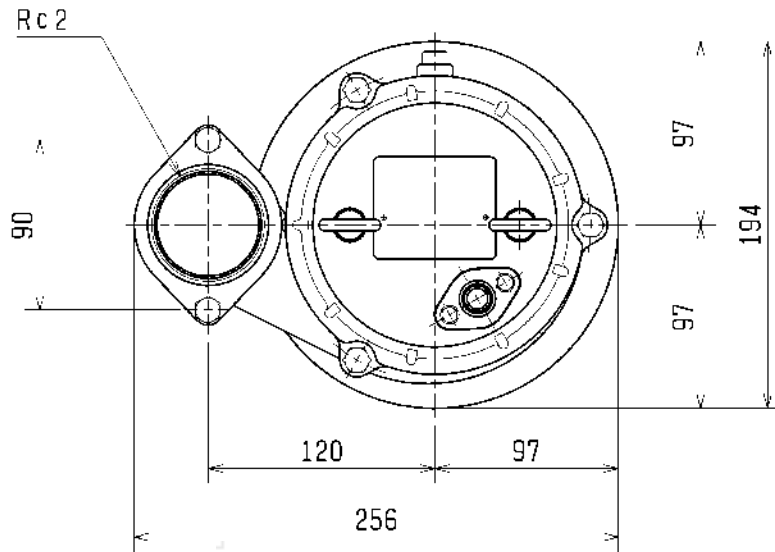
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	50 mm	mm
TOTAL HEAD	14 m	m
CAPACITY	0.1 m <sup>3</sup> /min	m <sup>3</sup> /min
MOTOR OUTPUT	0.75 kW	kW
PHASE x VOLTAGE	3 φ x V	φ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / s. s. 3000 min <sup>-1</sup>	P / min <sup>-1</sup>
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	E	



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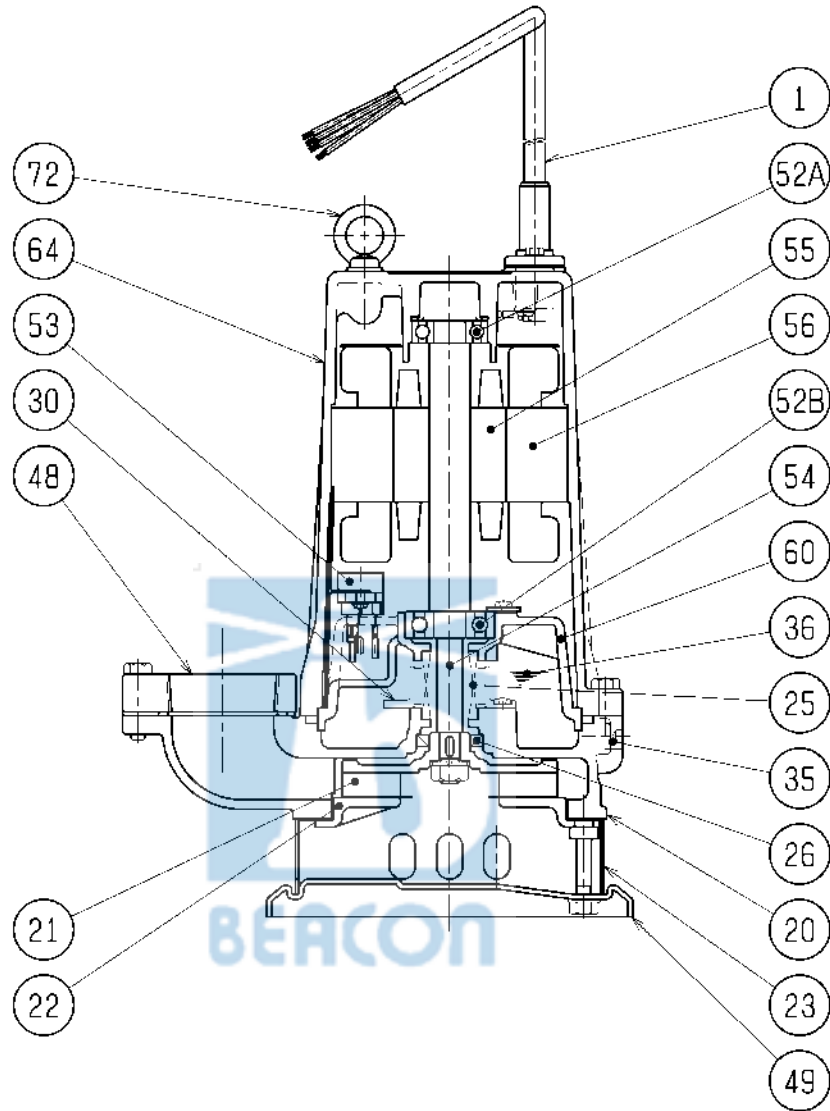
<b>DIMENSION DRAWING</b>		No.	No. A-20050-1
TYPE	Submersible Centrifugal Effluent Pump	MODEL	50SF2.75 -53/63

Approximate Weight (kg)  
20kg  
\*excluding cable



C.W.L.:Continuous running Water Level  
L.W.L.:Lowest running Water Level

<b>SECTIONAL DRAWING</b>		No.	No. A-20074-1
TYPE	Submersible Centrifugal Effluent Pump	MODEL	50SF2.75 -53/63

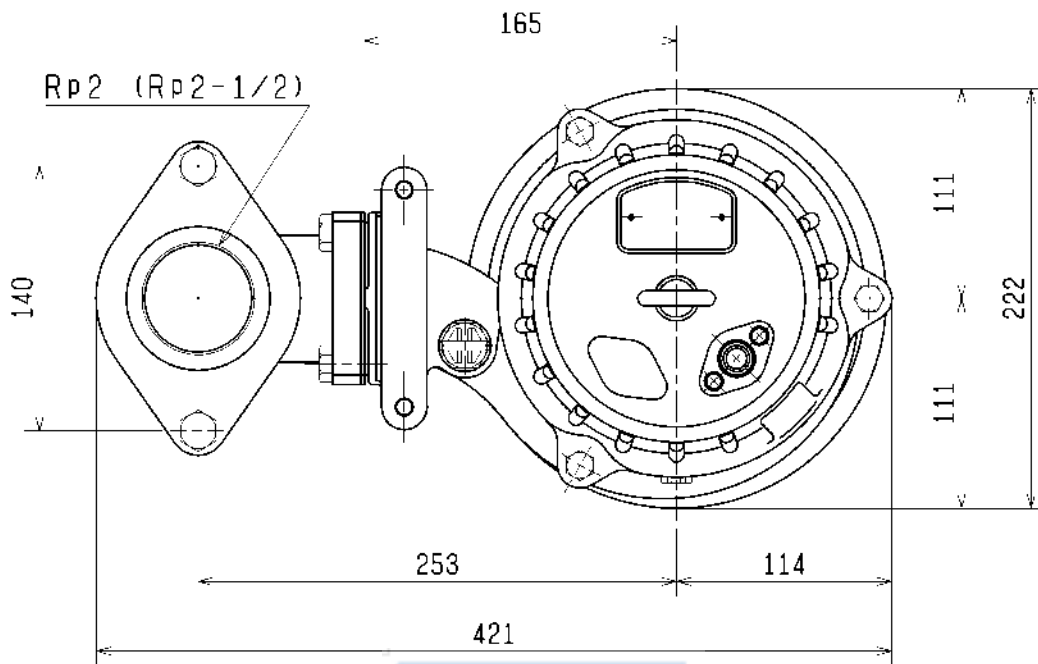


REQ. SPECIFICATION

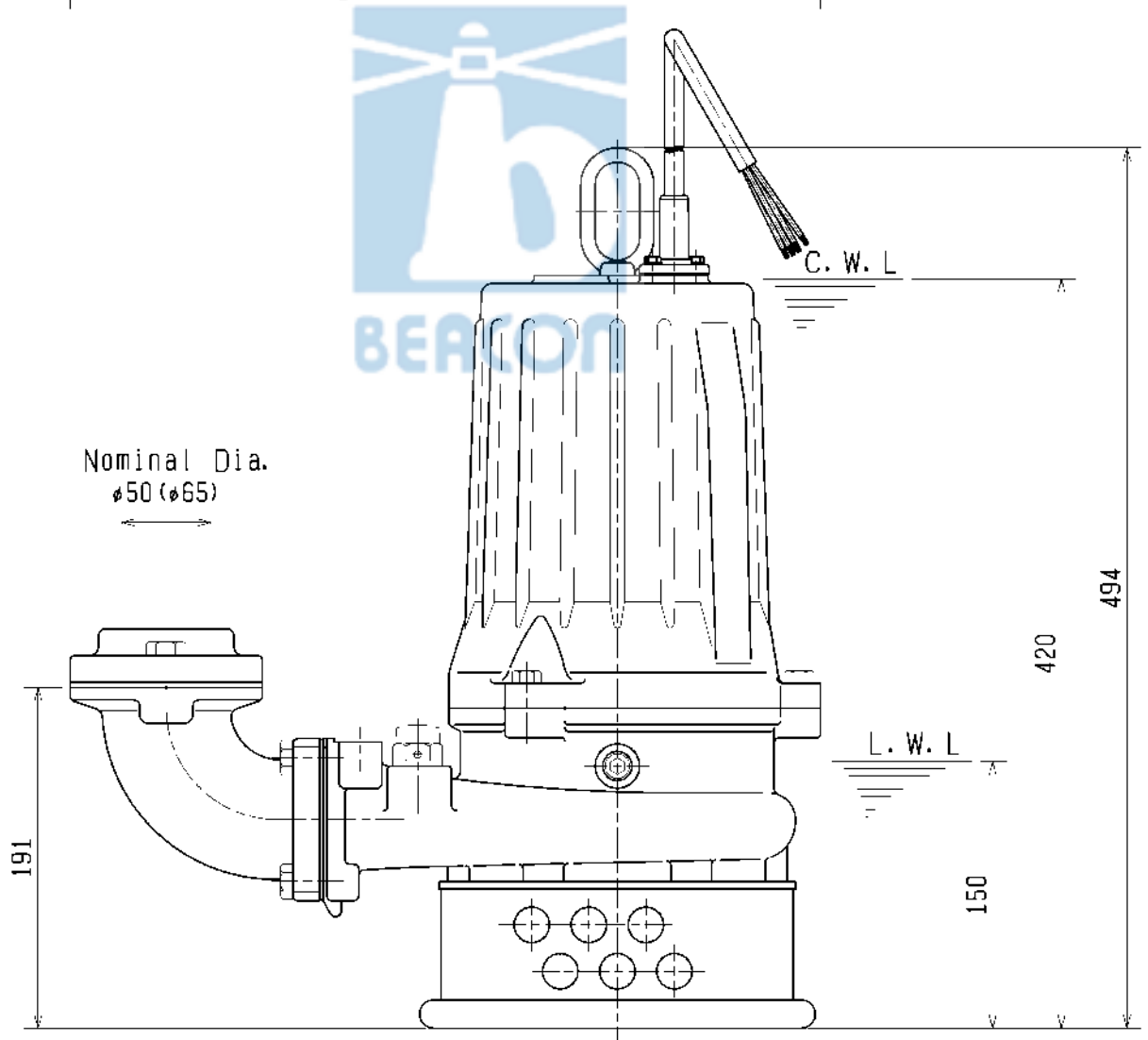
No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	52A	Upper Bearing	1	6203ZZC3
20	Pump Casing	1	Gray Iron Casting	52B	Lower Bearing	1	6303ZZC3
21	Impeller	1	Gray Iron Casting	53	Motor Protector	1	
22	Suction Cover	1	Gray Iron Casting	54	Shaft	1	Stainless Steel 420J2
23	Strainer	1	Steel Sheet	55	Rotor	1	
25	Mechanical Seal	1	W-14HC	56	Stator	1	
26	Oil Seal	1	SC22357	60	Bearing Housing	1	Gray Iron Casting
30	Oil Lifter	1	Plastic	64	Motor Frame	1	Gray Iron Casting
35	Oil Plug	1	Stainless Steel 304	72	Eye Bolt	2	Stainless Steel 304
36	Lubricant		Turbine Oil (ISO VG32)				
48	Screwed Flange	1	Plastic				
49	Bottom Plate	1	Steel Sheet				



DIMENSION DRAWING		No.	No. A-11554-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	50SF21.5 -52/62



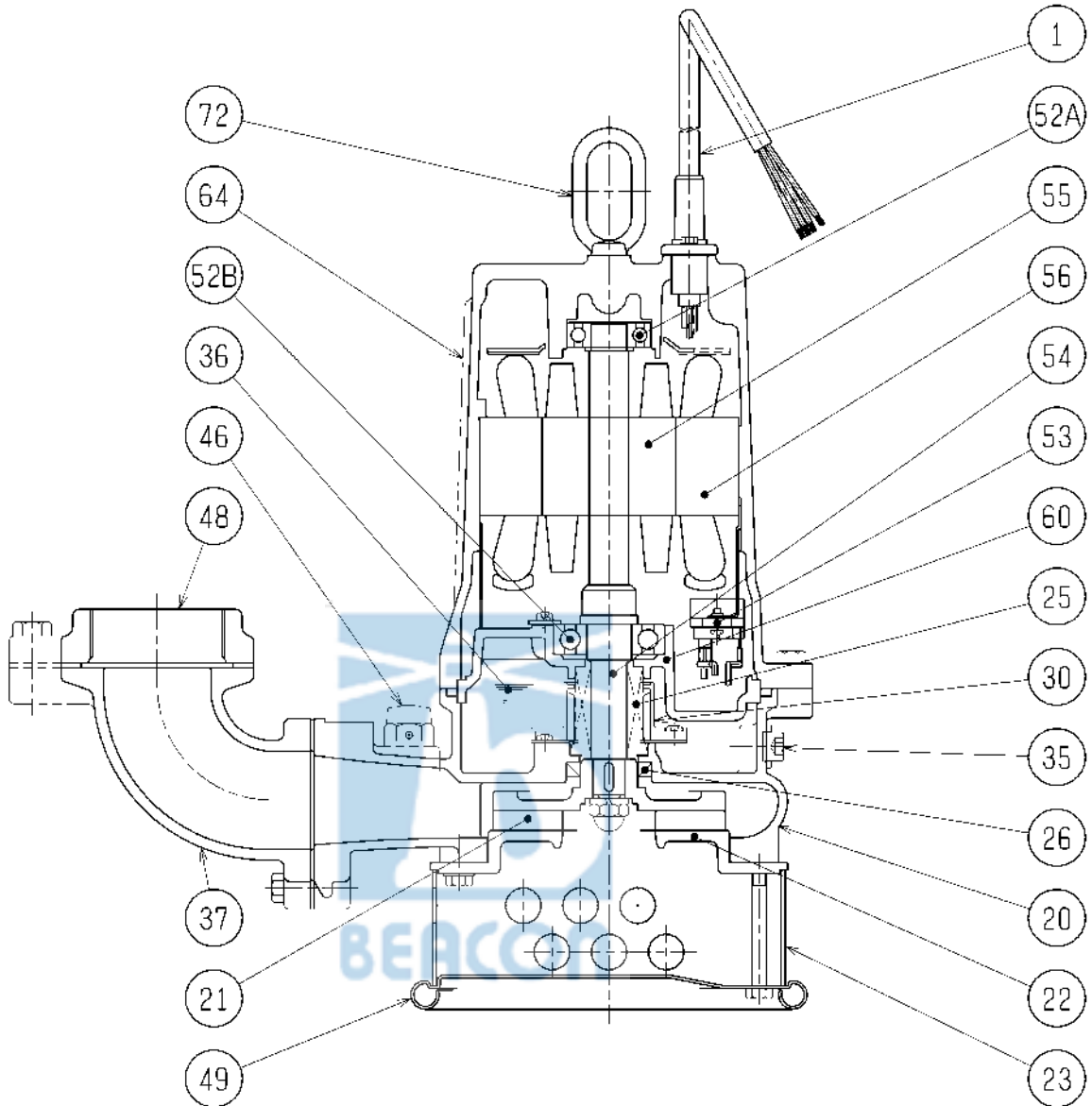
Approximate Weight (※)
33kg
※excluding cable



The Figure in ( ) shows the dimensions of discharge Bore at Nominal  $\phi 65$ .

C.W.L. :Continuous Running Water Level  
L.W.L. :Lowest Running Water Level

<b>SECTIONAL DRAWING</b>		No.	No. A-11562-3
TYPE Waste Water Submersible Centrifugal Pump	MODEL	50SF21.5 -52/62	



REQ. SPECIFICATION
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※ the wetted part

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	49	Bottom Plate	1	Steel Sheet
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6204ZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6305ZC3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer	1	Steel Sheet	54	Shaft	1	Stainless Steel 420J2(※)
25	Mechanical Seal	1	H-20A	55	Rotor	1	
26	Oil Seal	1	TC32488	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	1	Stainless Steel 304
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				
48	Screwed Flange	1	Gray Iron Casting				

NO. A-11546-1

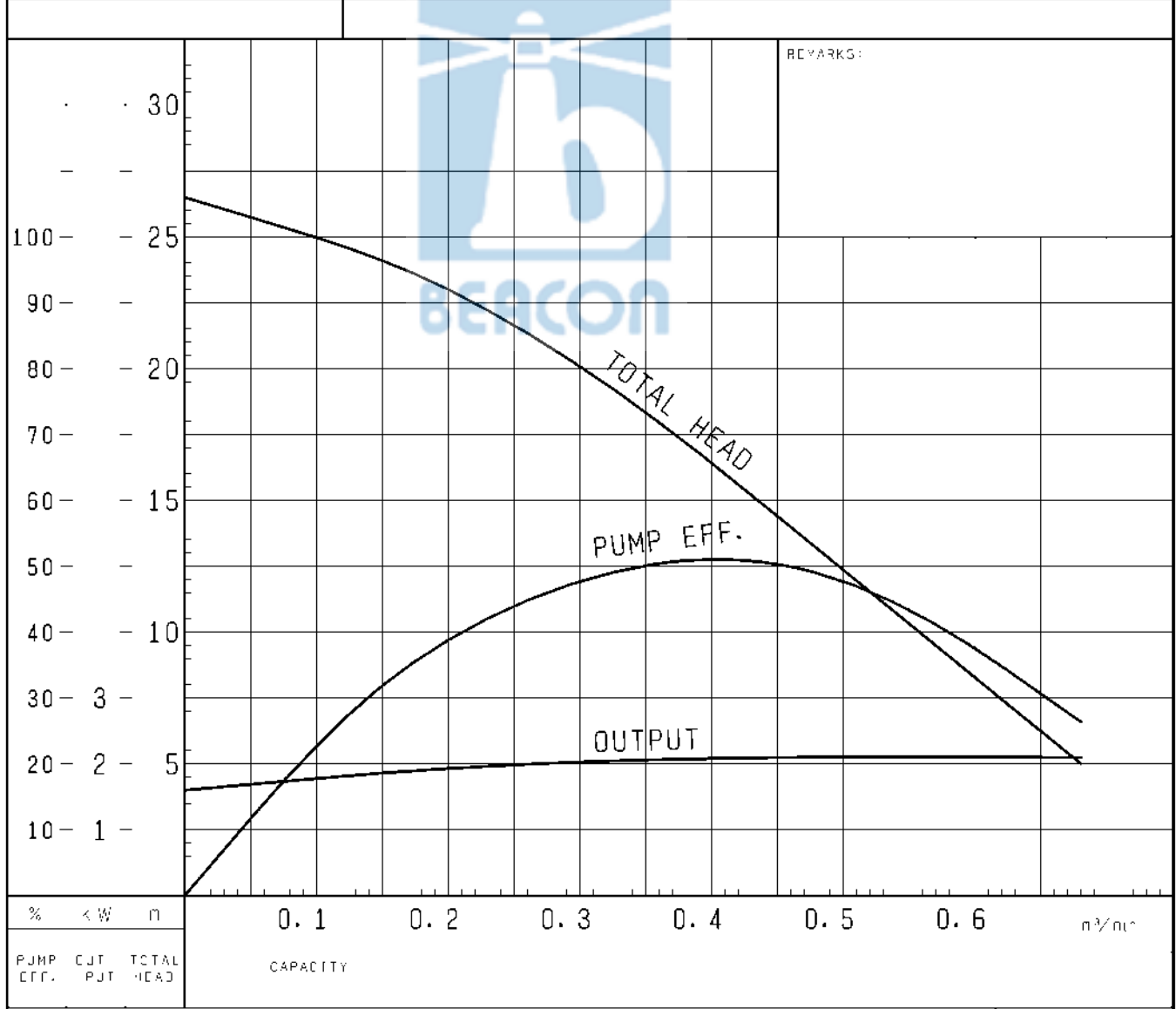
# PUMP PERFORMANCE CURVES

TYPE Waste Water Submersible Centrifugal Pump	MODEL 50SF (A/W) 22.2 -52 TOS50SF (A/W) 22.2 -52	FREQUENCY 50 Hz
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CUSTOMER'S NAME \_\_\_\_\_

EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

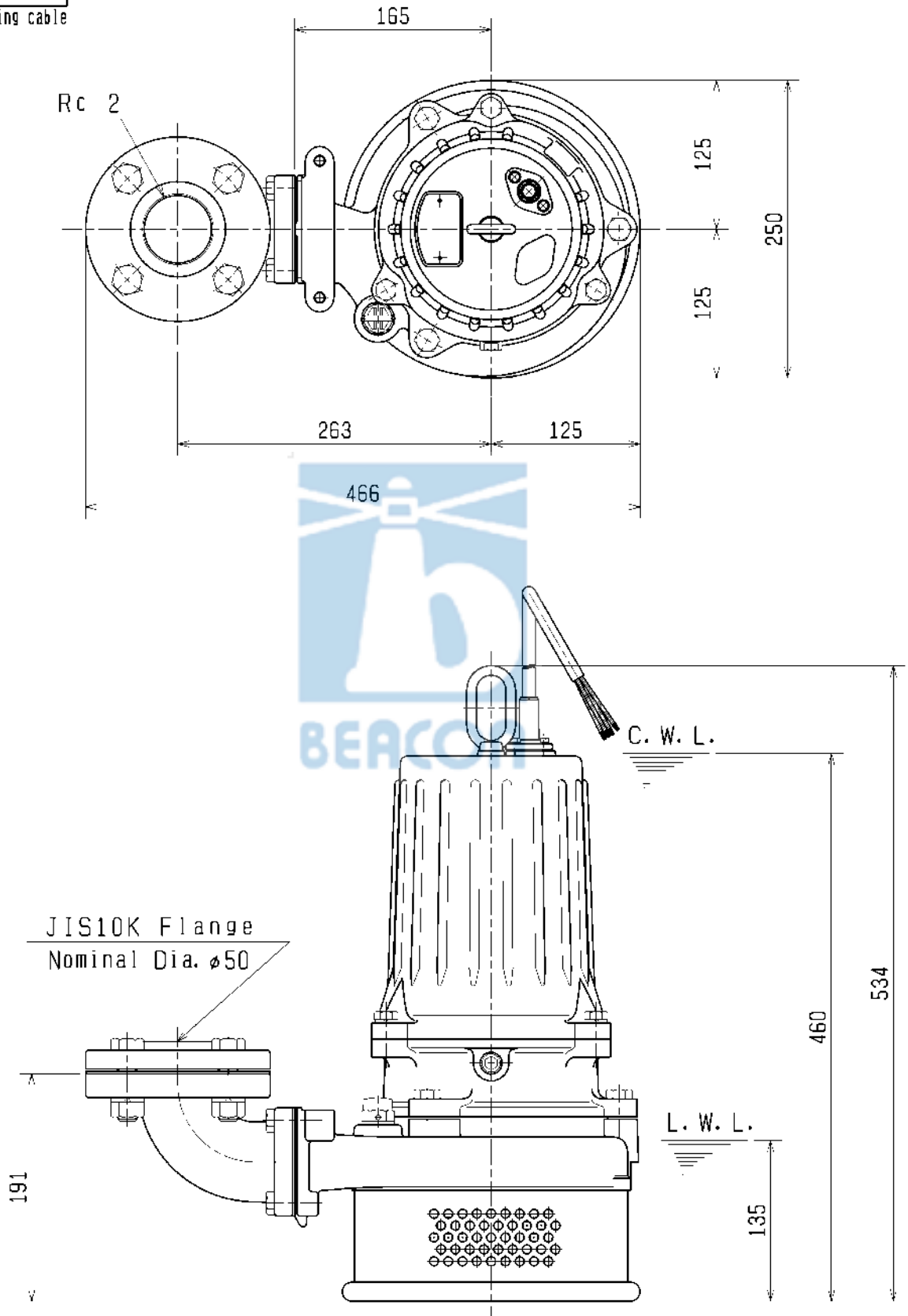
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	50 mm	mm
TOTAL HEAD	23 m	m
CAPACITY	0.2 m <sup>3</sup> /min	m <sup>3</sup> /min
MOTOR OUTPUT	2.2 kW	kW
PHASE x VOLTAGE	3 $\phi$ x	$\phi$ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / S. S. 3000 min <sup>-1</sup>	P / min <sup>-1</sup>
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	F	



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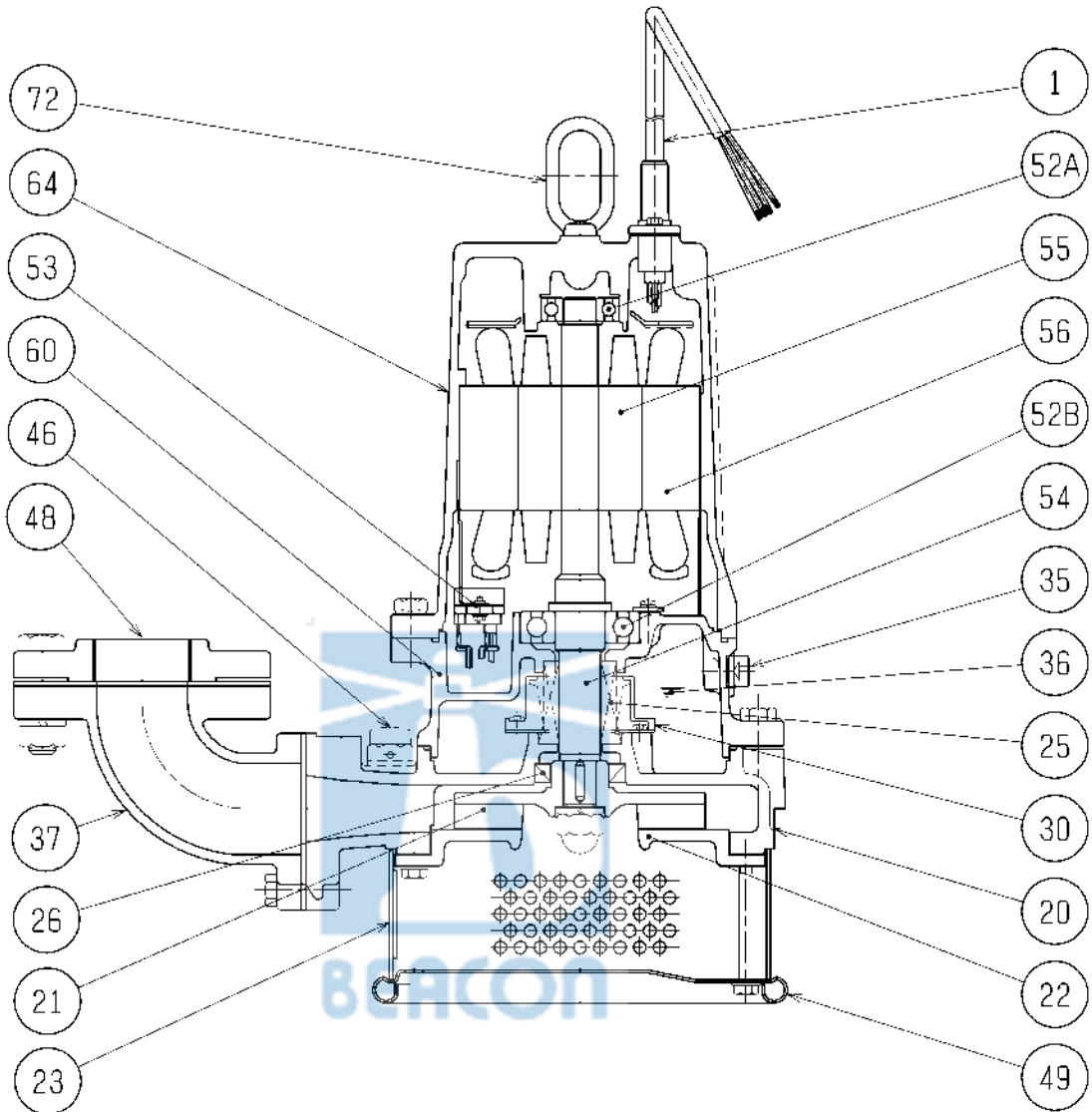
DIMENSION DRAWING		No.	No.	A-11557-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	50SF22.2 -52/62	

Approximate Weight (kg)  
49kg  
\*excluding cable



C. W. L. : Continuous Running Water Level  
L. W. L. : Lowest Running Water Level

<b>SECTIONAL DRAWING</b>		No.	No. A-11565-3
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	50SF22.2 -52/62



REQ. SPECIFICATION	
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※ the wetted part

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	49	Bottom Plate	1	Steel Sheet
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6204ZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6306ZC3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer	1	Steel Sheet	54	Shaft	1	Stainless Steel 420J2(※)
25	Mechanical Seal	1	H-25A	55	Rotor	1	
26	Oil Seal	1	TC355S11	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	1	Stainless Steel 304
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				
48	Screwed Flange	1	Gray Iron Casting				

NO. A-12145-1

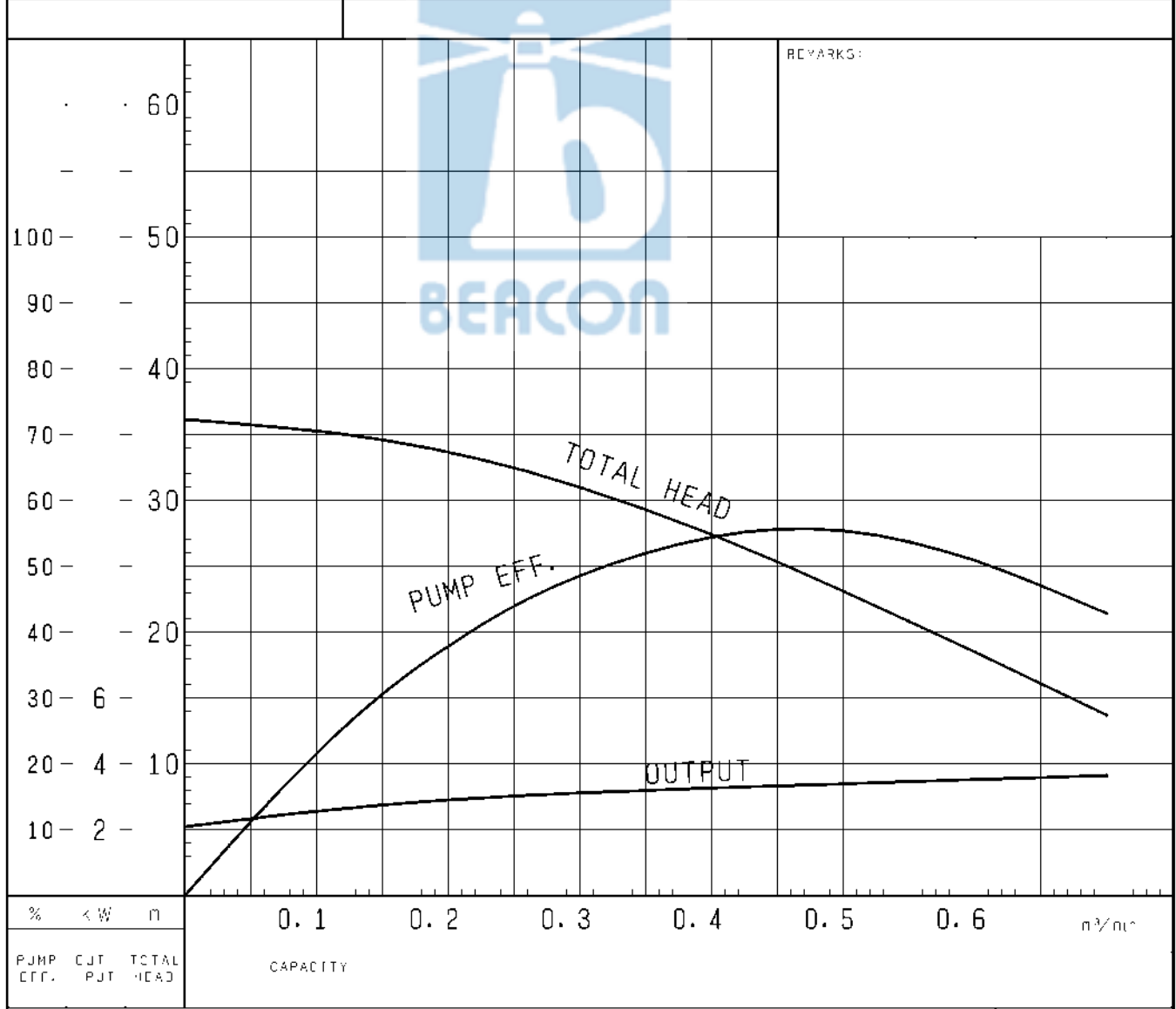
# PUMP PERFORMANCE CURVES

TYPE Waste Water Submersible Centrifugal Pump	MODEL 50SF (A/W) 23.7 -52 TOS50SF (A/W) 23.7 -52	FREQUENCY 50 Hz
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CUSTOMER'S NAME \_\_\_\_\_

EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

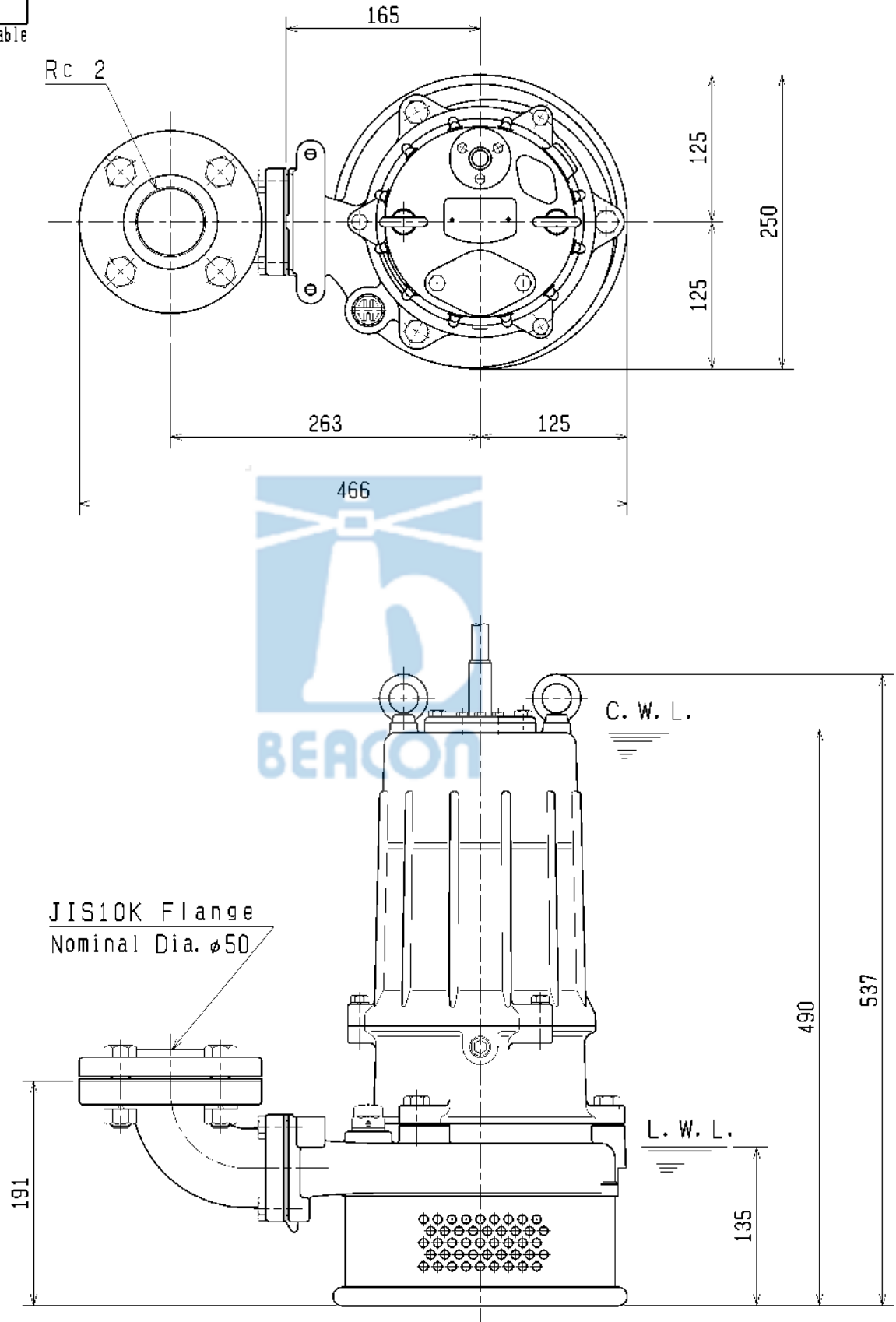
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	50 mm	mm
TOTAL HEAD	31 m	m
CAPACITY	0.3 m <sup>3</sup> /min	m <sup>3</sup> /min
MOTOR OUTPUT	3.7 kW	kW
PHASE x VOLTAGE	3 $\phi$ x	$\phi$ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / S. S. 3000 min <sup>-1</sup>	P / min <sup>-1</sup>
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	F	



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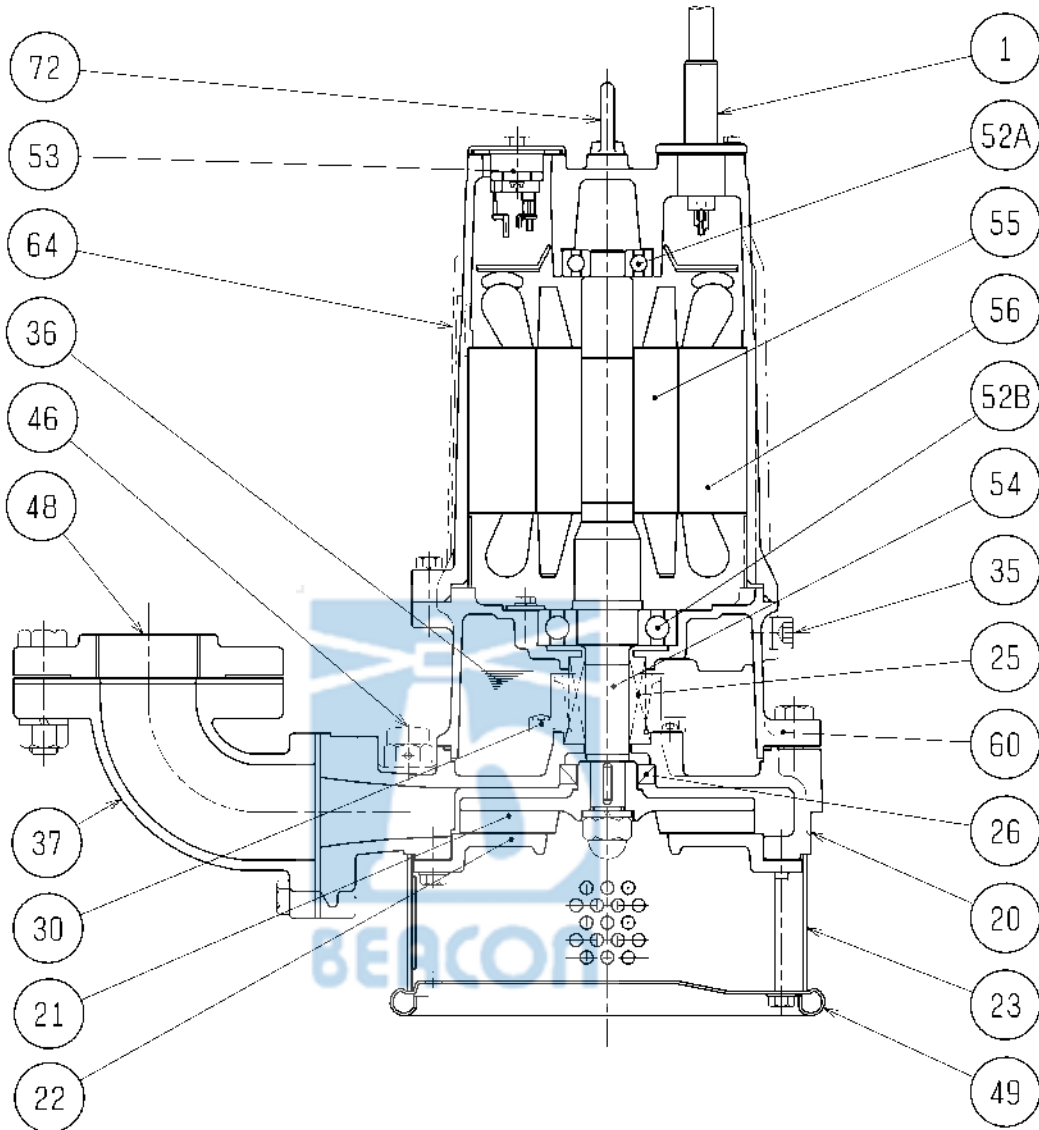
<b>DIMENSION DRAWING</b>		No.	No. A-12147-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	50SF23.7 -52/62

Approximate Weight (kg)  
 59kg  
 ※excluding cable



C. W. L. : Continuous Running Water Level  
 L. W. L. : Lowest Running Water Level

<b>SECTIONAL DRAWING</b>		No.	No. A-12150-3
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	50SF23.7 -52/62



REQ. SPECIFICATION
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※ the wetted part

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	49	Bottom Plate	1	Steel Sheet
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6304ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6307ZZC3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer	1	Steel Sheet	54	Shaft	1	Stainless Steel 420J2(※)
25	Mechanical Seal	1	H-25A	55	Rotor	1	
26	Oil Seal	1	TC355S11	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	2	Stainless Steel 304
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				
48	Screwed Flange	1	Gray Iron Casting				

NO. A-11548-1

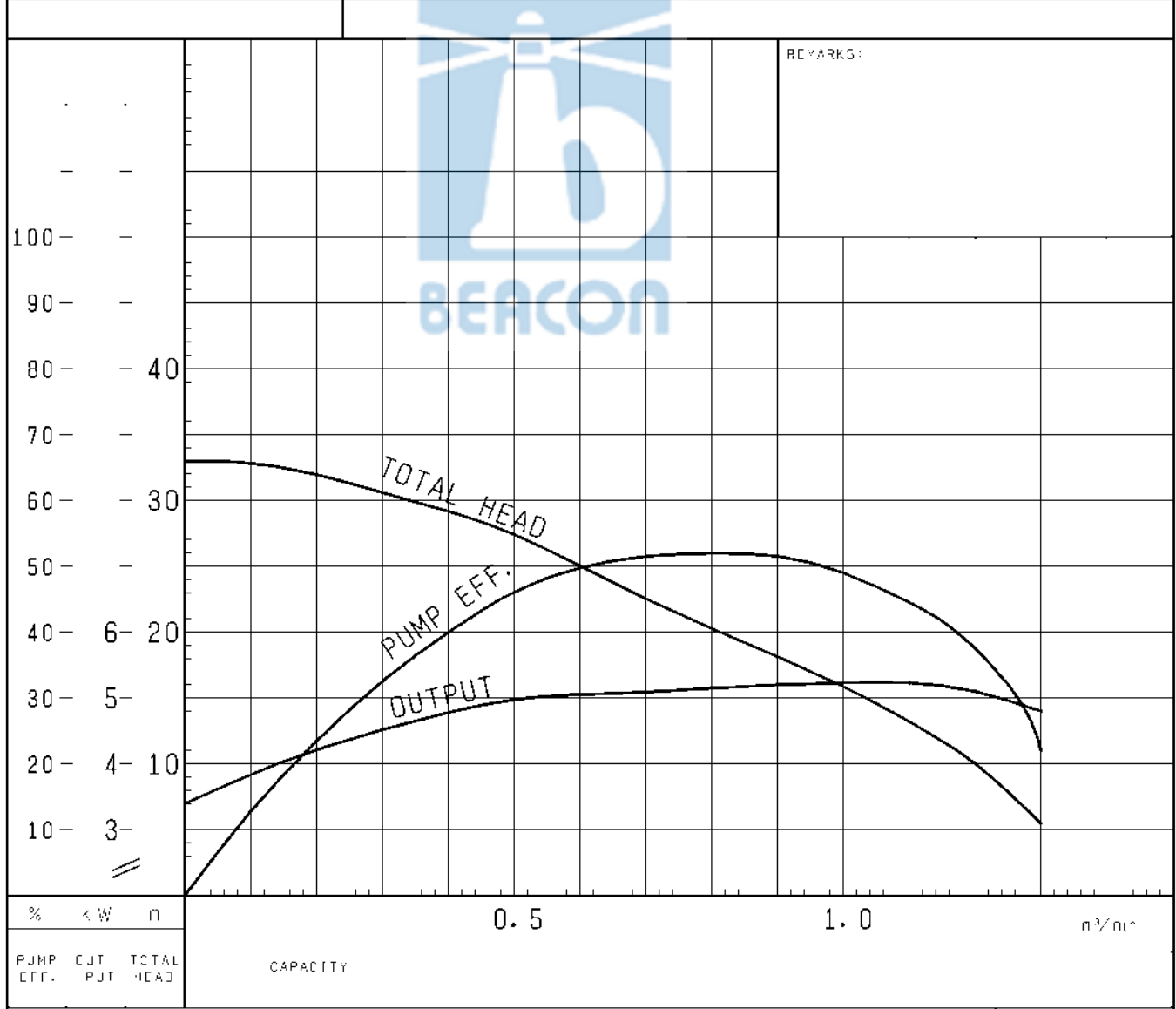
# PUMP PERFORMANCE CURVES

TYPE Waste Water Submersible Centrifugal Pump	MODEL 80SF25.5 -52 TOS80SF25.5 -52	FREQUENCY 50 Hz
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CUSTOMER'S NAME \_\_\_\_\_

EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

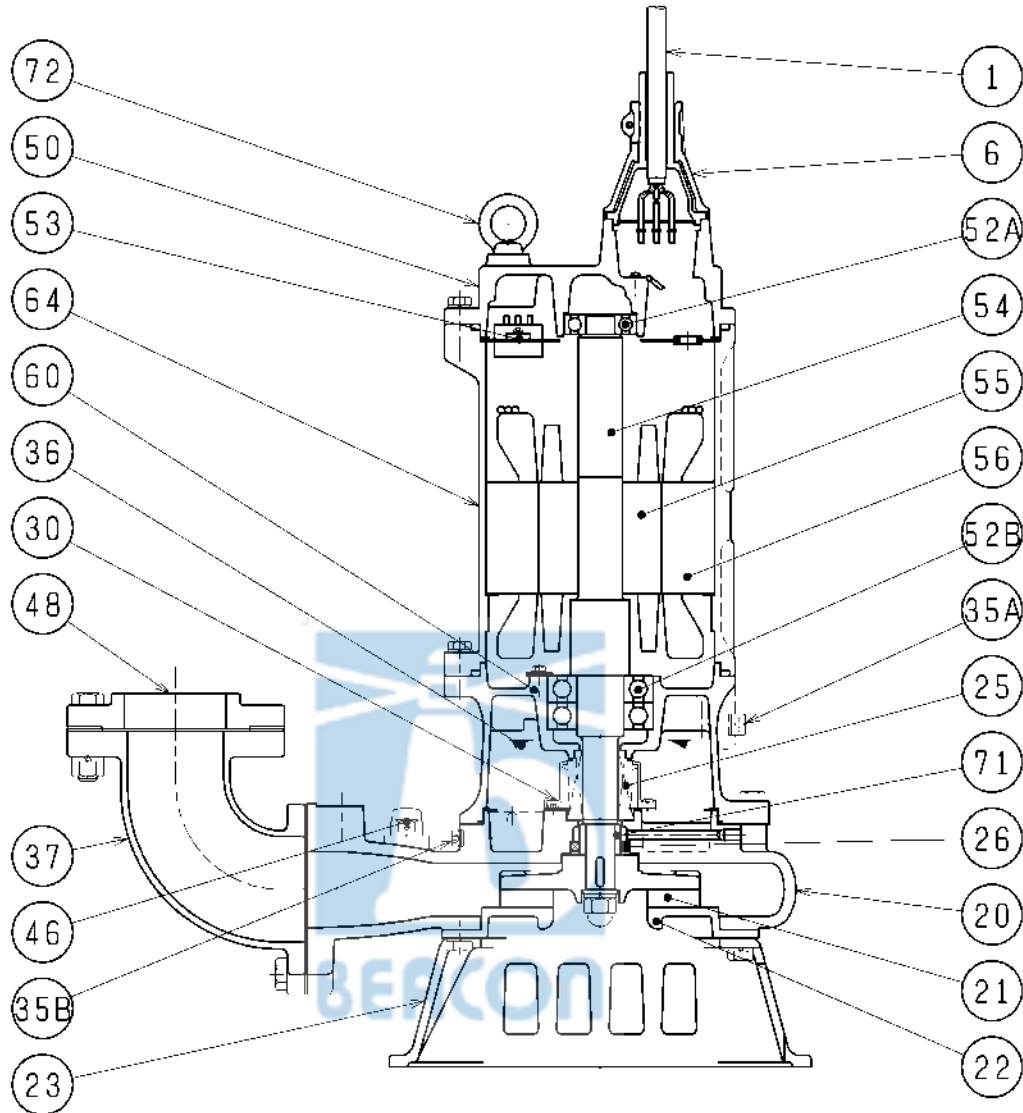
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	80 mm	mm
TOTAL HEAD	25 m	m
CAPACITY	0.6 m <sup>3</sup> /min	m <sup>3</sup> /min
MOTOR OUTPUT	5.5 kW	kW
PHASE x VOLTAGE	3 $\phi$ x	$\phi$ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / s. s. 3000 min <sup>-1</sup>	P / min <sup>-1</sup>
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	F	



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<b>SECTIONAL DRAWING</b>		No.	No. A-11568-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	80SF25.5 -52/62



REQ. SPECIFICATION

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	Chloroprene Sheath	48	Screwed Flange	1	Gray Iron Casting
6	Stuffing Box	1	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6305ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6308ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer Stand	1	Ductile Iron Casting	54	Shaft	1	Stainless Steel 420J2
25	Mechanical Seal	1	H-30A	55	Rotor	1	
26	Oil Seal	1	TC35508	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35A	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
35B	Oil Plug	1	Stainless Steel 304	71	Shaft Sleeve	1	Stainless Steel 403
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	2	Structure Steel
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				

NO. A-11550-1

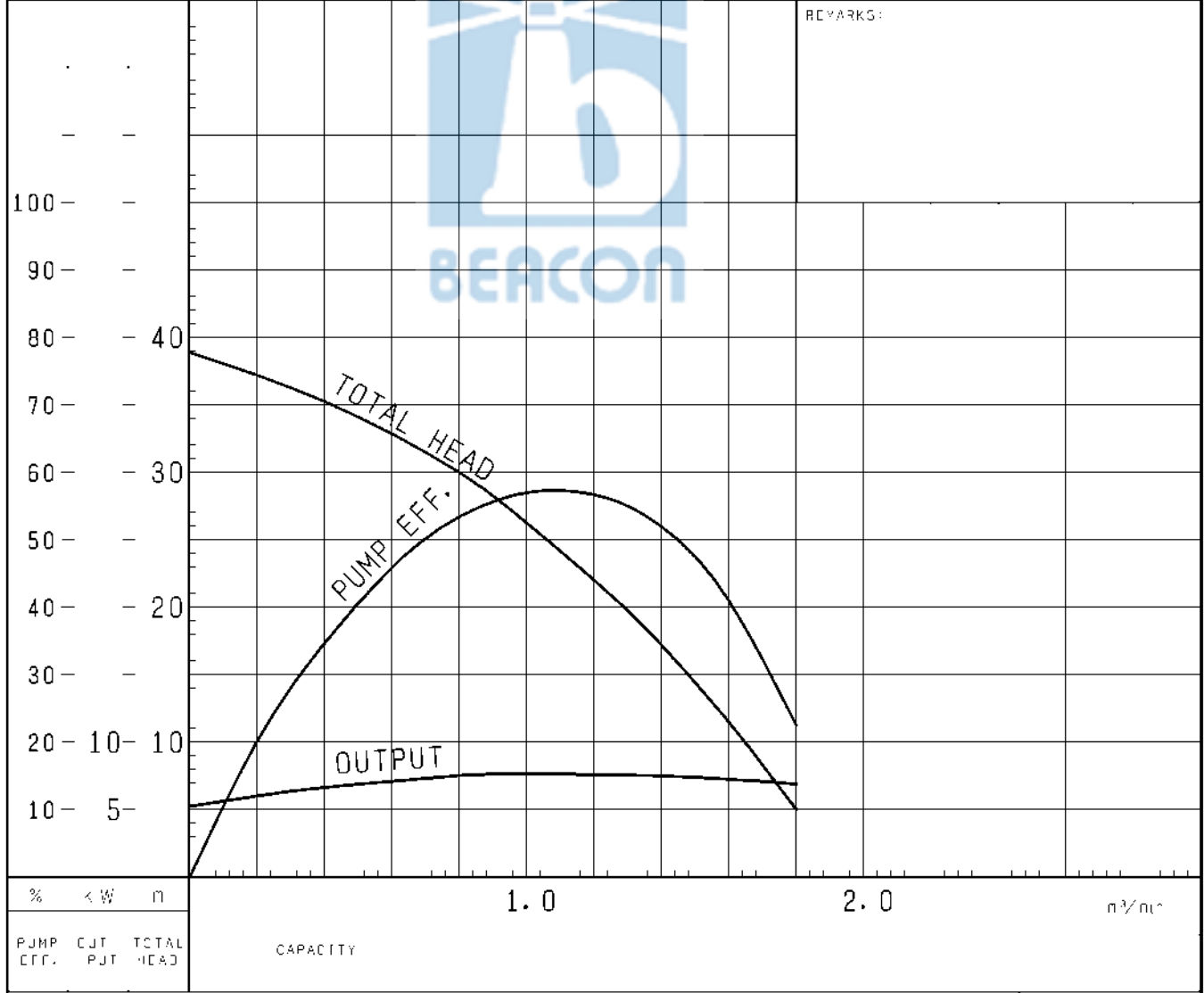
# PUMP PERFORMANCE CURVES

TYPE Waste Water Submersible Centrifugal Pump	MODEL 80SF27.5 -52 TOS80SF27.5 -52	FREQUENCY 50 Hz
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CUSTOMER'S NAME \_\_\_\_\_

EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

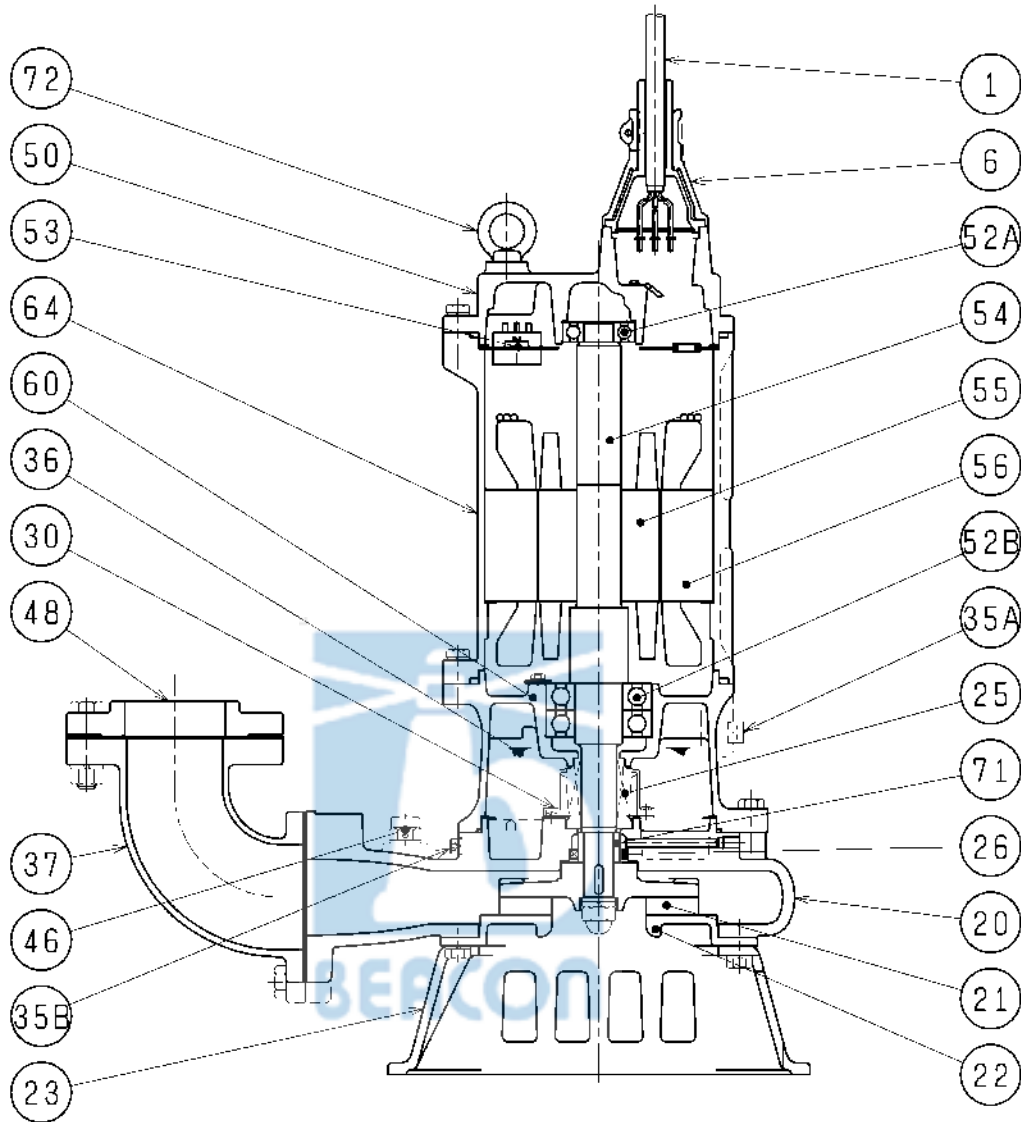
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	80 mm	mm
TOTAL HEAD	30 m	m
CAPACITY	0.8 m <sup>3</sup> /min	m <sup>3</sup> /min
MOTOR OUTPUT	7.5 kW	kW
PHASE x VOLTAGE	3 $\phi$ x V	$\phi$ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / s. s. 3000 min <sup>-1</sup>	P / min <sup>-1</sup>
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	F	



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<b>SECTIONAL DRAWING</b>		No.	No.	A-11569-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	80SF27.5 -52/62	



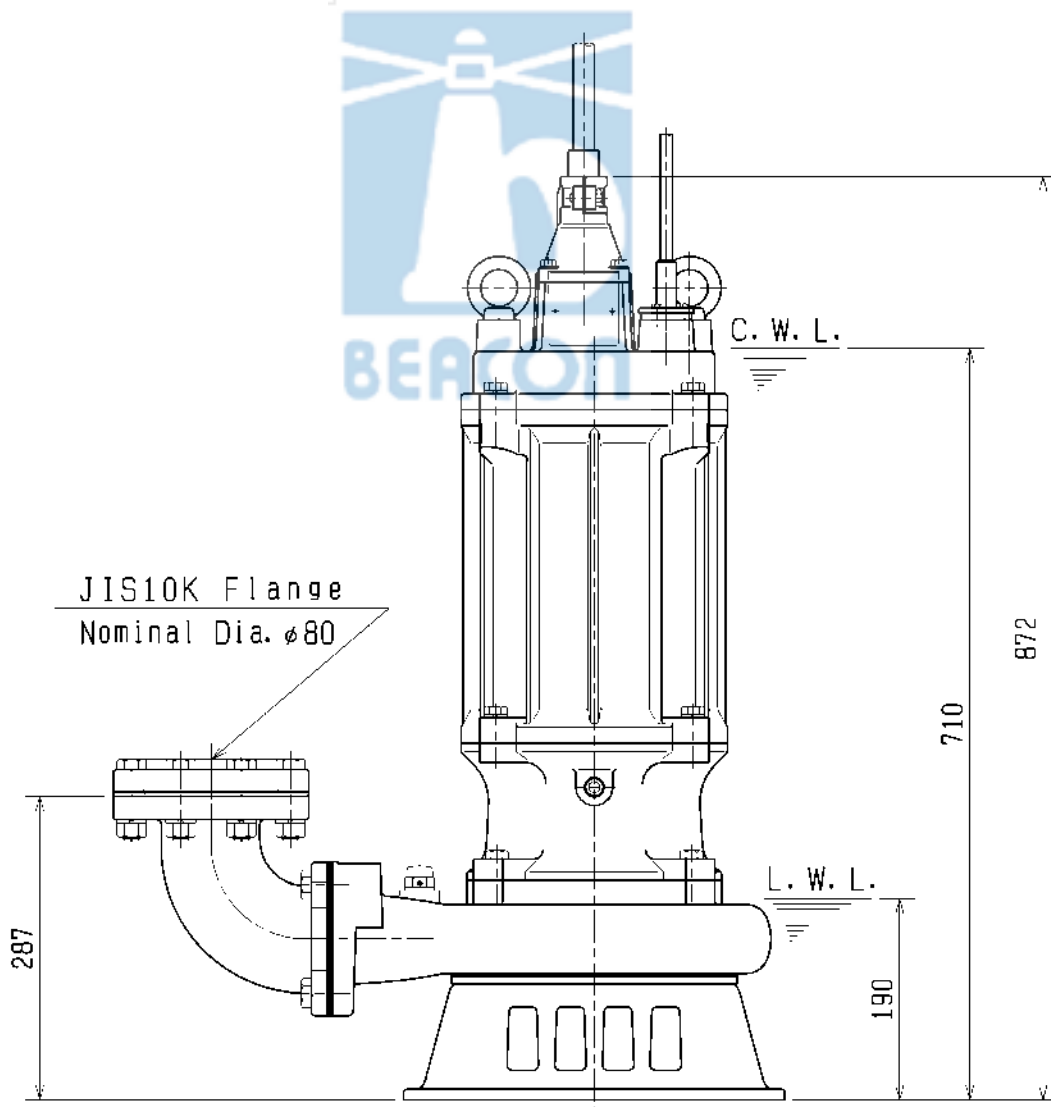
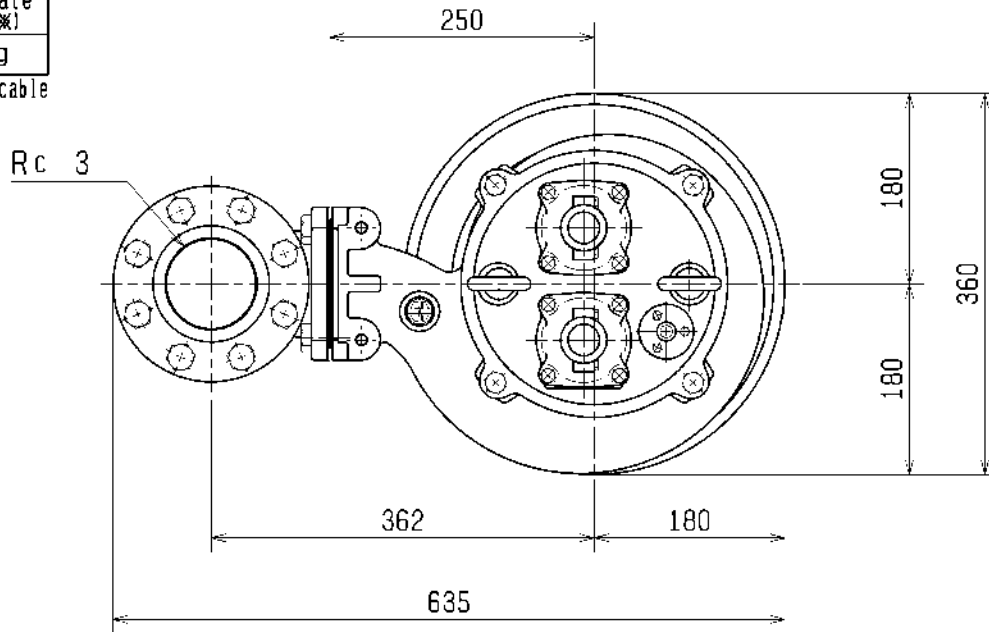
REQ. SPECIFICATION

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	Chloroprene Sheath	48	Screwed Flange	1	Gray Iron Casting
6	Stuffing Box	1	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6305ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6308ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer Stand	1	Ductile Iron Casting	54	Shaft	1	Stainless Steel 420J2
25	Mechanical Seal	1	H-30A	55	Rotor	1	
26	Oil Seal	1	TC3550B	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35A	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
35B	Oil Plug	1	Stainless Steel 304	71	Shaft Sleeve	1	Stainless Steel 403
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	2	Structure Steel
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				



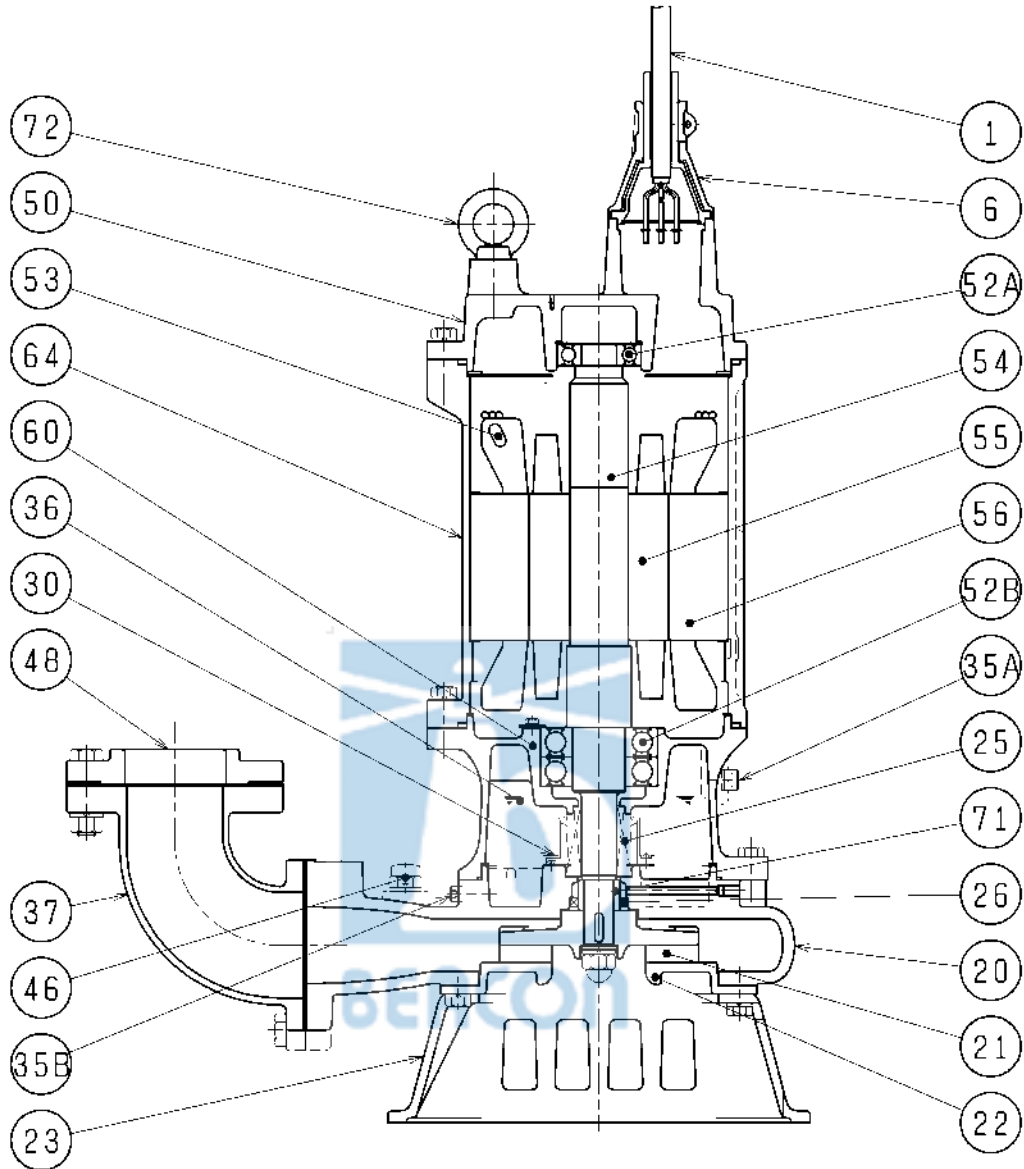
<b>DIMENSION DRAWING</b>		No.	No. A-11561-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	80SF211 -52/62

Approximate Weight (※)  
147kg  
※excluding cable



C. W. L. :Continuous Running Water Level  
L. W. L. :Lowest Running Water Level

<b>SECTIONAL DRAWING</b>		No.	No. A-11570-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	80SF211 -52/62



REQ. SPECIFICATION

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	3	Chloroprene Sheath	48	Screwed Flange	1	Gray Iron Casting
6	Stuffing Box	2	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6306ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6309ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	3	
23	Strainer Stand	1	Ductile Iron Casting	54	Shaft	1	Stainless Steel 420J2
25	Mechanical Seal	1	H-30A	55	Rotor	1	
26	Oil Seal	1	TC35508	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35A	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
35B	Oil Plug	1	Stainless Steel 304	71	Shaft Sleeve	1	Stainless Steel 403
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	2	Structure Steel
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				