

# **HCP PUMP**

<b>Model</b>	<b>80(100)SA27.5</b>
<b>Series</b>	<b>SA</b>
<b>Frequency</b>	<b>50</b>
<b>Phase</b>	<b>3</b>
<b>Discharge</b>	<b>100 mm (4")</b>



## **Motor Data**

Input Power—P1	8.8 kW
Rated Power—P2	7.5 kW
Insulation Class	H
Voltage Range	200~525V
Max. Starts Per Hour	5
Rated Speed (rpm)	2900
Start Method	DOL
Ingress Protection Code	DOL
Explosion-Proof	IP68

## **Technology**

Impeller Type	Open
Mechanical Seal	Double
Lubricating Oil VG32	2000 CC
Solid Passage	20 mm
Cooling Type	External cooling

## **Material**

Motor Frame	SUS316 (AISI 316)
Shaft	SUS316 (X5CrNiMo17-12-2)
Casing	SCS14 (G-X6CrNiMo1810)
Impeller	SCS14 (G-X6CrNiMo1810)
Mechanical Seal	CA/CE&SiC/SiC
Cable	VCT,H07RN-F
Upper and Lower Bearing	6306ZZ,6309ZZ

## **Liquid**

Maximum Ambient Temperature	0~40°C (32~104°F)
Maximum Installation Depth	20m (66ft)
Highest Liquid Temperature	40 °C (104°F)
Liquid Transported	Acid and alkali sewage

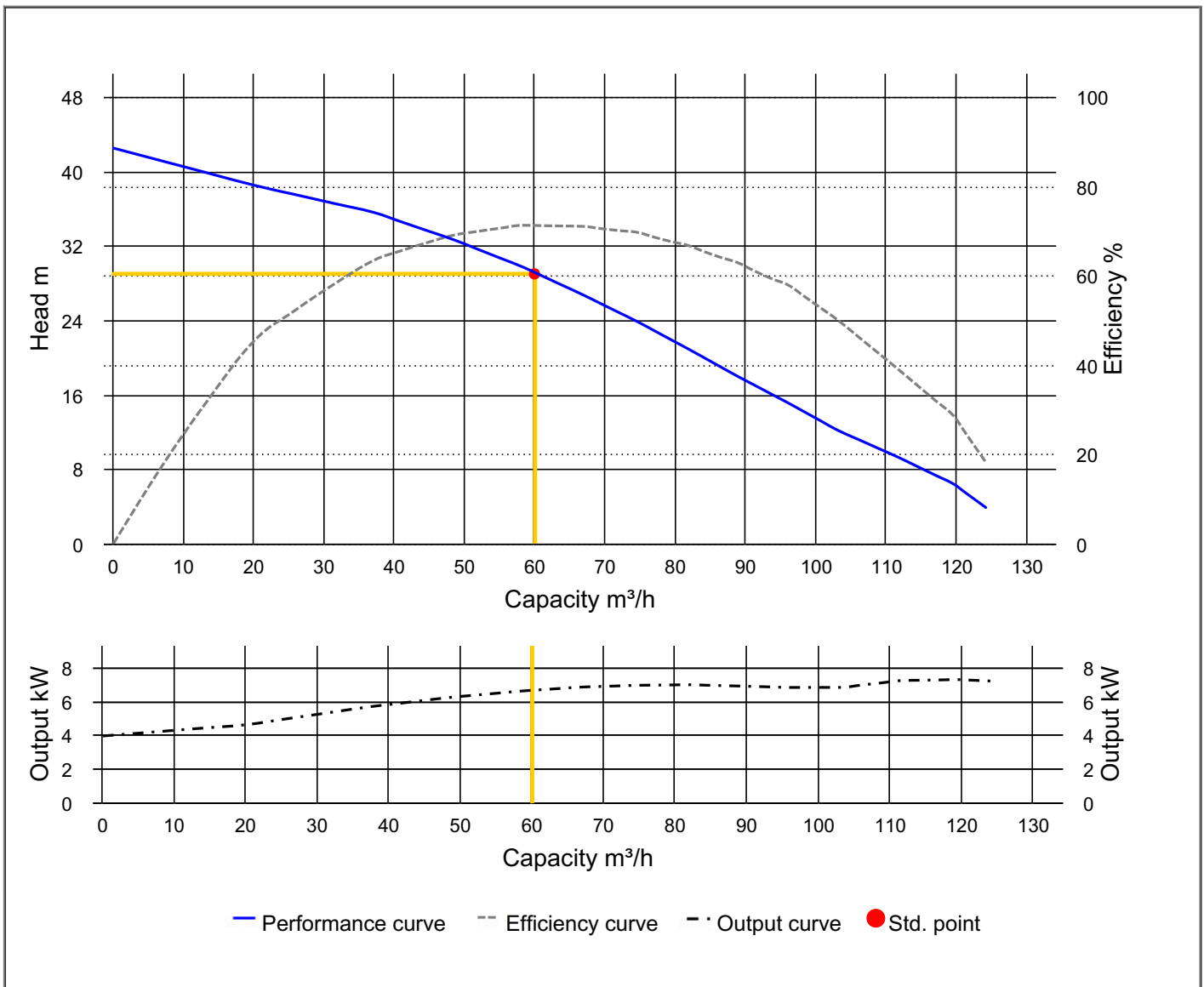
## **Others**

Protection Device	Auto-cut Protector
Moisture Sensor	



# HCP PUMP

PUMP PERFORMANCE CURVES			
Model	80(100)SA27.5	File NO.	20210210215947
Frequency	50 Hz	Ver NO.	202003060911
Discharge	4" / 100 mm	<b>REFERENCE SPECIFICATION</b>	
Output	10 HP / 7.5 kW		
Std. Head	29 m	Efficiency	71.2 %
Std. Capacity	60 m <sup>3</sup> /h		
Phase / Volt	3 Ø / 380 V		
Rated Current	15.70 A		
Pole / rpm	2 P / 2900 rpm		
Start Method	DOL		
Insulation Class	H		

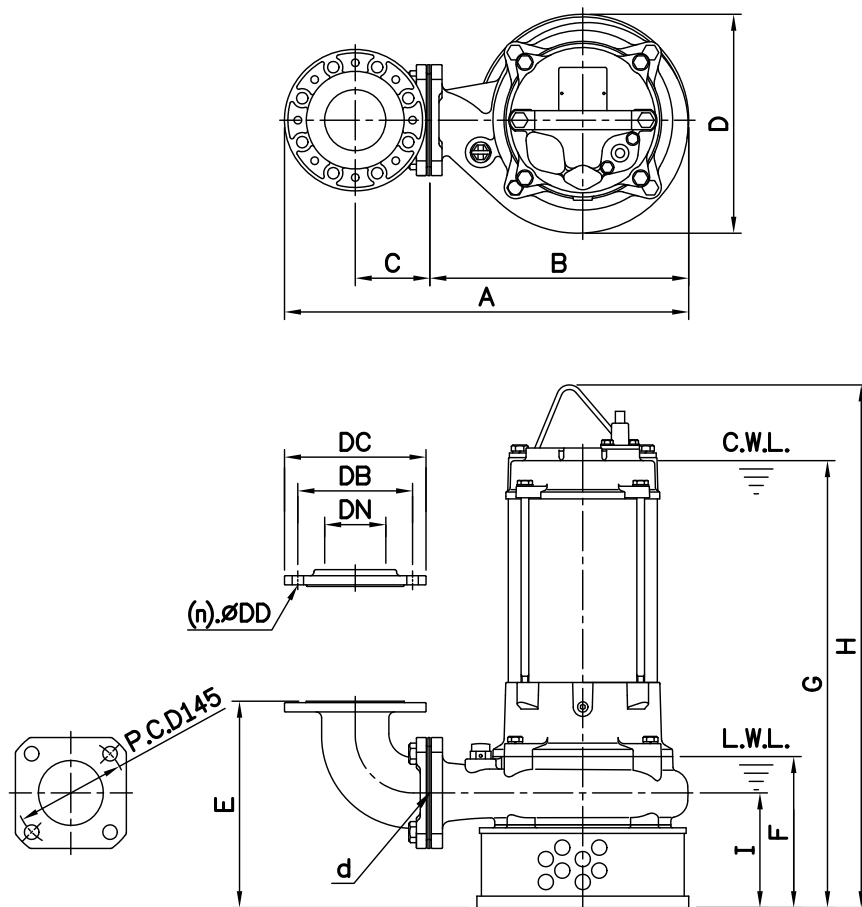


## DIMENSIONS

NO: S3SA0275030-00

MODEL: 80(100)SA25.5 / 27.5

50Hz 3Ø



Flange	
Female Thread	
PT	NPT

Dimensions—mm

Weight:kg

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
80(100)SA25.5	80	528	338	98	286	271	198	585	684	151	67	ESB3-150K	80	150	185	15	8	7
80(100)SA25.5	80	556	338	113	286	276	198	585	684	151	67	ESB4-175(145)K	100	175	210	15	8	10
80(100)SA27.5	80	528	338	98	286	271	198	585	684	151	73	ESB3-150K	80	150	185	15	8	7
80(100)SA27.5	80	556	338	113	286	276	198	585	684	151	73	ESB4-175(145)K	100	175	210	15	8	10

Dimensions—inch

Weight:lb

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
80(100)SA25.5	3	20 <sup>3</sup> / <sub>8</sub>	13 <sup>5</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>16</sub>	23 <sup>1</sup> / <sub>16</sub>	26 <sup>3</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	148	ESB3-150K	3	5 <sup>7</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>8</sub>	<sup>1</sup> / <sub>8</sub>	8	16
80(100)SA25.5	3	21 <sup>7</sup> / <sub>8</sub>	13 <sup>5</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>4</sub>	10 <sup>7</sup> / <sub>16</sub>	7 <sup>7</sup> / <sub>16</sub>	23 <sup>1</sup> / <sub>16</sub>	26 <sup>3</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	148	ESB4-175(145)K	4	6 <sup>7</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	<sup>1</sup> / <sub>8</sub>	8	21
80(100)SA27.5	3	20 <sup>3</sup> / <sub>8</sub>	13 <sup>5</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>16</sub>	23 <sup>1</sup> / <sub>16</sub>	26 <sup>3</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	161	ESB3-150K	3	5 <sup>7</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>8</sub>	<sup>1</sup> / <sub>8</sub>	8	16
80(100)SA27.5	3	21 <sup>7</sup> / <sub>8</sub>	13 <sup>5</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>4</sub>	10 <sup>7</sup> / <sub>16</sub>	7 <sup>7</sup> / <sub>16</sub>	23 <sup>1</sup> / <sub>16</sub>	26 <sup>3</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	161	ESB4-175(145)K	4	6 <sup>7</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	<sup>1</sup> / <sub>8</sub>	8	21

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

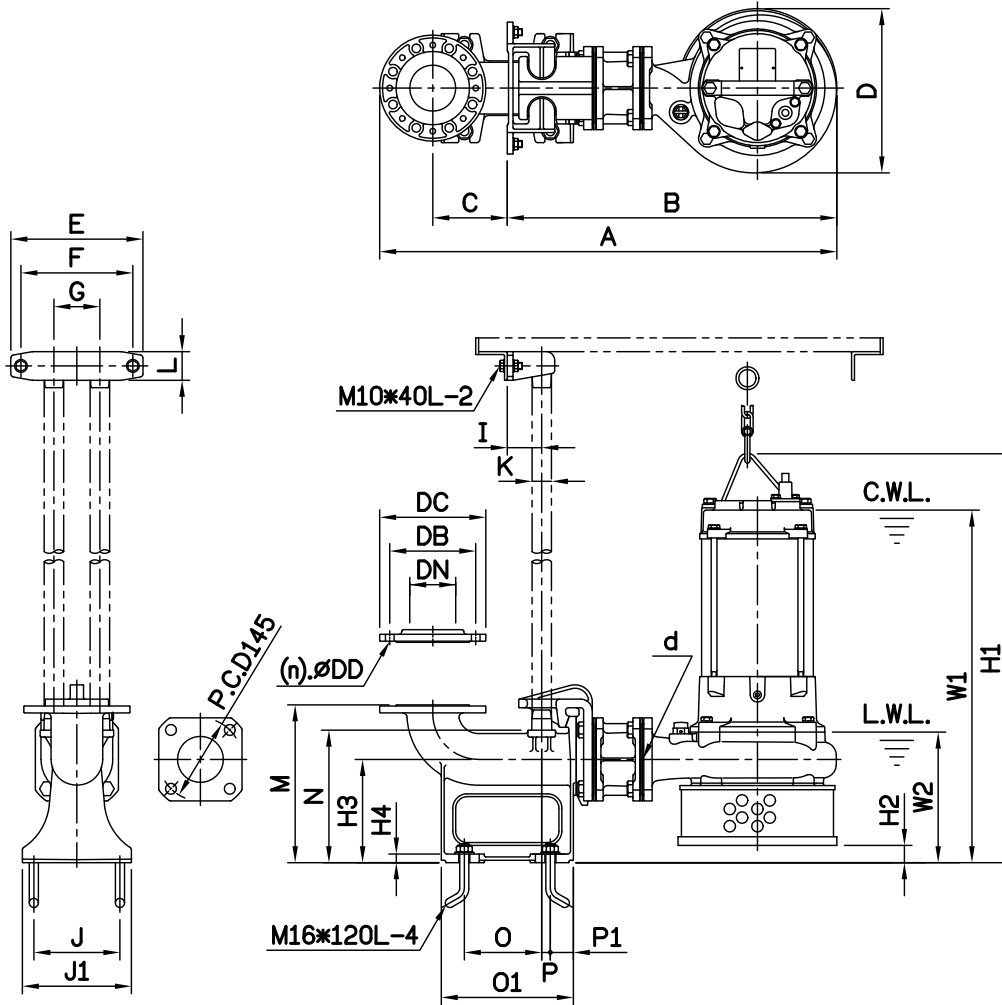
WT1:Pump Weight(Without Cable)  
WT2:Elbow Set Weight

## DIMENSIONS

NO: T3SA0275030-00

MODEL: 80(100)SA25.5 / 27.5

50Hz 3Ø



Flange	
Female Thread	
PT	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
ESF3-150	80	150	185	15	8
ESF4-175	100	175	210	15	8

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
ESF3-150	3	5 <sup>7</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	<sup>5</sup> / <sub>8</sub>	8
ESF4-175	4	6 <sup>7</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	<sup>5</sup> / <sub>8</sub>	8

Dimensions-mm

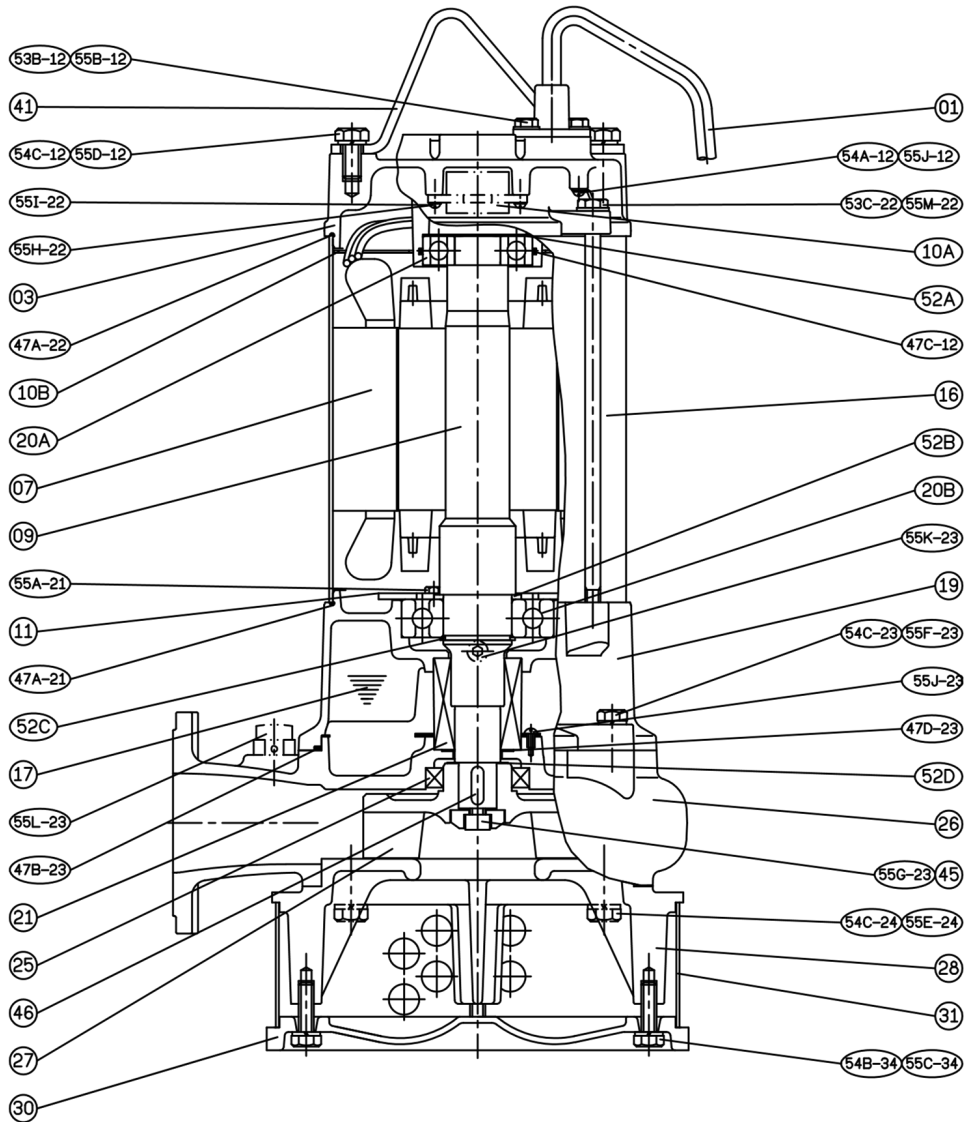
Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:kg	
																											GRS Set	WT2
80(100)SA25.5	80	797	574	130	286	230	195	80	60	150	190	1 <sup>1</sup> / <sub>4</sub>	50	275	231	135	230	15	40	615	228	714	30	180	15	67	ST80DH	25
80(100)SA27.5	80	797	574	130	286	230	195	80	60	150	190	1 <sup>1</sup> / <sub>4</sub>	50	275	231	135	230	15	40	615	228	714	30	180	15	73	ST80DH	25
80(100)SA25.5	80	829	574	150	286	230	195	80	60	170	210	1 <sup>1</sup> / <sub>4</sub>	50	285	231	155	250	15	40	615	228	714	30	180	15	67	ST100(80)BH	28
80(100)SA27.5	80	829	574	150	286	230	195	80	60	170	210	1 <sup>1</sup> / <sub>4</sub>	50	285	231	155	250	15	40	615	228	714	30	180	15	73	ST100(80)BH	28

Dimensions-inch

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:lb	
																											GRS Set	WT2
80(100)SA25.5	3	31 <sup>3</sup> / <sub>8</sub>	22 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>	2	10 <sup>3</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	24 <sup>3</sup> / <sub>8</sub>	9	28 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	148	ST80DH	55
80(100)SA27.5	3	31 <sup>3</sup> / <sub>8</sub>	22 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>	2	10 <sup>3</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	24 <sup>3</sup> / <sub>8</sub>	9	28 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	161	ST80DH	55
80(100)SA25.5	3	32 <sup>3</sup> / <sub>8</sub>	22 <sup>3</sup> / <sub>8</sub>	5 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	2	11 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	9 <sup>13</sup> / <sub>16</sub>	<sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	24 <sup>3</sup> / <sub>8</sub>	9	28 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	148	ST100(80)BH	62
80(100)SA27.5	3	32 <sup>3</sup> / <sub>8</sub>	22 <sup>3</sup> / <sub>8</sub>	5 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	2	11 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	9 <sup>13</sup> / <sub>16</sub>	<sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	24 <sup>3</sup> / <sub>8</sub>	9	28 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	161	ST100(80)BH	62

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

WT1:Pump Weight(Without Cable)  
WT2:GRS Set Weight



NO.	Part name	Material	QTY
01	Cable		1
03	Upper Cover	SCS14	1
07	Stator		1
09	Shaft End	SUS316	1
10A	Auto-cut Protector		1
10B	Protective Plate		1
11	Bearing Fixer	SPCC	1
16	Motor Frame	SUS316	1
17	Lubricant		
19	Bearing Bracket	SCS14	1
20A	Bearing		1
20B	Bearing		1
21	M. Seal	CA/CE & SiC/SiC	1
23	M. Seal Bracket	SCS14	1

NO.	Part name	Material	QTY
25	Oil Seal	NBR	1
26	Casing	SCS14	1
27	Impeller	SCS14	1
28	Casing Cover	SCS14	1
30	Footing	SCS14	1
31	Strainer	SUS316	1
41	Handle	SUS304	1
46	Impeller Key	SUS304	1
47	Gasket Kit		