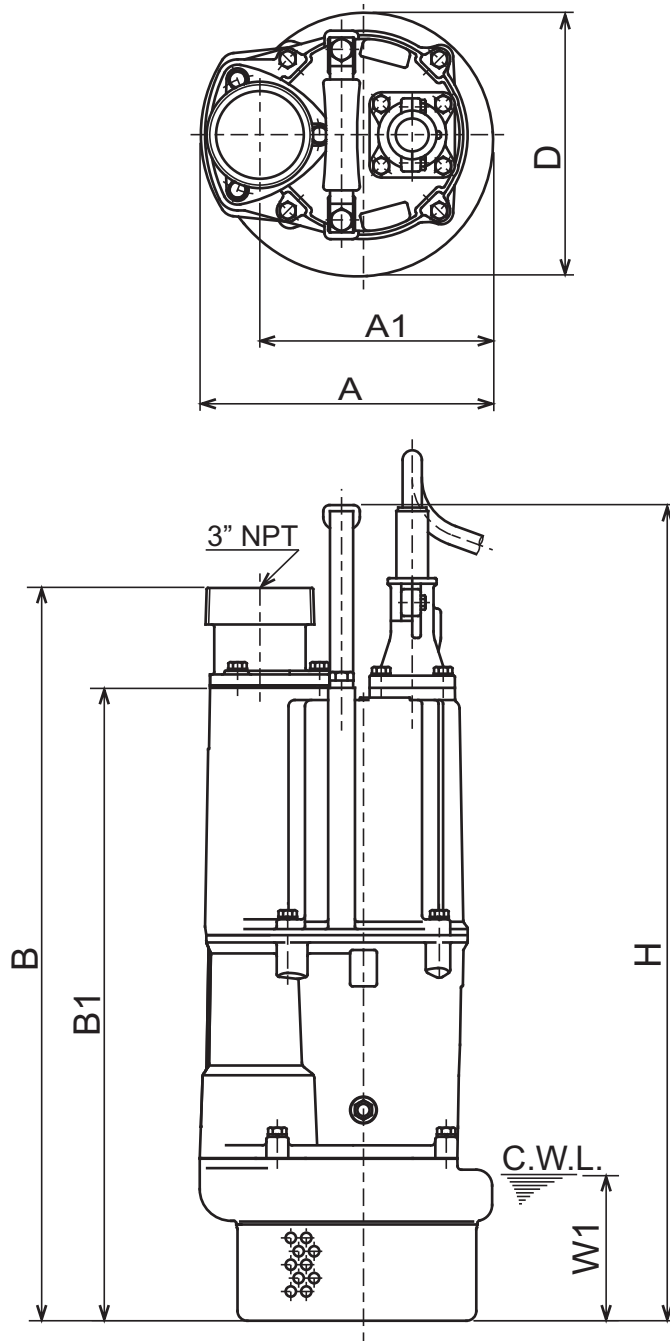




NK - SERIES
SEMI-VORTEX - DEWATERING PUMPS

DIMENSIONS

NK3-22L



C.W.L. : Continuous running Water Level

DIMENSIONS:USCS (Inch)

Model	HP	NOM. SIZE	Pump & Motor						C.W.L.	*Wt.
			A	A1	B	B1	D	H	W1	(lbs.)
NK3-22L	3	3"	9 1/4	7 1/2	23 5/8	20 3/8	8 1/2	26 1/2	4 3/4	73

DIMENSIONS:METRIC (mm)

Model	kW	NOM. SIZE	Pump & Motor						C.W.L.	*Wt.
			A	A1	B	B1	D	H	W1	(kg)
NK3-22L	2.2	80	235	192	601	519	216	669	120	33.0

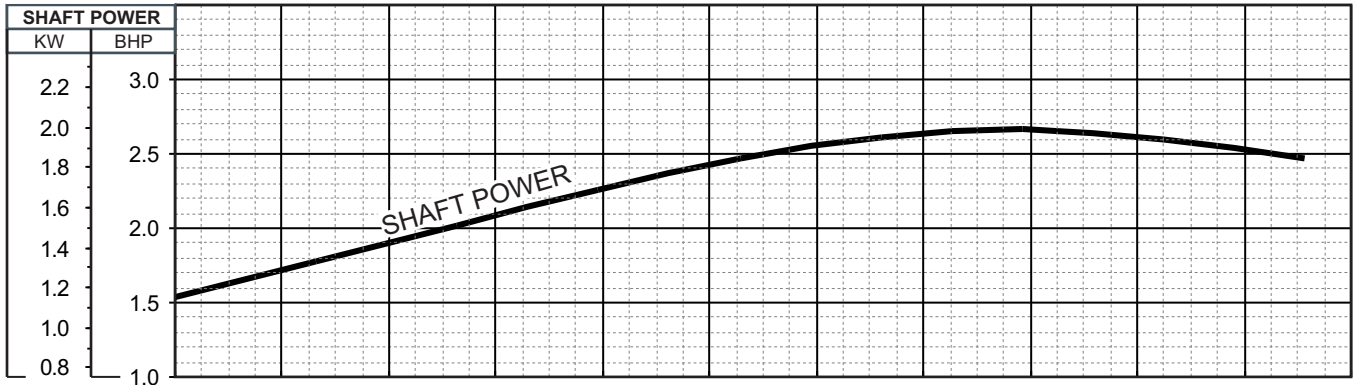
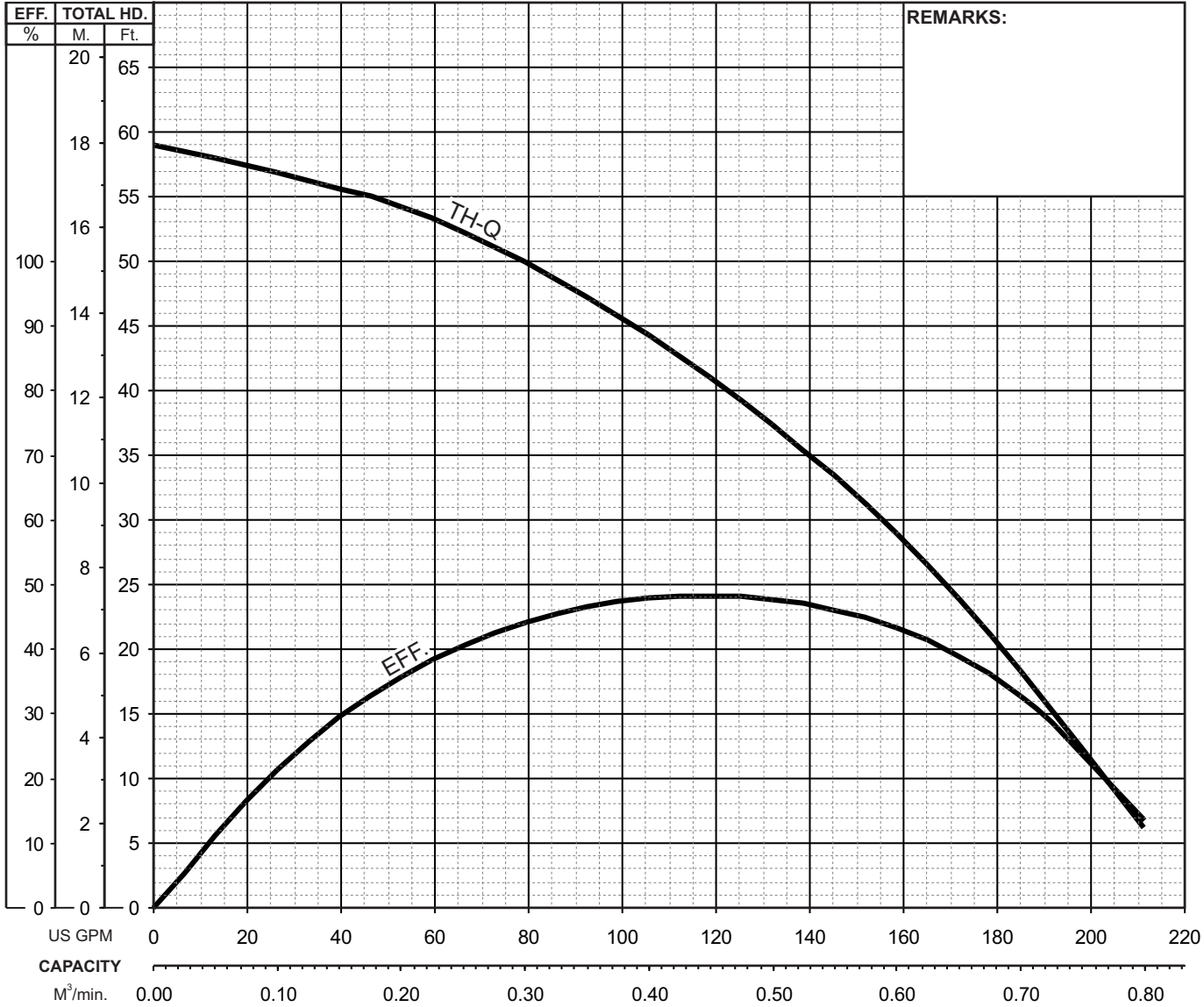
* Excluding Cable



NK - SERIES SEMI-VORTEX - DEWATERING PUMPS

PERFORMANCE CURVE

MODEL	BORE	HP	KW	RPM	SOLIDS DIA	LIQUID	SG.	VISCOSITY	TEMP.
NK3-22L	3"/80mm	3	2.2	3465	0.334"/8.5mm	Water	1.0	1.123 cSt.	60°F
PUMP TYPE		PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD		INS. CLASS	
Semi-Vortex - Dewatering Pump		Single	220	13.0	60	Capacitor Start		B	
CURVE No.	DATE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD		INS. CLASS	
-	-	-	-	-	-	-		-	

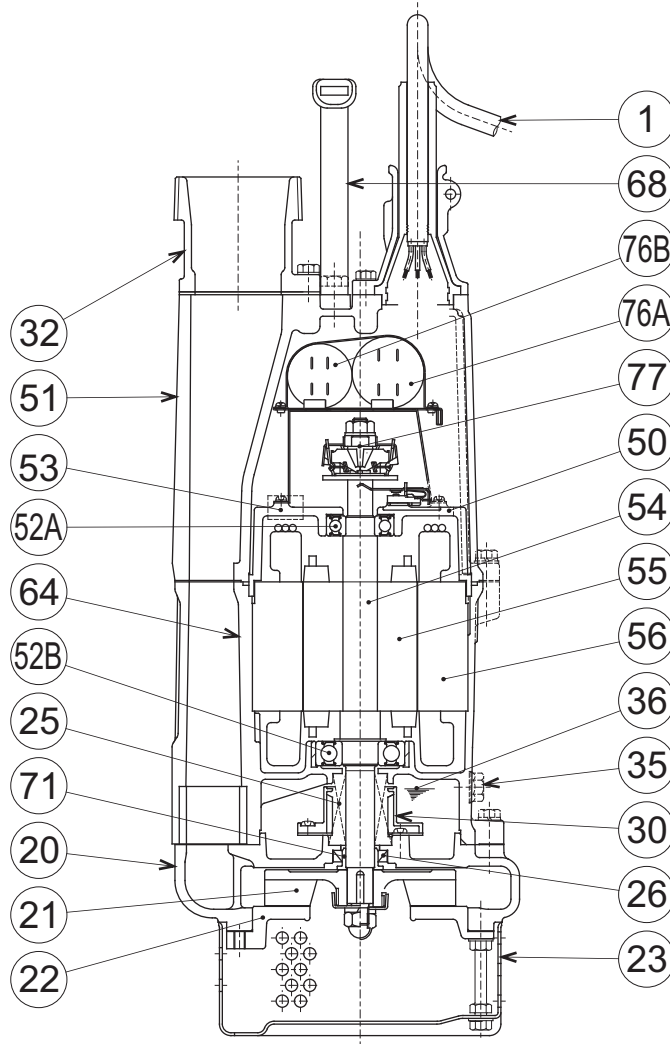




NK - SERIES
SEMI-VORTEX - DEWATERING PUMPS

SECTIONAL VIEW

NK3-22L



ITEM#	DESCRIPTION	MAIN MATERIAL / NOTE	RELATED ASTM, AISI CODE	RELATED EN CODE	Q'TY
1	Power Cable	Chloroprene Sheath AWG14/3-32ft			1
20	Pump Casing	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
21	Impeller	High Chrome Cast Iron	A532 ClassIII TypeA	DIN 1695 G-X260Cr27	1
22	Suction Cover	Ductile Cast Iron	A536 65-45-12	EN 1563 GJS-500-7	1
23	Suction Strainer	Steel (Cold Rolled)	A109/A1008	EN 10130	1
25	Mechanical Seal	Silicon Carbide / H-20T			1
26	Oil Seal	NBR Rubber / TC25388			1
30	Oil Lifter	PBT Resin			1
32	Discharge Connection	Cast Iron / NPT 3"	A48M Class30B	EN 1561 GJL-200	1
35	Oil Plug	Stainless Steel	S 30400	1.4301	1
36	Lubricant	Turbine Oil ISO VG32 or SAE 10W-20			
50	Motor Bracket	Cast Iron	A48M Class25B	EN 1561 GJL-150	1
51	Motor Head Cover	Aluminum Alloy Die Casting	B85 383.0	EN 1706 AC-46100	1
52A	Upper Bearing	#6204ZZC3			1
52B	Lower Bearing	#6305ZZC3			1
53	Motor Protector				1
54	Shaft	Stainless Steel	S 42000	1.4028	1
55	Rotor				1
56	Stator				1
64	Motor Housing	Aluminium Alloy Casting	B108 333.0	EN 1706 AC-46200	1
68	Handle	Steel (Cold Rolled) + NBR Rubber	A109/A1008	EN 10130	1
71	Shaft Sleeve	Stainless Steel	S 30400	1.4301	1
76A	Capacitor				1
76B	Capacitor				1
77	Centrifugal Sw itch				1

PARTS LIST		SINGLE PHASE DEWATERING PUMP			8/10/2018	
ITEM	PART No.	DESCRIPTION	QTY	SIZE	MATERIAL	NOTES
1	001-499-16	Cabtyre Cable Set (32') 220V-60Hz(USA)	1	2PNCTF3Cx2mm2	KTV	
2	140-033-12	Hex.Bolt	2	M6x16	SUS304	included in ITEM#1 Cable Ass'y
3	140-447-13	Hex.Bolt (w/Plain Washer)	4	M8x25(B=12)	SUS304	
4	003-122-24	Stuffing Box	1	No.1-1(w/Clamp)	ADC	included in ITEM#1 Cable Ass'y
5	008-133-10	Mould Cover	1	No.1-9	CR	included in ITEM#1 Cable Ass'y
6	009-146-19	Terminal	3	CE-5	CU	
7	009-202-14	Intermediate Lead Wire	1Set	AWG-14x250L		
8	009-195-13	Intermediate Lead Wire	1Set	AWG-14x110L		
9	143-000-64	Pan Tapping Screw	1	M4x6	SUS410	
10	002-000-23	Irrax Tube A	1	d6x80		
11	002-000-23	Irrax Tube A	1	d6x80		
12	140-477-12	Hex.Bolt (w/Plain Washer)	4	M8x30	SUS304	
13	032-355-15	Hose Coupling 3"	1	NPT-3(KTV2-15)	FC	
	032-000-21	Hose Coupling 2" OPTION	1	NPT 2"	FC	2" OPTION
14	121-001-09	Packing	1	KTV2-15/22	NBR	*
15	068-000-35	Handle (for USA)	1	KTZ21.5/32.2(H=150)	SPC+NBR	
16	140-074-15	Hex.Bolt	2	M10x20	SUS304	
17	140-432-15	Hex.Bolt (w/Spring Washer/Plain Washer)	4	M8x30	SUS304	
18	051-000-45	Motor Head Cover	1		ADC	
19	122-473-12	O-Ring	1	150xd3.3	NBR	*
20	143-085-34	Pan Screw (w/Spring Washer)	2	M4x6	C3604	
21	076-000-58	Capacitor 220V-60Hz(USA)	1	30MF,400VAC,d45x100.5L	(T)	
22	127-001-01	Capacitor Fixing Plate	1	NK3-22	SECC	
23	076-142-13	Capacitor 220V-60Hz(USA)	1	200MF-250VAC	(T)	
24	078-000-04	Centrifugal Switch Cover	1	NK3-22	SPC	
25	143-085-34	Pan Screw (w/Spring Washer)	4	M4x6	C3604	
26	002-000-22	Irrax Tube A	2	d6x130		
27	002-000-24	Insulation Sleeve	6	PF-250		
28	009-001-67	Intermediate Lead Wire	1Set	AWG14x220L(#41802)		
29	009-001-69	Intermediate Lead Wire	1Set	AWG14x150L(#41802)		
30	009-001-67	Intermediate Lead Wire	1Set	AWG14x220L(#41802)		
31	181-065-10	Cable Tie	1	CV-150	Nylon	
32	143-136-15	Truss Screw	2	M4x10	SWRM	
33	181-065-10	Cable Tie	1	CV-150	Nylon	
34	053-001-78	Motor Protector 220V-60Hz(USA)	1	KA143-CCVL402	(H.C)	
35	009-001-68	Intermediate Lead Wire	1Set	AWG14x150L(#41802)		
36	141-119-16	Hex.Nut	1	M10 (U-nut)	SS	
37	142-128-24	Plain Washer	1	M10	SPC	

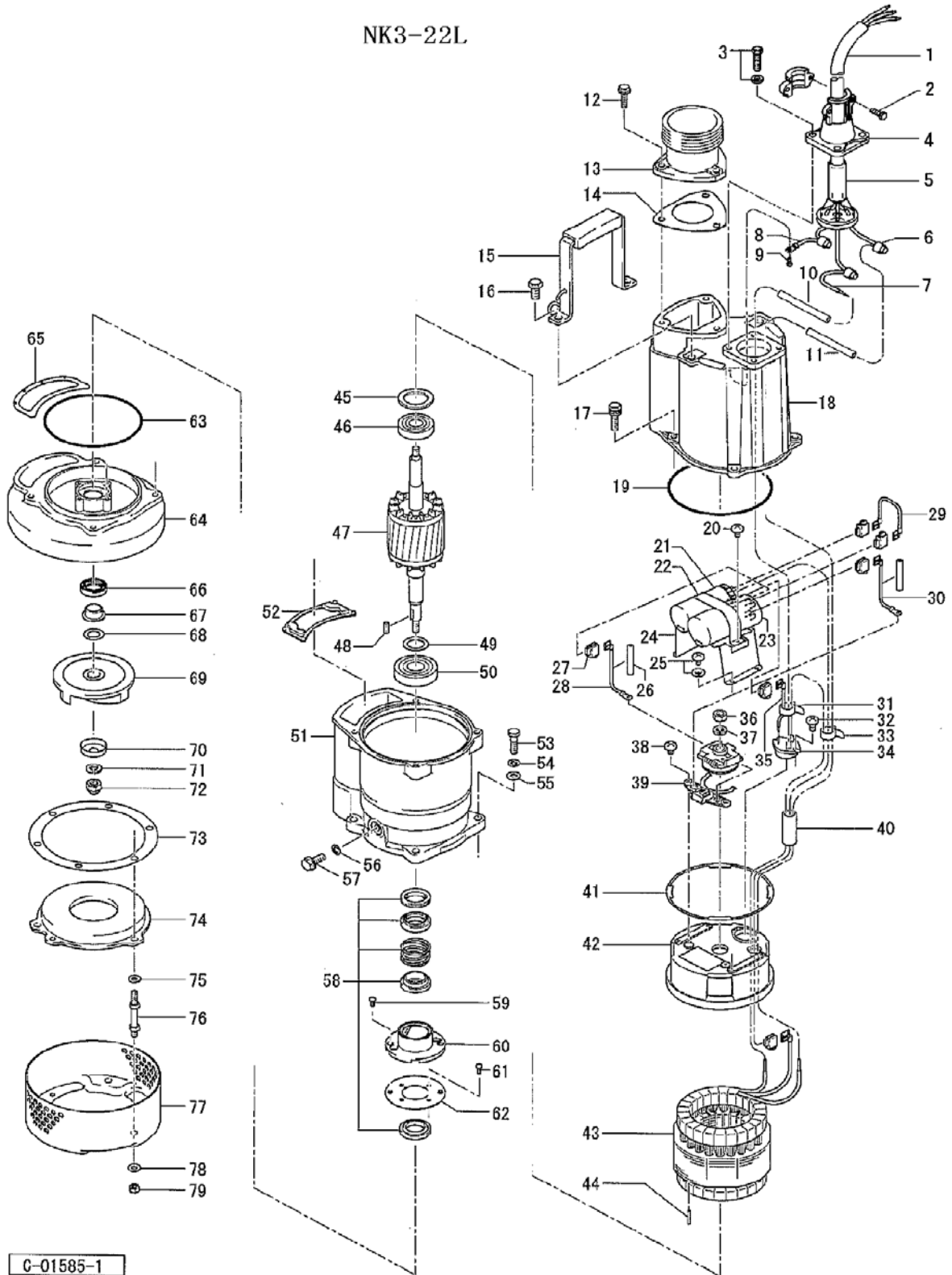
PARTS LIST		SINGLE PHASE DEWATERING PUMP			8/10/2018	
ITEM	PART No.	DESCRIPTION	QTY	SIZE	MATERIAL	NOTES
38	143-015-17	Pan Screw	2	M4x10	SWRM	
39	077-115-10	Centrifugal Switch	1	GS-114		
40	016-143-18	Lead Wire Protection Bush	1	d18x45l	NBR	
41	121-474-10	Packing	1	NK2-15/22	NBR	*
42	050-416-11	Motor Bracket	1		FC	
43	056-711-17	Stator 220V-60Hz(USA)	1Set			
44	145-031-15	Spring Pin	1	#4x25l	SCM	
45	142-195-19	Wave Washer	1	6204/6303(d47x,0.3t)	SK5	
46	052-103-18	Bearing	1	6204ZZC3		
47	055-002-39	Rotor	1Set	w/Bearing		
48	147-128-16	Impeller Key	1	5x5x18.5L	SUS403	
49	061-161-12	Bearing Collar	1	d25.1xd36x1.6t	SPC	
50	052-108-13	Bearing	1	6305ZZC3		
51	064-001-11	Motor Frame	1	NKH-22L	AC4C	
52	121-445-12	Packing (Water Way, Upp.)	1	KTV2-15/22	NBR	*
53	140-057-12	Hex.Bolt	4	M8x35	SUS304	
54	142-163-18	Spring Washer	4	M8	SUS304	
55	142-127-10	Plain Washer	4	M8	SUS304	
56	121-246-11	Packing	1	d10.3xd16x2t	PE	*
57	035-125-13	Oil Plug	1	M10x20(B=13)	SUS304	
58	025-243-17	Mechanical Seal	1	H-20T	SIC	
59	143-070-23	Pan Screw	2	M5x6	SWRM	
60	030-144-13	Oil Lifter	1	H-20(A)(T)	Resin	
61	143-070-10	Pan Screw	4	M5x6	SWRM	
62	030-154-16	Seal Stopper	1	H-20T	SPCC	
63	122-139-13	O-Ring	1	G-140(139.4xd3.1)	NBR	*
64	020-001-01	Pump Casing	1	KTZ21.5/32.2	FC	
65	121-501-17	Packing (Water Way, Low.)	1	KTZ21.5/22.2	NBR	*
66	026-105-19	Oil Seal	1	TC-25388	NBR	
67	071-314-13	Shaft Sleeve	1	d20xd25x16l	SUS304	
68	040-104-25	Impeller Shim		d18.2xd29x0.3t	SUS304	
69	021-552-23	Impeller (60Hz)	1	NK2-22L	HiCrFC	
	021-556-27	Impeller (50Hz)	1		HiCrFC	50Hz OPTION
70	047-113-28	Impeller Thread Protect.Cover	1	No.3A(13.5)	SUS304	
71	142-165-10	Spring Washer	1	M12	SUS304	
72	141-032-14	Hex.Cap Nut	1	M12	SUS304	
73	120-110-12	Packing (S.Cover)		d150xd186x0.3t	PE	
74	022-000-53	Suction Cover	1	KTZ31.5/32.2	FCD	

PARTS LIST		SINGLE PHASE DEWATERING PUMP			8/10/2018	
ITEM	PART No.	DESCRIPTION	QTY	SIZE	MATERIAL	NOTES
75	142-127-10	Plain Washer	3	M8	SUS304	
76	144-000-56	Stud Bolt	3	M8x85(23/12)	SUS410	
77	023-472-11	Strainer Stand	1	KTZ21.5/32.2	SPCC	
78	142-127-10	Plain Washer	3	M8	SUS304	
79	141-005-18	Hex.Nut	3	M8	SUS304	
	173-003-01	Packing O-Ring Set	1Set	(Marked by *)		
14	121-001-09	Packing (Hose Coupling)	1	KTV2-15/22	NBR	*
19	122-473-12	O-Ring (M.Head cover/M.Frame)	1	150xd3.3	NBR	*
41	121-474-10	Packing (M.Head cover/M.Frame)	1	NK2-15/22	NBR	*
52	121-445-12	Packing (Water Way, Upp.)	1	KTV2-15/22	NBR	*
56	121-246-11	Packing (Oil Plug)	1	d10.3xd16x2t	PE	*
63	122-139-13	O-Ring (M.Frame/P.Casing)	1	G-140(139.4xd3.1)	NBR	*
65	121-501-17	Packing (Water Way, Low.)	1	KTZ21.5/22.2	NBR	*
		Lubricant		Turbine Oil VG32 580ml		

PARTS LIST		SINGLE PHASE DEWATERING PUMP			8/10/2018	
ITEM	PART No.	DESCRIPTION	QTY	SIZE	MATERIAL	NOTES

EXPLODED VIEW

NK3-22L



C-01585-1