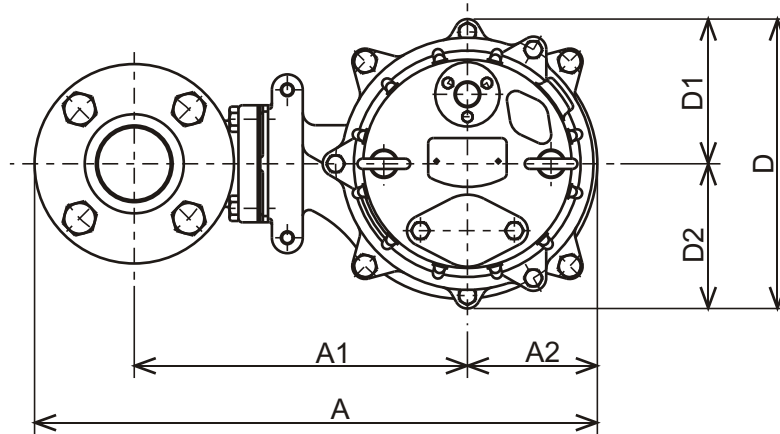


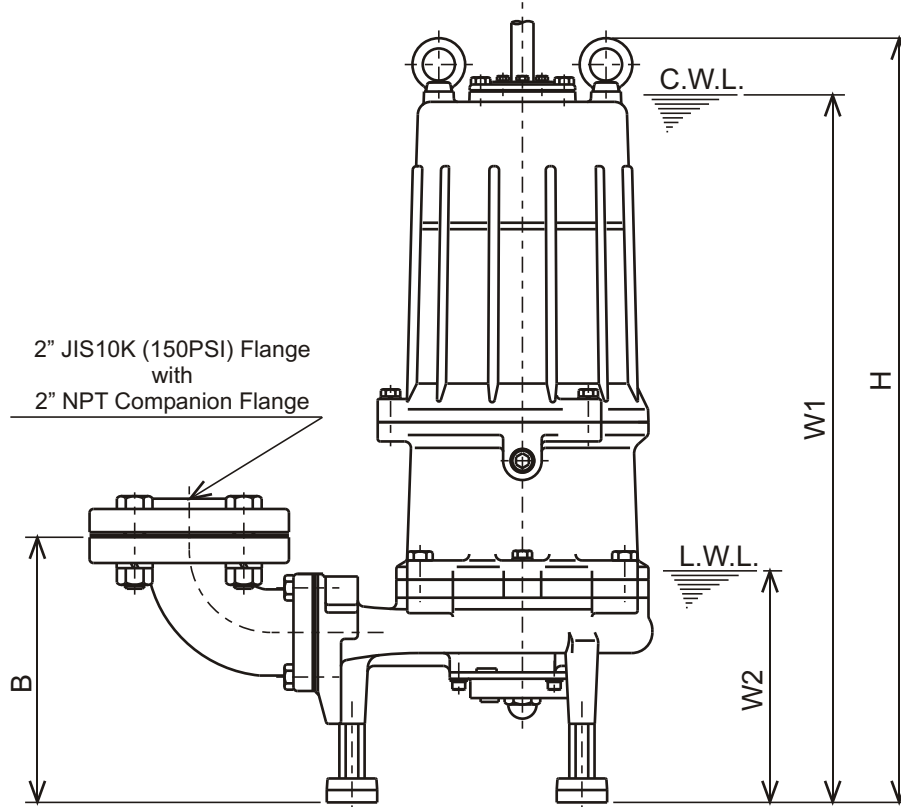


**MG - SERIES
GRINDER PUMPS**

DIMENSIONS



**50MG22.2-63
50MG23.7-63**



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

DIMENSIONS:USCS (Inch)

Model	HP	NOM. SIZE	Pump & Motor								C.W.L. W1	L.W.L. W2	Wt. (lbs.)
			A	A1	A2	B	D	D1	D2	H			
50MG22.2-63	3	2"	17 1/4	10 3/16	4	8 1/8	8 7/8	4 7/16	4 7/16	23 3/8	21 5/8	7 1/8	170
50MG23.7-63	5	2"	17 1/4	10 3/16	4	8 1/8	8 7/8	4 7/16	4 7/16	23 3/8	21 5/8	7 1/8	172

DIMENSIONS:METRIC (mm)

Model	kW	NOM. SIZE	Pump & Motor								C.W.L. W1	L.W.L. W2	Wt. (kg)
			A	A1	A2	B	D	D1	D2	H			
50MG22.2-63	2.2	50	438	259	101	206	226	113	113	594	550	180	77
50MG23.7-63	3.7	50	438	259	101	206	226	113	113	594	550	180	78



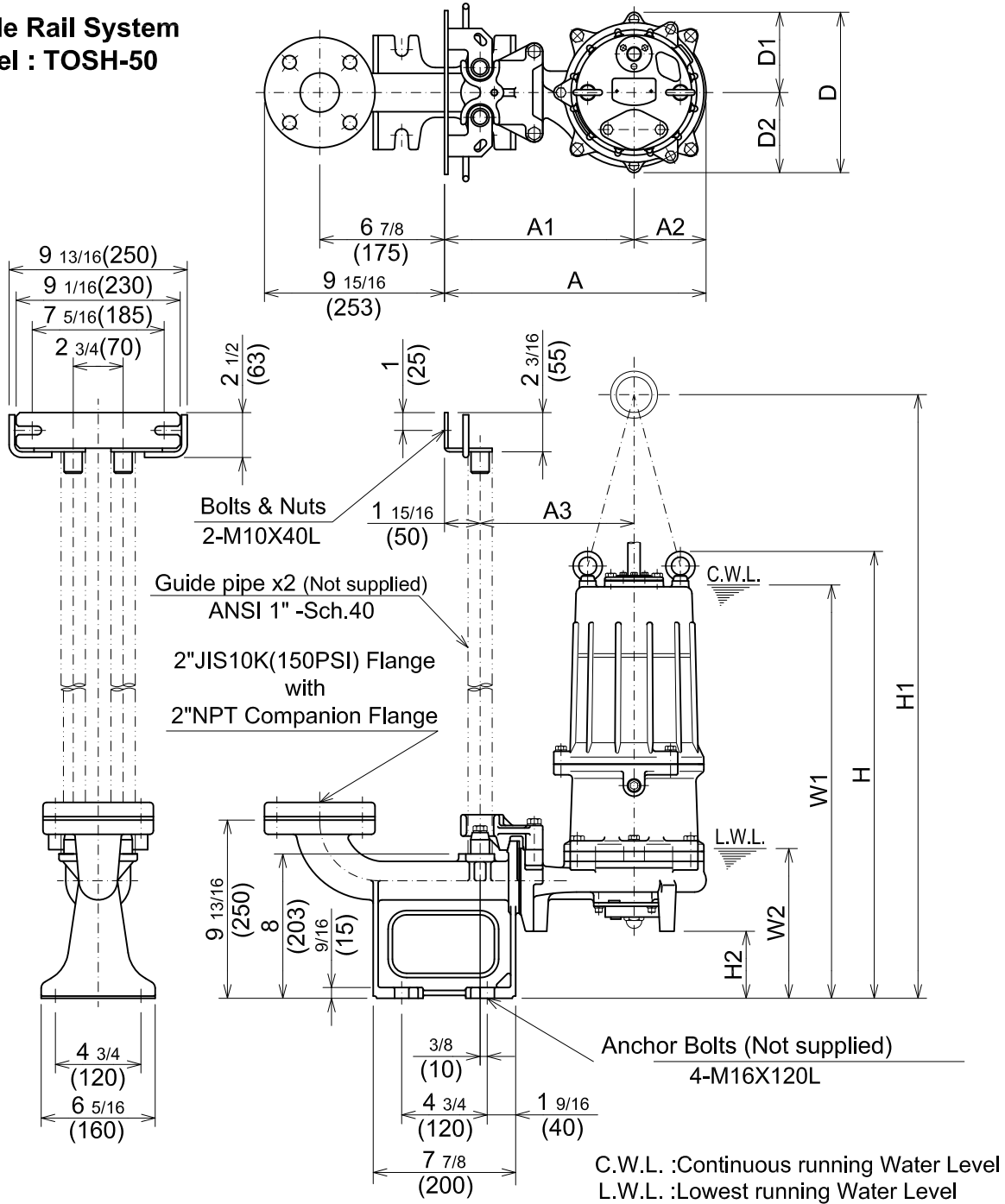
TSURUMI PUMP

**MG-SERIES
GRINDER PUMPS**

DIMENSIONS

TOS50MG23.7 -63

**Guide Rail System
Model : TOSH-50**



DIMENSIONS:USCS(Inch)

Model	HP	NOM. SIZE	Pump & Motor									C.W.L.	L.W.L.	*Wt. (lbs.)	
			A	A1	A2	A3	D	D1	D2	H	H1				H2
TOS50MG23.7 -63	5	2"	14 7/16	10 1/2	4	8 1/2	8 7/8	4 7/16	4 7/16	24 11/16	33 3/8	3 11/16	22 7/8	8 1/4	163

DIMENSIONS:METRIC(mm)

Model	kW	NOM. SIZE	Pump & Motor									C.W.L.	L.W.L.	*Wt. (kg)	
			A	A1	A2	A3	D	D1	D2	H	H1				H2
TOS50MG23.7 -63	3.7	50	367	266	101	216	225	113	113	627	847	94	580	210	74

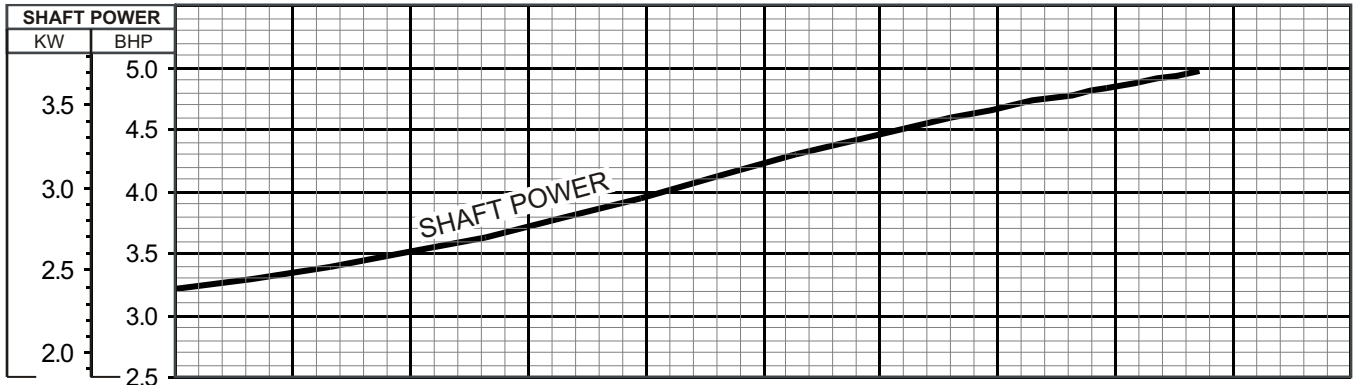
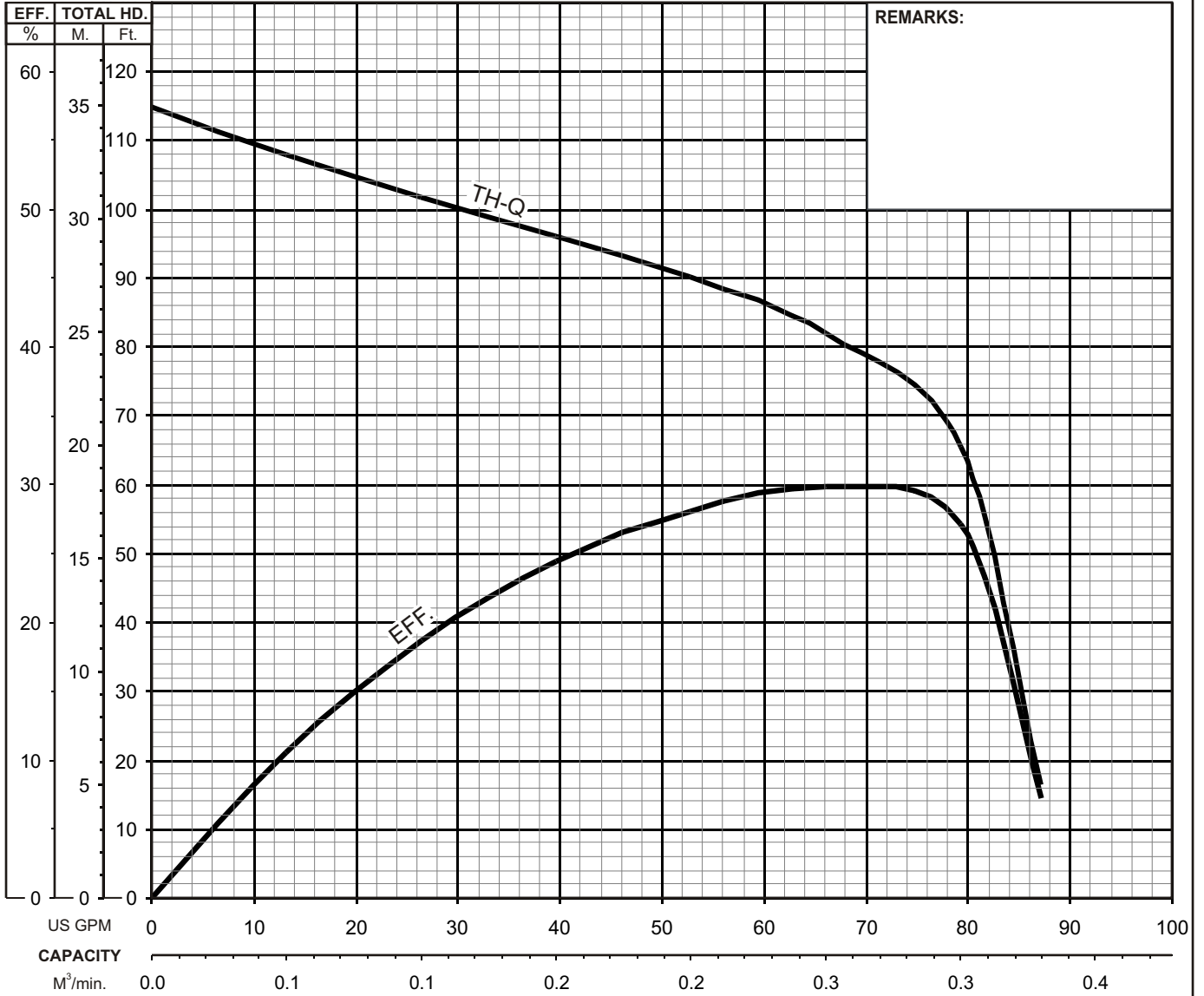
*Excluding Cable & TOS

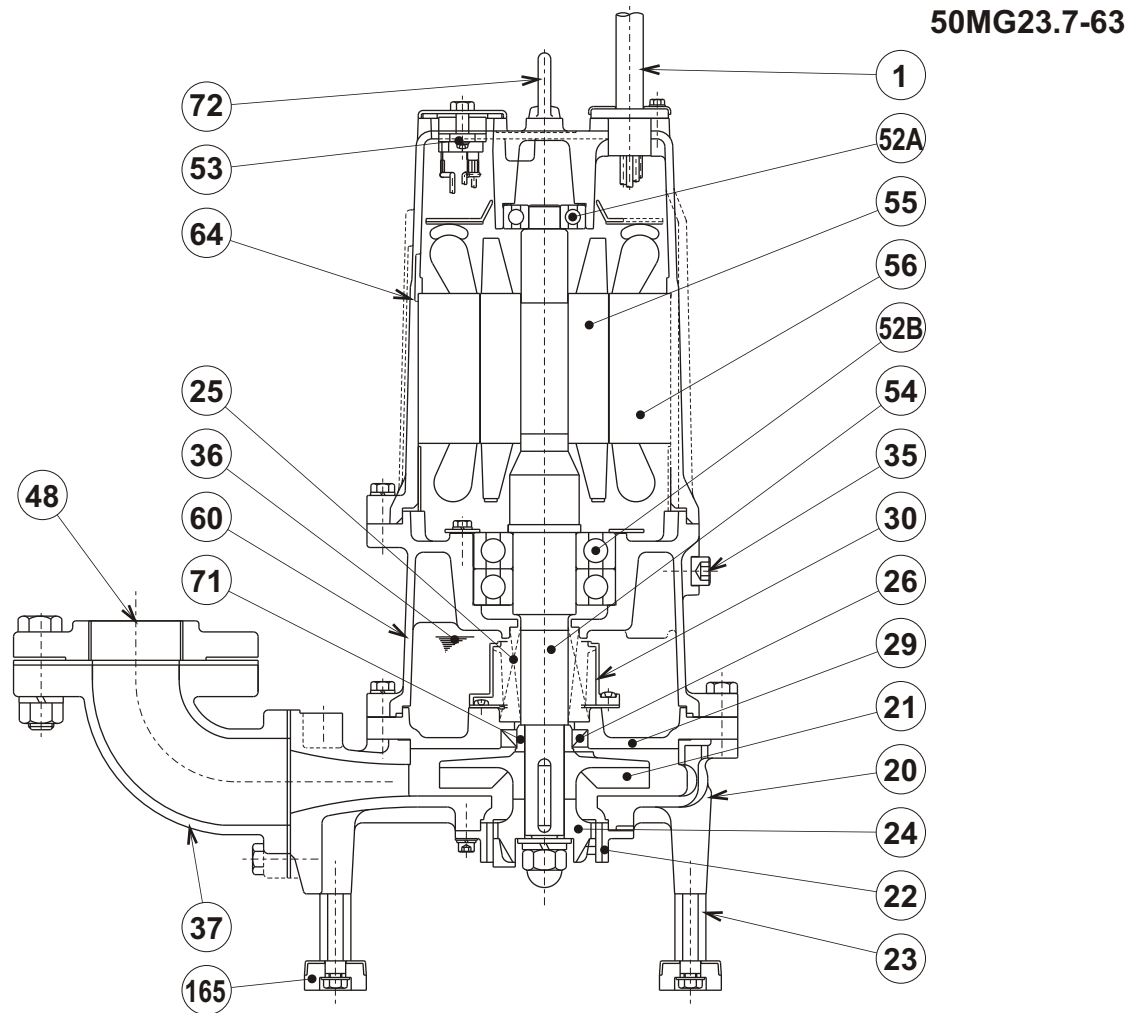


MG - SERIES GRINDER PUMPS

PERFORMANCE CURVE

MODEL	BORE	HP	KW	RPM	SOLIDS DIA	LIQUID	SG.	VISCOSITY	TEMP.
(TOS)50MG23.7 -63	2"/50mm	5	3.7	3410	0.2"/ 5mm	Water	1.0	1.123 cSt.	60°F
PUMP TYPE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS			
Grinder	3	208-230/460/575	14.4-13.6 / 6.8 / 5.3	60	Direct On Line	F			
CURVE No.	DATE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS		
-	-	-	-	-	-	-	-		





PART#	DESCRIPTION	MAIN MATERIAL / NOTE	ASTM, AISI CODE	RELATED DIN CODE	QTY
1	Power Cable	PVC Sheath AWG12/4- 32ft			1
20	Pump Casing	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
21	Impeller	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
22	Stationary Blade	High Chrome Cast Iron (hardened)	A532 Class TypeA	DIN 1695 G-X260Cr27	1
23	Pump Stand	Stainless Steel	S 41000	1.4006	3
24	Rotatory Blade	High Chrome Cast Iron (hardened)	A532 Class TypeA	DIN 1695 G-X260Cr27	1
25	Mechanical Seal	Silicon Carbide/H-30T			1
26	Oil Seal	Nitril Butadiene Rubber/TC355511			1
29	Oil Casing	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
30	Oil Lifter	PBT Plastic W/(GF+MD)40			1
35	Oil Plug	Stainless Steel	S 30400	1.4301	1
36	Lubricant	Turbine Oil ISO VG32 or SAE 10W-20			
37	Discharge Bend	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
48	Companion Flange	Cast Iron/NPT 2"	A48M Class30B	EN 1561 GJL-200	1
52A	Upper Bearing	#6204ZZC3			1
52B	Lower Bearing	#6307ZZD2C3			1
53	Motor Protector				1
54	Shaft	Stainless Steel	S 42000	1.4028	1
55	Rotor				1
56	Stator				1
60	Bearing Housing	Cast Iron	A48M Class25B	EN 1561 GJL-150	1
64	Motor Housing	Cast Iron	A48M Class25B	EN 1561 GJL-150	1
71	Shaft Sleeve	Stainless Steel	S 40300	1.4000	1
72	Lifting Lug Bolt	Stainless Steel	S 30400	1.4301	1
165	Rubber Cushion	Nitril Butadiene Rubber			3

PARTS LIST		THREE PHASE GRINDER PUMP					7/3/2018
ITEM	PART No.	DESCRIPTION	QTY	SIZE	MATERIAL		NOTES
1	140-052-17	Hex.Bolt	2	M8x16	SUS304		
2	127-000-16	Protector Fixing Plate	1		SUS304		
3	121-000-23	Packing	1		NBR	*	
4	053-000-31	Motor Protector 220V-60Hz(USA)	1	KA313-GDBL110	(T.C)		
4	053-394-11	Motor Protector 440V-60Hz(USA)	1	KA313-GBXL102	(T.C)		
5	143-126-12	Pan Screw (w/Spring Washer/Plain Washer)	2	M4x12	SWRM		
6	001-150-25	Cabtyre Cable Set (32') 60Hz(USA)	1	VCT4Cx3.5mm2	BE/CE		
7	140-021-17	Hex.Bolt	3	M5x20	SUS304		
8	142-422-18	Seal Washer	3	PM-5	SUS+NBR		
9	003-111-20	Gland	1		SUS304		
10	009-275-18	Compression type Terminal	4	TGNB-5.5(Insulated)	CU		
11	072-100-20	Eye Bolt	2	M10	SUS304		
12	140-057-12	Hex.Bolt	3	M8x35	SUS304		
13	142-163-18	Spring Washer	3	M8	SUS304		
14	064-000-20	Motor Frame	1		FC		
15	009-212-17	Earth Terminal	1Set	2mm2x130L			
16	143-085-21	Pan Screw (w/Spring Washer)	1	M4x6	SWRM		
17	122-333-19	O-Ring	1	170xd3.1	NBR	*	
18	058-000-04	Lead Wire Protection Plate	1	d66xd150x1.5t	Bakelite		
19	142-196-10	Wave Washer	1	6205/6304	SK5		
20	052-188-17	Bearing (w/O-ring)	1	AC-6304ZZC3			
21	056-001-27	Stator 220V-60Hz(USA)	1Set				
21	056-001-29	Stator 440V-60Hz(USA)	1Set				
22	055-000-35	Rotor	1Set		S4240		
23	147-024-11	Impeller Key	1	8x8x38l	SUS420		
24	140-000-06	Hex.Bolt (w/Spring Washer/Plain Washer)	3	M6x12	SWCH		
25	052-139-13	Bearing	1Set	6308ZZD2C3			
26	071-336-11	Collar	1	41L	SECC		
27	035-113-18	Oil Plug	1	M12x14	SUS304		
28	121-247-12	Packing	1	d12.3xd18x2t	PE	*	
29	060-000-19	Bearing Housing	1		FC		
30	140-080-14	Hex.Bolt	4	M10x45	SUS304		
31	140-488-16	Hex.Bolt (w/Spring Washer)	2	M8x30	SUS304		
32	025-000-73	Mechanical Seal	1	H-30T	SiC		supercedes 025-246-10
33	143-070-23	Pan Screw	2	M5x6	SWRM		
34	030-142-11	Oil Lifter	1	H-30(A)(T)	Resin		
35	143-070-10	Pan Screw	3	M5x6	SWRM		
36	030-151-13	Seal Stopper	1	H-30(A)(T)	SPCC		
37	122-246-14	O-Ring	1	180xd3.1	NBR	*	
38	029-274-19	Oil Casing	1	22/37-MGC	FC		
39	120-127-12	Packing	1	d171xd186x0.3t	PE		
40	026-109-13	Oil Seal	1	TC-355511	NBR		
41	071-214-12	Shaft Sleeve	1	d25xd35x17l	SUS403		
42	021E2210	Impeller (60Hz)	1	50MG23.7-63	FC		

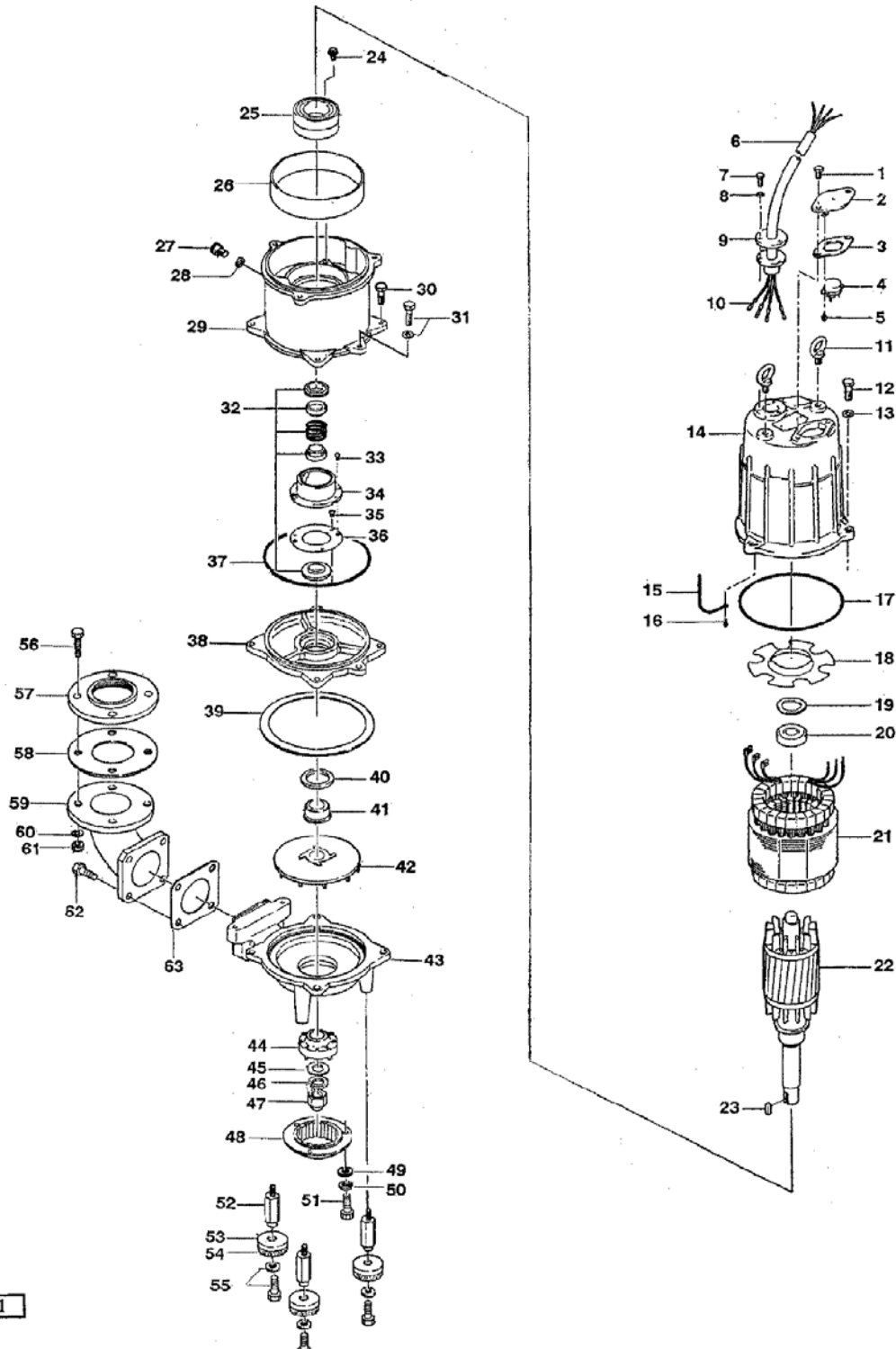
* Indicates items included in set

PARTS LIST		THREE PHASE GRINDER PUMP			7/3/2018	
ITEM	PART No.	DESCRIPTION	QTY	SIZE	MATERIAL	NOTES
43	020-800-13	Pump Casing (60Hz)	1	50MG23.7-63	FC	
44	024-147-17	Rotating Cutter	1	22/37-MGC	HiCrFC	
45	142-332-10	Plain Washer	1	d18xd34x3t	SUS304	
46	142-166-11	Spring Washer	1	M16	SUS304	
47	141-033-15	Hex.Cap Nut	1	M16	SUS304	
48	022-652-14	Stationary Cutter	1	22/37-MGC	HiCrFC	
49	142-113-13	Plain Washer	3	M6(D=11.5)	SUS304	
50	142-162-17	Spring Washer	3	M6	SUS304	
51	140-249-13	Hex.Socket Cap Bolt	3	M6x15	SUS304	
52	144-502-19	Stud Bolt	3	M8x67(-18/16.5)	SUS410	
53	047-113-28	Rubber Feet Cover	3	No.3A(Impeller Pro.Cover)	SUS304	
54	165-008-15	Rubber Feet	3	15/37-MGC	NBR	
55	140-487-15	Hex.Bolt (w/plain washer)	3	M8x20	SUS304	
56	140-129-32	Hex.Bolt	4	M16x65	SWRM	
57	048-196-15	Screwed Flange	1	NPT-2(JIS10K)	FC	
58	121-103-31	Packing	1	JIS10Kx50mm	NR	
59	037-132-19	Discharge Bend	1	50mm(JIS10K,d12)	FC	
60	142-166-37	Spring Washer	4	M16	SWRH	
61	141-008-11	Hex.Nut	4	M16	SUS304	
62	140-079-10	Hex.Bolt	4	M10x40	SUS304	
63	121-142-16	Packing	1	90mm2(P.C.98)	NBR	*
	173-000-64	Packing O-Ring Set	1Set	(Marked by *)		
3	121-000-23	Packing (Protector Fixing Plate)	1		NBR	*
17	122-333-19	O-Ring (M.Frame/Brg.Housing)	1	170xd3.1	NBR	*
28	121-247-12	Packing (Oil Plug)	1	d12.3xd18x2t	PE	*
37	122-246-14	O-Ring (Brg.Housing/O.Casing)	1	180xd3.1	NBR	*
63	121-142-16	Packing (Discharge Bend)	1	90mm2(P.C.98)	NBR	*
		Lubricant		Turbine Oil VG32 1,300ml		

PARTS LIST		THREE PHASE GRINDER PUMP				7/3/2018
ITEM	PART No.	DESCRIPTION	QTY	SIZE	MATERIAL	NOTES

EXPLODED VIEW

50MG23.7-53/63



* Indicates items included in set