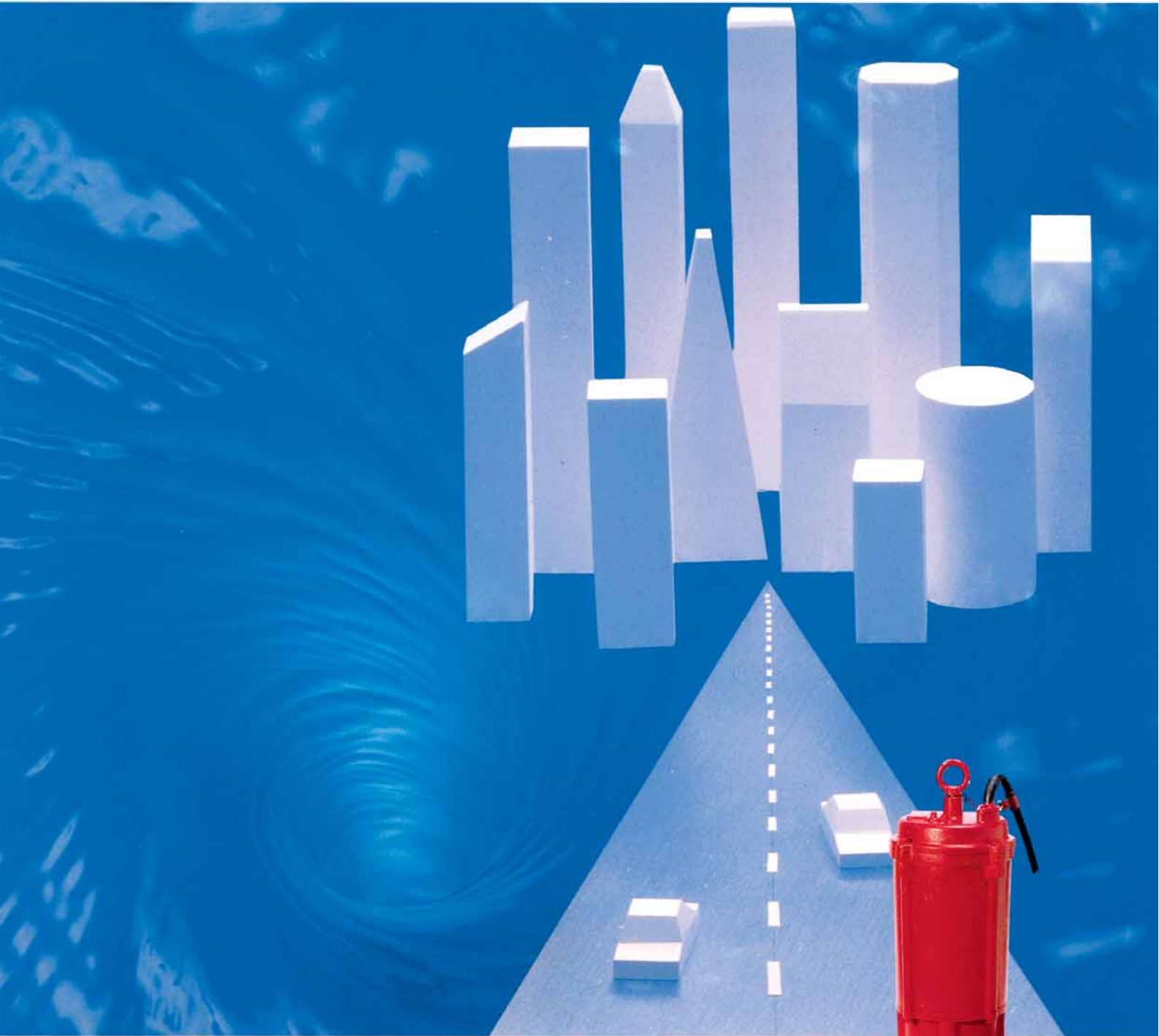


Kawamoto

SEWAGE PUMP *Type* **ZU³**



KAWAMOTO PUMP MFG. CO.,LTD.



Type ZU³ SEWAGE PUMP

Drainage of miscellaneous waste water, sewage and other filthy liquid.

FEATURES

- 1 Newly designed S-shaped impeller allows passage of foreign matters without clogging. (PAT pending)
- 2 This pump is small in size and light in weight because 2-pole submersible motor is adopted.
- 3 Impeller is designed to prevent from forming air pocket behind it. (PAT pending)
- 4 Corrosion-proof double mechanical seal prevents from water entering into motor. (Oil-bath type sealing)
- 5 Powerful, safety and durable specially designed electric motor is adopted.
- 6 ZUJ is quick service type with discharge connector.
- 7 Automatic operation type with float switch is available with 0.75, 1.5, 2.2 and 3.7 kw. Single operation is performed by L type, and alternate/parallel operation is performed by L and LN type.
- 8 Automatic operation type is equipped with thermostat to protect control circuit.

SPECIFICATIONS

Liquid	Kind	Waste water, sewage and filthy water
	Hydrogen ion	Between PH6.5 and PH8.0
	Temperature	5°C (41°F) ~ 32°C (90°F)
Material	Impeller	Cast iron (FC15)
	Shaft	Stainless steel (SUS403)
	Casing	Cast iron (FC15)
Motor	Kind	Dry-sealing type submersible
	Speed	50 HZ = 3,000 rpm 60HZ = 3,600 rpm
	Starting	Direct on line (0.4 kw single phase is capacitor start)
Sealed oil	Quality	JIS turbine oil class 2, ISO VG32
	Quantity	0.4 & 0.75 kw : 190 cc 1.5 kw : 330 cc 2.2 & 3.7 kw : 500 cc 5.5 & 7.5 kw : 950 cc



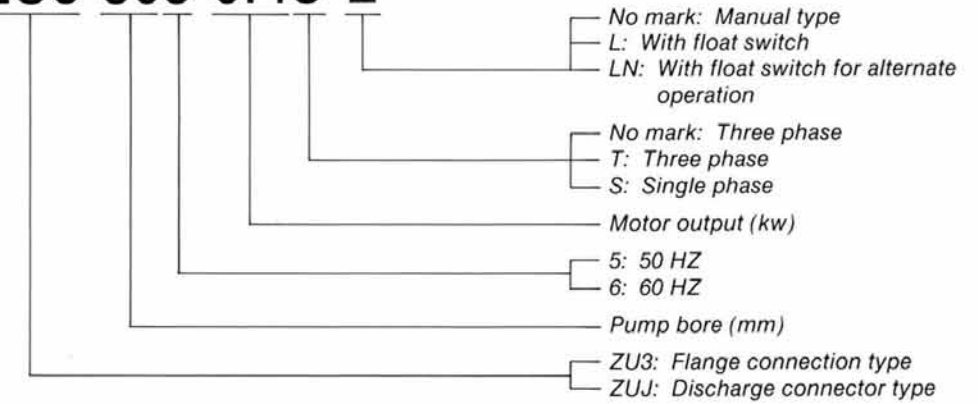
Type: ZU3



Type: ZUJ

● SYMBOLS

ZU3-505-0.4S L



Type: ZU3-L



Type: ZU3-LN

STANDARD ACCESSORIES

	ZU3	ZUJ
Discharge flange	○	○
Cable (*Note)	○	○
Cable band	○ (3 pcs)	
Chain		○ (6 m)
Foundation bolts		○

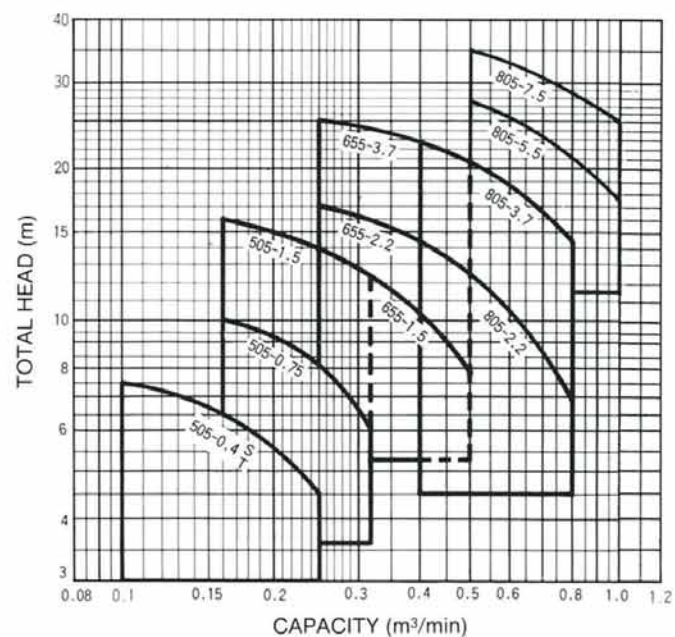
Note: *6 meter for 0.4 & 0.75 kw, and 10 meter for 1.5, 2.2, 3.7, 5.5 & 7.5 kw
*4 cored for three phase and 3 cored for single phase

PASSAGE PERFORMANCE

PUMP BORE (mm)	BALL SHAPED MATTERS (mm)	CLOTH SHAPED MATTERS (L x W mm)
50	35	200 x 200
65	35	300 x 300
80	40	300 x 450

SELECTION CHART & TABLE

50Hz
3000rpm



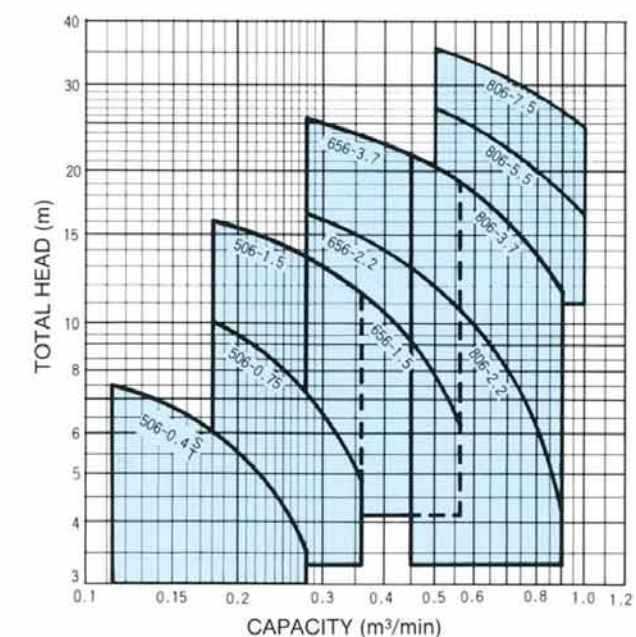
SPECIFICATIONS

Bore	Model	Motor	Specifications					
			Capacity	Total head	Capacity	Total head	Capacity	Total head
mm		kW	m³/min	m	m³/min	m	m³/min	m
50	ZU _J ³ -505-0.4S	0.4	0.1	7.5	0.16	6.5	0.25	4.5
	ZU _J ³ -505-0.4T	0.4	0.1	7.5	0.16	6.5	0.25	4.5
	ZU _J ³ -505-0.75	0.75	0.16	10	0.22	8.8	0.32	6
	ZU _J ³ -505-1.5	1.5	0.16	16	0.22	14.5	0.32	12.2
65	ZU _J ³ -655-1.5	1.5	0.25	13.8	0.36	11.2	0.5	7.8
	ZU _J ³ -655-2.2	2.2	0.25	17	0.36	15	0.5	12.2
	ZU _J ³ -655-3.7	3.7	0.25	25	0.36	23.2	0.5	20.5
80	ZU _J ³ -805-2.2	2.2	0.4	14.2	0.56	11.2	0.8	6.8
	ZU _J ³ -805-3.7	3.7	0.4	22.5	0.56	19.2	0.8	14.2
	ZU _J ³ -805-5.5	5.5	0.5	27.5	0.71	23	1.0	17.5
	ZU _J ³ -805-7.5	7.5	0.5	35	0.71	30.5	1.0	25

Note 1. Specification subjects to change without notice.
Note 2. Automatic type (0.75 ~ 3.7 kw) shows the same performance.

SELECTION CHART & TABLE

60Hz
3600rpm



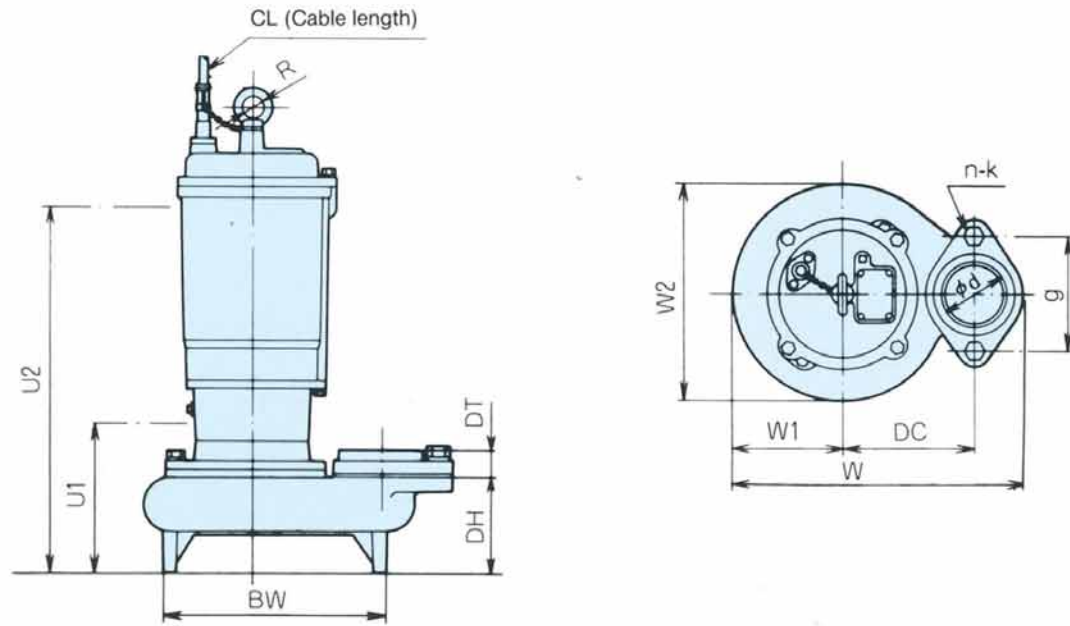
SPECIFICATIONS

Bore	Model	Motor	Specifications					
			Capacity	Total head	Capacity	Total head	Capacity	Total head
mm		kW	m³/min	m	m³/min	m	m³/min	m
50	ZU _J ³ -506-0.4S	0.4	0.112	7.5	0.18	6	0.28	3.5
	ZU _J ³ -506-0.4T	0.4	0.112	7.5	0.18	6	0.28	3.5
	ZU _J ³ -506-0.75	0.75	0.18	9.8	0.25	8	0.36	4.8
	ZU _J ³ -506-1.5	1.5	0.18	16	0.25	14.2	0.36	11.5
65	ZU _J ³ -656-1.5	1.5	0.28	13.5	0.4	10.5	0.56	6.2
	ZU _J ³ -656-2.2	2.2	0.28	16.5	0.4	14	0.56	10.5
	ZU _J ³ -656-3.7	3.7	0.28	25.5	0.4	22.8	0.56	19
80	ZU _J ³ -806-2.2	2.2	0.45	13	0.63	9.2	0.9	4.2
	ZU _J ³ -806-3.7	3.7	0.45	21.5	0.63	17.5	0.9	11.5
	ZU _J ³ -806-5.5	5.5	0.5	27	0.71	22	1.0	16.5
	ZU _J ³ -806-7.5	7.5	0.5	35.5	0.71	30.5	1.0	24.5

Note 1. Specification subjects to change without notice.
Note 2. Automatic type (0.75 ~ 3.7 kw) shows the same performance.

DIMENSIONS

ZU3



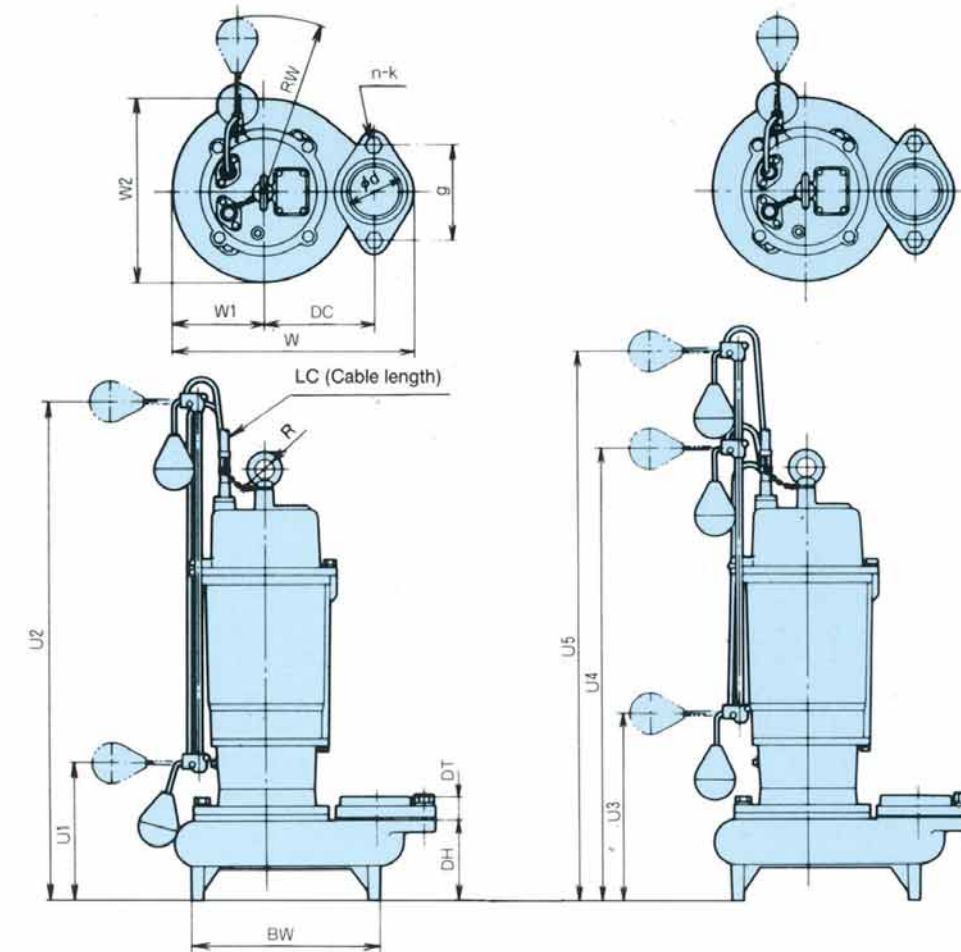
U₁ : Lowest water level for operation
 U₂ : Lowest water level for continuous operation

Hz	Bore mm	Model	Motor kW	Pump						Flange					Water level		Others		(kgf)
				DH	DC	W	W1	W2	BW	d	g	n	k	DT	U1	U2	R	CL (m)	
50	50	ZU3-505-0.4S	0.4	98	120	249	90	181	200	50	95	2	M10	27	140	250	25	6	20.5
		ZU3-505-0.4T	0.4	98	120	249	90	181	200	50	95	2	M10	27	140	250	25	6	18.5
		ZU3-505-0.75	0.75	98	120	254	95	190	205	50	95	2	M10	27	140	250	25	6	21
		ZU3-505-1.5	1.5	103	140	301	111	222	235	50	120	2	M12	29	170	300	25	10	31
	65	ZU3-655-1.5	1.5	103	140	301	111	222	235	65	120	2	M12	29	170	300	25	10	31
		ZU3-655-2.2	2.2	117	160	352	134	268	275	65	140	2	M16	29	200	430	30	10	49
		ZU3-655-3.7	3.7	117	160	352	134	268	275	65	140	2	M16	29	200	430	30	10	55
		ZU3-805-2.2	2.2	117	160	352	134	268	275	80	140	2	M16	33	200	430	30	10	49
		ZU3-805-3.7	3.7	117	160	352	134	268	275	80	140	2	M16	33	200	430	30	10	55
80	ZU3-805-5.5	5.5	160	205	446	148	295	295	80	150	8	M12	33	240	490	35	10	80	
	ZU3-805-7.5	7.5	160	205	446	148	295	295	80	150	8	M12	33	240	490	35	10	84	
	ZU3-506-0.4S	0.4	98	120	249	90	181	200	50	95	2	M10	27	140	250	25	6	20.5	
60	50	ZU3-506-0.4T	0.4	98	120	249	90	181	200	50	95	2	M10	27	140	250	25	6	18.5
		ZU3-506-0.75	0.75	98	120	254	95	190	205	50	95	2	M10	27	140	250	25	6	21
		ZU3-506-1.5	1.5	103	140	301	111	222	235	50	120	2	M12	29	170	300	25	10	31
		ZU3-656-1.5	1.5	103	140	301	111	222	235	65	120	2	M12	29	170	300	25	10	31
	65	ZU3-656-2.2	2.2	117	160	352	134	268	275	65	140	2	M16	29	200	430	30	10	49
		ZU3-656-3.7	3.7	117	160	352	134	268	275	65	140	2	M16	29	200	430	30	10	55
		ZU3-806-2.2	2.2	117	160	352	134	268	275	80	140	2	M16	33	200	430	30	10	49
		ZU3-806-3.7	3.7	117	160	352	134	268	275	80	140	2	M16	33	200	430	30	10	55
		ZU3-806-5.5	5.5	160	205	446	148	295	295	80	150	8	M12	33	240	490	35	10	80
80	ZU3-806-7.5	7.5	160	205	446	148	295	295	80	150	8	M12	33	240	490	35	10	84	

DIMENSIONS

ZU3-L

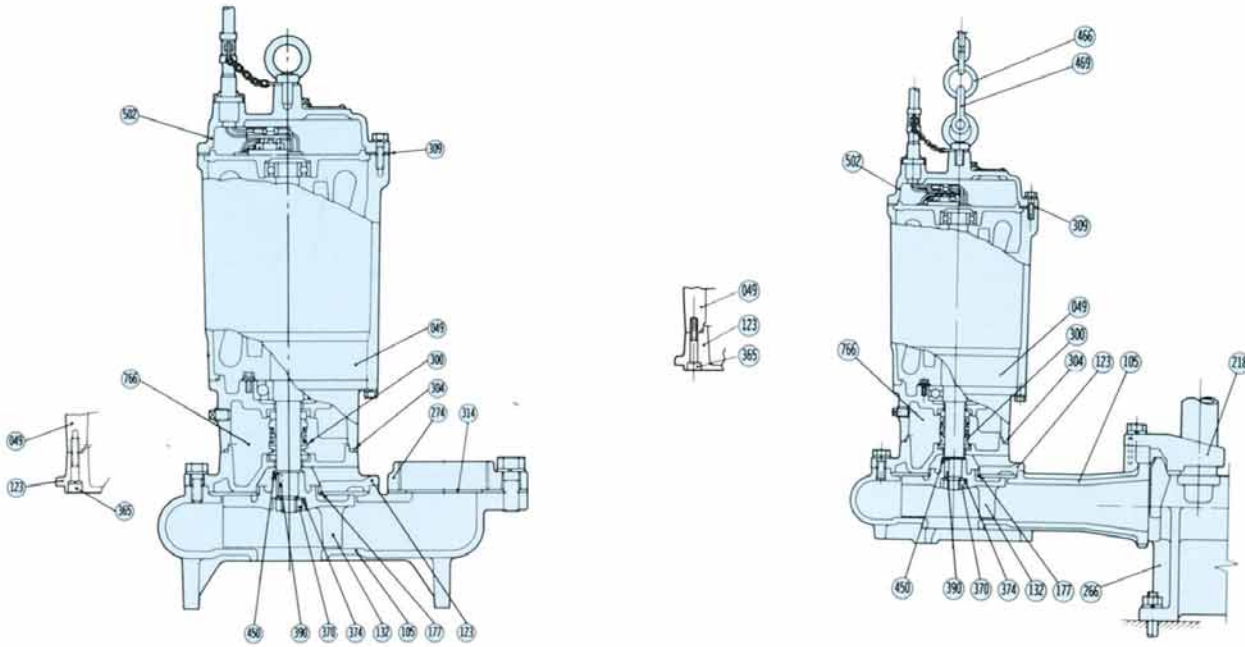
ZU3-LN



U₁ : Pump stop water level
 U₂ : Pump start water level
 U₃ : Pump stop water level
 U₄ : Pump start water level (every other time start)
 U₅ : Parallel operation water level

Hz	Bore mm	Model	Motor kW	Pump						Flange					Float switch					Others		(kgf)		
				DH	DC	W	W1	W2	BW	d	g	n	k	DT	U1	U2	U3	U4	U5	RW	R		CL (m)	TG
50	50	ZU3-505-0.75 _{LN}	0.75	98	120	254	91	190	205	50	95	2	M10	27	140	510	230	450	570	242	25	6	24.5	
		ZU3-505-1.5 _{LN}	1.5	103	140	301	111	222	235	50	120	2	M12	29	170	540	230	480	600	248	25	10	35	
	65	ZU3-655-1.5 _{LN}	1.5	103	140	301	111	222	235	65	120	2	M12	29	170	540	270	480	600	248	25	10	35	
		ZU3-655-2.2 _{LN}	2.2	117	160	352	134	268	275	65	140	2	M16	29	200	720	270	650	790	258	30	10	53.5	
		ZU3-655-3.7 _{LN}	3.7	117	160	352	134	268	275	65	140	2	M16	29	200	720	270	650	790	258	30	10	59.5	
	80	ZU3-805-2.2 _{LN}	2.2	117	160	352	134	268	275	80	140	2	M16	33	200	720	270	650	790	258	30	10	53.5	
		ZU3-805-3.7 _{LN}	3.7	117	160	352	134	268	275	80	140	2	M16	33	200	720	270	650	790	258	30	10	59.5	
		50	ZU3-506-0.75 _{LN}	0.75	98	120	254	91	190	205	50	95	2	M10	27	140	510	230	450	570	242	25	6	24.5
			ZU3-506-1.5 _{LN}	1.5	103	140	301	111	222	235	50	120	2	M12	29	170	540	230	480	600	248	25	10	35
60	65	ZU3-656-1.5 _{LN}	1.5	103	140	301	111	222	235	65	120	2	M12	29	170	540	270	480	600	248	25	10	35	
		ZU3-656-2.2 _{LN}	2.2	117	160	352	134	268	275	65	140	2	M16	29	200	720	270	650	790	258	30	10	53.5	
	80	ZU3-806-2.2 _{LN}	2.2	117	160	352	134	268	275	80	140	2	M16	33	200	720	270	650	790	258	30	10	53.5	
		ZU3-806-3.7 _{LN}	3.7	117	160	352	134	268	275	80	140	2	M16	33	200	720	270	650	790	258	30	10	59.5	

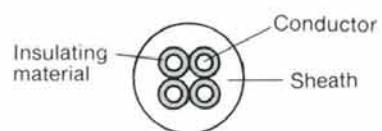
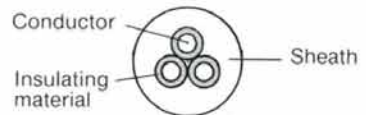
PARTS LIST



NO.	NAME OF PARTS	MATERIAL	NO.	NAME OF PARTS	MATERIAL
049	Submersible motor	—	314	Flange packing	Rubber
105	Casing	Cast iron	365	Socket head cap screw	SUS304
123	Casing cover	Cast iron	304	Nut	SUS304
132	Impeller	Cast iron	374	External gear screw	SUS304
177	Liner ring	Bronze	390	Key	SUS403
218	Sliding bracket	Ductile cast iron	450	Shim	SUS304
266	Connecting pipe with base	Cast iron	466	Chain	SS41
274	Discharge flange	Cast iron	469	Shackle	SS41
300	Mechanical seal	—	502	Motor end cover	Cast iron
304	O-ring	Rubber	766	Sealed oil	—
309	Packing	Rubber			

CABLE

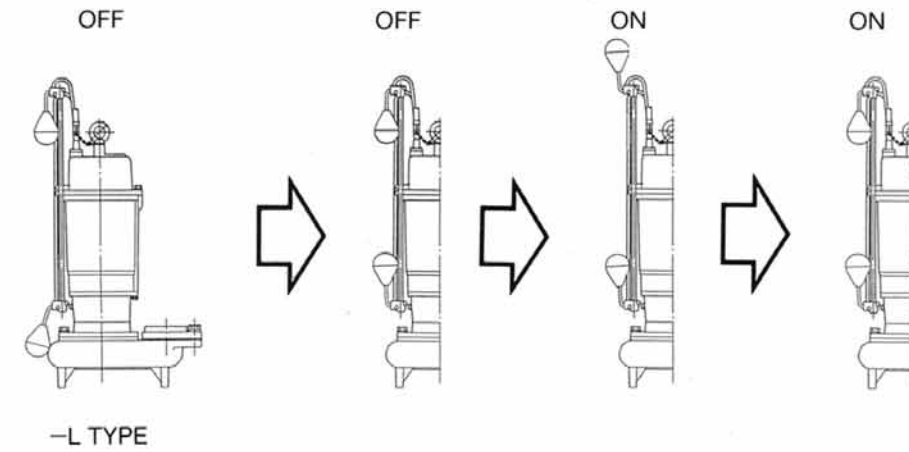
Kind: 600V class vinyl insulating vinyl cable (VCT)



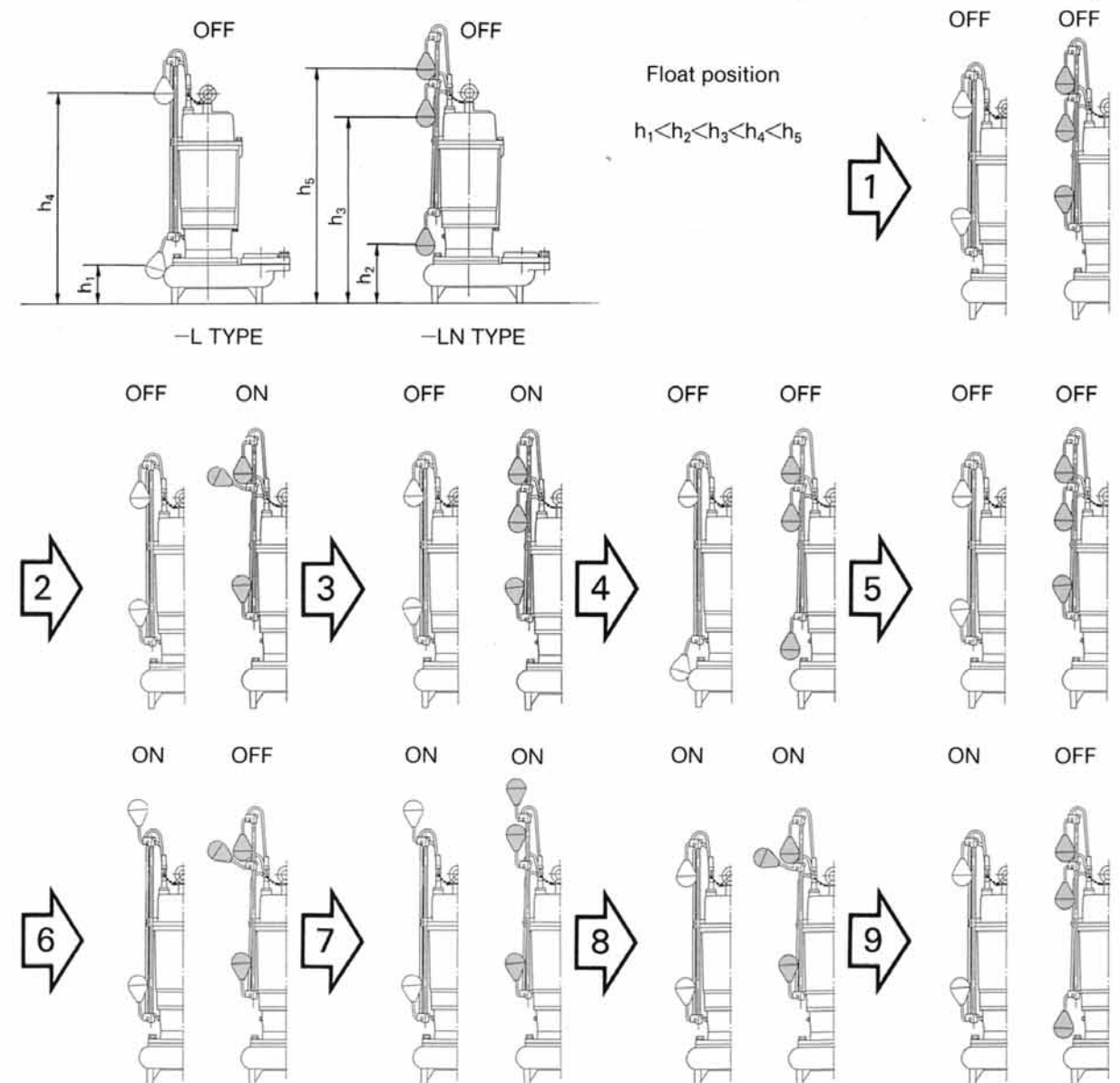
Output (kw)	Phase	Cable		
		Size (mm)	Core	Outer dia. (mm)
0.4	1	1.25	3	10.1
0.4	3	1.25	4	11
0.75	3	1.25	4	11
1.5	3	1.25	4	11
2.2	3	1.25	4	11
3.7	3	2.0	4	11.7
5.5	3	3.5	4	14.0
7.5	3	5.5	4	16.5

PUMP OPERATION ORDER & FLOAT POSITION

SINGLE OPERATION (-L TYPE)



ALTERNATE & PARALLEL OPERATION OFF (-L & -LN TYPE)



Kawamoto

Distributor



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