



:KUR2
:KURH2

SUBMERSIBILE
TURBINE

Kawamoto

Submersible pump **KUR2** and **KURH2**

**Stainless steel
and long life**

**Low noise
and less vibration**



KAWAMOTO PUMP MFG. CO.,LTD.

Applications

Type KUR2 and KURH2 are submersible pump to be installed in a reservoir for space saving as well as less operation sound and vibration.

Type KUR2 is applicable for clean and fresh water below 30 and suitable for water supply to Buildings, Municipality, Cooling water, Industry, etc.

KURH2 is applicable for clean and fresh water below 60 and suitable for Hot water supply, Hot spring, Hot water circulation, Industrial hot water supply, etc.

Features

Sanitary and clean water supply

The pumps, constructed by stainless steel and bronze, can supply clean and sanitary water without making red discolourment of water.

Long life

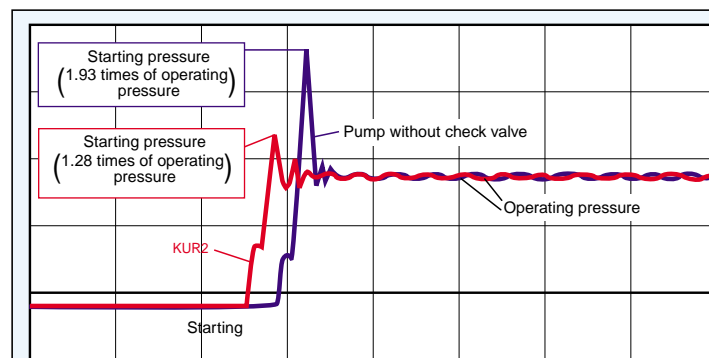
The pump casing and flanges are made from precision cast stainless steel to withstand heavy load and free from strain.

KUR2 type is built in impact relief type check valve to protect the pump from water hammer.

(KURH2 is not provided)



Check valve



Water hammer test result :

As referred to the figure, the shock given to the pump due to water hammer is remarkably reduced by built-in impact relief type check valve.

High performance

Computer analysis of the water flow in the impeller and the guide vane reduced friction loss and realized high performance.

Structure

The pump is multi-stage centrifugal pump with guide vane(difuser) to be directly coupled to submersible motor by means of sleeve coupling without using mechanical seal.

Impeller, made from stainless steel(SCS13) or bronze(BC6), is a statically and dynamically balanced closed type to reduce vibration and realize longer life.

Guide vane, made from stainless steel(SCS13), is mono-constructed to casing(s) to make the pump rugged.

Motor is submerside canned type with stainless steel frame(SUS304) and shaft(SUS420J2 or SUS431) and is installed inside the stainless steel suction frame(SCS13) to protect such motor.

Horizontal installation possible

If water depth is not enough, the pump can be used in horizontal installtion with a special kit(optional accessory) to avoid from no lift up of water.(The pump must be completely submerged into water)

Silent operation

The pump generates less sound and vibration with an installation in the water as well as dynamically balanced impeller.

Standard specifications

		KUR2	KURH2
Scope to liquid	Kind	Clean water	
	Chlorine content	Less than 200mg/ ℓ	
	Sand content	Less than 50mg/ ℓ	
	Hydrogen ion	pH6.0 ~ 9.0	
	Halogen ion	Less than 1500mg/ ℓ	
	Temperature	0 ~ 30	0 ~ 60
Pump material	Impeller	Bore 32 ~ 65mm : SCS13, Bore : 80 ~ 100mm : BC6	
	Shaft	SUS403	
	Casing	SCS13(Suction casing is SUS304)	
	Vane	BC6 + Rubber	
	Kind	Canned type submersible motor	
Synchronous speed	50Hz : 3,000min ⁻¹ , 60Hz : 3,600min ⁻¹		
Maximum water depth	10m		
Installation	Completely submerged, vertical or horizontal(Note 1)		
Flange	Equivalent to JIS10K		
Submersible cable	2PNCT(600V, class 2 Ethylene-propylene rubber insulated chloroprene-rubber cabtyre cable 0.75 ~ 18.5kw : Round type & 4 cored, 22 ~ 45kW : Round type & 3 cored		

Note 1.Horizontal installation kit(optional accessoty) is necessary

Standard accessory

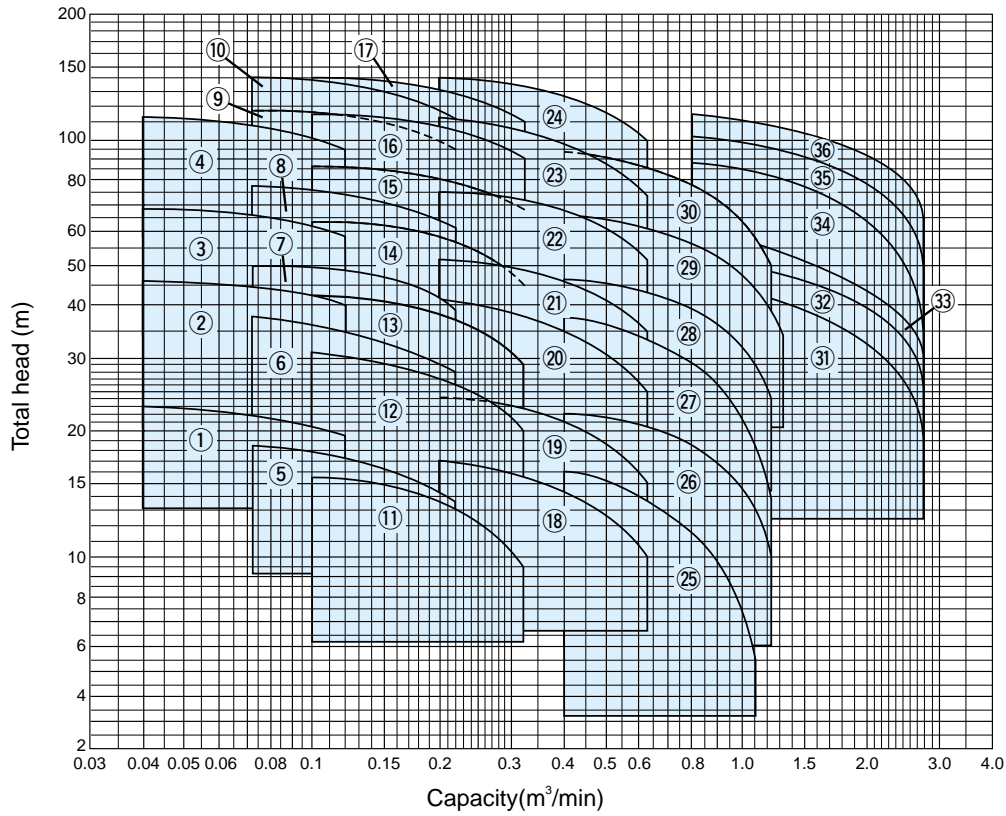
- 10m Submersible cable
- 3 Pcs. Cable band
- 1 Pce. Mating flange(Equivalent to JIS10K, RF & threaded to PT) with packing & bolts except 80mm and 100mm pumps.

Optional accessory

- Control panel
- Support for horizontal installtion
- Discharge unit
- Pressure gauge
- Compound gauge
- Sluice and Check valve
- Cushion
- Mating flange for 80mm and 100mm pumps



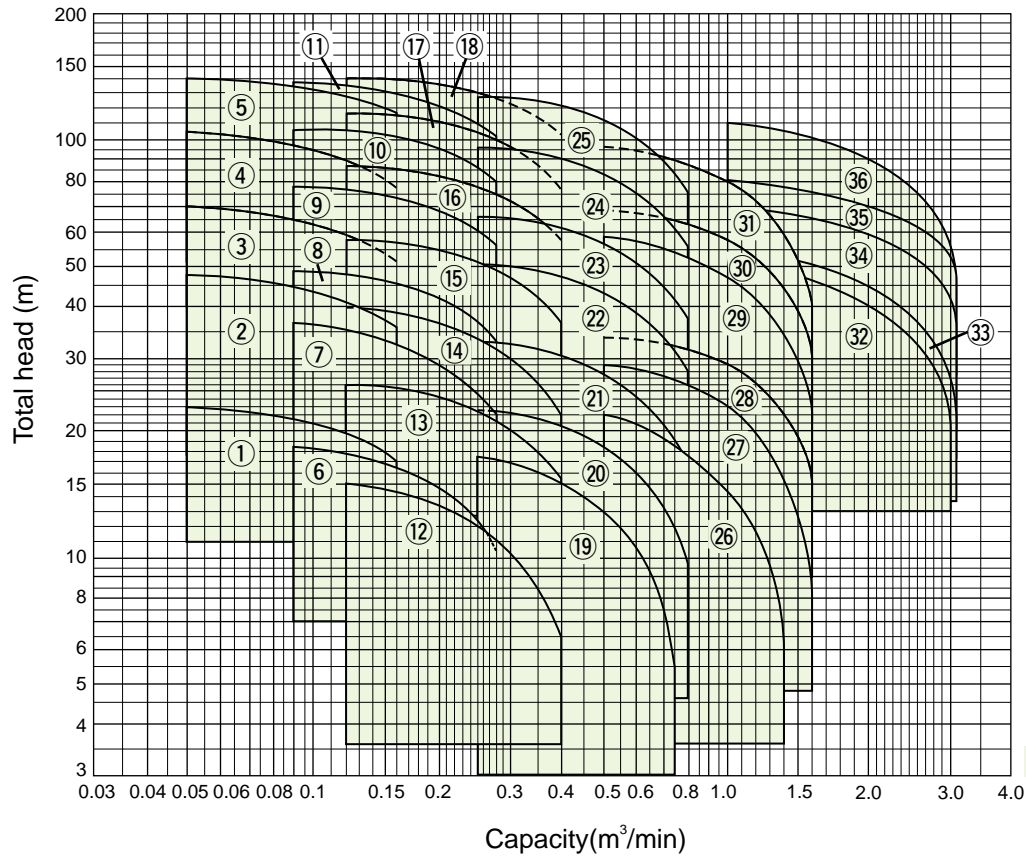
KUR2(50Hz) Selection



50Hz

Hz	BORE mm	NO.	MODEL	MOTOR kW	NOS OF STAGE	PERFORMANCE			
						CAPACITY		TOTAL HEAD	
						m³/min	m	m³/min	m
50	32	1	KUR2-325-0.75	0.75	1	0.04	23	0.12	19.5
		2	KUR2-325-1.5	1.5	2	0.04	46	0.12	40
		3	KUR2-325-2.2	2.2	3	0.04	69	0.12	59
		4	KUR2-325-3.7	3.7	5	0.04	113	0.12	95
	40	5	KUR2-405-0.75	0.75	1	0.071	18.5	0.22	13.5
		6	KUR2-405-1.5	1.5	2	0.071	37	0.22	28
		7	KUR2-405-2.2	2.2	2	0.071	50	0.22	39
		8	KUR2-405-3.7	3.7	3	0.071	78	0.22	61
		9	KUR2-405-5.5	5.5	4	0.071	117	0.22	95
	50	10	KUR2-405-7.5	7.5	5	0.071	140	0.22	112
		11	KUR2-505-0.75	0.75	1	0.1	15.5	0.32	9.5
		12	KUR2-505-1.5	1.5	2	0.1	31	0.32	20
		13	KUR2-505-2.2	2.2	2	0.1	42	0.32	29
		14	KUR2-505-3.7	3.7	3	0.1	64	0.32	45
		15	KUR2-505-5.5	5.5	3	0.1	86	0.32	68
		16	KUR2-505-7.5	7.5	4	0.1	115	0.32	90
		17	KUR2-505-11	11	5	0.1	140	0.32	112
	65	18	KUR2-655-1.5	1.5	1	0.2	17	0.63	10
		19	KUR2-655-2.2	2.2	1	0.2	24	0.63	15
		20	KUR2-655-3.7	3.7	2	0.2	41	0.63	25
		21	KUR2-655-5.5	5.5	2	0.2	52	0.63	35
		22	KUR2-655-7.5	7.5	3	0.2	75	0.63	52
		23	KUR2-655-11	11	5	0.2	112	0.63	74
		24	KUR2-655-15	15	6	0.2	140	0.63	100
	80	25	KUR2-805-2.2	2.2	1	0.4	16	1.12	5.5
		26	KUR2-805-3.7	3.7	1	0.4	22	1.25	10
		27	KUR2-805-5.5	5.5	2	0.4	37	1.25	14
		28	KUR2-805-7.5	7.5	2	0.4	46	1.25	24
		29	KUR2-805-11	11	3	0.4	69	1.25	36
		30	KUR2-805-15	15	4	0.4	94	1.25	50
	100	31	KUR2-1005-15	15	1	0.8	46	2.8	19
		32	KUR2-1005-18	18.5	1	0.8	52	2.8	25
		33	KUR2-1005-22	22	1	0.8	58	2.8	30
		34	KUR2-1005-30	30	2	0.8	88	2.8	34
		35	KUR2-1005-37	37	2	0.8	102	2.8	48
		36	KUR2-1005-45	45	2	0.8	115	2.8	63

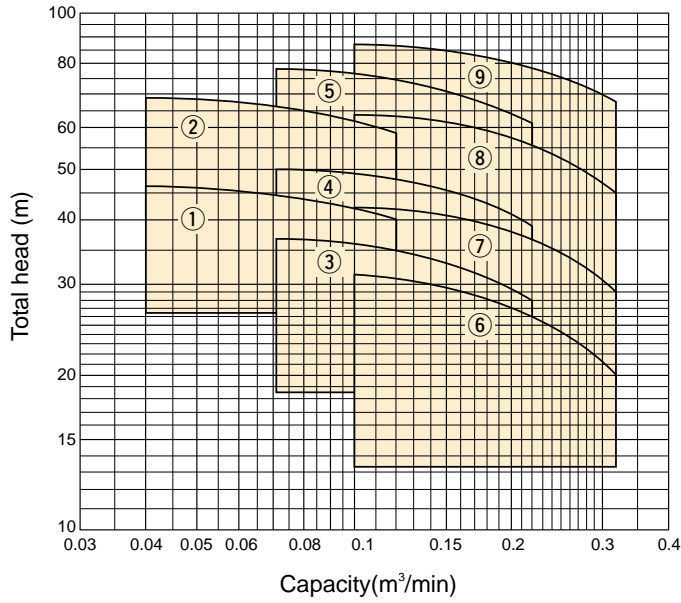
KUR2(60Hz) Selection



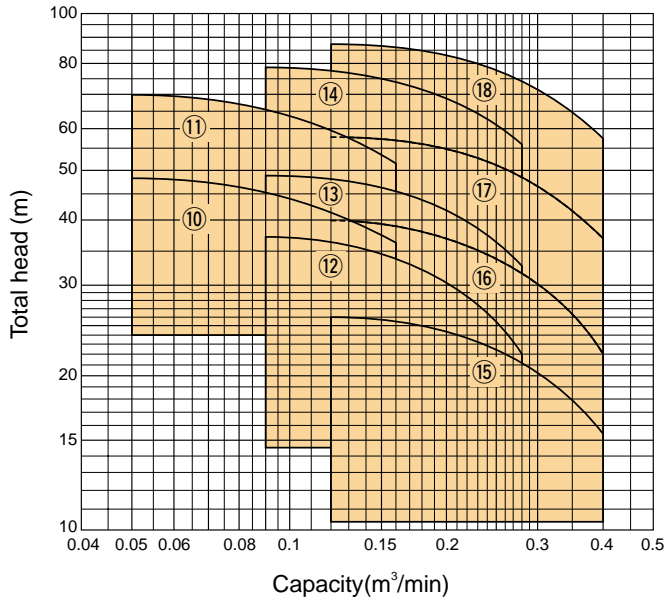
60Hz

Hz	BORE mm	NO.	MODEL	MOTOR kW	NOS OF STAGE	PERFORMANCE			
						CAPACITY	TOTAL HEAD	CAPACITY	TOTAL HEAD
						m ³ /min	m	m ³ /min	m
60	32	1	KUR2-326-0.75	0.75	1	0.05	23	0.16	17
		2	KUR2-326-1.5	1.5	2	0.05	48	0.16	36
		3	KUR2-326-2.2	2.2	3	0.05	70	0.16	51
		4	KUR2-326-3.7	3.7	4	0.05	105	0.16	78
		5	KUR2-326-5.5	5.5	4	0.05	140	0.16	117
	40	6	KUR2-406-0.75	0.75	1	0.09	18.5	0.28	10.5
		7	KUR2-406-1.5	1.5	2	0.09	37	0.28	22
		8	KUR2-406-2.2	2.2	2	0.09	49	0.28	33
		9	KUR2-406-3.7	3.7	3	0.09	79	0.28	56
		10	KUR2-406-5.5	5.5	3	0.09	106	0.28	80
		11	KUR2-406-7.5	7.5	4	0.09	138	0.28	102
	50	12	KUR2-506-0.75	0.75	1	0.12	15	0.4	6.5
		13	KUR2-506-1.5	1.5	1	0.12	26	0.4	15.5
		14	KUR2-506-2.2	2.2	2	0.12	40	0.4	22
		15	KUR2-506-3.7	3.7	2	0.12	58	0.4	37
		16	KUR2-506-5.5	5.5	3	0.12	87	0.4	58
		17	KUR2-506-7.5	7.5	4	0.12	117	0.4	77
	65	18	KUR2-506-11	11	4	0.12	140	0.4	102
		19	KUR2-656-1.5	1.5	1	0.25	17.5	0.75	5.5
		20	KUR2-656-2.2	2.2	1	0.25	22.5	0.8	9.5
		21	KUR2-656-3.7	3.7	1	0.25	33	0.8	17
		22	KUR2-656-5.5	5.5	2	0.25	51	0.8	28
		23	KUR2-656-7.5	7.5	2	0.25	66	0.8	38
		24	KUR2-656-11	11	3	0.25	96	0.8	56
		25	KUR2-656-15	15	4	0.25	128	0.8	76
	80	26	KUR2-806-3.7	3.7	1	0.5	22	1.4	6
		27	KUR2-806-5.5	5.5	1	0.5	29	1.6	8
		28	KUR2-806-7.5	7.5	1	0.5	34	1.6	15
		29	KUR2-806-11	11	2	0.5	59	1.6	22
		30	KUR2-806-15	15	2	0.5	68	1.6	30
		31	KUR2-806-18	18.5	3	0.5	97	1.6	40
	100	32	KUR2-1006-18	18.5	1	1.0	52	3.0	20
		33	KUR2-1006-22	22	1	1.0	57	3.15	21
		34	KUR2-1006-30	30	1	1.0	70	3.15	37
		35	KUR2-1006-37	37	1	1.0	81	3.15	47
		36	KUR2-1006-45	45	2	1.0	111	3.15	45

KURH2 Selection



50_{Hz}



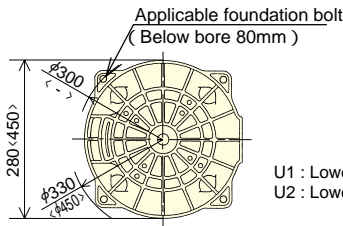
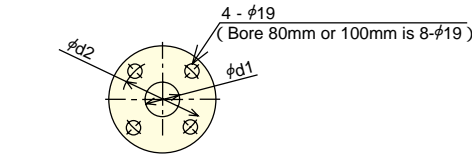
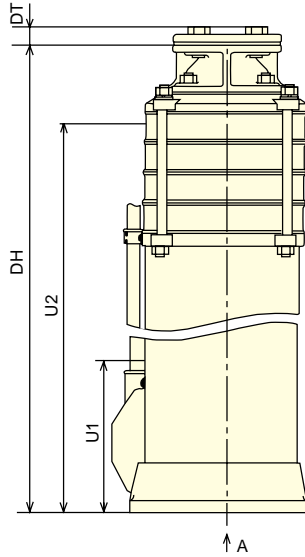
60_{Hz}

Hz	BORE mm	NO.	MODEL	MOTOR kW	NOS OF STAGE	PERFORMANCE				
						CAPACITY m³/min	TOTAL HEAD m	CAPACITY m³/min	TOTAL HEAD m	
50	32	1	KURH2-325-1.9	1.9	2	0.04	46	0.12	40	
		2	KURH2-325-2.7	2.7	3	0.04	69	0.12	59	
	40	3	KURH2-405-1.9	1.9	2	0.071	37	0.22	28	
		4	KURH2-405-2.7	2.7	2	0.071	50	0.22	39	
		5	KURH2-405-5.5	5.5	3	0.071	78	0.22	61	
	50	6	6	KURH2-505-1.9	1.9	2	0.1	31	0.32	20
			7	KURH2-505-2.7	2.7	2	0.1	42	0.32	29
		8	8	KURH2-505-5.5	5.5	3	0.1	64	0.32	45
			9	KURH2-505-7.5	7.5	3	0.1	86	0.32	68
60	32	10	KURH2-326-1.9	1.9	2	0.05	48	0.16	36	
		11	KURH2-326-2.7	2.7	3	0.05	70	0.16	51	
	40	12	KURH2-406-1.9	1.9	2	0.09	37	0.28	22	
		13	KURH2-406-2.7	2.7	2	0.09	49	0.28	33	
		14	KURH2-406-5.5	5.5	3	0.09	79	0.28	56	
	50	15	15	KURH2-506-1.9	1.9	1	0.12	26	0.4	15.5
			16	KURH2-506-2.7	2.7	2	0.12	40	0.4	22
		17	17	KURH2-506-5.5	5.5	2	0.12	58	0.4	37
18			KURH2-506-7.5	7.5	3	0.12	87	0.4	58	

Dimensions

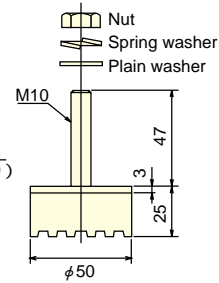
VERTICAL INSTALLATION (Figure is KUR2-505)

(Pumps with bore 80mm and 100mm are not provided with mating flange)



U1 : Lowest water level for operation
U2 : Lowest water level for starting < > is 100mm pump

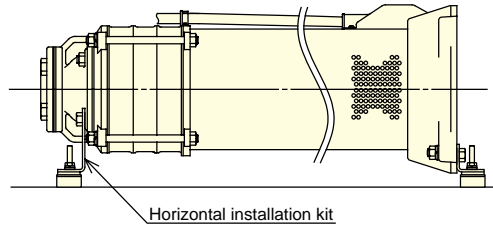
Cushion(Optional accessory)



HORIZONTAL INSTALLATION

(Figure is KUR2-505)

Horizontal installation kit of optional accessory is necessary



KUR2

Hz	BORE mm	MODEL	MOTOR KW	NOS OF STAGE	DIMENSIONS(AT VERTICAL INSTALLATION)						WEIGHT kg
					DH	U1	U2	d1	d2	DT	
50	32	KUR2-325-0.75	0.75	1	530	200	419	32	100	25	32
		KUR2-325-1.5	1.5	2	617	200	506	32	100	25	39
		KUR2-325-2.2	2.2	3	798	200	687	32	100	25	50
		KUR2-325-3.7	3.7	5	955	200	844	32	100	25	66
	40	KUR2-405-0.75	0.75	1	530	200	419	40	105	25	32
		KUR2-405-1.5	1.5	2	617	200	506	40	105	25	39
		KUR2-405-2.2	2.2	2	758	200	647	40	105	25	45
		KUR2-405-3.7	3.7	3	875	200	764	40	105	25	55
		KUR2-405-5.5	5.5	4	921	200	810	40	105	25	75
		KUR2-405-7.5	7.5	5	1021	200	910	40	105	25	85
	50	KUR2-505-0.75	0.75	1	530	200	419	50	120	27	32
		KUR2-505-1.5	1.5	2	617	200	506	50	120	27	39
		KUR2-505-2.2	2.2	2	758	200	647	50	120	27	45
		KUR2-505-3.7	3.7	3	875	200	764	50	120	27	55
		KUR2-505-5.5	5.5	3	881	200	770	50	120	27	71
		KUR2-505-7.5	7.5	4	981	200	870	50	120	27	81
		KUR2-505-11	11	5	1151	200	1040	50	120	27	101
	65	KUR2-655-1.5	1.5	1	597	200	486	65	140	31	35
		KUR2-655-2.2	2.2	1	738	200	627	65	140	31	42
		KUR2-655-3.7	3.7	2	865	200	754	65	140	31	51
		KUR2-655-5.5	5.5	2	871	200	760	65	140	31	67
		KUR2-655-7.5	7.5	3	981	200	870	65	140	31	78
		KUR2-655-11	11	5	1211	200	1100	65	140	31	102
		KUR2-655-15	15	6	1346	200	1235	65	140	31	115
80	KUR2-805-2.2	2.2	1	723	200	628	80	150	Mating flange is not provided	40	
	KUR2-805-3.7	3.7	1	800	200	705	80	150		45	
	KUR2-805-5.5	5.5	2	871	200	776	80	150		65	
	KUR2-805-7.5	7.5	2	931	200	836	80	150		72	
	KUR2-805-11	11	3	1126	200	1031	80	150		92	
	KUR2-805-15	15	4	1276	200	1181	80	150		106	
100	KUR2-1005-15	15	1	1102	250	1017	100	175	170		
	KUR2-1005-18	18.5	1	1174	250	1089	100	175	178		
	KUR2-1005-22	22	1	1061	250	976	100	175	201		
	KUR2-1005-30	30	2	1371	250	1286	100	175	257		
	KUR2-1005-37	37	2	1436	250	1351	100	175	274		
	KUR2-1005-45	45	2	1501	250	1416	100	175	285		

Note:Weight does not include cable

KUR2

Hz	BORE mm	MODEL	MOTOR KW	NOS OF STAGE	DIMENSIONS(AT VERTICAL INSTALLATION)						WEIGHT kg
					DH	U1	U2	d1	d2	DT	
60	32	KUR2-326-0.75	0.75	1	530	200	419	32	100	25	32
		KUR2-326-1.5	1.5	2	617	200	506	32	100	25	39
		KUR2-326-2.2	2.2	3	798	200	687	32	100	25	50
		KUR2-326-3.7	3.7	4	915	200	804	32	100	25	60
		KUR2-326-5.5	5.5	4	921	200	810	32	100	25	75
	40	KUR2-406-0.75	0.75	1	530	200	419	40	105	25	32
		KUR2-406-1.5	1.5	2	617	200	506	40	105	25	39
		KUR2-406-2.2	2.2	2	758	200	647	40	105	25	45
		KUR2-406-3.7	3.7	3	875	200	764	40	105	25	55
		KUR2-406-5.5	5.5	3	881	200	770	40	105	25	70
		KUR2-406-7.5	7.5	4	981	200	870	40	105	25	81
		50	KUR2-506-0.75	0.75	1	530	200	419	50	120	27
	KUR2-506-1.5		1.5	1	577	200	466	50	120	27	35
	KUR2-506-2.2		2.2	2	758	200	647	50	120	27	45
	KUR2-506-3.7		3.7	2	835	200	724	50	120	27	51
	KUR2-506-5.5		5.5	3	881	200	770	50	120	27	70
	KUR2-506-7.5		7.5	4	981	200	870	50	120	27	81
	KUR2-506-11		11	4	1111	200	1000	50	120	27	97
	65	KUR2-656-1.5	1.5	1	597	200	486	65	140	31	35
		KUR2-656-2.2	2.2	1	738	200	627	65	140	31	42
		KUR2-656-3.7	3.7	1	815	200	704	65	140	31	47
		KUR2-656-5.5	5.5	2	871	200	760	65	140	31	67
		KUR2-656-7.5	7.5	2	931	200	820	65	140	31	74
		KUR2-656-11	11	3	1111	200	1000	65	140	31	94
		KUR2-656-15	15	4	1246	200	1135	65	140	31	108
	80	KUR2-806-3.7	3.7	1	800	200	705	80	150		45
		KUR2-806-5.5	5.5	1	806	200	711	80	150		59
		KUR2-806-7.5	7.5	1	866	200	771	80	150		66
KUR2-806-11		11	2	1061	200	966	80	150		86	
KUR2-806-15		15	2	1146	200	1051	80	150		94	
KUR2-806-18		18.5	3	1238	200	1188	80	150		107	
KUR2-1006-18		18.5	1	1174	250	1089	100	175		178	
100	KUR2-1006-22	22	1	1061	250	976	100	175		201	
	KUR2-1006-30	30	1	1291	250	1206	100	175		236	
	KUR2-1006-37	37	1	1356	250	1271	100	175		252	
	KUR2-1006-45	45	2	1501	250	1416	100	175		285	

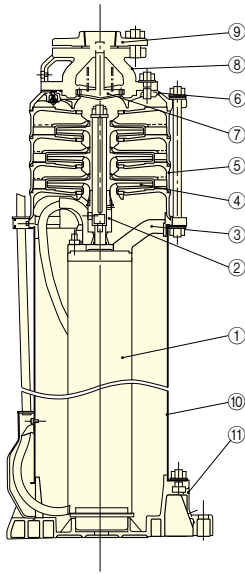
Note:Weight does not include cable

KURH2

Hz	BORE mm	MODEL	MOTOR KW	NOS OF STAGE	DIMENSIONS(AT VERTICAL INSTALLATION)						WEIGHT kg
					DH	U1	U2	d1	d2	DT	
50	32	KURH2-325-1.9	1.9	2	759	200	648	32	100	25	43
		KURH2-325-2.7	2.7	3	875	200	763	32	100	25	55
	40	KURH2-405-1.9	1.9	2	759	200	648	40	105	25	43
		KURH2-405-2.7	2.7	2	835	200	723	40	105	25	50
		KURH2-405-5.5	5.5	3	882	200	771	40	105	25	71
	50	KURH2-505-1.9	1.9	2	759	200	648	50	120	27	43
		KURH2-505-2.7	2.7	2	835	200	723	50	120	27	50
KURH2-505-5.5		5.5	3	882	200	771	50	120	27	71	
60	32	KURH2-326-1.9	1.9	2	759	200	648	32	100	25	43
		KURH2-326-2.7	2.7	3	875	200	763	32	100	25	55
	40	KURH2-406-1.9	1.9	2	759	200	648	40	105	25	43
		KURH2-406-2.7	2.7	2	835	200	723	40	105	25	50
		KURH2-406-5.5	5.5	3	882	200	771	40	105	25	71
	50	KURH2-506-1.9	1.9	1	719	200	608	50	120	27	39
		KURH2-506-2.7	2.7	2	835	200	723	50	120	27	50
KURH2-506-5.5		5.5	2	842	200	731	50	120	27	67	

Note:Weight does not include cable

Parts list



No.	Parts name	Note
1	Submersible motor	
2	Sleeve coupling	SUS304
3	Suction frame	SCS13
4	Impeller	SCS13(Bore 80mm & 100mm)
5	Stage casing	SCS13
6	Discharge casing	SCS13
7	Vane(Note 1)	CAC406 + Rubber (EPDM)
8	Vane casing	SCS13
9	Mating flange	SCS13
10	Suction casing	SUS304
11	Base	Resin or SCS13(Bore 100mm)

Note 1 : Pump bore 32, 40, 50 & 65mm of KUR2 type

Control panel(Optional)



ECA3



ECBA3-A

Control panel Type ECA3 and ECBA3-A are exclusively designed for KAWAMOTO submersible pumps type KUR2 and are recommended to use together with such pumps to ensure trouble free operation for long period of time. Control panel type ECBA3-B are prepared for pump type KURH2.--Ask specifications to manufacturer. Various type such as residual current circuit breaker built-in type, outdoor(ECAW3) type,semi-outdoor type(ECAJ3) type are available.

Specifications

Type	ECA3	ECBA3-A
Operation	Single operation of 1 pump	Alternate operation of 2 pumps
Operation	ON-OFF by water level	ON-OFF by water level
Control	ON-OFF by pressure switch	ON-OFF by water level
Available product	0.75 ~ 45kW	1.5 ~ 3.7kW
Ambient temperature	-5 ~ 40	
Humidity	45 ~ 85%RH	
Protection equipment	3E(3 elements) relay to protect from over load, phase failure and reverse phase	
Installation	Indoor	
Colour(Munsell No.)	Gray(5Y7/1)	
Lamp display	Power supply	○(White)
	Trouble	-
	Pump run	○(Red)-No1 & No2 respective
	Suction tank	○(Empty)
	Discharge tank	○(Full & low water level)
Digital display	Ammeter	○
	Volt meter	○
	Over load	○
	Phase failure	○
	Reverse phase	○
External signa of no voltage	Pump run	○
	Trouble	○
	Suction tank full	-
	Suction tank empty	○
	Discharge tank full	○
	Discharge tank low water	○
Starting	0.75 ~ 7.5kW : Direct on-line, 11 ~ 45kW : Star & Delta	



Developed product of KUR2(Inverter control submersible pump unit)

Pumper"KUF"

- Stainless steel pump and ground section
- Energy saving operation
- Constant discharge pressure operation



Ground section



Pump section

Distributor

KAWAMOTO PUMP MFG. CO.,LTD.

11, Ohsu 4-Chome, Naka-Ku,
Nagoya, Japan

Kind	KUR2-ENG
No	53-08-30-S
Ed.	1