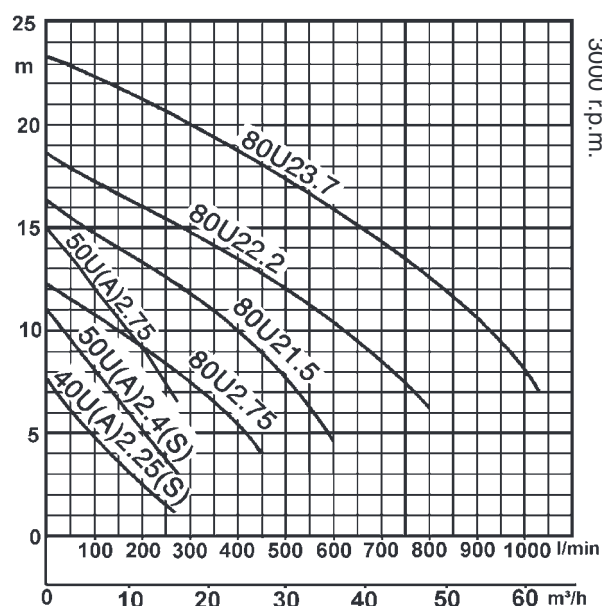
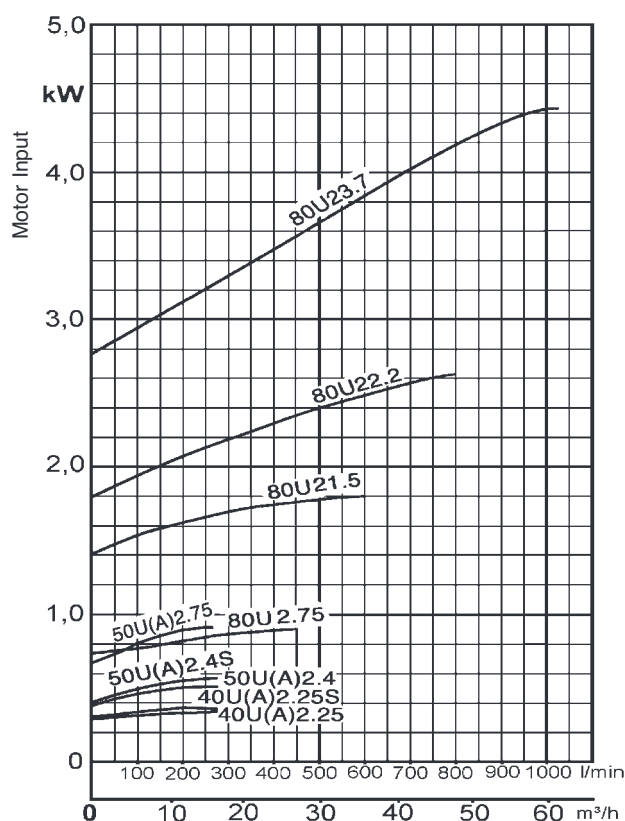


## Sewage Pump with Vortex Impeller - for professional use

**The U pump features a vortex (eddy flow) structure and wide pump casing interior, preventing clogging by waste and solid matter.**

**The automatic version is available in the range of 0,25kW to 0,75kW.**



## Vortex Impeller



This impeller is used mainly to avoid clogging or wear by large or stringy solids in the water. It accelerates part of the water to great speed, and this speed is used to smoothly move all the water from inlet to outlet. Development is enabling Tsurumi to design ever more pump models to this valuable principle.

### Standard Accessories:

- Cable
- Special screwed-in mating flange (1,5kW)
- JIS10K screwed-in mating flange (2,2kW or over and guide rail fitting type)

### Optional Accessories:

- Guide Rail Fitting consisting of:
  - Guide support
  - Duck foot bend
  - Guide hook
  - Lifting chain
  - Guide connector
- Discharge bend

Discharge bore mm				40	50	80	100	U
Pumping Fluid	Type of Fluid		Wastewater and liquids carrying waste and solid matters					
	Liquid Temperature		0 - 40°C					
Pump	Components	Impeller	Vortex					
		Shaft Seal	Double mechanical seal					
		Bearing	Shielded ball bearings					
	Material	Impeller	Grey iron casting					
		Casing	Grey iron casting					
		Shaft Seal (mechanical Seal)	Silicon carbide in oil bath					
Motor	Type, Poles		Dry-type submersible induction motor, IP68 2 poles, 3000 r.p.m. (U2)					
	Insulation		Insulation class E, F (1,5-3,7kW)					
	Phase / Voltage		1-ph. 230V / 3-ph. 400V / 50Hz					
	Motor Protector (built-in)		Circle thermal protector					
	Lubricant		Turbine oil (ISO VG32)					
	Material	Frame	Grey iron casting					
		Shaft	Stainless EN-X6Cr13/X30Cr13					
Cable		Rubber, H07RN-F						
Discharge Connection			Special flange, JIS10K flange					

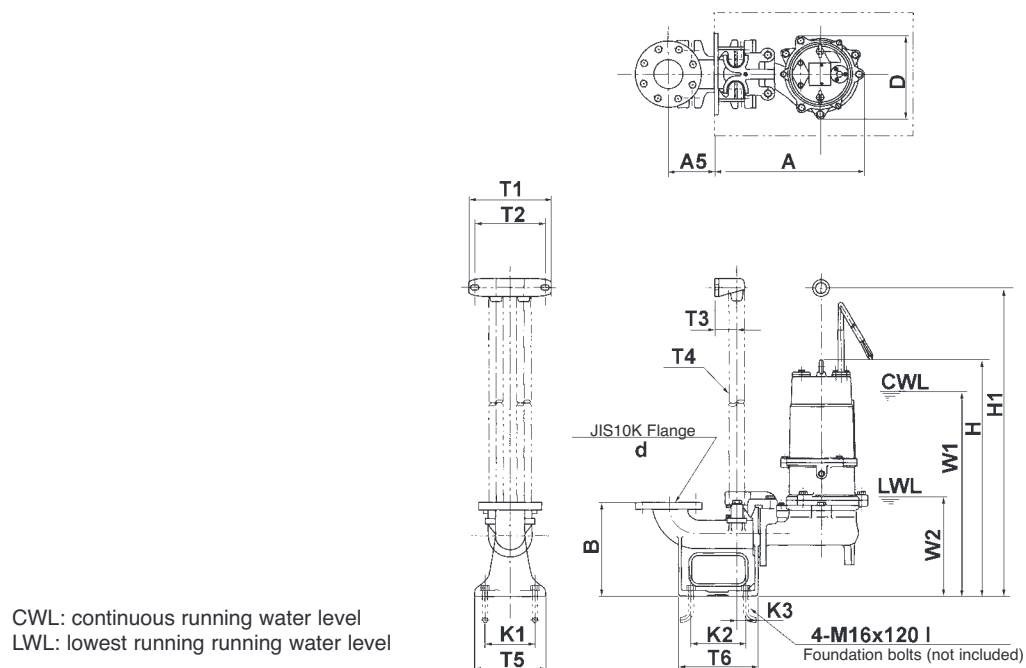
### Specifications:

Bore mm	Model		Output kW	Phase	Total Head max.m	Capacity max. l/min	Starting method	Dry Weight kg standard (automatic)		Impeller passage dia. mm	Cable m
	free standing	guide rail fitting						Free standing	TOS-model		
40	40U(A)2.25S	optional	0,25	Single	7,4	264	Split-phase	14,0 (14,5)	---	35	10
40	40U(A)2.25	optional	0,25	Three	7,5	264	D.O.L.	13,5 (14,5)	---	35	10
50	50U(A)2.4S	optional	0,4	Single	11,0	270	Condenser	20,0 (20,5)	---	35	10
50	50U(A)2.4	optional	0,4	Three	11,0	270	D.O.L.	19,2 (19,7)	---	35	10
50	50U(A)2.75	optional	0,75	Three	15,0	270	D.O.L.	22,7 (23,5)	---	35	10
80	80U2.75	optional	0,75	Three	12,2	450	D.O.L.	28,5	24,3	46	10
80	80U21.5	optional	1,5	Three	16,5	600	D.O.L.	40	36	46	10
80	80U22.2	optional	2,2	Three	19,0	800	D.O.L.	55	51	56	10
80	80U23.7	optional	3,7	Three	23,5	1030	D.O.L.	75	71	56	10

Dry weight of the pump excluding cable

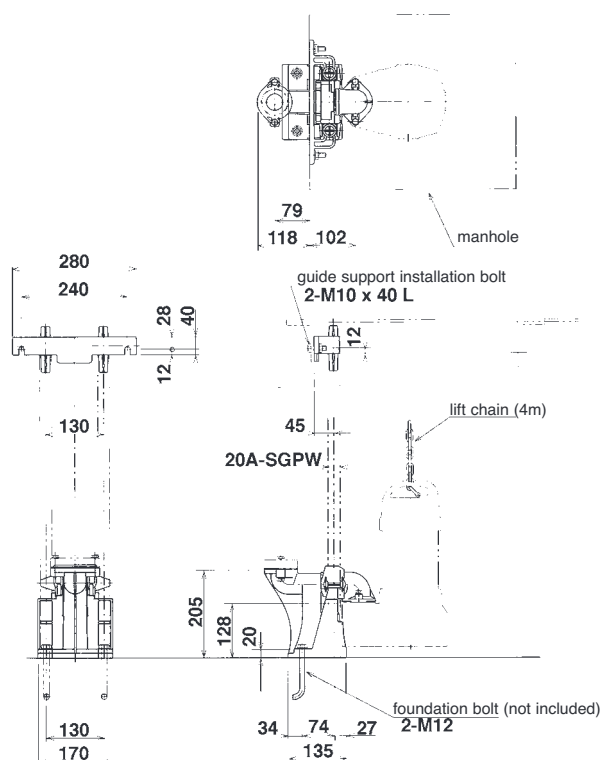
## Dimensions TOS-Models:

Unit: mm



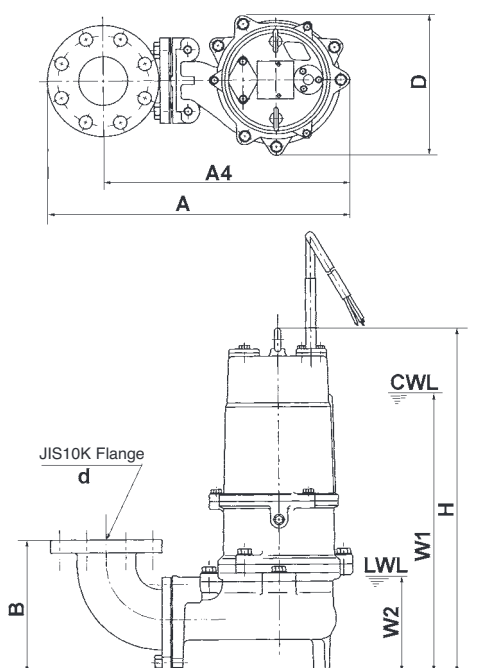
Model	discharge bore d	Pump Section					Water level		Guide Rail Fitting Section								Foundation		
		A	A5	D	H	H1	W1	W2	T1	T2	T3	T4	T5	T6	B	K1	K2	K3	
TOS80U2.75	80	347	130	172	523	710	490	230	230	195	60	32A	190	220	270	140	140	15	
TOS80U21.5	80	389	130	200	603	--	530	240	230	195	60	32A	190	220	270	140	140	15	
TOS80U22.2	80	418	130	240	647	--	575	245	230	195	60	32A	190	220	270	140	140	15	
TOS80U23.7	80	418	130	235	650	895	610	245	230	195	60	32A	190	220	270	140	140	15	

Use **TOK3** guide rail fitting for other types:

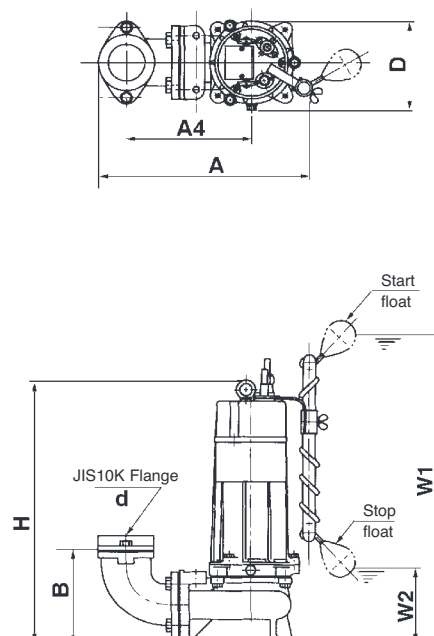


## Dimensions free standing types:

Unit mm



CWL: continuous running water level  
LWL: lowest running water level



Model	discharge bore d	A	A4	D	B	H	Operating Water Level	
							W1	W2
40U2.25S	40	241	207	172	107	383	340	100
40UA2.25S	40	241	207	194	107	433	585	100
40U2.25	40	241	207	172	107	383	340	100
40UA2.25	40	241	207	194	107	433	585	100
50U2.4S	50	236	199	158	102	433	390	105
50UA2.4S	50	236	199	187	102	450	590	105
50U2.4	50	236	199	158	102	400	355	105
50UA2.4	50	236	199	187	102	450	590	105
50U2.75	50	249	212	172	102	395	365	105
50UA2.75	50	283	246	172	102	475	590	105
80U2.75	80	383	329	172	173	421	390	130
80U21.5	80	420	366	200	173	501	430	135
80U22.2	80	502	410	240	225	562	490	160
80U23.7	80	502	410	234	226	565	520	160

We reserve the right to change specifications and designs herein for improvement without prior notice. Our pumps are for professional use only. In the event that Tsurumi (Europe) GmbH have, in exceptional cases taken over, a manufacturer's warranty, this entitles the end-user to assert remedy free of charge against Tsurumi (Europe) GmbH due to any defect to the product occurring during the guarantee period (see below), also then when the warranty claims against the seller do not or no longer exist. In the event of malfunction, which is attributable to the improper handling by the enduser, no guarantee claim shall arise. Further claims shall not result from the warranty, unless if something to the contrary has explicitly been determined. The decision as to whether remedy is effected by way of replacement or repair shall be at the choice of Tsurumi (Europe) GmbH. The claims shall be time barred after a period of three months after expiry of the guarantee period, however, not before expiry of the warranty period which is valid towards the seller. In the event of doubt, the warranty period shall correspond with the warranty period which is valid between the end-user and his seller.

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