



### Aplicação

- Engenharia Civil
- Minas, pedreiras, minério de carvão e lamas
- Estações de tratamento de esgoto
- Finalidades gerais de bombeamento

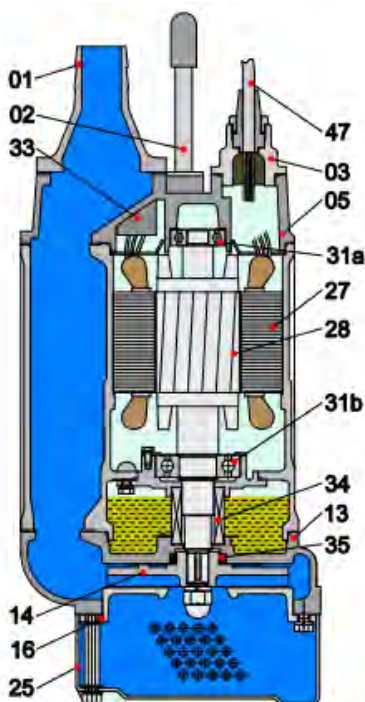
### Bomba

- O corpo do motor e da bomba é feito de ferro fundido rígido.
- Profundidade máxima de submersão bastante alta devido ao selo mecânico resistente a alta pressão.
- O impulsor semiaberto feito de liga de aço cromo duro combina com placa de desgaste (ferro dúctil) alcança durabilidade superior.
- Resfriamento eficaz do motor devido ao canal de descarga fundido como parte da carcaça do motor;
- Conexão de Descarga: Ø50 mm (2") a Ø150 mm (6");
- Motor hermeticamente selado equipado com proteção térmica integrada para potências abaixo de 15 kW.
- Temperatura máx. do líquido: 0 - 40 °C
- Profundidade máxima de imersão: 25 m.

### Motor

- Enrolamento de cobre;
- Número de polos: 2;
- Classe de isolamento: B;
- Grau de proteção: IP68;

### Tabela de Materiais



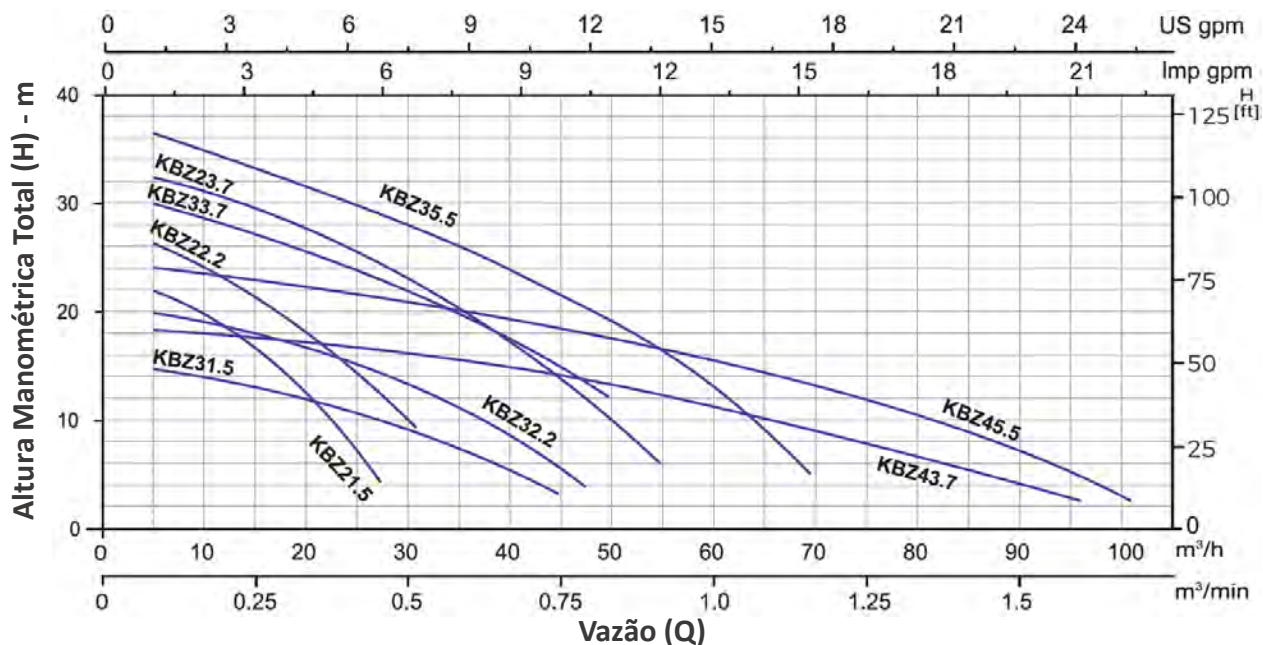
### Identificação

**KBZ 4 7.5**

- Potência (kW)
- Diâmetro da Conexão de Saída
- Motobomba Submersível p/ Drenagem

No.	Peça	Material
1	Conexão de Saída	FoFo
2	Alça	Aço/Borracha
5	Tampa Superior	FoFo
11	Camisa Externa do Motor	FoFo
13	Voluta	FoFo
14	Impulsor	Aço Cromo Duro
16	Tampa Inferior	Ferro Ductil
25	Crivo	Aço
27	Estator do Motor	
28	Rotor do Motor	Eixo: AISI 420SS
31a	Rolamento de Esfera	
31b	Rolamento de Esfera	
33	Protetor do Motor	
34	Selo Mecânico	Inferior: Sic/Sic - Superior: Carbetto de Silício (s2kW) Inferior: Sic/Sic - Superior: Sic/Sic (≥3,7kW)
35	Retentor	
47	Cabo Elétrico	

## Curva de Performance

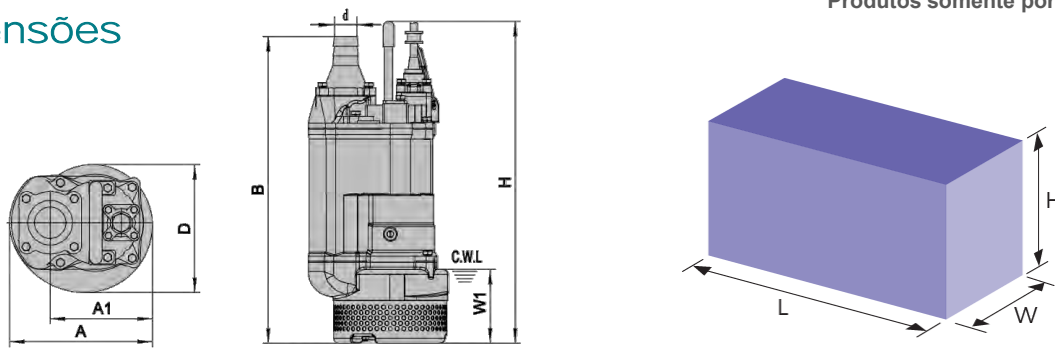


## Parâmetros de Desempenho

Modelo	Potência		Descarga	Vazão Máxima		Pressão Máx.	Ø Máx. Sólidos
	kW	HP	mm	m <sup>3</sup> /h	m <sup>3</sup> /min	m	mm
* KBZ21.5	1.5	2	50	27	0.45	23	8.5
* KBZ22.2	2.2	3	50	31	0.52	28	8.5
* KBZ23.7	3.7	5	50	50	0.83	33	8.5
KBZ31.5	1.5	2	80	45	0.75	15	8.5
* KBZ32.2	2.2	3	80	47	0.78	20.5	8.5
KBZ33.7	3.7	5	80	55	0.92	31	8.5
* KBZ35.5	5.5	7.5	80	69	1.15	38	8.5
* KBZ43.7	3.7	5	100	96	1.6	18.5	8.5
* KBZ45.5	5.5	7.5	100	102	1.7	24.4	8.5

\* Produtos somente por encomenda

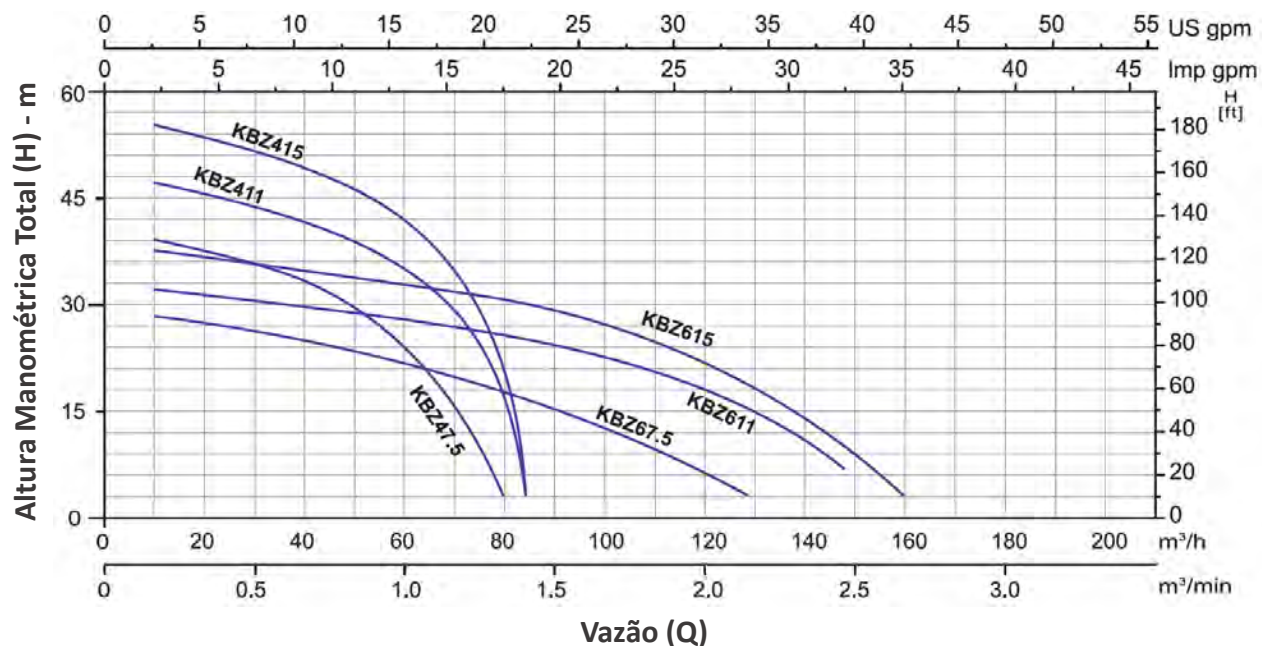
## Dimensões



C.W.L: Nível de água mínimo para trabalho contínuo

Modelo	d (mm)	A (mm)	A1 (mm)	B (mm)	D (mm)	H (mm)	W1 (mm)	P. Líquido (kg)	P. Bruto (kg)	L (mm)	W (mm)	H (mm)
KBZ21.5	50	235	173	517	216	486	120	34.5	37.5	585	270	270
KBZ22.2	80	235	173	517	216	486	120	36	39	585	270	270
KBZ23.7	50	235	173	517	216	486	120	60	65	685	325	300
KBZ31.5	80	235	173	517	216	486	120	34.5	37	585	270	270
KBZ32.2	50	283	208	628	252	638	150	36	39	585	270	270
KBZ33.7	80	283	208	628	252	638	150	60	65	685	325	300
KBZ35.5	100	283	208	642	252	638	150	77	84	725	355	370
KBZ43.7	80	306	218	671	259	598	150	61	66	685	325	300
KBZ45.5	100	306	218	686	259	598	150	78	85	725	355	370

### Curva de Performance

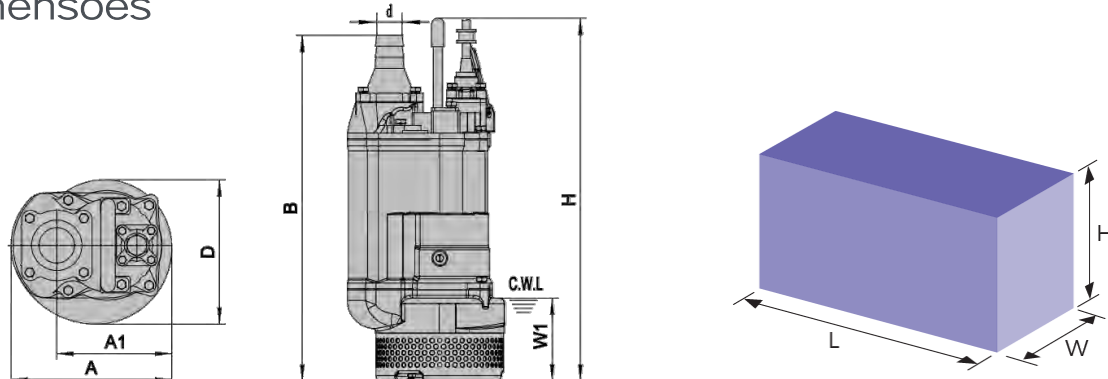


### Parâmetros de Desempenho

Modelo	Potência		Descarga	Vazão Máxima		Pressão Máx.	Ø máx. Sólidos
	kW	HP		m <sup>3</sup> /h	m <sup>3</sup> /min		
* KBZ47.5	7.5	10	100	80	1.33	41	11.5
* KBZ411	11	15	100	84	1.4	48.5	11.5
KBZ415	15	20	100	84	1.4	57	11.5
* KBZ67.5	7.5	10	150	127	2.12	31	19.5
* KBZ611	11	15	150	147	2.45	32	19.5
* KBZ615	15	20	150	160	2.67	39	19.5

### Dimensões

\* Produtos somente por encomenda



C.W.L: Nível de água mínimo para trabalho contínuo

Modelo	d (mm)	A (mm)	A1 (mm)	B (mm)	D (mm)	H (mm)	W1 (mm)	P. Líquido (kg)	P. Bruto (kg)	L (mm)	W (mm)	H (mm)
KBZ47.5	100	330	240	764	314	676	190	105	114	805	365	390
KBZ411	100	373	255	807	350	695	190	130	140	895	415	440
KBZ67.5	150	330	240	790	314	676	190	142	153	895	415	440
KBZ611	150	373	255	807	350	695	190	106	114	835	365	390
KBZ415	100	373	255	842	350	755	190	133	143	855	415	440
KBZ615	150	373	255	842	350	755	190	145	156	895	415	440

# KBS SUBMERSIBLE SLURRY PUMP

KBS series is submersible slurry pump with 4-pole motor for increased lifetime and greater convenience. High chrome alloy impeller combined with agitator is designed for pumping heavy slurry. Slim pump body with a top discharge design enables pump installation in narrow spaces. The pump is also designed for pumping bentonite mixed water in foundation works or muddy water in civil engineer works.



## Specification

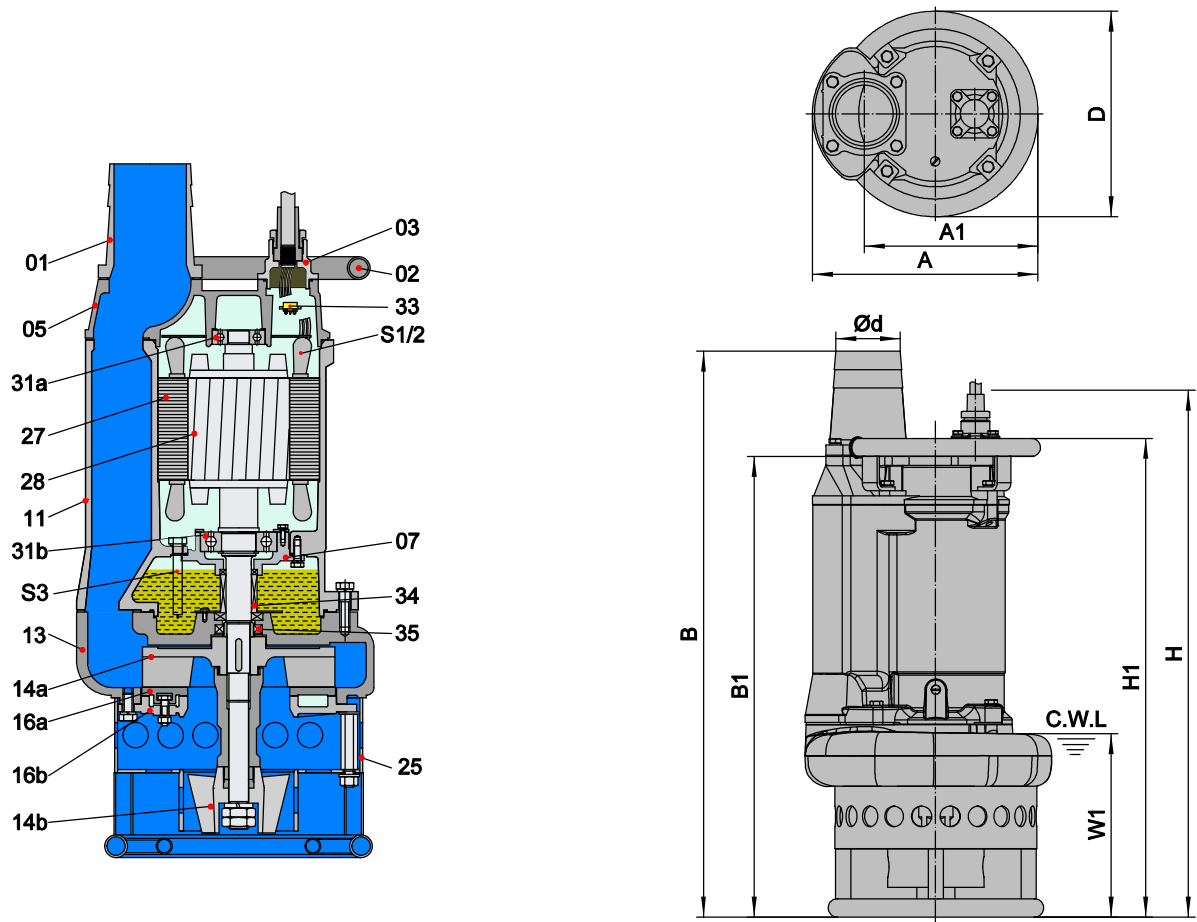
- Capacity: up to 390m<sup>3</sup>/h
- Head: up to 39 meters
- Discharge: 80mm(3") to 200mm(8")
- Power: 4kW (5.5HP) to 37 kW (50HP)
- Power supply: three phase 380V ± 10%, 50Hz  
380V ± 10%, 60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8m
- Water temperature: up to 40°C
- Max. water depth: 15m

## Application

- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes
- Pumping fluid: sludge, liquid-containing  
mud and bentonite

## Special features on request

- Other voltages
- The length of cable is optional



C.W.L: continuous running water level

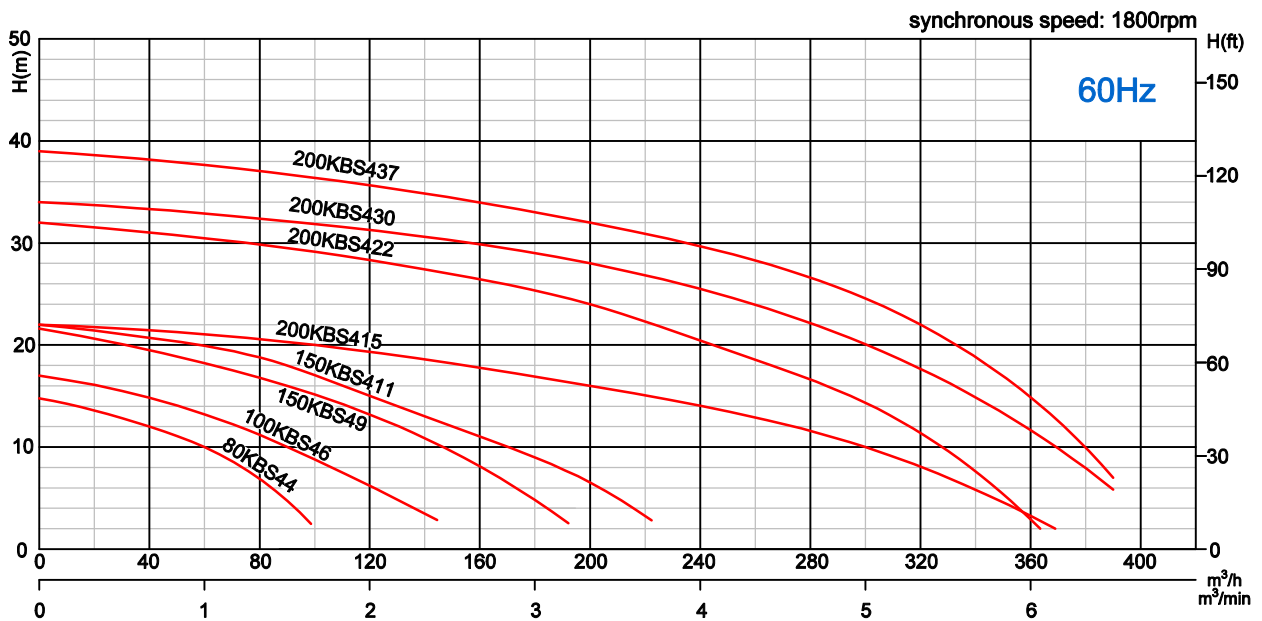
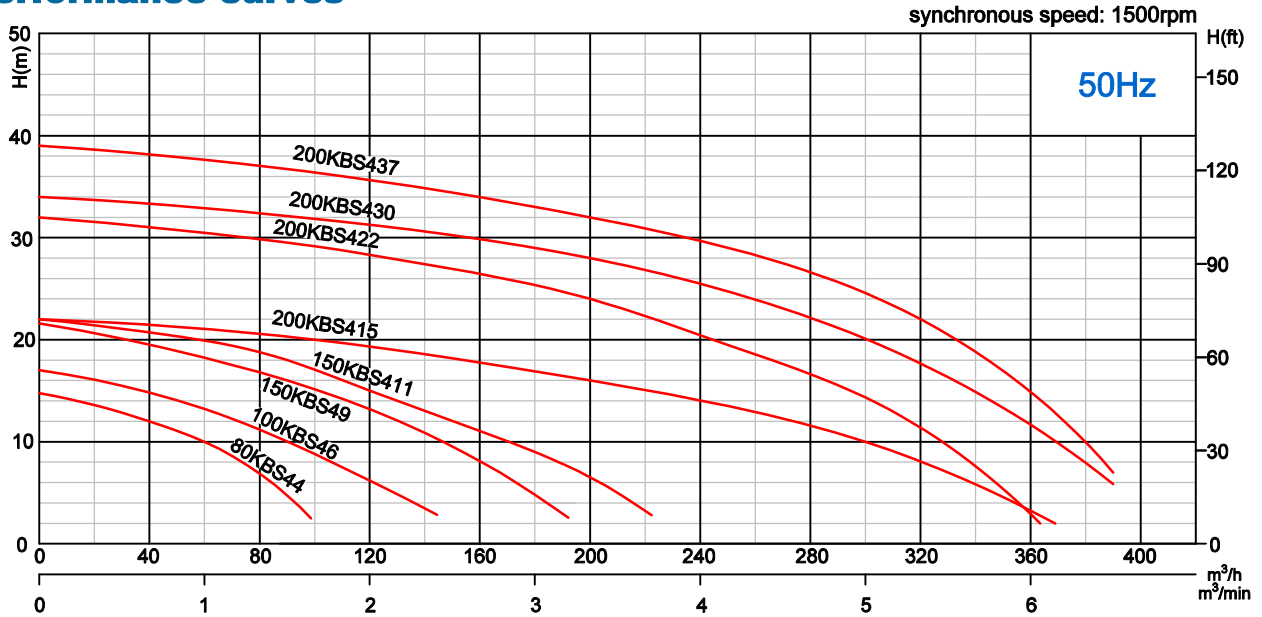
## Materials of components

Item No.	Part name	Material	Item No.	Part name	Material
01	Hose coupling	Cast iron	27	Stator	
02	Handle	Steel	28	Rotor	Shaft:AISI420SS
05	Upper cover	Cast iron	31a	Bearing	Ball bearing
07	Bearing house	Cast iron	31b	Bearing	
11	Motor body	Cast iron	33	Motor protector	4~11kW
13	Pump body	Cast iron	34	Mechanical seal	
14a	Impeller	High chrome alloy	35	Oil seal	
14b	Agitator	High chrome alloy	47	Cable	
16a	Inlet plate	High chrome alloy	S1/2	Overheat protector : 15~37kW	
16b	Inlet plate	Cast iron	S3	Oil water leakage probe : on option (only for pumps > 22kW)	
25	Strainer	Steel			

## Dimensions & weights

Model (50/60Hz)	d mm	A mm	A1 mm	B mm	B1 mm	D mm	H mm	H1 mm	W1 mm	N.W Kg	G.W Kg	Packing dimension mm
80KBS44	80	366	270	802	680	340	765	700	250	108.5	119	855x385x395
100KBS46	100	420	308	844	683	378	768	720	250	141	151	880x450x455
150KBS49	150	434	324	889	727	407	813	735	250	171	183	940x470x475
150KBS411	150	434	324	926	765	407	850	802	250	197	210	980X465X465
200KBS415	200	484	352	1121	890	457	1025	935	295	260	290	1285x570x705
200KBS422	200	575	442	1243	1011	528	1200	1040	330	408	458	1455x660x765
200KBS430	200	622	469	1378	1147	543	1345	1198	432	510	560	1565x700x775
200KBS437	200	622	469	1378	1147	543	1345	1198	432	535	585	1565x700x775

## Performance curves



## Performance table

Model (50/60Hz)	Outlet mm	Motor power		Starting method	Rated current (380V)	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
		kW	HP		A	m³/h	m³/min		m³/h	m³/min		
80KBS44	80	4	5.5	D.O.L.	10.2	60	1.0	10	99	1.65	14.8	30
100KBS46	100	6	8	D.O.L.	13.8	90	1.50	10	144	2.40	16.9	30
150KBS49	150	9	12	D.O.L.	19.5	100	1.67	15	192	3.20	21.5	30
150KBS411	150	11	15	D.O.L.	22	120	2.0	15	234	3.90	22	30
200KBS415	200	15	20	D.O.L.	30.1	200	3.33	16	372	6.20	22	30
200KBS422	200	22	30	Star-Delta	42	200	3.33	24	360	6.0	32	30
200KBS430	200	30	40	Star-Delta	57.6	200	3.33	28	390	6.5	34	30
200KBS437	200	37	50	Star-Delta	69.8	200	3.33	32	390	6.5	39	30

NTZ series is submersible slurry pump with 4-pole motor for increased lifetime and greater convenience. High chrome alloy impeller combined with agitator is designed for pumping heavy slurry. A cooling water jacket allows the pump to operate at low water level for extended period of time without any fear of overheating.

### Specification

- Capacity: up to 246m<sup>3</sup>/h
- Head: up to 27 meters
- Discharge: 80mm(3") to 150mm(6")
- Power: 2.2kW (3HP) to 11 kW (15HP)
- Power supply: three phase 380V ± 10%, 50Hz  
380V ± 10%, 60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8m
- Water temperature: up to 40°C
- Max. water depth: 20m

### Application

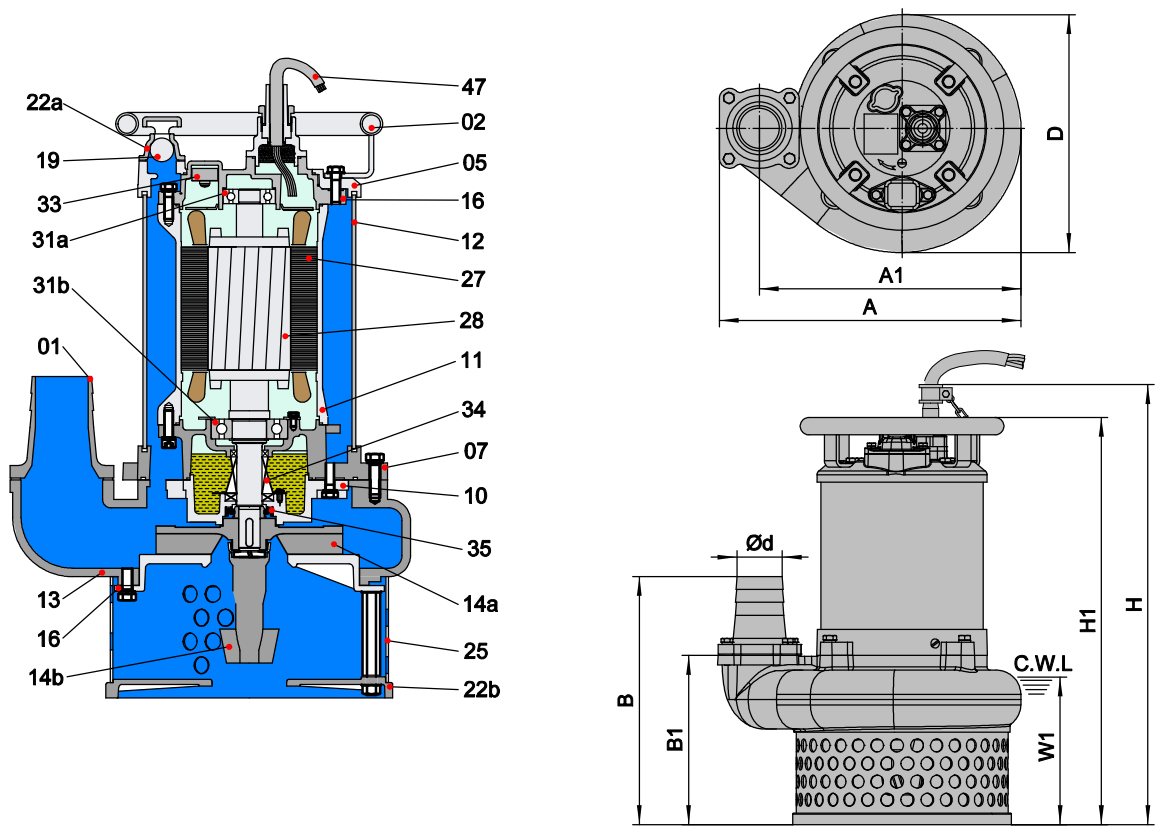
- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes
- Pumping fluid: sludge, liquid-containing mud and bentonite

### Special features on request

- Other voltages
- The length of cable is optional



# NTZ SUBMERSIBLE SLURRY PUMP



C.W.L: continuous running water level

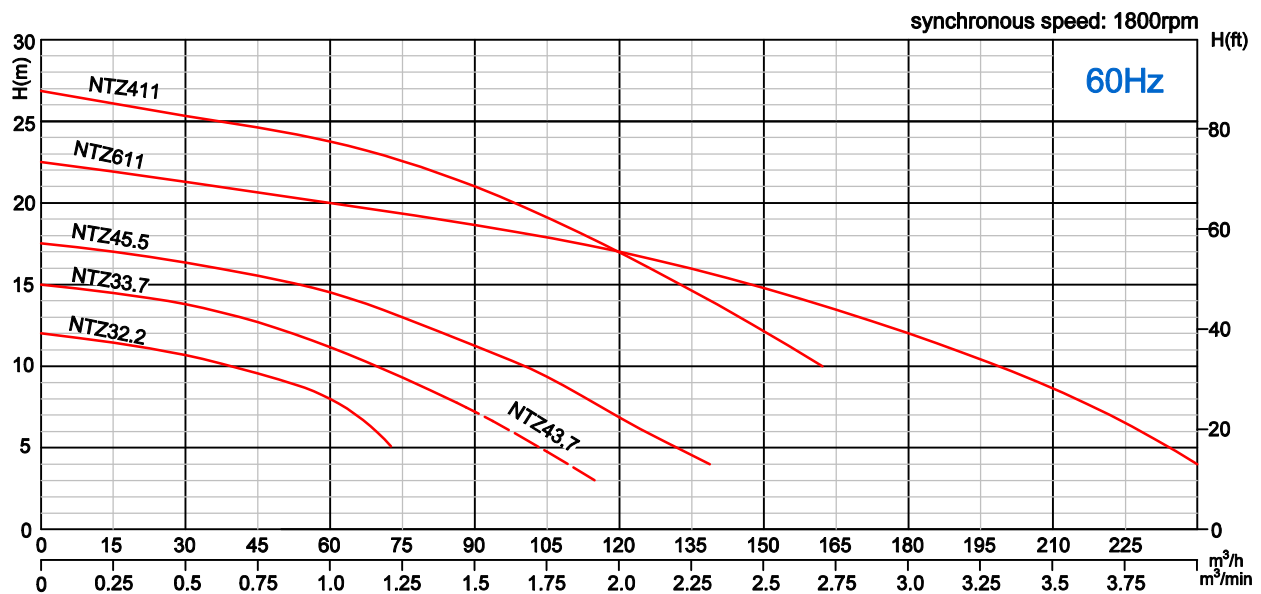
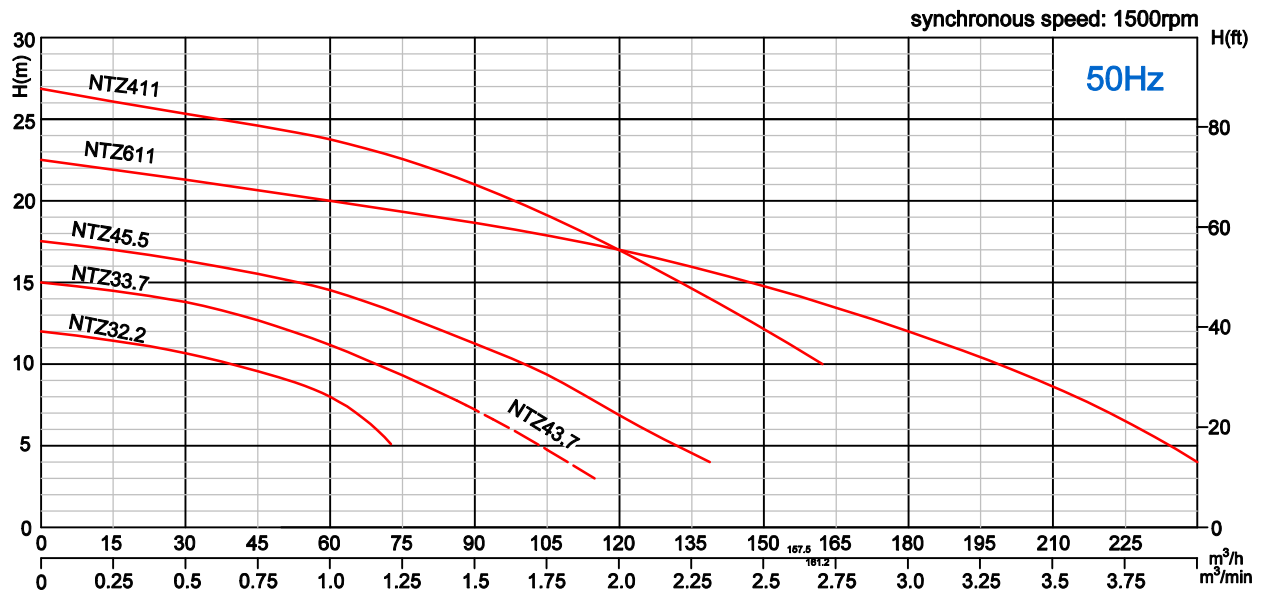
## Materials of components

Item No.	Part name	Material	Item No.	Part name	Material
01	Hose coupling	Cast iron	22a	Valve seat	Cast iron
02	Handle	Steel	22b	Seat assembly	Cast iron
05	Upper cover	Cast iron	25	Strainer	Steel
06	Up-Bearing house	Cast iron	27	Stator	
07	Bearing house	Cast iron	28	Rotor	Shaft:AISI420SS
10	Seal house	Cast iron	31a	Bearing	Ball bearing
11	Motor body	Cast iron	31b	Bearing	Ball bearing
12	Outer casing	Steel	33	Motor protector	
13	Pump body	Cast iron	34	Mechanical seal	SiC-SiC/SiC-SiC (< 5.5kW) To-SiC/SiC-SiC(11kW)
14a	Impeller	High chrome alloy	35	Oil seal	
14b	Agitator	High chrome alloy	47	Cable	
16	Inlet plate	Ductile iron			
19	Check value	NBR			

## Dimensions & weights

Model (50/60Hz)	d	A	A1	B	B1	D	H	H1	W1	N.W	G.W	Packing dimension mm
	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg	Kg	
NTZ32.2	80	469	408	378	257	371	685	625	230	92	99	765x405x515
NTZ33.7	80	469	408	378	257	371	750	690	230	108	116	830x405x515
NTZ43.7	100	469	408	378	257	371	750	690	230	108	116	830x405x515
NTZ45.5	100	494	433	383	262	386	795	735	225	139	151	835x425x560
NTZ411	100	598	505	436	275	441	862	802	240	210	226	910x475x665
NTZ611	150	598	505	436	275	441	862	802	240	210	226	910x475x665

### Performance curves



### Performance table

Model (50/60Hz)	Outlet mm	Motor power		Rated current (380V) A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
		kW	HP		m³/h	m³/min		m³/h	m³/min		
NTZ32.2	80	2.2	3	5.5	36	0.6	10	72	1.2	12	20
NTZ33.7	80	3.7	5	8.2	36	0.6	13.5	86.4	1.44	15	20
NTZ43.7	100	3.7	5	8.2	60	1.0	11	114	1.9	15	20
NTZ45.5	100	5.5	7.5	11.7	65	1.08	14	138	2.3	17.5	30
NTZ411	100	11	15	22	60	1.0	24	162	2.7	27	20
NTZ611	150	11	15	22	120	2.0	17	246	4.1	22.5	30

# QNS SUBMERSIBLE SLURRY PUMP

**2.2 ~ 75kW 4P**

50Hz(synchronous speed: 1500rpm)

60Hz(synchronous speed: 1800rpm)

QNS series submersible sand pump is specially designed for pumping in harsh environment, sites containing solids and other abrasive material. Each component fully reflects the design concepts of high durability, reliability and ease of maintenance.

Each QNS submersible sand pump is adopted with F Class insulated 4-pole motor, high wear-resistant mechanical seal and heavy-duty semi-open high wear-resistant alloy impeller.

There is an agitator in the lower part of this pump. The sediment at the bottom of water will be stirred into suspension form and then be sucked into the inlet to be discharged completely.

## Application

- Underwater sand extraction, cleaning the bottom of the pond, cleaning the sedimentation tank
- Construction silt water drainage, mine surface drainage
- Industrial mining enterprises pumping sewage water containing quartz sand, slime, sludge and other abrasive materials

## Specification

- Insulation class : F
- Protection class : IP68
- Water temperature : up to 40°C
- PH : 6 to 10
- Density of liquid : up to 1.3g/cm<sup>3</sup>
- Power supply : three phase 380V ± 10%, 50Hz  
three phase 380V ± 10%, 60Hz
- Capacity : up to 600m<sup>3</sup>/h
- Head : up to 57m
- Maximum immersion depth : 15m
- Cable Length : 8m

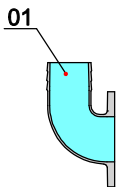


Type	Pump body	Impeller, Agitator, Inlet plate
QNS	Ductile iron	High chrome alloy
QNS-G	High chrome alloy	

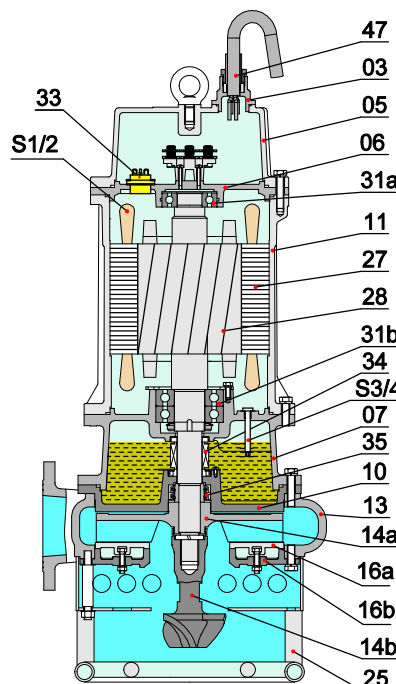
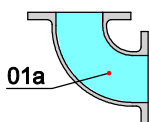
## Materials of components

Item No.	Part name	Material
01	Hose coupling	Cast iron
01a	Hose coupling	Cast iron
03	Terminal box	Cast iron
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Ductile iron
11	Motor body	Cast iron
13	Pump body	Ductile iron
14a	Impeller	High chrome alloy
14b	Agitator	High chrome alloy
16a	Inlet plate	High chrome alloy
16b	Inlet plate	Cast iron
25	Strainer	
27	Stator	Shaft : AISI420SS
28	Rotor	
31a	Bearing	
31b	Bearing	
33	Motor protector	< 7.5kW
34	Mechanical seal	Sic-Sic/Sic-Sic
35	Oil seal	
47	Cable	
S1/2	Overheat protector :55~75kW (2.2~45kW : on option)	
S3/4	Oil water leakage probe : 55~75kW (5.5~45kW : on option)	

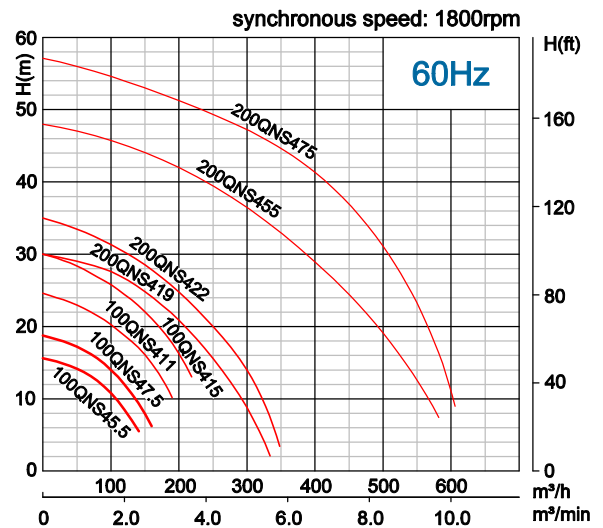
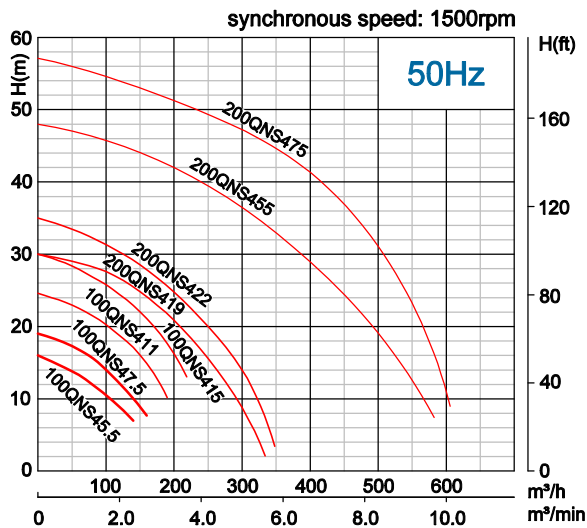
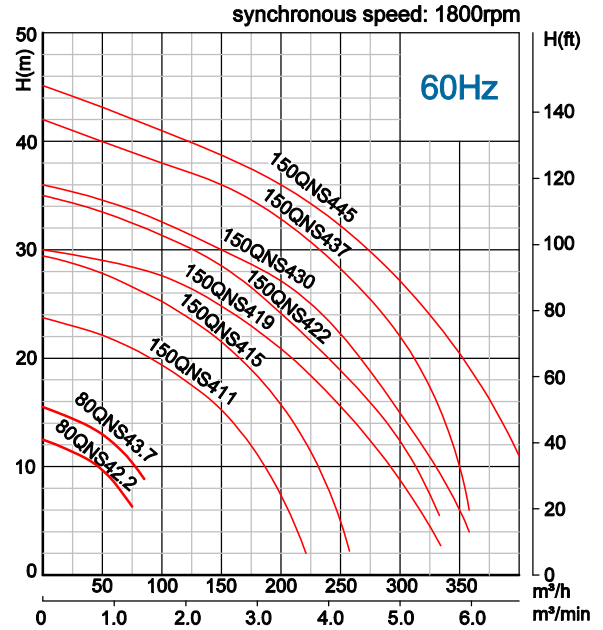
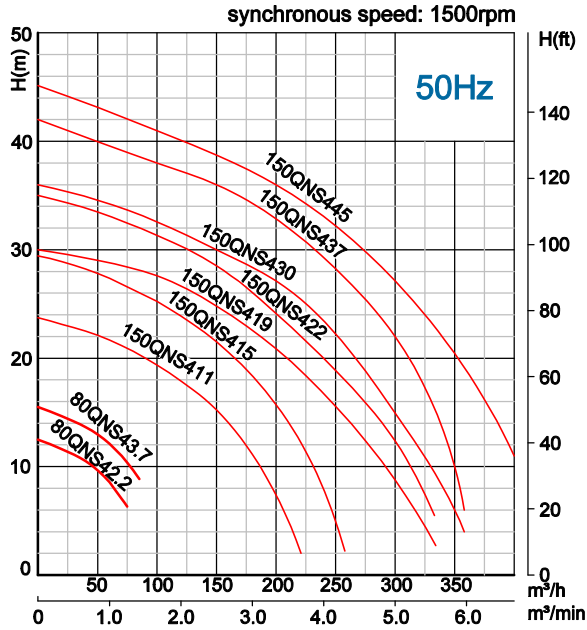
### Movable Soft Pipe Installation (R)



### Movable Hard Pipe Installation (Y)



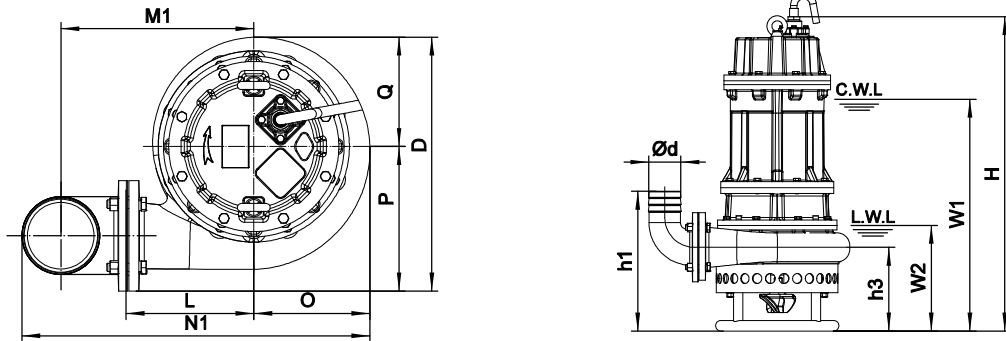
## Performance curves



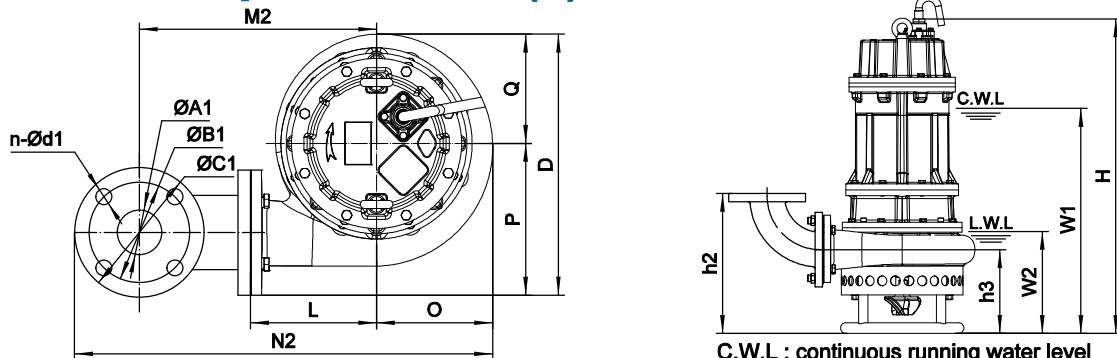
Model	Voltage	Current	Motor power		Outlet		Rated capacity	Rated head	Max capacity	Max head	Impeller passage
	V		A	kW	HP	inch					
80QNS42.2	380	5.0	2.2	3	3	80	50	10	75	13	20
80QNS43.7	380	8.5	3.7	5	3	80	60	12	85	16	20
100QNS45.5	380	11.7	5.5	7.5	4	100	65	13	140	16	30
100QNS47.5	380	15.7	7.5	10	4	100	100	14	160	19	30
100QNS411	380	22	11	15	4	100	100	20	190	24	30
150QNS411	380	22	11	15	6	150	100	20	220	24	30
100QNS415	380	30.1	15	20	4	100	100	25	220	30	30
150QNS415	380	30.1	15	20	6	150	100	25	255	30	30
150QNS419	380	38	19	25	6	150	150	24	330	30	30
200QNS419	380	38	19	25	8	200	150	24	330	30	30
150QNS422	380	45	22	30	6	150	150	28	330	35	30
200QNS422	380	45	22	30	8	200	150	28	350	35	30
150QNS430	380	57.6	30	40	6	150	150	30	360	36	30
150QNS437	380	69.8	37	50	6	150	150	36	366	43	30
150QNS445	380	84.5	45	60	6	150	200	36	402	45	30
200QNS455	380	105	55	75	8	200	300	36	580	48	40
200QNS475	380	141	75	100	8	200	300	46	600	57	40

# QNS SUBMERSIBLE SLURRY PUMP

## Movable Soft Pipe Installation (R)



## Movable Hard Pipe Installation (Y)



C.W.L : continuous running water level  
L.W.L : lowest running water level

## Dimensions table

Model	Ød	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
80QNS42.2	80	80	150	190	4-Ø18	331	325	185	474	235	625	168	223	158	210	381	302	352	507	614
80QNS43.7	80	80	150	190	4-Ø18	331	325	185	539	235	690	168	223	158	210	381	302	352	507	614
100QNS45.5	100	100	170	210	4-Ø18	426	406	256	616	309	854	206	265	188	230	453	333	382	588	693
100QNS47.5	100	100	170	210	4-Ø18	426	406	256	661	309	899	206	265	188	230	453	333	382	588	693
100QNS411	100	100	170	210	4-Ø18	425	405	255	691	308	958	221	275	208	240	483	343	393	613	719
150QNS411	150	150	225	265	8-Ø18	480	455	255	691	308	958	221	303	208	240	511	393	443	689	797
100QNS415	100	100	170	210	4-Ø18	425	405	255	736	308	1008	221	275	208	240	483	343	393	613	719
150QNS415	150	150	225	265	8-Ø18	480	455	255	736	308	1008	221	303	208	240	511	393	443	689	797
150QNS419	150	150	225	265	8-Ø18	521	496	296	808	360	1103	264	326	247	280	573	433	483	772	880
200QNS419	200	200	295	340	8-Ø22	606	526	296	808	360	1103	264	363	247	280	610	483	513	848	948
150QNS422	150	150	225	265	8-Ø18	521	496	296	828	360	1123	264	326	247	280	573	433	483	772	880
200QNS422	200	200	295	340	8-Ø22	606	526	296	828	360	1123	264	363	247	280	610	483	513	848	948
150QNS430	150	150	240	285	8-Ø22	546	521	320	900	350	1249	292	338	279	330	617	482	532	848	966
150QNS437	150	150	240	285	8-Ø22	546	521	320	890	350	1300	292	338	279	330	617	482	532	848	966
150QNS445	150	150	240	285	8-Ø22	546	521	320	930	350	1294	292	338	279	330	617	482	532	848	966
200QNS455	200	200	295	340	8-Ø22	673	592	362	1150	450	1576	336	395	319	410	714	614	644	1049	1149
200QNS475	200	200	295	340	8-Ø22	673	592	362	1150	450	1576	336	395	319	410	714	614	644	1049	1149

## Weights & Packing dimensions

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
80QNS42.2	79	87	725x375x495	83	91	755x375x495
80QNS43.7	89	98	785x375x495	93	101	815x375x495
100QNS45.5	141	153	985x455x605	147	159	985x455x605
100QNS47.5	156	168	1015x455x605	162	174	1015x455x605
100QNS411	236	256	700x480x1195	242	262	700x480x1195
150QNS411	245	265	700x480x1195	253	273	700x480x1195
100QNS415	260	280	700x480x1195	266	286	700x480x1195
150QNS415	269	289	700x480x1195	277	297	700x480x1195

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
150QNS419	342	372	780x600x1330	350	380	780x600x1330
200QNS419	361	391	780x600x1330	369	399	780x600x1330
150QNS422	355	385	780x600x1330	363	393	780x600x1330
200QNS422	374	404	780x600x1330	382	412	780x600x1330
150QNS430	478	500	780x600x1470	486	508	780x600x1290
150QNS437	536	558	780x600x1520	544	566	780x600x1340
150QNS445	570	592	780x600x1520	578	600	780x600x1340
200QNS455	812	860	950x770x1950	820	868	950x790x1950
200QNS475	880	928	950x770x1950	888	936	950x790x1950

- The water-cooled motor ensures a long service life during continuous or intermittent operation, which is highly efficient and energy-saving.
- The dry motor with thermal auto-cut can prevent the motor from overheating.
- Greatly increased maximum submersion depth due to mechanical seal resistant to high pressure.
- The cast iron upper cover and strengthened AISI304SS pumps casing can provide better anti-hitting performance.
- The impeller is designed by 3D technology and made of chrome steel, which can improve the efficiency and extend the product lifetime.
- The KC pump strainer can be easily removed for maintenance.



**Chrome steel**

### Specification

- Capacity: up to 108 m<sup>3</sup>/h
- Head: up to 31 meters
- Power: 1.5kW (2HP) to 5.5kW (7.5HP)
- Power supply: single phase 220V ± 10%, 50Hz, 60Hz  
three phase 400V ± 10%, 50Hz  
380V ± 10%, 60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8m
- Water temperature: up to 40°C
- Max.water depth: 25m

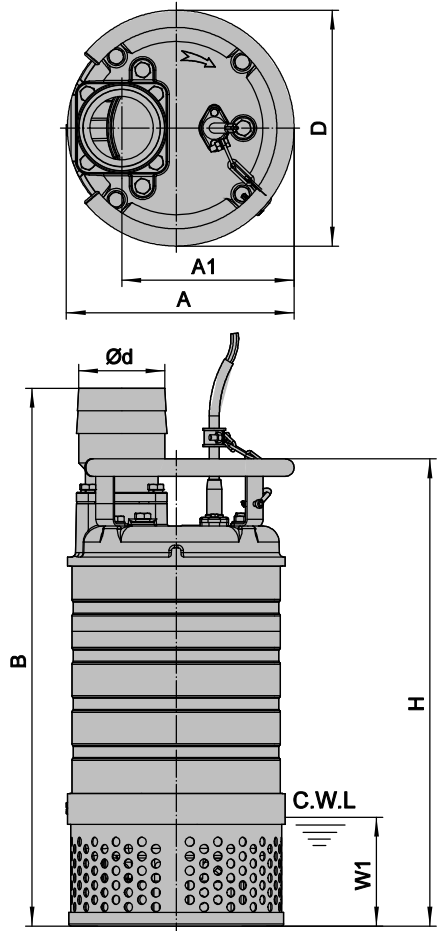
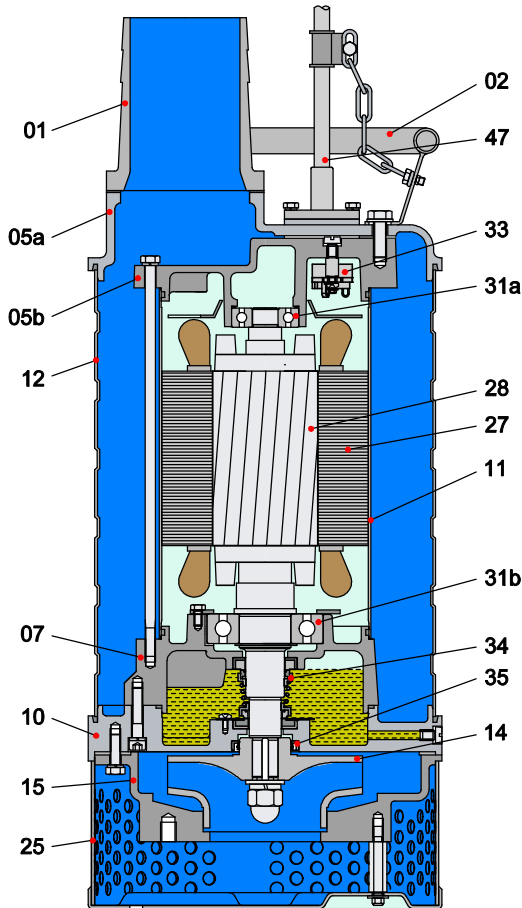
### Application

- Aquiculture water supply and drainage
- Water supply for agriculture irrigation systems and underground water pumping
- Extraction of water from rivers, lakes and reservoirs

### Special features on request

- Other voltages
- The length of cable is optional

# KC SUBMERSIBLE PUMP



C.W.L: continuous running water level

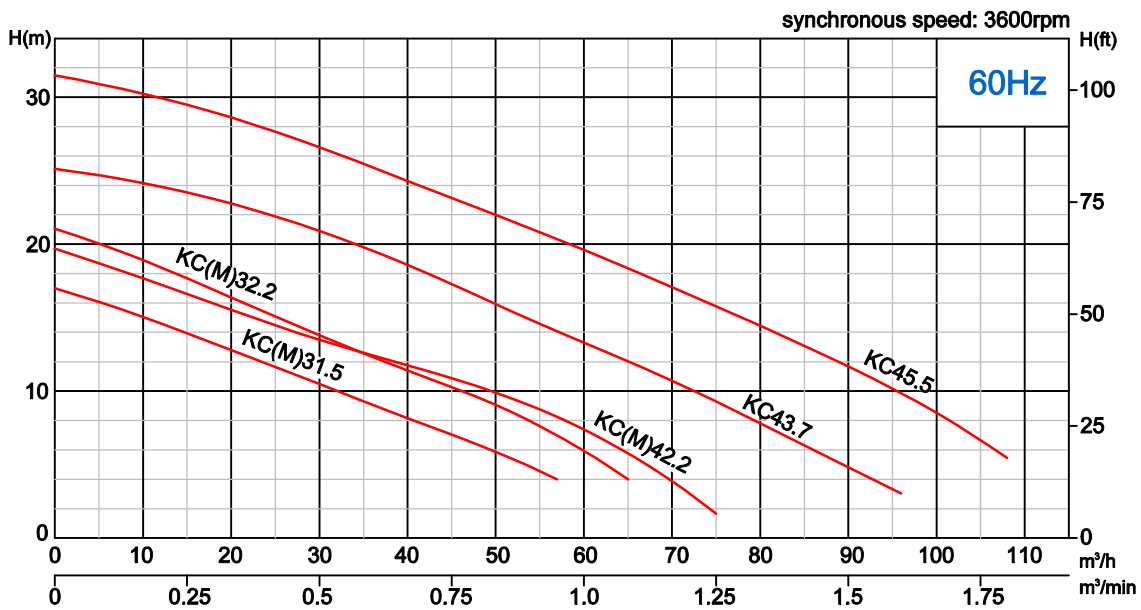
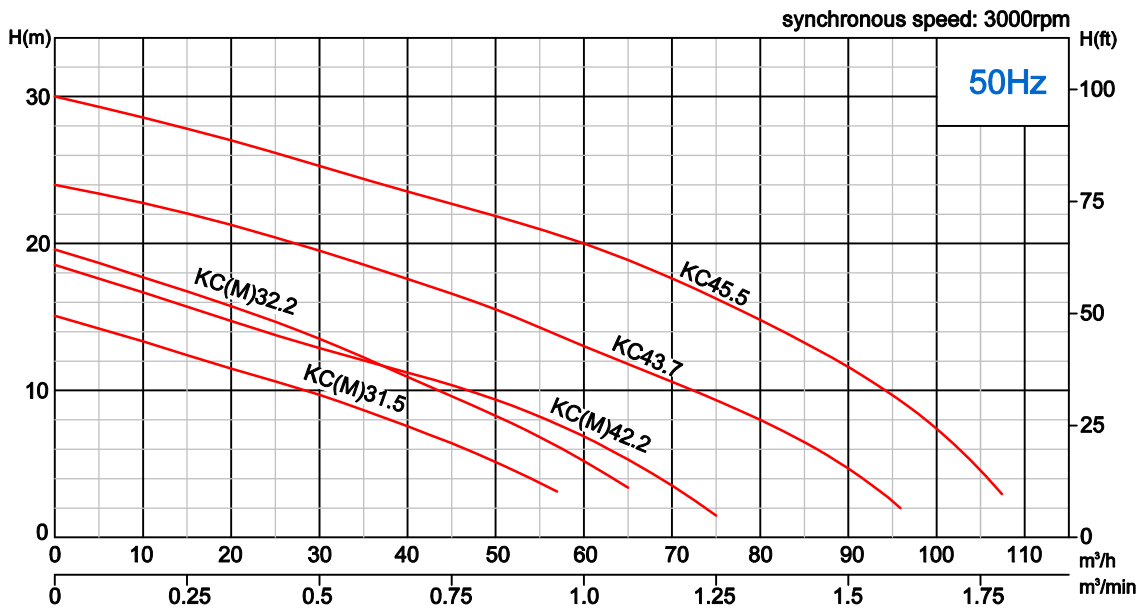
## Materials of components

Item No.	Part name	Material	Item No.	Part name	Material
01	Hose coupling	Cast iron	25	Strainer	AISI201SS
02	Handle	steel	27	Stator	
05a	Upper cover	Cast iron	28	Rotor	Shaft:420SS
05b	Upper cover	Cast iron	31a	Bearing	Ball bearing
07	Bearing house	Cast iron	31b	Bearing	Ball bearing
10	Seal house	Cast iron	33	Motor protector	
11	Motor casing	Stainless steel	34	Mechanical seal	Sic-Sic/Carbon-Sic(<2.2kW) Sic-Sic/Sic-Sic(3.7-5.5kW)
12	Outer casing	Stainless steel	35	Oil seal	
14	Impeller	Chrome steel	47	Cable	H07RN-F
15	Diffuser	Cast iron			

## Dimensions & weights

Model (50/60Hz)	d	A	A1	B	D	H	W1	N.W	G.W	Packing dimension
KCM31.5	80	251	191	633	262	565	110	40.5	44.5	675×290×315
KCM32.2	80	251	191	658	262	590	110	43	47	700×290×315
KCM42.2	100	251	191	668	262	590	110	43	47	720×290×315
KC31.5	80	251	191	583	262	515	110	38.5	42.5	625×290×315
KC32.2	80	251	191	583	262	515	110	41	45	625×290×315
KC42.2	100	251	191	593	262	515	110	41	45	645×290×315
KC43.7	100	288	213	663	302	579	135	60	66	730×320×345
KC45.5	100	288	213	703	302	619	135	67	73	770×320×355

### Performance curves



### Performance table

Model (50/60Hz)	Outlet mm	Motor power		Rated current A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
		kW	HP		m³/h	m³/min		m³/h	m³/min		
KCM31.5	80	1.5	2	10	30	0.5	10	57	0.95	15/17	10
KCM32.2	80	2.2	3	14	30	0.5	13	65	1.08	20/21	10
KCM42.2	100	2.2	3	14	48	0.8	10.5	75	1.25	19/20	10
KC31.5	80	1.5	2	3.5	30	0.5	10	57	0.95	15/17	10
KC32.2	80	2.2	3	5.0/5.1	30	0.5	13	65	1.08	20/21	10
KC42.2	100	2.2	3	5.0/5.1	48	0.8	10.5	75	1.25	19/20	10
KC43.7	100	3.7	5	7.7/8.0	60	1.0	13.5	96	1.6	24/25	10
KC45.5	100	5.5	7.5	11.4/11.6	60	1.0	20	108	1.8	30/31	10

• **KC:** three phase; **KCM:** single phase

# KS(M) SUBMERSIBLE DRAINAGE PUMP

Compact design, high performance and exceptional durability for handling abrasive liquid, widely used in general construction and civil engineering.

The motor body and pump body are made of rigid cast iron or stainless steel for long-lasting durability. Greatly increased maximum submersion depth due to mechanical seal resistant to high pressure. Semi-open impeller made of high chrome alloy matching with wear plate (ductile iron) achieves superior durability.

Effective motor cooling due to discharge channel cast as part of the motor housing.

Discharge 50mm(2") to 150mm(6"), motor 0.25kW (0.35HP) to 15 kW (20HP).

Hermetically sealed motor equipped with built-in thermal protection.



## Specification

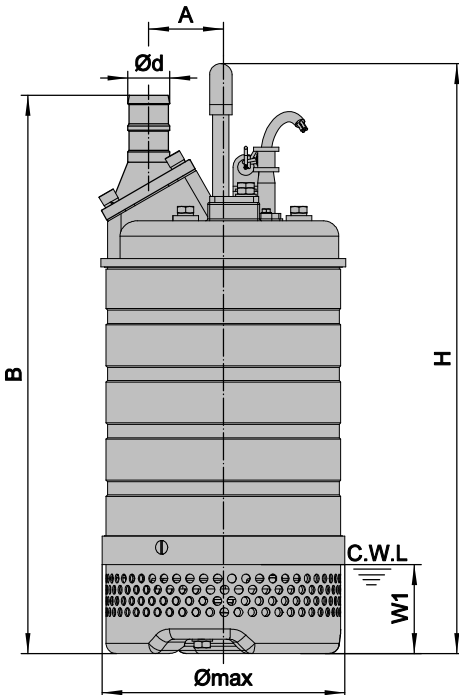
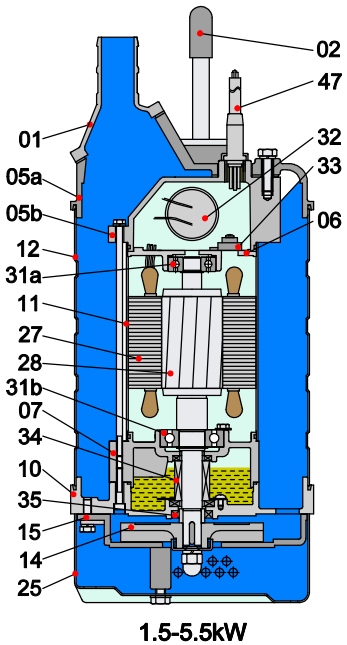
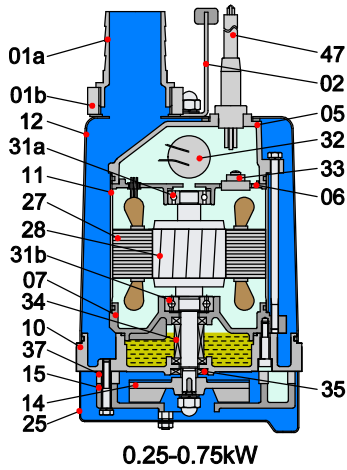
- Capacity: up to 168m<sup>3</sup>/h
- Head: up to 57 meters
- Power: 0.25kW (0.35HP) to 15 kW (20HP)
- KSM0.25~1.5: single phase 220V ± 10%, 50Hz  
220V ± 10%, 60Hz
- KS1.5~15: three phase 400V ± 10%, 50Hz  
380V ± 10%, 60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8m(0.25 ~ 0.75kW)  
15m(1.5 ~ 5.5kW)  
8m(7.5 ~ 15kW)
- Water temperature: up to 40 °C
- Max. water depth: KSM0.25~0.75kW: 10m  
KS(M)1.1~15kW: 25m

## Application

- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes

## Special features on request

- Other voltages
- The length of cable is optional



C.W.L.: continuous running water level

## Materials of components

Item No.	Part name	Material
01a	Hose coupling	ABS
01b	Hose coupling	PA66
02	Handle	Rubber&AISI304SS
05	Upper cover	Cast iron
06	Up-Bearing house	Aluminum die casting
07	Bearing house	Cast iron
10	Seal house	Cast iron
11	Motor casing	Stainless steel
12	Outer casing	AISI304SS
14	Impeller	Ductile iron
15	Diffuser	Cast iron
25	Strainer	AISI304SS
27	Stator	
28	Rotor	Shaft:AISI304SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
32	Capacitor	
33	Motor protector	
34	Mechanical seal	Sic-Ceramic/Ceramic-Carbon
35	Oil seal	
37	Gasket	NBR
47	Cable	H07RN-F

Item No.	Part name	Material
01	Hose coupling	Cast iron
02	Handle	Rubber&steel
05a	Upper cover	Cast iron
05b	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor casing	Stainless steel
12	Outer casing	Stainless steel
14	Impeller	High chrome alloy
15	Diffuser	Ductile iron
25	Strainer	Steel
27	Stator	
28	Rotor	Shaft:AISI420SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
32	Capacitor	(Single phase only)
33	Motor protector	
34	Mechanical seal	Sic-Sic/Carbon-Sic(<2.2kW) Sic-Sic/Sic-Sic(3.7-5.5kW)
35	Oil seal	
47	Cable	H07RN-F

## Dimensions

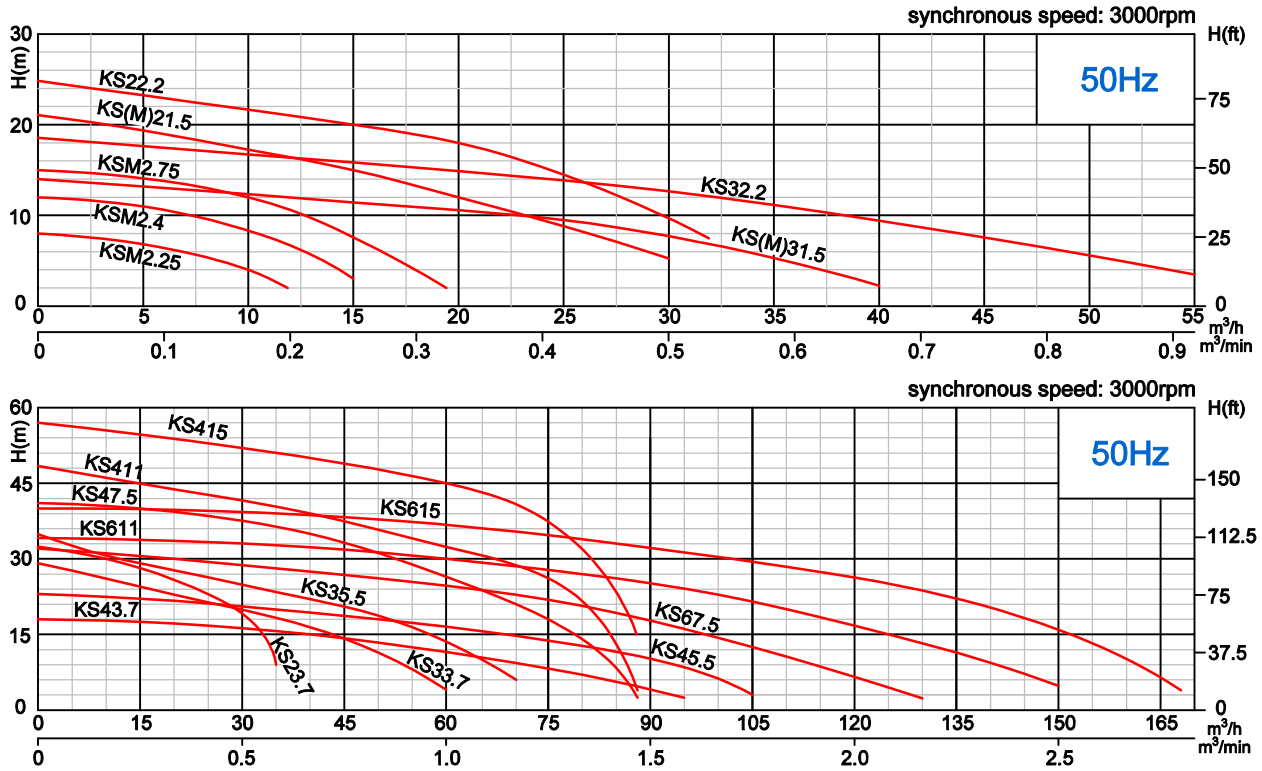
Model	A	H	B	Ømax	W1	Model	A	H	B	Ømax	W1
KSM2.25(F)	42	347	342	184	50	KS43.7	88	514	613	300	76
KSM2.4(F)	42	347	342	184	50	KS35.5	80	554	640	300	76
KSM2.75(F)	42	367	362	184	50	KS45.5	88	554	653	300	76
KSM2.15(F)	75	582	569	240	87	KS23.7F	74	569	646	320	76
KSM31.5(F)	83	582	577	240	87	KS33.7F	80	569	655	320	76
KS21.5	75	563	550	240	87	KS43.7F	88	569	668	320	76
KS31.5	83	563	558	240	87	KS35.5F	80	609	695	320	76
KS22.2	75	563	550	240	87	KS45.5F	88	609	708	320	76
KS32.2	83	563	558	240	87	KS47.5	54	696	810	355	142
KS21.5F	75	613	600	260	87	KS67.5	54	696	810	355	142
KS31.5F	83	613	608	260	87	KS411	54	741	855	355	142
KS22.2F	75	613	600	260	87	KS611	54	741	855	355	142
KS32.2F	83	613	608	260	87	KS415	54	768	882	355	142
KS23.7	74	514	591	300	76	KS615	54	768	882	355	142
KS33.7	80	514	600	300	76						

B: the height from pump's bottom to outlet

H: the height from pump's bottom to handle's top

# KS(M) SUBMERSIBLE DRAINAGE PUMP

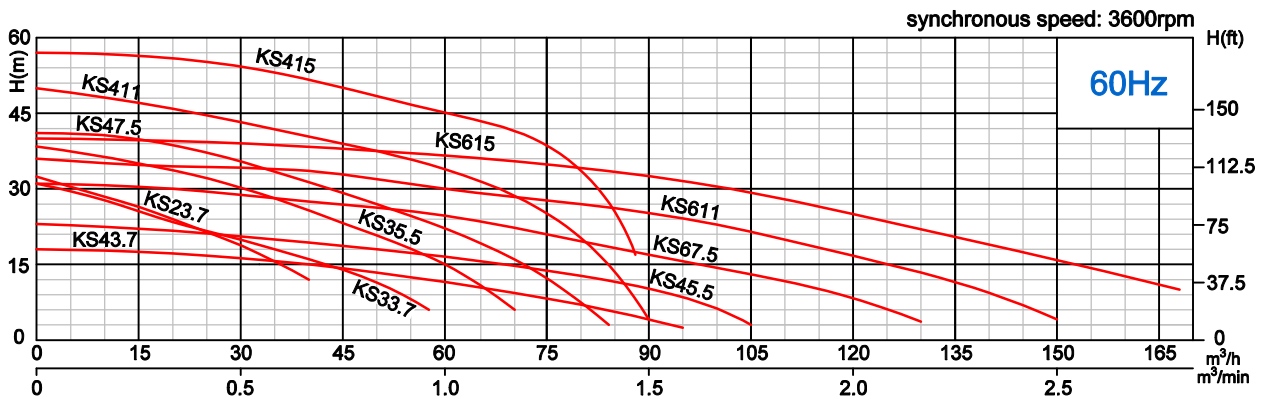
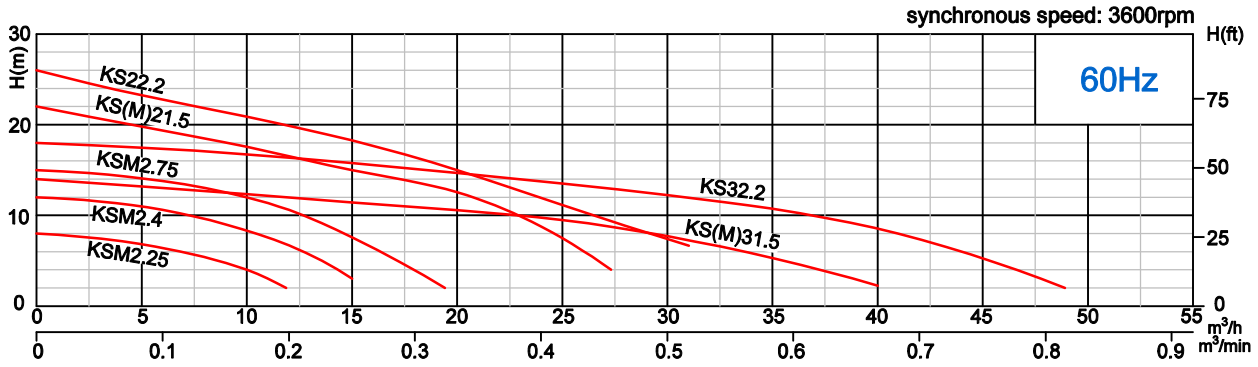
## Performance curves



## Performance table

Model (50Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max head	Impeller passage	N.W	G.W	Packing dimension
	mm	kW	HP			A	m³/h		m³/min	m³/h					
KSM2.25(F)	50	0.25	0.35	220	2.0	6	0.1	7	12	0.2	8	6	14	15	385x225x250
KSM2.4(F)	50	0.4	0.55	220	3.0	8	0.13	10	14.5	0.24	12	6	15	16	385x225x250
KSM2.75(F)	50	0.75	1	220	5.0	10	0.17	12	19.5	0.32	15	6	17	18	405x225x250
KSM21.5(F)	50	1.5	2	220	10	15	0.25	15	30	0.5	21	8.5	37	41	660x270x315
KSM31.5(F)	80	1.5	2	220	10	27	0.45	9	42	0.7	14	8.5	37	41	660x270x315
KS21.5	50	1.5	2	400	3.5	15	0.25	15	30	0.5	21	8.5	37	41	620x270x315
KS21.5F	50	1.5	2	400	3.5	15	0.25	15	30	0.5	21	8.5	39	43	690x270x315
KS31.5	80	1.5	2	400	3.5	27	0.45	9	42	0.7	14	8.5	37	41	620x270x315
KS31.5F	80	1.5	2	400	3.5	27	0.45	9	42	0.7	14	8.5	39	43	690x270x315
KS22.2	50	2.2	3	400	5.0	20	0.33	18	32	0.53	25	8.5	40	44	620x270x315
KS22.2F	50	2.2	3	400	5.0	20	0.33	18	32	0.53	25	8.5	42	46	690x270x315
KS32.2	80	2.2	3	400	5.0	36	0.6	11	55	0.92	18.5	8.5	40	44	620x270x315
KS32.2F	80	2.2	3	400	5.0	36	0.6	11	55	0.92	18.5	8.5	42	46	690x270x315
KS23.7	50	3.7	5	400	7.7	18	0.3	26	36	0.6	32	8.5	58	64	670x320x345
KS23.7F	50	3.7	5	400	7.7	18	0.3	26	36	0.6	32	8.5	60	66	730x320x345
KS33.7	80	3.7	5	400	7.7	35	0.58	18.5	60	1.0	29	8.5	58	64	670x320x345
KS33.7F	80	3.7	5	400	7.7	35	0.58	18.5	60	1.0	29	8.5	60	66	730x320x345
KS43.7	100	3.7	5	400	7.7	60	1.0	11.5	95	1.58	18	8.5	59	65	670x320x345
KS43.7F	100	3.7	5	400	7.7	60	1.0	11.5	95	1.58	18	8.5	61	67	730x320x345
KS35.5	80	5.5	7.5	400	11.4	45	0.75	22	72	1.2	35	8.5	66	72	710x320x355
KS35.5F	80	5.5	7.5	400	11.4	45	0.75	22	72	1.2	35	8.5	68	74	770x320x355
KS45.5	100	5.5	7.5	400	11.4	60	1.0	16	105	1.75	23	8.5	67	73	710x320x355
KS45.5F	100	5.5	7.5	400	11.4	60	1.0	16	105	1.75	23	8.5	69	75	770x320x355
KS47.5	100	7.5	10	400	15	60	1.0	26	88	1.47	41	11.5	108	120	895x395x455
KS67.5	150	7.5	10	400	15	80	1.33	20.5	130	2.17	32	19.5	110	122	895x395x455
KS411	100	11	15	400	22	60	1.0	32	86.4	1.44	48.5	11.5	123	135	925x395x455
KS611	150	11	15	400	22	90	1.5	25	150	2.5	34	19.5	125	137	925x395x455
KS415	100	15	20	400	29.5	60	1.0	45	86.4	1.44	57	11.5	145	157	965x395x455
KS615	150	15	20	400	29.5	102	1.7	30	168	2.8	40	19.5	146	158	965x395x455

## Performance curves



## Performance table

Model (60Hz)	Outlet mm	Motor power		Voltage V	Rated current A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm	N.W kg	G.W kg	Packing dimension mm
		kW	HP			m³/h	m³/min		m³/h	m³/min					
KSM2.25(F)	50	0.25	0.35	220	2.0	6	0.1	7	12	0.20	8	6	14	15	385x225x250
KSM2.4(F)	50	0.4	0.55	220	3.0	8	0.13	10	14.5	0.24	12	6	15	16	385x225x250
KSM2.75(F)	50	0.75	1	220	5.0	10	0.17	12	19.5	0.32	15	6	17	18	405x225x250
KSM21.5(F)	50	1.5	2	220	10	15	0.25	15	27	0.45	22	8.5	37	41	660x270x315
KSM31.5(F)	80	1.5	2	220	10	27	0.45	9	42	0.70	14	8.5	37	41	660x270x315
KS21.5	50	1.5	2	380	3.5	15	0.25	15	27	0.45	22	8.5	37	41	620x270x315
KS21.5F	50	1.5	2	380	3.5	15	0.25	15	27	0.45	22	8.5	39	43	690x270x315
KS31.5	80	1.5	2	380	3.5	27	0.45	9	42	0.70	14	8.5	37	41	620x270x315
KS31.5F	80	1.5	2	380	3.5	27	0.45	9	42	0.70	14	8.5	39	43	690x270x315
KS22.2	50	2.2	3	380	5.1	20	0.33	15	31	0.52	26	8.5	40	44	620x270x315
KS22.2F	50	2.2	3	380	5.1	20	0.33	15	31	0.52	26	8.5	42	46	690x270x315
KS32.2	80	2.2	3	380	5.1	30	0.50	12	47	0.92	19	8.5	40	44	620x270x315
KS32.2F	80	2.2	3	380	5.1	30	0.50	12	47	0.92	19	8.5	42	46	690x270x315
KS23.7	50	3.7	5	380	8.0	18	0.30	25	42	0.70	32	8.5	58	64	670x320x345
KS23.7F	50	3.7	5	380	8.0	18	0.30	25	42	0.70	32	8.5	60	66	730x320x345
KS33.7	80	3.7	5	380	8.0	35	0.58	18.5	57	0.95	31	8.5	58	64	670x320x345
KS33.7F	80	3.7	5	380	8.0	35	0.58	18.5	57	0.95	31	8.5	60	66	730x320x345
KS43.7	100	3.7	5	380	8.0	60	1.0	12	95	1.58	18	8.5	59	65	670x320x345
KS43.7F	100	3.7	5	380	8.0	60	1.0	12	95	1.58	18	8.5	61	67	730x320x345
KS35.5	80	5.5	7.5	380	11.6	45	0.75	22	69	1.15	38	8.5	66	72	710x320x355
KS35.5F	80	5.5	7.5	380	11.6	45	0.75	22	69	1.15	38	8.5	68	74	770x320x355
KS45.5	100	5.5	7.5	380	11.6	60	1.0	16	105	1.75	23	8.5	67	73	710x320x355
KS45.5F	100	5.5	7.5	380	11.6	60	1.0	16	105	1.75	23	8.5	69	75	770x320x355
KS47.5	100	7.5	10	380	15.4	60	1.0	22	84	1.40	40	11.5	108	120	894x394x455
KS67.5	150	7.5	10	380	15.4	80	1.33	18.5	130	2.17	32	19.5	110	122	894x394x455
KS411	100	11	15	380	22.5	60	1.0	34	89	1.48	50	11.5	123	135	924x394x455
KS611	150	11	15	380	22.5	90	1.50	25	150	2.50	36	19.5	125	137	924x394x455
KS415	100	15	20	380	30	60	1.0	45	86.4	1.44	57	11.5	145	157	965x395x455
KS615	150	15	20	380	30	102	1.7	30	168	2.8	40	19.5	146	158	965x395x455

•KS: three phase; KSM: single phase; KSM...F: with float switch

# KSE INTELLIGENT SUBMERSIBLE DRAINAGE PUMP

Effective motor cooling due to discharge channel cast as part of the motor housing, allowing the pump to run at low water level for a long time.

Semi-open impeller is made of high chrome alloy.

The pump can operate automatically with a built-in intelligent control system, thus achieving low total energy consumption.



## Main advantages

- Prevent the reverse phase and ensure correct rotation of the impeller
- Prevent the open phase or impeller jam, to prevent accidental damage
- Automatically stop the pump in event of overload, abnormal voltage and recovery 5mins later
- The pump stop working at high temperature, and will automatically restart after cooling to the specified temperature
- The water sensor's height is adjustable to control pump operation and stop
- The pump stops working within 60s when water level is below the probe, when the water level rises to contact the electric probe, pump starts operating again
- Rapid assessment about the pump operation and malfunction history

## Specification

- Capacity: up to 150m<sup>3</sup>/h
- Head: up to 50 meters
- Power: 1.5kW (2HP) to 11 kW (15HP)
- Power supply: three phase 400V ± 10%,50Hz  
380V ± 10%,60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 15m(1.5 ~ 5.5kW)  
8m(7.5 ~ 11kW)
- Water temperature: up to 40°C
- Max. water depth: 25m

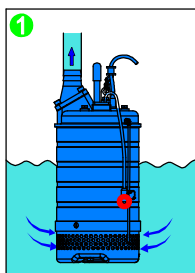
## Application

- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes
- Pumping fluid: sludge, liquid-containing mud and bentonite

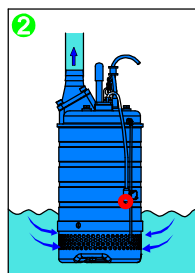
## Special features on request

- Other voltages

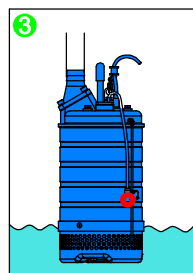
## Automatic control



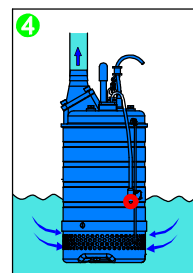
1 Pump continues to run while the electric probe remains submerged



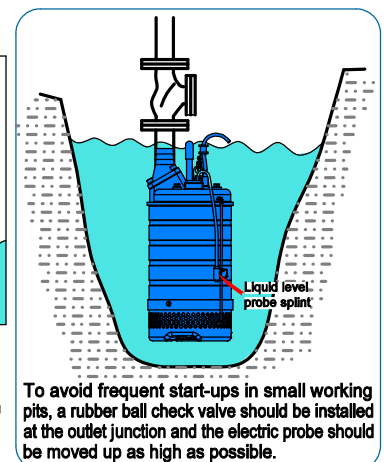
2 When the water surface falls below the electric probe, timer starts to count about one minute



3 Pump stops in about one minute after the water level falls

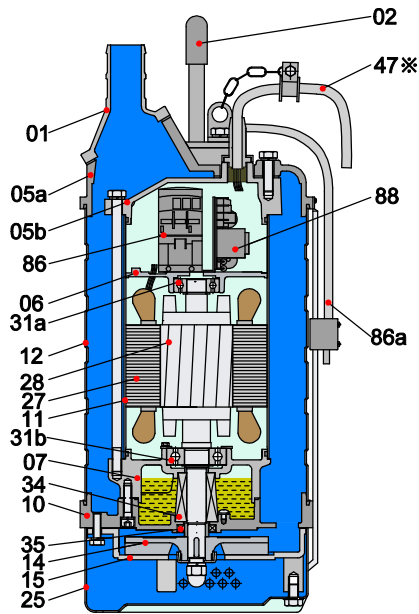


4 When the water level rises to contact the electric probe, pump starts operating again

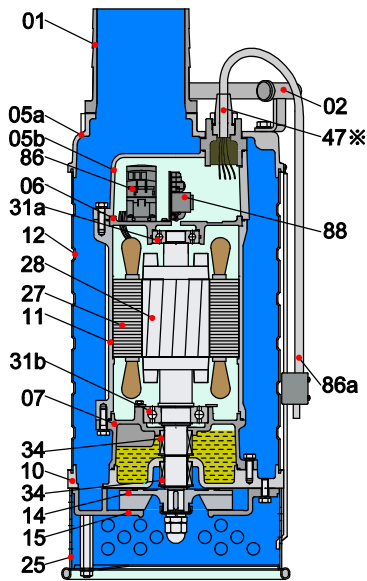


To avoid frequent start-ups in small working pits, a rubber ball check valve should be installed at the outlet junction and the electric probe should be moved up as high as possible.

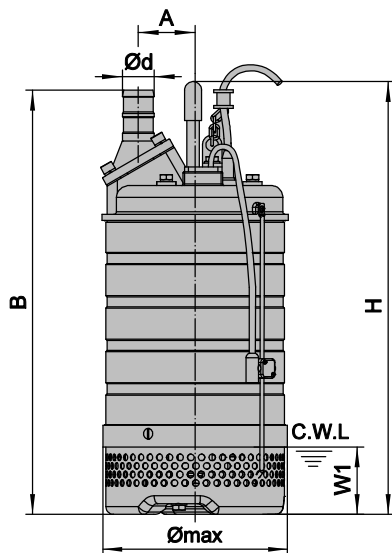




1.5-5.5kW



7.5-11kW



C.W.L: continuous running water level

### Materials of components

Item No.	Part name	Material
01*	Hose coupling	Cast iron
02*	Handle	Rubber&steel
05a*	Upper cover	Cast iron
05b*	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07*	Bearing house	Cast iron
10*	Seal house	Cast iron
11	Motor casing	Stainless steel
12	Outer casing	Stainless steel
14*	Impeller	High chrome alloy
15*	Diffuser	Ductile iron
25*	Strainer	Steel
27	Stator	
28	Rotor	Shaft:AISI420SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
34	Mechanical seal	Sic-Sic/Carbon-Sic (< 2.2kW) Sic-Sic/Sic-Sic (> 3.7kW)
35	Oil seal	
47	Cable	
86	AC Contactor	
86a	Water level sensor	
88	Controller block	

\*Optional:AISI304SS

Item No.	Part name	Material
01*	Hose coupling	Cast iron
02*	Handle	Steel
05a*	Upper cover	Cast iron
05b*	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07*	Bearing house	Cast iron
10*	Seal house	Cast iron
11*	Motor casing	Cast iron
12	Outer casing	Stainless steel
14*	Impeller	High chrome alloy
15*	Diffuser	Ductile iron
25*	Strainer	Steel
27	Stator	
28	Rotor	Shaft:AISI420SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
34	Mechanical seal	Sic-Sic
35	Oil seal	
47	Cable	
86	AC Contactor	
86a	Water level sensor	
88	Controller block	

\*Optional:AISI304SS

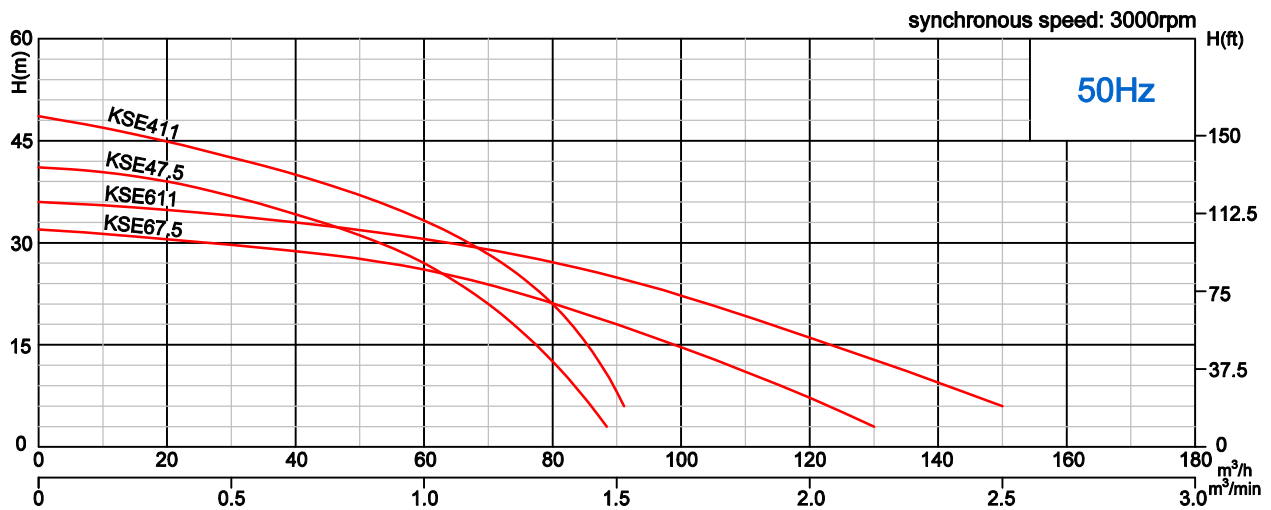
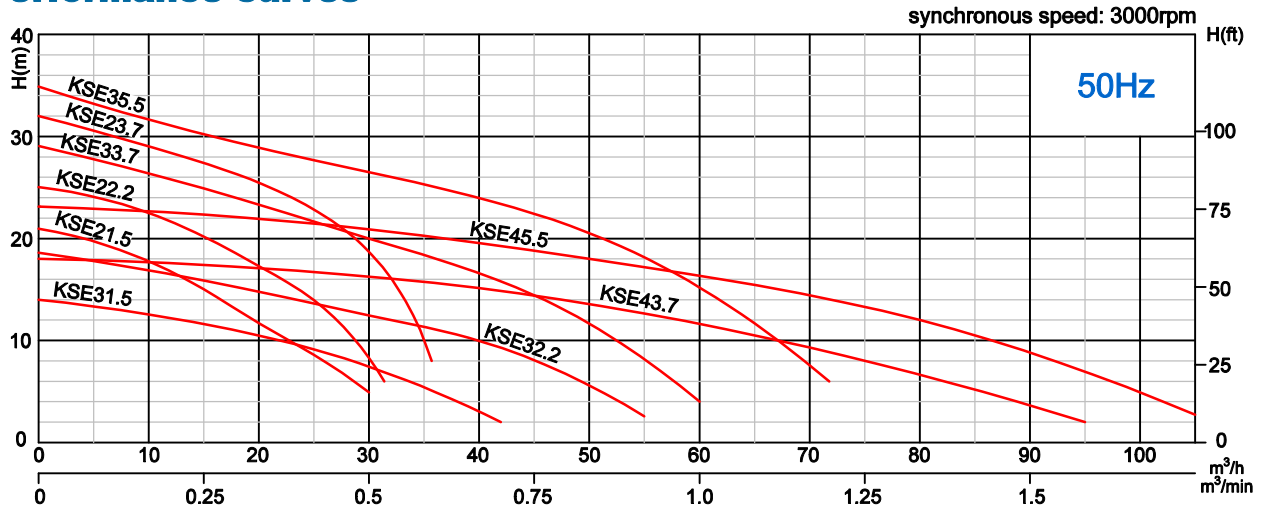
### Dimensions

Model	A	H	B	Ømax	W1	Model	A	H	B	Ømax	W1
KSE21.5	75	613	600	260	87	KSE35.5	80	609	695	320	76
KSE31.5	83	613	608	260	87	KSE45.5	88	609	708	320	76
KSE22.2	75	613	600	260	87	KSE47.5	54	768	882	375	142
KSE32.2	83	613	608	260	87	KSE67.5	54	768	882	375	142
KSE23.7	74	569	646	320	76	KSE411	54	813	927	375	142
KSE33.7	80	569	655	320	76	KSE611	54	813	927	375	142
KSE43.7	88	569	668	320	76						

B: the height from pump's bottom to outlet

H: the height from pump's bottom to handle's top

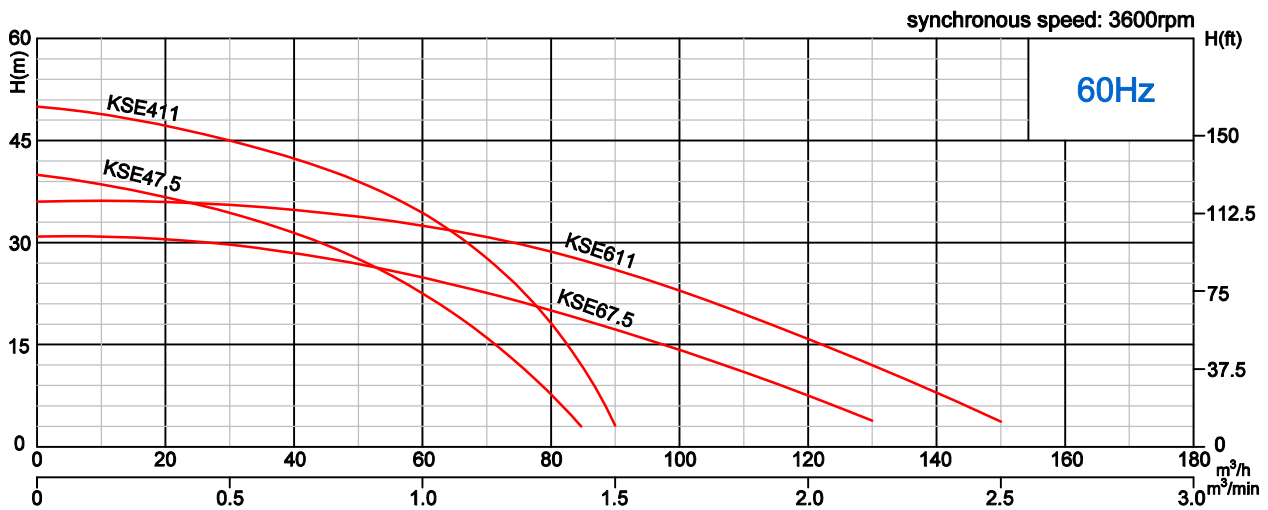
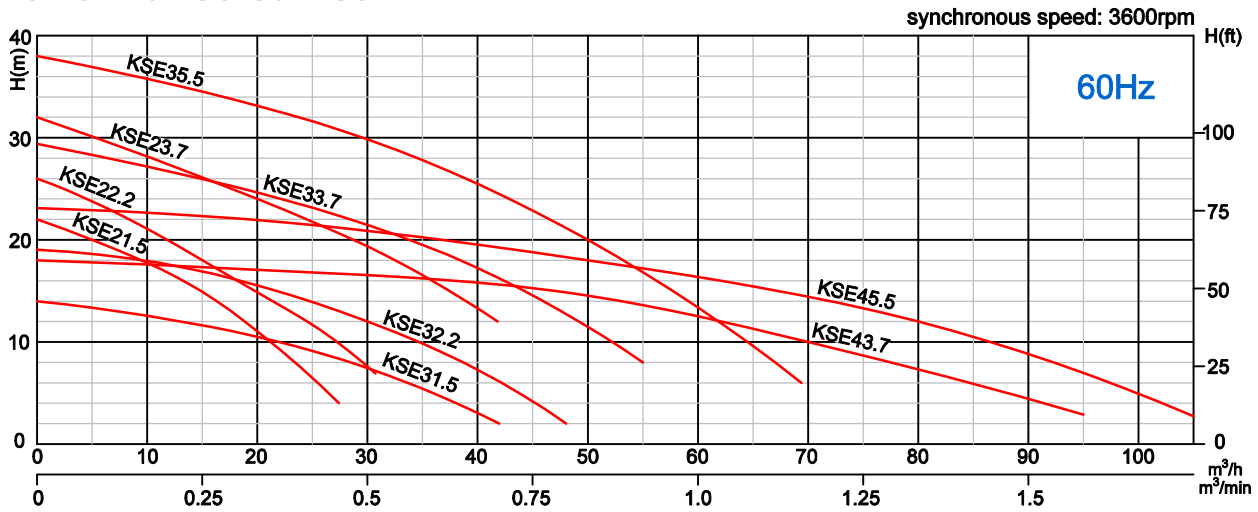
## Performance curves



## Performance table

Model (50Hz)	Outlet	Motor power		Rated current (400V)	Rated capacity		Rated head	Max capacity		Max head	Impeller passage	N.W	G.W	Packing dimension
	mm	kW	HP	A	m³/h	m³/min	m	m³/h	m³/min	m	mm	kg	kg	mm
KSE21.5	50	1.5	2	3.5	15	0.25	15	30	0.5	21	8.5	39	43	690x270x315
KSE31.5	80	1.5	2	3.5	27	0.45	9	42	0.7	14	8.5	39	43	690x270x315
KSE22.2	50	2.2	3	5.0	20	0.33	18	32	0.53	25	8.5	42	46	690x270x315
KSE32.2	80	2.2	3	5.0	36	0.6	11	55	0.92	18.5	8.5	42	46	690x270x315
KSE23.7	50	3.7	5	7.7	18	0.3	26	36	0.6	32	8.5	60	66	730x320x345
KSE33.7	80	3.7	5	7.7	35	0.58	18.5	60	1.0	29	8.5	60	66	730x320x345
KSE43.7	100	3.7	5	7.7	60	1.0	11.5	95	1.58	18	8.5	61	67	730x320x345
KSE35.5	80	5.5	7.5	11.4	45	0.75	22	72	1.2	35	8.5	68	74	770x320x365
KSE45.5	100	5.5	7.5	11.4	60	1.0	16	105	1.75	23	8.5	71	75	770x320x365
KSE47.5	100	7.5	10	15	60	1.0	26	88	1.47	41	11.5	118	130	965x395x455
KSE67.5	150	7.5	10	15	80	1.33	20.5	130	2.17	32	19.5	119	131	965x395x455
KSE41.1	100	11	15	22	60	1.0	32	86.4	1.44	48.5	11.5	136	149	975x395x455
KSE61.1	150	11	15	22	90	1.5	25	150	2.5	34	19.5	137	150	975x395x455

### Performance curves



### Performance table

Model (60Hz)	Outlet	Motor power		Rated current (380V)	Rated capacity		Rated head	Max capacity		Max head	Impeller passage	N.W	G.W	Packing dimension
	mm	kW	HP	A	m³/h	m³/min	m	m³/h	m³/min	m	mm	kg	kg	mm
KSE21.5	50	1.5	2	3.5	15	0.25	15	27	0.45	22	8.5	39	43	690x270x315
KSE31.5	80	1.5	2	3.5	27	0.45	9	42	0.70	14	8.5	39	43	690x270x315
KSE22.2	50	2.2	3	5.1	20	0.33	15	31	0.52	26	8.5	42	46	690x270x315
KSE32.2	80	2.2	3	5.1	30	0.50	12	47	0.92	19	8.5	42	46	690x270x315
KSE23.7	50	3.7	5	8.0	18	0.30	25	42	0.70	32	8.5	60	66	730x320x345
KSE33.7	80	3.7	5	8.0	35	0.58	18.5	57	0.95	31	8.5	60	66	730x320x345
KSE43.7	100	3.7	5	8.0	60	1.0	12	95	1.58	18	8.5	61	67	730x320x345
KSE35.5	80	5.5	7.5	11.6	45	0.75	22	69	1.15	38	8.5	68	74	770x320x365
KSE45.5	100	5.5	7.5	11.6	60	1.0	16	105	1.75	23	8.5	71	75	770x320x365
KSE47.5	100	7.5	10	15.4	60	1.0	22	84	1.40	40	11.5	118	130	965x395x455
KSE67.5	150	7.5	10	15.4	80	1.33	18.5	130	2.17	31	19.5	119	131	965x395x455
KSE411	100	11	15	22.5	60	1.0	34	89	1.48	50	11.5	136	149	975x395x455
KSE611	150	11	15	22.5	90	1.50	25	150	2.5	36	19.5	137	150	975x395x455

# KSS(M) SUBMERSIBLE DRAINAGE PUMP

Compact design, high performance and exceptional durability for handling abrasive liquid, widely used in general construction and civil engineering.

The body of motor and pump is made of stainless steel for long-lasting durability.

Greatly increased maximum submersion depth due to mechanical seal resistant to high pressure.

Semi-open impeller made of high chrome alloy matching with wear plate (ductile iron) achieves superior durability.

Effective motor cooling due to discharge channel cast as part of the motor housing.

Discharge 50mm(2") to 150mm(6"), motor 0.25kW (0.35HP) to 11 kW (15HP).

Hermetically sealed motor equipped with built-in thermal protection for pumps with power below 11kW.



## Specification

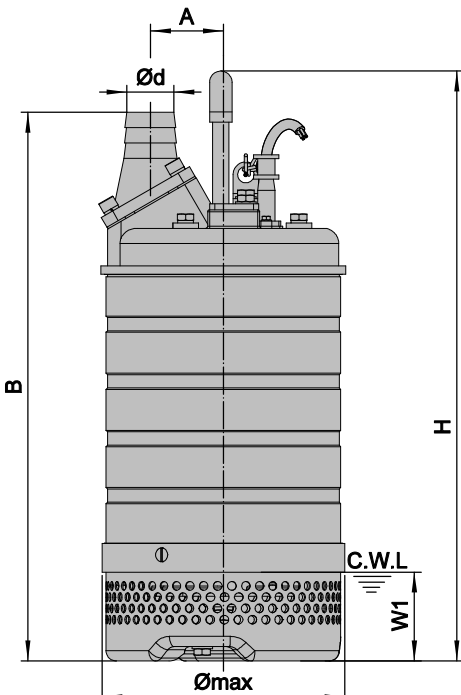
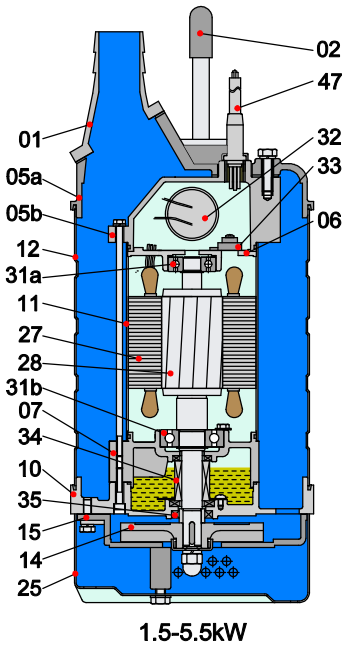
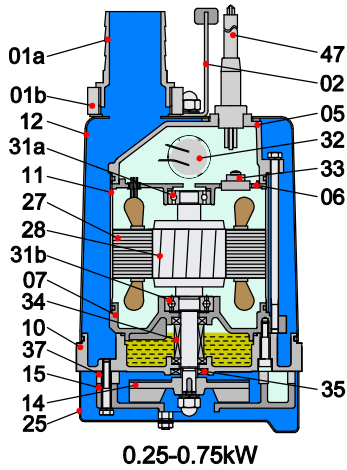
- Capacity: up to 150m<sup>3</sup>/h
- Head: up to 50 meters
- Power: 0.25kW (0.35HP) to 11 kW (15HP)
- KSSM0.25~0.75: single phase 220V ± 10%,50Hz  
220V ± 10%,60Hz
- KSS1.5~11: three phase 400V ± 10%,50Hz  
380V ± 10%,60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8m(0.25 ~ 0.75kW)  
15m(1.5 ~ 5.5kW)  
8m(7.5 ~ 11kW)
- Water temperature: up to 40°C
- Max. water depth: KSSM0.25~0.75kW: 10m  
KSS1.1~11kW: 25m

## Application

- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes

## Special features on request

- Other voltages
- The length of cable is optional



C.W.L: continuous running water level

### Materials of components

Item No.	Part name	Material
01a	Hose coupling	ABS
01b	Hose coupling	PA66
02	Handle	Rubber&AISI304SS
05	Upper cover	AISI304SS
06	Up-Bearing house	Aluminum die casting
07	Bearing house	AISI304SS
10	Seal house	AISI304SS
11	Motor casing	AISI304SS
12	Outer casing	AISI304SS
14	Impeller	AISI304SS
15	Diffuser	AISI304SS
25	Strainer	AISI304SS
27	Stator	
28	Rotor	Shaft:AISI304SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
32	Capacitor	
33	Motor protector	
34	Mechanical seal	Sic-Ceramic/Ceramic-Carbon
35	Oil seal	
37	Gasket	NBR
47	Cable	H07RN-F

Item No.	Part name	Material
01	Hose coupling	AISI304SS
02	Handle	Rubber&AISI304SS
05a	Upper cover	AISI304SS
05b	Upper cover	AISI304SS
06	Up-Bearing house	AISI304SS
07	Bearing house	AISI304SS
10	Seal bracket	AISI304SS
11	Motor casing	AISI304SS
12	Outer casing	AISI304SS
14	Impeller	AISI304SS
15	Diffuser	AISI304SS
25	Strainer	AISI304SS
27	Stator	
28	Rotor	Shaft:AISI304SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
32	Capacitor	(Single phase only)
33	Motor protector	
34	Mechanical seal	Sic-Sic/Carbon-Sic(< 2.2kW) Sic-Sic/Sic-Sic(3.7-5.5kW)
35	Oil seal	
47	Cable	H07RNF

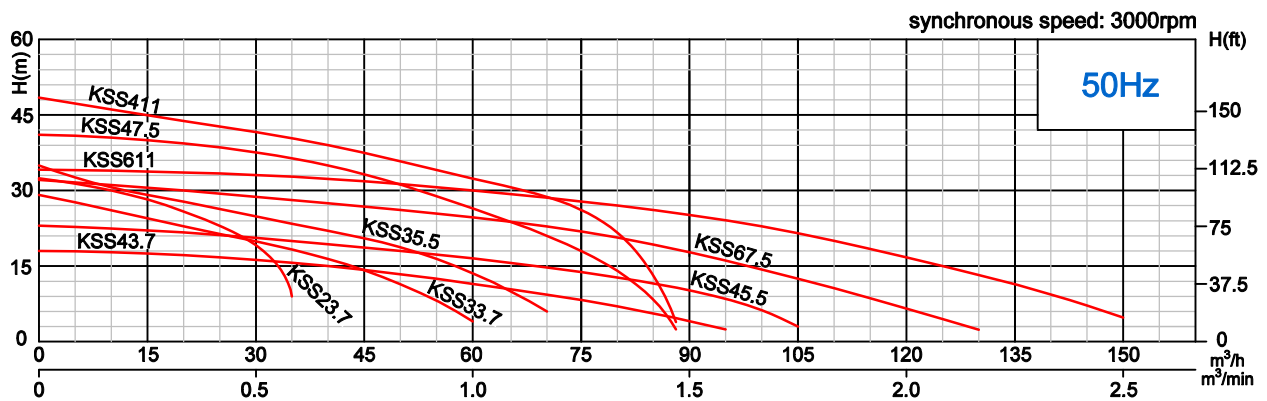
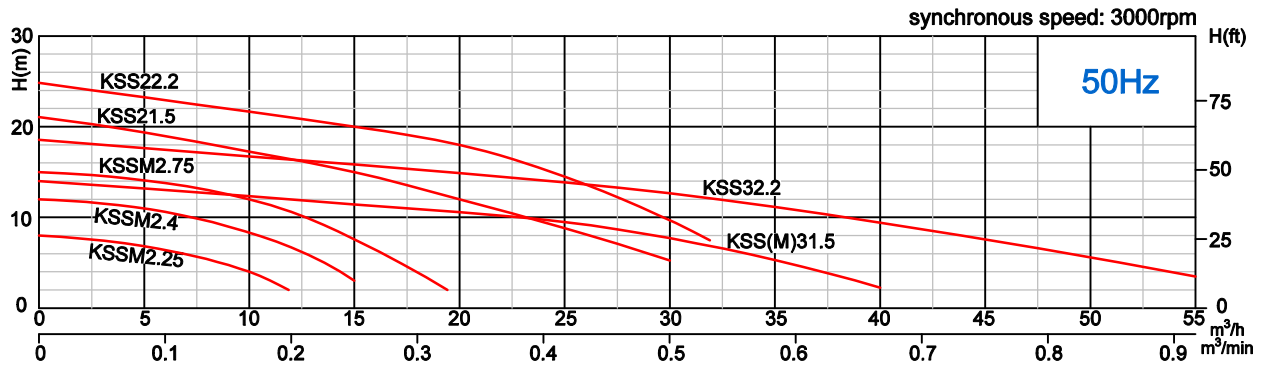
### Dimensions

Model	A	H	B	Ømax	W1	Model	A	H	B	Ømax	W1
KSSM2.25(F)	42	347	342	184	50	KSS43.7	86	514	613	300	76
KSSM2.4(F)	42	347	342	184	50	KSS35.5	72	554	624	300	76
KSSM2.75(F)	42	367	362	184	50	KSS45.5	86	554	653	300	76
KSS21.5	68	558	538	240	87	KSS23.7F	71	569	642	320	76
KSS31.5	78	558	548	240	87	KSS33.7F	72	569	639	320	76
KSS22.2	68	558	538	240	87	KSS43.7F	86	569	668	320	76
KSS32.2	78	558	548	240	87	KSS35.5F	72	609	679	320	76
KSS21.5F	68	608	588	260	87	KSS45.5F	86	609	708	320	76
KSS31.5F	78	608	598	260	87	KSS47.5	54	696	810	355	142
KSS22.2F	68	608	588	260	87	KSS67.5	54	696	810	355	142
KSS32.2F	78	608	598	260	87	KSS411	54	741	855	355	142
KSS23.7	71	514	587	300	76	KSS611	54	741	855	355	142
KSS33.7	72	514	584	300	76						

B: the height from pump's bottom to outlet  
H: the height from pump's bottom to handle's top

# KSS(M) SUBMERSIBLE DRAINAGE PUMP

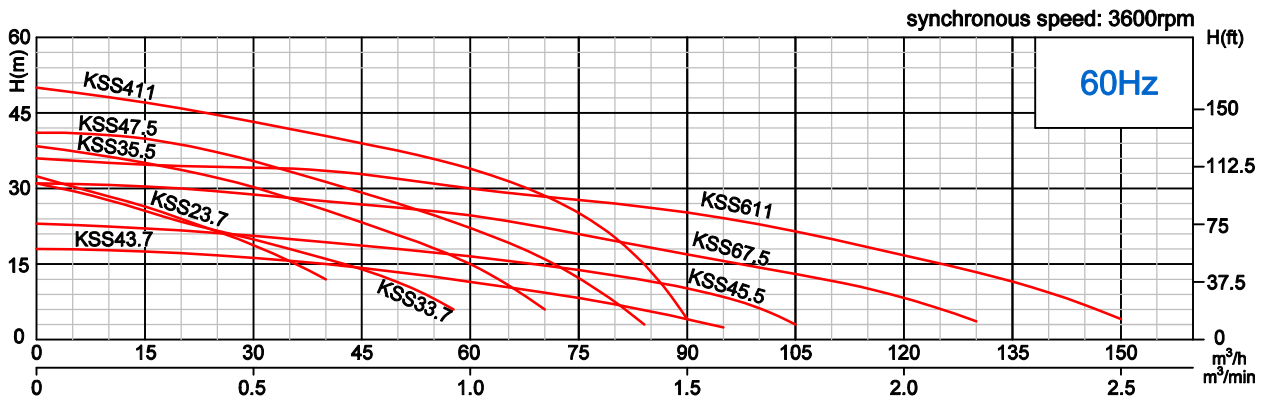
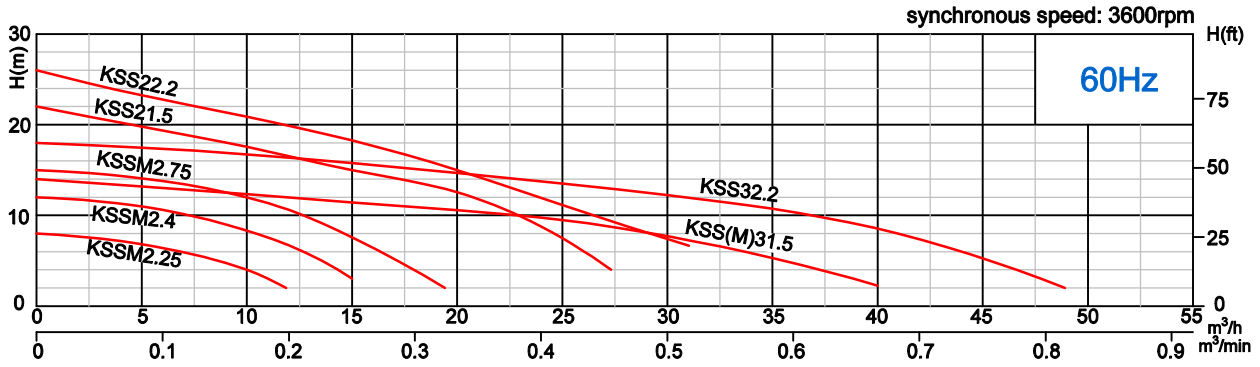
## Performance curves



## Performance table

Model (50Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max head	Impeller passage	N.W	G.W	Packing dimension
	mm	kW	HP			A	m³/h		m³/min	m³/h					
KSSM2.25(F)	50	0.25	0.35	220	2.0	6	0.1	7	12	0.2	8	6	14	15	385x225x250
KSSM2.4(F)	50	0.4	0.55	220	3.0	8	0.13	10	14.5	0.24	12	6	15	16	385x225x250
KSSM2.75(F)	50	0.75	1	220	5.0	10	0.17	12	19.5	0.32	15	6	17	18	405x225x250
KSS21.5	50	1.5	2	400	3.5	15	0.25	15	30	0.5	21	8.5	37	41	620x270x315
KSS21.5F	50	1.5	2	400	3.5	15	0.25	15	30	0.5	21	8.5	39	43	690x270x315
KSS31.5	80	1.5	2	400	3.5	27	0.45	9	42	0.7	14	8.5	37	41	620x270x315
KSS31.5F	80	1.5	2	400	3.5	27	0.45	9	42	0.7	14	8.5	39	43	690x270x315
KSS22.2	50	2.2	3	400	5.0	20	0.33	18	32	0.53	25	8.5	40	44	620x270x315
KSS22.2F	50	2.2	3	400	5.0	20	0.33	18	32	0.53	25	8.5	42	46	690x270x315
KSS32.2	80	2.2	3	400	5.0	36	0.6	11	55	0.92	18.5	8.5	40	44	620x270x315
KSS32.2F	80	2.2	3	400	5.0	36	0.6	11	55	0.92	18.5	8.5	42	46	690x270x315
KSS23.7	50	3.7	5	400	7.7	18	0.3	26	36	0.6	32	8.5	58	64	670x320x345
KSS23.7F	50	3.7	5	400	7.7	18	0.3	26	36	0.6	32	8.5	60	66	730x320x345
KSS33.7	80	3.7	5	400	7.7	35	0.58	18.5	60	1.0	29	8.5	58	64	670x320x345
KSS33.7F	80	3.7	5	400	7.7	35	0.58	18.5	60	1.0	29	8.5	60	66	730x320x345
KSS43.7	100	3.7	5	400	7.7	60	1.0	11.5	95	1.58	18	8.5	59	65	670x320x345
KSS43.7F	100	3.7	5	400	7.7	60	1.0	11.5	95	1.58	18	8.5	61	67	730x320x345
KSS35.5	80	5.5	7.5	400	11.4	45	0.75	22	72	1.2	35	8.5	66	72	710x320x355
KSS35.5F	80	5.5	7.5	400	11.4	45	0.75	22	72	1.2	35	8.5	68	74	770x320x355
KSS45.5	100	5.5	7.5	400	11.4	60	1.0	16	105	1.75	23	8.5	67	73	710x320x355
KSS45.5F	100	5.5	7.5	400	11.4	60	1.0	16	105	1.75	23	8.5	69	75	770x320x355
KSS47.5	100	7.5	10	400	15	60	1.0	26	88	1.47	41	11.5	108	120	894x394x455
KSS67.5	150	7.5	10	400	15	80	1.33	20.5	130	2.17	32	19.5	110	122	894x394x455
KSS411	100	11	15	400	22	60	1.0	32	86.4	1.44	48.5	11.5	123	135	954x394x455
KSS611	150	11	15	400	22	90	1.5	25	150	2.5	34	19.5	125	137	954x394x455

### Performance curves



### Performance table

Model (60Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max head	Impeller passage	N.W	G.W	Packing dimension
	mm	kW	HP	V	A	m³/h	m³/min	m	m³/h	m³/min	m	mm	kg	kg	mm
KSSM2.25(F)	50	0.25	0.35	220	2.0	6	0.1	7	12	0.20	8	6	14	15	385x225x250
KSSM2.4(F)	50	0.4	0.55	220	3.0	8	0.13	10	14.5	0.24	12	6	15	16	385x225x250
KSSM2.75(F)	50	0.75	1	220	5.0	10	0.17	12	19.5	0.32	15	6	17	18	405x225x250
KSS21.5	50	1.5	2	380	3.5	15	0.25	15	27	0.45	22	8.5	37	41	620x270x315
KSS21.5F	50	1.5	2	380	3.5	15	0.25	15	27	0.45	22	8.5	39	43	690x270x315
KSS31.5	80	1.5	2	380	3.5	27	0.45	9	42	0.70	14	8.5	37	41	620x270x315
KSS31.5F	80	1.5	2	380	3.5	27	0.45	9	42	0.70	14	8.5	39	43	690x270x315
KSS22.2	50	2.2	3	380	5.1	20	0.33	15	31	0.52	26	8.5	40	44	620x270x315
KSS22.2F	50	2.2	3	380	5.1	20	0.33	15	31	0.52	26	8.5	42	46	690x270x315
KSS32.2	80	2.2	3	380	5.1	30	0.50	12	47	0.92	19	8.5	40	44	620x270x315
KSS32.2F	80	2.2	3	380	5.1	30	0.50	12	47	0.92	19	8.5	42	46	690x270x315
KSS23.7	50	3.7	5	380	8.0	18	0.30	25	42	0.70	32	8.5	58	64	670x320x345
KSS23.7F	50	3.7	5	380	8.0	18	0.30	25	42	0.70	32	8.5	60	66	730x320x345
KSS33.7	80	3.7	5	380	8.0	35	0.58	18.5	57	0.95	31	8.5	58	64	670x320x345
KSS33.7F	80	3.7	5	380	8.0	35	0.58	18.5	57	0.95	31	8.5	60	66	730x320x345
KSS43.7	100	3.7	5	380	8.0	60	1.0	12	95	1.58	18	8.5	59	65	670x320x345
KSS43.7F	100	3.7	5	380	8.0	60	1.0	12	95	1.58	18	8.5	61	67	730x320x345
KSS35.5	80	5.5	7.5	380	11.6	45	0.75	22	69	1.15	38	8.5	66	72	710x320x355
KSS35.5F	80	5.5	7.5	380	11.6	45	0.75	22	69	1.15	38	8.5	68	74	770x320x355
KSS45.5	100	5.5	7.5	380	11.6	60	1.0	16	105	1.75	23	8.5	67	73	710x320x355
KSS45.5F	100	5.5	7.5	380	11.6	60	1.0	16	105	1.75	23	8.5	69	75	770x320x355
KSS47.5	100	7.5	10	380	15.4	60	1.0	22	84	1.40	40	11.5	108	120	894x394x455
KSS67.5	150	7.5	10	380	15.4	80	1.33	18.5	130	2.17	32	19.5	110	122	894x394x455
KSS411	100	11	15	380	22.5	60	1.0	34	89	1.48	50	11.5	123	135	954x394x455
KSS611	150	11	15	380	22.5	90	1.50	25	150	2.50	36	19.5	125	137	954x394x455

• KSS: three phase; KSSM: single phase; KSSM...F: with float switch

# KA Large flow seawater pump

KA series is an axial-flow or mixed-flow energy-saving pump with low head and large flow. The built-in channel structure pump draws water from the bottom and discharges water to the top through the side channel of motor, providing the best motor cooling and allowing long term continuous operation at low water level. AISI444 stainless steel impeller, with superior wear and corrosion resistance, has a longer service life than bronze impeller in seawater or silty water application.

The motor casing and rotor shaft are made of AISI316L, which is even more resistant to seawater corrosion. The entire series is equipped with standard anodized aluminum block, which effectively slows down the corrosion of pump components from exposing to seawater and extends the service life of the pump.



Axial-flow impeller  
(0.75-7.5kW)

Mixed-flow impeller  
( $> 11$ kW)

## Specification

- Capacity: up to 660 m<sup>3</sup>/h
- Power supply: single phase 220V  $\pm$  10%, 50Hz, 60Hz  
three phase 380V  $\pm$  10%, 50Hz, 60Hz
- Water temperature: up to 40°C
- Insulation class: F (0.75 ~ 2.2kW)  
H (5.5 ~ 15kW)
- Protection class: IP68
- Cable length: 6m (0.75kW)  
8m (1.5 ~ 15kW)
- Max water depth: 10m

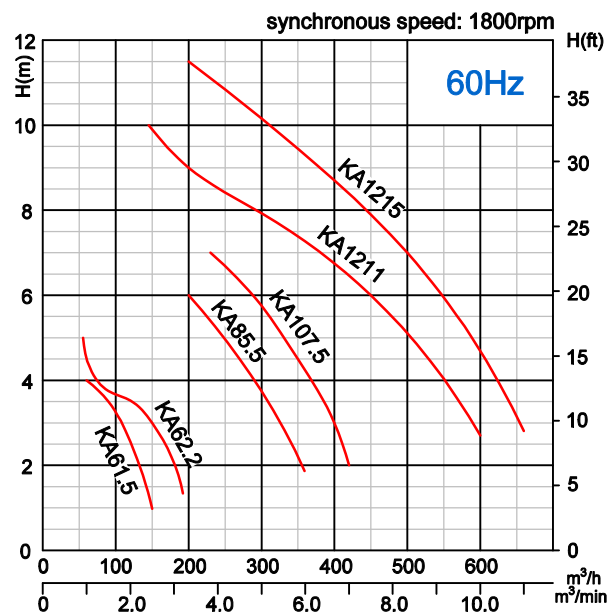
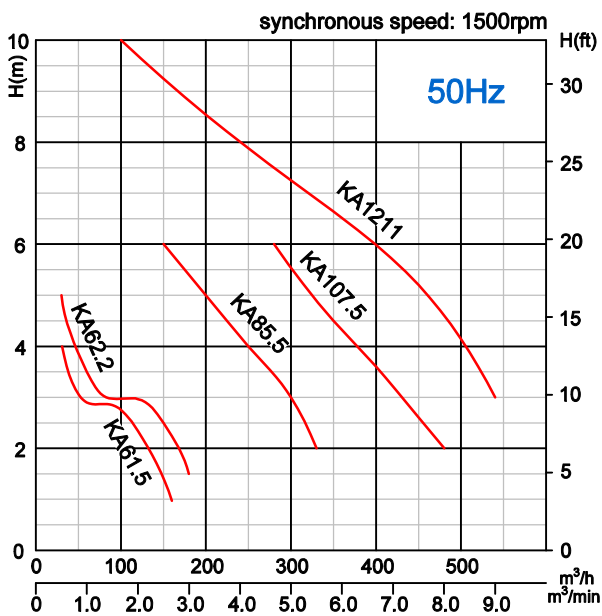
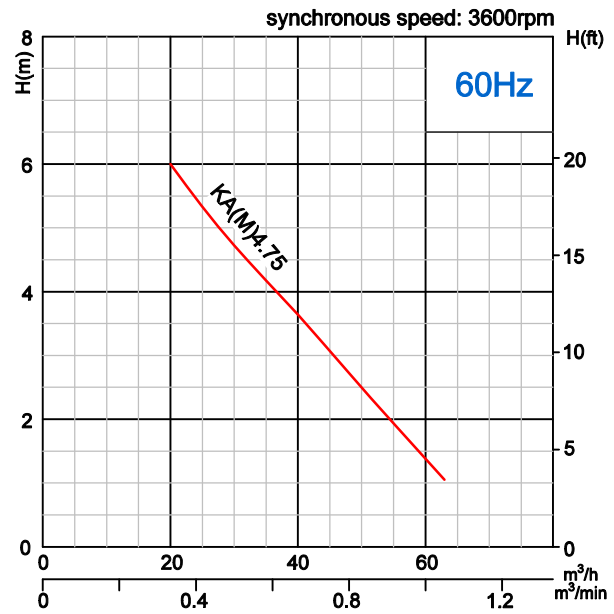
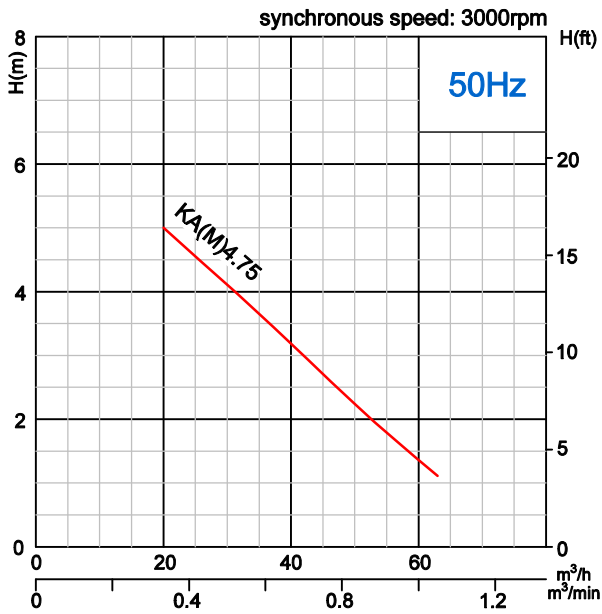
## Application

- Aquaculture water supply and drainage of seawater or freshwater
- Agriculture water supply, drainage and irrigation
- Water supply and drainage of ponds and lakes
- Landscaping

## Special features on request

- Other voltages
- The length of cable is optional

## Performance curves

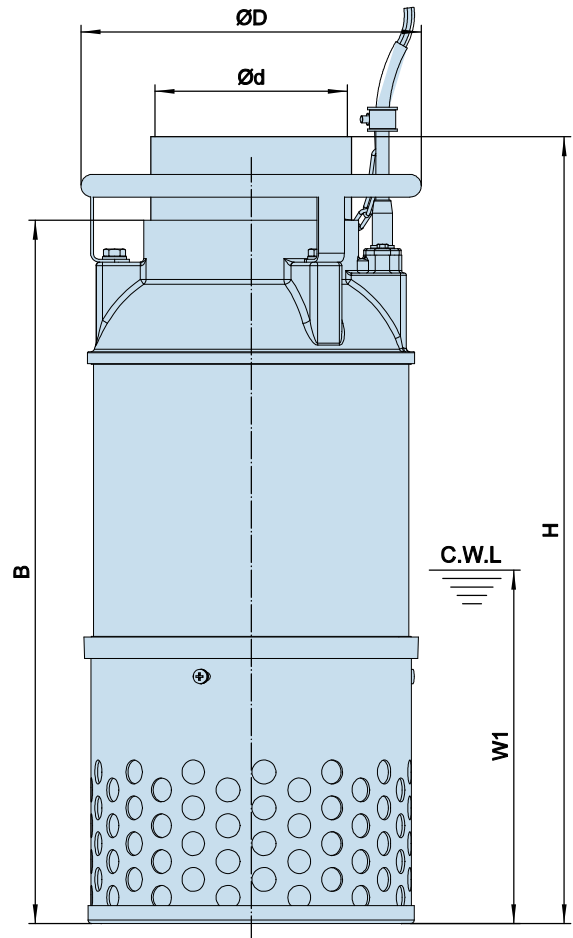
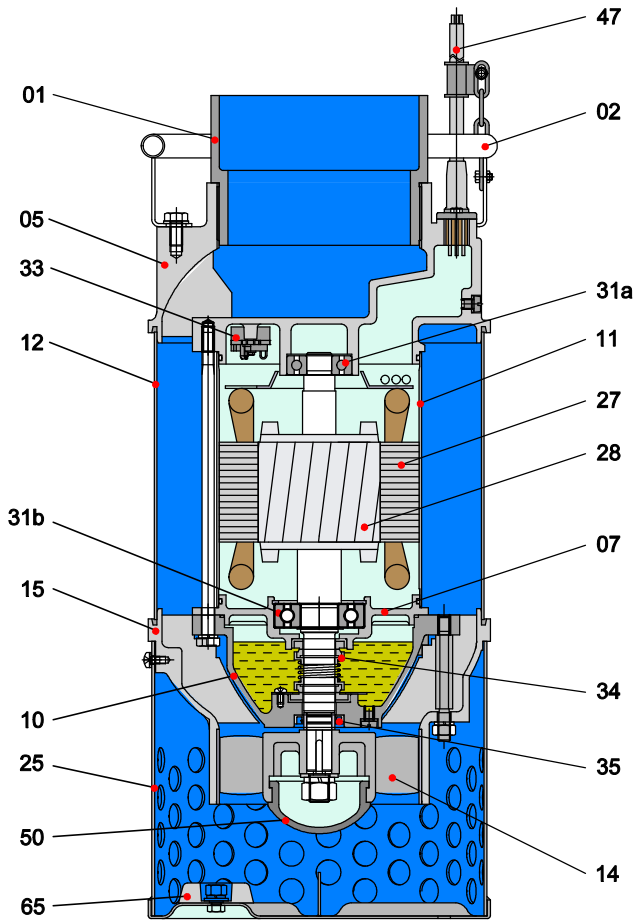


## Performance table

Model (50/60Hz)	Outlet mm	Motor power		Rated current (A)		Rated capacity		Rated head m	Max capacity		Impeller Passage mm
		kW	HP	1~	3~	m³/h	m³/min		m³/h	m³/min	
KA(M)4.75	100	0.75	1.0	5.0	2.0	42	0.7	3	63	1.05	10
KA61.5	150	1.5	2.0	/	3.7	120	2.0	2.3/2.5	162/150	2.7/2.5	20
KA62.2	150	2.2	3.0	/	5.1	120	2.0	3/3.5	180/192	3.0/3.2	20
KA85.5	200	5.5	7.5	/	11.7	240/270	4.0/4.5	4/4.5	330/360	5.5/6.0	22
KA107.5	250	7.5	10	/	15.7	360	6.0	4	480/420	8.0/7.0	22
KA1211	300	11	15	/	22	450	7.5	5/6	540/600	9.0/10	33
KA1215(Only60Hz)	300	15	20	/	30.1	540	9.0	6	660	11	33

•KA: three phase; KAM: single phase

# KA Large flow seawater pump



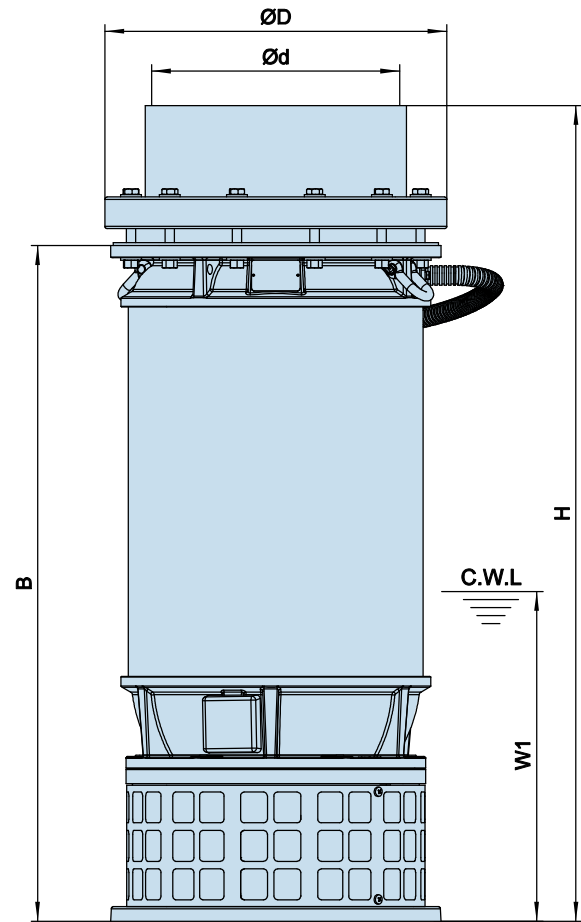
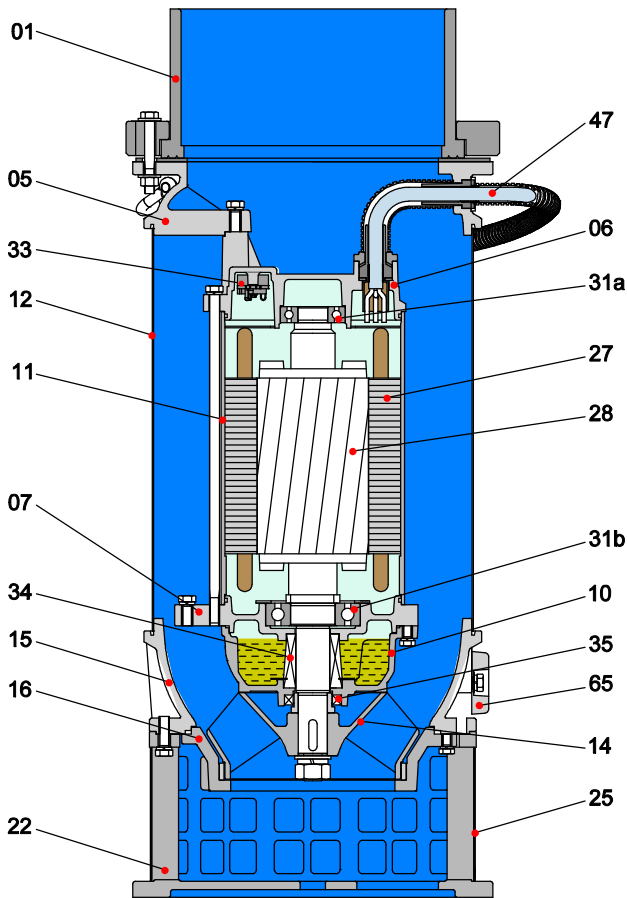
C.W.L: continuous running water level

## Materials of components

Item No.	Part name	Material	Item No.	Part name	Material
01	Discharge connection	PVC	28	Rotor	Shaft: AISI316LSS
02	Handle	AISI304SS	31a	Bearing	Ball bearing
05	Upper cover	Cast iron	31b	Bearing	Ball bearing
07	Bearing house	Cast iron	33	Motor protector	
10	Seal house	Cast iron	34	Mechanical seal	Sic-Ceramic/Carbon-Ceramic(0.75kW) Sic-Sic/Carbon-Ceramic(1.5-2.2kW)
11	Motor casing	AISI316LSS	35	Oil seal	
12	Outer casing	AISI304SS	47	Cable	H07RN-F
14	Impeller	AISI444SS	50	Sealing bowl	NBR
15	Diffuser	Cast iron	65	Cathodic protection plate	Aluminum die casting
25	Strainer	AISI304SS			
27	Stator				

## Dimensions & weights

Model (50/60Hz)	d	B	D	H	W1	N.W	G.W	Packing dimension mm
	mm	mm	mm	mm	mm	Kg	Kg	
KA(M)4.75	100	454	225	525	200	25	27	620×270×315
KA61.5	150	602	285	672	300	47	51	750×320×345
KA62.2	150	602	285	672	300	50	54	750×320×345



C.W.L: continuous running water level

### Materials of components

Item No.	Part name	Material	Item No.	Part name	Material
01	Discharge connection	PVC	22	Seat assembly	Cast iron
		Optional: Cast iron	25	Strainer	AISI304SS
05	Upper cover	Cast iron	27	Stator	
06	Upper Support	AISI444SS	28	Rotor	Shaft: AISI316LSS
07	Bearing house	AISI444SS	31a	Bearing	Ball bearing
10	Seal house	AISI444SS	31b	Bearing	Ball bearing
11	Motor casing	AISI316LSS	33	Motor protector	
12	Outer casing	AISI304SS	34	Mechanical seal	Sic-Sic/Sic-Sic
14	Impeller	AISI444SS	35	Oil seal	
15	Diffuser	Cast iron	47	Cable	H07RN-F
16	Inlet plate	Cast iron	65	Cathodic protection plate	Aluminum die casting

### Dimensions & weights

Model (50/60Hz)	d	B	D	H	W1	N.W	G.W	Packing dimension mm
	mm	mm	mm	mm	mm	Kg	Kg	
KA85.5	200	757	340	877	400	115	128	945x395x465
KA107.5	250	825	390	975	500	145	160	1065x435x505
KA1211	315(DN300)	848	445	1030	600	186	205	1105x495x565
KA1215(Only60Hz)	315(DN300)	878	445	1060	600	195	215	1105x495x565

# SH SUBMERSIBLE DRAINAGE PUMP

The body of motor and pump is made of hard cast iron for long-lasting durability. Greatly increased maximum submersion depth due to mechanical seal resistant to high pressure. The pump can be only partially immersed, with hydraulic part under motor and motor cooled by pumped water for safe operation. The top discharge design maximize the utilization of space. Hermetically sealed motor equipped with built-in thermal protection. Seal pressure relief ports is incorporated to prevent the pumping pressure from applying to the shaft seal. Discharge 100mm(4") to 200mm(8"), motor 22kW (30HP) to 110 kW (150HP). Motor is dry type submersible induction motor (2 poles).



## Specification

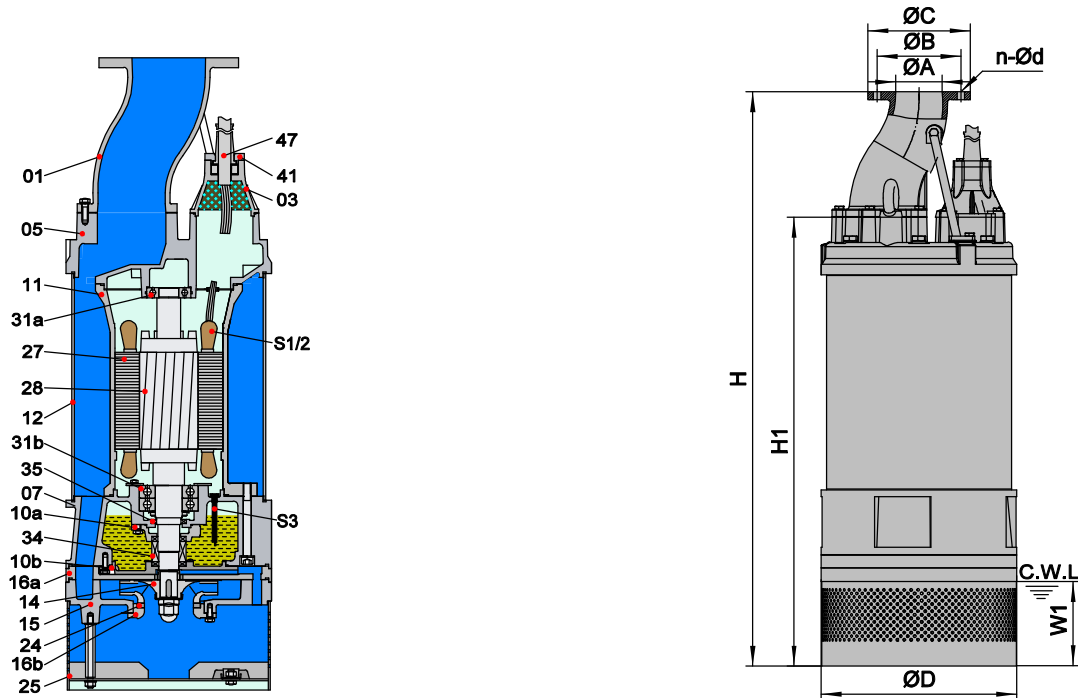
- Capacity: up to 408m<sup>3</sup>/h
- Head: up to 140 meters
- Power: 22kW (30HP) to 110 kW (150HP)
- Power supply: three phase 400V  $\pm$  10%, 50Hz  
380V  $\pm$  10%, 60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20m
- Water temperature: up to 40°C
- Max. water depth: 30m

## Application

- Deep-well pre-dewatering or high-head dewatering
- Civil engineering and construction works
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes

## Special features on request

- Other voltages
- The length of cable is optional



C.W.L: continuous running water level

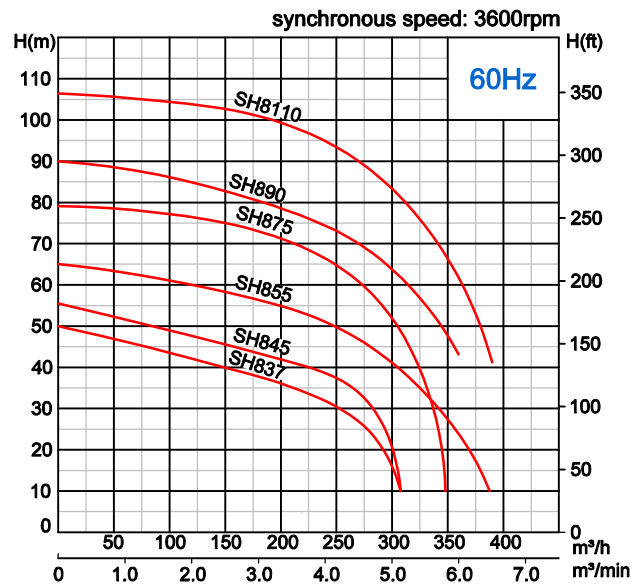
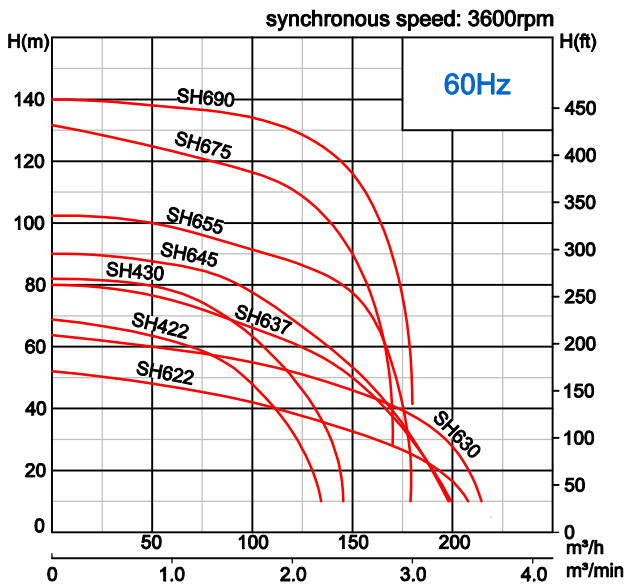
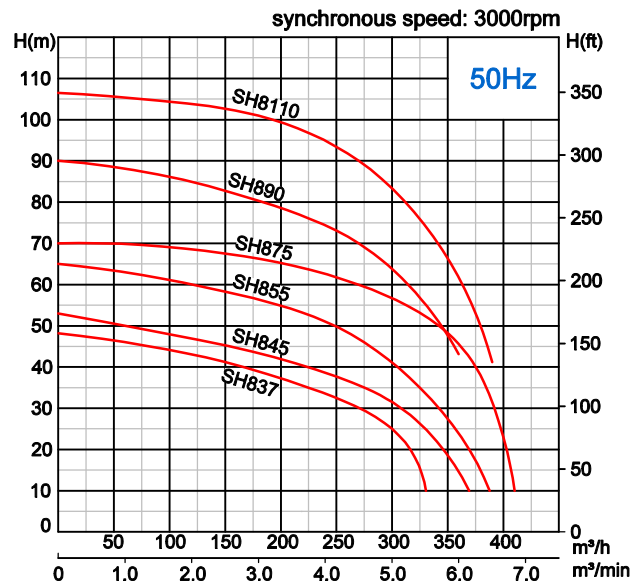
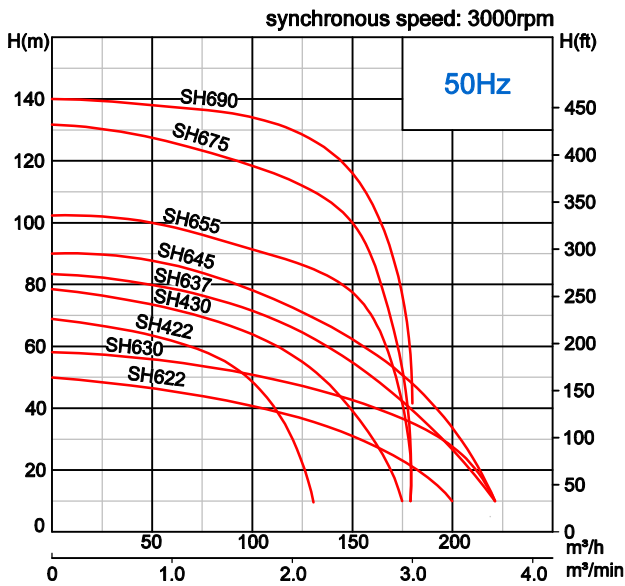
## Materials of components

Item No.	Part name	Material	Item No.	Part name	Material
01	Discharge connection	Ductile iron	25	Strainer	AISI201SS
03	Terminal box	Cast iron	27	Stator	
05	Upper cover	Cast iron	28	Rotor	Shaft:AISI420SS
07	Bearing house	Cast iron	31a	Bearing	
10a	Seal bracket	Cast iron	31b	Bearing	
10b	Seal bracket	Cast iron	34	Mechanical seal	Tc-Sic/Sic-Sic
11	Motor body	Cast iron	35	Oil seal	
12	Outer casing	Steel	41	Shim	Cast iron
14	Impeller	High chrome alloy	47	Cable	
15	Diffuser	Ductile iron	S1/2	Overheat protector	
16a	Inlet plate	Ductile iron	S3	Oil water leakage probe : 55~150kW (22~45kW : on option)	
16b	Inlet plate	Cast iron			
24	Neck ring	High chrome alloy			

## Dimensions & weights

Model (50/60Hz)	A	B	C	n-Ød	D	H	H1	W1	N.W	G.W	Packing dimension mm
	mm	mm	mm	mm	mm	mm	mm	mm	Kg	Kg	
SH422	100	180	220	8-Ø18	420	1374	1072	240	370	410	1495x490x705
SH430	100	180	220	8-Ø18	420	1374	1072	240	375	415	1495x490x705
SH622	150	240	285	8-Ø22	420	1434	1082	250	385	425	1565x490x705
SH630	150	240	285	8-Ø22	420	1434	1082	250	390	430	1565x490x705
SH637	150	240	285	8-Ø22	530	1424	1072	180	570	615	1605x600x860
SH645	150	240	285	8-Ø22	530	1424	1072	180	575	620	1605x600x860
SH837	200	295	340	12-Ø22	530	1474	1072	180	575	625	1605x600x860
SH845	200	295	340	12-Ø22	530	1474	1072	180	580	630	1605x600x860
SH655	150	240	285	8-Ø22	550	1630	1280	200	840	890	1815x620x920
SH675	150	240	285	8-Ø22	550	1630	1280	200	888	938	1815x620x920
SH855	200	295	340	12-Ø22	550	1680	1280	200	850	900	1815x620x920
SH875	200	295	340	12-Ø22	550	1680	1280	200	898	948	1815x620x920
SH690	150	250	300	8-Ø26	592	1687	1282	200	1110	1166	1825x665x965
SH890	200	295	340	12-Ø22	592	1687	1282	200	1120	1176	1825x665x965
SH8110	200	295	340	12-Ø22	592	1687	1282	200	1150	1206	1825x665x965

## Performance curves



## Performance table

Model (50/60Hz)	Outlet mm	Motor power		Rated current A	Rated capacity		Rated Head m	Max capacity		Max head m	Impeller passage mm
		kW	HP		m³/h	m³/min		m³/h	m³/min		
SH422	100	22	30	41.5/42	66	1.1	60	130/138	2.17/2.3	68	6
SH430	100	30	40	54/56	72	1.2	70/75	170/144	2.83/2.4	78/82	6
SH622	150	22	30	41.5/42	120	2.0	37/40	200/210	3.33/3.5	50/52	15
SH630	150	30	40	54/56	140	2.33	45/48	220/216	3.67/3.6	58/64	15
SH637	150	37	50	66/68	120/100	2.0/1.7	65	220/198	3.67/3.3	83/80	6
SH645	150	45	60	80/82	120/100	2.0/1.7	75	220/198	3.67/3.3	90	6
SH837	200	37	50	66/68	216	3.6	35	330/306	5.5/5.1	48/50	20
SH845	200	45	60	80/82	270	4.5	35	372/305	6.2/5.1	53/56	20
SH655	150	55	75	100/104	90	1.5	90	180	3.0	102	8
SH675	150	75	100	134/139	90	1.5	120	180/168	3.0/2.8	132	8
SH855	200	55	75	100/104	240	4.0	50	390	6.5	65	20
SH875	200	75	100	134/139	270	4.5	60	408/348	6.8/5.8	70/78	20
SH690	150	90	120	162/166	120	2.0	128	180	3.0	140	10
SH890	200	90	120	162/166	270	4.5	70	360	6.0	90	20
SH8110	200	110	150	198/203	270	4.5	90	390	6.5	107	20

The body of motor and pump is made of hard cast iron for long-lasting durability.

Greatly increased maximum submersion depth due to mechanical seal resistant to high pressure.

The pump can be only partially immersed, with hydraulic part under motor and motor cooled by pumped water for safe operation. The top discharge design maximize the utilization of space. Hermetically sealed motor equipped with built-in thermal protection. Seal pressure relief ports is incorporated to prevent the pumping pressure from applying to the shaft seal.

The back-to-back design of the double impeller greatly reduces the axial force of the pump and improves the service life of the bearing.

Discharge 50mm(2") to 150mm(6"), motor 3.0kW (4.0HP) to 150 kW (200HP).

Motor is dry type submersible induction motor (2 poles).



### Specification

- Capacity: up to 218m<sup>3</sup>/h
- Head: up to 230 meters
- Power: 3.0kW (4.0HP) to 150 kW (200HP)
- Power supply: three phase 400V ± 10%,50Hz  
380V ± 10%,60Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20m
- Water temperature: up to 40°C
- Max. water depth: 30m

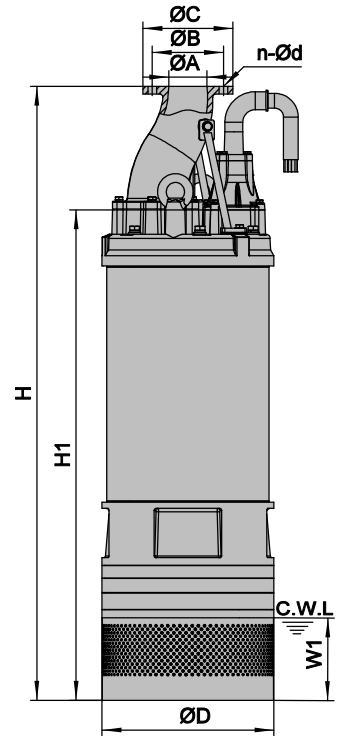
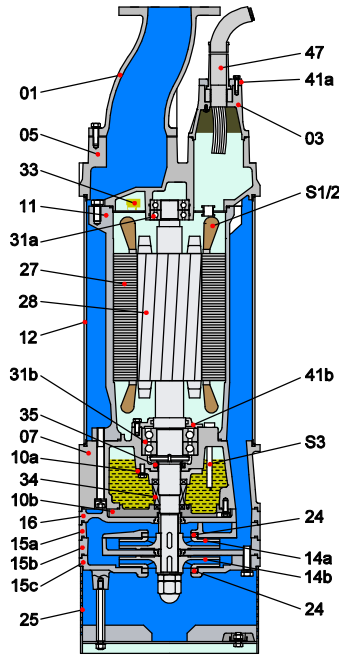
### Application

- Deep-well pre-dewatering or high-head dewatering
- Civil engineering and construction works
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes

### Special features on request

- Other voltages
- The length of cable is optional

# SH-W SUBMERSIBLE DRAINAGE PUMP



C.W.L: continuous running water level

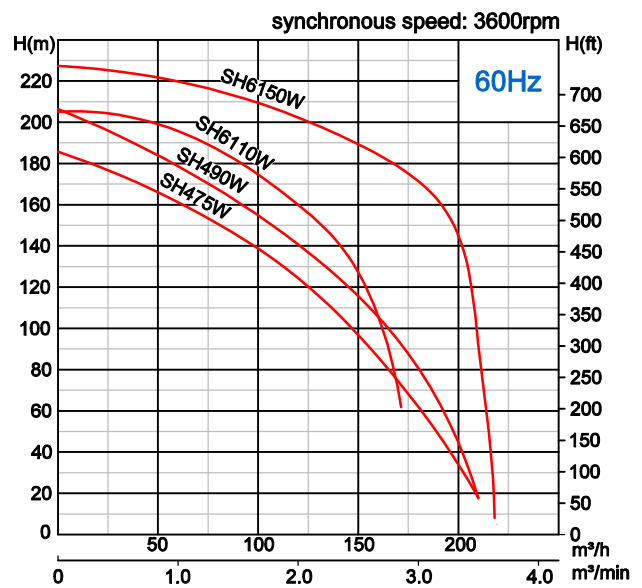
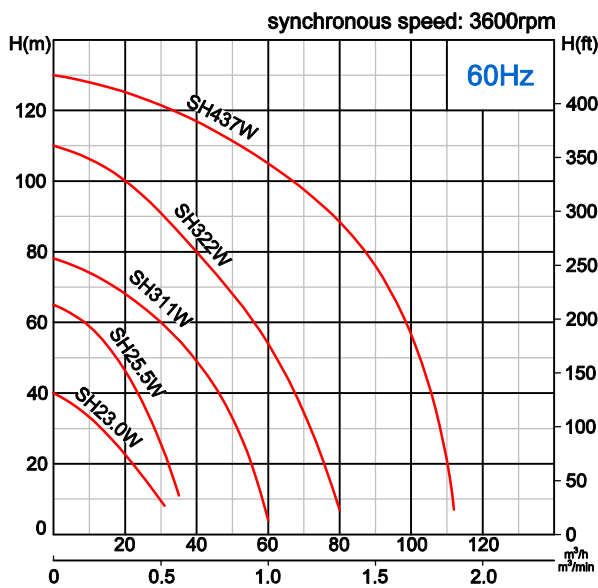
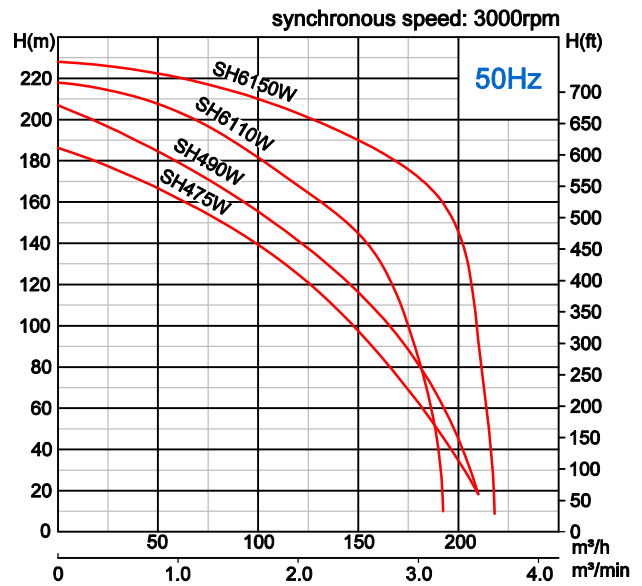
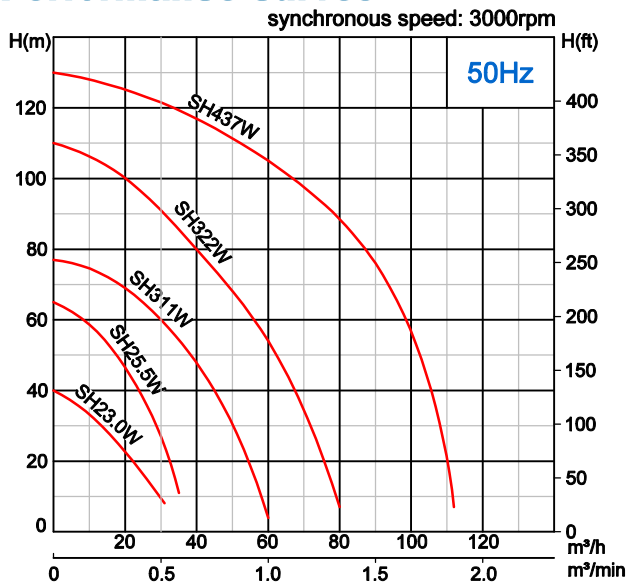
## Materials of components

Item No.	Part name	Material	Item No.	Part name	Material
01	Discharge connection	Ductile iron	25	Strainer	Stainless steel
03	Terminal box	Cast iron	27	Stator	
05	Upper cover	Cast iron	28	Rotor	Shaft:AISI420SS
07	Bearing house	Cast iron	31a	Bearing	
10a	Seal bracket	Cast iron	31b	Bearing	
10b	Seal bracket	Cast iron	33	Motor protector	3~11kW
11	Motor body	Cast iron	34	Mechanical seal	
12	Outer casing	Steel	35	Oil seal	
14a	Impeller	High chrome alloy	41a	Cable fixing plate	Cast iron
14b	Impeller	High chrome alloy	41b	Bearing fixing plate	Cast iron
15a	Diffuser & Casing	Ductile iron	47	Cable	
15b	Diffuser & Casing	Ductile iron	S1/2	Overheat protector : 22~150kW	
15c	Diffuser & Casing	Ductile iron	S3	Oil water leakage probe : 37~150kW (22kW : on option)	
16	Inlet plate	Ductile iron			
24	Neck ring	High chrome alloy			

## Dimensions & weights

Model (50/60Hz)	A	B	C	n-Ød	D	H	H1	W1	N.W	G.W	Packing dimension mm
	mm	mm	mm	mm	mm	mm	mm	mm	Kg	Kg	
SH23.0W	50	-	-	-	185	685	570	146	52	57	740x220x295
SH25.5W	50	125	165	4-Ø18	243	788	616	170	100	107	840x280x385
SH311W	80	160	200	8-Ø18	275	1036	824	210	160	172	1085x310x415
SH322W	80	160	200	8-Ø18	330	1174	914	260	278	308	1225x375x545
SH437W	100	180	220	8-Ø18	420	1500	1198	227	500	540	1625x465x705
SH475W	100	190	235	8-Ø22	550	1762	1410	400	1000	1052	1900x620x690
SH490W	100	190	235	8-Ø22	550	1822	1470	400	1055	1110	1960x620x700
SH6110W	150	250	300	8-Ø26	592	1793	1388	370	1245	1301	1935x665x965
SH6150W	150	250	300	8-Ø26	592	1925	1520	415	1428	1488	2065x665x975

## Performance curves



## Performance table

Model (50/60Hz)	Outlet mm	Motor power		Starting method	Rated current A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
		kW	HP			m³/h	m³/min		m³/h	m³/min		
SH23.0W	50	3.0	4.0	D.O.L.	6.2/6.3	18	0.3	26	30	0.5	39	6
SH25.5W	50	5.5	7.5	D.O.L.	11.4/11.6	18	0.3	48	35	0.59	65	6
SH311W	80	11	15	D.O.L.	22/22.5	30	0.5	60	60	1.0	78	8.5
SH322W	80	22	30	Star-Delta	41.5/42	40	0.67	80	78	1.30	110	8.5
SH437W	100	37	50	Star-Delta	66/68	60	1.0	105	112	1.87	130	6
SH475W	100	75	100	Star-Delta	134/139	120	2.0	125	210	3.5	185	15
SH490W	100	90	120	Star-Delta	162/166	120	2.0	140	210	3.5	205	15
SH6110W	150	110	150	Star-Delta	198/203	120	2.0	168/160	192/171	3.2/2.85	218/205	8
SH6150W	150	150	200	Star-Delta	260/268	150	2.5	190	218	3.63	230	12

# QXN SUBMERSIBLE PUMP

Hydraulic part is under the motor and motor is cooled by the pumped water for safe operation even with the pump only partially immersed.  
Double shaft seals are utilized with interposed oil chamber.



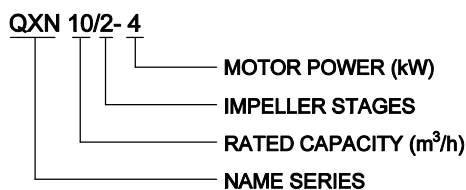
## Application

- For mining, building, factory and industrial applications
- For water supply from wells, tanks or reservoirs
- For garden use and agricultural irrigation

## Specification

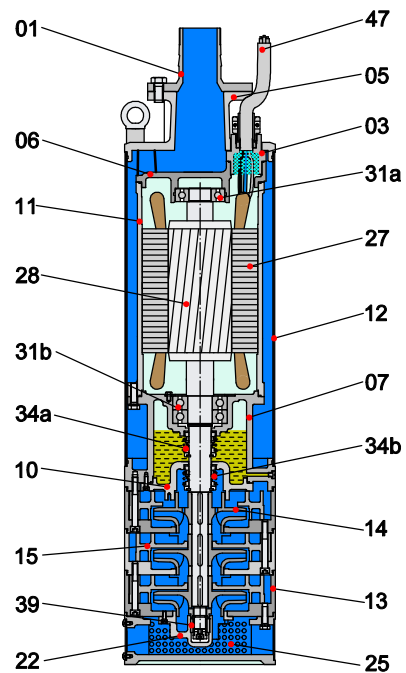
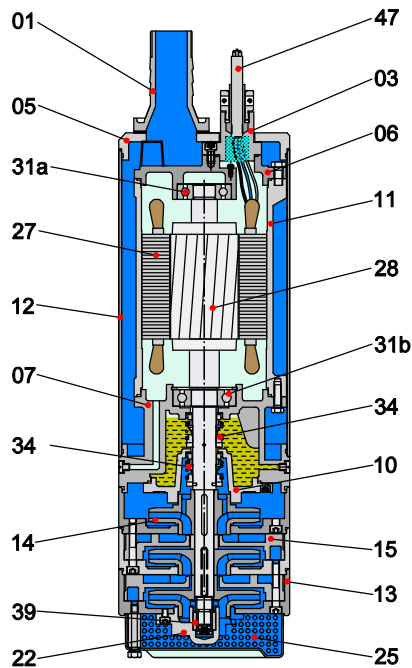
- Water temperature: up to 40°C
- PH: 6.5-8.5
- Power supply: three phase, 380V  $\pm$  10%, 50Hz  
380V  $\pm$  10%, 60Hz
- Power: 2.2 kW ~ 75kW
- Insulation class: < 30kW B  
> 37kW F
- Protection class: IP68
- Capacity: up to 190m<sup>3</sup> /h
- Head: up to 204 m
- Maximum immersion depth: 20 m
- Cable length: 15m

## Nomen Clature



## Special features on request

- Other voltages
- The length of cable is optional



Item No.	Part name	Material
01	Hose coupling	Cast iron
03	Terminal box	Cast iron
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
12	Outer casing	Stainless steel (< 30kW)
13	Pump casing	Cast iron
14	Impeller	Cast iron

Item No.	Part name	Material
15	Diffuser	Cast iron
22	Seat assembly	Cast iron
25	Strainer	Steel
27	Stator	
28	Rotor	Shaft:Stainless steel
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
34	Mechanical seal	Sic-Sic
38	Shaft sleeve	NBR & Steel
47	Cable	

## Dual purpose water outlet joint

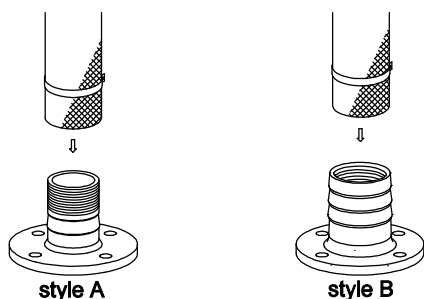


diagram of use hose

Outlet D	Style	Hose		Steel pipe	
		I.D.	G	Transition joint	Nominal pipe diameter
50	A	50	G1½"	G1½" → G2"	50
65	A	65	G2"	G2" → G2½"	65
80	A	80	G2½"	G2½" → G3"	80
100	B	100	G3"	G3" → G4"	100

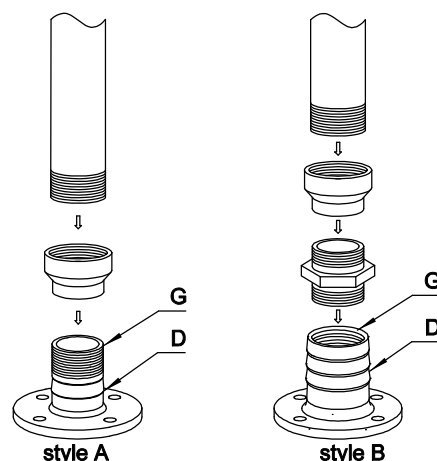
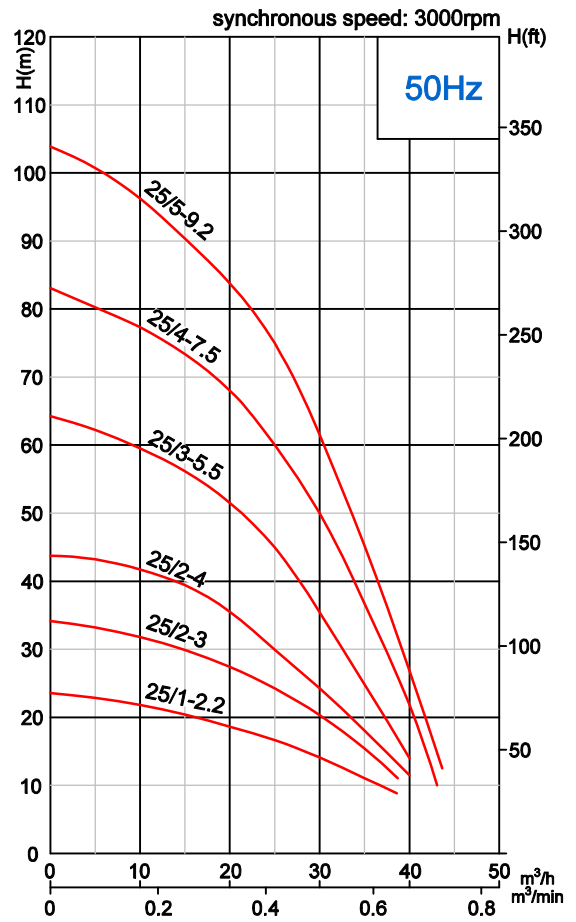
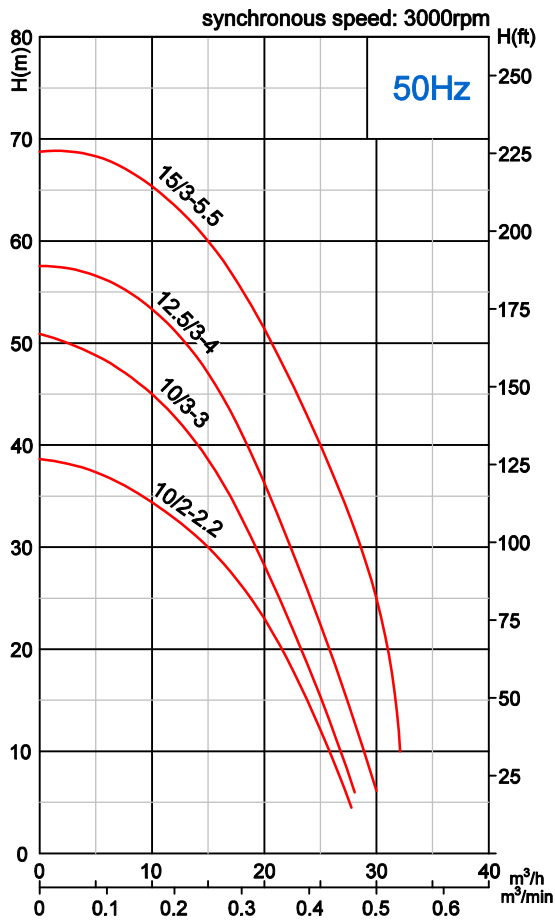


diagram of use steel pipe

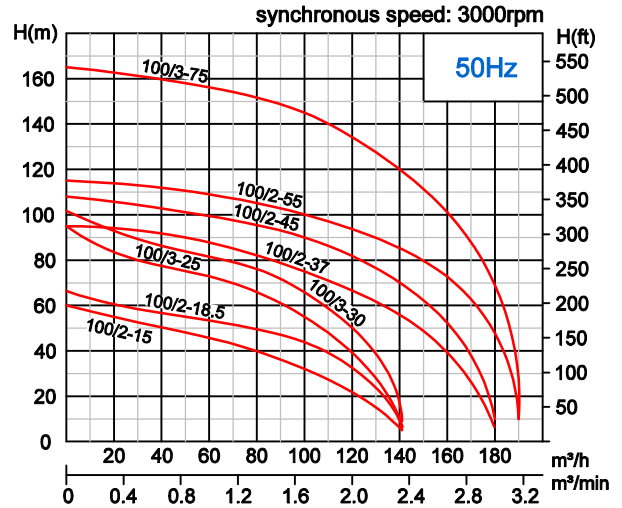
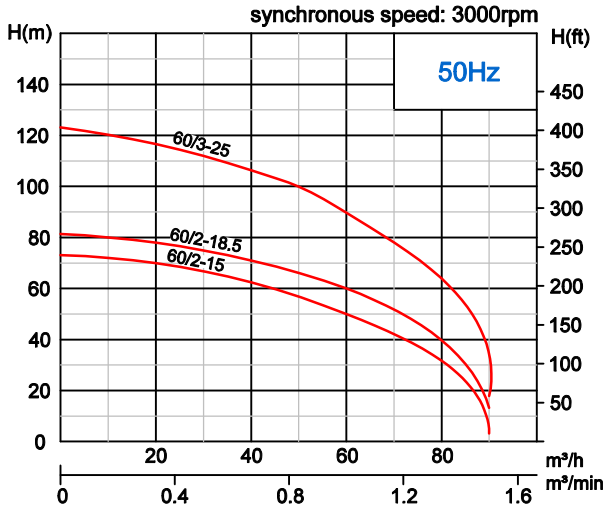
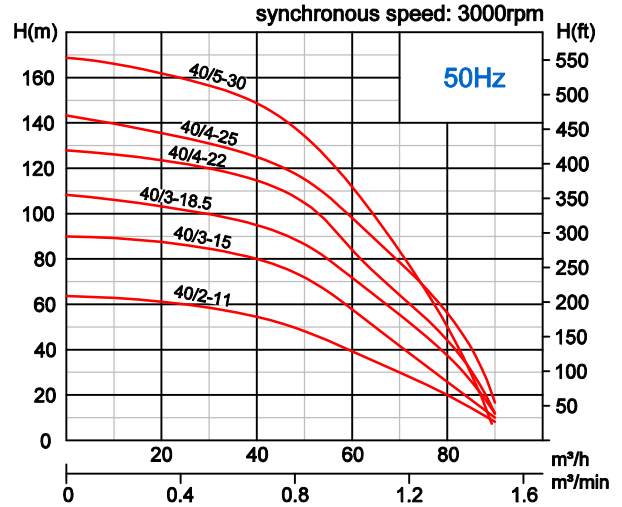
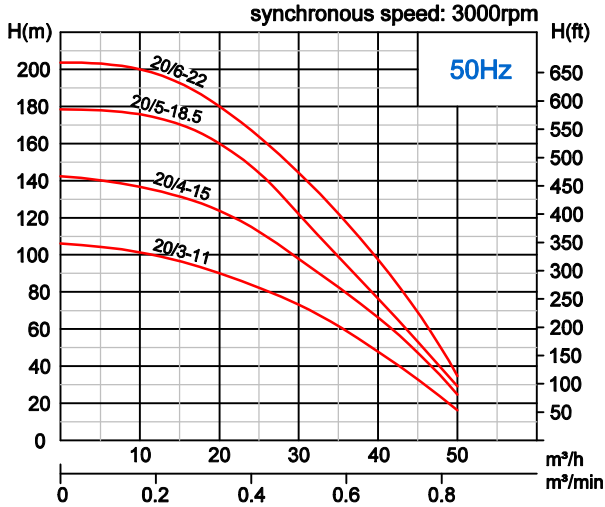
## Performance curves



## Performance table

Model (50Hz)	Motor power		Rated current (380V) A	Motor protector	Outlet mm	Rated capacity m³/h	Rated Head m	Max capacity m³/h	Max head m	Impeller passage mm
	kW	HP								
QXN10/2-2.2	2.2	3	5.4	Built-in	50	10	34	28	38	6
QXN25/1-2.2	2.2	3	5.4	Built-in	65	25	17	37	23	6
QXN10/3-3	3	4	7.2	Built-in	50	10	45	28	51	6
QXN25/2-3	3	4	7.2	Built-in	65	25	25	37	33	6
QXN12.5/3-4	4	5.5	8.8	Built-in	50	12.5	50	30	57	6
QXN25/2-4	4	5.5	8.8	Built-in	65	25	30	40	43	6
QXN15/3-5.5	5.5	7.5	11.7	Built-in	50	15	60	32	67	6
QXN25/3-5.5	5.5	7.5	11.7	Built-in	65	25	45	40	64	6
QXN25/4-7.5	7.5	10	15.7	Built-in	65	25	60	42	84	6
QXN25/5-9.2	9.2	12.5	19.1	-	65	25	75	44	104	6

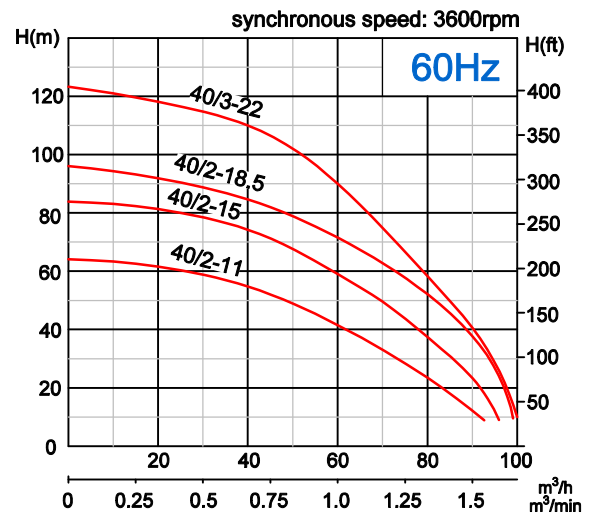
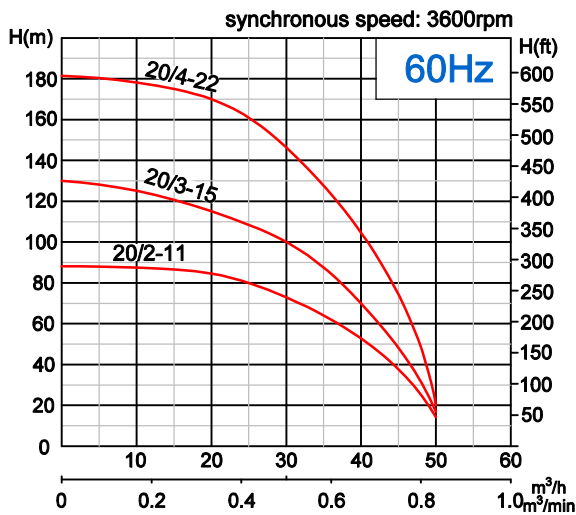
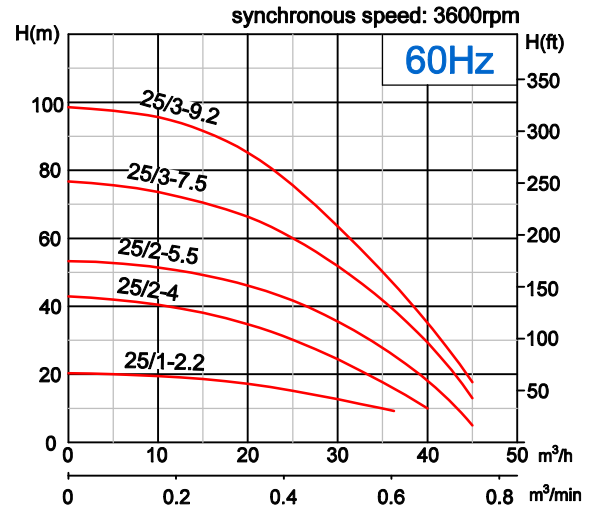
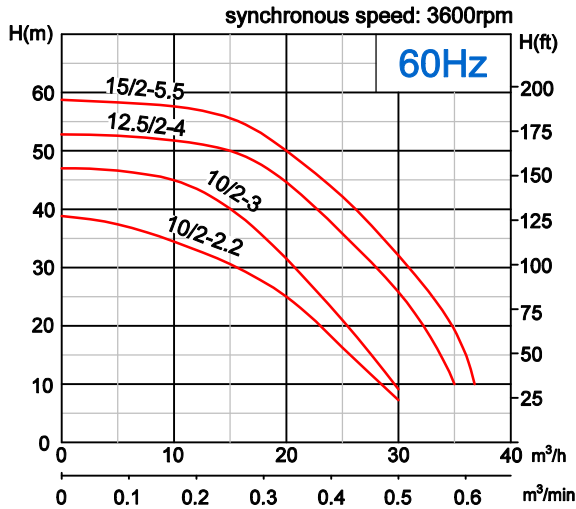
## Performance curves



## Performance table

Model (50Hz)	Motor power		Rated current (380V) A	Outlet mm	Rated capacity m³/h	Rated Head m	Max capacity m³/h	Max head m	Impeller passage mm
	kW	HP							
QXN20/3-11	11	15	22	65	20	90	50	106	6
QXN40/2-11	11	15	22	80	40	55	90	63	8
QXN20/4-15	15	20	31	65	20	125	50	142	6
QXN40/3-15	15	20	31	80	40	80	90	90	8
QXN60/2-15	15	20	31	100	60	50	90	73	10
QXN100/2-15	15	20	31	150	100	33	142	60	10
QXN20/5-18.5	18.5	25	37.2	65	20	160	50	178	6
QXN40/3-18.5	18.5	25	37.2	80	40	95	90	108	8
QXN60/2-18.5	18.5	25	37.2	100	60	60	90	81	10
QXN100/2-18.5	18.5	25	37.2	150	100	44	142	68	10
QXN20/6-22	22	30	45	65	20	180	50	204	6
QXN40/4-22	22	30	45	80	40	115	90	127	8
QXN40/4-25	25	34	51	80	40	125	90	144	8
QXN60/3-25	25	34	51	100	60	90	90	123	10
QXN100/3-25	25	34	51	150	100	55	142	95	10
QXN40/5-30	30	40	60.2	80	40	150	90	170	8
QXN100/3-30	30	40	60.2	150	100	66	142	102	10
QXN100/2-37	37	50	68	150	100	75	180	95	15
QXN100/2-45	45	60	82	150	100	90	180	108	15
QXN100/2-55	55	75	100	150	100	100	190	115	15
QXN100/3-75	75	100	134	150	100	145	190	165	15

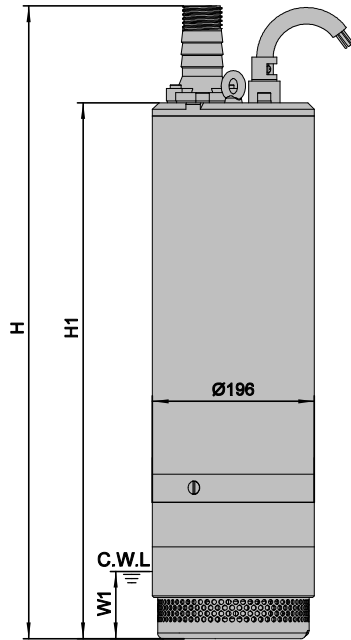
## Performance curves



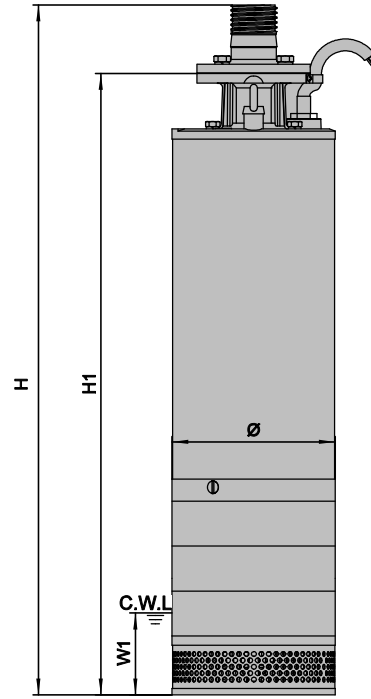
## Performance table

Model (60Hz)	Motor power		Rated current (380V) A	Motor protector	Outlet mm	Rated capacity m³/h	Rated Head m	Max capacity m³/h	Max head m	Impeller passage mm
	kW	HP								
QXN10/2-2.2	2.2	3	5.4	Built-in	50	10	34	30	38	6
QXN25/1-2.2	2.2	3	5.4	Built-in	65	25	17	35	21	6
QXN10/2-3	3	4	7.2	Built-in	50	10	45	30	47	6
QXN12.5/2-4	4	5.5	8.8	Built-in	50	12.5	50	35	53	6
QXN25/2-4	4	5.5	8.8	Built-in	65	25	30	40	43	6
QXN15/2-5.5	5.5	7.5	11.7	Built-in	50	15	57	37	59	6
QXN25/2-5.5	5.5	7.5	11.7	Built-in	65	25	45	45	53	6
QXN25/3-7.5	7.5	10	15.7	Built-in	65	25	60	45	76	6
QXN25/3-9.2	9.2	12.5	19.1	-	65	25	75	45	96	6
QXN20/2-11	11	15	22	-	65	20	85	50	87	6
QXN40/2-11	11	15	22	-	80	40	55	92	63	8
QXN20/3-15	15	20	31	-	65	20	115	50	130	6
QXN40/2-15	15	20	31	-	80	40	75	95	83	8
QXN40/2-18.5	18.5	25	37.2	-	80	40	85	98	96	8
QXN20/4-22	22	30	45	-	65	20	170	50	182	6
QXN40/3-22	22	30	45	-	80	40	110	100	123	8

## Dimensions & weights



C.W.L.: continuous running water level



C.W.L.: continuous running water level

50Hz	Dimension				Weight G.W kg	Packing dimension mm
	Ø	H1	H	W1		
QXN10/2-2.2	Ø196	555	670	80	57	750×230×285
QXN25/1-2.2	Ø196	515	630	80	51	720×230×285
QXN10/3-3	Ø196	600	715	80	66	795×230×285
QXN25/2-3	Ø196	570	685	80	61	765×230×285
QXN12.5/3-4	Ø196	635	750	80	72	830×230×285
QXN25/2-4	Ø196	600	715	80	68	800×230×285
QXN15/3-5.5	Ø196	680	795	80	80	875×230×285
QXN25/3-5.5	Ø196	705	820	80	84	900×230×285
QXN25/4-7.5	Ø196	825	940	80	98	995×235×315
QXN25/5-9.2	Ø196	910	1025	80	113	1080×235×315
QXN20/3-11	Ø274	895	1010	130	189	1065×305×395
QXN40/2-11	Ø274	901	1016	130	187	1075×305×395
QXN20/4-15	Ø274	992	1107	130	222	1175×305×395
QXN40/3-15	Ø274	1022	1137	130	218	1205×305×395
QXN60/2-15	Ø274	946	1061	130	201	1125×305×395
QXN100/2-15	Ø274	989	1130	130	211	1175×305×395
QXN20/5-18.5	Ø274	1066	1181	130	250	1245×305×425
QXN40/3-18.5	Ø274	1042	1157	130	237	1225×305×425
QXN60/2-18.5	Ø274	966	1081	130	216	1145×305×425
QXN100/2-18.5	Ø274	1009	1150	130	230	1195×305×425
QXN20/6-22	Ø274	1193	1308	130	282	1385×305×425
QXN40/4-22	Ø274	1193	1308	130	241	1385×305×425
QXN40/4-25	Ø274	1193	1308	130	283	1385×305×425
QXN60/3-25	Ø274	1117	1232	130	277	1305×305×425
QXN100/3-25	Ø274	1178	1319	130	274	1365×305×425
QXN40/5-30	Ø274	1320	1435	130	324	1520×305×425
QXN100/3-30	Ø274	1228	1369	130	295	1415×305×425
QXN100/2-37	Ø350	1120	1301	175	428	1425×420×615
QXN100/2-45	Ø350	1185	1366	175	468	1490×420×615
QXN100/2-55	Ø380	1198	1379	175	555	1495×450×655
QXN100/3-75	Ø380	1406	1587	175	658	1715×450×655

60Hz	Dimension				Weight G.W kg	Packing dimension mm
	Ø	H1	H	W1		
QXN10/2-2.2	Ø196	555	670	80	57	750×230×285
QXN25/1-2.2	Ø196	515	630	80	51	720×230×285
QXN10/2-3	Ø196	553	668	80	60	750×230×285
QXN12.5/2-4	Ø196	588	703	80	65	785×230×285
QXN25/2-4	Ø196	600	715	80	68	800×230×285
QXN15/2-5.5	Ø196	633	748	80	74	830×230×285
QXN25/2-5.5	Ø196	650	765	80	77	845×230×285
QXN25/3-7.5	Ø196	770	885	80	93	965×230×285
QXN25/3-9.2	Ø196	800	915	80	100	995×230×285
QXN20/2-11	Ø274	841	956	130	174	1040×305×395
QXN40/2-11	Ø274	901	1016	130	187	1105×305×395
QXN20/3-15	Ø274	938	1053	130	207	1150×305×395
QXN40/2-15	Ø274	946	1061	130	199	1160×305×395
QXN40/2-18.5	Ø274	966	1081	130	218	1180×305×405
QXN20/4-22	Ø274	1085	1200	130	253	1305×305×405
QXN40/3-22	Ø274	1117	1232	130	222	1340×305×405