

Breathing New Life into Water, Oceans to Hot-Springs



OKAMOTO PUMP Co., Ltd.

Variety of Product Lines for Various Fresh Water Wells

Submersible Motor Pumps for Fresh Water and Sea Water

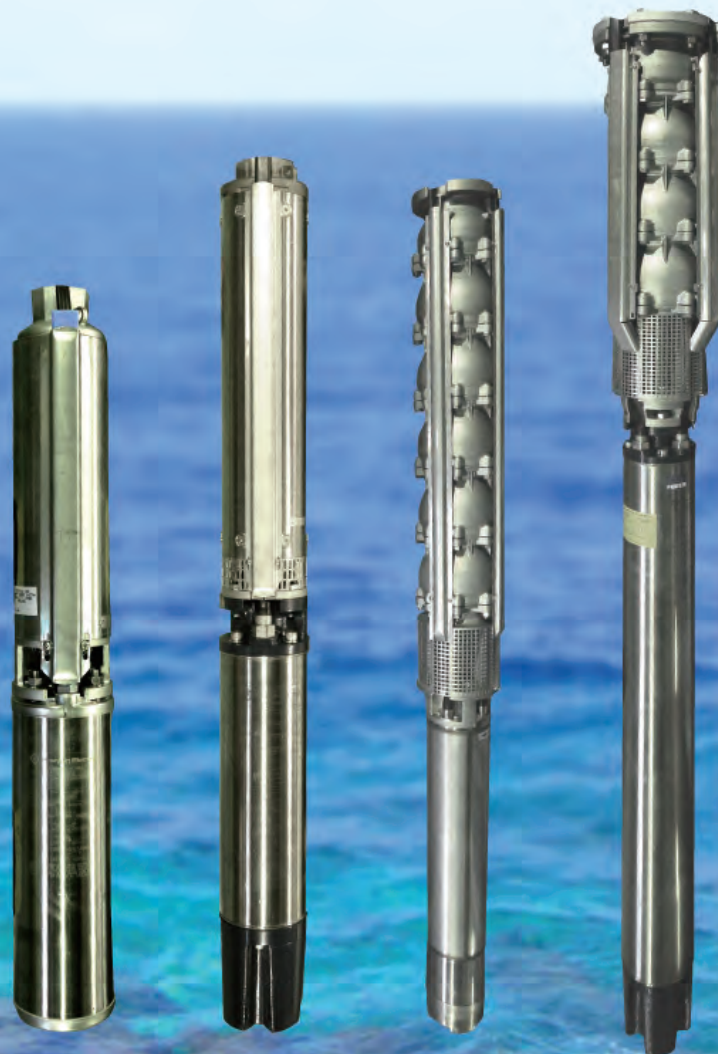


Global Standard Lineup

Wide Variety of
Materials & Lineup

Various
Accessory Options

Applicable to
Various Circumstances



www.okamoto-pump.co.jp

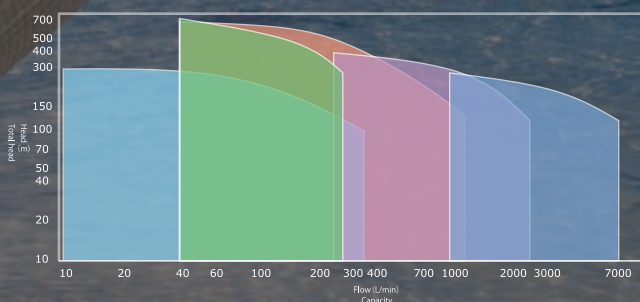


Guaranteed Technique and Achievement

Large Flow & Wide Range

Large Flow & Wide Range

Max. Flow Rate
Max. Head
Max. Output
Our products covers a wild range of flow and output



Extensive Materials

Wide Variety of Materials
Fit in Wells All Over the World

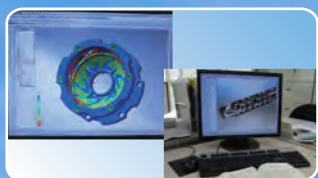
Main Material : SUS 316 & SCS 14
We offer ready availability of high
-grade materials and perform coating to be suited
and resistant to various water types in the world.

Casting Material	SCS 13/SCS 14/Duplex
Machine Material	SUS304/SUS316/SUS316L SUS630/SUS329J4L
Coating Material	Tungsten carbide

We are committed to service - From Design to Maintenance

Design

Designing and selecting
a suitable pump according to
circumstances



Casting

Manufacturing pump parts
from raw materials



Processing

Precise work based upon
thorough data management



Assembly

Skilled craftsmen complete
quality pumps



Legend

- 4** Applicable to 4" (100mm) Well Casing
- 5** Applicable to 5" (125mm) Well Casing
- 6** Applicable to 6" (150mm) Well Casing
- 8** Applicable to 8" (200mm) Well Casing
- CASTING** Lost Wax Casting-made(Most of parts)

- 10** Applicable to 10" (250mm) Well Casing
- 12** Applicable to 12" (300mm) Well Casing
- 14** Applicable to 14" (350mm) Well Casing
- PRESS** Stamping-made (Most of parts)
- SEA** Resistance in Sea Water

Variety of Accessories



Meeting Diverse Customer Needs
with a Large Selection of Accessories
Satisfactory Maintenance Support

Manufacture & Modification
We can make accessories such as pump sleeves, motor sleeves, and rise pipes meeting required specifications

Quick & Precise Installation and Repair Work
Best Support on Maintenance

Best Suited Solution



Applicable to
Various Circumstances

We can provide solutions of the use for
land improvement, sea water, brackish water, etc.

We provide solutions as a consultant
and make them come true as a manufacturer

Installation

Excellent technique enables
a deep well pump installation



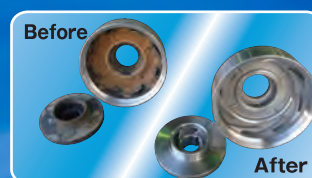
Periodic Inspection

"Health check" of pumps is
conducted by one with skills
and experience



Repair

We, pump manufacturer,
can restore worn pumps as good as new



Specifications

4 PRESS

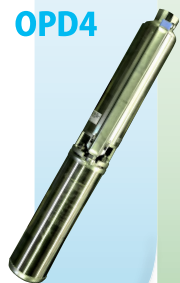
5 6 CASTING SEA

6 PRESS SEA

6 CASTING SEA

			OPD4	OPD5A , 6T, 6A				FE6	OPDS6S, 6J	
Well Diameter			100	125				150		
Pump Model			OPD4	OPD5A	OPD5A	OPD6T	OPD6A	FE613～FE665	OPDS6S	OPDS6J
Max. Output (kW)			0.45～7.5※1	1.5～7.5	11	3.7～22	3.7～22	1.5～37	3.7～37	3.7～37
Max. Outer Diameter (mm)			98	111	137※2	142	142	146	143	143
Max. Permissible Depth for Pump Installation			M4 1.5kW以下：70m M4 1.9kW以上：210m M6/M8/M10/M12：350m※4							
Lowest Allowable water level for pump operation			1m以上							
Pump	Discharge Diameter		32～50	50	50	50	65	50～100	80	80
	Discharge Type		Threaded	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded
	Material	Impeller	GPCN※3	SCS13				SUS304	SCS13	
		Casing	SUS304	SCS13				SUS304	SCS13	
		Shaft	SUS304	SUS304				SUS431	SUS304	
		Sleeve	Polyurethane	HNBR, SiC/SiC				HNBR	HNBR, SiC/SiC	
Motor	Phase・Voltage		3 Phase 50Hz/200V, 60Hz/200V or 220V, 50Hz/400V, 60Hz/400V or 440V							
	Structure・Size		Canned Type		M4：0.45kW～7.5kW		M6：3.7kW～37kW	M8：30kW～110kW		
			Winding Type		M6：5.5kW～37kW		M8：45kW～110kW	M10：130kW～220kW		
	Material	Frame	M4：SUS301		M6：SUS301/SUS304		M8/M10：SUS304			
		Bracket	FC/SUS304							
		Shaft	M4 2.2kW>：SUS303		2.7kW<：SUS630		M6 26kW>：SUS303/SUS304		30kW<：SUS630 M8/M10：SUS630	
Starting Method		9.2kW<：Direct 11kW<：Star-Delta								
Liquid	Type		Fresh Water							
	Temperature (℃)		10～25							
	Permissible Sand Carrying Capacity		50ppm>							
	Permissible Chlorine Content		200ppm>							

OPD4



8P-9P

OPD
5A, 6T, 6A



10P-11P

FE6



12P-13P

OPDS
6S, 6J



14P-15P

Contents ►

Installation Record

Food Processing Plant

Safe and Secure pumps for a drinking water well



Waterworks Facility

Water Intake Pumps - Meeting the standard of effect on water quality



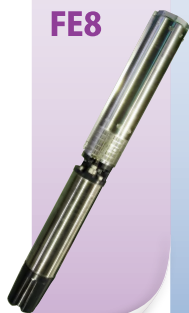
Mining

Drainage pumps at mining sites



			FE8	OPDS8H, 8J		OPDS10, 12S, 12J, 16			
Well Diameter				200		250	300		350
Pump Model			FE8	OPDS8H	OPDS8J	OPDS10	OPDS12S	OPDS12J	OPDS16
Max. Output (kW)			7.5～110	3.7～75	7.5～130	11～132	15～150	18.5～170	45～220
Max. Outer Diameter (mm)			198	194	194	248	258	258	310
Max. Permissible Depth for Pump Installation			M6/M8/M10/M12：350m※4						
Lowest Allowable water level for pump oeration			1m<						4m<
Pump	Discharge Diameter		100/125	100	100	125	150	150	200
	Discharge Type		Threaded	Flange	Flange	Flange	Flange	Flange	Flange
	Material	Impeller	SUS316			SCS13			
		Casing	SUS304			SCS13			
		Shaft	SUS329			SUS304			
		Sleeve	NBR			HNBR, SiC/SiC			
Motor	Phase・Voltage			3 Phase 50Hz/200V, 60Hz/200V or 220V, 50Hz/400V, 60Hz/400V or 440V					
	Structure・Size			Canned Type	M6：3.7kW～37kW	M8：30kW～110kW			
			Winding Type	M6：5.5kW～37kW	M8：45kW～110kW M10：130kW～220kW				
		Frame		M6：SUS301/SUS304		M8/M10：SUS304			
		Bracket				FC/SUS304			
		Shaft		M6 26kW>：SUS303/SUS304 30kW<：SUS630 M8/M10：SUS630					
Starting Method			9.2kW<：Direct 11kW<：Star-Delta						
Liquid	Type					Fresh Water			
	Temperature (℃)					10～25			
	Permissible Sand Carrying Capacity					50ppm>			
	Permissible Chlorine Content					200ppm>			

FE8



16P-17P

OPDS
8H, 8J

14P-15P

OPDS
10, 12S, 12J, 16

18P-19P

Offshore Platform

Water Intake Pump • Fire Pump



Aquaculture Facility

Sew Water Intake Pump



Power Plant

Coolant Water Intake Pump



※1 In case that the motor output is 7.5kW, voltage spec is 400V.
 ※2 Motor's outer diameter.

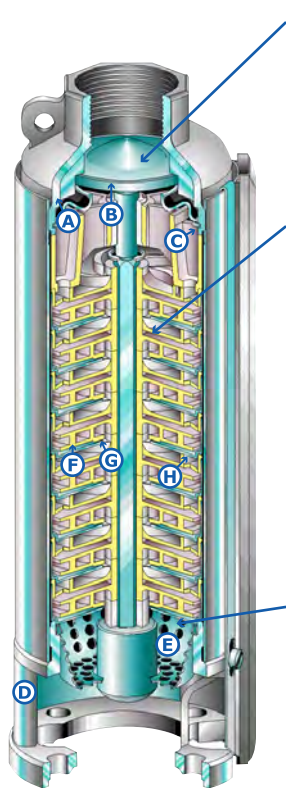
※3 Fiber glass-reinforced polycarbonate
 ※4 In the case of M6 9.2kW, max. depth will be 200m.

OPD4

Stainless stamping pump for 4" well

4 PRESS

Wide Variety of Lineup to fit in all 4" wells - High head & Large Flow



Check Valve

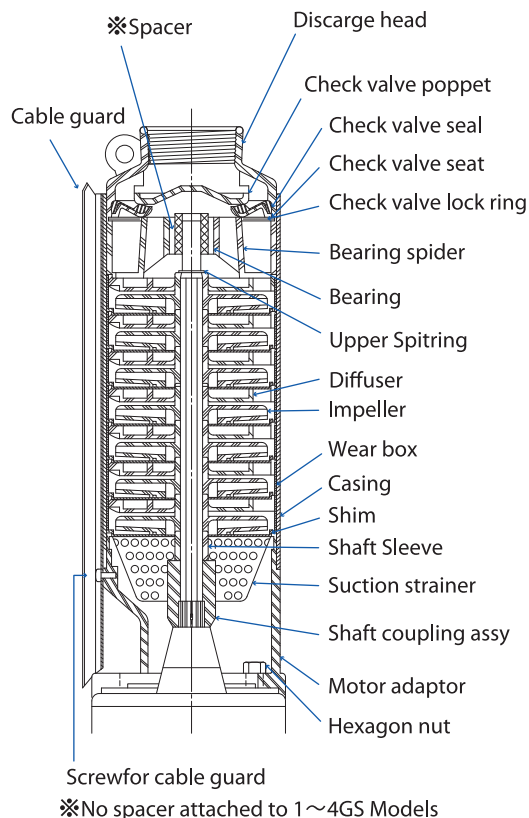
Check valve is fitted in a precision-cast stainless steel-made discharge casing (A) to prevent back flow of water and alleviate water hammer. Check valve (B) safeguards impellers and diffusers.

Abrasion-Resistant Impellers

The most innovative feature of the GS series is the abrasion-resistant impeller. This impeller does not include a mouth ring and liner ring. A Gap (G) between stainless-made diffusers (H) and impellers' wear surface prevents pressure occurring to the impellers. This floating system of the impeller eliminates dusts by impellers uplifted once the pump runs. Thus, the floating impeller design ensures an excellent resistance to wear.

Suction Casing (Filter)

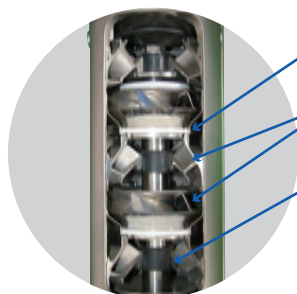
Suction casing (E) is made of precision-cast stainless steel, ensuring resistance to corrosion, durability and a sturdy coupling to the motor. All components of this pump for drinking water are FDA compatible. FDA approved materials (nitrile rubber, polyurethane, and polycarbonate) are used.



FE6,8

6 8 PRESS

All Stainless - Made



Floating Neckring

High-abrasion resistance

Impeller / Diffuser

High-corrosion Resistance

Intermediate Bearing bush

High resistance & chemical resistance

Upper bearing

Low resistance & high resistance design

Upthrust Disc

High resistance design



Check valve

Low-resistance design



Discharge head

High-efficient design High

Motor adaptor

High strength corrosion resistance

Suction casing

Low-resistance design

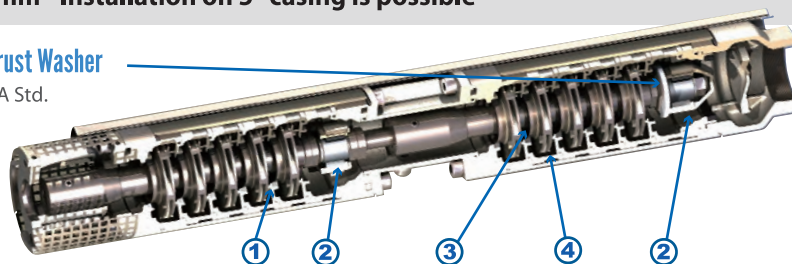


OPD5A

5 CASTING

Max. outer diameter 111mm - Installation on 5" casing is possible

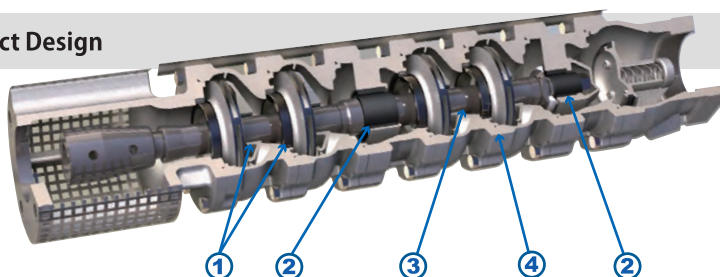
Upthrust Washer
NEMA Std.



OPD6T,6A

6 CASTING

Max. outer diameter 142mm - Compact Design



① Liner Ring / Intermediate bush

High resistance
High chemical resistance

Hydrogenated Nitrile Rubber (H-NBR) used on Intermediate bush / Liner ring.

② Upper bearing / Intermediate bearing / Sleeve

High-abrasion resistance

Silicon carbide (SiC) on Upper bearing / Intermediate bearing / Sleeve

③ Intermediate Sleeve

High-abrasion resistance

Tungsten carbide (TgC) on shaft sleeve *Optional

④ Casing / Impeller

Compact • High-efficient design
• High-resistance design

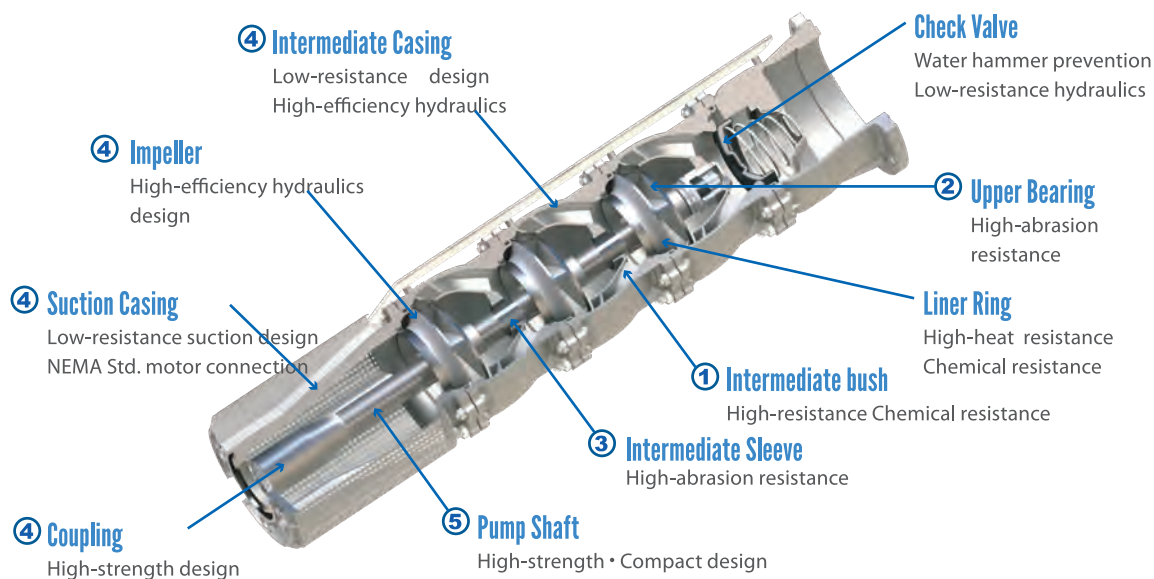
OPD5A model can be installed to 5" well casing. Best suited to 5" double casing well which is a rehabilitated 6" well. OPD6A/T is a slimmed down-model with much smaller outer diameter compared to the previous model.



OPDS

6 8 10 12 14

Satisfied with the Standard of Effect on Water Quality and ROHS



④ Intermediate Casing

Low-resistance design
High-efficiency hydraulics

④ Impeller

High-efficiency hydraulics design

Check Valve

Water hammer prevention
Low-resistance hydraulics

④ Suction Casing

Low-resistance suction design
NEMA Std. motor connection

② Upper Bearing

High-abrasion resistance

Liner Ring

High-heat resistance
Chemical resistance

① Intermediate bush

High-resistance Chemical resistance

③ Intermediate Sleeve

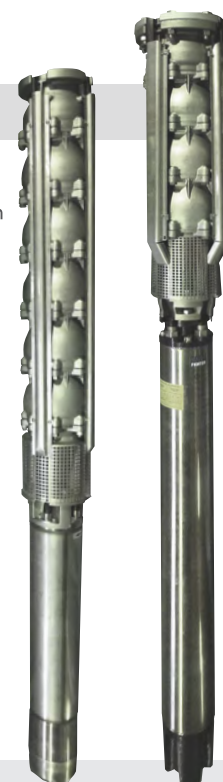
High-abrasion resistance

④ Coupling

High-strength design

⑤ Pump Shaft

High-strength • Compact design



① Hydrogenated Nitrile Rubber (H-NBR) on Intermediate bush / Liner ring

② Silicon carbide (SiC) on Upper bearing

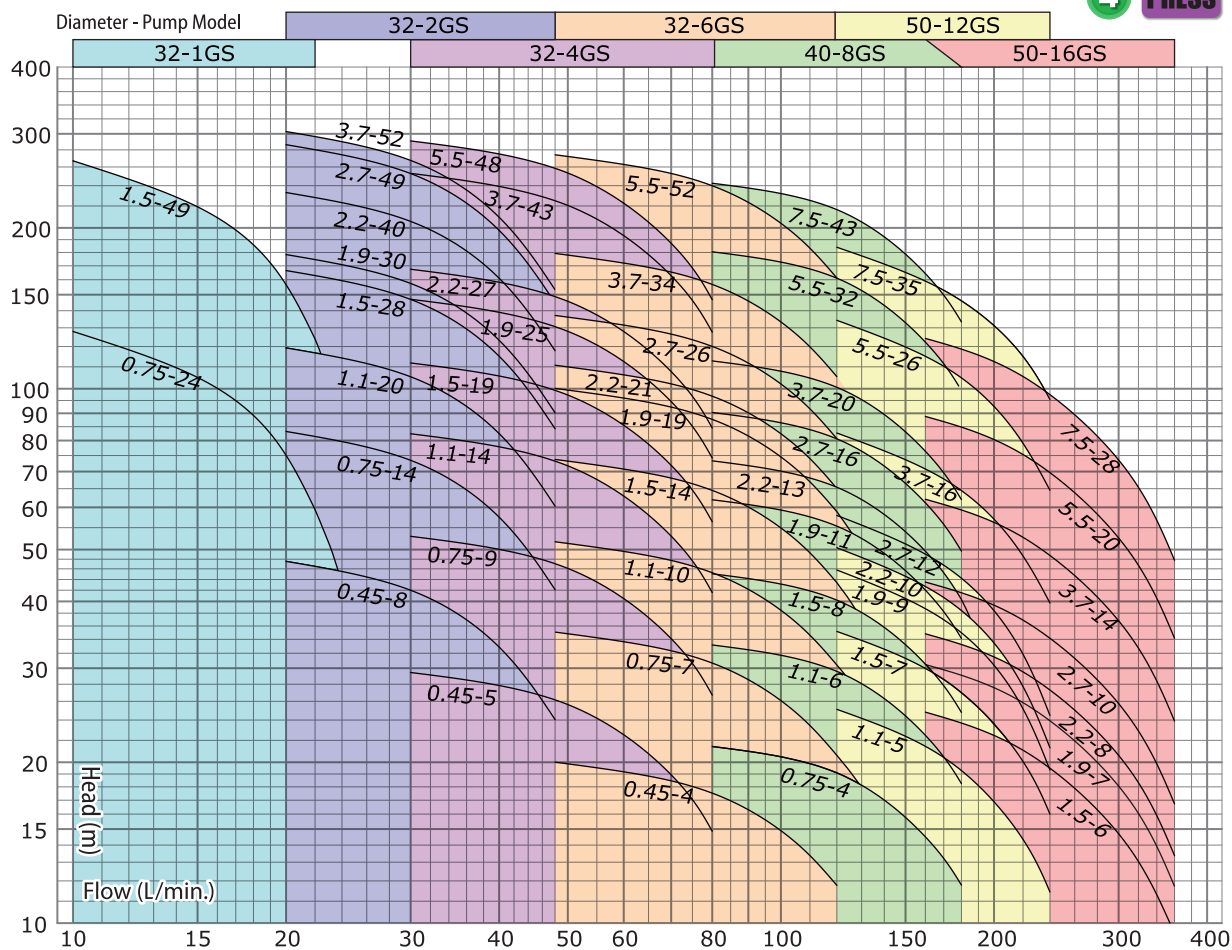
③ Ceramic coating on the shaft sleeve

④ Impeller and casing reflect the advanced engineering design by 3D analysis software

⑤ Affluent selection of shaft materials enables manufacturing large output pumps with compact body.

Performance Chart OPD4 (GS) 50Hz

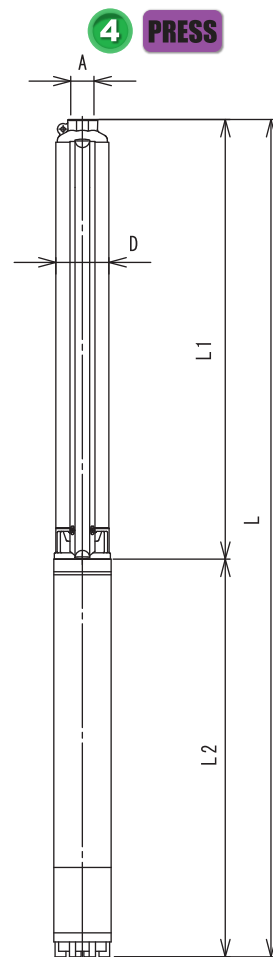
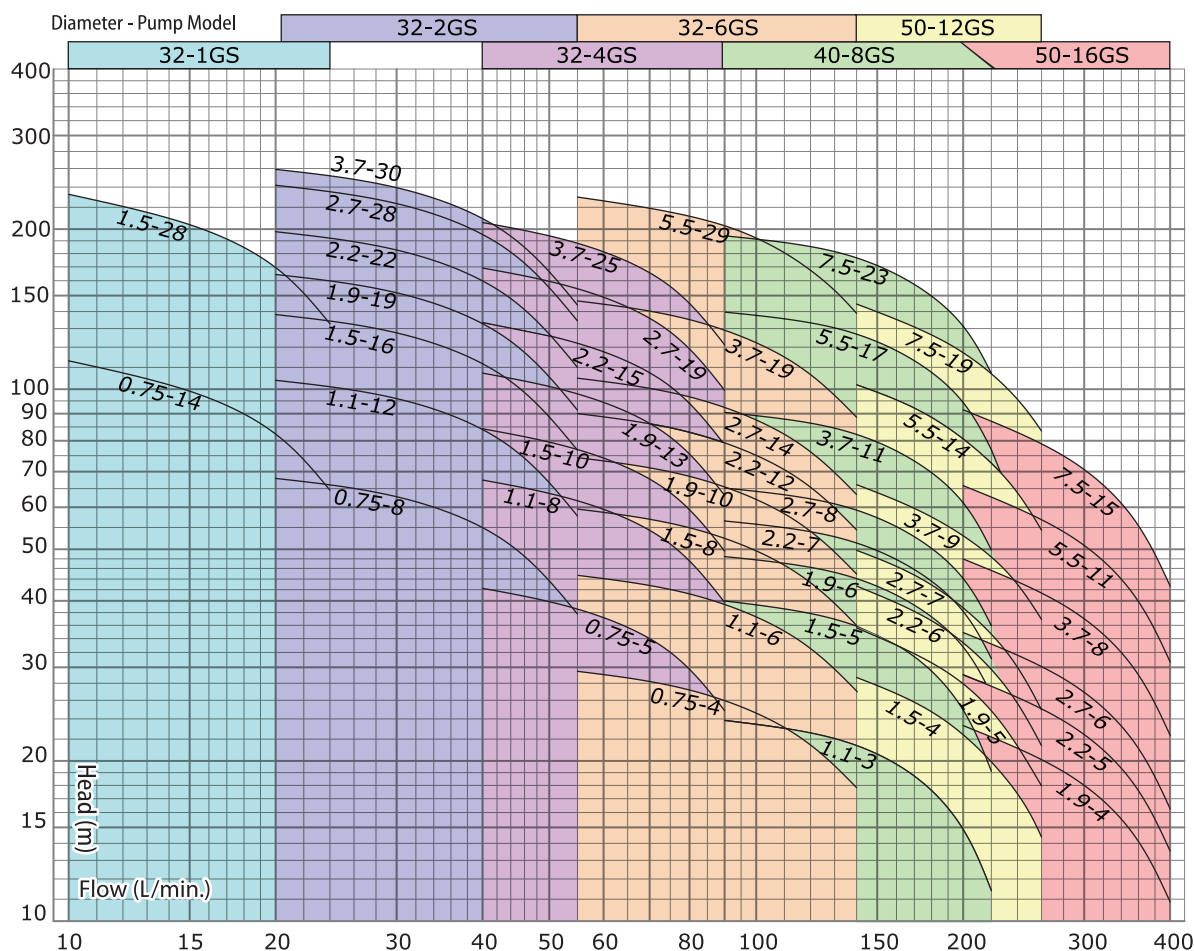
4 PRESS



Well dia. (mm)	Disch dia. A (mm)	Impeller Model	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
100	32	1GS	OPD4-32-0.75-24	98	578	298	876	15.8
			OPD4-32-1.5-49		1068	346	1414	23.8
	32	2GS	OPD4-32-0.45-8	98	298	223	521	10.1
			OPD4-32-0.75-14		402	298	700	14.2
			OPD4-32-1.1-20		542	298	840	15.8
			OPD4-32-1.5-28		680	346	1026	19.1
			OPD4-32-1.9-30		712	389	1101	22.6
			OPD4-32-2.2-40		914	389	1303	25.1
			OPD4-32-2.7-49		1120	590	1710	34.2
			OPD4-32-3.7-52		1120	590	1710	37.2
	32	4GS	OPD4-32-0.45-5	98	266	223	489	9.7
			OPD4-32-0.75-9		352	298	650	13.5
			OPD4-32-1.1-14		481	298	779	14.8
			OPD4-32-1.5-19		568	346	914	17.7
			OPD4-32-1.9-25		770	389	1159	22.6
			OPD4-32-2.2-27		770	389	1159	22.6
			OPD4-32-3.7-43		1140	590	1730	33.6
			OPD4-32-5.5-48		1248	590	1838	37.8
	32	6GS	OPD4-32-0.45-4	98	297	223	520	10.1
			OPD4-32-0.75-7		390	298	688	14.2
			OPD4-32-1.1-10		485	298	783	15.1
			OPD4-32-1.5-14		645	346	991	18.8
			OPD4-32-1.9-19		862	389	1251	23.2
			OPD4-32-2.2-21		862	389	1251	24.1
			OPD4-32-2.7-26		1127	590	1717	33.8
			OPD4-32-3.7-34		1282	590	1872	38.4
			OPD4-32-5.5-52		1840	742	2582	51.3

Well dia. (mm)	Disch dia. A (mm)	Impeller Model	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
100	40	8GS	OPD4-40-0.75-4	98	311	298	609	13.7
			OPD4-40-1.1-6		404	298	702	14.7
			OPD4-40-1.5-8		435	346	781	17.0
			OPD4-40-1.9-11		527	389	916	21.2
			OPD4-40-2.2-13		592	389	981	21.5
			OPD4-40-2.7-16		752	590	1342	30.3
			OPD4-40-3.7-20		877	590	1467	34.8
			OPD4-40-5.5-32		1236	742	1978	45.3
			OPD4-40-7.5-43		1575	818	2393	49.7
	50	12GS	OPD4-50-1.1-5	98	487	298	785	15.4
			OPD4-50-1.5-7		539	346	885	17.2
			OPD4-50-1.9-9		733	389	1122	21.8
			OPD4-50-2.2-10		733	389	1122	21.8
			OPD4-50-2.7-12		940	590	1530	31.5
			OPD4-50-3.7-16		1097	590	1687	35.2
			OPD4-50-5.5-26		1634	742	2376	48.8
			OPD4-50-7.5-35		2049	818	2867	53.9
	50	16GS	OPD4-50-1.5-6	98	681	346	1027	19.0
			OPD4-50-1.9-7		681	389	1070	22.0
			OPD4-50-2.2-8		681	389	1070	22.0
			OPD4-50-2.7-10		885	590	1475	31.0
			OPD4-50-3.7-14		1224	590	1814	37.0
			OPD4-50-5.5-20		1620	742	2362	48.2
			OPD4-50-7.5-28		2096	818	2914	54.2

Performance Chart OPD4 (GS) 60Hz



Well dia. (mm)	Disch dia. A (mm)	Impeller Model	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
100	32	1GS	OPD4-32-0.75-14	98	402	298	700	14.2
			OPD4-32-1.5-28		677	346	1023	18.7
	32	2GS	OPD4-32-0.75-8	98	298	298	596	13.1
			OPD4-32-1.1-12		402	298	700	14.2
			OPD4-32-1.5-16		437	346	783	16.6
			OPD4-32-1.9-19		542	389	931	20.8
			OPD4-32-2.2-22		542	389	931	20.8
			OPD4-32-2.7-28		680	590	1270	29.1
			OPD4-32-3.7-30		712	590	1302	32.6
			OPD4-32-0.75-5	98	266	298	564	12.7
	32	4GS	OPD4-32-1.1-8		352	298	650	13.5
			OPD4-32-1.5-10		374	346	720	15.8
			OPD4-32-1.9-13		481	389	870	19.8
			OPD4-32-2.2-15		481	389	870	19.8
			OPD4-32-2.7-19		568	590	1158	27.7
			OPD4-32-3.7-25		770	590	1360	32.6
			OPD4-32-0.75-4	98	297	298	595	13.1
	32	6GS	OPD4-32-1.1-6		359	298	657	13.8
			OPD4-32-1.5-8		421	346	767	16.4
			OPD4-32-1.9-10		485	389	874	20.1
			OPD4-32-2.2-12		545	389	934	20.7
			OPD4-32-2.7-14		645	590	1235	28.8
			OPD4-32-3.7-19		862	590	1452	33.2
			OPD4-32-5.5-29		1127	742	1869	43.8

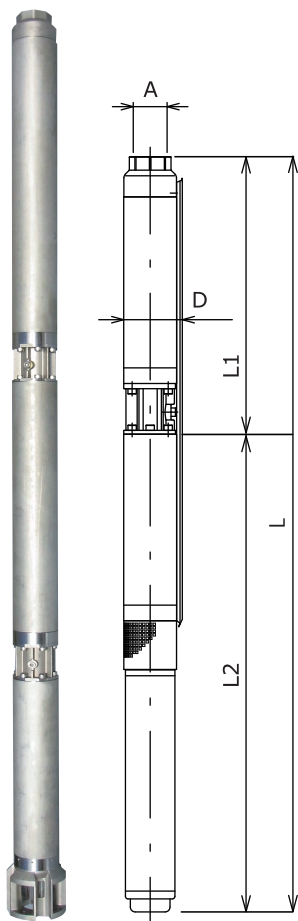
Well dia. (mm)	Disch dia. A (mm)	Impeller Model	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
100	40	8GS	OPD4-40-1.1-3	98	311	298	609	13.7
			OPD4-40-1.5-5		342	346	688	16.0
			OPD4-40-1.9-6		404	389	793	19.7
			OPD4-40-2.2-7		404	389	793	19.7
			OPD4-40-2.7-8		435	590	1025	27.0
			OPD4-40-3.7-11		527	590	1117	31.2
			OPD4-40-5.5-17		752	742	1494	40.3
			OPD4-40-7.5-23		938	818	1756	43.1
	50	12GS	OPD4-50-1.5-4	98	383	346	729	16.4
			OPD4-50-1.9-5		487	389	876	20.4
			OPD4-50-2.2-6		487	389	876	20.4
			OPD4-50-2.7-7		539	590	1129	27.2
			OPD4-50-3.7-9		733	590	1323	31.8
			OPD4-50-5.5-14		940	742	1682	41.5
			OPD4-50-7.5-19		1200	818	2018	45.1
	50	16GS	OPD4-50-1.9-4	98	477	389	866	20.0
			OPD4-50-2.2-5		477	389	866	20.0
			OPD4-50-2.7-6		681	590	1271	29.0
			OPD4-50-3.7-8		681	590	1271	32.0
			OPD4-50-5.5-11		885	742	1627	41.0
			OPD4-50-7.5-15		1156	818	1974	44.7

Note

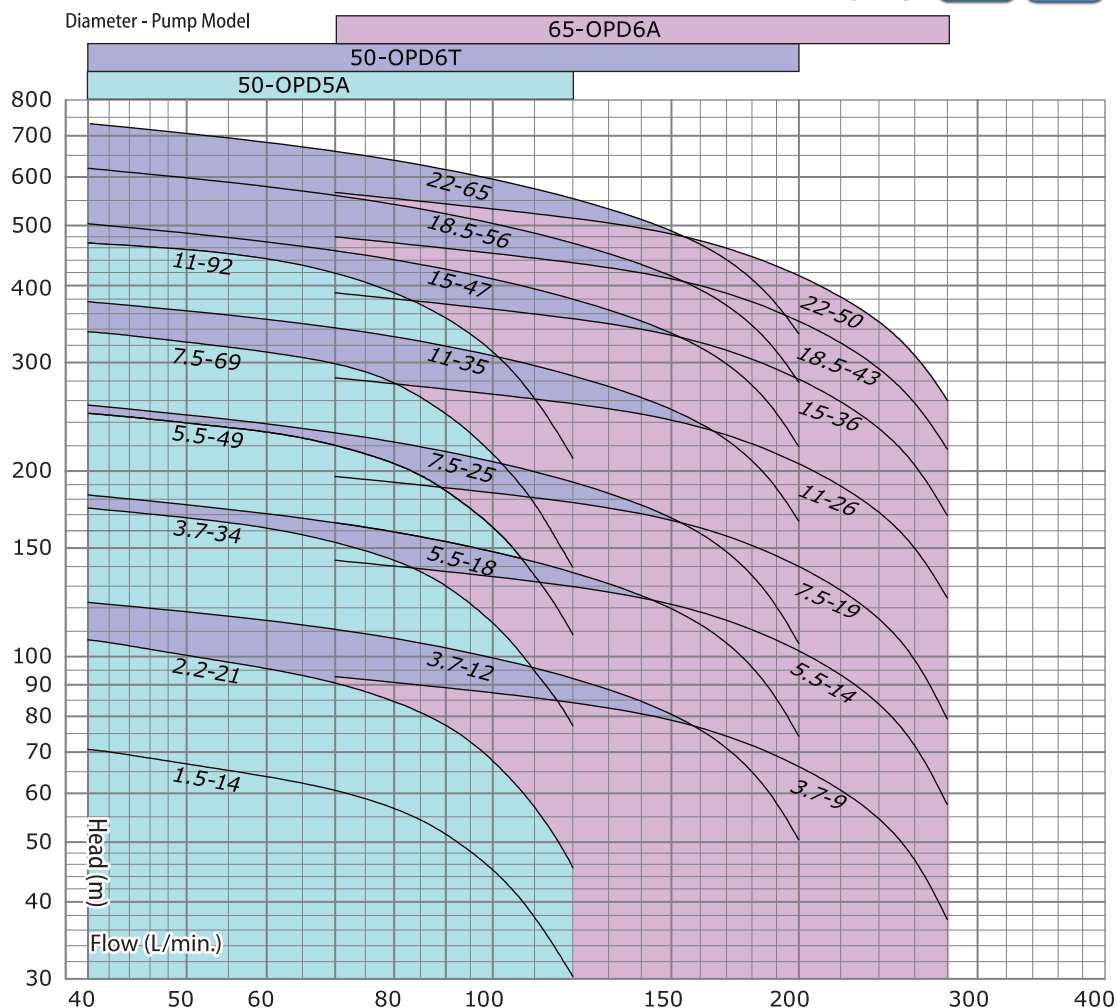
1. Regulatory model (25mm) is corresponding as well.
2. 7.5kW models are 400V.
3. Total length of pump varies depending on a selected motor.

Performance Chart OPD5A,OPD6T,OPD6A 50Hz

5 6 CASTING SEA



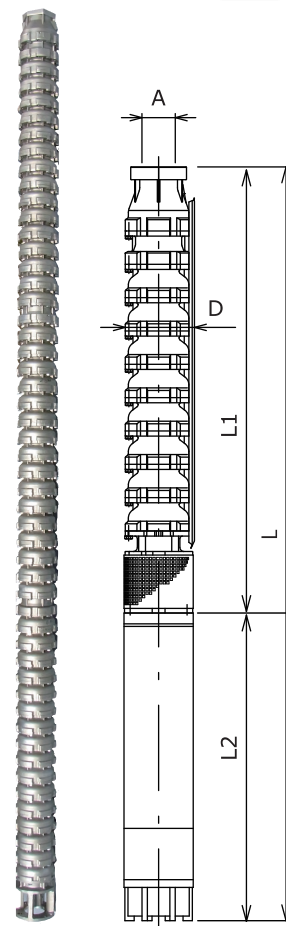
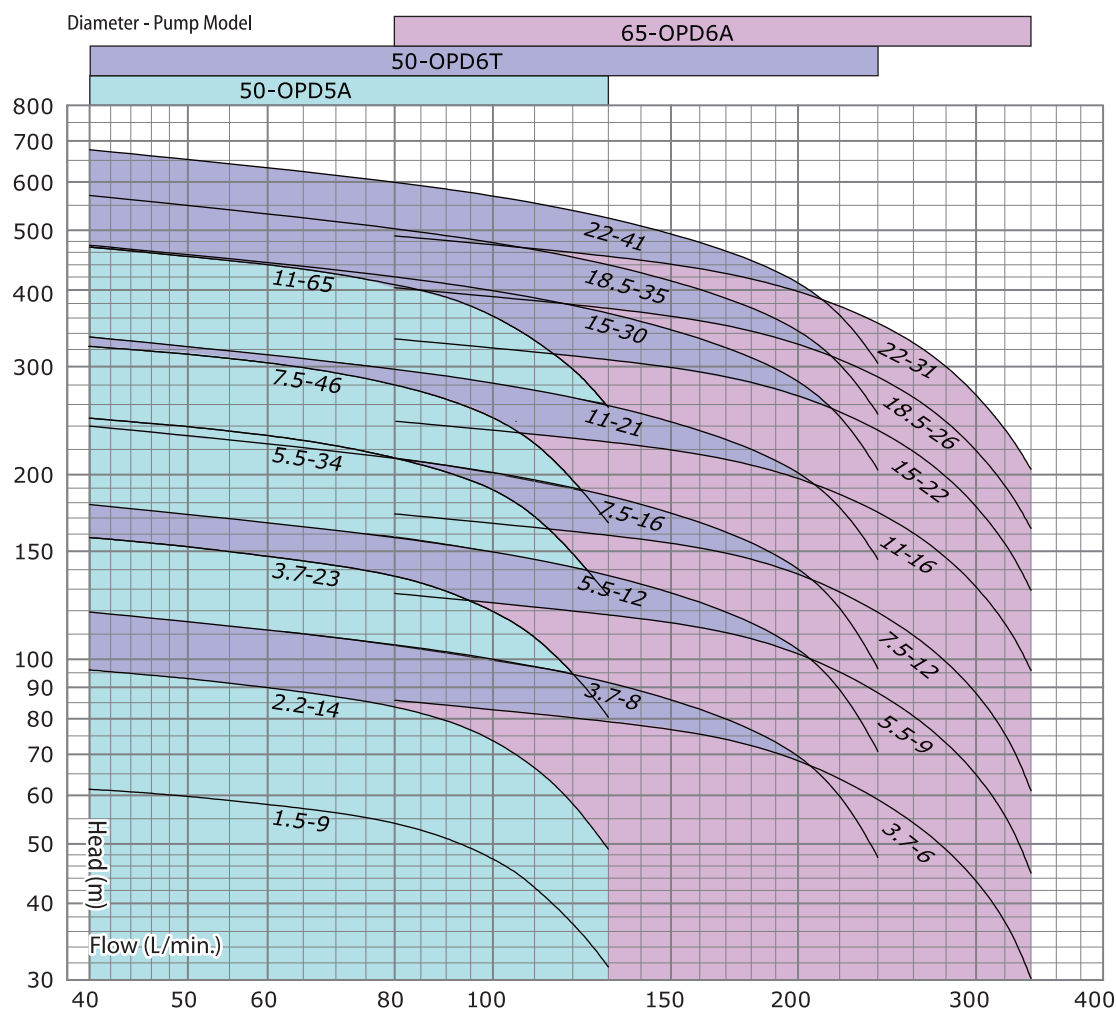
OPD5A



Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
125	50	OPD5A-50-1.5-14	111	676	346	1022	35
		OPD5A-50-2.2-21		886	389	1275	46
		OPD5A-50-3.7-34		1276	590	1866	78
		OPD5A-50-5.5-49		1911	742	2653	103
		OPD5A-50-7.5-69		2511	818	3329	126
150	50	OPD5A-50-11-92	137	3423	777	4200	180
		OPD6T-50-3.7-12	141	1130	615	1745	86
	50	OPD6T-50-5.5-18		1520	647	2167	105
		OPD6T-50-7.5-25	142	2040	712	2752	131
		OPD6T-50-11-35		2690	777	3467	165
		OPD6T-50-15-47		3535	842	4377	206
		OPD6T-50-18.5-56		4120	907	5027	237
		OPD6T-50-22-65		4770	1037	5807	274
	65	OPD6A-65-3.7-9	141	935	615	1550	78
		OPD6A-65-5.5-14		1260	647	1907	94
		OPD6A-65-7.5-19		1650	712	2362	115
		OPD6A-65-11-26	142	2105	777	2882	140
		OPD6A-65-15-36		2820	842	3662	176
		OPD6A-65-18.5-43		3275	907	4182	201
		OPD6A-65-22-50		3730	1037	4767	233

Performance Chart OPD5A,OPD6T,OPD6A 60Hz

5 6 CASTING SEA



OPD6T

Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
125	50	OPD5A-50-1.5-9	111	526	346	872	29
		OPD5A-50-2.2-14		676	389	1065	38
		OPD5A-50-3.7-23		946	590	1536	58
		OPD5A-50-5.5-34		1276	742	2018	83
		OPD5A-50-7.5-46		1821	818	2639	97
150	50	OPD5A-50-11-65	137	2428	777	3205	145
	50	OPD6T-50-3.7-8	141	870	615	1485	75
		OPD6T-50-5.5-12		1130	647	1777	88
		OPD6T-50-7.5-16		1390	712	2102	104
		OPD6T-50-11-21	142	1715	777	2492	124
		OPD6T-50-15-30		2365	842	3207	157
		OPD6T-50-18.5-35		2690	907	3597	177
		OPD6T-50-22-41		3080	1037	4117	206
	65	OPD6A-65-3.7-6	141	740	615	1355	70
		OPD6A-65-5.5-9		935	647	1582	80
		OPD6A-65-7.5-12		1130	712	1842	93
		OPD6A-65-11-16	142	1390	777	2167	110
		OPD6A-65-15-22		1845	842	2687	135
		OPD6A-65-18.5-26		2105	907	3012	152
		OPD6A-65-22-31		2430	1037	3467	179

Note

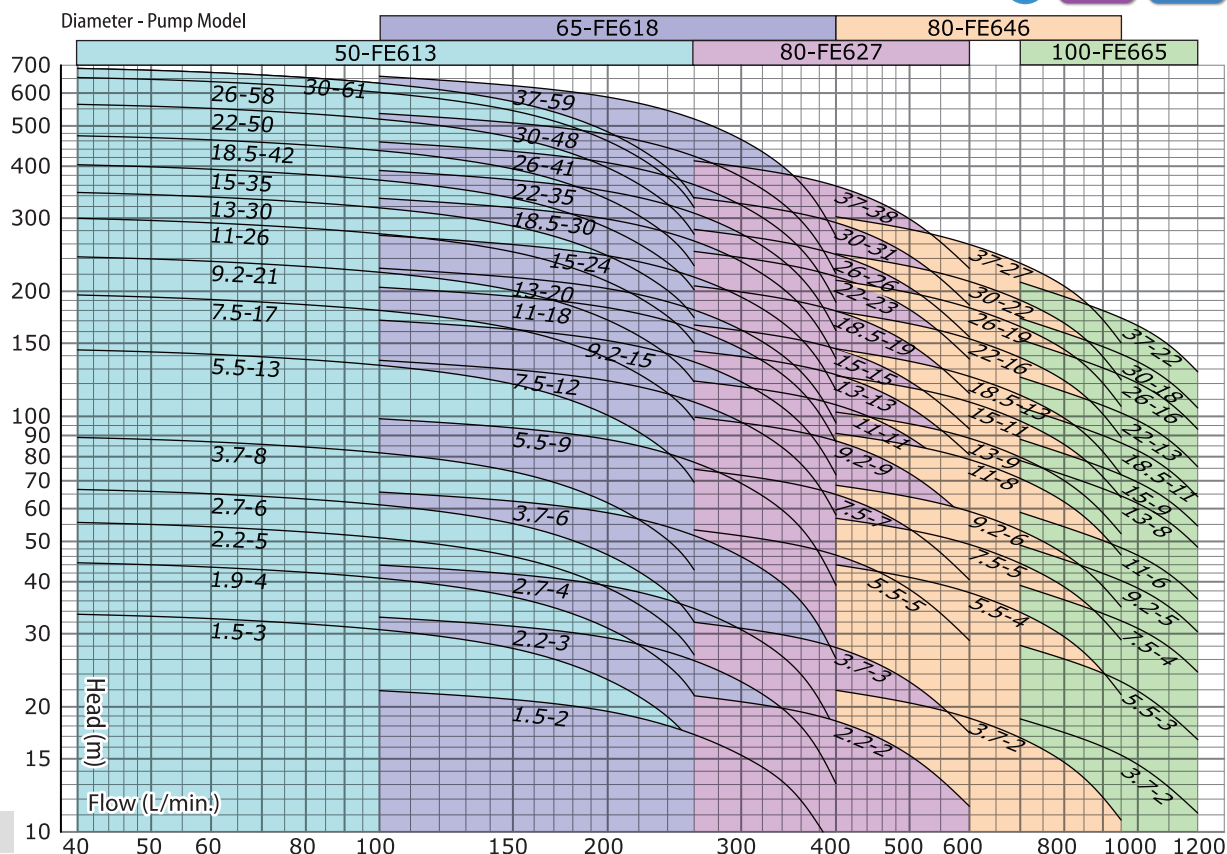
1. Total length of pump varies depending on a selected motor.

Performance Chart FE6 50Hz

6 PRESS SEA



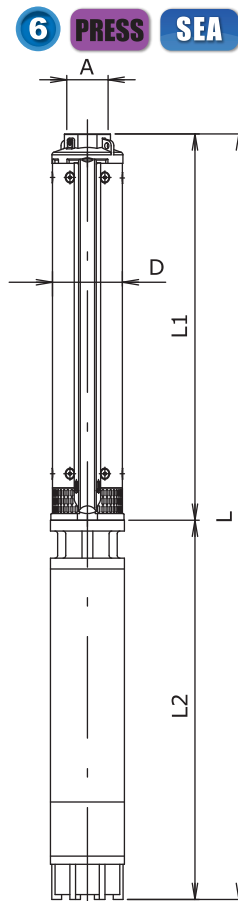
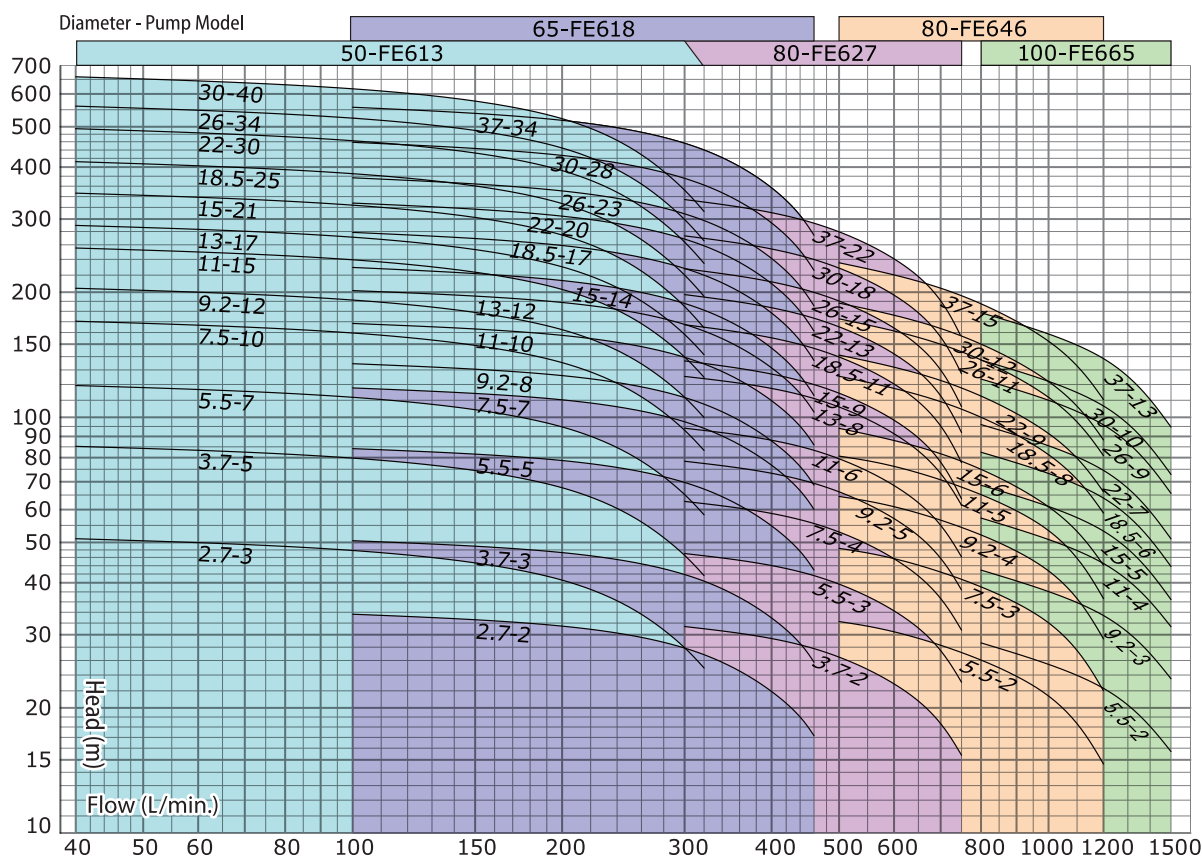
FE6



Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
150	50	FE613/3-50-1.5	142	367	346	713	25
		FE613/4-50-1.9		397	389	786	29
		FE613/5-50-2.2		427	389	816	29
		FE613/6-50-2.7		457	590	1047	35
		FE613/8-50-3.7	143	517	590	1107	39
		FE613/13-50-5.5		667	742	1409	50
		FE613/17-50-7.5	144	784	712	1496	73
		FE613/21-50-9.2		904	769	1673	76
		FE613/26-50-11	144	1054	777	1831	86
		FE613/30-50-13		1179	818	1997	95
		FE613/35-50-15	146	1324	842	2166	98
		FE613/42-50-18.5		1534	907	2441	110
	65	FE613/50-50-22	142	1774	1037	2811	130
		FE613/58-50-26		2013	972	2985	134
		FE613/61-50-30		2103	1037	3140	140
		FE618/2-65-1.5	142	378	346	724	23
		FE618/3-65-2.2		408	389	797	26
		FE618/4-65-2.7		438	590	1028	34
		FE618/6-65-3.7		498	590	1088	38
		FE618/9-65-5.5	143	610	742	1352	47
		FE618/12-65-7.5		720	712	1432	70
		FE618/15-65-9.2	144	833	769	1602	72
		FE618/18-65-11		945	777	1722	81
		FE618/20-65-13	146	1025	818	1843	88
		FE618/24-65-15		1170	842	2012	92
		FE618/30-65-18.5	142	1395	907	2302	103
		FE618/35-65-22		1582	1037	2619	120
	80	FE618/41-65-26	144	1807	972	2779	123
		FE618/48-65-30		2069	1037	3106	132
		FE618/59-65-37	146	2482	1405	3887	197
		FE627/2-80-2.2		431	389	820	28
		FE627/3-80-3.7	142	461	590	1051	39

Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
150	80	FE627/5-80-5.5	142	554	742	1296	46
		FE627/7-80-7.5		645	712	1357	68
		FE627/9-80-9.2		738	769	1507	70
		FE627/11-80-11		831	777	1608	78
		FE627/13-80-13	143	929	818	1747	87
		FE627/15-80-15		1017	842	1859	87
		FE627/19-80-18.5	144	1203	907	2110	98
		FE627/23-80-22		1389	1037	2426	114
		FE627/26-80-26		1528	972	2500	116
		FE627/31-80-30		1760	1037	2797	123
		FE627/38-80-37	142	2086	1405	3491	183
		FE646/2-80-3.7		594	590	1184	41
	100	FE646/4-80-5.5	143	822	742	1564	51
		FE646/5-80-7.5		934	712	1646	74
		FE646/6-80-9.2		1047	769	1816	76
		FE646/8-80-11		1275	777	2052	88
		FE646/9-80-13	144	1394	818	2212	96
		FE646/11-80-15		1617	842	2459	101
		FE646/13-80-18.5		1845	907	2752	113
		FE646/16-80-22		2168	1037	3223	134
		FE646/19-80-26	146	2528	972	3500	139
		FE646/22-80-30		2869	1037	3906	149
		FE646/27-80-37	142	3438	1405	4843	217
		FE665/2-100-3.7		594	590	1184	43
		FE665/3-100-5.5	143	708	742	1450	49
		FE665/4-100-7.5		820	712	1532	71
		FE665/5-100-9.2	144	934	769	1703	74
		FE665/6-100-11		1047	777	1824	83
		FE665/8-100-13		1280	818	2098	94
		FE665/9-100-15		1389	842	2231	96
		FE665/11-100-18.5	146	1617	907	2524	108
		FE665/13-100-22		1845	1037	2882	126
		FE665/16-100-26		2186	972	3158	131
		FE665/18-100-30		2414	1037	3451	139
		FE665/22-100-37		2869	1405	4274	203

Performance Chart FE6 60Hz



Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
150	50	FE613/3-50-2.7	142	367	590	957	33
		FE613/5-50-3.7		427	590	1017	37
		FE613/7-50-5.5		487	742	1229	45
		FE613/10-50-7.5	143	574	712	1286	67
		FE613/12-50-9.2		634	769	1403	69
		FE613/15-50-11		724	777	1501	78
		FE613/17-50-13	144	789	818	1607	85
		FE613/21-50-15		904	842	1746	88
		FE613/25-50-18.5		1024	907	1931	97
		FE613/30-50-22		1174	1037	2211	115
		FE613/34-50-26		1294	972	2266	114
		FE613/40-50-30	146	1474	1037	2511	122
	65	FE618/2-65-2.7	142	348	590	938	33
		FE618/3-65-3.7		385	590	975	37
		FE618/5-65-5.5		460	742	1202	45
		FE618/7-65-7.5	143	533	712	1245	66
		FE618/8-65-9.2		570	769	1339	67
		FE618/10-65-11		645	777	1422	75
		FE618/12-65-13	144	725	818	1543	82
		FE618/14-65-15		795	842	1637	84
		FE618/17-65-18.5		908	907	1815	93
		FE618/20-65-22		1020	1037	2057	108
		FE618/23-65-26		1133	972	2105	107
		FE618/28-65-30		1320	1037	2357	115
		FE618/34-65-37	146	1545	1405	2950	173
	80	FE627/2-80-3.7	142	415	590	1005	36
		FE627/3-80-5.5		461	742	1203	44
		FE627/4-80-7.5	143	505	712	1217	65

Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
150	80	FE627/5-80-9.2	143	552	769	1321	66
		FE627/6-80-11	144	598	777	1375	73
		FE627/8-80-13		696	818	1514	81
		FE627/9-80-15		738	842	1580	82
		FE627/11-80-18.5		831	907	1738	90
		FE627/13-80-22		924	1037	1961	106
		FE627/15-80-26		1017	972	1989	104
		FE627/18-80-30		1156	1037	2193	110
		FE627/22-80-37		1342	1405	2747	167
	80	FE646/2-80-5.5	142	594	742	1336	46
		FE646/3-80-7.5	143	706	712	1418	68
		FE646/4-80-9.2		820	769	1589	71
		FE646/5-80-11	144	934	777	1711	80
		FE646/6-80-15		1047	842	1889	88
		FE646/8-80-18.5		1275	907	2182	100
		FE646/9-80-22		1389	1037	2426	116
		FE646/11-80-26		1617	972	2589	118
		FE646/12-80-30		1731	1037	2768	123
		FE646/15-80-37		2073	1405	3478	185
	100	FE665/2-100-5.5	142	594	742	1336	46
		FE665/3-100-9.2	143	706	769	1475	68
		FE665/4-100-11	144	820	777	1597	78
		FE665/5-100-15		934	842	1776	86
		FE665/6-100-18.5		1047	907	1954	94
		FE665/7-100-22		1161	1037	2198	110
		FE665/9-100-26		1389	972	2361	113
		FE665/10-100-30		1503	1037	2540	118
		FE665/13-100-37	146	1845	1405	3250	180

Note

1. 4" motor is used up to 5.5kW

2. Motor ~9.2kW is direct-starting

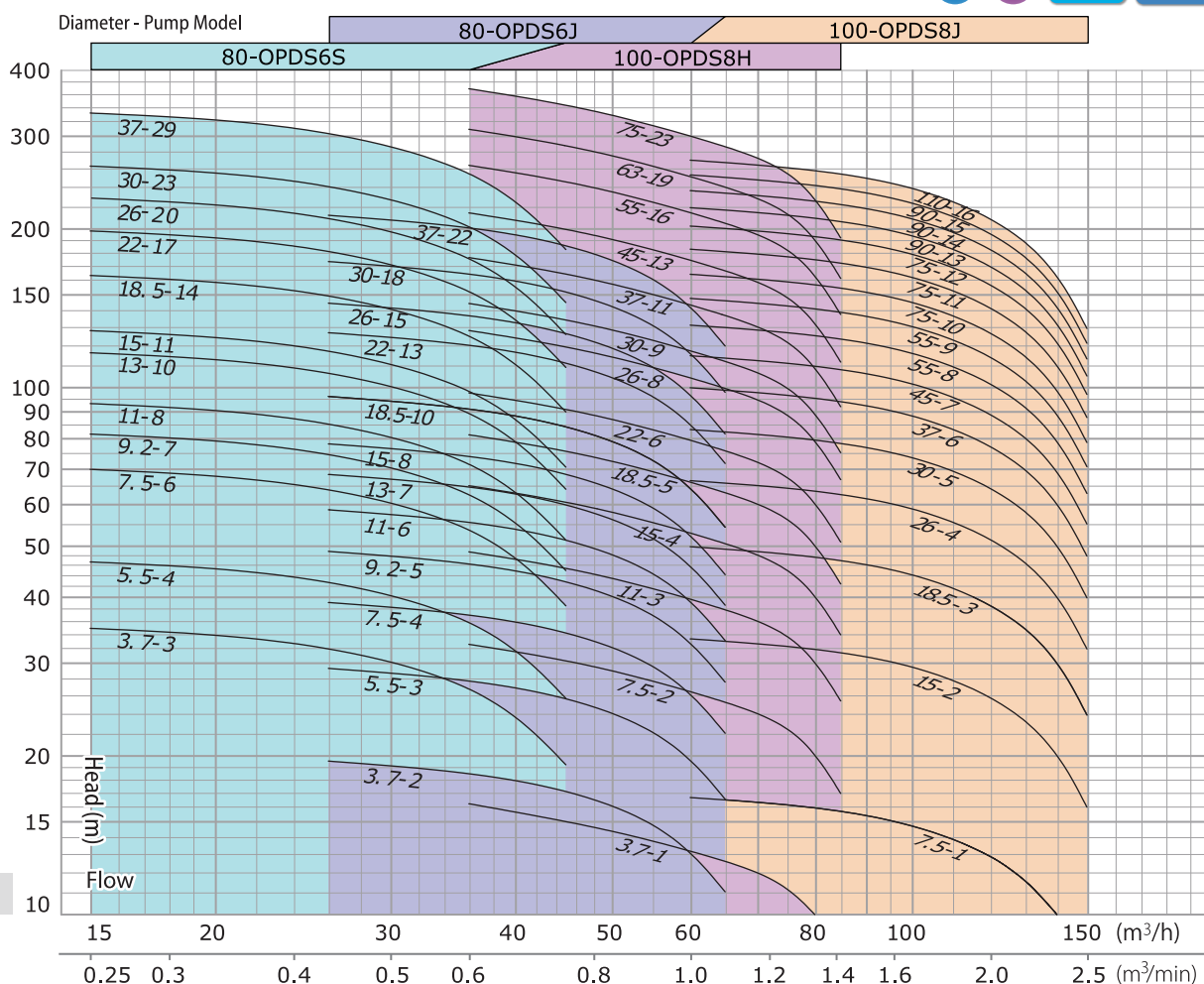
3. Total length of pump varies depending on a selected motor.

Performance Chart OPDS6S,6J,8H,8J 50Hz

6 8 CASTING SEA



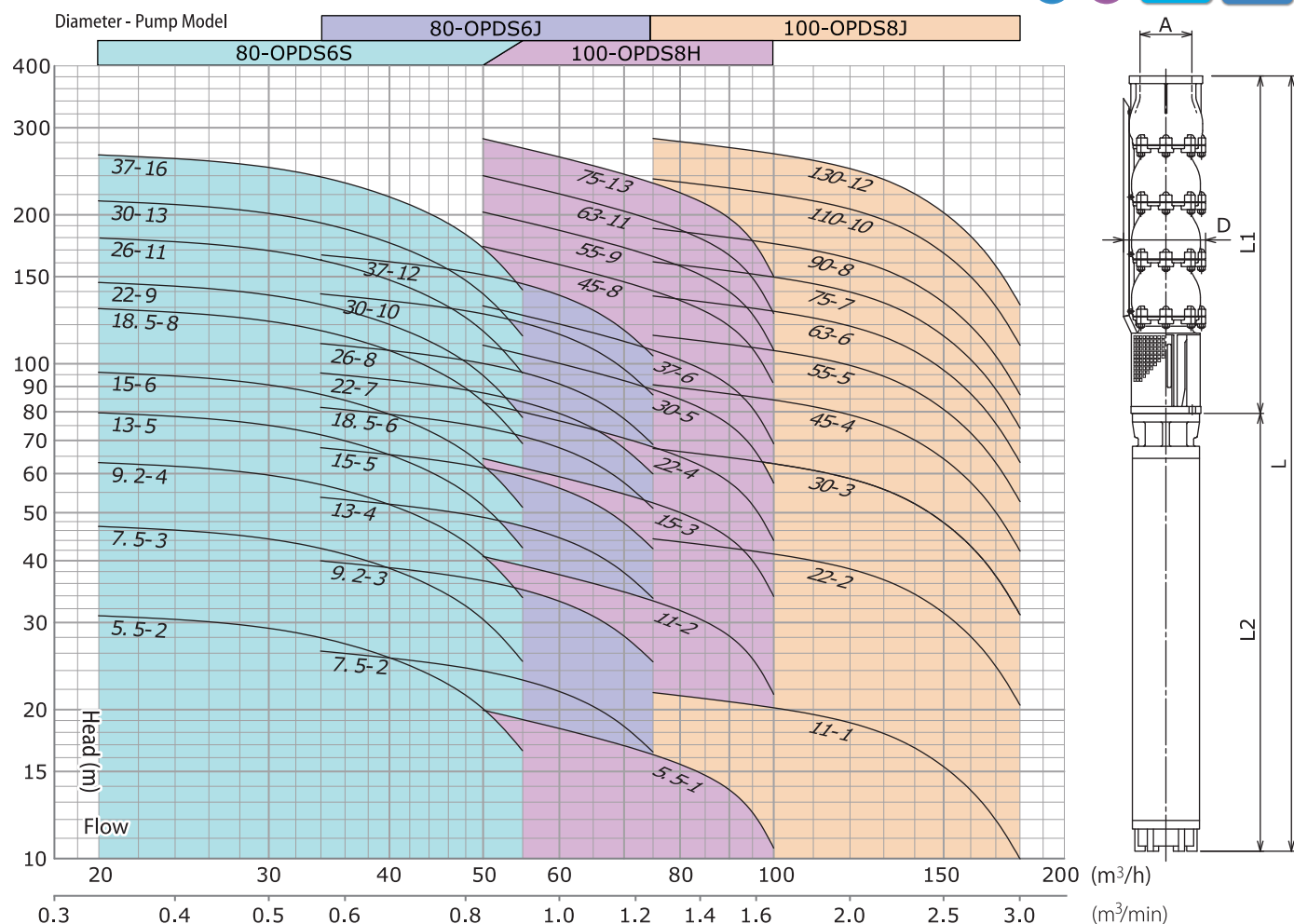
OPDS6



We'll dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)	We'll dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
150	80	OPDS6S-80-3.7-3	142	640	654	1294	59	200	100	OPDS8H-100-11-3	180	810	854	1664	100
		OPDS6S-80-5.5-4		740	697	1437	62			OPDS8H-100-15-4		950	939	1889	117
		OPDS6S-80-7.5-6		940	729	1669	74			OPDS8H-100-18.5-5		1090	1004	2094	132
		OPDS6S-80-9.2-7		1040	769	1809	82			OPDS8H-100-22-6		1230	1079	2309	148
		OPDS6S-80-11-8		1140	854	1994	94			OPDS8H-100-26-8		1510	1149	2659	170
		OPDS6S-80-13-10	143	1340	818	2158	106			OPDS8H-100-30-9	194	1650	1259	2909	187
		OPDS6S-80-15-11		1440	939	2379	115			OPDS8H-100-37-11		1930	1389	3319	212
		OPDS6S-80-18.5-14		1740	1004	2744	134			OPDS8H-100-45-13		2230	1252	3482	273
		OPDS6S-80-22-17		2040	1079	3119	153			OPDS8H-100-55-16		2650	1332	3982	310
		OPDS6S-80-26-20		2340	1149	3489	171			OPDS8H-100-63-19		3070	1412	4482	348
	80	OPDS6S-80-30-23	143	2640	1259	3899	191			OPDS8H-100-75-23		3630	1512	5142	397
		OPDS6S-80-37-29		3240	1389	4629	224			OPDS8J-100-7.5-1	180	530	729	1259	67
		OPDS6J-80-3.7-2		560	654	1214	60			OPDS8J-100-15-2		670	939	1609	100
		OPDS6J-80-5.5-3		670	697	1367	63			OPDS8J-100-18.5-3		810	1004	1814	116
		OPDS6J-80-7.5-4		780	729	1509	71			OPDS8J-100-26-4		950	1149	2099	137
		OPDS6J-80-9.2-5	142	890	769	1659	79			OPDS8J-100-30-5	194	1090	1259	2349	153
		OPDS6J-80-11-6		1000	854	1854	91			OPDS8J-100-37-6		1230	1389	2619	171
		OPDS6J-80-13-7		1110	818	1928	99			OPDS8J-100-45-7		1390	1252	2642	223
		OPDS6J-80-15-8		1220	939	2159	108			OPDS8J-100-55-8		1530	1332	2862	243
		OPDS6J-80-18.5-10		1440	1004	2444	123			OPDS8J-100-55-9		1670	1332	3002	252
200	100	OPDS6J-80-22-13	143	1770	1079	2849	142			OPDS8J-100-75-10	194	1810	1512	3322	289
		OPDS6J-80-26-15		1990	1149	3139	156			OPDS8J-100-75-11		1950	1512	3462	297
		OPDS6J-80-30-18		2320	1259	3579	176			OPDS8J-100-75-12		2090	1512	3602	305
		OPDS6J-80-37-22		2760	1389	4149	201			OPDS8J-100-90-13		2230	1572	3802	324
200	100	OPDS8H-100-3.7-1	180	530	654	1184	63			OPDS8J-100-90-14		2370	1572	3942	332
		OPDS8H-100-7.5-2		670	729	1399	79			OPDS8J-100-90-15		2510	1572	4082	340
										OPDS8J-100-110-16		2650	1622	4272	357

Performance Chart OPDS6S,6J,8H,8J 60Hz

6 8 CASTING SEA



Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)	Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
150	80	OPDS6S-80-5.5-2	142	540	697	1237	59	200	100	OPDS8H-100-5.5-1	180	530	697	1227	67
		OPDS6S-80-7.5-3		640	729	1369	66			OPDS8H-100-11-2		670	854	1524	91
		OPDS6S-80-9.2-4		740	769	1509	74			OPDS8H-100-15-3		810	939	1749	109
		OPDS6S-80-13-5	143	840	818	1658	90			OPDS8H-100-22-4		950	1079	2029	131
		OPDS6S-80-15-6		940	939	1879	99			OPDS8H-100-30-5		1090	1259	2349	153
		OPDS6S-80-18.5-8		1140	1004	2144	114			OPDS8H-100-37-6		1230	1389	2619	171
		OPDS6S-80-22-9		1240	1079	2319	125			OPDS8H-100-45-8	194	1530	1252	2782	231
		OPDS6S-80-26-11		1440	1149	2589	139			OPDS8H-100-55-9		1670	1332	3002	252
		OPDS6S-80-30-13		1640	1259	2899	155			OPDS8H-100-63-11		1950	1412	3362	281
		OPDS6S-80-37-16		1940	1389	3329	176			OPDS8H-100-75-13		2230	1512	3742	314
	80	OPDS6J-80-7.5-2	142	560	729	1289	68		100	OPDS8J-100-11-1	180	530	854	1384	83
		OPDS6J-80-9.2-3		670	769	1439	71			OPDS8J-100-22-2		670	1079	1749	114
		OPDS6J-80-13-4	143	780	818	1598	87			OPDS8J-100-30-3		810	1259	2069	137
		OPDS6J-80-15-5		890	939	1829	96			OPDS8J-100-45-4	194	970	1252	2222	198
		OPDS6J-80-18.5-6		1000	1004	2004	107			OPDS8J-100-55-5		1110	1332	2442	218
		OPDS6J-80-22-7		1110	1079	2189	118			OPDS8J-100-63-6		1250	1412	2662	240
		OPDS6J-80-26-8		1220	1149	2369	128			OPDS8J-100-75-7		1390	1512	2902	264
		OPDS6J-80-30-10		1440	1259	2699	144			OPDS8J-100-90-8		1530	1572	3102	282
		OPDS6J-80-37-12		1660	1389	3049	161			OPDS8J-100-110-10		1810	1622	3432	307
										OPDS8J-100-130-12		2090	1722	3812	338

Note

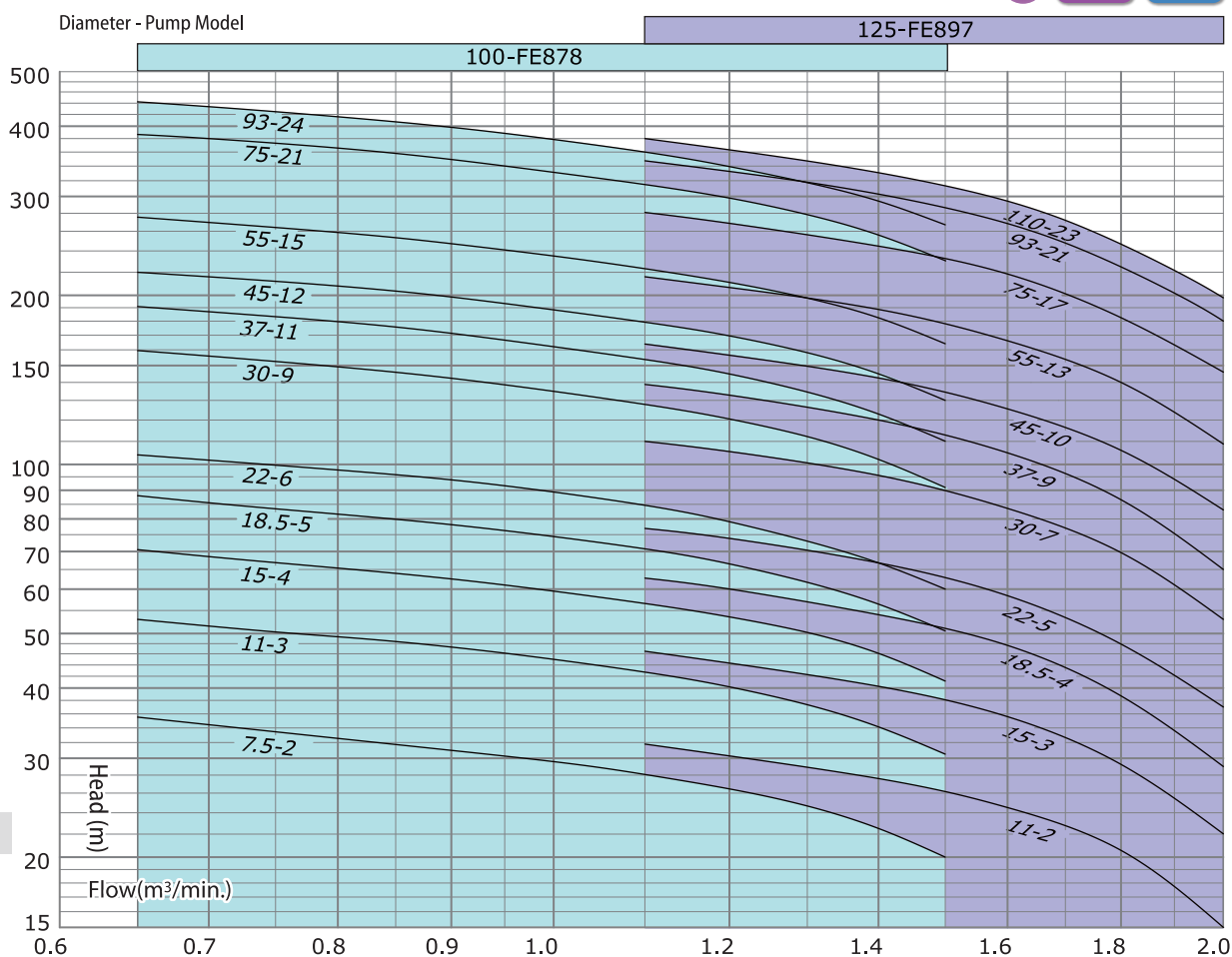
1. Total length of pump varies depending on a selected motor.

Performance Chart FE8 50Hz

8 PRESS SEA



FE8

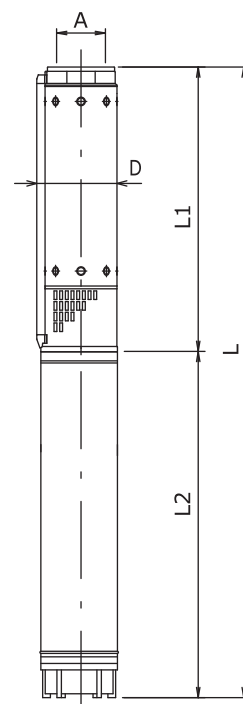
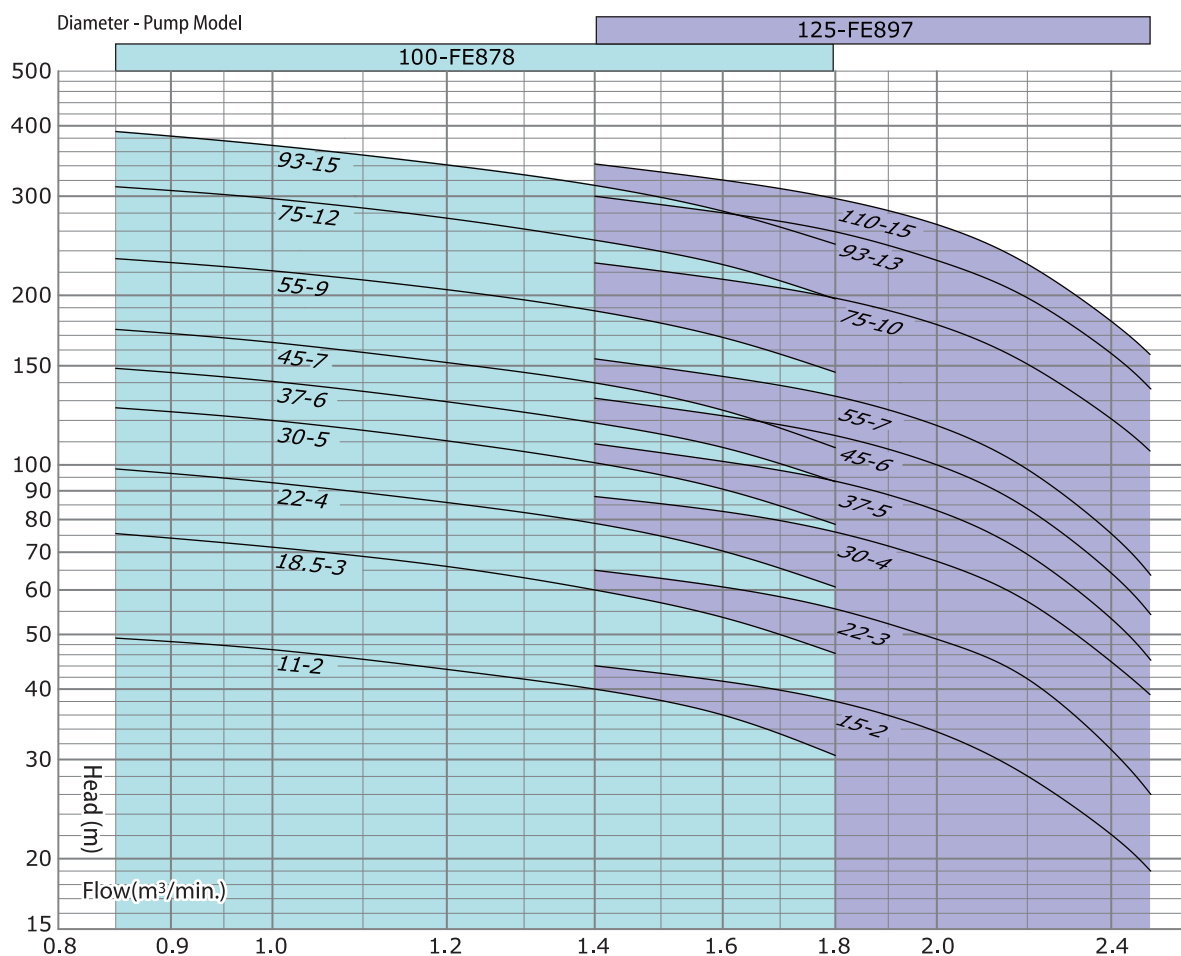


Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
200	100	FE878/2-100-7.5	192	655	712	1367	84
		FE878/3-100-11		780	777	1557	95
		FE878/4-100-15		906	842	1748	106
		FE878/5-100-18.5		1032	907	1939	117
		FE878/6-100-22		1158	1037	2195	134
		FE878/9-100-30		1536	1037	2573	149
		FE878/11-100-37		1788	1405	3193	213
		FE878/12-100-45	198	1919	1078	2997	257
		FE878/15-100-55		2297	1205	3502	297
		FE878/21-100-75		3053	1395	4448	371
		FE878/24-100-93		3431	1748	5179	463

Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
200	125	FE897/2-125-11	192	644	777	1421	90
		FE897/3-125-15		770	842	1612	101
		FE897/4-125-18.5		896	907	1803	112
		FE897/5-125-22		1022	1037	2059	130
		FE897/7-125-30		1274	1037	2311	139
		FE897/9-125-37		1526	1405	2931	203
		FE897/10-125-45	198	1657	1078	2735	247
		FE897/13-125-55		2035	1205	3240	287
		FE897/17-125-75		2539	1395	3934	352
		FE897/21-125-93		3043	1748	4791	448
		FE897/23-125-110		3295	1976	5271	522

Performance Chart FE8 60Hz

8 PRESS SEA



Well dia. (mm)	Disch. dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
200	100	FE878/2-100-11	192	655	777	1432	90
		FE878/3-100-18.5		780	907	1687	107
		FE878/4-100-22		906	1037	1943	125
		FE878/5-100-30		1032	1037	2069	129
		FE878/6-100-37		1158	1405	2563	188
		FE878/7-100-45	198	1284	1078	2362	231
		FE878/9-100-55		1541	1205	2746	267
		FE878/12-100-75		1919	1395	3314	327
		FE878/15-100-93		2297	1748	4045	419

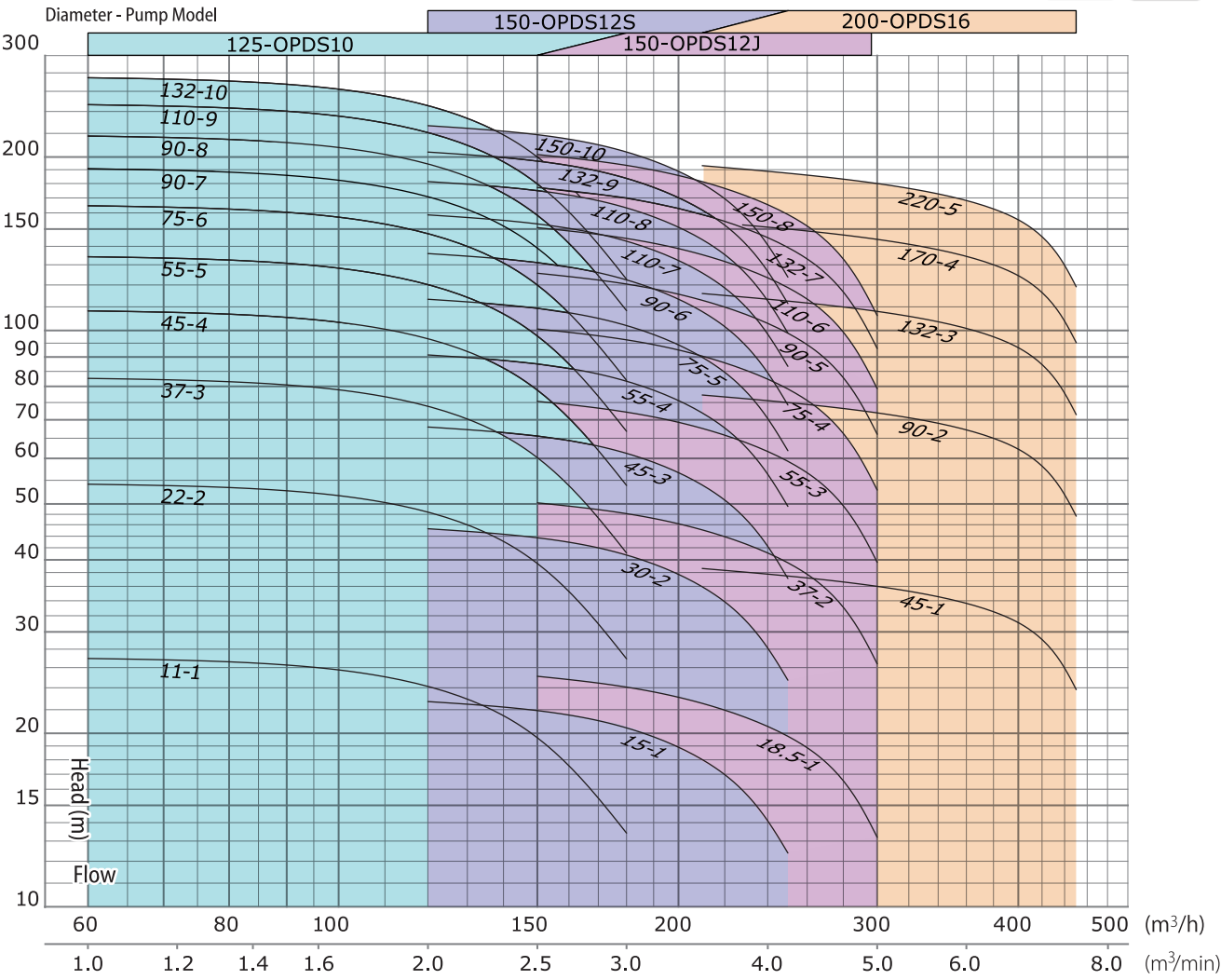
Well dia. (mm)	Disch. dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
200	125	FE897/2-125-15	192	644	842	1486	96
		FE897/3-125-22		770	1037	1807	120
		FE897/4-125-30		896	1037	1933	125
		FE897/5-125-37		1022	1405	2427	183
		FE897/6-125-45	198	1148	1078	2226	226
		FE897/7-125-55		1274	1205	2479	256
		FE897/10-125-75		1657	1395	3052	317
		FE897/13-125-93		2035	1748	3783	409
		FE897/15-125-110		2287	1976	4263	483

Note

1. 125A sized connection pipe with flange type cannot be installed to a 200A well.
2. Total length of pump varies depending on a selected motor.

Performance Chart OPDS10,12S,12J,16 50Hz

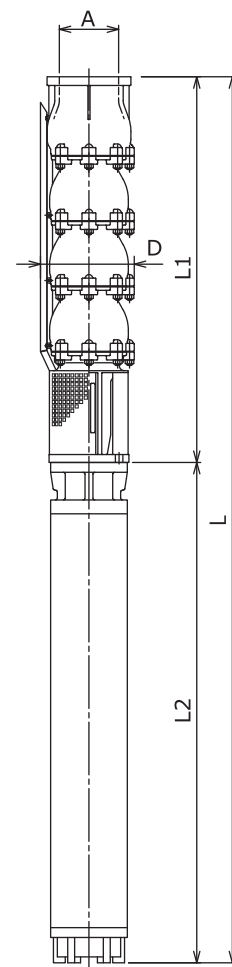
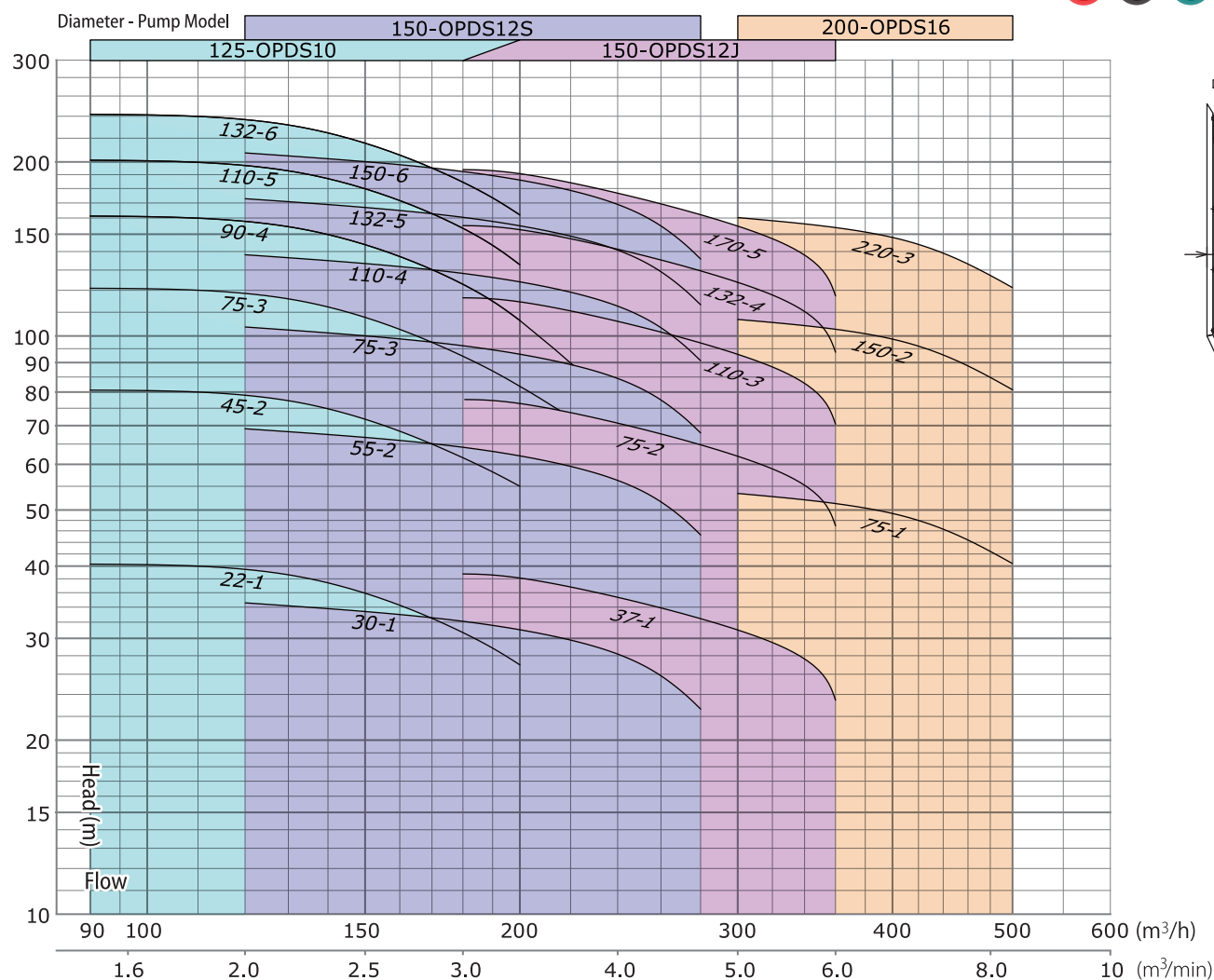
10 12 14 CASTING SEA



Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)	Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
250	125	OPDS10-125-11-1	236	610	854	1464	93	300	150	OPDS12J-150-18.5-1	258	640	1004	1644	116
		OPDS10-125-22-2		760	1079	1839	128			OPDS12J-150-37-2		820	1389	2209	161
		OPDS10-125-37-3		910	1389	2299	164			OPDS12J-150-55-3		980	1332	2312	232
		OPDS10-125-45-4	248	1040	1252	2292	220			OPDS12J-150-75-4		1160	1512	2672	277
		OPDS10-125-55-5		1190	1332	2522	245			OPDS12J-150-90-5		1340	1572	2912	302
		OPDS10-125-75-6		1340	1512	2852	286			OPDS12J-150-110-6		1520	1622	3142	325
		OPDS10-125-90-7		1490	1572	3062	309			OPDS12J-150-132-7		1700	1722	3422	355
		OPDS10-125-90-8		1640	1572	3212	321			OPDS12J-150-150-8		1880	1995	3875	502
		OPDS10-125-110-9		1790	1622	3412	342								
300	150	OPDS10-125-132-10		1940	1722	3662	369	350	200	OPDS16-200-45-1	310	865	1252	2117	223
		OPDS12S-150-15-1	258	625	939	1564	108			OPDS16-200-90-2		1070	1572	2642	299
		OPDS12S-150-30-2		790	1259	2049	149			OPDS16-200-132-3		1275	1722	2997	347
		OPDS12S-150-45-3		935	1252	2187	216			OPDS16-200-170-4		1420	2045	3465	518
		OPDS12S-150-55-4		1100	1332	2432	242			OPDS16-200-220-5		1625	2155	3780	573
		OPDS12S-150-75-5		1265	1512	2777	284								
		OPDS12S-150-90-6		1430	1572	3002	308								
		OPDS12S-150-110-7		1595	1622	3217	329								
		OPDS12S-150-110-8		1760	1622	3382	343								
		OPDS12S-150-132-9		1925	1722	3647	372								
		OPDS12S-150-150-10		2090	1995	4085	517								

Performance Chart OPDS10,12S,12J,16 60Hz

10 12 14 CASTING SEA



Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
250	125	OPDS10-125-22-1	236	610	1079	1689	116
		OPDS10-125-45-2	248	740	1252	1992	195
		OPDS10-125-75-3		890	1512	2402	249
		OPDS10-125-90-4		1040	1572	2612	271
		OPDS10-125-110-5		1190	1622	2812	292
		OPDS10-125-132-6		1340	1722	3062	319
300	150	OPDS12S-150-30-1	258	625	1259	1884	108
		OPDS12S-150-55-2		770	1332	2102	214
		OPDS12S-150-75-3		935	1512	2447	257
		OPDS12S-150-110-4		1100	1622	2722	289
		OPDS12S-150-132-5		1265	1722	2987	317
		OPDS12S-150-150-6		1430	1995	3425	463

Well dia. (mm)	Disch dia. A (mm)	Model	Max. dia. D (mm)	Pump L1 (mm)	Motor L2 (mm)	Total length L (mm)	Mass (kg)
300	150	OPDS12J-150-37-1	258	640	1389	2029	146
		OPDS12J-150-75-2		800	1512	2312	246
		OPDS12J-150-110-3		980	1622	2602	279
		OPDS12J-150-132-4		1160	1722	2882	310
		OPDS12J-150-170-5		1340	2045	3385	471
350	200	OPDS16-200-75-1	310	865	1512	2377	264
		OPDS16-200-150-2		1010	1995	3005	454
		OPDS16-200-220-3		1215	2155	3370	523

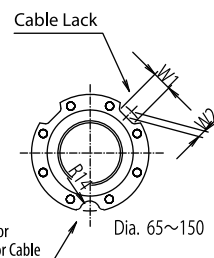
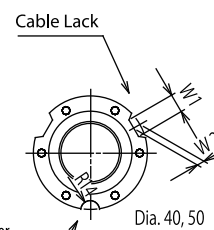
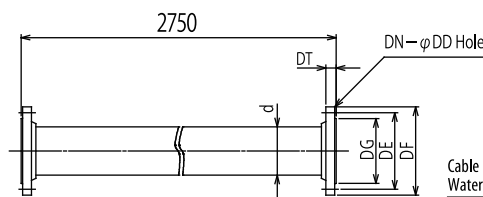
Note

1. Total length of pump varies depending on a selected motor.

Riser Pipe / FRP Pipe / 100V Deep Well Submersible Motor Pump / 200V Control Unit

Riser Pipe (Flange Type)

Max. Working Pressure	1.37Mpa
Material	Flange: SS Hot Dip Galvanizing Pipe: SGP SS Hot Dip Galvanizing
Accessories	Sheet Packing gasket : 1 pc Hexagon bolt • Nut : SUS 304 x for one side of flange

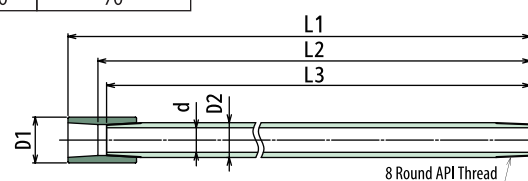


Diameter	Pipe	Flange								Max. Applicable Cable Size kg ²	Weight
	dDF	DE	DG	DT	DN	DD	W1	W2	mm		
40	11/2B	115	90	75	16	6	12	24	12	Flat3core14	13
50	2B	125	100	85	16	6	12	24	12	Flat3core14	17
65	21/2B	140	115	100	18	8	12	24	12	Flat3core14	24
80	3B	165	136	118	20	8	15	26	15	Flat3core14	29
100	4B	180	155	137	22	8	15	32	16	Flat3core30	39
125	5B	224	190	168	28	8	19	42	18	Flat3core50	52
150	6B	258	224	202	32	8	19	42	18	Flat3core50	70

※Length is customizable

HZCM FRP Pipe

Only FRP Pipe Made By Centrifugal Forming Method in Japan



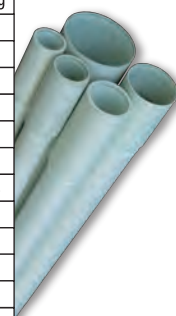
FRP Riser Pipe

Screw Thread Std.	API Std 5B 8Round Thread EUE Extra Long			API Std 5B 8Round Thread Casing Long	
Permissible Temp. Range	-20 ~ 70°C				
Diameter (inch)	2-3/8	2-7/8	3-1/2	5	7
Rated Shaft Power (t)	6	8.3	14.6	7.3	12.5
Rater Pressure	20.0	20.0	20.0	6.7	6.7
Weight (kg)	2.1	3.1	4.4	3.5	6.2
Gravity	1.8				
Total Length (mm)(±10) w/ socket / L1	4774/9574	4784/9584	4809/9609	4774/9474	4804/9504
Effective Length (mm)(±10) w/ socket / L2	4700/9500				
Pipe Length (mm)(±5) w/ socket / L3	4667/9467				
Outer diameter (mm)(+0, -1) / D2	64	77	92	127	176
Inner diameter (mm) (+0.5, -1.5) (5", 7" is -1.5) / d	49.2	60	71	113	160
Socket diameter (mm)(+0, -1) / D1	84	97	118	135	187

※Length is customizable

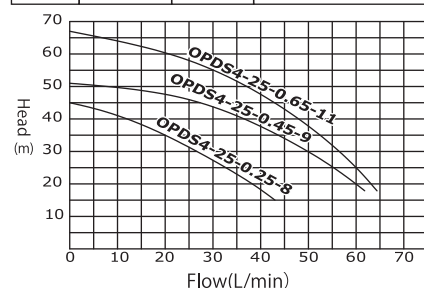
FRP Interpolated Casing Pipe

Screw Thread Std.	API Std 5B 8Round Thread Casing Long	
Permissible Temp. Range	-20 ~ 70°C	
Diameter (inch)	5	7
Rated Shaft Power (t)	70~90	70~90
Rater Pressure	6.7	6.7
Weight (kg)	3.5	6.2
Gravity	1.8	
Total Length (mm)(±10) w/ socket / L1	4774/9474	4804/9504
Effective Length (mm)(±10) w/ socket / L2	4700/9400	
Pipe Length (mm)(±5) w/ socket / L3	4672/9372	4667/9367
Outer diameter (mm)(+0, -1) / D2	127	176
Inner diameter (mm) (+0.5, -1.5) (5", 7" is -1.5) / d	113	160
Socket diameter (mm)(+0, -1) / D1	135	187

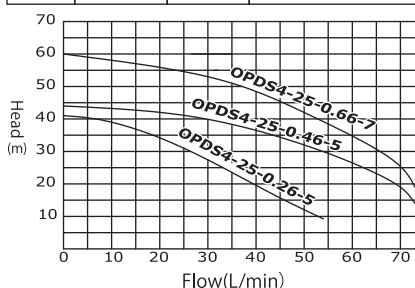


100V Deep Well Submersible Motor Pump

Frequency	Diameter (mm)	Output (kW)	Model
50Hz	25	0.25	OPDS4-25-0.25-8
		0.45	OPDS4-25-0.45-9
		0.6	OPDS4-25-0.65-11



Frequency	Diameter (mm)	Output (kW)	Model
60Hz	25	0.25	OPDS4-25-0.26-5
		0.45	OPDS4-25-0.46-5
		0.6	OPDS4-25-0.66-7



200V Control Unit 50Hz / 60Hz

Frequency	Phase - Voltage	Output (kW)	Model	Output (kW)	Model
50Hz	3 Phase	0.75	OUW25-0705/6	2.2	OUW25-2205/6
			OUW32-0705/6		OUW32-2205/6
		1.1	OUW25-1105/6		OUW40-2205/6
			OUW32-1105/6		OUW50-2205/6
60Hz	200V	1.5	OUW40-1105/6	OUW32-3705/6	
			OUW25-1505/6	OUW40-3705/6	
		3.7	OUW32-1505/6	OUW50-3705/6	
			OUW40-1505/6		
		OUW50-1505/6			



※Photo: 40A / 50A

Extension Underwater Cable Selection Chart (<30°C- Fresh water)

200/220V • 50Hz/60Hz • 3Phase

- Number in the list means an allowable length of underwater cable.
- Conductor resistance value is the one when CVCTF / EVCTF is used.
- Voltage drop should be less than 5%.

Starting Method	Motor Output (kW)	Cable Cross Sectional Diameter (mm ²)									
		2	3.5	5.5	8	14	22	30	38	50	60
Direct	0.45	269	503								
	0.75	179	335	522							
	1.1	121	227	354	499						
	1.5	87	164	255	359	632					
	1.9	77	145	226	319	560					
	2.2	66	124	194	273	481					
	2.7	56	106	165	232	408	639				
	3.7	41	77	120	170	298	467	631			
	5.5		51	79	112	197	308	416	524		
	7.5			51	71	126	197	267	336	429	536
	9.2			54	76	135	211	285	360	459	574
	11				54	96	151	204	257	327	410
	13					91	143	194	244	311	389
	15					74	116	157	198	252	316
	18.5						98	132	166	212	265
	22							105	132	169	211
	26							101	127	162	203
	30							92	116	148	186
Star-Delta	37									116	145
	11			58	81	143	224	303	382	488	610
	13				77	136	213	288	364	464	580
	15				63	110	173	234	295	376	470
	18.5					93	145	197	248	316	396
	22						116	156	197	252	315
	26						111	150	190	242	303
	30						102	137	173	221	277
	37								135	172	216
	45								120	153	192

400/440V • 50Hz/60Hz • 3Phase

Starting Method	Motor Output (kW)	Cable Cross Sectional Diameter (mm ²)									
		2	3.5	5.5	8	14	22	30	38	50	60
Direct	0.75	719									
	1.1	487									
	1.5	351									
	1.9	308									
	2.2	260	486								
	2.7	225	421								
	3.7	166	310	482							
	5.5	112	210	327	461						
	7.5	69	129	201	283	499					
	9.2	73	136	212	299	525					
	11	101	157	222	391	612					
	13	95	148	209	367	574	776				
	15		120	169	298	466	629				
	18.5			101	142	250	392	529	667		
	22				111	195	305	412	519	662	
	26				109	191	300	405	510	651	
	30					171	267	361	455	581	727
	37					142	222	300	378	483	604
Star-Delta	45						189	255	321	410	513
	55							206	260	332	415
	11	80	151	235	331	582					
	13	76	141	220	311	547	855				
	15	115	179	252	443	694					
	18.5		96	150	212	373	583	788			
	22			117	165	290	454	614	773		
	26			115	162	285	446	603	760		
	30				145	255	398	538	678	865	
	37				120	212	331	447	564	719	899
	45					179	281	380	478	610	763
	55					145	228	308	388	495	619
	75						167	226	285	363	455

Pump Sleeve

Please have larger water flow than one mentioned in the chart below to prevent damage on the motor due to insufficient coolant

Manufacturer	Size	Cooling Flow	Well Diameter (L/min.)					
			4B(100A)	5B(125A)	6B(150A)	8B(200A)	10B(250A)	12B(300A)
Hitachi	M6	0.15m/sec			45.3(31.7)	225.2(157.6)	454.6(318.2)	739.6(517.7)
	M9	0.50m/sec					947.1(663.0)	1,897.1(1,328)
Ebara	M4	0.10m/sec	12.6(8.8)	53.1(37.2)	100.1(70.1)	220.0(154.0)	373.0(261.1)	
	M6	0.10m/sec			33.9(23.8)	153.9(107.7)	306.8(214.8)	496.8(347.8)
	M8	0.10m/sec				68.8(48.2)	221.7(155.2)	411.7(288.2)
Franklin	M4	0.076m/sec	9.6(6.7)	40.5(28.3)	76.3(53.4)	167.7(117.4)	284.2(198.9)	
	M6	0.154m/sec			54.6(38.2)	237.3(166.1)	470.4(329.3)	760.0(532.0)
	M8 (～75kw)	0.154m/sec				55.6(38.9)	288.7(202.1)	578.2(404.8)
	M8 (95kw～)	0.154m/sec					268.8(188.2)	558.4(390.9)

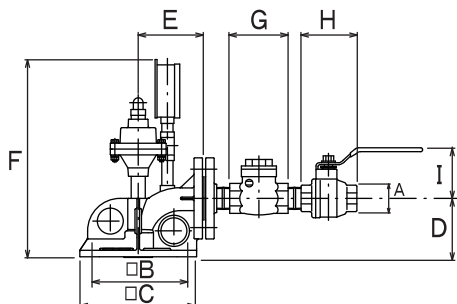
- If water flow is less than the amount written in the list above, please install a flow sleeve to the pump.
- Number in a "()" means a necessary amount of water flow.
- Inner diameter of the carbon steel pipe for ordinary piping (JIS G3452 (SGP)) is considered a well diameter. Water flow is calculated based on the used of the JIS pipe.



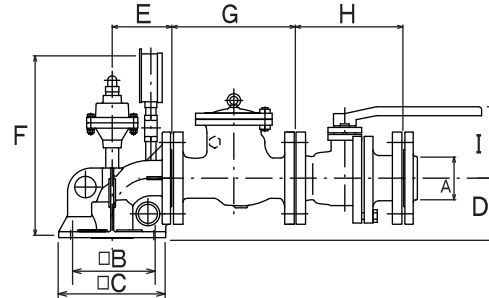
All Stainless Steel-Made Well Head with Discharge Pipe CASTING

For Standard Threaded-Type Riser Pipe (JIS 10K)

Diameter : 25A, 32A, 40A, 50A



Diameter : 40A, 50A, 65A

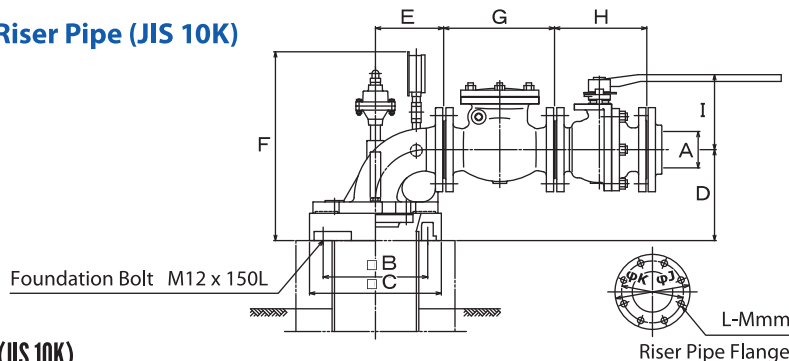


Unit : mm

Applicable Well Diameter	Connection	A	B	C	D	E	F	G	H	I	Permissible Lifting Load (kgf)	Flat Type Cable(mm ²)
100/150	Threaded	25	140	180×180	90	100	310	90	86	78	900	14
		32	140	180×180	90	100	310	105	100	82	1200	14
		40	140	180×200	90	100	310	120	109	93	1400	14
		50	140	180×200	100	100	320	140	130	99	1700	8(Well Dia.100)/14
	Diameter	40	140	180×200	90	100	310	165	165	112	1400	14
150/200	Diameter	50	140	180×200	100	100	320	203	178	120	1700	8(Well Dia.100)/14
		65	185	225×225	160	120	385	216	190	134	3800	14(Well Dia.150)/30

For Standard Flange-Type Riser Pipe (JIS 10K)

Diameter : 40A-150A



High Head Type

Diameter : 25A-100A

For Standard Threaded-Type Riser Pipe (JIS 10K)

Applicable Well Diameter	A	B	C	D	E	F	G	H	I	J	K	L	M	Permissible Lifting Load (kgf)	Flat Type Cable(mm ²)
150/200	40	185	240	120	120	340	165	165	112	115	90	6	M10	2200	22
	50	185	240	130	120	350	203	178	120	125	100	6	M10	2700	22
	65	185	240	160	120	380	216	190	134	140	115	8	M10	4100	14 (Well Dia.150) /30
200/250	80	230	290	200	150	420	241	203	163	165	136	8	M12	4700	30 (Well Dia.200) /50
	100	230	290	225	150	445	292	229	178	180	155	8	M12	6200	30 (Well Dia.200) /50
250/300	125	280	360	255	220	475	330	356	255	224	190	8	M16	8100	60
300/350	150	310	400	275	250	495	356	394	285	258	224	8	M16	8900	60

Unit : mm

High Head Type (JIS 20K)

Unit : mm

Applicable Well Diameter	A	B	C	D	E	F	G	H	I	J	K	L	M	Permissible Lifting Load (kgf)	Flat Type Cable(mm ²)
100/150	25	160	190×210	90	100	310	203	165	92	90	69	4	M10	1200	22x1 (Well Dia.100) /14
	32	160	190×210	90	100	310	216	178	98	95	75	4	M10	1500	22x1 (Well Dia.100) /14
150/200/250	40	250	290	150	150	370	241	190	112	125	100	6	M12	4000	22 (Well Dia.150) /38
	50	250	290	150	150	370	267	216	120	135	110	8	M12	5000	22 (Well Dia.150) /38
	65	250	290	150	150	370	292	241	130	146	123	8	M12	6000	14 (Well Dia.150) /30
200/250	80	250	290×360	160	150	380	318	283	163	185	145	8	M16	8500	30 (Well Dia.200) /50
	100	250	290×360	170	150	390	356	305	220	195	160	8	M16	8500	30 (Well Dia.200) /50

※Permissible Lifting Load= Pump Weight + Riser Pipe Weight w/ water filled + underwater cable + accessory (in the well) + Internal pressure load at the top riser pipe.

※Short pipe under the discharge vent pipe is necessary if riser pipes are threaded type.

Sole Plate

SUS304 Std. Plate Thickness: 20mm SS Std. Plate Thickness 19mm, 22mm

Discharge head JIS 10K Threaded type

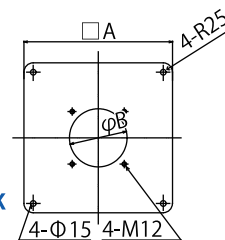
Well Diameter	Discharge Diameter			
	25A	32A	40A	50A
200A	A=□300 B=φ155			
250A	A=□350 B=φ155			
300A	A=□400 B=φ155			
350A	A=□450 B=φ155			
400A	A=□500 B=φ155			
450A	A=□550 B=φ155			
500A	A=□600 B=φ155			

Discharge head JIS 10K Sole Plate type

Well Diameter	Discharge Diameter					
	40A	50A	65A	80A	100A	125A
250A	A=□350 B=φ200					
300A	A=□400 B=φ200	A=□400 B=φ250				
350A	A=□450 B=φ200	A=□450 B=φ250	A=□450 B=φ300			
400A	A=□500 B=φ200	A=□500 B=φ250	A=□500 B=φ300	A=□500 B=φ350		
450A	A=□550 B=φ200	A=□550 B=φ250	A=□550 B=φ300	A=□550 B=φ350		
500A	A=□600 B=φ200	A=□600 B=φ250	A=□600 B=φ300	A=□600 B=φ350		

Discharge head JIS 20K Sole Plate type

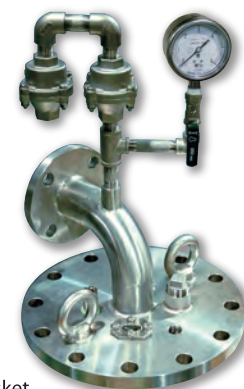
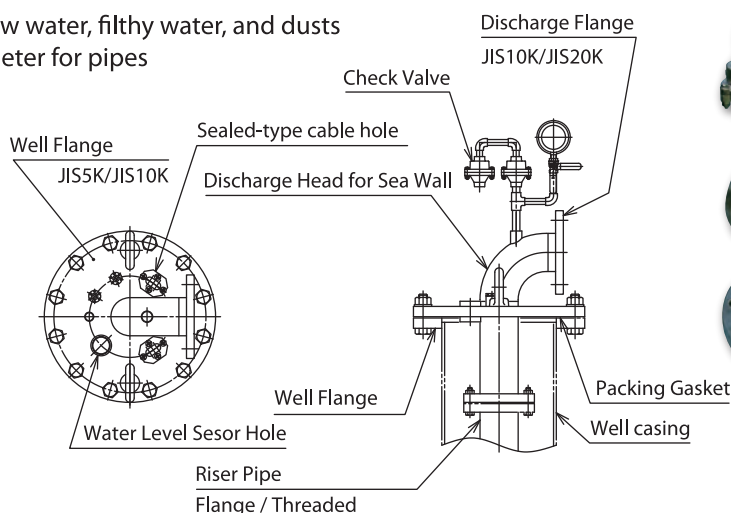
Well Diameter	Discharge Diameter				
	40A	50A	65A	80A	100A
300A	A=□400 B=φ250				
350A	A=□450 B=φ250				
400A	A=□500 B=φ250				
450A	A=□550 B=φ250				
500A	A=□600 B=φ250				



Discharge Head for Sea Wall

Sealed structure prevents incoming sew water, filthy water, and dusts and protects the well. Any size of diameter for pipes and wells can be manufactured.

Pipe Dia.	25A~150A (1"~6")
Well Dia.	100A~300A (4"~12")
Discharge Head	Flange Type : JIS10K/JIS20K
Riser Pipe	Flange Type : JIS B 8324 Threaded Type : JIS B 0203
Material	SUS316/SUS304/SS400



Control Panel Board

Control board is designed for submersible motor pump
Indoor / Outdoor wall-hanging type, Outdoor self-standing type etc.

Model	CLFN2
Safeguard	3E Relay (Overload, Phase-loss, and Phase reversal)
Level Equipment	Float-less switch
Control	Well and water reserve tank
Indicating Lamp	Power, operation, Error, and well drought
Switch	Manual - Stop - Auto



Touch Panel Control

Functional and comfortable touch panel operation.
2 Models: Commercial model / Inverter model

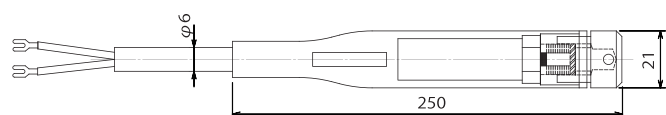
Ambient temp. / Humidity	0~50°C / 30~90% RH (Dew • No Dew)	
Power	3 Phase	AC200V±10%、400V±10% 50/60Hz AC440V±10% 60Hz
Control Power	Single Phase	AC200V
Output	0.37~75kW (Please contact for other outputs)	
Structure	Wall-hanging type (indoor) / Sole plate Type (indoor) /	

※Outdoor type is optional.



Water Level Sensor

When installing a submersible pump for fresh water, this water level sensor is submerged along with an indicator and shows you an exact well water level with digital display.



Model	OPLS-50SC	OPLS-100SC	Operating Temp. Range	0~25°C
Measurement Range	0.5MPa(51.0m)	1.0MPa(102.0m)	Material	Outer Sheath : crosslinked polyolefin Sensor Part : SUS316
Cable Length	60m	120m	Pressure Sensing Method	Semiconductor strain gauge method
Measurement Accuracy	±0.15%FS (linear direction)		Cable Seal	Multi-layered seal method
Application	For Fresh water well		Sensor Size	Dia. 21mm x Length 250mm
Overload	110%FS		Weight	approx. 250g
Cable Color	White: + (Positive) Black: - (Negative)		Lightning Protection	Arrester (optional)
Power Supply	DC12~24V		Cable Material	Crosslinked polyolefin
Signal Output	DC4~20mA (2 wire type)		Cable Diameter	6mm
Load Resistance	250~500Ω or less			

There are Things Only Okamoto Pump Can Do

1

**Committed to thorough Service- Design,
Manufacture, Installation Work,
and Maintenance**

2

**Customer-oriented support by
offering custom-manufacture**

3

**Global Expansion in procurement
and exports for ODA project**

Global Procurement

**Italy, China, USA,
Singapore, Belgium, etc**

ODA Project

● 45 countries /110 sites



Tanzania Metropolitan Waterworks Project

Okamoto Pump Product Lineup

All Stainless-Made Pump for Sea Water

- Water intake at low-cost with space-saving design
- Sea water-resistance materials used for pump and motor



Submersible Motor Pump for Fresh Water Deep Well

- Best suitable pump for well performance
- Performance, cost, and life expectancy in balance



Stainless Steel Casting

- Maximum Flow: 7.5 m³ / min
- Maximum Head : 280m / Maximum Output: 400kW



Deep Well Hand Pump

- Securing water supply during disaster
- Maximum Head 50m/ Available on deep well



All Stainless-Made Pump Accessories

- Employment of stainless steel-made standardized ahead of others in the world
- JIS 10K 25A ~ 150A / JIS 20K 25A ~ 100A



Hot Spring Well Surveillance System

- Surveillance on hot spring source using the Internet
- Automatic-data processing for pump management



Water Level Sensor and Its System

- Easy-check of water level



Safety Caution

- Please read the operation manual before setup or use.
- Please select products according to the needs. Improper handling of products may cause accidents.

おかもとポンプ株式会社 OKAMOTO PUMP Co., Ltd.

Head Office 7-15-27 Minami-Senju, Arakawaku-ku, Tokyo, 116-0003, Japan
TEL : +81-3-3803-4511 FAX : +81-3-3803-4514
<http://www.okamoto-pump.co.jp>

Osaka Office Office No.404, Sanplaza-Midosuji, 1-1-1 kasuga, Suita-shi,
Osaka, 565-0853, Japan
TEL : +81-6-6821-2434 FAX : +81-6-6821-2435

Sendai Office 1-3-46, Komegafukuro, Aoba-Ku, Sendai-Shi,
Miyagi, 980-0813, Japan
TEL : +81-22-713-9351 FAX : +81-22-713-9352

OKAMOTO High-Tech Pump (Wuxi) Co., Ltd.

No.99 Zhangcun, Hudai Town, Binhu District, Wuxi City
Jiangsu Province, People's Republic of China
TEL : 0510-82722073 FAX : 0510-85536857