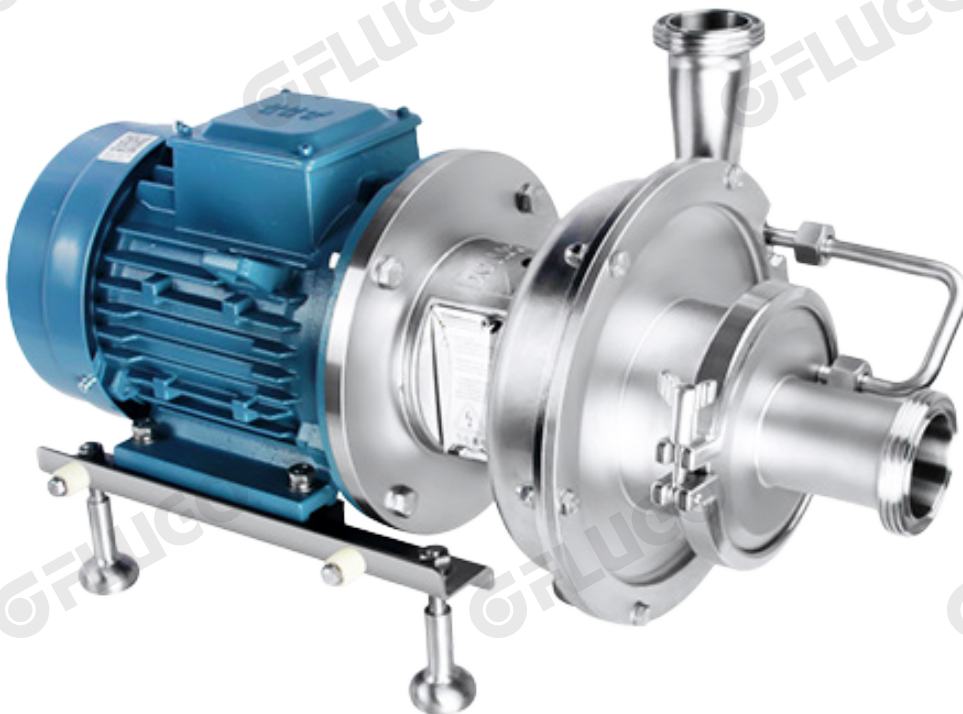




Technical Catalogue



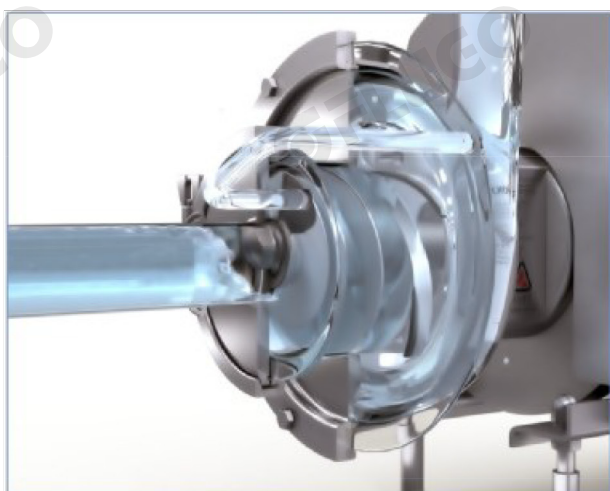
FSNZL-X Series

Self Priming Pumps

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP

High efficiency, low noise, FSNCIP backhaul, material transport, high clean solution.



FSNZL-X Series is a self priming centrifugal pump. It can be applied to FSNCIP system as self - priming backflow circulating pump, also as centrifugal pump, material - transport. Max. viscosity 500CPS (mPas). Advantages of this pump are high efficiency, low noise, high cleaning and easy cleaning of liquid components and so on.

Technical Specifications

Max Flow rate	50m ³ /h
Max Head	66M
Max temperature	From -20°C to 150°C
Material	304/316L, 1.431/1.4404, ASME BPE 316L, 1.4435 NB2 Fe ≤ 0.5%
Surface treatment	≤ Ra0.8 μm, ≤ Ra0.6 μm, ≤ Ra0.4 μm
Mechanical Seal	Single mechanical seal, double mechanical seal (see configuration scheme)
inlet/Outlet	Threaded, clamped, flange, Aseptic flange
Certification	3-A-02-10 (N.O.1579); MD/06/42 - EC (N.O.70521616101-00); FDA 177.2600; USP CLASS-II; EG/VO1935/2004;

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP

Typical Application



FSNZL-X series various application

Brewery	Dairy Products	Food	Other Application
• Beer • Wort • Yeast • Water • FSNCIP Solution	• Milk • Cream • Yogurt • Whey • Saline • FSNCIP Solution	• Edible Oil • Soup-Sauce • Soup-Stock • Saline • Flavoring • Ice Cream Mixture • FSNCIP Solution	• FSNCIP solution • Storage tank empty

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP



Very simple maintenance, no special tools required,
no professionals required



Technical Advantages

- Maintenance disassembly and installation can be completed without professional staff and special tools.
- Initial use of installation debugging, even if a short reverse rotation will not be damaged.
- Impeller and shaft are connected by keyway; impeller and mechanical seal rotating ring are connected by pin; mechanical seal static ring and pump body are connected by special-shaped flange.
- Compatible with single and double machine seal, only need to change machine seal.

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP



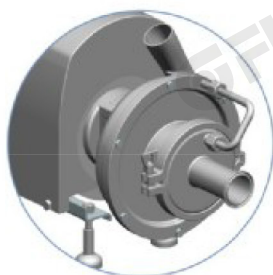
Flange Inlet/Outlet



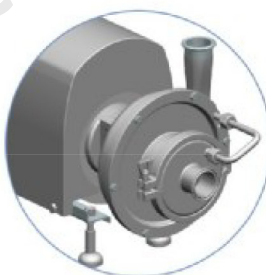
Thread Inlet/Outlet



Union Inlet/Outlet



90° 135° inclined Outlet



Clamp Inlet/Outlet

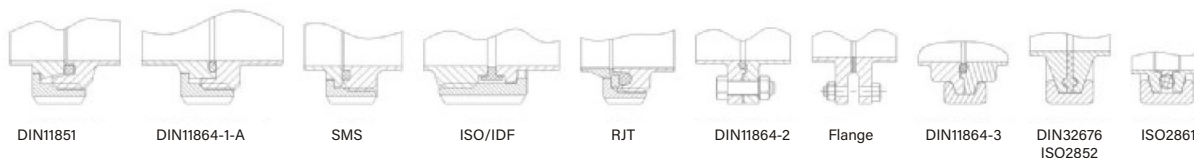


Aseptic Flange (DIN 11864) Inlet/Outlet

Technical Advantages

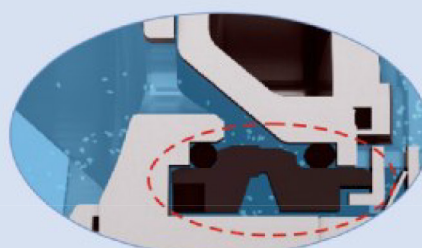
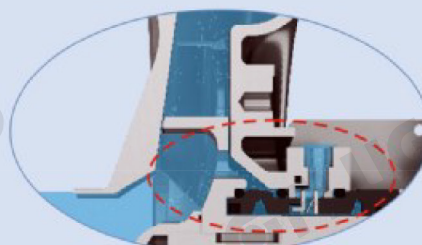
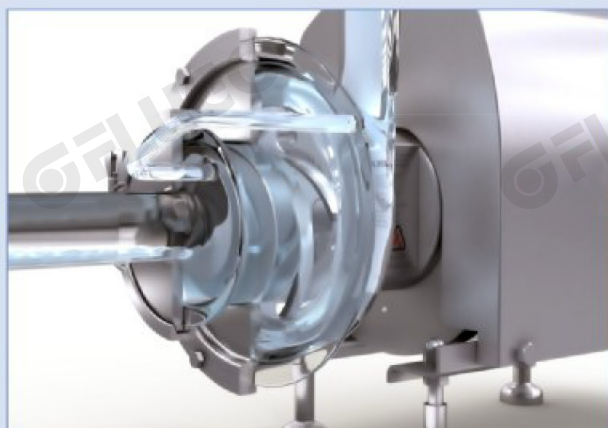
Connection: Threaded, Clamped, Flange, Aseptic Flange, KF etc.

Standard: DIN SMS ISO IDF RJT ASME BPE 3A I-line



FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP MECHANICAL SEAL DESIGN



Double mechanical seal design



Single mechanical seal design

Mechanical Seal Features

Flugo FSNZL-X series self-priming centrifugal pump mechanical seal is researched and developed together with European Swedish famous company. The mechanical seal is designed with pressure balanced and super long working life, can be disassembled and maintained easily without special tools. The sanitary purity is according to EU EHEDG, USA 3-A-02-11, FDA1772600 and so on, and has lots of configuration.

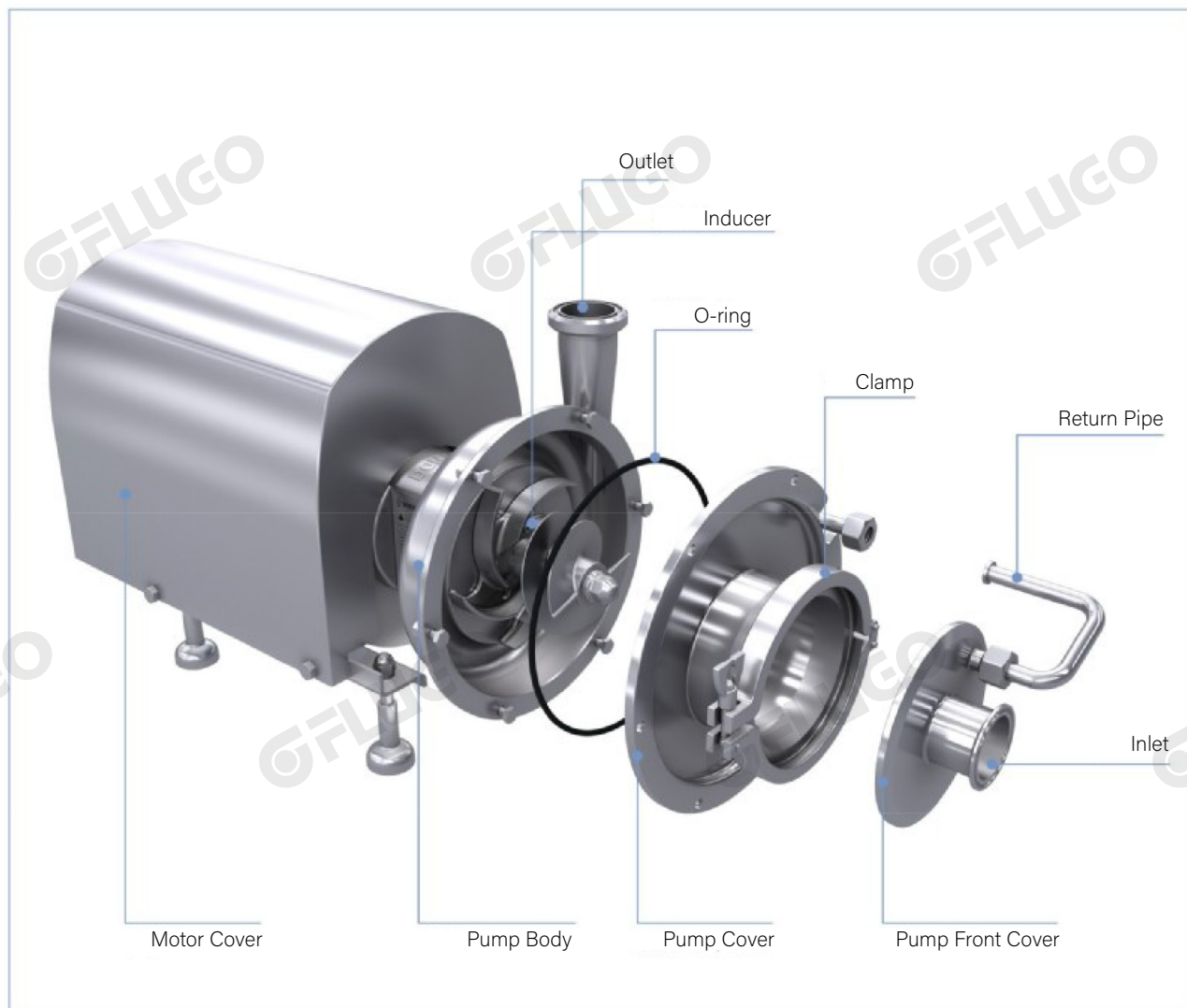
Mechanical Seal Configuration

1) SIC/C/EPDM	Standard
2) SIC/C/FKM	
3) SIC/C/HNBR	Optional
4) SIC/SIC/EPDM	
5) SIC/SIC/FKM	
6) SIC/SIC/HNBR	
7) TC/TC/EPDM	
8) TC/TC/FKM	
9) TC/TC/HNBR	

Note: Above configuration is suitable for single and double mechanical seal.

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP



FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP MODEL INSTRUCTION



FSNZL-X 15 8T 22 1.5KW 380V 50HZ M 2/1.5 S

Connection Standard:
DIN (D) SMS (S) 3A (A) RJT (R) ISO/IDF (I)

Inlet/Outlet Size

Connection method: Thread (M) Clamp (C) Flange (F)

Motor frequency:
50Hz; 60Hz

Voltage: 110V 220V 380V (See selection table)

Motor Power: 1.1kw 1.5kw 2.2kw.....

Pump head (See selection table)

Pump flow (See selection table)

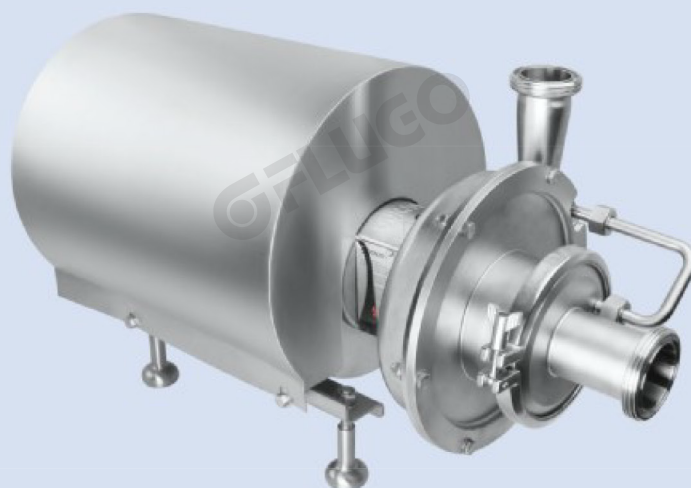
Centrifugal pump model

Self-priming centrifugal pump code: FSNZL-X

For example:
FSNZL-X-15-8T-22-1.5KW-380V-50HZ-M-2/1.5-S

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP MODEL INSTRUCTION

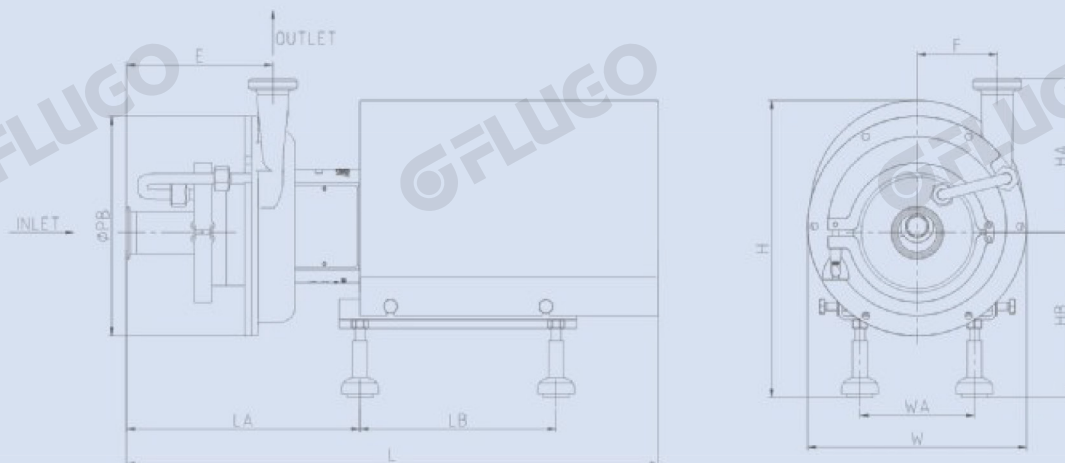


Model	Motor Power	Flow rate (m³)	Head (M)	Inlet&Outlet	Weight (KG)
FSNZL-X-15	1.5KW	3	25	2"/1.5"	42
	1.5KW	5	25		42
	1.5KW	8	22		42
	2.2KW				42
	2.2KW	10	20		42
	2.2KW	15	19		42
	2.2KW	18	15		42
	3.0KW				54
	2.2KW	20	13		45
	3.0KW				54
FSNZL-X-20-1	2.2KW	5	32	2.5"/2"	51
	3.0KW				60
	3.0KW	10	32		60
	4.0KW				64
	4.0KW	15	31		64
	4.0KW	20	29		64
	4.0KW	25	25		64
	5.5KW				82
	5.5KW	30	26		82
	5.5KW	38	18		82
FSNZL-X-20-2	5.5KW	20	36	2.5"/2"	86
	5.5KW	25	33		86
	5.5KW	30	32		86
	5.5KW	36	28		86
	7.5KW	40	26		90
	7.5KW	45	24		90

Model	Motor Power	Flow rate (m³)	Head (M)	Inlet&Outlet	Weight (KG)
FSNZL-X-25	4.0KW	5	46	2.5"/1.5"	70
	5.5KW	10	45		88
	5.5KW	15	44		88
	5.5KW	20	40		88
	5.5KW	10	54		93
FSNZL-X-30	5.5KW	15	50	2.5"/1.5"	93
	5.5KW	20	47		93
	7.5KW	25	42		97
	7.5KW	30	36		97
	11KW	10	66		159
	11KW	15	61		159
	11KW	20	61		159
FSNZL-X-35-1	11KW	25	56	3"/1.5"	159
	11KW	30	56		159
	11KW	35	51		159
	15KW	40	46		172
	15KW	45	46		172
	15KW	50	41		172
	15KW	20	64		172
	15KW	25	62		172
	15KW	30	62		172
	15KW	35	61		172
FSNZL-X-35-2	15KW	40	59	3"/1.5"	172
	18.5KW	45	56		180
	18.5KW	50	51		180

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP MODEL INSTRUCTION

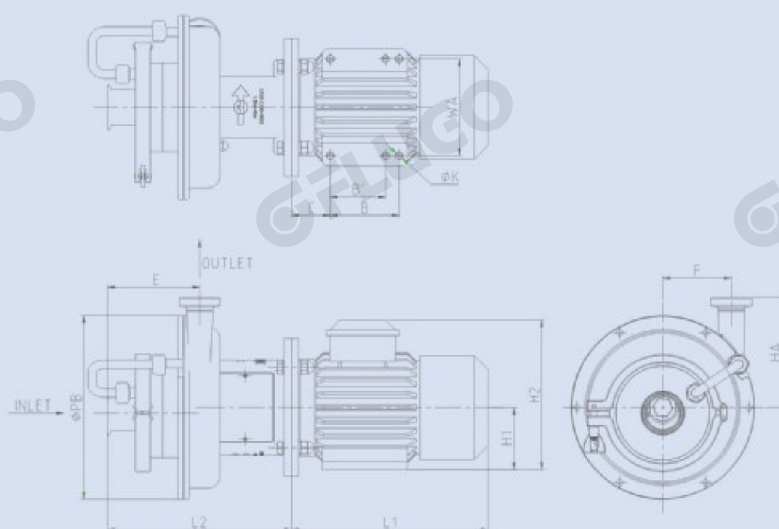


FSNZL-X series	Assembly Dimension											Inlet/Outlet connection							
	Power (KW)	Inlet	Outlet	ΦPB	F	H	HB	HC	LB	W	WA	SMS Thread connection				INCH Clamp connection			
												E	LA	L	HA	E	LA	L	HA
FSNZL-X-15	1.5-2.2KW	2"	1.5"	268	98	362	189	95	240	260	140	187	293	658	188	179	286	651	181
	3.0KW	2"	1.5"	268	98	413	218	95	300	320	160	187	275	700	188	179	268	693	181
FSNZL-X-20-1	3.0KW	2.5"	2"	282	100	413	218	95	300	320	160	191	283	641	208	184	275	633	201
	4.0KW	2.5"	2"	282	100	421	210	95	300	340	190	191	279	711	208	184	268	700	201
FSNZL-X-20-2	5.5-7.5KW	2.5"	2"	282	100	466	231	95	330	380	216	200	332	807	208	193	320	800	201
FSNZL-X-25	4.0KW	2.5"	1.5"	328	104	421	211	95	300	340	190	194	294	714	218	183	283	703	211
	5.5-7.5KW	2.5"	1.5"	328	104	466	231	95	330	380	216	194	328	808	218	183	317	796	211
FSNZL-X-30	5.5-7.5KW	2.5"	1.5"	328	104	466	231	95	330	380	216	194	328	808	218	183	317	796	211
FSNZL-X-35-1	11-15KW	3"	1.5"	363	141	551	260	95	450	470	254	201	357	932	243	189	345	920	236
FSNZL-X-35-2	15.0KW	3"	1.5"	363	141	551	260	95	450	470	254	208	362	937	243	197	351	926	236
	18.5KW	3"	1.5"	363	141	551	260	95	450	470	254	208	362	937	243	197	351	926	236

Note: The relevant dimensions of the above data diagrams are not regarded as the final basis of the actual object.
Flugo reserves the right to update the data without further notice.

FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP-DATA CHART (WITHOUT COVER)

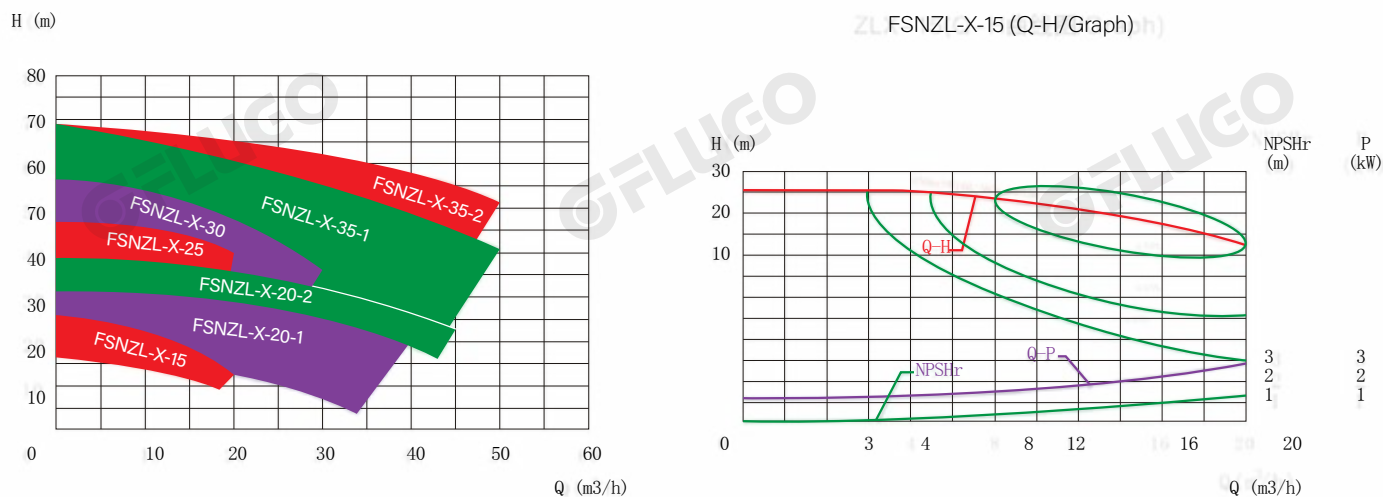


FSNZL-X series	Assembly Dimension													Inlet/Outlet connection					
	Power	Inlet	Outlet	ΦPB	B	B'	C	F	H1	H2	K	L1	WA	SMS Thread connection			INCH Clamp connection		
														E	L2	HA	E	L2	HA
FSNZL-X-15	1.5KW	2"	1.5"	268	100	\	56	98	90	217	10	285	140	187	317	188	179	310	181
	2.2KW	2"	1.5"	268	125	\	56	98	90	217	10	301	140	187	317	188	179	310	181
	3.0KW	2"	1.5"	268	140	\	63	98	100	240	12	346	160	187	317	188	179	310	181
FSNZL-X-20-1	3.0KW	2.5"	2"	282	140	\	63	100	100	240	12	346	160	191	328	208	184	317	201
	4.0KW	2.5"	2"	282	140	\	70	100	112	252	12	351	190	191	328	208	184	317	201
FSNZL-X-20-2	5.5-7.5KW	2.5"	2"	282	140	\	89	100	132	301	12	399	216	200	328	208	193	317	201
FSNZL-X-25	4.0KW	2.5"	1.5"	328	140	\	70	104	112	252	12	351	190	194	329	218	183	318	211
	5.5-7.5KW	2.5"	1.5"	328	140	\	89	104	132	301	12	399	216	194	329	218	183	318	211
FSNZL-X-30	5.5-7.5KW	2.5"	1.5"	328	140	\	89	107	132	301	12	399	216	194	354	218	183	343	211
FSNZL-X-35-1	11-15KW	3"	1.5"	363	254	210	108	141	160	413	15	477	254	201	400	243	189	388	236
FSNZL-X-35-2	15.0KW	3"	1.5"	363	254	210	108	141	160	413	15	477	254	208	400	243	197	388	236
	18.5KW	3"	1.5"	363	254	210	108	141	160	413	15	477	254	208	400	243	197	388	236

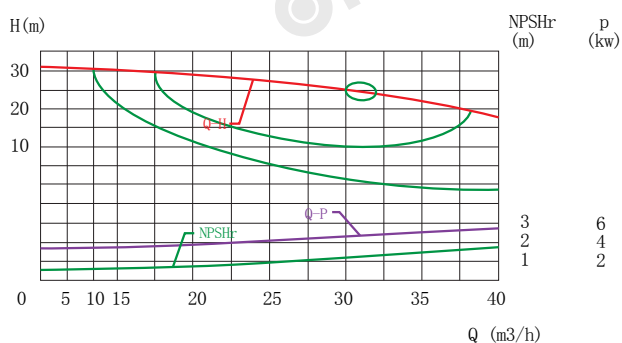
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FSNZL-X SERIES

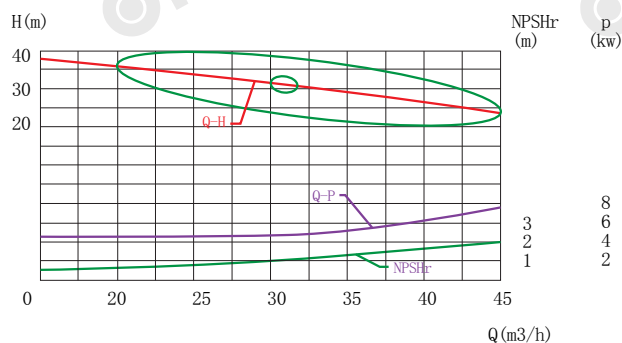
SELF-PRIMING CENTRIFUGAL PUMP GRAPH



FSNZL-X-20-1 (Q-H/Graph)



FSNZL-X-20-2 (Q-H/Graph)

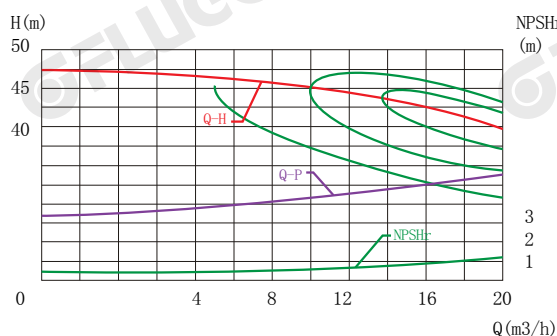


Testing condition: medium water, temperature 20°C, impeller speed 2900RPM (This graph also applies to motor 60Hz, impeller speed 3600RPM) Q-Flow rate (m³/h), H-head (meter), P-power (KW), η % pump efficiency.

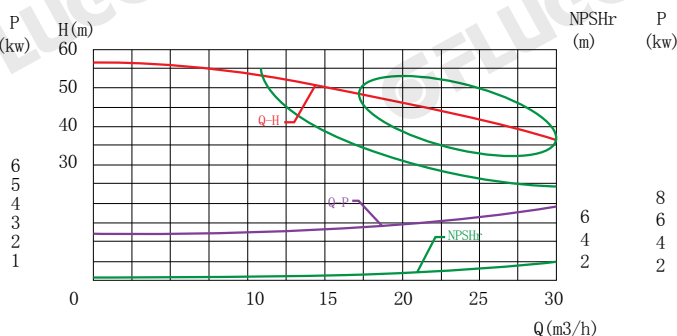
FSNZL-X SERIES

SELF-PRIMING CENTRIFUGAL PUMP GRAPH

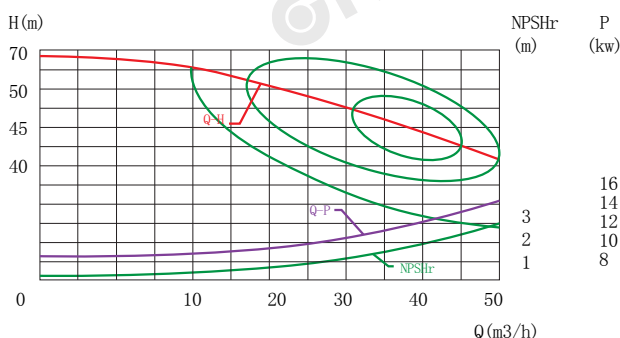
FSNZL-X-25 (Q-H/Graph)



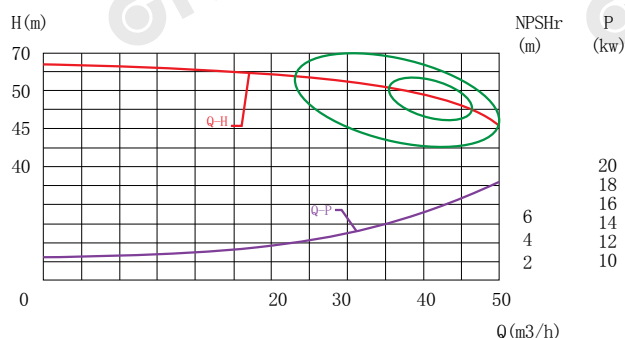
FSNZL-X-30 (Q-H/Graph)



FSNZL-X-35-1 (Q-H/Graph)



FSNZL-X-35-2 (Q-H/Graph)



Testing condition: medium water, temperature 20°C, impeller speed 2900RPM (This graph also applies to motor 60Hz, impeller speed 3600RPM) Q-Flow rate (m³/h), H-head (meter), P-power (KW), η % pump efficiency.



FSNZL-X Series - Centrifugal Pump

Authorized Distributor