



Technical Catalogue



FSNBS Series

Centrifugal (Close Impeller)

FSNBS SERIES

SERIES CENTRIFUGAL PUMP

Solution for high efficiency,
low noise, simple and economical
maintenance, high purity

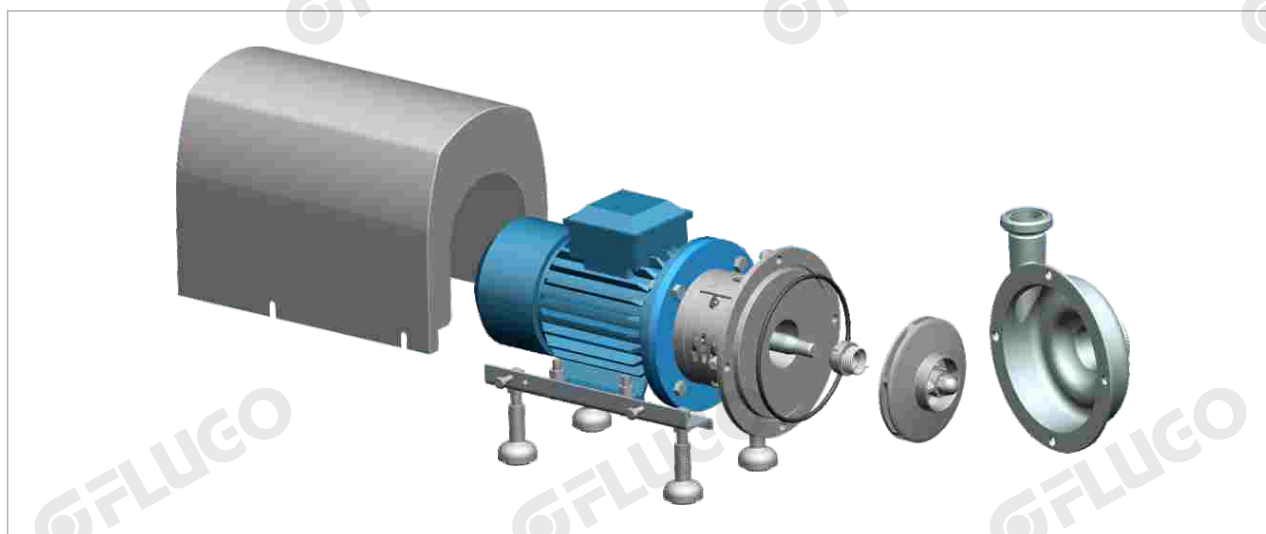
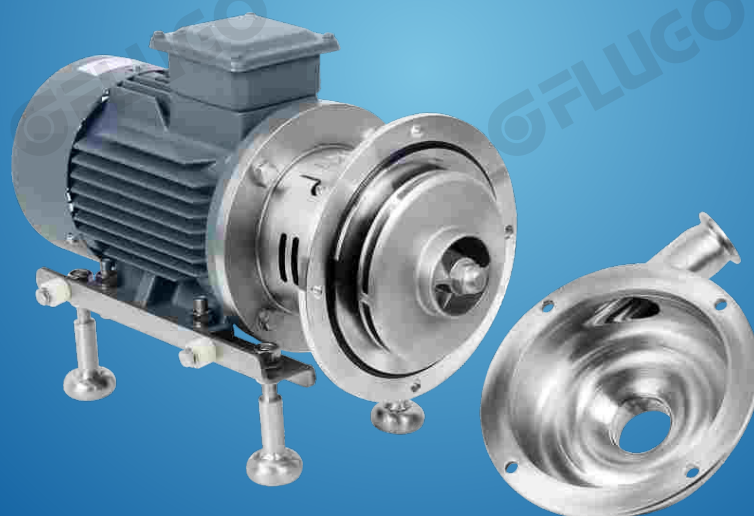


Flugo FSNBS series is a closed impeller centrifugal pump with simple internal structure and pressure balance design. It is suitable for various liquid transportation industries such as food and beverage, brewing and water treatment, and meets CIP cleaning, SIP sterilization, etc. In addition, we have maintained the most flexible combination application for FSNBS series pumps. For example, the pump outlet angle can be adjusted from 0° to 135°, various connection and import modes, and a wide range of machine seal materials. At the same time, the maintenance efficiency is maintained, and the high professionalism of the personnel is reduced, and no special special tools are required to complete these tasks. Therefore, the goal of achieving high efficiency, hygiene, high reliability and low cost is to make the FSNBS series centrifugal pump a high-performance and low-cost pump.

Technical Specifications

Max flow	50m³/h		
Max head	210M		
Max temperature	-10℃-140℃		
Material	304 /316L, 1.431/1.4404, ASME BPE 316L, 1.4435 NB2 Fe≤0.5%	Dual-phase steel 2205,	Hastelloy alloy C276
Surface treatment	≤ Ra0.8 μm, ≤ Ra0.6 μm, ≤ Ra0.4 μm		
Machine seal	Single seal, double seal		
Machine seal configuration	See mechanical seal configuration table		
Inlet/Outlet connection	Threads, clamps, flanges, aseptic flanges		
Certified	3-A-02-12(N.O.1579); MD/06/42-EC (N.O.70521616101-00); FDA 177.2600; USP CLASS-II; EG/VO1935/2004		

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.
- ◆ This pump only rotate clockwise, forbid to rotate counterclockwise. (can check rotation direction from backside)

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CENTRIFUGAL PUMP VARIOUS CONFIGURATIONS



Thread connection



Clamp connection



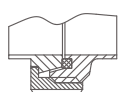
Union nut



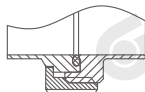
Flange connection inlet / outlet

Pump Inlet/outlet Connection Standard

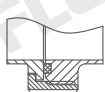
Connection: Thread, Clamp, Flange, Aseptic flange, KF etc.
Standard: DIN SMS ISO IDF RJT ASME BPE 3A I-line



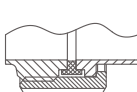
DIN11851



DIN11864-1-A



SMS



ISO/IDF



RJT



DIN11864-2



Flange



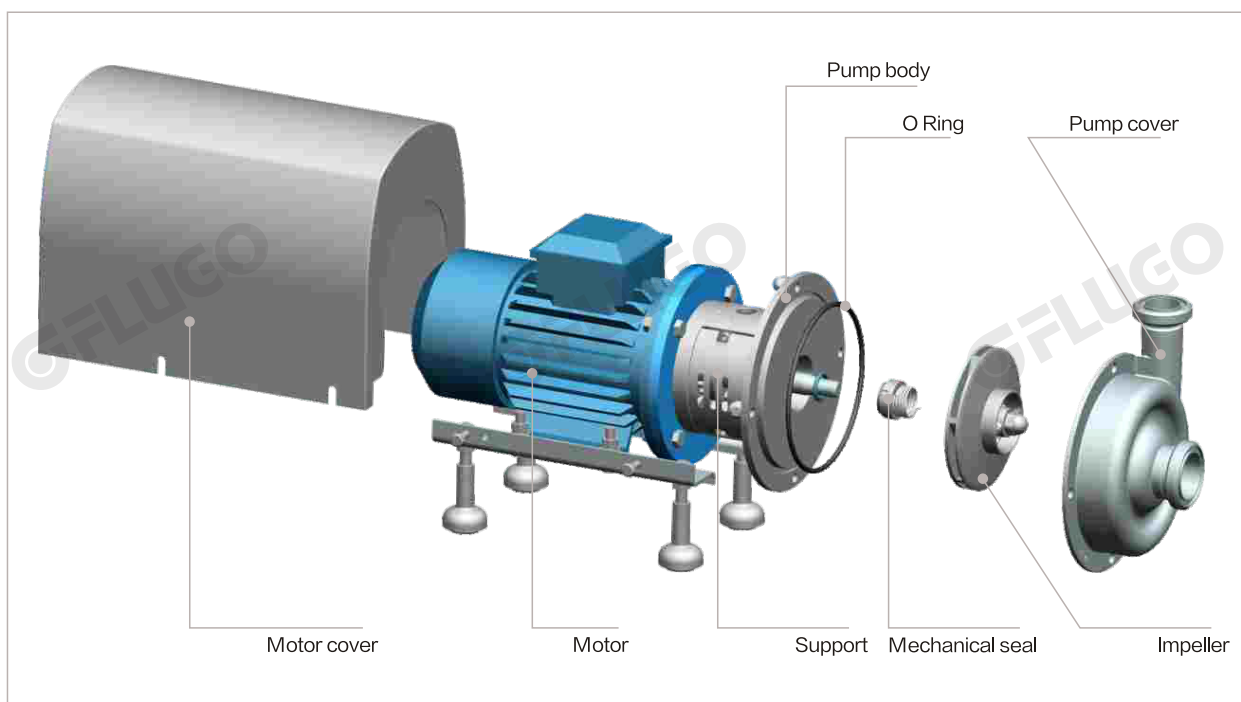
DIN11864-3



DIN32676
ISO2852

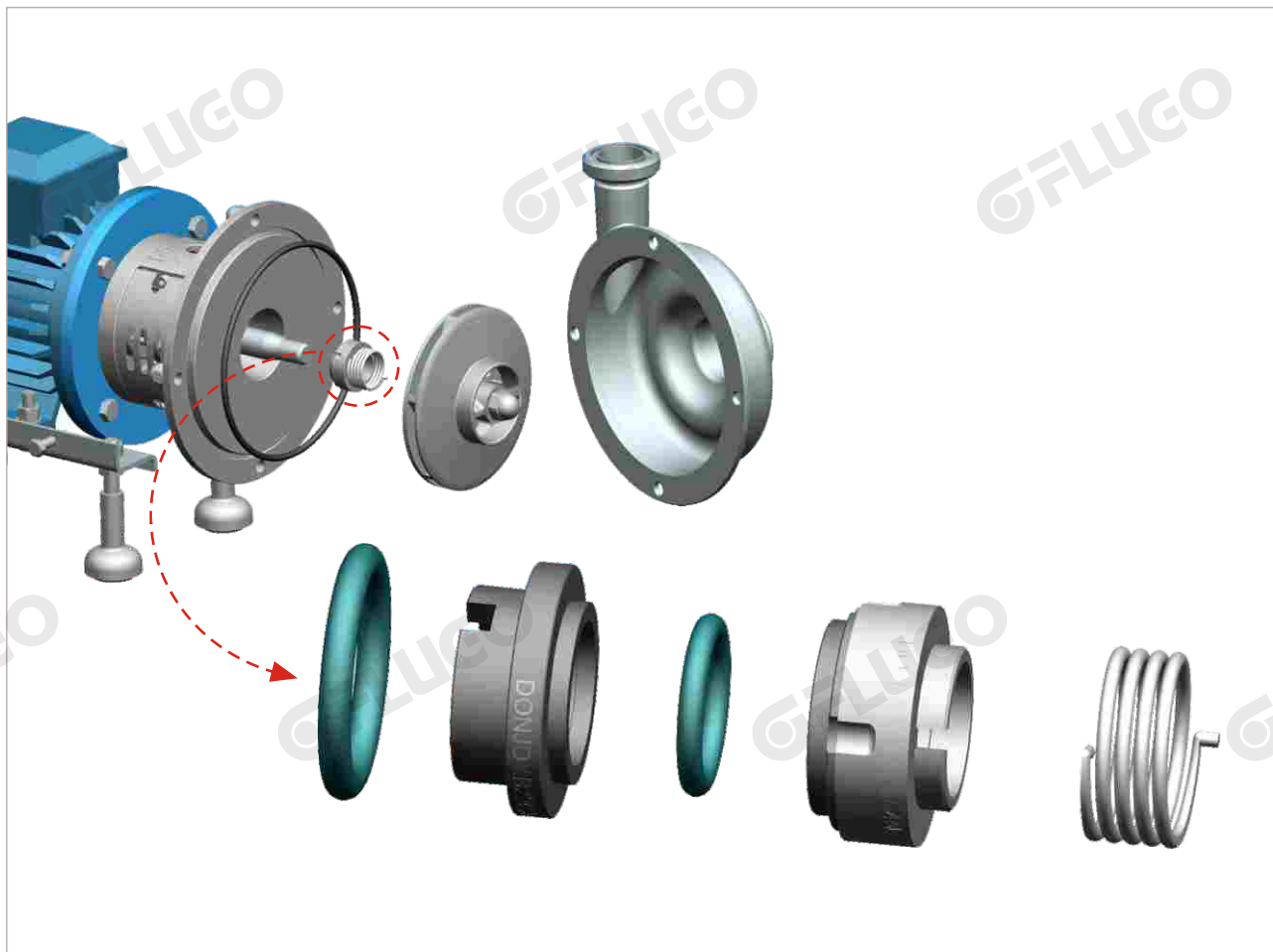


ISO2861



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CENTRIFUGAL PUMP MECHANICAL SEAL DESIGN



Mechanical Seal Features

Flugo FSNBS series centrifugal pump mechanical seal is researched and developed together with European Swedish famous company. The mechanical seal is designed with pressure balance 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-02-12, FDA1772600 and so on. and has lots of configuration.

Mechanical Seal Configuration

- | | |
|--------------|----------------|
| 1)SIC/C/EPDM | 4)SIC/SIC/EPDM |
| 2)SIC/C/FKM | 5)SIC/SIC/FKM |
| 3)SIC/C/HNBR | 6)SIC/SIC/HNBR |

Note: The above machine seal material is suitable for single seal

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CENTRIFUGAL PUMP MODEL INSTRUCTION



FSNBS 10 6t 22 1.5KW 380V 50HZ M 1.5/1.5 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 table)

Motor power: 1.1kw 1.5kw 2.2kw.....

Centrifugal pump head (see table)

Centrifugal pump flow(see table)

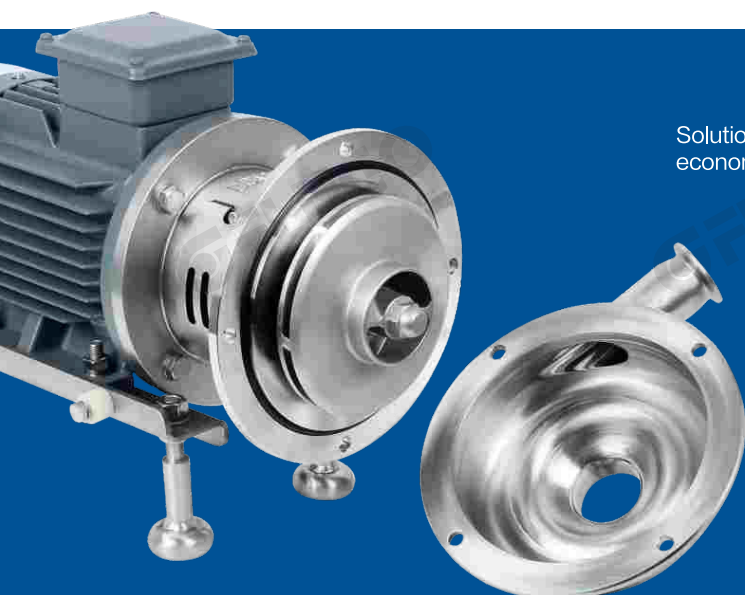
Centrifugal pump model

Centrifugal pump code: FSNBS

For example:
FSNBS-10-6T-22-1.5KW-380V-50HZ-M-1.5"/1.5"-S

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CENTRIFUGAL PUMP SELECTION TABLE



Solution for high efficiency, low noise, simple and economical maintenance, high purity

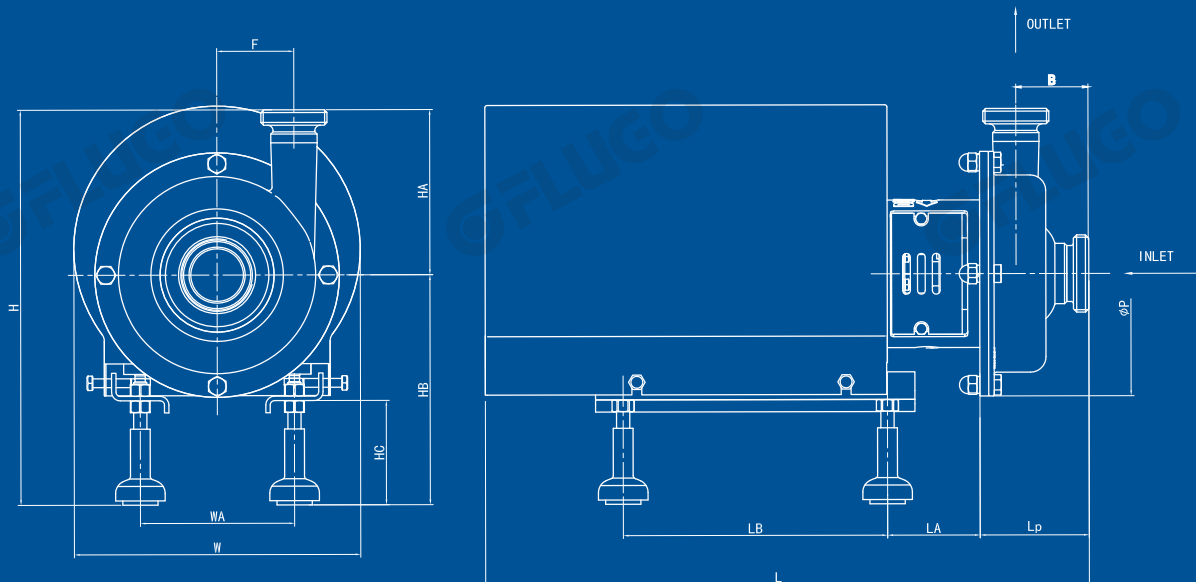


Centrifugal pump selection table

Model	Power	Flow(m³/h)	Head(M)	Inlet/Outlet
FSNBS-4	2.2KW	20	14	2"/1.5"
	2.2KW	18	18	
	2.2KW	15	21	
	2.2KW	12	23	
	2.2KW	10	24	
	1.5KW	8	25	
	1.5KW	5	25	
	1.5KW	3	26	
FSNBS-6	4KW	29	13	2.5"/2"
	4KW	25	20	
	3KW	20	25	
	3KW	15	27	
	3KW	12	29	
	3KW	10	30	
	3KW	5	32	
FSNBS-10	5.5KW	35	19	3"/2"
	5.5KW	30	26	
	4KW	25	26	2.5"/2"
	4KW	20	29	
	4KW	15	31	
	3KW	10	34	
	3KW	5	36	
	5.5KW	40	25	3"/2"
FSNBS-12	5.5KW	35	29	
	5.5KW	30	31	
	5.5KW	25	31	
	4KW	20	33	2.5"/2"
	4KW	15	35	
	3KW	10	37	

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CENTRIFUGAL PUMP DATA CHART



Model	Pump Dimension					Assembly dimension							
	Power (KW)	Inlet d" /DN	Inlet d" /DN	ΦP	mechanical seal size	F	LA	LB	H	HB	HC	W	WA
FSNBS-4	1.5KW-2.2KW	2"/DN50	1.5"/DN40	222	22	70	84	240	362	189	95	260	140
FSNBS-6	3KW	2.5"/DN65	2"/DN50	245	22	84.3	74	300	409	218.5	95	320	160
	4KW	2.5"/DN65	2"/DN50	245	22	84.3	81	300	414	211	95	340	160
FSNBS-10 FSNBS-12	3KW	2.5"/DN65	2"/DN50	245	22	84.3	74	300	409	218.5	95	320	160
	4KW	2.5"/DN65	2"/DN50	245	22	84.3	81	300	414	211	95	340	160
	5.5KW	3"/DN80	2"/DN50	245	22	84.3	90	330	468	231	95	380	216

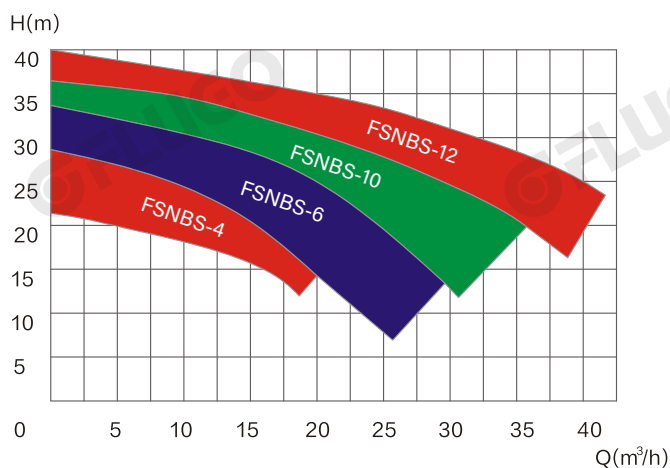
Model	Pump Dimension					Assembly dimension											
						SMS (Thread)				INCH (Clamp)				DIN (Thread)			
	Power (KW)	Inlet d" /DN	Inlet d" /DN	ΦP	mechanical seal size	B	Lp	L	HA	B	Lp	L	HA	B	Lp	L	HA
FSNBS-4	1.5KW-2.2KW	2"/DN50	1.5"/DN40	222	22	66	99	548	150	59	92	541	143	66	99	548	150
FSNBS-6	3KW	2.5"/DN65	2"/DN50	245	22	80	122	620	174	69	111	609	167	81	123	621	174
	4KW	2.5"/DN65	2"/DN50	245	22	80	122	620	174	69	111	609	167	81	123	621	174
FSNBS-10 FSNBS-12	3KW	2.5"/DN65	2"/DN50	245	22	80	122	620	174	69	111	609	167	81	123	621	174
	4KW	2.5"/DN65	2"/DN50	245	22	80	122	620	174	69	111	609	167	81	123	621	174
	5.5KW	3"/DN80	2"/DN50	245	22	81	123	693	174	69	111	681	167	86	128	713	174

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

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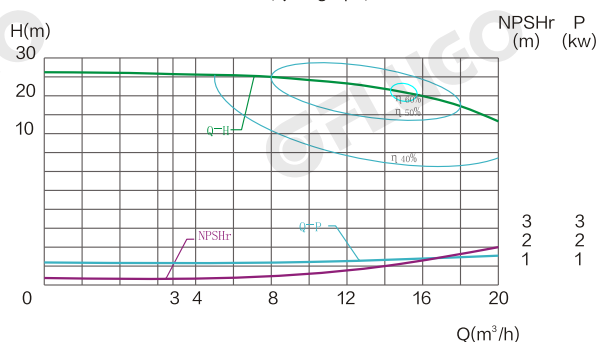
CENTRIFUGAL PUMP GRAPH

FSNBS (Q-H Graph)

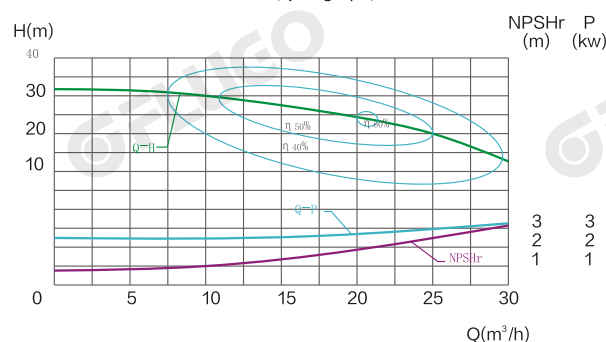


Testing condition: medium water, temperature 20 °C, impeller speed 2900 RPM (This graph also applies to motor 60HZ, impeller speed 3600RPM) Q-Flow rate

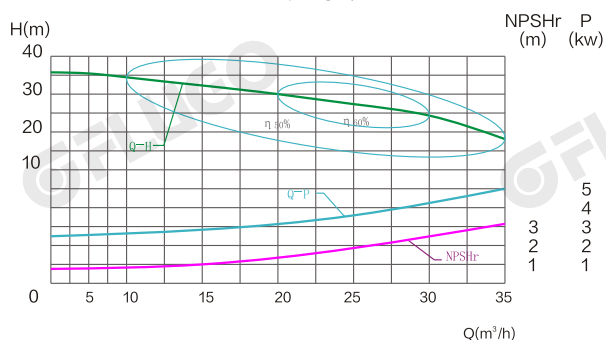
FSNBS-4(Q-H graph)



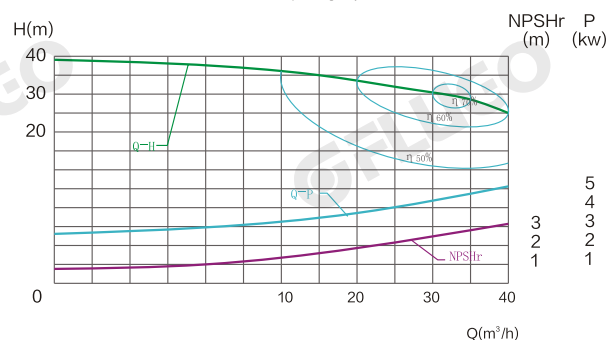
FSNBS-6(Q-H graph)



FSNBS-10(Q-H graph)



FSNBS-12(Q-H graph)



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



FSNBS Series - Centrifugal Pump

