

YANGZHOU XIANGXIN ELECTROMECHANICAL IMP. & EXP. CO. , LTD.

## IHF TYPE FLUORIC PLASTIC INNER CENTRIFUGAL PUMP



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## General and characteristic

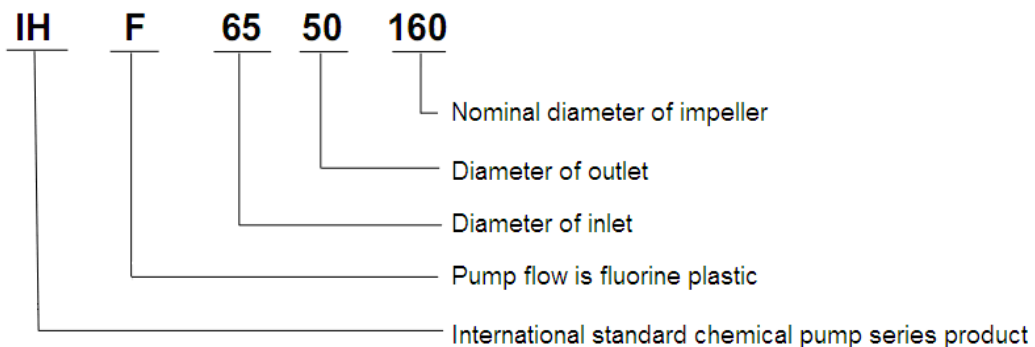
IHF type fluorine plastic inner, centrifugal pump is one of kind of chemical pump, which is produced by our company devoting in researching FEP inner centrifugal pump. As proper structure, excellent sealing, the products favored in chemical, metallurgy, oil, ion membrane, war industry project etc. On the decades of 1990, we adopt relative materials from home and abroad, take great pains to design, develop the new generation IHF type pump which and endure strong erode successfully, it almost can resist erode for any kind of acid, alkali, salt, the oxide of acid, alkali, and salt, and organic solvent, The product sells well all over the country.

IHF centrifugal pump is designed according to international standard, pump casing adopts metal shell inner F46, pump cover, impeller and shaft sleeve are agglomerated and pressed to model by using the fluorine plastic of metal insert outsourcing.

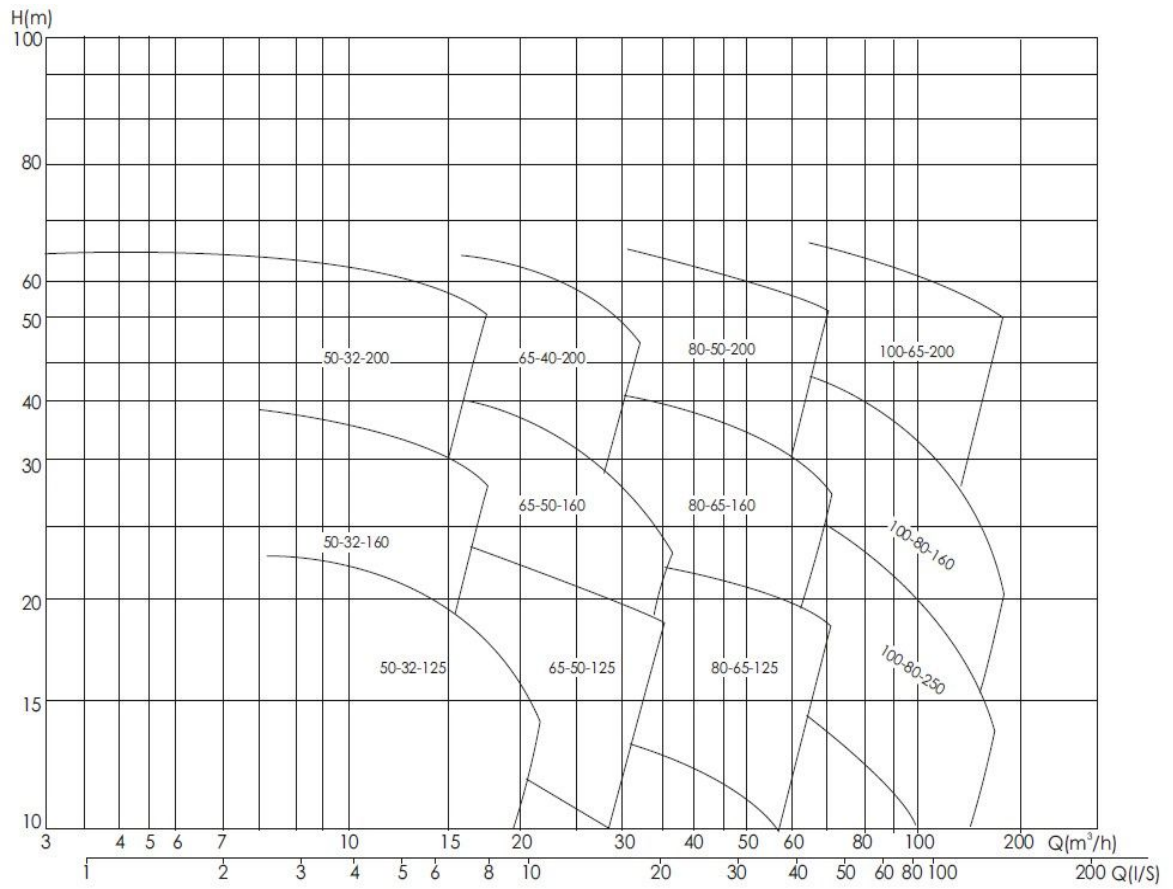
## Main Application

The type of pump is applied to transmit any thickness vitriol, hydrochloric acid, acetic acid, hydrofluoric acid, nitric acid, aqua regia; strong alkali, strong oxidant, organic solvent, reducer and other strong causticity medium under rigor condition which is one of the newest enduring caustic equipment in the world at present. The biggest excellence is structure is advanced, sealing is credible, disassembly and maintenance is convenient, operation is stable, noise is low and life is long life.

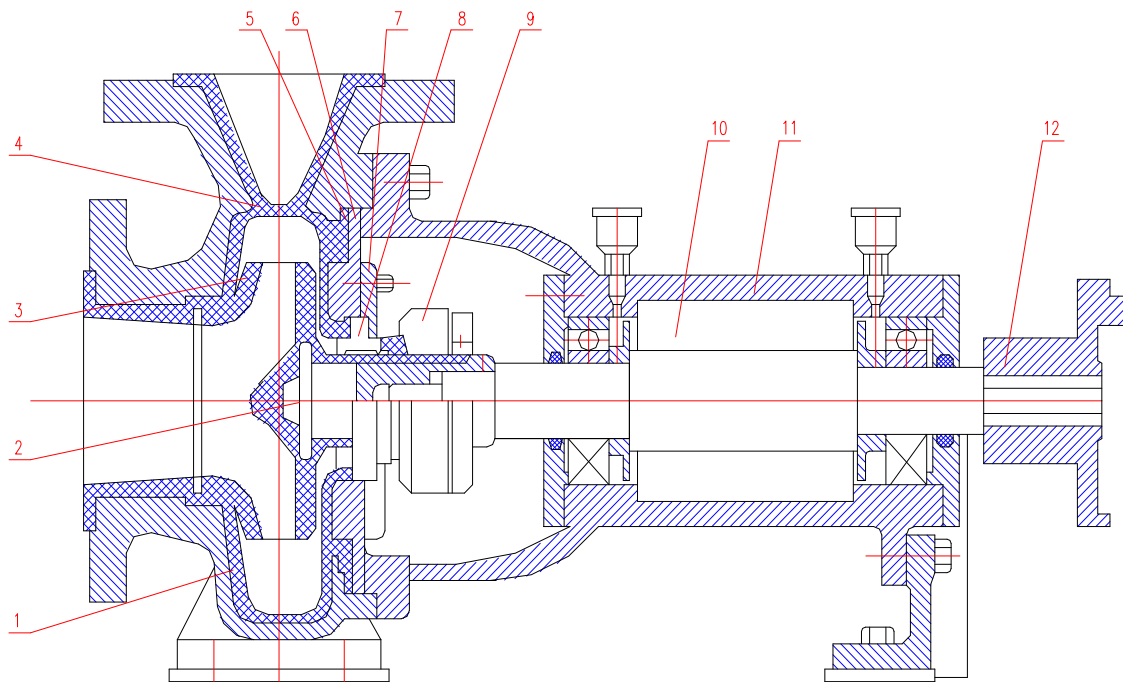
## The meaning of type



## Performance chart



## Structure drawing



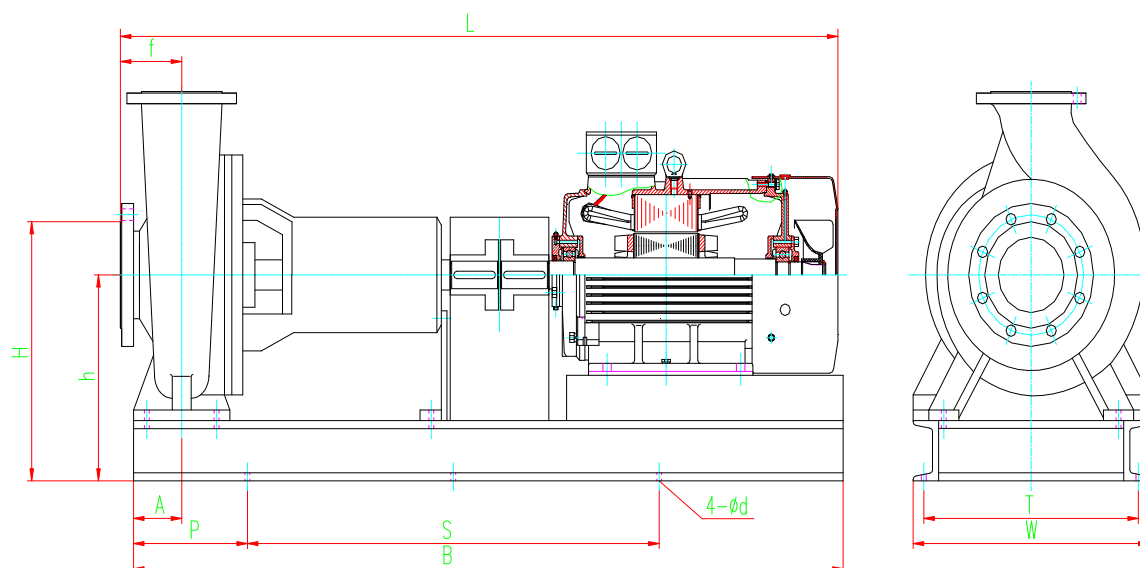
## Structure Table

No.	Name	Material	No.	Name	Material
1	Pump casing	HT200	7	Mechanical seal pressure cover	1Cr18Ni9Ti
2	Impeller framework	45#	8	Static ring	99.9% alumina porcelain
3	Impeller	F-46	9	Rotating ring	Fill lublon
4	Pump body liner	F-46	10	Pump shaft	3Cr13
5	Pump cover liner	F-46	11	Bearing body	HT200
6	Pump cover	HT200	12	Coupling	HT200

## Parameter table

Type	Inlet	Inlet	Flow		Head	Shaft power	Motor power	Speed	NPSH	%
	mm	mm	m <sup>3</sup> /h	l/s	m	kw		rpm		
IHF50-32-125	50	32	12.5	3.47	20	1.33	2.2	2900	3.0	51
IHF50-32-160	50	32	12.5	3.47	32	2.37	4	2900	3.0	46
IHF50-32-200	50	32	12.5	3.47	50	4.36	7.5	2900	3.0	39
IHF60-50-125	65	50	25	6.94	20	2.2	3	2900	3	62
IHF60-50-160	65	50	25	6.94	32	3.82	5.5	2900	3.5	57
IHF60-40-200	65	40	25	6.94	50	6.53	11	2900	3.5	52
IHF80-65-125	80	65	50	13.88	20	3.95	5.5	2900	3.5	69
IHF80-65-160	80	65	50	13.88	32	6.5	11	2900	4.0	67
IHF80-50-200	80	50	50	13.88	50	10.8	15	2900	4.0	63
IHF100-80-125	100	80	100	27.77	20	7.1	11	2900	4.0	77
IHF100-80-160	100	80	100	27.77	32	11.9	15	2900	4.5	73
IHF100-65-200	100	65	100	27.77	50	18.9	30	2900	4.5	73
IHF150-125-315	150	125	200	55.6	32	22.35	30	1450	3.0	78

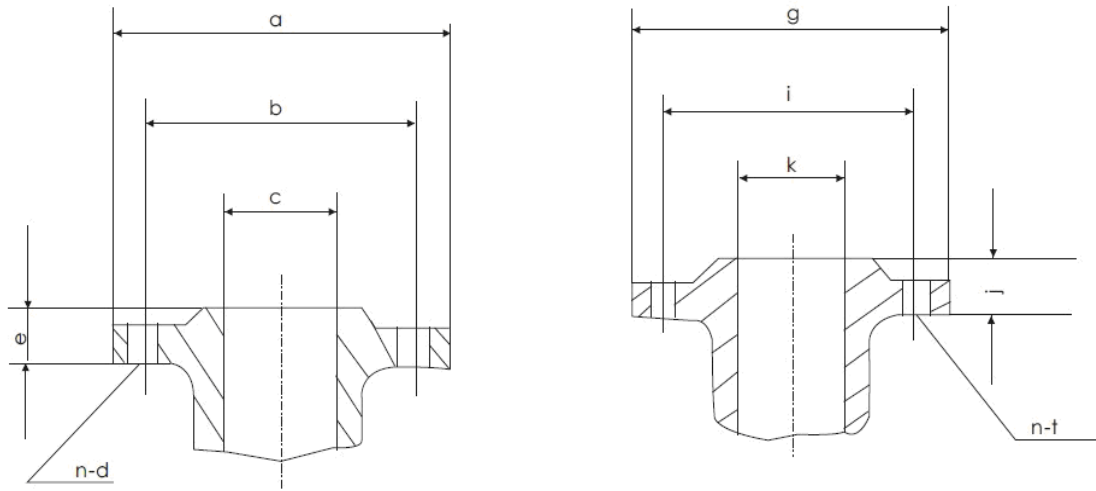
## Installation dimension drawing



## Installation dimension table

Type	Outline and installation dimension												
	L	B	S	P	A	W	T	H	h	f	4- $\varnothing$ d		
IHF50-32-125	820	750	530	120	60	350	300	300	220	80	4- $\varnothing$ 19		
IHF50-32-160	900		560						240				
IHF50-32-200	950	920		140		410	350	370	250				
IHF60-50-125	870	770	530	110		370	330	430	220				
IHF60-50-160	960	840	600	120		380	340	360	240				
IHF60-40-200	990	1050	660	150		420	380	400	270				
IHF80-65-125	980	840	600	120	80	380	340	440	100	4- $\varnothing$ 24			
IHF80-65-160	1020	960	660	150				420			400	400	
IHF80-50-200												460	270
IHF100-80-125												440	270
IHF100-80-160	1140	1090	760	165	80	470	450	480	100	4- $\varnothing$ 28			
IHF100-65-200	1330	1240	880	190				560			500	525	300
IHF150-125-315	1710	1620	940	260	110	620	550	775	410	140	6- $\varnothing$ 28		

## Flange dimension drawing



## Flange dimension table

Type	Inlet flange dimension					Outlet flange dimension				
	C	a	b	e	n-d	K	g	i	j	n-t
IHF50-32-125	30	165	125	20	4- $\varnothing$ 17.5	32	140	100	18	4- $\varnothing$ 17.5
IHF50-32-160						32	145	110	18	4- $\varnothing$ 17.5
IHF50-32-200						32	145	110	18	4- $\varnothing$ 17.5
IHF60-50-125	65	185	145	20	4- $\varnothing$ 18	50	165	125	20	4- $\varnothing$ 18
IHF60-50-160						50	165	125	20	4- $\varnothing$ 18
IHF60-40-200						40	150	110	18	4- $\varnothing$ 18
IHF80-65-125	80	200	160	20	8- $\varnothing$ 18	65	185	145	20	4- $\varnothing$ 18
IHF80-65-160						65	185	145	20	4- $\varnothing$ 18
IHF80-50-200						50	165	125	20	4- $\varnothing$ 18
IHF100-80-125	100	220	180	22	8- $\varnothing$ 18	80	200	160	20	8- $\varnothing$ 18
IHF100-80-160						80	200	160	20	8- $\varnothing$ 18
IHF100-65-200						65	185	145	20	4- $\varnothing$ 18
IHF150-125-315	150	285	240	26	8- $\varnothing$ 22	125	250	210	26	8- $\varnothing$ 17.5

## Installation and not

- Cover base bolt well according to installation dimension and prepare the concrete foundation.
- Put four cuneiform pad on foundation, later put the unit on top, to correct the level of pump according to adjust mat, after adjusting well, screw down base nut.
- Check whether the revolving parts is blocked or not, if there is hitting in the process of operation, you should test whether the joints are the same shaft or not, and adjust.
- The suction and discharge pipeline of pump should be installed framework, should not be supported by pump.
- In order to prevent impurity enter into the pump, you should install filter before the inlet of pump, the filter area should be 3-4times than section area of pipeline.
- The high head pump should be installed check valve in outlet pipeline, to avoid water hammer being damaged because of the sudden stop.
- You must assure the height of installation accords with NPSH, and consider the damage of pipeline, the temperature of medium.

## Operation and Maintenance

- Add enough standby liquid in pump, avoid to start on the condition of or short of liquid, or else mechanical seal part will be burned-out, and pump can not operate normally.
- Open power, first check switch, check whether revolving direction of motor and revolving



direction of pump keep accord or not, otherwise, correct immediately, avoid reversing.

- After the unit revolves 5-10 minutes, if there is no abnormal, drive into operation.
- When stop, first close outlet valve, later cut off power.
- Fill in excellent calcium based grease timely, exchange easy damaged part.
- If unit keeps stop condition for long time, you should clear flow passage of pump.

## Malfunction and troubleshooting

<b>Malfunction</b>	<b>Reason</b>	<b>Troubleshooting</b>
Water pump couldn't discharge water	a、 There isn't liquid storage in pump body or there is air in suction pipe. b、 Suction pipe leaks gas c、 The revolving direction is reverse; d、 The suction head is too high or the suction pipeline is too long; e、 Suction pipeline is blocked.	a、 Add liquid or discharge air; b、 Solve the leakage problem; c、 Adjust their revolving direction; d、 Reduce suction head or pipeline; e、 Remove the block.
Flow capacity of water pump isn't enough	a、 Impeller is worn out; b、 Suction pipeline is blocked; c、 Power isn't enough and revolving speed is too low.	a、 Replace impeller b、 Remove block; c、 Check motor and power supply line.
Head isn't enough	a、 The proportion transporting medium is too large; b、 Impeller is worn out; c、 There is air in the transporting medium; d、 The revolving speed isn't enough.	a、 Reduce viscosity or increase filling pressure; b、 Replace impeller; c、 Add liquid or discharge air; d、 Check motor and power supply line.
Noise and shake	a、 The foot isn't stable; b、 The error between pump axis and motor axis is too large; c、 Suction head is too high.	a、 Reinforce pipeline; b、 Adjust again; c、 Reduce the installation height.
The temperature Rise of bearing is too large	a、 The bearing is damaged; b、 Lubrication is bad or dry.	a、 Replace it; b、 Replace lubrication.
Pump leaks water	a、 Mechanical seal is damaged; b、 Installed bolt is loose.	a、 Replace it; b、 Tighten it.

As we are constantly endeavoring to improve the performance of our equipment, the company reserves the right to make alteration from time to time and equipment differ from that detailed in this brochure.

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