

HORIZONTAL MULTI-STAGE CENTRIFUGAL PUMP MANUAL INSTRUCTION

Application

Mainly applicable for conveying of industrial liquid, such as mineral water、soft water、pure water、clean oil and circulation and boosting for other weak chemical - industrial medium.

- Water treatment processes
- Industrial cleaner and dishwasher
- Water boosting on process
- Heating and cooling for industrial process
- Air-conditioning system
- Air freshening、heater device(soft water)
- Water supply and boosting(drinking water、light chlorine water)
- Fertilization/metering system

Working conditions

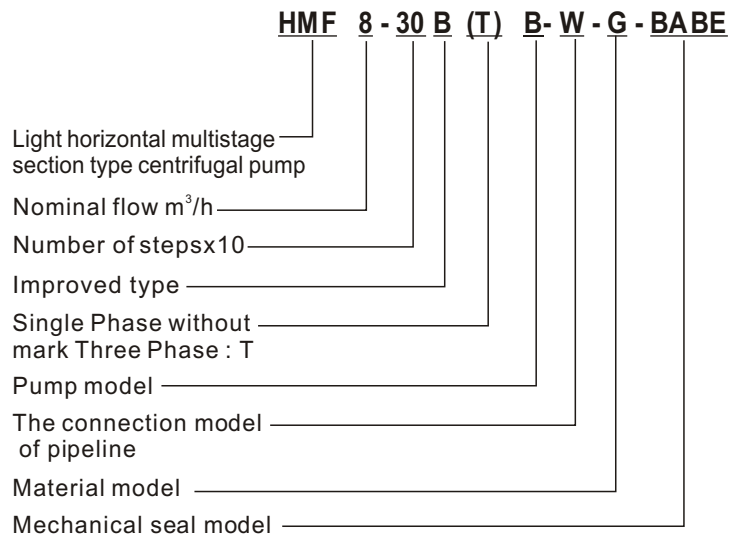
- Diluted, clean, non-flammable, and non-explosive
- liquid without solid grain or fibers ;
- Liquid temperature :
low temperature: -20℃ ~ +15℃;
standard model:+15℃~+70℃;
high temperature:+70℃~+104℃.;
- Max.environmental temperature: 50℃
- Max. operating pressure: 10 bar
- Max. suction pressure is limited by max. Operating pressure

Motor

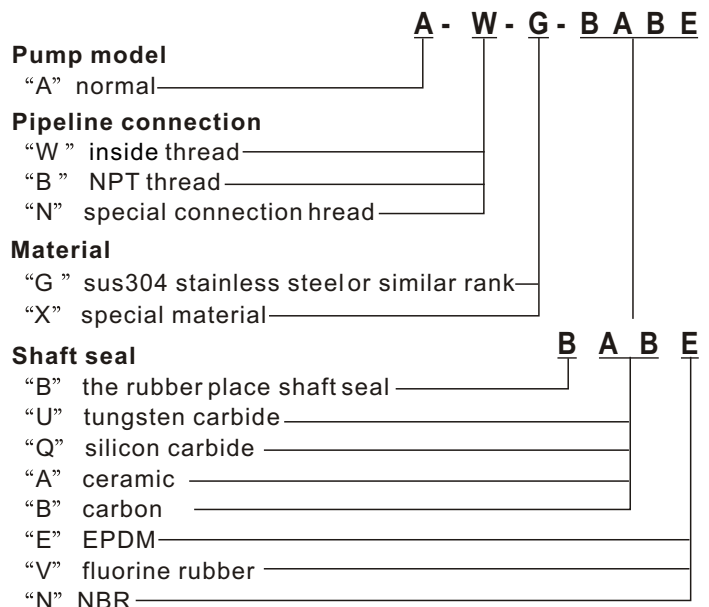
- 2-pole induction motor;
- three-phase: 220/380V/50Hz, 254/440V/50Hz
- Single-phase: 220~240V/50Hz
- Single-phase with input thermal protector
- Insulation class: F
- Protection: IP55
- Continuous duty



Connotation of the type



code number explanation



Performance table

Model		Driving motor P ₂ (kW)	Q (m ³ /h)	H (m)							
Single Phase	Three Phase			4.0	6.0	8.0	10	12	14	16	
HMF8-10B	HMF8-10BT	0.55	H (m)	11	10	9	8	7	6	5	
HMF8-20B	HMF8-20BT	0.75		22	20	19	18	13	11	8	
HMF8-30B	HMF8-30BT	1.1		31	29	26	24	20	16	11	
HMF8-40B	HMF8-40BT	1.5		41	39	37	33	28	23	17	
HMF8-50B	HMF8-50BT	2.2		51	49	46.5	42	37	30	23	

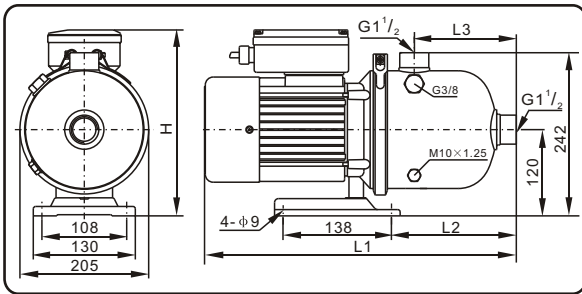
Model		Driving motor P ₂ (kW)	Q (m ³ /h)	H (m)											
Single Phase	Three Phase			7.0	8.0	9.0	10	11	12	13	14	15	16		
HMF12-10B	HMF12-10BT	0.75	H (m)	12	11.5	11	10.5	10	9.5	9	8	7	6		
HMF12-20B	HMF12-20BT	1.1		23	22.5	22	21	20.5	19.5	18.5	17	15.5	13		
HMF12-30B	HMF12-30BT	1.85		35	34.5	33.5	32.5	31	29.5	28	26	23.5	20		
HMF12-40B	HMF12-40BT	2.2		47	46	45	43.5	41.5	39.5	37.5	35	31.5	27.5		
	HMF12-50BT	3.0		60	58	56.5	55	52.5	50	47	44	40	35		

Performance curve resource:

Performance curve are based on the following

1. Performance based on actual speed of standard motor.
2. Carrying on test by 20°C water without air.
3. Curve are suitable for delivering liquid ($\nu = 1\text{mm}^2/\text{s}$, $\rho = 1\text{g}/\text{cm}^3$).
4. The operation of pump shall refer to the performance region described by the thickened curve to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.

Contour dimension and weight



Model	Size(mm)							
	Single Phase				Three Phase			
	L1	L2	L3	H	L1	L2	L3	H
HMF8-10B(T)	425	180	139	245	425	180	139	224
HMF8-20B(T)	425	180	139	245	425	180	139	224
HMF8-30B(T)	455	180	139	254	455	180	139	232
HMF8-40B(T)	455	180	139	254	455	180	139	232
HMF8-50B(T)	566	246	205	239	521	246	205	232
HMF12-10B(T)	425	180	139	245	425	180	139	224
HMF12-20B(T)	458	180	139	245	455	180	139	232
HMF12-30B(T)	500	180	139	239	455	180	139	232
HMF12-40B(T)	500	180	139	239	455	180	139	232
HMF12-50BT	-	-	-	-	583	246	205	239

Performance curve

