CNP

CNP PUMPS INDIA PVT. LTD.

MS

Light Stainless Steel Horizontal Single-stage centrifugal Pump

CE

STAINLESS STEEL PUMPS SPECIALIST

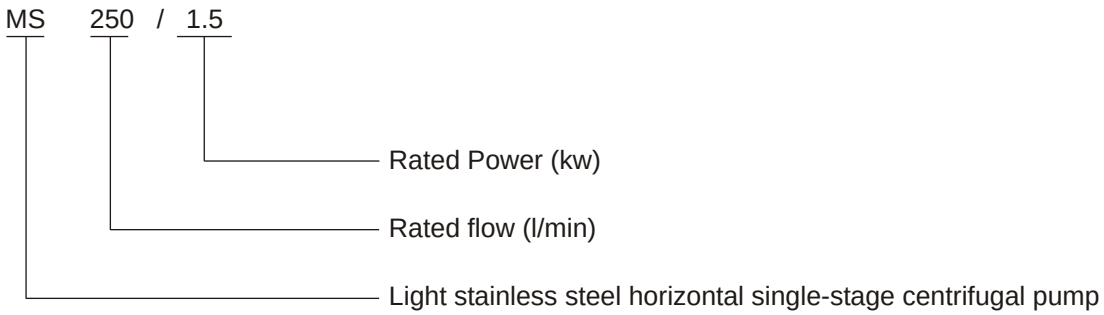
CONTENT

GENERAL DATA

TECHNICAL DATA

CONNOTATION OF THE TYPE

Connotation of the type
MS250/1.5



STRUCTURE FEATURES

- MS Series of pump is single-stage centrifugal pump and features axial suction and radial discharge;
- Compact structure, The pump is directly connected with the motor, coaxial installation;
- Convenient installation, screw thread water inlet and outlet;
- Light weight, thin plate pressing structure for main parts and components;
- Corrosion resistance, components passing the flow use AISI 304 or AISI 316 stainless steel.

APPLICATION

- Pressurization and pumping of industrial and domestic clean water or other liquids;
- Water treatment ;
- Water circulating system;
- Agricultural irrigation;
- Other fields

PUMPING LIQUIDS

- Thin, clean, non-flammable and explosive, not containing the liquid with solid particle and fiber
- Able to transmit light corrosive medium (have a bearing on the content of chloride ion in the medium, thickness of acid or alkali, whether generate corrosion on the rubber and mechanical seal materials)
- The density of transmitted medium is less than that of clean water, viscosity close to that of water. Otherwise the motor of large power is required.

OPERATING CONDITION

- Liquid temperature -10^{0}C ~ +85^{0}C
- Ambient temperature: up to +40^{0}C
- Altitude: up to 1000m
- Max. pressure of the system is 8bar.

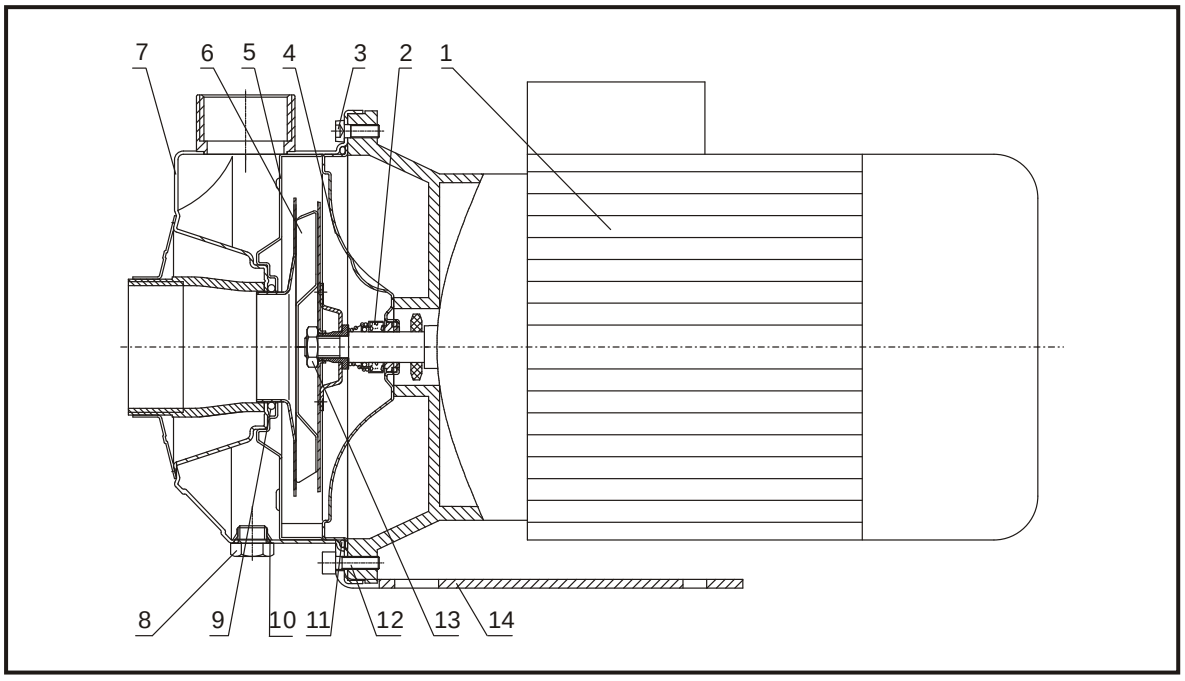
MOTOR

- TEFC motor, 2-pole
- Protection class:IP55
- Insulation class :F
- Standard voltage:50Hz 1 220V
  3 X 380V/3 220V

INSTALLATION REQUIREMENTS

- The pump shall be fastened on the stable horizontal base;
- The installation of the pump shall ensure that the pump will not be influenced by the tension of the pipeline;
- The pump shall be installed on the ventilating and anti-freezing place to ensure normal operation of the motor;
- Electric wiring device shall guarantee that the pump will not be damaged by lack of phase, unstable voltage, current leakage and overload.

SECTION DRAWING



MATERIAL

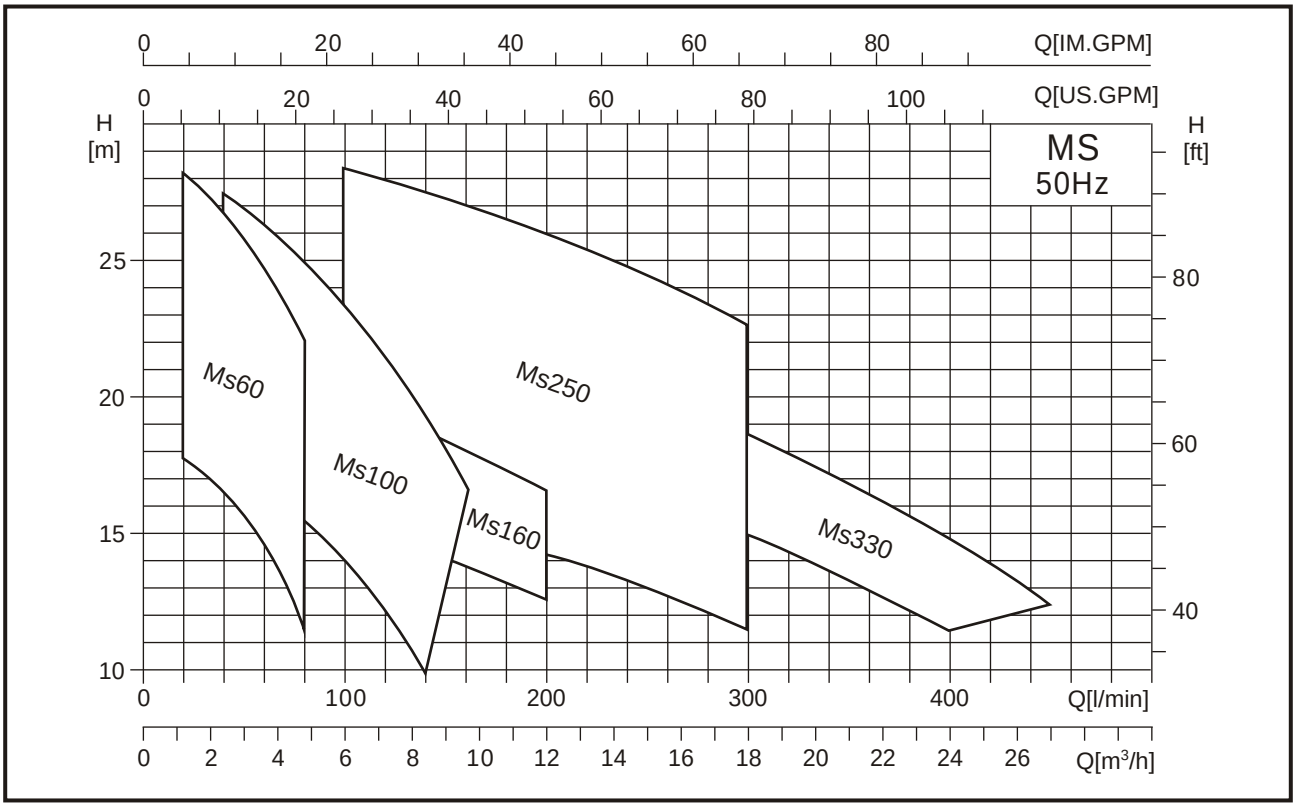
NO.	Parts Name	Material	AISI
1	Motor		
2	Mechanical seal	Ceramic / Carbon	
3	M6 15 / Screw	0Cr18Ni9 / SS304	AISI304
4	Mechanical base	0Cr18Ni9 / SS304	AISI304
5	Diffuser	0Cr18Ni9 / SS304	AISI304
6	Impeller	0Cr18Ni9 / SS304	AISI304
7	Pump body	0Cr18Ni9 / SS304	AISI304
8	Plug	0Cr18Ni9 / SS304	AISI304
9	O-Ring	EPDM	
10	O-Ring	EPDM	
11	O-Ring	EPDM	
12	M6 20 / Screw	0Cr18Ni9 / SS304	AISI304
13	M10 / Nut M10	0Cr18Ni9 / SS304	AISI304
14	Base	Steel	A570

CURVES

Include performance curve in the technical data:

- All curves are based on the measured value of motor 3 X 380V, under the constant speed of 2850rpm
- Measurement is done with 20^0C air-free water, kinematic viscosity of 1mm^2 /sec
- Curve tolerance in conformity with ISO9906, appendix A
- The operation of pump shall refer to the performance region to prevent overload of motor due to too large flow rate.

SCOPE OF PERFORMANCE



PERFORMANCE TABLE

Model	Power (kw)	Q(l/min)	20	40	60	80	100	120	140	160	200	250	300	330	350	400	450
		Q(m³/h)	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	12	15	18	20	21	24	27
MS60/0.37	0.37	H(m)	17.7	16.4	14.6	11.4											
MS60/0.55	0.55		22.7	21.3	19.5	16.2											
MS60/0.75	0.75		28.2	26.8	25	22											
MS100/0.55	0.55			17.8	16.7	15.4	14	12.2	9.9								
MS100/1.1	1.1			27.4	26.3	25	23.4	21.5	19.5	16.7							
MS160/0.75	0.75				15.5	15.3	15	14.8	14.3	13.8	12.5						
MS160/1.1	1.1				19.7	19.5	19.3	19.1	18.7	18.2	16.5						
MS250/1.1	1.1						15.8	15.6	15.4	15	14.3	13	11.5				
MS250/1.5	1.5						23.2	23	22.7	22.2	21.4	19.8	17.7				
MS250/2.2	2.2						28.2	27.8	27.5	27	26.2	24.6	22.6				
MS330/1.5	1.5							18.8	18.7	18.5	17.8	16.7	15	14	13.5	11.6	
MS330/2.2	2.2							22.5	22.2	22	21.5	20.3	18.7	17.5	16.8	14.8	12.3