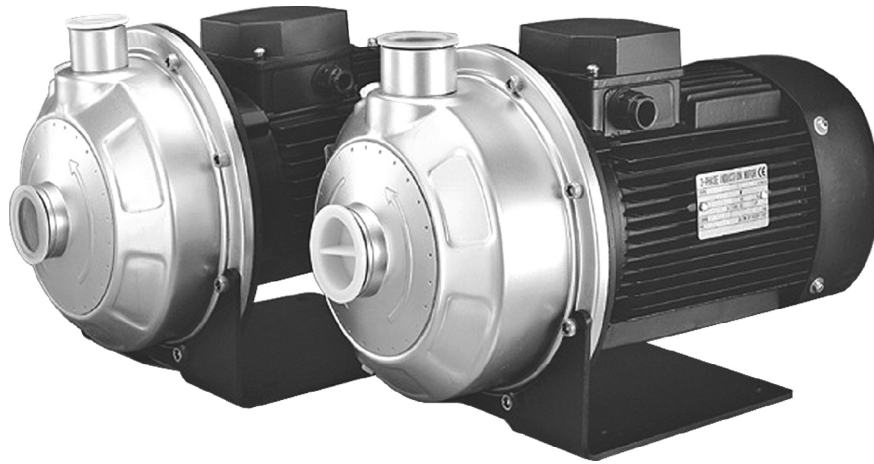


MS

2006版

50 轻型不锈钢卧式单级离心泵

Light Stainless Steel Horizontal Single-stage Centrifugal Pump



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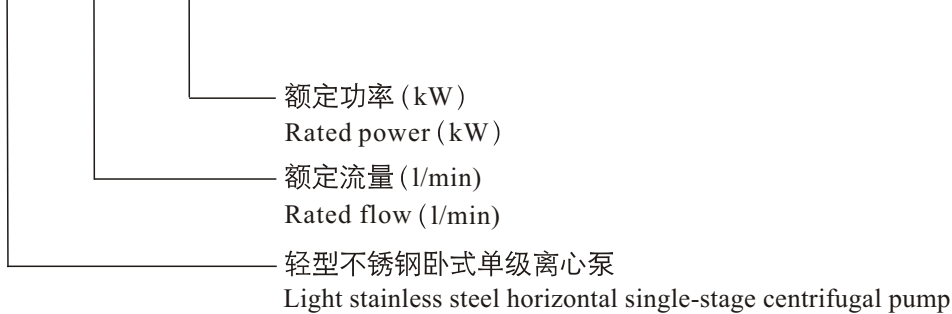
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型号含义 / Connotation of the type

MS250/1.5

MS 250 / 1.5



结构特点

- MS 系列泵为单级叶轮离心泵，具有轴向吸水、径向排水的特点；
- 结构紧凑，水泵与电机直接连接，同轴安装；
- 联接方便，配有螺纹进、出水口；
- 重量轻，主要零部件均采用薄板冲压件结构；
- 耐轻腐蚀，过流部件采用AISI 304或AISI 316不锈钢材料。

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 AISI304 or AISI 316 stainless steel.

应用

- 工、民用清水或其它液体的增压、输送；
- 水处理系统；
- 水循环系统；
- 农业灌溉；
- 其它领域。

Application

- Pressurization and pumping of industrial and civilian clean water or other liquids;
- Watertreatment ;
- Watercirculating system;
- Agricultural irrigation;
- Other fields.

输送介质

- 稀薄、干净、非易燃易爆并不含固体颗粒和纤维的液体；
- 可输送轻腐蚀性介质（与介质中氯离子含量、酸或碱的浓度、是否对橡胶和机械密封摩擦付材料产生腐蚀等情况有关）；
- 所输送介质的密度不能大于清水，粘度要接近于水。否则需配用大功率电机。

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.

运行条件

- 液体温度：-10℃至+85℃；
- 环境温度：最高+40℃；
- 海拔：最高1000m；
- 最大工作压力：8巴。

电机

- 电机为全封闭、风冷式二极电机；
- 防护等级：IP55；
- 绝缘等级：F；
- 标准电压：50Hz 1×220V
3×380V/3×220V

Operating condition

- Liquid temperature -10℃ ~ +85℃；
- Ambient temperature: up to +40℃；
- 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
3×380V/3×220V

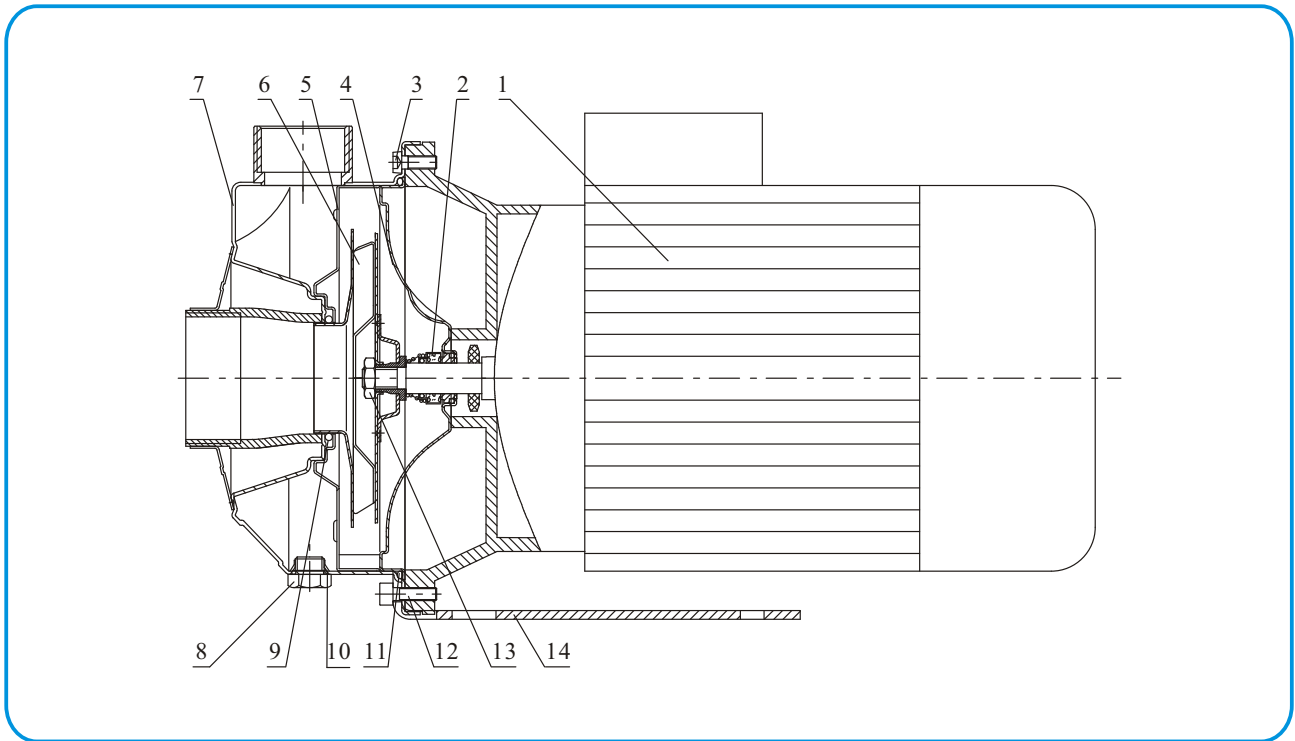
安装条件

- 泵应紧固在平稳的水平基座上；
- 泵的安装要保证泵在使用时不受系统管路张力的影响；
- 为保证电机的正常运转，泵要安装在具有良好通风条件、并防冰冻的位置；
- 电气接线装置应保证泵不受缺相、电压不稳、漏电和过载的损害。

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.

截面图 / Section drawing



零件材料 / Material

序号/NO.	零件名称 / Parts Name	材料 / Material	AISI
1	电机 / Motor		
2	机械密封 / Mechanical seal	陶瓷 Ceramic / 石墨 Carbon	
3	内六角螺钉M6 × 15 / Screw	不锈钢 0Cr18Ni9 / SS304	AISI304
4	密封座板 / Mechanical base	不锈钢 0Cr18Ni9 / SS304	AISI304
5	导叶 / Diffuser	不锈钢 0Cr18Ni9 / SS304	AISI304
6	叶轮 / Impeller	不锈钢 0Cr18Ni9 / SS304	AISI304
7	泵体 / Pump body	不锈钢 0Cr18Ni9 / SS304	AISI304
8	堵头 / Plug	不锈钢 0Cr18Ni9 / SS304	AISI304
9	O型圈 / O-Ring	NBR	
10	O型圈 / O-Ring	NBR	
11	O型圈 / O-Ring	NBR	
12	内六角螺钉M6 × 20 / Screw	不锈钢 0Cr18Ni9 / SS304	AISI304
13	螺母M10 / Nut M10	不锈钢 0Cr18Ni9 / SS304	AISI304
14	托架 / Base	钢 / Steel	A570

曲线条件

后面的性能曲线适合下述条件：

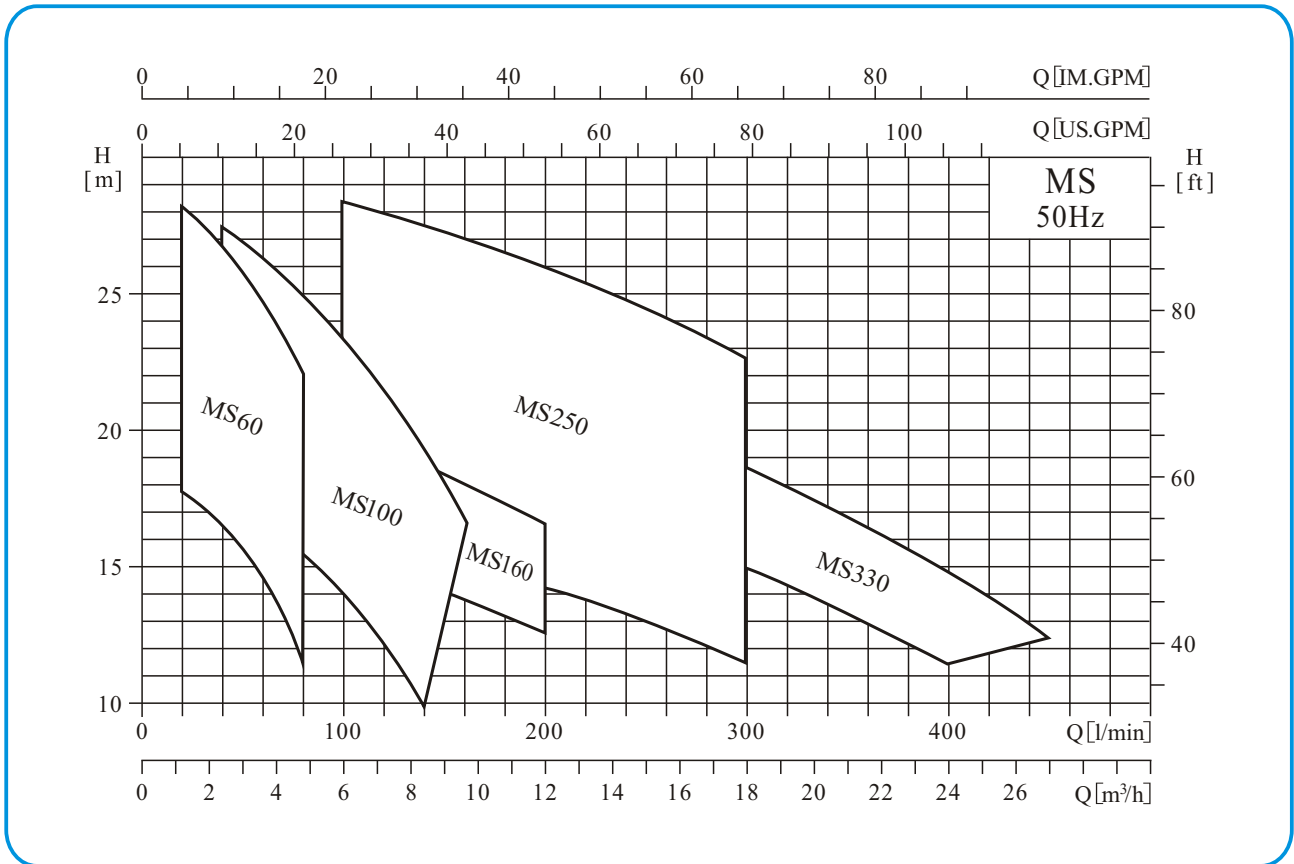
- 所有曲线都基于 $3 \times 380V$ ，电机在恒速2850rpm时的测量值；
- 测试采用 $20^{\circ}C$ 不含空气的水，运动粘度为 $1mm^2/s$ ；
- 曲线容差符合ISO9906，附录A；
- 泵的使用参照曲线的性能范围,以防流量过大使电机过载。

Curves

Include performance curve in the technical data:

- All curves are based on the measured value of motor $3 \times 380V$, under the constant speed of 2850rpm;
- Measurement is done with $20^{\circ}C$ 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.

性能范围 / Scope of performance

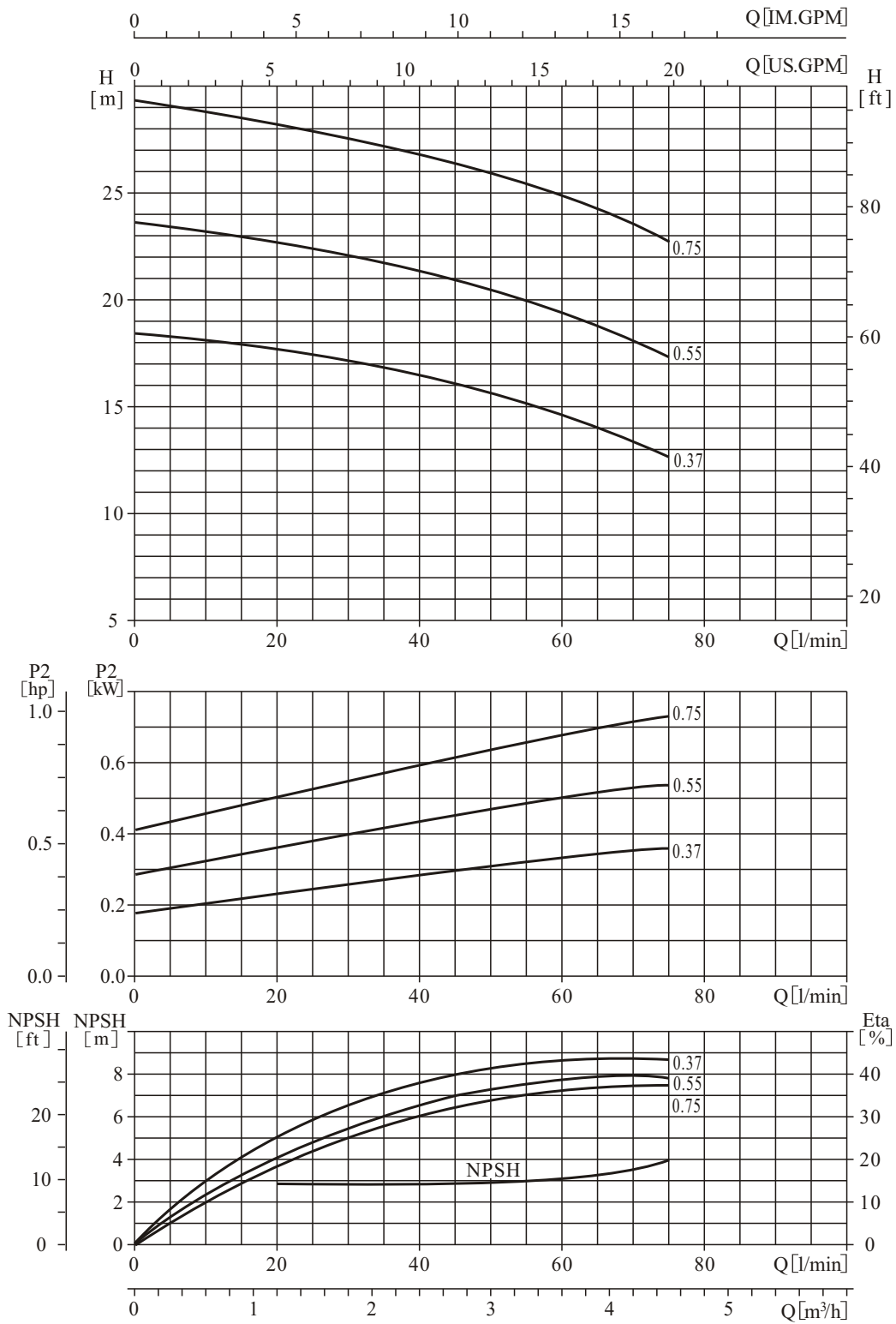


性能表 / Performance table

型号/Model	功率/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	

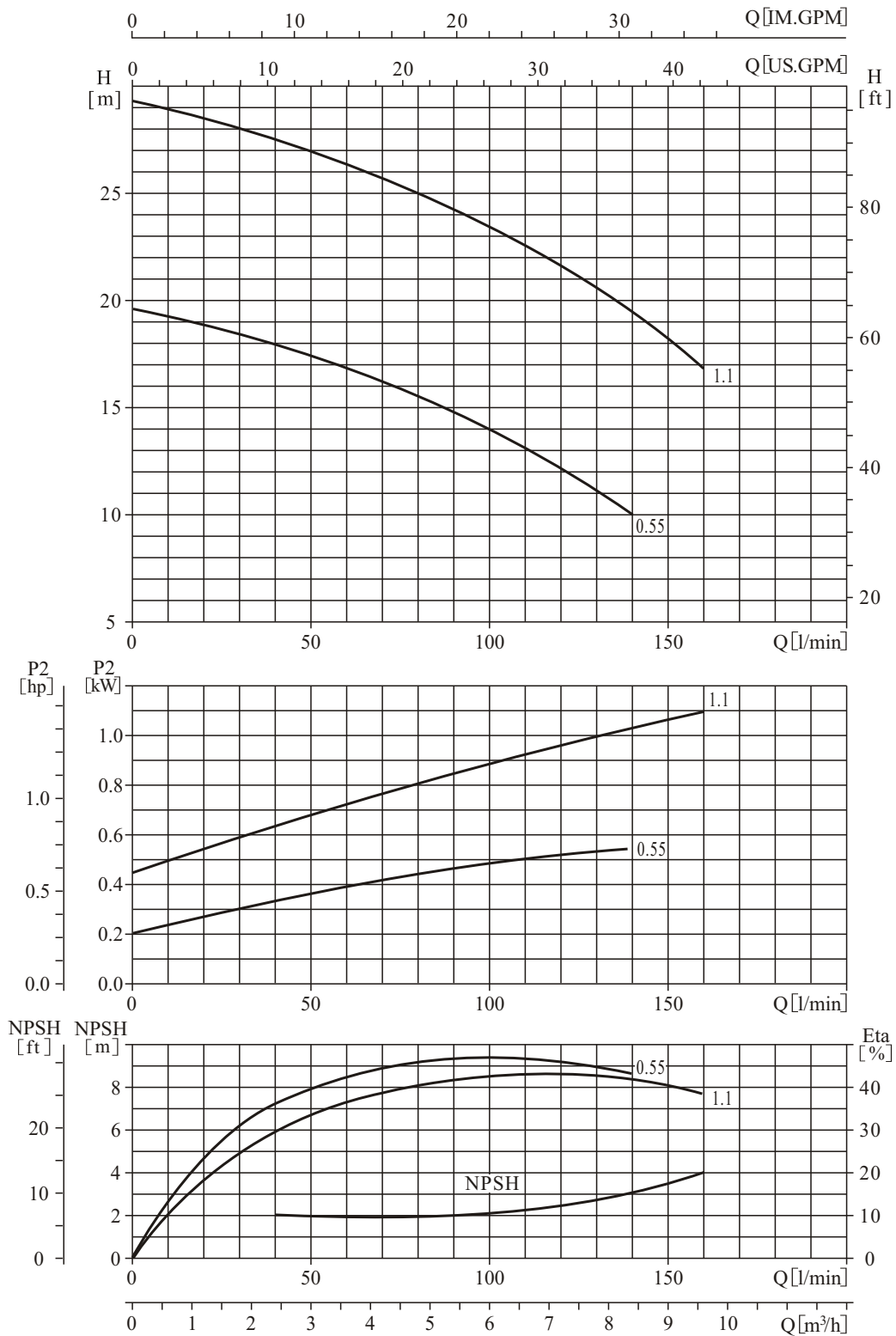
性能曲线 / Performance curve MS60

50Hz 2850rpm



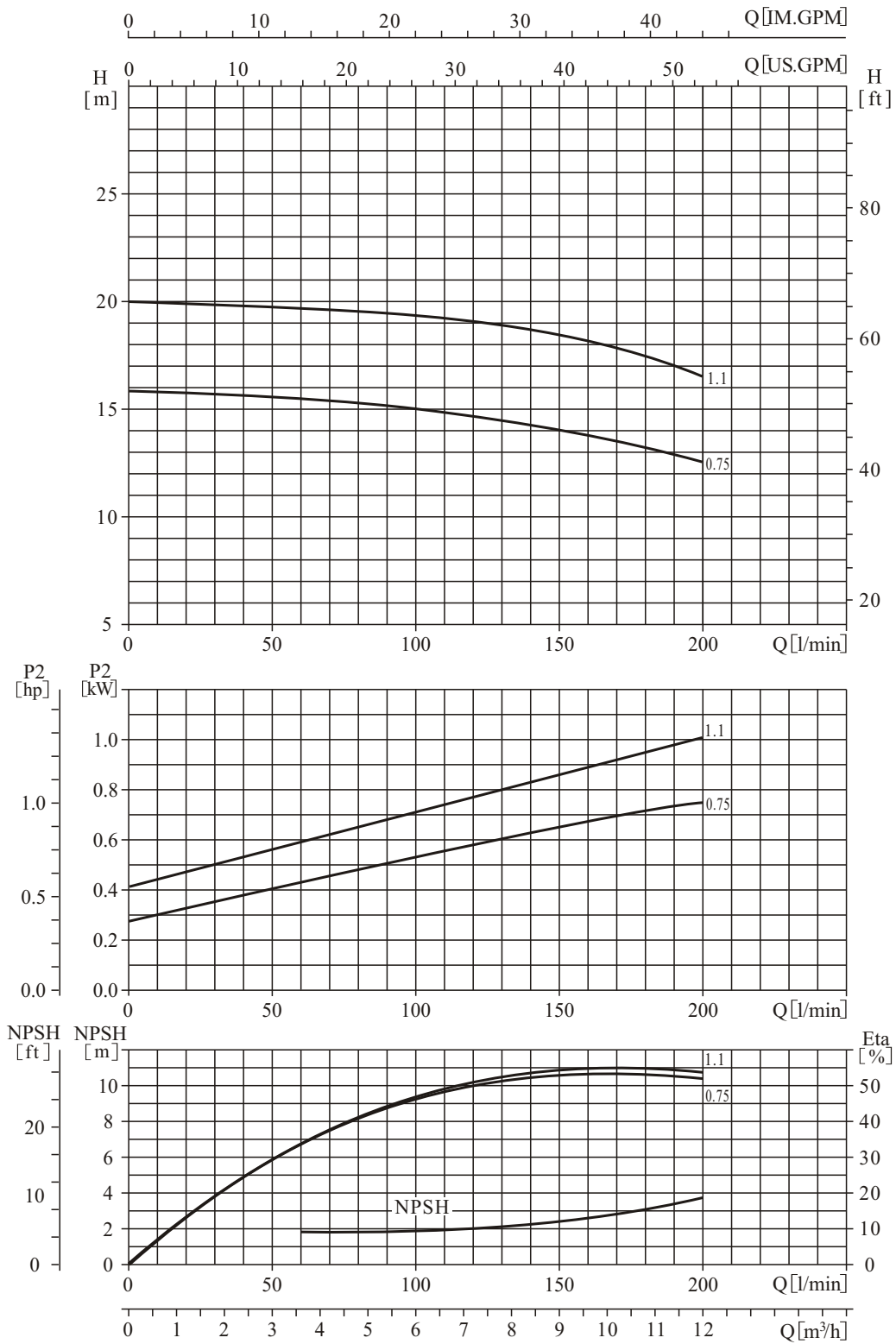
性能曲线 / Performance curve MS100

50Hz 2850rpm



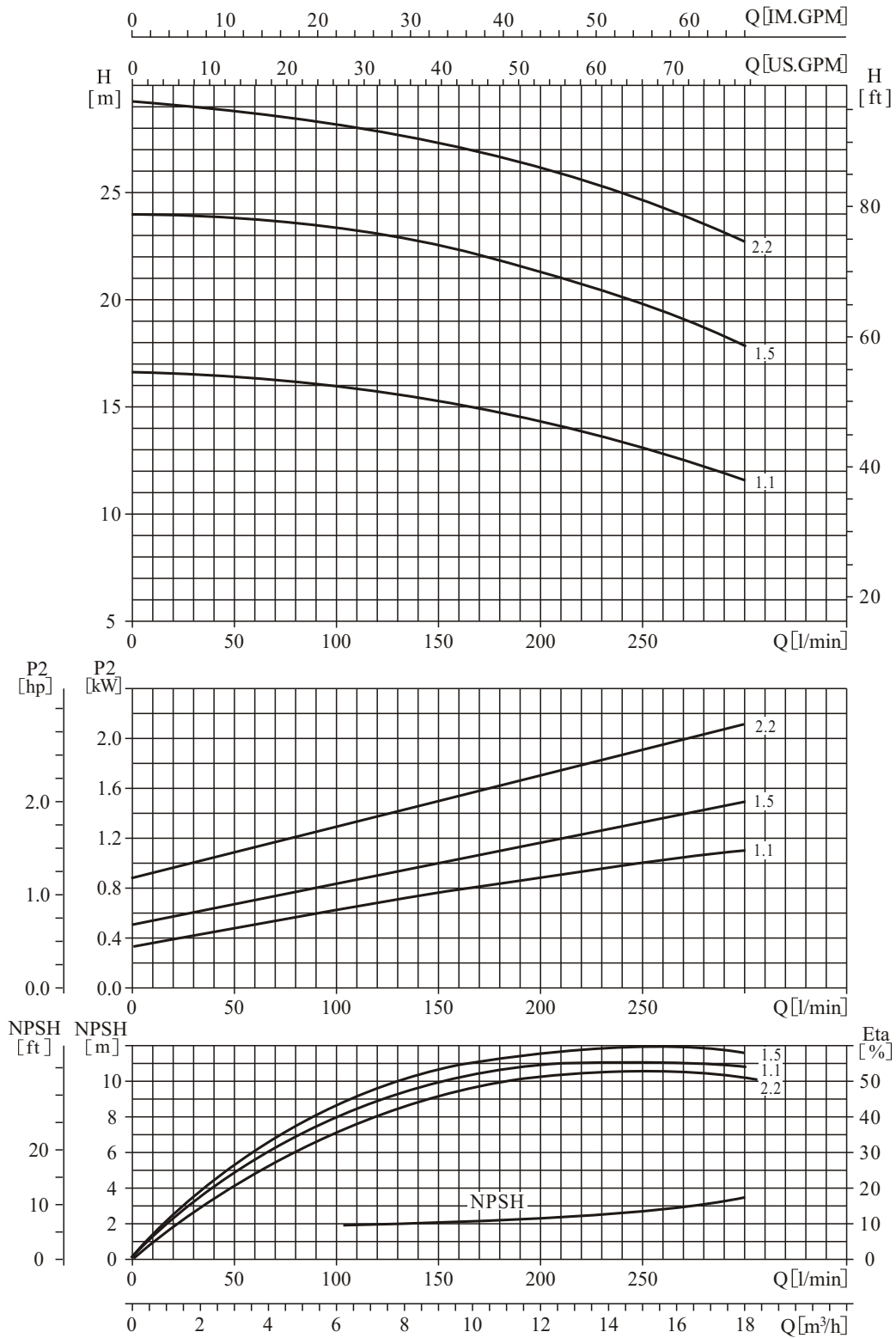
性能曲线 / Performance curve **MS160**

50Hz 2850rpm



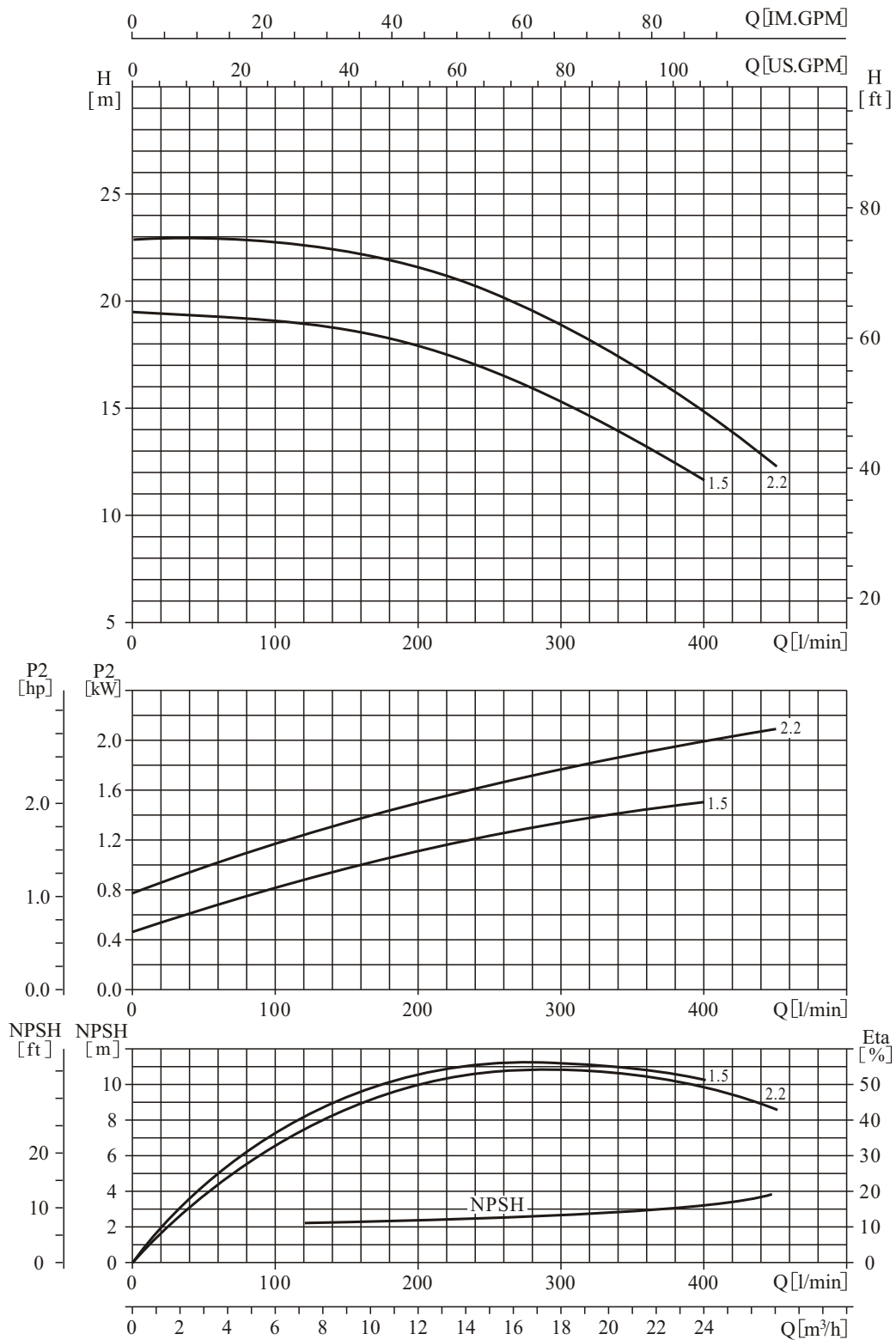
性能曲线 / Performance curve **MS250**

50Hz 2850rpm

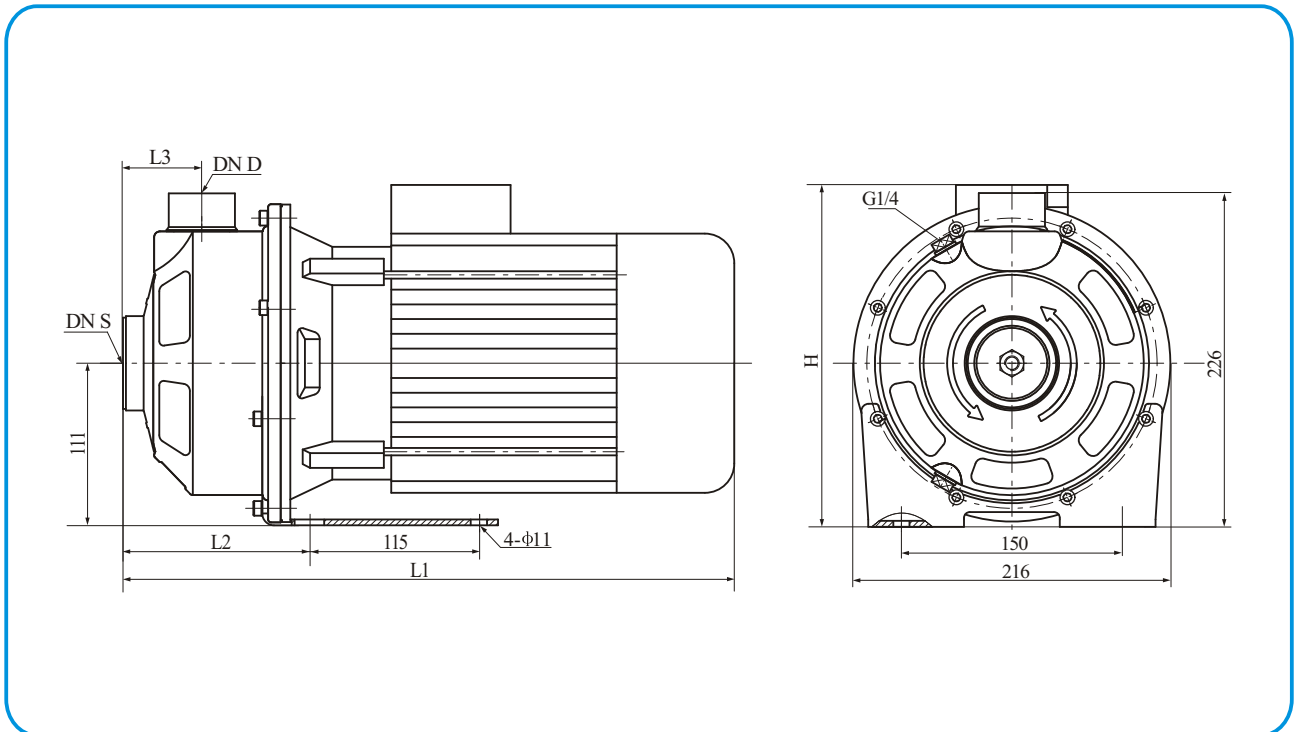


性能曲线 / Performance curve MS330

50Hz 2850rpm



安装图 / Installation sketch



尺寸和重量 / Size and weight

泵型号 Model	电机 / Motor		L1	L2	L3	H	DN S	DN D	重量/Weight kg
	相数/Phase	功率/Power kW							
MS60/0.37	三相 / 单相 3PH/1PH	0.37	328	113	51	216 / 230	G1 $\frac{1}{4}$	G1	10
MS60/0.55		0.55	328	113	51	216 / 230	G1 $\frac{1}{4}$	G1	12
MS60/0.75		0.75	361	113	51	223 / 245	G1 $\frac{1}{4}$	G1	14
MS100/0.55		0.55	328	113	51	216 / 230	G1 $\frac{1}{4}$	G1	12
MS100/1.1		1.1	361	113	51	223 / 245	G1 $\frac{1}{4}$	G1	16
MS160/0.75		0.75	375	127	54	223 / 245	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	14
MS160/1.1		1.1	375	127	54	223 / 245	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	16
MS250/1.1		1.1	375	127	54	223 / 245	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	16
MS250/1.5		1.5	415	127	54	232 / 253	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	20
MS250/2.2		2.2	415	127	54	232 / 253	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	23
MS330/1.5		1.5	415	127	54	232 / 253	G2	G1 $\frac{1}{4}$	20
MS330/2.2		2.2	415	127	54	232 / 253	G2	G1 $\frac{1}{4}$	23