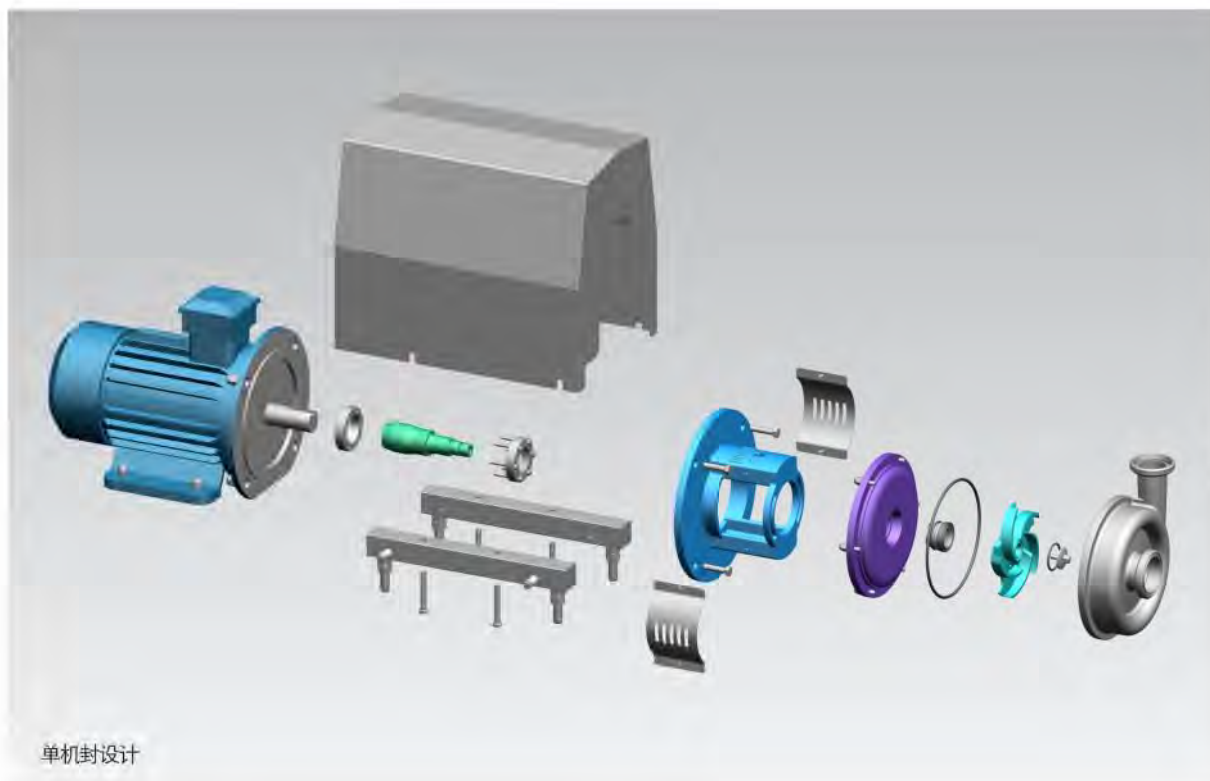


离心泵(KS系列) Centrifugal pump (KS series)



KS系列 KS Series

- ◆该离心泵是不锈钢制造，带有不锈钢电机外罩。
- ◆卫生和低成本效益的设计，使它非常适用于乳制品、饮料、食品加工，制药和精细化工工作中。
- ◆The centrifugal pump is made of stainless steel and with a shrouded motor.
- ◆Sanitary and cost-efficient design makes it perfect for the dairies, beverages, food-processing, pharmaceutical and fine chemicals industries.

工作原理 Operating principles

- ◆叶轮安置在泵壳里面，它和泵轴一起在联合中旋转，叶轮刀片以动能和压能和压能的形式将能量传达给流体。
- ◆该泵即使通过简单的反向旋转，也是不可行的。从电机后面也可以看出泵的旋转方向，正确的旋转方向，是顺时针的。
- ◆Housed inside the casing, the impeller rotates in conjunction with the pump shaft. With this arrangement, the impeller blades convey energy to the fluid in the form of kinetic energy and pressure energy.
- ◆This pump can't reversible by simple reversal of the direction of rotation. The direction of rotation is clockwise when the pump is viewed from the rear side of the motor.



离心泵(KS系列) Centrifugal pump (KS series)

技术规格

- ◆最大流量: 150m³/h
- ◆最高扬程: 70h(M)
- ◆最高温度: 120°C/248°F(满足30Min CIP/SIP)
- ◆最高转速: 3600Min-1
- ◆卫生认证: 3A-02-10/NO.1579, 密封FDA.177.2600

设计和特点

- ◆不锈钢电机外圈由冷成型板做; 开式叶轮或闭式叶轮由不锈钢熔模铸造;
- ◆可调节不锈钢脚; 根据3A卫生标准认证; IEC或NEMA B35电机 IP55, F等级绝缘, 50HZ、60HZ。

材质 Materials

- ◆与物料接触部位: AISI-316/304
- ◆垫圈(标准): EPDM(FDA)
- ◆机械密封圈(标准): SIC/SIC/EPDM
- ◆内表面处理: Ra≤0.8 μm
- ◆外表面处理: 喷沙处理或者抛光处理
- ◆Parts in contact with pumped media: AISI-316/304
- ◆Gaskets(standard): EPDM(FDA)
- ◆Mechanical seal(standard): SIC/SIC/EPDM
- ◆Inside surface finishing: Ra≤0.8 μm
- ◆Outside surface finishing: Sandblast or Mirror polish

选项 Options

- ◆机械密封圈: C/SIC, TC/TC
- ◆垫圈: FPM(VITON)和NBR
- ◆进出口连接: 卡箍、螺纹、法兰、DIN、SMS、RJT、IDF
- ◆电机: 2900, 1450, 3600Min/1, 50HZ, 60HZ
- ◆单端面机械密封(标准)
- ◆水冲洗双端面机械密封(选项)
- ◆Mechanical seal in: C/SIC, TC/TC
- ◆Gaskets in: FPM(VITON)and NBR
- ◆Connections: Clamp, thread, flange, DIN, SMS, RJT, IDF
- ◆Motor: 2900, 1450, 3600Min/1, 50HZ, 60HZ
- ◆Single mechanical seal(standard)
- ◆Flushed couple mechanical seal(Options)

Technical specifications

- ◆Max.Flow: 150m³/h
- ◆Max.Head: 70h(M)
- ◆Max.working temperature: 120 degree C/248 degree F (30Min CIP/SIP)
- ◆Max.Rev: 3600Min-1
- ◆Certificate: 3A-02-10/NO.1579,FDA.177.2600

Design and features

- ◆Casing manufactured with cold-formed plate.Open impeller and close impeller manufactured with stainless steel investment casting;
- ◆Adjustable stainless steel legs,Pump designed according to 3A Sanitary standards. IEC or NEMA B34 motors, IP 55, F-class insulation, 50HZ,60HZ

电机采用IEC EN IE2高效等级(相当于中国二级能效), PTC热敏电阻 Motor the IEC EN IE2(Equivalent to China two energy efficiency), PTC thermistor

宽电压电机Wide input range motor

功率(kw) Power	电压备注 Voltage	功率(kw) Power	电压备注 Voltage
0.55	210V~230V/50HZ	4	360V~400V/50HZ
0.75		5.5	
1.1		7.5	
1.5		11	
2.2		15	
3	420V~460V/60HZ	18.5	420V~460V/60HZ
		30	

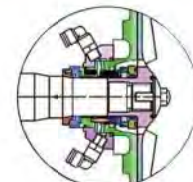
其他电压和频率电机请与东正联系
Please contact Donjoy for any other voltage or frequency of motor.



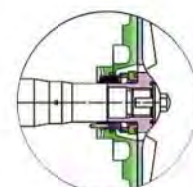


机械密封 Mechanical seal

机封示意图
Mechanical Sealing Fig



水冲洗双端机械密封
Flushed double
mechanical seal



单端面机械密封
Single mechanical seal

泵进出口的连接方式 Application of pump inlet and outlet connection type

液体在管道中会有能量的损失，分为沿程损失和局部阻力损失，管内越光滑，沿程损失越小，弯道越少，管径变化越小，局部阻力损失越小，因而尽量不要采用粗糙的管道连接，也不要连接中用管道急变的方式连接。

The fluid in pipe will be lose a part of energy that called as "pathway lose" and "local resistance lose", pipe surface is more smooth, pathway lose is more less, and blend of pipe and the change of pipe diameter are moer less, local resisistance lose is more less, thus it is not better by rough surface pipe and by rapid change pipe diameter.

管道直径及连接距离 Pipe diameter and dictance of connection

泵在小流量运行时，效率很低，消耗的能量使液体温度急剧上升，泵在小流量下运行，通过叶轮间隙回流增加，造成泵压力脉动、振动、噪音等危害增加，因而，连接的管道进口直径最好不要小于泵进口直径。为了保证泵运行的更加稳定、泵进口前需要连接一段直管，长度约为5-10倍管道直径。

When low flow rate runing the effieience of pump is very less, consume of energy have fluid temperature rise up rapidly, and when low flow rate runing, the return flow of pump is increased in impeller clearance, the pulsant pressure, shaking, noise from pump etc harm will resat, for the connection diameter of pipe front inlet is not less than design pipe diameter, and it need a straight pipe front inlet, long for 5-10 times pipe diameter, so that keep pump better runing.

错误的连接管道 Wrong pipe type

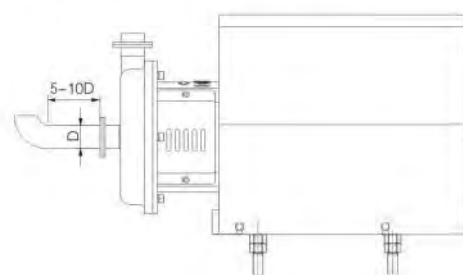


正确的连接管道 Right pipe type



D-02

管道入口连接距离 Pipe connection distance

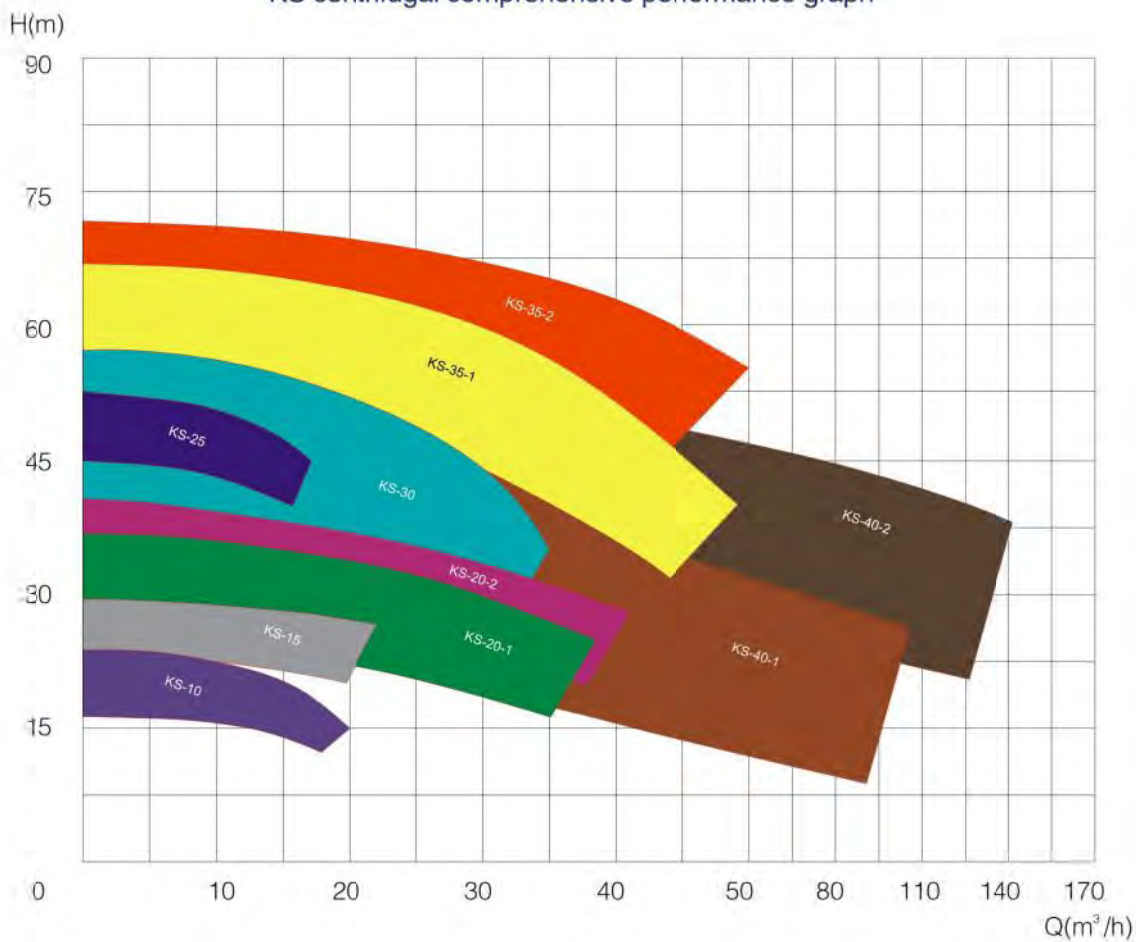


D-03

离心泵(KS系列) Centrifugal pump (KS series)



KS系列离心泵综合性能曲线图
KS centrifugal comprehensive performance graph



KS带排污口离心泵示意图 KS series pump drainage pipe picture



离心泵(KS系列)

Centrifugal pump (KS series)

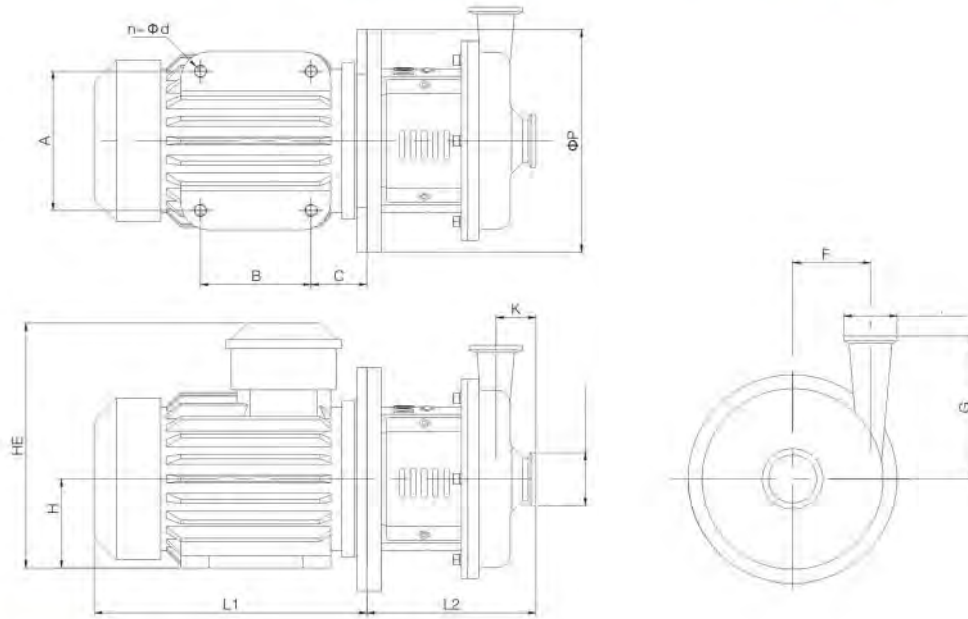
KS离心泵订购选型表 KS centrifugal pump selection table

型号 Model	选型规格		电机选择	进口/出口
	流量(T)	扬程(M)	功率(KW)·电流(A)	
KS10	3	22	1.5KW	1.5"/1.5"
	5	22	1.5KW	
	8	22	1.5KW	
	9	22	1.5KW	
	12	20	1.5KW	
	15	18	1.5KW	
	18	16	2.2KW	
KS15	3	30	1.5KW	2"/1.5"
	5	30	1.5KW	
	8	26	1.5KW	
			2.2KW	
	10	25	2.2KW	
	15	22	2.2KW	
	18	18	2.2KW	
KS20-1			3.0KW	2"/2"
	20	16	2.2KW	
			3.0KW	
	5	36	2.2KW	
			3.0KW	
	10	36	4.0KW	
	15	35	4.0KW	
KS20-2	20	33	4.0KW	2"/2"
	25	30	4.0KW	
			5.5KW	
	30	30	5.5KW	
KS25	38	22	5.5KW	2"/1.5"
	20	40	5.5KW	
	25	40	5.5KW	
	30	35	5.5KW	
	35	32	5.5KW	
KS25	40	30	7.5KW	2"/1.5"
	45	28	7.5KW	
	5	50	4KW/5.5KW	
	10	45	5.5KW	
	15	40	5.5KW	

型号 Model	选型规格		电机选择	进口/出口
	流量(T)	扬程(M)	功率(KW)·电流(A)	
KS30	5.5KW/10.2A	10	55	2"/1.5"
	5.5KW/10.2A	15	50	
	5.5KW/10.2A	20	50	
	7.5KW/13.6A			
	7.5KW/13.6A	25	45	
	7.5KW/13.6A	30	40	
	7.5KW/14.5A	35	40	
KS35-1	10	70	11KW	2.5"/1.5"
	15	65	11KW	
	20	65	11KW	
	25	60	11KW	
	30	60	11KW	
	35	55	11KW	
	40	50	15KW	
KS35-2	45	50	15KW	2.5"/2"
	20	70	15KW	
	25	70	15KW	
	30	70	15KW	
	35	65	15KW	
	40	65	15KW	
	45	60	18.5KW	
KS40-1	50	55	18.5KW	3"/2.5"
	45	42	11KW	
	50	42	11KW	
	60	40	15KW	
	65	40	15KW	
	70	38	15KW	
	80	35	15KW	
KS40-2	90	33	15KW	3"/2.5"
	100	30	18.5KW	
	110	28	18.5KW	
	50	50	15KW	
	60	48	15KW	
	70	47	18.5KW	
	80	46	18.5KW	
KS40-2	85	45	22kw	3"/2.5"
	90	44	22kw	
	100	43	22kw	
	110	40	22kw	
	120	35	22kw	
	130	30	30KW	
	140	20	30KW	



离心泵KS无防护罩尺寸图 Centrifugal pump without protective cover size figure



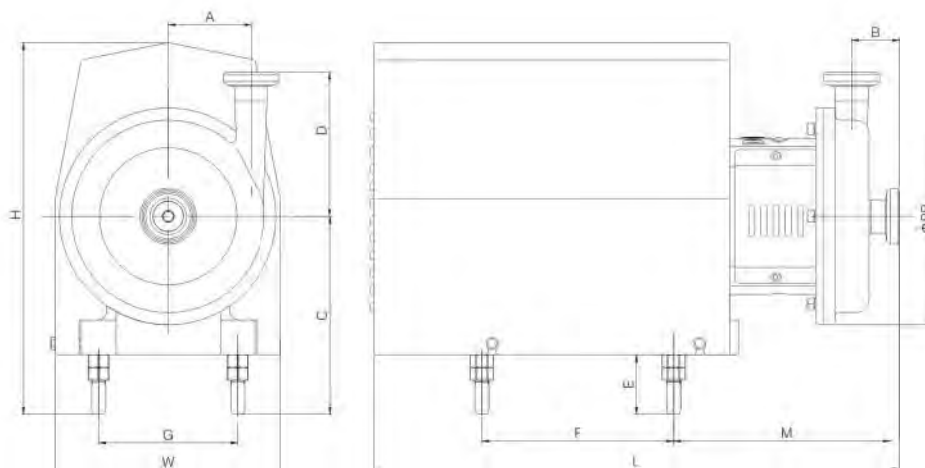
KS泵安装数据表(无罩)
KS pump series installation table(no moter cover)

型号 Model	功率	进口DI	出口DO	PS		a	b	c	H	HE	L1	P	fixd	K	F	G	L2
KS10	1.5KW	1.5"	1.5"	189	Φ32	140	100	56	90	200	260	200	4x10	53	63	129	180
	2.2KW	1.5"	1.5"	189	Φ32	140	125	56	90	200	285	200	4x10	53	63	129	180
KS15	1.5KW	2"	1.5"	250	Φ32	140	100	56	90	200	260	200	4x10	35	90.5	148	203
	2.2KW	2"	1.5"	250	Φ32	140	125	56	90	200	285	200	4x10	35	90.5	148	203
KS20-I KS20-II	2.2KW	2"	2"	250	Φ32	140	125	56	90	200	285	200	4x10	38	85	163	203
	3KW	2"	2"	250	Φ32	160	140	63	100	270	320	250	4x12	38	85	163	216
	4KW	2"	2"	250	Φ32	190	140	70	112	278	335	250	4x12	38	85	163	216
	5.5KW	2"	2"	250	Φ32	216	140	89	132	320	385	300	4x12	38	85	163	216
	7.5KW	2"	2"	250	Φ32	216	140	89	132	320	385	300	4x12	38	85	163	214
	4KW	2"	1.5"	268	Φ32	190	140	70	112	278	335	250	4x12	49	108	183	214
KS25	5.5KW	2"	1.5"	268	Φ32	216	140	89	132	320	385	300	4x12	49	108	183	214
	5.5KW	2"	1.5"	268	Φ32	216	140	89	132	320	385	300	4x12	49	108	183	214
KS30	7.5KW	2"	1.5"	268	Φ32	216	140	89	132	320	385	300	4x12	49	108	183	214
	11KW	2.5"	1.5"	350	Φ36	254	210	108	160	400	490	350	4x15	57	131	222	273
KS35-I	15KW	2.5"	1.5"	350	Φ36	254	210	108	160	400	490	350	4x15	57	131	222	273
	15KW	2.5"	2"	350	Φ36	254	210	108	160	400	490	350	4x15	57	131	222	273
KS35-II	18.5KW	2.5"	2"	350	Φ36	254	254	108	160	400	535	350	4x15	57	131	222	273
	11KW	3"	2.5"	303	Φ36	254	210	108	160	400	490	350	4x15	61.5	105	202	290
KS40-I KS40-II	15KW	3"	2.5"	303	Φ36	254	210	108	160	400	490	350	4x15	61.5	105	202	290
	18.5KW	3"	2.5"	303	Φ36	254	254	108	160	400	535	350	4x15	61.5	105	202	290
	22KW	3"	2.5"	303	Φ36	279	241	121	180	420	560	350	4x15	61.5	105	202	290
	30KW	3"	2.5"	303	Φ36	318	305	133	200	470	660	400	4x19	61.5	105	202	290

注：以上尺寸均以卡箍接头为准。

离心泵(KS系列) Centrifugal pump (KS series)

KS系列尺寸图 Centrifugal pump dimensions figure

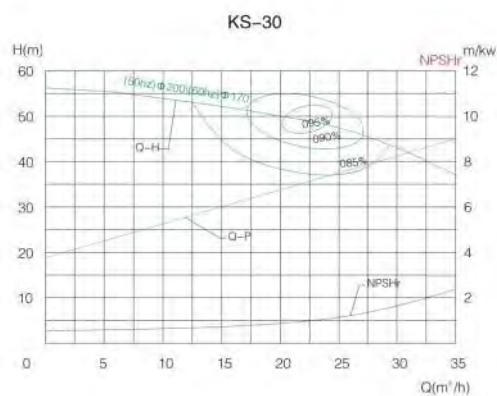
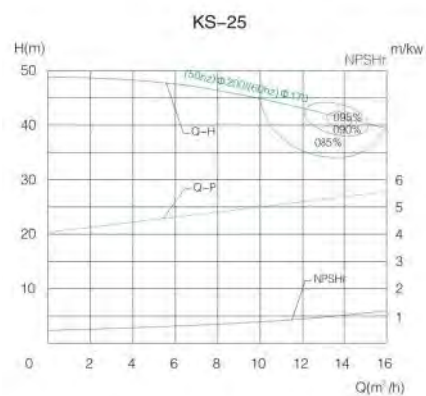
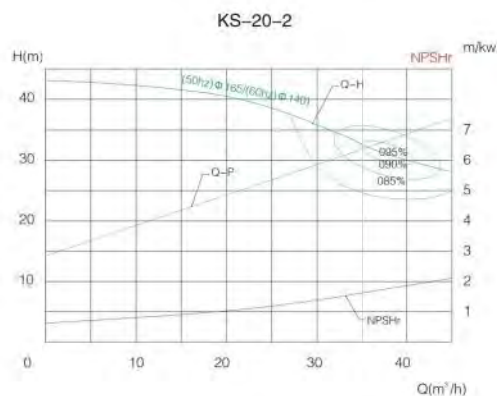
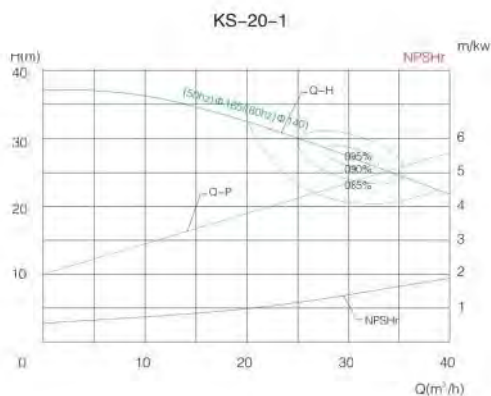
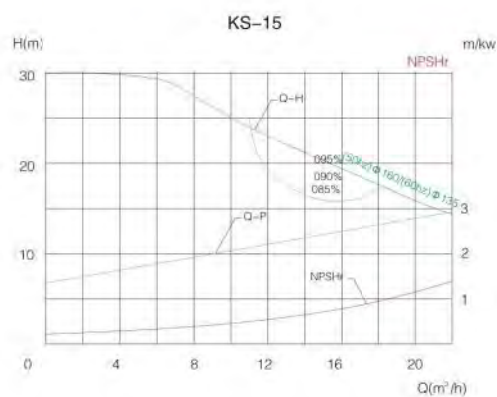
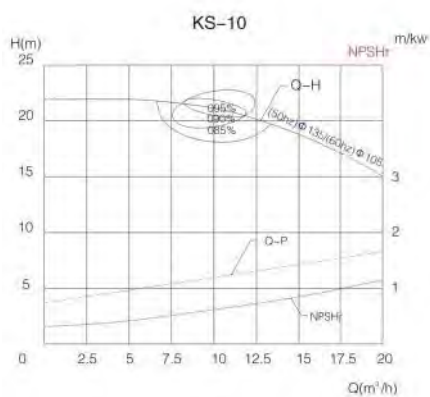


KS离心泵安装尺寸 Centrifugal Pump Open Impeller Series

型号 Model																			
	功率		出口	PE		a	B	C	D	M	F	G	H	L	W	E	G	H	E
KS10	1.5KW	1.5"	1.5"	189	Φ32	63	60	190	136	163	240	140	360	528	210	70	222	392	102
	2.2KW	1.5"	1.5"	189	Φ32	63	60	210	136	163	240	140	360	528	210	70	242	392	102
KS15	1.5KW	2"	1.5"	250	Φ32	90.5	42	190	155	186	240	140	360	551	210	70	222	392	102
	2.2KW	2"	1.5"	250	Φ32	90.5	42	210	155	186	240	140	360	551	210	70	242	392	102
KS20-I KS20-II	2.2KW	2"	2"	250	Φ32	85	45	210	170	186	240	140	360	551	210	70	242	392	102
	3KW	2"	2"	250	Φ32	85	45	230	170	175	300	160	430	599	260	70	262	462	102
	4KW	2"	2"	250	Φ32	85	45	222	170	175	300	190	430	599	260	70	254	462	102
	5.5KW	2"	2"	250	Φ32	85	45	252	170	197	330	216	470	737	310	70	284	502	102
	7.5KW	2"	2"	250	Φ32	85	45	252	170	197	330	216	470	737	310	70	284	502	102
KS25	4KW	2"	1.5"	268	Φ32	108	56	222	190	173	300	190	430	597	260	70	254	462	102
	5.5KW	2"	1.5"	268	Φ32	108	56	252	190	195	330	216	470	735	310	70	284	502	102
KS30	5.5KW	2"	1.5"	268	Φ32	108	56	252	190	195	330	216	470	735	310	70	284	502	102
	7.5KW	2"	1.5"	268	Φ32	108	56	252	190	195	330	216	470	735	310	70	284	502	102
KS35-I	11KW	2.5"	1.5"	350	Φ36	131	68	290	229	240	450	254	575	860	375	102	322	607	102
	15KW	2.5"	1.5"	350	Φ36	131	68	290	229	240	450	254	575	860	375	102	322	607	102
KS35-II	15KW	2.5"	2"	350	Φ36	131	68	290	229	240	450	254	575	860	375	102	322	607	102
	18.5KW	2.5"	2"	350	Φ36	131	68	290	229	240	515	254	575	885	375	102	322	607	102
KS40-I KS40-II	11KW	3"	2.5"	303	Φ36	105	73.5	290	213.5	240	450	254	575	870	375	102	322	607	102
	15KW	3"	2.5"	303	Φ36	105	73.5	290	213.5	240	450	254	575	870	375	102	322	607	102
	18.5KW	3"	2.5"	303	Φ36	105	73.5	290	213.5	240	515	254	575	895	375	102	322	607	102
	22KW	3"	2.5"	303	Φ36	105	73.5	310	213.5	240	515	279	625	946	400	102	342	657	102
	30KW	3"	2.5"	303	Φ36	105	73.5	330	213.5	267	580	318	670	1014	440	102	362	702	102

注：以上尺寸均以SMS标准螺纹接头为准。

离心泵性能综合曲线图 KS Series pump performance curve figure

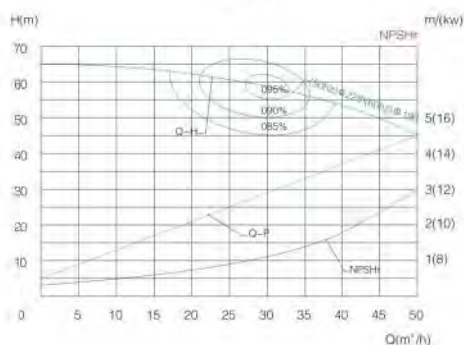


说明: 测试条件: 介质清水, 温度20℃, 叶轮转速2900 R.P.M (此曲线图亦适用电机60Hz, 叶轮转速3600R.P.M)

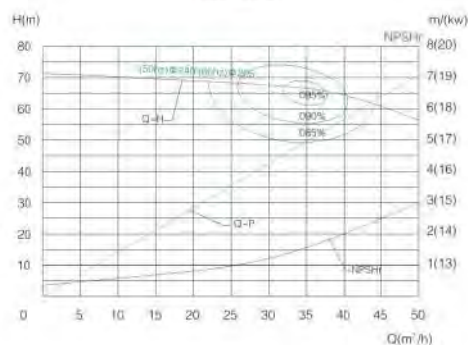
Note: Test condition is pure water, 20°C temperature, impeller speed 2900R.P.M (it is the same curve as motor 60Hz, impeller speed 3600R.P.M)

离心泵(KS系列) Centrifugal pump (KS series)

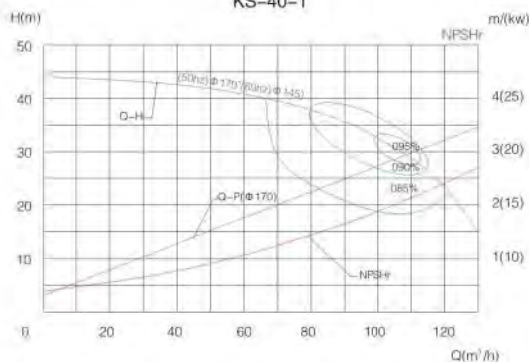
KS-35-1



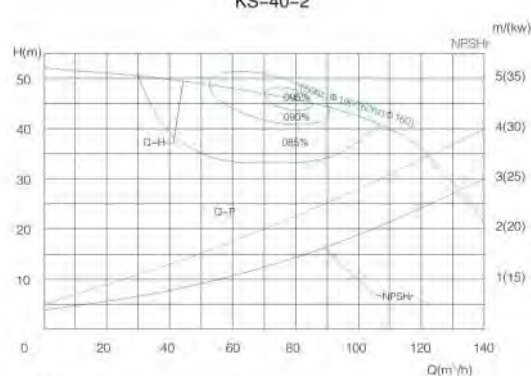
KS-35-2



KS-40-1



KS-40-2



说明: 测试条件: 介质清水, 温度20℃, 叶轮转速2900 R.P.M (此曲线图亦适用电机60Hz, 叶轮转速3600R.P.M)

Note: Test condition is pure water, 20℃ temperature, impeller speed 2900R.P.M (it is the same curve as motor 60Hz, impeller speed 3600R.P.M)

离心泵型号说明 Model instruction of Centrifugal Pump

KS 10 6T 22 1.5KW 380V 50HZ M 1.5"/1.5" S

接口标准: DIN(D), SMS(S), 3A(A), RJT(R), ISO/IDF(I)
Connection standard: DIN(D), SMS(S), 3A(A), RJT(R), ISO/IDF(I)

进出口规格 Inlet & Outlet Size

连接方式: 螺纹(M) 卡箍(C)
Connection way: threaded(M), Clamped(C)

电机频率: 50HZ; 60HZ
Motor frequency: 50HZ; 60HZ

电压: 110V 220V 380V(详见选型表)
Voltage: 110V 220V 380V(refer to selection table)

电机功率: 1.1kw 1.5kw 2.2kw.....
Motor power: 1.1kw 1.5kw 2.2kw.....

离心泵扬程(详见选型表)
Discharge head(refer to selection table)

离心泵流量(详见选型表) Flow rate(refer to selection table)

离心泵型号 Model

离心泵代码: 开式叶轮KS; 闭式叶轮BS
Centrifugal Pump code: KS series(Open impeller) & BS series(Close impeller)

例: KS-10-6T-22-1.5Kw-380V-50HZ-M-2.5"/2.5"-S
Sample: KS-10-6T-22-1.5Kw-380V-50HZ-M-2.5"/2.5"-S