



HYLIC PUMP

Reliable Pumping Solutions
for a Sustainable Future



Model HSP/HSM

Submersible Axial/Mixed Flow Pump

Hylic HSP & HSM Series

Manufactured by an **ISO 9001-certified facility**, the Hylic HSP and HSM series deliver reliable performance with ongoing improvements in productivity and system efficiency. We offer a **diverse range of pump types** and provide **tailored pumping solutions** to meet customer requirements across various applications.

Hylic pumps are a trusted choice for enhancing reliability and operational value.

Application

Hylic submersible axial flow and mixed flow pumps are designed for high-volume water transfer in demanding environments. Their compact, efficient, and fully submersible construction makes them ideal for the following applications :

- **Flood Control & Drainage Stations**

Efficiently handles emergency and seasonal flooding in urban and rural areas.

- **Irrigation & Agricultural Water Supply**

Transfers large volumes of water from rivers, canals, and reservoirs to farmlands.

- **Stormwater & Wastewater Management**

Ideal for municipal systems requiring fast removal of storm runoff and treated wastewater.

- **Raw Water Intake for Water Treatment Plants**

Draws large volumes of surface water with low to medium head requirements.

- **Cooling Water Circulation for Power Plants & Industrial Sites**

Ensures stable water flow for heat exchange systems in industrial operations.

- **Reservoir Level Management & Canal Pumping**

Maintains optimal water levels in dams, reservoirs, and irrigation canals.

These pump types are especially suited for low head, high flow applications, providing robust and energy-efficient solutions for infrastructure and environmental management.



HSP-HSM

Hylic HSP & HSM Series

HSP Series Submersible Motor – Key Features

Motor Specifications

The HSP series motor is designed for submersible applications with robust performance and high durability. It complies with the GB755 standard and is protected to IP68 level, ensuring full underwater operation.

- **Cooling System** : ICW08A41
- **Mounting Configuration** : IM3013
- **Available Voltages** : 380V, 600V, 6kV, and 10kV (up to 355kW capacity)
- **Frequency** : 50Hz
- **Insulation Rating** : Class H
- **Standard Cable Length** : 10 meters (15 m./20 m. /25 m. Optional)

High-Efficiency IE3 Motors Certified to IEC 60034-30 Standard

We provide premium-grade motors that meet international efficiency standards, ensuring reliable performance and long-term energy savings for all pumping applications.

Durable with Class H Insulation (up to 180°C)

Built to withstand high operating temperatures, our motors use Class H insulation to support extended service life and thermal stability in demanding environments.

Engineered for Lower Energy Costs

Our IE3 motors are optimized for maximum efficiency—reducing operational costs and enhancing overall system performance.

Committed to Sustainability

Frontline's pump systems are designed with environmental responsibility in mind, helping to lower ecological impact and support greener infrastructure.

Advanced Shaft Sealing

To prevent leakage and enhance longevity, each motor is fitted with a double or triple mechanical seal system. The first seal, exposed to water, uses carbon silicon and tungsten carbide, while subsequent seals are composed of graphite and tungsten carbide for superior wear resistance.

Integrated Protection Systems

- **Leakage Detection:**
Sensors detect any breach in the oil chamber or wiring compartment, triggering alerts or automatic shutdown.
- **Thermal Overload Protection:**
Embedded thermal sensors monitor coil temperatures. When overheating is detected, the motor stops or issues warnings to prevent damage.

Rotation Direction

Viewed from the top of the unit, the impeller operates in a clockwise direction.

Hylic HSP & HSM Series

Key Advantages of Submersible Pump Solutions

We deliver a new era of axial and mixed-flow submersible electric pumps—engineered for exceptional durability and performance. Our pumps are designed to minimize installation complexity and maintenance efforts, while maximizing operational uptime and service life. A reliable solution tailored for long-term efficiency in every system.

- **Precision-Cast Components**

Our impellers and major components are manufactured from a single-piece casting process to ensure optimal balance and robust, stable performance under demanding conditions. with optional Adjustable impeller

- **IE3 High-Efficiency Motors**

Frontline pumps feature energy-efficient motors certified to IEC 60034-30 IE3 standards, helping reduce electricity use and lower environmental impact.

- **Advanced Hydraulic Simulation**

Designed using Computational Fluid Dynamics (CFD) and predictive AI tools, our pumps are optimized through in-depth flow simulation to resolve complex hydraulic challenges before they occur.

- **Anti-Clogging Propeller Design**

Our self-cleaning impeller blades significantly reduce blockages and operational risks, especially when handling fibrous or sludge-laden water.

- **Compact & Low-NPSH Construction**

The slim-profile pump body enables straightforward installation in tight spaces, while maintaining low vibration and efficient suction performance even at low NPSH values.

- **Smart Monitoring System**

Intelligent control system with multi-point sensor integration, ready for expansion with AI-based analytics and IoT connectivity to suit modern operational needs.

- **High-Performance Surface Coating**

Special coatings provide superior durability against abrasion and corrosion, extending pump life in harsh service conditions. With optional sacrificed anode.

- **Certified to International Standards**

All Frontline products are developed under ISO 9001, ISO 14001, and ISO 45001 certifications—ensuring quality, safety, and environmental compliance you can trust.

Pump part

Motor housing/connection chamber
Pump Shaft
Pump Bowl and Diffusion vane
Propeller
Wear ring

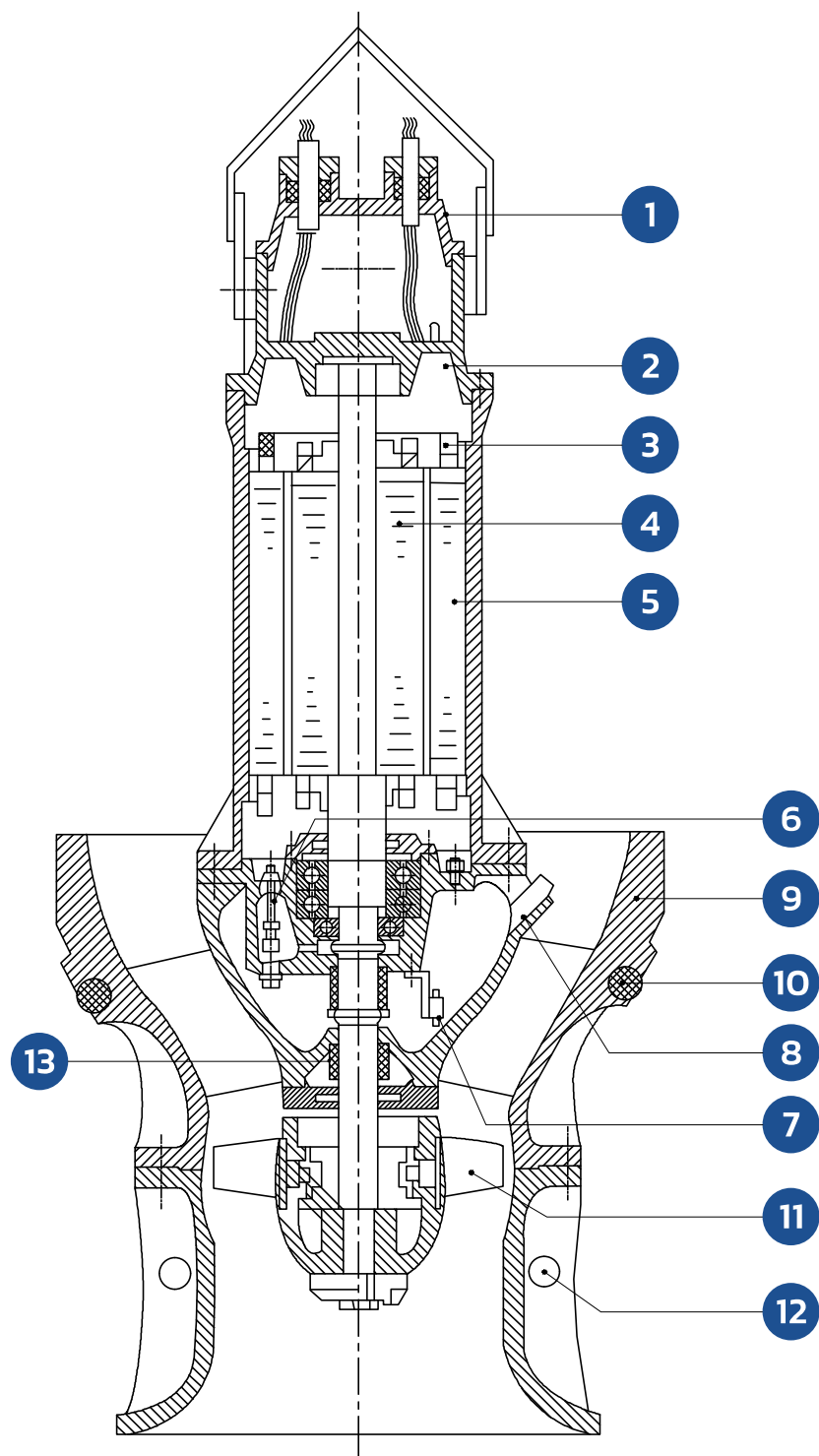
Material

JIS FC 250 / DIN GG25 / ASTM A48 class 35
JIS SUS 431 / DIN 1.4057 / ASTM A – Type 431
JIS FC 200 / DIN GG 20 / ASTM A48 class 30
JIS SCS 14 / DIN 1.4517 / ASTM A – Type CF8M
JIS SUS 316Ti / DIN 1.4571 / ASTM A – Type 316Ti

HSP Series: Axial Flow

HSP type submersible axial-flow pumps structure drawing

HSP Series



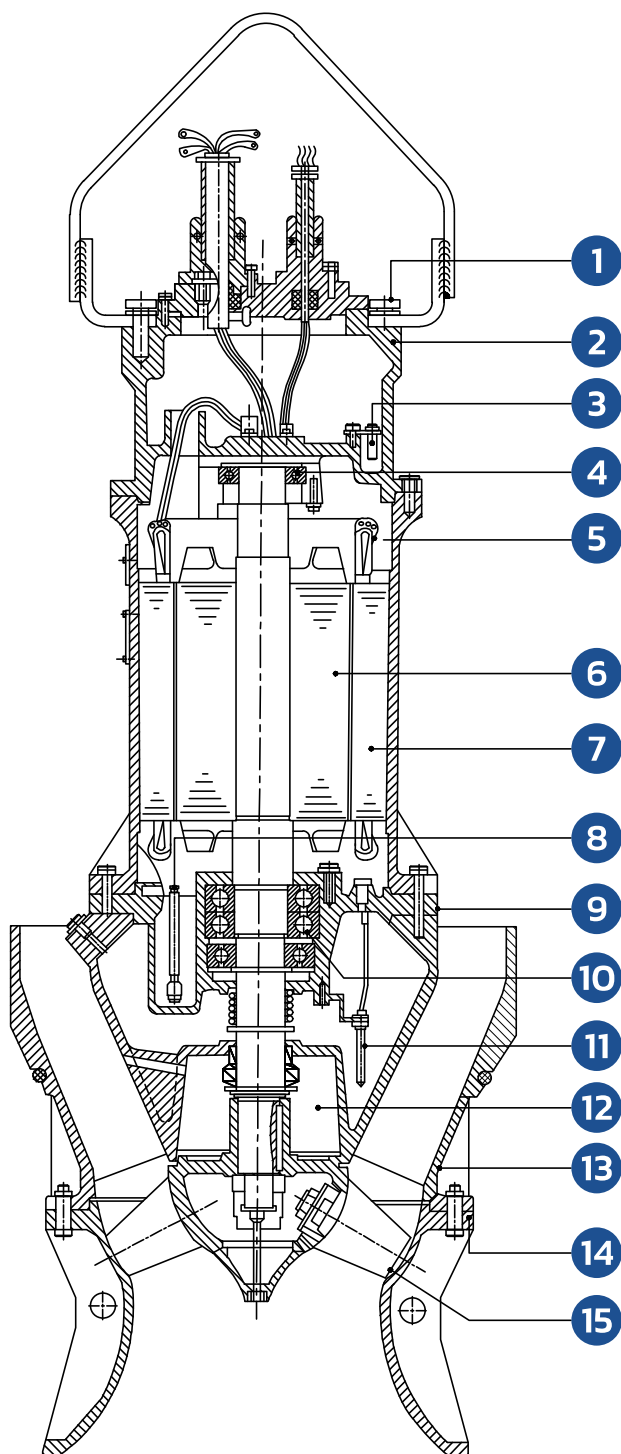
Pump Structure (Part List)

1	Junction
2	Leakage probe
3	Heat protector
4	Rotor
5	Stator
6	Leakage sensor
7	Oil - water probe
8	Oil filler
9	Guide vane
10	Seal ring
11	Impeller
12	Suction bell
13	Mechanical Seal

HSM Series: Mixed Flow

HSM type submersible Mixed-flow pumps structure drawing

HSM Series

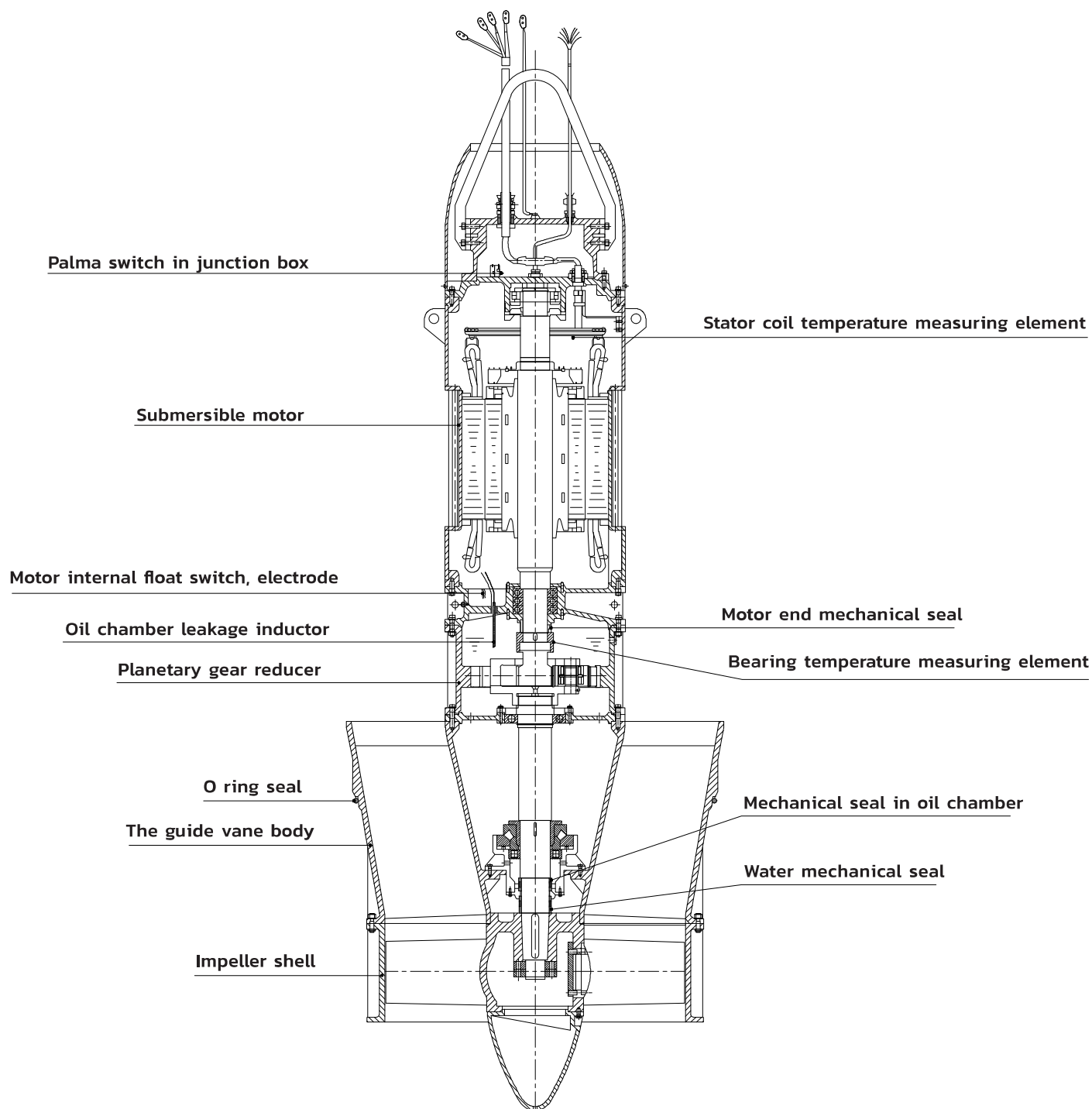


Pump Structure (Part List)

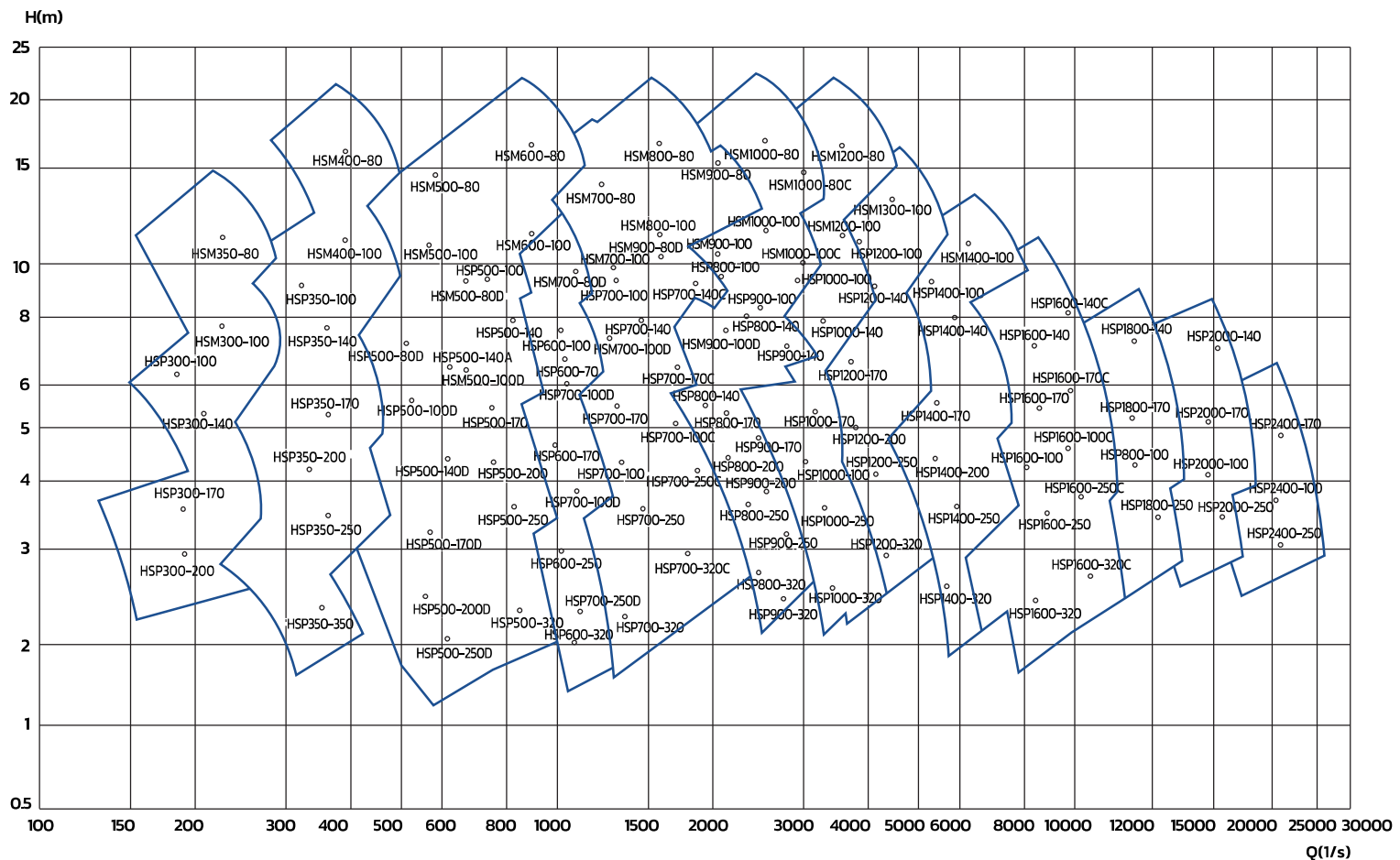
1	Junction
2	Upper cover
3	Leakage probe
4	Upper bearing
5	Heat protector
6	Rotor
7	Stator
8	Leakage sensor
9	Bottom cover
10	Lower bearing
11	Oil - water probe
12	Mechanical seal
13	Guide vane
14	Suction bell
15	Impeller part

Submersible Axial/Mixed Flow Pumps

Submersible Axial and Mixed-Flow Pumps – Structural Diagram

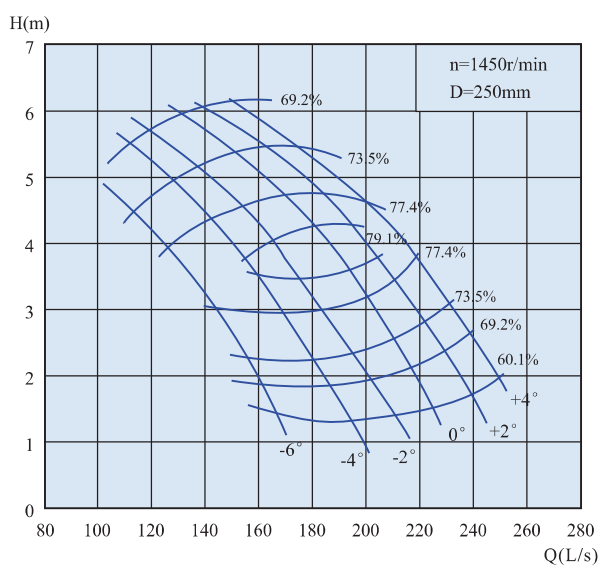


Spectrum diagram

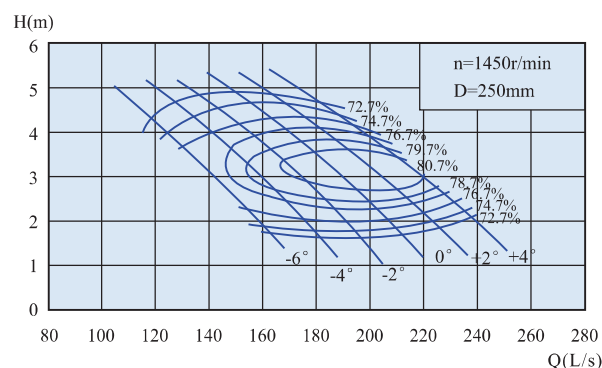


HSP Curve and specification

HSP300-170



HSP300-200

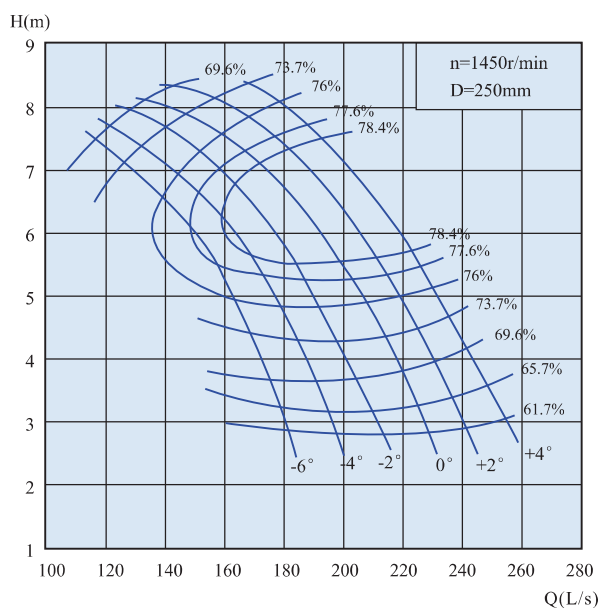


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	564.5	156.8	1.94	1450	4.3	705	69.3	250
	516.6	143.5	2.94		5.3		78.3	
	364.7	101.3	4.97		7.1		69.3	
-4°	654.1	181.7	1.88		4.8	11	69.3	
	558.4	155.1	3.61		6.9		79.3	
	400	111.1	5.27		8.3		69.3	
-2°	735.5	204.3	1.94		5.6		69.3	
	635.4	176.5	3.54		7.7		79.3	
	439.6	122.1	5.52		9.5		69.3	
0°	791.6	219.9	2.12		6.6		69.3	
	695.9	193.3	3.67		8.7		80.3	
	483.5	134.3	5.73		10.9		69.3	
+2°	846	235	2.43		8.1	15	69.3	
	743.8	206.6	3.92		10.0		79.3	
	527	146.4	5.9		12.2		69.3	
+4°	900	250	2.73		9.7		69.3	
	760.3	211.2	4.44		11.7		78.3	
	574.9	159.7	5.89		13.3		69.3	

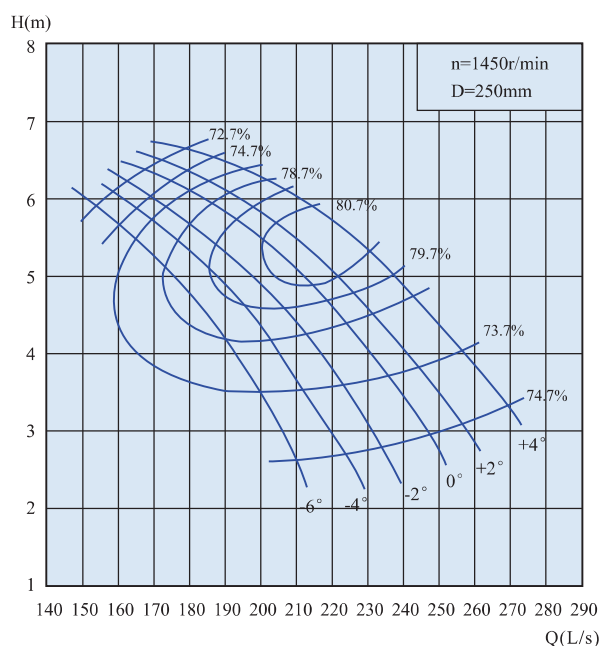
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	554	153.9	2.22	1450	4.4	7.5	76.7	250
	520.9	144.7	2.8		5.1		78.3	
	468.7	130.2	3.68		6.1		76.7	
-4°	633.2	175.9	2.03		4.6		76.7	
	583.2	162	2.85		5.7		79.8	
	509.4	141.5	3.99		7.2		76.7	
-2°	689.8	191.6	1.98		4.9	11	76.7	
	635.4	176.5	2.92		6.3		80.4	
	545.8	151.6	4.19		8.1		76.7	
0°	743.8	206.6	2.04		5.4		76.7	
	687.6	191	2.92		6.8		80.7	
	586.4	162.9	4.34		9		76.7	
+2°	791.6	219.9	2.2		6.2		76.7	
	729	202.5	3.08		7.5		81.2	
	633.2	175.9	4.35		9.8		76.7	
+4°	833.4	231.5	2.42		7.2	15	76.7	
	781.2	217	3.09		8.1		80.9	
	698	193.9	4.17		10.3		76.7	

HSP Curve and specification

HSP300-100



HSP300-140

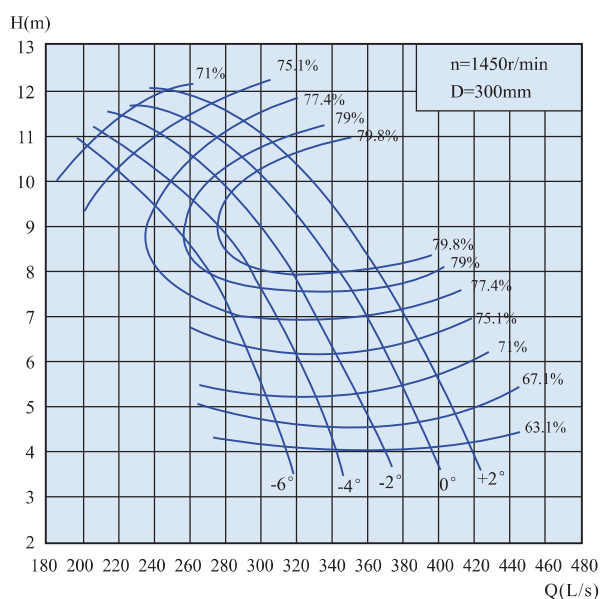


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	636.8	176.9	3.24	1450	8.6	15	65.7	250
	537.5	149.3	5.92		11.1		77.9	
	425.5	118.2	7.46		12.3		70.6	
-4°	691.6	192.1	3.18		9.1	18.5	65.7	
	584.3	162.3	6.11		12.3		79.1	
	439.2	122	7.81		13.2		70.6	
-2°	746.6	207.4	3.18		9.8	18.5	65.7	
	601.9	167.2	6.29		13		79.1	
	460.8	128	8.03		14.3		70.6	
0°	806.4	224	3.33		11.1	18.5	65.7	
	668.5	185.7	6.32		14.5		79.3	
	533.9	148.3	7.92		15.6		73.7	
+2°	855	237.5	3.41		12.1	22	65.7	
	703.8	195.5	6.48		15.7		79.1	
	574.6	159.6	8.18		17.4		73.7	
+4°	887.8	246.6	3.7		13.6	22	65.7	
	740.2	205.6	6.66		17		79.1	
	601.6	167.1	8.33		18.5		73.7	

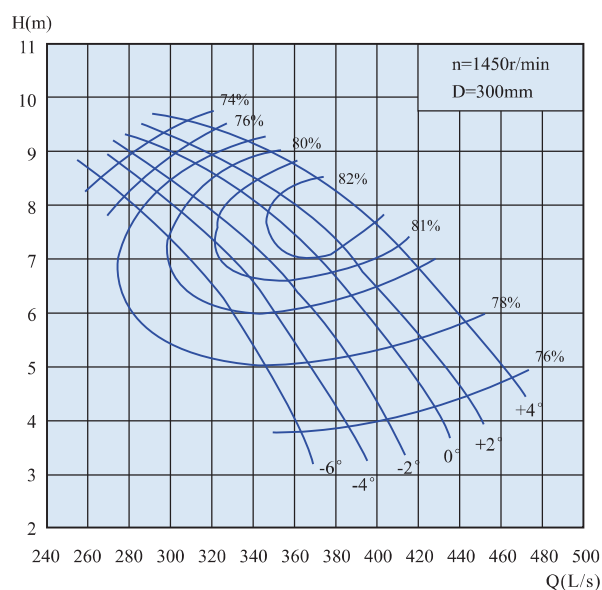
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	749.9	208.3	2.6	1450	6.9	15	76.9	250
	666.7	185.2	4.58		10.3		80.9	
	552.2	153.4	5.9		11.9		74.9	
-4°	802.1	222.8	2.67		7.6	15	76.9	
	683.3	189.8	4.86		11		82.1	
	572.8	159.1	6.17		12.9		74.9	
-2°	843.8	234.4	2.78		8.3	18.5	76.9	
	718.9	199.7	5.07		12.1		82.3	
	585.4	162.6	6.25		13.3		74.9	
0°	885.2	245.9	2.99		9.4	18.5	76.9	
	748.1	207.8	5.29		12.9		83.4	
	600.1	166.7	6.46		14.1		74.9	
+2°	916.6	254.6	3.13		10.2	18.5	76.9	
	766.8	213	5.35		13.3		83.8	
	606.2	168.4	6.53		14.4		74.9	
+4°	962.6	267.4	3.4		11.6	22	76.9	
	796	221.1	5.69		14.9		82.9	
	643.7	178.8	6.67		15.6		74.9	

HSP Curve and specification

HSP350-100



HSP350-140

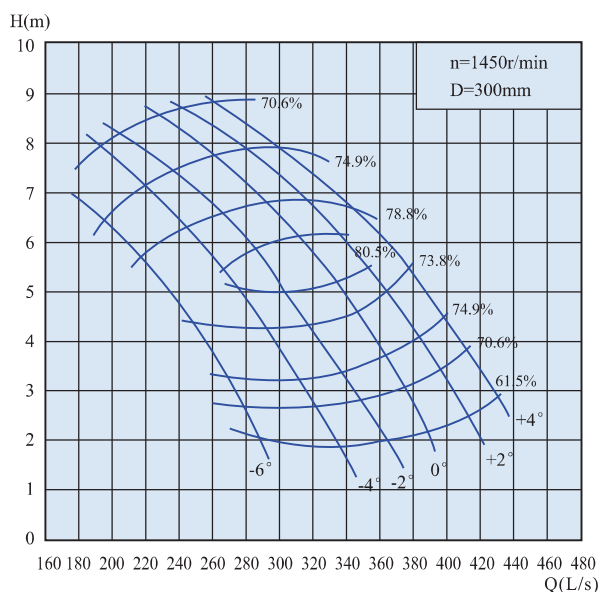


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	1100.5	305.7	4.67	1450	20.9	37	67.1	300
	928.8	258.0	8.53		27.2		79.3	
	735.5	204.3	10.74		29.9		72.0	
-4°	1195.2	332.0	4.58		22.2		67.1	
	1009.8	280.5	8.79		30.0		80.5	
	758.9	210.8	11.25		32.3		72.0	
0°	1290.2	358.4	4.58		24.0	45	67.0	
	1040.4	289.0	9.05		31.9		80.5	
	796.3	221.2	11.56		34.8		72.0	
0°	1393.2	387.0	4.80		27.2		67.1	
	1155.6	321.0	9.10		35.5		80.7	
	922.7	256.3	11.40		38.2		75.1	
+2°	1477.8	410.5	4.91		29.5		67.1	
	1216.4	337.9	9.33		38.4		80.5	
	992.9	275.8	11.78		42.4		75.1	

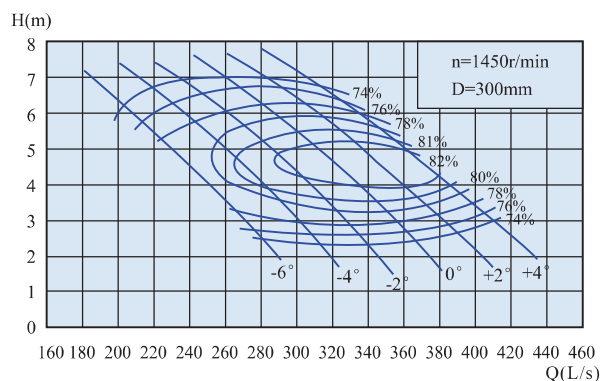
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	1296.0	360.0	3.75	1450	17.4	37	69.3	300
	1152.0	320.0	6.60		25.9		78.3	
	954.0	265.0	8.50		29.9		69.3	
-4°	1386.0	385.0	3.85		19.1		69.3	
	1180.8	328.0	7.00		27.7		79.3	
	990.0	275.0	8.88		32.4		69.3	
-2°	1458.0	405.0	4.00		20.9	45	69.3	
	1242.0	345.0	7.30		30.4		79.3	
	1011.6	281.0	9.00		33.5		69.3	
0°	1530.0	425.0	4.30		23.6		69.3	
	1292.4	359.0	7.62		32.5		80.3	
	1036.8	288.0	9.30		35.5		69.3	
+2°	1584.0	440.0	4.50		25.6	45	69.3	
	1324.8	368.0	7.70		33.5		79.3	
	1047.6	291.0	9.40		36.3		69.3	
+4°	1663.2	462.0	4.90		29.2		69.3	
	1375.2	382.0	8.20		37.5		78.3	
	1112.4	309.0	9.60		39.3		69.3	

HSP Curve and specification

HSP350-170



HSP350-100

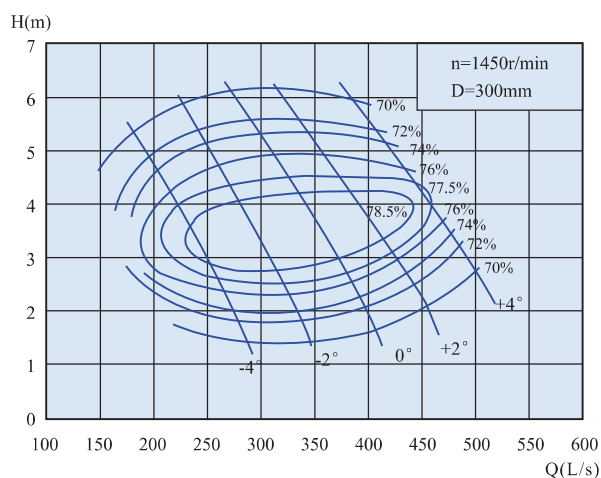


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	975.6	271.0	2.79	1450	10.5	18.5	70.7	300
	892.8	248.0	4.24		12.9		79.7	
	630.0	175.0	7.15		17.4		70.7	
-4°	1130.4	314.0	2.70		11.8	22	70.7	
	964.8	268.0	5.20		16.9		80.7	
	691.2	192.0	7.59		20.2		70.7	
-2°	1270.8	353.0	2.79		13.7	30	70.7	
	1098.0	305.0	5.10		18.9		80.7	
	759.6	211.0	7.95		23.3		70.7	
0°	1368.0	380.0	3.05		16.1	37	70.7	
	1202.4	334.0	5.29		21.2		81.7	
	835.2	232.0	8.25		26.6		70.7	
+2°	1461.6	406.0	3.50		19.7	37	70.7	
	1285.2	357.0	5.65		24.5		80.7	
	910.8	253.0	8.49		29.8		70.7	
+4°	1555.2	432.0	3.93		23.6	37	70.7	
	1314.0	365.0	6.39		28.7		79.7	
	993.6	276.0	8.48		32.5		70.7	

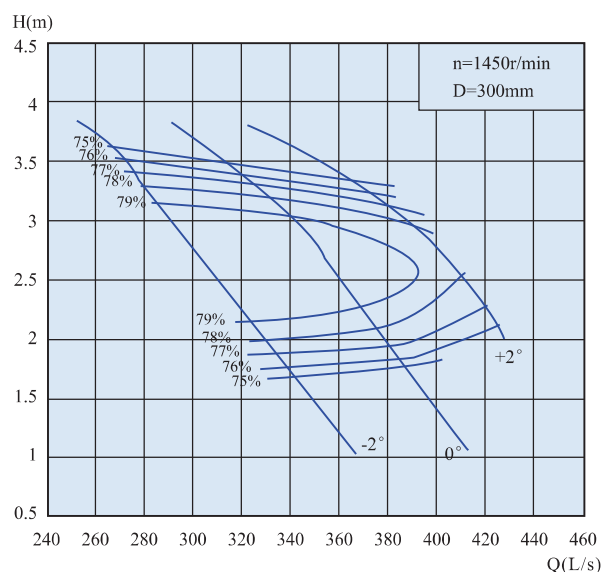
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	957.6	266.0	3.20	1450	10.7	18.5	78.0	300
	900.0	250.0	4.03		12.4		79.6	
	810.0	225.0	5.30		15.0		78.0	
-4°	1094.4	304.0	2.93		11.2	22	78.0	
	1008.0	280.0	4.10		13.9		81.1	
	880.2	244.5	5.75		17.7		78.0	
-2°	1191.6	331.0	2.85		11.9	30	78.0	
	1098.0	305.0	4.21		15.4		81.7	
	943.2	262.0	6.03		19.9		78.0	
0°	1285.2	357.0	2.94		13.2	30	78.0	
	1188.0	330.0	4.20		16.6		82.0	
	1013.4	281.5	6.25		22.1		78.0	
+2°	1368.0	380.0	3.17		15.2	30	78.0	
	1260.0	350.0	4.43		18.4		82.5	
	1094.4	304.0	6.27		24.0		78.0	
+4°	1440.0	400.0	3.48		17.5	30	78.0	
	1350.0	375.0	4.45		19.9		82.2	
	1206.0	335.0	6.0		25.3		78.0	

HSP Curve and specification

HSP350-250



HSP350-320

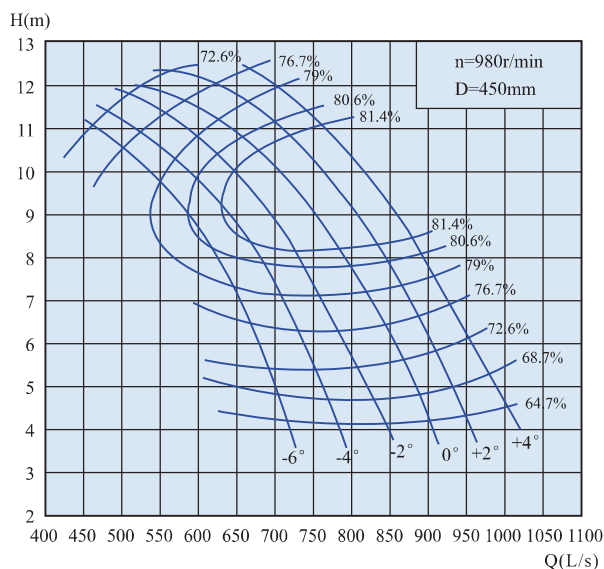


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	979.2	272.0	2.04	1450	7.4	15	74.0	300
	892.8	248.0	3.03		9.4		78.5	
	712.8	198.0	4.93		13.3		72.0	
-2°	1198.8	333.0	2.03		9.0	22	74.0	
	1105.2	307.0	3.14		12.0		78.9	
	871.2	242.0	5.34		17.6		72.0	
0°	1414.8	393.0	2.28		11.9	30	74.0	
	1303.2	362.0	3.46		15.5		79.5	
	1047.6	291.0	5.60		22.2		72.0	
+2°	1573.2	437.0	2.70		15.6	37	74.0	
	1447.2	402.0	3.58		17.9		78.9	
	1213.2	337.0	5.60		25.7		72.0	
+4°	1717.2	477.0	3.46		21.9	37	74.0	
	1645.2	457.0	3.96		22.8		77.8	
	1468.8	408.0	5.41		30.1		72.0	

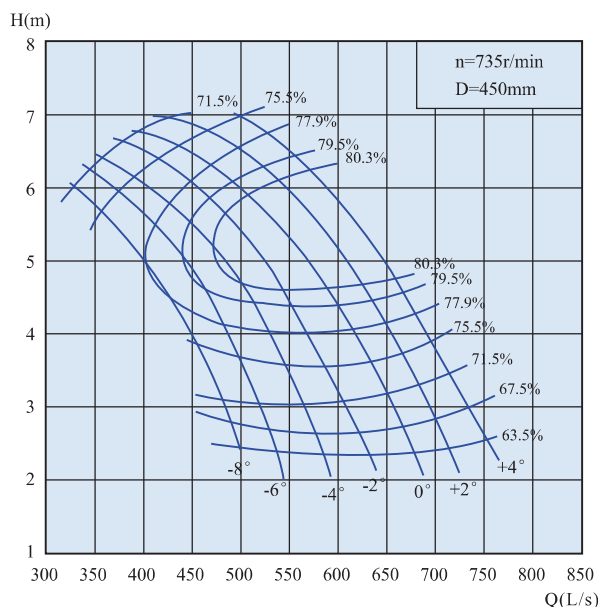
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	1219.0	338.6	1.76	1450	7.7	15	76.0	300
	1116.0	310.0	2.49		9.4		80.5	
	977.4	271.5	3.53		12.4		76.0	
0°	1377.7	382.7	1.82		9.0	18.5	76.0	
	1296.0	360.0	2.50		11.1		79.5	
	1154.5	320.7	3.38		14.0		76.0	
+2°	1526.8	424.1	2.10		11.5	18.5	76.0	
	1447.2	402.0	2.70		13.7		78.0	
	1340.6	372.4	3.23		15.5		76.0	

HSP Curve and specification

HSP500-100



HSP500-100D

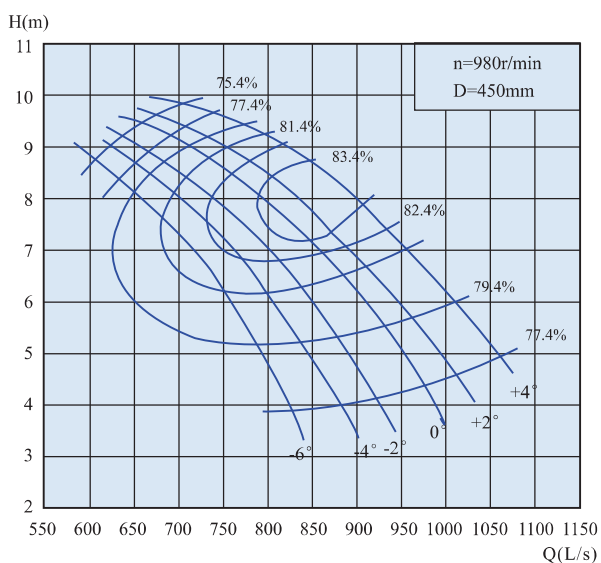


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	2510.6	697.4	4.8	980	47.8	75	68.7	450
	2118.6	588.5	8.77		62.6		80.9	
	1677.2	465.9	11.04		68.6		73.6	
-4°	2726.3	757.3	4.71		50.9	90	68.7	
	2303.3	639.8	9.04		69.1		82.1	
	1730.9	480.8	11.56		74.1		73.6	
-2°	2943.4	817.6	4.71		55.0	110	68.7	
	2372.8	659.1	9.31		73.3		82.1	
	1816.2	504.5	11.88		79.9		73.6	
0°	3178.4	882.9	4.93		62.2	110	68.7	
	2635.6	732.1	9.35		81.6		82.3	
	2104.6	584.6	11.72		87.6		76.7	
+2°	3370.7	936.3	5.04		67.4	110	68.7	
	2774.5	770.7	9.59		88.3		82.1	
	2264.8	629.1	12.11		97.4		76.7	
+4°	3498.8	971.9	5.47		75.9	110	68.7	
	2917.8	810.5	9.85		95.4		82.1	
	2371.7	658.8	12.33		103.9		76.7	

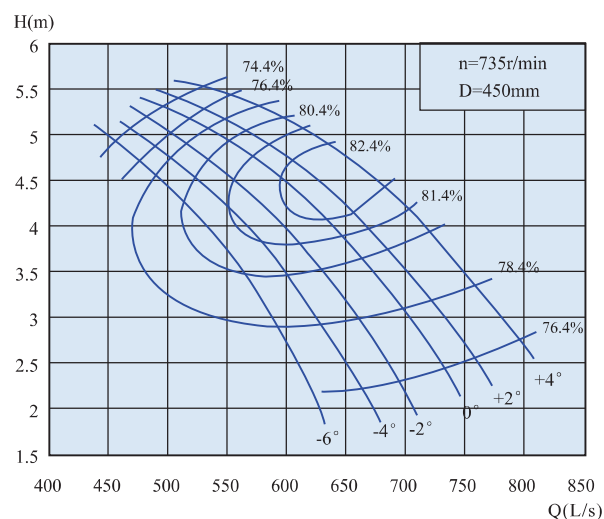
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	1882.8	523.0	2.70	735	20.5	37	67.6	450
	1589.0	441.4	4.93		26.8		79.8	
	1257.8	349.4	6.21		29.4		72.5	
-4°	2044.8	568.0	2.65		21.8	37	67.6	
	1727.6	479.9	5.08		29.5		81.0	
	1298.2	360.6	6.50		31.7		72.5	
-2°	2207.5	613.2	2.65		23.6	45	67.6	
	1779.5	494.3	5.23		31.3		81.0	
	1362.2	378.4	6.68		34.2		72.5	
0°	2383.9	662.2	2.77		26.6	45	67.6	
	1976.8	549.1	5.26		34.9		81.2	
	1578.6	438.5	6.59		37.5		75.6	
+2°	2527.9	702.2	2.84		28.9	55	67.6	
	2080.8	578.0	5.39		37.7		81.0	
	1698.8	471.9	6.81		41.7		75.6	
+4°	2624.0	728.9	3.08		32.6	55	67.6	
	2188.1	607.8	5.54		40.8		81.0	
	1778.8	494.1	6.94		44.5		75.6	

Outline Drawing & Dimensions

HSP500-140



HSP500-140D

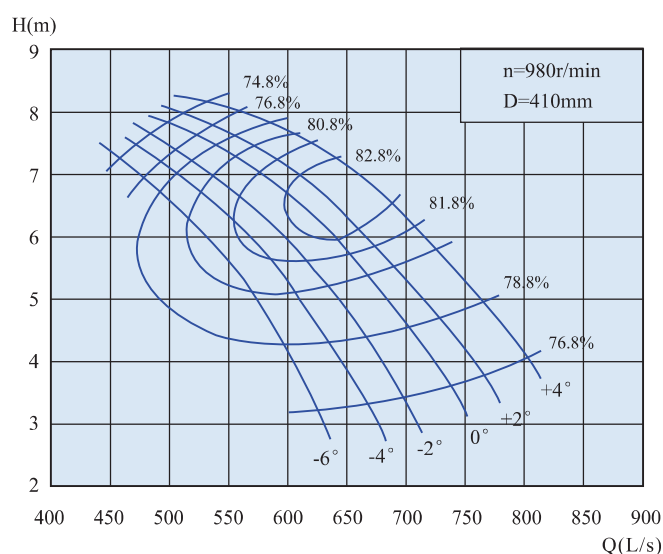


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	2956.3	821.2	3.85	980	39.2	75	79.2	450
	2627.6	729.9	6.78		58.3		83.2	
	2176.2	604.5	8.74		67.1		77.2	
-4°	3161.5	878.2	3.96		43.1	75	79.2	
	2693.5	748.2	7.19		62.5		84.4	
	2258.3	627.3	9.13		72.8		77.2	
-2°	3325.7	923.8	4.11		47.0	90	79.2	
	2833.2	787.0	7.50		68.4		84.6	
	2307.6	641.0	9.25		75.3		77.2	
0°	3489.8	969.4	4.42		53.1	90	79.2	
	2948.0	818.9	7.83		73.4		85.7	
	2364.8	656.9	9.56		79.8		77.2	
$+2^\circ$	3613.3	1003.7	4.62		57.4	90	79.2	
	3021.8	839.4	7.91		75.7		86.1	
	2389.7	663.8	9.66		81.5		77.2	
$+4^\circ$	3793.7	1053.8	5.04		65.8	90	79.2	
	3137.0	871.4	8.43		84.6		85.2	
	2537.3	704.8	9.87		88.4		77.2	

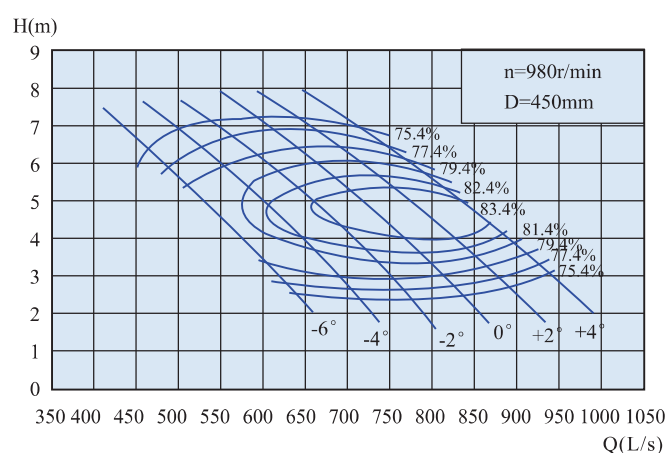
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	2217.2	615.9	2.17	735	16.7	37	78.4	450
	1970.6	547.4	3.82		24.9		82.4	
	1632.2	453.4	4.91		28.6		76.4	
-4°	2371.0	658.6	2.23		18.4	37	78.4	
	2020.0	561.1	4.05		26.7		83.6	
	1693.8	470.5	5.13		31.0		76.4	
-2°	2494.4	692.9	2.31		20.0	37	78.4	
	2124.7	590.2	4.22		29.2		83.8	
	1730.5	480.7	5.20		32.1		76.4	
0°	2617.6	727.1	2.49		22.7	37	78.4	
	2211.1	614.2	4.41		31.3		84.9	
	1773.7	492.7	5.38		34.0		76.4	
$+2^\circ$	2709.7	752.7	2.60		24.5	45	78.4	
	2266.6	629.6	4.45		32.2		85.3	
	1792.1	497.8	5.43		34.7		76.4	
$+4^\circ$	2845.4	790.4	2.83		28.0	45	78.4	
	2352.6	653.5	4.74		36.0		84.4	
	1903.0	528.6	5.55		37.7		76.4	

HSP Curve and specification

HSP500-140A



HSP500-200

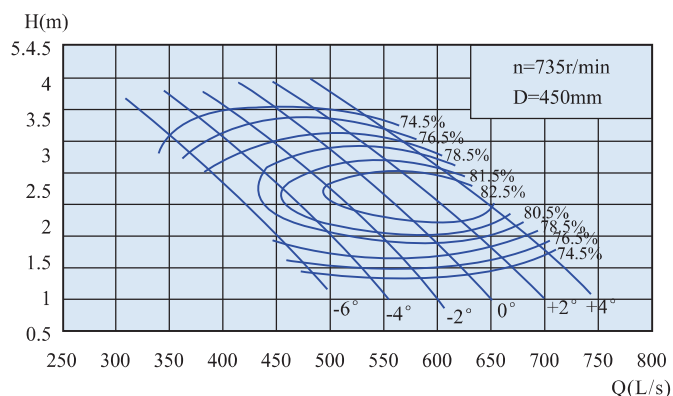


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	2236.0	621.1	3.20	980	25.4	45	76.8	410
	1987.6	552.1	5.63		37.7		80.8	
	1645.9	457.2	7.25		43.5		74.8	
-4°	2391.1	664.2	3.28		27.8	55	76.8	
	2037.2	565.9	5.97		40.4		82.0	
	1707.8	474.4	7.58		47.2		74.8	
-2°	2515.3	698.7	3.41		30.4		76.8	
	2142.7	595.2	6.23		44.3		82.2	
	1745.3	484.8	7.68		48.8		74.8	
0°	2639.5	733.2	3.67		34.4	75	76.8	
	2229.8	619.4	6.50		47.4		83.3	
	1788.8	496.9	7.93		51.7		74.8	
+2°	2732.8	759.1	3.84		37.2		76.8	
	2285.6	634.9	6.57		48.9		83.7	
	1807.2	502.0	8.02		52.8		74.8	
+4°	2869.6	797.1	4.18		42.6	75	76.8	
	2372.4	659.0	7.00		54.7		82.8	
	1919.2	533.1	8.19		57.3		74.8	

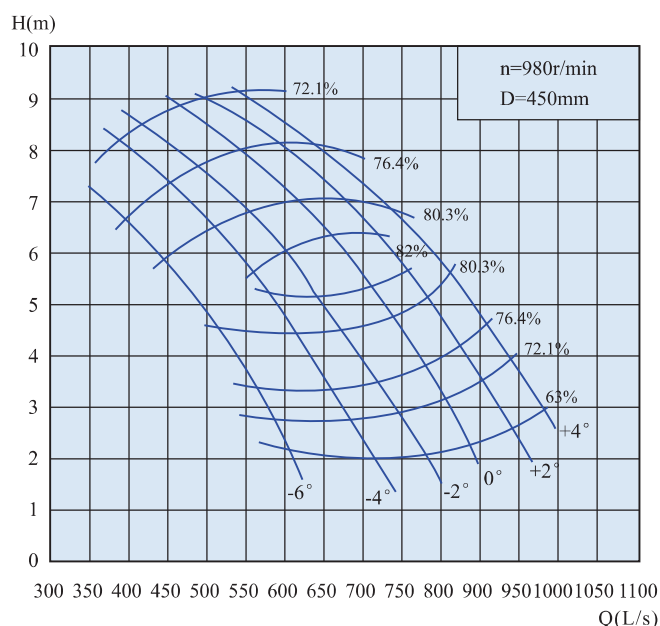
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	2184.5	606.8	3.29	980	24.7	37	79.4	450
	2053.1	570.3	4.14		28.6		81.0	
	1847.5	513.2	5.45		34.6		79.4	
-4°	2496.2	693.4	3.01		25.8	45	79.4	
	2299.3	638.7	4.21		32.0		82.5	
	2007.7	557.7	5.91		40.7		79.4	
-2°	2718.0	755.0	2.93		27.3	55	79.4	
	2504.5	695.7	4.33		35.6		83.1	
	2151.4	597.6	6.20		45.8		79.4	
0°	2931.5	814.3	3.02		30.4	75	79.4	
	2709.7	752.7	4.32		38.2		83.4	
	2311.6	642.1	6.42		50.9		79.4	
+2°	3120.5	866.8	3.26		34.9		79.4	
	2874.2	798.4	4.55		42.5		83.9	
	2496.2	693.4	6.44		55.2		79.4	
+4°	3284.6	912.4	3.58		40.4	75	79.4	
	3079.4	855.4	4.57		45.9		83.6	
	2750.8	764.1	6.17		58.2		79.4	

HSP Curve and specification

HSP500-200D



HSP500-170

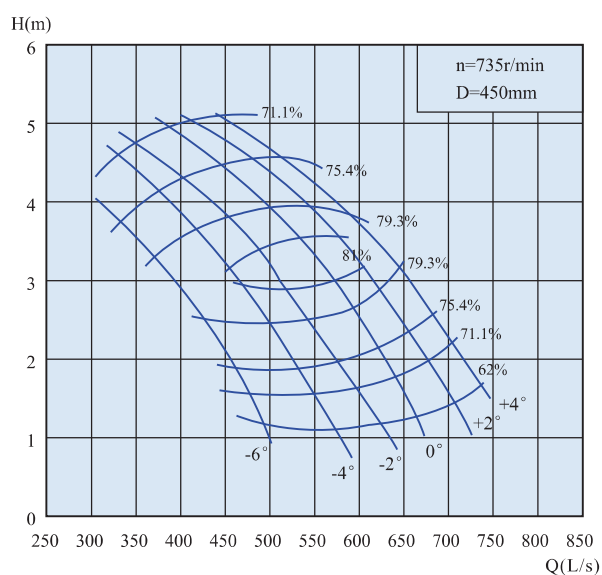


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	1638.4	455.1	1.85	735	10.5	18.5	78.5	450
	1539.7	427.7	2.33		12.2		80.1	
	1385.6	384.9	3.06		14.7		78.5	
-4°	1872.4	520.1	1.69		11.0	22	78.5	
	1724.4	479.0	2.37		13.6		81.6	
	1505.9	418.3	3.32		17.4		78.5	
-2°	2038.7	566.3	1.65		11.7		78.5	
	1878.5	521.8	2.43		15.1		82.2	
	1613.5	448.2	3.49		19.5		78.5	
0°	2198.5	610.7	1.70		13.0		78.5	
	2032.6	564.6	2.43		16.3		82.5	
	1733.8	481.6	3.61		21.7		78.5	
+2°	2340.4	650.1	1.83		14.9	30	78.5	
	2155.7	598.8	2.56		18.1		83.0	
	1872.4	520.1	3.62		23.5		78.5	
+4°	2463.5	684.3	2.01		17.2		78.5	
	2309.4	641.5	2.57		19.6		82.7	
	2063.2	573.1	3.47		24.9		78.5	

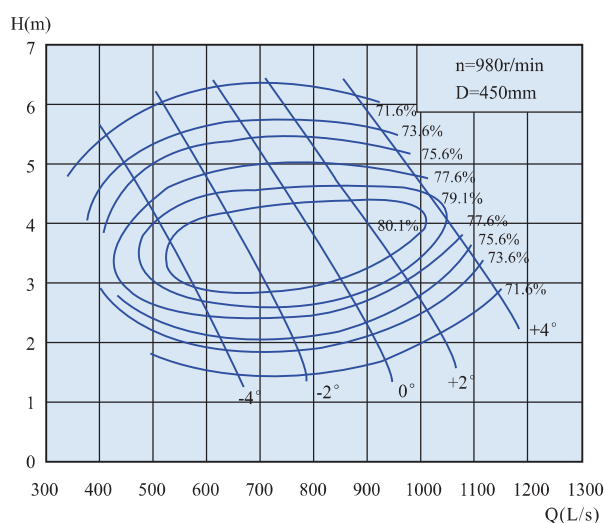
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	2225.5	618.2	2.87	980	24.1	45	72.2	450
	2036.5	565.7	4.36		29.8		81.2	
	1437.1	399.2	7.35		39.9		72.2	
-4°	2578.3	716.2	2.77		27.0	55	72.2	
	2200.7	611.3	5.34		39.0		82.2	
	1576.8	438.0	7.80		46.4		72.2	
-2°	2898.7	805.2	2.87		31.4	75	72.2	
	2504.5	695.7	5.24		43.5		82.2	
	1732.7	481.3	8.17		53.4		72.2	
0°	3120.5	866.8	3.13		36.9	90	72.2	
	2742.8	761.9	5.44		48.9		83.2	
	1905.1	529.2	8.48		61.0		72.2	
+2°	3334.0	926.1	3.60		45.3		72.2	
	2931.5	814.3	5.81		56.5		82.2	
	2077.6	577.1	8.73		68.5		72.2	
+4°	3547.4	985.4	4.04		54.1	90	72.2	
	2997.4	832.6	6.57		66.1		81.2	
	2266.6	629.6	8.72		74.6		72.2	

HSP Curve and specification

HSP500-170D



HSP500-250

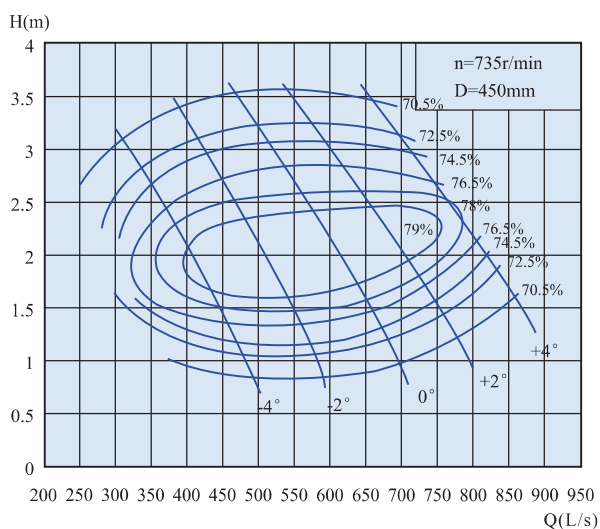


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	1669.0	463.6	1.61	735	10.3	18.5	71.2	450
	1527.5	424.3	2.45		12.7		80.2	
	1077.8	299.4	4.13		17.0		71.2	
-4°	1933.9	537.2	1.56		11.5	22	71.2	
	1650.6	458.5	3.01		16.7		81.2	
	1182.6	328.5	4.39		19.9		71.2	
-2°	2174.0	603.9	1.61		13.4	30	71.2	
	1878.5	521.8	2.95		18.6		82.2	
	1299.6	361.0	4.60		22.9		71.2	
0°	2340.4	650.1	1.76		15.8	37	71.2	
	2057.0	571.4	3.06		20.9		82.5	
	1428.8	396.9	4.77		26.1		71.2	
+2°	2500.6	694.6	2.02		19.3	37	71.2	
	2198.5	610.7	3.27		24.1		81.2	
	1558.1	432.4	4.91		29.3		71.2	
+4°	2660.8	739.1	2.27		23.1	37	71.2	
	2247.8	624.4	3.69		28.2		80.2	
	1699.9	472.2	4.90		31.9		71.2	

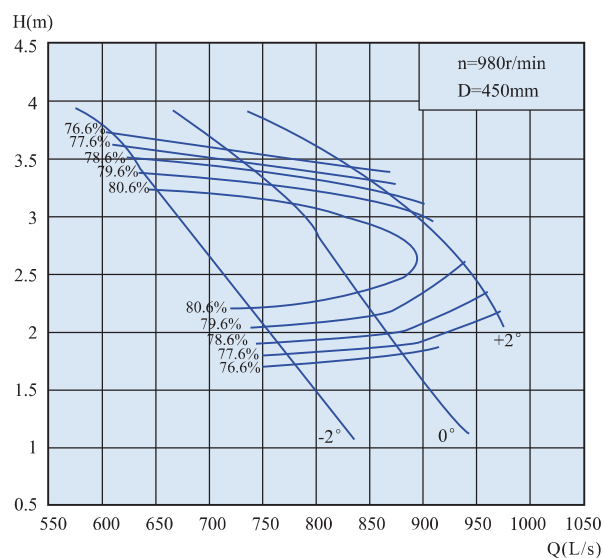
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	2233.4	620.4	2.10	980	16.9	37	75.6	450
	2036.5	565.7	3.11		21.5		80.1	
	1625.8	451.6	5.07		30.5		73.6	
-2°	2734.6	759.6	2.09		20.6	45	75.6	
	2521.1	700.3	3.23		27.6		81.1	
	1987.2	552.0	5.49		40.4		73.6	
0°	3227.0	896.4	2.34		27.2	55	75.6	
	2972.5	825.7	3.56		35.6		81.1	
	2389.7	663.8	5.76		51.0		73.6	
+2°	3588.5	996.8	2.77		35.8	75	75.6	
	3301.2	917.0	3.68		41.1		80.5	
	2767.3	768.7	5.76		59.0		73.6	
+4°	3917.2	1088.1	3.56		50.3	75	75.6	
	3752.6	1042.4	4.07		52.4		79.4	
	3350.5	930.7	5.56		69.0		73.6	

HSP Curve and specification

HSP500-250D



HSP500-320

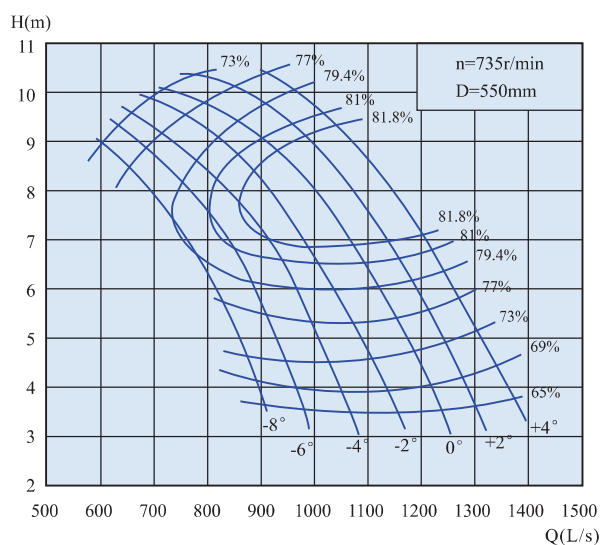


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	1675.1	465.3	1.18	735	7.2	15	74.5	450
	1527.5	424.3	1.75		9.2		79.0	
	1219.3	338.7	2.85		13.1		72.5	
-2°	2050.9	569.7	1.17		8.8	18.5	74.5	
	1890.7	525.2	1.82		11.8		79.4	
	1490.4	414.0	3.09		17.3		72.5	
0°	2420.3	672.3	1.32		11.7	30	74.5	
	2229.5	619.3	2.00		15.2		80.0	
	1792.1	497.8	3.24		21.8		72.5	
+2°	2691.4	747.6	1.56		15.4	37	74.5	
	2475.7	687.7	2.07		17.6		79.4	
	2075.4	576.5	3.24		25.3		72.5	
+4°	2937.6	816.0	2.00		21.5	37	74.5	
	2814.5	781.8	2.29		22.4		78.3	
	2512.8	698.0	3.13		29.6		72.5	

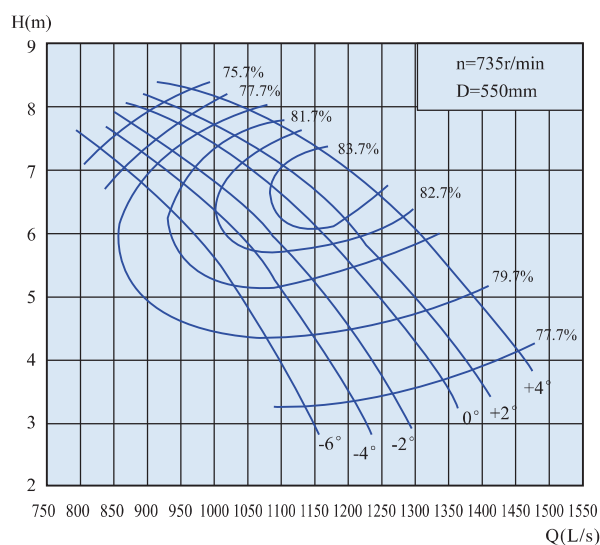
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	2780.6	772.4	1.81	980	17.7	37	77.6	450
	2545.6	707.1	2.56		21.6		82.1	
	2229.5	619.3	3.63		28.4		77.6	
0°	3142.8	873.0	1.87		20.6	37	77.6	
	2956.3	821.2	2.57		25.5		81.1	
	2633.4	731.5	3.47		32.1		77.6	
+2°	3482.6	967.4	2.16		26.4	37	77.6	
	3301.2	917.0	2.77		31.3		79.6	
	3058.2	849.5	3.32		35.7		77.6	

HSP Curve and specification

HSP600-100



HSP600-140

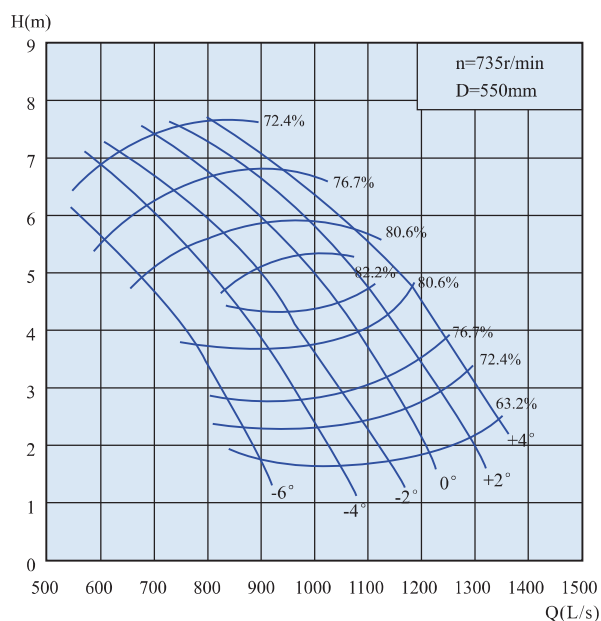


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	3438.0	955.0	4.03	735	54.6	90	69.1	550
	2900.9	805.8	7.37		71.7		81.3	
	2296.8	638.0	9.28		78.5		74.0	
-4°	3733.6	1037.1	3.96		58.3	110	69.1	
	3154.0	876.1	7.59		79.1		82.5	
	2369.9	658.3	9.71		84.7		74.0	
-2°	4030.6	1119.6	3.96		62.9	132	69.1	
	3249.0	902.5	7.82		83.9		82.5	
	2486.9	690.8	9.99		91.5		74.0	
0°	4352.4	1209.0	4.14		71.1	132	69.1	
	3609.0	1002.5	7.86		93.5		82.7	
	2882.2	800.6	9.84		100.2		77.1	
+2°	4615.6	1282.1	4.24		77.2	132	69.1	
	3799.1	1055.3	8.05		101.0		82.5	
	3101.4	861.5	10.17		111.5		77.1	
+4°	4791.2	1330.9	4.60		86.9	132	69.1	
	3995.3	1109.8	8.28		109.3		82.5	
	3247.6	902.1	10.36		118.9		77.1	

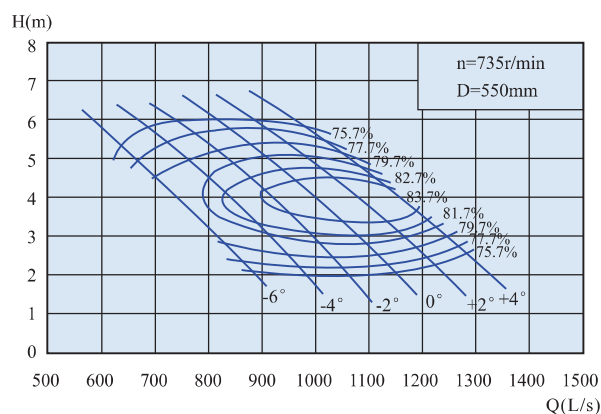
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	4048.2	1124.5	3.24	735	46.0	90	77.7	550
	3598.2	999.5	5.70		68.4		81.7	
	2979.7	827.7	7.34		78.7		75.7	
-4°	4329.4	1202.6	3.32		50.4	110	77.7	
	3688.2	1024.5	6.05		73.3		82.9	
	3092.4	859.0	7.67		85.4		75.7	
-2°	4554.0	1265.0	3.45		55.1	110	77.7	
	3879.4	1077.6	6.30		80.1		83.1	
	3159.7	877.7	7.77		88.4		75.7	
0°	4779.0	1327.5	3.71		62.2	110	77.7	
	4036.7	1121.3	6.58		86.0		84.2	
	3238.6	899.6	8.03		93.6		75.7	
+2°	4947.5	1374.3	3.89		67.5	110	77.7	
	4138.2	1149.5	6.65		88.6		84.6	
	3272.0	908.9	8.12		95.6		75.7	
+4°	5195.2	1443.1	4.23		77.1	110	77.7	
	4295.5	1193.2	7.08		99.0		83.7	
	3474.7	965.2	8.29		103.7		75.7	

HSP Curve and specification

HSP600-170



HSP600-200

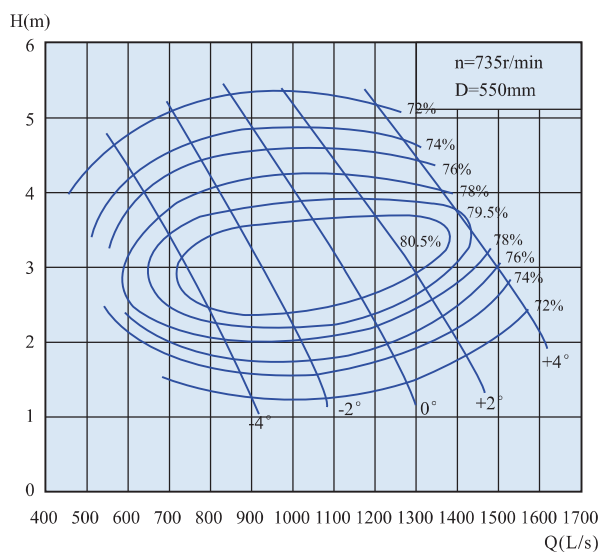


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	3047.4	846.5	2.41	735	27.6	55	72.5	550
	2788.6	774.6	3.66		34.1		81.5	
	1967.8	546.6	6.17		45.6		72.5	
-4°	3530.9	980.8	2.33		30.9	75	72.5	
	3013.6	837.1	4.49		44.7		82.5	
	2158.9	599.7	6.55		53.2		72.5	
-2°	4030.6	1119.6	3.96		36.0	90	72.5	
	3249.0	902.5	7.82		49.8		82.5	
	2486.9	690.8	9.99		61.3		72.5	
0°	4272.8	1186.9	2.74		42.2	90	72.5	
	3935.5	1093.2	3.83		56.0		83.5	
	3418.2	949.5	5.41		69.8		72.5	
+2°	4615.6	1282.1	4.24		51.8	90	72.5	
	3799.1	1055.3	8.05		64.7		82.5	
	3101.4	861.5	10.17		78.4		72.5	
+4°	4791.2	1330.9	4.60		61.9	90	72.5	
	3995.3	1109.8	8.28		75.8		81.5	
	3247.6	902.1	10.36		85.4		72.5	

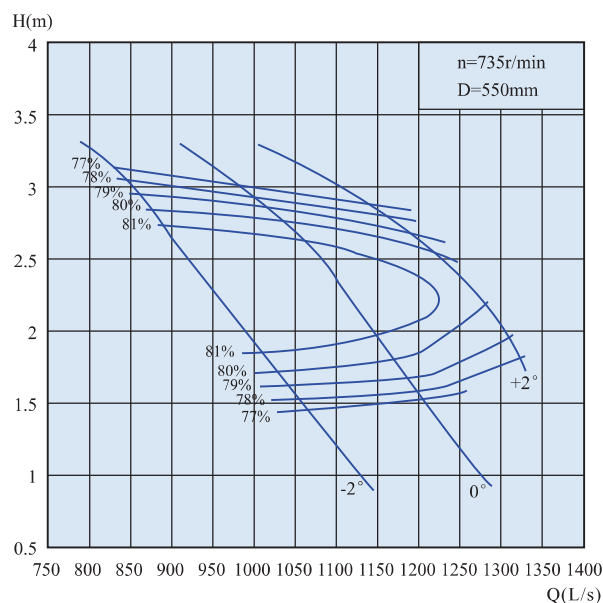
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	2991.2	830.9	2.76	735	28.2	45	71.2	550
	2811.2	780.9	3.48		32.8		80.2	
	2530.1	702.8	4.58		39.6		71.2	
-4°	3418.2	949.5	2.53		29.5	55	79.8	
	3148.6	874.6	3.54		36.6		82.9	
	2749.3	763.7	4.97		46.7		79.8	
-2°	3722.0	1033.9	2.46		31.3	55	79.8	
	3429.7	952.7	3.64		40.7		83.5	
	2946.2	818.4	5.21		52.4		79.8	
0°	4014.4	1115.1	2.54		34.8	75	79.8	
	3710.9	1030.8	3.63		43.8		83.8	
	3165.5	879.3	5.40		58.4		79.8	
+2°	4272.8	1186.9	2.74		40.0	75	79.8	
	3935.5	1093.2	3.83		48.7		84.3	
	3418.2	949.5	5.41		63.1		79.8	
+4°	4497.8	1249.4	3.01		46.2	75	79.8	
	4216.7	1171.3	3.84		52.5		84.0	
	3767.0	1046.4	5.18		66.6		79.8	

HSP Curve and specification

HSP600-250



HSP1600-320

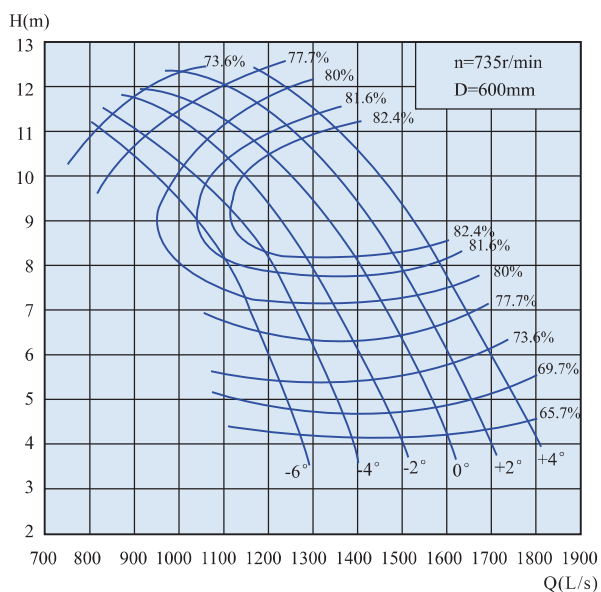


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	3058.6	849.6	1.76	735	19.3	37	76.1	550
	2788.6	774.6	2.62		24.7		80.6	
	2226.6	618.5	4.26		34.9		74.1	
-2°	3744.4	1040.1	1.75		23.5	55	76.1	
	3452.0	958.9	2.71		31.5		81.0	
	2721.2	755.9	4.61		46.1		74.1	
0°	4419.0	1227.5	1.97		31.2	75	76.1	
	4070.5	1130.7	2.99		40.6		81.6	
	3272.0	908.9	4.84		58.2		74.1	
+2°	4914.0	1365.0	2.33		41.0		76.1	
	4520.5	1255.7	3.09		47.0		81.0	
	3789.4	1052.6	4.84		67.4		74.1	
+4°	5363.6	1489.9	2.99		57.4	90	76.1	
	5138.6	1427.4	3.42		59.9		79.9	
	4587.8	1274.4	4.67		78.8		74.1	

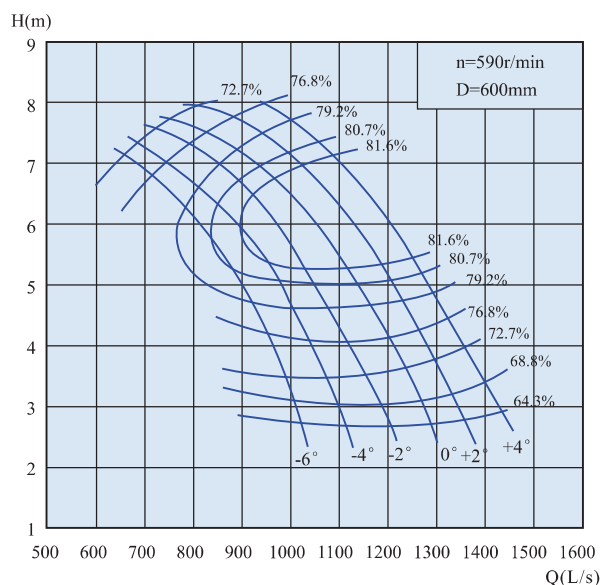
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	3807.7	1057.7	1.52	375	20.2	37	78.0	550
	3485.9	968.3	2.15		24.8		82.5	
	3052.8	848.0	3.05		32.5		78.0	
0°	4303.8	1195.5	1.57		23.6	45	78.0	
	4048.2	1124.5	2.16		29.2		81.5	
	3605.8	1001.6	2.92		36.8		78.0	
+2°	4768.9	1324.7	1.81		30.2		78.0	
	4520.5	1255.7	2.33		35.9		80.0	
	4187.9	1163.3	2.79		40.8		78.0	

HSP Curve and specification

HSP700-100



HSP700-100D

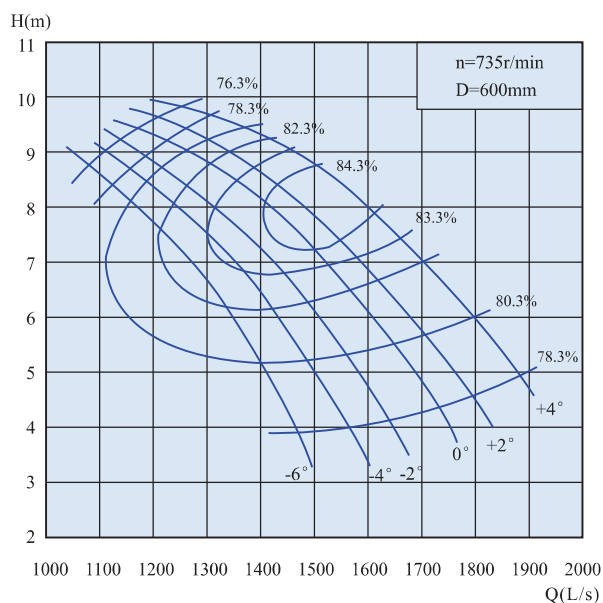


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	4463.3	1239.8	4.80	735	83.8	132	69.7	600
	3766.3	1046.2	8.77		109.9		81.9	
	2981.9	828.3	11.04		120.3		74.6	
-4°	4847.0	1346.4	4.71		89.3	160	69.7	
	4095.0	1137.5	9.04		121.4		83.1	
	3076.9	854.7	11.56		129.9		74.6	
-2°	5232.6	1453.5	4.71		96.4	160	69.7	
	4218.5	1171.8	9.31		128.8		83.1	
	3228.8	896.9	11.88		140.1		74.6	
0°	5650.6	1569.6	4.93		108.9	185	69.7	
	4685.4	1301.5	9.35		143.3		83.3	
	3741.5	1039.3	11.72		153.8		77.7	
+2°	5992.2	1664.5	5.04		118.1	200	69.7	
	4932.4	1370.1	9.59		155.1		83.1	
	4026.6	1118.5	12.11		171.0		77.7	
+4°	6220.1	1727.8	5.47		133.0	200	69.7	
	5186.9	1440.8	9.85		167.5		83.1	
	4216.3	1171.2	12.33		182.3		77.7	

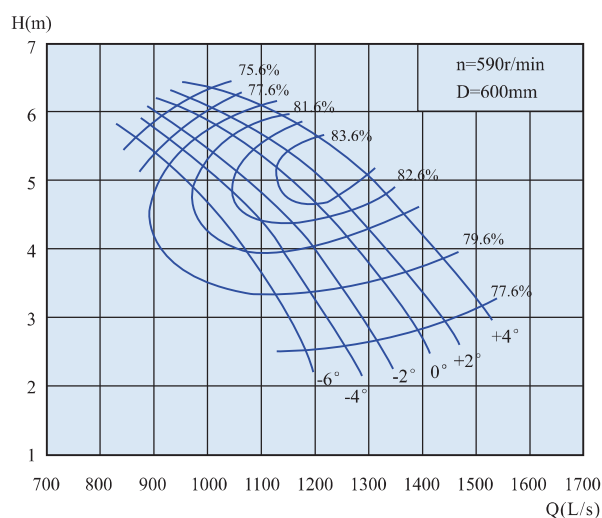
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	3582.7	995.2	3.09	590	43.8	75	68.9	600
	3023.3	839.8	5.65		57.4		81.1	
	2393.6	664.9	7.12		62.9		73.8	
-4°	3890.9	1080.8	3.03		46.6	75	68.9	
	3287.2	913.1	5.82		63.3		82.3	
	2470.0	686.1	7.45		67.9		73.8	
-2°	4200.1	1166.7	3.03		50.3	90	68.9	
	3386.2	940.6	6.00		67.3		82.3	
	2591.6	719.9	7.66		73.3		73.8	
0°	4535.6	1259.9	3.18		57.0	90	68.9	
	3761.3	1044.8	6.02		74.8		82.5	
	3003.5	834.3	7.55		80.4		76.9	
+2°	4810.0	1336.1	3.25		61.8	110	68.9	
	3959.3	1099.8	6.18		81.0		82.3	
	3232.1	897.8	7.80		89.3		76.9	
+4°	4993.2	1387.0	3.53		69.7	110	68.9	
	4163.8	1156.6	6.35		87.5		82.3	
	3384.7	940.2	7.95		95.4		76.9	

HSP Curve and specification

HSP700-140



HSP700-140D

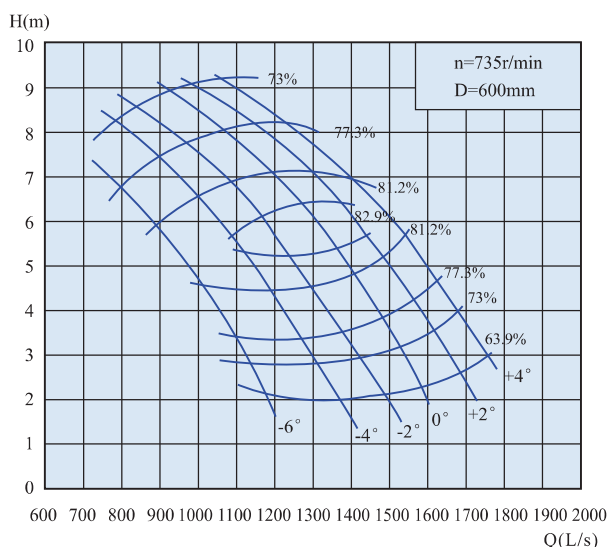


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	5255.6	1459.9	3.85	735	70.4	132	78.3	600
	4671.7	1297.7	6.78		104.9		82.3	
	3868.6	1074.6	8.74		120.8		76.3	
-4°	5620.3	1561.2	3.96		77.5	160	78.3	
	4788.4	1330.1	7.19		112.4		83.5	
	4014.7	1115.2	9.13		130.9		76.3	
-2°	5912.3	1642.3	4.11		84.6		78.3	
	5036.4	1399.0	7.50		123.0		83.7	
	4102.2	1139.5	9.25		135.5		76.3	
0°	6204.2	1723.4	4.42		95.4	185	78.3	
	5240.9	1455.8	7.83		131.9		84.8	
	4204.4	1167.9	9.56		143.6		76.3	
+2°	6423.5	1784.3	4.62		103.3		78.3	
	5372.3	1492.3	7.91		135.9		85.2	
	4248.4	1180.1	9.66		146.6		76.3	
+4°	6744.6	1873.5	5.04		118.3	185	78.3	
	5576.8	1549.1	8.43		152.0		84.3	
	4510.8	1253.0	9.87		159.0		76.3	

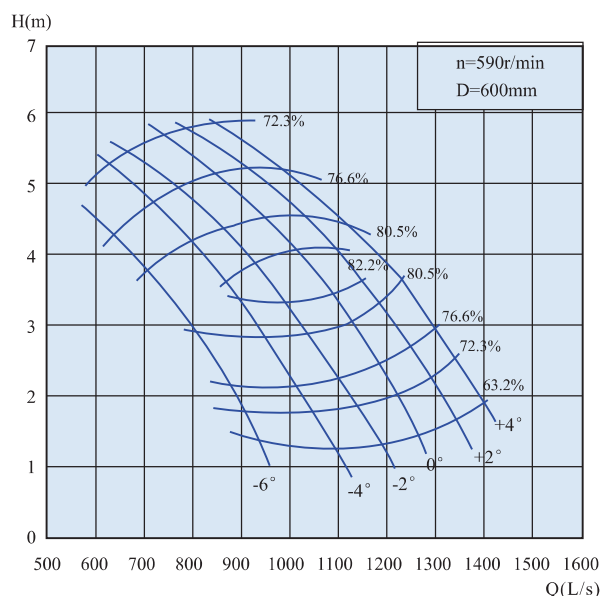
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	4218.8	1171.9	2.48	590	36.7	75	77.6	600
	3750.1	1041.7	4.37		54.7		81.6	
	3105.4	862.6	5.63		63.0		75.6	
-4°	4511.5	1253.2	2.55		40.4	75	77.6	
	3843.7	1067.7	4.64		58.7		82.8	
	3222.7	895.2	5.88		68.3		75.6	
-2°	4745.9	1318.3	2.65		44.2	90	77.6	
	4042.8	1123.0	4.83		64.1		83.0	
	3292.9	914.7	5.96		70.7		75.6	
0°	4980.2	1383.4	2.85		49.8	90	77.6	
	4207.0	1168.6	5.05		68.8		84.1	
	3375.0	937.5	6.16		74.9		75.6	
+2°	5156.3	1432.3	2.98		54.0	90	77.6	
	4312.4	1197.9	5.10		70.9		84.6	
	3410.3	947.3	6.23		76.6		75.6	
+4°	5414.0	1503.9	3.25		61.8	90	77.6	
	4476.6	1243.5	5.43		79.2		83.6	
	3620.9	1005.8	6.36		83.0		75.6	

HSP Curve and specification

HSP700-170



HSP700-170D

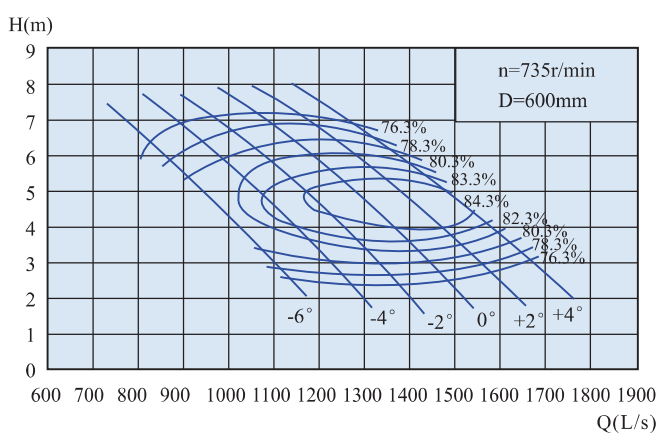


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	3956.4	1099.0	2.87	735	42.3	75	73.1	600
	3620.5	1005.7	4.36		52.4		82.1	
	2554.9	709.7	7.35		70.0		73.1	
-4°	4583.9	1273.3	2.77		47.3	90	73.1	
	3912.5	1086.8	5.34		68.5		83.1	
	2803.0	778.6	7.80		81.5		73.1	
-2°	5153.4	1431.5	2.87		55.1	110	73.1	
	4452.5	1236.8	5.24		76.5		83.1	
	3080.2	855.6	8.17		93.8		73.1	
0°	5547.6	1541.0	3.13		64.7		73.1	
	4875.8	1354.4	5.44		85.9		84.1	
	3386.9	940.8	8.48		107.1		73.1	
+2°	5927.0	1646.4	3.60		79.5	132	73.1	
	5211.7	1447.7	5.81		99.3		83.1	
	3693.6	1026.0	8.73		120.2		73.1	
+4°	6306.5	1751.8	4.04		95.0	160	73.1	
	5328.4	1480.1	6.57		116.2		82.1	
	4029.1	1192.2	8.72		131.0		73.1	

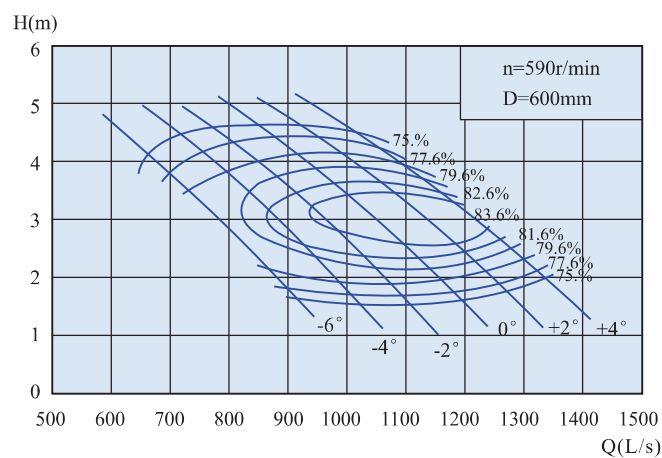
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	3175.9	882.2	1.85	590	22.1	45	72.4	600
	2906.3	807.3	2.81		27.3		81.4	
	2050.9	569.7	4.74		36.6		72.4	
-4°	3679.6	1022.1	1.79		24.8	55	72.4	
	3140.6	872.4	3.44		35.7		82.4	
	2250.0	625.0	5.03		42.6		72.4	
-2°	4136.8	1149.1	1.85		28.8	75	72.4	
	3574.1	992.8	3.38		40.0		82.4	
	2472.5	686.8	5.26		48.9		72.4	
0°	4453.2	1237.0	2.02		33.9		72.4	
	3913.9	1087.2	3.50		44.8		83.4	
	2718.7	755.2	5.46		55.9		72.4	
+2°	4757.8	1321.6	2.32		41.5	75	72.4	
	4183.6	1162.1	3.74		51.7		82.4	
	2965.0	823.6	5.62		62.7		72.4	
+4°	5062.3	1406.2	2.60		49.5		72.4	
	4277.2	1188.1	4.23		60.6		81.4	
	3234.2	898.4	5.62		68.4		72.4	

HSP Curve and specification

HSP700-200



HSP700-200D

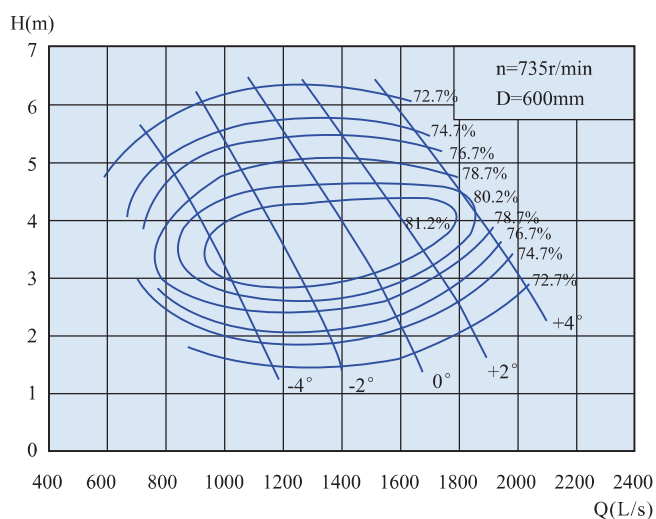


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	3883.3	1078.7	3.29	735	43.4	75	80.3	600
	3649.7	1013.8	4.14		50.3		81.9	
	3284.6	912.4	5.45		60.7		80.3	
-4°	4438.1	1232.8	3.01		45.3	75	80.3	
	4087.4	1135.4	4.21		56.2		83.4	
	3569.4	991.5	5.91		71.6		80.3	
-2°	4832.3	1342.3	2.93		48.0	90	80.3	
	4452.5	1236.8	4.33		62.5		84.0	
	3825.0	1062.5	6.20		80.5		80.3	
0°	5211.7	1447.7	3.02		53.4	110	80.3	
	4817.5	1338.2	4.32		67.3		84.3	
	4109.4	1141.5	6.42		89.5		80.3	
$+2^\circ$	5547.6	1541.0	3.26		61.4	110	80.3	
	5109.5	1419.3	4.55		74.7		84.8	
	4438.1	1232.8	6.44		97.0		80.3	
$+4^\circ$	5839.6	1622.1	3.58		70.9	110	80.3	
	5474.5	1520.7	4.57		80.7		84.5	
	4890.6	1358.5	6.17		102.4		80.3	

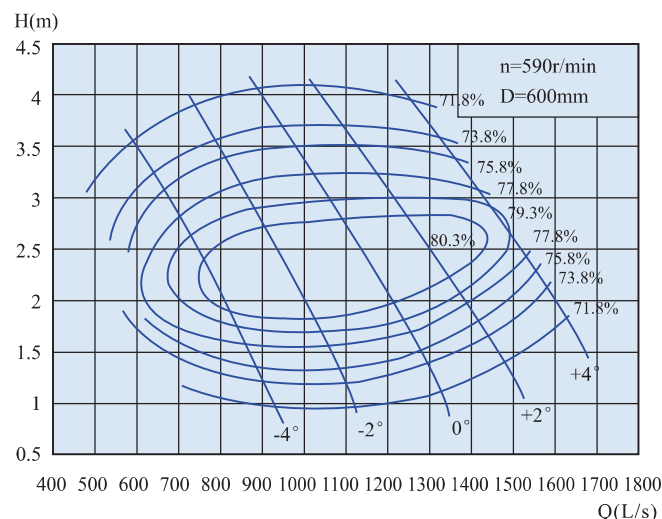
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	3117.2	865.9	2.12	590	22.6	37	79.6	600
	2929.7	813.8	2.67		26.3		81.2	
	2636.6	732.4	3.51		31.7		79.6	
-4°	3562.6	989.6	1.94		23.7	45	79.6	
	3281.0	911.4	2.72		29.4		82.7	
	2865.2	795.9	3.81		37.4		79.6	
-2°	3879.0	1077.5	1.89		25.1	45	79.6	
	3574.1	992.8	2.79		32.6		83.3	
	3070.4	852.9	3.99		41.9		79.6	
0°	4183.6	1162.1	1.95		27.9	55	79.6	
	3867.1	1074.2	2.78		35.0		83.6	
	3298.7	916.3	4.14		46.8		79.6	
$+2^\circ$	4453.2	1237.0	2.10		32.0	55	79.6	
	4101.5	1139.3	2.93		38.9		84.1	
	3562.6	989.6	4.15		50.6		79.6	
$+4^\circ$	4687.6	1302.1	2.30		36.9	55	79.6	
	4394.5	1220.7	2.95		42.2		83.8	
	3925.8	1090.5	3.97		53.4		79.6	

HSP Curve and specification

HSP700-250



HSP700-250D

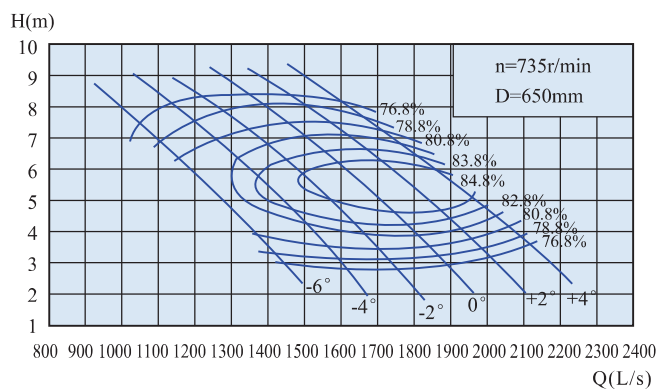


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	3970.8	1103.0	2.10	735	29.6	55	76.7	600
	3620.5	1005.7	3.11		37.8		81.2	
	2890.4	802.9	5.07		53.5		74.7	
-2°	4861.4	1350.4	2.09		36.1	75	76.7	
	4481.6	1244.9	3.23		48.3		81.6	
	3533.0	981.4	5.49		70.8		74.7	
0°	5737.3	1593.7	2.34		47.7	110	76.7	
	5284.8	1468.0	3.56		62.4		82.2	
	4248.4	1180.1	5.76		89.3		74.7	
+2°	6379.6	1772.1	2.77		62.8	110	76.7	
	5868.7	1630.2	3.68		72.1		81.6	
	4919.8	1366.6	5.76		103.4		74.7	
+4°	6963.5	1934.3	3.56		88.1	132	76.7	
	6671.5	1853.2	4.07		91.9		80.5	
	5956.2	1654.5	5.56		120.8		74.7	

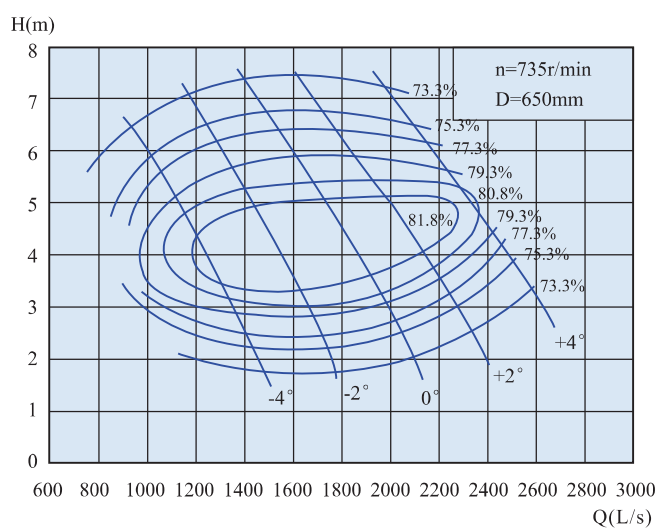
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	3187.4	885.4	1.35	735	15.4	30	75.9	600
	2906.3	807.3	2.01		19.8		80.4	
	2320.2	644.5	3.26		27.9		73.9	
-2°	3902.4	1084.0	1.34		18.8	45	75.9	
	3597.5	999.3	2.08		25.2		80.8	
	2836.1	787.8	3.54		37.0		73.9	
0°	4605.5	1279.3	1.51		25.0	55	75.9	
	4242.2	1178.4	2.29		32.5		81.4	
	3410.3	947.3	3.71		46.7		73.9	
+2°	5121.0	1422.5	1.79		32.9	75	75.9	
	4711.0	1308.6	2.37		37.7		80.8	
	3949.2	1097.0	3.71		54.0		73.9	
+4°	5589.7	1552.7	2.29		46.0	75	75.9	
	5355.4	1487.6	2.62		48.0		79.7	
	4781.2	1328.1	3.58		63.1		73.9	

HSP Curve and specification

HSP700-200C



HSP700-250C

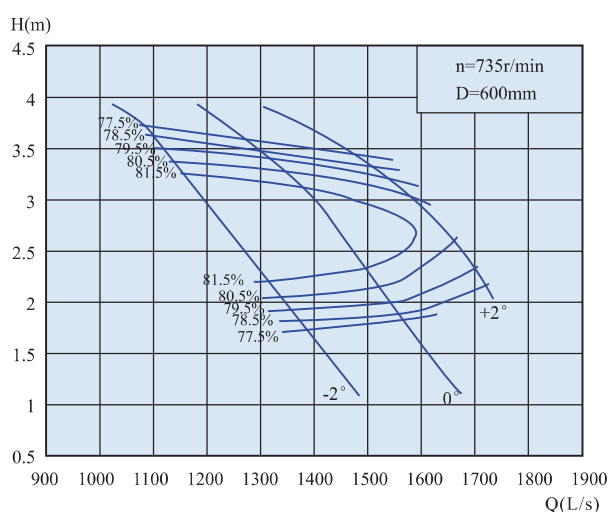


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	4937.0	1371.4	3.86	735	64.3	110	80.8	650
	4640.0	1288.9	4.86		74.6		82.4	
	4176.4	1160.1	6.39		90.0		80.8	
-4°	5642.6	1567.4	3.53		67.2	110	80.8	
	5197.0	1443.6	4.95		83.6		83.9	
	4538.2	1260.6	6.94		106.2		80.8	
-2°	6143.8	1706.6	3.44		71.3	132	80.8	
	5661.0	1572.5	5.08		92.7		84.5	
	4862.9	1350.8	7.27		119.2		80.8	
0°	6626.2	1840.6	3.55		79.3	160	80.8	
	6125.0	1701.4	5.07		99.8		84.8	
	5225.0	1451.4	7.54		132.9		80.8	
+2°	7053.1	1959.2	3.82		90.9		80.8	
	6496.2	1804.5	5.34		110.8		85.3	
	5642.6	1567.4	7.56		143.9		80.8	
+4°	7424.3	2062.3	4.20		105.2		80.8	
	6960.2	1933.4	5.37		119.8		85.0	
	6217.9	1727.2	7.24		151.8		80.8	

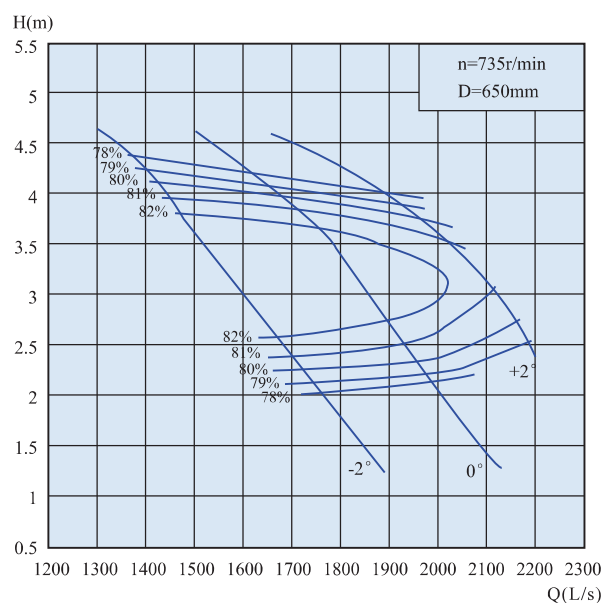
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	5048.6	1402.4	2.46	735	43.8	90	77.3	650
	4603.0	1278.6	3.65		56.0		81.8	
	3674.9	1020.8	5.95		79.1		75.3	
-2°	6180.8	1716.9	2.45		53.4	110	77.3	
	5698.1	1582.8	3.79		71.6		82.2	
	4491.7	1247.7	6.44		104.7		75.3	
0°	7294.3	2026.2	2.75		70.7	160	77.3	
	6719.0	1866.4	4.17		92.2		82.8	
	5401.1	1500.3	6.75		131.9		75.3	
+2°	8111.2	2253.1	3.26		93.2		77.3	
	7461.2	2072.6	4.32		106.9		82.2	
	6255.0	1737.5	6.75		152.8		75.3	
+4°	8853.5	2459.3	4.17		130.1	185	77.3	
	8482.3	2356.2	4.78		136.2		81.1	
	7573.0	2103.6	6.53		179.0		75.3	

HSP Curve and specification

HSP700-320



HSP700-320C

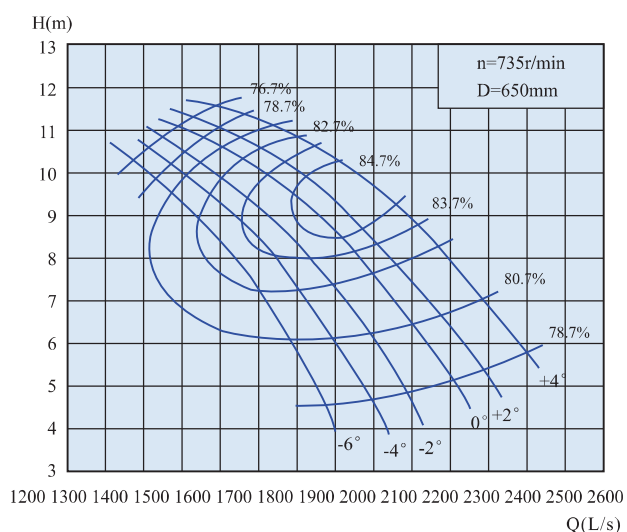


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	4943.5	1373.2	1.81	735	31.0	55	78.6	600
	4525.6	1257.1	2.56		38.0		81.0	
	3963.2	1100.9	3.63		49.9		78.6	
0°	5587.2	1552.0	1.87		36.2	75	78.6	
	5255.6	1459.9	2.57		44.8		82.1	
	4681.4	1300.4	3.47		56.3		78.6	
+2°	6191.3	1719.8	2.16		46.4		78.6	
	5868.7	1630.2	2.77		55.0		80.6	
	5437.1	1510.3	3.32		62.6		78.6	

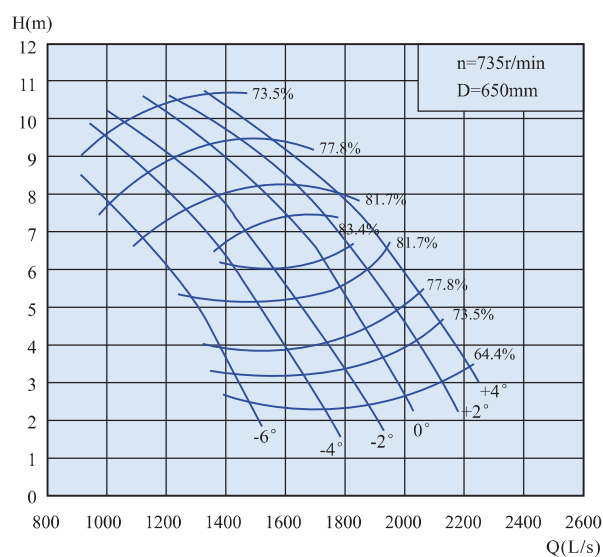
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	6285.6	1746.0	2.12	1450	45.9	90	79.1	650
	5753.9	1598.3	3.00		56.3		83.6	
	5038.9	1399.7	4.26		73.9		79.1	
0°	7103.9	1973.3	2.20		53.8		79.1	
	6682.0	1856.1	3.02		66.6		82.6	
	5952.2	1653.4	4.08		83.7		79.1	
+2°	7871.8	2186.6	2.53		68.6	110	79.1	
	7461.4	2072.6	3.26		81.7		81.1	
	6912.7	1920.2	3.90		92.9		79.1	

HSP Curve and specification

HSP700-140C



HSP700-170C

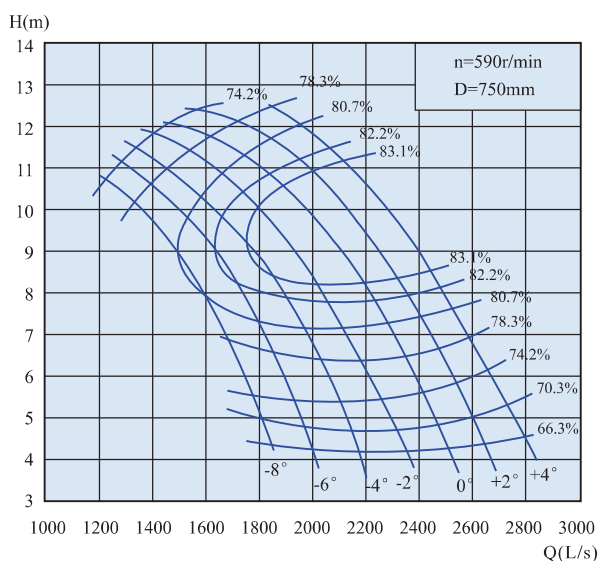


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	6682.0	1856.1	4.52	730	104.6	185	78.7	650
	5939.6	1649.9	7.96		155.8		82.7	
	4918.7	1366.3	10.25		179.1		76.7	
-4°	7146.0	1985.0	4.64		114.8	200	78.7	
	6088.0	1691.1	8.44		166.9		83.9	
	5104.1	1417.8	10.71		194.2		76.7	
-2°	7517.2	2088.1	4.82		125.5	220	78.7	
	6403.3	1778.7	8.81		182.8		84.1	
	5215.7	1448.8	10.86		201.2		76.7	
0°	7888.3	2191.2	5.19		141.8	250	78.7	
	6663.2	1850.9	9.19		195.9		85.2	
	5345.6	1484.9	11.22		213.1		76.7	
+2°	8166.6	2268.5	5.43		153.5	250	78.7	
	6830.3	1897.3	9.29		202.0		85.6	
	5401.1	1500.3	11.34		217.6		76.7	
+4°	8575.2	2382.0	5.91		175.5	250	78.7	
	7090.2	1969.5	9.89		225.6		84.7	
	5735.2	1593.1	11.58		236.0		76.7	

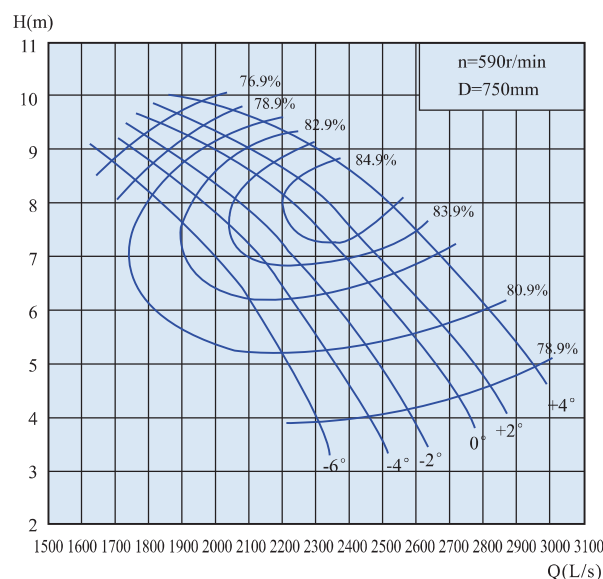
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	5029.9	1397.2	3.37	735	62.8	110	78.7	300
	4603.0	1278.6	5.11		77.6		82.7	
	3248.3	902.3	8.62		103.7		76.7	
-4°	5828.0	1618.9	3.26		70.3	132	78.7	
	4974.5	1381.8	6.27		101.7		83.9	
	3563.6	989.9	9.16		120.9		76.7	
-2°	6552.0	1820.0	3.37		81.8	160	78.7	
	5661.0	1572.5	6.15		113.5		84.1	
	3916.4	1087.9	9.59		139.1		76.7	
0°	7053.1	1959.2	3.68		96.1	185	78.7	
	6199.2	1722.0	6.38		127.4		85.2	
	4306.0	1196.1	9.95		158.6		76.7	
+2°	7535.9	2093.3	4.22		117.7	200	78.7	
	6626.2	1840.6	6.82		147.3		85.6	
	4695.8	1304.4	10.24		178.0		76.7	
+4°	8018.3	2227.3	4.74		140.7	200	78.7	
	6774.8	1881.9	7.71		172.3		84.7	
	5122.8	1423.0	10.23		194.0		76.7	

HSP Curve and specification

HSP800-100



HSP800-140

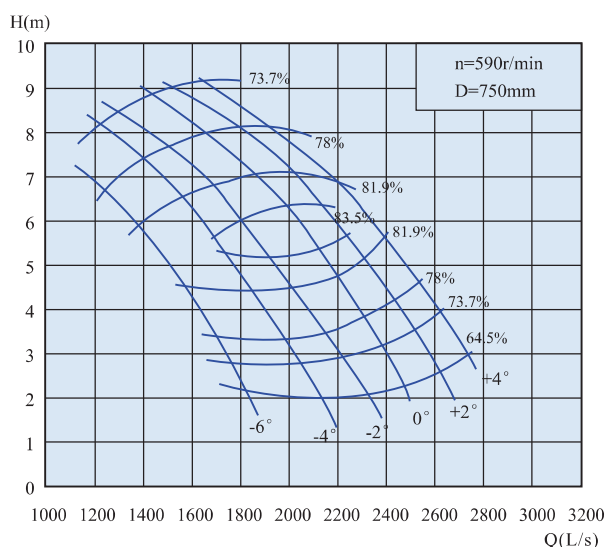


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	6997.7	1943.8	4.83	590	130.8	200	70.4	750
	5904.7	1640.2	8.83		172.0		82.6	
	4675.0	1298.6	11.12		188.1		75.3	
-4°	7599.2	2110.9	4.74		139.4	220	70.4	
	6419.9	1783.3	9.10		190.0		83.8	
	4824.0	1340.0	11.64		203.2		75.3	
-2°	8203.7	2278.8	4.74		150.5	250	70.4	
	6613.6	1837.1	9.37		201.5		83.8	
	5062.3	1406.2	11.96		219.1		75.3	
0°	8858.9	2460.8	4.97		170.4	280	70.4	
	7346.2	2040.6	9.41		224.3		84.0	
	5866.2	1629.5	11.80		240.6		78.4	
+2°	9394.9	2609.7	5.08		184.7	315	70.4	
	7733.2	2148.1	9.65		242.7		83.8	
	6313.0	1753.6	12.19		267.5		78.4	
+4°	9752.0	2708.9	5.51		208.0		70.4	
	8132.0	2258.9	9.92		262.3		83.8	
	6610.7	1836.3	12.42		285.4		78.4	

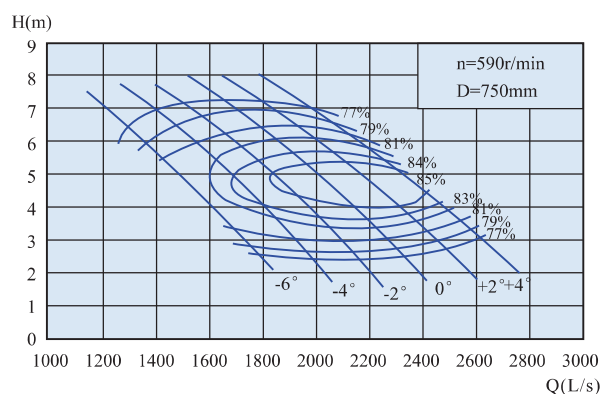
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	8239.7	2288.8	3.88	590	110.4	200	78.9	750
	7324.2	2034.5	6.83		164.4		82.9	
	6065.3	1684.8	8.80		189.1		76.9	
-4°	8811.7	2447.7	3.98		121.1	220	78.9	
	7507.1	2085.3	7.24		176.1		84.1	
	6294.2	1748.3	9.19		205.0		76.9	
-2°	9269.6	2574.9	4.14		132.0	250	78.9	
	7896.2	2193.4	7.55		192.7		83.8	
	6431.4	1786.5	9.31		212.2		76.9	
0°	9727.2	2702.0	4.45		149.5	280	78.9	
	8216.6	2282.4	7.89		206.9		85.4	
	6591.6	1831.0	9.62		224.7		76.9	
+2°	10070.6	2797.4	4.66		162.1		78.9	
	8422.9	2339.7	7.97		213.2		85.8	
	6660.4	1850.1	9.73		229.6		76.9	
+4°	10574.3	2937.3	5.07		185.2	280	78.9	
	8743.3	2428.7	8.49		238.3		84.7	
	7072.2	1964.5	9.93		248.9		76.9	

HSP Curve and specification

HSP800-170



HSP800-200

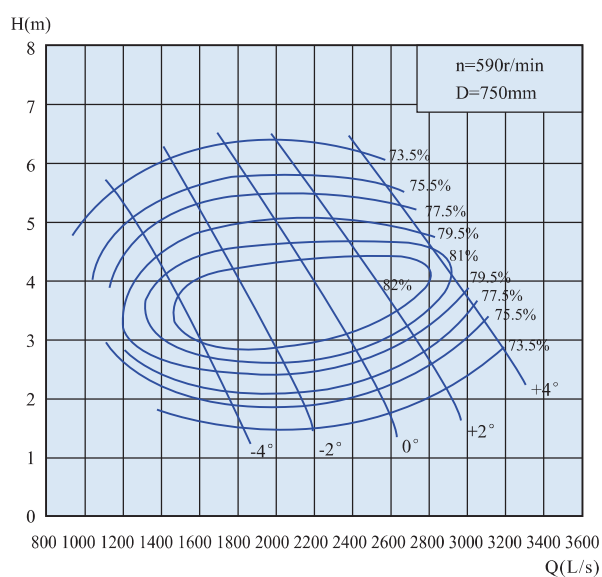


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	6202.8	1723.0	2.89	590	66.2	132	73.8	750
	5676.1	1576.7	4.39		82.0		82.8	
	4005.4	1112.6	7.40		109.4		73.8	
-4°	7186.7	1996.3	2.79		74.0	132	73.8	
	6134.0	1703.9	5.38		107.3		83.8	
	4394.5	1220.7	7.85		127.4		73.8	
-2°	8079.5	2244.3	2.89		86.2	160	73.8	
	6980.8	1939.1	5.28		119.9		83.8	
	4829.4	1341.5	8.23		146.8		73.8	
0°	8697.2	2415.9	3.16		101.5	185	73.8	
	7644.6	2123.5	5.47		134.4		84.8	
	5310.0	1475.0	8.54		167.4		73.8	
+2°	9292.7	2581.3	3.62		124.2	200	73.8	
	8170.9	2269.7	5.85		155.4		83.8	
	5790.6	1608.5	8.79		187.9		73.8	
+4°	9887.8	2746.6	4.07		148.6	220	73.8	
	8354.2	2320.6	6.61		181.7		82.8	
	6316.9	1754.7	8.77		204.6		73.8	

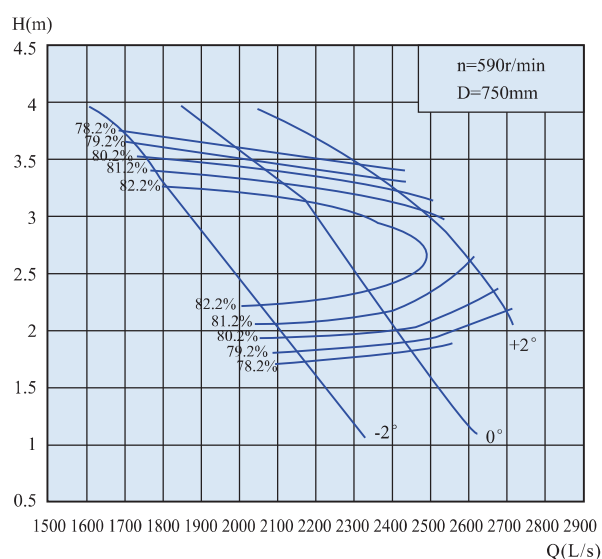
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	6088.3	1691.2	3.31	590	67.8	110	81.0	750
	5721.8	1589.4	4.17		78.7		82.6	
	5149.8	1430.5	5.48		94.9		81.0	
-4°	6958.1	1932.8	3.03		70.9	132	81.0	
	6408.7	1780.2	4.24		88.0		84.1	
	5596.2	1554.5	5.95		112.0		81.0	
-2°	7575.8	2104.4	2.95		75.2	160	81.0	
	6980.8	1939.1	4.36		97.9		84.7	
	5996.5	1665.7	6.24		125.9		81.0	
0°	8170.9	2269.7	6.04		83.6	185	81.0	
	7553.2	2098.1	4.35		105.3		85.0	
	6442.9	1789.7	6.47		140.2		81.0	
+2°	8697.2	2415.9	3.28		96.0	200	81.0	
	8010.7	2225.2	4.58		116.9		85.5	
	6958.1	1932.8	6.49		151.9		81.0	
+4°	9155.2	2543.1	3.60		110.9	220	81.0	
	8583.1	2384.2	4.60		126.3		85.2	
	7667.3	2129.8	6.21		160.2		81.0	

HSP Curve and specification

HSP800-250



HSP800-320

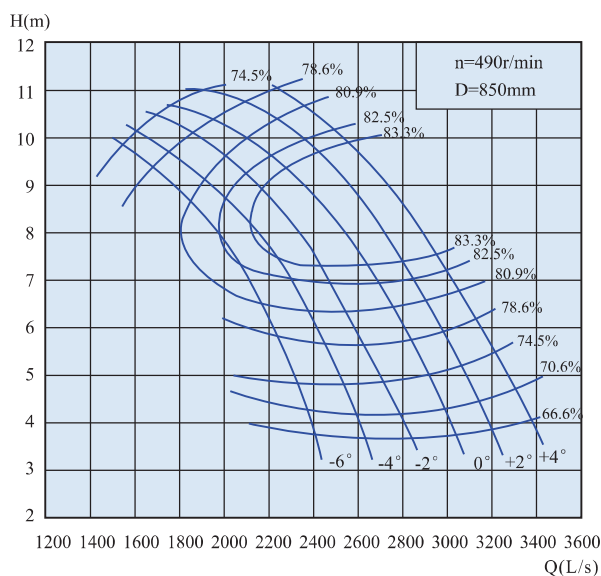


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	6225.5	1729.3	2.11	590	46.2	90	77.5	750
	5676.1	1576.7	3.14		59.2		82.0	
	4531.7	1258.8	5.10		83.4		75.5	
-2°	7621.6	2117.1	2.10		56.3	132	77.5	
	7026.5	1951.8	3.25		75.5		82.4	
	5539.0	1538.6	5.53		110.6		75.5	
0°	8995.0	2498.6	2.36		74.6	160	77.5	
	8285.4	2301.5	3.58		97.4		83.0	
	6660.4	1850.1	5.79		139.2		75.5	
+2°	10001.9	2778.3	2.79		98.1	185	77.5	
	9200.9	2555.8	3.70		112.6		82.4	
	7713.4	2142.6	5.79		161.2		75.5	
+4°	10917.7	3032.7	3.58		137.4	200	77.5	
	10459.8	2905.5	4.10		143.7		81.3	
	9338.4	2594.0	5.60		188.7		75.5	

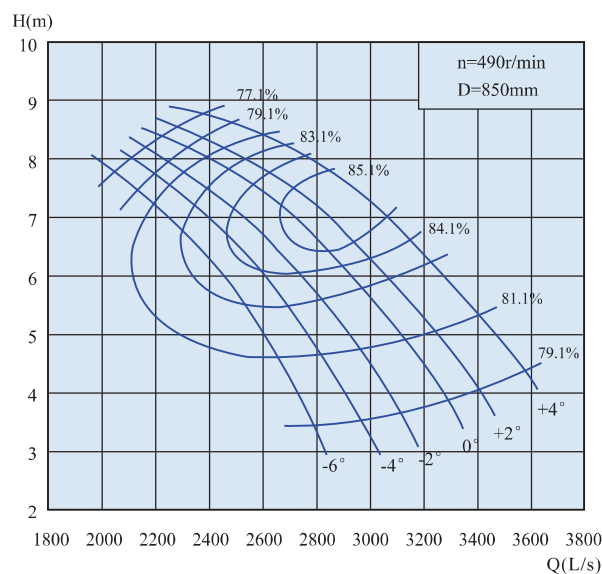
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	7750.8	2153.0	1.82	1450	48.5	90	79.3	750
	7095.2	1970.9	2.58		59.5		83.8	
	6213.6	1726.0	3.65		77.9		79.3	
0°	8759.9	2433.3	1.88		56.6	110	79.3	
	8239.7	2288.8	2.59		70.2		82.8	
	7339.7	2038.8	3.50		88.3		79.3	
+2°	9707.0	2696.4	2.17		72.4	110	79.3	
	9200.9	2555.8	2.79		86.0		81.3	
	8524.1	2367.8	3.34		97.8		79.3	

HSP Curve and specification

HSP900-100



HSP900-140

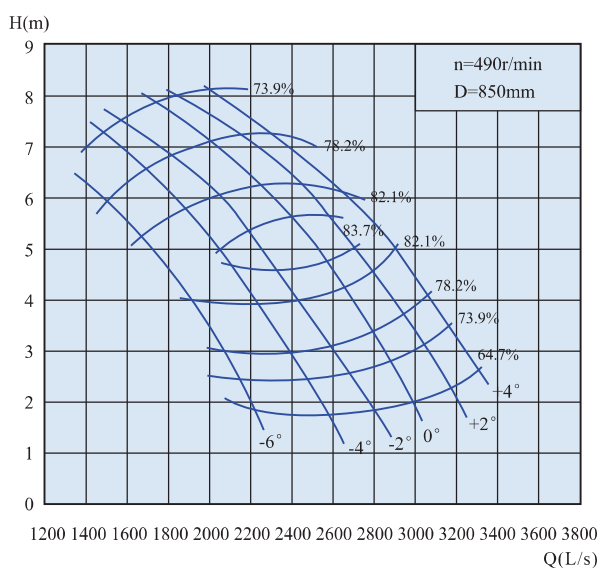


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	8460.0	2350.0	4.28	490	139.8	220	70.6	850
	7138.8	1983.0	7.82		183.7	220	82.8	
	5652.0	1570.0	9.85		200.9	250	75.5	
-4°	9187.2	2552.0	4.20		148.9	280	70.6	
	7761.2	2156.0	8.06		202.9	315	84.0	
	5832.0	1620.0	10.31		217.0		75.5	
-2°	9918.0	2755.0	4.20		160.8		70.6	
	7995.6	2221.0	8.30		215.3		84.0	
	6120.0	1700.0	10.60		234.1		75.5	
0°	10710.0	2975.0	4.40		181.9		70.6	
	8881.2	2467.0	8.34		239.7		84.2	
	7092.0	1970.0	10.45		256.9		78.6	
+2°	11358.0	3155.0	4.50		197.3		70.6	
	9349.2	2597.0	8.55		259.3		84.0	
	7632.0	2120.0	10.80		285.8		78.6	
+4°	11790.0	3275.0	4.88		222.1		70.6	
	9831.6	2731.0	8.79		280.3		84.0	
	7992.0	2220.0	11.00		304.8		78.6	

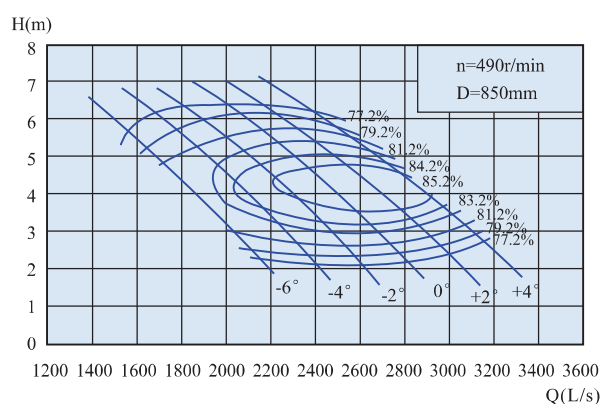
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	9961.6	2767.1	3.44	490	118.1	220	79.1	850
	8854.6	2459.6	6.05		175.7	220	83.1	
	7332.8	2036.9	7.79		201.9		77.1	
-4°	10653.5	2959.3	3.53		129.6		79.1	
	9076.0	2521.1	6.42		188.4		84.3	
	7609.7	2113.8	8.14		218.9		77.1	
-2°	11206.8	3113.0	3.67		141.7		79.1	
	9546.5	2651.8	6.69		206.0	250	84.5	
	7775.6	2159.9	8.25		226.7		77.1	
0°	11760.1	3266.7	3.94		159.6		79.1	
	9933.8	2759.4	6.99		221.0		85.6	
	7969.3	2213.7	8.53		240.3		77.1	
+2°	12175.2	3382.0	4.13		173.2		79.1	
	10183.0	2828.6	7.06		227.8	280	86.0	
	8052.1	2236.7	8.62		245.3		77.1	
+4°	12784.0	3551.1	4.49		197.7		79.1	
	10570.3	2936.2	7.52		254.5		85.1	
	8550.4	2375.1	8.80		265.9		77.1	

HSP Curve and specification

HSP900-170



HSP900-200

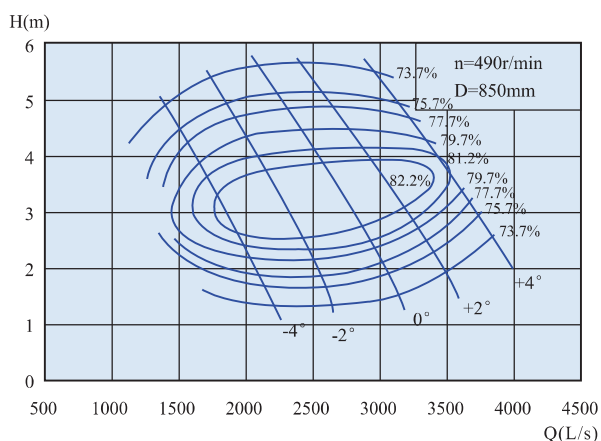


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	7498.8	2083.0	2.56	490	70.7	132	74.0	850
	6862.3	1906.2	3.89		87.6		83.0	
	4842.4	1345.1	6.55		116.8		74.0	
-4°	8688.6	2413.5	2.48		79.3	160	74.0	
	7415.6	2059.9	4.77		114.8		84.0	
	5312.9	1475.8	6.96		136.2		74.0	
-2°	9767.9	2713.3	2.56		92.1	185	74.0	
	8439.5	2344.3	4.68		128.1		84.0	
	5838.5	1621.8	7.29		156.7		74.0	
0°	10514.9	2920.8	2.80		108.4	220	74.0	
	9241.9	2567.2	4.85		143.7		85.0	
	6419.5	1783.2	7.56		178.7		74.0	
+2°	11234.5	3120.7	3.21		132.8	250	74.0	
	9878.4	2744.0	5.18		166.0		84.0	
	7000.9	1944.7	7.78		200.6		74.0	
+4°	11953.8	3320.5	3.60		158.5		74.0	
	10099.8	2805.5	5.86		194.3		83.0	
	7637.0	2121.4	7.77		218.5		74.0	

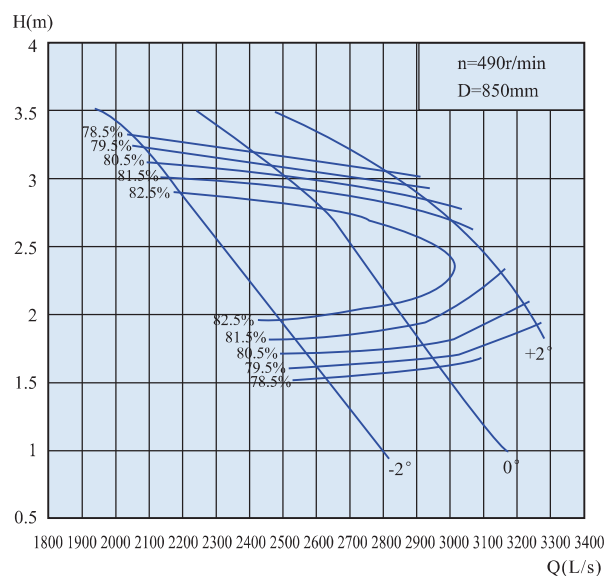
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	7360.6	2044.6	2.93	490	72.4	110	81.2	850
	6917.8	1921.6	3.69		84.0		82.8	
	6225.8	1729.4	4.86		101.5		81.2	
-4°	8412.1	2336.7	2.69		75.9	132	81.2	
	7747.9	2152.2	3.76		94.2		84.3	
	6765.5	1879.3	5.27		119.7		81.2	
-2°	9159.1	2544.2	2.61		80.2	160	81.2	
	8439.5	2344.3	3.86		104.6		84.9	
	7249.7	2013.8	5.53		134.5		81.2	
0°	9878.4	2744.0	2.70		89.5	185	81.2	
	9131.4	2536.5	3.85		112.4		85.2	
	7789.3	2163.7	5.73		149.8		81.2	
+2°	10514.9	2920.8	2.91		102.7		81.2	
	9684.7	2690.2	4.06		125.0		85.7	
	8412.1	2336.7	5.75		162.3		81.2	
+4°	11068.2	3074.5	3.19		118.5	185	81.5	
	10376.6	2882.4	4.08		135.1		85.4	
	9269.6	2574.9	5.50		171.1		81.2	

HSP Curve and specification

HSP900-250



HSP900-320

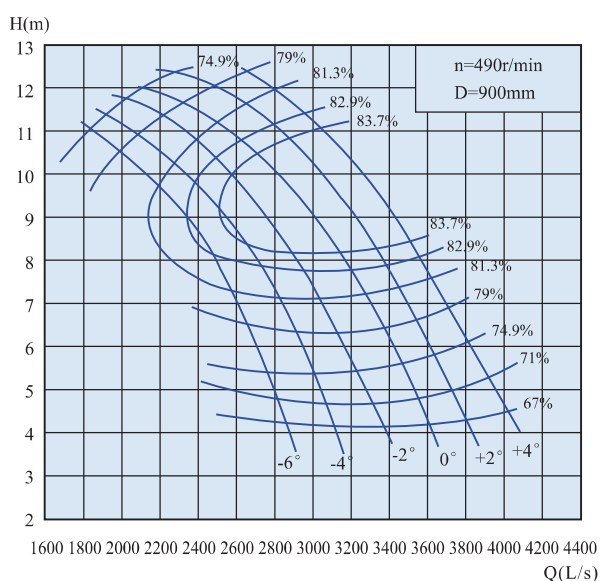


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	7526.5	2090.7	1.87	490	49.4	110	77.7	850
	6862.3	1906.2	2.78		63.2		82.2	
	5478.8	1521.9	4.52		89.1		75.7	
-2°	9214.6	2559.6	1.86		60.1	132	77.7	
	8494.9	2359.7	2.88		80.7		82.6	
	6696.4	1860.1	4.90		118.1		75.7	
0°	10874.5	3020.7	2.09		79.7	160	77.7	
	10017.0	2782.5	3.17		104.0		83.2	
	8052.1	2236.7	5.13		148.7		75.7	
+2°	12092.0	3358.9	2.48		105.2	185	77.7	
	11123.6	3089.9	3.28		120.4		82.6	
	9325.1	2590.3	5.13		172.2		75.7	
+4°	13199.0	3666.4	3.17		146.7	220	77.7	
	12645.7	3512.7	3.63		153.5		81.5	
	11289.6	3136.0	4.96		201.6		75.7	

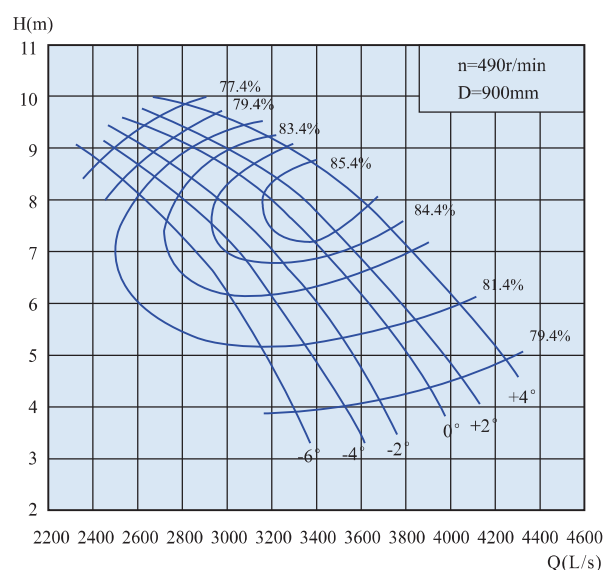
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	9370.4	2602.9	1.61	490	51.7	90	79.5	850
	8578.1	2382.8	2.28		63.4		84.0	
	7512.1	2086.7	3.24		83.4		79.5	
0°	10590.5	2941.8	1.67		60.6	110	79.5	
	9961.6	2767.1	2.29		74.9		83.0	
	8873.6	2464.9	3.10		94.3		79.5	
+2°	11735.6	3259.9	1.93		77.6	130	79.5	
	11123.6	3089.9	2.48		92.2		81.5	
	10305.4	2862.6	2.96		104.6		79.5	

HSP Curve and specification

HSP1000-100



HSP1000-140

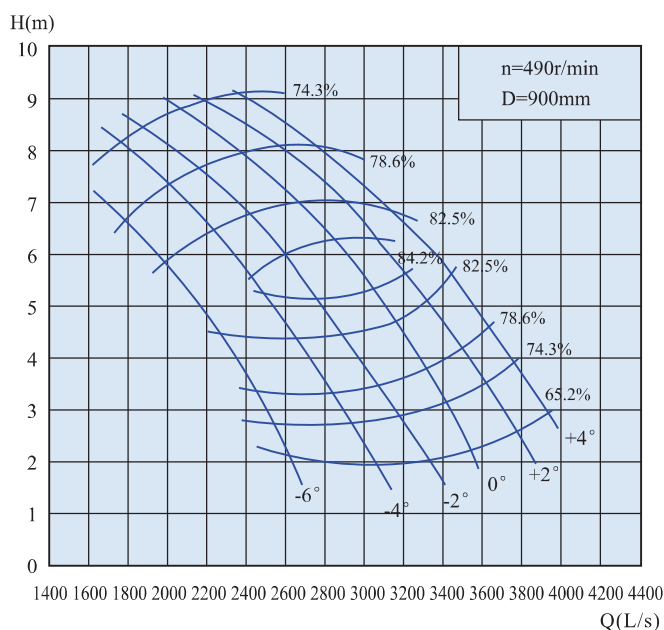


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	10042.6	2789.6	4.80	490	185.0	280	71.0	900
	8474.0	2353.9	8.77		243.4		83.2	
	6709.3	1863.7	11.04		265.9		75.9	
-4°	10905.8	3029.4	4.71		197.1	315	71.0	
	9213.5	2559.3	9.04		268.9		84.4	
	6922.8	1923.0	11.56		287.3		75.9	
-2°	11773.1	3270.3	4.71		212.8	355	71.0	
	9491.0	2636.4	9.31		285.3		84.4	
	7264.8	2018.0	11.88		309.9		75.9	
0°	12713.4	3531.5	4.93		240.6	400	71.0	
	10542.6	2928.5	9.85		317.5		84.6	
	8418.6	2338.5	11.72		340.3		79.0	
+2°	13482.7	3745.2	5.04		260.8	450	71.0	
	11098.1	3082.8	9.59		343.6		84.4	
	9059.8	2516.6	12.11		378.4		79.0	
+4°	13995.4	3887.6	5.47		293.8		71.0	
	11670.5	3241.8	9.85		371.1		84.4	
	9487.1	2635.3	12.33		403.5		79.0	

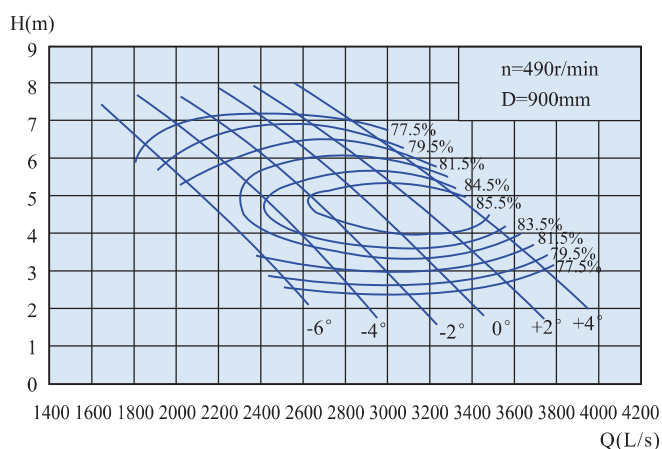
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	11824.9	3284.7	3.85	490	156.2	280	79.4	900
	10510.9	2919.7	6.78		232.8		83.4	
	8704.4	2417.9	8.74		267.8		77.4	
-4°	12646.1	3512.8	3.96		171.9	315	79.4	
	10773.7	2992.7	7.19		249.5		84.6	
	9032.8	2509.1	9.13		290.3		77.4	
-2°	13303.1	3695.3	4.11		187.5	355	79.4	
	11332.1	3147.8	7.50		273.1		84.8	
	9230.0	2563.9	9.25		300.6		77.4	
0°	13960.1	3877.8	4.42		211.8	400	79.4	
	11792.2	3275.6	7.83		292.9		85.9	
	9460.1	2627.8	9.56		318.4		77.4	
+2°	14526.6	4014.6	4.62		229.2	450	79.4	
	12087.7	3357.7	7.91		301.9		86.3	
	9558.4	2655.1	9.66		325.1		77.4	
+4°	15175.4	4215.4	5.04		262.5		79.4	
	12547.4	3485.4	8.43		337.5		85.4	
	10149.8	2819.4	9.87		352.7		77.4	

HSP Curve and specification

HSP1000-170



HSP1000-200

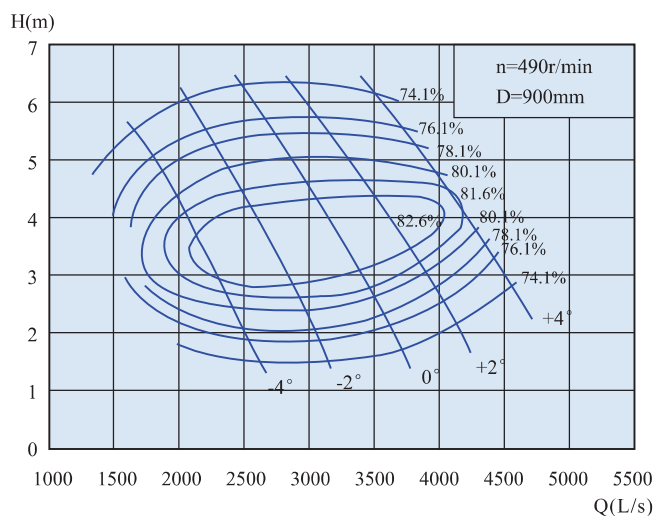


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	8901.4	2472.2	2.87	490	93.6	160	74.4	900
	8146.1	2262.8	4.36		116.0		83.4	
	5748.1	1596.7	7.35		154.7		74.4	
-4°	10314.0	2865.0	2.77		104.6	185	74.4	
	8803.1	2445.3	5.34		151.8		84.4	
	6306.5	1751.8	7.80		180.2		74.4	
-2°	11594.9	3220.8	2.87		121.9	220	74.4	
	10018.4	2782.9	5.24		169.5		84.4	
	6930.7	1925.2	8.17		207.4		74.4	
0°	12481.9	3467.2	3.13		143.1	250	74.4	
	10971.0	3047.3	5.44		190.4		85.4	
	7620.5	2116.8	8.48		236.7		74.4	
+2°	13335.8	3704.4	3.60		175.8	280	74.4	
	11726.3	3257.3	5.81		220.0		84.4	
	8310.2	2308.4	8.73		265.7		74.4	
+4°	14189.8	3941.6	4.04		210.0	315	74.4	
	11989.1	3330.3	6.57		257.4		83.4	
	9065.9	2518.3	8.72		289.5		74.4	

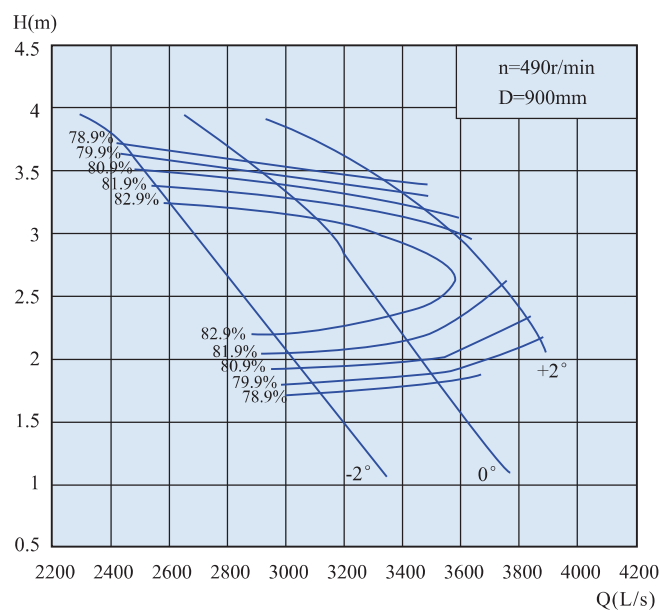
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	8772.0	2427.0	3.29	490	96.1	160	81.5	900
	8211.6	2281.0	4.14		111.5		83.1	
	7390.4	2052.9	5.45		134.7		81.5	
-4°	9985.3	2773.7	3.01		100.5	185	81.5	
	9197.3	2554.8	4.21		124.7		84.6	
	8031.2	2230.9	5.91		158.7		81.5	
-2°	10872.4	3020.1	2.93		106.5	220	81.5	
	10018.4	2782.9	4.33		138.7		85.2	
	8605.8	2390.5	6.20		178.4		81.5	
0°	11726.3	3257.3	3.02		118.4	250	81.5	
	10839.6	3011.0	4.32		149.2		85.5	
	9246.2	2568.4	6.42		198.5		81.5	
+2°	12481.9	3467.2	3.26		136.1	280	81.5	
	11496.2	3193.4	4.55		165.7		85.7	
	9985.3	2773.7	6.44		215.0		81.5	
+4°	13138.9	3649.7	3.58		157.3	315	81.5	
	12317.8	3421.6	4.57		179.0		85.7	
	11003.8	3056.6	6.17		227.0		81.5	

HSP Curve and specification

HSP1000-250



HSP1000-320

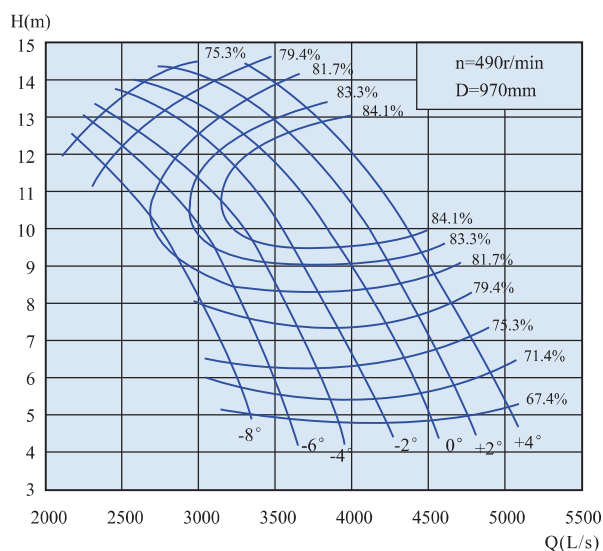


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	8934.5	2481.8	2.1	490	65.5	132	78.1	900
	8146.1	2262.8	3.11		83.6		82.6	
	6503.8	1806.6	5.07		118.1		76.1	
-2°	10937.9	3038.3	2.09		79.8	160	78.1	
	10084	2801.1	3.23		106.9		83	
	7948.8	2208	5.49		156.3		76.1	
0°	12908.9	3585.8	2.34		105.4	220	78.1	
	11890.4	3302.9	3.56		138		83.6	
	9558.4	2655.1	5.76		197.1		76.1	
+2°	14353.9	3987.2	2.77		138.7	250	78.1	
	13204.4	3667.9	3.68		159.5		83	
	11069.3	3074.8	5.76		228.3		76.1	
+4°	15667.9	4352.2	3.56		194.6	280	78.1	
	15010.9	4169.7	4.07		203.3		81.9	
	13401.4	3722.6	5.56		266.8		76.1	

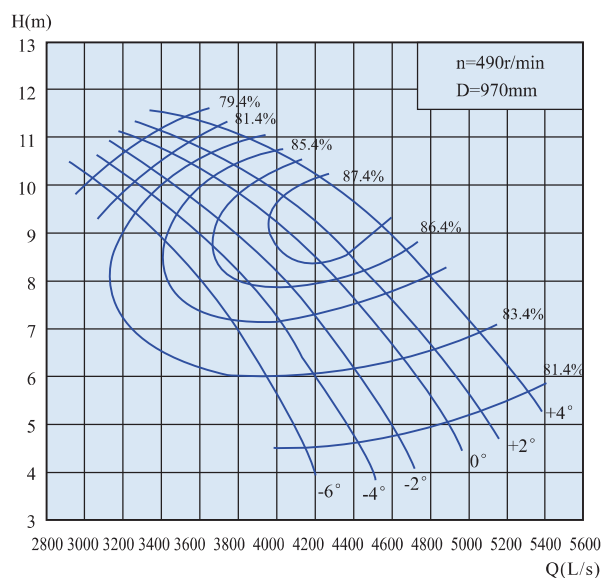
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	11123.3	3089.8	1.81	490	68.7	132	79.9	900
	10182.6	2828.5	2.56		84.2		84.4	
	8917.2	2477	3.63		110.4		79.9	
0°	12571.6	3492.1	1.87		80.2	160	79.9	
	11824.9	3284.7	2.57		99.3		83.4	
	10533.2	2925.9	3.47		124.7		79.9	
+2°	13930.6	3869.6	2.16		102.6	160	79.9	
	13204.4	3667.9	2.77		121.7		81.9	
	12233.2	3398.1	3.32		138.5		79.9	

HSP Curve and specification

HSP1200-100



HSP1200-140

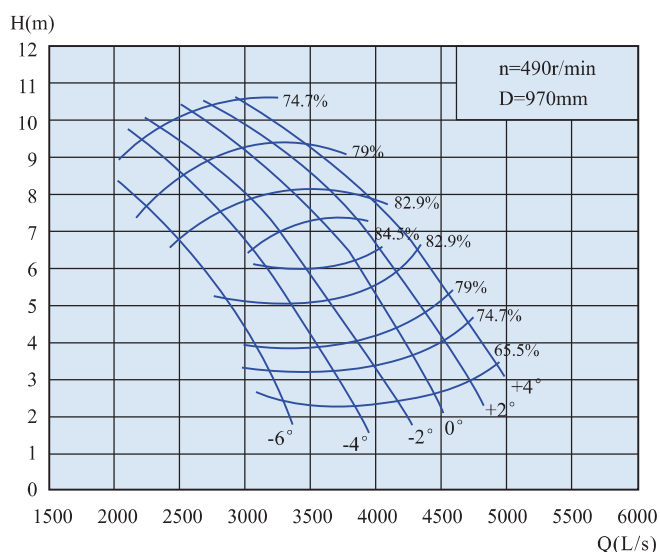


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	12572.6	3492.4	5.57	490	267.3	400	71.4	970
	10609.2	2947	10.18		352		83.6	
	8399.5	2333.2	12.83		384.9		86.3	
-4°	13653.4	3792.6	5.47		285	450	71.4	
	1154.8	3204.1	10.5		389.2		84.8	
	8667	2407.5	13.43		415.7		76.3	
-2°	14739.5	4094.3	5.47		307.7	500	71.4	
	11882.5	3300.7	10.81		412.8		84.8	
	9095	2526.4	13.8		448.3		76.3	
0°	15916.7	4421.3	5.73		348.1	560	71.4	
	13198.7	3666.3	10.86		459.5		85	
	10539.7	2927.7	13.61		492.3		79.4	
+2°	16879.7	4688.8	5.86		377.5	630	71.4	
	13894.2	3859.5	11.13		496.9		84.8	
	11342.2	3150.6	14.06		547.3		79.4	
+4°	17521.6	4867.1	6.36		425.3	630	71.4	
	14611	4058.6	11.45		537.6		84.8	
	11877.1	3299.2	14.33		584.1		79.4	

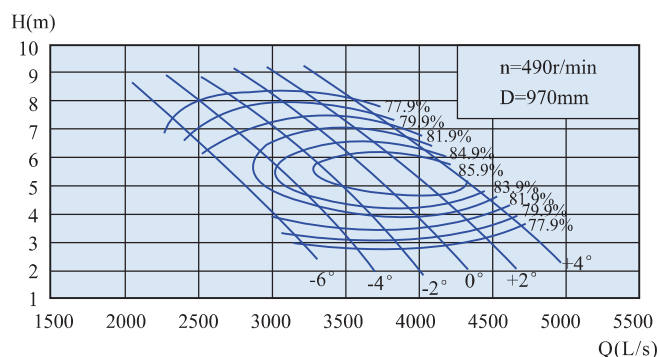
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	1480.3	4112.3	4.48	490	222	400	81.4	970
	13159.4	3655.4	7.88		330.9		85.4	
	10897.6	3027.1	10.15		379.6		79.4	
-4°	15832.1	4397.8	4.6		243.8	450	81.4	
	13488.1	3746.7	8.36		354.8		86.6	
	11308.7	3141.3	10.6		411.4		79.4	
-2°	16654.7	4626.3	4.78		266.5	500	81.4	
	14187.2	3940.9	8.72		388.4		86.8	
	11555.6	3209.9	10.74		425.9		79.4	
0°	17477.3	4854.8	5.13		300.1	560	81.4	
	14763.2	4100.9	9.1		416.5		87.9	
	11843.3	3289.8	11.1		451.2		79.4	
+2°	18094	5026.1	5.37		325.3	560	81.4	
	15133.3	4203.7	9.19		429.2		88.3	
	11966.8	3324.1	11.22		460.8		79.4	
+4°	18998.6	5277.4	5.85		372.1	560	81.4	
	15709	4363.6	9.79		479.5		87.4	
	12706.9	3529.7	11.46		499.8		79.4	

HSP Curve and specification

HSP1200-170



HSP1200-200

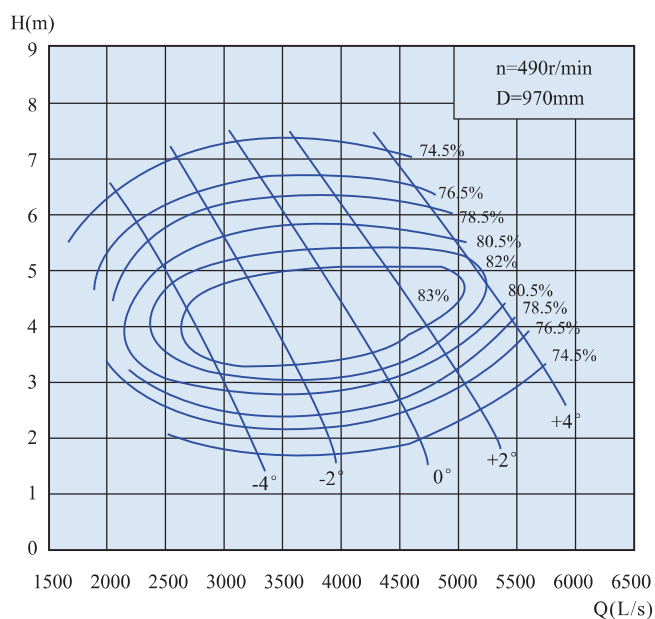


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	11144.2	3095.6	3.33	490	135.2	250	74.8	970
	10198.4	2832.9	5.06		167.8		83.8	
	7196.4	1999	8.54		223.9		74.8	
-4°	12912.5	3586.8	3.22		151.5	280	74.8	
	11021	3061.4	6.21		219.9		84.8	
	7895.5	2193.2	9.06		260.6		74.8	
-2°	14516.3	4032.3	3.33		176.1	315	74.8	
	12542.4	3484	6.09		245.5		84.8	
	8676.7	2410.2	9.49		300		74.8	
0°	15626.5	4340.7	3.64		207.2	400	74.8	
	13735.1	3815.3	6.32		275.7		85.8	
	9540.4	2650.1	9.85		342.3		74.8	
+2°	16695.7	4637.7	4.18		254.2	450	74.8	
	14680.8	4078	6.75		318.4		84.8	
	10404	2890	10.14		384.3		74.8	
+4°	17764.9	4934.7	4.69		303.5	450	74.8	
	15009.8	4169.4	7.63		372.4		83.8	
	11349.7	3152.7	10.12		418.4		74.8	

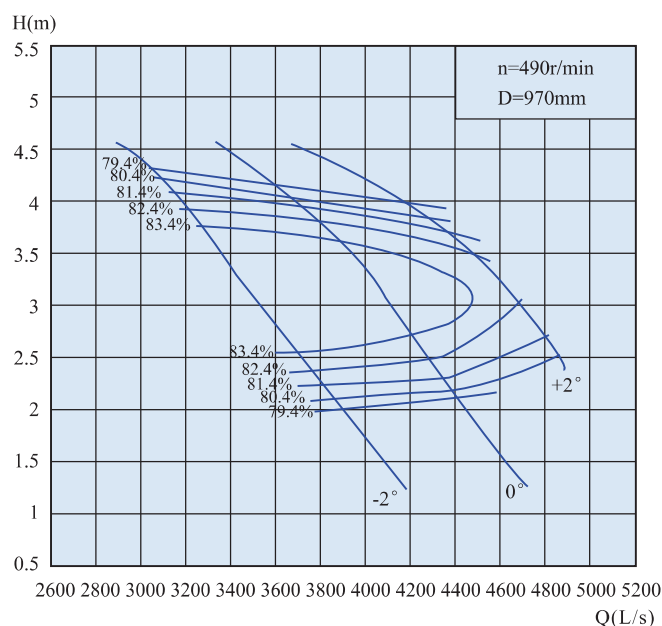
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	10938.6	3038.5	3.82	490	139	250	81.9	970
	10280.5	2855.7	4.81		161.4		83.5	
	9252.7	2570.2	6.33		194.9		81.9	
-4°	12501.4	3472.6	3.5		145.6	280	81.9	
	11514.2	3198.4	4.89		180.5		85	
	10054.4	2792.9	6.86		229.5		81.9	
-2°	13611.6	3781	3.4		154	280	81.9	
	12542.4	3484	5.03		200.8		85.6	
	10774.1	2992.8	7.2		258.1		81.9	
0°	14680.8	4078	3.51		171.5	315	81.9	
	13570.6	3769.6	5.01		215.7		85.9	
	11576.2	3215.6	7.46		287.3		81.9	
+2°	15626.5	4340.7	3.78		196.5	355	81.9	
	14392.8	3998	5.29		240.1		86.4	
	12501.4	3472.6	7.49		311.5		81.9	
+4°	16449.1	4569.2	4.15		227.1	355	81.9	
	15421	4283.6	5.31		259.2		86.1	
	13776.1	3826.7	7.16		328.2		81.9	

HSP Curve and specification

HSP1200-250



HSP1200-160

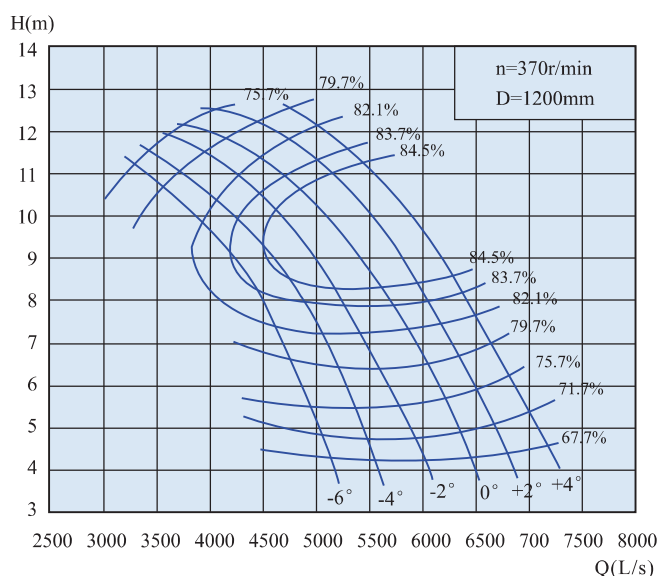


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	11185.6	3107.1	2.44	490	94.6	185	78.6	970
	10198.4	2832.9	3.62		121.1		83.1	
	8142.5	2261.8	5.89		170.6		76.6	
-2°	13694	3803.9	2.42		114.9	250	78.6	
	12624.8	3506.9	3.75		154.5		83.5	
	9951.8	2764.4	6.38		225.9		76.6	
0°	16161.1	4489.2	2.72		152.4	315	78.6	
	14886.4	4135.1	4.13		199.2		84.1	
	11966.8	3324.1	6.69		284.8		76.6	
+2°	17970.5	4991.8	3.22		200.6	355	78.6	
	16531.2	4592	4.27		230.4		83.5	
	13858.2	3849.5	6.69		329.8		76.6	
+4°	19615.7	5448.8	4.13		280.9	400	78.6	
	18793.1	5220.3	4.73		294		82.4	
	16778.2	4660.6	6.46		385.6		76.6	

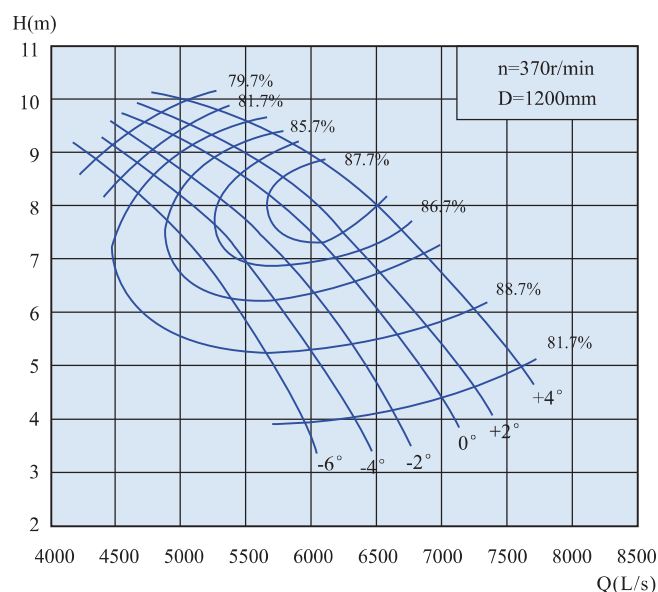
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	13925.9	3868.3	2.1	370	99.1	185	80.4	970
	12748	3541.1	2.97		121.5		84.9	
	11164	3101.1	4.21		159.3		80.4	
0°	15738.8	4371.9	2.17		115.8	200	80.4	
	14804.3	4112.3	2.98		143.3		83.9	
	13187.2	3663.1	4.04		180.6		80.4	
+2°	17440.6	4844.6	2.51		148.4	220	80.4	
	16531.2	4592	3.22		176		82.4	
	15315.5	4254.3	3.86		200.4		80.4	

HSP Curve and specification

HSP1400-100



HSP1400-140

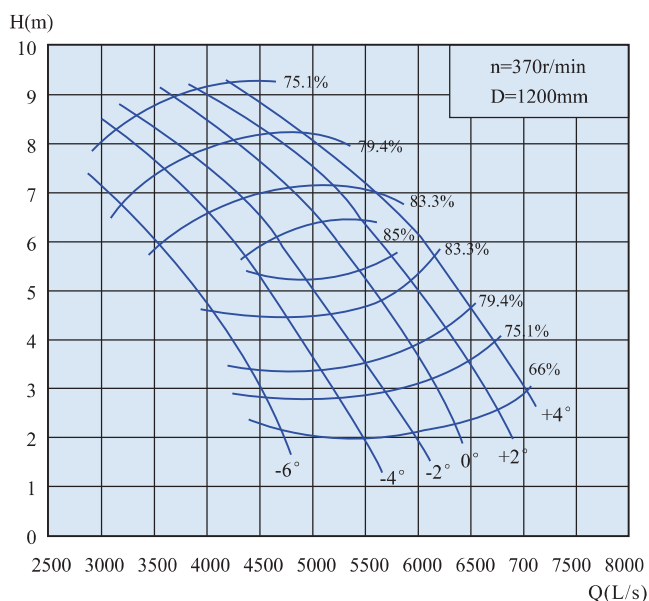


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	17974.8	4993	4.86	370	331.5	560	71.8	1200
	15167.5	4213.2	8.89		437.4		84	
	12008.5	3335.7	11.19		477.4		76.7	
-4°	19519.9	5422.2	4.77		353.4	630	71.8	
	16490.9	4580.8	9.16		483.1		85.2	
	12391.2	3442	11.72		516		76.7	
-2°	21072.6	5853.5	4.77		381.5	710	71.8	
	16988	4718.9	9.43		512.4		85.2	
	13002.8	3611.9	12.05		556.7		76.7	
0°	22755.2	6320.9	5		431.8	800	71.8	
	18869.8	5241.6	9.48		570.8		85.4	
	15068.2	4185.6	11.88		611.3		79.8	
+2°	24132.2	6703.4	5.11		468		71.8	
	19864.1	5517.8	9.72		617.5		85.2	
	16215.5	4504.3	12.27		679.4		79.8	
+4°	25049.9	6958.3	5.55		527.6		71.8	
	20889	5802.5	9.99		667.4		85.2	
	16980.5	4716.8	12.5		724.8		79.8	

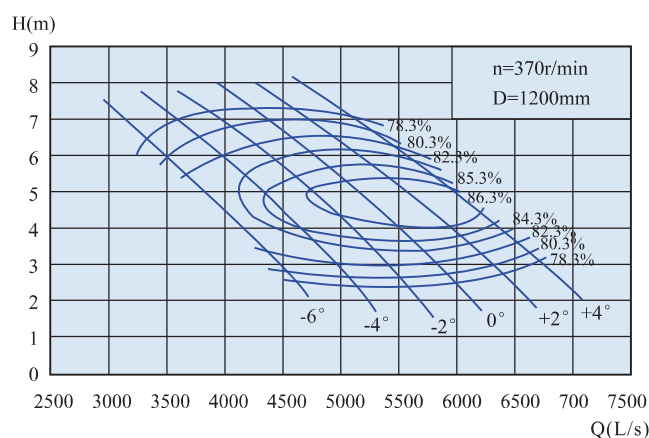
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	21165.1	5879.2	3.91	370	276	500	81.7	1200
	18813.2	5225.9	6.88		411.6		85.7	
	15579.7	4327.7	8.86		472		79.7	
-4°	22634.6	6287.4	4.01		302.7	560	81.7	
	19283.8	5356.6	7.29		440.8		86.9	
	16167.6	4491	9.25		511.3		79.7	
-2°	23810.8	6614.1	4.17		331.2	630	81.7	
	20283.1	5634.2	7.61		482.9		87.1	
	16520.4	4589	9.38		529.8		79.7	
0°	24986.5	6940.7	4.48		373.4	710	81.7	
	21106.1	5862.8	7.94		517.8		88.2	
	16931.9	4703.3	9.69		561		79.7	
+2°	25868.5	7185.7	4.69		404.7		81.7	
	21635.3	6009.8	8.02		533.7		88.6	
	17108.3	4752.3	9.79		572.7		79.7	
+4°	27161.6	7544.9	5.1		462		81.7	
	22458.6	6238.5	8.54		595.9		87.7	
	18166.7	5046.3	10		621.1		79.7	

HSP Curve and specification

HSP1400-170



HSP1400-200

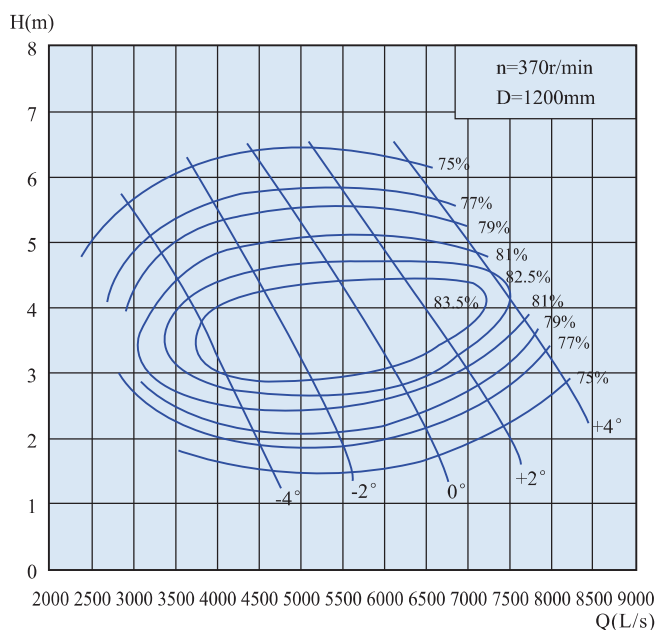


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	15932.5	4425.7	2.91	370	168	315	75.2	1200
	14580.4	4050.1	4.42		208.6		84.2	
	10288.4	2857.9	7.45		277.8		75.2	
-4°	18460.4	5127.9	2.81		188	355	75.2	
	15756.1	4376.7	5.42		273.1		85.2	
	11288.2	3135.6	7.91		323.6		75.2	
-2°	20753.6	5764.9	2.91		218.8	400	75.2	
	17931.6	4981	5.31		304.5		85.2	
	12404.9	3445.8	8.28		372.2		75.2	
0°	22340.9	6205.8	3.18		257.4	450	75.2	
	19636.6	5454.6	5.51		342		86.2	
	13639.7	3788.8	8.59		424.6		75.2	
$+2^\circ$	23869.4	6630.4	3.65		315.7	560	75.2	
	20988.7	5830.2	5.89		395.4		85.2	
	14874.5	4131.8	8.84		476.5		75.2	
$+4^\circ$	25398	7055	4.09		376.4		75.2	
	21458.9	5960.8	6.66		462.5		84.2	
	16226.6	4507.4	8.83		519.2		75.2	

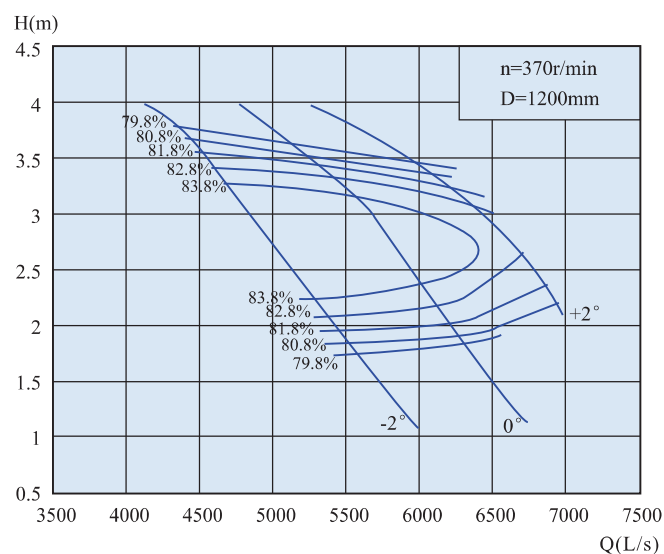
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	15638.8	4344.1	3.33	370	172.4	315	82.3	1200
	14698.1	4082.8	4.2		200.5		83.9	
	13228.2	3674.5	5.52		241.8		82.3	
-4°	17872.6	4964.6	3.05		180.5	355	82.3	
	16461.7	4572.7	4.27		224.3		85.4	
	14374.4	3992.9	5.99		285.1		82.3	
-2°	19460.2	5405.6	2.97		191.4	400	82.3	
	17931.6	4981	4.39		249.4		86	
	15403.3	4278.7	6.28		320.3		82.3	
0°	20988.7	5830.2	3.06		212.7	450	82.3	
	19401.1	5389.2	4.38		268.3		86.3	
	16549.9	4597.2	6.51		356.7		82.3	
$+2^\circ$	22340.9	6205.8	3.3		244.1	450	82.3	
	20577.2	5715.9	4.62		298.5		86.8	
	17872.6	4964.6	6.53		386.4		82.3	
$+4^\circ$	23516.6	6532.4	3.63		282.6		82.3	
	22046.8	6124.1	4.64		322.3		86.5	
	19695.2	5470.9	6.25		407.6		82.3	

HSP Curve and specification

HSP1400-250



HSP1400-320

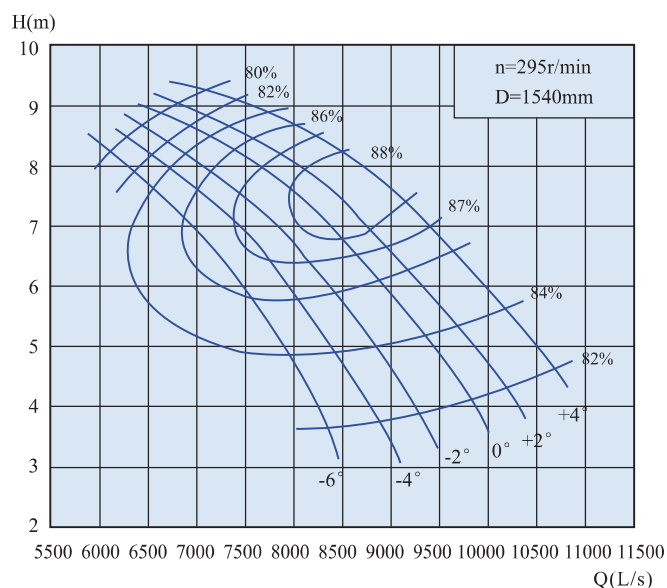


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	15991.2	4442	2.13	370	117.5	250	79	1200
	14580.4	4050.1	3.16		150.4		83.5	
	11640.6	3233.5	5.14		211.7		77	
-2°	19577.5	5438.2	2.11		142.5	315	79	
	18049	5013.6	3.27		191.7		83.9	
	14227.6	3952.1	5.56		280		77	
0°	23105.2	6418.1	2.38		189.7	400	79	
	21282.5	5911.8	3.6		247.1		84.5	
	17108.3	4752.3	5.83		353		77	
+2°	25692.1	7136.7	2.81		249	500	79	
	23634.4	6565.1	3.73		286.3		83.9	
	20170	5603.6	5.53		381.6		78	
+4°	28043.6	7789.9	3.6		348.2	500	79	
	26867.9	7463.3	4.13		365.2		82.8	
	23987.2	6753.1	5.54		460.8		78	

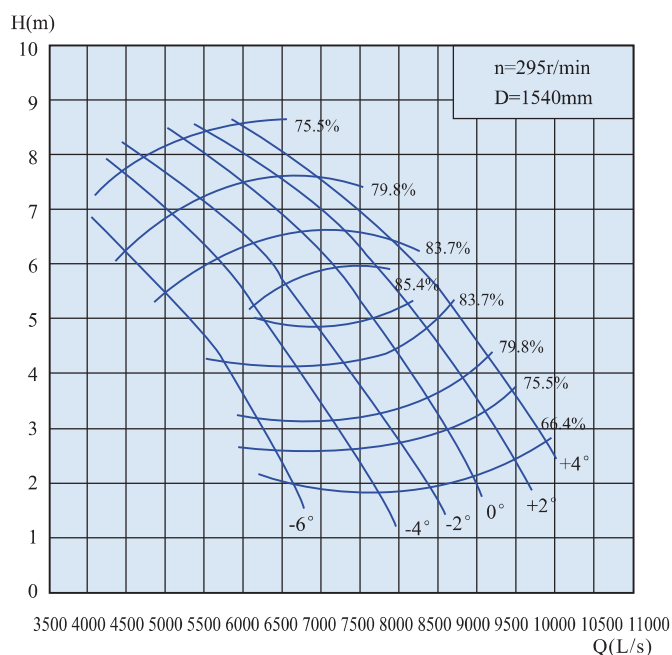
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	19909.1	5530.3	1.83	370	122.9	220	76	1200
	18225.4	5062.6	2.59		150.8		80.5	
	15960.6	4433.5	3.68		198.1		76	
0°	22501.4	6250.4	1.9		144.2	250	76	
	21165.1	5879.2	2.6		177.9		79.5	
	18853.2	5237	3.52		223.8		76	
+2°	24934.3	6926.2	2.19		184.2	280	76	
	23634.4	6565.1	2.81		218.6		78	
	21895.9	6082.2	3.37		248.9		76	

HSP Curve and specification

HSP1600-140



HSP1600-170

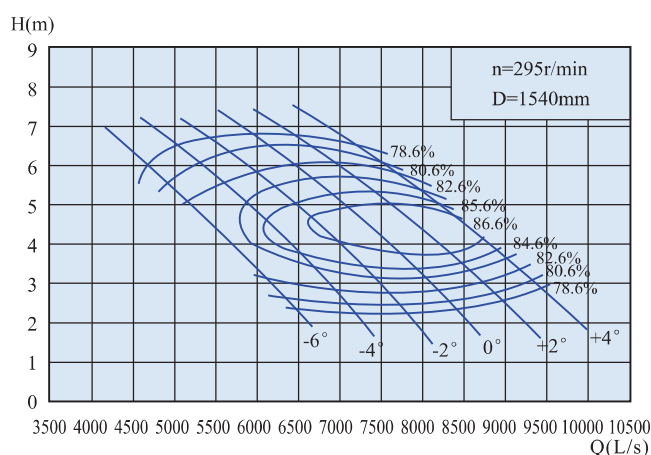


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	29771.3	8269.8	3.63	295	359.1	630	82	1450
	26463.6	7351	6.38		535		86	
	21915	6087.5	8.22		613.6		80	
-4°	31838.8	8844.1	3.72		393.6	710	82	
	27124.9	7534.7	6.77		573.9		87.2	
	22741.9	6317.2	8.59		665.4		80	
-2°	33493	9303.6	3.87		430.7	800	82	
	28531.1	7925.3	7.06		628		87.4	
	23238.4	6455.1	8.7		688.7		80	
0°	35146.8	9763	4.16		485.9		82	
	29688.8	8246.9	7.37		673.7		88.5	
	23817.2	6615.9	8.99		729.3		80	
+2°	36387.4	10107.6	4.35		526	900	82	
	30433	8453.6	7.45		695		88.9	
	24065.3	6684.8	9.09		745.1		80	
+4°	38206.8	10613	4.74		601.8	900	82	
	31590.7	8775.2	7.93		775.7		88	
	25553.9	7098.3	9.28		807.8		80	

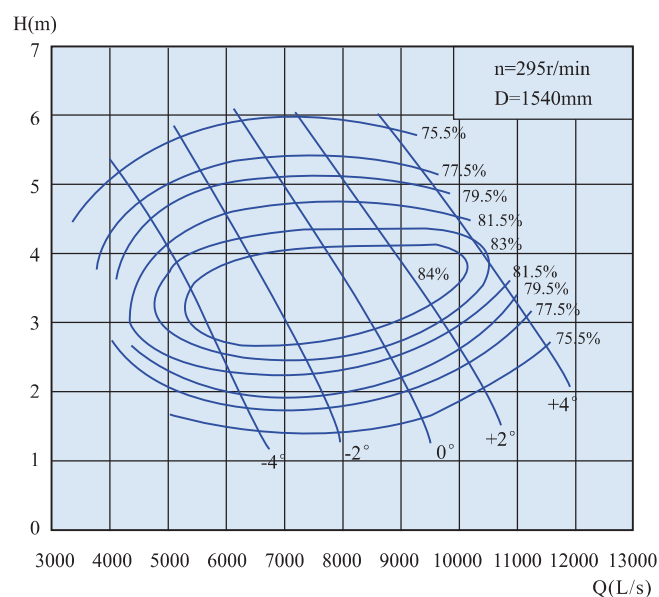
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	22411.1	6225.3	2.7	295	28.1	400	75.6	1450
	20509.2	5697	4.1		270.8		84.6	
	14472.4	4020.1	6.91		360.5		75.6	
-4°	25967.2	7213.1	2.61		244.3	450	75.6	
	22163	6156.4	5.03		354.9		85.6	
	15878.2	4410.6	7.34		420.1		75.6	
-2°	29192.4	8109	2.7		284.1	560	75.6	
	25223	7006.4	4.93		395.9		85.6	
	17449.2	4847	7.69		483.7		75.6	
0°	31425.5	8729.3	2.95		334.2	630	75.6	
	27621.4	7672.6	5.12		445		85.6	
	19185.8	5329.4	7.98		551.9		75.6	
+2°	33575.4	9326.5	3.38		409.1	710	75.6	
	29523.2	8200.9	5.46		513.2		84.6	
	20922.8	5811.9	8.21		619.2		75.6	
+4°	35725.7	9923.8	3.8		489.3	710	75.6	
	30184.9	8384.7	6.18		600.9		84.6	
	22824.7	6340.2	8.2		674.6		75.6	

HSP Curve and specification

HSP1600-200



HSP1600-250

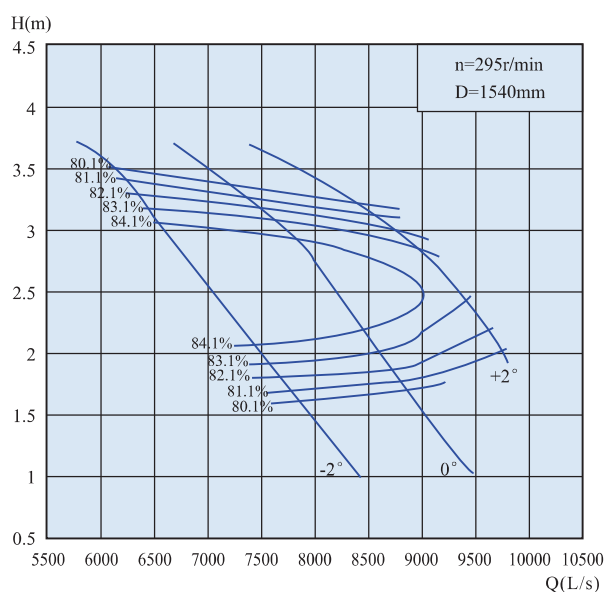


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	21997.8	6110.5	3.09	295	224	355	82.7	1450
	20674.4	5742.9	3.9		260.6		84.3	
	18607	5168.6	5.12		313.9		82.7	
-4°	25140.2	6983.4	2.83		234.4	400	82.7	
	23155.6	6432.1	3.96		291.2		85.8	
	20219.8	5616.6	5.56		370.4		82.7	
-2°	27373.3	7603.7	2.76		248.9	450	82.7	
	25223	7006.4	4.07		323.9		86.4	
	21667	6018.6	5.83		416.2		82.7	
0°	29523.2	8200.9	2.84		276.3	500	82.7	
	27290.5	7580.7	4.06		348.2		86.7	
	23279.8	6466.6	6.04		463.3		82.7	
+2°	31425.5	8729.3	3.07		317.9	560	82.7	
	28944.4	8040.1	4.28		387.1		87.2	
	25140.2	6983.4	6.06		502		82.7	
+4°	33079.3	9188.7	3.36		366.2		82.7	
	31011.8	8614.4	4.3		418.2		86.9	
	27703.8	7695.5	5.8		529.5		82.7	

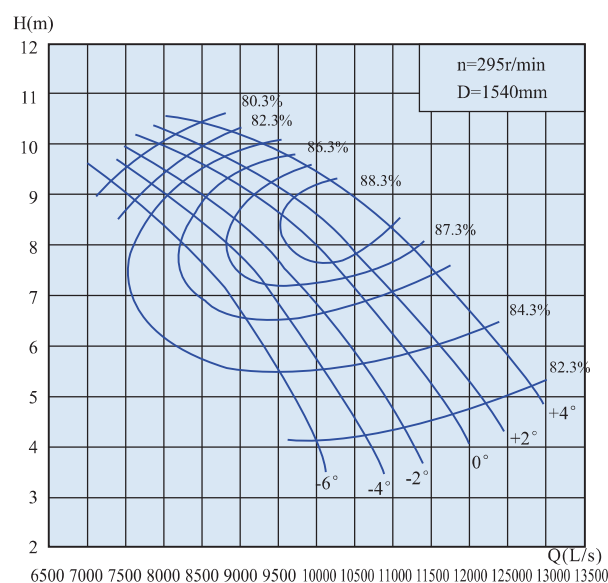
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	22493.9	6248.3	1.97	295	151.9	315	79.5	1450
	20509.2	5697	2.93		194.9		84	
	16374.2	4548.4	4.77		274.6		77.5	
-2°	27538.6	7649.6	1.96		185	400	79.5	
	25388.3	7052.3	3.04		249.2		84.4	
	20013.1	5559.2	5.16		363.1		77.5	
0°	32500.4	9027.9	2.2		245.1	500	79.5	
	29936.9	8315.8	3.35		321.5		85	
	24065.3	6684.8	5.41		457.8		77.5	
+2°	36139.3	10038.7	2.61		323.3	560	79.5	
	33244.6	9234.6	3.46		371.4		84.4	
	27869.4	7741.5	5.41		530.1		77.5	
+4°	39447	10957.5	3.35		453	710	79.5	
	37793.2	10498.1	3.83		473.5		83.3	
	33741	9372.5	5.23		620.5		77.5	

HSP Curve and specification

HSP1600-320



HSP1600-140C

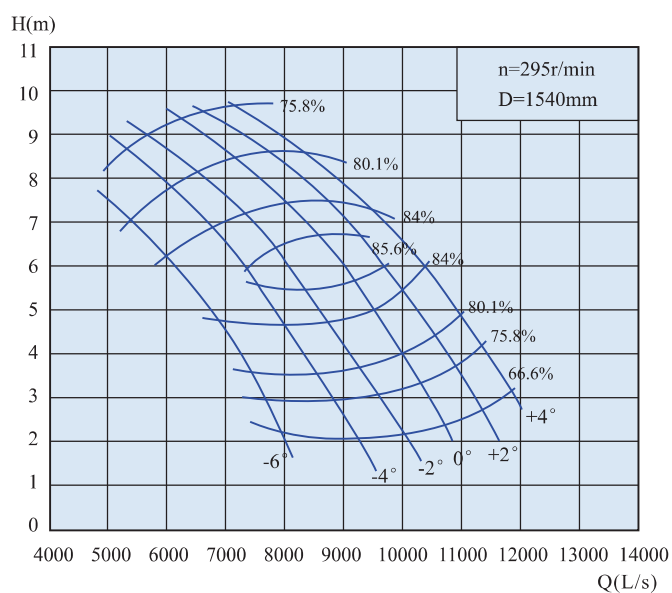


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	28005.1	7779.2	1.7	295	159.8	280	81.2	1450
	25636.3	7121.2	2.41		196.5		85.7	
	22451	6236.4	3.41		256.9		81.2	
0°	31651.2	8792	1.76		186.9	315	81.2	
	29771.3	8269.8	2.42		231.8		84.7	
	26519.8	7366.6	3.27		291		81.2	
+2°	35073.4	9742.6	2.03		238.9	355	81.2	
	33244.6	9234.6	2.61		284.2		83.2	
	30799.4	8555.4	3.12		322.5		81.2	

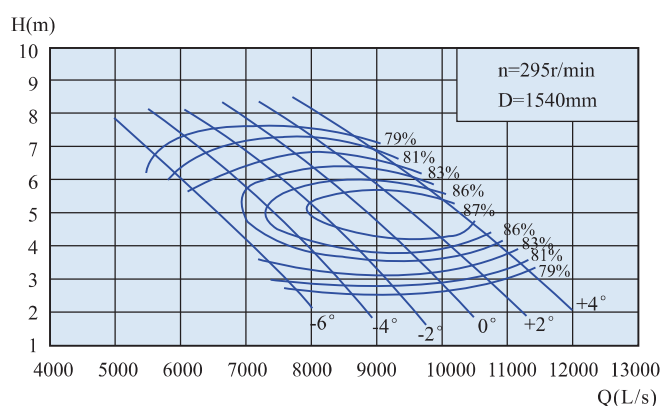
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	35666.3	9907.3	4.09	295	483	900	82.3	1540
	31703.4	8806.5	7.2		720.8		86.3	
	26254.4	7292.9	9.27		825.9		80.3	
-4°	38143.1	10595.3	4.2		530.4	1000	82.3	
	32495.8	9026.6	7.63		772.2		87.5	
	27245.2	7568.1	9.69		895.9		80.3	
-2°	40124.5	11145.7	4.36		579.2	1100	82.3	
	34180.2	9494.5	7.96		845.4		87.7	
	27839.5	7733.2	9.82		927.7		80.3	
0°	42106	11696.1	4.69		653.9	1200	82.3	
	35567.3	9879.8	8.31		907		88.8	
	28532.9	7925.8	10.14		981.8		80.3	
+2°	43592	12108.9	4.91		708.7	1200	82.3	
	36459	10127.5	8.4		935.6		89.2	
	28830.2	8008.4	10.25		1002.8		80.3	
+4°	45771.8	12714.4	5.34		809.3	1200	82.3	
	37845.7	10512.7	8.94		1044.1		88.3	
	30613.7	8503.8	10.47		1087.7		80.3	

HSP Curve and specification

HSP1600-170C



HSP1600-200C

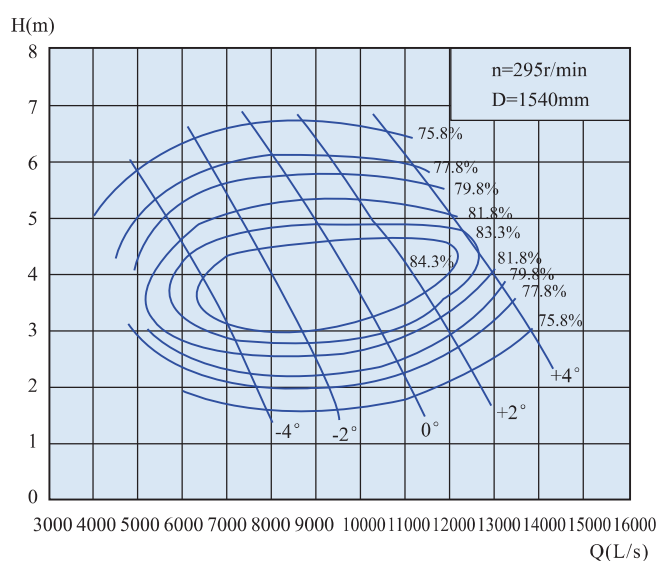


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	26848.8	7458	3.04	245	293	560	75.9	1540
	24570	6825	4.62		364.3		84.9	
	17337.6	4816	7.8		485.5		75.9	
-4°	31109	8641.4	2.94		328.4	630	75.9	
	26551.4	7375.4	5.67		477.6		85.9	
	19022	5283.9	8.28		565.5		75.9	
-2°	34972.6	9714.6	3.04		381.7	710	75.9	
	30217.3	8393.7	5.56		533		85.9	
	20904.5	5806.8	8.67		650.7		75.9	
0°	37647.7	10457.7	3.33		450.1	800	75.9	
	33090.5	9191.8	5.77		598.7		86.9	
	22984.9	6384.7	9		742.7		75.9	
$+2^\circ$	40223.5	11173.2	3.82		551.7	900	75.9	
	35368.9	9824.7	6.16		691.2		85.9	
	25065.4	6966	9.26		833.3		75.9	
$+4^\circ$	42799.3	11888.7	4.29		659.2	1000	75.9	
	36161.6	10044.9	6.97		809		84.9	
	27344.2	7595.6	9.25		908.1		75.9	

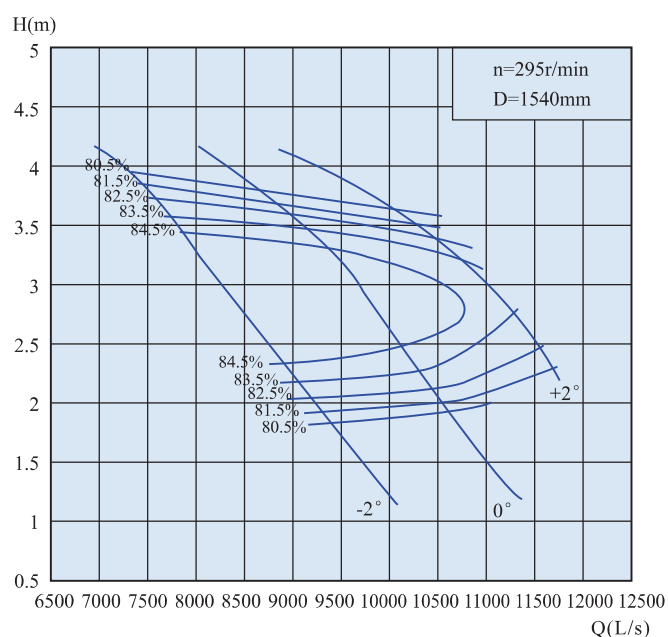
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	26353.4	7320.4	3.49	295	302	450	83	1540
	24768.4	6880.1	4.4		351		84.6	
	22291.6	6192.1	5.78		423		83	
-4°	30118.3	8366.2	3.2		316.4	560	83	
	27740.5	7705.7	4.47		392.5		86.1	
	24223.3	6728.7	6.27		498.6		83	
-2°	32793.1	9109.2	3.11		334.8	630	83	
	30217.3	8393.7	4.59		435.9		86.7	
	25957.1	7210.3	6.58		560.8		83	
0°	35368.9	9824.7	3.21		372.7	710	83	
	32694.1	9081.7	4.58		469		87	
	27889.2	7747	6.82		624.5		83	
$+2^\circ$	37647.7	10457.7	3.46		427.7	800	83	
	34675.6	9632.1	4.83		521.6		87.5	
	30118.3	8366.2	6.84		676.4		83	
$+4^\circ$	39629.2	11008.1	3.8		494.4	800	83	
	37152.4	10320.1	4.85		563.1		87.2	
	33189.5	9219.3	6.54		712.6		83	

HSP Curve and specification

HSP1600-250C



HSP1600-320C

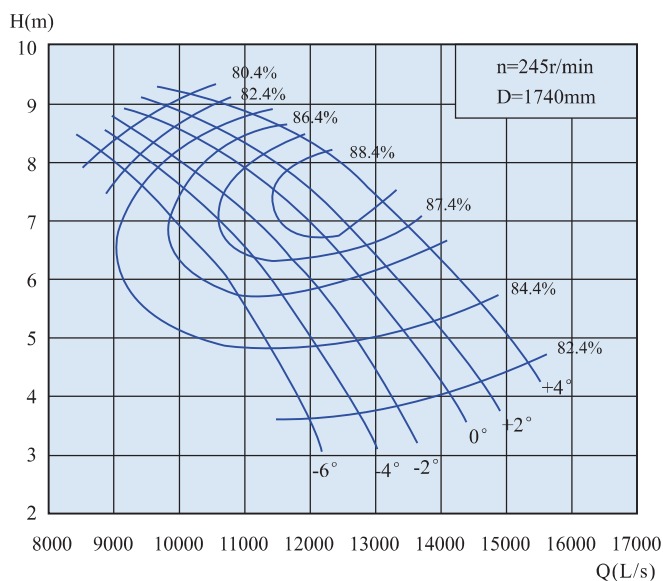


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	26947.8	7485.5	2.23	295	205.2	400	79.8	1540
	24570	6825	3.3		262.1		84.3	
	19616.4	5449	5.38		369.6		77.8	
-2°	32991.1	9164.2	2.21		249	560	79.8	
	30415.3	8448.7	3.42		334.7		84.7	
	23975.6	6659.9	5.82		488.7		77.8	
0°	38935.8	10815.5	2.49		331.1	710	79.8	
	35864.3	9962.3	3.77		431.9		85.3	
	28830.2	8008.4	6.11		617		77.8	
+2°	43295	12026.4	2.94		434.7	800	79.8	
	39827.2	11063.1	3.9		499.7		84.7	
	33387.5	9274.3	6.11		714.5		77.8	
+4°	47257.9	13127.2	3.77		608.4	900	79.8	
	45276.5	12576.8	4.32		637.6		83.6	
	40421.9	11228.3	5.9		835.3		77.8	

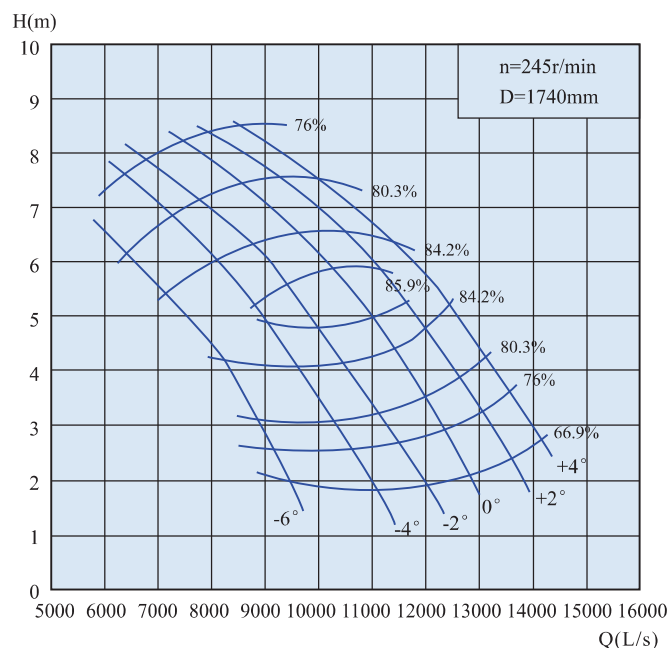
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	33550.2	9319.5	1.92	295	215.1	400	81.6	1540
	30712.7	8531.3	2.72		264.4		84.1	
	26896	7471.2	3.85		345.8		81.6	
0°	37918.1	10532.8	1.99		252	450	81.6	
	35666.3	9907.3	2.73		311.8		85.1	
	31770.7	8825.2	3.69		391.5		81.6	
+2°	42017.8	11671.6	2.29		321.3	500	81.6	
	39827.2	11063.1	2.94		381.7		83.6	
	36897.8	10249.4	3.52		433.7		81.6	

HSP Curve and specification

HSP1800-140



HSP1800-170



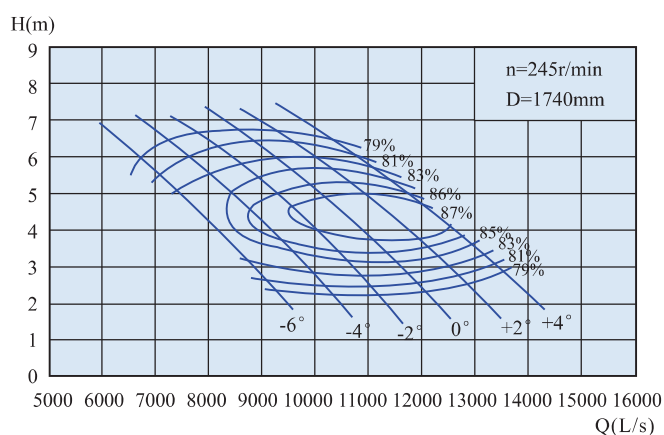
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	42725.5	11868.2	3.6	245	508.7	1000	82.4	1740
	37978.2	10549.5	6.34		759.4		86.4	
	31450.7	8736.3	8.16		869.8		80.4	
-4°	45692.6	12692.4	3.7		559.1	11000	82.4	
	38927.5	10813.2	6.72		813.7		87.6	
	32637.6	9066	8.53		943.6		80.4	
-2°	48066.1	13351.7	3.84		610.4	1200	82.4	
	40945.3	11373.7	7.01		890.8		87.8	
	33349.7	9263.8	8.64		976.6		80.4	
0°	50440	14011.1	4.13		688.9	1300	82.4	
	42606.7	11835.2	7.32		956		88.9	
	34180.6	9494.6	8.93		1034.5		80.4	
+2°	52220.2	14505.6	4.32		746	1400	82.4	
	43674.8	12131.9	7.4		986.2		89.3	
	34536.6	9593.5	9.03		1057		80.4	
+4°	54830.9	15230.8	4.71		854.1	1500	82.4	
	45336.6	12593.5	7.88		1101.3		88.4	
	36672.8	10186.9	9.22		1146		80.4	

Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	32162.8	8934.1	2.68	245	308.7	560	76.1	1740
	29433.2	8175.9	4.07		383.6		85.1	
	20769.5	5769.3	6.87		510.9		76.1	
-4°	37266.1	10351.7	2.59		345.6	630	76.1	
	31806.7	8835.2	4.99		502.3		86.1	
	22786.9	6329.7	7.29		594.8		76.1	
-2°	41894.6	11637.4	2.68		402	710	76.1	
	36198	10055	4.9		561.4		86.1	
	25042	6956.1	7.64		685.1		76.1	
0°	45099	12527.5	2.93		473.2	900	76.1	
	39639.6	11011	5.08		630		87.1	
	27534.2	7648.4	7.92		780.9		76.1	
+2°	48184.9	13384.7	3.36		579.7	1000	76.1	
	42369.5	11769.3	5.43		728.1		86.1	
	30026.5	8340.7	8.15		876.3		76.1	
+4°	51270.5	14241.8	3.77		692.1	1100	76.1	
	43318.8	12033	6.14		851.7		85.1	
	32756	9098.9	8.14		954.8		76.1	

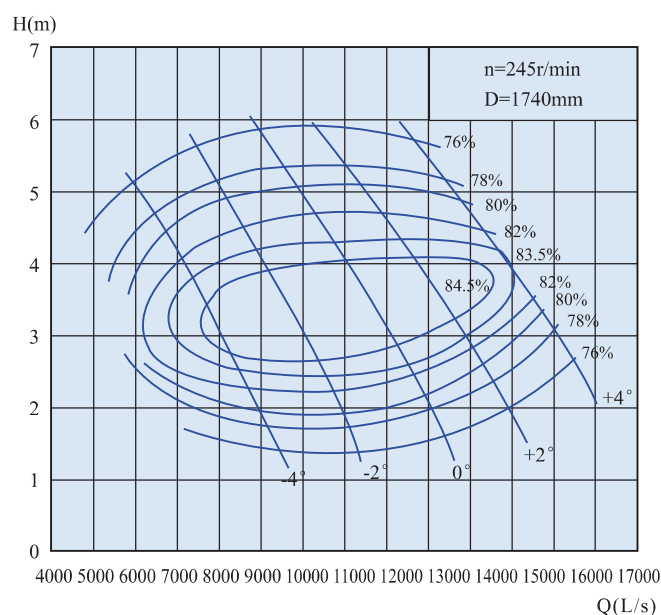
HSP Curve and specification

HSP Curve and specification

HSP1800-200



HSP1800-250



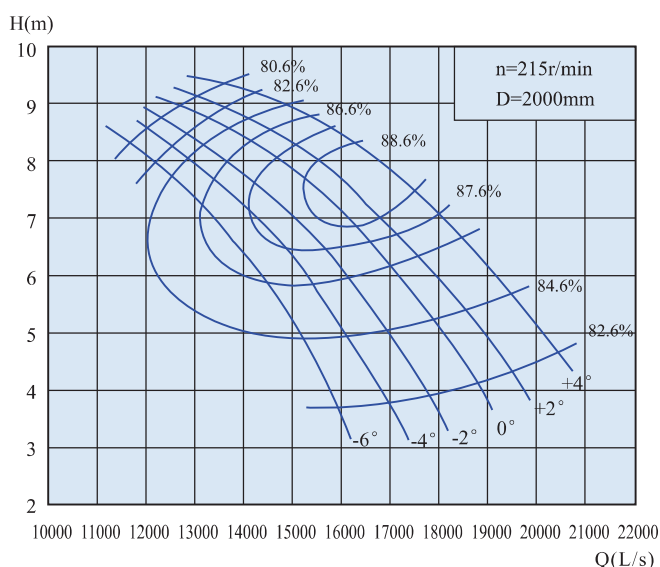
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	31569.5	8769.3	3.07	245	317.8	500	83.1	1740
	29670.5	8241.8	3.87		369.4		84.7	
	26703.4	7417.6	5.09		445.7		83.1	
-4°	36079.2	10022	2.81		332.5	560	83.1	
	33230.9	9230.8	3.94		413.9		86.2	
	29017.8	8060.5	5.52		525.3		83.1	
-2°	39283.6	10912.1	2.74		353	630	83.1	
	36198	10055	4.04		459.1		86.8	
	31094.6	8637.4	5.79		590.4		83.1	
0°	42369.5	11769.3	2.82		391.8	710	83.1	
	39165.1	10879.2	4.03		493.8		87.1	
	33409.1	9280.3	6		657.3		83.1	
+2°	45099	12527.5	3.04		449.6	800	83.1	
	41538.6	11538.5	4.25		549.2		87.6	
	36079.2	10022	6.02		712.2		83.1	
+4°	47472.8	13186.9	3.34		519.9		83.1	
	44505.7	12362.7	4.27		593.2		87.3	
	39758.4	11044	5.76		751		83.1	

Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	32281.6	8967.1	1.96	245	215.5	450	80	1740
	29433.2	8175.9	2.91		276.2		84.5	
	23499	6527.5	4.73		388.3		78	
-2°	39521.2	10978.1	1.95		262.5	560	80	
	36435.2	10120.9	3.02		353.2		84.9	
	28721.2	7978.1	5.13		514.7		78	
0°	46642	12956.1	2.19		347.9	710	80	
	42962.8	11934.1	3.32		454.6		85.5	
	34536.6	9593.5	5.38		649.1		78	
+2°	51864.1	14406.7	2.59		457.6	800	80	
	47710.1	13252.8	3.44		526.8		84.9	
	39995.6	11109.9	5.38		751.7		78	
+4°	56611.4	15725.4	3.32		640.2	900	80	
	54237.6	15066	3.8		670.2		83.8	
	48422.2	13450.6	5.5		879.7		78	

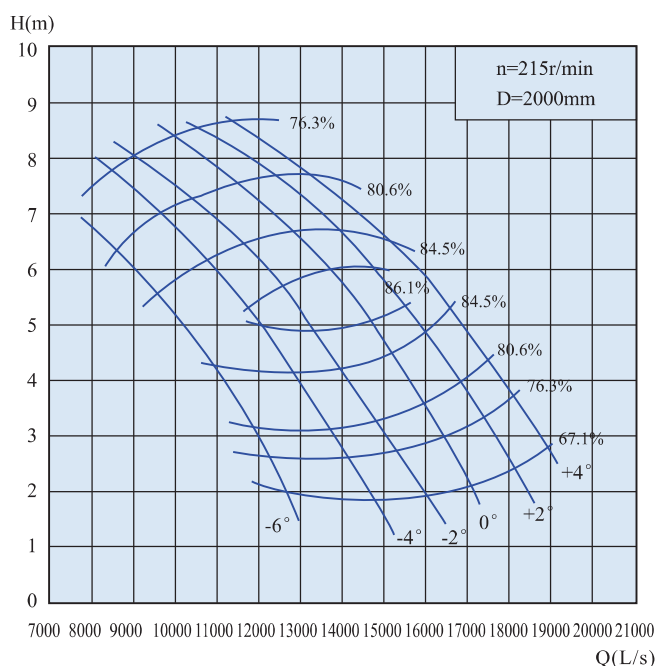
HSP Curve and specification

HSP Curve and specification

HSP2000-140



HSP2000-170

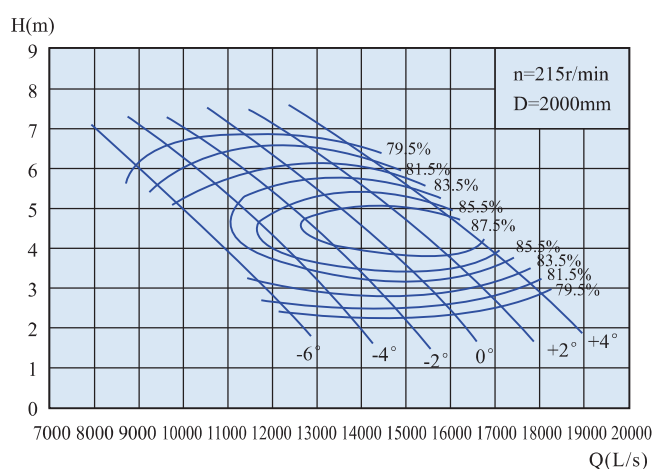


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	56938	15816.1	3.66	215	686.7	1100	82.7	2000
	50611.3	14058.7	6.45		1026		86.7	
	46080	12800	7.6		1086		82.6	
-4°	60891.8	16914.4	3.76		754.4	1200	82.7	
	51876.7	14410.2	6.84		1100		87.9	
	46440.3	12900.1	8.0		1144		86.6	
-2°	64055.2	17793.1	3.91		825.3	1300	82.7	
	54565.6	15157.1	7.13		1203.4		88.1	
	44082.2	12245.3	8.2		1113.5		86.6	
0°	67218.5	18671.8	4.2		930.2	1400	82.7	
	56779.9	15772.2	7.45		1292.3		89.2	
	50760.1	14100	8.0		1251.4		80.7	
+2°	69590.9	19330.8	4.4		1008.9	1500	82.7	
	58203.4	16167.6	7.52		1331.1		89.6	
	54000	15000	8.2		1358		87	
+4°	73070.3	20297.3	4.79		1153.3		82.7	
	60417.4	16782.6	8.01		1486.7		88.7	
	48871.8	15200	8.6		1443.6		80.7	

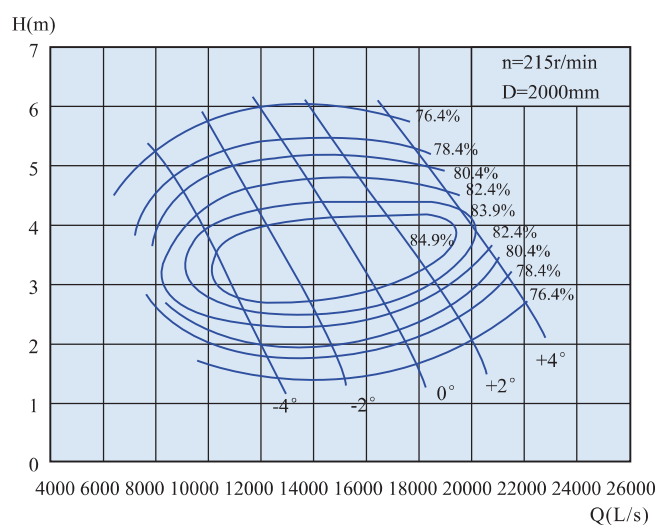
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	42861.6	11906	2.73	215	417.4	800	76.4	2000
	39223.8	10895.5	4.14		518.2		85.4	
	27678.2	7688.4	6.99		690.1		76.4	
-4°	49662.4	13795.1	2.64		467.6	900	76.4	
	42387.1	11774.2	5.08		679.1		86.4	
	30366.7	8435.2	7.42		803.7		76.4	
-2°	55831	15508.6	2.73		543.6	1000	76.4	
	48238.9	13399.7	4.98		757.7		86.4	
	33372	9270	7.77		924.9		76.4	
0°	60101.3	16694.8	2.98		638.8	1200	76.4	
	52825.7	14673.8	5.17		851.5		87.4	
	36693.4	10192.6	8.06		1054.9		76.4	
+2°	64213.2	17837	3.42		783.3	1250	76.4	
	56463.5	15684.3	5.52		983		86.4	
	40014.7	11115.2	8.3		1184.6		76.4	
+4°	68325.5	18979.3	3.84		935.8	1300	76.4	
	57728.9	16035.8	6.24		1149.4		85.4	
	43652.5	12125.7	8.29		1290.7		76.4	

HSP Curve and specification

HSP2000-200



HSP2000-250

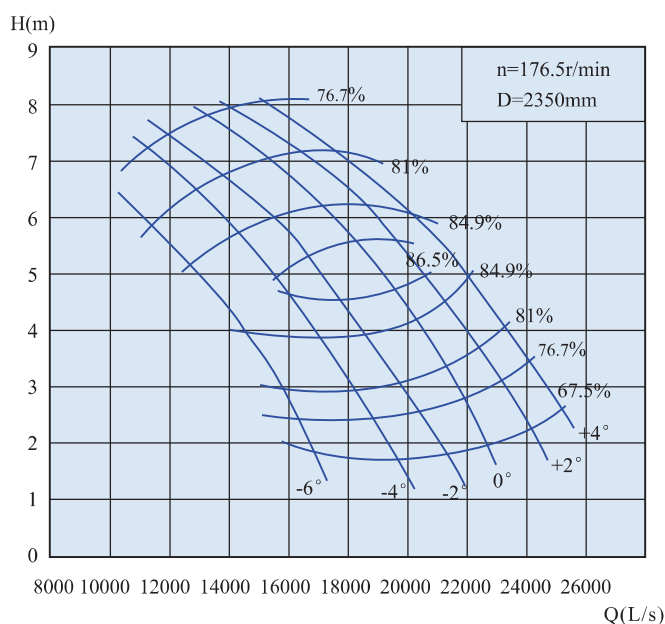


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	42070.7	11686.3	3.13	215	429.7	710	83.5	2000
	39540.2	10983.4	3.94		498.9		85.1	
	35586.4	9885.1	5.18		601.6		83.5	
-4°	48080.9	13355.8	2.86		448.8	800	83.5	
	44285	12301.4	4.01		558.8		86.6	
	38670.5	10741.8	5.62		709.2		83.5	
-2°	52351.2	14542	2.78		475	900	83.5	
	48238.9	13399.7	4.11		619.6		87.2	
	41438.2	11510.6	5.89		796.5		83.5	
0°	56463.5	15684.3	2.89		528.8	1000	83.5	
	52193.2	14498.1	4.1		666.4		87.5	
	44522.3	12367.3	6.11		887.8		83.5	
+2°	60101.3	16694.8	3.1		608	1100	83.5	
	55356.5	15376.8	4.33		742.2		88	
	48080.9	13355.8	6.13		961.9		83.5	
+4°	63264.2	17573.4	3.4		702		83.5	
	59310.4	16475.1	4.35		801.7		87.7	
	52984.1	14717.8	5.86		1013.3		83.5	

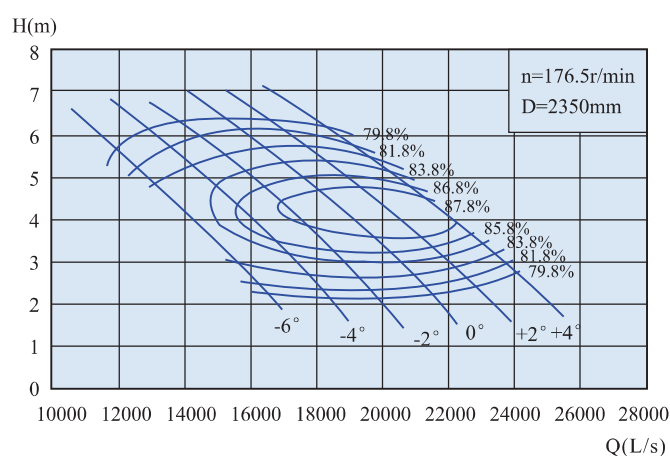
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	43019.6	11949.9	1.99	215	290.2	560	80.4	2000
	39223.8	10895.5	2.96		372.6		84.9	
	31316	8698.9	4.82		524.6		78.4	
-2°	52667.6	14629.9	1.98		353.4	800	80.4	
	48555.4	13487.6	3.07		476.2		85.3	
	38274.8	10631.9	5.22		694.4		78.4	
0°	62157.2	17265.9	2.23		469.8	1000	80.4	
	57254.4	15094	3.38		613.9		85.9	
	46024.9	12784.7	5.47		875		78.4	
+2°	69116.4	19199	2.64		618.4	1100	80.4	
	63580.7	17661.3	3.5		710.9		85.3	
	53300.2	14805.6	5.47		1013.4		78.4	
+4°	75442.7	20956.3	3.38		864.3	1200	80.4	
	72279.7	20077.7	3.87		905.3		84.2	
	64529.6	17924.9	5.29		1186.5		78.4	

HSP Curve and specification

HSP2400-170



HSP2400-200

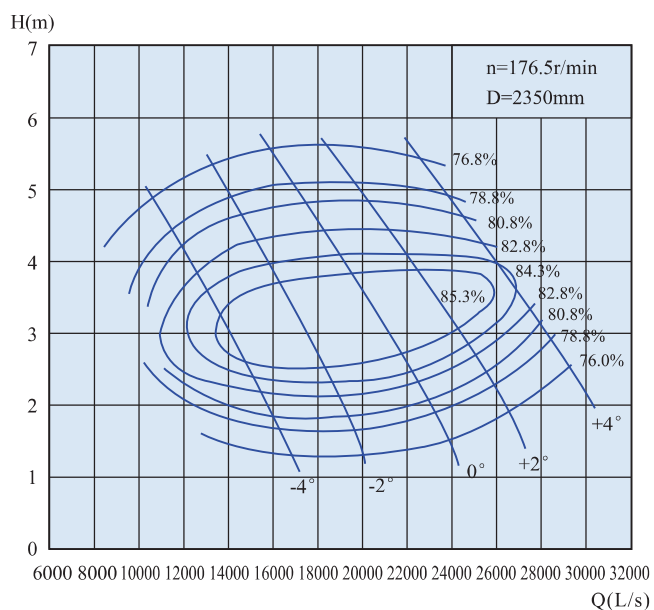


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	57080.5	15855.7	2.54	176.5	514.4	900	76.8	2350
	52236	14510	3.85		638.7		85.8	
	36860	10238.9	6.5		850.1		76.8	
-4°	66137.8	18371.6	2.45		574.9	1100	76.8	
	56448.7	15680.2	4.73		838.2		86.8	
	40441	11233.6	6.9		990.1		76.8	
-2°	74352.2	20653.4	2.54		670.1	1200	76.8	
	64242	17845	4.64		935.8		86.8	
	44442.7	12345.2	7.23		1140.1		76.8	
0°	80039.2	22233.1	2.77		786.7	1350	76.8	
	70350.1	19541.7	4.81		1050.2		87.8	
	48866	13573.9	7.5		1300.4		76.8	
+2°	85515.5	23754.3	3.18		964.9	1400	76.8	
	75194.6	20887.4	5.14		1213.4		86.8	
	53200.4	16200	7		1345.6		81.1	
+4°	90991.8	25275.5	3.57		1152.6	1500	76.8	
	76879.8	21355.5	5.81		1418.6		85.8	
	58133.9	17500.3	7.1		1453.3		81.1	

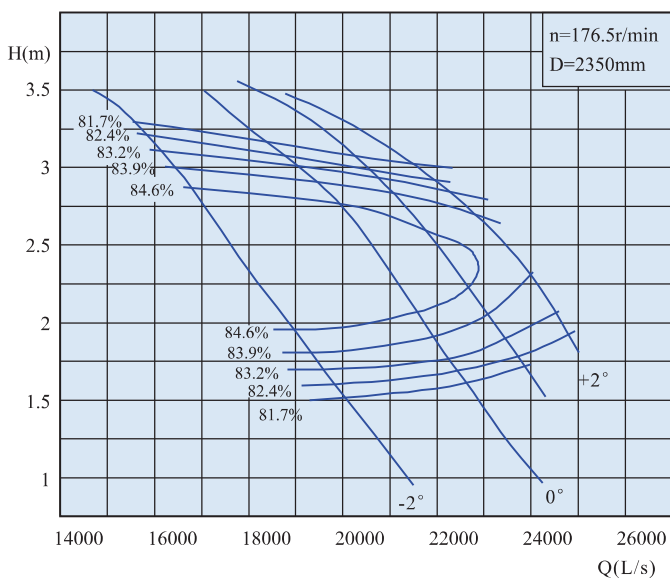
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-6°	56027.5	15563.2	2.91	176.5	530.2	800	83.8	2350
	52657.2	14627	3.66		615		85.4	
	47391.5	13164.3	4.82		742.8		83.8	
-4°	64031.4	17786.5	2.66		553.9	900	83.8	
	58976.3	16382.3	3.73		689.8		86.9	
	51498.7	14305.2	5.23		875.8		83.8	
-2°	69718.3	19366.2	2.59		587.2	1100	83.8	
	64242	17845	3.83		766.3		87.5	
	55184.8	15329.1	5.48		983.4		83.8	
0°	75194.6	20887.4	2.67		652.9	1150	83.8	
	69507.7	19307.7	3.82		824.1		87.8	
	59292.4	16470.1	5.68		1095.1		83.8	
+2°	80039.2	22233.1	2.88		749.6	1200	83.8	
	73720.4	20477.9	4.03		916.9		88.3	
	64031.4	17786.5	5.7		1186.8		83.8	
+4°	84251.9	23403.3	3.16		865.7	1300	83.8	
	78986.2	21940.6	4.05		990.6		88	
	70560.7	19600.2	5.46		1252.8		83.8	

HSP Curve and specification

HSP2400-250



HSP2400-320

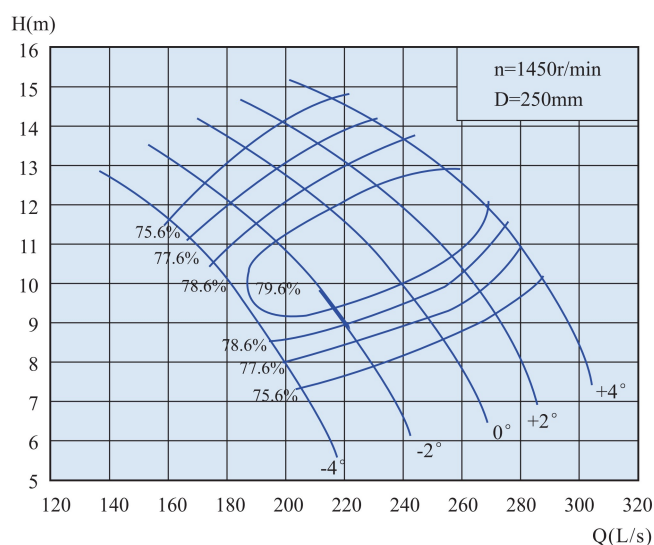


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	57291.1	15914.2	1.85	176.5	357.4	560	80.8	2350
	52236	14510	2.75		458.9		85.3	
	41704.6	11584.6	4.48		646.1		78.8	
-2°	70139.5	19483.2	1.85		437.6	800	80.8	
	64663.2	17962	2.85		586		85.7	
	50972.4	14159	4.85		854.9		78.8	
0°	82777.3	22993.7	2.07		577.9	1000	80.8	
	76248	21180	3.15		758.4		86.3	
	61293.2	17025.9	5.09		1078.9		78.8	
+2°	92045.2	25568.1	2.45		760.5	1100	80.8	
	8673.1	23520.3	3.25		875		85.7	
	70982.3	19717.3	5.09		1249.4		78.8	
+4°	100470.2	27908.4	3.15		1067.3	1200	80.8	
	96257.5	26738.2	3.6		1116.2		84.6	
	85936.7	23871.3	4.92		1462.1		78.8	

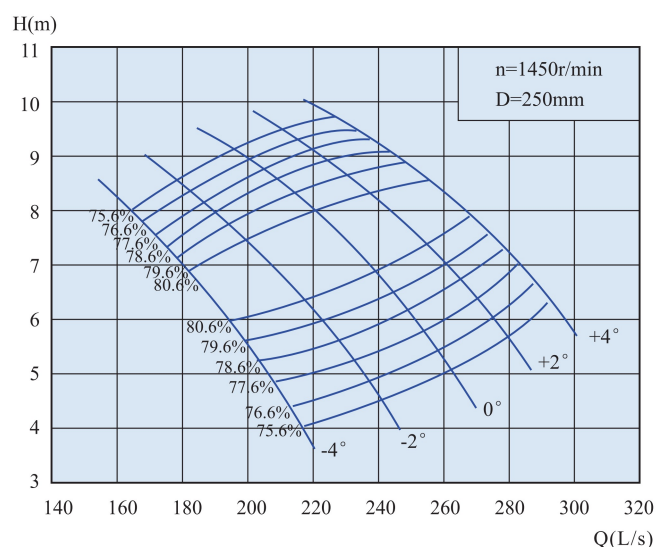
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-2°	57181.5	15884	3.21	176.5	602	710	83.2	2350
	65295.5	18138	2.27		468		86.2	
	71327.9	19813	1.6		374		83.2	
0°	67544.3	18762	3.07		679	800	83.2	
	75826.4	21063	2.27		549		85.6	
	80614.6	22393	1.65		436		83.2	
+2°	78445.1	21790	2.93		754	900	83.2	
	84673.3	23520	2.45		670		84.6	
	89330.4	24814	1.91		560		83.2	

HSM Curve and specification

HSM350-80



HSM350-100

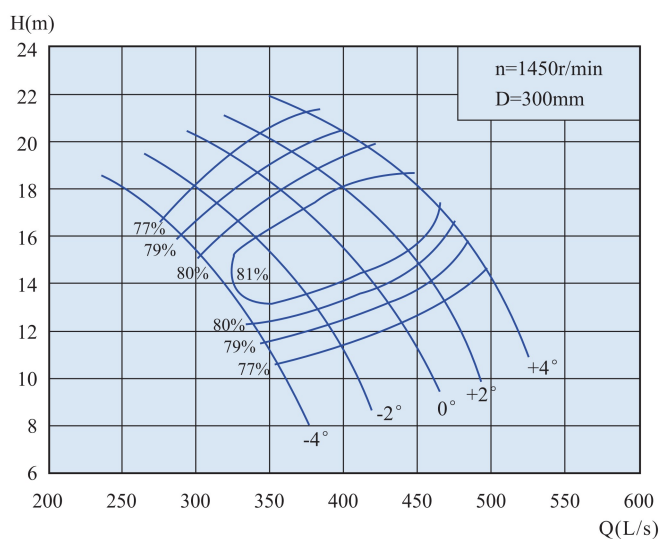


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	739.4	205.4	7.38	1450	19.7	30	75.6	250
	677.2	188.1	9.48		22		79.4	
	581.4	161.5	11.74		24.6		75.6	
-2°	829.1	230.3	7.96		23.8	37	75.6	
	749.9	208.3	10.28		26.4		79.6	
	625	173.6	12.66		28.5		75.6	
0°	910.4	252.9	8.59		28.2	45	75.6	
	812.5	225.7	11.18		31		79.9	
	672.8	186.9	13.59		33		75.6	
+2°	977	271.4	9.29		32.7	45	75.6	
	875.2	243.1	11.81		34.9		80.6	
	718.9	199.7	14.27		37		75.6	
+4°	1035.4	287.6	10.24		38.2	45	75.6	
	937.4	260.4	12.64		40.3		80.1	
	781.2	217	14.85		41.8		75.6	

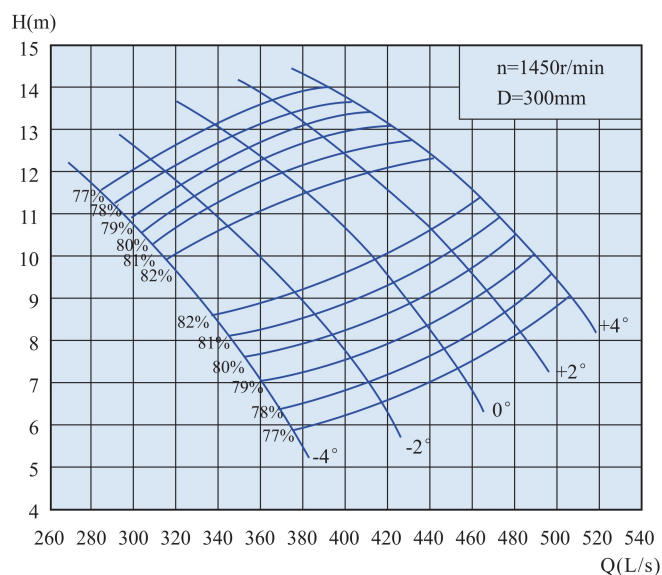
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	768.6	213.5	4.41	1450	12.1	18.5	76.6	250
	666.7	185.2	6.74		15.2		80.6	
	601.9	167.2	7.81		16.7		76.6	
-2°	854.3	237.3	4.86		14.8	22	76.6	
	729	202.5	7.29		17.9		80.7	
	654.1	181.7	8.33		19.4		76.6	
0°	931.3	258.7	5.42		18	30	76.6	
	812.5	225.7	7.64		21		80.6	
	720.7	200.2	8.92		22.9		76.6	
+2°	989.6	274.9	6.04		21.3	30	76.6	
	854.3	237.3	8.33		24.1		80.6	
	783.4	217.6	9.31		25.9		76.6	
+4°	1037.5	288.2	6.6		24.4	30	76.6	
	916.6	254.6	8.61		26.7		80.6	
	837.4	232.6	9.51		28.3		76.6	

HSM Curve and specification

HSM400-80



HSM400-100

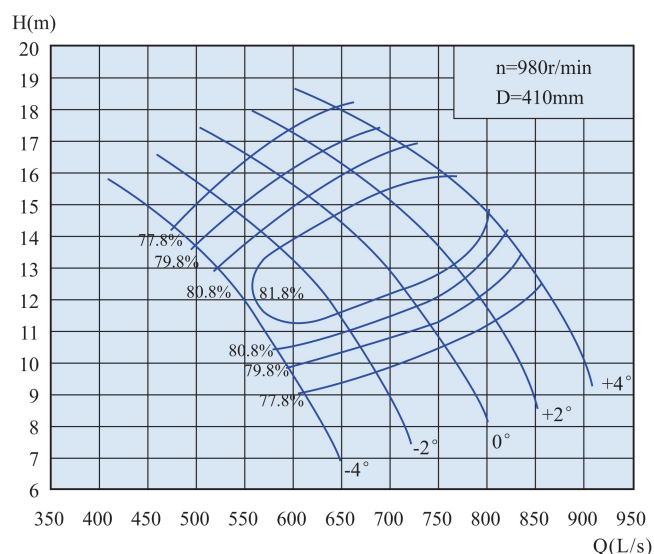


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	1278	355	10.63	1450	48.1	75	77	300
	1170	325	13.65		53.9		80.8	
	1004.4	279	16.9		60.1		77	
-2°	1432.8	398	11.46		58.1	90	77	
	1296	360	14.8		64.5		81	
	1080	300	18.23		69.7		77	
0°	1573.2	437	12.37		68.9	110	77	
	1404	390	16.1		75.8		81.3	
	1162.8	323	19.57		80.5		77	
+2°	1688.4	469	13.38		79.9		77	
	1512	420	17		85.4		82	
	1242	345	20.55		90.3		77	
+4°	1789.2	497	14.75		93.4		77	
	1620	450	18.2		98.6		81.5	
	1350	375	21.38		102.1		77	

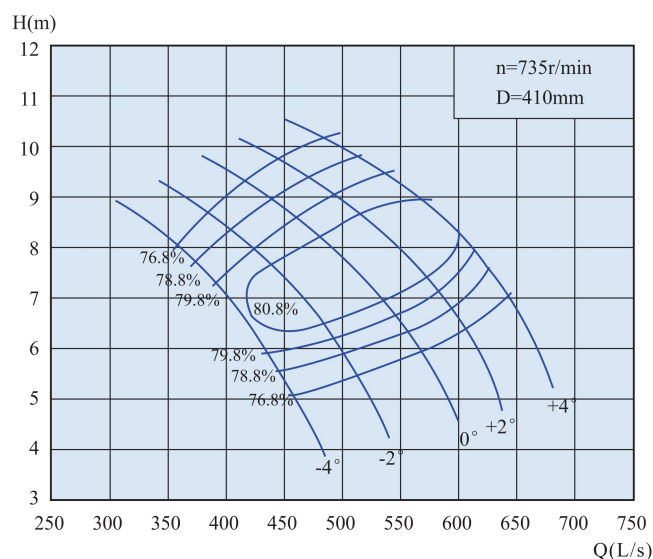
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	1328.4	369	6.35	1450	29.5	45	78	300
	1152	320	9.7		37.1		82	
	1040.4	289	11.25		40.9		78	
-2°	1476	410	7		36.1	55	78	
	1260	350	10.5		43.9		82.1	
	1130.4	314	12		47.4		78	
0°	1609.2	447	7.8		43.9	75	78	
	1404	390	11		51.3		82	
	1245.6	346	12.85		55.9		78	
+2°	1710	475	8.7		52		78	
	1476	410	12		58.9		82	
	1353.6	376	13.4		63.4		78	
+4°	1792.8	498	9.5		59.5		78	
	1584	440	12.4		65.3		82	
	1447.2	402	13.7		69.3		78	

HSM Curve and specification

HSM500-80



HSM500-80D

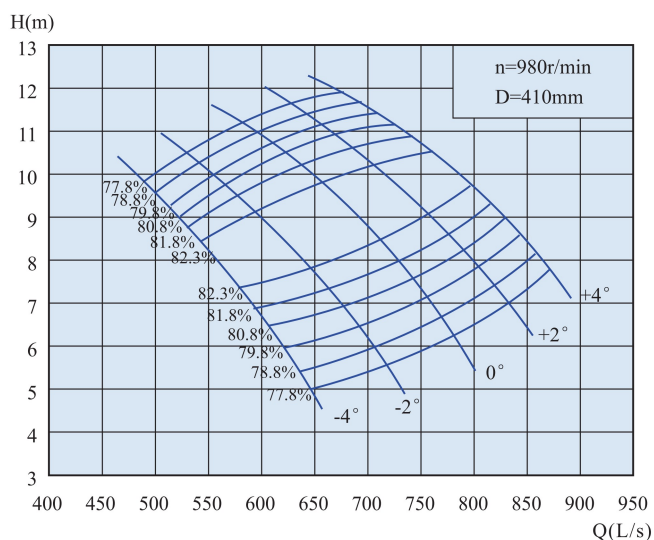


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	2205	612.5	9.07	980	70	90	77.8	410
	2018.5	560.7	11.65		78.5		81.6	
	1732.7	481.3	14.42		87.5		77.8	
-2°	2471.8	686.6	9.78		84.7	110	77.8	
	2236	621.1	12.63		94.1		81.8	
	1863.4	517.6	15.55		101.5		77.8	
0°	2714	753.9	10.55		100.3	132	77.8	
	2422.1	672.8	13.74		110.5		82.1	
	2005.9	557.2	16.7		117.3		77.8	
+2°	2912.8	809.1	11.42		116.5	160	77.8	
	2608.6	724.6	14.5		124.5		82.8	
	2142.7	595.2	17.53		131.6		77.8	
+4°	3086.6	857.4	12.58		136		77.8	
	2795	776.4	15.53		143.7		82.3	
	2329.2	647	18.24		148.8		77.8	

Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	1653.5	459.3	5.1	735	29.9	45	76.8	410
	1513.8	420.5	6.55		33.5		80.6	
	1299.6	361	8.11		37.4		76.8	
-2°	1854	515	5.5		36.2	55	76.8	
	1676.9	465.8	7.1		40.2		80.8	
	1397.5	388.2	8.75		43.4		76.8	
0°	2035.4	565.4	5.94		42.9	75	76.8	
	1816.6	504.6	7.73		47.2		81.1	
	1504.4	417.9	9.39		50.1		76.8	
+2°	2184.5	606.8	6.42		49.8		76.8	
	1956.2	543.4	8.16		53.2		81.8	
	1607	446.4	9.86		56.2		76.8	
+4°	2315.2	643.1	7.08		58.2		76.8	
	2096.3	582.3	8.73		61.3		81.3	
	1746.7	485.2	10.26		63.6		76.8	

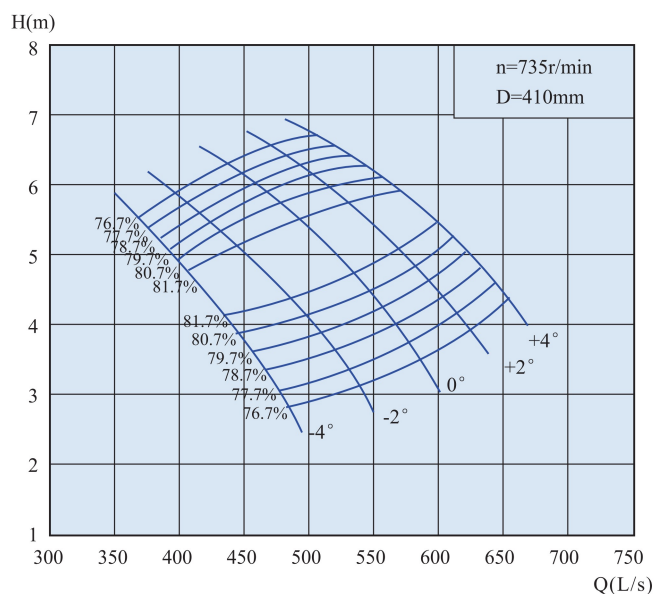
HSM Curve and specification

HSM500-100



Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	2291.8	636.6	5.42	980	43	75	78.8	410
	1987.6	552.1	8.28		54.2		82.8	
	1795	498.6	9.6		59.6		78.8	
-2°	2546.3	707.3	5.97		52.6	90	78.8	
	2173.7	603.8	8.96		64		82.9	
	1950.1	541.7	10.24		69.1		78.8	
0°	2776.3	771.2	6.65		63.8	110	78.8	
	2422.1	672.8	9.38		74.8		82.8	
	2148.8	596.9	10.96		81.4		78.8	
$+2^\circ$	2950.2	819.5	7.42		75.7	110	78.8	
	2546.3	707.3	10.24		85.8		82.8	
	2335.3	648.7	11.43		92.3		78.8	
$+4^\circ$	3093.1	859.2	8.11		86.7	110	78.8	
	2732.8	759.1	10.58		95.2		82.8	
	2496.6	693.5	11.69		100.9		78.8	

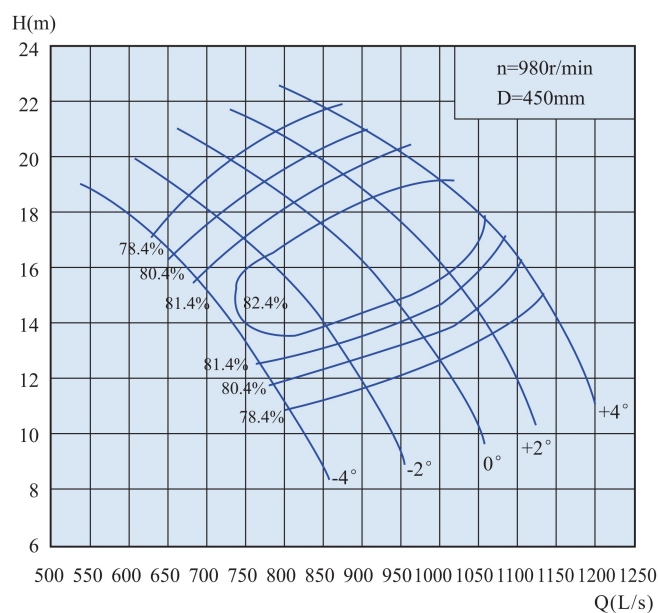
HSM500-100D



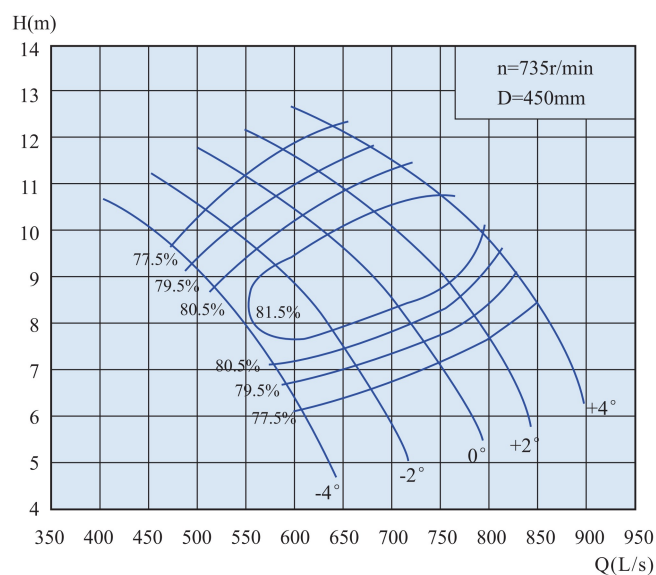
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	1719	477.5	3.05	735	18.4	30	77.8	410
	1490.8	414.1	4.66		23.1		81.8	
	1346	373.9	5.4		25.5		77.8	
-2°	1909.8	530.5	3.36		22.5	37	77.8	
	1630.4	452.9	5.04		27.3		81.9	
	1462.7	406.3	5.76		29.5		77.8	
0°	2082.2	578.4	3.74		27.3	37	77.8	
	1816.6	504.6	5.28		32		81.8	
	1611.7	447.7	6.17		34.8		77.8	
$+2^\circ$	2212.6	614.6	4.18		32.4	45	77.8	
	1909.8	530.5	5.76		36.6		81.8	
	1751.4	486.5	6.43		39.4		77.8	
$+4^\circ$	2319.8	644.4	4.56		37.1	45	77.8	
	2049.5	569.3	5.95		40.6		81.8	
	1872.7	520.2	6.57		43.1		77.8	

HSM Curve and specification

HSM600-80



HSM600-80D

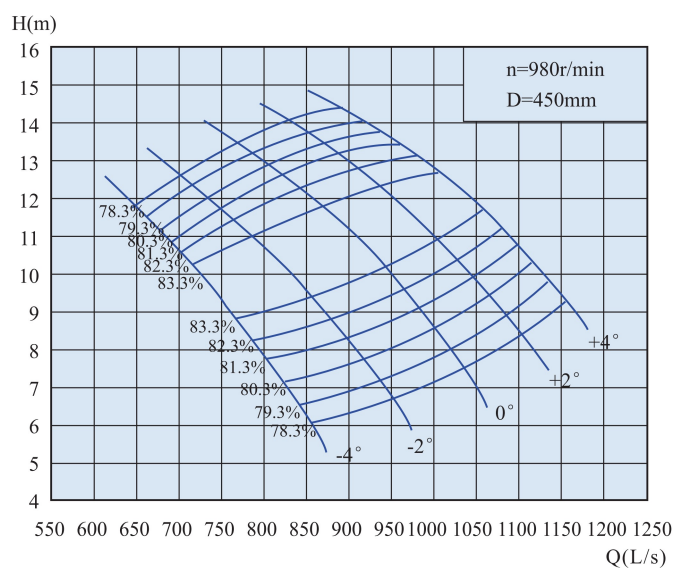


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	2915.3	809.8	10.93	980	110.8	160	78.4	450
	2668.7	741.3	14.03		124.1		82.2	
	2291	636.4	17.37		138.3		78.4	
-2°	3268.4	907.9	11.78		133.8	185	78.4	
	2956.3	821.2	15.21		148.7		82.4	
	2463.5	684.3	18.74		160.5		78.4	
0°	3588.5	996.8	12.71		158.5	200	78.4	
	3202.6	889.6	16.55		174.6		82.7	
	2652.5	736.8	20.11		185.4		78.4	
+2°	3851.3	1069.8	13.75		184.1	220	78.4	
	3448.8	958	17.47		196.9		83.4	
	2833.2	787	21.12		208		78.4	
+4°	4081.3	1133.7	15.16		215.1	250	78.4	
	3695.4	1026.5	18.71		227.3		82.9	
	3079.4	855.4	21.97		235.2		78.4	

Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	2186.3	607.3	6.15	735	47.3	75	77.5	450
	2001.6	556	7.89		52.9		81.3	
	1718.3	477.3	9.77		59		77.5	
-2°	2451.2	680.9	6.63		57.1	90	77.5	
	2217.2	615.9	8.56		63.5		81.5	
	1847.5	513.2	10.54		68.5		77.5	
0°	2691.4	747.6	7.15		67.7	110	77.5	
	2401.9	667.2	9.31		74.5		81.8	
	1989.4	552.6	11.31		79.1		77.5	
+2°	2888.6	802.4	7.74		78.6	110	77.5	
	2586.6	718.5	9.83		84		82.5	
	2124.7	590.2	11.88		88.8		77.5	
+4°	3061.1	850.3	8.53		91.8	110	77.5	
	2771.3	769.8	10.52		96.9		82	
	2309.4	641.5	12.36		100.4		77.5	

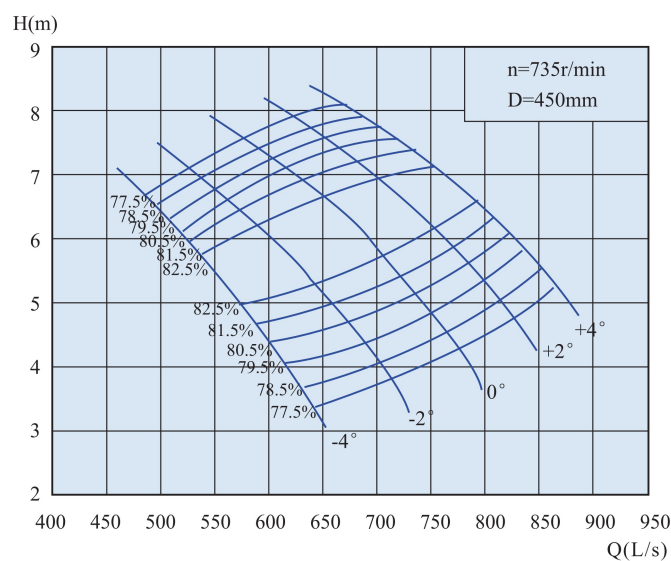
HSM Curve and specification

HSM600-100



Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	3030.1	841.7	6.53	980	67.9	110	75.6	450
	2627.6	729.9	9.97		85.6		79.4	
	2373.1	659.2	11.56		94.2		75.6	
-2°	3366.7	935.2	7.19		83.1	132	75.6	
	2874.2	798.4	10.79		101.2		79.6	
	2578.3	716.2	12.33		109.1		75.6	
0°	3670.6	1019.6	8.02		101	132	75.6	
	3202.6	889.6	11.31		118.3		79.9	
	2841.1	789.2	13.21		128.8		75.6	
+2°	3900.6	1083.5	8.94		119.7	160	75.6	
	3366.7	935.2	12.33		135.6		80.6	
	3087.7	857.7	13.77		145.9		75.6	
+4°	4089.6	1136	9.76		137	185	75.6	
	3613.3	1003.7	12.74		150.4		80.1	
	3301.2	917	14.08		159.5		75.6	

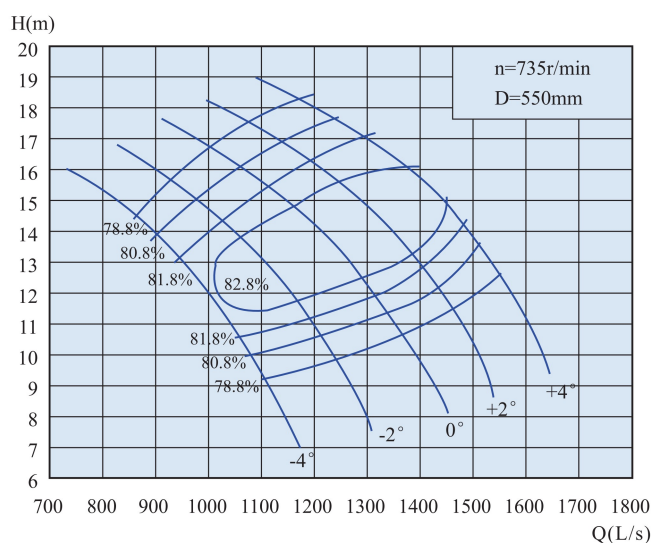
HSM600-100D



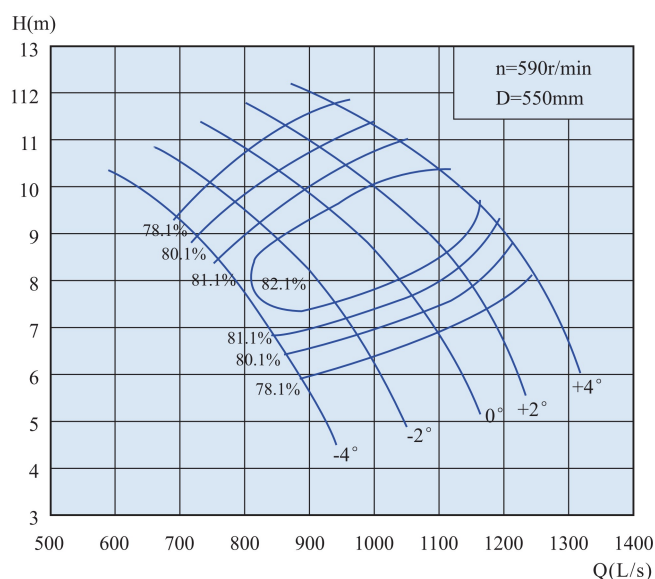
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	2272.7	631.3	3.67	735	29	185	78.5	450
	1970.6	547.4	5.61		36.5		82.5	
	1779.8	494.4	6.5		40.2		78.5	
							78.5	
-2°	2525	701.4	4.05		35.5	200	82.6	
	2155.7	598.8	6.07		43.2		78.5	
	1933.9	537.2	6.94		46.6		78.5	
							82.5	
0°	2752.9	764.7	4.51		43.1	220	78.5	
	2401.9	667.2	6.36		50.5		78.5	
	2130.8	591.9	7.43		55		82.5	
							78.5	
+2°	2925.4	812.6	5.03		51.1	250	78.5	
	2525	701.4	6.94		57.9		82.5	
	2315.9	643.3	7.75		62.3		78.5	
+4°	3067.2	852	5.49		58.5	280		
	2709.7	752.7	7.17		64.2			
	2475.7	687.7	7.92		68.1			

HSM Curve and specification

HSM700-80



HSM700-80D

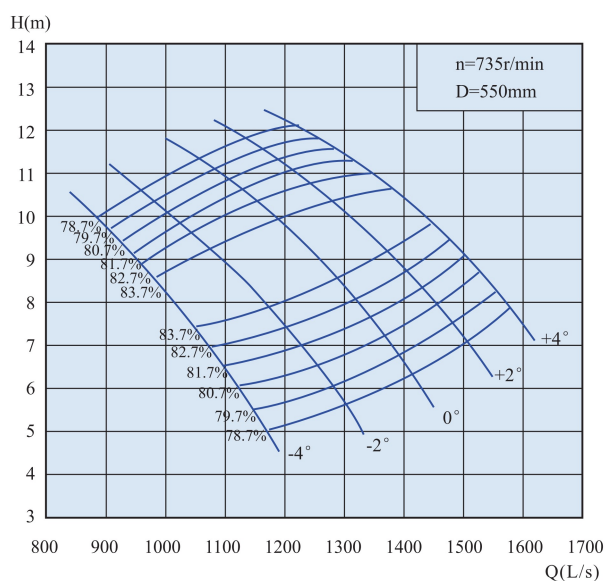


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	3991.7	1108.8	9.18	735	126.7	185	78.8	550
	3654.4	1015.1	11.79		142.1		82.6	
	3137.4	871.5	14.6		158.4		78.8	
-2°	4475.5	1243.2	9.9		153.2	200	78.8	
	4048.2	1124.5	12.78		170.3		82.8	
	3373.6	937.1	15.74		183.6		78.8	
0°	4914	1365	10.68		181.5	220	78.8	
	4385.5	1218.2	13.9		199.9		83.1	
	3632	1008.9	16.9		212.3		78.8	
+2°	5273.6	1464.9	11.56		210.8	250	78.8	
	4722.8	1311.9	14.68		225.5		83.8	
	3879.4	1077.6	17.75		238.1		78.8	
+4°	5586.6	1552.4	12.74		246.2	280	78.8	
	5060.2	1405.6	15.72		260.2		83.3	
	4216.7	1171.3	18.46		269.2		78.8	

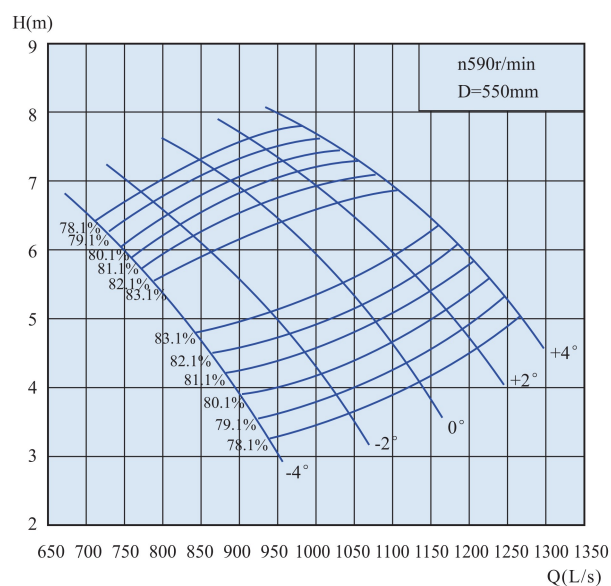
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	3204.4	890.1	5.92	590	66.2	90	78.1	550
	2933.6	814.9	7.6		74.2		81.9	
	2518.2	699.5	9.4		82.6		78.1	
-2°	3592.4	997.9	6.38		80	110	78.1	
	3249.4	902.6	8.24		88.9		82.1	
	2707.9	752.2	10.14		95.8		78.1	
0°	3944.5	1095.7	6.88		94.7	132	78.1	
	3520.4	977.9	8.96		104.3		82.4	
	2915.6	809.9	10.89		110.8		78.1	
+2°	4233.2	1175.9	7.45		110	132	78.1	
	3791.2	1053.1	9.46		117.6		83.1	
	3114	865	11.44		124.3		78.1	
+4°	4486	1246.1	8.21		128.5	160	78.1	
	4061.9	1128.3	10.13		135.7		82.6	
	3384.7	940.2	11.9		140.5		78.1	

HSM Curve and specification

HSM700-100



HSM700-100D

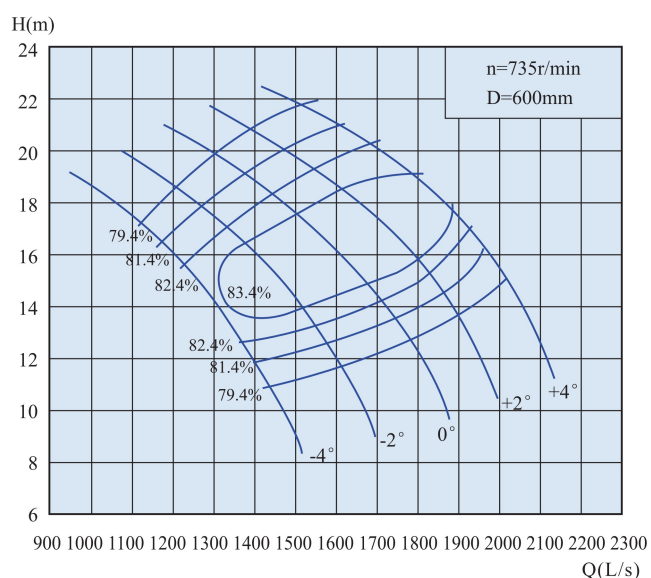


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	4149.4	1152.6	5.48	735	77.6	110	79.8	550
	3598.2	999.5	8.38		98.1		83.8	
	3249.7	902.7	9.72		107.9		79.8	
-2°	4610.2	1280.6	6.05		95.2	132	79.8	
	3935.5	1093.2	9.07		115.9		83.9	
	3530.9	980.8	10.36		124.9		79.8	
0°	5026.3	1396.2	6.74		115.7	160	79.8	
	4385.5	1218.2	9.5		135.5		83.8	
	3890.5	1080.7	11.1		147.5		79.8	
+2°	5341.3	1483.7	7.51		137	185	79.8	
	4610.2	1280.6	10.36		155.3		83.8	
	4227.8	1174.4	11.57		167		79.8	
+4°	5599.8	1555.5	8.2		156.8	200	79.8	
	4947.5	1374.3	10.71		172.3		83.8	
	4520.5	1255.7	11.83		182.6		79.8	

Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	3330.7	925.2	3.53	590	40.5	75	79.1	600
	2888.3	802.3	5.4		51.1		83.1	
	2608.6	724.6	6.26		56.3		79.1	
-2°	3700.8	1028	3.9		49.7	75	79.1	
	3159.4	877.6	5.84		60.4		83.2	
	2834.3	787.3	6.68		65.2		79.1	
0°	4034.9	1120.8	4.34		60.3	90	79.1	
	3520.4	977.9	6.12		70.7		83.1	
	3123	867.5	7.15		76.9		79.1	
+2°	4287.6	1191	4.84		71.5	90	79.1	
	3700.8	1028	6.68		81.1		83.1	
	3393.7	942.7	7.46		87.2		79.1	
+4°	4495	1248.6	5.29		81.9	110	79.1	
	3971.5	1103.2	6.9		89.9		83.1	
	3628.4	1007.9	7.62		95.2		79.1	

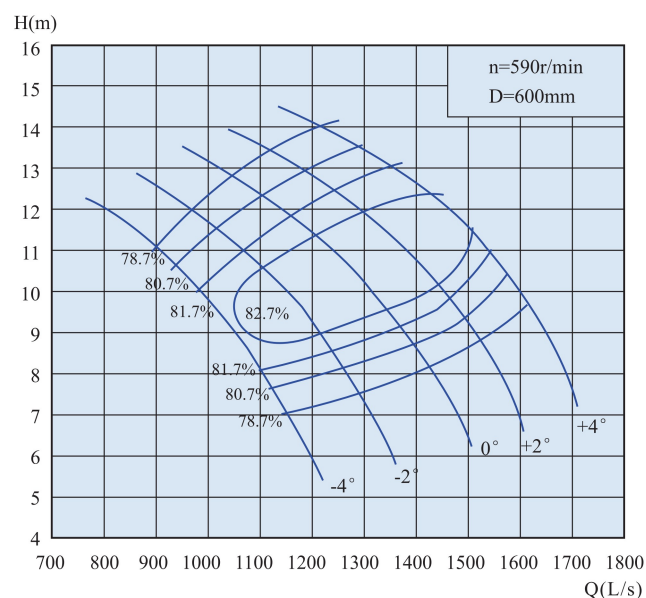
HSM Curve and specification

HSM800-80



Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	5182.6	1439.6	10.93	735	194.4	250	79.4	600
	4744.4	1317.9	14.03		218		83.2	
	4073	1131.4	17.37		242.8		79.4	
-2°	5810.4	1614	11.78		234.9	315	79.4	
	5255.6	1459.9	15.21		261.2		83.4	
	4379.8	1216.6	18.74		281.7		79.4	
0°	6379.6	1772.1	12.71		278.3	355	79.4	
	5693.4	1581.5	16.55		306.9		83.7	
	4715.3	1309.8	20.11		325.4		79.4	
+2°	6846.8	1901.9	13.75		323.1	400	79.4	
	6131.5	1703.2	17.47		345.8		84.4	
	5036.4	1399	21.12		365.1		79.4	
+4°	7255.4	2015.4	15.16		377.5	450	79.4	
	6569.3	1824.8	18.71		399.2		83.9	
	5474.5	1520.7	21.97		412.8		79.4	

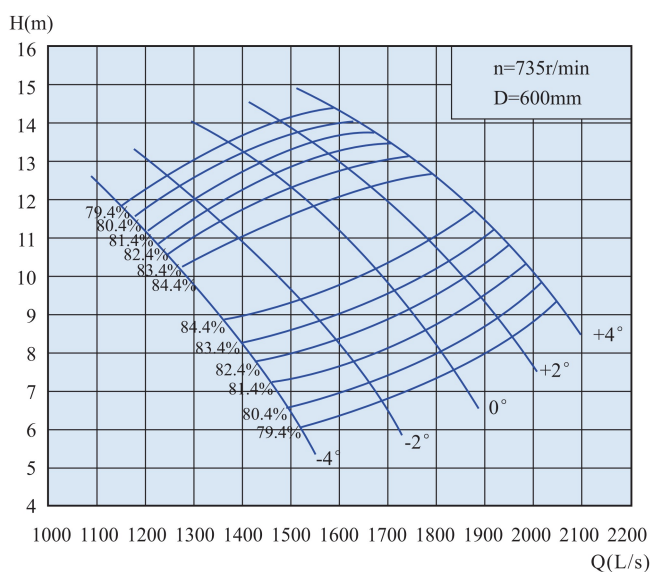
HSM800-80D



Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	4160.2	1155.6	7.04	590	101.4	132	78.7	600
	3808.4	1057.9	9.04		113.7		82.5	
	3269.5	908.2	11.19		126.7		78.7	
-2°	4664.2	1295.6	7.59		122.6	160	78.7	
	4218.8	1171.9	9.8		136.2		82.7	
	3515.8	976.6	12.07		146.9		78.7	
0°	5121	1422.5	8.19		145.2	185	78.7	
	4570.2	1269.5	10.66		159.9		83	
	3785	1051.4	12.96		169.9		78.7	
+2°	5496.1	1526.7	8.86		168.6	200	78.7	
	4921.9	1367.2	11.26		180.4		83.7	
	4042.8	1123	13.61		190.5		78.7	
+4°	5824.1	1617.8	9.77		197	220	78.7	
	5273.3	1464.8	12.05		208.1		83.2	
	4394.5	1220.7	14.16		215.5		78.7	

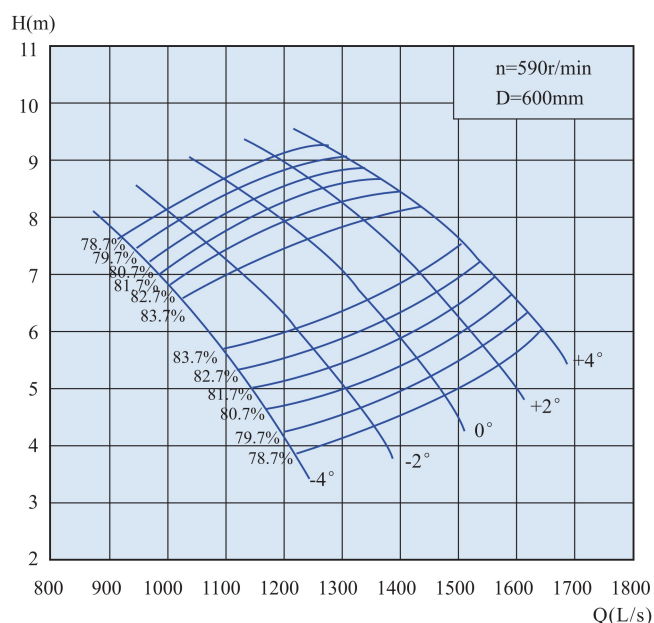
HSM Curve and specification

HSM800-100



Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	5387	1496.4	6.53	735	119.2		80.4	600
	4671.7	1297.7	9.97		150.4	185	84.4	
	4218.8	1171.9	11.56		165.3		80.4	
-2°	5985.4	1662.6	7.19		145.9		80.4	
	5109.5	1419.3	10.79		177.8	200	84.5	
	4583.9	1273.3	12.33		191.6		80.4	
0°	6525.7	1812.7	8.02		177.4		80.4	
	5693.4	1581.5	11.31		207.9	250	84.4	
	5051.2	1403.1	13.21		226.2		80.4	
$+2^\circ$	6934.3	1926.2	8.94		210.1		80.4	
	5985.4	1662.6	12.33		238.3	280	84.4	
	5488.9	1524.7	13.77		256.2		80.4	
$+4^\circ$	7270.2	2019.5	9.76		240.5		80.4	
	6423.5	1784.3	12.74		264.2	315	84.4	
	5868.7	1630.2	14.08		280.1		80.4	

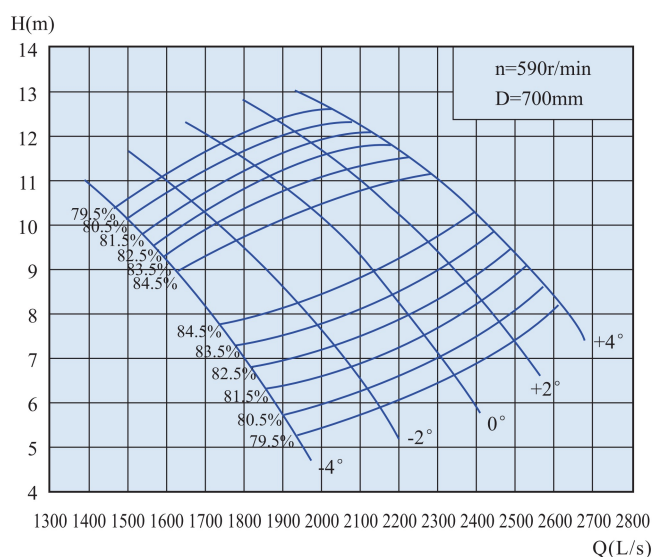
HSM800-100D



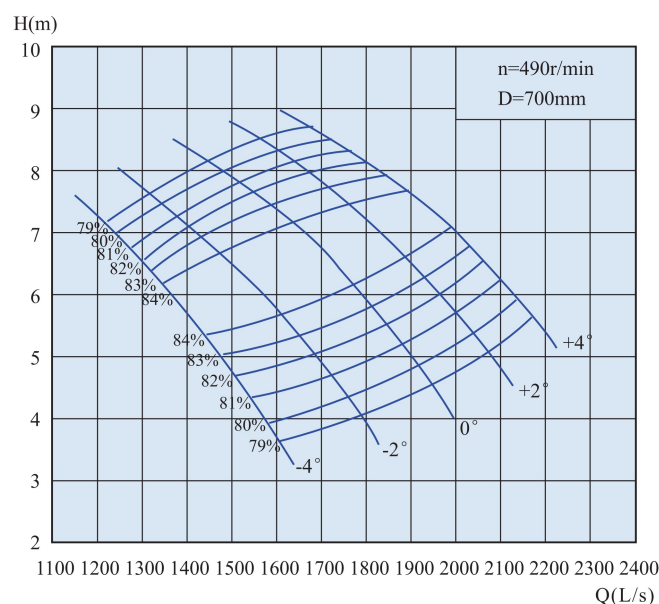
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	4324.3	1201.2	4.21	590	62.2		79.7	600
	3750.1	1041.7	6.42		78.4	90	83.7	
	3386.5	940.7	7.45		86.3		79.7	
-2°	4804.6	1334.6	4.64		76.2		79.7	
	4101.5	1139.3	6.95		92.7	110	83.8	
	3679.6	1022.1	7.95		100		79.7	
0°	5238.4	1455.1	5.17		92.6		79.7	
	4570.2	1269.5	7.28		108.3	132	83.7	
	4054.7	1126.3	8.51		118		79.7	
$+2^\circ$	5566.3	1546.2	5.76		109.6		79.7	
	4804.6	1334.6	7.95		124.4	160	83.7	
	4406	1223.9	8.87		133.6		79.7	
$+4^\circ$	5836	1621.1	6.29		125.5		79.7	
	5156.3	1432.3	8.21		137.8	160	83.7	
	4711	1308.6	9.07		146.1		79.7	

HSM Curve and specification

HSM900-100



HSM900-100D

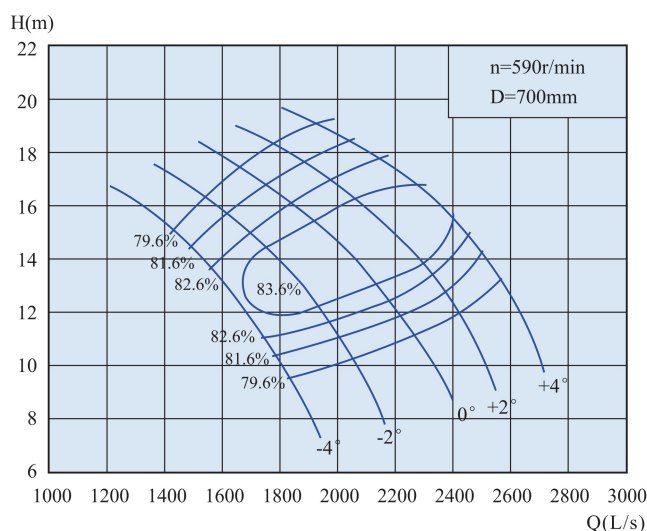


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	6866.6	1907.4	5.72	590	132.8	200	80.6	700
	5954.8	1654.1	8.74		167.6		84.6	
	5378	1493.9	10.14		184.4		80.6	
-2°	7629.5	2119.3	6.31		162.8	220	80.6	
	6513.1	1809.2	9.46		198.2		84.7	
	5843.2	1623.1	10.82		213.8		80.6	
0°	8318.2	2310.6	7.03		197.7	280	80.6	
	7257.2	2015.9	9.92		231.9		84.6	
	6438.6	1788.5	11.58		252.1		80.6	
$+2^\circ$	8839.1	2455.3	7.84		234.3	315	80.6	
	7629.5	2119.3	10.82		265.9		84.6	
	6997	1943.6	12.08		285.8		80.6	
$+4^\circ$	9267.1	2574.2	8.56		268.2	355	80.6	
	8187.8	2274.4	11.18		294.9		84.6	
	7480.8	2078	12.35		312.4		80.6	

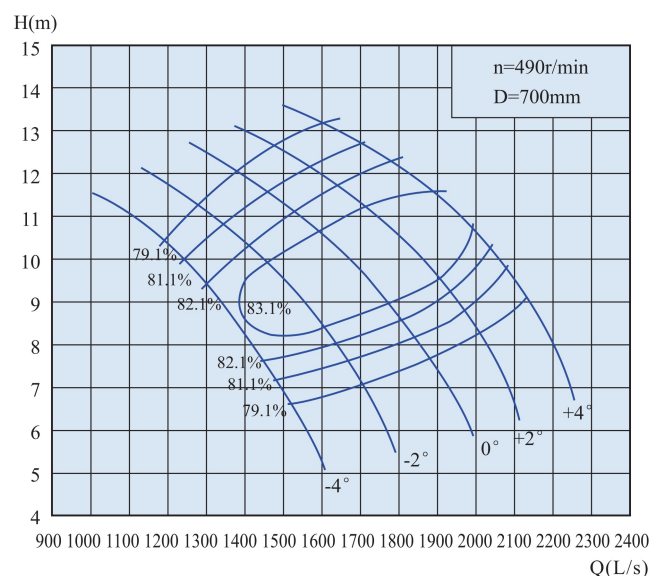
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	6606	1835	9.58	490	76.6	110	80.1	700
	6048	1680	12.3		96.6		84.1	
	5191.9	1442.2	15.23		106.2		80.1	
-2°	7406.3	2057.3	10.33		93.8	132	80.1	
	6699.2	1860.9	13.34		114.3		84.2	
	5582.5	1550.7	16.43		123.2		80.1	
0°	8132	2258.9	11.15		114	160	80.1	
	7257.2	2015.9	14.51		133.6		84.1	
	6010.6	1669.6	17.64		145.4		80.1	
$+2^\circ$	8727.5	2424.3	12.06		135.1	185	80.1	
	7815.6	2171	15.32		153.2		84.1	
	6419.9	1783.3	18.52		164.7		80.1	
$+4^\circ$	9248.4	2569	13.3		154.7	185	80.1	
	8374	2326.1	16.41		169.9		84.1	
	6978.2	1938.4	19.27		180.1		80.1	

HSM Curve and specification

HSM900-80



HSM900-80D

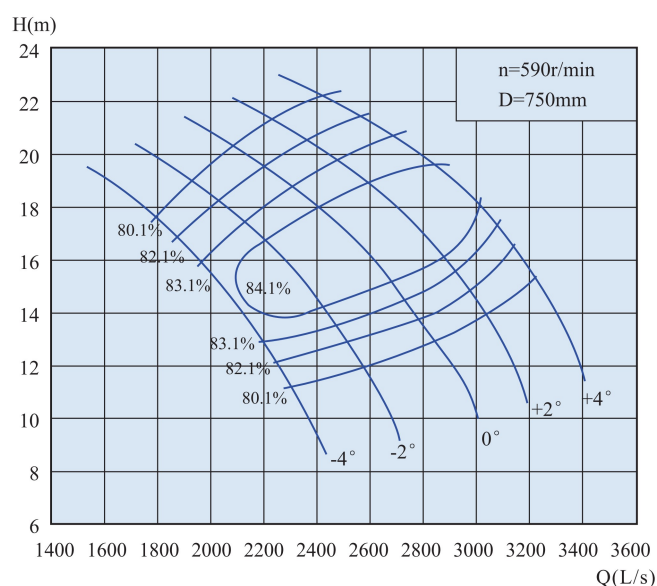


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	6606	1835	9.58	590	216.6		79.6	700
	6048	1680	12.3		243.1	280	83.4	
	5191.9	1442.2	15.23		270.7		79.6	
-2°	7406.3	2057.3	10.33		261.9		79.6	
	6699.2	1860.9	13.34		291.3	355	83.6	
	5582.5	1550.7	16.43		314		79.6	
0°	8132	2258.9	11.15		310.4		79.6	
	7257.2	2015.9	14.51		342	400	83.9	
	6010.6	1669.6	17.64		363		79.6	
$+2^\circ$	8727.5	2424.3	12.06		360.3		79.6	
	7815.6	2171	15.32		385.7	450	84.6	
	6419.9	1783.3	18.52		407		79.6	
$+4^\circ$	9248.4	2569	13.3		421.1		79.6	
	8374	2326.1	16.41		445.3	500	84.1	
	6978.2	1938.4	19.27		460.3		79.6	

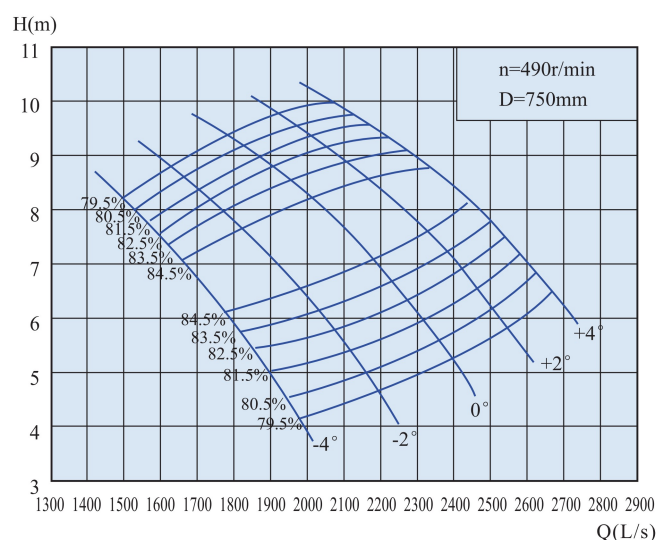
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	5486.4	1524	6.61	490	124.9		79.1	700
	5022.7	1395.2	8.49		140.2	160	82.9	
	4311.7	1197.7	10.51		156.1		79.1	
-2°	6151	1708.6	7.13		151.1		79.1	
	5563.8	1545.5	9.2		167.9	185	83.1	
	4636.4	1287.9	11.33		181		79.1	
0°	6753.6	1876	7.69		178.9		79.1	
	6027.5	1674.3	10.01		197.1	220	83.4	
	4991.8	1386.6	12.17		209.3		79.1	
$+2^\circ$	7248.2	2013.4	8.32		207.8		79.1	
	6491.2	1803.1	10.57		222.3	250	84.1	
	5332	1481.1	12.78		234.8		79.1	
$+4^\circ$	7681	2133.6	9.17		242.6		79.1	
	6954.5	1931.8	11.32		256.6	280	83.6	
	5795.6	1609.9	13.29		265.3		79.1	

HSM Curve and specification

HSM1000-80



HSM1000-80D

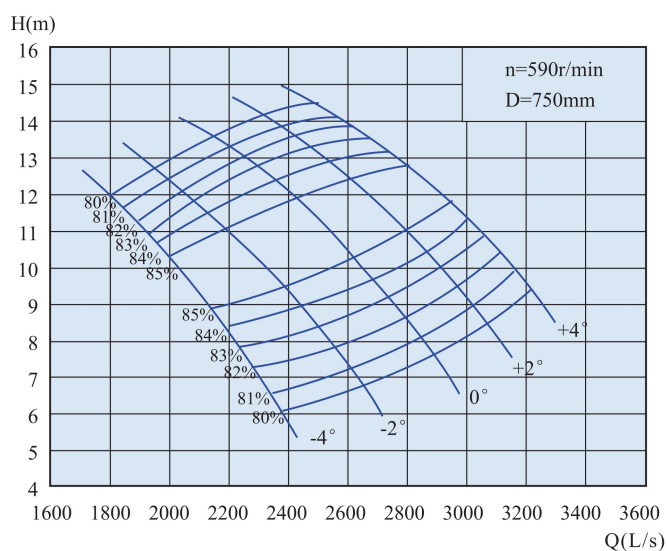


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	8288.6	2302.4	11.15	590	314.4	280	80.1	750
	7588.4	2107.9	14.31		352.7		83.9	
	6514.2	1809.5	17.72		392.7		80.1	
-2°	9292.7	2581.3	12.02		380	315	80.1	
	8405.6	2334.9	15.52		422.7		84.1	
	7004.5	1945.7	19.12		455.6		80.1	
0°	10203.5	2834.3	12.97		450.2	400	80.1	
	9105.8	2529.4	16.88		496.3		84.1	
	7541.6	2094.9	20.52		526.5		80.1	
+2°	10950.5	3041.8	14.03		522.7	450	80.1	
	9806.4	2724	17.83		559.9		85.1	
	8055.4	2237.6	21.55		590.6		80.1	
+4°	11604.2	3223.4	15.47		610.7	450	80.1	
	10507	2918.6	19.08		645.7		84.6	
	8755.9	2432.2	22.42		667.8		80.1	

Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	6748.2	1874.5	7.59	490	175.6	250	79.5	750
	6178	1716.1	9.74		196.8		83.3	
	5303.5	1473.2	12.06		219.2		79.5	
-2°	7565.4	2101.5	8.18		212.1	280	79.5	
	6843.2	1900.9	10.56		235.8		83.5	
	5702.8	1584.1	13.01		254.3		79.5	
0°	8306.6	2307.4	8.83		251.4	315	79.5	
	7413.5	2059.3	11.49		277		83.8	
	6139.8	1705.5	13.97		294		79.5	
+2°	8915	2476.4	9.55		291.8	355	79.5	
	7983.7	2217.7	12.13		312.3		84.5	
	6558.1	1821.7	14.67		329.8		79.5	
+4°	9447.1	2624.2	10.53		341	400	79.5	
	8554	2376.1	12.99		360.5		84	
	7128.4	1980.1	15.26		372.9		79.5	

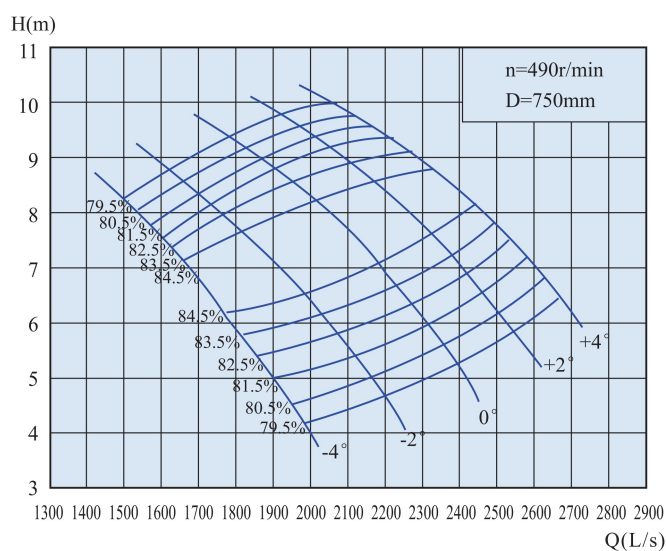
HSM Curve and specification

HSM1000-100



Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	8445.6	2346	6.57	590	186.7		81	750
	7324.2	2034.5	10.04		235.7	280	85	
	6614.6	1837.4	11.64		259		81	
-2°	9384.1	2606.7	7.24		228.6		81	
	8010.7	2225.2	10.87		278.8	315	85.1	
	7186.7	1996.3	12.42		300.3		81	
0°	10230.8	2841.9	8.07		277.8		81	
	8926.2	2479.5	11.38		325.7	400	85	
	7919.3	2199.8	13.3		354.3		81	
$+2^\circ$	10871.6	3019.9	9		329.2		81	
	9384.1	2606.7	12.42		373.6	450	85	
	8605.8	2390.5	13.87		401.6		81	
$+4^\circ$	11398.3	3166.2	9.83		376.9		81	
	10070.6	2797.4	12.83		414.2	450	85	
	9200.9	2555.8	14.18		438.9		81	

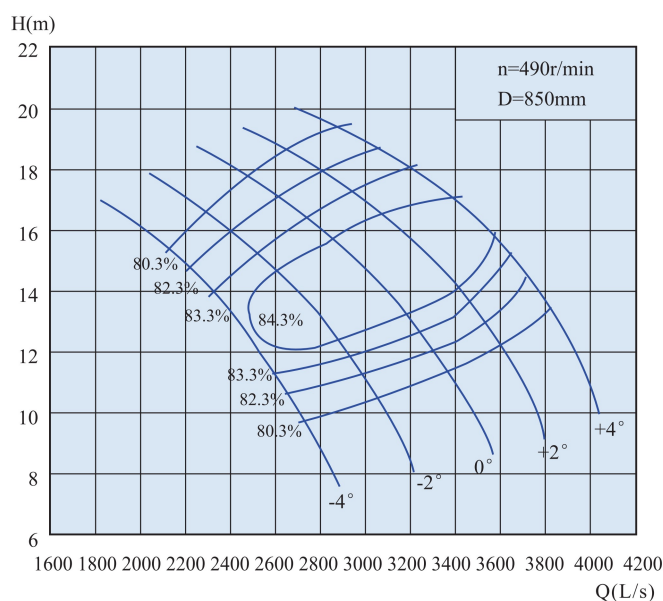
HSM1000-100D



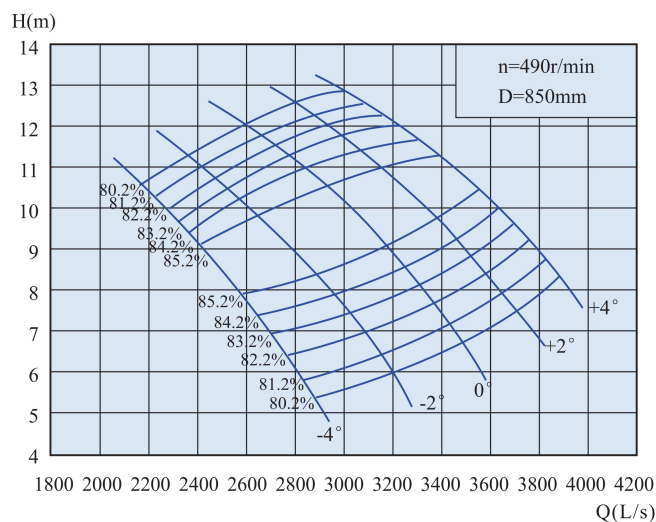
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	7014.2	1948.4	4.53	490	107.6		80.5	750
	6082.9	1689.7	6.92		135.7	160	84.5	
	5493.6	1526	8.03		149.3		80.5	
-2°	7793.6	2164.9	5		131.9		80.5	
	6653.2	1848.1	7.49		160.5	185	84.6	
	5968.8	1658	8.56		173		80.5	
0°	8496.7	2360.2	5.57		160.2		80.5	
	7413.5	2059.3	7.85		187.7	220	84.5	
	6576.8	1826.9	9.17		204.2		80.5	
$+2^\circ$	9029.2	2508.1	6.21		189.8		80.5	
	7793.6	2164.9	8.56		215.1	250	84.5	
	7147.1	1985.3	9.56		231.3		80.5	
$+4^\circ$	9466.2	2629.5	6.78		217.3		80.5	
	8363.9	2323.3	8.85		238.7	280	84.5	
	7641.4	2122.6	9.78		253		80.5	

HSM Curve and specification

HSM1000-80C



HSM1000-100C

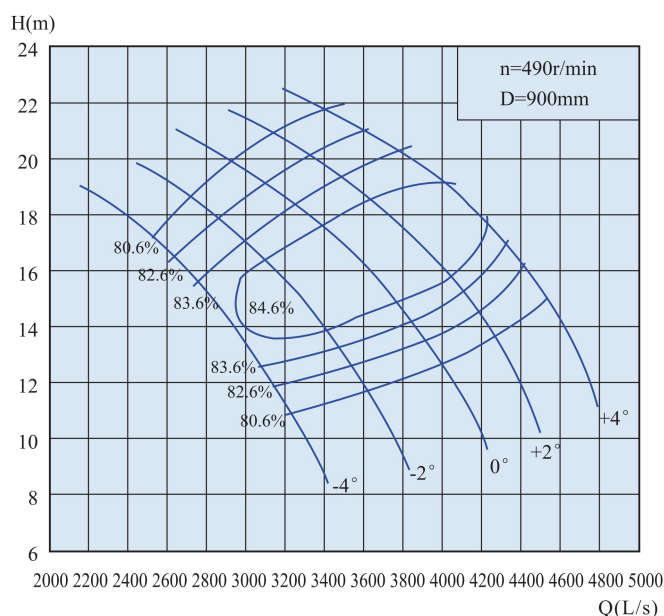


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	9823.3	2728.7	9.75	490	325	450	81.2	850
	8993.2	2498.1	12.51		364.5		85.2	
	7720.2	2144.5	15.49		405.8		81.2	
-2°	11013.1	3059.2	10.51		392.8	500	81.2	
	9961.6	2767.1	13.57		437		85.3	
	8301.2	2305.9	16.71		470.7		81.2	
0°	12092	3358.9	11.34		465.3	560	81.2	
	10791.7	2997.7	14.76		513.1		85.2	
	8937.7	2482.7	17.94		544.1		81.2	
+2°	12977.6	3604.9	12.27		540.4	650	81.2	
	11621.9	3228.3	15.58		578.4		85.2	
	9546.5	2651.8	18.84		610.3		81.2	
+4°	13752.4	3820.1	13.52		631	750	81.2	
	12452	3458.9	16.68		667.4		85.2	
	10376.6	2882.4	19.6		690.2		81.2	

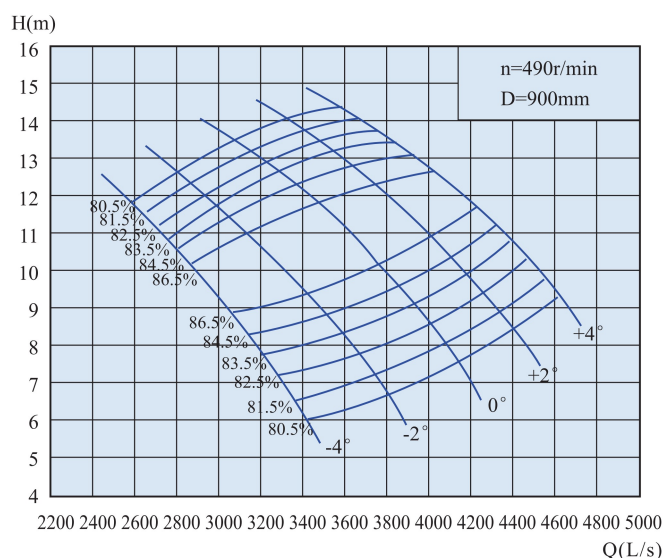
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	10210.7	2836.3	5.82	490	199.4	315	81.2	850
	8854.6	2459.6	8.89		251.8		85.2	
	7997	2221.4	10.31		276.7		81.2	
-2°	11345	3151.4	6.42		244.4	355	81.2	
	9684.7	2690.2	9.63		297.9		85.3	
	8688.6	2413.5	11		320.7		81.2	
0°	12368.9	3435.8	7.15		296.8	400	81.2	
	10791.7	2997.7	10.08		347.9		85.2	
	9574.2	2659.5	11.78		378.5		81.2	
+2°	13143.6	3651	7.98		352	450	81.2	
	11345	3151.4	11		399.1		85.2	
	10404.4	2890.1	12.28		428.8		81.2	
+4°	13780.1	3827.8	8.71		402.8	500	81.2	
	12175.2	3382	11.37		442.8		85.2	
	11123.6	3089.9	12.56		468.9		81.2	

HSM Curve and specification

HSM1200-80



HSM1200-100

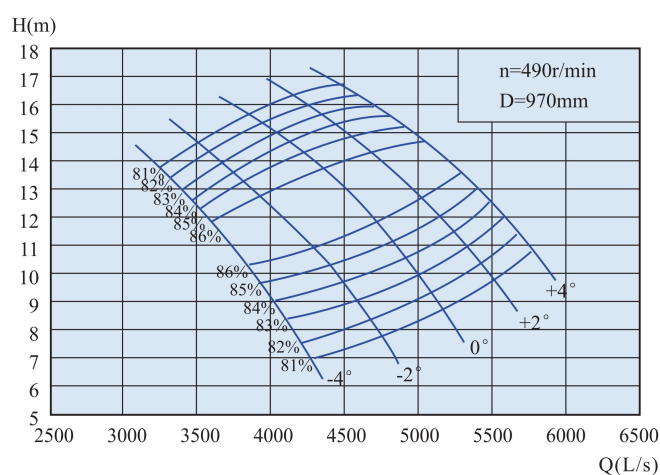


Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	11660.8	3239.1	10.93	490	430.9	630	80.6	900
	10675.1	2965.3	14.03		483.6		84.4	
	9164.2	2545.6	17.37		538.2		80.6	
-2°	13073	3631.4	11.78		520.7	710	80.6	
	11824.9	3284.7	15.21		579.3		84.6	
	9853.9	2737.2	18.74		624.3		80.6	
0°	14353.9	3987.2	12.71		616.8	800	80.6	
	12810.2	3558.4	16.55		680.5		84.9	
	10609.6	2947.1	20.11		721.3		80.6	
+2°	15405.1	4279.2	13.75		716.1	900	80.6	
	13795.6	3832.1	17.47		767.2		85.6	
	11332.1	3147.8	21.12		809.2		80.6	
+4°	16324.9	4534.7	15.16		836.7	1000	80.6	
	14781.2	4105.9	18.71		885.6		85.1	
	12317.8	3421.6	21.97		914.9		80.6	

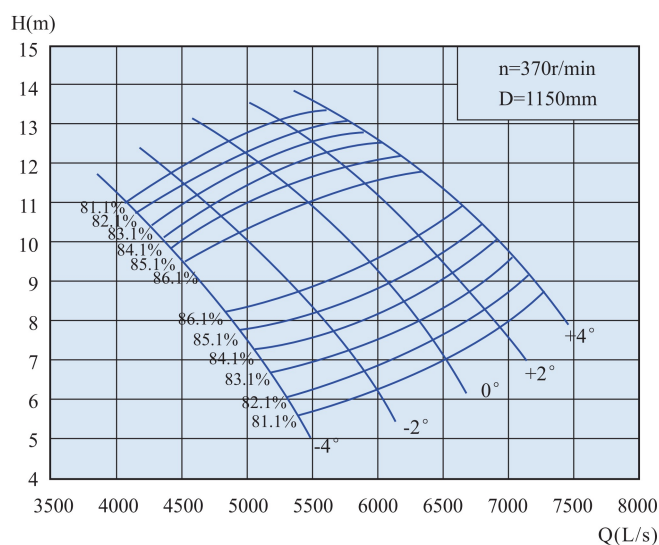
Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	12120.5	3366.8	6.53	490	264.3	400	81.6	900
	10510.9	2919.7	9.97		333.6		85.6	
	9492.8	2636.9	11.56		366.5		81.6	
-2°	13467.2	3740.9	7.19		323.4	450	81.6	
	11496.2	3193.4	10.79		394.4		85.7	
	10314	2865	12.33		424.7		81.6	
0°	14682.6	4078.5	8.02		393.2	560	81.6	
	12810.2	3558.4	11.31		461.2		85.6	
	11365.2	3157	13.21		501.4		81.6	
+2°	15602.4	4334	8.94		465.8	630	81.6	
	13467.2	3740.9	12.33		528.6		85.6	
	12350.5	3430.7	13.77		567.9		81.6	
+4°	16357.7	4543.8	9.76		533.1	710	81.6	
	14452.6	4014.6	12.74		586.1		85.6	
	13204.4	3667.9	14.08		620.9		81.6	

HSM Curve and specification

HSM1300-100



HSM1400-100



Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	15174.4	4215.1	7.58	490	382.2	560	82	970
	13159.4	3655.4	11.58		482.9		86	
	11884.3	3301.2	13.43		530.4		82	
-2°	16860.2	4683.4	8.36		468.4	630	82	
	14392.8	3998	12.54		571.2		86.1	
	12912.5	3586.8	14.33		614.9		82	
0°	18382	5106.1	9.31		568.7	800	82	
	16038	4455	13.13		667.2		86	
	14228.6	3952.4	15.34		725.3		82	
$+2^\circ$	19533.2	5425.9	10.39		674.4	900	82	
	16860.2	4683.4	14.33		765.6		86	
	15462	4295	16		822.1		82	
$+4^\circ$	20479	5688.6	11.34		771.7	1000	82	
	18094	5026.1	14.8		848.5		86	
	16531.2	4592	16.36		898.8		82	

Angle	Capacity		Head (m)	Speed (r/min)	power (kW)		Eff (%)	Diameter of Impeller Diameter (mm)
	(m³/h)	(L/s)			Shaft power	Motor power		
-4°	19093.7	5303.8	6.08	370	384.8	560	82.2	1150
	16558.2	4599.5	9.28		485.8		86.2	
	14954.4	4154	10.76		533.4		82.2	
-2°	21215.2	5893.1	6.7		471.2	710	82.2	
	18110.5	5030.7	10.05		574.7		86.2	
	16247.9	4513.3	11.48		618.3		82.2	
0°	23130	6425	7.46		572	800	82.2	
	20180.5	5605.7	10.52		671.1		86.2	
	17903.5	4973.2	12.29		729.4		82.2	
$+2^\circ$	24578.6	6827.4	8.32		677.9	900	82.2	
	21215.2	5893.1	11.48		769.9		86.2	
	19455.8	5404.4	12.82		826.9		82.2	
$+4^\circ$	25768.8	7158	9.09		776.5	1000	82.2	
	22767.8	6324.4	11.86		853.6		86.2	
	20801.5	5778.2	13.11		904.1		82.2	

HSP/HSM pump performance

Hylc Model	Capacity (m3/hr)		Head (m)		Shaft power		Motor power		Speed (rpm)	Diameter of impeller (mm)
	Min	Max	Min	Max	Min	Max	Min	Max		
HSP300-100	425.50	887.80	3.24	8.33	8.60	18.50	15	22	1450	250
HSP300-140	552.20	962.60	2.60	6.67	6.90	15.60	15	19	1450	250
HSP300-170	364.70	900.00	1.94	5.89	4.30	13.30	8	15	1450	250
HSP300-200	468.70	833.40	2.22	4.17	4.40	10.30	8	15	1450	250
HSP350-100	735.50	1477.80	4.67	11.78	20.90	42.40	37	45	1450	300
HSP350-140	954.00	1663.20	3.75	9.60	17.40	39.30	37	45	1450	300
HSP350-170	630.00	1555.20	2.79	8.48	10.50	32.50	19	37	1450	300
HSP350-100	810.00	1440.00	3.20	6.00	10.70	25.30	19	30	1450	300
HSP350-250	712.80	1717.20	2.04	5.41	7.40	30.10	15	37	1450	300
HSP350-320	977.40	1526.80	1.76	3.23	7.70	15.50	15	19	1450	300
HSP500-100	1677.20	3498.80	4.80	12.33	47.80	103.90	75	110	980	450
HSP500-100D	1257.80	2624.00	2.70	6.94	20.50	44.50	37	55	735	450
HSP500-140	2176.20	3793.70	3.85	9.87	39.20	88.40	75	90	980	450
HSP500-140D	1632.20	2845.40	2.17	5.55	16.70	37.70	37	45	735	450
HSP500-140A	1645.90	2869.60	3.20	8.19	25.40	57.30	45	75	980	410
HSP500-200	1847.50	3284.60	3.29	6.17	24.70	58.20	37	75	980	450
HSP500-200D	1385.60	2463.50	1.85	3.47	10.50	29.40	19	30	735	450
HSP500-170	1437.10	3547.40	2.87	8.72	24.10	74.60	45	90	980	450
HSP500-170D	1077.80	2660.80	1.61	4.90	10.30	31.90	19	37	735	450
HSP500-250	1625.80	3917.20	2.10	5.56	16.90	69.00	37	75	980	450
HSP500-250D	1219.30	2937.60	1.18	3.13	7.20	29.60	15	37	735	450
HSP500-320	2229.50	3482.60	1.81	3.32	17.70	35.70	37	37	980	450
HSP600-100	2296.80	4791.20	4.03	10.36	54.60	118.90	90	132	735	550
HSP600-140	2979.70	5195.20	3.24	8.29	46.00	103.70	90	110	735	550
HSP600-170	1967.80	4857.80	2.41	7.32	27.60	85.40	55	90	735	550
HSP600-200	2530.10	4497.80	2.76	5.18	28.20	66.60	45	75	735	550
HSP600-250	2226.60	5363.30	1.76	4.67	19.30	78.80	39	90	735	550
HSP600-320	3052.80	4768.90	1.52	2.79	20.20	40.80	37	45	735	550
HSP700-100	2981.90	6220.10	4.80	12.33	83.80	182.30	132	200	735	600
HSP700-100D	2393.60	4993.20	3.09	7.95	43.80	95.40	75	110	590	600
HSP700-140	3868.60	6744.60	3.85	9.87	70.40	159.00	132	185	735	600
HSP700-140D	3105.40	5414.00	2.48	6.36	36.70	83.00	75	90	590	600
HSP700-170	2554.90	6306.50	2.87	8.72	42.30	131.00	75	160	735	600
HSP700-170D	2050.90	5062.30	1.85	5.62	22.10	68.40	45	75	590	600
HSP700-200	3284.60	5839.60	3.29	6.17	43.40	102.40	75	110	735	600
HSP700-200D	2636.60	4687.60	2.12	3.97	22.60	53.40	37	55	590	600
HSP700-250	2890.40	6963.50	2.10	5.56	29.60	120.80	55	132	735	600
HSP700-250D	2320.20	5589.70	1.35	3.58	15.40	63.10	30	75	735	600
HSP700-200C	4176.40	7424.30	3.86	7.24	64.30	151.80	110	160	735	650
HSP700-250C	3674.90	8853.50	2.46	6.53	43.80	179.00	90	185	735	650
HSP700-320	3963.20	6191.30	1.81	3.32	31.00	62.60	55	75	735	600
HSP700-320C	5038.90	7871.80	2.12	3.90	45.90	92.90	90	110	735	650
HSP700-140C	4918.70	8575.20	4.52	11.58	104.60	236.00	185	250	735	650
HSP700-170C	3284.30	8018.30	3.37	10.23	62.80	194.00	110	200	735	650
HSP800-100	4675.00	9752.00	4.83	12.42	130.80	285.40	200	315	590	750
HSP800-140	6065.30	10574.30	3.88	9.93	110.40	248.90	200	280	590	750
HSP800-170	4005.40	9887.80	2.89	8.77	66.20	204.60	132	220	590	750
HSP800-200	5149.80	9155.20	3.31	6.21	67.80	160.20	110	185	590	750

HSP/HSM pump performance

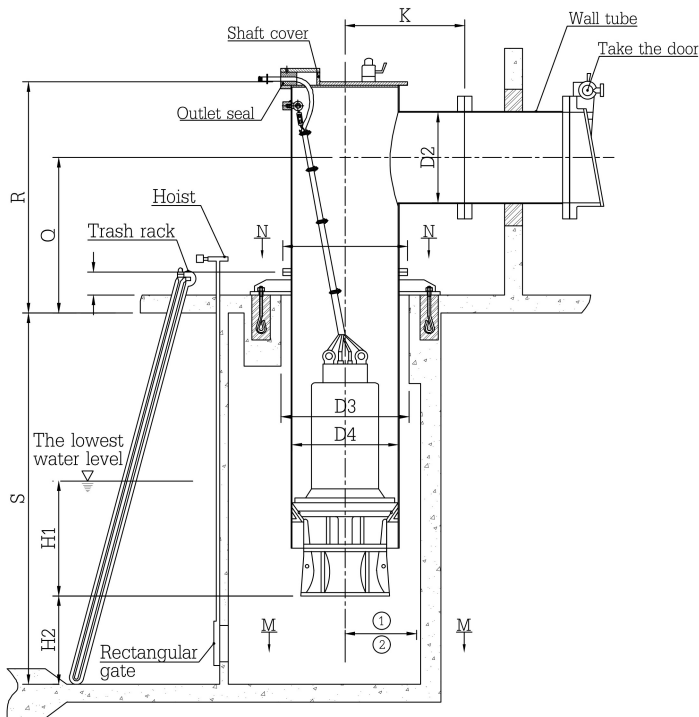
Hylic Model	Capacity (m3/hr)		Head (m)		Shaft power		Motor power		Speed (rpm)	Diameter of impeller (mm)
	Min	Max	Min	Max	Min	Max	Min	Max		
HSP800-250	4531.70	10917.70	2.11	5.60	46.20	188.70	90	200	590	750
HSP800-320	6213.60	9707.00	1.82	3.34	48.50	97.80	90	110	590	750
HSP900-100	5652.00	11790.00	4.28	11.00	139.80	304.80	220	315	490	850
HSP900-140	7332.80	12784.00	3.44	8.80	118.10	265.90	220	280	490	850
HSP900-170	8482.40	11953.80	2.56	7.77	70.70	218.50	132	250	490	850
HSP900-200	6225.80	11068.20	2.93	5.50	72.40	171.10	110	185	490	850
HSP900-250	5478.80	13199.00	1.87	4.96	49.40	201.60	110	220	490	850
HSP900-320	7512.10	11735.60	1.61	2.96	51.70	104.60	90	110	490	850
HSP1000-100	6709.30	13995.40	4.80	12.33	185.00	403.50	280	450	490	900
HSP1000-140	8704.40	15175.40	3.85	9.87	156.20	352.70	280	400	490	900
HSP1000-170	5748.10	14189.80	2.87	8.72	93.60	289.50	160	315	490	900
HSP1000-200	7390.40	13138.90	3.29	6.17	96.10	227.00	160	250	490	900
HSP1000-250	6503.80	15667.90	2.10	5.56	65.50	266.80	132	280	490	900
HSP1000-320	8917.20	13930.60	1.81	3.32	68.70	138.50	132	160	490	900
HSP1200-100	8399.50	17521.60	5.57	14.33	267.30	584.10	400	630	490	970
HSP1200-140	10897.60	18998.60	4.48	11.46	222.00	499.80	400	560	490	970
HSP1200-170	7196.40	17764.90	3.33	10.12	135.20	418.40	250	450	490	970
HSP1200-200	9252.70	16449.10	3.82	7.16	139.00	328.20	250	355	490	970
HSP1200-250	8142.50	19615.70	2.44	6.46	94.60	385.60	185	400	490	970
HSP1200-160	11164.00	17440.60	2.10	3.86	99.10	200.40	185	220	490	970
HSP1400-100	12008.50	25049.90	4.89	12.50	331.50	724.80	560	800	370	1200
HSP1400-140	15579.70	27161.60	3.91	10.00	276.00	621.10	500	710	370	1200
HSP1400-170	10288.40	25398.00	2.91	8.83	168.00	519.20	315	560	370	1200
HSP1400-200	13228.20	23516.60	3.33	6.25	172.40	407.60	315	450	370	1200
HSP1400-250	11640.60	28043.60	2.13	5.54	117.50	460.80	250	500	370	1200
HSP1400-320	15960.60	24934.30	1.83	3.37	122.90	248.90	220	280	370	1200
HSP1600-140	21915.00	38206.80	3.63	9.28	359.10	807.80	630	900	295	1450
HSP1600-170	14472.40	35725.70	2.70	8.20	28.10	674.60	400	710	295	1450
HSP1600-200	18607.00	33079.30	3.09	5.80	224.00	529.50	355	560	295	1450
HSP1600-250	16374.20	39447.00	1.97	5.23	151.90	620.50	315	710	295	1450
HSP1600-320	22451.00	35073.40	1.70	3.12	159.80	322.50	280	355	295	1450
HSP1600-140C	26254.40	45771.80	4.09	10.47	483.00	1087.70	900	1200	295	1540
HSP1600-170C	17337.60	42799.30	3.04	9.25	293.00	908.10	560	1000	295	1540
HSP1600-200C	22291.60	39629.20	3.49	6.54	302.00	712.60	450	800	295	1540
HSP1600-250C	19616.40	47257.90	2.23	5.90	205.20	835.30	400	900	295	1540
HSP1600-320C	26896.00	42017.80	1.92	3.52	215.10	433.70	400	500	295	1540
HSP1800-140	31450.70	54830.90	3.60	9.22	508.70	1146.00	1000	1200	245	1740
HSP1800-170	20769.50	51270.50	2.68	8.14	308.70	954.80	560	1100	245	1740
HSP1800-200	26703.40	47472.80	3.07	5.76	317.80	751.00	500	800	245	1740
HSP1800-250	23499.00	56611.40	1.96	5.50	215.50	879.70	450	900	245	1740
HSP2000-140	46080.00	73070.30	3.66	8.60	686.70	1443.60	1100	1500	215	2000
HSP2000-170	27678.20	68325.50	2.73	8.29	417.40	1290.70	800	1300	215	2000
HSP2000-200	35586.40	63264.20	3.13	5.86	429.70	1013.30	710	1100	215	2000
HSP2000-250	31316.00	75442.70	1.99	5.29	290.20	1186.50	560	1200	215	2000
HSP2400-170	36860.00	90991.80	2.54	7.10	514.40	1453.30	900	1500	176.5	2350
HSP2400-200	47391.50	84251.90	2.91	5.46	530.20	1252.80	800	1300	176.5	2350
HSP2400-250	41704.60	100470.20	1.85	4.92	357.40	1462.10	710	1500	176.5	2350
HSP2400-320	71327.90	78445.10	3.21	1.91	602.00	560.00	710	900	176.5	2350

HSP/HSM pump performance

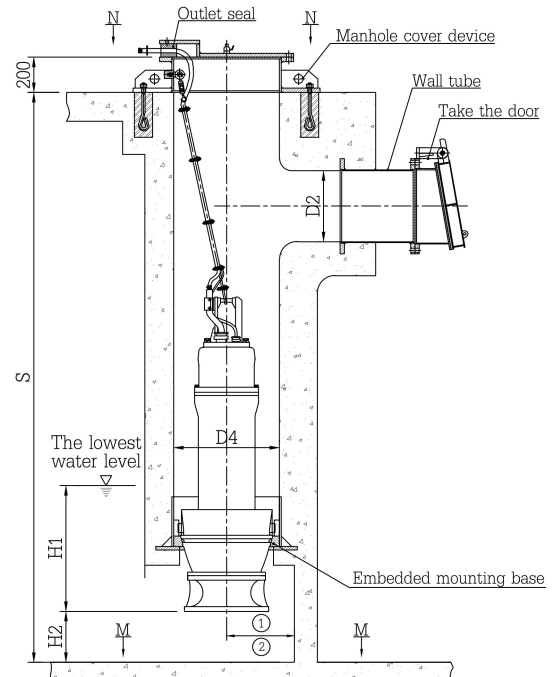
Hylic Model	Capacity (m3/hr)		Head (m)		Shaft power		Motor power		Speed	Diameter of impeller (mm)
	Min	Max	Min	Max	Min	Max	Min	Max	(rpm)	
HSM350-80	581.40	1035.40	7.38	14.85	19.70	41.80	30	45	1450	250
HSM350-100	601.90	1037.50	4.41	9.51	12.10	28.30	19	30	1450	250
HSM400-80	1004.40	1789.20	10.63	21.38	48.10	102.10	75	110	1450	300
HSM400-100	1040.40	1792.80	6.35	13.70	29.50	69.30	45	75	1450	300
HSM500-80	1732.20	3086.60	9.07	18.24	70.00	148.80	90	160	980	410
HSM500-80D	1299.60	2315.20	5.10	10.26	29.90	63.60	45	75	735	410
HSM500-100	1795.00	3093.10	5.42	11.69	43.00	100.90	75	110	980	410
HSM500-100D	1346.00	2319.80	3.05	6.58	18.40	43.10	30	43	735	410
HSM600-80	2291.00	4081.00	10.93	21.97	110.80	235.20	160	250	980	450
HSM600-80D	1718.30	3061.10	6.15	12.36	47.30	100.40	75	110	735	450
HSM600-100	2373.10	4089.60	6.53	14.80	67.90	159.50	110	185	980	450
HSM600-100D	1779.80	3067.20	3.67	7.92	29.00	68.10	45	75	735	450
HSM700-80	3137.40	5588.60	9.18	18.46	126.70	269.20	185	280	735	550
HSM700-80D	2518.20	4486.00	5.29	11.90	66.20	140.50	90	160	590	550
HSM700-100	3249.70	5599.80	5.48	11.83	77.60	182.60	110	200	735	550
HSM700-100D	2608.60	4495.00	3.53	7.62	40.50	95.20	75	110	590	550
HSM800-80	4073.00	7255.40	19.93	21.97	194.40	412.80	250	450	735	600
HSM800-80D	3269.50	5824.10	7.04	14.16	101.40	215.50	132	220	590	600
HSM800-100	4218.80	7270.20	6.53	14.08	119.20	280.10	185	315	735	600
HSM800-100D	3386.50	5836.00	4.21	9.07	62.20	146.10	90	160	590	600
HSM900-100	5378.00	9267.10	5.72	12.35	132.80	312.40	200	355	590	700
HSM900-100D	4466.50	7696.40	3.95	8.52	76.60	180.10	110	185	490	700
HSM900-80	5191.90	9248.40	9.58	19.27	216.60	460.30	280	500	700	700
HSM900-80D	4311.70	7681.00	6.61	13.29	124.90	265.30	160	280	490	700
HSM1000-80	6514.20	11604.20	11.15	22.42	314.40	667.80	450	710	590	750
HSM1000-80D	5303.50	9447.10	7.59	15.26	175.60	372.90	250	400	490	750
HSM1000-100	6614.60	11398.30	6.57	14.18	186.70	438.90	280	450	590	750
HSM1000-100D	5493.60	9466.20	4.53	9.78	107.50	253.00	160	280	490	750
HSM1000-80C	7720.20	13752.40	9.75	19.60	325.00	690.20	450	750	490	850
HSM1000-100C	7997.00	13780.10	5.82	12.56	199.40	468.90	315	500	490	850
HSM1200-80	9164.20	16324.90	10.93	21.97	430.90	914.90	630	1000	490	900
HSM1200-100	9492.80	16357.70	6.53	14.08	264.30	620.90	400	710	490	900
HSM1300-100	11884.30	20479.00	7.58	16.36	382.20	898.80	560	1000	490	970
HSM1400-100	14954.40	20801.50	6.08	13.11	384.80	904.10	560	1000	370	1150

Outline installation drawing

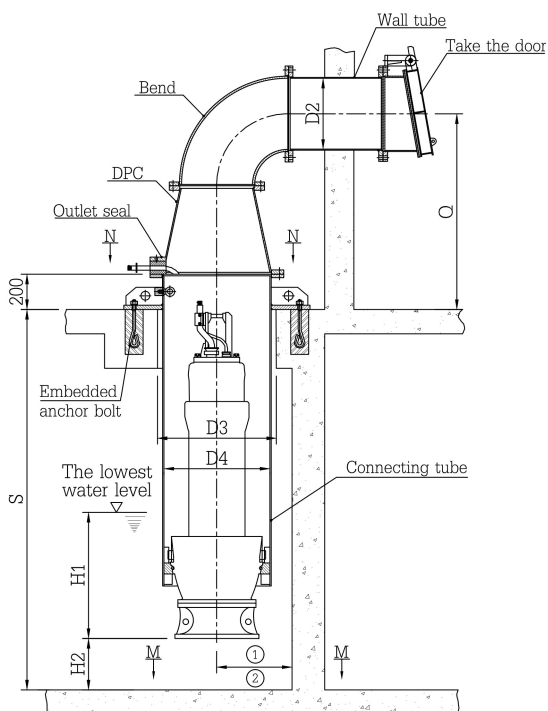
1. Suspension installation of wellbore



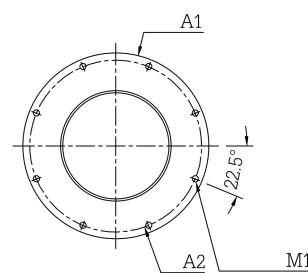
2. Precast concrete shaft installation



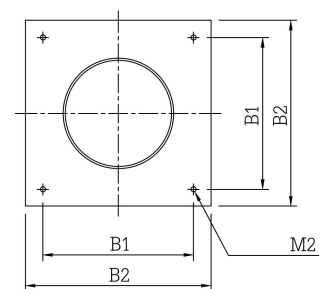
3. Bend suspension installation



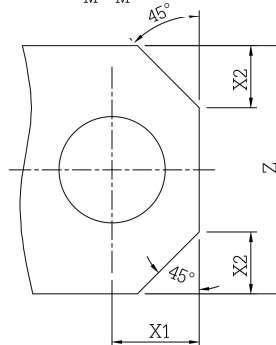
N - N (I)



N - N (II)



M - M



Note :

1. The recommended distance between the pump center and the rear pool wall is C1;
2. The distance between the tow pump centers in the same pool shall not be less than C2;
3. The outlet pipe flange is normally 0.6 mpa;
4. Sizes of S, Q, R and K are according to user requirements.

Outline installation drawing

Item	Hylic Model	Dimension							Weight of electric pump (kg)	Sump & Column Dimension																				
		D1	D2	D3	D4	H1	H2	G1		G2	A1	A2	M1	M2	B1	B2	X1	X2	Z	C1	C2									
1	HSP300-100	1050	300	720	500	650	280	1050	850	500	1050	970	8-M20x400	4-M20x400	850	1050	300	300	1200	400	1400									
2	HSP300-140																													
3	HSP300-170																													
4	HSP300-200																													
5	HSP350-100	1050	400	720	660	800	300	1050	850	550	1050	970	8-M24x400	4-M24x400	850	1050	400	350	1400	400	1400									
6	HSP350-140																													
7	HSP350-170																													
8	HSP350-100																													
9	HSP350-250	1050	600	1050	850	1200	830	1450	1350	8-M24x400	4-M24x400	1200	1400	600	450	1900	600	1900												
10	HSP350-320																													
11	HSP500-100																													
12	HSP500-100D																													
13	HSP500-140	1450	600	1050	850	1000	500	1400	1200	700	860	700	830	700	650	2100	1900	1550	1450	8-M30x400	4-M30x400	1250	1450	780	495	2600	780	2600		
14	HSP500-140D																													
15	HSP500-140A																													
16	HSP500-200																													
17	HSP500-200D	1550	700	1150	1000	1200	600	1450	1250	1800	1850	1700	2500	2000	2200	1900	2200	1900	2000	1600	1500	8-M30x500	4-M30x500	1500	1650	780	495	2600	780	2600
18	HSP500-170																													
19	HSP500-170D																													
20	HSP500-250																													
21	HSP500-250D	1600	800	1200	1100	1400	650	1650	1500	1800	1850	1700	2500	2000	2200	1900	2200	1900	2000	1600	1500	8-M30x500	4-M30x500	1500	1650	780	495	2600	780	2600
22	HSP500-320																													
23	HSP600-100																													
24	HSP600-140																													
25	HSP600-170	1600	800	1200	1100	1400	650	1650	1500	1800	1850	1700	2500	2000	2200	1900	2200	1900	2000	1600	1500	8-M30x500	4-M30x500	1500	1650	780	495	2600	780	2600
26	HSP600-200																													
27	HSP600-250																													
28	HSP600-320																													
29	HSP700-100	1600	800	1200	1100	1400	650	1650	1500	1800	1850	1700	2500	2000	2200	1900	2200	1900	2000	1600	1500	8-M30x500	4-M30x500	1500	1650	780	495	2600	780	2600
30	HSP700-100D																													
31	HSP700-140																													
32	HSP700-140D																													
33	HSP700-170	1600	800	1200	1100	1400	650	1650	1500	1800	1850	1700	2500	2000	2200	1900	2200	1900	2000	1600	1500	8-M30x500	4-M30x500	1500	1650	780	495	2600	780	2600
34	HSP700-170D																													
35	HSP700-200																													
36	HSP700-200D																													
37	HSP700-250	1600	800	1200	1100	1400	650	1650	1500	1800	1850	1700	2500	2000	2200	1900	2200	1900	2000	1600	1500	8-M30x500	4-M30x500	1500	1650	780	495	2600	780	2600
38	HSP700-250D																													
39	HSP700-200C																													
40	HSP700-250C																													
41	HSP700-320	1600	800	1200	1100	1400	650	1650	1500	1800	1850	1700	2500	2000	2200	1900	2200	1900	2000	1600	1500	8-M30x500	4-M30x500	1500	1650	780	495	2600	780	2600
42	HSP700-320C																													

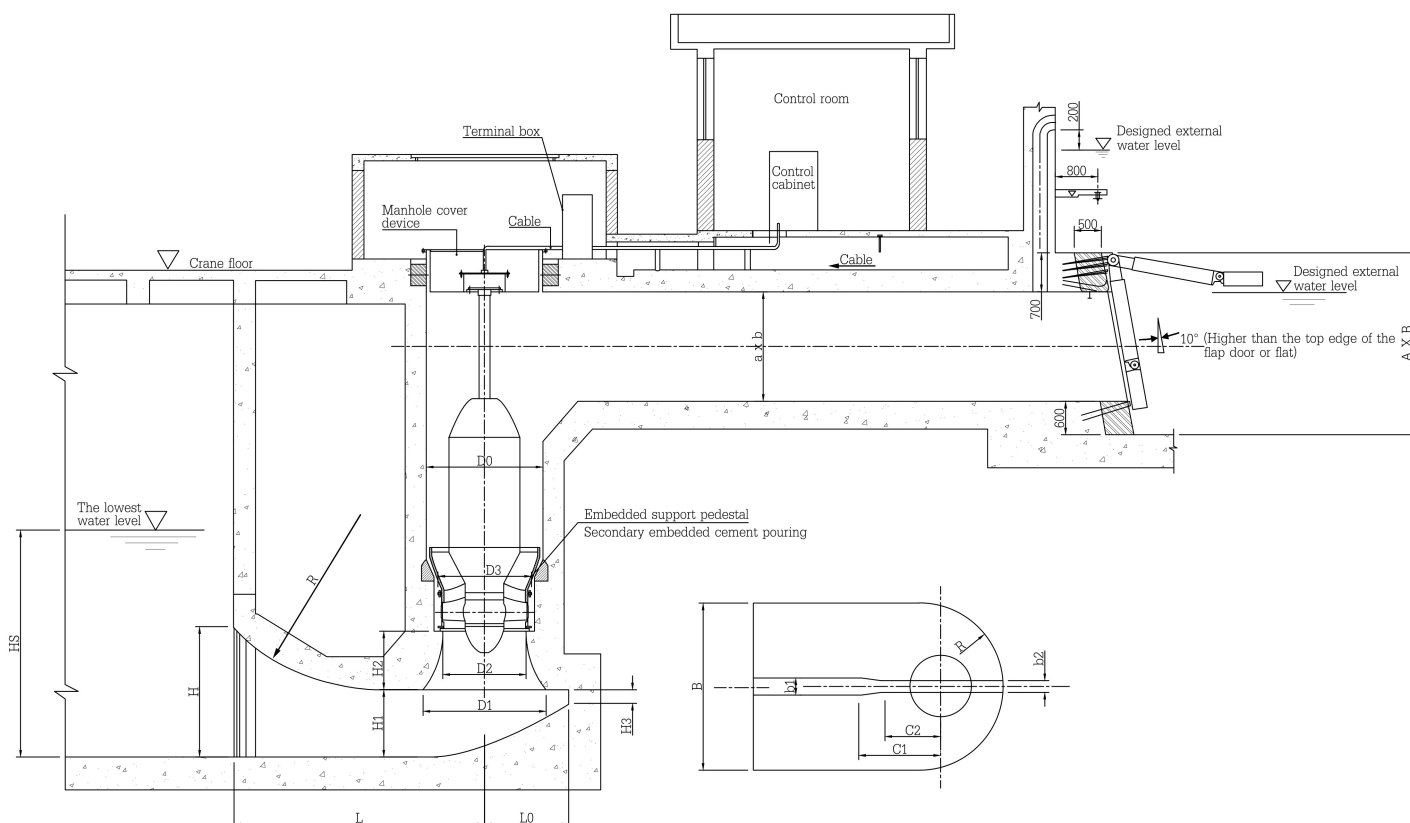
Outline installation drawing

Item	Hytic Model	Dimension							Weight of electric pump (kg)	Sump & Column Dimension											
		D1	D2	D3	D4	H1	H2	G1		G2	A1	A2	M1	M2	B1	B2	X1	X2	Z	C1	C2
43	HSP700-140C									2900											
44	HSP700-170C									2750											
45	HSP800-100									5500											
46	HSP800-140	1750	1000	1350	1200	1500	750	1750	1600	4900	1650	8-M30x500	4-M30x500	1600	1750	900	750	3000	900	3000	
47	HSP800-170									4200											
48	HSP800-200									4000											
49	HSP800-250									3800											
50	HSP800-320									3500											
51	HSP900-100									6000											
52	HSP900-140									5500											
53	HSP900-170	1950	1200	1450	1330	1600	850	1800	1650	5500	1800	8-M36x630	4-M36x630	1650	1800	900	750	3000	900	3000	
54	HSP900-200									5000											
55	HSP900-250									4000											
56	HSP900-320									3600											
57	HSP1000-100										6800										
58	HSP1000-140									6500											
59	HSP1000-170	2250	1200	1700	1500	2000	1000	2050	1900	6000	2050	8-M36x630	4-M36x630	1900	2050	900	750	3000	900	3000	
60	HSP1000-200									6000											
61	HSP1000-250									5500											
62	HSP1000-320									5000											
63	HSP1200-100										12000										
64	HSP1200-140									10100											
65	HSP1200-170	2350	1400	1850	1630	2200	1100	2250	2000	9800	2200	8-M36x630	4-M36x630	2000	2250	1200	1000	3960	1200	3960	
66	HSP1200-200									9500											
67	HSP1200-250									8800											
68	HSP1200-160									8000											
69	HSP1400-100										18000										
70	HSP1400-140									16300											
71	HSP1400-170	2650	1600	2100	1900	2300	1300	2700	2400	14000	2500	8-M36x630	4-M36x630	2400	2700	1440	1200	4800	1440	4800	
72	HSP1400-200									13200											
73	HSP1400-250									12700											
74	HSP1400-320																				
75	HSP1600-140										15000										
76	HSP1600-170									14000											
77	HSP1600-200									15800											
78	HSP1600-250									15000											
79	HSP1600-320	3200	2000	2500	2300	2600	1500	3000	2700	3200	2900	8-M36x630	4-M36x630	2700	3000	1800	1400	6000	1800	6000	
80	HSP1600-140C									18500											
81	HSP1600-170C									17900											
82	HSP1600-200C									17000											
83	HSP1600-250C									16500											
84	HSP1600-320C																				

Outline installation drawing

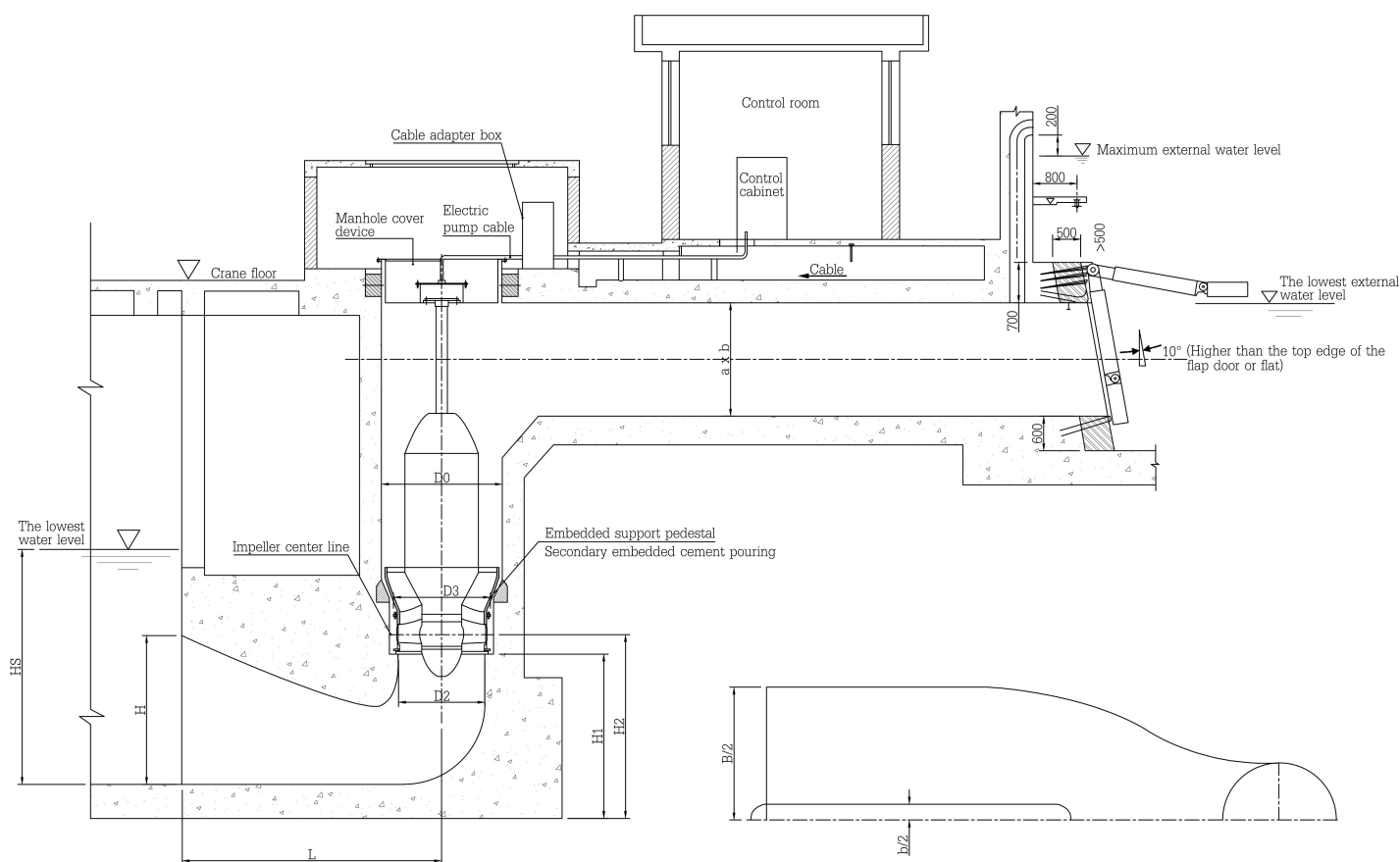
Item	Hytic Model	Dimension								Weight of electric pump (kg)	Sump & Column Dimension										
		D1	D2	D3	D4	H1	H2	G1	G2		A1	A2	M1	M2	B1	B2	X1	X2	Z	C1	C2
1	HSM350-80	1050	300	720	500	650	280	1050	850	500	970	8-M20x400	4-M20x400	850	1050	300	300	1200	400	1400	
2	HSM350-100									600											
3	HSM400-80	1050	400	720	660	800	300	1050	850	1000	970	8-M24x400	4-M24x400	850	1050	400	350	1400	400	1400	
4	HSM400-100									800											
5	HSM500-80	1500	600	1150	1000	1200	500	1450	1250	1700											
6	HSM500-80D									1400											
7	HSM500-100	1450	600	1050	850	1000	500	1400	1200	1600	1350	8-M24x400	4-M24x400	1200	1400	600	450	1900	600	1900	
8	HSM500-100D									1400											
9	HSM600-80	1550	700	1150	1000	1200	600	1450	1250	2000	1450	8-M30x400	4-M30x400	1250	1450	780	495	2600	780	2600	
10	HSM600-80D									1700											
11	HSM600-100									1900											
12	HSM600-100D									1500											
13	HSM700-80	1600	800	1200	1100	1400	650	1650	1500	3900	1600	8-M30x500	4-M30x500	1600	1750	900	750	3000	900	3000	
14	HSM700-80D									2800											
15	HSM700-100									3200											
16	HSM700-100D									2600											
17	HSM800-80	1750	1000	1350	1200	1500	750	1750	1600	4300	1750	8-M30x500	4-M30x500	1600	1750	900	750	3000	900	3000	
18	HSM800-80D									3700											
19	HSM800-100									4400											
20	HSM800-100D									3500											
21	HSM900-100	1950	1200	1450	1330	1600	850	1800	1650	4600	1800	8-M36x630	4-M36x630	1650	1800	900	750	3000	900	3000	
22	HSM900-100D									4200											
23	HSM900-80	2250	1200	1700	1500	2000	1000	2050	1900	4800	2050	8-M36x630	4-M36x630	1900	2050	900	750	3000	900	3000	
24	HSM900-80D									4400											
25	HSM1000-80									7300											
26	HSM1000-80D																				
27	HSM1000-100									6500											
28	HSM1000-100D																				
29	HSM1000-80C	2350	1200	1850	1630	2000	1000	2250	2000		2250	8-M36x630	4-M36x630	2000	2250	1120	935	3470	1200	3470	
30	HSM1000-100C									7300											
31	HSM1200-80	2350	1400	1850	1630	2200	1100	2250	2000	12000	2250	8-M36x630	4-M36x630	2000	2250	1200	1000	3960	1200	3960	
32	HSM1200-100									12600											
33	HSM1300-100	2650	1600	2100	1900	2300	1300	2700	2400		2650	2500	8-M36x630	4-M36x630	2400	2700	1440	1200	4800	1440	4800
34	HSM1400-100									13000											

Outline installation drawing



No.	HS	φD0	φD1	φD2	φD3	H	H1	H2	H3	B	L	L0	C1	C2	R	R1	b1	b2	axb (mm)
1	370	1700	1423	955	1250	1527	780	679	165	2590	2190	970	1260	866	2748	1293	300	100	1400×1000
2	420	1800	1760	1180	1480	1630	920	729	204	3200	3060	1200	1562	1071	3400	1600	300	100	1600×2200
3	470	2100	2120	1427	1720	1800	1020	836	246	3867	4350	1450	1887	1294	4108	1933	400	200	1800×2400
4	500	2300	2259	1540	1900	2424	1230	1078	316	4100	4620	1540	2000	1375	4363	2035	400	200	1800×2400
5	520	2400	2552	1712	2000	2738	1329	1098	296	4640	5220	1740	2371	1535	4929	2320	400	200	1800×2400
6	580	2800	2933	1968	2400	3168	1420	1200	340	5333	6000	2000	2725	1785	5666	2667	400	200	2400×3000
7	650	3200	3447	2395	2750	3699	1580	1372	350	6276	7050	2350	3058	2097	6658	3133	400	200	2800×3400
8	170	1320	886	850	750	1350	700	630	165	2400	2700	900	1171	800	2550	1230	300	100	1400×1000
9	354	1400	1423	969	1600	1527	776	678	165	2587	2910	970	1260	866	2748	1293	300	100	1400×1000
10	376	2000	1687	1150	1700	1810	920	805	195	3070	3450	1150	1497	1026	3258	1533	300	100	1600×2200

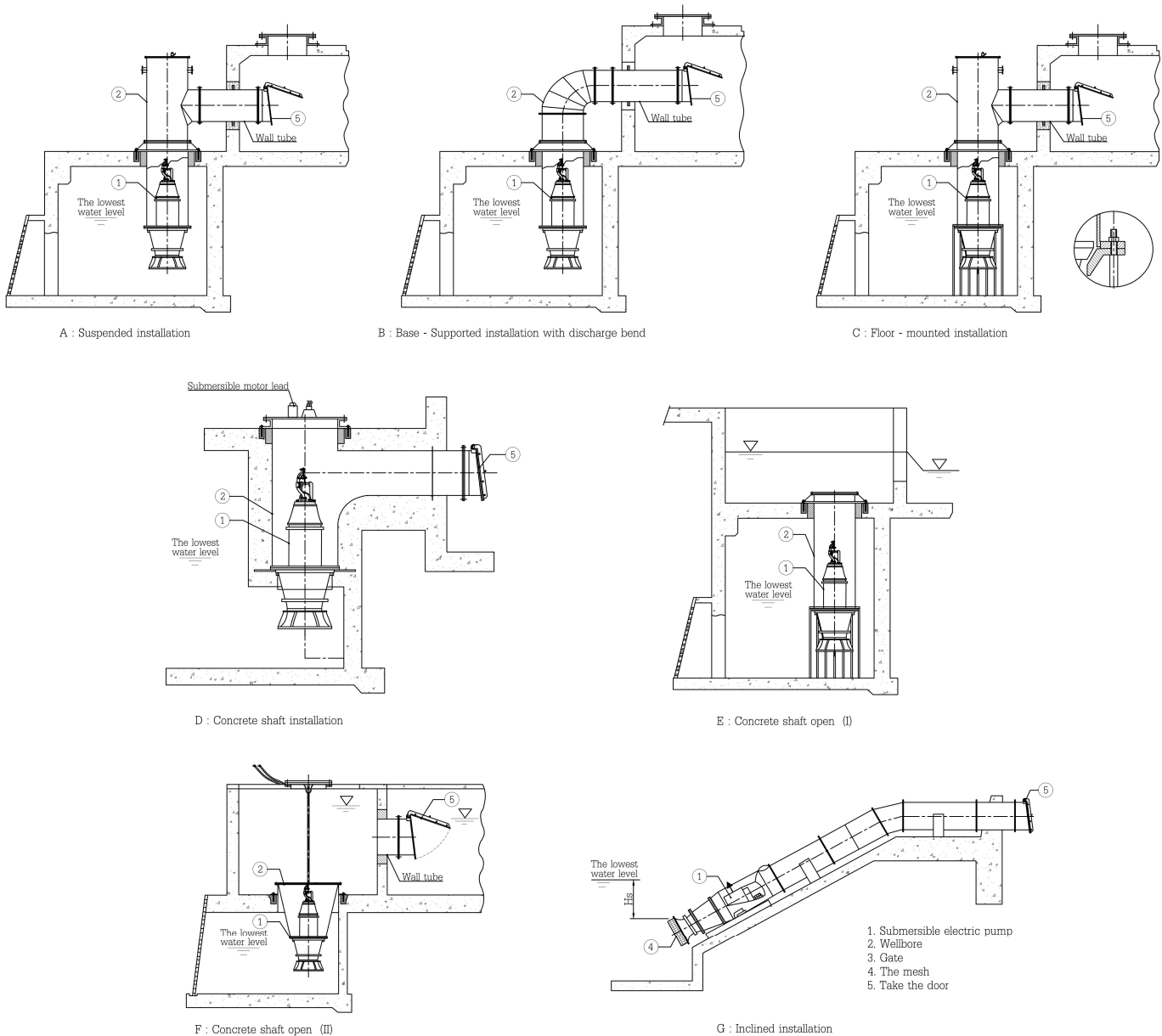
Outline installation drawing



No.	HS	$\phi D0$	$\phi D2$	$\phi D3$	H	H1	H2	B	L	b1	axb
1	3700	1700	955	1250	1940	1533	1700	2260	3500	300	1400×1000
2	4700	1800	1150	1600	2400	1896	2103	2460	4330	300	1600×2200
3	4700	2100	1427	1700	2200	2292	2541	3378	5232	300	1800×2400
4	5000	2000	1540	1900	3080	2434	2699	3568	5537	300	1800×2400
5	4800	2400	1712	2040	2750	2750	3049	4054	6236	300	2000×2400
6	5500	1968	2400	2400	3161	3058	3405	4659	7216	400	2400×3400
7	6200	2320	2350	2750	3714	3174	4119	5475	8479	400	2800×3400
8	3270	1750	886	1300	1800	1422	1577	2096	3247	300	1400×1000
9	3540	1800	969	1500	1940	1533	1720	2260	3500	300	1600×2200
10	3760	2000	1150	1700	2300	1817	2015	2679	4149	300	1600×2200

Outline installation drawing

Submersible Pump Installation Methods

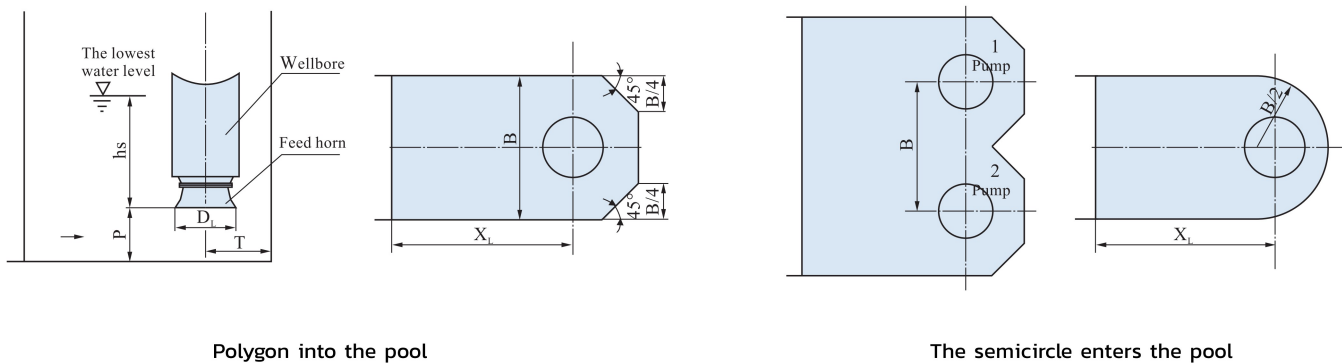


Hydraulic Design Reference for Open Inlet Tank

Open inlet tanks, or open runners, feature a simple structure and are widely used in small to medium-sized pump stations.

Their hydraulic performance plays a critical role in stable pump operation, prompting numerous studies and design recommendations from various engineering bodies worldwide.

Although multiple design guidelines exist, no unified standard has been established due to variations in construction practices and pump configurations.



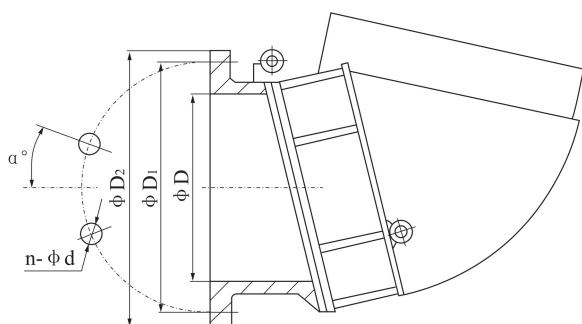
Geometry of inlet tank	Japan machinery institute	British society for fluid mechanical engineering	American hydraulic research institute	Recommended values	Conditions of use
Width of pool	2.0-2.5	2-3	2.6-2.8	2.0-2.5	The small pump takes the small value, the big pump takes the big value
Pump spacing	2.0-2.5	2-3	2.6-2.8	2.0-2.5	The small pump takes the small value, the big pump takes the big value
Hung up high	0.5-0.75	0.5-0.75	0.52-0.59	0.5-0.7	The small pump takes the small value, the big pump takes the big value
The back of	0.8-1.0	0.75	1.2-1.4	0.5-0.75	
length of pool		4.0		5-8	

The inlet horn diameter (**DL**) is often used as a reference for defining related dimensions such as tank width, depth, pump submergence, and rear clearance. However, since the horn diameter is not standardized and varies with impeller sizes, using **DL** as a design base may lead to inconsistencies. Designers should apply it with caution to avoid misinterpretation in hydraulic calculations.

HSP/HSM series pump various of Flap Valves

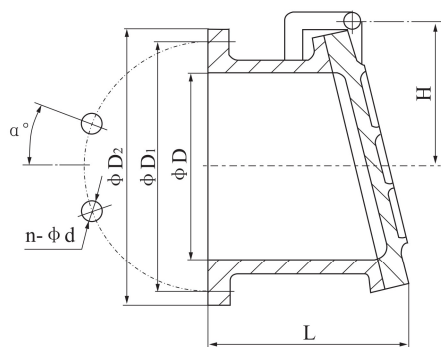
Flap valve

A. Appearance and connection dimension table for flap valve



Discharge caliber of well pipe	φD	φD1	φD2	n-φd	α°
400	400	495	540	8-23	22.5
500	500	655	710	6-27	30
600	600	705	755	10-27	18
700	700	810	860	12-27	15
800	800	920	980	12-27	15
900	900	1020	1075	12-27	15
1000	1000	1120	1175	12-27	15
1200	1220	1320	1380	12-27	15
1300	1300	1430	1500	10-27	18
1400	1400	1560	1630	12-36	15

B. Appearance and connection dimension for Alocated heavy flap valve



Discharge caliber of well pipe	φD	φD1	φD2	L	H	n-φd	α°
400	400	495	540	230	260	8-23	22.5
500	500	655	710	280	310	6-27	30
600	600	705	755	330	360	10-27	18
700	700	810	860	420	410	12-27	15
800	800	920	980	420	460	12-27	15
900	900	1020	1075	420	510	12-27	15
1000	1000	1120	1175	420	560	12-27	15
1200	1200	1320	1380	420	700	12-27	15
1400	1400	1560	1630	480	790	12-36	15

HSP,HSM Series – Grille Waste Remover

Smart Solutions for Efficient Pump Station Operation

To support diverse pump station requirements, our HSP and HSM series are compatible with advanced grille waste removal systems, ensuring smooth and reliable operation by preventing clogging and debris accumulation at the inlet.

Customizable Grille Waste Remover Systems

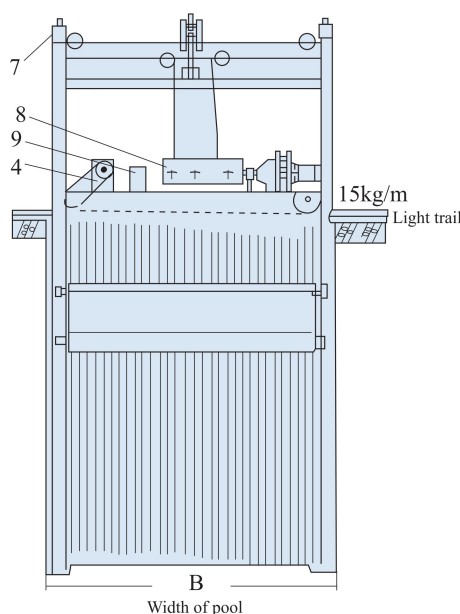
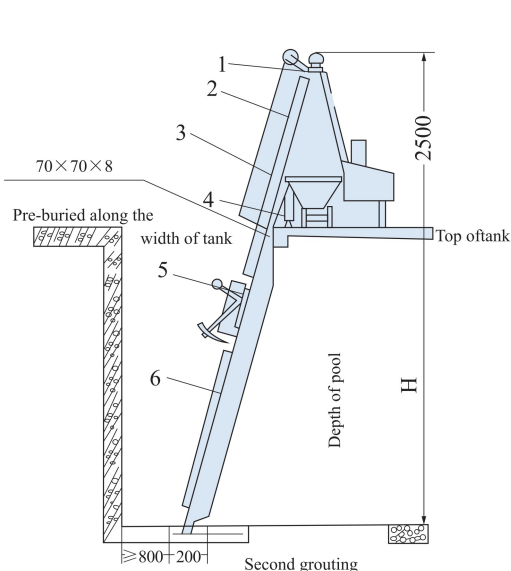
Choose from a variety of automatic and mechanical trash removal configurations tailored to your station's size and specifications.

- **SCT Series** – Durable **steel cable-type automatic waste removers**
- **MMG Series** – High-performance **mobile mechanical grille removers**

Both models are designed for seamless integration into open channel systems and are engineered for optimal efficiency and ease of maintenance.

Installation Highlights

- **Well Depth Range:** 2–12 meters
- **Bar Spacing Options:** 20–100 mm
- **Installation Angle:** 60°–75° (customizable up to 90° for special sites)
- **Grid Sizes Available:** 1000, 1250, 1500, 1750, 2000 mm



1	Hydraulic press system
2	Gate frame
3	Rubbish vehicle
4	Walking device
5	Grab bucket
6	Bar
7	Insurance device
8	Elevator
9	Electric control part

MAIN SPECIFICATION AND TECHNICAL PARAMETER

Model	Grid	Well depth (m)	Space between bars (mm)	Installing angle	Motor power
SCT MMG-1000	1000	2~12	20~100	60°~75°, 90° for special condition	Elevating motor 1.1~15kW, Control motor 0.75kW, Walking motor 0.8/0.4kW(Double-speed)
SCT MMG-1250	1250				
SCT MMG-1500	1500				
SCT MMG-1750	1750				
SCT MMG-2000	2000				



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