

#### **Model Number KQSN-X**

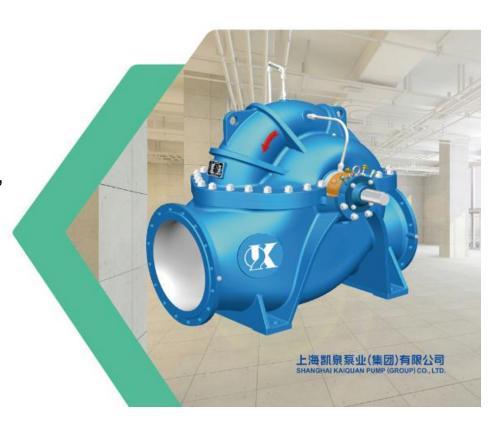
## Single-stage double-suction centrifugal pump

# 1.Efficient, reliable, energy-saving and environmentally friendly

- I. Integrating hydraulic, material, and structural design to ensure product reliability and efficiency.
- II. The perfect match between impeller and shell, high efficiency, wide high-efficiency zone, and high operating efficiency.
- III. Reasonable balance between cavitation performance and efficiency indicators, energy-saving and environmentally friendly operation.

## 2.Intelligent interconnection, winning the future with intelligence

- Reserve multiple sensor installation interfaces, several of which can be connected to the cloud monitoring platform and can be used online
- II. Monitor the status of long-distance travel, receive early warnings, and achieve intelligent remote maintenance.





#### **Product Overview**

The KQSN-X single-stage double suction centrifugal pump is an upgraded product that combines the company's advanced hydraulic model research results, structural reliability upgrades, universality, and configuration optimization.

This series of products fully adopts excellent hydraulic models, while optimizing the overall structure to improve the reliability and overall performance of remote rotation. Good rotor rigidity and moment of inertia Small, small starting current has little impact on the power grid; Optimization of external dimensions, small storage capacity of the foundation and saving installation space; The disassembly and assembly structure of bearing components is convenient for on-site maintenance, avoiding excessive damage. Heating caused bearing damage, resulting in unstable pump operation. The performance of this series of products is planned based on the parameters of market demand over the years, and is matched with multiple shell and impeller models, More suitable for various on-site parameter requirements, ensuring efficient and reliable operation.

## application area

Water supply systems for water plants, circulating water systems for power plants and industrial production, irrigation and drainage restriction station systems, building water supply systems, heating and cooling systems, and other pipelines are missing transportation.

## **Transport medium**

Tap water from water plants, industrial water, river water, fire water, heating hot water, etc.



### Technical parameter

Caliber: DN150-DN1400mm, The flange complies with GBT17241.8 standard (special customization is

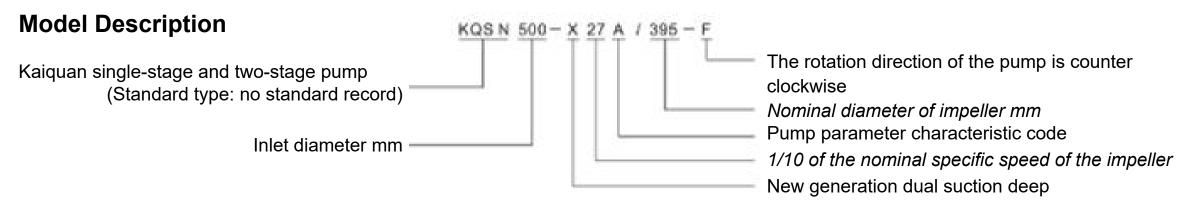
available)

Speed: 7409901480 and 2960r/mln (corresponding to different speeds according to the model).

Flow rate: 65-13600m/h Lift: 9-320m

#### **Attention:**

- 1. Regarding the cavitation allowance of the device, it is necessary to consider the cumulative effects of local altitude (atmospheric pressure) and medium saturation (saturated vapor pressure).
- 2. The selection of motor power for use should take into account the influence of local altitude factors (especially when greater than 1000 meters).



#### **Performance and Reliability upgrade:**

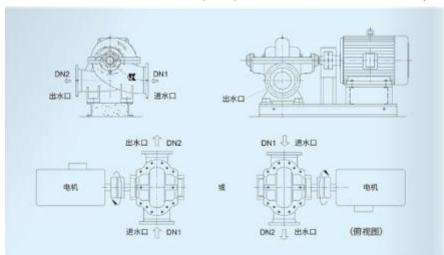
- 1. Optimization of impeller, suction chamber, and pressurized water chamber wet cycle for higher efficiency.
- 2. The positioning of the impeller shoulder and the reasonable design of the rotor result in directional axial force, making the operation more stable and reliable.
- 3. The weight of the rotor is reduced, the moment of inertia is small, the starting current is small, and the impact on the power grid is small.



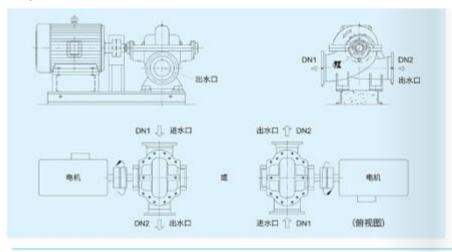
#### **Rotation direction determination**

## Determination of pump rotation direction

Standard type (from the perspective of the meat pump at the transmission end, the rotation direction of the pump is clockwise acid rotation).



F special type, when viewed from the transmission end towards the pump, the required rotation direction is clockwise control.



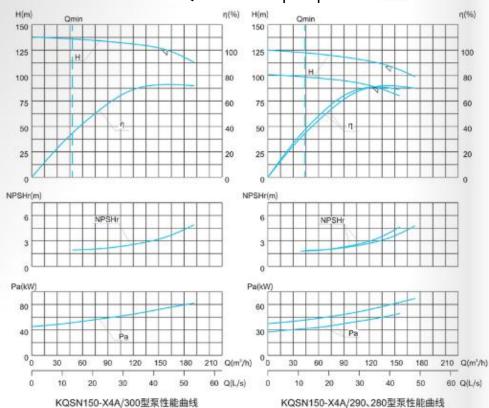
## Main component material selection table

and the second			材料牌	号及组合				
零件名称	А	В	С	D	E	F		
泵体	泵体 HT250 QT450-10 ZG230-450 ZG270-500		12%铬钢	奥氏体 不锈钢	2205/250			
泵盖	HT250	QT450-10 QT500-7	ZG230-450 ZG270-500	12%铬钢	奥氏体 不锈钢	2205/250		
叶轮	HT250 ZG230-450 ZG20Cr13	QT500-7 QT600-3 ZG20Cr13	ZG270-500 ZG20Cr13	12%铬钢	奥氏体 不锈钢	2205/250		
轴	40Cr	2205	2205	2205	2205	2205		
密封环	HT200 HT250/ ZCuSn10P1	QT450-10 QT500-7 HT250/HT200 ZCSn10P1u	QT500-7 HT250/HT200 ZCSn10P1u	12%锗铜	ZCuSn10P1 奥氏体不锈钢	316L/317		
填料轴套	20Cr13	QT500-7 HT250 20Cr13	QT500-7 HT250 20Cr13	20Cr13	奥氏体 不锈钢	316L/317L		
喉部衬套	HT200/ HT250	QT450-10 HT250 HT200	QT600-3 HT250 HT200	12%铬钢	ZCuSn10P1 奥氏体不锈钢	316L/317		
叶轮螺母	45/20Cr13	45/20Cr13	45/20Cr13	20Cr13	奥氏体 不锈钢	2205		
机封压盖	HT200 HT250	HT250	Q235/HT250	ZG230-450 Q235	304	2205		
填料压盖	HT200 HT250	HT250	Q235/HT250	ZG230-450 Q235	304	2205		
键	45	45	45	20Cr13	12Cr13 20Cr13	硬面处理的 双相钢		
机封定位套	20Cr13	20Cr13	20Cr13	20Cr13	0C17Ni4Cu4Nb 20Cr13	2205		

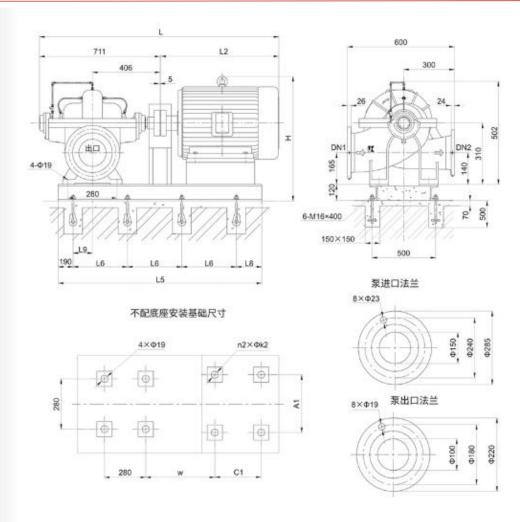
注:材料組合A为标准产品配置,特殊介质时过流件材料需根据情况合理选配。



## Technical parameters and performance curve of KQSN150-X4A pump

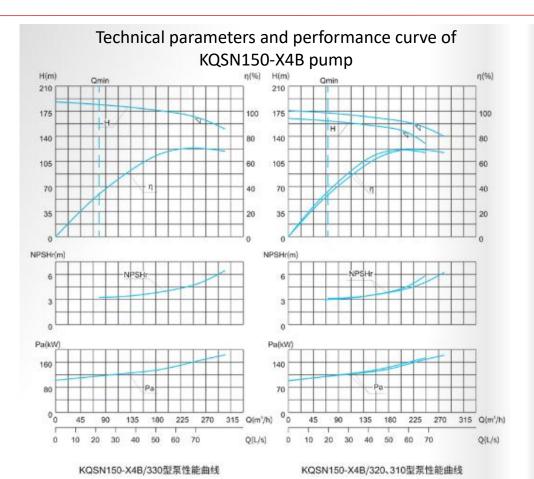


菜型号	流量Ca	apacity	扬程	转速	功率	(kW)	效率	NPSHr	聚重 (kg)	
Pump type	(m²/h)	(L/s)	Head (m)	Speed (r/min)	轴功率 Shaft Power	电机功率 Moter Power	Efficiency %	(m)		
KQSN150-X4A/300	120	33.3	131		62.0		69			
	160	44.4	125	2960	74.6	90	73	3.5	170	
	192	53.3	113		82.1		72			
	108	30.0	116		50.5		68		169	
KQSN150-X4A/290	145	40.3	109	2960	59.8	75	72	3.4		
180	174	48.3	99		67.0		70			
KQSN150-X4A/280	98	27.2	94		37.6		67			
	130	36.1	89	2960	44.5	55	71	3.3	168	
- 27 - 3	156	43.3	81		49.9		69			

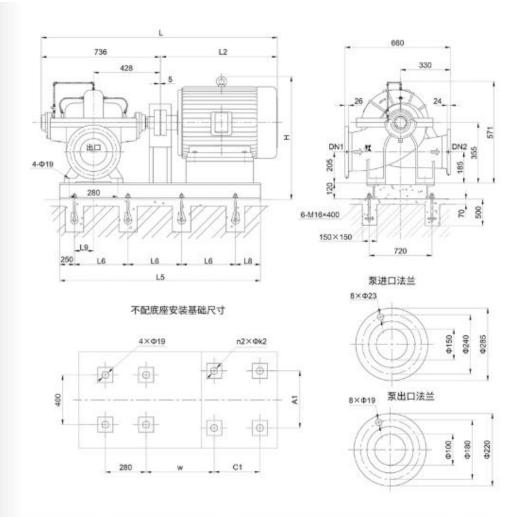


	电动机					尺寸mm											重量(kg)		
泵型号	코 号	电压 (V)	防护 等级	功率 (kW)	L	L2	L5	L6	L8	L9	н	w	C1	n2	k2	A1	电机	底座	
KQSN150-X4A/300	YE2-280M-2	380	IP55	90	1736	1020	1450	535	190	0	790	601	419	4	24	457	540	190	
KQSN150-X4A/290	YE2-280S-2	380	IP55	75	1686	970	1400	510	190	0	790	601	368	4	24	457	510	190	
KQSN150-X4A/280	YE2-250M-2	380	IP55	55	1631	915	1320	470	190	0	795	579	349	4	24	406	415	180	





泵型号 Pump type	液量C	apacity	扬程	转速	功率	(kW)	效率	NPSHr	聚重 (kg)	
	(m²/h)	(L/s)	Head (m)	Speed (r/min)	轴功率 Shaft Power	电机功率 Moter Power	Efficiency %	(m)		
KQSN150-X4B/330	195	54.2	175		138.7		67	5	240	
	260	72.2	165	2980	165.7	185	70.5			
	305	84.7	150		183.2		68			
	177	49.2	165		120.7		66	4.8	240	
KQSN150-X4B/320	237	65.8	155	2980	144.1	160	69.5			
	280	77.8	140		159.3		67			
	161	44.7	154		103.0		66		240	
KQSN150-X4B/310	215	59.7	146	2980	123.9	132	69	4.6		
	246	68.3	130		130.0		67			



泵型号	电动机					尺寸mm												(kg)
	및 号	电压 (V)		功率 (kW)	L	L2	L5	L6	L8	L9	н	w	C1	n2	k2	A1	电机	底座
KQSN150-X4B/330	YE2-315L2-2	380	IP55	185	1951	1210	1740	650	190	0	1005	649	508	4	28	508	1060	210
KQSN150-X4B/320	YE2-315L1-2	380	IP65	160	1951	1210	1740	650	190	0	1005	649	508	4	28	508	1060	210
KQSN150-X4B/310	YE2-315M-2	380	IP55	132	1951	1210	1700	630	190	0	1005	649	457	4	28	508	1060	210





## KQSN single-stage double suction centrifugal pump

Wide, efficient, low cavitation design, overall structural optimization, good structural stability, high degree of universality





**WQ** submersible sewage pump

WL dry sewage pump





**XBC** diesel engine fire pump





Efficient and energy-saving, green and environmentally friendly/compact structure, safe and reliable/durable, easy to maintain/precision manufacturing, quality first

## KQDQ series lightweight vertical multi-stage centrifugal pump

More products are being launched, welcome to customize products by writing to us.

contacts:Paul Rocke paul@epitsh.com