

BE PUMPING
PARTNERS



hydroo®

VKF, VKX VKN VDROO Series

Immersion type multistage
centrifugal pump
50Hz



HYDROO is present in all the European markets by means of a distribution network focused on the service and the valuation of the pumping business. HYDROO conceives, researches, develops, designs, industrializes, and manufactures a wide range of pumping solutions for the most demanding applications in industrial markets, irrigation, water supply and water treatment as well as in residential and commercial buildings. The values of operational excellence, experience, reliability, and passion for a well-done job guide the daily work of the Hydroo team together with our partners and distributors. The global challenges of water management require excellence in pumping technologies and a joint effort between designers, manufacturers, and pumping engineers. To meet the needs of the market in the more demanding installations Hydroo is firmly committed to manufacturing the best pumping equipment on the market following and sharing our values worldwide.

The Hydroo values are presented in 5 great concepts that we summarize in our motto Hy5, which are our principles and commitments:

BE PUMPING PARTNERS



Sant Llorenç de la Muga
(Alt Empordà county, Catalonia)

Sant Llorenç de la Muga is a medieval village built in the Muga valley, remaining the remains of the wall, different bridges as well as an impressive architectural ensemble keeping still nowadays the charm of the stone as a raw material for construction.

Coordinates:
Longitude: 2.78890
Latitude: 42.32069



hy5

hylite
Contribution to preservation of the environment and to sustainability. We reduce the environmental impact and footprint of carbon. We contribute to the development of the circular economy. Our team stand out for the highest standards of energy efficiency.

hymotion
Value proposal based on the reliability of products enhancing the quality, the development of efficient supply chains, the productivity with the love of craftsmen at every step of the manufacturing and production lines. We move with the commitment to improve pumping systems, make them more efficient, more reliable, more digitized, more at the service of the human development.

hyficient
The use of the most advanced analytical, development and simulation tools allows us to optimize our R&D teamwork results. We maximize the study of materials, efficient hydraulics, mechanical improvements and the optimization of our motors up to 200 kW. The results are robust, reliable, flexible, adjustable, multipurpose, and user-friendly pumping equipment.

hynovative
Commitment to implementation of the innovation process as strategic pillar of the company. Transfer new ideas to realities that evolve pumping industry and internalize the process in each job position to offer market improvements.

hyliance
We are the factory of our customers. Without solution of continuity between the value chain starting in the components production plants and ending with amortization of the pumping equipment operating at full performance for years and giving satisfaction to distributors, project engineers and pumping systems managers. We make real our catchphrase **Be Pumping Partners**.



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VKF VKX VKN

Immersion type
multistage
centrifugal pump

Description

Non self-priming immersion multistage centrifugal pumps made in Stainless Steel. Standard totally enclosed, fan cooled, insulation class F, IP 55 motors. Single phase motors up to 2,2 kW.

Flexible installation length to meet the requirements of installation depth of the water tank or vessel, by means of cavity bodies.

Standard version can be used for conveying water, cooling water solutions and cutting lubricating liquids. Versions for hot water up to 120 °C are also available on request.

Performance range

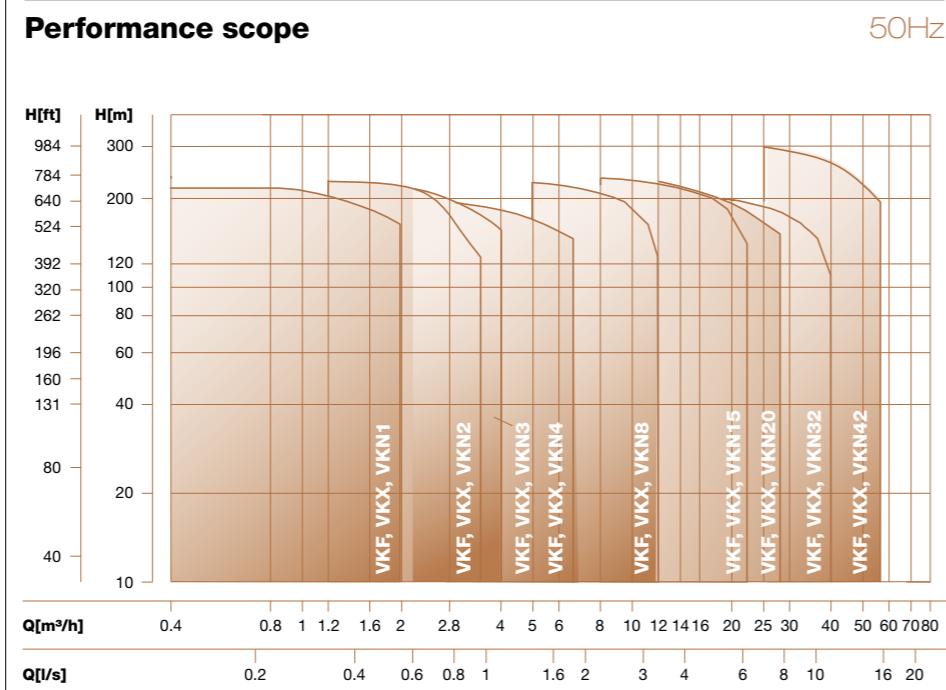
Flow: Q up to 540 m³/h
Head: H up to 450 m
Temperature: T up to 50 °C
Speed: n 2900 rpm or 3500 rpm
Power: P up to 350 kW

Standard material

Cast iron, stainless steel 304 or Stainless steel 316 on request.

Applications

- Machine tools cooling systems
- Industrial washing systems
- Chiller units
- Industrial filtration systems
- Other industrial applications



Pump

VKF, VKX, VKN is non-self priming multi-stage centrifugal pump installed with standard motor. The motor shaft is directly connected with the pump shaft through coupling. According to the requirement, the pump can be equipped with intelligent protector, which effectively protects pump from dry rotation, phase lack, overload etc. In order to meet the requirement of installation depth of the water tank or vessel, it is possible to install cavity body for changing length of the pump. Length for different number of stages is shown in the dimensions & weight table and the table of products supply scope.

- Single phase motors with 0.37-2.2kW are available.

Motor

- The motor is fully-sealed, air-cooling standard motor 2 poles.
- Protection class: IP55
- Insulation class: F
- Standard voltage:
1x220-230/240V
3x220-240/380-415V
3x400-690V
- Motors for other voltages can be supplied on request.

Concretely, it is applicable to electric spark, lathe, grinding machine, processing center, cooling devices, industrial cleaning equipment, filtering system etc.

Operation conditions

Thin, clean non-explosive liquid without solid grains and fibers; can be used for conveying of water, cooling water solution and cutting lubricating liquid.

Liquid temperature:
Normal temperature type: -15 °C~+70 °C
Warm water type: -15 °C~+120 °C

Product range

Description	VK-1	-2	-3	-4	-8	-15	-20	-32	-42
Rated flow [m ³ /h]	1	2	3	4	8	15	20	32	42
Rated flow [l/s]	0.28	0.56	0.83	1.1	2.2	4.17	5.6	8.9	11.7
Flow range [m ³ /h]	0.4~2	1~3.5	1.2~4	1.5~7	5~12	8~22	10~28	16~40	25~55
Flow range [l/s]	0.11~0.56	0.28~0.97	0.33~1.1	0.42~1.9	1.4~3.3	2.2~6.1	2.8~7.8	4.4~11.1	6.9~15.3
Max. pressure [bar]	21	23	22	21	21	22	23	26	30
Motor power [kW]	0.37~2.2	0.37~3	0.37~3	0.37~4	0.75~7.5	2.2~15	2.2~18.5	1.5~30	3~45
Temp. [°C]	-15 ~ +120								
Max. efficiency [%]	44	46	54	57	62	70	69	73	75

Performance curves

- All curves are based on measured values of 50Hz: constant motor speed 2900 r/min.
- The allowable tolerance of the curve complies with ISO9906:2012 Grade 3B.
- For measurement, air-free water with temperature 20 °C and kinematical viscosity 1 mm²/s.
- The pump application is in reference to performance scope of heavy line to prevent overheating due to too low flow and motor overload due to too high flow rate etc.

Notes



202232-CTL-VK-EN
subject to amendments

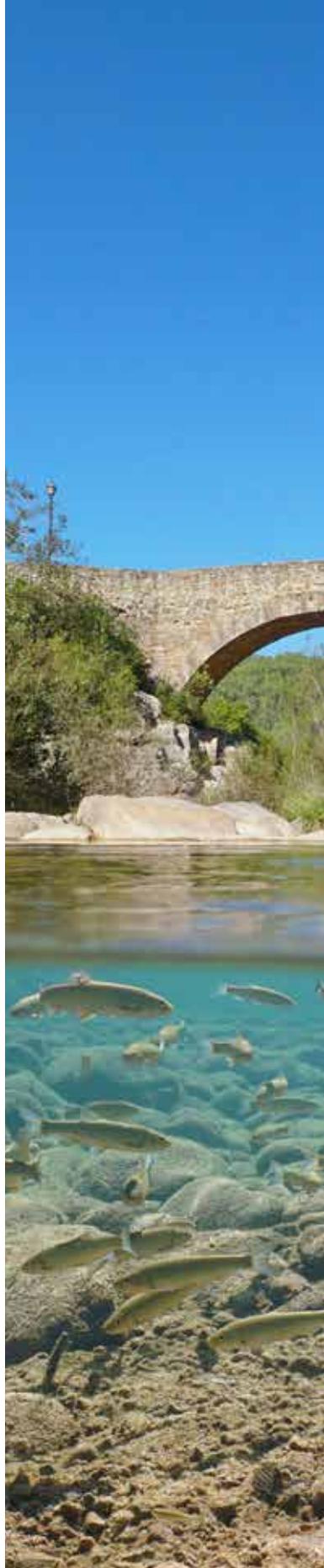
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