Chemtai®
CHEMICAL PUMP

CATALOG

YEAR 2025

STAINLESS STEEL VERTICAL PUMP

MODEL : QHV SERIES

HIGH EFFICIENCY
MOTOR IE3/IE4
Premium Quality

Certifield ISO9001:2015

A NEW LEVEL OF PUMP PERFORMANCE
Expanded field of application owning
to improved corrosion resistance.

- CHEMICAL INDUSTRY
- POLLUTION PROCESS
- SEMICONDUCTOR
- AUTO-PART INDUSTRY

Chemtai® CHEMICAL PUMP

Stainless Steel Verticle Pump [QHV Series]

Product Specification List

Model	Inlet & Outlet Size	Power HP	Power KW	Max. Head (50Hz)(m)	Max. Flow(50Hz)		Motor Speed R/MIN
					(L/min)	(m^3/h)	
QHV-25SK-0.5	DN25	0.5	0.37	11.5	100	6	2850
QHV-25SK-1	DN25	1	0.75	11.5	150	9	2850
QHV-40SK-1	DN40	1	0.75	11.5	200	12	2850
QHV-40SK-2	DN40	2	1.5	17	300	18	2850
QHV-50SK-2	DN50	2	1.5	17	366	22	2850
QHV-50SK-3	DN50	3	2.2	17	416	25	2850
QHV-50SK-5	DN50	5	4.0	23	600	36	2850
QHV-65SK-3	DN65	3	2.2	17	483	29	2850
QHV-65SK-5	DN65	5	4.0	23	666	40	2850
QHV-80SK-7.5	DN80	7.5	5.5	27	800	48	2850
QHV-80SK-10	DN80	10	7.5	27	933	56	2850
QHV-100SK-7.5	DN100	7.5	5.5	23	1666	100	2850
QHV-100SK-10	DN100	10	7.5	27.5	1666	100	2850
QHV-100SK-15	DN100	15	11	31	1800	108	2850
QHV-100SK-20	DN100	20	15	31	2100	126	2850
QHV-125SK-15	DN125	15	11	22.5	2633	158	2850
QHV-125SK-20	DN125	20	15	27	2633	158	2850

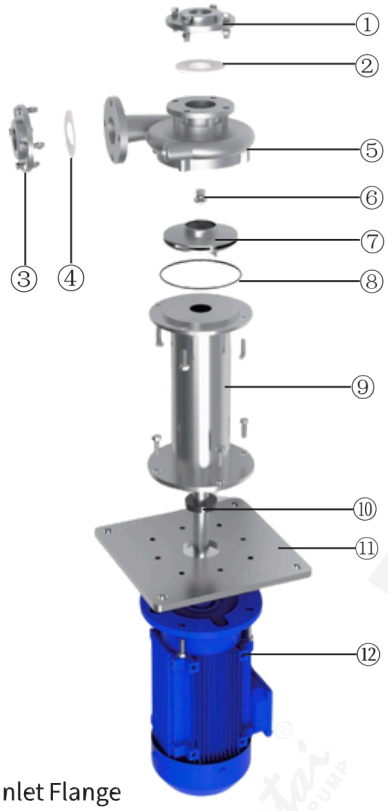
- **Medium temperature: 0 °C~+180 °C, medium specific gravity: 1-2, working environment temperature: -5 °C~+50 °C, maximum operating altitude: 2000m, maximum working pressure: 10Bar. Test basis: The above performance data corresponds to the normal speed of transportation of clean water at 25 °C. The performance error is ± 5%. The performance of a pump varies with the specific gravity and temperature of the fluid medium being transported.**

QHV SERIES - STAINLESS STEEL VERTICAL PUMP

Model Description

QHV - 40 - SK - 1 - 5 - P - S4 - V38 - K - A - B - S
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

① Model No.: QHV
② Inlet And Outlet Caliber: 25-1 "; 40-1.5 "; 50-2 "; 65-2.5 "; 80-3 "; 100-4 "; 125-5 "
③ Specific Gravity Of Liquid: SK-1. 0-1.2; SB-1. 3; SC-1. 4; SD-1. 5; SE-1. 6; SF-1. 7; SG-1. 8; SH-1. 9; SI-2. 0
④ Power: 1/2-1/2 HP; 1-1HP; 2-2HP; 3-3HP; 5-5HP; 7.5-7.5 HP; 10-10HP; 15-15HP; 20-20HP; 25-25HP
⑤ Frequency: 5-50HZ; 6-60HZ
⑥ Sealing Material: P-PTFE
⑦ Pump Body Material: S4-SUS304; S6-SUS316
⑧ Voltage: Voltage: V38-3∅/380V; V41-3∅/415V; V44-3∅/440V; V 48-3∅/480V; V66-3∅/660V; V32-3∅/220V; V22-1∅/220V
⑨ Motor Brand: G-Kingdom; K-Kailida; Q-Other
⑩ Motor Requirements: A-IE3 Normal Motor; B-IE4 Normal Motor; C-IE5 Normal Motor; D-Variable Frequency Motor; E-IE3, BT4 Ex-Proof Motor; F-IE4, BT4 Ex-Proof Motor;
G-IE5, BT4 Ex-Proof Motor; H-IE3, CT4 Ex-Proof Motor; I-IE4, CT4 Ex-Proof Motor; J-IE5, CT4 Ex-Proof Motor; K-Permanent magnet variable frequency motor; L-BT4 Ex-Proof Variable Frequency Motor; M-CT4 Ex-Proof Variable Frequency Motor
⑪ Motor Protection Level: A-IP54; B-IP55; C-IP56; D-IP65
⑫ S-Standard；N-Non-Standard



① Inlet Flange
② Inlet Gasket
③ Outlet Flange
④ Outlet Gasket
⑤ Front Cover
⑥ Impeller Nut
⑦ Impeller
⑧ Cover O-Ring
⑨ Pump Body
⑩ Oil Seal
⑪ Motor Base
⑫ Motor

Product Characteristics

1. It is made of 304 or 316 stainless steel by virtue of casting molding, with compact and firm structure.
2. The design of non-shaft seal, and it will not burn out because of idling.
3. It is suitable for all kinds of acid alkali solution and micro acid solution. It can be recycled and resistant to high temperature.
4. The pump has low noise and slight vibration.
5. The volume of the pump is small, which is suitable for the usage of the inside and outside design of tank.

Product Superiority

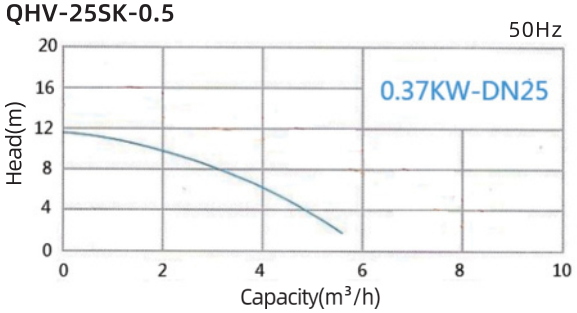
1. It is made of 304 or 316 stainless steel, with compact and firm structure. The interior and exterior appearance of the body is balanced and smooth.
2. The impeller has been corrected for dynamic balance, with low noise and low vibration rate;
3. The use of dry liquid seal can ensure that the motor and bearing are not corroded by chemical gas, so as to prolong the service life of the motor and pump;
4. It is equipped with high-end foreign brand motors, with high efficiency and low noise;
5. The pump shaft is integrated with motor and rotor to ensure the accuracy and stability of operation.

QHV - 25SK-0.5/25SK-1/40SK-1/40SK-2/50SK-2/50SK-3
50SK-5/65SK-3/65SK-5/80SK-7.5/80SK-10/100SK-7.5
100SK-10/100SK-15/100SK-20/125SK-15/125SK-20

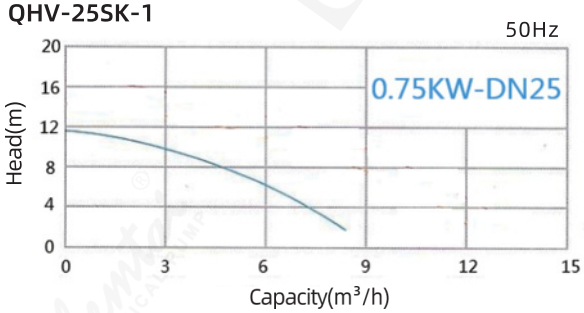
- **Max.Flow:** 2633 L/min
- **Max.Head:** 31 m

Performance Curve

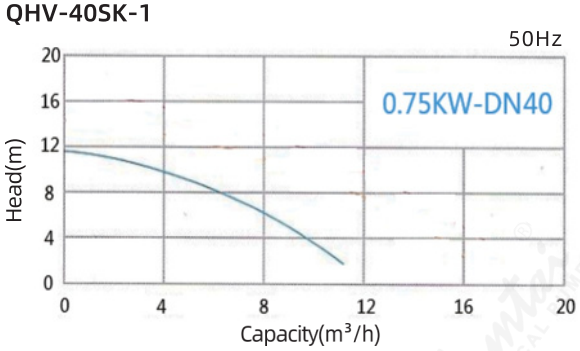
QHV-25SK-0.5



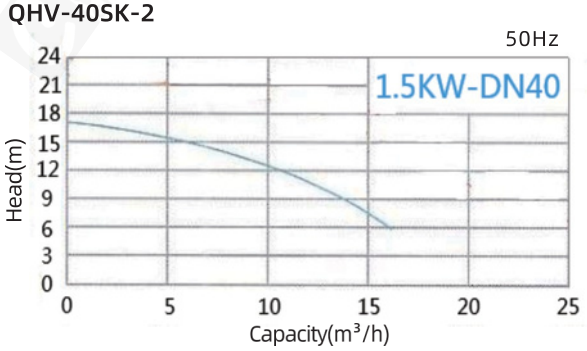
QHV-25SK-1



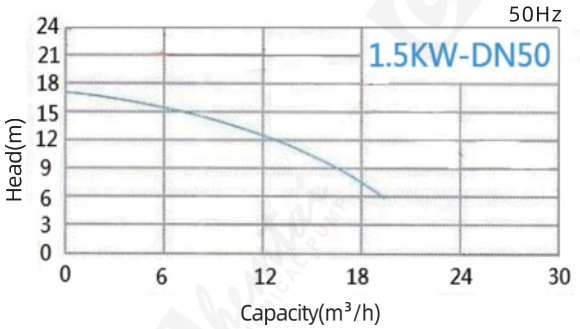
QHV-40SK-1



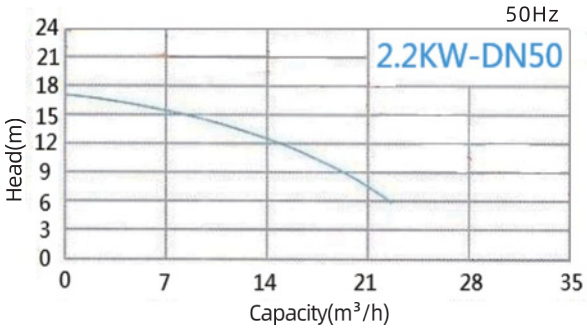
QHV-40SK-2



QHV-50SK-2



QHV-50SK-3



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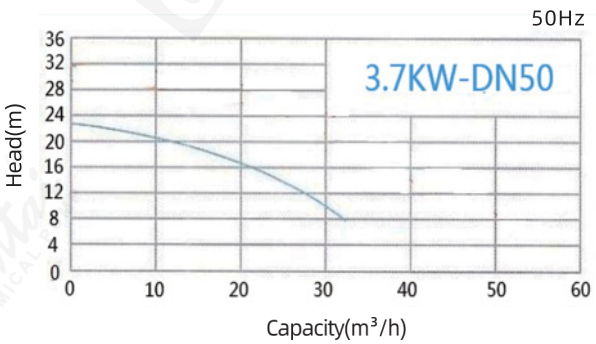
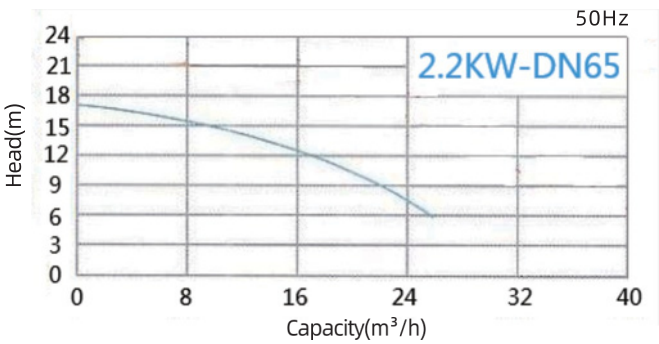
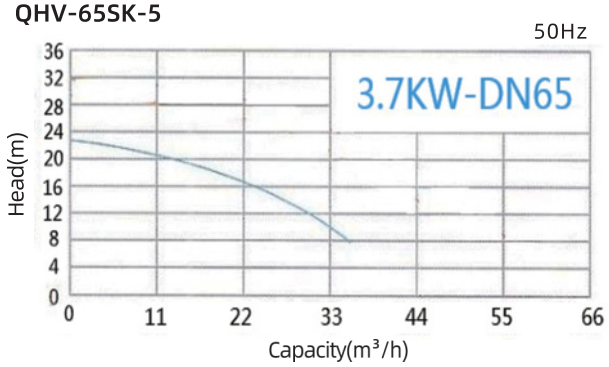


QHV-65SK-3

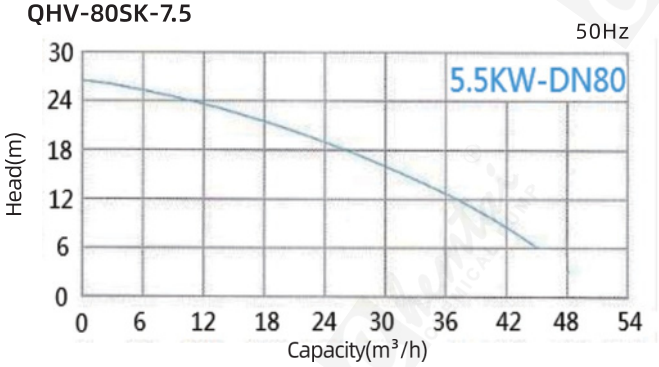


Performance Curve

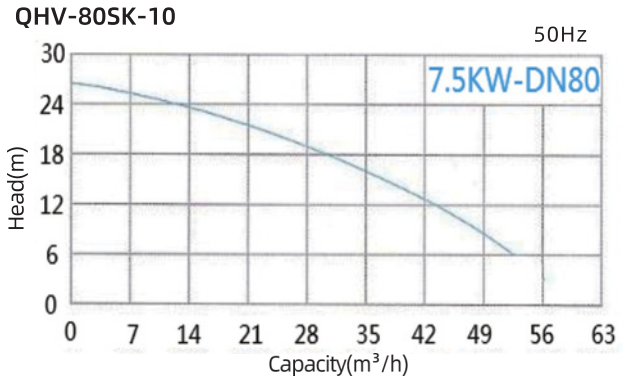
QHV-65SK-5



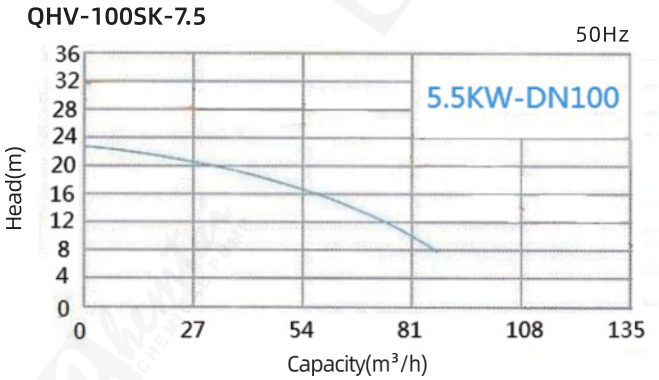
QHV-80SK-7.5



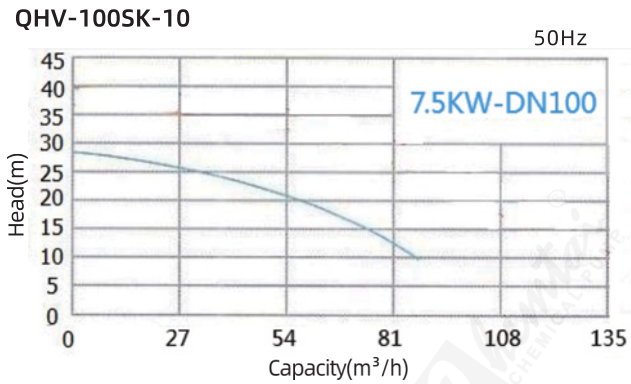
QHV-80SK-10



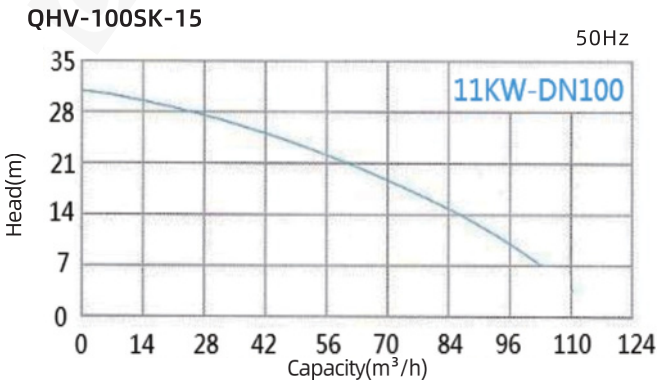
QHV-100SK-7.5



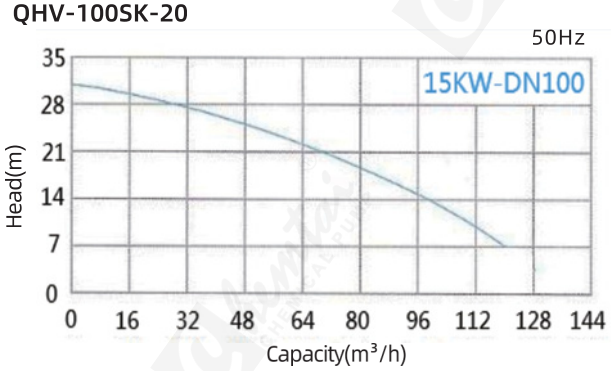
QHV-100SK-10



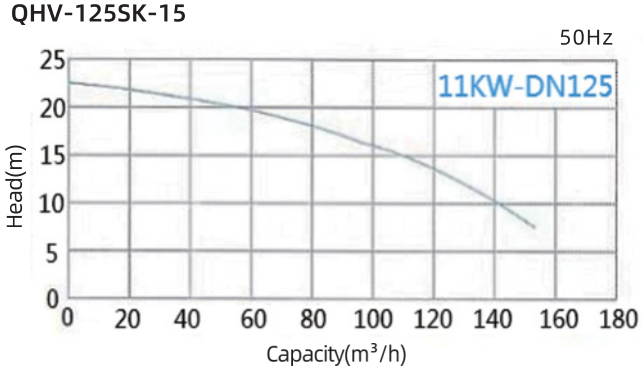
QHV-100SK-15



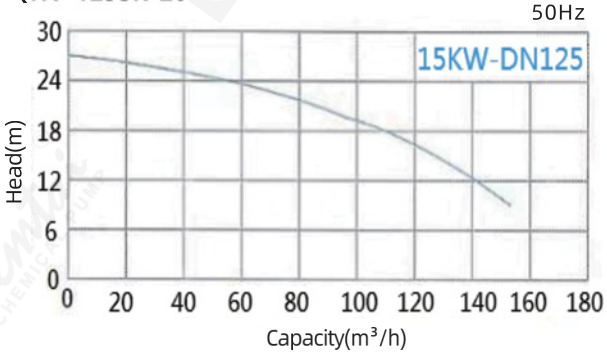
QHV-100SK-20



QHV-125SK-15

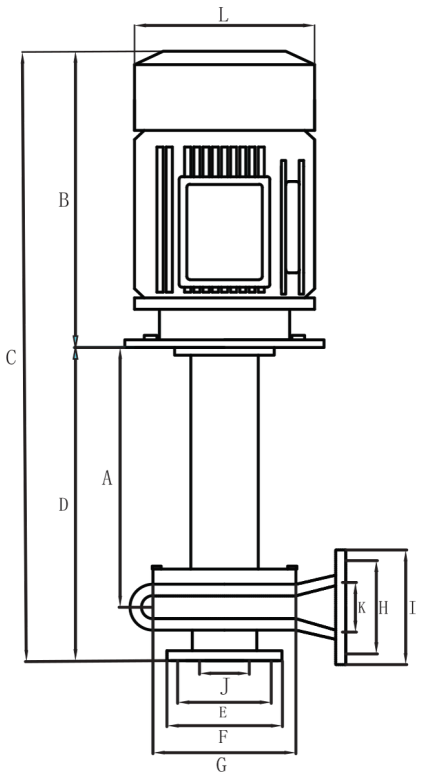


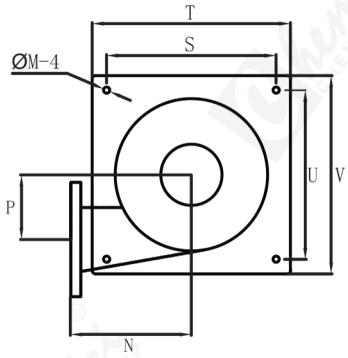
QHV-125SK-20



QHV SERIES - STAINLESS STEEL VERTICAL PUMP

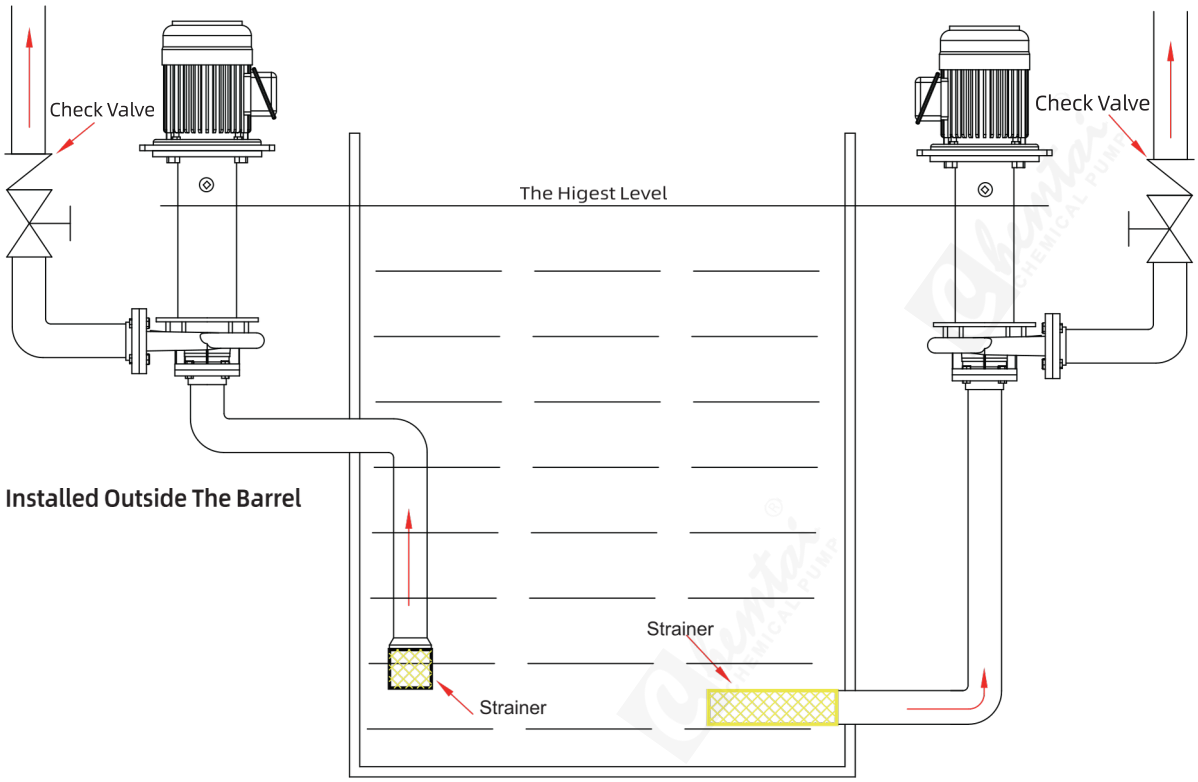
Overalll Dimensions





Model	Horse Power HP	A	B	C	D	J	E	F	G	K	H	I	L	M	S	T	U	V	P	N
QHV-25SK-0.5	0.5	258	300	558	260	25	78	93	150	25	78	93	170	15	150	210	180	210	70	107
QHV-25SK-1	1	258	300	558	260	25	78	93	150	25	78	93	170	15	150	210	180	210	70	107
QHV-40SK-1	1	258	300	558	260	40	78	93	150	40	78	93	170	15	150	210	180	210	70	107
QHV-40SK-2	2	340	390	730	335	40	95	118	180	40	95	118	200	15	222	260	222	260	82	107
QHV-50SK-2	2	340	390	730	335	50	95	118	180	50	95	118	200	15	222	260	222	260	82	107
QHV-50SK-3	3	340	390	730	335	50	95	118	180	50	95	118	200	15	222	260	222	260	82	107
QHV-65SK-3	3	340	410	750	335	65	122	150	200	65	122	150	200	15	222	260	222	260	85	158
QHV-50SK-5	5	340	410	750	388	50	122	150	200	50	122	150	235	15	222	260	222	260	85	158
QHV-65SK-5	5	340	410	750	388	65	122	150	200	65	122	150	235	15	222	260	222	260	85	158
QHV-80SK-7.5	7.5	350	420	770	420	80	122	150	230	80	122	150	280	15	300	350	300	350	100	154
QHV-80SK-10	10	350	420	770	420	80	122	150	230	80	122	150	280	15	300	350	300	350	100	154
QHV-100SK-7.5	7.5	365	440	805	420	100	175	210	240	100	175	210	280	15	300	350	300	350	106	163
QHV-100SK-10	10	365	440	805	420	100	175	210	240	100	175	210	280	15	300	350	300	350	106	163
QHV-100SK-15	15	395	480	875	513	100	175	210	270	100	175	210	316	15	300	350	300	350	122	167
QHV-100SK-20	20	395	480	875	513	100	175	210	270	100	175	210	316	15	300	350	300	350	122	167
QHV-125SK-15	15	403	495	898	513	125	210	250	270	125	210	250	316	15	300	350	300	350	128	210
QHV-125SK-20	20	403	495	898	513	125	210	250	270	125	210	250	316	15	300	350	300	350	128	210

Installation Diagram



Attentions

1. If it is used in chemical plant or environment with volatile gas, it is necessary to select the safe and explosion-proof Eg3 or D2g4 motor;
2. Filter screen shall be installed at the inlet pipe to prevent foreign matters from being inhaled, which may cause damage to the pump;
3. If the outlet pipe is higher than the motor, a check valve shall be installed at the highest point of the liquid level to prevent the motor from being damaged;
4. The mixing of different types of chemical solution may cause chemical reaction, even high heat, which may damage the pump. Therefore, do not use the same pump to transport different chemical solutions.

Chemtai® CHEMICAL PUMP

CORROSION RESISTANCE CHART

Chemical Solution Name	Concen-Tration %	Temperate °C	Body Materail			Seal Materail			Rubber Materail		
			FRPP	CPVC	PVDF / GFR ETFE	Ceramic	Carbon	Sic	NBR	EPDM	VITON
H_2SO_4 Sulfuric acid	30	40	✕	●	●	●	●	●	●	●	●
		60	✕	●	●	●	●	●		●	●
		80	✕	○	●	●	●	●		○	●
		95			●	●	●	●			●
	60	40	✕	●	●	●	●	●		●	●
		60	✕	●	●	●	●	●		●	●
		80	✕	△	●	●	●	●		○	●
		95			●	●	●	●			●
	98	40	✕	○	●	●	●	●			●
		60	✕	△	○	●	●	●			●
HCL Hydrochloric acid	25	40	●	●	●	○	●	●		●	●
		60	○	○	●	●	●	●		●	●
		80			●	●	●	●		○	●
	35	40	●	●	●	●	●	●		○	○
		60	○	○	●	●	●	●			
		80			●	●	●	●			
CrO_3 Chromic acid	20	40	✕	○	●	●	●	●			●
		60		△	●	●	●	●			●
		80			●	●	●	●			○
HNO_3 Nitric acid	30	40	○	○	●	●	○	●			●
		60	✕	△	●	●	○	●			●
		80	✕	✕	●	●	○	●			●
	50	40	△	○	●	●	○	●			●
		60	✕	△	●	●	○	●			●
H_3PO_4 Phosphoric acid	10	40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	○	●	●
		80	○	○	●	●	●	●		○	●
	50	40	●	●	●	●	●	●		●	●
		60	●	○	●	●	●	●		○	●
		80	△	△	●	○	●	●		○	●
NaOCl Sodium Hypochlorite	10	40	○	●	●	●	○	●			●
		60	○	○	●	●	△	●			●
		80	△		●	●	✕	●			●
CH_3COOH Acetic acid	20	40	●	●	●	●	●	●			✕
		60	●	○	●	●	●	●			✕
		80	○	△	●	●	●	●			✕
HF Hydrofluoric	30	40	✕	○	●	✕	○	●		●	
		60	✕	△	●	✕	○	●		●	
		80	✕	✕	●	✕	○	●		○	
$HNO_3+{}_3HCl$ Aqua regia	3:1	40	✕	△	●	●	✕	●	✕		○
		60	✕	✕	●	○	✕	●	✕		○
		80	✕	✕	●		✕	●	✕		●
H_2O_2 Hydrogen Peroxide	20	40	●	●	●	●	✕	●	✕		●
		60	●	○	●	●	✕	●	✕		●
		80	○	○	●	●	✕	●	✕		●
NaOH Sodium Hydroxide	45	40	●	○	●	●	✕	●	●	●	○
		60	○	△	○	●	✕	●	●	●	△
		80	○	✕	✕	●	✕	●	○	○	△
$FeCl_3$ Ferric chloride	40	40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	○	●	●
		80	●	●	●	●	●	●		●	●
$Cu(CN)_2$ Copper Cyanide		40	●	●	●	△	●	●	●		●
		60	●	●	●	△	●	●	●		●
$ZnCl_2$ Zinc Chloride		40	●	●	●	●	●	●	●		●
		60	●	●	●	●	●	●	●		●
$NiSO_4$ Nickel Sulfate		40	●	●	●	●	●	●	●		●
		60	●	●	●	●	●	●	●		●

● : Excellent ○ : Good △ : Not Good ✕ : Bad

Chemtai®
CHEMICAL PUMP
2025

A new level of pump performance.
Expanded field of application owning
to improved corrosion resistance.

Certifield ISO:9001/2015