ump

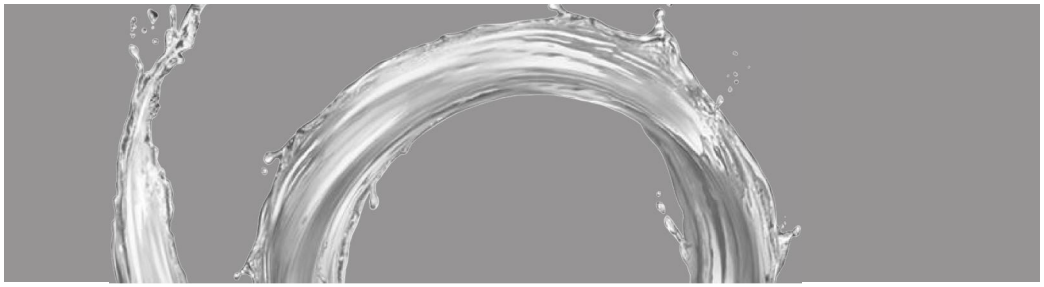
QP / QHA
HH / QHP

# Outside-tank vertical pump

【QHD series】

## Product specification

| QHD series | | | | | | | |
|---|---|---|---|---|---|---|---|
| Model | Inlet and outlet diameter (mm) Inlet / outlet | Horse power | Max.Head (M) | | Max.Capacity (L/min) | | Weight |
| | | | 50HZ | 60HZ | 50HZ | 60HZ | (kg) |
| QHD-40SK-15 | 50/40 | 1 | 14 | 13 | 280 | 250 | 23.1 |
| QHD-40SK-25 | 50/40 | 2 | 18 | 22 | 400 | 320 | 30 |
| QHD-40SK-35 | 50/40 | 3 | 20 | 26 | 420 | 420 | 32 |
| QHD-50SK-35 | 65/50 | 3 | 21 | 23 | 530 | 520 | 32.5 |
| QHD-50SK-55 | 65/50 | 5 | 31 | 36 | 580 | 560 | 43.9 |
| QHD-65SK-55 | 80/65 | 5 | 29 | 29 | 550 | 700 | 44.6 |
| QHD-65SK-7.55 | 80/65 | 7.5 | 34 | 37 | 730 | 960 | 58.6 |
| QHD-65SK-105 | 80/65 | 10 | 31 | 39.5 | 970 | 1100 | 65.4 |
| QHD-100SK-155 | 100/100 | 15 | 35 | 35 | 1710 | 1800 | 85.6 |



## Model description

QHD--65--SK--7.5--5--V--F

① ② ③ ④ ⑤ ⑥ ⑦

① Model No.: QHD

② Outlet diameter: 40-1.5"; 50-2" ; 65-2.5"; 100-4"

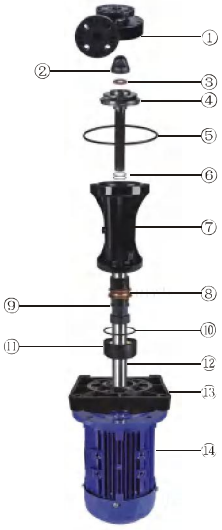
③ S.G: SK-1.1 ; SP-1.4

④ Horsepower: 1-1 HP;2-2HP;3-3HP;5-5HP;7.5-7.5HP;10-10HP
15-15HP; 20-20HP

⑤ Frequency: 5:50HZ ;

⑥ O-Ring: E-EPDM ;V-VITON(FKM)

⑦ Pump material: F-GFRPP; C-CFRPP; P-PVDF



① Front cover
② Impeller nut
③ Flat gasket seal
④ Impeller
⑤ Front Cover O-ring
⑥ Impeller rod O-ring
⑦ Pump body
⑧ Vapor
⑨ Shaft sleeve
⑩ Ceramic base O-ring
⑪ Ceramic base
⑫ Motor shaft key
⑬ Motor base
⑭ Motor

## Product characteristics:

1. GFRPP、CFRPP、PVDF plastic steel are used for injection molding, with strong acid and alkali resistance;
2. It can be used idling and in combination with the filter connection;
3. It is suitable for various acid-alkali liquid circulation, spray washing equipment, exhaust gas tower, etching machine, waste water treatment and various special electroplating liquid circulation transportation.

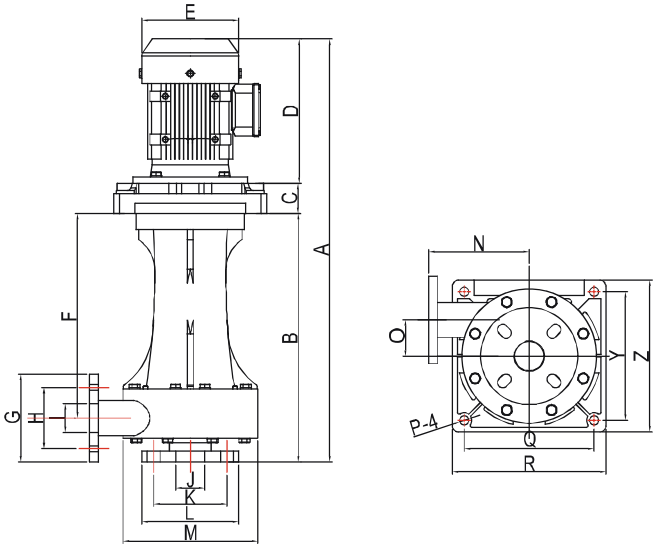
## Product superiority

1. The inlet and outlet flange and the front cover are injection molded, which can reduce the probability of leakage;
2. The convex point structure and flat gasket seal ring are used at the impeller nut and impeller seal, which can ensure the excellent effect of sealing;
3. The vibration of impeller is less than 2.0MM/S, and the mould is employed for integral injection molding, with long service life;
4. The distance between impeller and front cover and back cover is precise to improve efficiency and reduce noise;
5. High precision and high anticorrosion dry shaft seal is adopted to prevent leakage of liquid and acid alkali gas;
6. Unlimited idling in case of liquid shortage





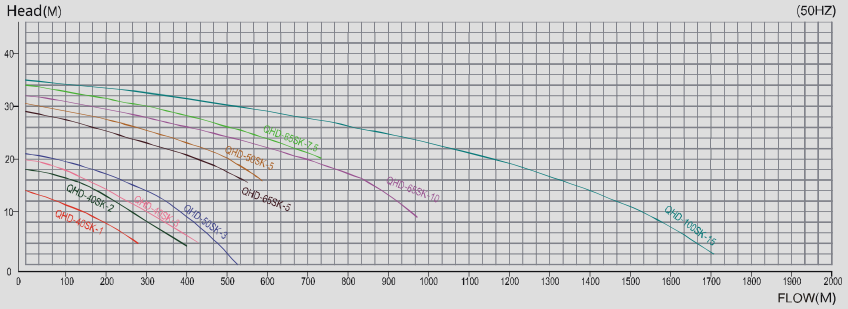
## Size specification

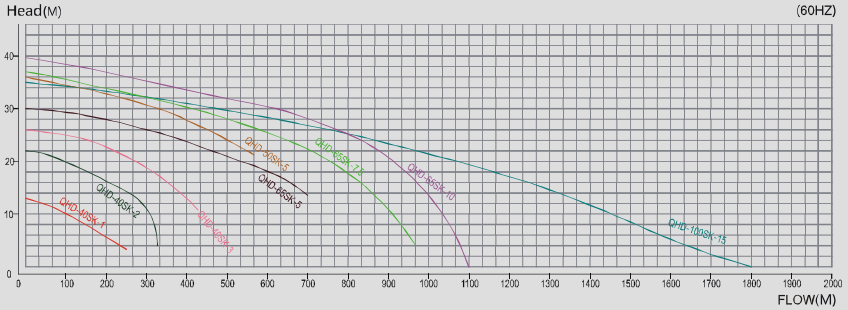



| Model | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| QHD-40SK-1 | 714 | 423 | 53 | 238 | ∅158 | 356 | ∅151 | ∅104 | ∅36 | ∅50 |
| QHD-40SK-2 | 756 | 423 | 53 | 280 | ∅175 | 356 | ∅151 | ∅104 | ∅36 | ∅50 |
| QHD-40SK-3 | 756 | 423 | 53 | 280 | ∅175 | 356 | ∅151 | ∅104 | ∅36 | ∅50 |
| QHD-50SK-3 | 756 | 423 | 53 | 280 | ∅175 | 356 | ∅153 | ∅117 | ∅50 | ∅67 |
| QHD-50SK-5 | 803 | 426 | 53 | 324 | ∅218 | 353 | ∅153 | ∅117 | ∅50 | ∅67 |
| QHD-65SK-5 | 803 | 426 | 53 | 324 | ∅218 | 353 | ∅175 | ∅130 | ∅65 | ∅75 |
| QHD-65SK-7.5 | 835 | 426 | 53 | 356 | ∅234 | 352.5 | ∅175 | ∅130 | ∅65 | ∅75 |
| QHD-65SK-10 | 875 | 426 | 53 | 396 | ∅230 | 352.5 | ∅175 | ∅130 | ∅65 | ∅75 |
| QHD-100SK-15 | 809 | 436 | 53 | 420 | ∅268 | 360 | ∅208 | ∅174 | ∅97 | ∅101 |
| QHD-100SK-20 | 809 | 436 | 53 | 420 | ∅268 | 360 | ∅208 | ∅174 | ∅97 | ∅101 |

| Model | K | L | M | N | O | P | Q | R | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|
| QHD-40SK-1 | ∅122 | ∅155 | ∅230 | 170 | 65 | ∅15 | 220 | 264 | 220 | 264 |
| QHD-40SK-2 | ∅122 | ∅155 | ∅230 | 170 | 65 | ∅15 | 220 | 264 | 220 | 264 |
| QHD-40SK-3 | ∅122 | ∅155 | ∅230 | 170 | 65 | ∅15 | 220 | 264 | 220 | 264 |
| QHD-50SK3 | ∅135 | ∅175 | ∅230 | 170 | 65 | ∅15 | 220 | 264 | 220 | 264 |
| QHD-50SK-5 | ∅135 | ∅175 | ∅260 | 200 | 69 | ∅15 | 220 | 264 | 220 | 264 |
| QHD-65SK-5 | ∅145 | ∅188 | ∅260 | 200 | 69 | ∅15 | 220 | 264 | 220 | 264 |
| QHD-65SK-7.5 | ∅145 | ∅188 | ∅260 | 200 | 67 | ∅18 | 300 | 350 | 300 | 350 |
| QHD-65SK-10 | ∅145 | ∅188 | ∅260 | 200 | 67 | ∅18 | 300 | 350 | 300 | 350 |
| QHD-100SK-15 | ∅174 | ∅208 | ∅288 | 220 | 68 | ∅18 | 300 | 350 | 300 | 350 |
| QHD-100SK-20 | ∅174 | ∅208 | ∅288 | 220 | 68 | ∅18 | 300 | 350 | 300 | 350 |

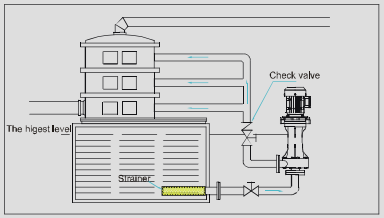
## QHD Performance curve



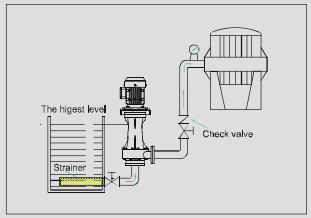




## Installation diagram

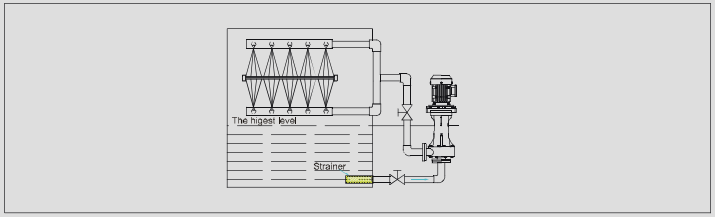
Used in waste gas cleaning tower




Used in reaction tank or filter compressor



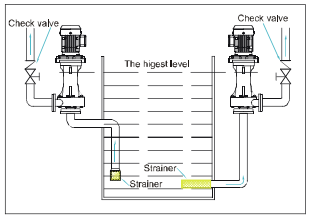

Paint pump etching



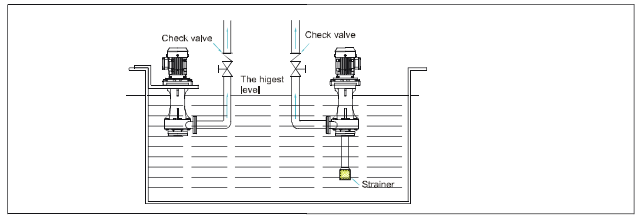




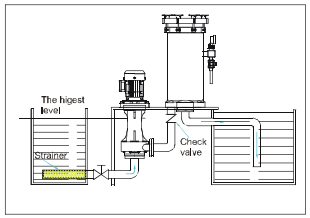

Installed outside the barrel



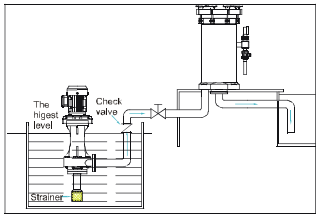

Special application of liquid exchange



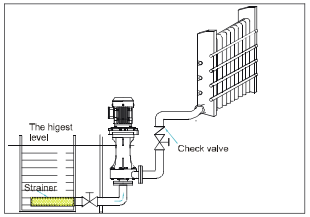

The pump is installed outside the barrel and used with the filter




The pump is installed inside the barrel and used with the filter



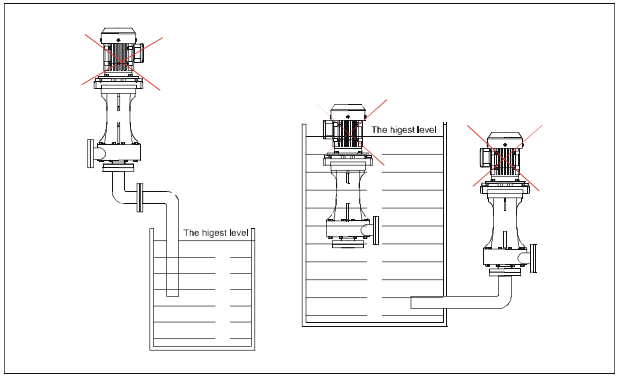

Used in heat exchanger




## 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.

**Warning: incorrect use**



# Accessories

Y-type filter

Dual-union ball valve

Union connector

Union ball valve



✆400-8558-745

## Attached table: list of drug resistance

| Drug name | % | °C | Material of pump head | | | | Material of shaft seal | | | Rubber material | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Concentration | Temperature | GFRPP | CFRPP | PVDF | CFRETFE | Ceramic | Carbon | Ssic | EPDM | VITON |
| Hydrochloride HCL | 15 | 40 | ● | ● | ● | ● | ○ | ● | ● | ● | ● |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 80 | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● |
| | 32 | 40 | ● | ● | ● | ● | ● | ● | ● | ○ | ○ |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | | |
| | | 80 | ○ | ○ | ● | ● | ● | ● | ● | | |
| Hydrogen peroxide solution $H_2O_2$ | 10 | 40 | ● | ● | ● | ● | ● | × | ● | | ● |
| | | 60 | ○ | ○ | ● | ● | ● | × | ● | | ● |
| | | 80 | × | × | ● | ● | ● | × | ● | | ● |
| Phosphoric acid $H_3PO_4$ | 25 | 40 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 80 | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● |
| | 50 | 40 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | ○ | ● |
| | | 80 | ○ | ○ | ● | ● | ○ | ○ | ● | ○ | ● |
| Sodium hypochlorite NaClO | 10 | 40 | ○ | ○ | ● | ● | ● | ○ | ● | | ● |
| | | 60 | △ | △ | ● | ● | ● | △ | ● | | ● |
| | | 80 | × | △ | ● | ● | ● | × | ● | | ● |
| Acetic acid $CH_3COOH$ | 25 | 40 | ● | ● | ● | ● | ● | ● | ● | | × |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | | × |
| | | 80 | ○ | ○ | ● | ● | ● | ● | ● | | × |
| Hydrofluoric acid HF | 25 | 40 | × | ● | ● | ● | × | ○ | ● | ● | ● |
| | | 60 | × | ○ | ● | ● | × | ○ | ● | ● | ● |
| | | 70 | × | × | ● | ● | × | ○ | ● | ○ | ● |
| Aqua regia $HCL+HNO_3$ | 3:1 | 40 | × | × | ● | ● | ● | × | ● | | ○ |
| | | 60 | × | × | ● | ● | ○ | × | ● | | ○ |
| | | 80 | × | × | ● | ● | | × | ● | | ● |
| Chromic acid $CrO_3$ | 20 | 40 | | | ● | ● | ● | | | | ● |
| | | 60 | | | ● | ● | ● | | | | ● |
| | | 80 | | | ● | ● | ● | | | | ○ |
| Sulphuric acid $H_2SO_4$ | 30 | 40 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 80 | ● | ● | ● | ● | ● | ● | ● | ○ | ● |
| | | 95 | | | ● | ● | ● | ● | ● | | ● |
| | 60 | 40 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | 80 | ○ | ○ | ● | ● | ● | ● | ● | ○ | ● |
| | | 95 | | | ● | ● | | | ● | | ● |
| | 98 | 40 | | | ● | ● | ● | | ● | | ● |
| | | 60 | | | ○ | ● | ● | | ● | | ● |
| Sodium hydroxide NaOH | 45 | 40 | ● | ● | ● | ● | △ | ● | ● | ● | ○ |
| | | 60 | ○ | ○ | ○ | ● | × | ● | ● | ● | △ |
| | | 80 | ○ | ○ | × | ● | × | ● | ● | ○ | △ |
| Ferric chloride $FeCl_3$ | | 40 | ● | ● | ● | ● | | ● | ● | ● | ● |
| | | 60 | ● | ● | ● | ● | | ● | ● | ● | ● |
| | | 80 | ● | ● | ● | ● | | ● | ● | ● | ● |
| Cupric cyanide $Cu(CN)_2$ | | 40 | ● | ● | ● | ● | △ | ● | ● | | ● |
| | | 60 | ● | ● | ● | ● | △ | ● | ● | | ● |
| | | 80 | | | ● | ● | | | ● | | |
| Zinc chloride $ZnCl_2$ | | 40 | ● | ● | ● | ● | ● | ● | ● | | ● |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | | ● |
| Nickel sulfate $NiSO_4$ | | 40 | ● | ● | ● | ● | ● | ● | ● | | ● |
| | | 60 | ● | ● | ● | ● | ● | ● | ● | | ● |
| Nitric acid $HNO_3$ | 20 | 40 | ● | ● | ● | ● | ● | | ● | | ● |
| | | 60 | ○ | ○ | ● | ● | ○ | | ● | | ● |
| | | 80 | ○ | ○ | ● | ● | | | ● | | ● |
| | 50 | 40 | ● | ● | ● | ● | | | ● | | ● |
| | | 60 | ○ | ○ | ● | ● | | | ● | | ● |

● Outstanding ○ Good △ Fair × Poor