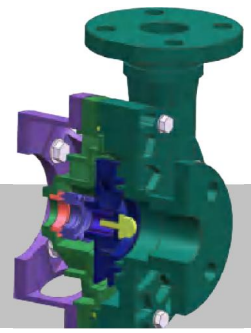
Plastic centrifugal pump

【QHG series】

① Front cover
② O-ring
③ Impeller nut
④ Impeller
⑤ Front shaft seal
⑥ Rear cover
⑦ Rear shaft seal
⑧ Connecting base
⑨ Frame
⑩ Motor



✆400-8558-745

Product characteristics

1. Resistant to strong acid, strong alkali and fluorinated substances.
2. Reinforced rear cover, with significantly enhanced temperature and pressure resistance.
3. Applicable temperature: GFRPP - below 80 ℃, PVDF - below 100 ℃. The applicable temperature shall be determined according to different chemical properties.
4. Equipped with anti-idling device
5. It has no self-priming capacity and is suitable to be installed below the liquid level. If it is installed above the liquid level, a self-priming barrel must be installed to prevent the pump from being damaged due to idling operation.

Product superiority

1. It is applicable to the transportation and circulation of chemical solution with particles and impurities.
2. It is resistant to strong acid, alkali and corrosion. The materials include GFRPP、CFRPP and PVDF (Teflon).
3. Equipped with exhaust valve switch, the air in the pump and pipeline can be discharged smoothly during operation, so as to prevent the damage of shaft seal caused by air accumulation.

Model description

QHG－50－05－2－V－H－S－S－H－5

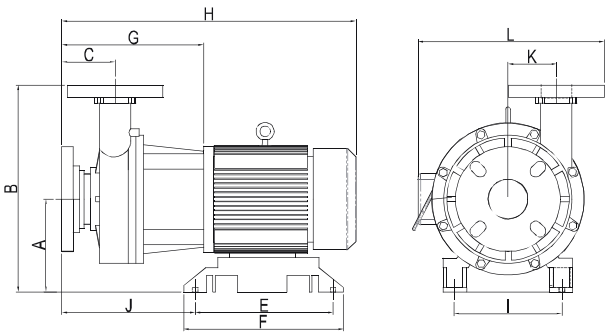
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① Model No.: QHG
② Outlet diameter: 40-1-½"; 50-2"; 65-2.5"; 80-3"; 100-4"
③ Horsepower: 00-3∅/ ½HP; 01-3∅/1HP; 02-3∅/2HP; 03-3∅/3HP; 05-3∅/5HP; 07-3∅/7.5HP; 10-3∅/10HP; 15-3∅/15HP
④ Number of poles: 2:2P ; 4:4P
⑤ O-Ring: E-EPDM; V-VITON(FKM)
⑥ Head: L- low lift; H- high lift
⑦ Rotating ring: S-SSIC
⑧ Fixed ring: S-SSIC
⑨ Spring type: H-HC; S-SUS316
⑩ Frequency: 50-50HZ; 60-60HZ

Product specification

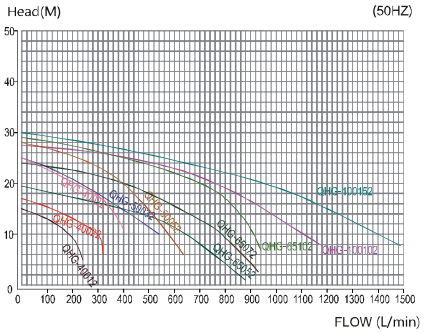
Model	Inlet and outlet diameter (mm)		Power		50HZ		60HZ		Weight (Kg)
	Inlet	Outlet	Phase	HP	Max.Head (M)	Max.Capacity (L/min)	Max.Head (M)	Max.Capacity (L/min)	
QHG-40012	50	40	3∅	1	15	250	15	240	21
QHG-40022	50	40	3∅	2	17	320	21	330	30
QHG-40032	50	40	3∅	3	25	400	26	430	33
QHG-50032	65	50	3∅	3	25	530	30	460	34
QHG-50052	65	50	3∅	5	28	635	35	560	47
QHG-65052	80	65	3∅	5	19.5	880	30	850	49
QHG-65072	80	65	3∅	7.5	24	930	33	980	73
QHG-65102	80	65	3∅	10	29	950	35	1100	80
QHG-100102	100	100	3∅	10	27.5	1180	32	1500	81
QHG-100152	100	100	3∅	15	30	1490	45	1750	110

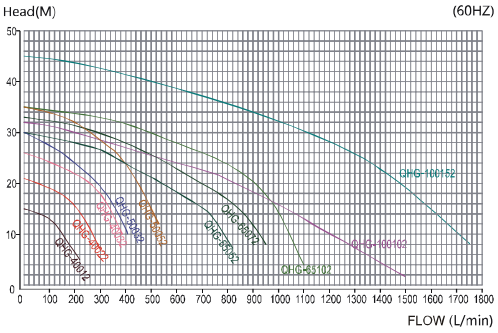
Size specification



Model	A	B	C	D	E	F	G	H	I	J	K	L
QHG-40012	127	298	78	218	275	320	197	425	130	170	66	300
QHG-40022	140	307	78	240	275	320	197	472	140	170	66	315
QHG-40032	150	310	78	258	275	320	197	500	160	210	66	315
QHG-50032	147	344	80	260	275	320	207	502	160	200	66	325
QHG-50052	163	360	80	275	275	320	207	530	188	210	66	355
QHG-65052	163	362	75	275	275	320	195	520	188	200	66	370
QHG-65072	185	387	75	325	275	320	200	555	215	220	66	425
QHG-65102	185	387	75	325	275	320	208	570	220	228	66	450
QHG-100102	185	398	80	325	275	320	210	572	220	230	66	450
QHG-100152	185	398	80	325	330	375	210	572	220	203	66	450

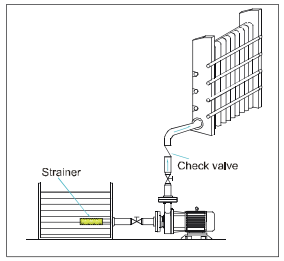
Performance curve



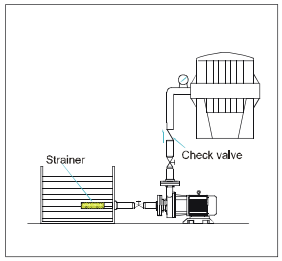


Installation diagram

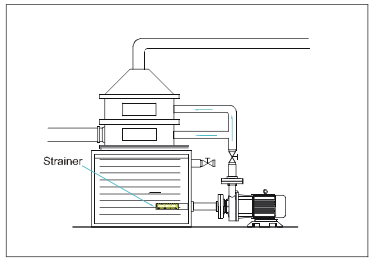
Used in heat exchanger



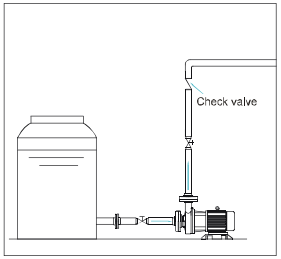
Used in reaction tank or filter compressor



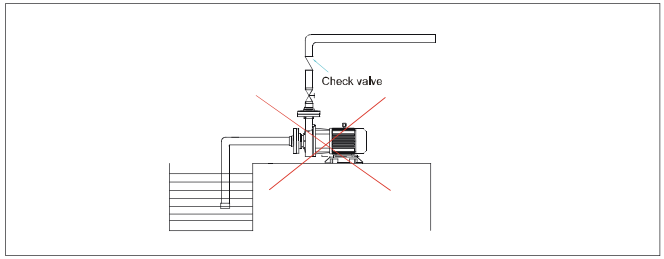
Used in waste gas cleaning tower



Installed outside the barrel



Warning: incorrect use



Attentions:

1. The pump shall be installed on a solid horizontal ground and kept stable. The pump inlet and outlet shall be equipped with valves for maintenance.
2. Try to avoid installing the machine in the outdoor area. Outdoor pump shall be covered with a protective cover. If the pump is equipped with an electronic controller, safeguard procedures shall be adopted.
3. The pump made of PVC material shall be protected from direct sunlight to prevent material embrittlement.
4. Before piping, different pipe fitting materials shall be selected according to the chemical liquid used, temperature conditions and delivery head to meet the actual requirements. For example, if the temperature is above 60 ° C, PP pipe fitting shall be selected for installation.
5. When piping, it shall be noted that there shall be no impurities or debris left in the pipe. If necessary, clean the pipe with clean water.
6. The flange joint shall be supplemented with gasket and locked to prevent air from being sucked into the pump.
7. If metal material is employed, shockproof joint shall be installed in the pipeline at the pump inlet and outlet to prevent the flange at the inlet and outlet from being broken.
8. When the pump conveying liquid exceeds a certain height, a check valve shall be installed at the outlet to prevent pump damage caused by back pressure.
9. The safety drain valve shall be installed between the pump outlet and the first on-off valve. It is better to install a pressure gauge to detect the pressure in the pipe.
10. Avoid suction of sundries and siphon effect, please add bottom valve (Ford valve).
11. Check valve shall be installed near the pump inlet and outlet as far as possible, and T-joint shall be employed when installing pressure gauge or safety discharge valve.
12. When piping, pay attention that the pipeline shall not be forcibly twisted. After installation, check whether the pump body is distorted due to excessive force or incorrect installation method.
13. After the machine is fixed, confirm whether it is firm, and rotate the motor fan to confirm whether the motor can rotate freely.
14. Before connecting the power cord, confirm whether the selected power supply matches the motor model, and connect the over-current protection switch.
15. If it is used for dangerous chemical liquid, the pump shall be covered with a protective cover.
16. Before starting the pump motor, fill it with liquid, check whether the inlet and outlet valves are open, and do not implement idling operation.
17. After installation, confirm whether the pipeline is firm again to avoid damage caused by vibration.
18. Before starting the power supply, check whether the inlet and outlet pipelines are correctly selected. For example: whether the inlet and outlet valves are opened, whether the pipeline flow path is correct, whether the liquid in the tank is normal and whether the pipeline is damaged, etc.
19. When operating liquid in dangerous environment, it is required to wear protective clothing, face shield and safety shoes and socks.
20. Check all kinds of protection switches. For example: whether the liquid switch, the liquid level controller in the tank and the power protection switch are in the normal operation position.
21. After starting the power supply, check whether the flow at the outlet is normal. If the flow is too small, stop the power supply immediately, and then check the inlet and outlet pipelines to address the problem.

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