High efficient permanent magnet oil immersed pump

GQY high efficient permanent magnet oil immersed pump is new product, independently researched and developed by JINBA, which has applied for relevant patents and obtained authorization. GQY consists of three parts: the pump end, motor, and mechanical seal. The pump end is the upper part of the pump. According to different performance, its hydraulic structures include centrifugal, mixed flow, and axial flow. The motor is the lower part of the pump, a permanent magnet brush-less variable frequency motor, which is equipped with an intelligent controller, and can operate AC/DC frequency conversion, with high efficiency, low power consumption, wide voltage usage, and constant output. Mechanical seal is used between the pump end and the motor, with o-shaped oil resistant rubber seals used as static seals at each fixed seam allowance.

It is coaxial pump, with a compact structure, small volume.light weight, easy to delivery and install. The pump's casing is stainless steel, and the hydraulic flow components are made of stainless steel and alloy plastic, which are corrosion-resistant and wear-resistant, and can be used in corrosive media.Based on its flow and head, this pump is widely used in agricultural sprinkler irrigation, irrigation and drainage, garden spray irrigation, fish pond oxygenation, water tower water supply,urban construction water supply, aquaculture water supply, flood control and drainage, and etc.

1. Working Principle

High-energy rare earth permanent magnets as excitation mechanism; With permanent magnet brushless motor; Square wave principle; Electronic commutation replaces mechanical commutation; High density programmable logic device technology.

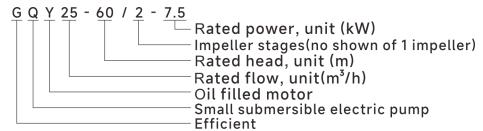
2. Performance Characteristics

Performance characteristics

- 2.1 Speed: 4200-6000 r/min;
- 2.2 Built-in controller: soft start, security and reliable, long service life;
- 2.3 Permanent magnet synchronous variable frequency motor: 25-30% more energy-efficient than normal products;
- 2.4 Multiple protection technologies: Protections of phase loss, undervoltage, overcurrent, overcurrent load, overheating, water shortage, blockage, etc.
 - 2.5 Wide voltage range design: suitable for 260-420V three-phase;
 - 2.6 AC and DC: DC voltage 450-550V;
 - 2.7 Small size and light weight: The weight is one-third of normal products of the same power.
- 2.8 Application Scenarios: marine aquaculture, fish pond water exchange,flood and drought resistance, agricultural irrigation, etc.

3. Parameter Center

Model Analysis



•GQY Series 15 TECHNICAL DATA

Rated v	oltage	:380 V	Speed	ange:400	00 ~ 6000	r/min C	outlet diam	neter: 2"
MODEL		wer	Rated flow	Rated head		Max.head	Weight	Measurement
	kW	HP	(m³/h)	(m)	(m³/h)	(m)	(kg)	(mm)
GQY15-26-2.2	2.2	3	15	26	25	32	23.6	700×220×255
GQY15-36-3	3	4	15	36	28	43	24.7	700×220×255
GQY15-45-4	4	5.5	15	45	30	56	26.7	700×220×255
GQY15-56-5.5	5.5	7.5	15	56	32	67	28.6	730×220×255
GQY15-90/2-7.5	7.5	10	15	90	30	102	38.6	930×220×255
GQY15-145/3-11	11	15	15	145	31	158	40.3	1000×220×255



•GQY Series 25 TECHNICAL DATA

Rated vo	ltage:	380 V	Spe ed ra	nge: 400	0 ~ 6000	r/min O	utlet diam	eter: 2.5 "
MODEL	Pov	wer	Rated flow	Rated head	Max.flow	Max.head	Weight	Measurement
	kW	HP	(m³/h)	(m)	(m³/h)	(m)	(kg)	(mm)
GQY25-20-2.2	2.2	3	25	20	41	35	24.5	700×220×255
GQY25-28-3	3	4	25	28	45	43	25.4	700×220×255
GQY25-35-4	4	5.5	25	35	48	49	27.5	700×220×255
GQY25-42-5.5	5.5	7.5	25	42	51	50	29.3	730×220×255
GQY25-60/2-7.5	7.5	10	25	60	48	66	38.9	930×220×255
GQY25-90/2-11	11	15	25	90	48	100	39.5	930×220×255
GQY25-120/3-15	15	20	25	120	51	132	45.2	1000×220×255



•GQY Series 40 TECHNICAL DATA

Rated v	oltage	:380 V	Spe ed r	ange:400	00 ~ 6000	r/min C	utlet diam	neter: 3"
MODEL		wer	Rated flow	Rated head	Max.flow (m³/h)	Max.head (m)	Weight	Measurement (mm)
	kW	HP	(m³/h)	(m)	(111711)	(11)	(kg)	(11111)
GQY40-12-2.2	2.2	3	40	12	53	24	25.2	745×245×275
GQY40-16-3	3	4	40	16	56	28	27.4	745×245×275
GQY40-21-4	4	5.5	40	21	60	38	28.3	745×245×275
GQY40-28-5.5	5.5	7.5	40	28	68	40	30.4	775×245×275
GQY40-38-7.5	7.5	10	40	38	75	44	38.3	930×245×275
GQY40-56/2-11	11	15	40	56	72	65	42.8	985×245×275
GQY40-84/3-15	15	20	40	84	68	97	47.3	1075×245×275



•GQY Series 65 TECHNICAL DATA

Rated v	Spe ed r	ange:28	00 ~ 4000	r/min C	utlet dian	neter: 4"		
MODEL		wer	Rated flow	Rated head		Max.head	Weight	Measurement
	kW	HP	(m³/h)	(m)	(m³/h)	(m)	(kg)	(mm)
GQY65-7-2.2	2.2	3	65	7	105	16	28.7	875×225×265
GQY65-10-3	3	4	65	10	110	18	30.1	875×225×265
GQY65-14-4	4	5.5	65	14	123	22	32.7	875×225×265
GQY65-18-5.5	5.5	7.5	65	18	110	30	40	975×225×265
GQY65-25-7.5	7.5	10	65	25	120	36	43.5	1030×225×265
GQY65-42-11	11	15	65	42	115	54	42	1030×225×265
GQY65-60/2-15	15	20	65	60	120	75	49	1180×225×265



•GQY Series 80 TECHNICAL DATA

Rated v	oltage	:380 V	Spe ed r	ange:280	00 ~ 4000	r/min C	utlet dian	neter: 4"
MODEL		wer	Rated flow	Rated head	Max.flow	Max.head (m)	Weight	Measurement (mm)
	kW	HP	(m³/h)	(m)	(m /n)	(iii)	(kg)	(mm)
GQY80-6-2.2	2.2	3	80	6	105	16	28.7	875×225×265
GQY80-8-3	3	4	80	8	110	18	30.1	875×225×265
GQY80-11-4	4	5.5	80	11	123	22	32.7	875×225×265
GQY80-15-5.5	5.5	7.5	80	15	110	30	40	975×225×265
GQY80-20-7.5	7.5	10	80	20	120	36	43.5	1030×225×265
GQY80-30-11	11	15	80	30	130	40	42	1030×225×265
GQY80-40-15	15	20	80	40	145	45	43.5	1030×225×265
GQY80-50-18.5	18.5	25	80	50	160	53	47	1150×225×265
GQY80-90/2-26	26	35	80	90	155	95	58	1410×225×265



•GQY Series 100 TECHNICAL DATA

Rated v	oltage	:380 V	Spe ed r	ange:280	00 ~ 4000	r/min C	utlet diam	neter: 4"
MODEL		wer	Rated flow	Rated head	Max.flow	Max.head (m)	Weight (kg)	Measurement (mm)
	kW	HP	(m³/h)	(m)	(111711)	(11)	titg/	(11111)
GQY100-4.5-2.2	2.2	3	100	4.5	105	16	28.7	875×225×265
GQY100-6-3	3	4	100	6	110	18	30.1	875×225×265
GQY100-9-4	4	5.5	100	9	123	22	32.7	875×225×265
GQY100-13-5.5	5.5	7.5	100	13	110	30	40	975×225×265
GQY100-17-7.5	7.5	10	100	17	120	36	43.5	1030×225×265
GQY100-25-11	11	15	100	25	130	40	42	1030×225×265
GQY100-36-15	15	20	100	36	145	45	43.5	1030×225×265
GQY100-45-18.5	18.5	25	100	45	160	53	47	1150×225×265



•GQY Series 160 TECHNICAL DATA

Rated v	oltage	:380 V	Spe ed r	ange:280	00 ~ 4000	r/min C	utlet diam	neter: 6"
MODEL		wer	Rated flow	Rated head	Max.flow	Max.head (m)	Weight (kg)	Measurement (mm)
	kW	HP	(m³/h)	(m)	(111711)	(11)	(kg)	(11111)
GQY160-4-3	3	4	160	4	210	8	29.3	850×225×265
GQY160-6-4	4	5.5	160	6	220	10	31.7	850×225×265
GQY160-8-5.5	5.5	7.5	160	8	210	14	39.2	980×250×290
GQY160-11-7.5	7.5	10	160	11	220	16	42.4	1020×250×290
GQY160-15-11	11	15	160	15	240	25	41	1020×250×290
GQY160-23-15	15	20	160	23	250	38	47	1135×305×330
GQY160-28-18.5	18.5	25	160	28	260	42	51	1250×305×330
GQY160-35-22	22	30	160	35	280	48	54.5	1290×305×330
GQY160-50/2-26	26	35	160	50	255	66	65	1560×305×330



•GQY Series 200/250 TECHNICAL DATA

Rated volt	Rated voltage: 380 V				~ 4000 r/	min Out	let diamet	er: 6" / 8 "
MODEL	Pov	wer	Rated flow	Rated head		Max.head	Weight	Measurement
	kW	HP	(m³/h)	(m)	(m³/h)	(m)	(kg)	(mm)
GQY200-4-4	4	5.5	200	4	250	8	33.8	830×270×290
GQY200-6-5.5	5.5	7.5	200	6	290	10	38.5	940×270×290
GQY200-9-7.5	7.5	10	200	9	315	11	42	990×270×290
GQY200-26-22	22	30	200	26	340	37	55.5	1300×305×330

Rated voltage: 380 V			Speed	range:280	00 ~ 4000	r/min O	utlet dian	neter: 8"
MODEL	Power		Rated flow	Rated head		Max.head	Weight	Measurement
MODEL	kW	HP	(m³/h) (m)	(m³/h) (m)		(kg)	(mm)	
GQY250-5-5.5	5.5	7.5	250	5	290	10	38.5	940×270×290
GQY250-7-7.5	7.5	10	250	7	315	11	42	990×270×290
GQY250-10-11	11	15	250	10	320	21	46.5	1135×305×330
GQY250-14-15	15	20	250	14	330	28	48	1135×305×330
GQY250-18-18.5	18.5	25	250	18	350	32	52	1250×305×330
GQY250-22-22	22	30	250	22	360	36	55.5	1290×305×330
GQY250-25-26	26	35	250	25	368	38	59	1340×305×330



•GQY Series 450/600/800 TECHNICAL DATA

Rated vo	oltage:	380 V	Spe ed r	ange:180	0 ~ 3000	r/min O	utlet diam	eter: 10 "
MODEL	Power		Rated flow	Rated head	Max.flow	Max.head	Weight	Measurement
MODEL	kW	HP	(m³/h)	(m)	(m³/h)	(m)	(kg)	(mm)
GQY450-6-11	11	15	450	6	530	7	50.5	1160×330×355
GQY450-8-15	15	20	450	8	540	9	52	1160×330×355
GQY450-10-18.5	18.5	25	450	10	550	11	56	1200×330×355
GQY450-12-22	22	30	450	12	560	13	59.5	1250×330×355

Rated vo	oltage:	380 V	Spe ed r	ange:1 80	0 ~ 3000	r/min O	utlet diam	eter: 10 "
MODEL	Pov	wer	Rated flow	May fl		Max.head	Weight	Measurement
MODEL	kW	HP	(m³/h)	(m)	(m³/h)	(m)	(kg)	(mm)
GQY600-4.5-11	11	15	600	4.5	820	5	49.5	1160×330×355
GQY600-6.5-15	15	20	600	6.5	850	7	51	1160×330×355
GQY600-8-22	22	30	600	8	900	9	58.5	1250×330×355

Rated vo	oltage:	380 V	Speed r	ange:180	0 ~ 3000	r/min O	utlet diam	eter: 12 "		
MODEL	Power				Rated flow	Rated head	Max.flow	Max.head	Weight	Measurement
MODEL	kW	HP	(m³/h)	(m)	(m³/h)	(m)	(kg)	(mm)		
GQY800-6-18.5	18.5	25	800	6	1000	7	61	1300×385×410		
GQY800-7.5-22	22	30	800	7.5	1100	9	64.5	1300×385×410		



•Application area



Animal Husbandry



Agriculture



High pressure water delivery



Dryland essential machine



Building Industry



Increase pressure



Mining



Industrial salt essential

Parts List

