



BQW 小型矿用隔爆型潜污水电泵

BQW small-sized type mine explosion-proof sewage water submersible electric pump

概述 Outline

BQW小型矿用隔爆型潜污水电泵采用充水式电机作动力,轴承采用水润滑轴承,可长期潜入水下工作,适用于矿井排水,可用于周围介质中含有甲烷、煤尘等爆炸性气体混合物的环境中,使用环境温度0~40℃,海拔高度小于2000m。本产品具有性能指标高,密封性能好,隔爆性能强等特点。

BQW small-sized type mine explosion-proof sewage water submersible electric pump has adopted water-filled motor as motive power, and water-lubricated bearing as its bearing. It can be long-term used in submersible water, suitable for discharging water in the mine well, and can be used in the environment filled with the explosive gas mixture made up of methane and coal dust. Working environment temperature is 0-40°C, the height above sea level is less than 2000m.

This product has the characteristic of advanced performance, good sealing ability and strong explosion-proof.



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使用须知 Use notice

1. 电机使用前必须灌满清水，拧紧注水、放水螺塞，否则不准使用。
 2. 陆地试运转不超过 1 秒。
 - △ 3. 注意：电泵应有过热或过电流保护装置，必要时应有漏电保护，或在配电系统中要求配置相应的保护装置。
 - △ 4. 注意：电泵配套电缆应与电动机的额定电压、电流相匹配；电缆应适当固定、夹持等。
 - △ 5. 警告：电泵必须可靠接地。
 - △ 6. 警告：为防止触电，电泵移动、维修或清理时必须先切断电源。
 - △ 7. 警告：长期存放时，必须卸下放水螺塞，放净电机内部清水。
1. Before using the motor, it must be filled with clear water, turn off tightly the water filling and the water draining screw plug, otherwise not permitted to use.
 2. The test operation on land is not more than 1 seconds.
 - △ 3. Caution: The electric pump should have over-heat and over-current sets, it should have electric-leakage protection when necessary, or require to putting the corresponding protection sets in the electric system.
 - △ 4. Caution: The cable of the electric pump should be matching with the rated voltage and rated current of the motor; the cables should be properly fixed or hold.
 - △ 5. Caution: The electric pump must be reliably connected with earth.
 - △ 6. Caution: For avoiding electric shock, the power supply must be cut off when the pump in moving, maintenance or cleaning.
 - △ 7. Caution: If no use for a long time, the water draining screw plug must be demounted and discharging all the clear water inside the motor.



使用条件 Use conditions

1. 电源要求：
 - (1) 额定频率为 50Hz，电机端额定电压应保证为 $380 \pm 5\%V$ 或 $660 \pm 5\%V$ 的三相交流电源。（用户电压为 660V 时需说明）
 - (2) 负载功率不应超过变压器容量的 75%。
 - (3) 输电线路较长时，应考虑输电线的电压降。
 2. 电泵正常运行条件
 - (1) 吸入口在动水位一米以下；
 - (2) 介质 PH 值为 4~10；
 - (3) 含固体颗粒的介质，其体积浓度一般不超过 2%；
 - (4) 工作环境温度 0~40℃；
- 注：当使用条件不符合上述规定时，用户应与制造厂协议。



1. Power supply requirements

- (1) The rated frequency is 50Hz, the rated voltage at the motor end should be guaranteed $380V \pm 5\%$ or $660V \pm 5\%$ three phase alternative current power supply. (A note is required when the voltage for the customer is 660V.)
- (2) The loading power should not exceed 75% of the transformer capacity.
- (3) When the transmitting circuitry is much long, should consider the voltage drop of the cables.

2. The conditions for the electric pump in normal working order

- (1) Suction inlet being one meter below the dynamic water level;
- (2) The medium PH value is 4-10;
- (3) For the medium containing solid granule, the volume concentration normally will not exceed 2%;
- (4) Working circumstance temperature $0\sim 40^{\circ}\text{C}$;

Note: When the use condition is not conformed with the above regulation, the user should have a discussion with the manufactory.



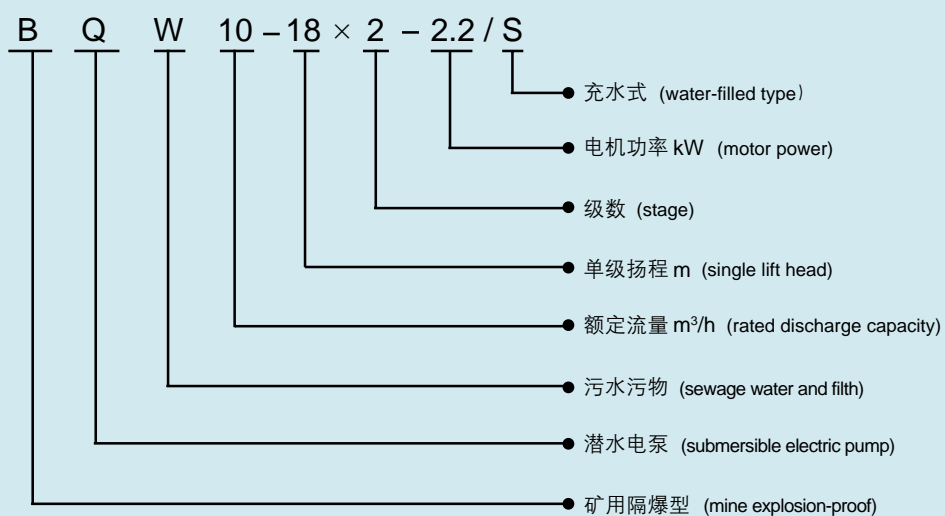


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技术规格 Technical specification

1. 型号举例说明: Type illustration:



2. 主要技术数据(详见小型矿用隔爆型潜污水电泵技术参数表 外形联接尺寸及性能曲线)

main technical data (for details, see the table of small-sized type mine explosion-proof sewage water Submersible electric pump technical parameter external dimension and performance curve)



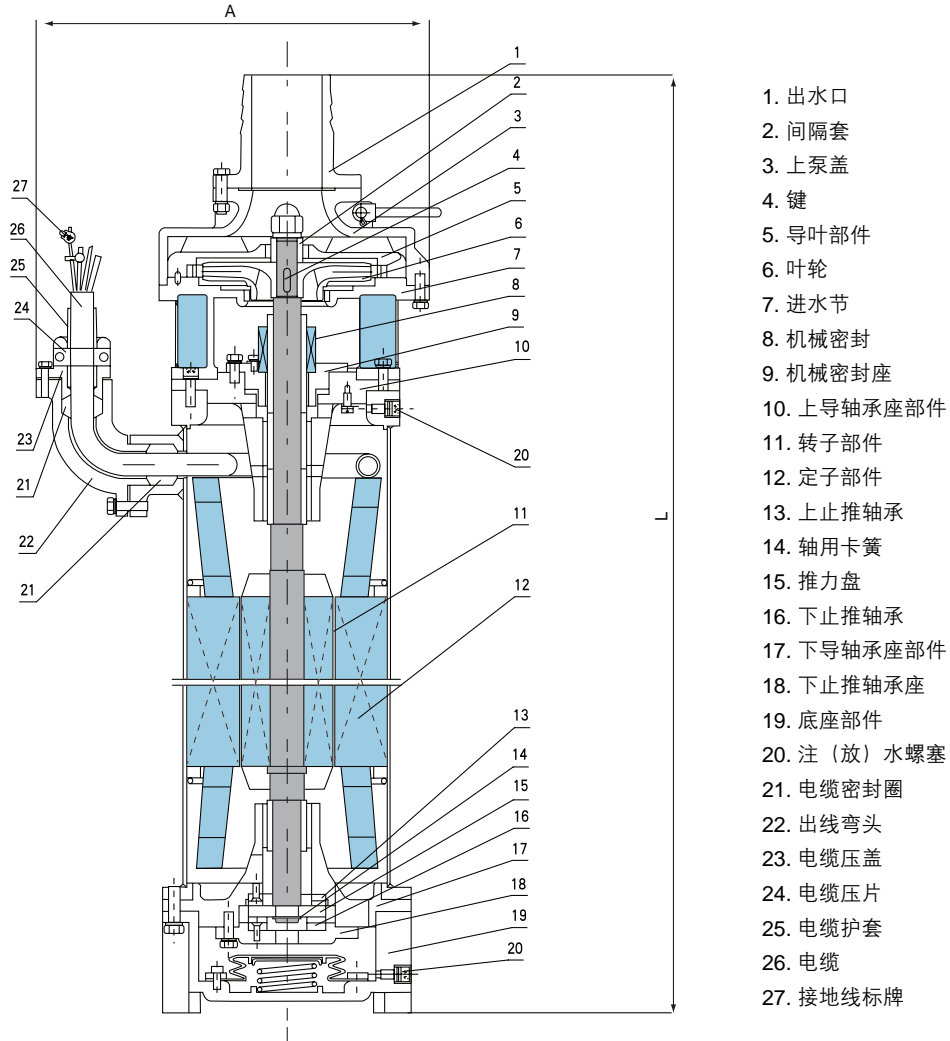
结构说明 Structure explanation

1. 电机采用隔爆型充水湿式结构，内腔充满清水，主要用于电机冷却及轴承润滑。
 2. 为防止煤尘、泥砂浸入电机，在电机上端装有由甩砂器和机械密封组成的防砂密封机构。
 3. 电机上端设有注水及排气孔，下端设有放水孔。
 4. 电机下端装有止推轴承及推力盘，主要承受电泵的轴向力。
 5. 电机的定子绕组采用耐水电磁线，有良好的绝缘和耐水性能。转子为鼠笼型结构。
 6. 电泵的防爆形式为隔爆型，代号为“d”，防爆标志为“ExdI”。
1. The motor adopts the explosion-roof, water-filling wet-structure, the chamber full of clear water, mainly for cooling the motor and the bearing lubrication. During operation, the temperature changing may cause the water-filling pressure to vary, that can be adjusted automatically by the pressure-regulator in the motor.
 2. For preventing the coal-dust and sand getting into the motor, a sand-preventing sealing mechanism consisting of a sand thrower and a mechanical seal is mounted on the upside motor, composing a sand-preventing structure, the whole motor is well sealed by its sealing structure.
 3. Water injecting hole and exhaust hole are opened on the upper part of motor, discharge hole on the low part.
 4. Thrust bearing and thrust collar are installed at the lower part of motor, mainly subjected to the axial force of the electric pump.
 5. Motor's stator winding has adopted water-proof electromagnetic wire, featuring insulation and water-proof. Rotor has adopted squirrel-cage structure.
 6. The explosion-proof type of the electric pump is explosion-separate, the explosion-proof mark is "ExdI".

安标受控件明细表 The detail table of safety mark controlled parts

序号 NO.	受控件名称 Parts name	材质 Material	序号 NO.	受控件名称 Drawing name	材质 Material
1	煤矿用移动橡胶软电缆	MT818	2	底座	ZG230-450
3	下导轴承座	HT250	4	定子部件	
5	轴套	40Cr13	6	上端环	ZG230-450
7	下端环	ZG230-450	8	上导轴承座	HT250
9	出线弯头	ZG230-450	10	转子部件	
11	电机轴	45	12	电缆密封圈	普胶
13	电缆压盖	ZG230-450	14	电缆压片	Q195
15	电缆护套	普胶	16	机械密封座	ZQpb25-5
17	铭牌	冷轧黄铜板	18	接地线标牌	冷轧黄铜板
19	防爆标志牌	冷轧黄铜板	20	煤矿安全标志牌	冷轧黄铜板
21	叶轮	HT200	22	导叶（导流壳）	HT200
23	进水节	HT200			

结构示意图 Structure diagram



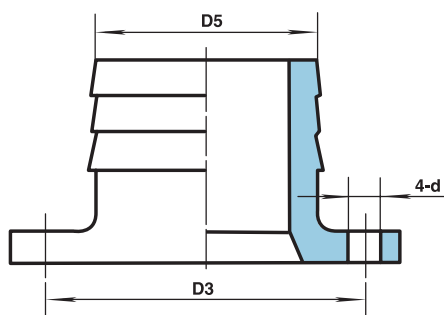
1. 出水口
2. 间隔套
3. 上泵盖
4. 键
5. 导叶部件
6. 叶轮
7. 进水节
8. 机械密封
9. 机械密封座
10. 上导轴承座部件
11. 转子部件
12. 定子部件
13. 上止推轴承
14. 轴用卡簧
15. 推力盘
16. 下止推轴承
17. 下导轴承座部件
18. 下止推轴承座
19. 底座部件
20. 注(放)水螺塞
21. 电缆密封圈
22. 出线弯头
23. 电缆压盖
24. 电缆压片
25. 电缆护套
26. 电缆
27. 接地线标牌

- | | | |
|-----------------------------------|---|-----------------------------------|
| 1. water outlet | 2. interval casing | 3. upper pump cover |
| 4. bond A6X25 | 5. idler pulley unit | 6. impeller |
| 7. water inlet joint | 8. FU268-35 Mechanical sealing FU268-35 | 9. mechanical sealing base |
| 10. upper guide-bearing base unit | 11. rotor unit | 12. stator unit |
| 13. upper non-thrust bearing | 14. circlip for shaft | 15. thrust collar |
| 16. lower non-thrust bearing | 17. lower guide-bearing base unit | 18. lower non-thrust bearing base |
| 19. base component | 20. inlet(outlet) plug screw | 21. cable sealing |
| 22. outlets elbow | 23. cable presser cover | 24. cable presser bit |
| 25. cable retainer | 26. cable | 27. earthing lable |

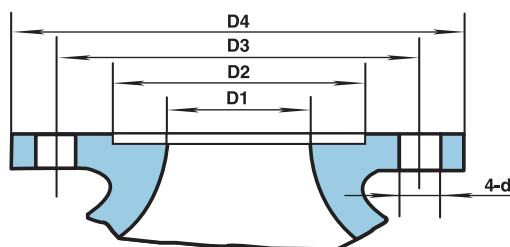
基本参数表 Basic parameter table

序号 No.	规格型号 Type & Specification	流量 Discharge capacity	扬程 Head	功率 Power	电流 380V/660V Electric current	电泵效率 Electric pump efficiency	出水管径 Outlet Pipe diameter	重量 Weight	推荐配套电缆规格(铜芯) Recommended Matching cable Spec.(copper core)
		m ³ /h	m	kW	A	%	mm	kg	
1	BQW10-18x2-2.2/S	10	36	2.2	5.7/3.3	35.7	50	73	MY3 × 4+1 × 4
2	BQW10-24x2-3/S	10	48	3	7.5/4.3	35.1	50	76	MY3 × 4+1 × 4
3	BQW10-28x2-4/S	10	56	4	9.8/5.7	35	50	81	MY3 × 4+1 × 4
4	BQW10-26x3-5.5/S	10	78	5.5	13.1/7.6	35	50	85	MY3 × 4+1 × 4
5	BQW10-27.5x4-7.5/S	10	110	7.5	17.4/10.1	35	50	92	MY3 × 4+1 × 4
6	BQW15-26-2.2/S	15	26	2.2	5.7/3.3	40.2	50	66	MY3 × 4+1 × 4
7	BQW15-19x2-3/S	15	38	3	7.5/4.3	42.9	50	75	MY3 × 4+1 × 4
8	BQW15-24x2-4/S	15	48	4	9.8/5.7	40.2	50	80	MY3 × 4+1 × 4
9	BQW15-22x3-5.5/S	15	66	5.5	13.1/7.6	40	50	86	MY3 × 4+1 × 4
10	BQW15-28x3-7.5/S	15	84	7.5	17.4/10.1	41	50	90	MY3 × 4+1 × 4
11	BQW25-17-2.2/S	25	17	2.2	5.7/3.3	46.9	75	68	MY3 × 4+1 × 4
12	BQW25-24-3/S	25	24	3	7.5/4.3	46.4	75	72	MY3 × 4+1 × 4
13	BQW25-16x2-4/S	25	32	4	9.8/5.7	46.9	75	75	MY3 × 4+1 × 4
14	BQW25-15x3-5.5/S	25	45	5.5	13.1/7.6	46.9	75	78	MY3 × 4+1 × 4
15	BQW25-15.5x4-7.5/S	25	62	7.5	17.4/10.1	46.9	75	81	MY3 × 4+1 × 4
16	BQW40-12-2.2/S	40	12	2.2	5.7/3.3	48.9	75	61	MY3 × 4+1 × 4
17	BQW40-16-3/S	40	16	3	7.5/4.3	50.3	75	64	MY3 × 4+1 × 4
18	BQW40-21-4/S	40	21	4	9.8/5.7	50.5	75	67	MY3 × 4+1 × 4
19	BQW40-28-5.5/S	40	28	5.5	13.1/7.6	50.6	75	72	MY3 × 4+1 × 4
20	BQW40-20x2-7.5/S	40	40	7.5	17.4/10.1	50.5	75	88	MY3 × 4+1 × 4
21	BQW65-7-2.2/S	65	7	2.2	5.7/3.3	47	100	70	MY3 × 4+1 × 4
22	BQW65-10-3/S	65	10	3	7.5/4.3	50.8	100	73	MY3 × 4+1 × 4
23	BQW65-13-4/S	65	13	4	9.8/5.7	51.9	100	75	MY3 × 4+1 × 4
24	BQW65-18-5.5/S	65	18	5.5	13.1/7.6	53.2	100	80	MY3 × 4+1 × 4
25	BQW65-25-7.5/S	65	25	7.5	17.4/10.1	53.9	100	84	MY3 × 4+1 × 4

联接尺寸 Coupling dimension



软管联接尺寸
Soft pipe connecting dimension

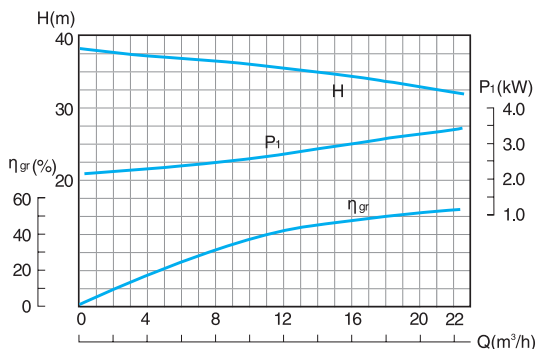


钢管联接尺寸
Steel pipe connecting dimension

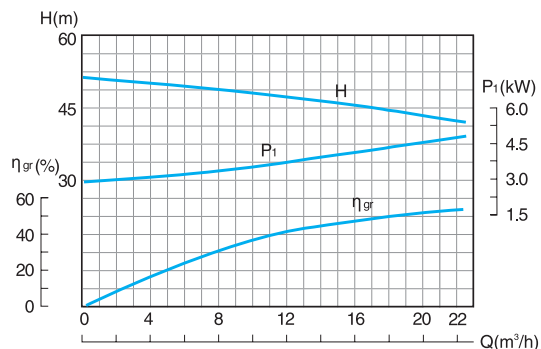
序号	规格型号	A	L	D1	D2	D3	D4	D5	d
No.	Type and specification	mm	mm	mm	mm	mm	mm	mm	mm
1	BQW10-18x2-2.2/S	335	810	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
2	BQW10-24x2-3/S	335	820	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
3	BQW10-28x2-4/S	335	835	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
4	BQW10-26x3-5.5/S	335	920	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
5	BQW10-27.5x4-7.5/S	335	988	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
6	BQW15-26-2.2/S	335	755	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
7	BQW15-19x2-3/S	335	820	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
8	BQW15-24x2-4/S	335	835	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
9	BQW15-22x3-5.5/S	335	920	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
10	BQW15-28x3-7.5/S	335	935	Ø40	Ø70	Ø102	Ø120	Ø50	Ø10
11	BQW25-17-2.2/S	360	759	Ø60	Ø85	Ø115	Ø130	Ø75	Ø10
12	BQW25-24-3/S	352	792	Ø60	Ø85	Ø115	Ø130	Ø75	Ø10
13	BQW25-16x2-4/S	360	847	Ø60	Ø85	Ø115	Ø130	Ø75	Ø10
14	BQW25-15x3-5.5/S	360	940	Ø60	Ø85	Ø115	Ø130	Ø75	Ø10
15	BQW25-15.5x4-7.5/S	360	1018	Ø60	Ø85	Ø115	Ø130	Ø75	Ø10
16	BQW40-12-2.2/S	320	834	Ø74	Ø120	Ø140	Ø166	Ø75	Ø13
17	BQW40-16-3/S	360	780	Ø62	Ø84	Ø115	Ø130	Ø75	Ø10
18	BQW40-21-4/S	360	802	Ø62	Ø84	Ø115	Ø130	Ø75	Ø10
19	BQW40-28-5.5/S	360	835	Ø62	Ø120	Ø140	Ø166	Ø75	Ø13
20	BQW40-20x2-7.5/S	360	930	Ø62	Ø84	Ø115	Ø130	Ø75	Ø10
21	BQW65-7-2.2/S	320	811	Ø80	Ø120	Ø140	Ø166	Ø100	Ø13
22	BQW65-10-3/S	320	869	Ø75	Ø120	Ø140	Ø166	Ø100	Ø13
23	BQW65-13-4/S	320	885	Ø75	Ø120	Ø140	Ø166	Ø100	Ø13
24	BQW65-18-5.5/S	320	925	Ø85	Ø120	Ø140	Ø166	Ø100	Ø13
25	BQW65-25-7.5/S	360	900	Ø85	Ø120	Ø140	Ø166	Ø100	Ø13

性能曲线图 Performance curves

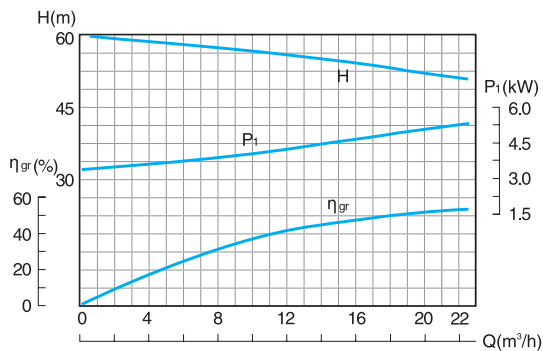
BQW10-18×2-2.2/S性能曲线



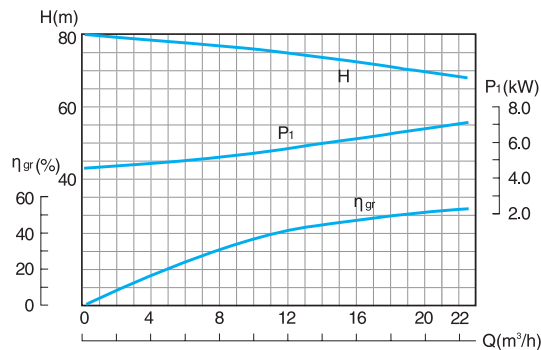
BQW10-24×2-3/S性能曲线



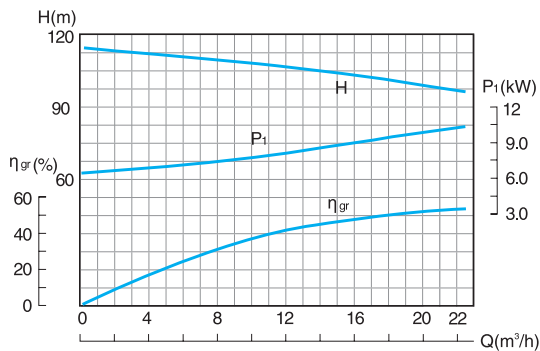
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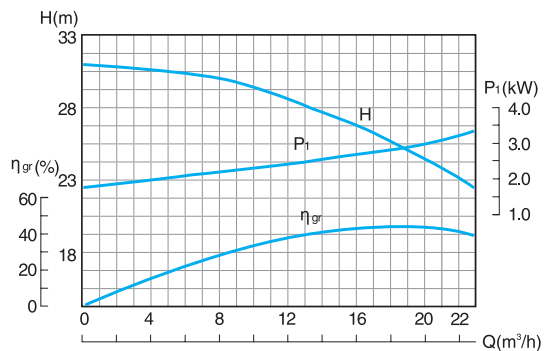
BQW10-26×3-5.5/S性能曲线



BQW10-27.5×4-7.5/S性能曲线



BQW15-26-2.2/S性能曲线



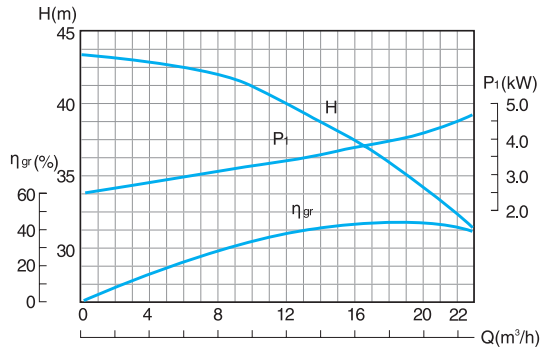


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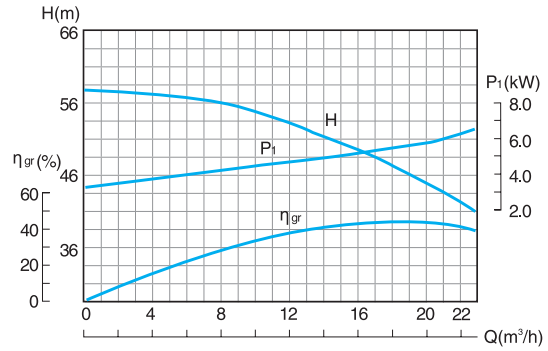
BQW small-sized type mine explosion-proof sewage water submersible electric pump

性能曲线图 Performance curves

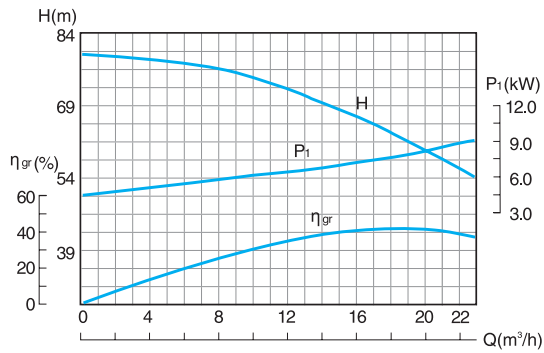
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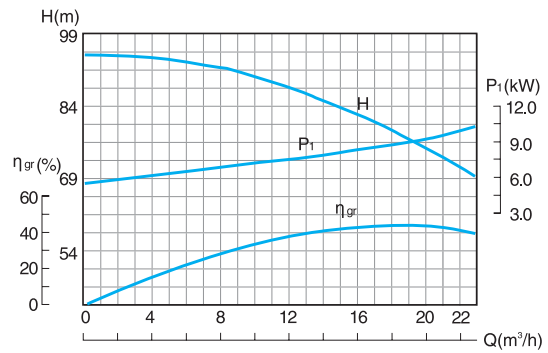
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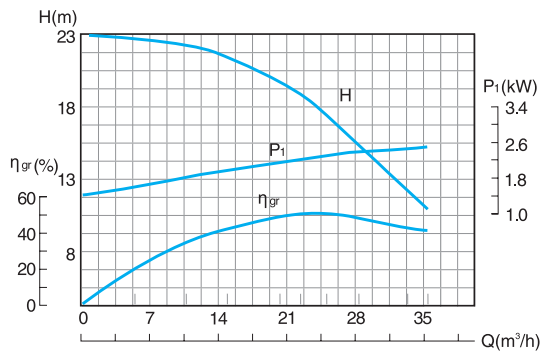
BQW15-22×3-5.5/S性能曲线



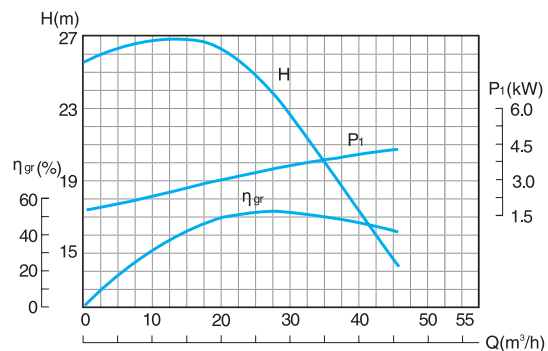
BQW15-28x3-7.5/S性能曲线



BQW25-17-2.2/S性能曲线

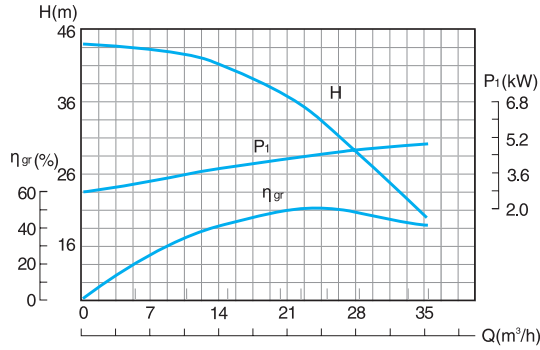


BQW25-24-3/S性能曲线

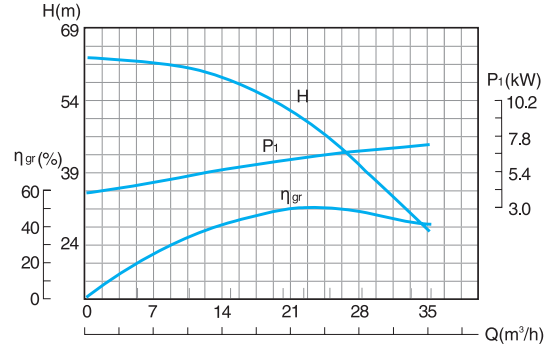


性能曲线图 Performance curves

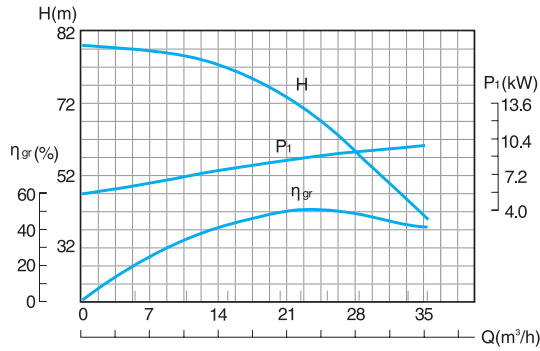
BQW25-16x2-4/S性能曲线



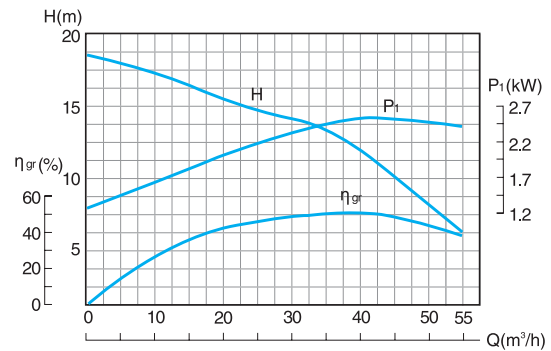
BQW25-15x3-5.5/S性能曲线



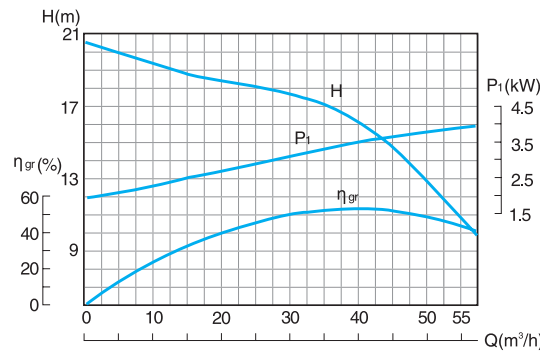
BQW25-15.5x4-7.5/S性能曲线



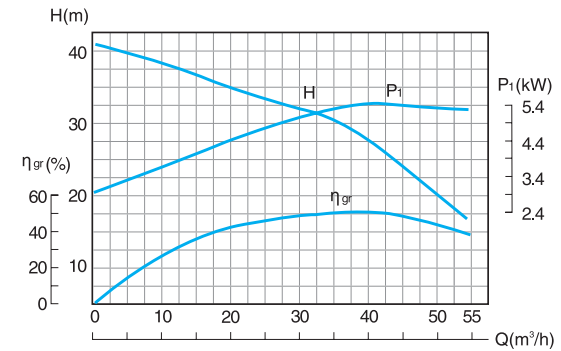
BQW40-12-2.2/S性能曲线



BQW40-16-3/S性能曲线



BQW40-28-5.5/S性能曲线



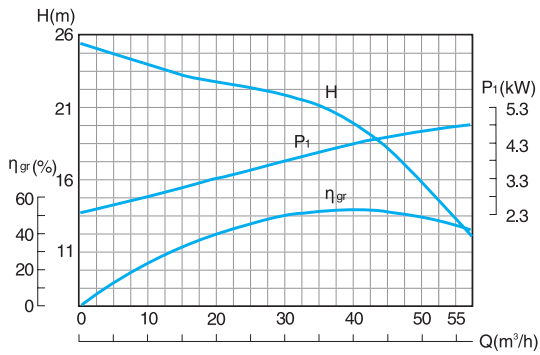


BQW 小型矿用隔爆型潜污水电泵

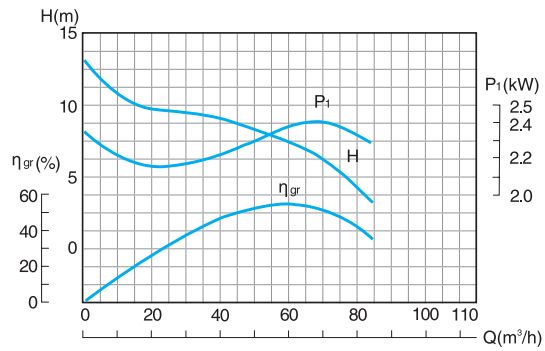
BQW small-sized type mine explosion-proof sewage water submersible electric pump

性能曲线图 Performance curves

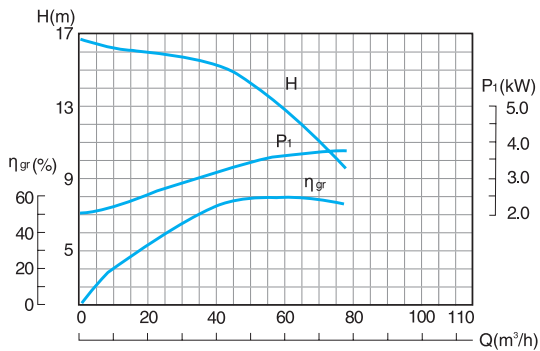
BQW40-21-4/S性能曲线
BQW40-20x2-7.5/S性能曲线(单级)



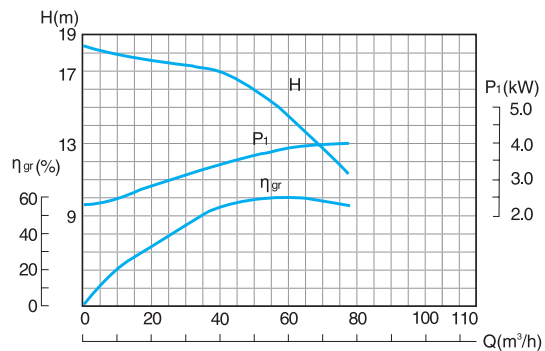
BQW65-7-2.2/S性能曲线



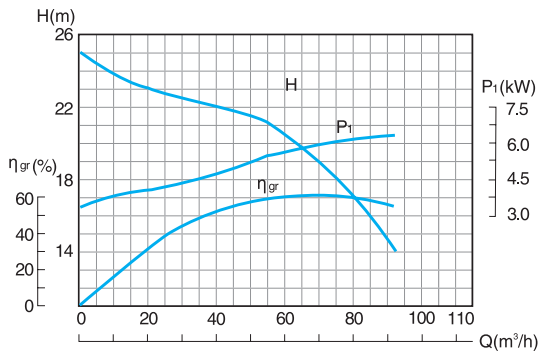
BQW65-10-3/S性能曲线



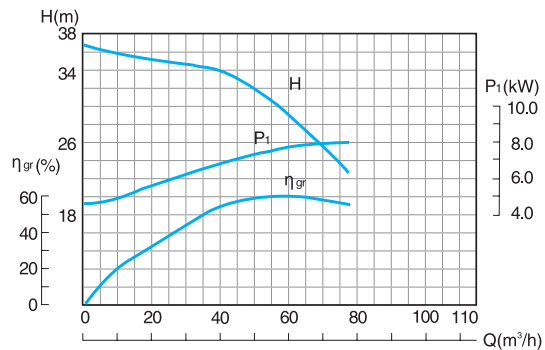
BQW65-13-4/S性能曲线



BQW65-18-5.5/S性能曲线



BQW65-25-7.5/S性能曲线



数据更新，恕不另行通知。
Data is subject to changes without notice beforehand.