



BQ 系列 矿用隔爆型潜水电泵

BQ series mine-use explosion-proof submersible electric pump

概述 Outline

BQ矿用隔爆型潜水电泵是由隔爆型泵用三相异步电动机与隔爆型泵直联一体使用，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，环境温度适用于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。

BQ mine-use explosion-proof type submersible electric pump is a kind of pump with its three phase asynchronous motor integrated directly into one set, to be long-term used in underground water and suitable for water discharge in mine well. Also it can be used in the atmosphere mixing with the explosive matters such as methane, coal-dust etc. The circumstance temperature should be below 0-40℃, the height above sea level is less than 2000m.

This product is characteristic with advanced performance, good seal ability and strong explosion-proof.

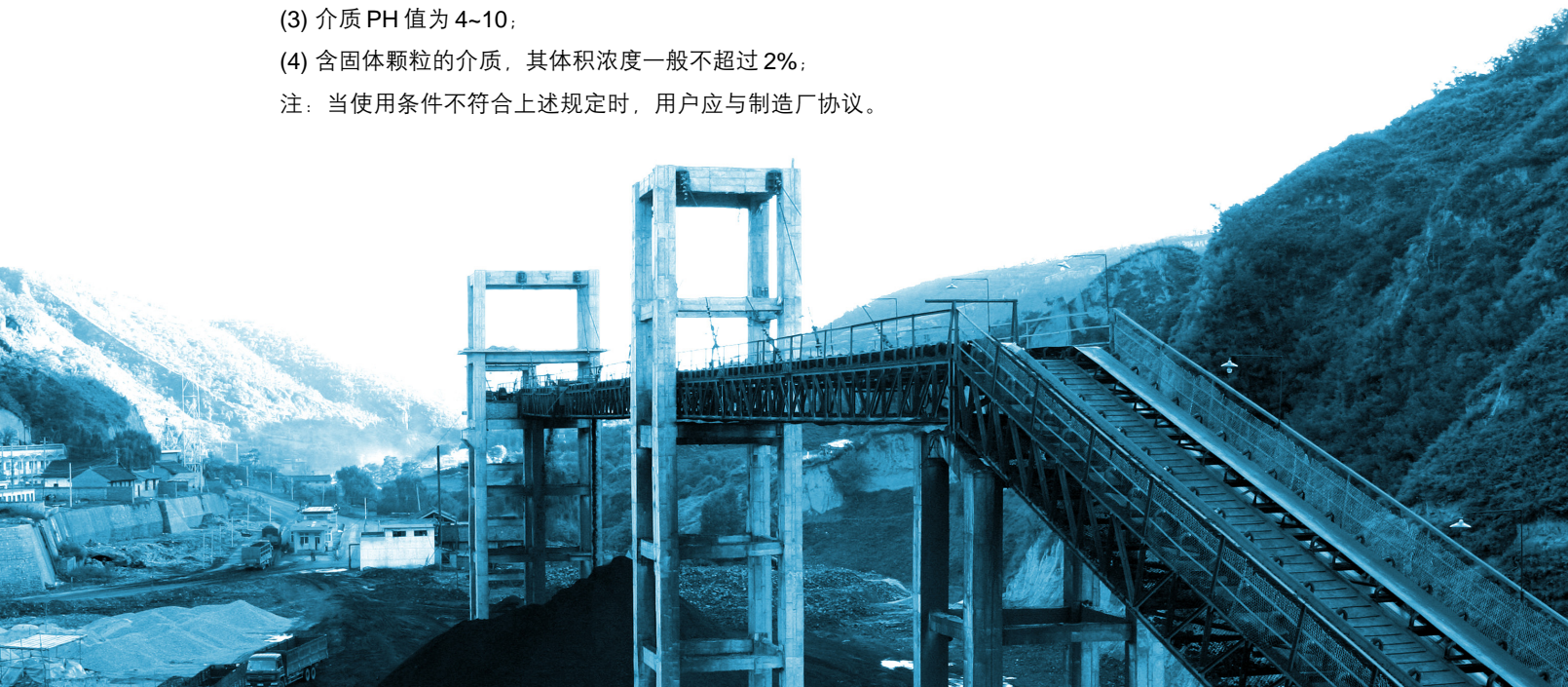
使用须知 Use notice

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 protection 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 $380V \pm 5\%$ 或 $660V \pm 5\%$ 的三相交流电源。（用户电压 660V 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) 输入介质温度不超过 40°C ；
 - (3) 介质 PH 值为 4~10；
 - (4) 含固体颗粒的介质，其体积浓度一般不超过 2%；

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 temperature in input medium is not more than 40°C ;
- (3) The medium PH value is 4-10;
- (4) For the medium containing solid granule, the volume concentration normally will not exceed 2%;

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

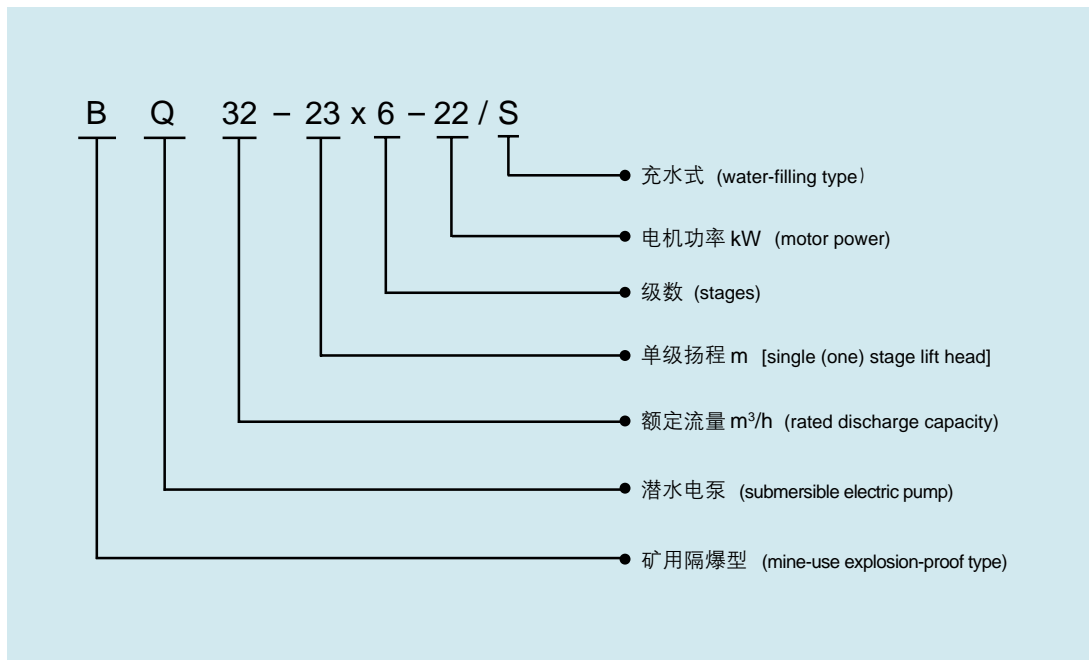


BQ系列 矿用隔爆型潜水电泵

BQ series mine-use explosion-proof submersible electric pump

技术规格 Technical specification

1. 型号举例说明: Type illustration:



2. 主要技术数据 (详见矿用隔爆型潜水电泵技术参数表及性能曲线)

The main technical data (for detail, see the Technical parameter table and the performance curve of the mine-use explosion-proof submersible electric pump)



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。在运转过程中由于温度变化，引起电机内腔充水体积变化时，电机中调压装置自动调节。
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。

1. The motor adopts the explosion-proof, water-filling wet-structure, the chamber full of clear water, mainly for cooling the motor and the bearing lubrication. During operation, as the temperature changing may cause the water-filling volume to vary, a pressure regulator is equipped in the motor to allow the calibration.
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 sealis 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.

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
1	水泵轴	30Cr13
2	叶轮	HT200
3	导流壳	HT200
4	上导流壳	HT200
5	进水节	HT200
6	YBQ 矿用隔爆型潜水泵用三相异步电动机	自制
7	煤矿用移动橡套软电缆	依据 MT818



BQ系列 矿用隔爆型潜水电泵

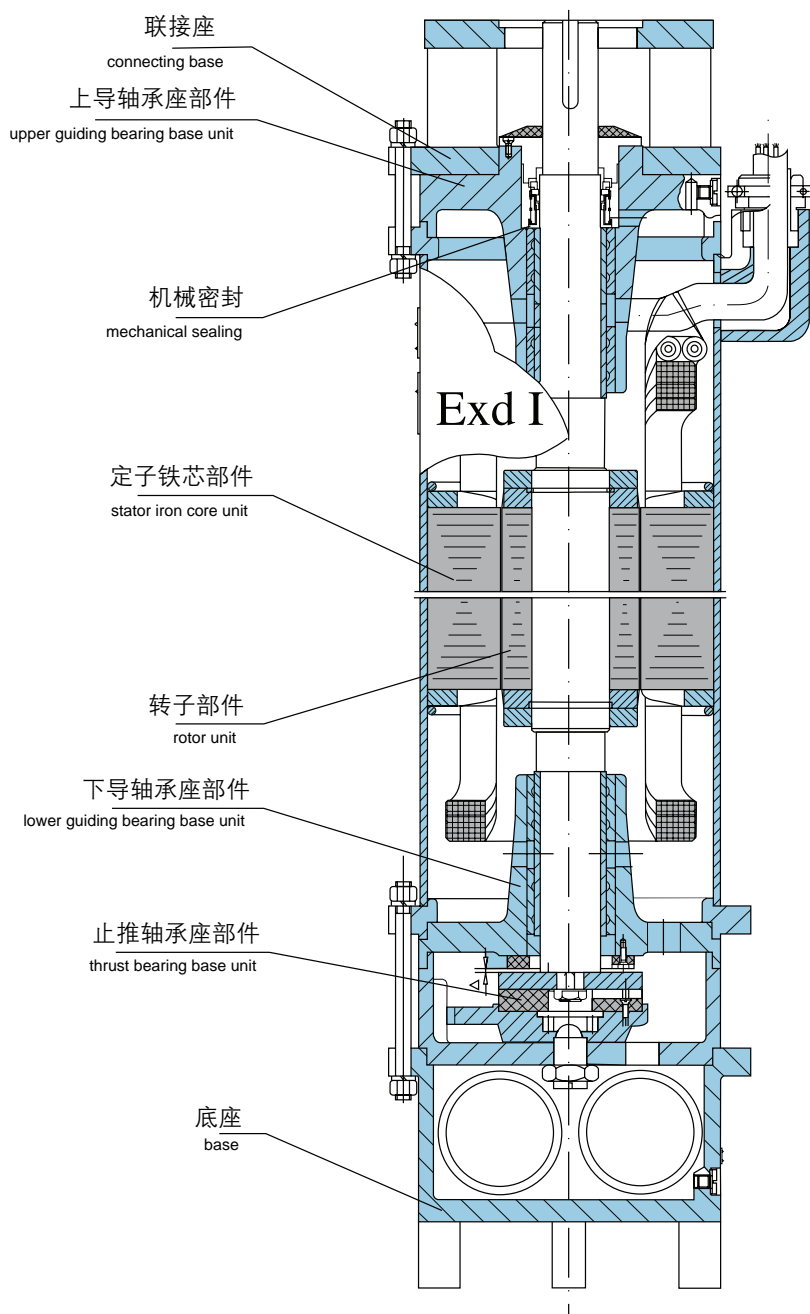
BQ series mine-use explosion-proof submersible electric pump

BQ 系列矿用隔爆型潜水电泵外形图

The configuration diagram of BQ series mine explosion-proof submersible electric pump

矿用隔爆型潜水电机结构简图

Mine Explosion-proof Submersible Motor Structure Diagram

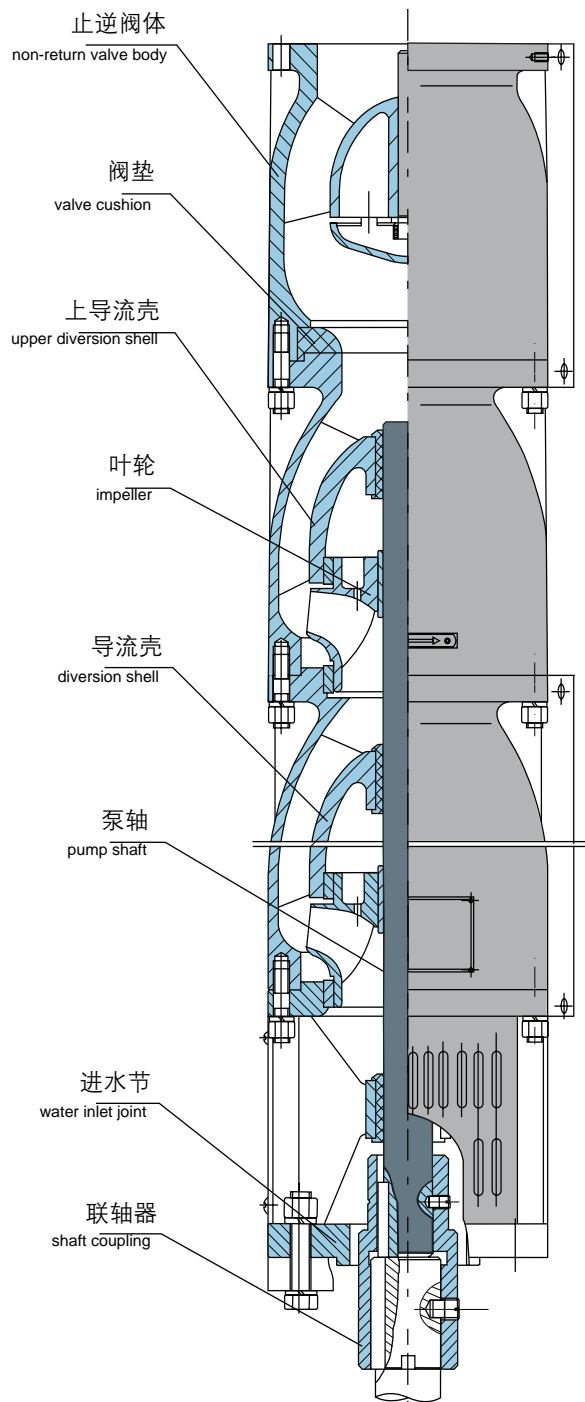


BQ 系列矿用隔爆型潜水电泵外形图

The configuration diagram of BQ series mine explosion-proof submersible electric pump

矿用隔爆型潜水泵结构简图

Mine Explosion-proof Submersible Electric Pump Structure Diagram





BQ系列 矿用隔爆型潜水电泵

BQ series mine-use explosion-proof submersible electric pump

基本参数表 Basic parameter table

序号 No.	电泵型号 Electric pump Type	流量 Discharge capacity	扬程 Head	功率 power	高度 Height	质量 Weight	额定电压 Rated voltage	同步转速 Rotational speed	电泵效率 Electric pump efficiency	出水管径 Outlet Pipe diameter	推荐配套电缆规格(铜芯) Recommended Matching cable Spec.(copper core)
		m ³ /h	m	kW	mm	kg	V	r/min	%	"	
1	BQ32-23 × 5-18.5/S	32	115	18.5	2003	224	380/660	3000	47	2.5	MY3 × 6+1 × 6
2	BQ32-23 × 6-22/S		138	22	2158	246			48		MY3 × 10+1 × 6
3	BQ32-23 × 7-25/S		161	25	2313	267			48		MY3 × 10+1 × 6
4	BQ32-23 × 8-30/S		184	30	2483	292			48		MY3 × 16+1 × 6
5	BQ32-23 × 9-37/S		207	37	2658	315			49		MY3 × 16+1 × 6
6	BQ32-23 × 10-37/S		230	37	2793	329			49		MY3 × 25+1 × 10
7	BQ32-23 × 11-45/S		253	45	2993	363			50		MY3 × 25+1 × 10
8	BQ32-23 × 12-45/S		276	45	3128	377			50		MY3 × 25+1 × 10
9	BQ32-23 × 13-55/S		299	55	3766	401			50		MY3 × 35+1 × 10
10	BQ32-23 × 14-55/S		322	55	3901	414			50		MY3 × 35+1 × 10
11	BQ32-23 × 15-63/S		345	63	3789	795			51		MY3 × 50+1 × 10
12	BQ32-23 × 16-63/S		368	63	3924	809			51		MY3 × 50+1 × 10
13	BQ32-23 × 17-63/S		391	63	4059	823			51		MY3 × 70+1 × 16
14	BQ32-23 × 18-75/S		414	75	4369	870			51		MY3 × 70+1 × 16
15	BQ32-23 × 19-75/S		437	75	4504	884			51		MY3 × 70+1 × 16
16	BQ32-23 × 20-75/S		460	75	4639	897			51		MY3 × 70+1 × 16
17	BQ32-23 × 21-90/S		483	90	5353	937			51		2-MY3 × 50+1 × 10
18	BQ32-23 × 22-90/S		506	90	5488	951			51		2-MY3 × 50+1 × 10
19	BQ32-23 × 23-90/S		529	90	5623	965			51		2-MY3 × 50+1 × 10
20	BQ32-23 × 24-90/S		552	90	5758	979			51		2-MY3 × 50+1 × 10
21	BQ32-23 × 25-110/S		575	110	5963	1026			51		2-MY3 × 50+1 × 10
22	BQ32-23 × 26-110/S	598	110	6098	1040	51	2-MY3 × 50+1 × 10				
23	BQ50-20 × 4-18.5/S	50	80	18.5	2007	224	51	3	MY3 × 6+1 × 6		
24	BQ50-20 × 5-22/S		100	22	2187	248	52		MY3 × 10+1 × 6		
25	BQ50-20 × 6-25/S		120	25	2367	271	52		MY3 × 16+1 × 6		
26	BQ50-20 × 7-37/S		140	37	2602	307	53		MY3 × 16+1 × 6		
27	BQ50-20 × 8-37/S		160	37	2762	323	53		MY3 × 16+1 × 6		
28	BQ50-20 × 9-45/S		180	45	2987	359	54		MY3 × 25+1 × 10		
29	BQ50-20 × 10-45/S		200	45	3147	375	54		MY3 × 25+1 × 10		
30	BQ50-20 × 11-55/S		220	55	3810	401	54		MY3 × 35+1 × 10		
31	BQ50-20 × 12-55/S		240	55	3970	417	54		MY3 × 50+1 × 10		
32	BQ50-20 × 13-63/S		260	63	3883	800	55		MY3 × 50+1 × 10		
33	BQ50-20 × 14-63/S		280	63	4043	816	55		MY3 × 50+1 × 10		

序号 No.	电泵型号 Electric pump Type	流量 Discharge capacity	扬程 Head	功率 power	高度 Height	质量 Weight	额定电压 Rated voltage	同步转速 Rotational speed	电泵效率 Electric pump efficiency	出水管径 Outlet Pipe diameter	推荐配套电缆规格(铜芯) Recommended Matching cable Spec.(copper core)
		m ³ /h	m	kW	mm	kg	V	r/min	%	"	
34	BQ50-20 × 15-63/S	50	300	63	4203	832	380/660	3000	55	3	MY3 × 50+1 × 10
35	BQ50-20 × 16-75/S		320	75	4563	883			55		MY3 × 50+1 × 10
36	BQ50-20 × 17-90/S		340	90	5302	925			55		MY3 × 50+1 × 10
37	BQ50-20 × 18-90/S		360	90	5462	941			55		MY3 × 50+1 × 10
38	BQ50-20 × 19-110/S		380	110	5692	990			55		MY3 × 50+1 × 10
39	BQ50-20 × 20-110/S		400	110	5852	1006			55		MY3 × 50+1 × 10
40	BQ50-20 × 21-110/S		420	110	6012	1022			55		MY3 × 70+1 × 16
41	BQ50-20 × 22-110/S		440	110	6172	1038			55		MY3 × 70+1 × 16
42	BQ50-20 × 23-110/S		460	110	6332	1054			55		MY3 × 70+1 × 16
43	BQ80-27 × 2-22/S		80	54	22	1703			213		380/660
44	BQ80-27 × 3-30/S	81		30	2230	276	50	MY3 × 16+1 × 6			
45	BQ80-27 × 4-45/S	108		45	2570	332	52	MY3 × 16+1 × 6			
46	BQ80-27 × 5-55/S	135		55	2880	368	52	MY3 × 25+1 × 10			
47	BQ80-27 × 6-75/S	162		75	3336	781	53	MY3 × 35+1 × 10			
48	BQ80-27 × 7-75/S	189		75	3571	807	53	MY3 × 50+1 × 10			
49	BQ80-27 × 8-90/S	216		90	4385	859	53	MY3 × 70+1 × 16			
50	BQ80-27 × 9-110/S	243		110	4690	918	53	2-MY3 × 50+1 × 10			
51	BQ80-27 × 10-110/S	270		110	5160	970	53	2-MY3 × 50+1 × 10			
52	BQ80-27 × 11-110/S	297		110	5395	996	53	2-MY3 × 50+1 × 10			
53	BQ80-27 × 12-125/S	324	125	5720	1064	53	2-MY3 × 70+1 × 16				
54	BQ80-27 × 13-140/S	351	140	6075	1147	53	2-MY3 × 70+1 × 16				
55	BQ80-27 × 14-140/S	378	140	6310	1173	53	2-MY3 × 70+1 × 16				
56	BQ100-26 × 2-25/S	100	52	25	1723	220	380/660	3000	51	4	MY3 × 16+1 × 6
57	BQ100-26 × 3-37/S		78	37	2270	285			52		MY3 × 16+1 × 6
58	BQ100-26 × 4-55/S		104	55	2645	342			53		MY3 × 25+1 × 10
59	BQ100-26 × 5-63/S		130	63	3061	735			54		MY3 × 35+1 × 10
60	BQ100-26 × 6-75/S		156	75	3336	781			54		MY3 × 35+1 × 10
61	BQ100-26 × 7-90/S		182	90	4150	833			54		MY3 × 50+1 × 10
62	BQ100-26 × 8-110/S		208	110	4455	892			54		MY3 × 70+1 × 16
63	BQ100-26 × 9-110/S		234	110	4690	918			54		MY3 × 70+1 × 16
64	BQ100-26 × 10-125/S		260	125	5250	1012			54		2-MY3 × 50+1 × 10
65	BQ100-26 × 11-140/S		286	140	5605	1095			54		2-MY3 × 50+1 × 10
66	BQ100-26 × 12-140/S	312	140	5840	1121	54	2-MY3 × 50+1 × 10				
67	BQ125-23 × 2-25/S	125	46	25	1723	220	380/660	3000	56	5	MY3 × 16+1 × 6
68	BQ125-23 × 3-37/S		69	37	2270	285			57		MY3 × 16+1 × 6
69	BQ125-23 × 4-55/S		92	55	2645	342			58		MY3 × 25+1 × 10
70	BQ125-23 × 5-63/S		115	63	3061	735			59		MY3 × 35+1 × 10



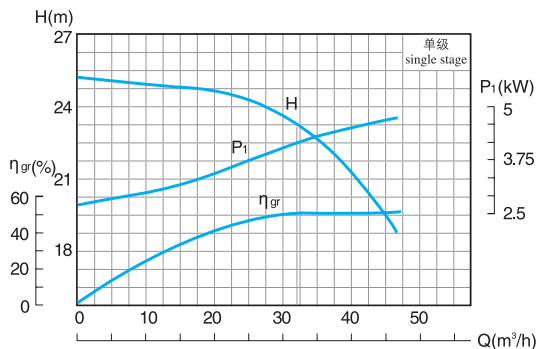
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BQ series mine-use explosion-proof submersible electric pump

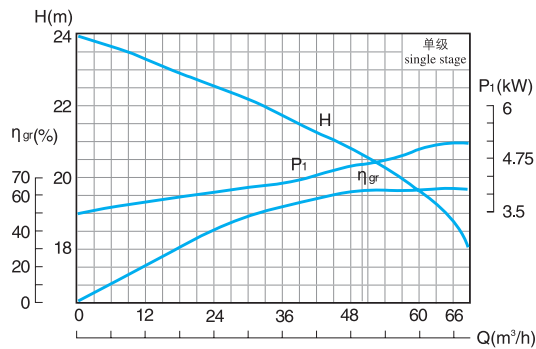
序号 No.	电泵型号 Electric pump Type	流量 Discharge capacity	扬程 Head	功率 power	高度 Height	质量 Weight	额定电压 Rated voltage	同步转速 Rotational speed	电泵效率 Electric pump efficiency	出水管径 Outlet Pipe diameter	推荐配套电缆规格(铜芯) Recommended Matching cable Spec.(copper core)	
		m ³ /h	m	kW	mm	kg	V	r/min	%	"		
71	BQ125-23 × 6-75/S	125	138	75	3336	781	380/660	3000	59	5	MY3 × 35+1 × 10	
72	BQ125-23 × 7-90/S		161	90	4150	833			59		MY3 × 50+1 × 10	
73	BQ125-23 × 8-110/S		184	110	4455	892			59		MY3 × 70+1 × 16	
74	BQ125-23 × 9-110/S		207	110	4690	918			59		MY3 × 70+1 × 16	
75	BQ125-23 × 10-125/S		230	125	5250	1012			59		2-MY3 × 50+1 × 10	
76	BQ125-23 × 11-140/S		253	140	5605	1095			59		2-MY3 × 50+1 × 10	
77	BQ150-20 × 2-30/S	150	40	30	1758	231			56	6	56	MY3 × 16+1 × 6
78	BQ150-20 × 3-45/S		60	45	2335	305			58		MY3 × 25+1 × 10	
79	BQ150-20 × 4-55/S		80	55	2645	342			58		MY3 × 25+1 × 10	
80	BQ150-20 × 5-63/S		100	63	3061	735			59		MY3 × 35+1 × 10	
81	BQ150-20 × 6-75/S		120	75	3336	781			59		MY3 × 35+1 × 10	
82	BQ150-20 × 7-90/S		140	90	4150	833			59		MY3 × 50+1 × 10	
83	BQ150-20 × 8-110/S		160	110	4455	892			59		MY3 × 70+1 × 16	
84	BQ150-20 × 9-125/S		180	125	4780	960			59		2-MY3 × 50+1 × 10	
85	BQ150-20 × 10-140/S		200	140	5370	1069			59		2-MY3 × 50+1 × 10	
86	BQ150-20 × 11-140/S		220	140	5605	1095			59		2-MY3 × 50+1 × 10	
87	BQ160-25-18.5/S	160	25	18.5	1413	180	56	5	56	MY3 × 6+1 × 6		
88	BQ160-25 × 2-37/S		50	37	1728	240	59		MY3 × 16+1 × 6			
89	BQ160-25 × 3-55/S		75	55	2318	325	60		MY3 × 25+1 × 10			
90	BQ160-25 × 4-75/S		100	75	2739	740	61		MY3 × 35+1 × 10			
91	BQ160-25 × 5-90/S		125	90	3518	795	61		MY3 × 50+1 × 10			
92	BQ160-25 × 6-110/S		150	110	3788	856	61		MY3 × 50+1 × 10			
93	BQ160-25 × 7-125/S		175	125	4078	927	61		MY3 × 70+1 × 16			
94	BQ160-25 × 8-140/S		200	140	4398	1012	61		2-MY3 × 50+1 × 10			
95	BQ200-20-18.5/S	200	20	18.5	1413	180	54	6	54	MY3 × 6+1 × 6		
96	BQ200-20 × 2-37/S		40	37	1728	240	56		MY3 × 16+1 × 6			
97	BQ200-20 × 3-55/S		60	55	2318	325	58		MY3 × 35+1 × 10			
98	BQ200-20 × 4-75/S		80	75	2739	740	58		MY3 × 50+1 × 10			
99	BQ200-20 × 5-90/S		100	90	3518	795	58		MY3 × 70+1 × 16			
100	BQ200-20 × 6-110/S		120	110	3788	856	58		MY3 × 70+1 × 16			
101	BQ200-20 × 7-125/S		140	125	4078	927	58		2-MY3 × 50+1 × 10			
102	BQ200-20 × 8-140/S		160	140	4398	1012	58		2-MY3 × 50+1 × 10			
103	BQ250-30-37/S	250	30	37	1558	217	60	6	60	MY3 × 16+1 × 6		
104	BQ250-30 × 2-75/S		60	75	2399	681	63		MY3 × 35+1 × 10			
105	BQ250-30 × 3-110/S		90	110	3278	765	63		MY3 × 50+1 × 10			
106	BQ250-30 × 4-140/S		120	140	3718	889	63		MY3 × 70+1 × 16			

性能曲线图 Performance curves

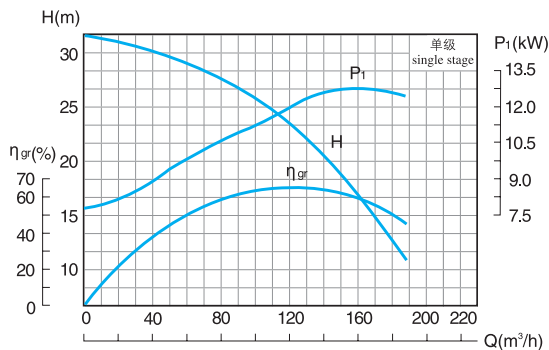
BQ32性能曲线



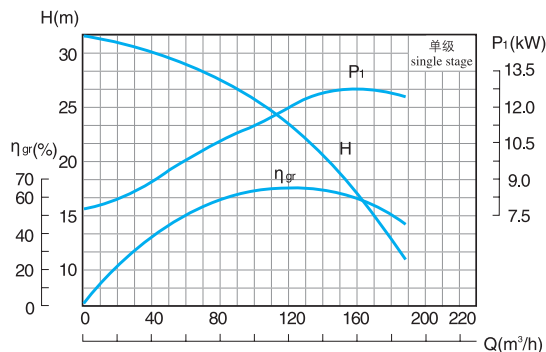
BQ50性能曲线



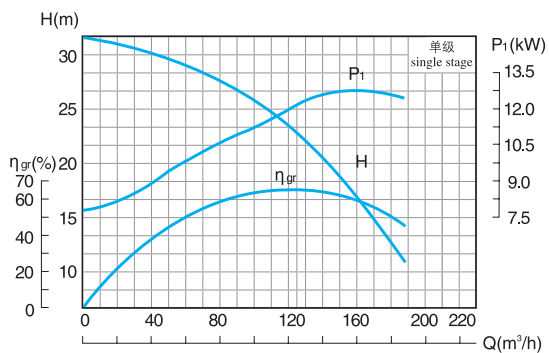
BQ80性能曲线



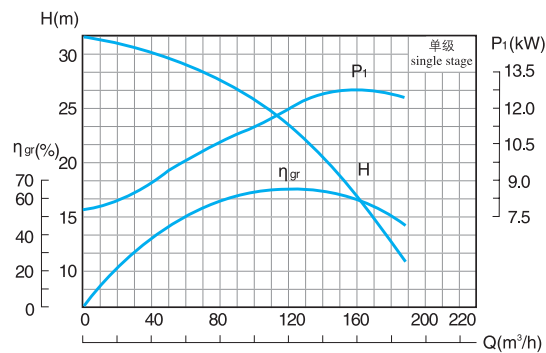
BQ100性能曲线



BQ125性能曲线



BQ150性能曲线



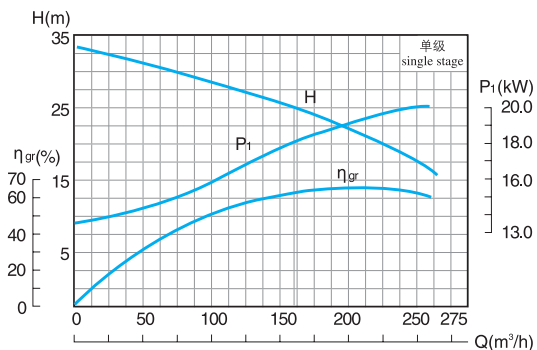


BQ系列 矿用隔爆型潜水电泵

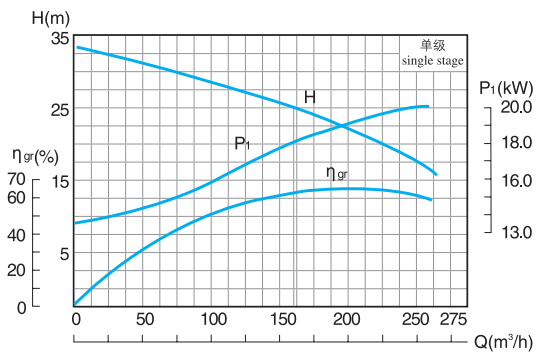
BQ series mine-use explosion-proof submersible electric pump

性能曲线图 Performance curves

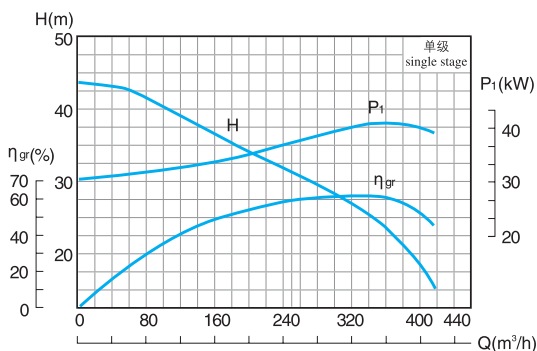
BQ160性能曲线



BQ200性能曲线



BQ250性能曲线



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