



WQW/WQF

Sewage submersible pump

Introduction

Model screening: after performance optimization, double-channel impeller is adopted with two or three reasonably arranged mechanical seals, which ensures the lubrication and cooling of mechanical seals, the smooth operation without blocking and good flow capacity.

Improvement of mechanical seals: series mechanical seal is adopted, with more reliable shaft seal and longer service life.

Structural optimization: the structural design ensures the airtightness of mechanical seals, smooth operation, vibration resistance, drop resistance, and higher reliability. The optimized sewage pump is more portable, practical, corrosion-resistant and wear-resistant.

The submersible motor is featured with IPX8 protection level, good cooling effect and temperature rise lower than ordinary motor, which ensure the better durability. Based on the F-level insulation, the motor has longer service life.

The motor is equipped with a variety of protection devices, which is convenient for users' choice at the time of optimization.

Main Application

It is applicable to discharge the waste water, rainwater and sewage containing solid particles and long fibers in buildings, hospitals, residential areas, municipal engineering, road traffic and their construction, engineering sewage discharge, small-scale sewage treatment and other occasions.

Pump Body & Impeller

Both pump body and impeller are carefully selected, which ensures the good passage capacity of flow channel, high efficiency, flat power curve and not ease to overload. The impeller is featured with accurate balance, small vibration and stable rotation.

Motor

The specially designed submersible motor, featured with IPX8 protection level and F-level insulation, can tolerate the high temperature rise. Under the normal temperature rise condition, the motor insulation life is extended, while the submersible cooling effect is good and the actual temperature rise is low, thus ensuring the longer insulation life of motor.

Motor Cooling

The heat of motor dissipates through the casing. As long as half of the motor stator casing is soaked by the medium, the motor can operate reliably and safely. The more soaked, the more favorable the motor cooling is.

Shaft Seal

The shaft seal of motor is realized with two or three series mechanical seals, which form multiple reliable sealing defense lines. One of the seals is in the medium of pump. The sealing surface is compressed more tightly with the increase of medium pressure, thus effectively preventing water from entering the oil chamber; the other two seals are in the oil chamber, which can prevent oil from entering the motor. If the first seal is failed, the other two can still prevent oil and water from entering the motor. Besides, the bellows-type mechanical seals cooperate with the innovative structural cavity to further improve the reliability of shaft seal greatly. Under normal use, the non-failure operation time is more than 9,000h.

Oil Chamber

The oil chamber is filled with proper machine oil and installed with two mechanical seals. It is the first barrier to prevent the medium from entering the motor through the pump shaft. If the first seal is failed, the buffer medium in oil chamber can not directly enter the motor. Meanwhile, the friction surfaces of the two independent mechanical seals are lubricated and cooled to make the mechanical seals work more reliable, which can also take away the heat of lower bearing and some heat of the motor.

Bearing

The lower bearing forms the reliable support of motor pump shaft. According to radial and axial forces and pulsating load generated during the operation of sewage pump, the lower bearing can be composed of two or three different types of bearing, thus ensuring the stable operation and long service life of unit.

Cable and Cable Seal

- 1) The cable is sewage-resistant flexible cable with rubber sheath. The cable core section is designed for long-term and reliable operation at 40P ambient temperature and motor full-load power. When the sewage pump works, if the motor runs at non-full load power or under the ambient temperature lower than 40P, the longer service life will be ensured.
- 2) There is seal compressed between the cable rubber sheath and the motor gland, so as to prevent the medium from penetrating into the inner cavity of motor from the interface between cable and motor gland.
- 3) There is rubber vulcanization between the cable sheath and the cable core. Once the rubber sheath is scratched, it can still effectively prevent the medium from entering the motor through the sheath.

Motor Shell

The frame, bearing seat and cover compose the motor shell. The connection place of all components is provided with the reliable static seal. Besides, each motor has been checked through the strict hydrostatic test, so as to ensure the good water tightness.

Safety Protection in Motor Pump

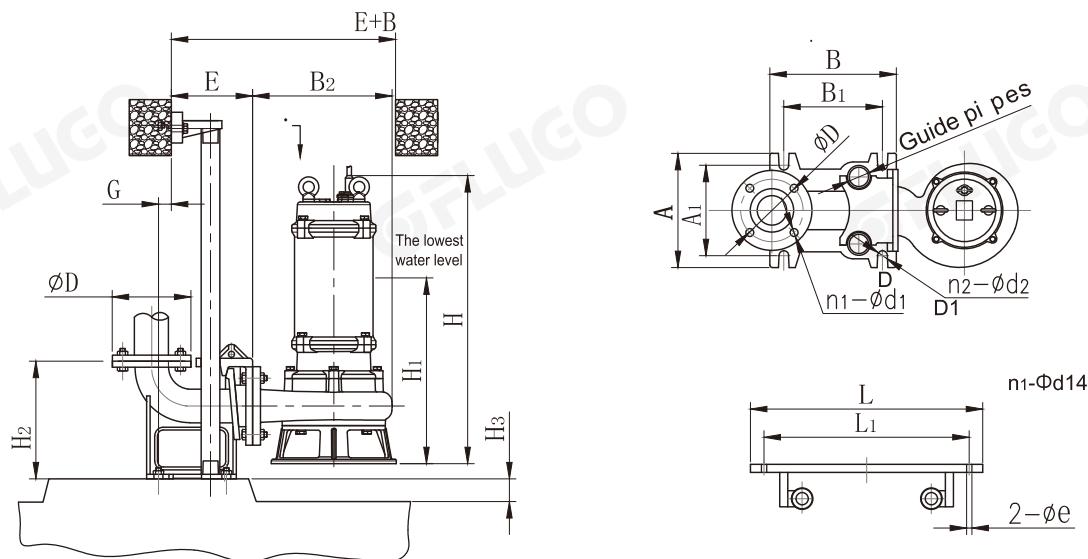
(operated by the special electricallycontrolled phase)

- 1) Oil-water probe: installed in the oil chamber to check the leakage of the first mechanical seal (in the medium), which will send the alarm signal when the medium leaks into the oil chamber and reaches a certain proportion.
- 2) Inlet probe: installed in the motor chamber to check the leakage of the second mechanical seal, which will send the alarm signal and stop the pump when the oil (oil-water mixture) enters the motor.
- 3) Thermo-sensitive element: installed in the motor stator winding, which will send the alarm signal and stop the pump when the motor is overloaded for long time and the temperature of motor winding (or the heating of the motor winding caused by other reasons) reaches a certain value.

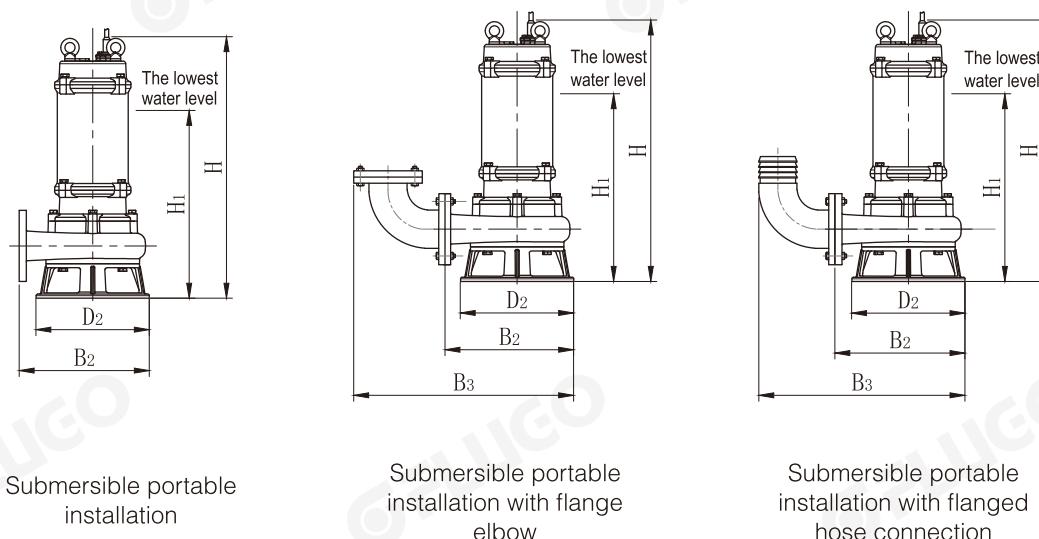
rubber sheath. The cable core section is designed

Installation

Fixed with connection foot: this installation includes foot, guide pipes, chain, etc. this connection allows for quick removal and installation of pumps from the system during maintenance.



Removable installation with base frame



Submersible portable installation

Submersible portable installation with flange elbow

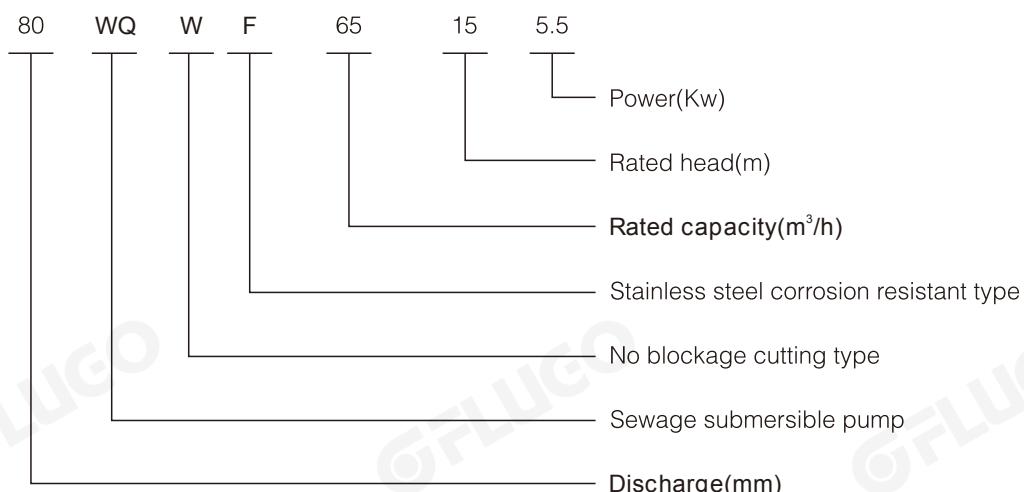
Submersible portable installation with flanged hose connection

WQ / WQF / WQW / Submersible sewage pump with Auto-coupling set

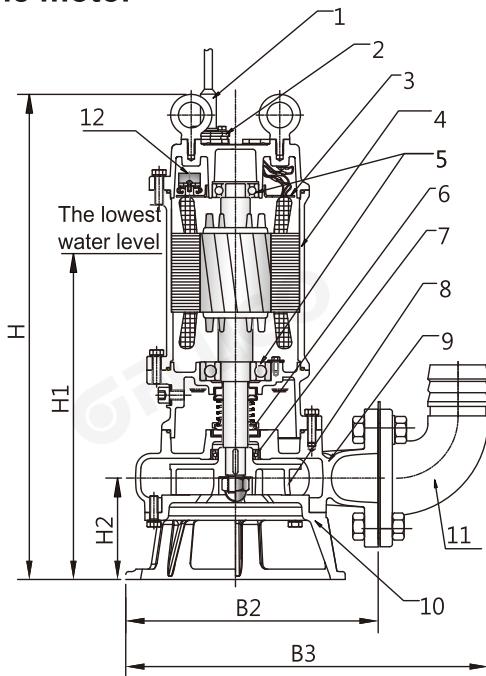
No.	Model	Dimension PN0.6MPa mm			Lightweight auto-coupling set dimension mm					G	H ₂	H ₃	L	L ₁	Rail pipe (inch)	Φe	E
		D	D1	n ₁ -Φd14	A	A ₁	B	B ₁	n ₂ -Φd ₂								
1	DN50	140	110	4-Φ14	132	115	160	118	4-Φ16	23	210	160	265	220	1	12	145
2	DN65	160	130	4-Φ14	160	140	185	135	4-Φ16	25	246	165	275	240	1	12	158
3	DN80	190	150	4-Φ18	185	160	220	160	4-Φ16	30	280	165	315	266	1.5	12	188
4	DN100	210	170	4-Φ18	210	175	260	196	4-Φ18	46	335	185	360	305	1.5	12	205
5	DN150	265	225	8-Φ18	260	230	340	252	4-Φ18	92	415	200	465	400	1.5	16	245
No.	Model	Dimension PN0.6MPa mm			Heavyweight auto-coupling set dimension mm					G	H ₂	H ₃	L	L ₁	Rail pipe (inch)	Φe	E
		D	D1	n ₁ -Φd14	A	A ₁	B	B ₁	n ₂ -Φd ₂								
1	DN50	140	110	4-Φ14	160	140	210	166	4-Φ16	72	210	160	265	220	1	12	145
2	DN65	160	130	4-Φ14	200	175	235	185	4-Φ16	73	245	165	275	240	1	12	155
3	DN80	190	150	4-Φ18	230	195	270	210	4-Φ16	80	280	165	315	266	1.5	12	188
4	DN100	210	170	4-Φ18	270	230	320	256	4-Φ20	110	335	185	360	305	1.5	12	212
5	DN150	265	225	8-Φ18	320	260	486	370	4-Φ20	234	415	200	465	400	1.5	16	240
6	D N200	320	280	8-Φ18	390	350	626	490	4-Φ20	361	444	200	530	465	1.5	16	245
No.	Model	Dimension PN0.6MPa mm			Heavyweight auto-coupling set dimension mm					G	H ₂	H ₃	L	L ₁	Rail pipe (inch)	Φe	E
		D	D1	n ₁ -Φd14	A	A ₁	B	B ₁	n ₂ -Φd ₂								
1	DN250	395	350	12-Φ22	480	420	666	480	4-Φ30	330	500	200	595	525	2	16	300
2	DN300	445	400	12-Φ22	560	500	760	570	4-Φ30	423	600	250	630	560	2	16	300
3	DN350	505	460	16×Φ22	620	560	860	660	4-Φ30	503	700	250	630	560	2	16	321
4	DN400	565	515	16×Φ26	700	620	980	750	4-Φ40	559	800	300	680	610	3	16	377
5	DN500	670	620	20×Φ26	840	760	1210	930	4-Φ40	736	1000	300	777	707	3	24	408

Pump material

Spare parts	Pump casing, impeller, cover	Motor shell	Shaft	Material of mechanical seal	
				Motor side	Pump side
Cast iron pump	HT200/QT600	HT200	45#/20Cr13	Carbon/Sic	Carbon/SIC/WC
Stainless steel pump	304-316L	304-316L	45#/304-316L	Carbon/Sic	Carbon/SIC/WC

WQW/WQF No blockage cutting type**WQW****WQF****Model definition**

Structure drawing of 2pole motor



Construction and material of WQW cast iron pump

No.	Spare part	Material	No.	Spare part	Material
1	Cable	YZW	7	Oil seal	NBR
2	Cable gland	304	8	Impeller	QT600
3	Threading plate	PA66	9	Pump casing	HT200
4	Motor	Shell HT200	10	Basement	QT600
5	Bearing	/	11	Counter flange (Optional accessories)	HT200
6	Mechanical seal	Carbon/SIC/WC	12	Thermal protector	/

Construction and material of WQF stainless steel pump

No.	Spare part	Material	No.	Spare part	Material
1	Cable	YZW	7	Oil seal	NBR
2	Cable gland	SS 304-316L	8	Impeller	SS 304-316L
3	Threading plate	PA66	9	Pump casing	SS 304-316L
4	Motor	Shell 304-316L	10	Basement	SS 304-316L
5	Bearing	/	11	Counter flange (Optional accessories)	SS 304-316L
6	Mechanical seal	Carbon/SIC/WC	12	Thermal protector	/

Technical data and overall dimensions**WQW NO-clogging cut cast iron type (2 Pole) WQF stainless steel same parameter**

Model	Size of pump end(DN)	Q	H	Speed	Power	Current	Mad.flow passage	Weight	Overall dimensions (mm)				
		mm	m³/h	m	rpm	kW	A	mm	kg	H	H1	H2	B2
40WQW10-10-0.75	40	10	10	2850	0.75	1.8	20	23	400	300	93	217	312
40WQW10-15-1.1	40	10	15	2850	1.1	2.6	20	27	415	315	93	217	312
50WQW10-10-0.75	50	10	10	2850	0.75	1.8	20	23	400	300	93	217	312
50WQW10-15-1.1	50	10	15	2850	1.1	2.6	20	27	415	315	93	217	312
50WQW15-10-1.1	50	15	10	2850	1.1	2.6	20	27	415	315	93	217	312
50WQW15-15-1.5	50	15	15	2880	1.5	3.3	26	35	493	370	103	250	345
50WQW9-22-2.2	50	9	22	2880	2.2	4.6	26	39	518	390	103	250	345
50WQW15-20-2.2	50	15	20	2880	2.2	4.6	26	39	518	390	103	250	345
50WQW15-25-3	50	15	25	2840	3	6.1	23	47	535	405	120	291	386
50WQW15-32-4	50	15	32	2840	4	7.7	18	52	565	435	120	291	386
50WQW25-25-4	50	25	25	2840	4	7.7	23	52	565	435	120	291	386
50WQW15-40-5.5	50	15	40	2940	5.5	10.8	18	86	650	510	123	313	408
50WQW20-45-7.5	50	20	45	2940	7.5	14.3	18	86	690	550	123	313	408
50WQW20-55-11	50	20	55	2950	11	21.8	19	100	765	480	128	346	441
50WQW20-60-15	50	20	60	2950	15	29.3	19	116	805	520	128	346	441
65WQW15-7-0.75	65	15	7	2850	0.75	1.8	20	23	400	300	93	217	312
65WQW15-10-1.1	65	15	10	2850	1.1	2.6	20	29	415	315	93	217	312
65WQW25-10-1.5	65	25	10	2880	1.5	3.3	26	38	493	370	103	250	355
65WQW25-14-2.2	65	25	14	2880	2.2	4.6	26	42	518	390	103	250	355
65WQW25-18-3	65	25	18	2840	3	6.1	26	48	535	405	120	291	396
65WQW40-16-4	65	40	16	2840	4	7.7	26	67	565	435	120	291	396
65WQW30-25-5.5	65	30	25	2940	5.5	10.8	18	87	650	510	123	313	418
65WQW30-35-7.5	65	30	35	2940	7.5	14.3	18	87	690	550	123	313	418
65WQW40-45-11	65	40	45	2950	11	21.8	19	122	765	480	128	346	441
65WQW40-50-15	65	40	50	2950	15	29.3	19	130	805	520	128	346	441
80WQW35-7-1.5	80	35	7	2880	1.5	3.3	45	51	505	390	107	276	401
80WQW40-8-2.2	80	40	8	2880	2.2	4.6	45	55	530	415	107	276	401
80WQW35-13-3	80	35	13	2840	3	6.1	45	49	560	430	130	295	420
80WQW50-12-4	80	50	12	2840	4	7.7	45	43	590	460	130	295	420
80WQW40-22-5.5	80	40	22	2940	5.5	10.8	26	87	660	520	125	325	450
80WQW40-30-7.5	80	40	30	2940	7.5	14.3	26	87	700	560	125	325	450
80WQW60-35-11	80	60	35	2950	11	21.8	32	122	775	490	136	340	490
80WQW60-40-15	80	60	40	2950	15	29.3	32	130	815	530	136	340	490
100WQW50-10-3	100	50	10	2840	3	6.1	55	50	578	458	136	306	456
100WQW60-11-4	100	60	11	2840	4	7.7	55	55	608	488	136	306	456
100WQW65-15-5.5	100	65	15	2940	5.5	10.8	46	92	690	550	143	320	470
100WQW65-20-7.5	100	65	20	2940	7.5	14.3	46	100	730	590	143	320	470
100WQW100-25-11	100	100	25	2950	11	21.8	25	125	775	490	136	340	490
100WQW100-30-15	100	100	30	2950	15	29.3	25	133	815	530	136	340	490
150WQW100-10-5.5	150	100	10	2940	5.5	10.8	60	112	707	567	150	356	556
150WQW140-10-7.5	150	140	10	2940	7.5	14.3	60	120	747	607	150	356	556
150WQW140-15-11	150	140	15	2950	11	21.8	55	128	805	520	168	398	598
150WQW150-20-15	150	150	20	2950	15	29.3	55	136	845	560	168	398	598
200WQW180-10-11	200	180	10	2950	11	21.8	70	132	835	550	199	413	670
200WQW180-15-15	200	180	15	2950	15	29.3	70	140	875	590	199	413	670

Note : WQW stainless steel type without DN40 discharge model

WQW NO-clogging cut cast iron type (2 Pole) WQF stainless steel same parameter

Model	Q(m³/h)	5	10	15	20	25	30	35	40	45	50	55
40WQW10-10-0.75	H (m)	11.5	10	8	6							
40WQW10-15-1.1		17	15	12.7	9	4						
40WQW15-10-1.1		14.5	12	10	7.5	4.8						
50WQW10-10-0.75		11.5	10	8	6							
50WQW10-15-1.1		17	15	12.7	9	4						
50WQW15-10-1.1		14.5	12	10	7.5	4.8						
50WQW15-15-1.5		18	16.5	15	13.3	11.5	9					
50WQW15-20-2.2		23.3	21.8	20	18.2	16.3	14.2	12.7				
50WQW15-25-3		28.5	27	25	23.2	21.3	19.3	17				
50WQW15-32-4		36	34	32	30	28	26.5	23.6	21			
50WQW25-25-4		31	29.8	28.4	26.5	25	23	21				
50WQW15-40-5.5		42.5	41.7	40	38	36	34	32	30			
50WQW20-45-7.5		49.5	48.5	47	45	43	41	39	37			
50WQW20-55-11		58	57.4	56	55	53	52	50	47.5	45		
50WQW20-60-15		63	62.2	60.7	60	58.3	57	55	53.8	51.7	50	47.5
65WQW15-7-0.75		9.7	9	7	5.3	3.7						
65WQW15-10-1.1		12.8	11.5	10	8	6.5						
65WQW25-10-1.5		15.5	14.4	13.4	11.7	10	8	5.9	3			
65WQW25-14-2.2		17.2	16.7	15.2	14.7	14	13	11.2	9.5	7.6	5.5	
65WQW25-18-3		23	22	20.9	19.6	18	16.5	14.3	12.5	10.2	7.4	
65WQW40-16-4		25.3	24	22.8	21.5	20.2	19	17.5	16.2	14.2	12.6	10.5
65WQW30-25-5.5		31.5	30.5	29	28	26.5	25	23	21.7	19.9	18	16.2
65WQW30-35-7.5		42	41	40	38.7	37.2	35	33	30.7	28	24.7	21
65WQW40-45-11		53	52.5	51.3	50.6	49.5	48	47	45	43.8	42	40.2
65WQW40-50-15		59	57.6	57	55	54.5	52.6	51	50	48	46	44.9

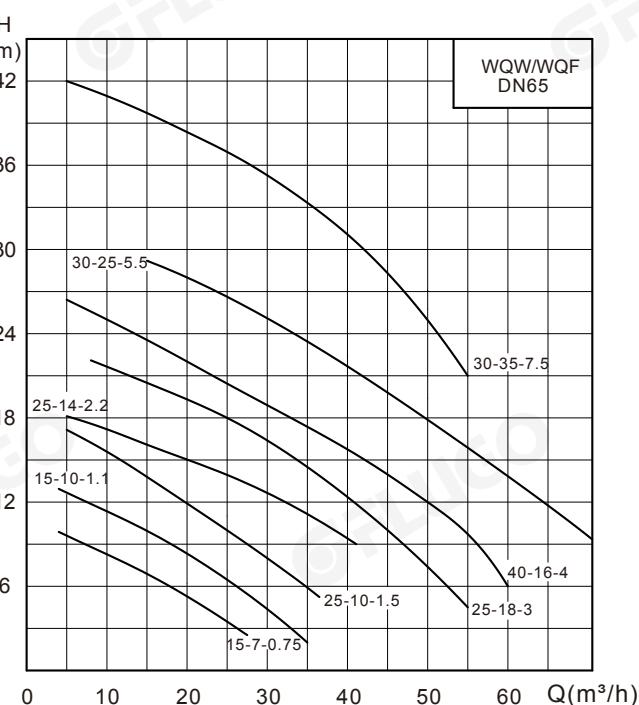
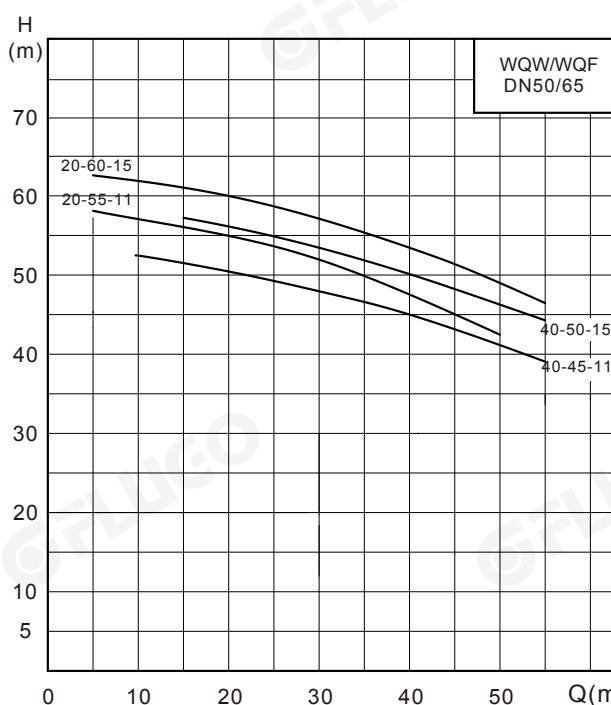
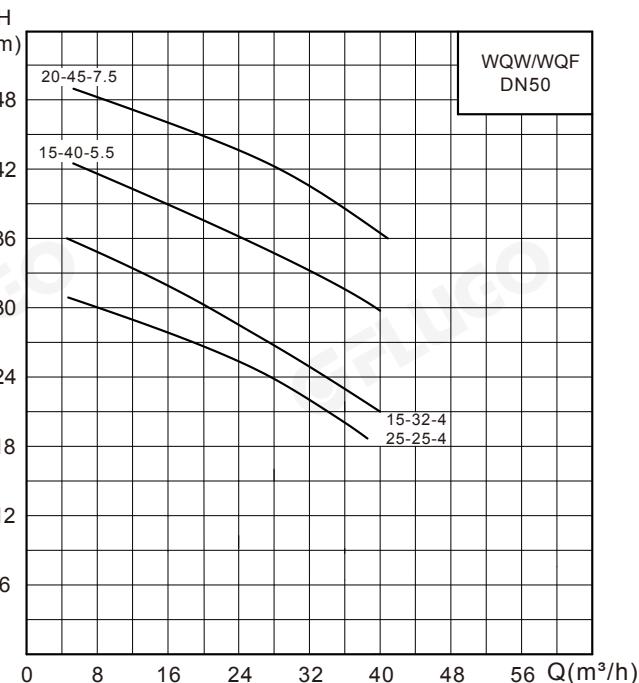
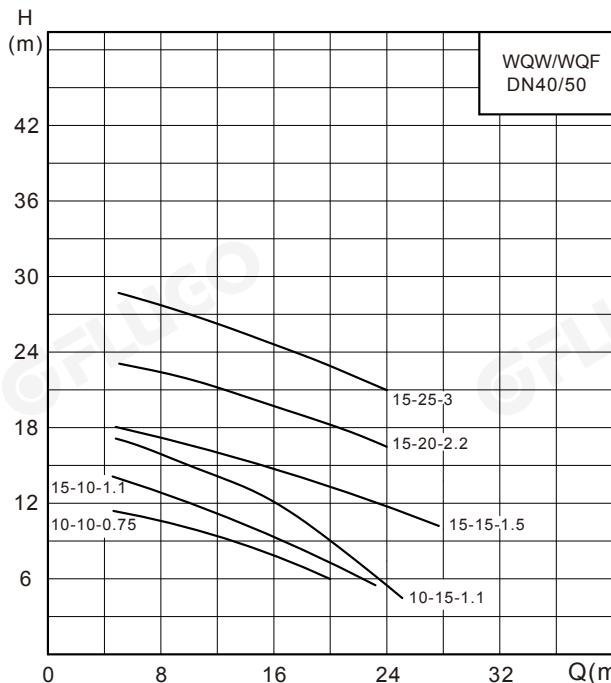
Model	Q(m³/h)	10	20	30	40	50	60	70	80	90	100	110
80WQW35-7-1.5	H (m)	10	8.9	7.6	6	4.4	2.5					
80WQW40-8-2.2		12	10.8	9.6	8	6.5	4.6					
80WQW35-13-3		17	15.5	14	12	9.7	6.7					
80WQW50-12-4		21	19.5	17.2	15	12	9	5.5				
80WQW40-22-5.5		30.8	28.2	25	22	17	12.1	7				
80WQW40-30-7.5		37	35	33	30	27.3	24.5	20.5	14			
80WQW60-35-11		42	41.2	40.2	39.7	37.3	35	33	30.6	27.6	23.8	
80WQW60-40-15		47	46.4	45	43.5	42	40	37.7	35	32	28.4	
100WQW50-10-3		15.5	14.2	13	10.8	10	7.5	5.8				
100WQW60-11-4		20.5	19	17.5	16	14	11	8	5			
100WQW65-15-5.5		21.8	21	20	19	18	16.5	14.5	12	8		
100WQW65-20-7.5		25.5	24.5	23.5	22.5	21.5	20.5	19.5	18.5	17	15	12.5

Model	Q(m³/h)	20	40	60	80	100	120	140	160	180	200	220
100WQW100-25-11	H (m)		40	35	30	25	19	12				
100WQW100-30-15			45	40	35	30	24	17				
150WQW100-10-5.5		16.5	15.5	13.7	12	10	8	5.8	3.5			
150WQW140-10-7.5		19	18.3	17	15.5	14	12	10	7.8	5.2		
150WQW140-15-11		27	25	23	21	19	17	15	13	11		
150WQW150-20-15		33	31	29	27.5	25.5	23	21	19	16	13	

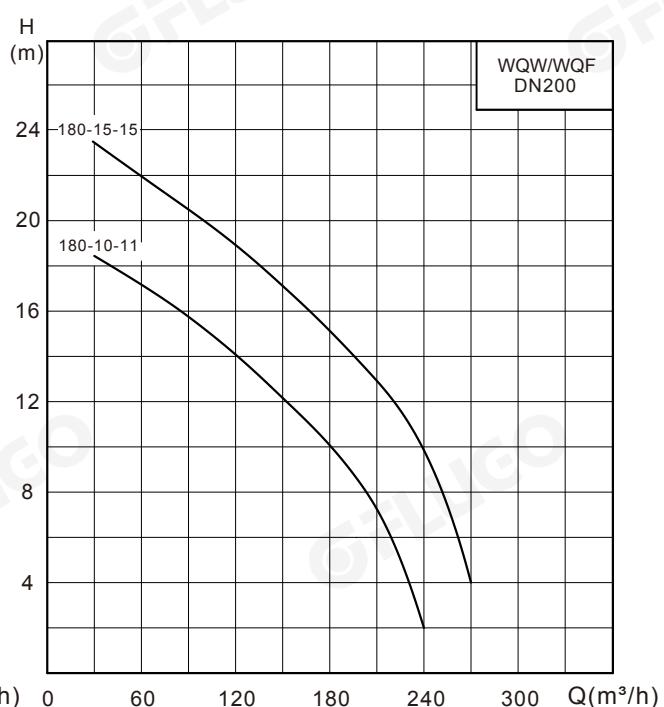
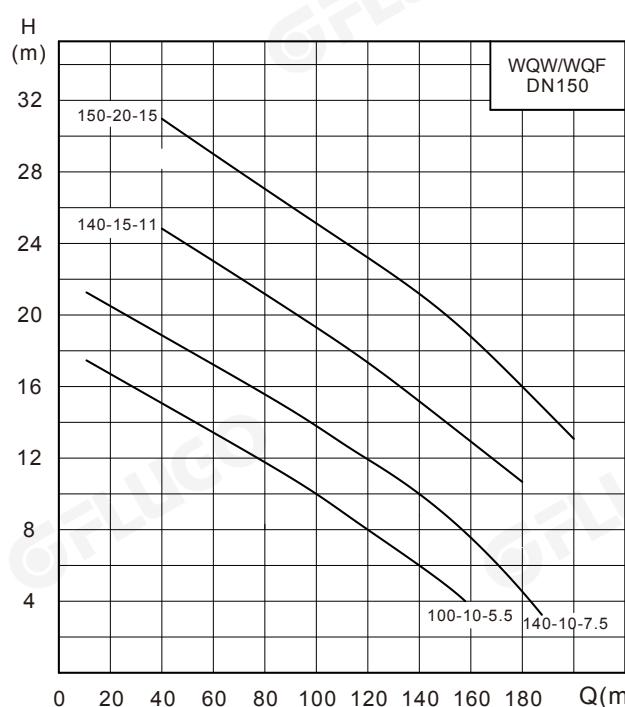
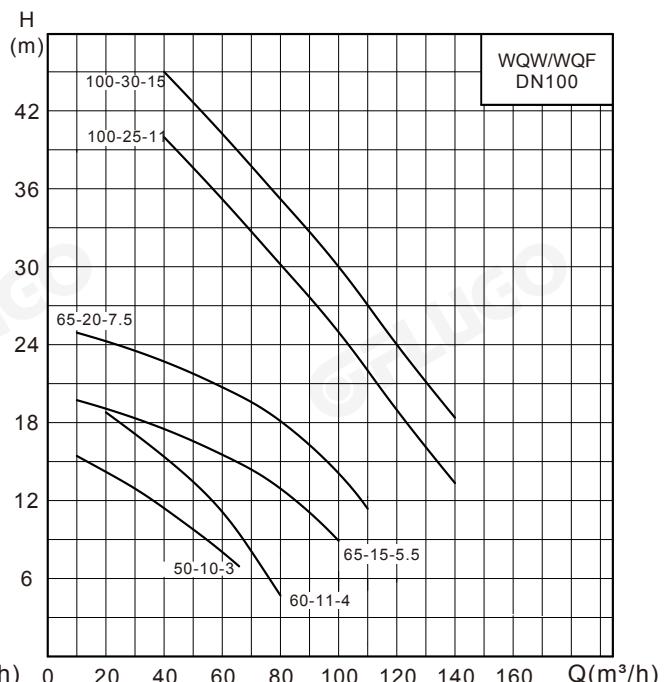
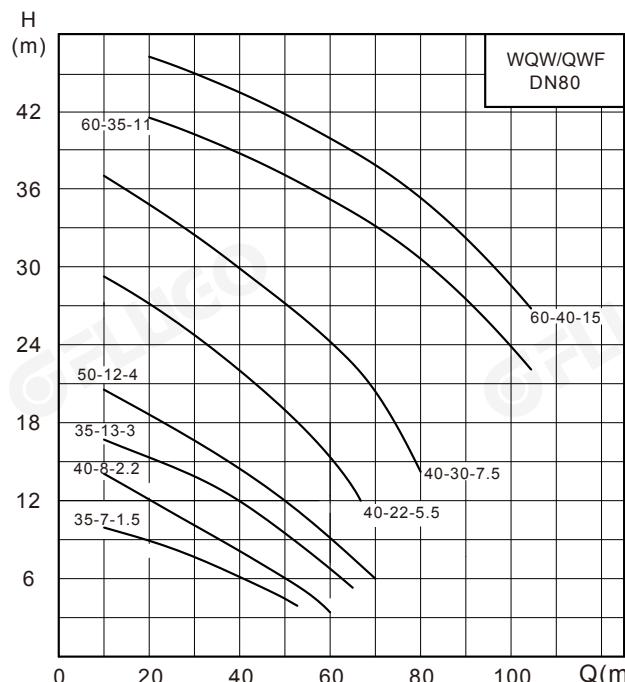
Model	Q(m³/h)	30	60	90	120	150	180	210	240	270	300	330
200WQW180-10-11	H (m)	18.5	17	15.5	14	12.2	10	7	2			
200WQW180-15-15		23.5	22	20.5	19	17.2	15	13	10	4		

Note : WQW stainless steel type without DN40 discharge model

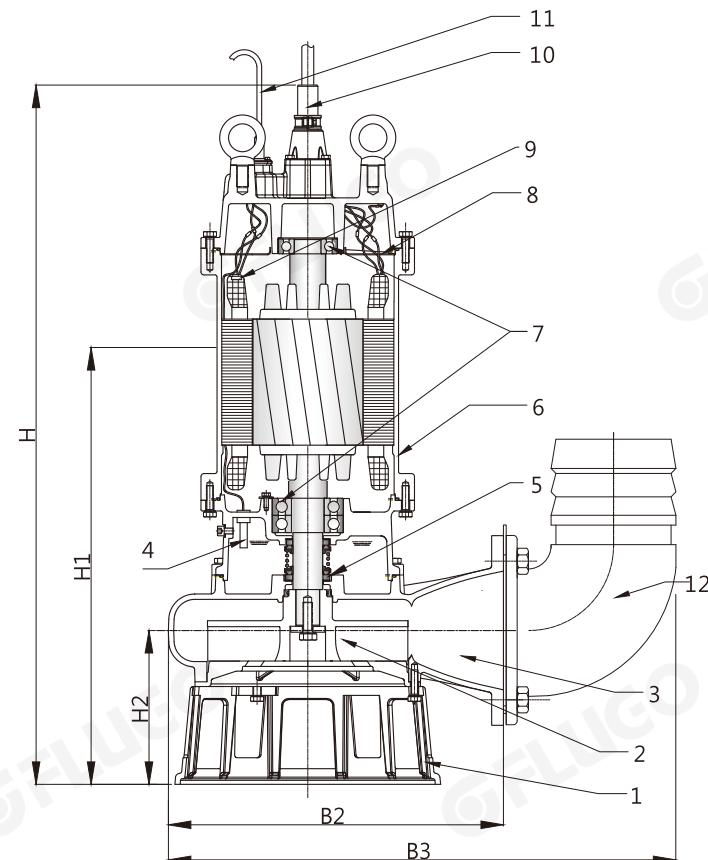
Performance curve



Performance curve



Construction and material of 4 pole WQW cast iron pump (high level)



Material of WQW cast iron pump

No.	Spare part	Material	No.	Spare part	Material
1	Basement	HT200	7	Bearing	/
2	Impeller	QT600	8	Threading plate	PA66
3	Pump casing	HT200	9	Thermal protector	/
4	Inlet induction electrode	/	10	Power cable	YZW
5	Mechanical seal	Carbon/SIC/WC	11	Induction cable	YZW
6	Motor	/	12	Counter flange (Optional accessories)	HT200

Technical data and overall dimensions

WQW NO-clogging cut cast iron type (4 Pole)

Model	Size of pump end(DN)	Q	H	Speed	Power	Current	Mad.flow passage	Weight	Overall dimensions mm				
	mm	m³/h	m	rpm	kW	A	mm	kg	H	H1	H2	B2	B3
100WQW100-35-18.5	100	100	35	1450	18.5	35.6	30	290	1100	710	244	545	696
100WQW100-38-22	100	100	38	1450	22	43.2	30	300	1100	710	244	545	696
100WQW100-45-30	100	100	45	1460	30	57.5	30	320	1150	750	244	545	696
150WQW180-20-18.5	150	180	20	1450	18.5	35.6	50	295	1140	750	258	523	725
150WQW180-25-22	150	180	25	1450	22	43.2	50	305	1140	750	258	523	725
150WQW200-28-30	150	200	28	1460	30	57.5	55	325	1190	800	258	523	725
150WQW150-35-37	150	150	35	1470	37	72	55	590	1300	900	280	622	825
150WQW200-35-45	150	200	35	1470	45	87	55	630	1300	900	280	622	825
150WQW200-45-55	150	200	45	1480	55	106	55	790	1300	900	280	620	825
200WQW300-12-18.5	200	300	12	1450	18.5	35.6	60	300	1150	750	260	566	826
200WQW300-15-22	200	300	15	1450	22	43.2	60	310	1150	750	260	566	826
200WQW250-22-30	200	250	22	1460	30	57.5	45	330	1200	810	260	566	826
200WQW300-25-37	200	300	25	1470	37	72	45	610	1300	900	358	699	960
200WQW400-25-45	200	400	25	1470	45	87	60	650	1300	900	258	699	960
200WQW400-30-55	200	400	30	1480	55	106	60	810	1300	900	258	699	960
250WQW300-12-18.5	250	300	12	1480	18.5	35.6	60	320	1200	750	260	632	962
250WQW300-15-22	250	300	15	1480	22	43.2	60	330	1200	750	260	632	962
250WQW400-15-30	250	400	15	1460	30	57.5	60	342	1250	550	262	632	962
250WQW500-15-37	250	500	15	1470	37	72	60	630	1350	950	300	750	1080
250WQW600-15-45	250	600	15	1470	45	87	60	670	1350	950	300	750	1080
250WQW500-23-55	250	500	23	1480	55	106	60	810	1350	950	300	750	1080
300WQW400-9-18.5	300	400	9	1480	18.5	35.6	60	340	1200	750	270	687	1090
300WQW500-9-22	300	500	9	1480	22	43.2	60	350	1200	750	270	687	1090
300WQW500-11-30	300	500	11	1460	30	57.5	60	380	690	550	262	687	1090
300WQW600-12-37	300	600	12	1470	37	72	60	650	1370	970	292	720	1120
300WQW800-12-45	300	800	12	1470	45	87	60	690	1370	970	292	720	1120
300WQW600-20-55	300	600	20	1480	55	106	55	830	1370	970	292	720	1120

WQF stainless steel type automatic coupling mounting dimension drawing

Pump outlet diameter Item	50	65	80	100	150	200	250	300		
Guide pipe dimensions	1"*(φ30*2)			1.5"*(φ45*2)				2"*(φ55*2.5)		
Guide pipe length (mm)	Pool depth-80									
Specification and quantity of expansion bolts	M12*80*2				M14*100*2		M16*120*2			
Specification and quantity of anchor bolts	M16*250*4						M20*300*4			
Size of hole reserved for anchor bolt	80*80*300						100*100*350			
Inner diameter of rubber hose (mm)	50	65	80	100	150	200	250	300		

Operation Data

WQW NO-clogging cut pump (4-Pole)

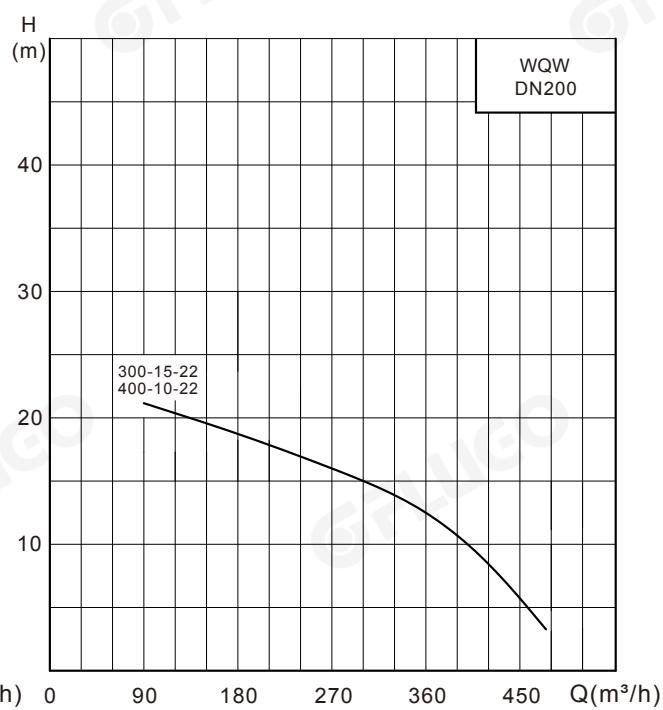
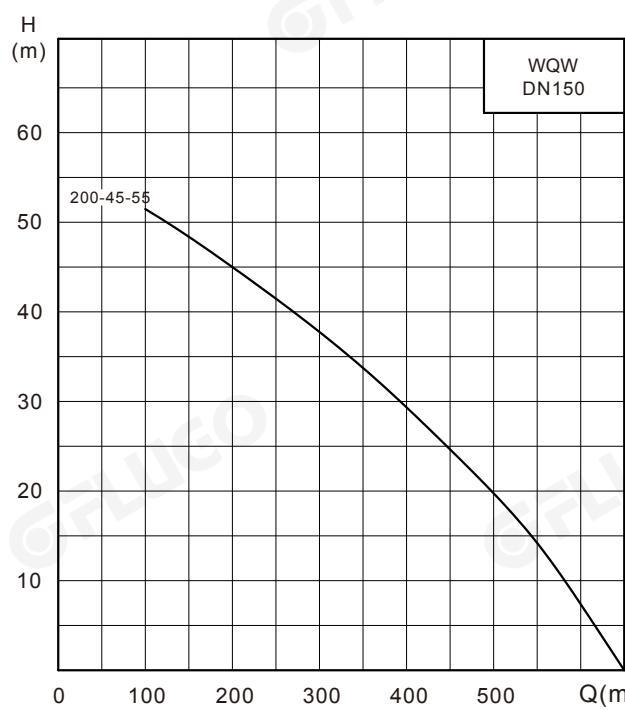
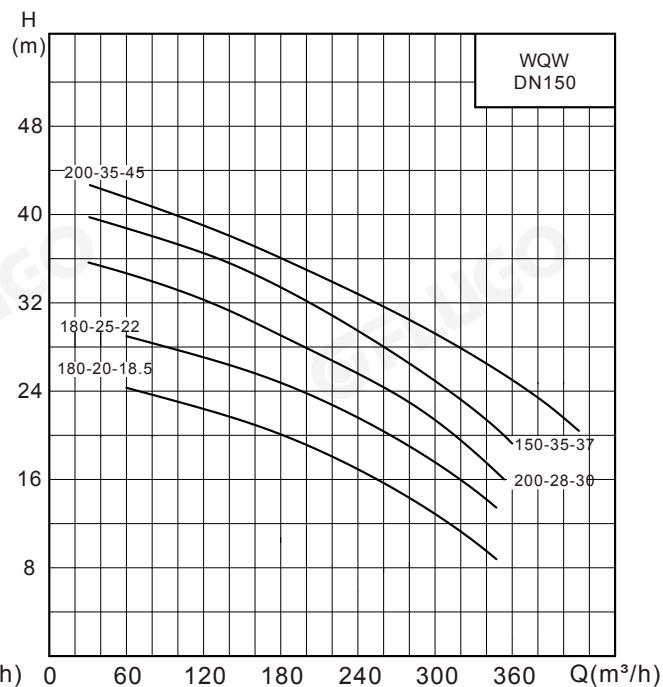
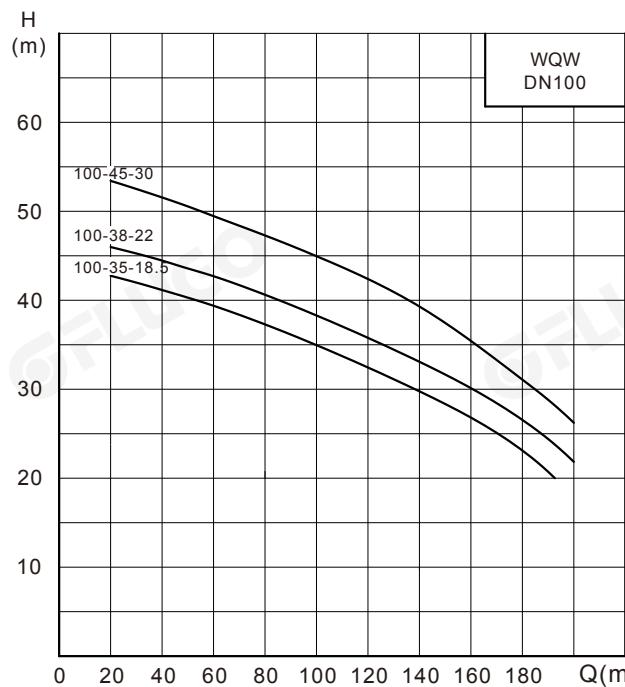
Model	Q(m³/h)	20	40	60	80	100	120	140	160	180	200	220
100WQW100-35-18.5	H (m)	43	41	39	37	35	32.8	30	27			
		46	44	42	40	38	35.8	33	30			
		53	51	49	47	45	42.3	39.2	35.5	31		

Model	Q(m³/h)	50	100	150	200	250	300	350	400	450	500	550
150WQW180-20-18.5	H (m)	25	23	21	19	17	14.5	9				
		35	31.8	28	23	17.3	11					
		35.5	33.5	30.8	28	25	21.5	16				
		39.8	37.6	35	31.8	28	23.3	18				
		42.3	40	38	35	32	28.2	25	19			
		56.3	52.7	49.2	45	40.7	36	30.7	25.5	19.8		
		20.5	19.5	17.5	17	14.8	12	9	7	3		
		21	20	19	18	17	15	12.4	10	3		

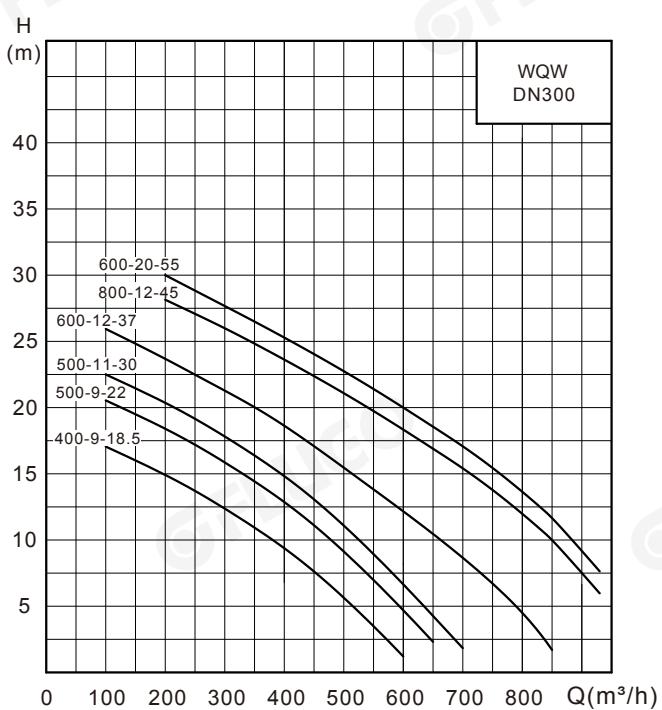
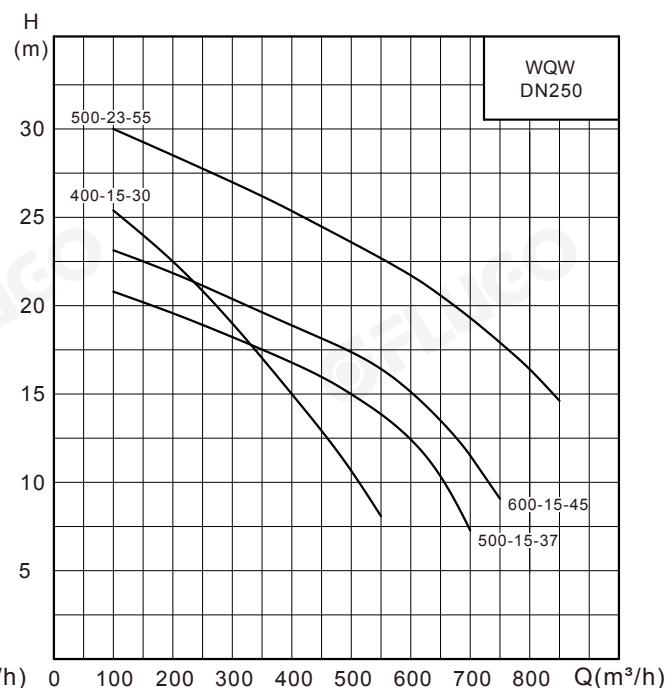
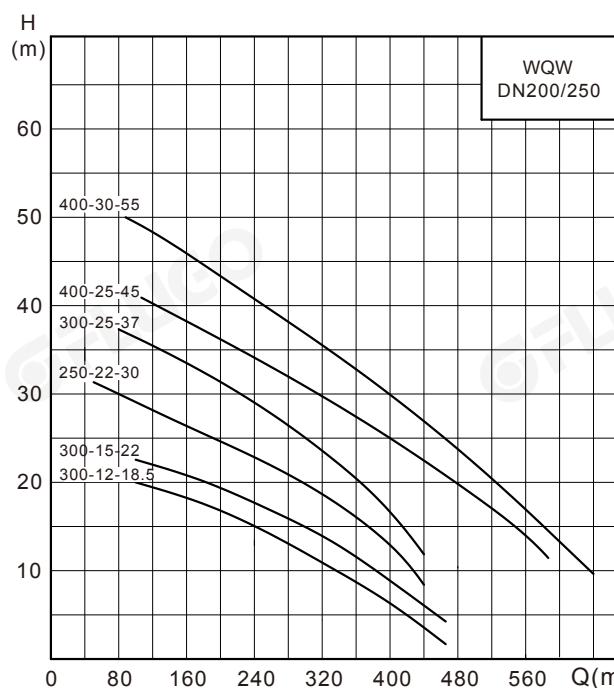
Model	Q(m³/h)	100	150	200	250	300	350	400	450	500	550	600
200WQW250-22-30	H (m)	29	26.5	24	22	20	17.5	13	8			
		37	34	31	28	25	21	17	13			
		40.5	38.5	36	33.5	31	28	25	21.5	17.8	14	10
		48.8	46	43	39.5	36.3	33.2	30	25.8	22.5	18	12.5
		20	18.5	17	14.5	12	9.5	7	4.5	2		
		23	21.5	20	17.5	15	12.5	10	6	2		
		25.5	24	22.5	20.7	19	17	15	12.5	10.5	8	

Model	Q(m³/h)	100	200	300	400	500	600	700	800	900	1000	1100
250WQW500-15-37	H (m)	20.8	19.5	18	16.7	15	11.5	6				
		23	22	20.5	19	17	15	11	7			
		29	28	27	25	23	21	19	17	11		
		17	15	12.5	9	5.5	1.5					
		20.5	18.5	16	13	9	4					
		22.5	20.5	18	15	11	6	2				
		26	23.5	21.2	17.8	15.6	12	8.9	4.5			
			28	26	23.5	21	18.5	15.3	12	7.5	2.5	
			30	27.5	25.5	23	20	17	13.7	8.5	3	

Performance curve



Performance curve





Sewage submersible pump

Authorized Distributor