



ZW ZW F 50Hz

Non-clogging Self-priming Sewage Pump



Stock code:300145



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Pumping Water Pumping Honor



Company profile

Nanfang Pump Industry Co., Ltd. (CNP), a subsidiary of Nanfang Zhongjin Environment Co., Ltd. was founded in 1991 and listed on Shenzhen Stock Exchange on 9th December 2010, Stock code 300145. In 2019, CNP'S annual output exceeded 900,000 sets and sales exceeded 3 billion RMB, and it continues to maintain high-speed growth. With a national-level enterprise technology center, CNP has its featured product-the innovative CDM (F) series light vertical multi-stage centrifugal pumps, which has ultra-high efficiency $MEI \geq 0.7$. And CNP has developed the same series of high temperature pump products in 2019 to meet the high temperature field pump demand. Its various stainless steel light industrial pump series products maintains stable growth, the complete sets of intelligent water supply and drainage equipment keep leading technology in the market. Its pumps products, including TD in-line circulation pump, NISO/ NIS/ NISF end suction pump, NSC split case pump, VTC vertical turbine pump, VTM series mixed flow pump, ZLB series submersible axial flow pump, NDS Series of multi-stage split case pump, WQ submersible pump, PQ stainless steel submersible fountain pump, BP silent tube pump, swimming pool pump, non-clogging self-priming sewage pump, diesel engine fire pump set, dosing pump, oil pump, NIH chemical process pump, provide pump solutions for the whole system. CNP has set up a perfect marketing network, not only its flagship sales and service in China domestic market, but also won the trust of the overseas market, and CNP has successfully set up good business relationship with distributors and customers from more than 60 countries and regions.

CNP, a green water expert beside you.

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Introduction

ZW(F) series non-clogging self-priming sewage pump is a novel structure, developed on the basis of repeated research on similar technologies in China and abroad. The pump adopts an external mixing structure, and combines self-priming and non-clogging functions together through the unique design of pump body and impeller flow passage.

Compared with similar domestic products, ZW(F) series pump has excellent self-priming performance and strong sewage discharge capacity, with simple structure and beautiful appearance. It has unique oil chamber structure to ensure the reliable operation of mechanical seal. ZW(F) series pump has leading technical performance parameters, broad application market and great development prospects.

Application

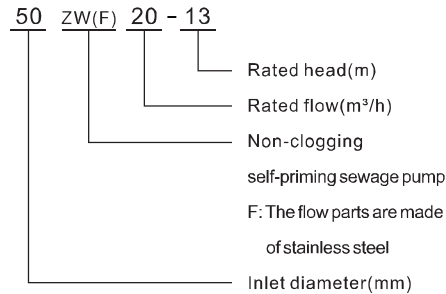
ZW(F) series non-clogging self-priming sewage pump can be used to transport liquids containing suspended particles and fiber impurities, mainly used in the following industries.

Environmental protection: municipal sewage, sewage treatment

Industry: Paper, textile, dyes

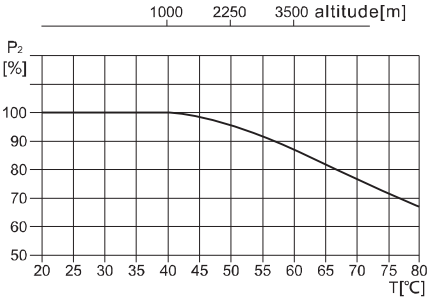
Agriculture: river pond farming, etc.

Model Definition



Maximum ambient temperature and altitude

When the pump is operating under ambient temperature higher than 40℃ or altitude higher than 1000 meters, the motor output power P2 needs to be increased when pump running under the above condition.



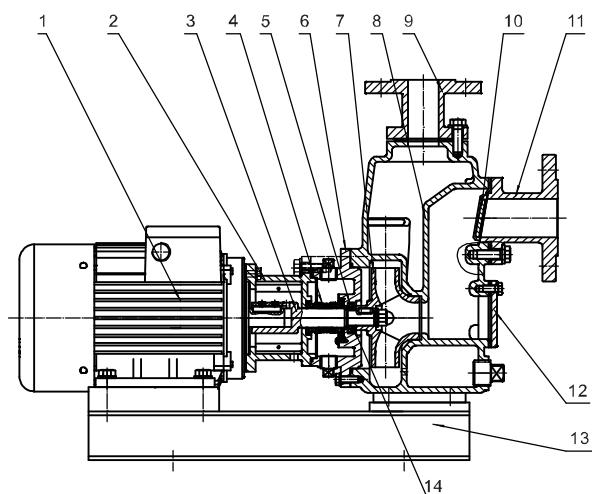
Operating condition

1. Ambient temperature: ≤40℃, Liquid temperature :≤40℃
2. Liquid pH range: 5-9
3. Liquid density: ≤1.2×10³ kg/m³
4. Self-priming height: Should not exceed the self-priming height specified by the pump, the total length of the suction pipeline should not exceed 10 meters.
5. Passing capacity: The suspended particle diameter can not exceed 60% of the pump diameter, and fiber can not exceed 5 times bigger than the pump diameter.

Product Range

Features	Model	ZW(F)							
		10	15	20	25	30	40	65	100
Rated flow[m³/h]		2.78	4.17	5.56	6.94	8.33	11.11	18.06	27.78
Rated flow[l/s]									
Flow range[m³/h]		7~13	10.5~19.5	14~26	17.5~32.5	21~39	28~52	45.5~84.5	70~120
Flow range[l/s]									
Max. pressure[bar]		3	2	2	4	2	3	3	4
Motor power[kW]		1.5~3	2.2~3	2.2~3	5.5~7.5	4	4~7.5	11	18.5
Max. self-priming height[m]		5	5	5.5	5	5	5	5	4
Highest efficiency[%]		45	38	42.5	55	57	57	60	65
DIN flange		DN 32	DN 40	DN 50	DN 40	DN 50	DN 40	DN 50	DN 65
Flange pressure level		PN10							

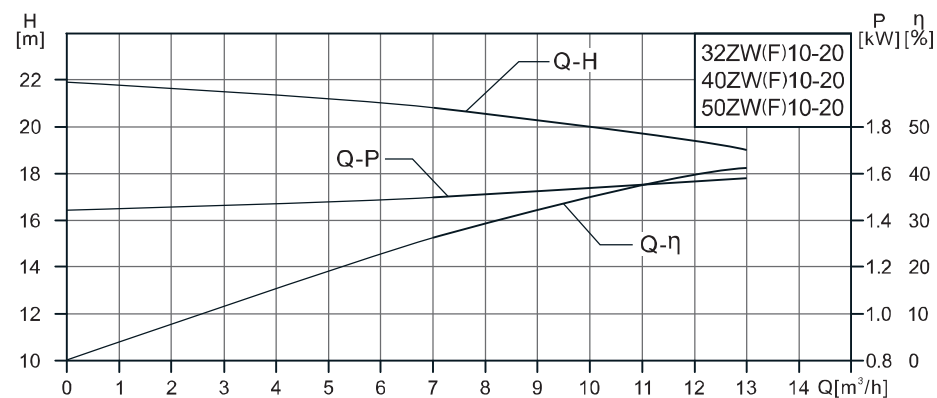
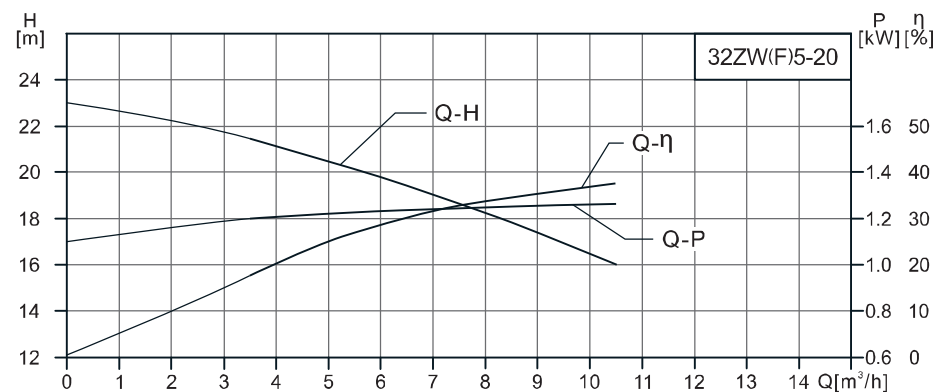
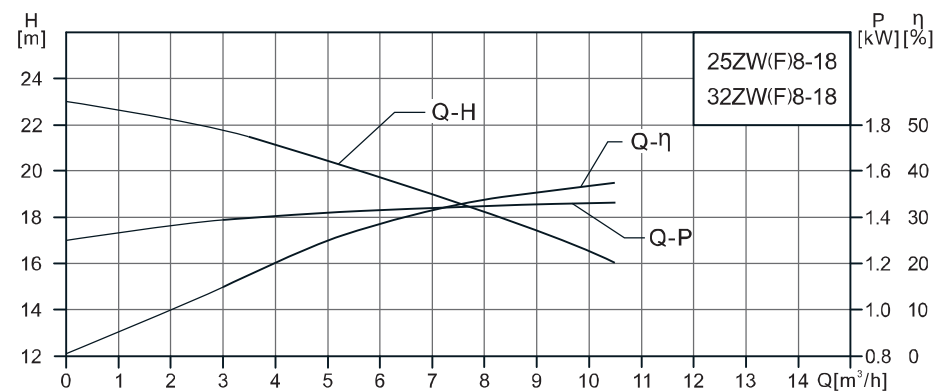
Sectional Drawing



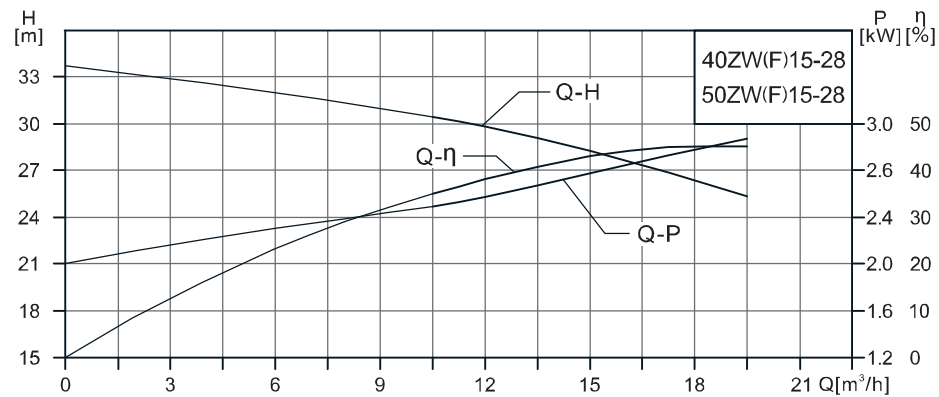
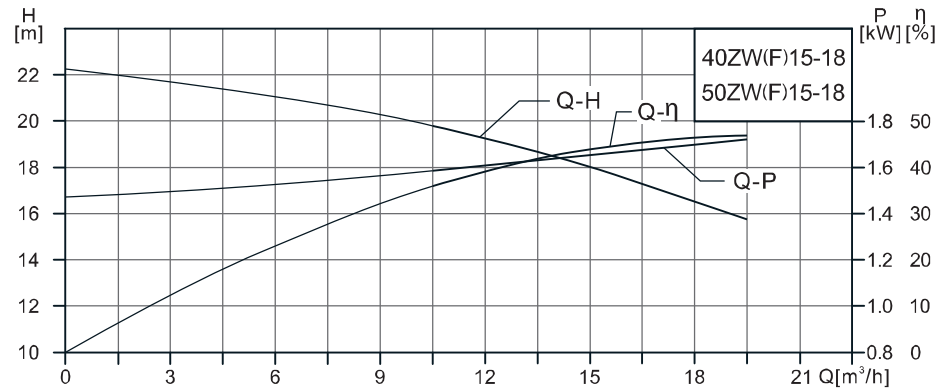
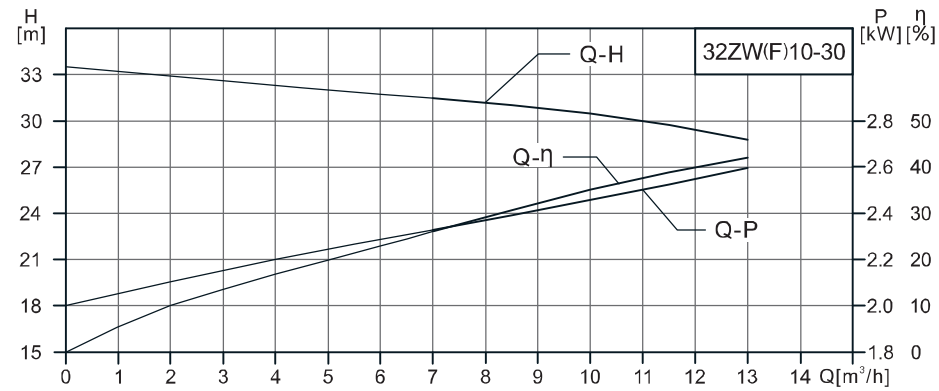
Material List

Pos.	Designation	Material	AISI/ASTM
1	Motor		
2	Pump head	Cast iron	ASTM25B
3	Shaft	Stainless steel	ASTM420
4	Mechanical seal	SIC/SIC	
5	Skeleton oil seal(< 5.5kW)		
	Bearing(≥5.5kW)	WC	
6	Pump cover	Cast iron	ASTM25B
7	Impeller	Cast iron	ASTM25B
8	Pump body	Cast iron	ASTM25B
9	Outlet flange	Cast iron	ASTM25B
10	Inlet valve	NBR+Q235A	
11	Inlet flange	Cast iron	ASTM25B
12	Drain cover	Cast iron	ASTM25B
13	Base plate	Q235A	
14	Sleeve	Stainless steel(< 5kW)	
		WC(≥5kW)	

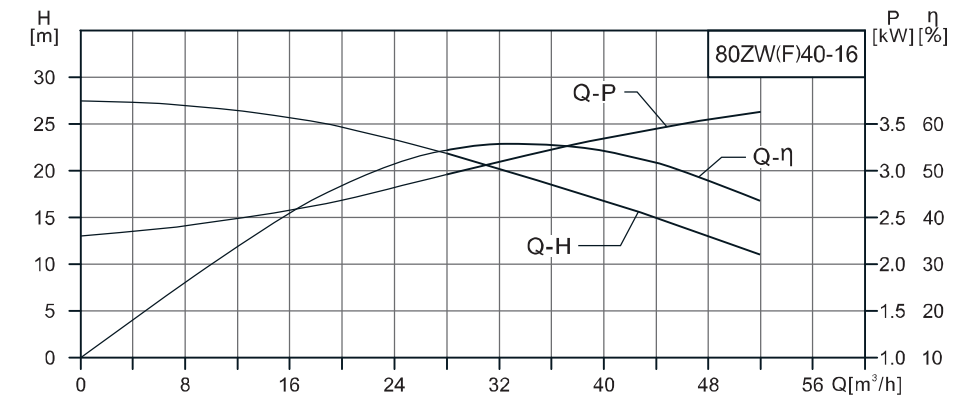
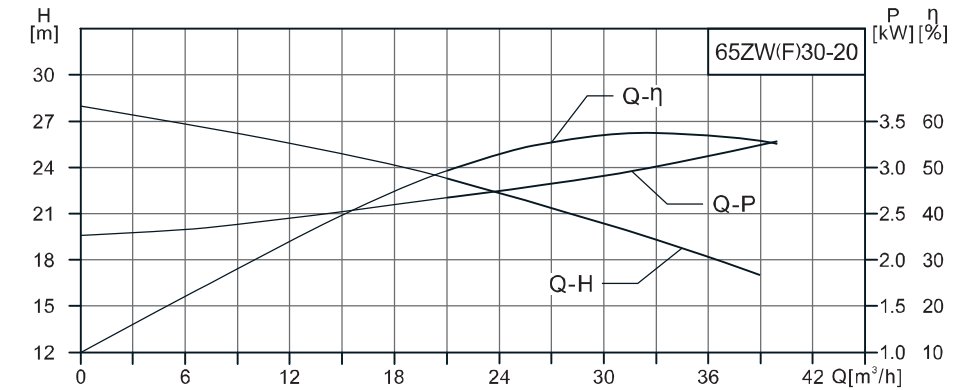
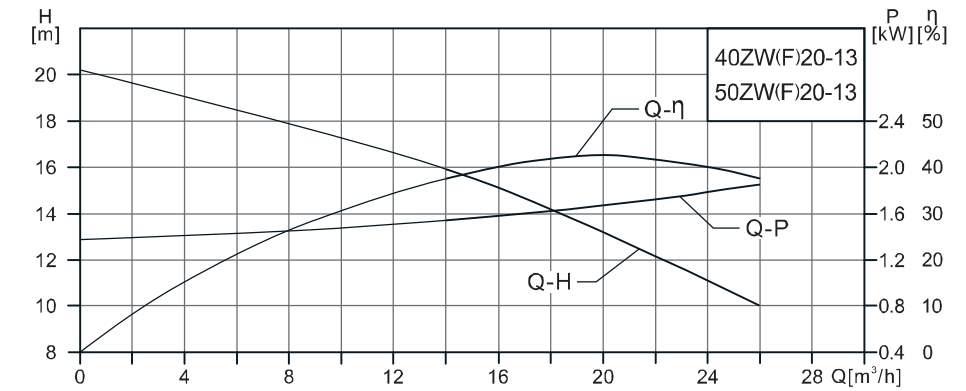
Performance curve



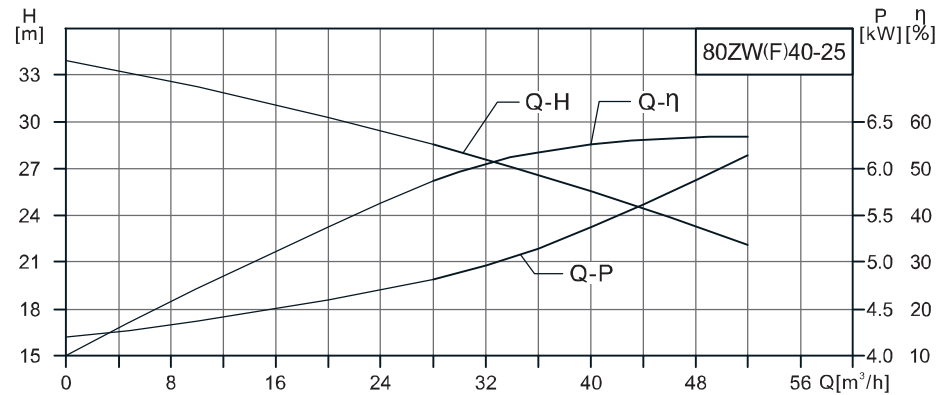
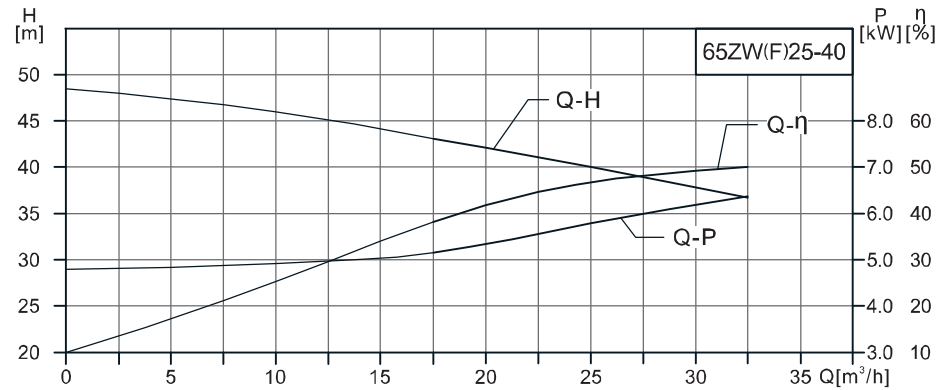
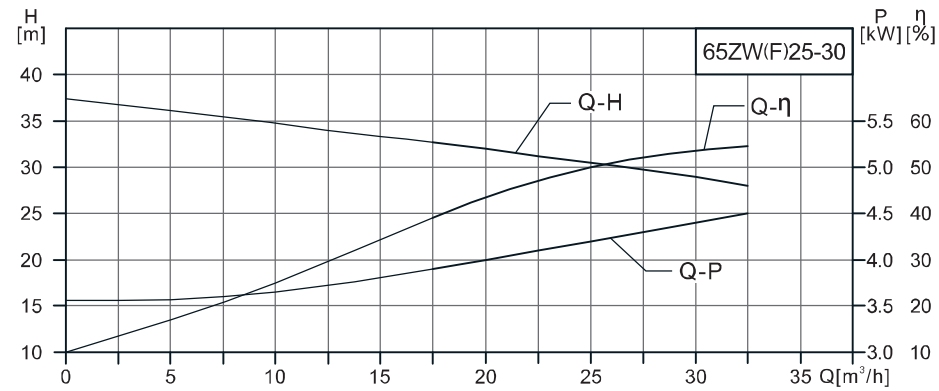
Performance curve



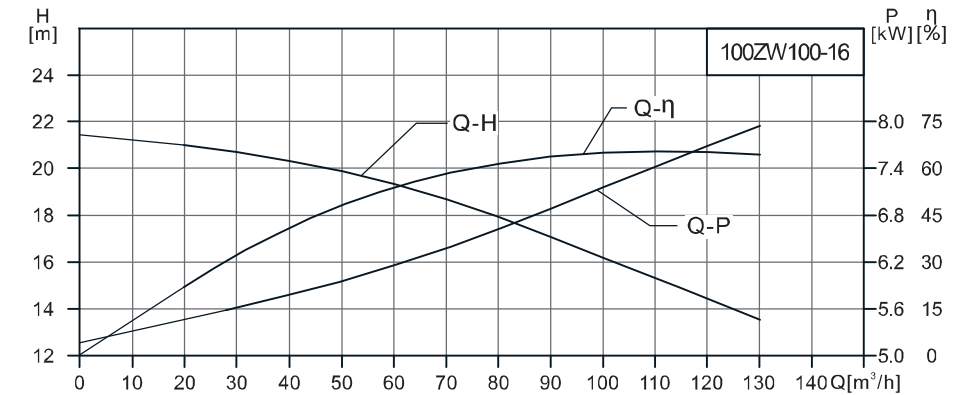
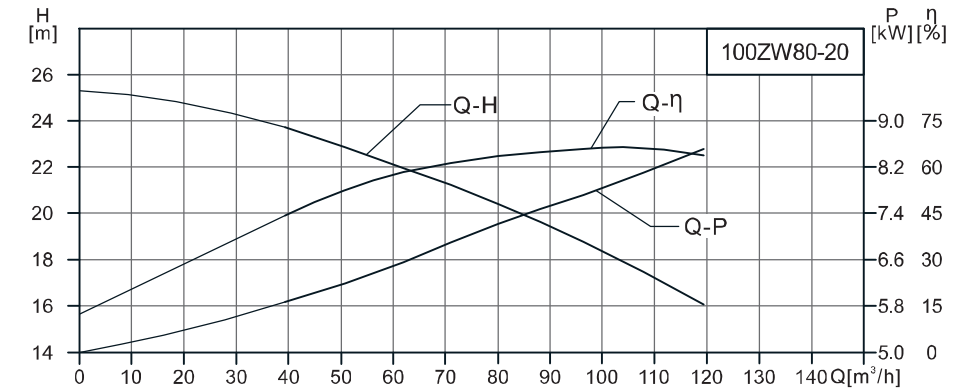
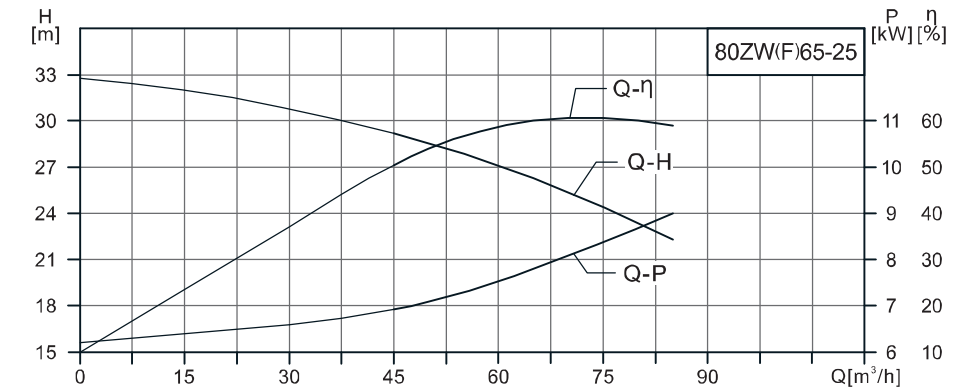
Performance curve



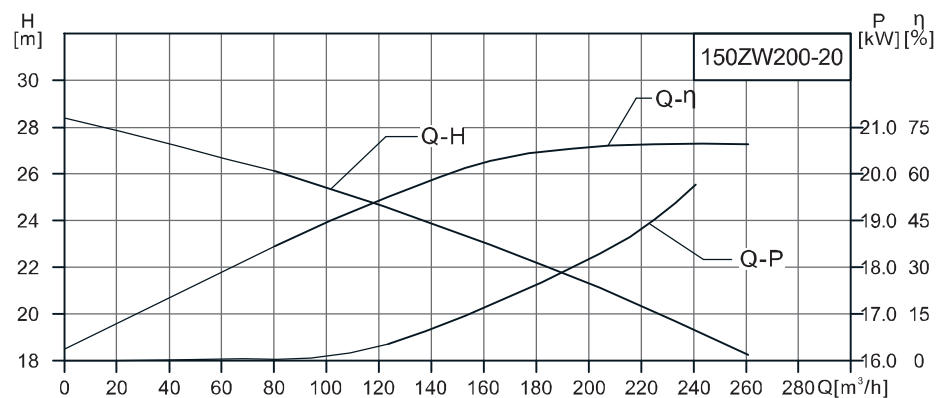
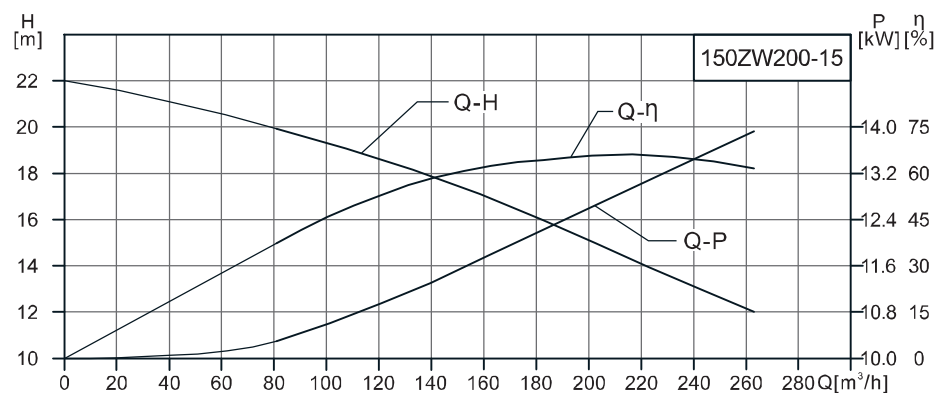
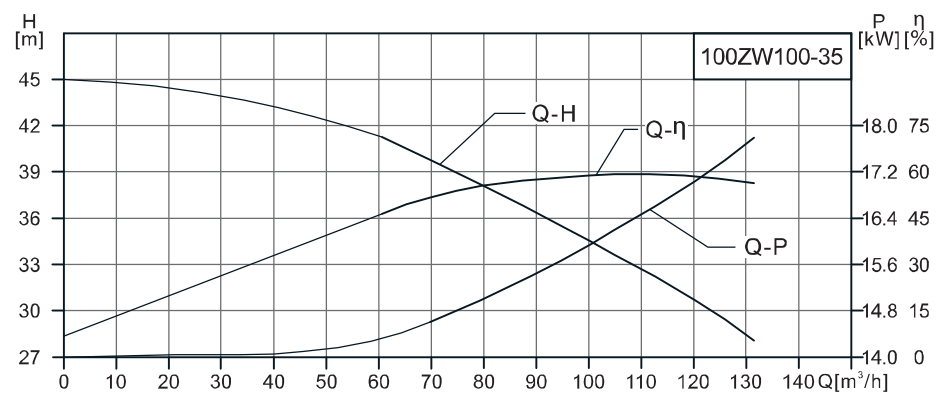
Performance curve



Performance curve



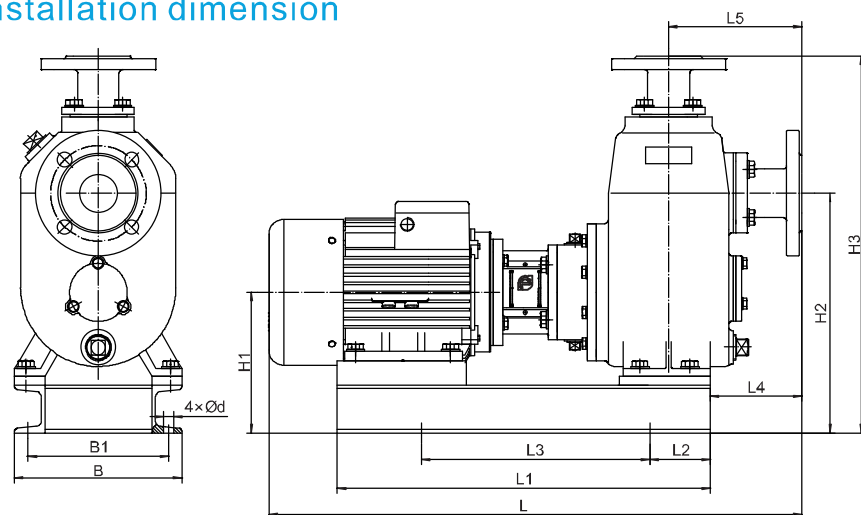
Performance curve



Technical data

Data Model	Inlet diameter (mm)	Outlet diameter (mm)	Flow (m³/h)	Head (m)	Power (kW)	Speed (r/min)	Pump efficiency (%)	Self-priming height(m)
25ZW(F)8-18	25	25	8	18	1.5	2900	32	5
32ZW(F)5-20	32	32	5	20	1.5	2900	32	5
32ZW(F)8-18	32	32	8	18	1.5	2900	32	5
32ZW(F)10-20	32	32	10	20	2.2	2900	35	5
32ZW(F)10-30	32	32	10	30	3	2900	35	5
40ZW(F)10-20	40	32	10	20	2.2	2900	35	5
40ZW(F)15-18	40	32	15	18	2.2	2900	44	5
40ZW(F)15-28	40	32	15	28	3	2900	43	5
40ZW(F)20-13	40	32	20	13	2.2	2900	42.5	5.5
50ZW(F)10-20	50	40	10	20	2.2	2900	35	5
50ZW(F)15-18	50	40	15	18	2.2	2900	44	5
50ZW(F)15-28	50	40	15	28	3	2900	43	5
50ZW(F)20-13	50	40	20	13	2.2	2900	42.5	5.5
50ZW(F)20-40	50	40	20	40	5.5	2900	46	5
65ZW(F)25-30	65	65	25	30	5.5	2900	50	5
65ZW(F)25-40	65	65	25	40	7.5	2900	46	5
65ZW(F)30-20	65	65	30	20	4	2900	57	5
65ZW(F)40-25	65	65	40	25	7.5	2900	56	5
80ZW(F)40-16	80	65	40	16	4	2900	57	5
80ZW(F)40-25	80	65	40	25	7.5	2900	56	5
80ZW(F)65-25	80	65	65	25	11	2900	65	5
100ZW80-20	100	80	80	20	11	1480	60	4.5
100ZW100-16	100	80	100	16	7.5	1450	65	4.5
100ZW100-35	100	80	100	35	18.5	2900	55	4.5
150ZW200-15	150	150	200	15	15	1480	65	4.5
150ZW200-20	150	150	200	20	22	1480	65	4.5

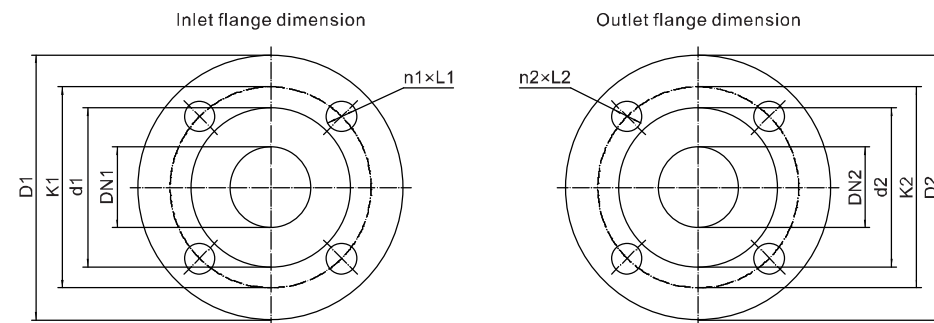
Installation dimension



Dimensions and weights

Model	Dimension (mm)													Weight (kg)
	L	L1	L2	L3	L4	L5	H1	H2	H3	B	B1	d		
25ZW(F)8-18	700	490	85	300	115	175	185	315	495	220	185	14		77
32ZW(F)5-20	700	490	85	300	115	175	185	315	495	220	185	14		78
32ZW(F)8-18	700	490	85	300	115	175	185	315	495	220	185	14		78
32ZW(F)10-20	700	490	85	300	115	175	185	315	495	220	185	14		81
32ZW(F)10-30	770	540	95	350	125	185	205	375	560	220	185	14		92
40ZW(F)10-20	700	490	85	300	115	175	185	315	495	220	185	14		81
40ZW(F)15-18	700	490	85	300	115	175	185	315	495	220	185	14		81
40ZW(F)15-28	770	540	95	350	125	185	205	375	560	220	185	14		94
40ZW(F)20-13	700	490	85	300	115	175	185	315	495	220	185	14		80
50ZW(F)10-20	700	490	85	300	115	175	185	315	495	220	185	14		82
50ZW(F)15-18	700	490	85	300	115	175	185	315	495	220	185	14		82
50ZW(F)15-28	770	540	95	350	125	185	205	375	560	220	185	14		95
50ZW(F)20-13	700	490	85	300	115	175	185	315	495	220	185	14		82
50ZW(F)20-40	880	630	105	420	115	190	245	395	610	280	250	14		180
65ZW(F)25-30	900	630	105	420	120	195	245	405	630	280	250	14		170
65ZW(F)25-40	880	630	105	420	115	190	245	395	610	280	250	14		180
65ZW(F)30-20	815	580	80	420	125	200	225	385	600	235	205	14		142
65ZW(F)40-25	900	630	105	420	120	195	245	405	630	280	250	14		172
80ZW(F)40-16	815	580	80	420	125	200	225	385	600	235	205	14		142
80ZW(F)40-25	900	630	105	420	120	195	245	405	630	280	250	14		172
80ZW(F)65-25	1040	760	140	485	130	260	255	455	705	315	280	19		265
100ZW80-20	1108	834	105	580	149	304	285	505	820	390	360	19		345
100ZW100-16	1040	763	115	521	160	345	295	515	870	390	360	19		325
100ZW100-35	1160	875	120	635	155	335	265	480	760	315	280	19		385
150ZW200-15	1270	968	150	700	175	400	345	595	1030	450	420	19		465
150ZW200-20	1334	1011	150	700	175	400	345	595	1030	450	420	19		530

Inlet and outlet flange dimension



Model	Inlet flange dimension (mm)						Outlet flange dimension (mm)					
	DN1	d1	K1	D1	n1	L1	DN2	d2	K2	D2	n2	L2
25ZW(F)8-18	25	65	85	115	4	Ø14	25	65	85	115	4	Ø14
32ZW(F)5-20	32	76	100	140	4	Ø19	32	76	100	140	4	Ø19
32ZW(F)8-18	32	76	100	140	4	Ø19	32	76	100	140	4	Ø19
32ZW(F)10-20	32	76	100	140	4	Ø19	32	76	100	140	4	Ø19
32ZW(F)10-30	32	76	100	140	4	Ø19	32	76	100	140	4	Ø19
40ZW(F)10-20	40	84	110	150	4	Ø19	32	76	100	140	4	Ø19
40ZW(F)15-18	40	84	110	150	4	Ø19	32	76	100	140	4	Ø19
40ZW(F)15-28	40	84	110	150	4	Ø19	32	76	100	140	4	Ø19
40ZW(F)20-13	40	84	110	150	4	Ø19	32	76	100	140	4	Ø19
50ZW(F)10-20	50	99	125	165	4	Ø19	40	84	110	150	4	Ø19
50ZW(F)15-18	50	99	125	165	4	Ø19	40	84	110	150	4	Ø19
50ZW(F)15-28	50	99	125	165	4	Ø19	40	84	110	150	4	Ø19
50ZW(F)20-13	50	99	125	165	4	Ø19	40	84	110	150	4	Ø19
65ZW(F)25-30	65	118	145	185	4	Ø19	65	118	145	185	4	Ø19
65ZW(F)25-40	65	118	145	185	4	Ø19	65	118	145	185	4	Ø19
65ZW(F)30-20	65	118	145	185	4	Ø19	65	118	145	185	4	Ø19
80ZW(F)40-16	80	132	160	200	8	Ø19	65	118	145	185	4	Ø19
80ZW(F)40-25	80	132	160	200	8	Ø19	65	118	145	185	4	Ø19
80ZW(F)65-25	80	132	160	200	8	Ø19	65	118	145	185	4	Ø19
65ZW(F)40-25	65	118	145	185	4	Ø19	65	118	145	185	4	Ø19
50ZW(F)20-40	50	99	125	165	4	Ø19	40	84	110	150	4	Ø19
100ZW80-20	100	156	180	220	8	Ø19	80	132	160	200	8	Ø19
100ZW100-16	100	156	180	220	8	Ø19	80	132	160	200	8	Ø19
100ZW100-35	100	156	180	220	8	Ø19	80	132	160	200	8	Ø19
150ZW200-15	150	211	240	285	8	Ø23	150	211	240	285	8	Ø23
150ZW200-20	150	211	240	285	8	Ø23	150	211	240	285	8	Ø23