

XQ-XR(L)



XQ-XR(L) Series

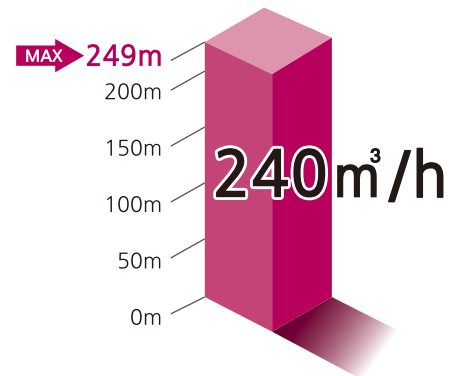
BUILT-IN VFD VERTICAL MULTI-STAGE CENTRIFUGAL PUMP

XQ-XR(L)

XQ-XR(L) pumps are built on the basis of XR(L) pumps. Enhanced with the XQ-Drive, the XR(L) pump together with the appropriate sensor is turned into an intelligent, variable speed pumping system. The XQ-Drives are frequency converter integrated into the pump which adjusts the motor speed to provide constant pressure or differential pressure to the flow rate.

Specification

- Max. Flow : 240m³/h
- Max. Head: 249m
- Motor Power : 0.75~22kW (1~30HP)
- Power specification : 3Φ×380~440V / 60Hz



Functions

- Pressure settings
- Alternative operation
- Pump Freeze Protection
- Automatic detection of low flow on discharge
- Automatic recovery after power outage
- XQ drive will protect the pump
- Operation display and storage
- Equipped with a RS485

Features

- 3.5" color display
- Built-in EMC filter/DC reactor
- Reduce noise and harmonic distortion
- Energy Saving (Up to 50%)
- Maintains constant pressure
- Simplicity (Eliminates separate control panels)
- Soft start functionality to minimize mechanical stress on the pumping system

Main Components



High Efficiency Pump
XR(L) Series



V.F.D.
XQ-Drive



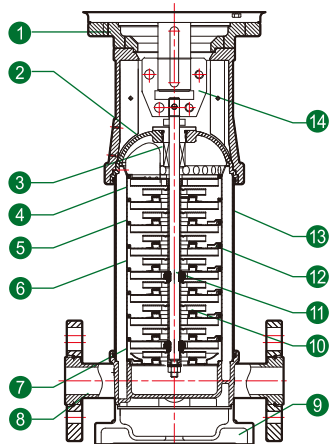
Pressure Tank



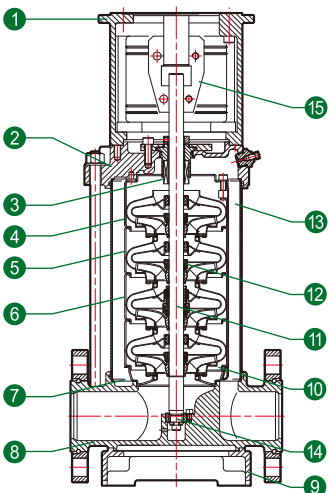
Non-return Valve

Sectional Drawing

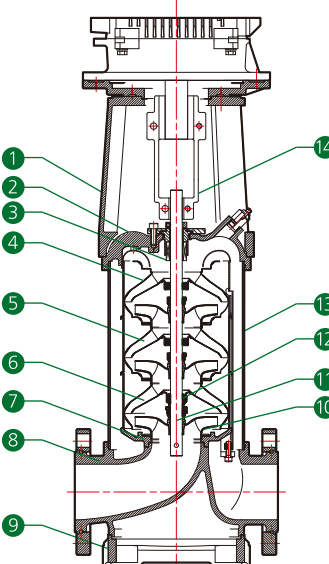
XR(L) 1, 3, 5, 10, 15, 20



XR(L) 32, 45, 64



XR(L) 95, 125, 155, 185



NO.	PARTS	MATERIAL	EN/DIN	AISI/ASTM
1	Motor bracket	GCD450	EN-GJS-450	A536-65-45
2	Pump head(XR)	GC250	EN-GJS-250C	A48-CL35
	Pump head(XRL)			
3	Mechanical seal	SIC/CARBON/VITON		
4	Top diffuser	STS304	EN10088 1,4301	A240-304
5	Diffuser	STS304	EN10088 1,4301	A240-304
6	Support diffuser	STS304	EN10088 1,4301	A240-304
7	Inducer	STS304	EN10088 1,4301	A240-304
8	Pump casing(XR)	GC250	EN-GJS-250C	A48-CL35
	Pump casing(XRL)			
9	Base plate	GC250	EN-GJS-250C	A48-CL35
10	Impeller	STS304	EN10088 1,4301	A240-304
11	Shaft	STS304	EN10088 1,4301	A276-304
12	Impeller sleeve	STS304	EN10088 1,4301	A240-304
13	Cylinder	STS304	EN10088 1,4301	A240-304
14	Coupling	GCD450	EN-GJS-450	A536-65-45
	Rubber part	EPDM		

* Intermediate flange: GC250

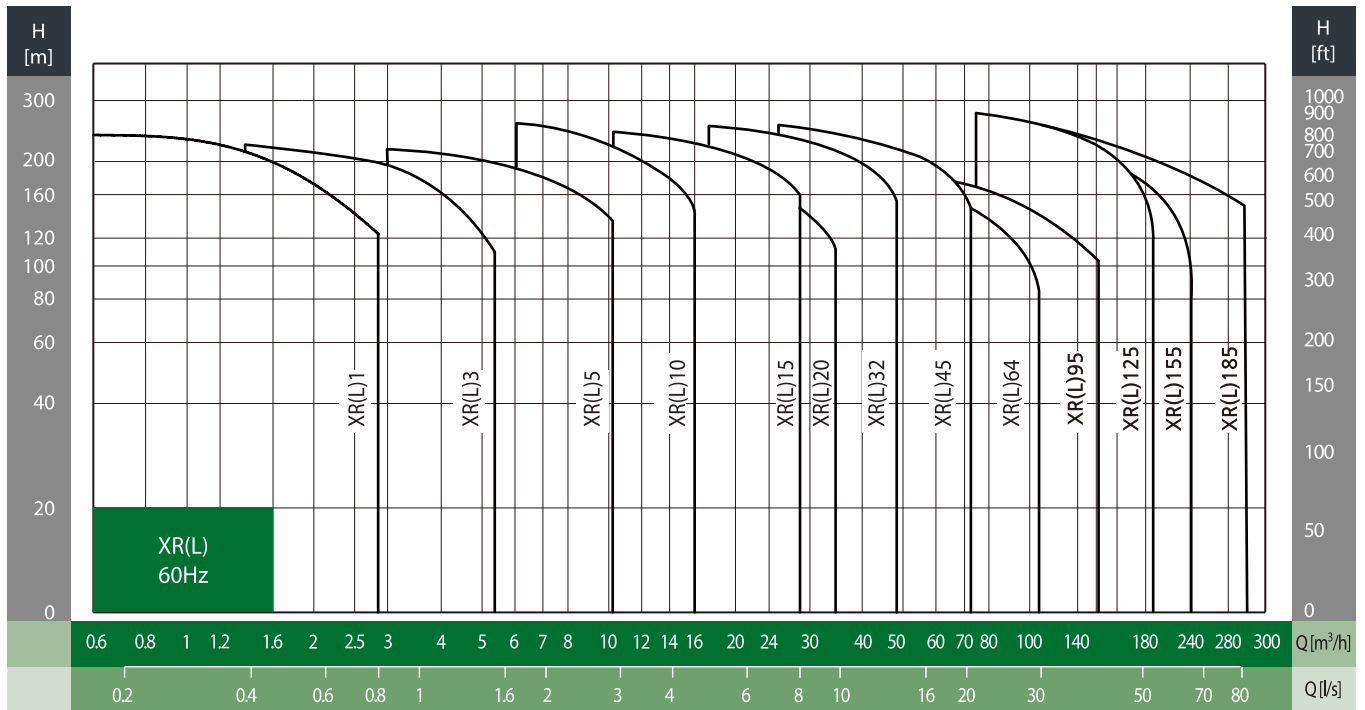
NO.	PARTS	MATERIAL	EN/DIN	AISI/ASTM
1	Motor bracket	GCD450	EN-GJS-450	A536-65-45
2	Pump head(XR)	GC250	EN-GJS-250C	A48-CL35
	Pump head(XRL)	SSC13	EN10283 1,4408	A351-CF8
3	Mechanical seal	SIC/CARBON/VITON		
4	Top diffuser	STS304	EN10088 1,4301	A240-304
5	Support diffuser	STS304	EN10088 1,4301	A240-304
6	Diffuser	STS304	EN10088 1,4301	A240-304
7	Inducer	STS304	EN10088 1,4301	A240-304
8	Pump casing(XR)	GC250	EN-GJS-250C	A48-CL35
	Pump casing(XRL)	SSC13	EN10283 1,4408	A351-CF8
9	Base plate	GC250	EN-GJS-250C	A48-CL35
10	Impeller	STS304	EN10088 1,4301	A240-304
11	Shaft	STS304	EN10088 1,4301	A276-304
12	Intermediate bearing	Tungsten carbide		
13	Cylinder	STS304	EN10088 1,4301	A240-304
14	Bottom bearing	Tungsten carbide		
15	Coupling	GCD450	EN-GJS-450	A536-65-45
	Rubber part	EPDM		

* Intermediate flange: GC250

NO.	PARTS	MATERIAL	EN/DIN	AISI/ASTM
1	Motor bracket	GCD500	EN-GJS-500	A536-70-50
2	Pump head(XR)	GCD500	EN-GJS-500-7C	A536-70-50-05
	Pump head(XRL)	SSC13	EN10283 1,4408	A351-CF8
3	Mechanical seal	SIC/CARBON/VITON		
4	Top diffuser	STS304	EN10088 1,4301	A240-304
5	Support diffuser	STS304	EN10088 1,4301	A240-304
6	Diffuser	STS304	EN10088 1,4301	A240-304
7	Inducer	STS304	EN10088 1,4301	A240-304
8	Pump casing(XR)	GCD500	EN-GJS-500-7C	A536-70-50-05
	Pump casing(XRL)	SSC13	EN10283 1,4408	A351-CF8
9	Base plate	GCD500	EN-GJS-500	A536-70-50
10	Impeller	STS304	EN10088 1,4301	A240-304
11	Shaft	STS304	EN10088 1,4301	A276-304
12	Intermediate bearing	Tungsten carbide		
13	Cylinder	STS304	EN10088 1,4301	A240-304
14	Coupling	GCD450	EN-GJS-450	A536-65-45
	Rubber part	EPDM		

* Intermediate flange: GC250/GCD500

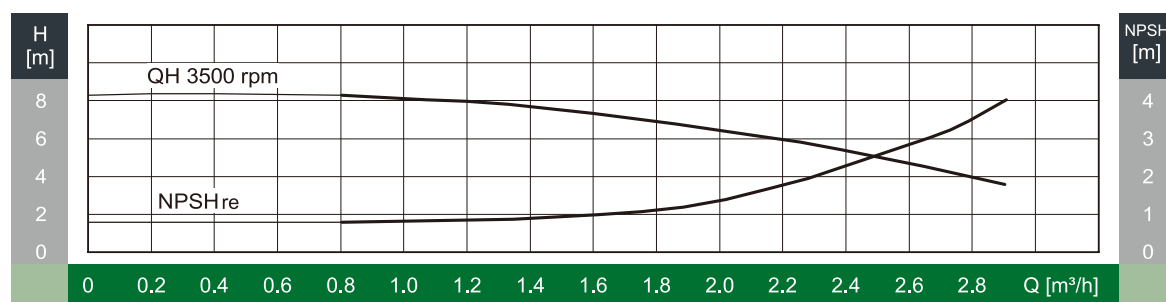
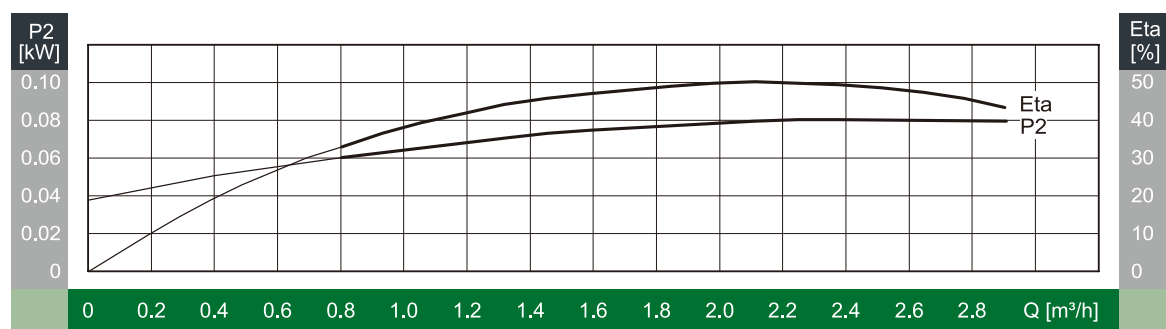
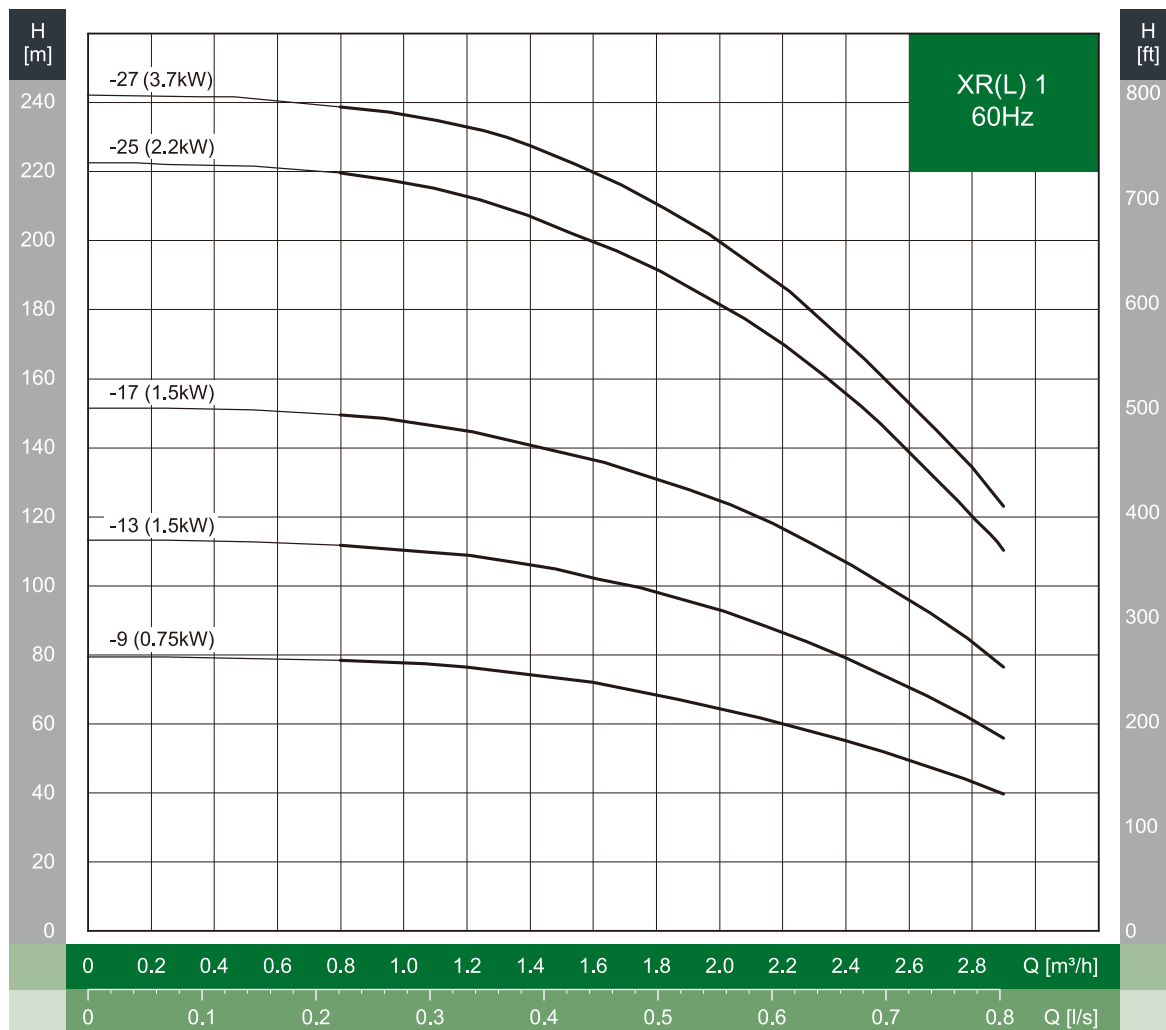
Performance Range



Specification

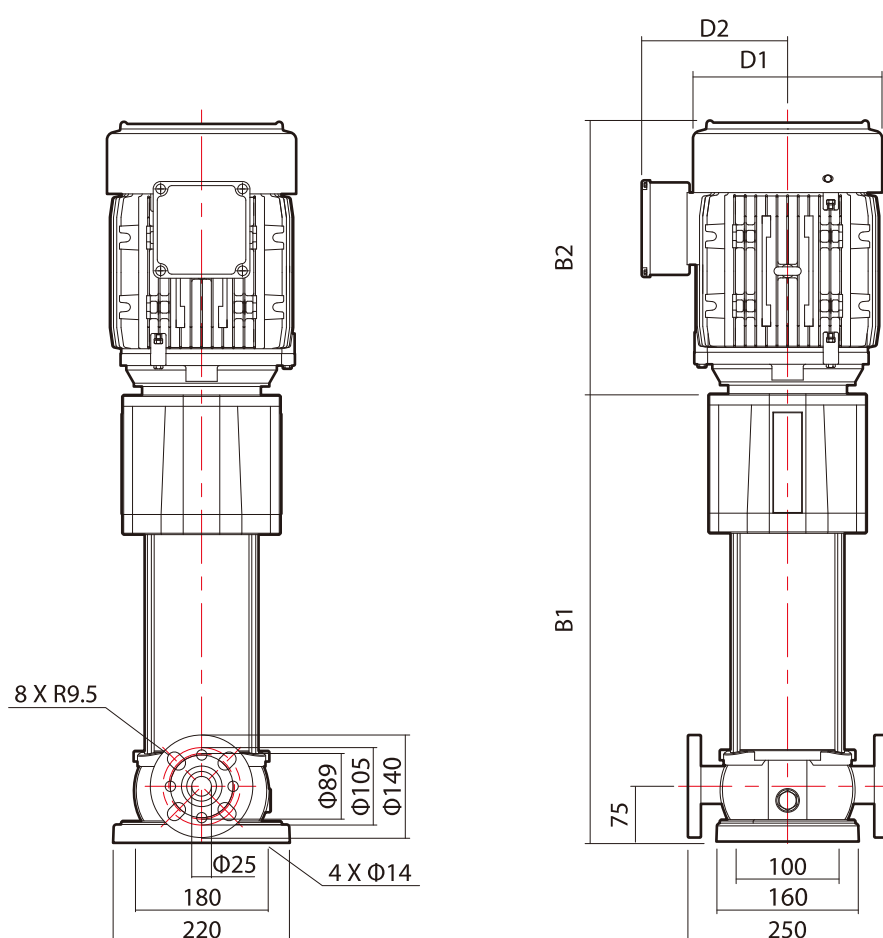
DESCRIPTION	XR(L)1	XR(L)3	XR(L)5	XR(L)10	XR(L)15	XR(L)20	XR(L)32	XR(L)45	XR(L)64	XR(L)95	XR(L)125	XR(L)155	XR(L)185
Rated flow [m³/h]	1	3	5	10	15	20	32	45	64	95	125	155	185
Flow range [m³/h]	0.8-2.9	1.4-5.4	3-10.2	6-16	10-29	12-35	18-48	25-72	36-108	55.5-150	75-190	90-240	110-290
Max. pressure [bar]	25						30						40
Motor power [kW]	0.75-3.7	0.75-3.7	0.75-7.5	1.5-11	3.7-18.5	3.7-18.5	5.5-30	5.5-45	7.5-45	11-55	15-110	18.5-110	30-132
Liquid Temperature [°C]	-15~+120°C												
Ambient Temperature [°C]	Max. 40°C												
Pump Type	Vertical Multistage Centrifugal Pump												
XR	●	●	●	●	●	●	●	●	●	●	●	●	●
XRL	●	●	●	●	●	●	●	●	●	●	●	●	●
DIN Flange	DN25	DN25	DN32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN150	DN150	DN200

Performance Curve



※ Given that the product mentioned above is customised, please contact the main office.

Outline Drawing

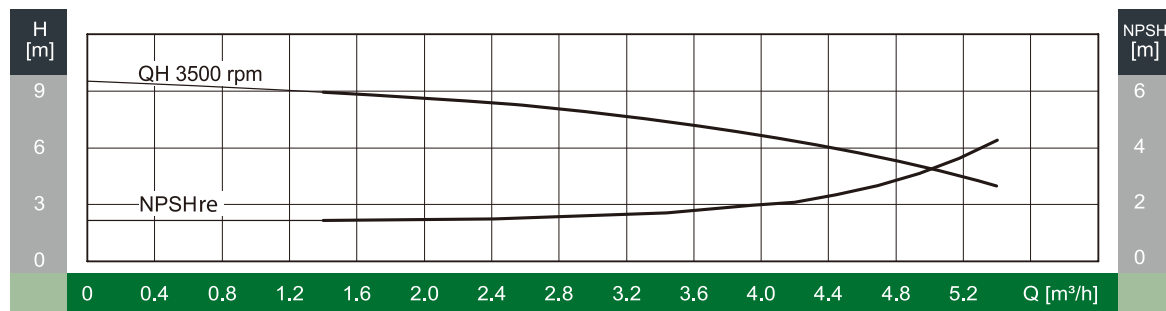
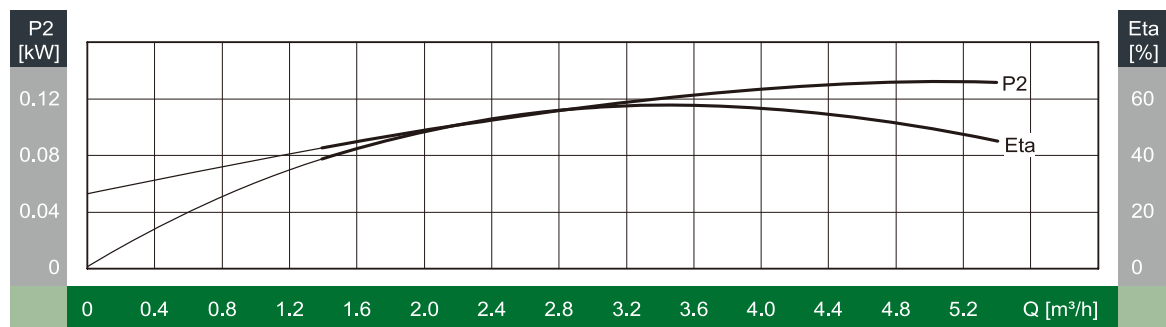
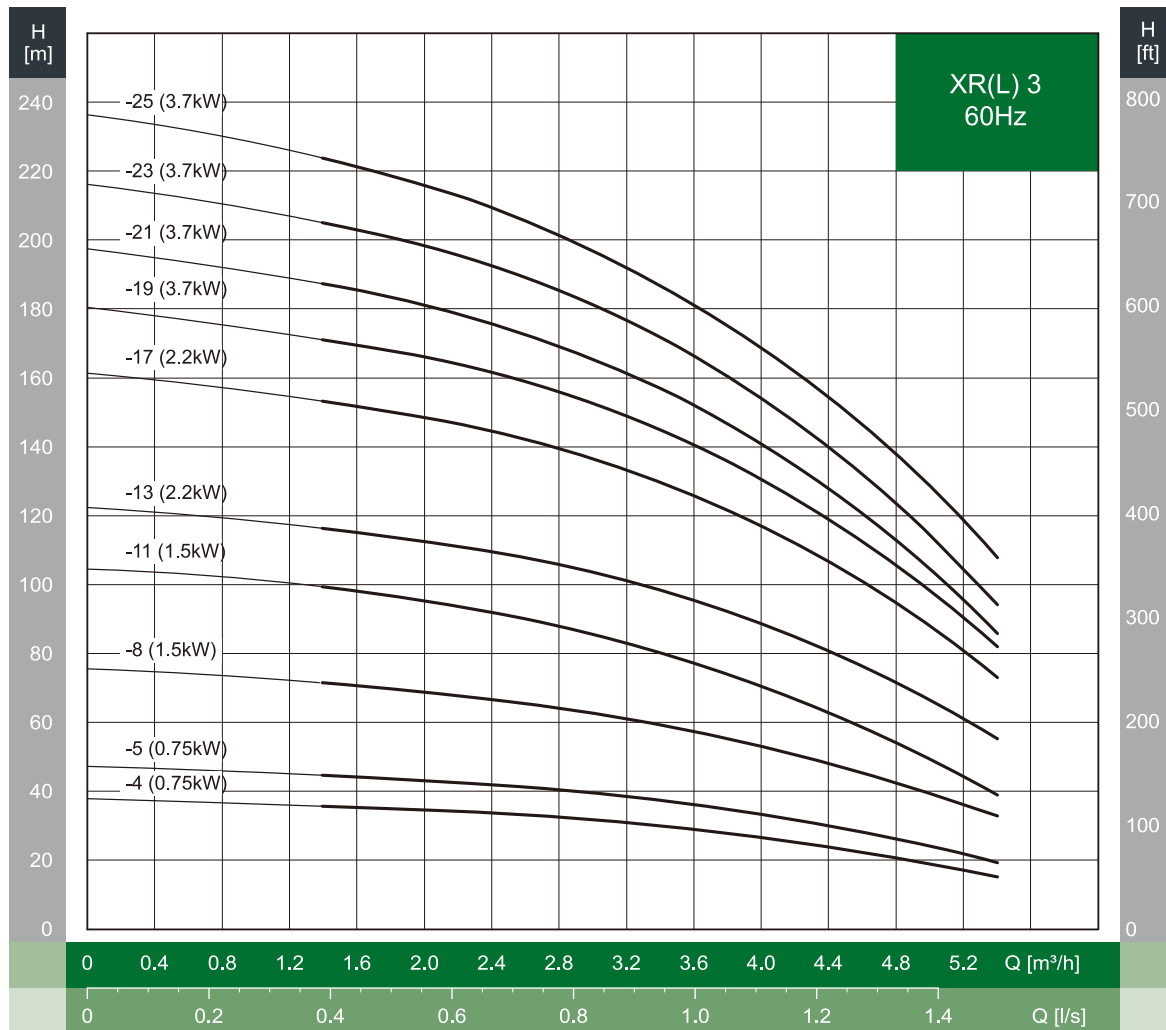


Dimension / Weight

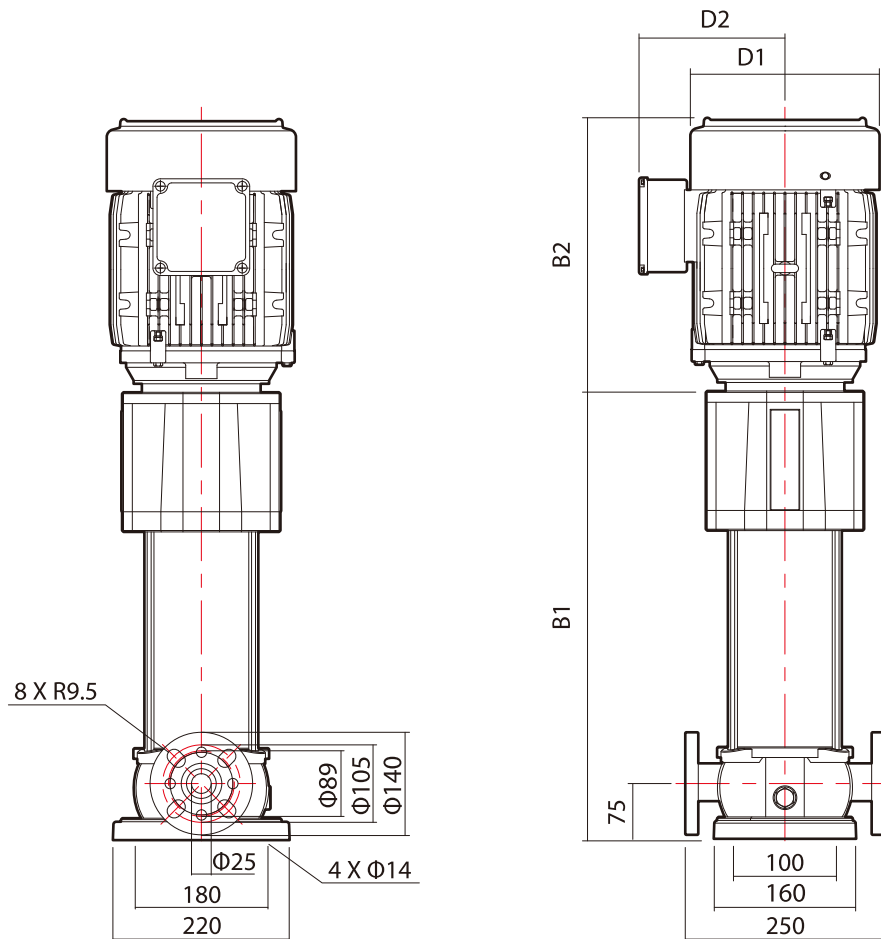
MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 1-9	0.75	1	474.5	255	729.5	170	160	26
XR(L) 1-13	1.5	2	546.5	315	861.5	187	170	30
XR(L) 1-17	1.5	2	618.5	315	933.5	187	170	38
XR(L) 1-25	2.2	3	762.5	315	1077.5	187	170	42
XR(L) 1-27	3.7	5	798.5	330	1128.5	227	220	45

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Performance Curve



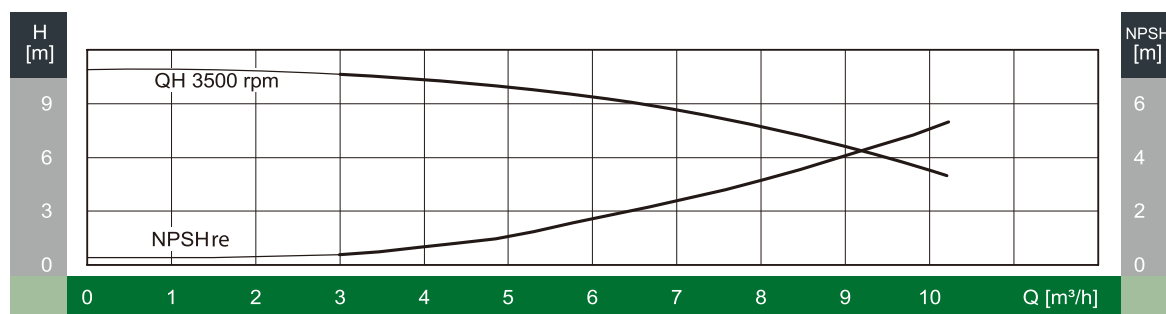
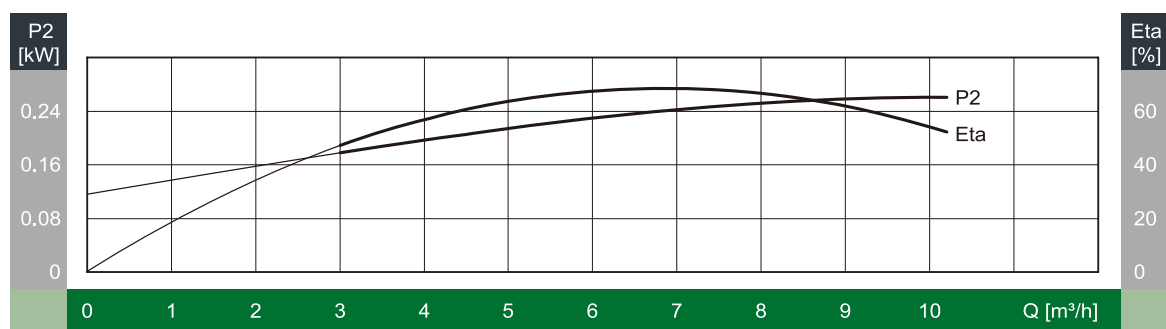
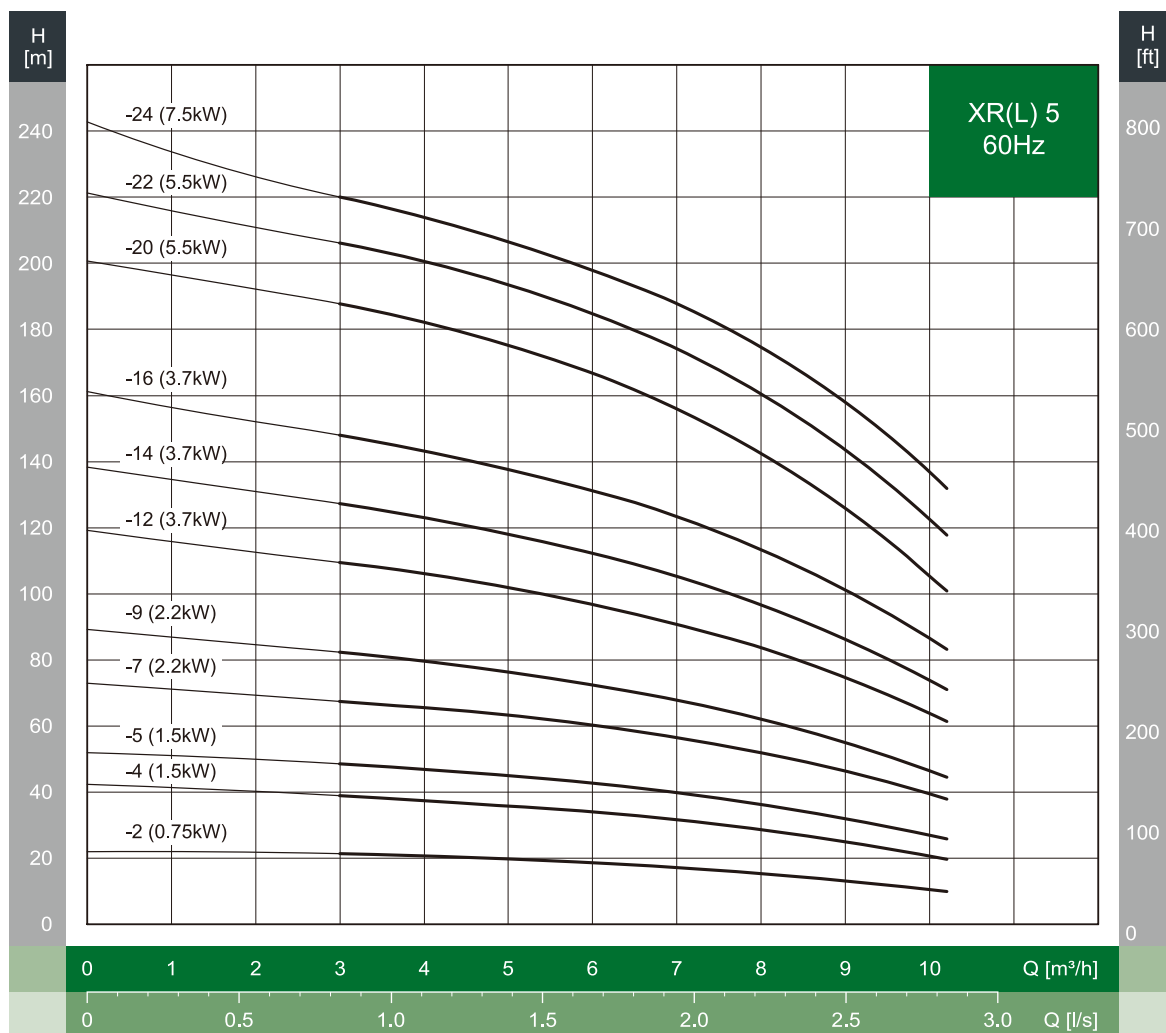
Outline Drawing



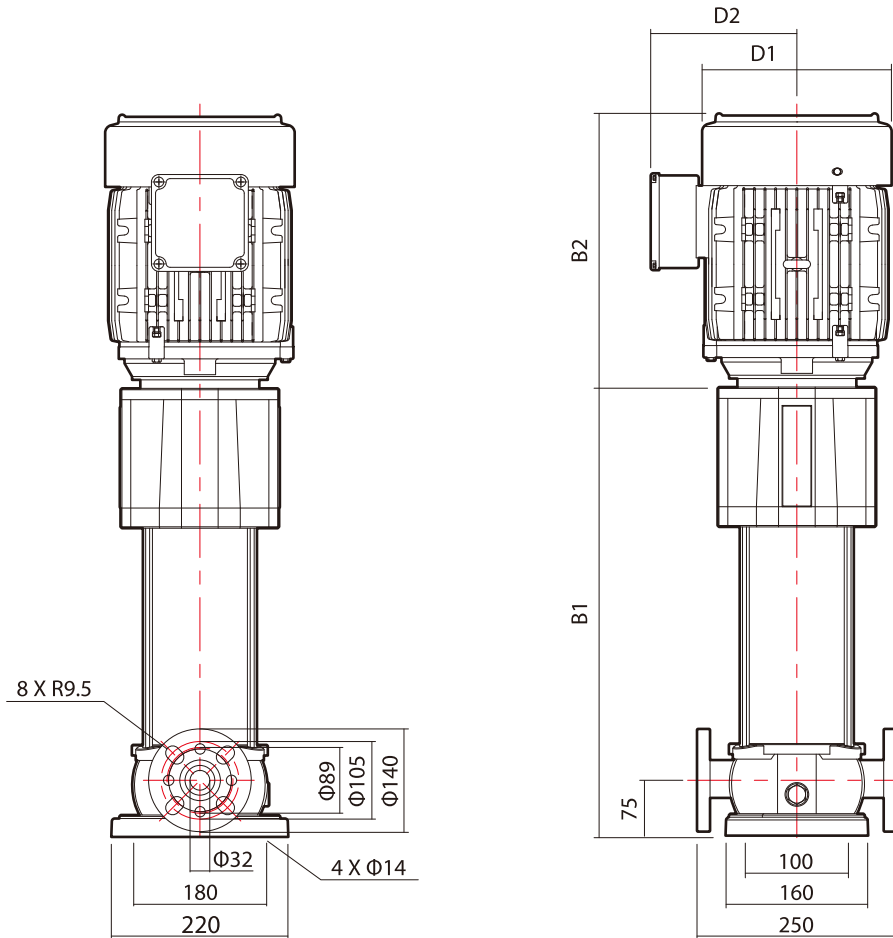
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 3-4	0.75	1	384.5	255	639.5	170	160	22
XR(L) 3-5	0.75	1	402.5	255	657.5	170	160	24
XR(L) 3-8	1.5	2	456.5	315	771.5	187	170	28
XR(L) 3-11	1.5	2	510.5	315	825.5	187	170	35
XR(L) 3-13	2.2	3	546.5	315	861.5	187	170	37
XR(L) 3-17	2.2	3	618.5	315	933.5	187	170	38
XR(L) 3-19	3.7	5	654.5	330	984.5	227	220	46
XR(L) 3-21	3.7	5	690.5	330	1020.5	227	220	46
XR(L) 3-23	3.7	5	726.5	330	1056.5	227	220	47
XR(L) 3-25	3.7	5	762.5	330	1092.5	227	220	57

Performance Curve



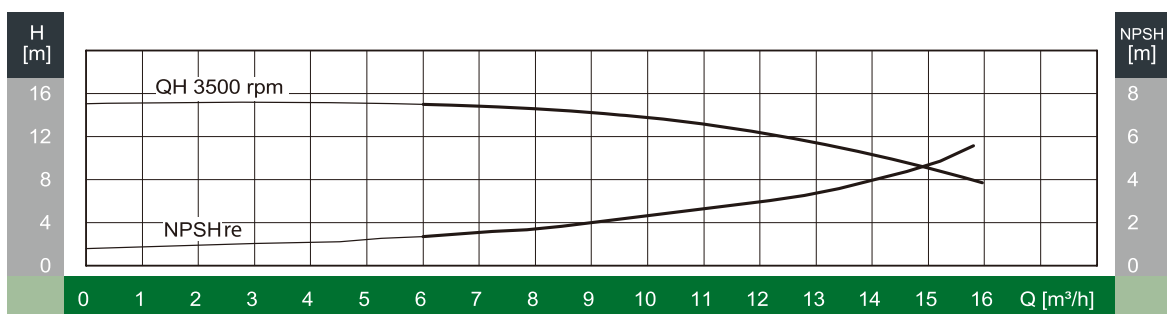
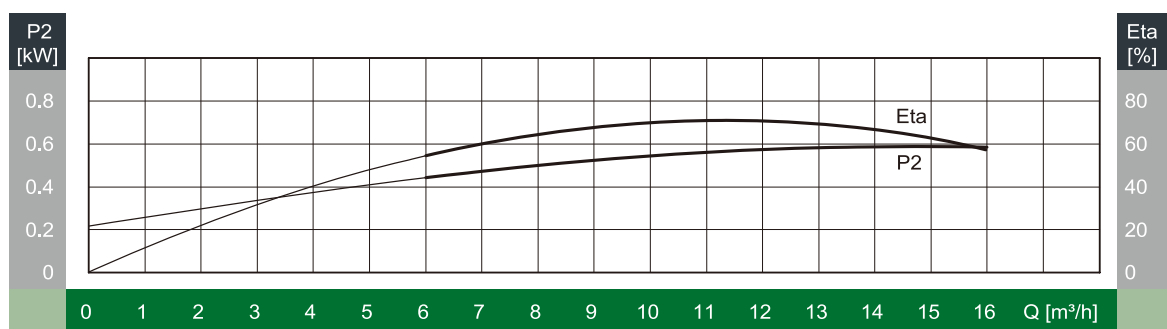
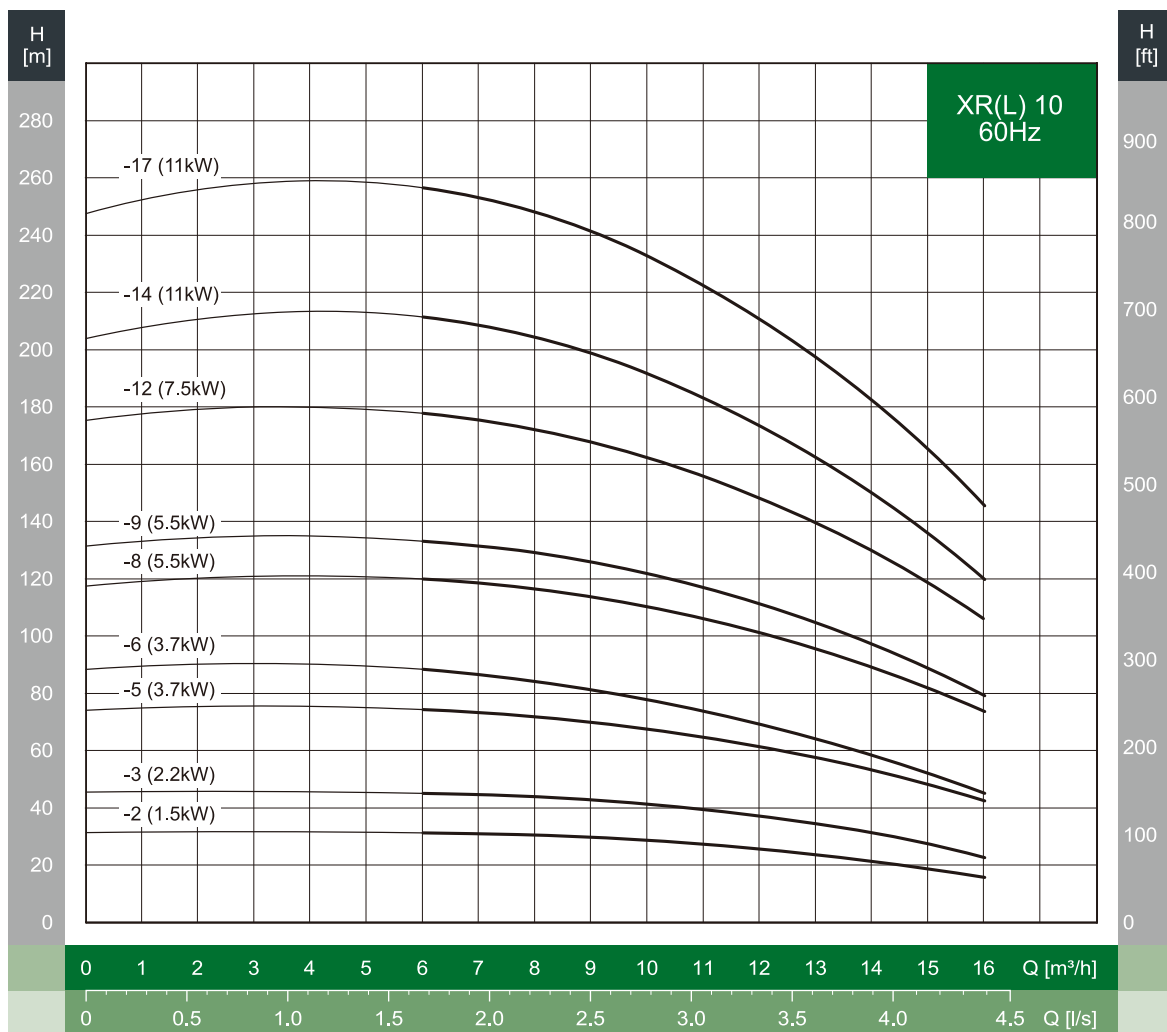
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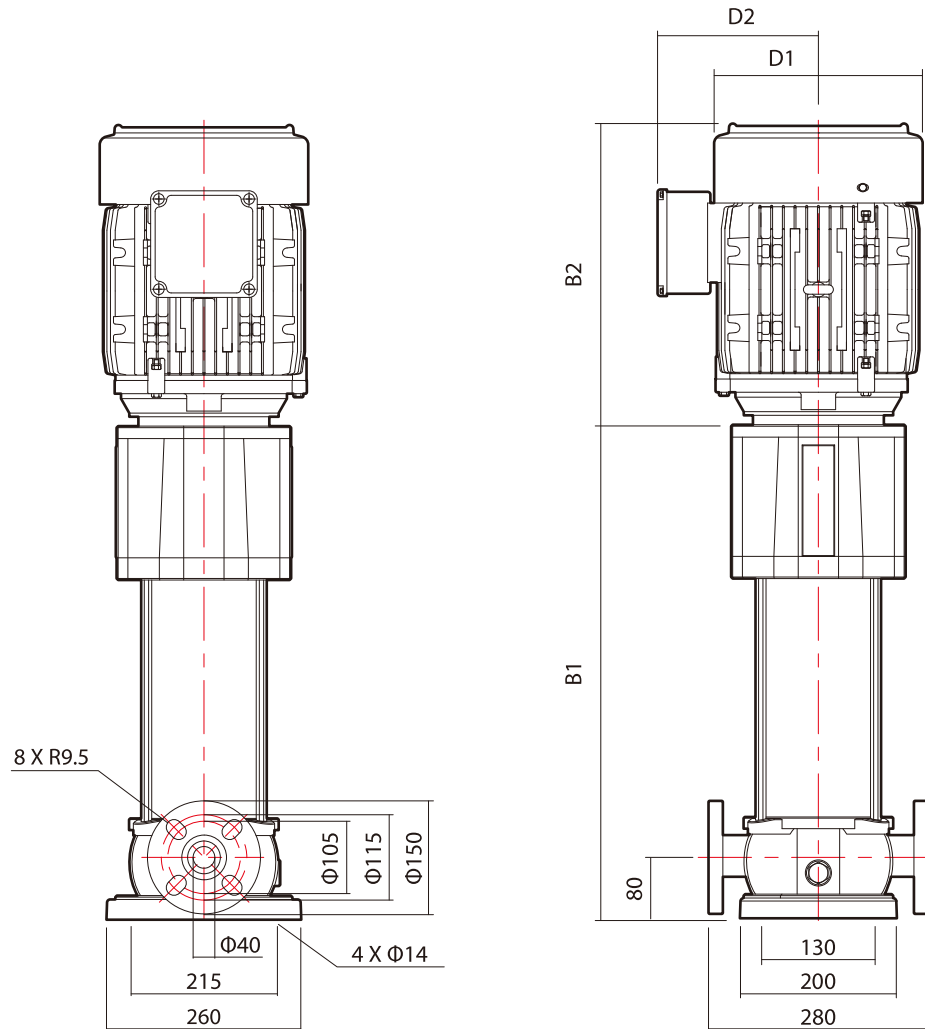
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 5-2	0.75	1	366.5	255	621.5	170	160	21
XR(L) 5-4	1.5	2	420.5	315	735.5	187	170	27
XR(L) 5-5	1.5	2	447.5	315	762.5	187	170	34
XR(L) 5-7	2.2	3	501.5	315	816.5	187	170	35
XR(L) 5-9	2.2	3	555.5	315	870.5	187	170	37
XR(L) 5-12	3.7	5	636.5	330	966.5	227	220	45
XR(L) 5-14	3.7	5	690.5	330	1020.5	227	220	55
XR(L) 5-16	3.7	5	744.5	330	1074.5	227	220	56
XR(L) 5-20	5.5	7.5	882.5	365	1247.5	268	245	72
XR(L) 5-22	5.5	7.5	936.5	365	1301.5	268	245	73
XR(L) 5-24	7.5	10	990.5	365	1355.5	268	245	86

Performance Curve



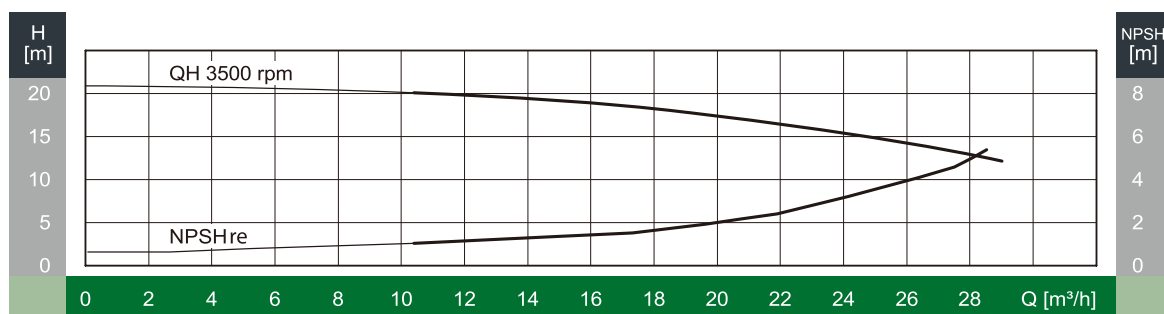
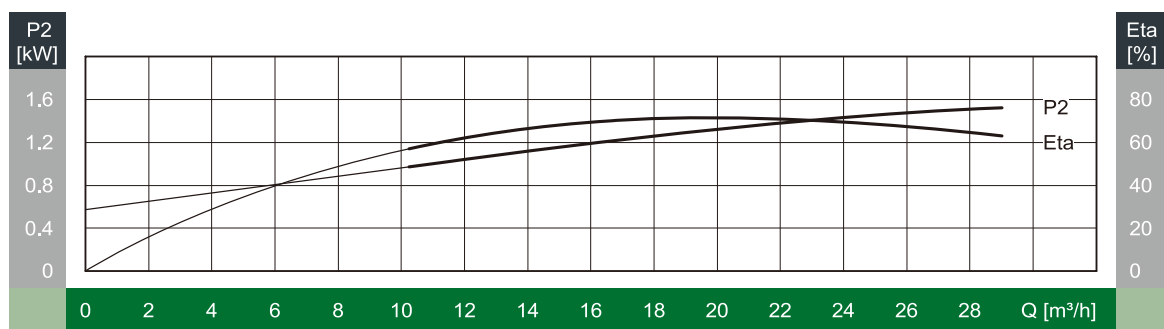
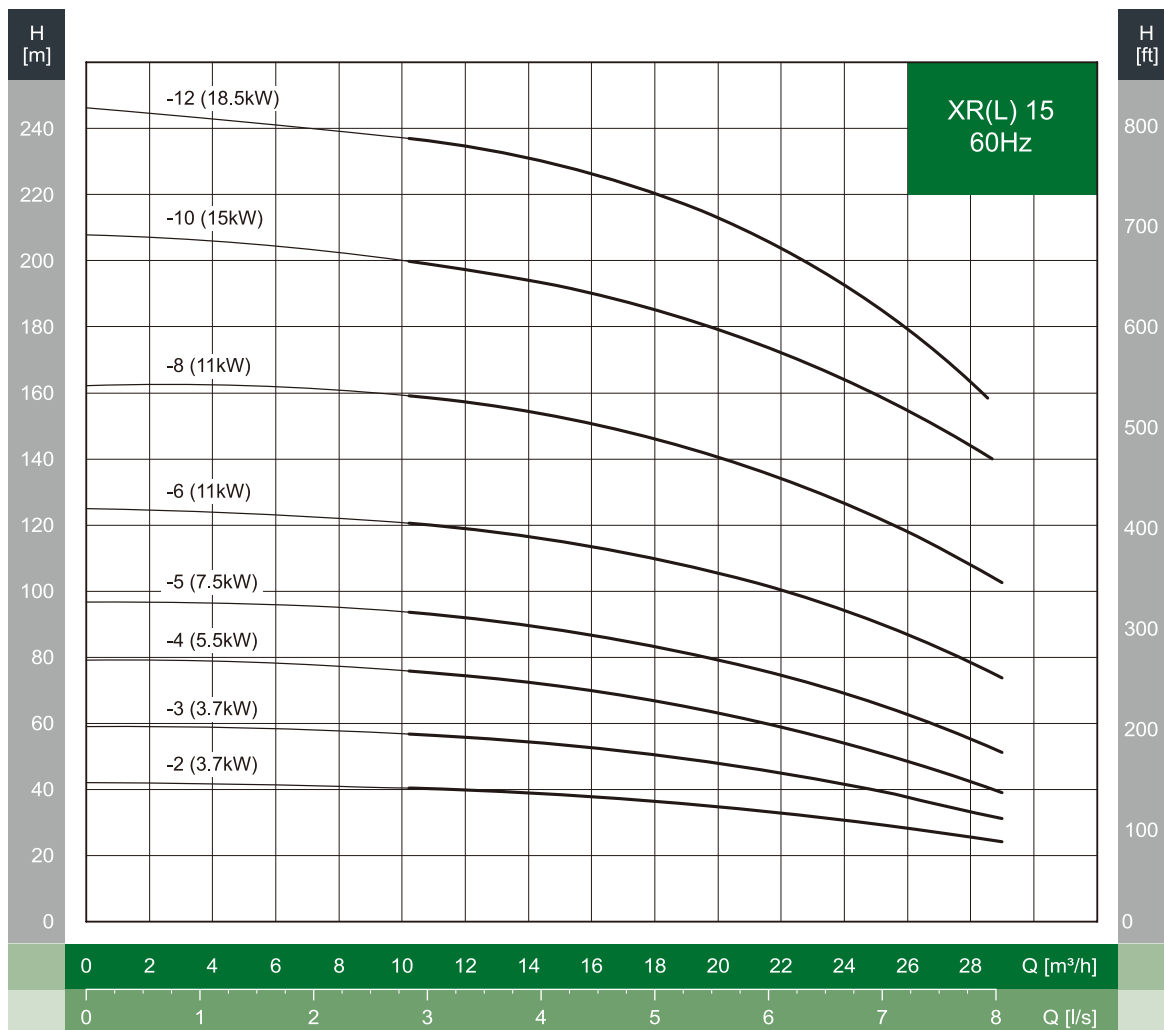
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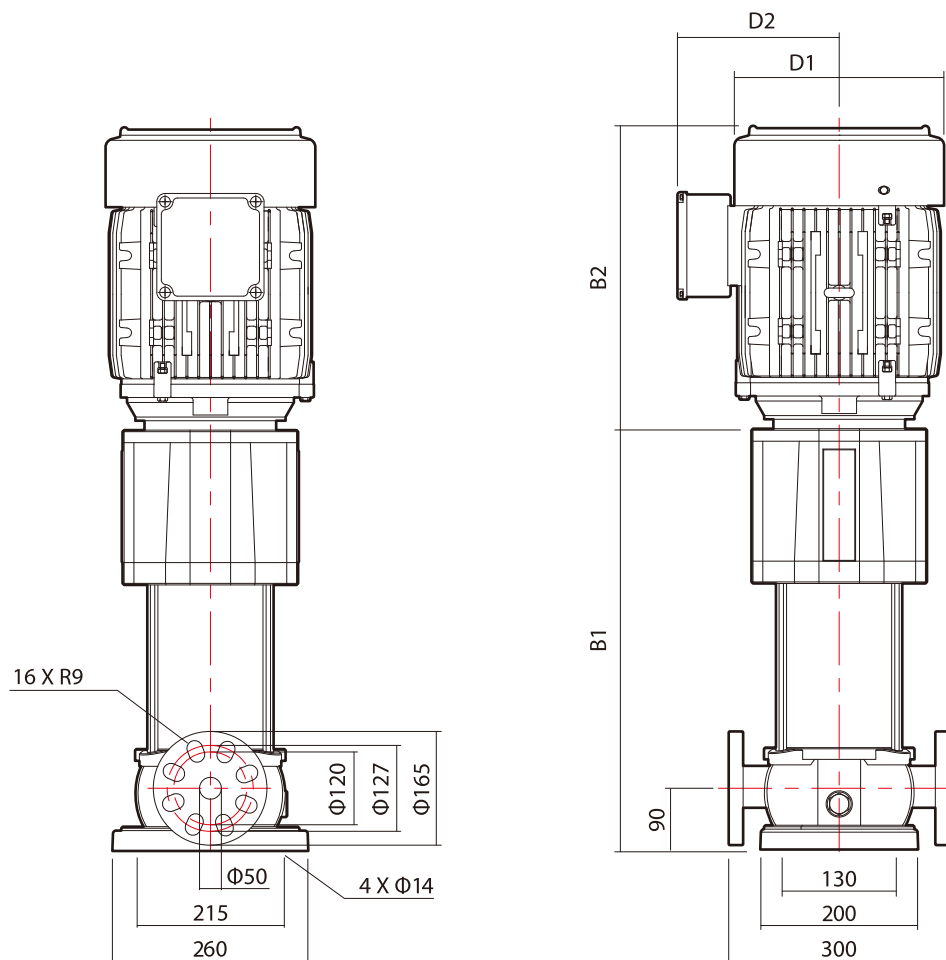
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 10-2	1.5	2	433	315	748	187	170	44
XR(L) 10-3	2.2	3	463	315	778	187	170	45
XR(L) 10-5	3.7	5	523	330	853	227	220	54
XR(L) 10-6	3.7	5	553	330	883	227	220	64
XR(L) 10-8	5.5	7.5	633	365	998	268	245	86
XR(L) 10-9	5.5	7.5	663	365	1028	268	245	87
XR(L) 10-12	7.5	10	753	365	1118	268	245	101
XR(L) 10-14	11	15	843	480	1323	318	290	144
XR(L) 10-17	11	15	933	480	1413	318	290	148

Performance Curve



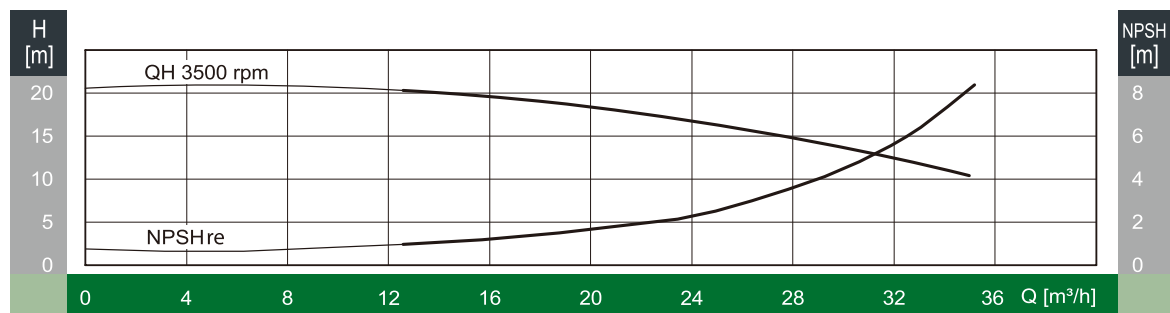
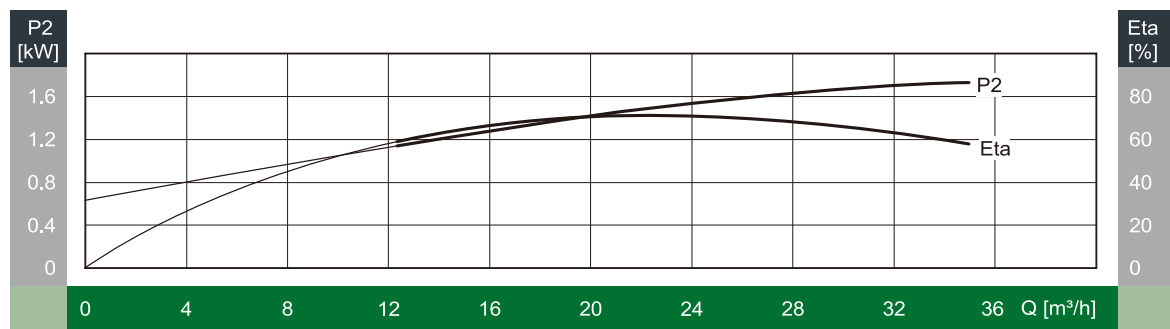
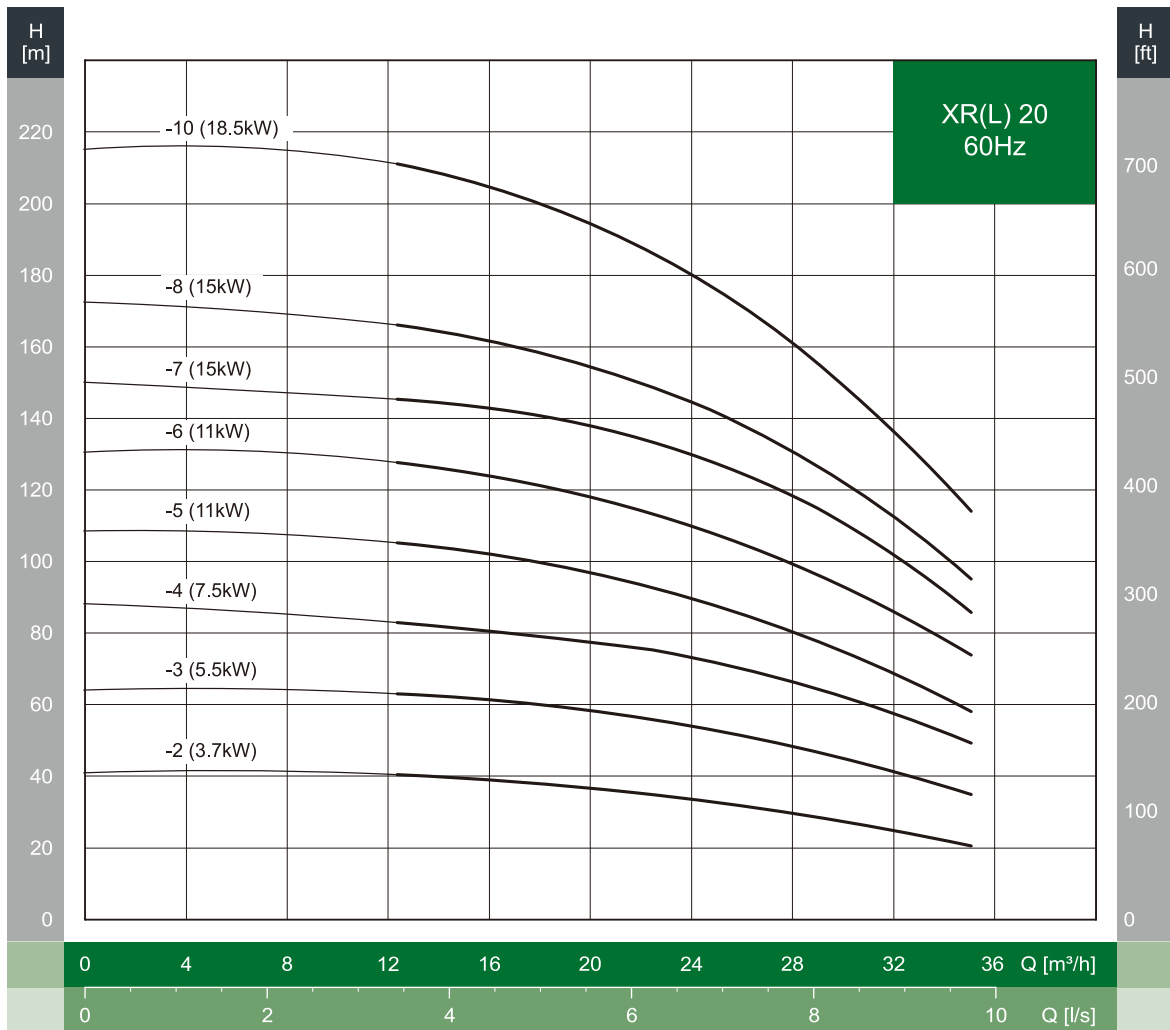
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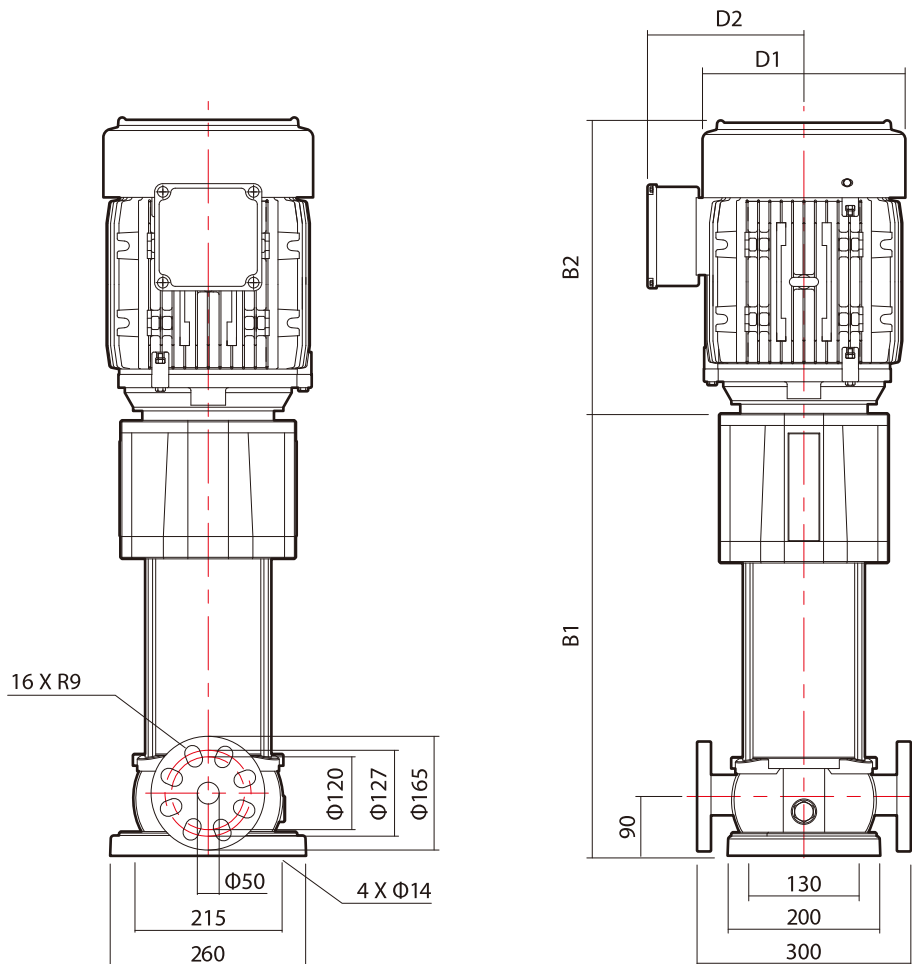
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 15-2	3.7	5	478	330	808	227	220	53
XR(L) 15-3	3.7	5	523	330	853	227	220	64
XR(L) 15-4	5.5	7.5	588	365	953	268	245	86
XR(L) 15-5	7.5	10	633	365	998	268	245	99
XR(L) 15-6	11	15	708	480	1188	318	290	141
XR(L) 15-8	11	15	798	480	1278	318	290	144
XR(L) 15-10	15	20	888	480	1368	318	290	160
XR(L) 15-12	18.5	25	978	525	1503	318	290	176

Performance Curve



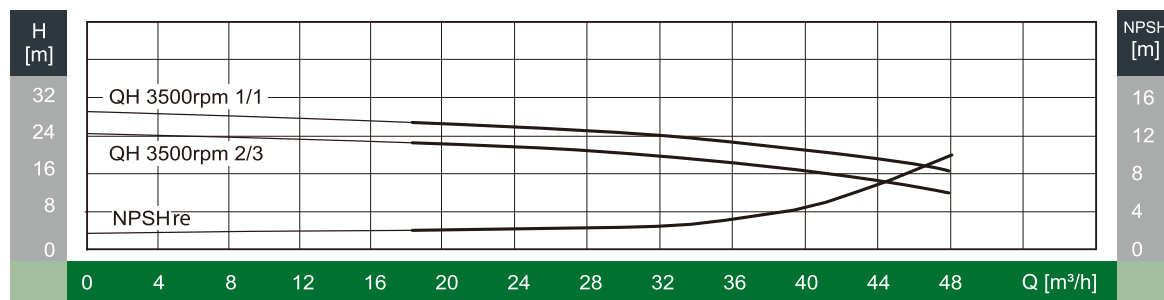
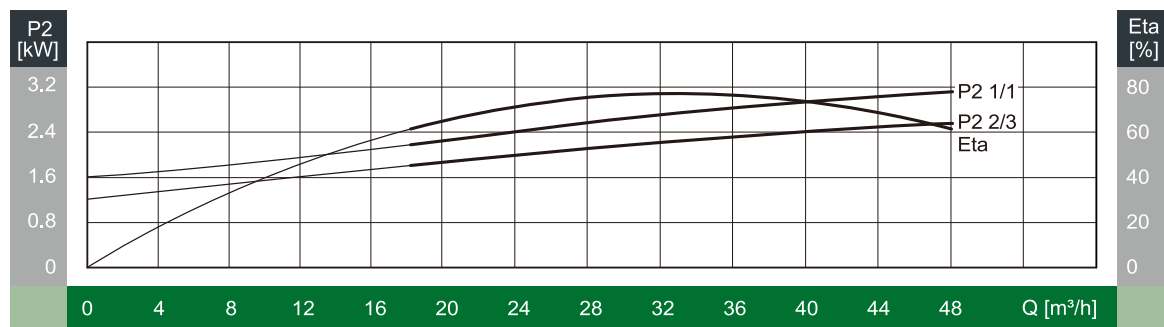
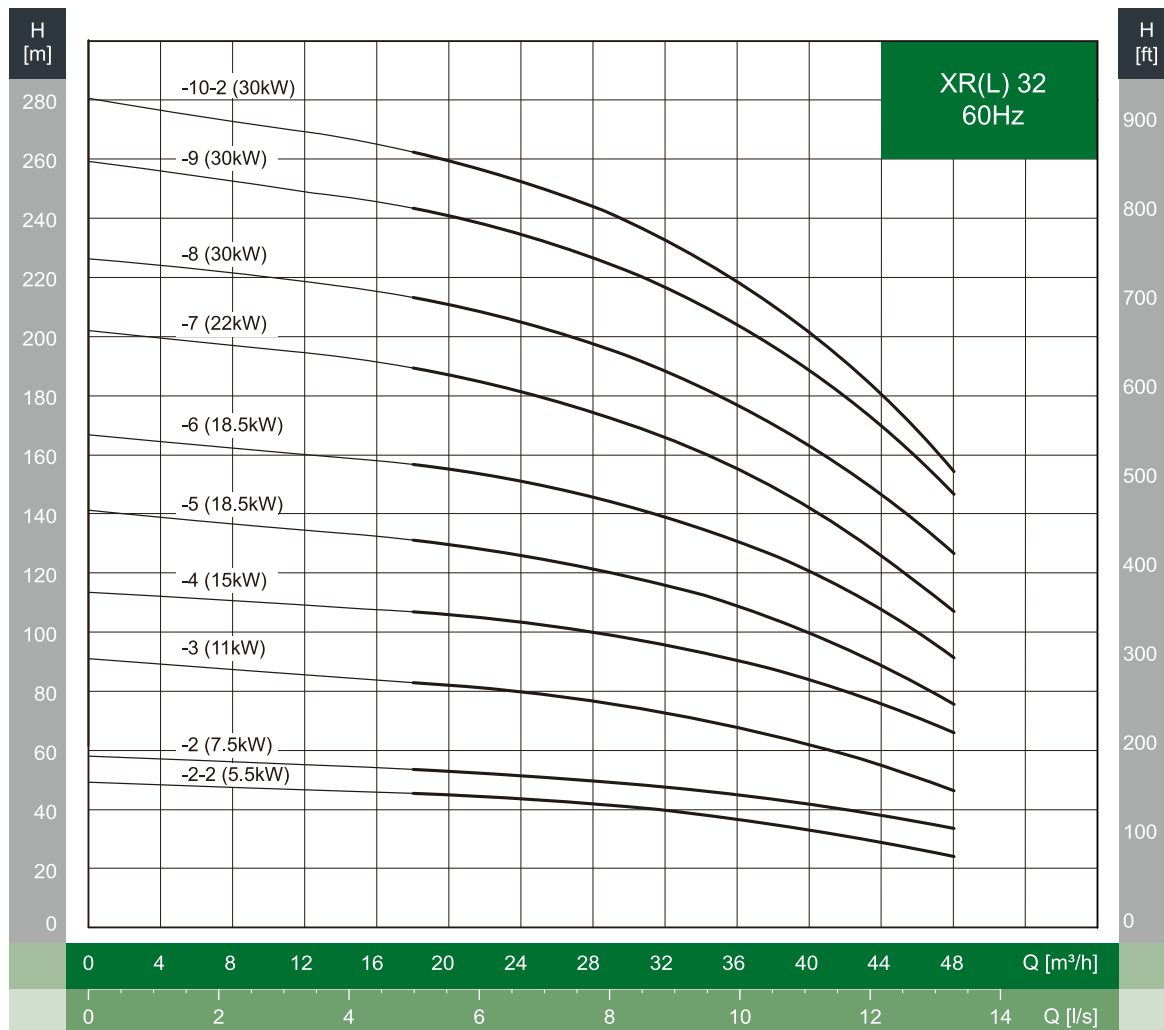
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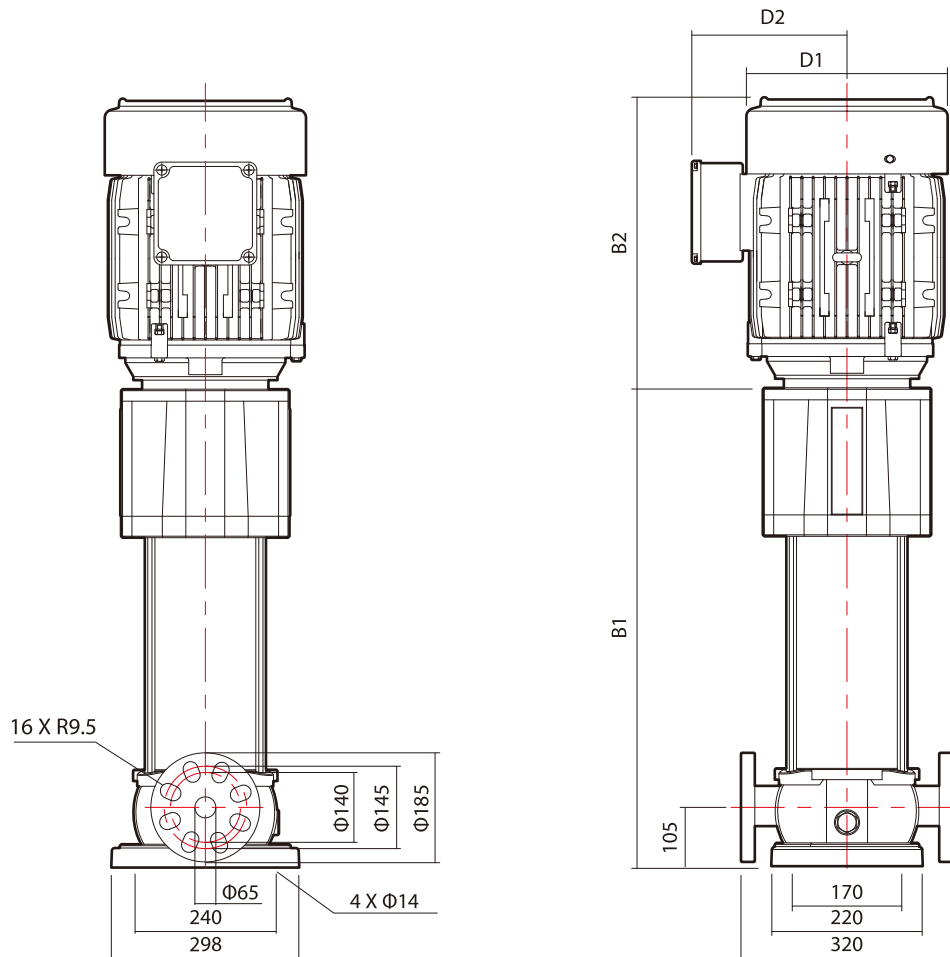
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 20-2	3.7	5	478	330	808	227	220	62
XR(L) 20-3	5.5	7.5	543	365	908	268	245	84
XR(L) 20-4	7.5	10	588	365	953	268	245	98
XR(L) 20-5	11	15	663	480	1143	318	290	139
XR(L) 20-6	11	15	708	480	1188	318	290	141
XR(L) 20-7	15	20	753	480	1233	318	290	155
XR(L) 20-8	15	20	798	480	1278	318	290	156
XR(L) 20-10	18.5	25	888	525	1413	318	290	173

Performance Curve



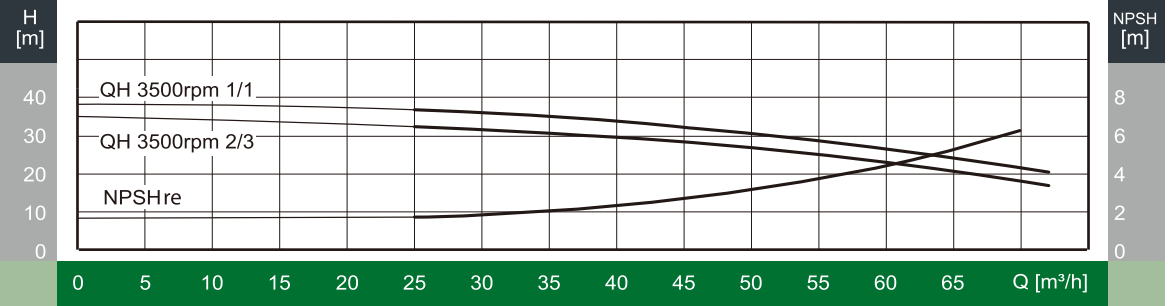
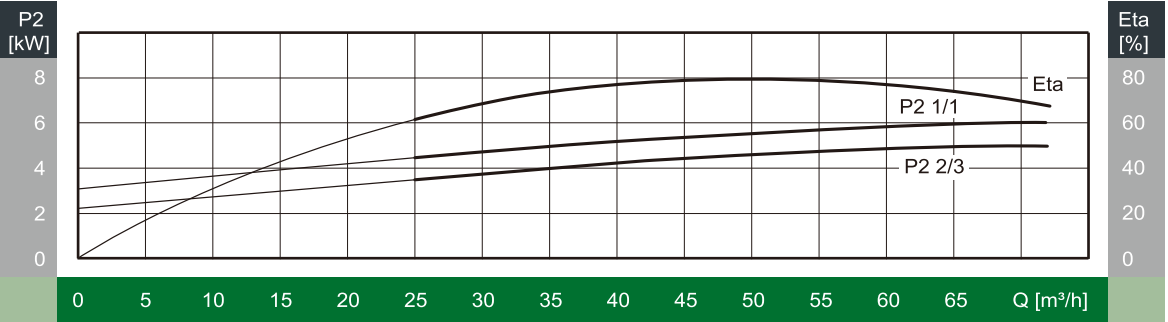
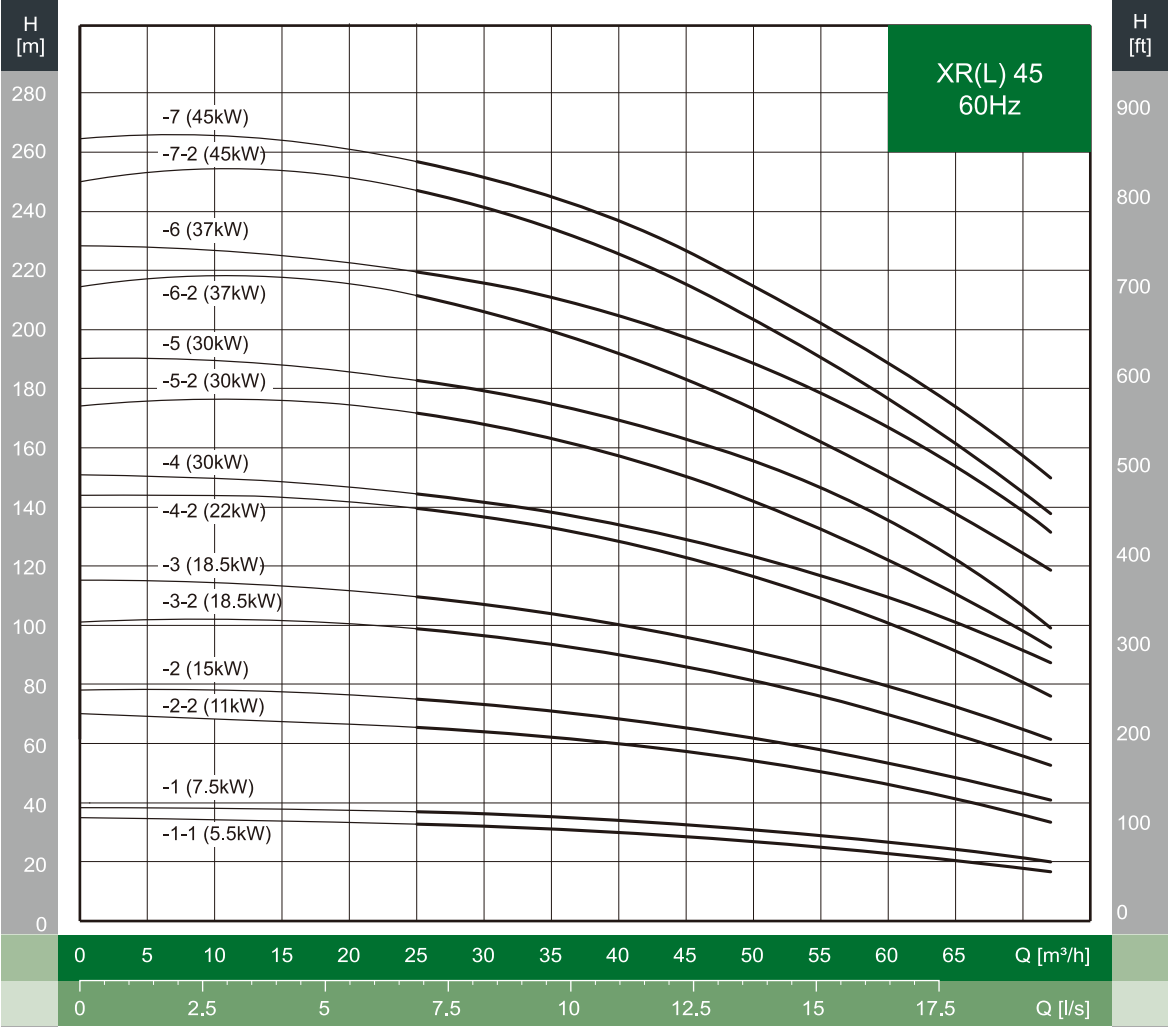
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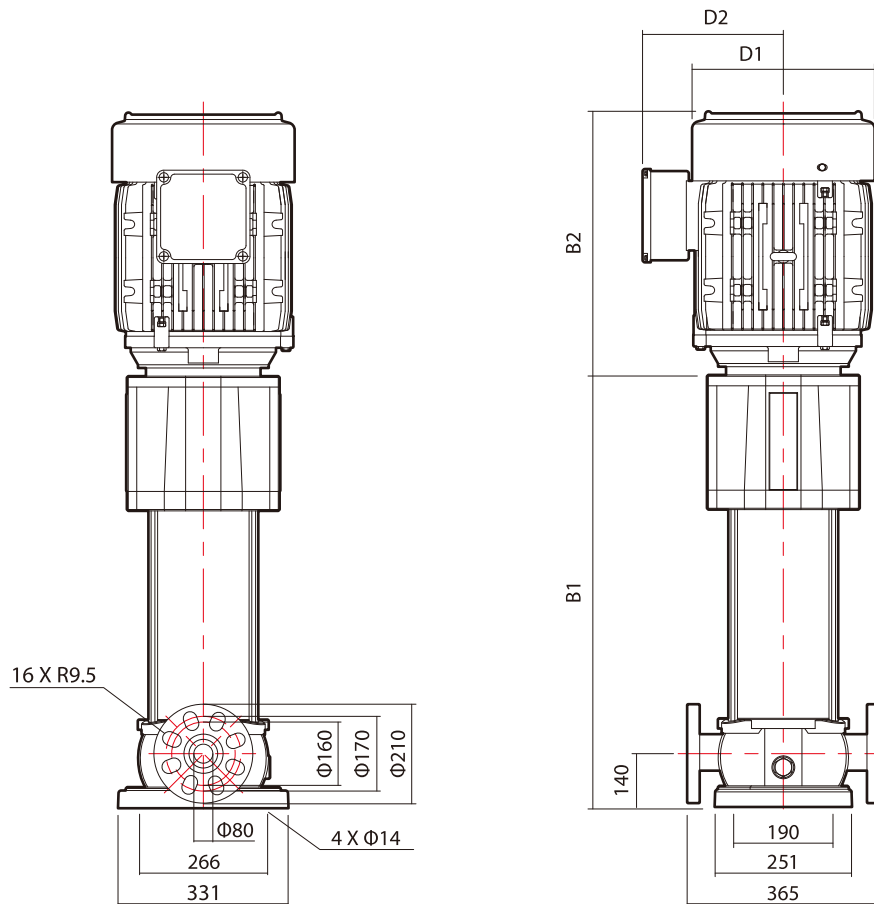
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 32-2-2	5.5	7.5	644.5	365	1009.5	268	245	95
XR(L) 32-2	7.5	10	644.5	365	1009.5	268	245	107
XR(L) 32-3	11	15	744.5	480	1224.5	318	290	154
XR(L) 32-4	15	20	814.5	480	1294.5	318	290	170
XR(L) 32-5	18.5	25	884.5	525	1409.5	318	290	186
XR(L) 32-6	18.5	25	954.5	525	1479.5	318	290	189
XR(L) 32-7	22	30	1024.5	570	1594.5	354	305	206
XR(L) 32-8	30	40	1094.5	610	1704.5	354	305	314
XR(L) 32-9	30	40	1164.5	610	1774.5	354	305	318
XR(L) 32-10-2	30	40	1234.5	610	1844.5	354	305	321

Performance Curve



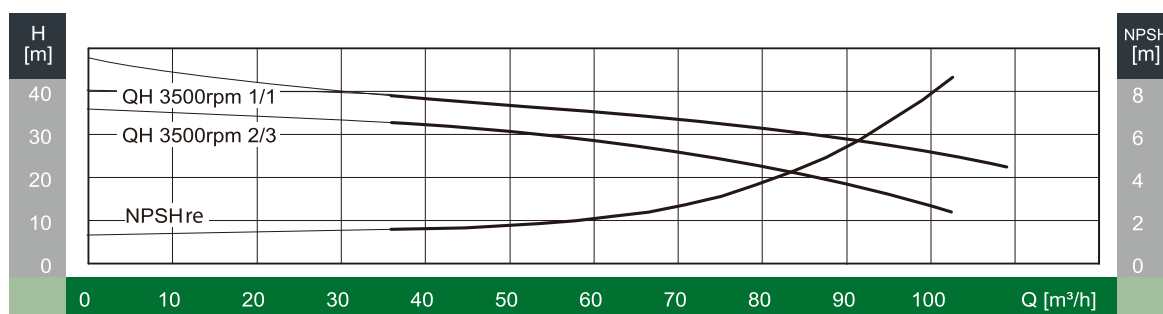
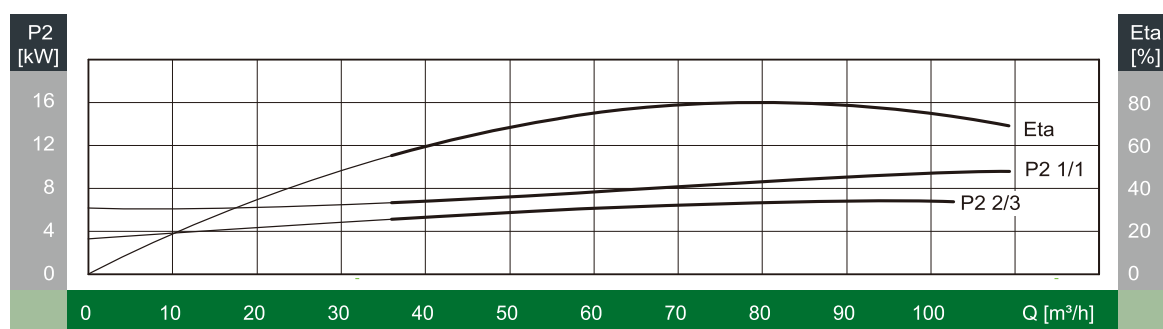
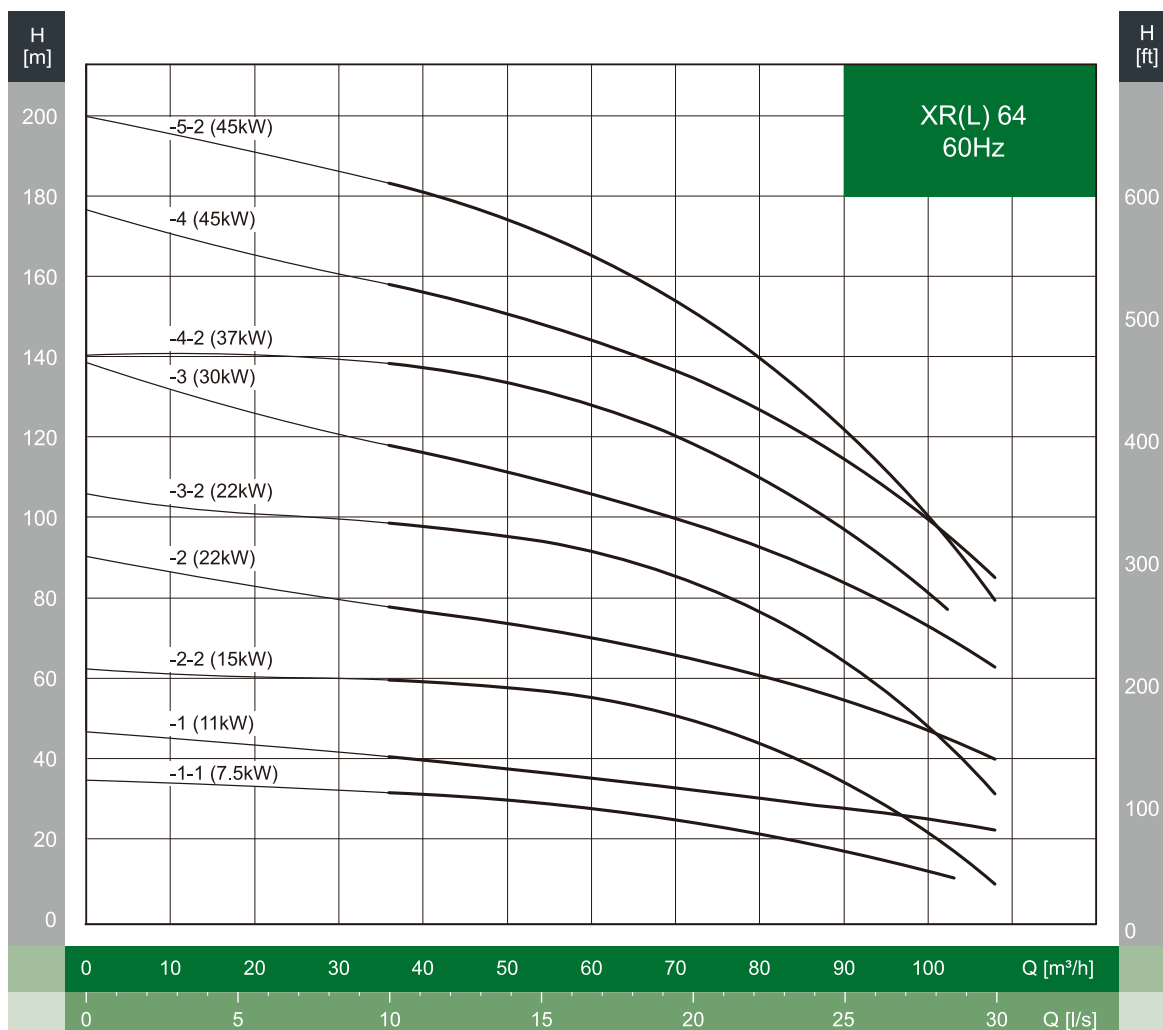
Outline Drawing



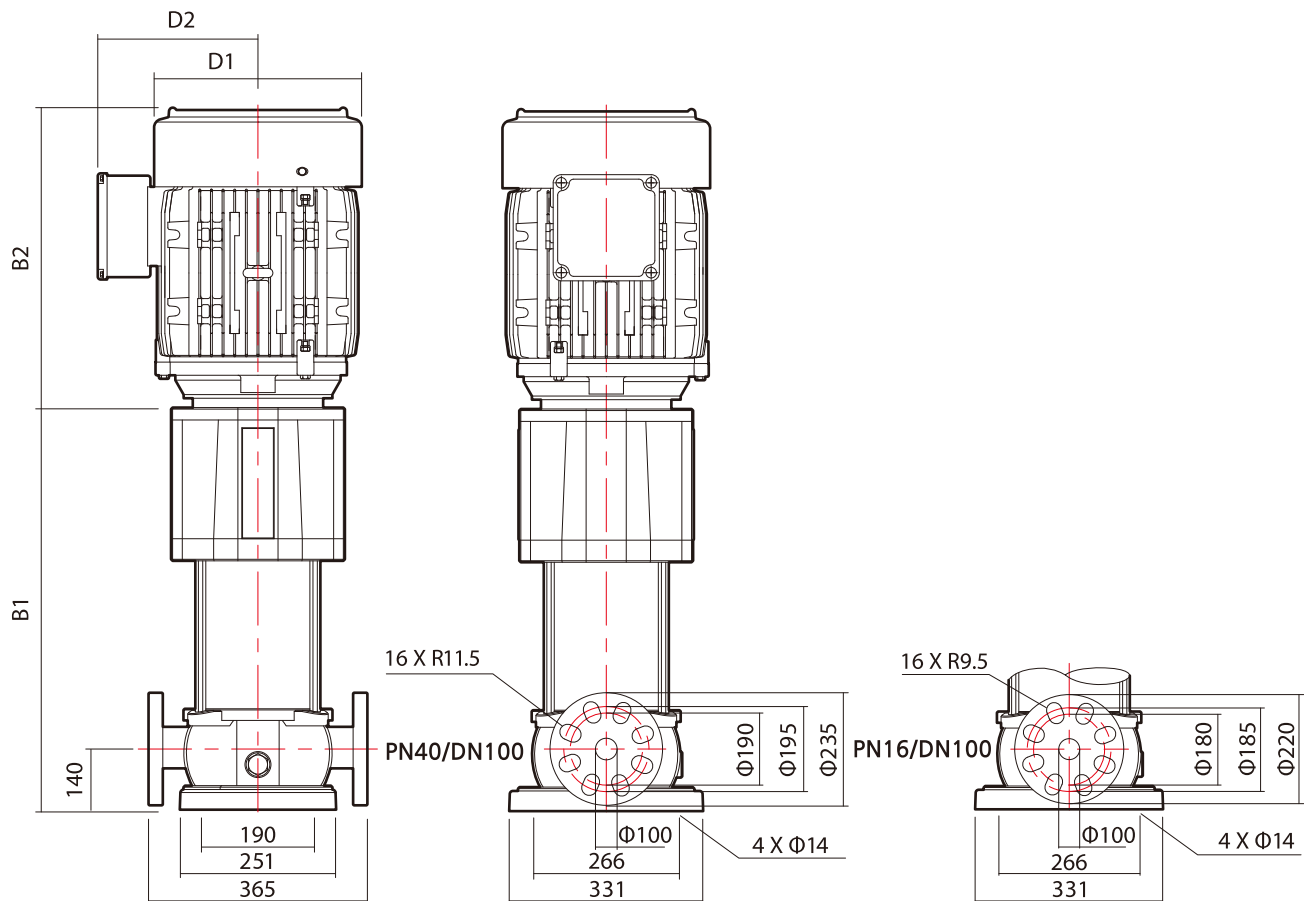
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 45-1-1	5.5	7.5	631.5	365	996.5	268	245	100
XR(L) 45-1	7.5	10	631.5	365	996.5	268	245	112
XR(L) 45-2-2	11	15	741.5	480	1221.5	318	290	160
XR(L) 45-2	15	20	741.5	480	1221.5	318	290	173
XR(L) 45-3-2	18.5	25	821.5	525	1346.5	318	290	190
XR(L) 45-3	18.5	25	821.5	525	1346.5	318	290	190
XR(L) 45-4-2	22	30	901.5	570	1471.5	354	305	207
XR(L) 45-4	30	40	901.5	610	1511.5	354	305	309
XR(L) 45-5-2	30	40	981.5	610	1591.5	354	305	313
XR(L) 45-5	30	40	981.5	610	1591.5	354	305	313
XR(L) 45-6-2	37	50	1061.5	670	1731.5	404	350	350
XR(L) 45-6	37	50	1061.5	670	1731.5	404	350	350
XR(L) 45-7-2	45	60	1141.5	670	1811.5	404	350	438
XR(L) 45-7	45	60	1141.5	670	1811.5	404	350	438

Performance Curve



Outline Drawing

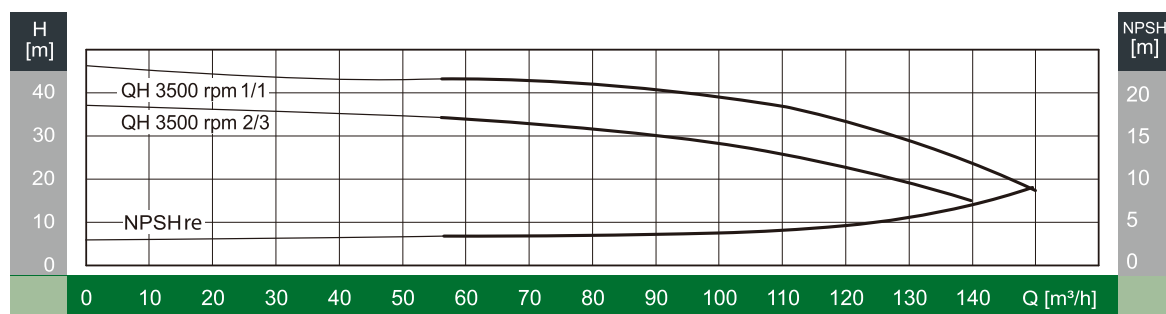
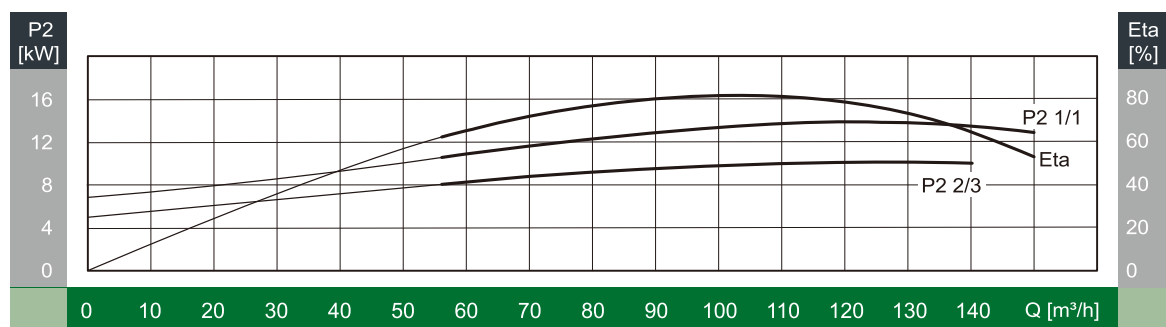
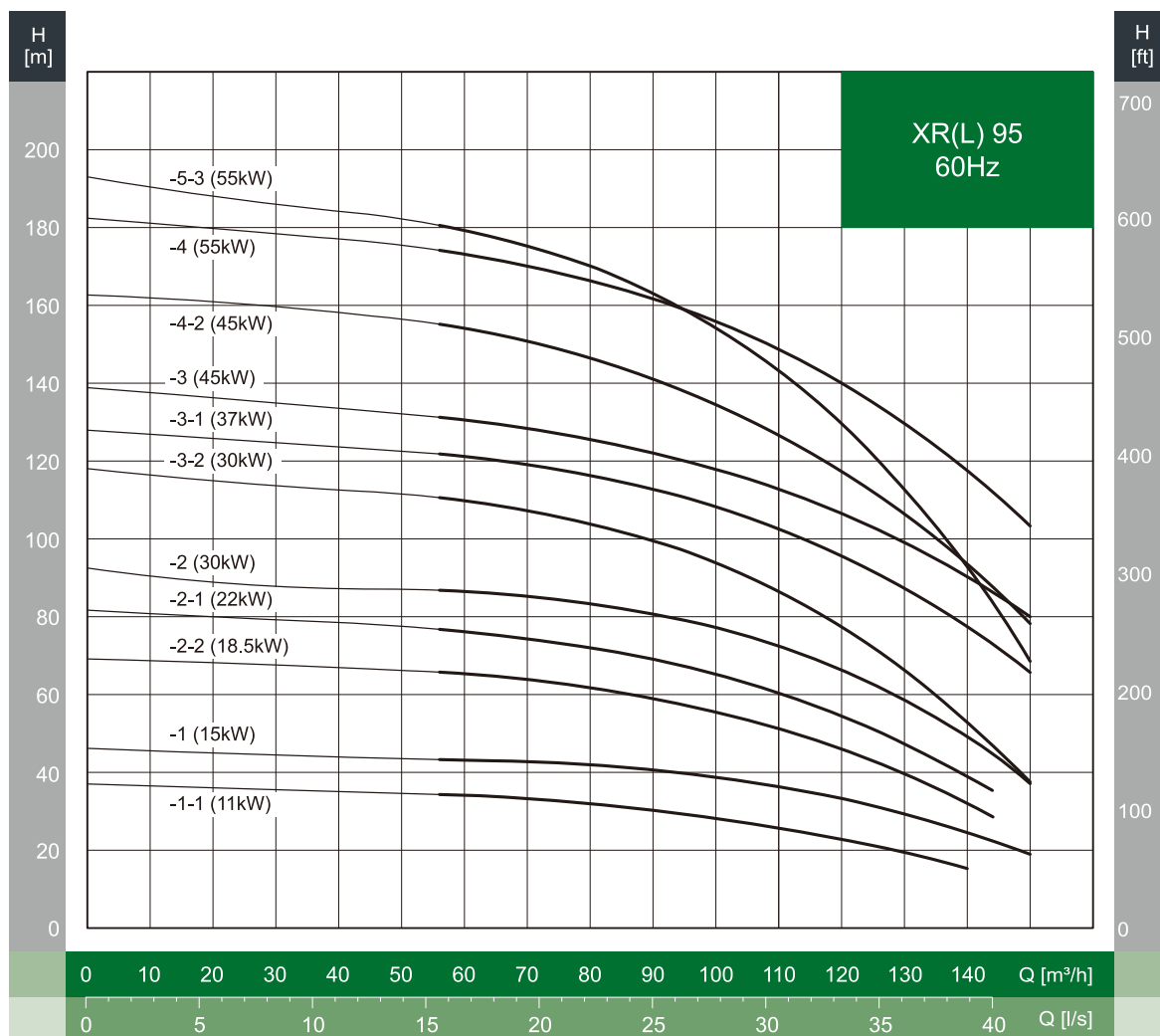


XR(L)64-3-2 and below models

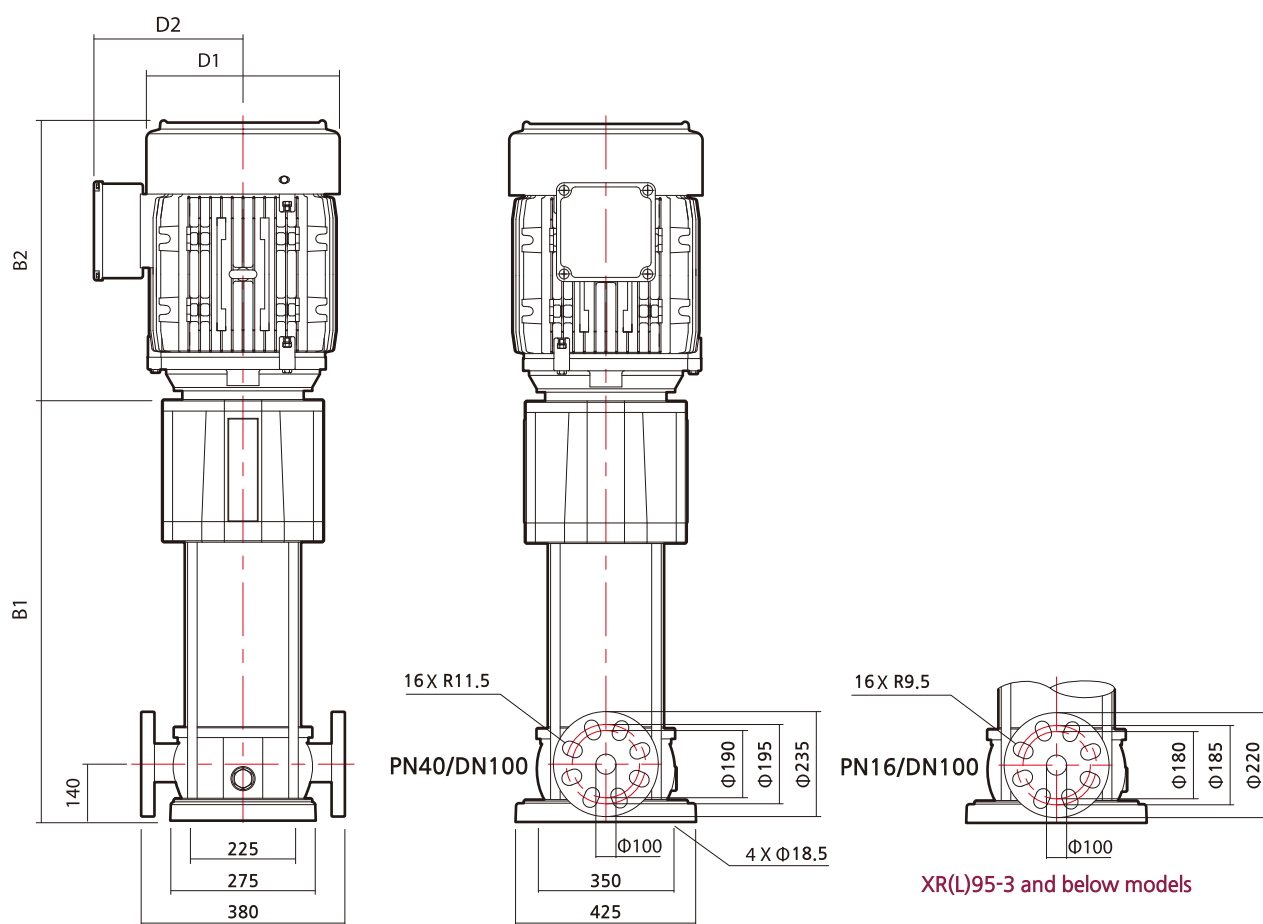
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 64-1-1	7.5	10	634	365	999	268	245	114
XR(L) 64-1	11	15	664	480	1144	318	290	158
XR(L) 64-2-2	15	20	746.5	480	1226.5	318	290	175
XR(L) 64-2	22	30	746.5	570	1316.5	354	305	202
XR(L) 64-3-2	22	30	829	570	1399	354	305	206
XR(L) 64-3	30	40	829	610	1439	354	305	309
XR(L) 64-4-2	37	50	911.5	670	1581.5	404	350	346
XR(L) 64-4	45	60	911.5	670	1581.5	404	350	430
XR(L) 64-5-2	45	60	994	670	1664	404	350	435

Performance Curve



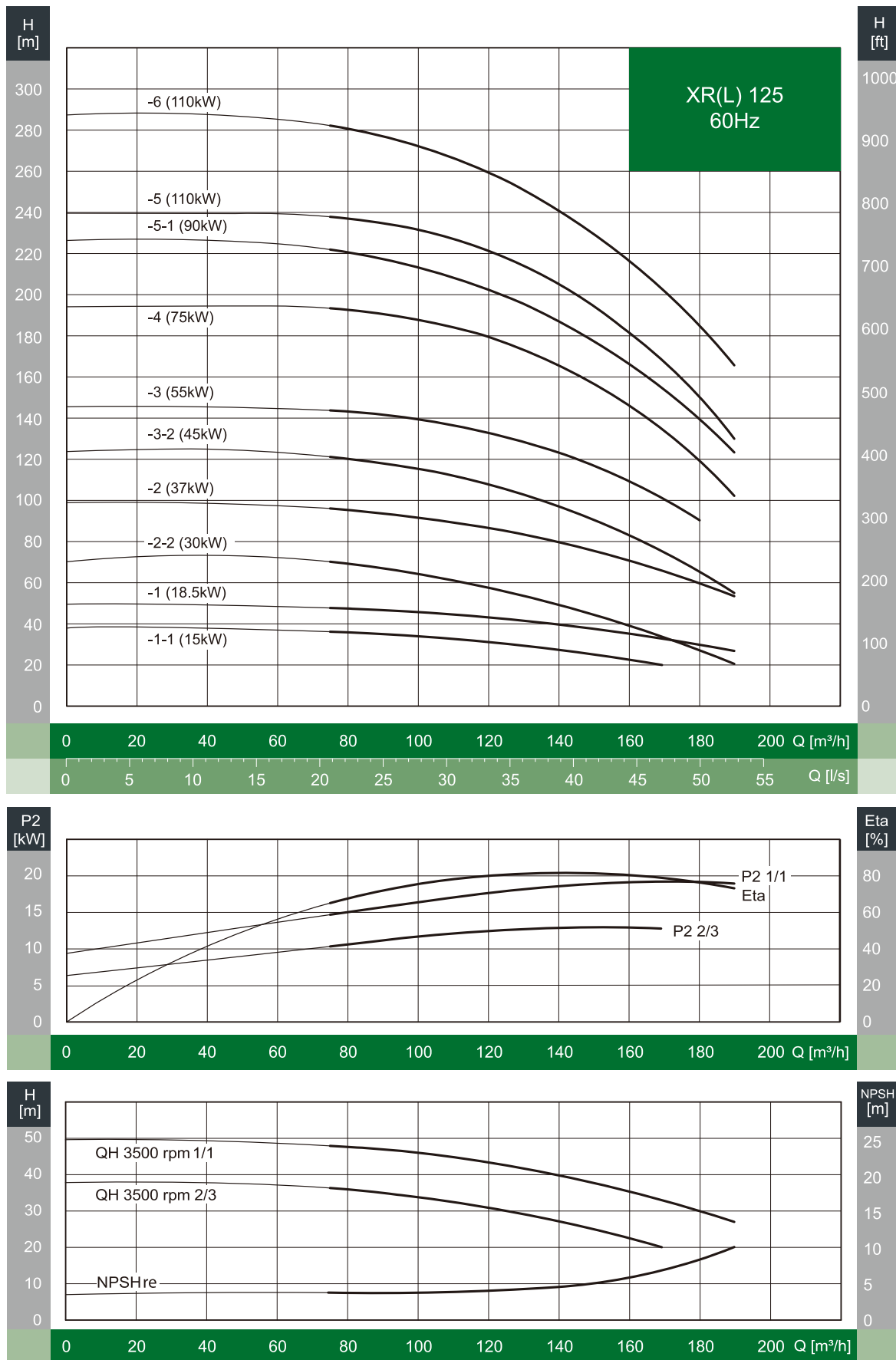
Outline Drawing



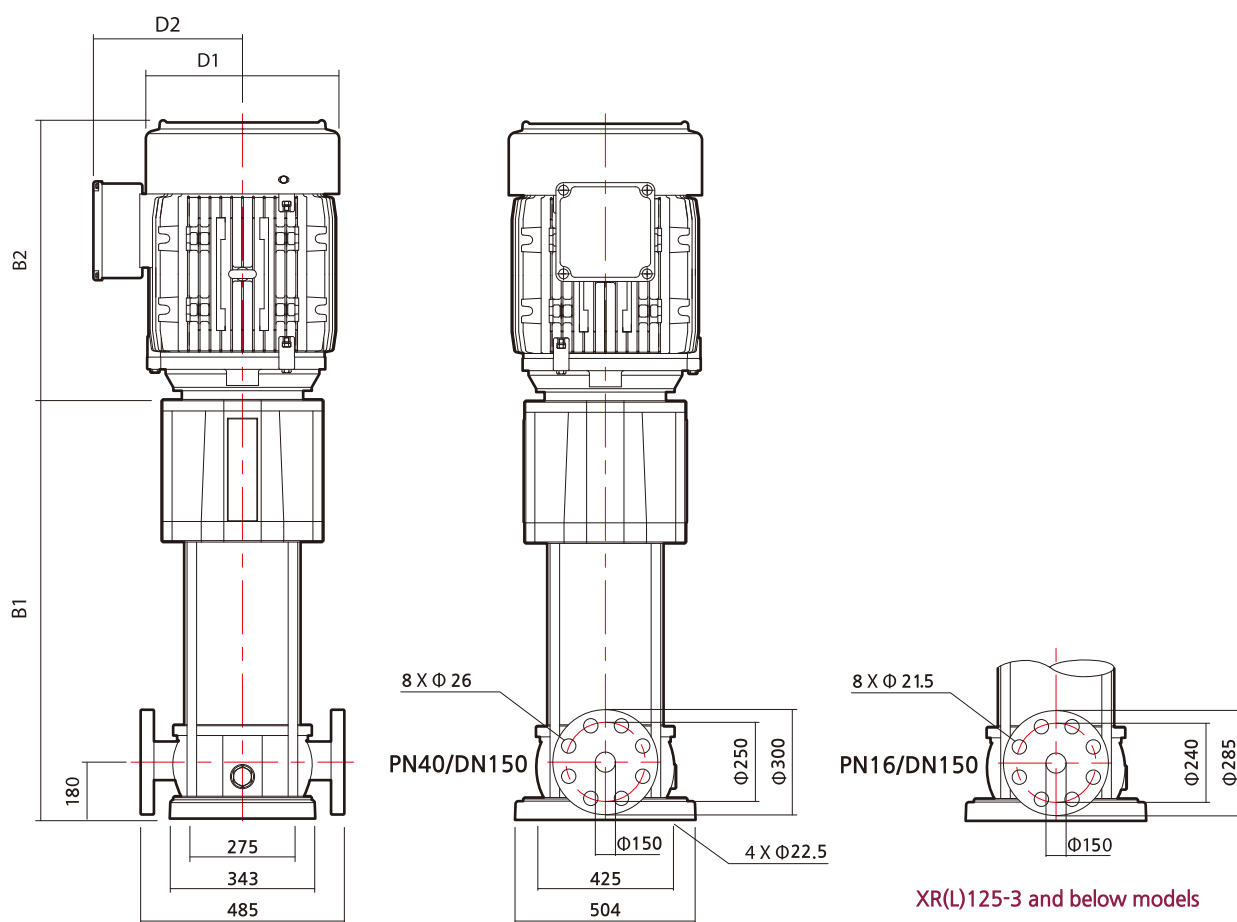
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 95-1-1	11	15	701	480	1181	318	290	189
XR(L) 95-1	15	20	701	480	1181	318	290	189
XR(L) 95-2-2	18.5	25	806	525	1331	318	290	210
XR(L) 95-2-1	22	30	806	570	1376	354	305	225
XR(L) 95-2	30	40	806	610	1416	354	305	345
XR(L) 95-3-2	30	40	910	610	1520	354	305	350
XR(L) 95-3-1	37	50	910	670	1580	404	350	375
XR(L) 95-3	45	60	910	670	1580	404	350	457
XR(L) 95-4-2	45	60	1015	670	1685	404	350	462
XR(L) 95-4	55	75	1035	685	1720	457	460	540
XR(L) 95-5-3	55	75	1139	685	1824	457	460	552

Performance Curve



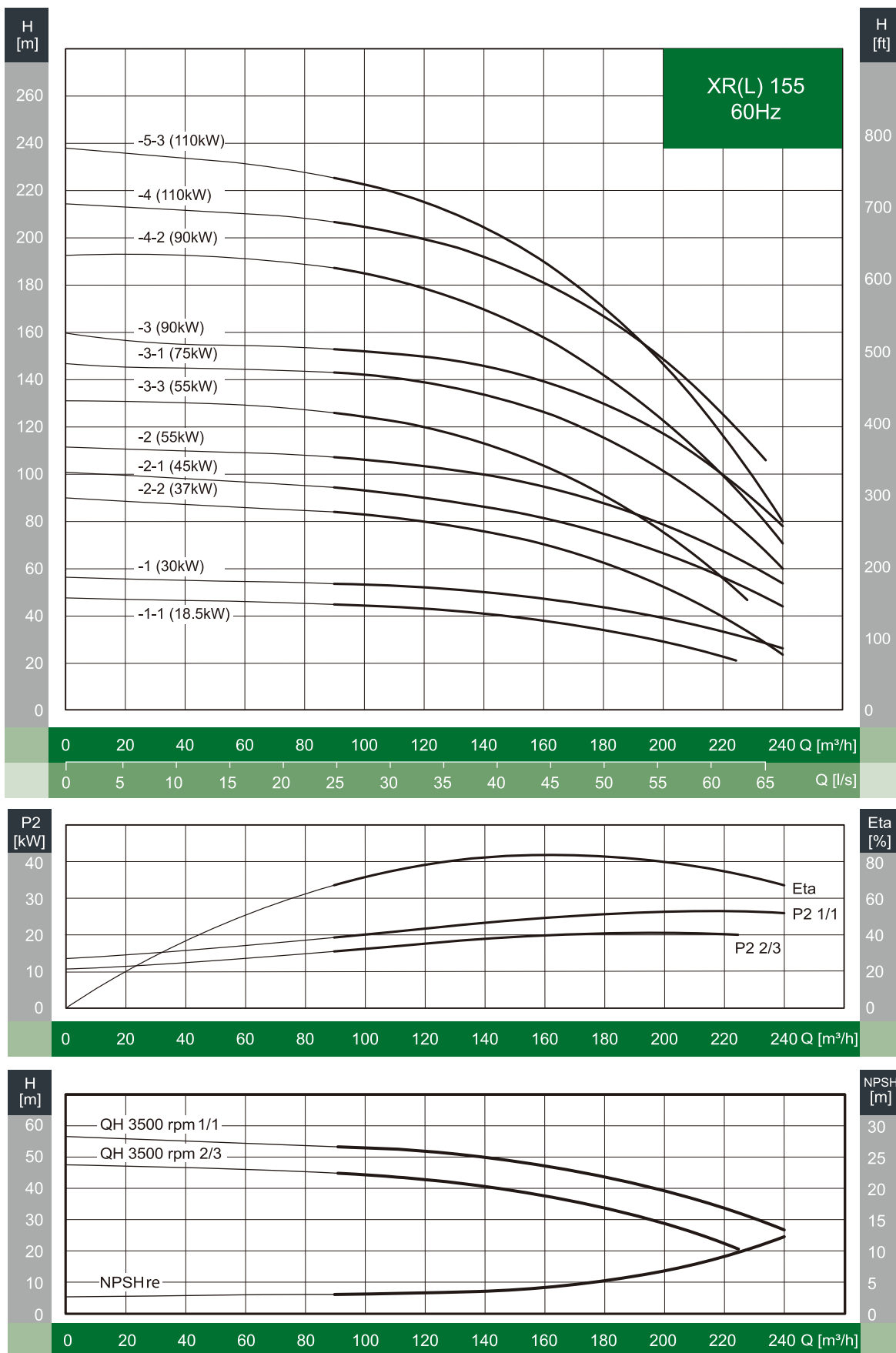
Outline Drawing



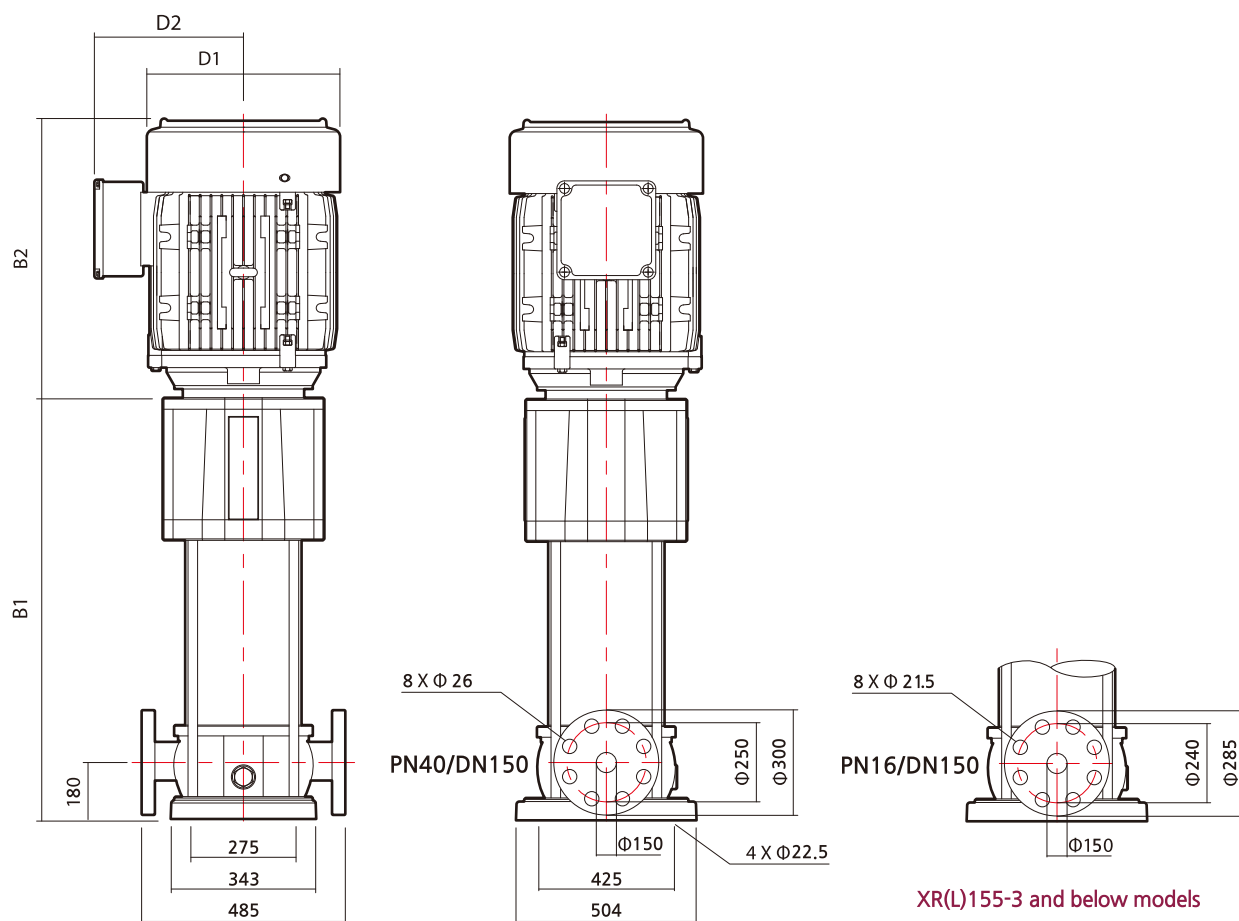
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 125-1-1	15	20	783	480	1263	318	290	265
XR(L) 125-1	18.5	25	783	525	1308	318	290	282
XR(L) 125-2-2	30	40	905	610	1515	354	305	387
XR(L) 125-2	37	50	905	670	1575	404	350	410
XR(L) 125-3-2	45	60	1057	670	1727	404	350	500
XR(L) 125-3	55	75	1057	685	1742	457	460	585
XR(L) 125-4	75	100	1179	760	1939	512	480	705
XR(L) 125-5-1	90	120	1301	800	2101	512	480	803
XR(L) 125-5	110	150	1311	950	2261	550	505	992
XR(L) 125-6	110	150	1433	950	2383	550	505	997

Performance Curve



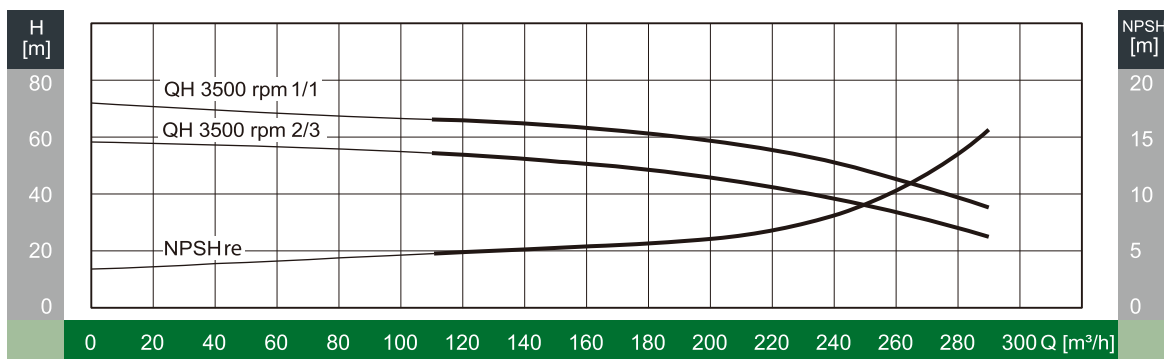
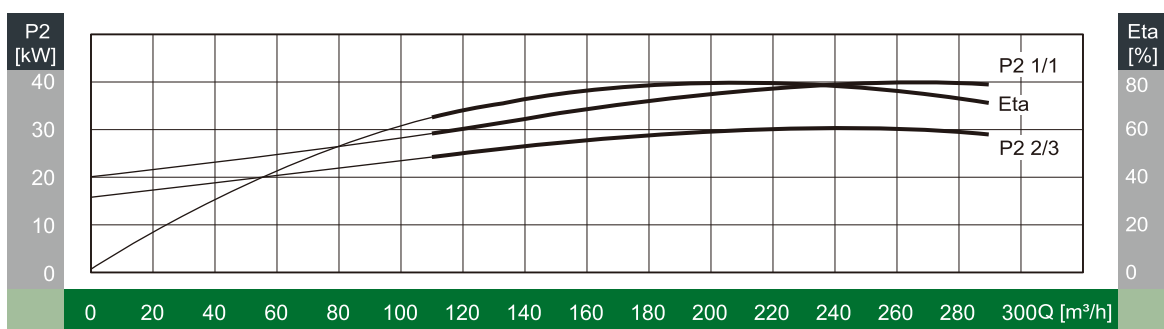
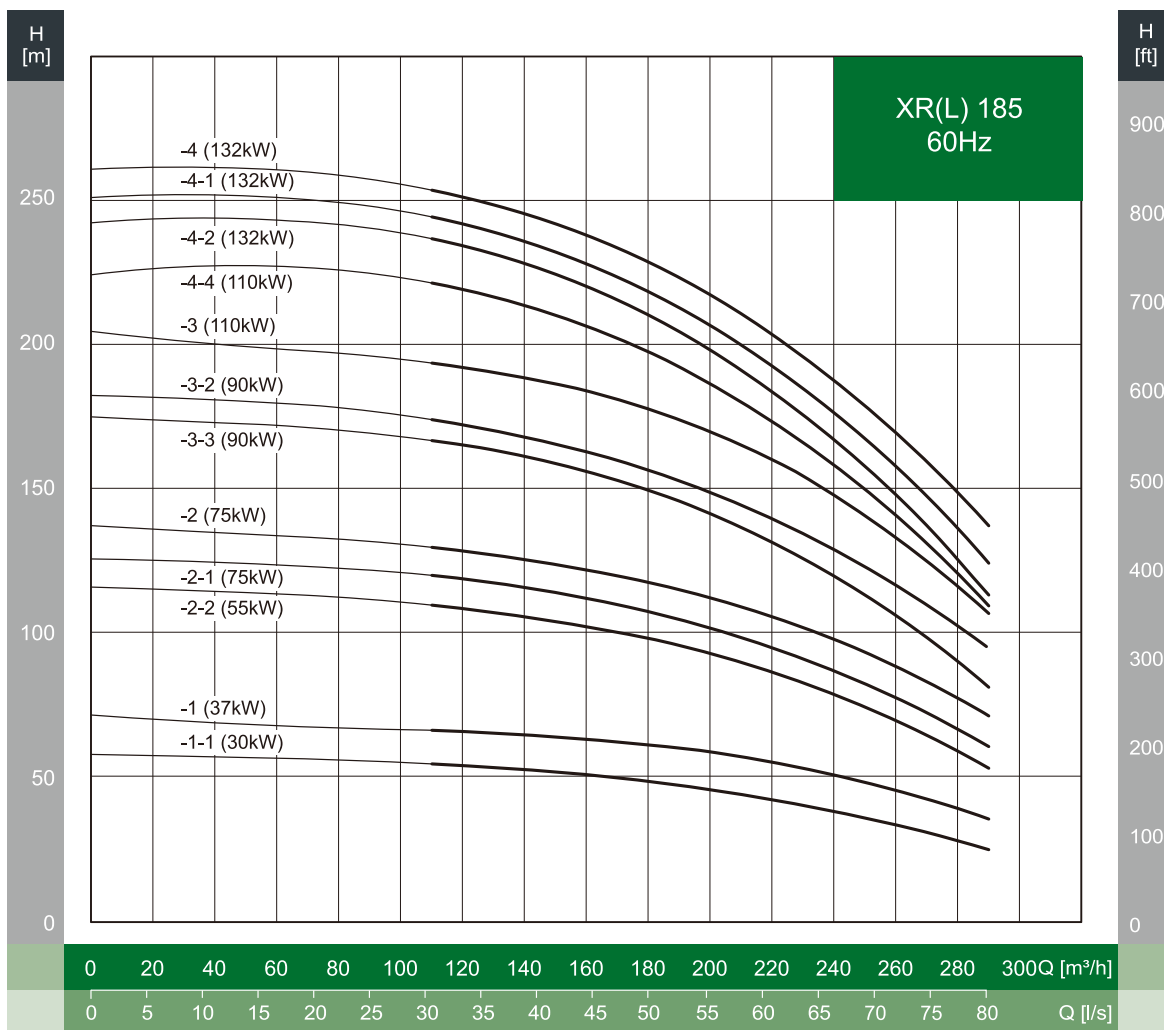
Outline Drawing



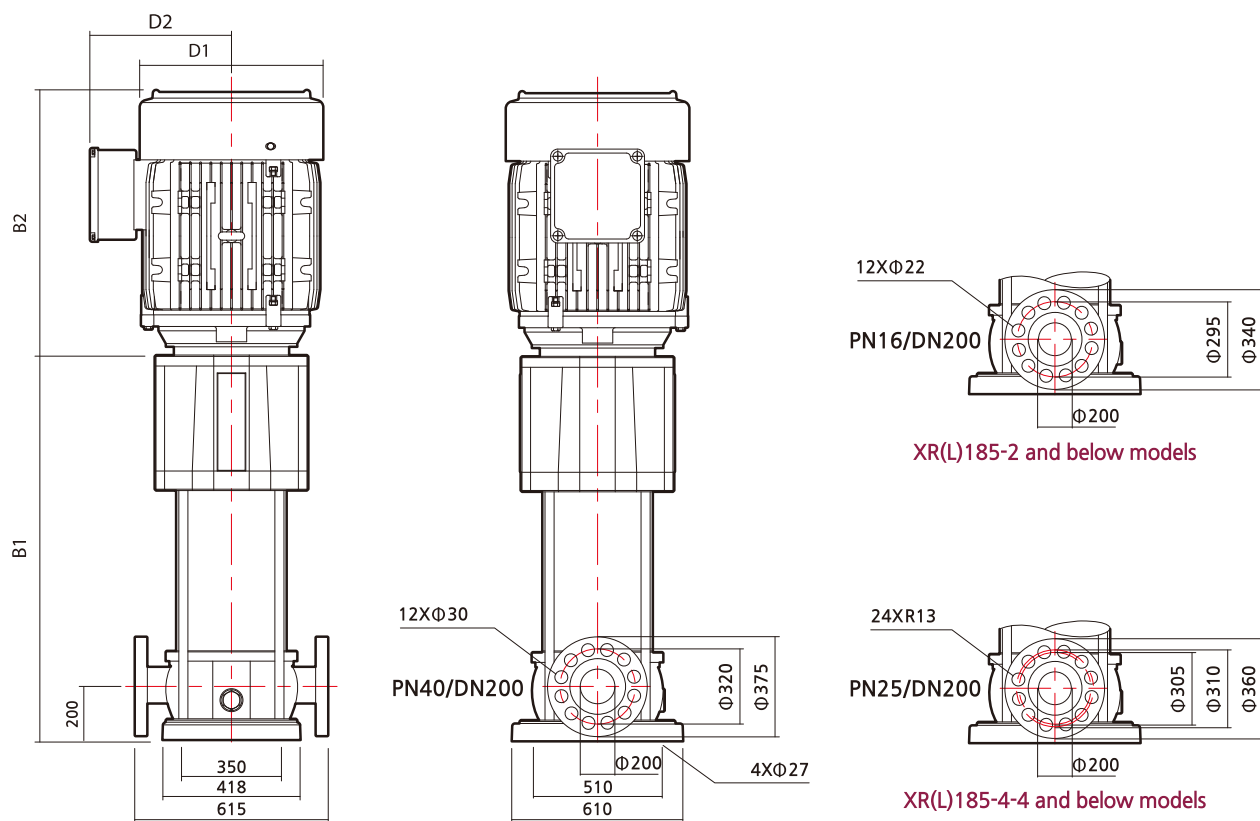
Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 155-1-1	18.5	25	783	525	1308	318	290	218
XR(L) 155-1	30	40	783	610	1393	354	305	272
XR(L) 155-2-2	37	50	905	670	1575	404	350	410
XR(L) 155-2-1	45	60	935	670	1605	404	350	490
XR(L) 155-2	55	75	935	685	1620	457	460	585
XR(L) 155-3-3	55	75	1057	685	1742	457	460	590
XR(L) 155-3-1	75	100	1057	760	1817	512	480	702
XR(L) 155-3	90	120	1057	800	1857	512	480	792
XR(L) 155-4-2	90	120	1179	800	1979	512	480	797
XR(L) 155-4	110	150	1189	950	2139	550	505	987
XR(L) 155-5-3	110	150	1311	950	2261	550	505	992

Performance Curve



Outline Drawing



Dimension / Weight

MODEL	POWER		DIMENSION (UNIT: mm)					WEIGHT (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 185-1-1	30	40	868	610	1478	354	305	415
XR(L) 185-1	37	50	868	670	1538	404	350	548
XR(L) 185-2-2	55	75	1026	685	1711	457	460	649
XR(L) 185-2-1	75	100	1026	760	1786	512	480	807
XR(L) 185-2	75	100	1026	760	1786	512	480	807
XR(L) 185-3-3	90	120	1154	800	1954	512	480	853
XR(L) 185-3-2	90	120	1154	800	1954	512	480	853
XR(L) 185-3	110	150	1184	950	2134	550	505	1120
XR(L) 185-4-4	110	150	1312	950	2262	550	505	1138
XR(L) 185-4-2	132	175	1312	950	2262	550	505	1208
XR(L) 185-4-1	132	175	1312	950	2262	550	505	1208
XR(L) 185-4	132	175	1312	950	2262	550	505	1208