GLOBAL PUMP SOLUTION DOOCH

60Hz


• XRL


• XQ-XRL


• NSQ-XRL

VERTICAL MULTISTAGE PUMP

XR(L) SERIES

dooch
두크펌프

펌프구조

XR, XRL 펌프는 비자흡식 입형 다단원심펌프입니다. 펌프의 흡입과 토출구경이 같고 일직선상에 위치하는 인라인 구조로 설계되어 배관설치 작업이 용이합니다. 펌프의 샤프트와 IEC표준품의 모터샤프트는 분할형 커플링으로 견고히 연결되어 있고 유지보수가 간편한 카트리지형 메카니컬 샤프트 씰이 모든 펌프에 장착되어 있습니다. 또한 두크의 펌프전용인버터(NSQ-Drive, XQ-Drive)를 장착, 회전수제어가 가능한 인버터펌프(NSQ-XRL, XQ-XRL)로 사용가능합니다.

펌프표시

XR(L) 32 – 4 – 2

- 2 : 작은 임펠라 단수
- 4 : 총 임펠라 단수
- 32 : 공칭유량(m^3/h)
- XR(L) : 펌프 타입 : 입형다단원심펌프
  XR : 펌프헤드, 펌프케이싱이 주철
  XRL : 펌프헤드, 펌프케이싱이 스테인레스 스틸

모터사양

IEC - 표준 농형 삼상전동기
모터형식 : TEFC
보호등급 : IP54~55
절연등급 : F등급
전원사양 : 7.5kW 이하 - 삼상 220/380V
11kW 이상 - 삼상 380V
(표준전압 변경은 옵션사항)

사용유체

취급액체는 음용수, 냉난방수, 응축수 등 고형입자나 섬유질 성분이 없고, 폭발의 위험이 없으며, 점도가 높지 않고 펌프재질에 화학적으로 손상을 주지 않는 액체여야 한다. 취급액체가 부식성이 강한 경우, 스테인레스 스틸에서는 부식을 방지하는 산화피막이 파괴될 가능성이 있으므로 주의해야 합니다.

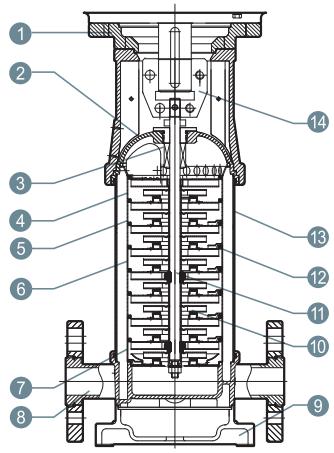


적용분야

급수 및 가압설비
세척시스템
수처리시스템
스프링클러
산업용 순환펌프
소방시스템
보일러 급수시스템
냉방 및 공조시스템
음료제조 설비
제조공정설비

제품 구조

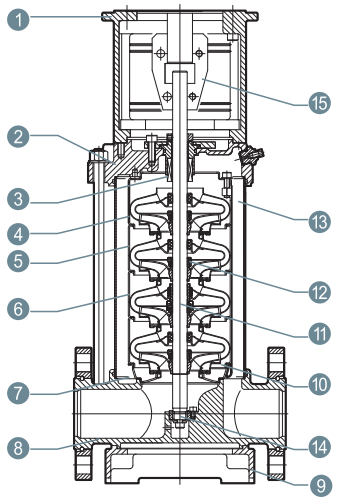
XRL1, 3, 5, 10, 15, 20



NO.	구성요소	재질	EN/DIN	AISI/ASTM
1	모터 브라켓	Cast iron	EN-GJL-200	ASTM25B
2	펌프헤드	Stainless steel	1,4301	AISI304
3	메카니컬 씰	Cartridge type		
4	탑디퓨져	Stainless steel	1,4301	AISI304
5	디퓨져	Stainless steel	1,4301	AISI304
6	서포트 디퓨져	Stainless steel	1,4301	AISI304
7	인듀서	Stainless steel	1,4301	AISI304
8	펌프케이싱	Stainless steel	1,4301	AISI304
9	베이스플레이트	Cast iron	EN-GJL-200	AISI304
10	임펠라	Stainless steel	1,4301	AISI304
11	샤프트	Stainless steel	1,4301/1,4401	AISI304
12	임펠라 슬리브	Stainless steel	1,4301	AISI304
13	실린더	Stainless steel	1,4301	AISI304
14	커플링	Carbon steel		
	고무부품	NBR or FKM		

* AISI316(Option)

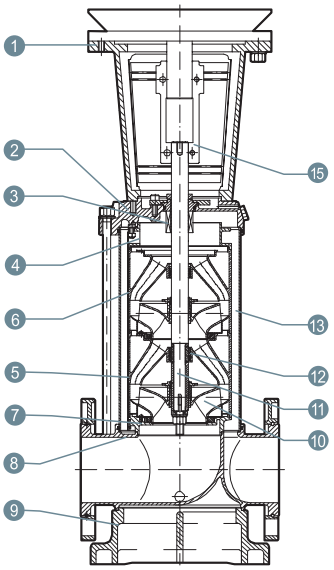
XR(L)32, 45, 64, 90



NO.	구성요소	재질	EN/DIN	AISI/ASTM
1	모터 브라켓	Cast iron	EN-GJL-200	ASTM25B
3	메카니컬 씰	Cartridge type		
4	탑 디퓨져	Stainless steel	1,4301	AISI304
5	서포트 디퓨져	Stainless steel	1,4301	AISI304
6	디퓨져	Stainless steel	1,4301	AISI304
7	인듀서	Stainless steel	1,4301	AISI304
9	베이스 플레이트	Cast iron	EN-GJL-200	ASTM25B
10	임펠라	Stainless steel	1,4301	AISI304
11	샤프트	Stainless steel	1,4301/1,4301/1,4401	AISI304
12	중간베어링	Tungsten carbide		
13	실린더	Stainless steel	1,4301	AISI304
14	하부베어링	Tungsten carbide		
15	커플링	Carbon steel		
	고무부품	NBR		
	XR (표준)			
2	펌프헤드	Cast iron	EN-GJL-200	ASTM25B
8	펌프케이싱	Cast iron	EN-GJL-200	ASTM25B
	XRL (OPTION)			
2	펌프헤드	Stainless steel	1,4301	AISI304
8	펌프케이싱	Stainless steel	1,4301	AISI304

* AISI316(Option)

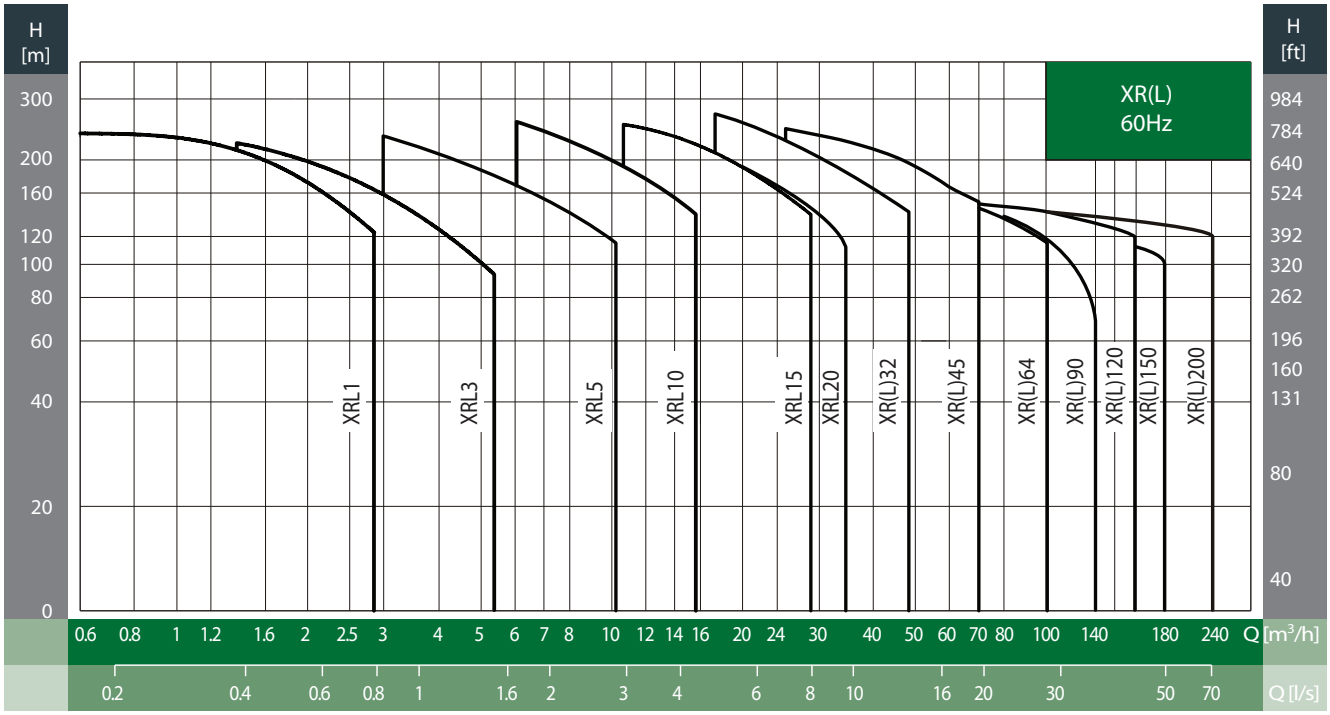
XR(L)120, 150, 200



NO.	구성요소	재질		AISI/ASTM
1	모터 브라켓	Cast iron	EN-GJL-200	ASTM25B
3	메카니컬 씰	Cartridge type		
4	탑디퓨져	Stainless steel	1,4301	AISI304
5	서포트 디퓨져	Stainless steel	1,4301	AISI304
6	디퓨져	Stainless steel	1,4301	AISI304
7	인듀서	Stainless steel	1,4301	AISI304
9	베이스 플레이트	Cast iron	EN-GJL-200	ASTM80-55-06
10	임펠라	Stainless steel	1,4301	AISI304
11	샤프트	Stainless steel	1,4301/1,4301/1,4401	AISI304
12	중간베어링	Tungsten carbide		
13	실린더	Stainless steel	1,4301	AISI304
15	커플링	Carbon steel		
	고무부품	NBR		
	XR (표준)			
2	펌프헤드	Cast iron	EN-GJL-200	ASTM80-55-06
8	펌프케이싱	Cast iron	EN-GJL-200	ASTM80-55-06
	XRL (OPTION)			
2	펌프헤드	Stainless steel	1,4301	AISI304
8	펌프케이싱	Stainless steel	1,4301	AISI304

* AISI316(Option)

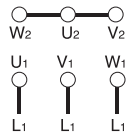
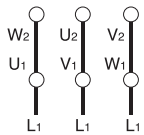
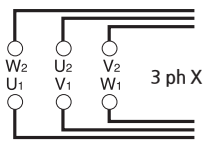
성능범위



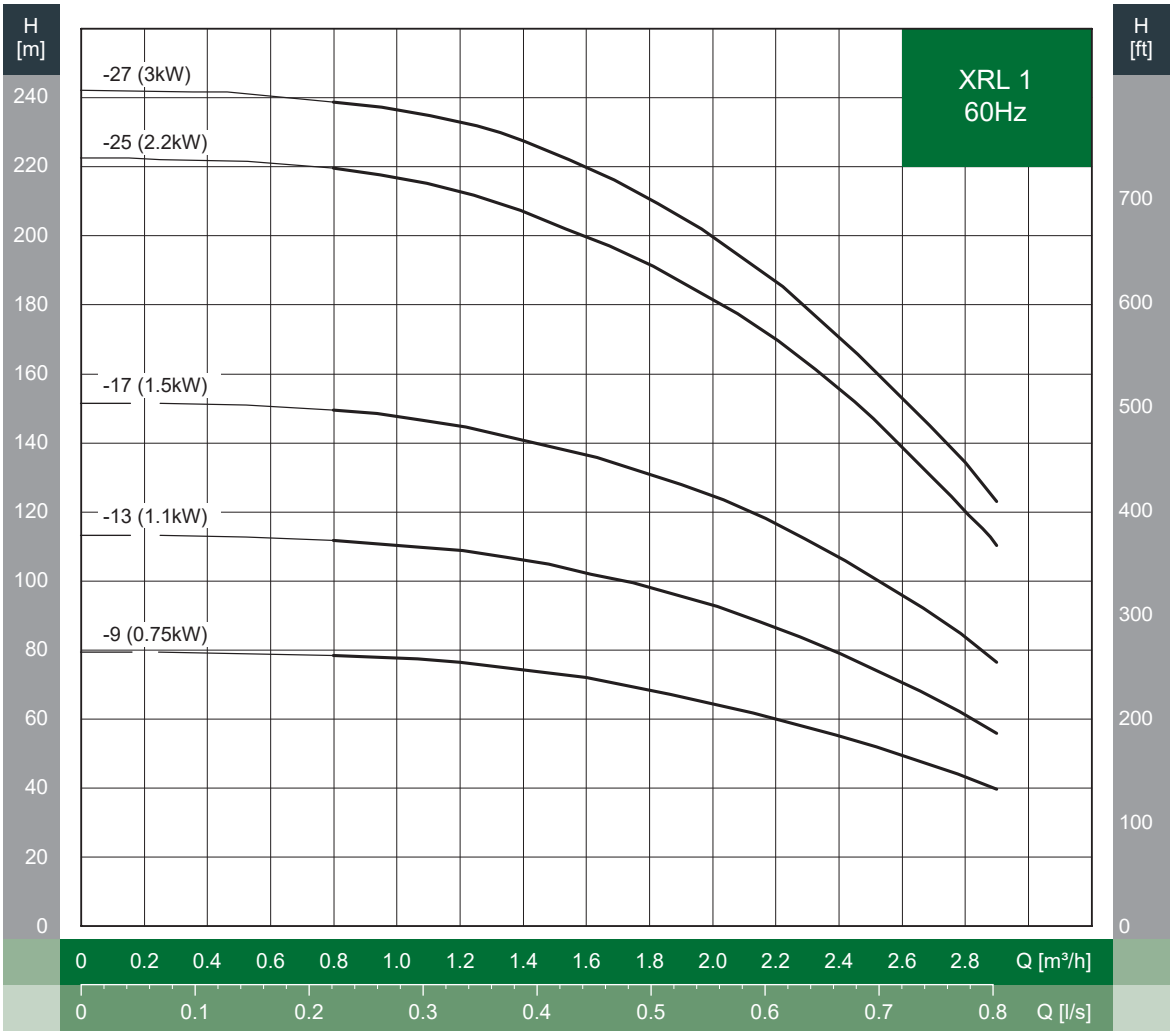
표준사양

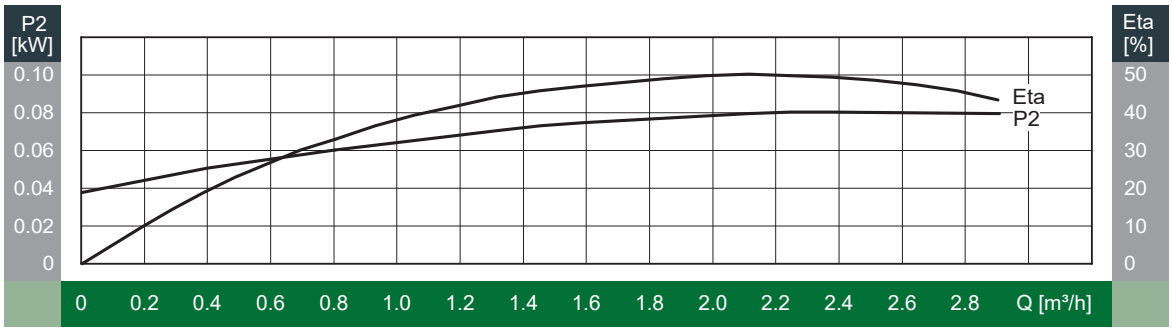
Descrption	XRL1	XRL3	XRL5	XRL10	XRL15	XRL20	XR(L)32	XR(L)45	XR(L)64	XR(L)90	XR(L)120	XR(L)150	XR(L)200
공칭유량 [m³/h]	1	3	5	10	15	20	32	45	64	90	120	150	200
유량범위 [m³/h]	0.8-2.9	1.4-5.4	3-10.2	6-15.6	10.5-28.5	12.5-35	18-48	26-70	36-102	54-144	60-160	80-180	100-240
최대운전압력 [bar]	24	24	24	25	24	21	25	24	17	14	15	14	15
모터동력 [kW]	0.75-3	0.55-4	0.55-7.5	1.5-11	3-18.5	4-18.5	5.5-30	5.5-45	7.5-45	11-45	18.5-75	15-75	30-110
허용유체온도 [℃]	-15~+120℃												
운전주위온도 [℃]	최대 40℃												
펌프타입	입형다단원심펌프												
XR							●	●	●	●	●	●	●
XRL	●	●	●	●	●	●	●	●	●	●	●	●	●
플랜지	DN25 /DN32	DN25 /DN32	DN25 /DN32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
내압	PN25	PN25	PN25	PN16-25	PN16-25	PN16-25	PN25-40	PN16-25	PN16	PN16	PN25-40	PN25-40	PN25-40

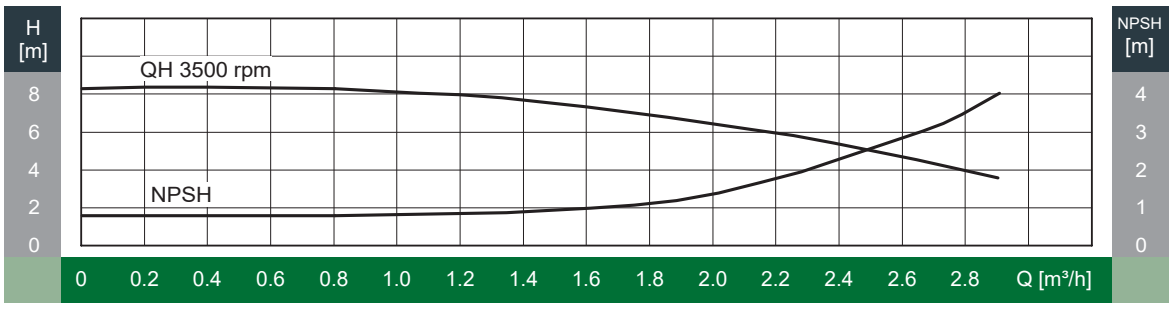
결선도 (두크 표준모터)

220/380V 겸용 모터일 경우 (~7.5kW)		380V 단독 모터일 경우 (11kW~)
Y결선	△ 결선	Y-△결선
 3 ph X 380V	 3 ph X 220V	 3 ph X 380V

성능곡선도

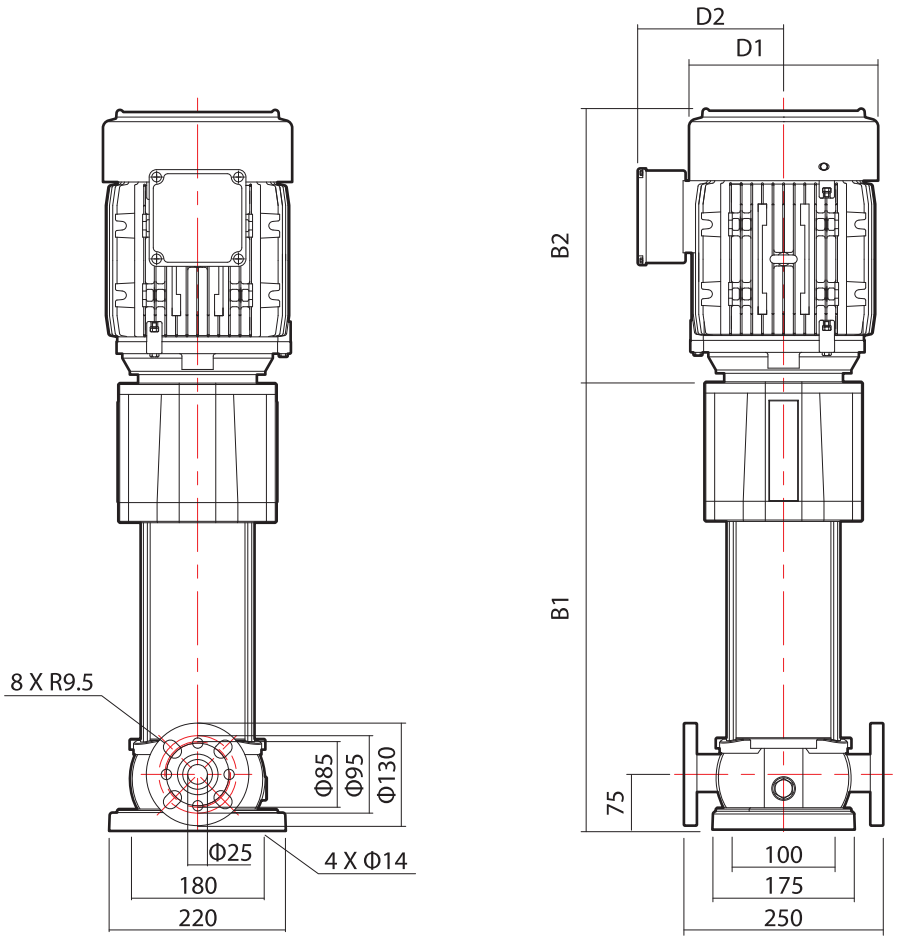






※ 상기 제품은 주문생산품이므로 본사 문의 바람.

외형도

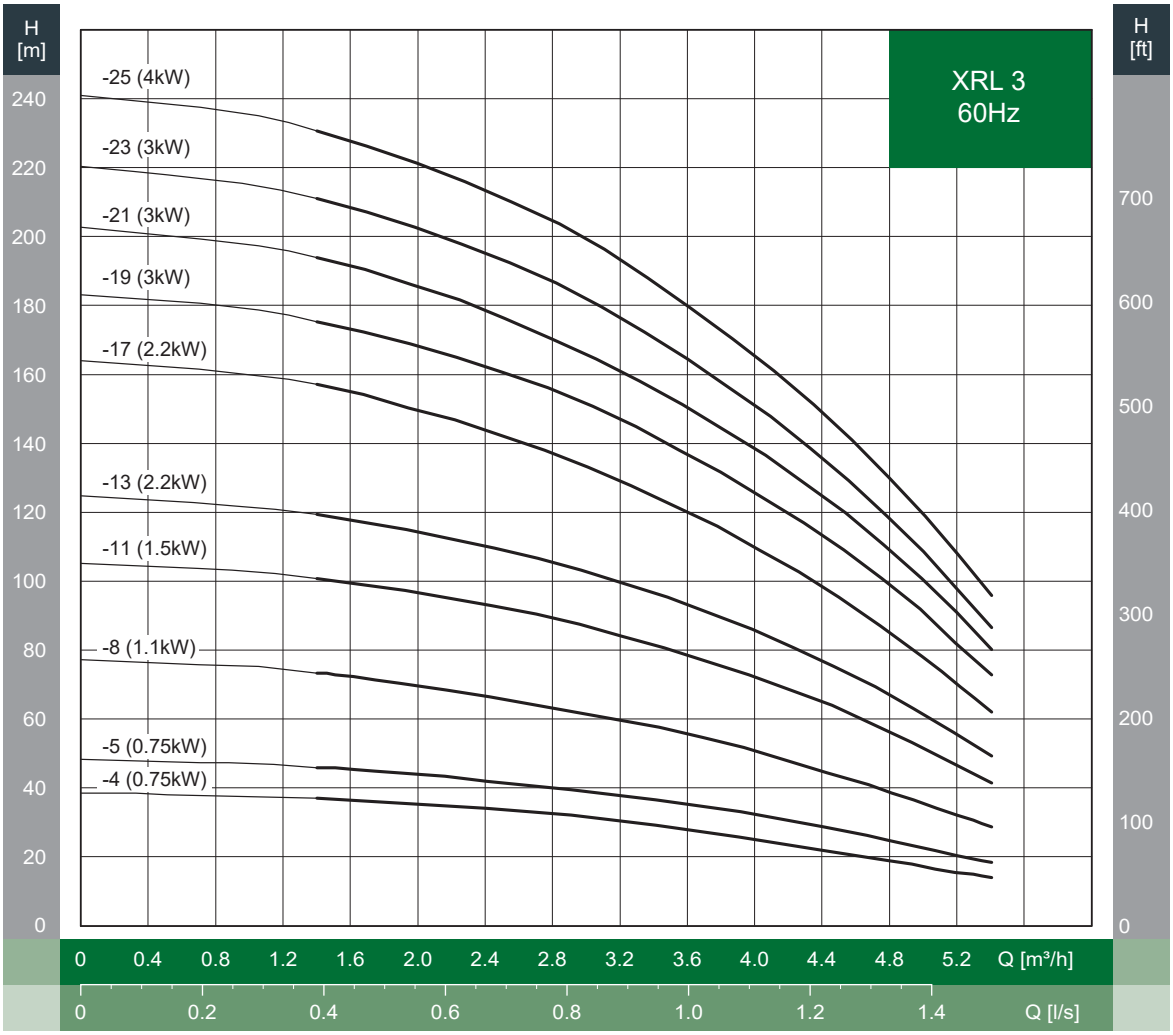


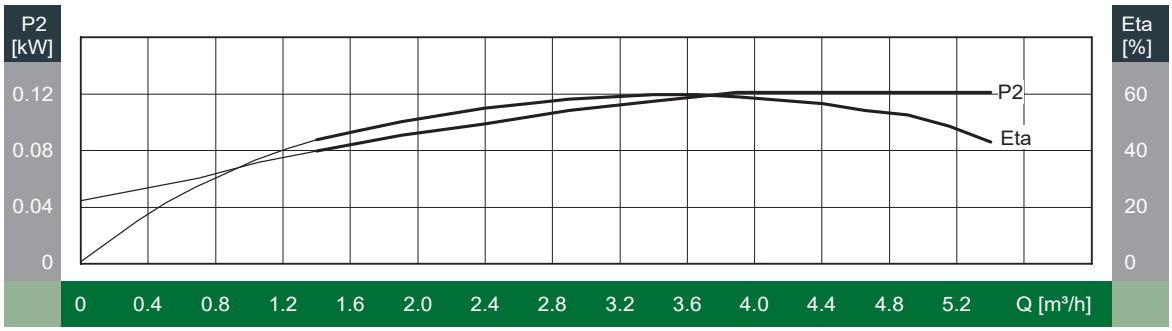
외형치수 및 중량

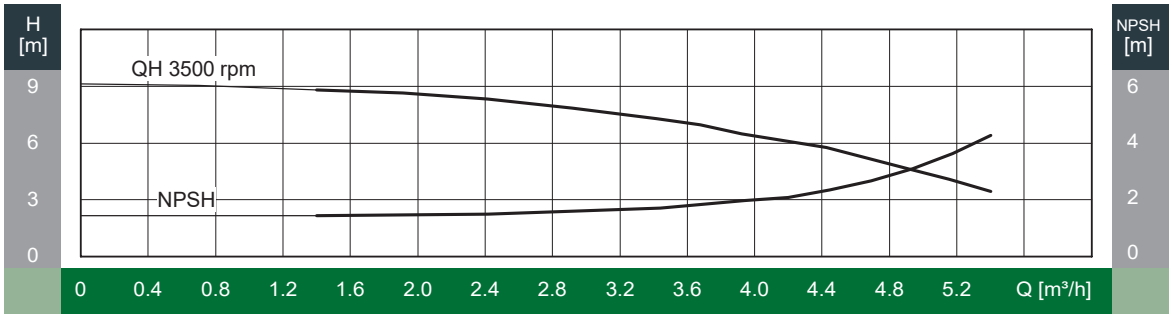
모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XRL 1-9	0.75	1	474.5	237	711.5	174	139	26
XRL 1-13	1.1	1.5	546.5	237	783.5	174	139	30
XRL 1-17	1.5	2	618.5	268	886.5	196	153	38
XRL 1-25	2.2	3	762.5	268	1030.5	196	153	42
XRL 1-27	3	4	798.5	312	1110.5	223	172	45

※ 상기 제품은 주문생산품이므로 본사 문의 바람.

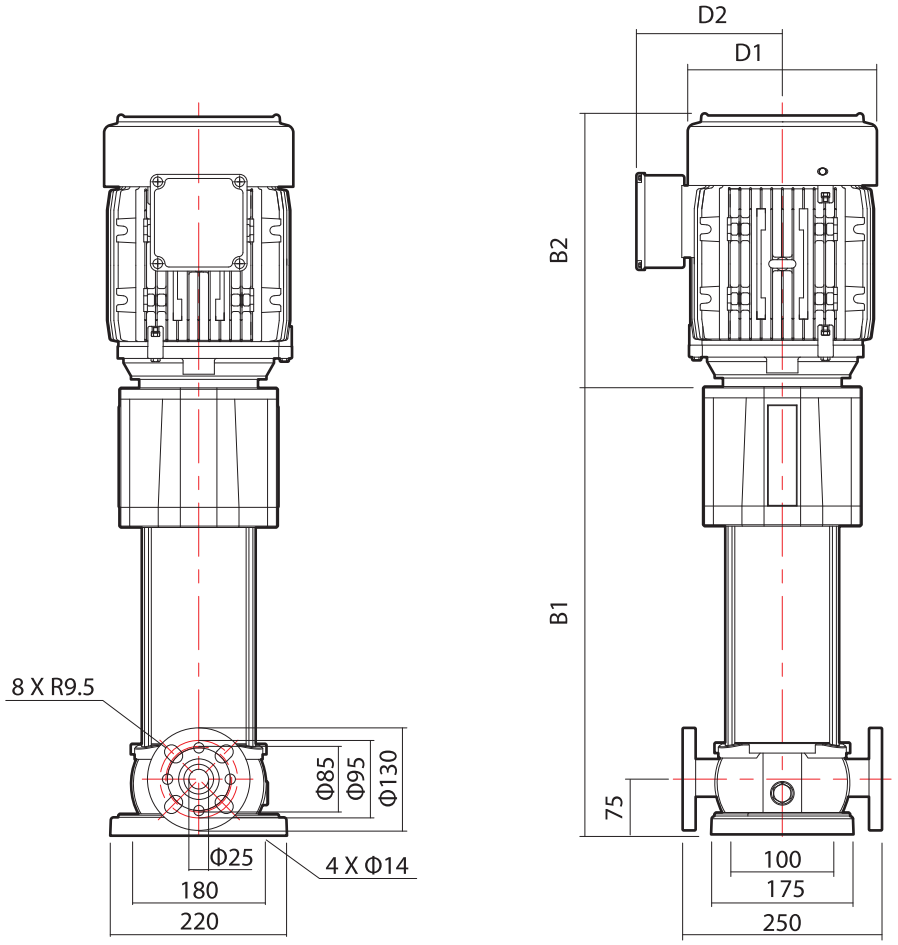
성능곡선도


H [m]
H [ft]
XRL 3
60Hz
-25 (4kW)
-23 (3kW)
-21 (3kW)
-19 (3kW)
-17 (2.2kW)
-13 (2.2kW)
-11 (1.5kW)
-8 (1.1kW)
-5 (0.75kW)
-4 (0.75kW)
240
220
200
180
160
140
120
100
80
60
40
20
0
700
600
500
400
300
200
100
0
0 0.4 0.8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 Q [m³/h]
0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 Q [l/s]


P2 [kW]
Eta [%]
P2
Eta
0.12
0.08
0.04
0
60
40
20
0
0 0.4 0.8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 Q [m³/h]


H [m]
NPSH [m]
QH 3500 rpm
NPSH
9
6
3
0
6
4
2
0
0 0.4 0.8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 Q [m³/h]

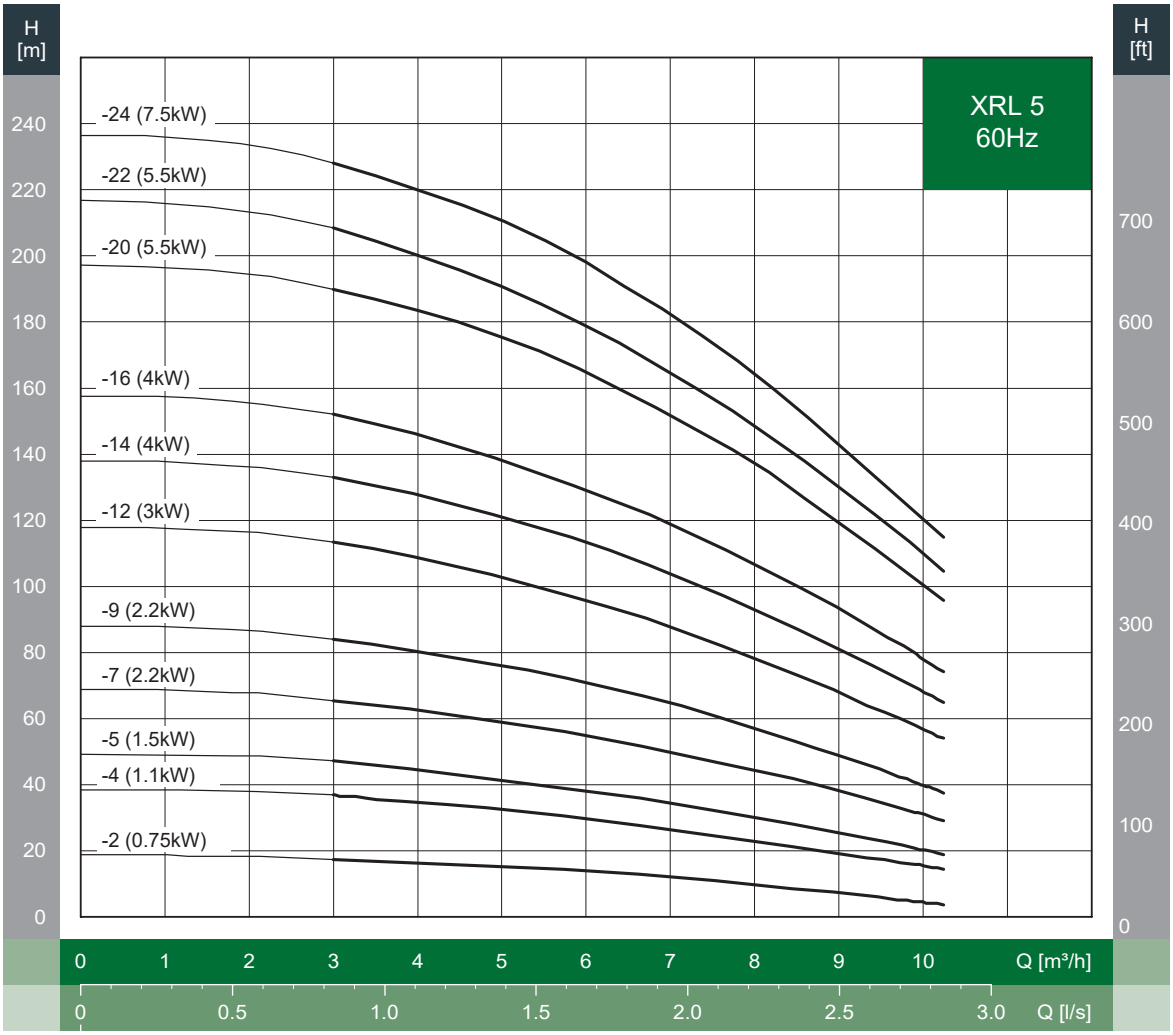
외형도

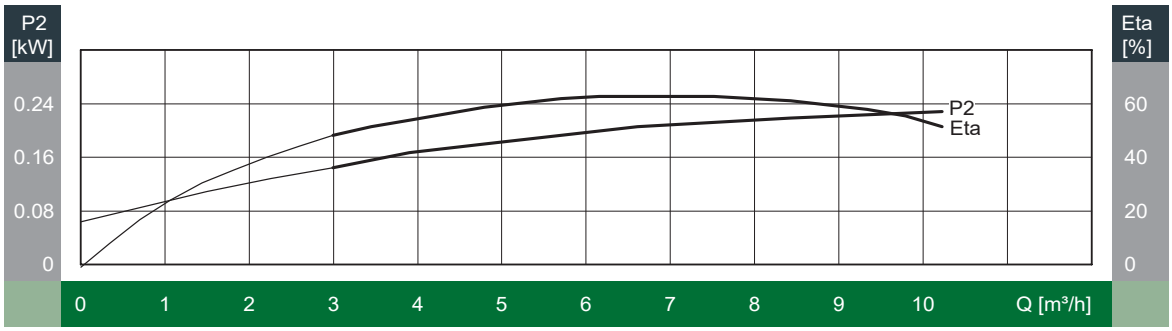


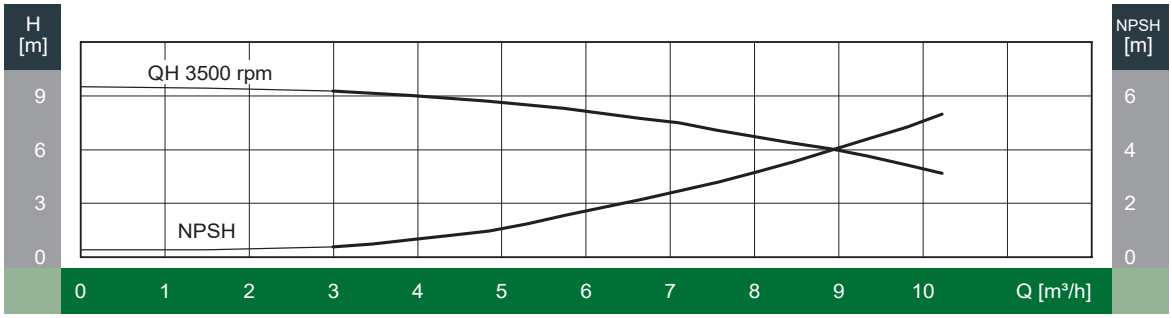
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XRL 3-4	0.75	1	384.5	237	621.5	174	127	22
XRL 3-5	0.75	1	402.5	237	639.5	174	139	24
XRL 3-8	1.1	1.5	456.5	237	693.5	174	139	28
XRL 3-11	1.5	2	510.5	268	778.5	196	153	35
XRL 3-13	2.2	3	546.5	268	814.5	196	153	37
XRL 3-17	2.2	3	618.5	268	886.5	196	153	38
XRL 3-19	3	4	654.5	312	966.5	223	172	46
XRL 3-21	3	4	690.5	312	1002.5	223	172	46
XRL 3-23	3	4	726.5	312	1038.5	223	172	47
XRL 3-25	4	5.5	762.5	312	1074.5	223	172	57

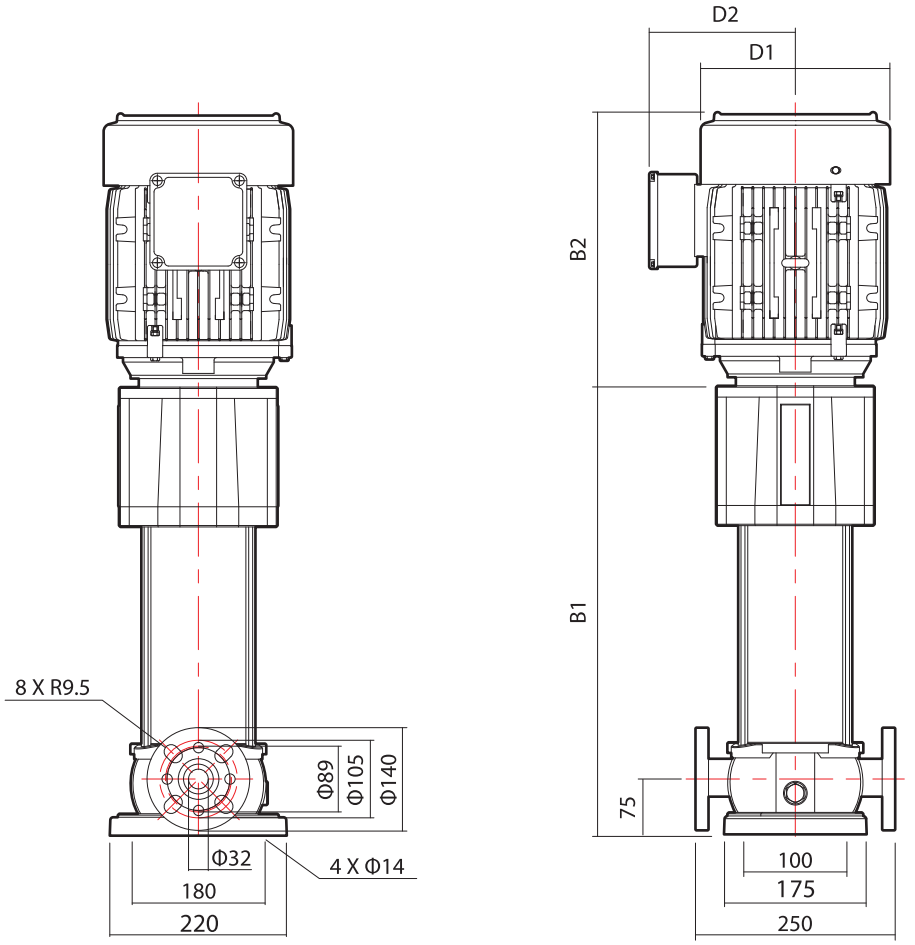
성능곡선도


H [m]
H [ft]
XRL 5
60Hz
-24 (7.5kW)
-22 (5.5kW)
-20 (5.5kW)
-16 (4kW)
-14 (4kW)
-12 (3kW)
-9 (2.2kW)
-7 (2.2kW)
-5 (1.5kW)
-4 (1.1kW)
-2 (0.75kW)
240
220
200
180
160
140
120
100
80
60
40
20
0
700
600
500
400
300
200
100
0
0 1 2 3 4 5 6 7 8 9 10 Q [m³/h]
0 0.5 1.0 1.5 2.0 2.5 3.0 Q [l/s]


P2 [kW]
Eta [%]
0.24
0.16
0.08
0
60
40
20
0
P2
Eta
0 1 2 3 4 5 6 7 8 9 10 Q [m³/h]


H [m]
NPSH [m]
9
6
3
0
6
4
2
0
QH 3500 rpm
NPSH
0 1 2 3 4 5 6 7 8 9 10 Q [m³/h]

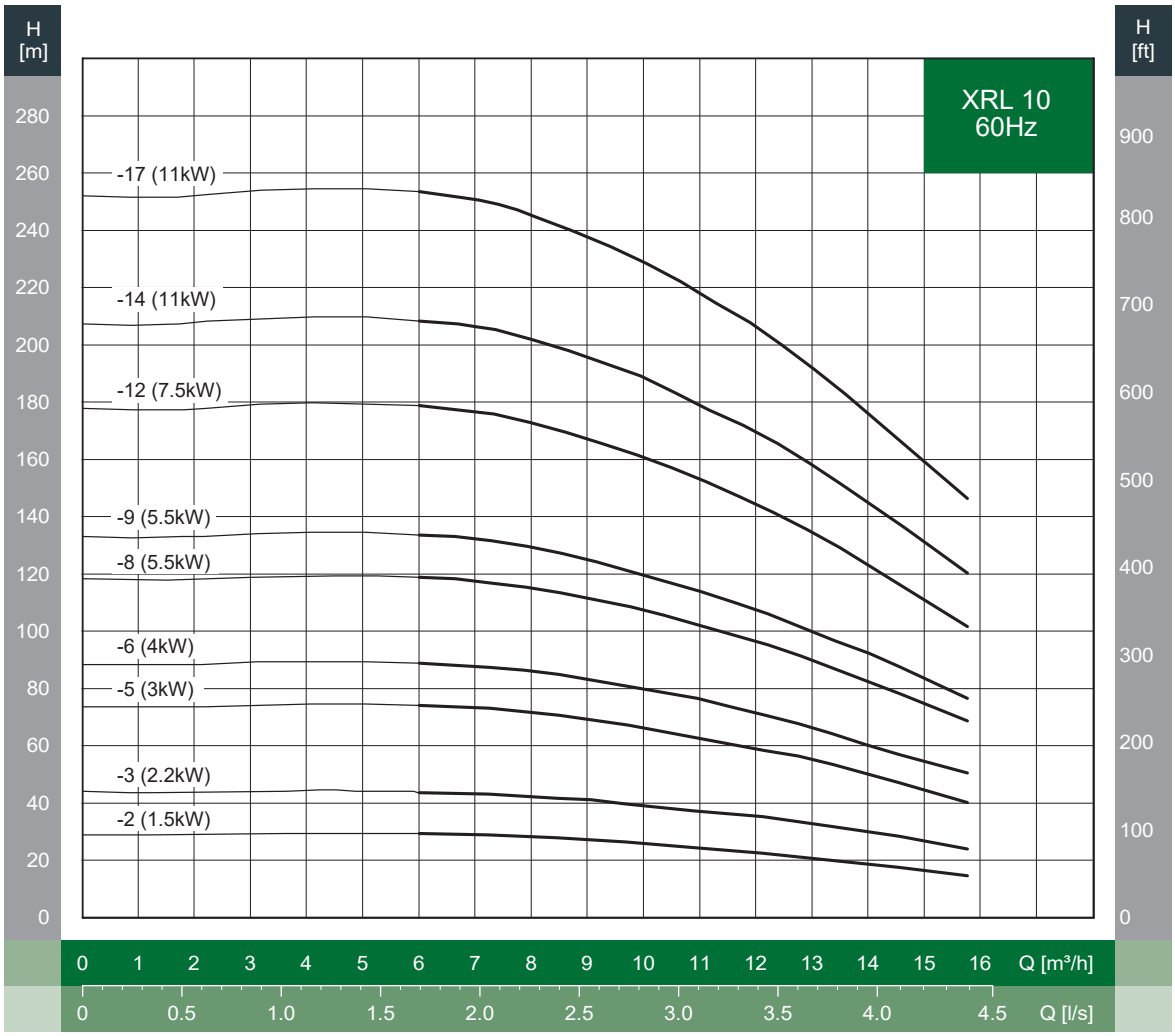
외형도

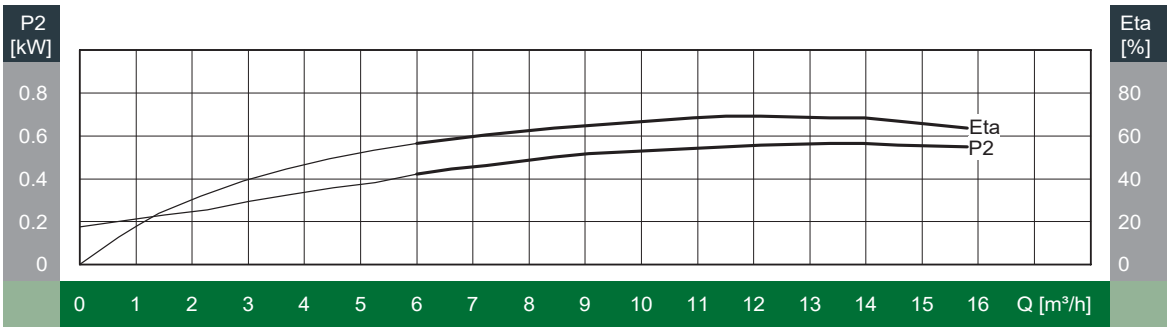


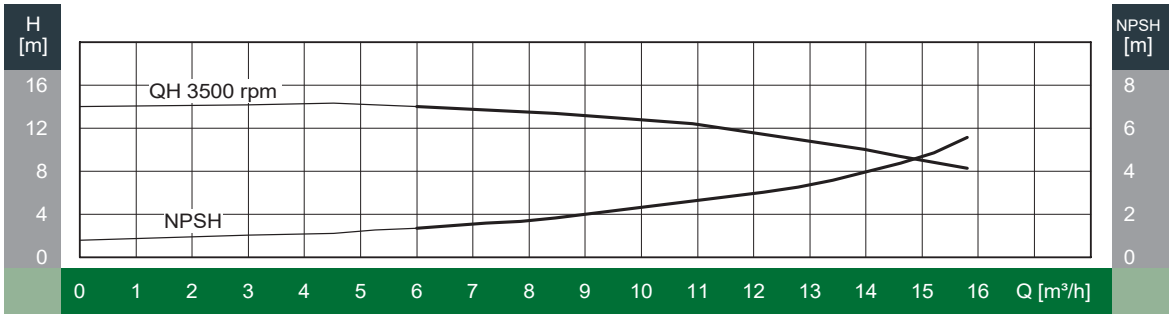
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XRL 5-2	0.75	1	366.5	237	603.5	174	139	21
XRL 5-4	1.1	1.5	420.5	237	657.5	174	139	27
XRL 5-5	1.5	2	447.5	268	715.5	196	153	34
XRL 5-7	2.2	3	501.5	268	769.5	196	153	35
XRL 5-9	2.2	3	555.5	268	823.5	196	153	37
XRL 5-12	3	4	636.5	312	948.5	223	172	45
XRL 5-14	4	5.5	690.5	312	1002.5	223	172	55
XRL 5-16	4	5.5	744.5	312	1056.5	223	172	56
XRL 5-20	5.5	7.5	882.5	379	1261.5	275	200	72
XRL 5-22	5.5	7.5	936.5	379	1315.5	275	200	73
XRL 5-24	7.5	10	990.5	379	1369.5	275	200	86

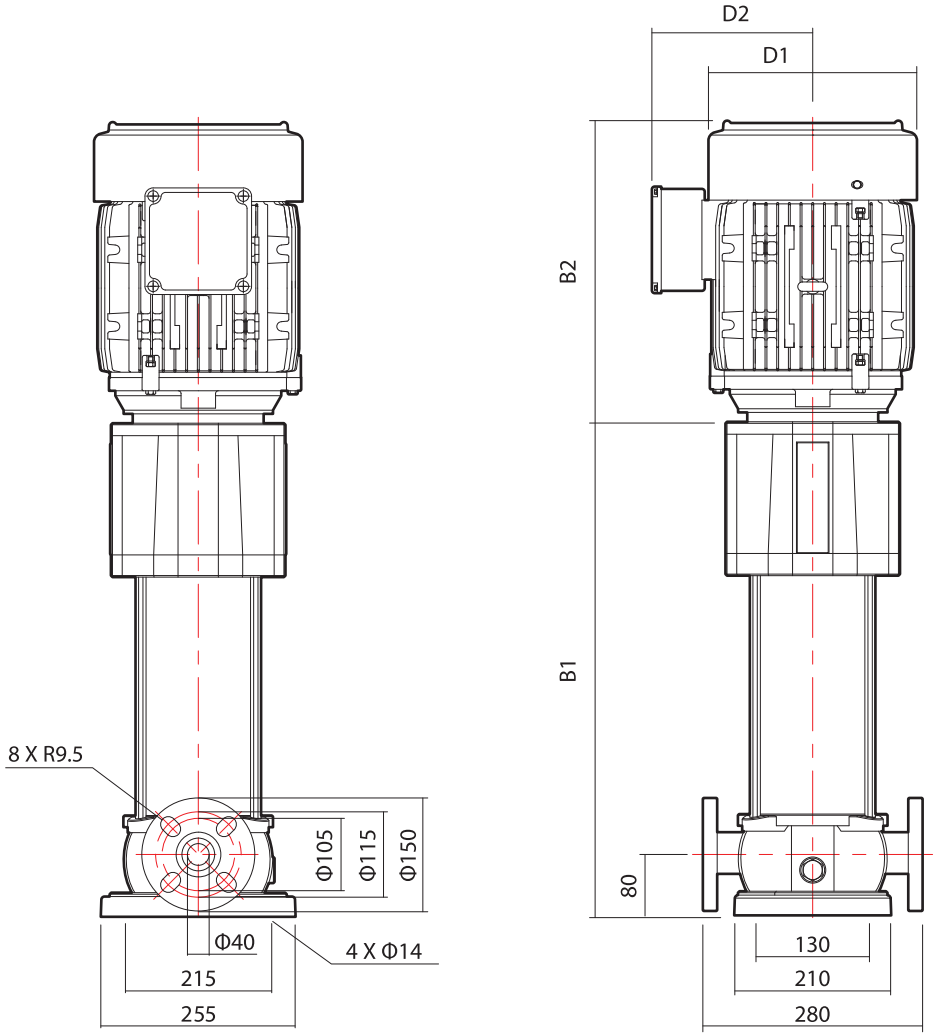
성능곡선도


H [m]
H [ft]
XRL 10
60Hz
-17 (11kW)
-14 (11kW)
-12 (7.5kW)
-9 (5.5kW)
-8 (5.5kW)
-6 (4kW)
-5 (3kW)
-3 (2.2kW)
-2 (1.5kW)
Q [m³/h]
Q [l/s]


P2 [kW]
Eta [%]
Eta
P2
Q [m³/h]


H [m]
NPSH [m]
QH 3500 rpm
NPSH
Q [m³/h]

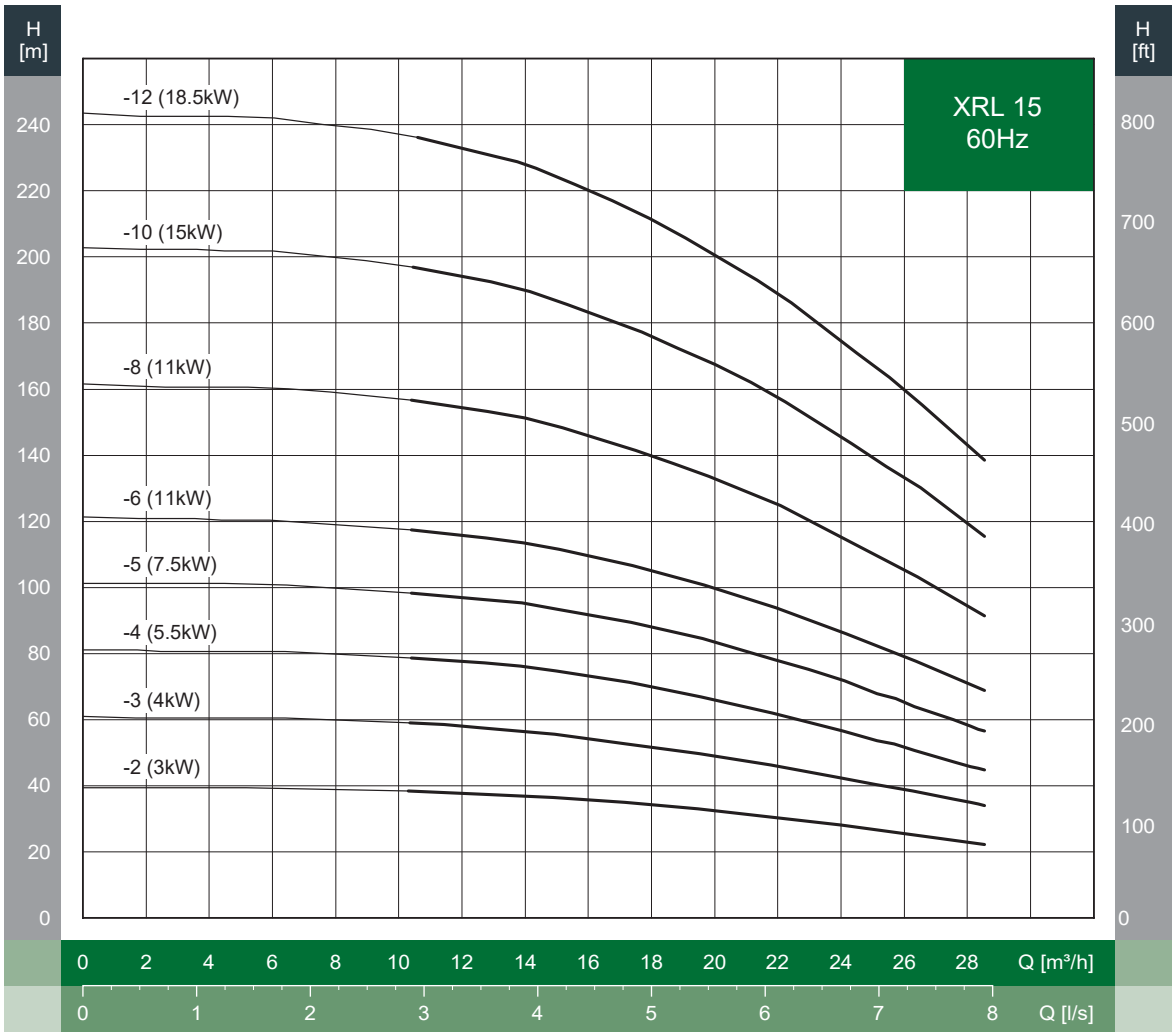
외형도

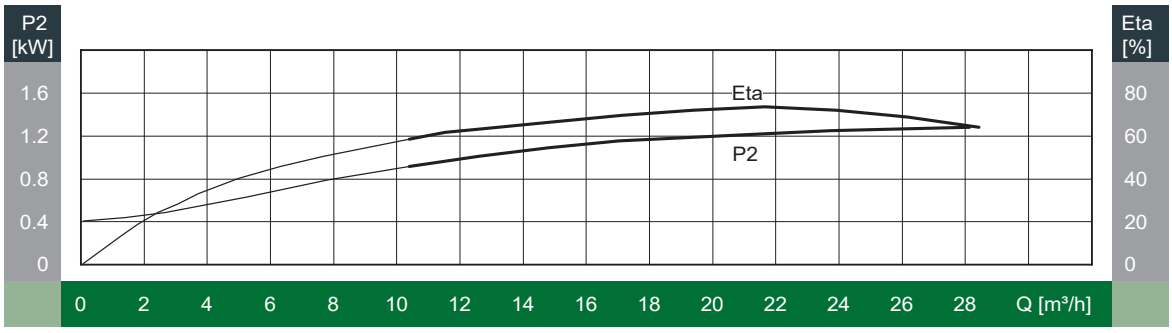


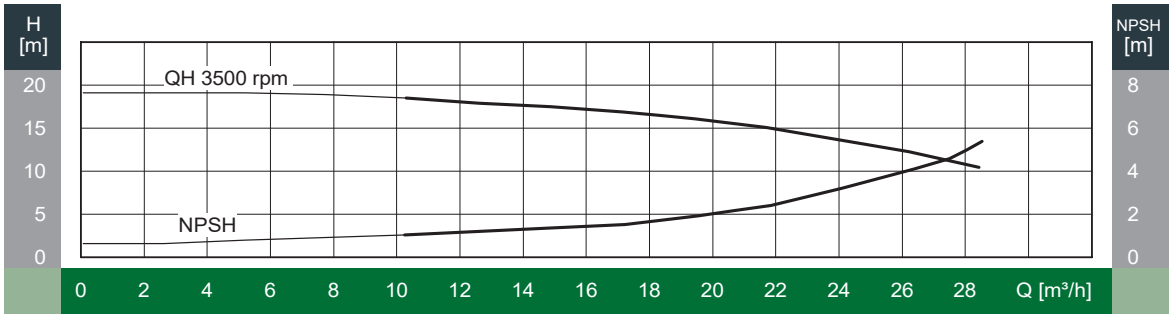
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XRL 10-2	1.5	2	433	268	701	196	153	44
XRL 10-3	2.2	3	463	268	731	196	153	45
XRL 10-5	3	4	523	312	835	223	172	54
XRL 10-6	4	5.5	553	312	865	223	172	64
XRL 10-8	5.5	7.5	633	379	1012	275	200	86
XRL 10-9	5.5	7.5	663	379	1012	275	200	87
XRL 10-12	7.5	10	753	379	1132	275	200	101
XRL 10-14	11	15	843	486	1329	326	288	144
XRL 10-17	11	15	933	486	1419	326	288	148

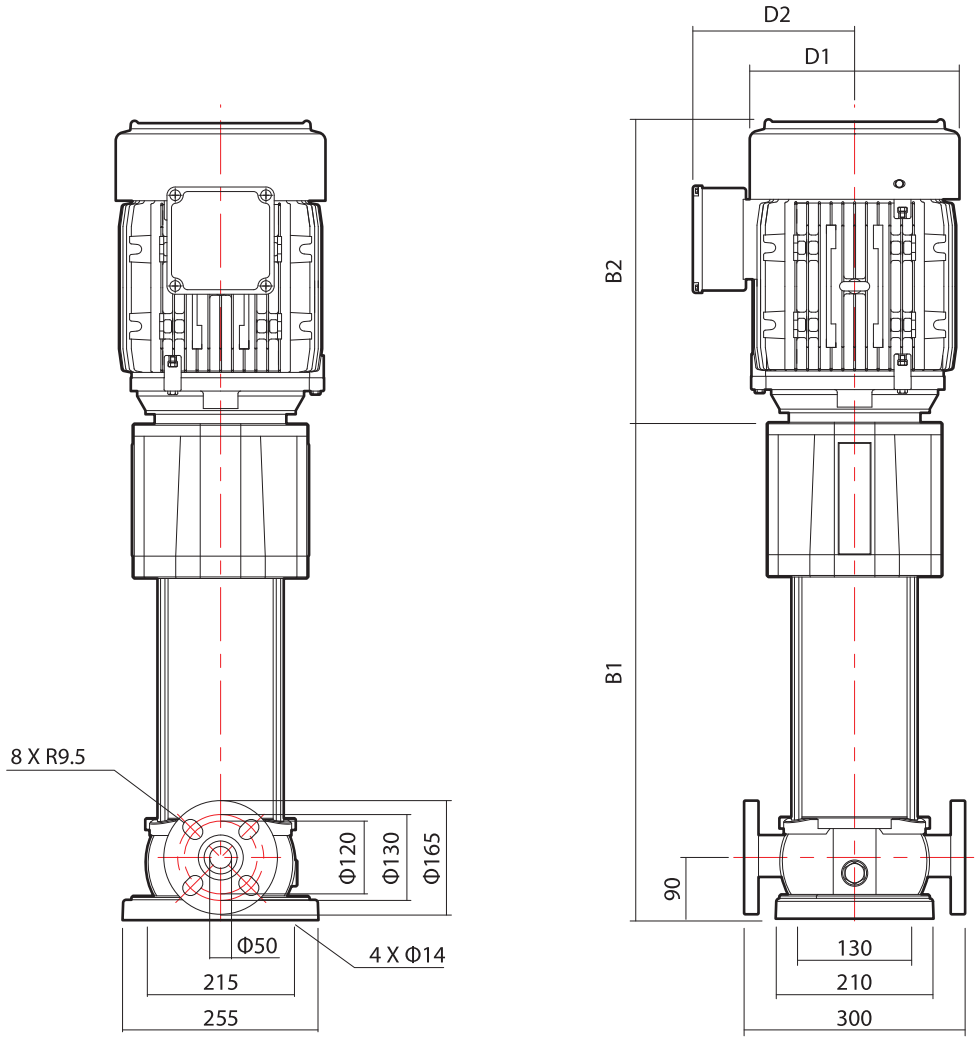
성능곡선도


H [m]
H [ft]
XRL 15
60Hz
-12 (18.5kW)
-10 (15kW)
-8 (11kW)
-6 (11kW)
-5 (7.5kW)
-4 (5.5kW)
-3 (4kW)
-2 (3kW)
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 Q [m³/h]
0 1 2 3 4 5 6 7 8 Q [l/s]


P2 [kW]
Eta [%]
Eta
P2
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 Q [m³/h]


H [m]
NPSH [m]
QH 3500 rpm
NPSH
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 Q [m³/h]

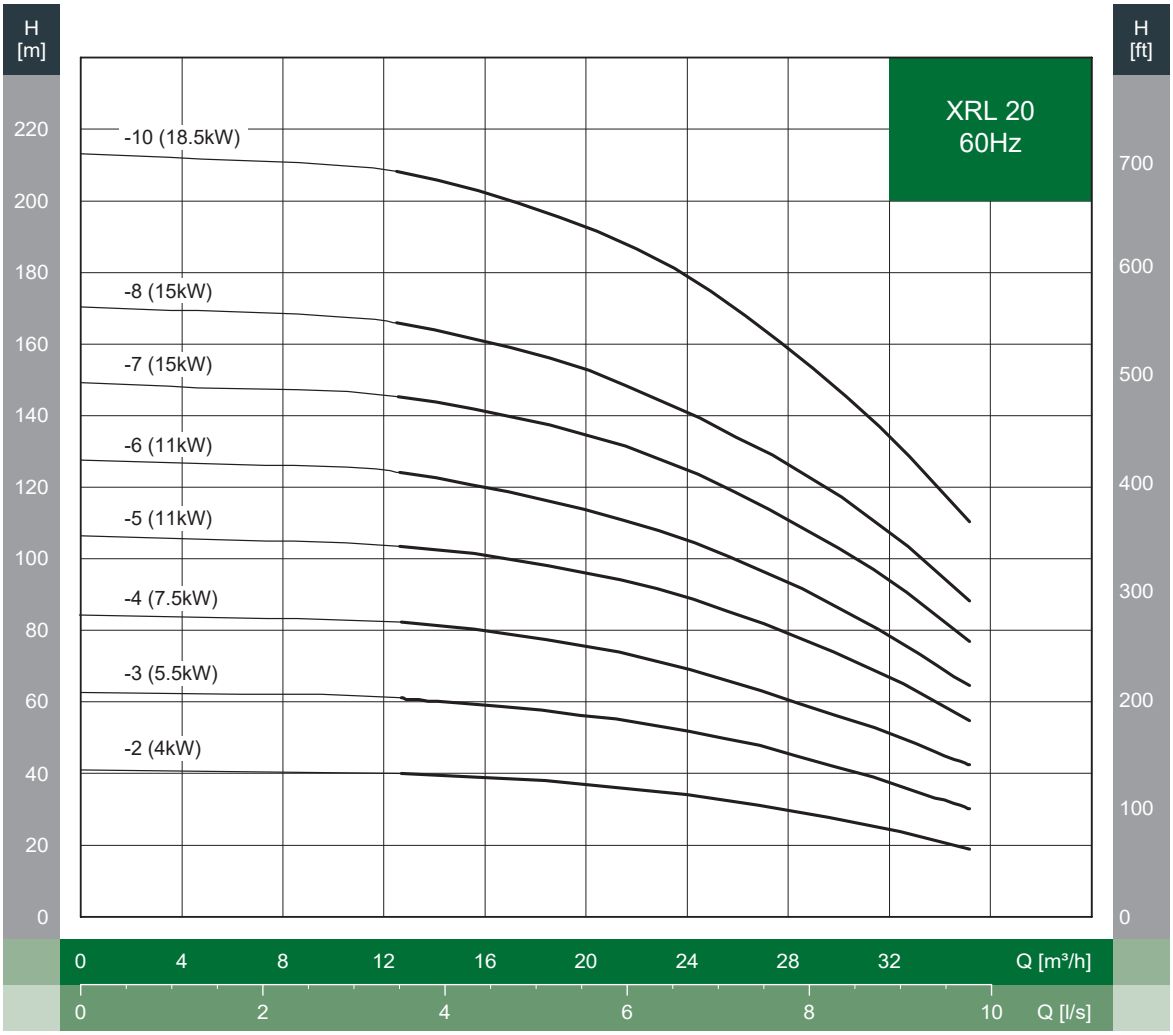
외형도

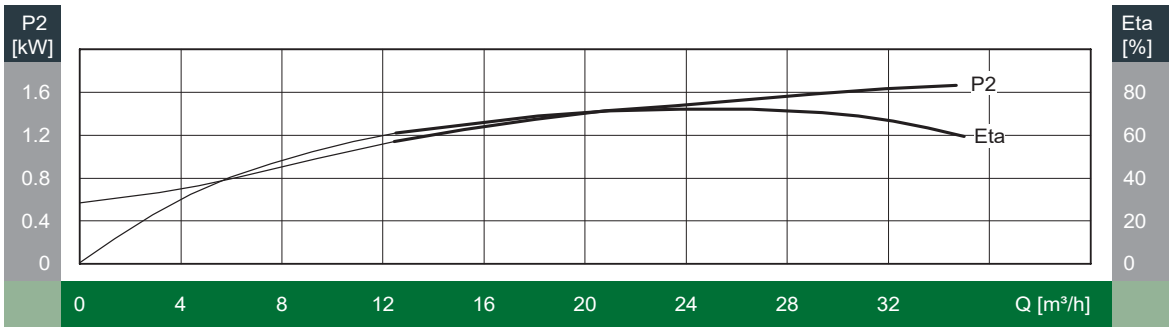


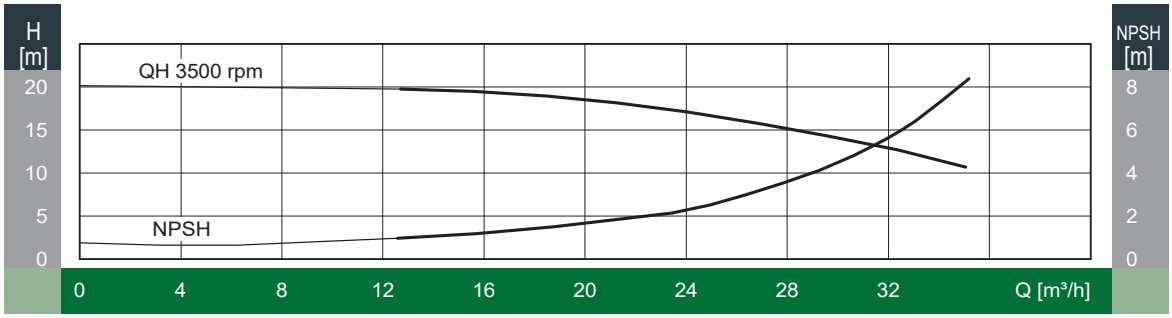
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XRL 15-2	3	4	478	312	790	223	172	53
XRL 15-3	4	5.5	523	312	835	223	172	64
XRL 15-4	5.5	7.5	588	379	967	275	200	86
XRL 15-5	7.5	10	633	379	1012	275	200	99
XRL 15-6	11	15	708	486	1194	326	288	141
XRL 15-8	11	15	798	486	1284	326	288	144
XRL 15-10	15	20	888	486	1374	326	288	160
XRL 15-12	18.5	25	978	530	1508	326	288	176

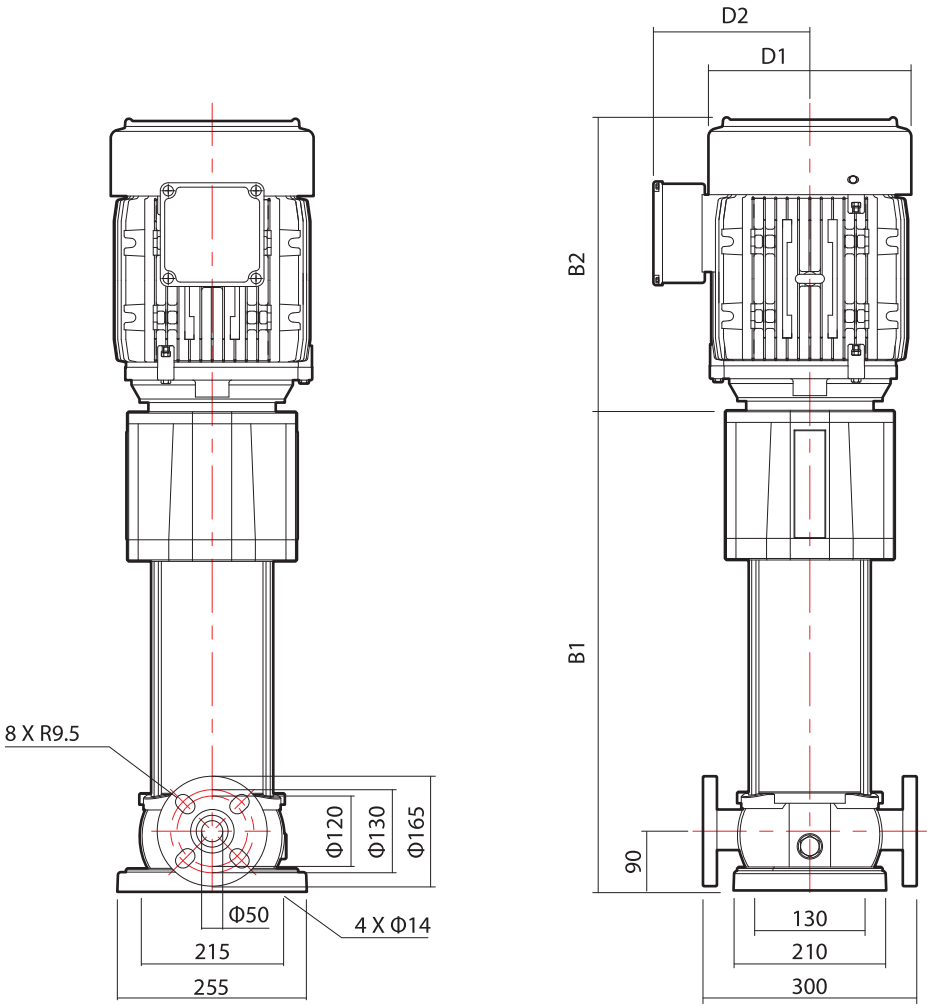
성능곡선도


H [m]
H [ft]
XRL 20
60Hz
-10 (18.5kW)
-8 (15kW)
-7 (15kW)
-6 (11kW)
-5 (11kW)
-4 (7.5kW)
-3 (5.5kW)
-2 (4kW)
220
200
180
160
140
120
100
80
60
40
20
0
700
600
500
400
300
200
100
0
0 4 8 12 16 20 24 28 32 Q [m³/h]
0 2 4 6 8 10 Q [l/s]


P2 [kW]
Eta [%]
P2
Eta
1.6
1.2
0.8
0.4
0
80
60
40
20
0
0 4 8 12 16 20 24 28 32 Q [m³/h]


H [m]
NPSH [m]
QH 3500 rpm
NPSH
20
15
10
5
0
8
6
4
2
0
0 4 8 12 16 20 24 28 32 Q [m³/h]

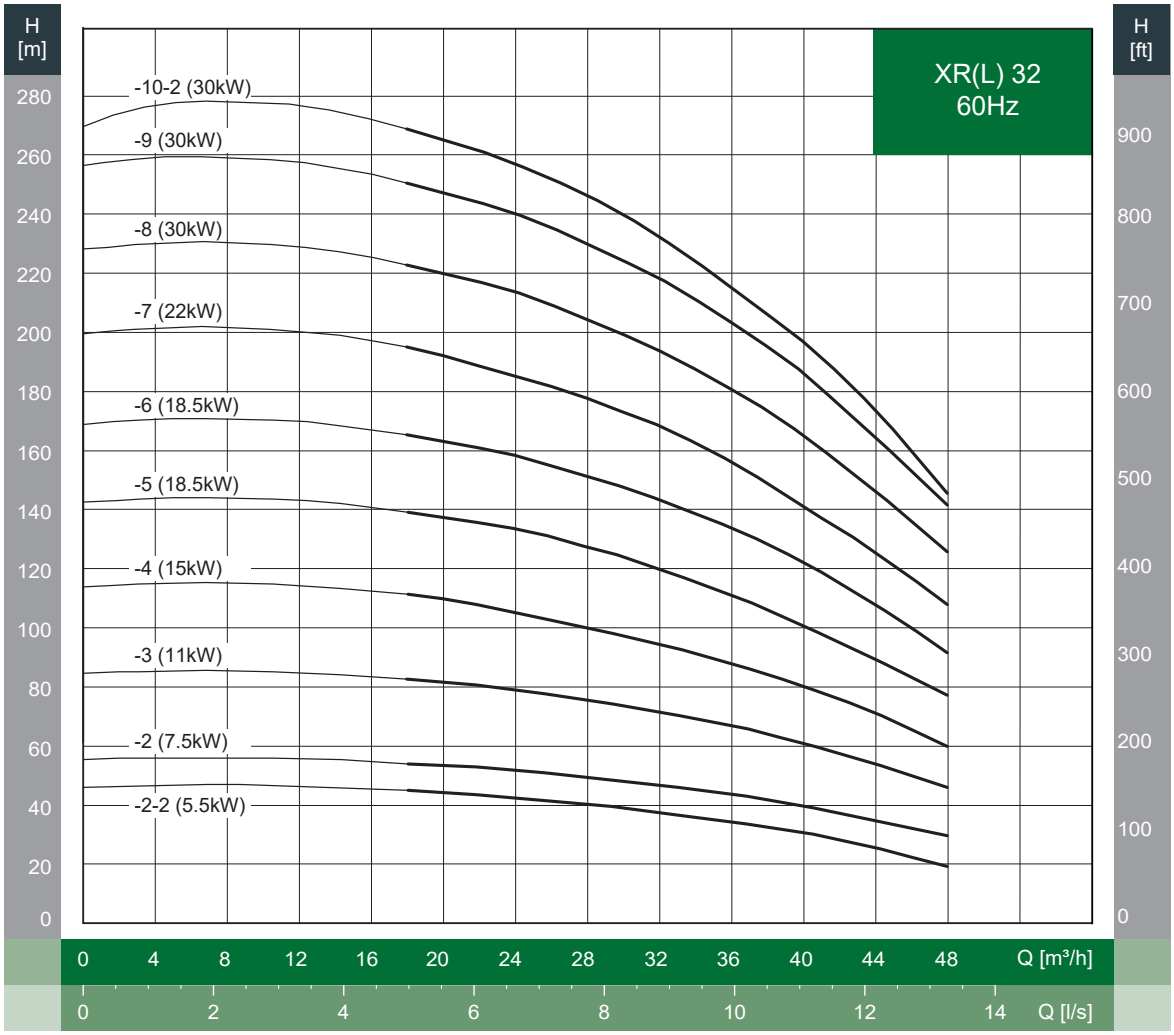
외형도

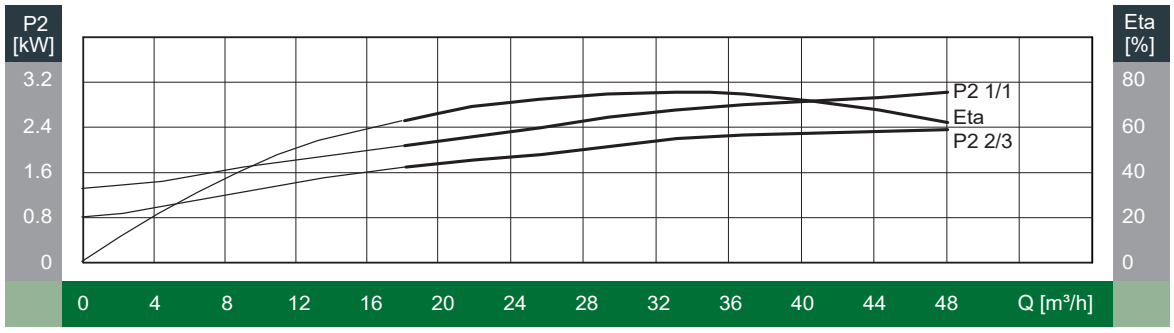


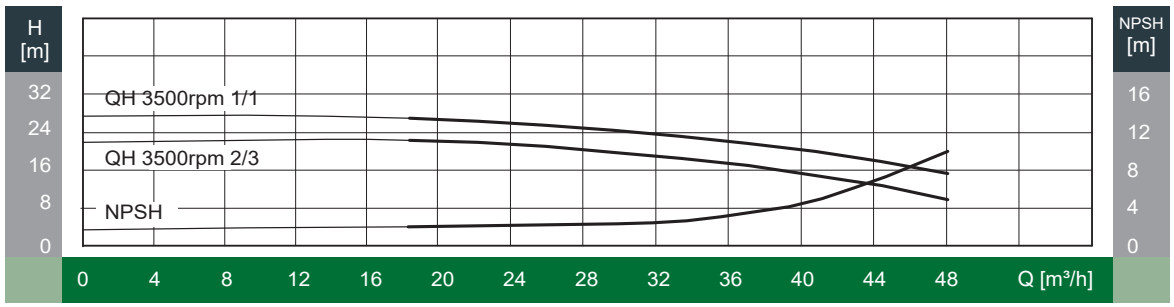
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XRL 20-2	4	5.5	478	312	790	223	172	62
XRL 20-3	5.5	7.5	543	379	922	275	200	84
XRL 20-4	7.5	10	588	379	967	275	200	98
XRL 20-5	11	15	663	486	1149	326	288	139
XRL 20-6	11	15	708	486	1194	326	288	141
XRL 20-7	15	20	753	486	1239	326	288	155
XRL 20-8	15	20	798	486	1284	326	288	156
XRL 20-10	18.5	25	888	530	1418	326	288	173

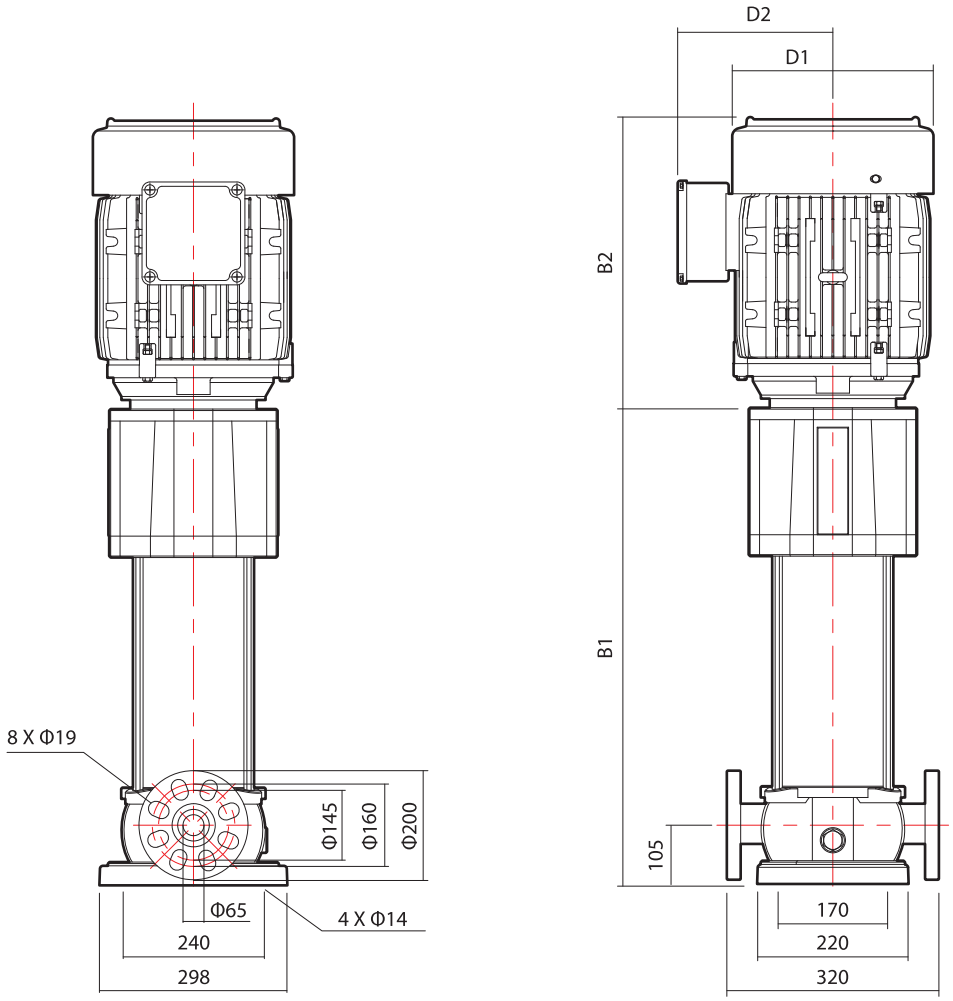
성능곡선도


H [m]
H [ft]
XR(L) 32
60Hz
-10-2 (30kW)
-9 (30kW)
-8 (30kW)
-7 (22kW)
-6 (18.5kW)
-5 (18.5kW)
-4 (15kW)
-3 (11kW)
-2 (7.5kW)
-2-2 (5.5kW)
280 260 240 220 200 180 160 140 120 100 80 60 40 20 0
900 800 700 600 500 400 300 200 100 0
0 4 8 12 16 20 24 28 32 36 40 44 48 Q [m³/h]
0 2 4 6 8 10 12 14 Q [l/s]


P2 [kW]
Eta [%]
P2 1/1
Eta
P2 2/3
3.2 2.4 1.6 0.8 0
80 60 40 20 0
0 4 8 12 16 20 24 28 32 36 40 44 48 Q [m³/h]


H [m]
NPSH [m]
QH 3500rpm 1/1
QH 3500rpm 2/3
NPSH
32 24 16 8 0
16 12 8 4 0
0 4 8 12 16 20 24 28 32 36 40 44 48 Q [m³/h]

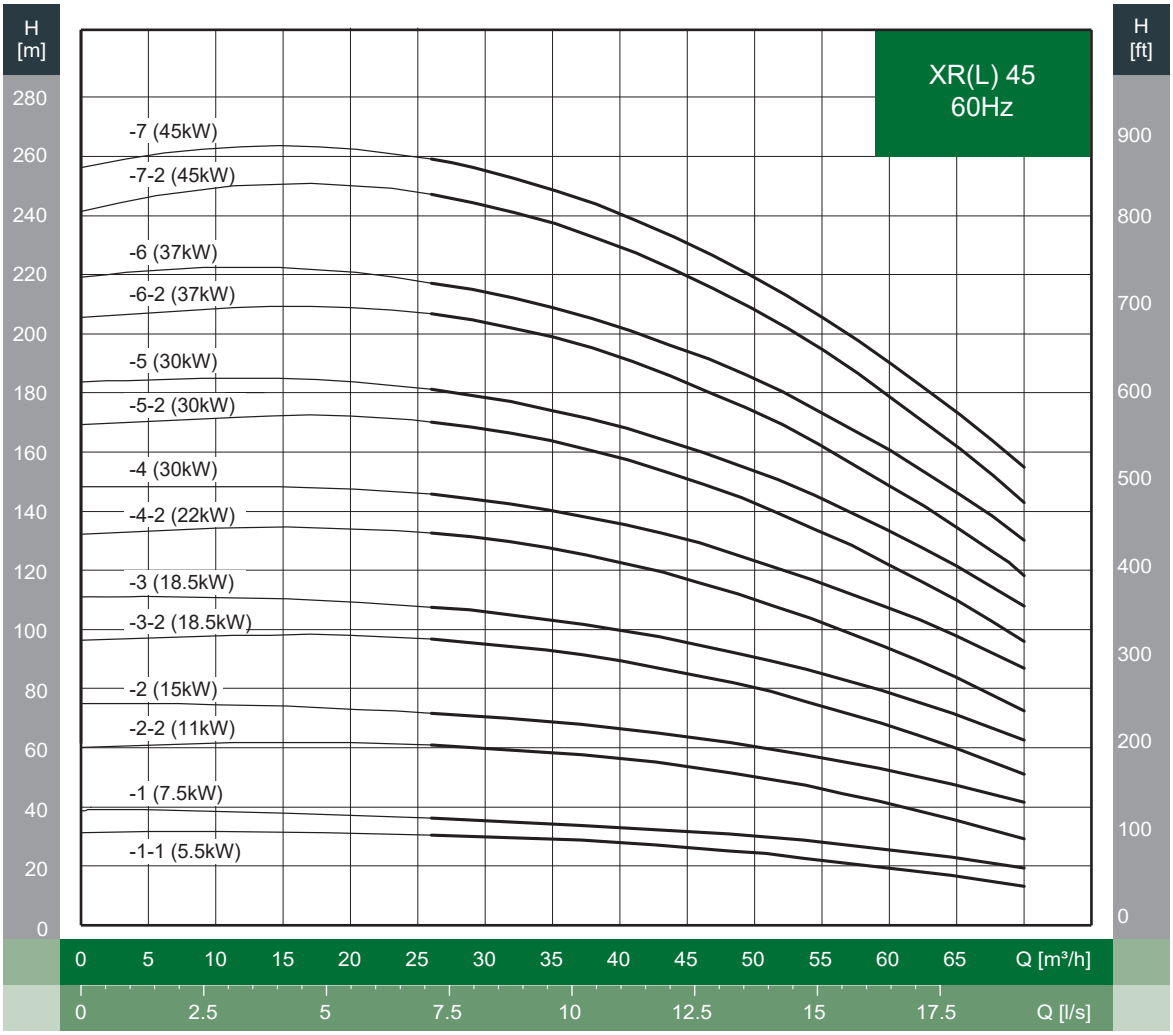
외형도

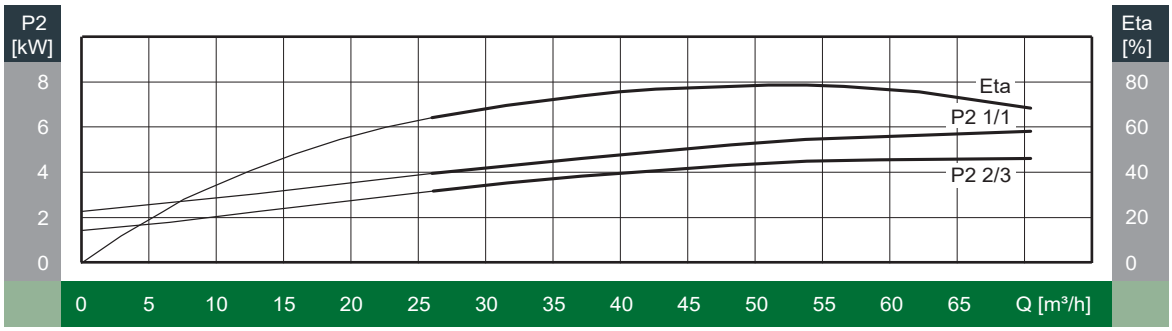


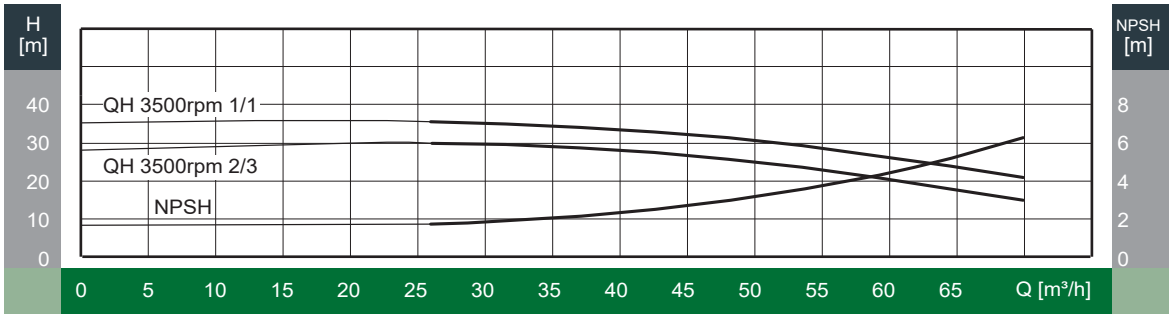
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 32-2-2	5.5	7.5	574.5	379	953.5	275	200	95
XR(L) 32-2	7.5	10	574.5	379	953.5	275	200	107
XR(L) 32-3	11	15	754.5	486	1240.5	326	288	154
XR(L) 32-4	15	20	824.5	486	1310.5	326	288	170
XR(L) 32-5	18.5	25	894.5	530	1424.5	326	288	186
XR(L) 32-6	18.5	25	964.5	530	1494.5	326	288	189
XR(L) 32-7	22	30	1034.5	549	1583.5	360	301	206
XR(L) 32-8	30	40	1104.5	587	1691.5	360	301	314
XR(L) 32-9	30	40	1174.5	587	1761.5	360	301	318
XR(L) 32-10-2	30	40	1244.5	587	1831.5	360	301	321

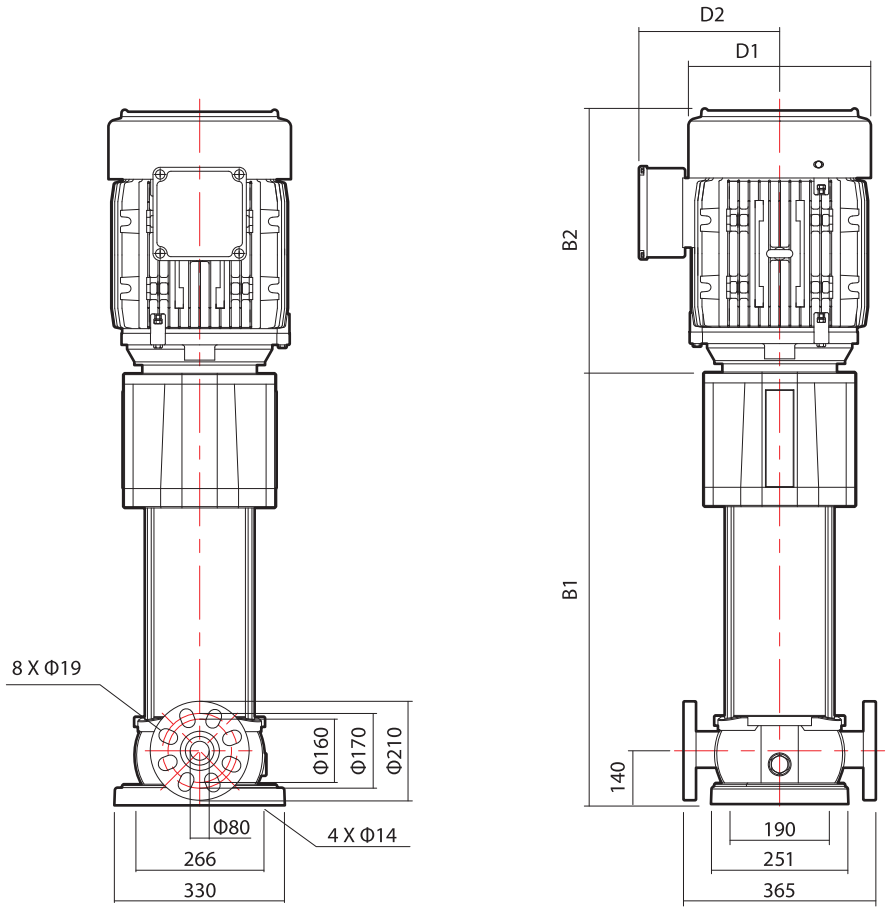
성능곡선도


H [m]
H [ft]
XR(L) 45
60Hz
-7 (45kW)
-7-2 (45kW)
-6 (37kW)
-6-2 (37kW)
-5 (30kW)
-5-2 (30kW)
-4 (30kW)
-4-2 (22kW)
-3 (18.5kW)
-3-2 (18.5kW)
-2 (15kW)
-2-2 (11kW)
-1 (7.5kW)
-1-1 (5.5kW)
Q [m³/h]
Q [l/s]


P2 [kW]
Eta [%]
Eta
P2 1/1
P2 2/3
Q [m³/h]


H [m]
NPSH [m]
QH 3500rpm 1/1
QH 3500rpm 2/3
NPSH
Q [m³/h]

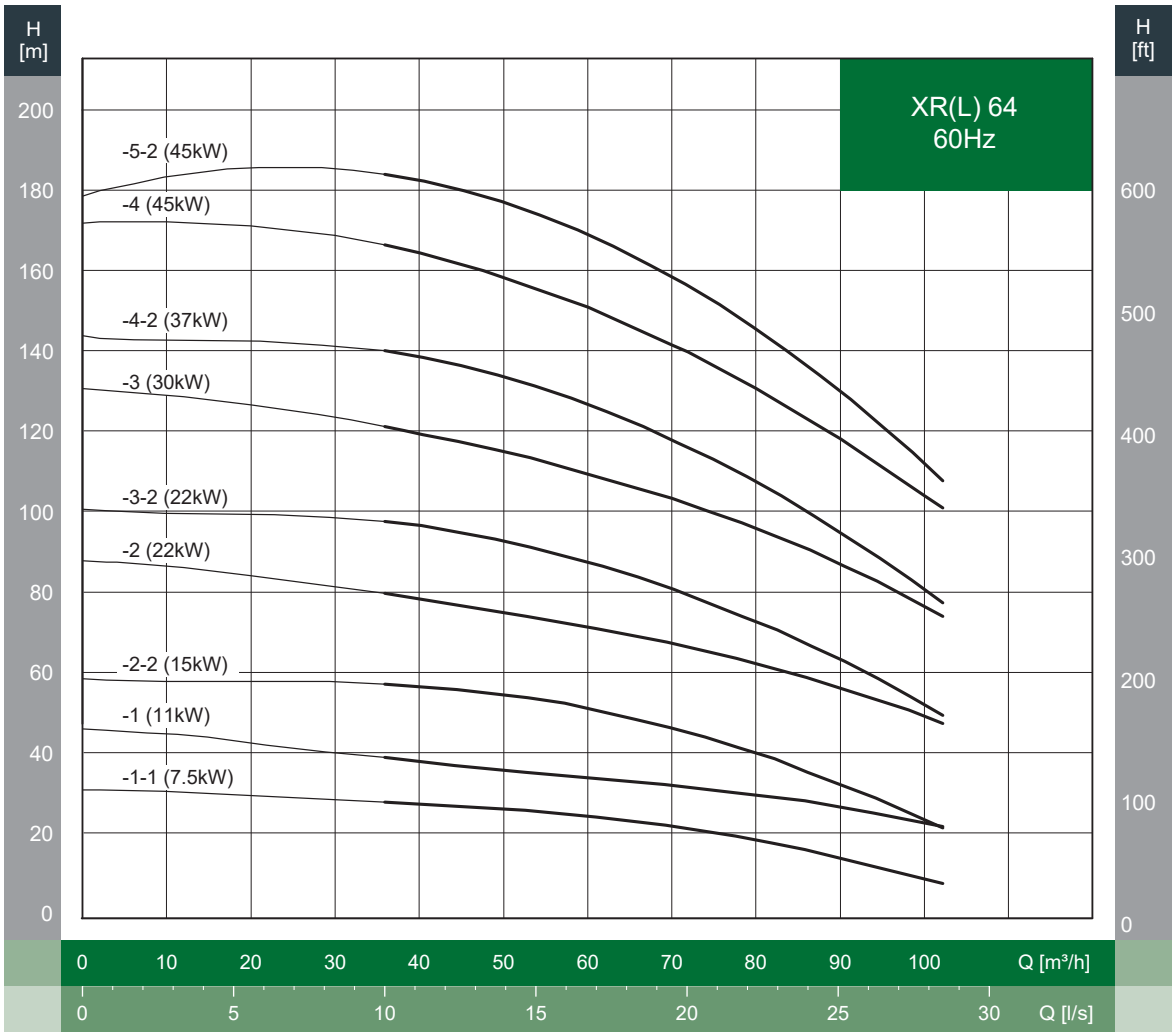
외형도

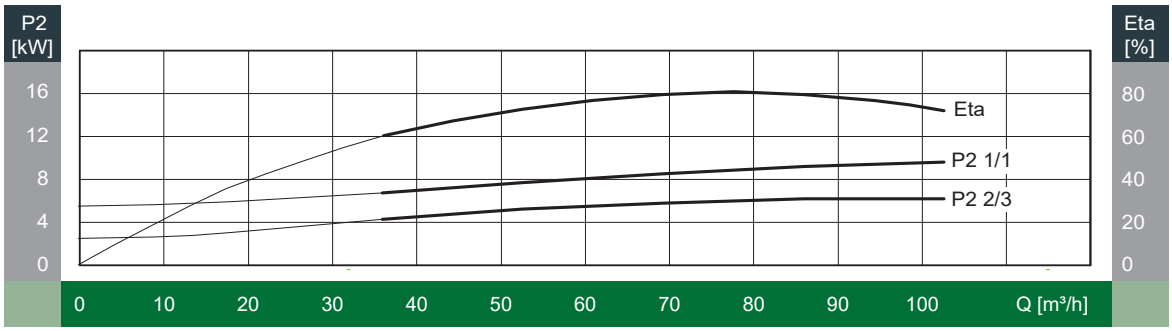


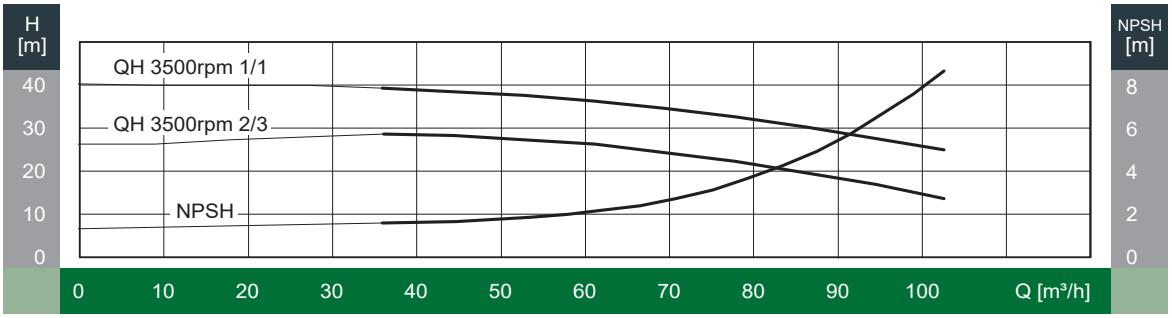
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 45-1-1	5.5	7.5	629	379	1008	275	200	100
XR(L) 45-1	7.5	10	629	379	1008	275	200	112
XR(L) 45-2-2	11	15	749	486	1235	326	288	160
XR(L) 45-2	15	20	749	486	1235	326	288	173
XR(L) 45-3-2	18.5	25	829	530	1359	326	288	190
XR(L) 45-3	18.5	25	829	530	1359	326	288	190
XR(L) 45-4-2	22	30	909	549	1458	360	301	207
XR(L) 45-4	30	40	909	587	1496	360	301	309
XR(L) 45-5-2	30	40	989	587	1576	360	301	313
XR(L) 45-5	30	40	989	587	1576	360	301	313
XR(L) 45-6-2	37	50	1069	656	1725	398	362	350
XR(L) 45-6	37	50	1069	656	1725	398	362	350
XR(L) 45-7-2	45	60	1149	706	1855	398	362	438
XR(L) 45-7	45	60	1149	706	1855	398	362	438

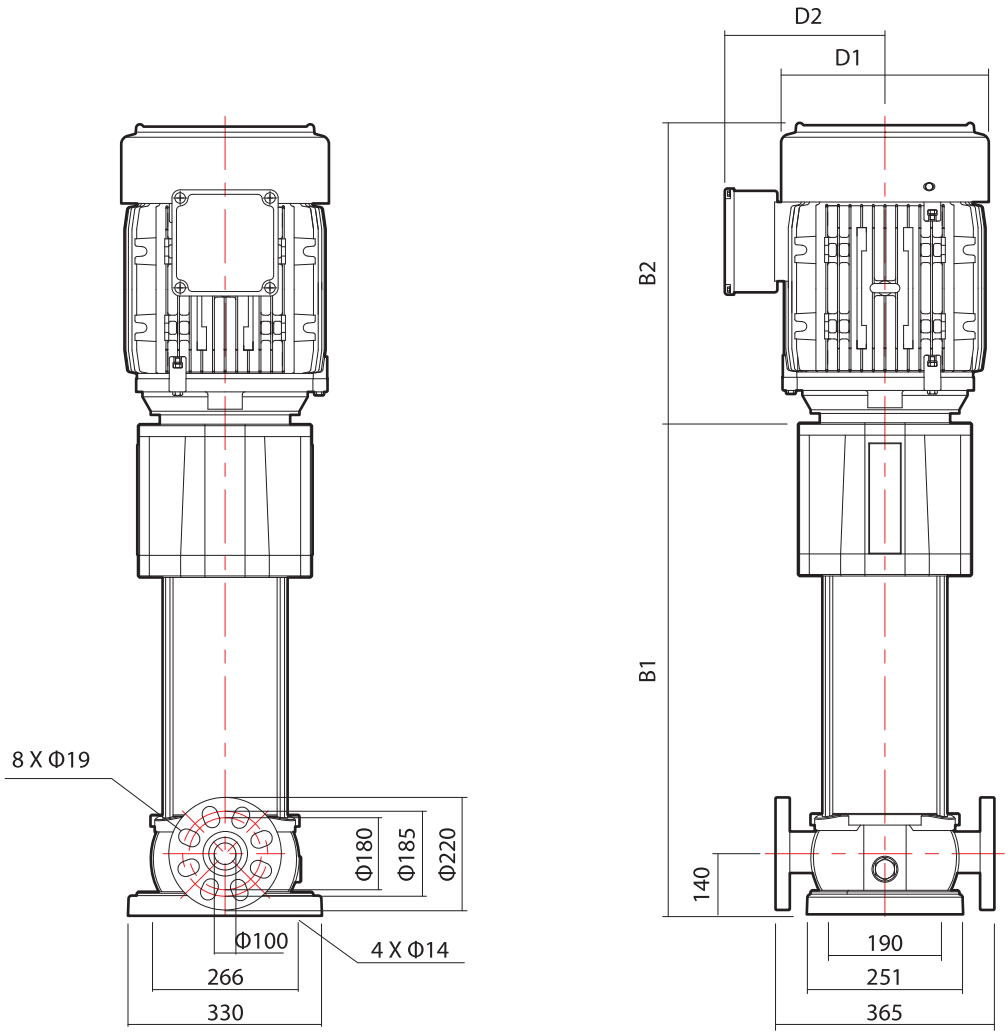
성능곡선도


H [m]
H [ft]
XR(L) 64
60Hz
-5-2 (45kW)
-4 (45kW)
-4-2 (37kW)
-3 (30kW)
-3-2 (22kW)
-2 (22kW)
-2-2 (15kW)
-1 (11kW)
-1-1 (7.5kW)
200
180
160
140
120
100
80
60
40
20
0
600
500
400
300
200
100
0
0 10 20 30 40 50 60 70 80 90 100 Q [m³/h]
0 5 10 15 20 25 30 Q [l/s]


P2 [kW]
Eta [%]
Eta
P2 1/1
P2 2/3
16
12
8
4
0
80
60
40
20
0
0 10 20 30 40 50 60 70 80 90 100 Q [m³/h]


H [m]
NPSH [m]
QH 3500rpm 1/1
QH 3500rpm 2/3
NPSH
40
30
20
10
0
8
6
4
2
0
0 10 20 30 40 50 60 70 80 90 100 Q [m³/h]

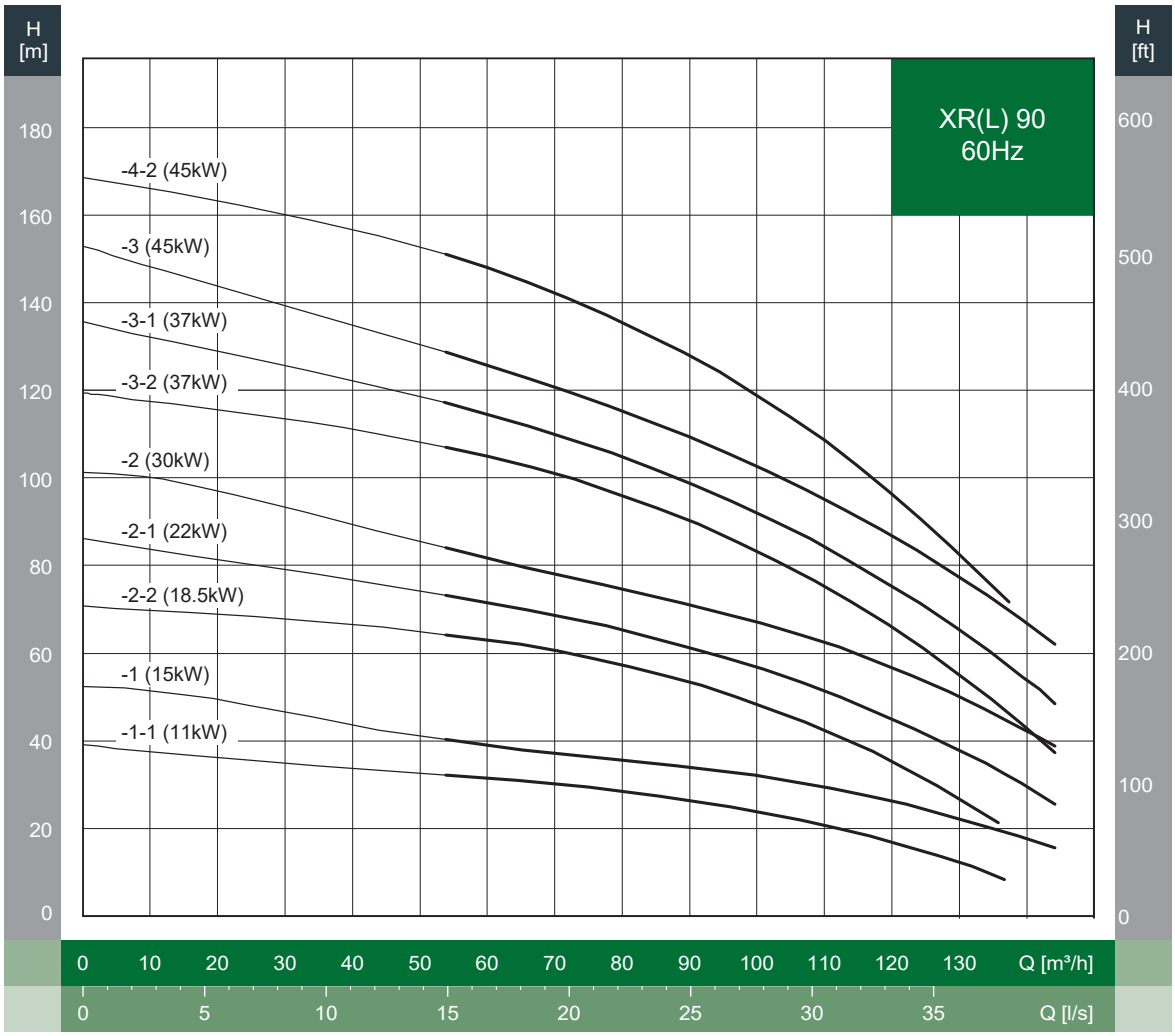
외형도

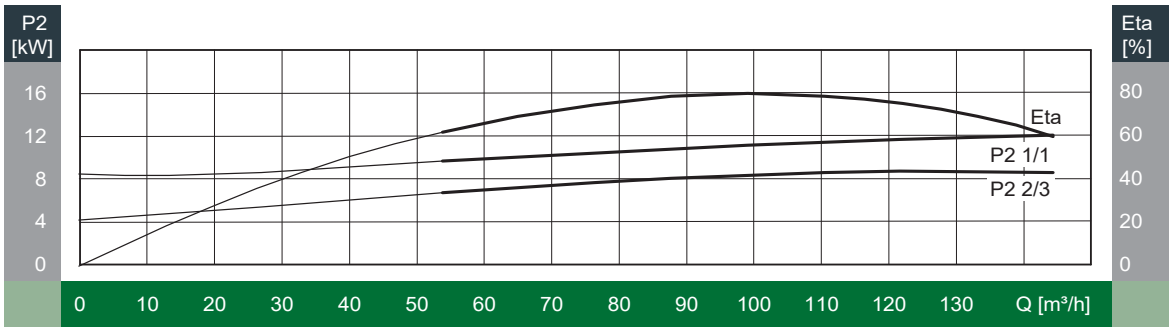


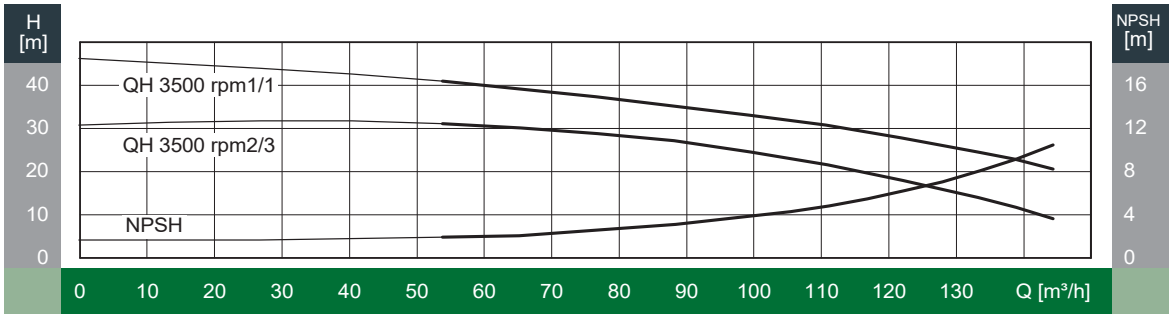
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 64-1-1	7.5	10	631	379	1010	275	200	114
XR(L) 64-1	11	15	671	486	1157	326	288	158
XR(L) 64-2-2	15	20	754	486	1240	326	288	175
XR(L) 64-2	22	30	754	549	1303	360	301	202
XR(L) 64-3-2	22	30	836	549	1385	360	301	206
XR(L) 64-3	30	40	836	587	1423	360	301	309
XR(L) 64-4-2	37	50	919	656	1575	398	362	346
XR(L) 64-4	45	60	919	706	1625	398	362	430
XR(L) 64-5-2	45	60	1001	706	1707	398	362	435

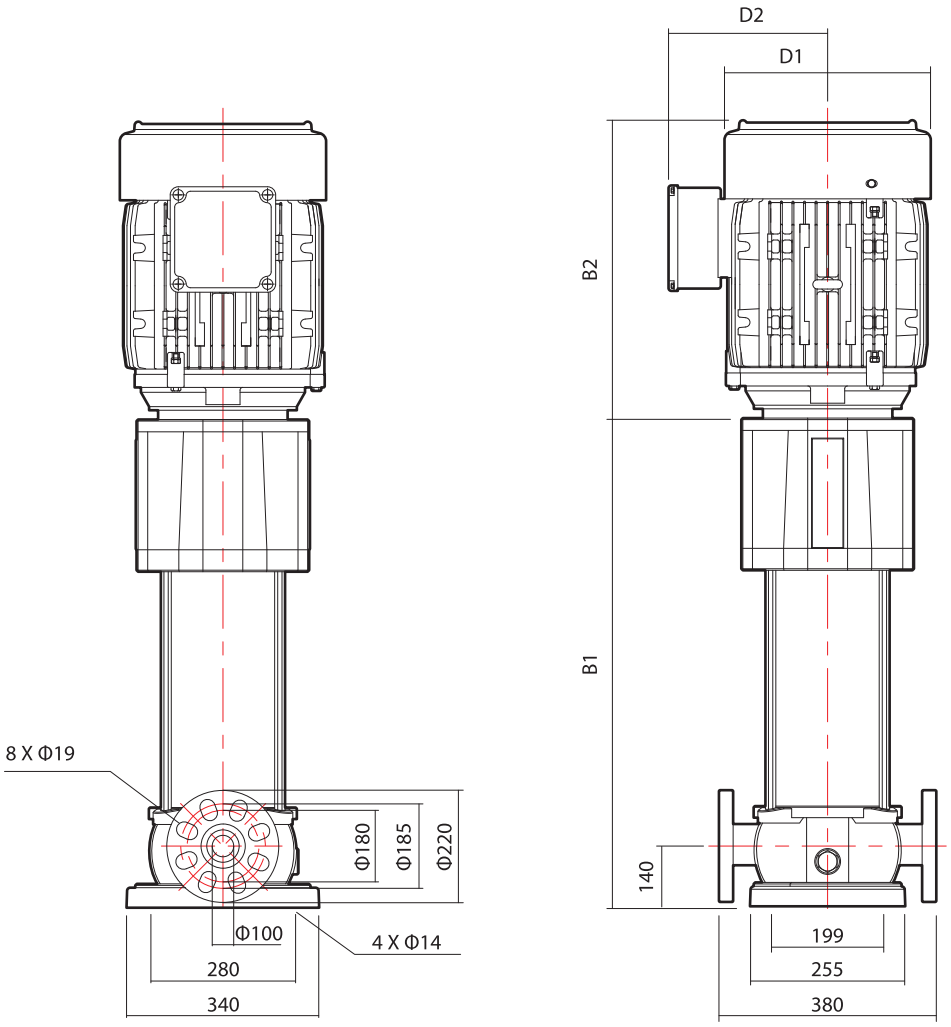
성능곡선도


H [m]
H [ft]
XR(L) 90
60Hz
-4-2 (45kW)
-3 (45kW)
-3-1 (37kW)
-3-2 (37kW)
-2 (30kW)
-2-1 (22kW)
-2-2 (18.5kW)
-1 (15kW)
-1-1 (11kW)
180
160
140
120
100
80
60
40
20
0
600
500
400
300
200
100
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 Q [m³/h]
0 5 10 15 20 25 30 35 Q [l/s]


P2 [kW]
Eta [%]
Eta
P2 1/1
P2 2/3
16
12
8
4
0
80
60
40
20
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 Q [m³/h]


H [m]
NPSH [m]
QH 3500 rpm1/1
QH 3500 rpm2/3
NPSH
40
30
20
10
0
16
12
8
4
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 Q [m³/h]

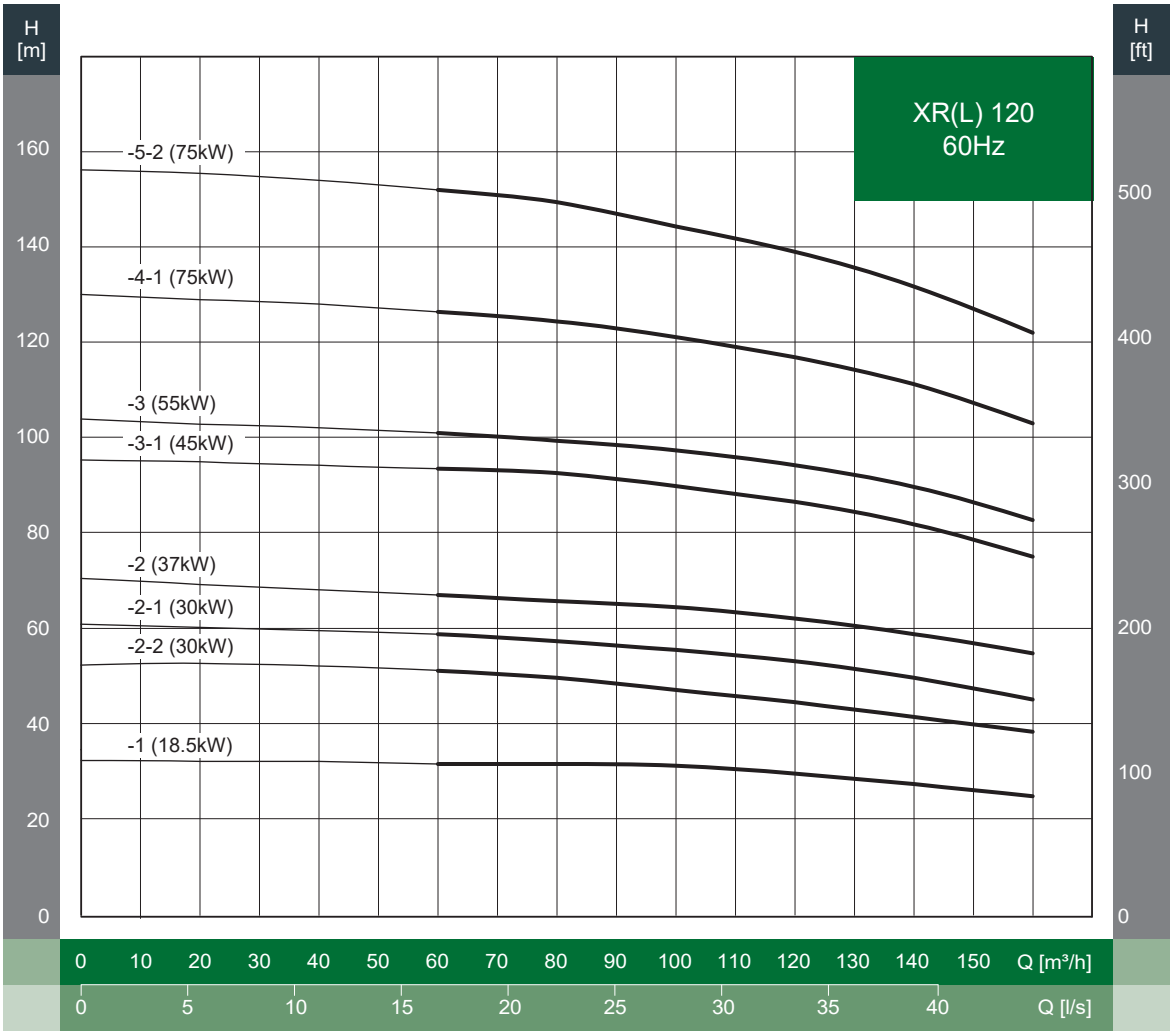
외형도

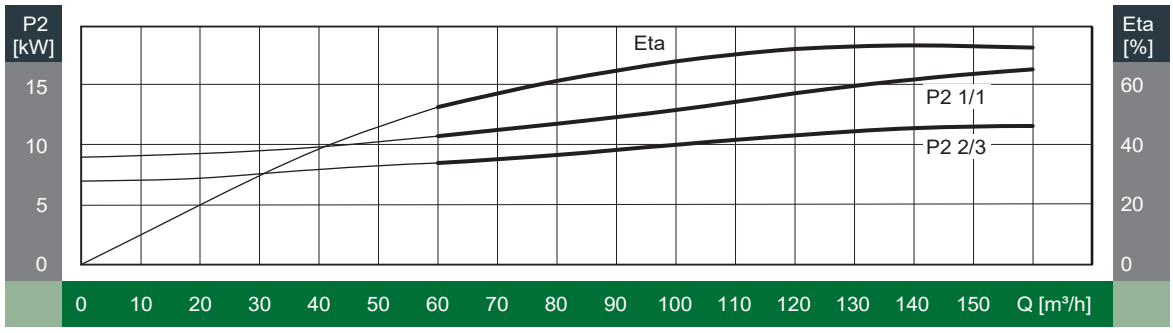


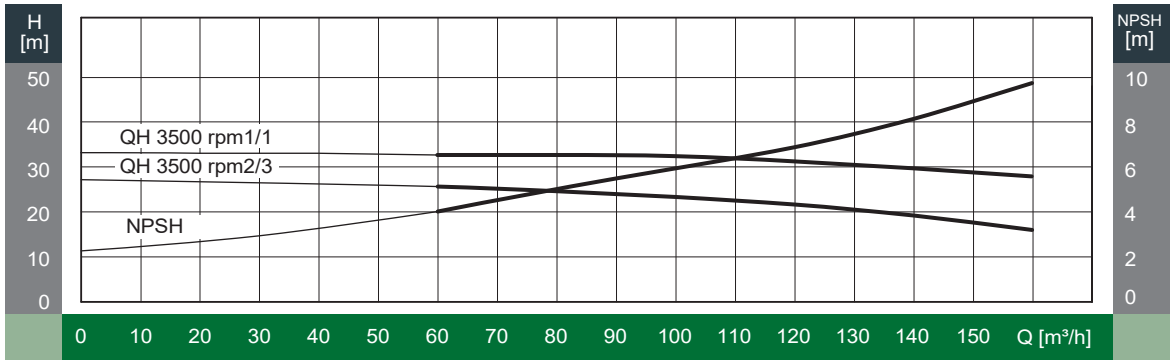
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 90-1-1	11	15	681	486	1167	326	288	109
XR(L) 90-1	15	20	681	486	1167	326	288	111
XR(L) 90-2-2	18.5	25	773	530	1303	326	288	170
XR(L) 90-2-1	22	30	773	549	1322	360	301	182
XR(L) 90-2	30	40	773	587	1360	360	301	200
XR(L) 90-3-2	37	50	865	656	1521	398	362	214
XR(L) 90-3-1	37	50	865	656	1521	398	362	321
XR(L) 90-3	45	60	865	706	1571	398	362	321
XR(L) 90-4-2	45	60	957	706	1663	398	362	359

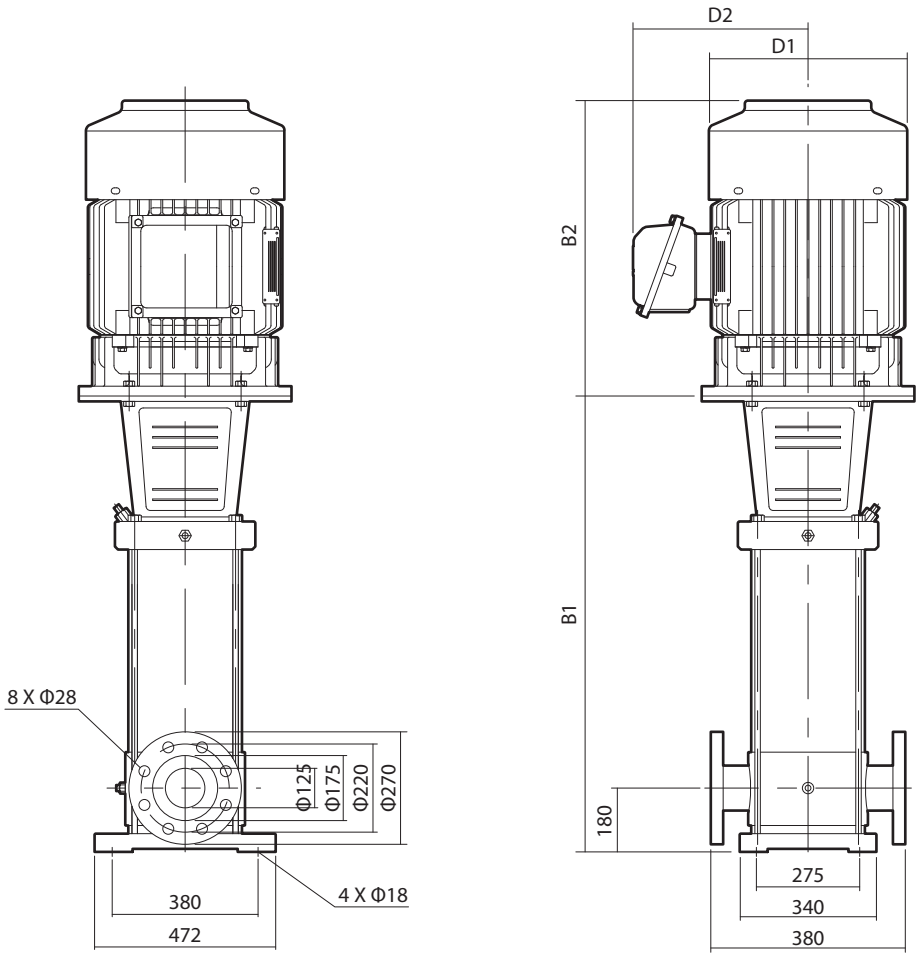
성능곡선도


H [m]
H [ft]
XR(L) 120
60Hz
-5-2 (75kW)
-4-1 (75kW)
-3 (55kW)
-3-1 (45kW)
-2 (37kW)
-2-1 (30kW)
-2-2 (30kW)
-1 (18.5kW)
160
140
120
100
80
60
40
20
0
500
400
300
200
100
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 Q [m³/h]
0 5 10 15 20 25 30 35 40 Q [l/s]


P2 [kW]
Eta [%]
Eta
P2 1/1
P2 2/3
15
10
5
0
60
40
20
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 Q [m³/h]


H [m]
NPSH [m]
QH 3500 rpm1/1
QH 3500 rpm2/3
NPSH
50
40
30
20
10
0
10
8
6
4
2
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 Q [m³/h]

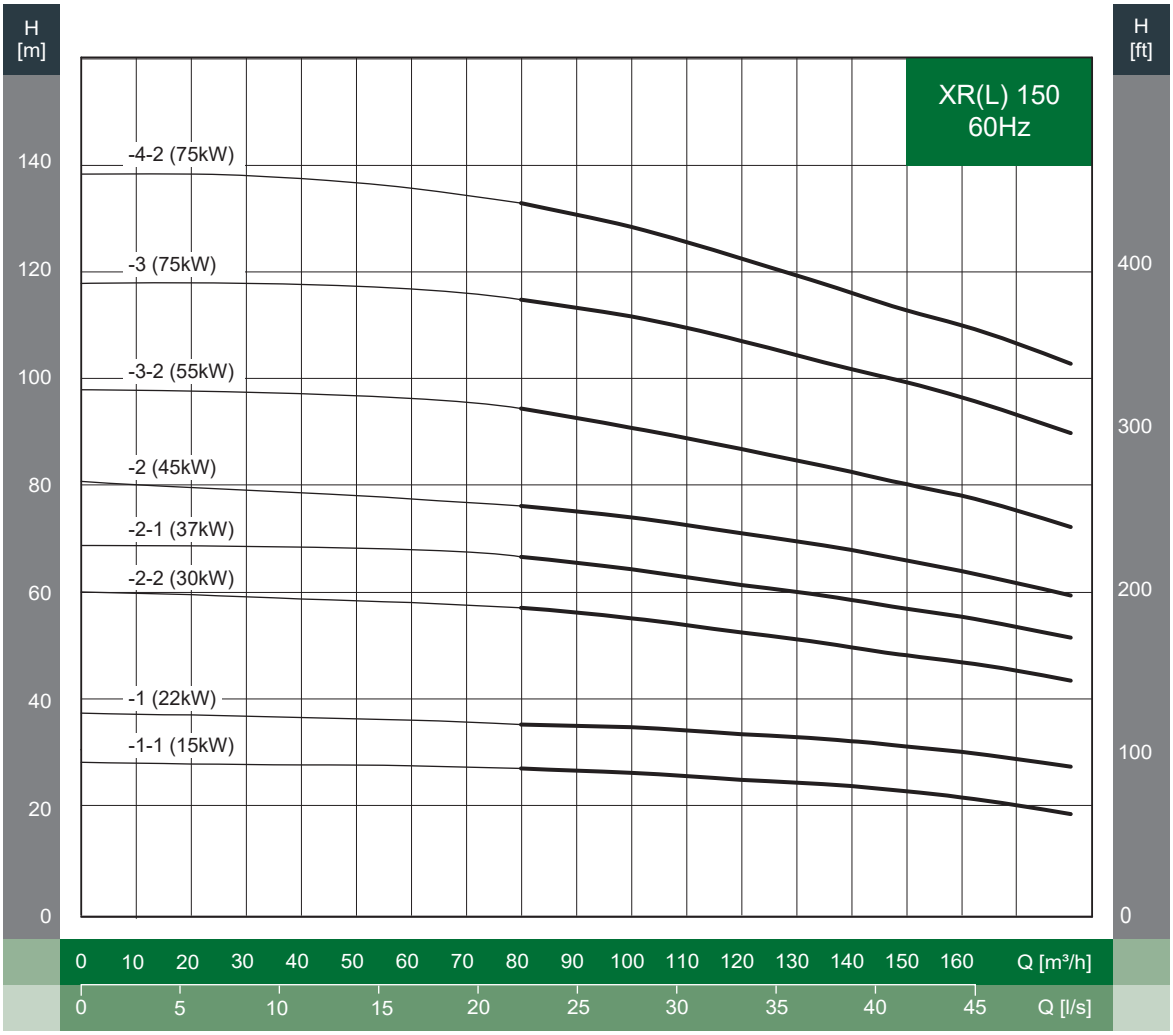
외형도

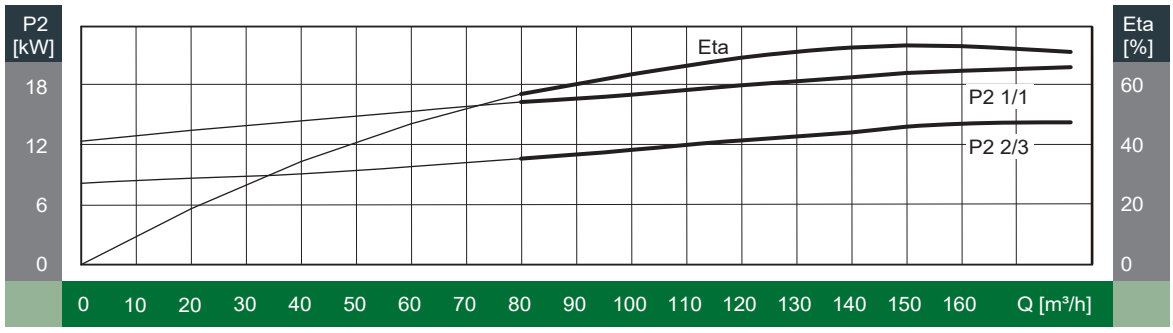


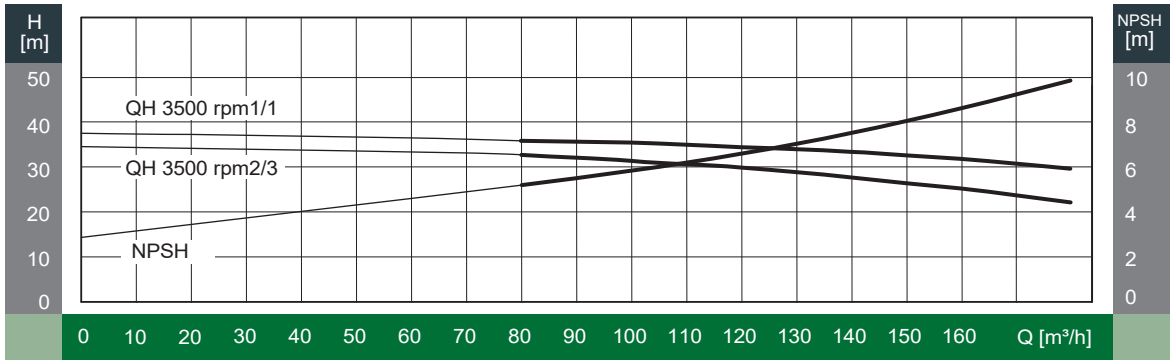
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L)120-1	18.5	25	840	550	1390	330	255	250
XR(L)120-2-2	30	40	1000	660	1660	400	310	350
XR(L)120-2-1	30	40	1000	660	1660	400	310	350
XR(L)120-2	37	50	1000	660	1660	400	310	380
XR(L)120-3-1	45	60	1160	700	1860	460	340	445
XR(L)120-3	55	75	1190	770	1960	540	370	545
XR(L)120-4-1	75	100	1350	845	2195	580	410	675
XR(L)120-5-2	75	100	1510	845	2355	580	410	690

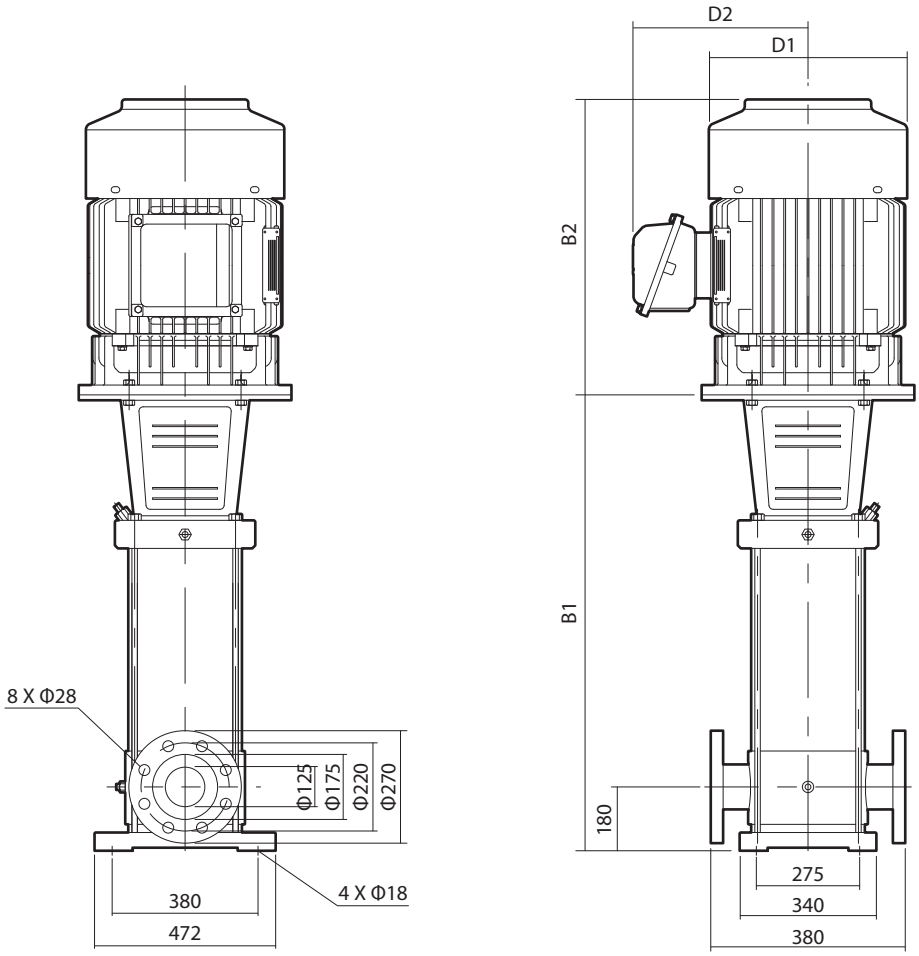
성능곡선도


H [m]
H [ft]
XR(L) 150
60Hz
-4-2 (75kW)
-3 (75kW)
-3-2 (55kW)
-2 (45kW)
-2-1 (37kW)
-2-2 (30kW)
-1 (22kW)
-1-1 (15kW)
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 Q [m³/h]
0 5 10 15 20 25 30 35 40 45 Q [l/s]


P2 [kW]
Eta [%]
Eta
P2 1/1
P2 2/3
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 Q [m³/h]


H [m]
NPSH [m]
QH 3500 rpm1/1
QH 3500 rpm2/3
NPSH
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 Q [m³/h]

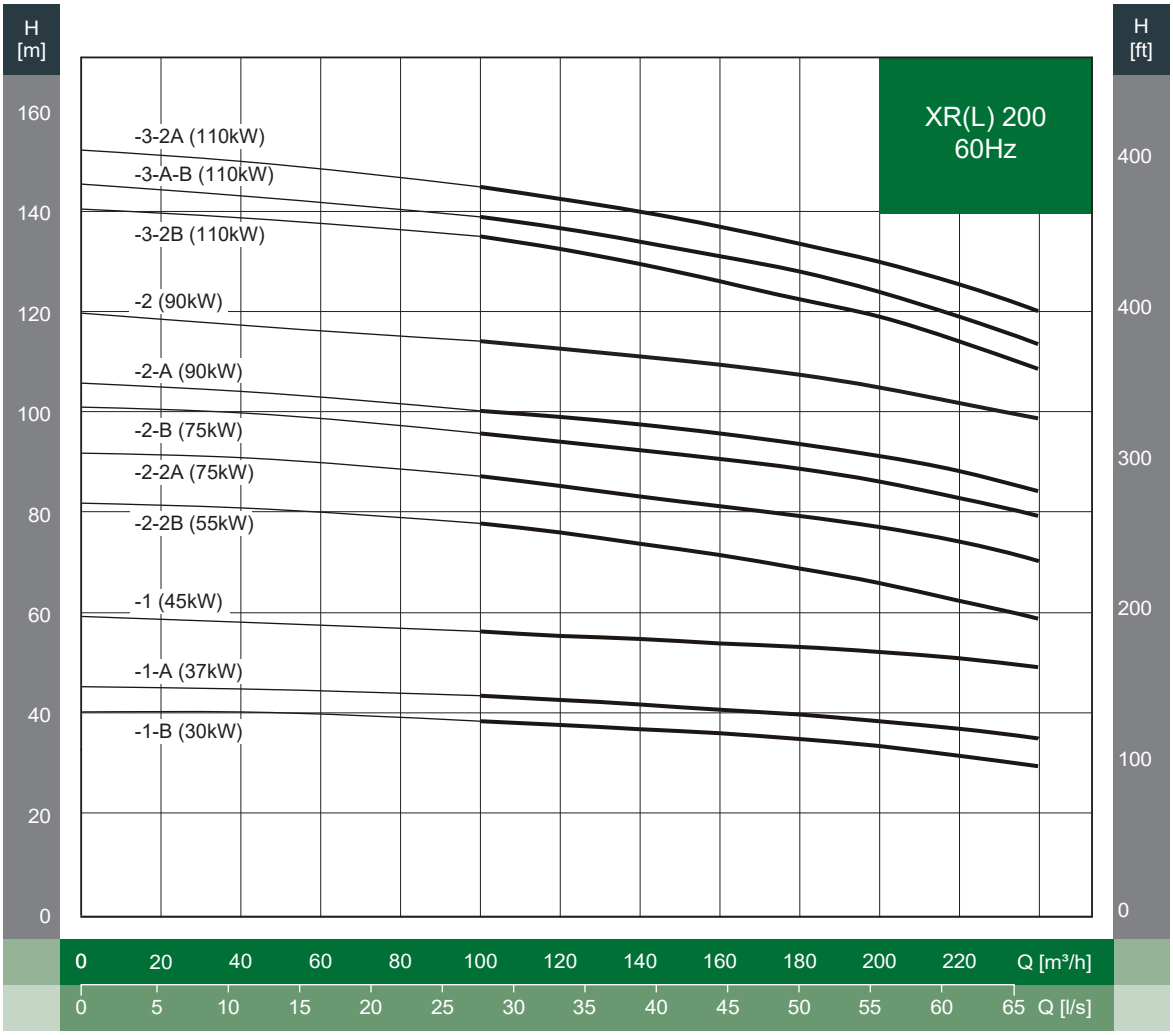
외형도

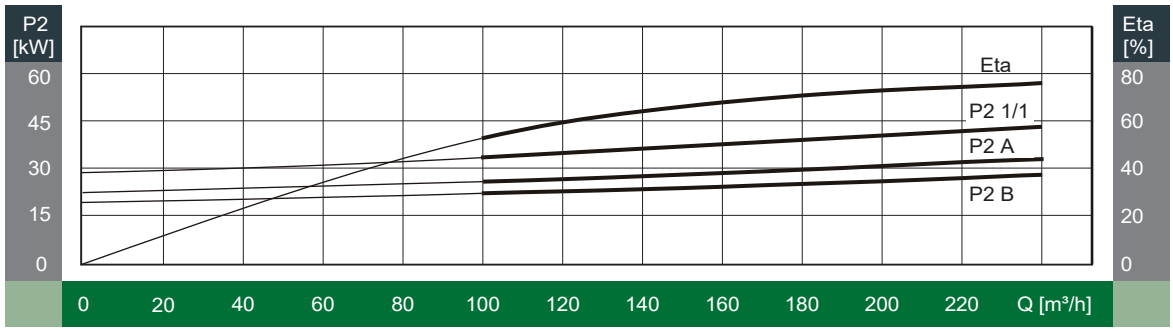


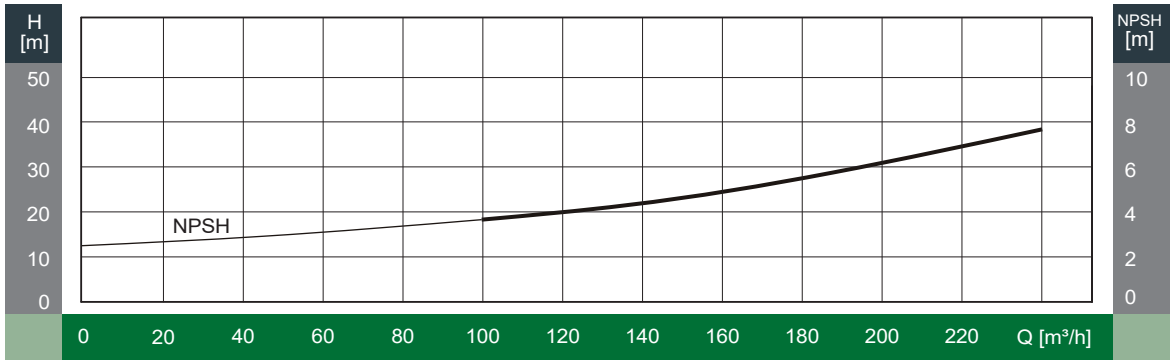
외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 150-1-1	15	20	840	490	1330	330	255	235
XR(L) 150-1	22	30	840	590	1430	360	285	280
XR(L) 150-2-2	30	40	1000	660	1660	400	310	360
XR(L) 150-2-1	37	50	1000	660	1660	400	310	380
XR(L) 150-2	45	60	1000	700	1700	460	340	435
XR(L) 150-3-2	55	75	1190	770	1960	540	370	545
XR(L) 150-3	75	100	1190	845	2035	580	410	665
XR(L) 150-4-2	75	100	1350	845	2195	580	410	680

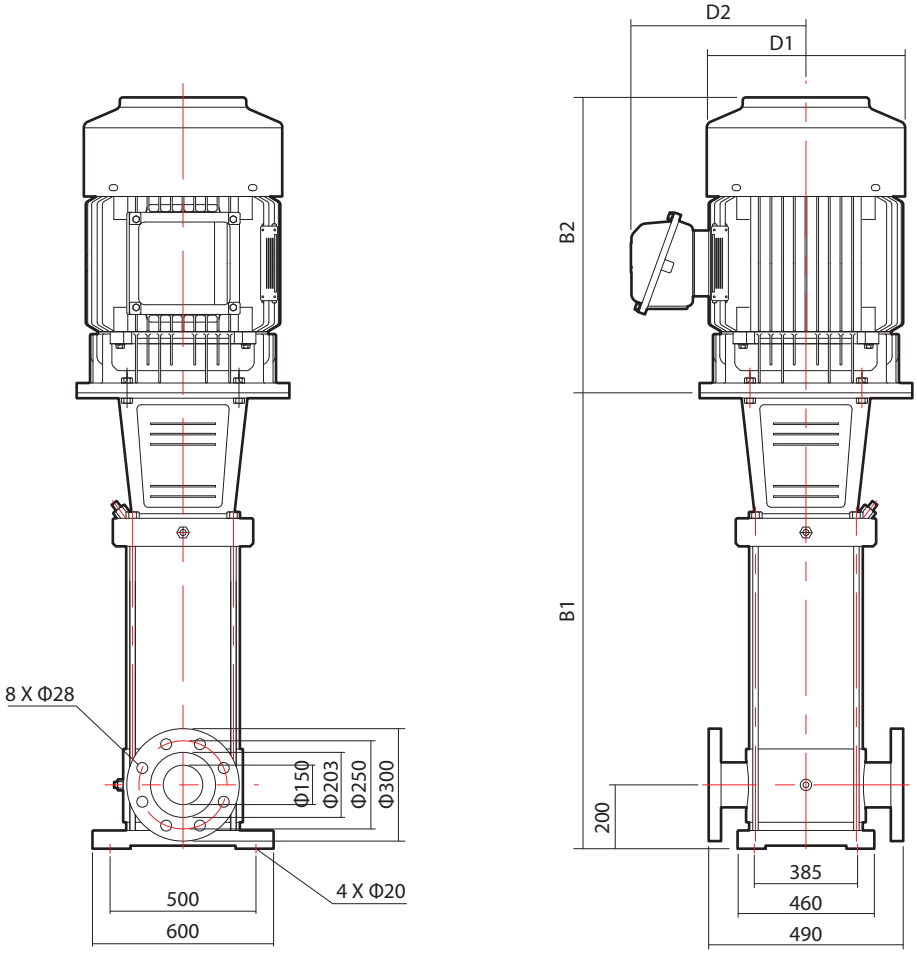
성능곡선도


H [m]
H [ft]
XR(L) 200
60Hz
-3-2A (110kW)
-3-A-B (110kW)
-3-2B (110kW)
-2 (90kW)
-2-A (90kW)
-2-B (75kW)
-2-2A (75kW)
-2-2B (55kW)
-1 (45kW)
-1-A (37kW)
-1-B (30kW)
160
140
120
100
80
60
40
20
0
400
400
300
200
100
0
0 20 40 60 80 100 120 140 160 180 200 220 Q [m³/h]
0 5 10 15 20 25 30 35 40 45 50 55 60 65 Q [l/s]


P2 [kW]
Eta [%]
Eta
P2 1/1
P2 A
P2 B
60
45
30
15
0
80
60
40
20
0
0 20 40 60 80 100 120 140 160 180 200 220 Q [m³/h]


H [m]
NPSH [m]
NPSH
50
40
30
20
10
0
10
8
6
4
2
0
0 20 40 60 80 100 120 140 160 180 200 220 Q [m³/h]

외형도



외형치수 및 중량

모 델	동 력		외형 치수 (mm)					중 량 (kg)
	kW	HP	B1	B2	B1+B2	D1	D2	
XR(L) 200-1-B	30	40	907	660	1567	400	310	403
XR(L) 200-1-A	37	50	907	660	1567	400	310	426
XR(L) 200-1	45	60	907	700	1607	450	345	484
XR(L) 200-2-2B	55	75	1131	770	1901	540	370	595
XR(L) 200-2-2A	75	100	1131	845	1976	580	410	718
XR(L) 200-2-B	75	100	1131	845	1976	580	410	718
XR(L) 200-2-A	90	120	1131	895	2026	580	410	787
XR(L) 200-2	90	120	1131	895	2026	580	410	787
XR(L) 200-3-2B	110	150	1325	1140	2465	645	550	1158
XR(L) 200-3-A-B	110	150	1325	1140	2465	645	550	1158
XR(L) 200-3-2A	110	150	1325	1140	2465	645	550	1158