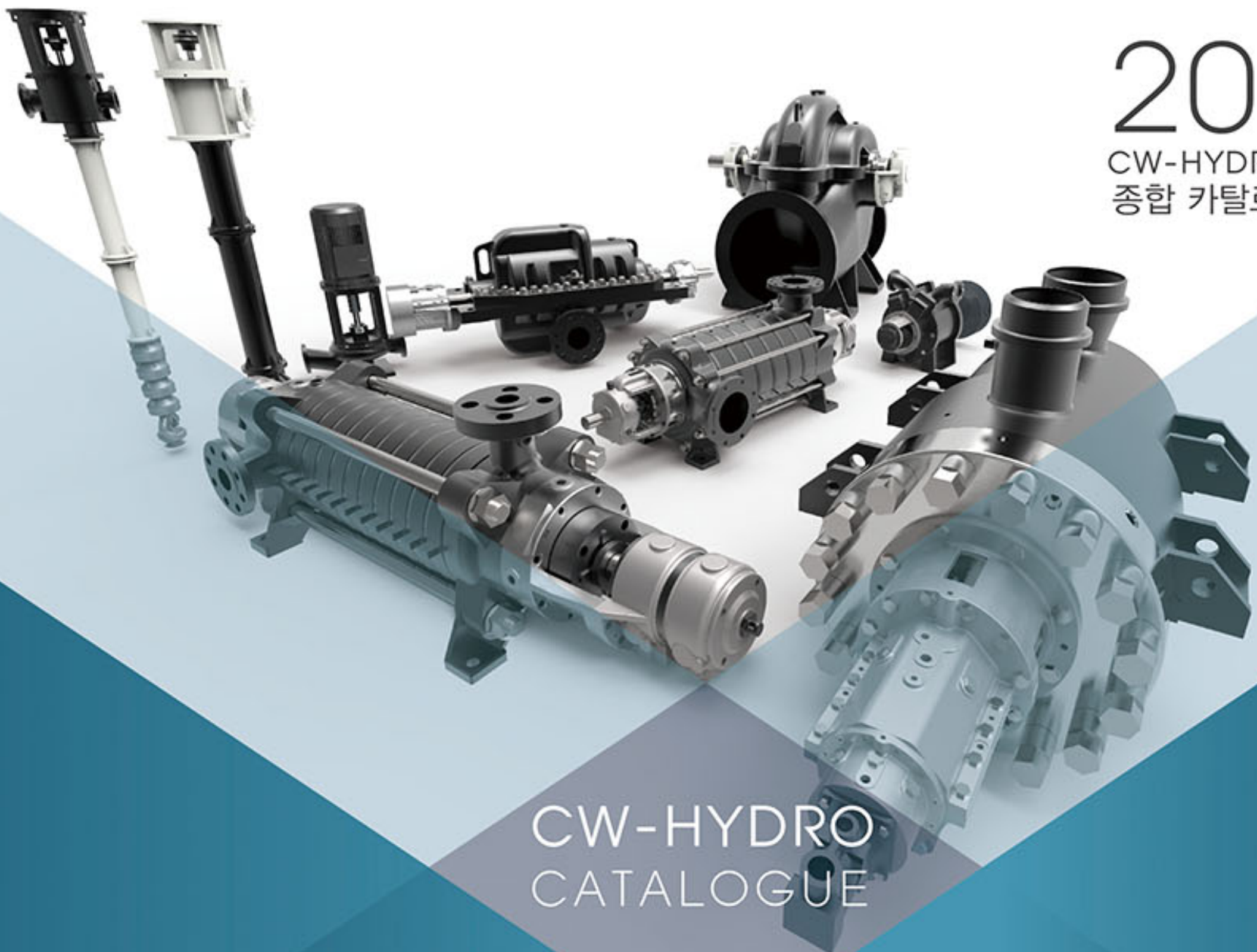




2019
CW-HYDRO, INC.
종합 카탈로그 국문

CW-HYDRO
CATALOGUE

Perfect Technology as an
Engine of the World— CW-Hydro

인천 서구 호두산로 166
(주)청우하이드로

T.(032) 561-0971
F.(032) 565-1743(영입)
032) 566-0972(해외)



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www.cwhydro.co.kr

CW-Hydro, Inc.

CAT.NO.DGN-TS-C-0002-2019-12

POWERFUL HEART
HIGH PERFORMANCE PUMP



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종합 카탈로그 국문

PUMPS
종합카탈로그

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POWERFUL HEART
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Perfect Technology

as an Engine of the World- CW-Hydro

산업용펌프 전문기업 청우하이드로

지난 반세기 동안 오직 펌프 단일 제품의 기술 발전에만 힘쓴 청우하이드로는 모든 걸 완벽하게 만들고자한 고집스러운 대한민국 최고의 산업용펌프 전문기업으로 자리잡게된 원동력이었습니다. 다양한 환경을 충족하며, 생산의 연속성과 높은 내구성의 고품질/고효율 펌프, 그 무한한 가능성을 현실로 만들어갑니다.

그 누구보다 뛰어난 기술력과 노하우 그리고 세계 최고의 품질수준은, 국내외 유수의 '제철소'와 '발전소'의 <주력 펌프>로 적용되는 결과로 입증되었을 뿐만 아니라, 안전성, 적합성에 대한 기술인증서와 각종 수상경력들로 증명해 왔습니다.

청우하이드로는 고객이 요구하는 제품에 대한 설계능력과 제조기술, 전문인력 등 최고의 개발환경을 갖추고 있습니다. 전체 임직원 중 15%가 연구 개발 인력으로 구성되어 있으며, 영업이익의 10%는 제품의 성능 향상과 신제품 개발을 위해 재투자하고 있습니다.

발전소의 <메인 보일러 피드 워터 펌프>, 제철소의 <디스케일 펌프>, 원자력용 <특수 펌프>와 석유화학용 <API 펌프> 등을 개발하여 최첨단 펌프 기술을 요구하는 분야에서도 수많은 실적을 쌓고 있습니다.

WWW.CWHYDRO.CO.KR

Company Profile

About Us

CW-Hydro

청우하이드로의 기본 정신은 각자 임무를 충실히 수행하는 조직 구조원에 대한 존중이고 크게는 고객, 즉 인류 전체에 대한 존중입니다. 이를 실현하기 위하여 조직 구성원에 대해서는 공정한 대우와 지속적인 능력개발을 지원할 뿐만 아니라 역량을 최대한 발휘할 수 있는 여건을 조성하고 있으며 사회의 삶과 질의 향상을 위해서 제품 개발에 정성을 다하고 있습니다.

Company Information

- 회 사 명 (주)청우하이드로
- 대 표 이 사 안 상 구, 안 송 준
- 설 립 연 도 1967년 5월 16일
- 생 산 품 목 산업용, 원자력용 펌프
- 전 화 / 팩 스 Tel: 032-561-0971, Fax: 032-565-1743
- 본사/공장주소 인천 서구 호두산로 166 (경서동 682-14)
- 홈 페 이 지 www.cwhydro.co.kr

Awards

& certification

- | | |
|------------------|-------------------------|
| 1994 기술혁신상 | 2010 명문 장수 기업인상 |
| 1997 품질경쟁력우수기업선정 | 2012 삼천만불 수출의탑 |
| 1997 가치혁신 대통령상 | 2013 상공회의소 상공대상 |
| 1998 수출유망중소기업선정 | 2014 간극조절 용이 웨어링 특허 |
| 1998 우수자본재 대통령상 | 2014 효율 증대 웨어링 특허 |
| 2005 과학기술부 엔지니어상 | 2015 고용보험 유공 정부포상 |
| 2008 자랑스러운중소기업인상 | 2016 인천 산업평화대상 |
| 2008 오백만불수출의탑 | 2018 노사상생문화 우수기업대상 |
| 2009 동탑산업훈장 | 2019 임펠러 상하 위치 조절 장치 특허 |



History

of CW-Hydro

- | | |
|---|--|
| 1967.05 펌프전문 제조업체 청우공업주식회사 설립 | 2002.11 원전기기 수리 및 정비공사 업체 등록 |
| 1980.01 소형 Volute Pump 국내최초 KS마크 인증 | 12 원자력 Q-CLASS 충전펌프 개발 |
| 1986.11 국산기계 개발 우수업체 국무총리상 수상 | 2003.11 ISO 9001 : 2001년판 개정 획득 (LRQA) |
| 1994.06 상하분리형 다단 Pump NT마크 획득 | 2004.06 5개 한국전력 발전처 정비업체 등록 |
| 07 중소기업 기술혁신상 수상 | 2005.07 이달의 엔지니어상 수상 (한국산업기술진흥협회) |
| 1995.09 제지원료 Pump EM마크 획득 | 2007.08 원심펌프 품질우수 추천제품 지정 (인천광역시장) |
| 11 열매체유 고온수 Pump EM마크 획득 | 2008.02 자랑스러운 중소기업인상 수상 (중소기업청) |
| 1997.06 인천 서부산업단지로 공장 확장 이전 | 2009.01 우수자본재개발 유공자 동탑 산업훈장 수상 |
| 09 품질경쟁력 우수 100대 기업 선정 | 2010.01 한국수자원공사 수도기자재 공급자 등록 |
| 09 한전 수력, 화력 및 원자력 분야 업체등록 | 05 명문 장수 기업인상 수상 (중소기업중앙회) |
| 11 가치혁신 대통령상 수상 | 2011.06 ASME인증 획득 (N, NPT) |
| 1998.01 고온고압 보일러 급수펌프 EM마크 획득 | 2012.12 3천만불 수출의 탑 및 지식경제부 장관상 수상 |
| 02 수출유망 중소기업 선정 | 2013.07 인천상공회의소 기술개발부문 상공대상 수상 |
| 10 우수 품질 인증 제품 (EM) 대통령상 수상 | 07 CE ATEX(유럽 방폭 인증) 획득 |
| 1999.01 기술경쟁력 우수기업 지정 (중소기업청) | 2014.11 원자력 원심식 충전펌프 국산화 개발 |
| 2000.05 미국 'HYDRO, INC' 와 Joint-Venture | 11 간극조절 용이 웨어링 특허 취득(특허청) |
| 06 벤처기업 선정 | 11 효율 증대 웨어링 특허 취득(특허청) |
| 08 환경설비 품질인증 | 2015.07 고용보험 유공 정부포상 국무총리표창 수상 |
| 12 고효율 에너지 기자재 인증 획득 | 2016.12 인천광역시 산업평화대상 수상 |
| 2001.03 '청우하이드로' 로 사명 변경 | 2017.05 (주)청우하이드로 창립 50주년 |
| 07 원자력 품질인증 (KEPIC) : 펌프 및 압력용기 | 2018.12 노사상생문화 우수기업대상 (인천광역시 노사민정협의회) |
| 11 기술혁신형 중소기업 (INNO-BIZ) 획득 | 2019.01 임펠러 상하 위치 조절 장치 특허 취득(특허청) |

Location

of CW-Hydro



본사 및 공장

(22743)
인천 서구 호두산로 166 (경서동 682-14)

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CW-Hydro, Inc.

청우하이드로 펌프 이렇게 만듭니다.

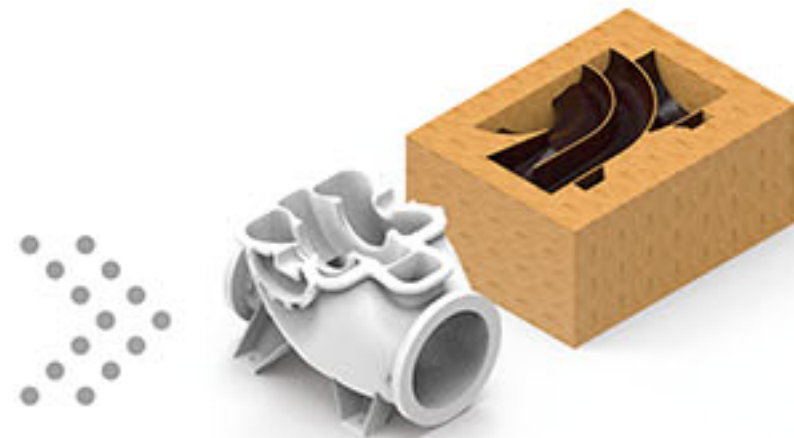
청우하이드로는 고객이 요구하는 제품에 대한 설계능력과 제조기술, 전문인력 등 최고의 개발 환경을 갖추고 있습니다.

- 고객의 요구에 완벽하게 반영하기 위한 기술 회의 활용
-기술회의는 영업자와 이를 수용해 설계할 연구원, 생산현장의 기술자가 모여 제품개발에 따른 여러 문제들을 토의합니다.
- 청우하이드로 자체 펌프 전문 연구소(R&D Center) 설립
-끊임없는 연구개발을 통해 미래의 고도 산업 사회에 부응 할 수 있는 신제품 개발에 많은 연구와 노력을 다하고 있습니다.
- 회사의 역사와 함께 성장해 온 엔지니어들이 보유한 숙련된 기술력과 전문성
-최장 근속 '38년' , 20년 이상 근속 사원 비율 '32%' 청우하이드로와 함께 성장한 숙련된 엔지니어들이 펌프를 만듭니다.
- 시대에 앞서가는 현대식 설비와 트렌드에 맞춘 최신 기계 장비의 도입
-전문 엔지니어들의 숙련된 스킬로 제어하기 때문에 가공 시간은 단축하는 반면 최상의 품질과 초 정밀도를 갖춘 가공품을 생산합니다.
- 자동화 창고 시스템, 기업형 전산프로그램 구축
-원자재 및 가공품을 체계적으로 관리하는 자동화 창고 시스템과 적정 재고관리를 위한 기업형 전산프로그램을 구축하였습니다.



설계과정

청우펌프연구소의 전문 인재들에 의해 펌프 설계가 이루어집니다.



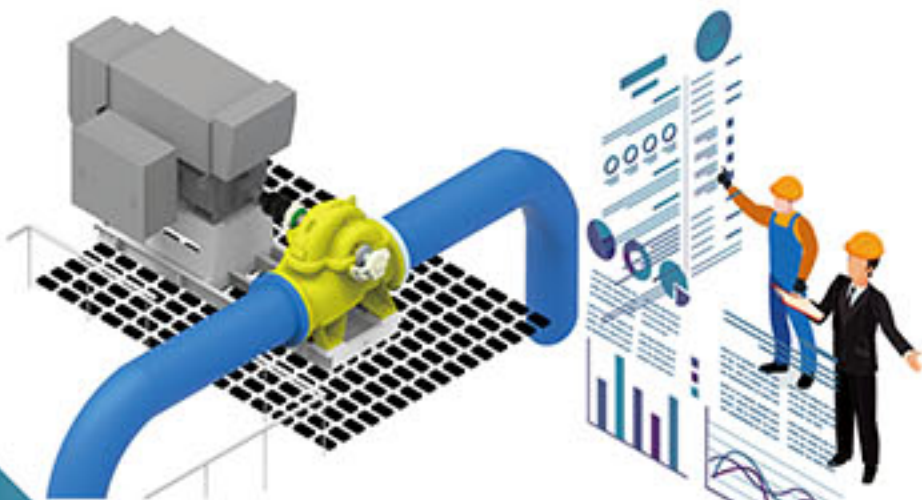
금형제작

역사와 함께 쌓아온 펌프의 묵형 및 금형은 청우하이드로의 오랜 펌프 역사를 반영하고 있습니다.



부품가공

3차원 자동 측정기로 평상을 정확히 측정,판단하기 때문에 정밀도가 높으며 불량품을 사전에 예방하고 있습니다.



성능시험

실제 사용 환경에 맞춘 양정과 유량을 측정하여 고객의 요구사항에 적합한 지 확인합니다.



펌프조립

20년 이상 근속한 숙련 기술자들이 조립공정을 책임지고 있기 때문에 제품의 견고성과 성능면에서 최고라고 자부합니다.



도장및출고

최종검수를 통과한 제품만이 고객이 요구하는 스펙에 맞추어 포장되어 출고됩니다.

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산업용 펌프 기술의 차이를 경험하세요.

- 최신 기계 설비, 자동화 창고 시스템, 기업형 전산 시스템, 스마트 팩토리등 첨단 장비,시스템을 지속적으로 도입해 운영하고 있습니다.
- 다년간 수집된 데이터를 통해 성능시험에서 측정되는 데이터 측정오차를 줄이고 신뢰도를 높이고 있습니다.
- 3차원 자동 측정기로 평상을 정확히 측정, 판단하기 때문에 정밀도가 높으며 불량품을 사전에 예방하고 있습니다.

제조설비현황

Manufacturing Facilities

임베디드 가공 Cell	CNC 선반, 비관성 머신(3), 슬로터 머신
주조 가공 Cell	CNC 선반(2), CNC 수직 머신센터, CNC 연삭기(2),고속선반
중소형 부품 가공 Cell	CNC 선반(2), CNC 수직 선반(3),CNC 수직 머신 센터(2),
중소형 케이스 가공Cell	레이저 드릴 머신 (2),밀링머신
프레임 가공 Cell	CNC 복합 머신 센터(2), 5축 가공기(1)
대형 케이스 가공 Cell	CNC 수평 머신 센터
베드 가공 Cell	CNC 수직타닝 머신 센터, CNC 보링 머신 센터,
중소형 조립 Cell	CNC 플레너 밀러, 레이저 드릴링 머신
도장 건조	복합 밀링
원,부자재 보관	테이블 리프트(7)
운반	도장 건조기(2)
	자동화창고(1960 Cells)
	크레인(48대), 자게차(4대)

주요검사설비현황

Inspection Equipment

종합 측정 장비	3차원 측정기(1대), 3차원 Portable측정기(1대)
길이 측정 장비	살린더 게이지(43), 마이크로 메터(95),버니어 캘리퍼스(64),
직각/전각도 측정 장비	높이 게이지(3),다이얼 내측 게이지(38), 다이얼 캘리퍼 (8)
평형/동심도 측정 장비	1형 전직자(1), 정밀 석정반(1), 강제 윤운자(5),직각 정반(1),
나사 측정 장비	직각자(3)
통사,깊이 측정 장비	다이얼 테스트 안티케이타(7), 다이얼 게이지(34)
진동 측정 및 분석 장비	한계 게이지(7), 피치 게이지(2)
	핀 게이지(2), 틱새 게이지(3), 테스트바(4),Radius 게이지(4),
	모따기 게이지(10),깊이 게이지(11)
	Vibration Monitoring System(1대)

주요시험설비현황

Test Facilities

측정력 측정 장비	CLAMP TESTER (2대), AC Power METER,ENERGY
모터 가동 장비	ANYLAZER, 전력 분석기 (3대),다이노모 메터 (3대)
유량 측정 장비	고압 기동 보상기 (3대), 유도 조정기 (IR), 판넬 (3대),인버터
압력 측정 장비	직각 상각위어, 전자 유량계, Flow converter,
소음 측정 장비	초음파 유량계 (3대), 온도위어 (2대), 전속 위어
절연저항 측정 장비	분동식 압력계, 압력 전송기 (13대), 수압기
	소음계 (2), Recorder, 온도계, 고장 탐지기 진동계 (2),
	역동 측정 장비, 디지털 타코메터
	절연 저항계, DOUBLE BRIDGE, 휘스톤 브리지



Single Suction Pumps

편흡입 펌프

펌프 날개차 한쪽 편으로만 유체를 흡입하는 형식의 펌프로 소형펌프에 많이 사용됩니다.



ISO Standard Process Pumps IS/ISB(F)



● Applications

- 화학공업 Chemical industry
- 석유정제 Petroleum refinery
- 석유화학공업용 Petrochemical industry
- 기타공업 Other various industries

● Ratings

- Capacity to : ~50 m³/min
- Head to : ~140 m
- Temperature to : ~177°C

PAGE . 20~23

ISO Standard Process Pumps ISBO



● Applications

- 화학공업 Chemical industry
- 석유정제 Petroleum refinery
- 석유화학공업용 Petrochemical industry
- 기타공업 Other various industries

● Ratings

- Capacity to : ~5 m³/min
- Head to : ~130 m
- Temperature to : ~177°C

PAGE . 24~27

Single-stage Overhung Pumps H(HB)



API Code : OH2

● Applications

- 석유 정제용 Petroleum refinery
- 석유 화학용 Petrochemical industry
- 기타 화학용 Other chemical
- 고온/고압용 High temperature and high pressure services

● Ratings

- Capacity to : ~25 m³/min
- Head to : ~300 m
- Temperature to : ~460°C

PAGE . 28~31

ISO Standard General Service Pumps GB



● Applications

- 급수, 정수용 Water supply
- 냉각수 순환용 Cooling water circulation
- 냉각탑용 Cooling tower
- 건물용 Building
- 농업용 Irrigation
- 일반 산업용 General industry

● Ratings

- Capacity to : ~6 m³/min
- Head to : ~60 m
- Temperature to : ~150°C

PAGE . 32~33

Vortex Paper Stock Solid Process Pumps GIV



● Applications

- 폐수처리 Waste Treatment
- 제지공업 Pulp and Paper
- 식품공업용 Food processing
- 농업용 Agriculture
- 광산용 Mining
- 제조공업용 Manufacturing Process

● Ratings

- Capacity to : ~5 m³/min
- Head to : ~80 m
- Temperature to : ~80°C

PAGE . 34~35

Close-Coupled General Service Pumps GM



● Applications

- 급수, 정수용 Water supply
- 냉각수 순환용 Cooling water circulation
- 냉각탑용 Cooling tower
- 건물용 Building
- 농업용 Irrigation
- 일반 산업용 General industry

● Ratings

- Capacity to : ~4 m³/min
- Head to : ~35 m
- Temperature to : ~80°C

PAGE . 36~37

Contents

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Single Suction Pumps

편흡입 펌프

펌프 날개차 한쪽 편으로만 유체를 흡입하는 형식의 펌프로 소형펌프에 많이 사용됩니다.



In-Line Pumps CLP(D)



Applications

- 산업용 Industrial
- 건축설비용 Building
- 액체이송용 Liquid transfer
- 가압용 Pressurized
- 프로세스용 Process

Ratings

- Capacity to : ~30 m³/min
- Head to : ~52 m
- Temperature to : ~150°C

PAGE . 38~41

Paper Stock Process Pumps NOP



Applications

- 화학공업용 Chemical industry
- 식품산업용 Food industry
- 제지공업용 Paper industry
- 산업폐수용 Industries waste water

Ratings

- Capacity to : ~7.5 m³/min
- Head to : ~100 m
- Temperature to : ~177°C

PAGE . 42~45

ISO Standard Paper Stock Process Pumps NP



Applications

- 화학공업용 Chemical industry
- 식품산업용 Food industry
- 제지공업용 Paper industry
- 산업폐수용 Industries waste water

Ratings

- Capacity to : ~12 m³/min
- Head to : ~40 m
- Temperature to : ~177°C

PAGE . 46~49

Horizontal Hydro-solids Pumps P



Applications

- 제지용 Pulp and paper
- 수처리용 Waste treatment
- 식품료용 Food processing
- 농업용 Agriculture
- 일반제조용 Manufacturing process

Ratings

- Capacity to : ~60 m³/min
- Head to : ~85m
- Temperature to : ~177°C

PAGE . 50~55

One Piece solid shaft Vertical Sump Pumps GV



Applications

- 배수용 Sump Drainage
- 오수처리용 Sewage treatment
- 일반 산업용 General industry

Ratings

- Capacity to : ~0.7 m³/min
- Head to : ~30 m
- Temperature to : ~60°C

PAGE . 56~57

Horizontal Screw Pumps SC



Applications

- 폐수처리 Waste treatment
- 식품이송 Food transfer
- 고농도제지액 Paper stock

Ratings

- Capacity to : ~30 m³/min
- Head to : ~30 m
- Temperature to : ~80°C

PAGE . 58~59

Contents

CW-HYDRO, INC. TOTAL CATALOGUE

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Double Suction Pumps

양흡입 펌프

임펠러의 양측으로부터 흡입하는 형식의 펌프로 유량이 많을 경우에 주로 사용됩니다.



Double Suction Pumps DS/DSN



API Code : BB1

● Applications

- 프로세스용 Process
- 석유화학용 Petrochemical industry
- 제지공업용 Pulp & Paper
- 일반 산업용 General Industry
- 선박용 Marine

● Ratings

- Capacity to : ~400 m³/min
- Head to : ~400 m
- Temperature to : ~150°C

PAGE . 60~67

Radial Split Between Bearing Pump DHB



API Code : BB2

● Applications

- 석유 정제용 Petroleum refinery
- 석유 화학용 Petrochemical industry
- 기타 화학용 Other chemical
- 고온/고압용 High temperature and high pressure services

● Ratings

- Capacity to : ~100 m³/min
- Head to : ~550 m
- Temperature to : ~460°C

PAGE . 68~69

Double Suction Pumps Multi Stage Type SMD



API Code : BB3

● Applications

- 급수, 정수용 Water Supply
- 냉각수용 Utilities cooling water
- 보일러 순환용 Boiler circulation
- 일반 산업용 General Industries
- 석유정제용 Petroleum refinery
- 석유화학공업용 Petrochemical industry

● Ratings

- Capacity to : ~35 m³/min
- Head to : ~400 m
- Temperature to : ~150°C

PAGE . 70~71

Double Suction Axial Split Pumps GD



● Applications

- 취수, 급수, 정수용 Water supply
- 냉각수 순환용 Cooling water circulation
- 냉각탑용 Cooling tower
- 건물용 Building
- 농업용 Irrigation
- 일반 산업용 General industry
- 소화설비용 Fire-fighting

● Ratings

- Capacity to : ~18 m³/min
- Head to : ~70 m
- Temperature to : ~135°C

PAGE . 72~73

Contents

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Multistage Pumps

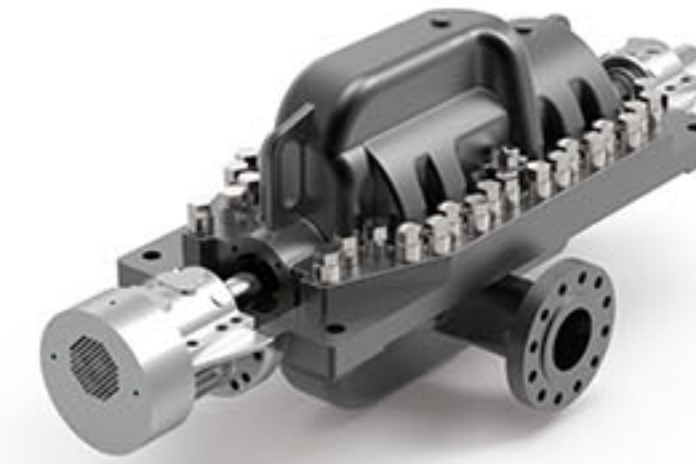
다단 펌프

높은 양정 또는 고압력을 얻기 위해 한대의 펌프의 동일 회전축에 2개 이상의 날개차를 설치하여 다단으로 구성하는 펌프입니다.



POWERFUL HEART HIGH PERFORMANCE PUMP

Axial Split Multi-stage Pumps SMC(H)



API Code : BB3

● Applications

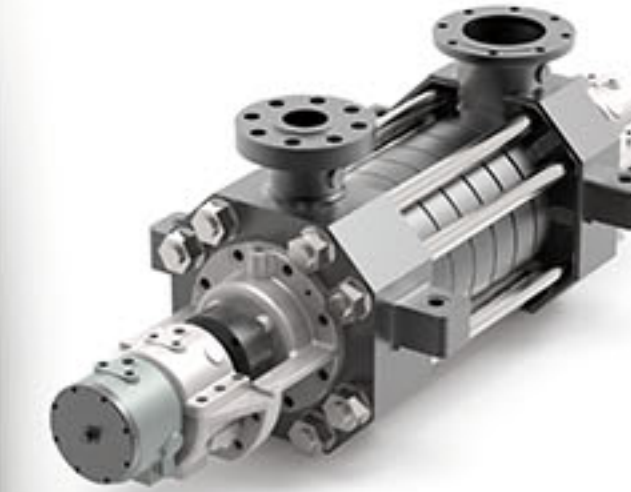
- 보일러 급수용 Boiler feed
- 파이프라인 부스터 Pipeline booster
- 광산용 Mine pumping
- 고압용 High pressure process

● Ratings

- Capacity to : ~30 m³/min
- Head to : ~1,500 m
- Temperature to : ~200°C

PAGE . 74~77

Super High Temperature & Pressure Boiler Feed Pumps ST



API Code : BB4

● Applications

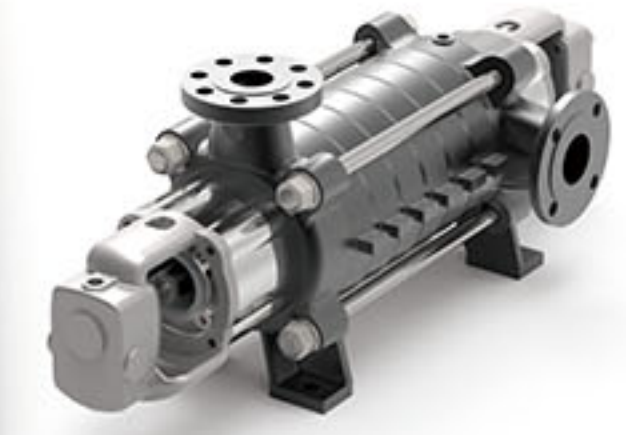
- 보일러 급수용 Boiler feed
- 광산용 Mine drainage
- 화학용 Chemical process
- 고압용 Other high pressure services

● Ratings

- Capacity to : ~20 m³/min
- Head to : ~3,000 m
- Temperature to : ~250°C

PAGE . 78~81

High Pressure Multi Stage Turbine Pumps HT



API Code : BB4

● Applications

- 보일러 급수용 Boiler feed
- 공정 용수용 Processing water
- 일반 산업용 General Industry
- 고압급수 및 시수용 City water and high pressure water

● Ratings

- Capacity to : ~2.5 m³/min
- Head to : ~500 m
- Temperature to : ~180°C

PAGE . 82~85

Double Casing Barrel Pumps DST



API Code : BB5

● Applications

- 초고압, 고온용 High Pressure & Temperature
- 제철소 디스케일용 Steel mill Descale
- 정유, 석유화학용 Petroleum refinery / Petrochemical industry
- 발전소 메인 보일러 급수용 Power Plant Boiler Main Water Supply System

● Ratings

- Capacity to : ~20 m³/min
- Head to : ~4,000 m
- Temperature to : ~300°C

PAGE . 86~87

High Pressure Multi Stage Turbine Pumps MTS



● Applications

- 보일러 급수용 Boiler feed
- 공정 용수용 Processing water
- 일반 산업용 General Industry
- 고압급수 및 시수용 City water and high pressure water

● Ratings

- Capacity to : ~10 m³/min
- Head to : ~500 m
- Temperature to : ~120°C

PAGE . 88~91

Dual Volute Multi-Stage Pumps MV



● Applications

- 보일러 급수용 Boiler feed
- 가압용 Booster
- 소화설비용 Fire-fighting jockey
- 건물용 Building
- 일반 산업용 General industry

● Ratings

- Capacity to : ~3 m³/min
- Head to : ~140 m
- Temperature to : ~90°C

PAGE . 92~93

Contents

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Vertical Type Pumps

버티컬 타입 펌프

구동용의 전동기와 접속하고 있는 펌프의 날개차를 회전시키기 위한 주축이 수직으로 되어 있는 펌프입니다.



Vertical Mixed Flow Pumps VM/VMS



API Code : VS1

Applications

- 일반 산업용
General Industrial
- 공장 배수용
Factory drainage
- 빗물 배수용
Rain water drainage
- 농업용
Agriculture

Ratings

- Capacity to : ~400 m³/min
- Head to : ~500 m
- Temperature to : ~180°C

PAGE . 94~99

Vertical Axial Flow Pumps VA



API Code : VS3

Applications

- 일반 산업용
General Industrial
- 공장 배수용
Factory drainage
- 빗물 배수용
Rain water drainage
- 농업용
Agriculture

Ratings

- Capacity to : ~500 m³/min
- Head to : ~15 m
- Temperature to : ~60°C

PAGE . 100~101

Vertical One Piece Solid Shaft Pumps VISB/VISBO



API Code : VS4

Applications

- 화학공업용
Chemical industry
- 공장배수용
Industrial sump drainage
- 부식성 액체이송용
Corrosive & none-corrosive liquids
- 환경장치용
Pollution control

Ratings

- Capacity to : ~50 m³/min
- Head to : ~200 m
- Temperature to : ~150°C

PAGE . 102~105

Vertical Multi-stage Can-Type VCM



API Code : VS6

Applications

- 파이프라인 부스터
Pipeline boosting
- 정제용
Refinery blending
- 암모니아 순환용
Ammonia transfer
- 응축수용
Condensate
- LNG 순환용
LNG transfer

Ratings

- Capacity to : ~100 m³/min
- Head to : ~500 m
- Temperature to : ~180°C

PAGE . 106~109

Vertical Double Casing Volute Pumps VCMD



API Code : VS7

Applications

- 석유 정제용
Petroleum refinery
- 석유 화학 산업
Petrochemical industry
- 일반 산업용
General Industrial
- 산업 배수 장치
Industrial drainage
- 기타 화학 공업
Other chemical industries

Ratings

- Capacity to : ~100 m³/min
- Head to : ~500 m
- Temperature to : ~180°C

PAGE . 110~111

Vertical Cantilever Bottom Suction Pumps WNOP



Applications

- 화학공업
Chemical industry
- 식품산업용
Food industry
- 제지공업용
Paper industry
- 산업폐수용
Industries waste water

Ratings

- Capacity to : ~3m³/min
- Head to : ~40 m
- Pit Depths to : ~1.2 m

PAGE . 112~113

Vertical Pump & Process Pumps WVP



Applications

- 산업공정용
Industrial process
- 배수용
Industrial sump drainage

Ratings

- Capacity to : ~3.5 m³/min
- Head to : ~45 m
- Temperature to : ~115°C

PAGE . 114~115

Contents

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Vacuum, Self-Priming, Horizontal Pumps

진공, 자흡식, 횡축 펌프

진공펌프 Vacuum Pumps

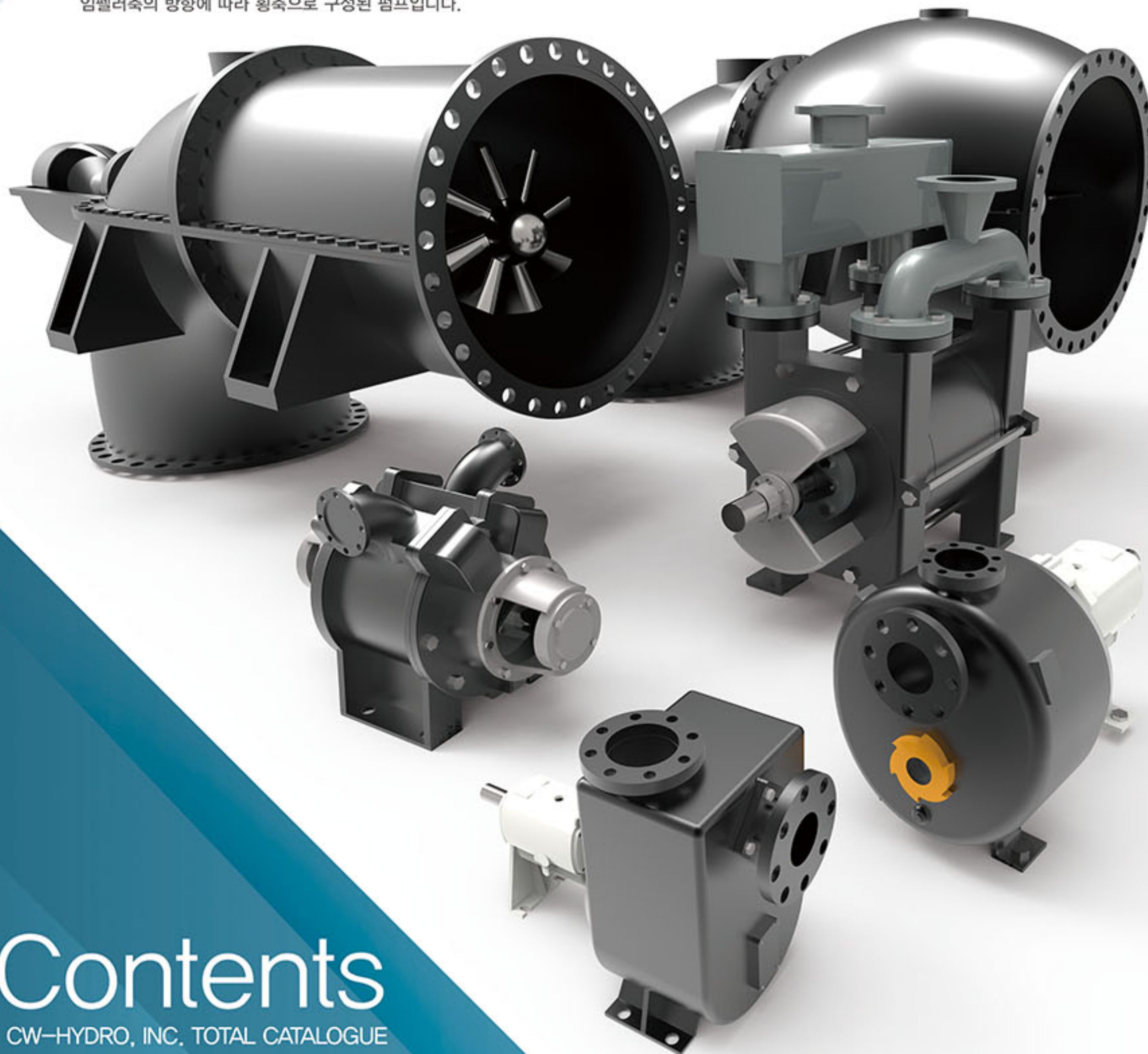
날개바퀴에 의해 액에 원심력을 주며 인접하는 2개의 날개 사이에 갇힌 액의 피스톤 작용으로 기체를 압축하는 진공 펌프입니다.

자흡식펌프 Self-Priming Pumps

운전을 장시간 정지하여 급수관내의 물이 없어져도 케이싱내에 물이 잔류하고 있어 운전을 재개하면 급수관내의 공기를 흡출하여 물을 흡입하고 양수를 가능케 하는 펌프입니다.

횡축펌프 Horizontal Pumps

원심펌프의 일종으로 임펠러축이 수평으로 위치하고 있는 것으로 일반적으로 많이 사용하는 형식이며 임펠러축의 방향에 따라 횡축으로 구성된 펌프입니다.



Self Priming Pumps SP



● Applications

- 프로세스용 Process
- 배수용 Sump drainage
- 화학용 Chemical industry
- 기타공업용 Other Various industries

● Ratings

- Capacity to : ~6 m³/min
- Head to : ~50 m
- Temperature to : ~177°C

PAGE . 116~119

ANSI Self Priming Pumps SSP



● Applications

- 화학공업 Chemical industry
- 석유정제 Petroleum refinery
- 석유화학공업용 Petrochemical industry
- 기타공업 Other various industries

● Ratings

- Capacity to : ~6 m³/min
- Head to : ~50 m
- Temperature to : ~177°C

PAGE . 120~121

Liquid Ring Type Pumps CNV



● Applications

- 증발용 Boiling processes
- 중앙 진공장치용 Central vacuum systems
- 응축플랜트 Condenser plants
- 탈기용 Deaerating systems
- 함침용 Impregnating plants
- 진공여과기용 Filter Plants
- 증류용 Distillation plants
- 건조기용 Drying system

● Ratings

- Capacity to : ~150 m³/min
- Vacuum to : ~720 mmHg
- Temperature to : ~60°C

PAGE . 122~125

High Vacuum Liquid Ring Pumps E



● Applications

- 탈기용 Deaerating
- 함침용 Impregnating plants
- 건조기용 Drying system
- 농축용 Concentrating
- 배기용 Condenser Exhausting
- 진공여과기용 Filtering

● Ratings

- Capacity to : ~22 m³/min
- Vacuum to : ~720 mmHg
- Temperature to : ~60°C

PAGE . 126~127

Horizontal Axial Flow Pumps HA



● Applications

- 일반산업용 General industry
- 공장배수용 Factory Drainage
- 빗물배수용 Rain-water Drainage
- 농업용 Agriculture

● Ratings

- Capacity to : ~350 m³/min
- Head to : ~5 m

PAGE . 128

Horizontal Shaft Mixed Flow Pumps HM



● Applications

- 일반산업용 General industry
- 공장배수용 Factory Drainage
- 빗물배수용 Rain-water Drainage
- 농업용 Agriculture

● Ratings

- Capacity to : ~350 m³/min
- Head to : ~15 m

PAGE . 128

Contents

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ISO Standard Process Pumps



IS/ISB(F)

Applications

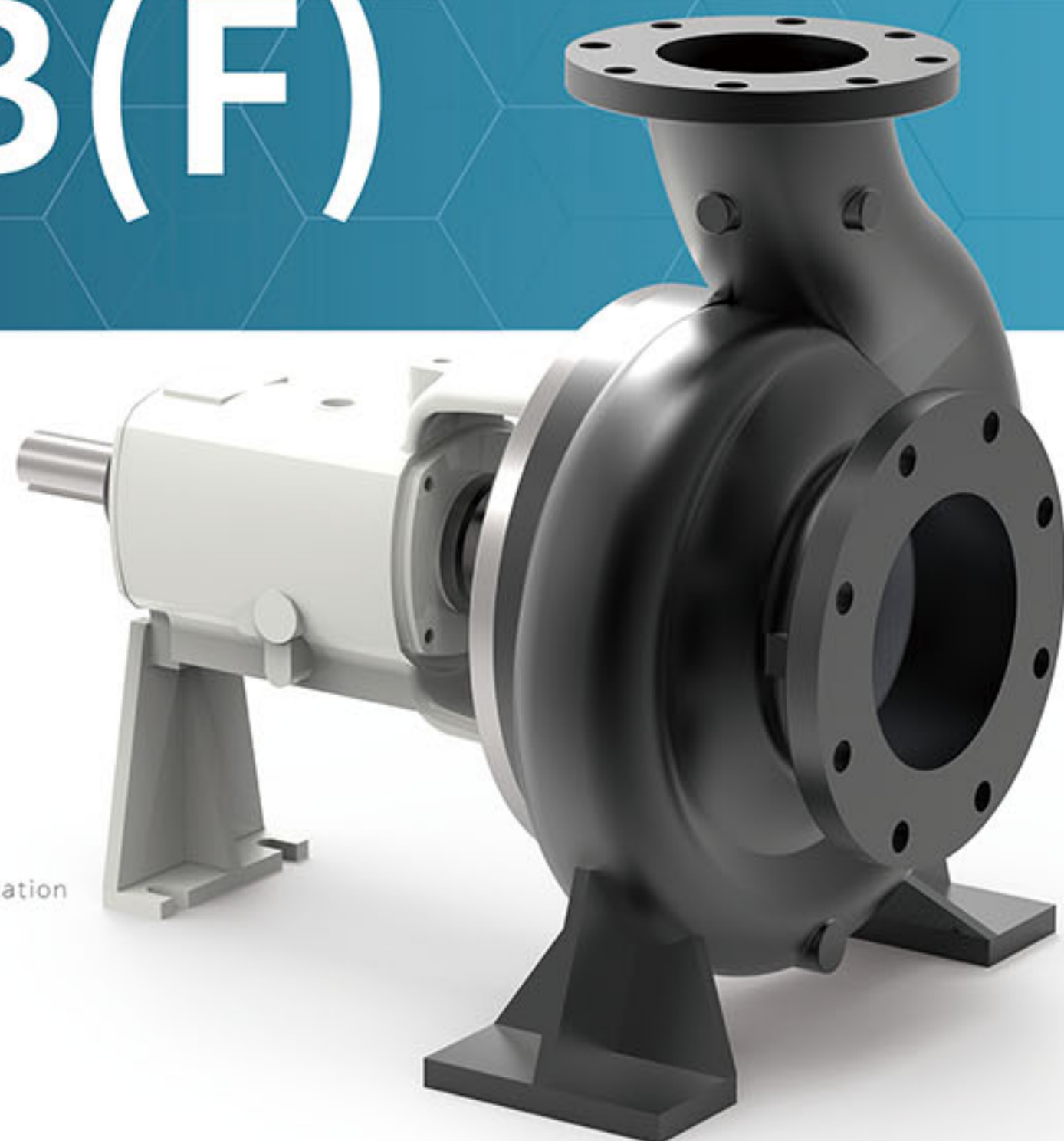
- 화학공업 Chemical industry
- 석유정제 Petroleum refinery
- 석유화학공업용 Petrochemical industry
- 기타공업 Other various industries

Feature

- ☑ 넓은 범위의 완전 표준화
Completely standardization for wide application
- ☑ Back Pull-Out 디자인으로 설계
Foot support and back pull-out design
- ☑ 신뢰성 높은 견고한 구조
Heavy and sturdy construction
- ☑ ISO 2858 Standard 규격 준수
Compliance with ISO 2858
- ☑ 최대의 호환성
High interchangeability
- ☑ 낮은 흡입양정
Low 'NPSHr'
- ☑ 최대의 효율
Good efficiency

Ratings

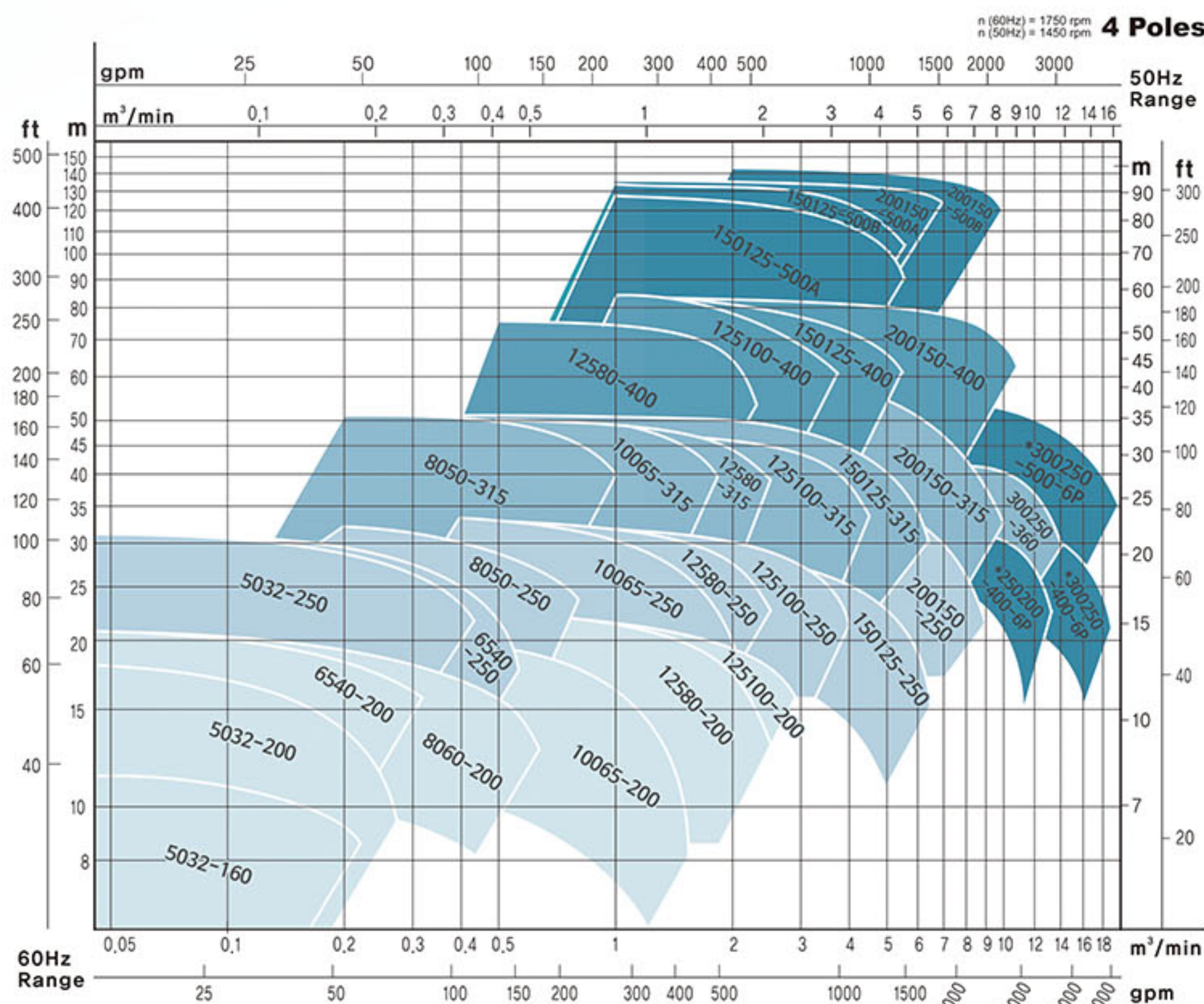
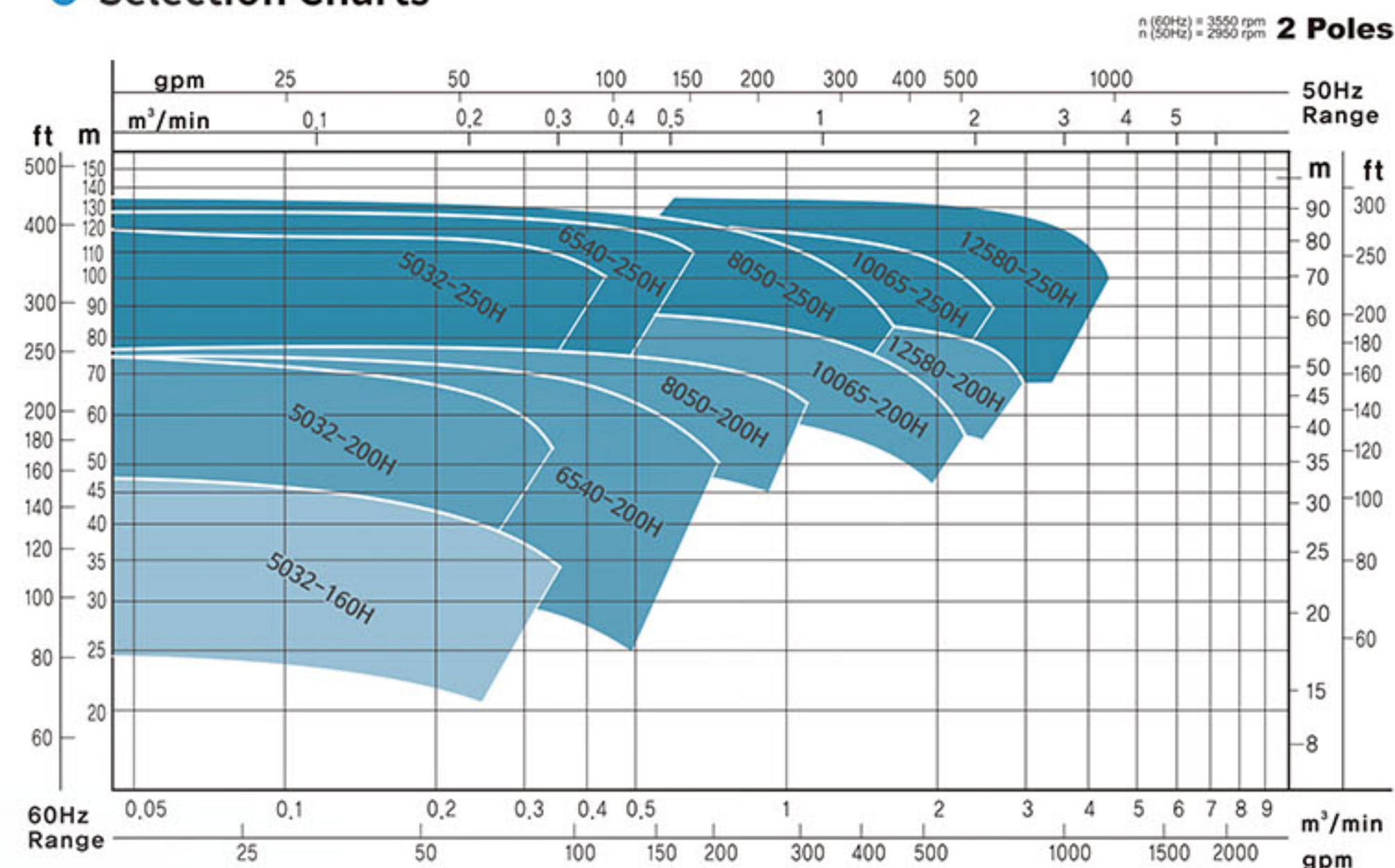
Capacity	Up to 50 m ³ /min (13,209 US GPM)
Head	Up to 140 m (460 ft)
Discharge Pressure	Up to 16 kgf/cm ² (227 PSIG)
Allowable Suction Pressure	Up to 9 kgf/cm ² (128 PSIG)
Revolution 60Hz (50Hz)	1750 OR 3550 min ⁻¹ (1450 or 2950 min ⁻¹)
Rotation	Clockwise viewed from coupling end
Stainless Steel Temp.	-50°C ~ 177°C (-58°F ~ 350°F)
Cast Iron Temp.	-20°C ~ 150°C (-4°F ~ 302°F)
Nozzle-Raing	Steel: ANSI CLASS150, Iron: ANSI CLASS150
Nozzle-Facing	Steel: RF Iron: FF
Nozzle-Location	End Suction: Top Discharge
Seals	Conventional Packing or Mechanical Seal



IS Type Model.



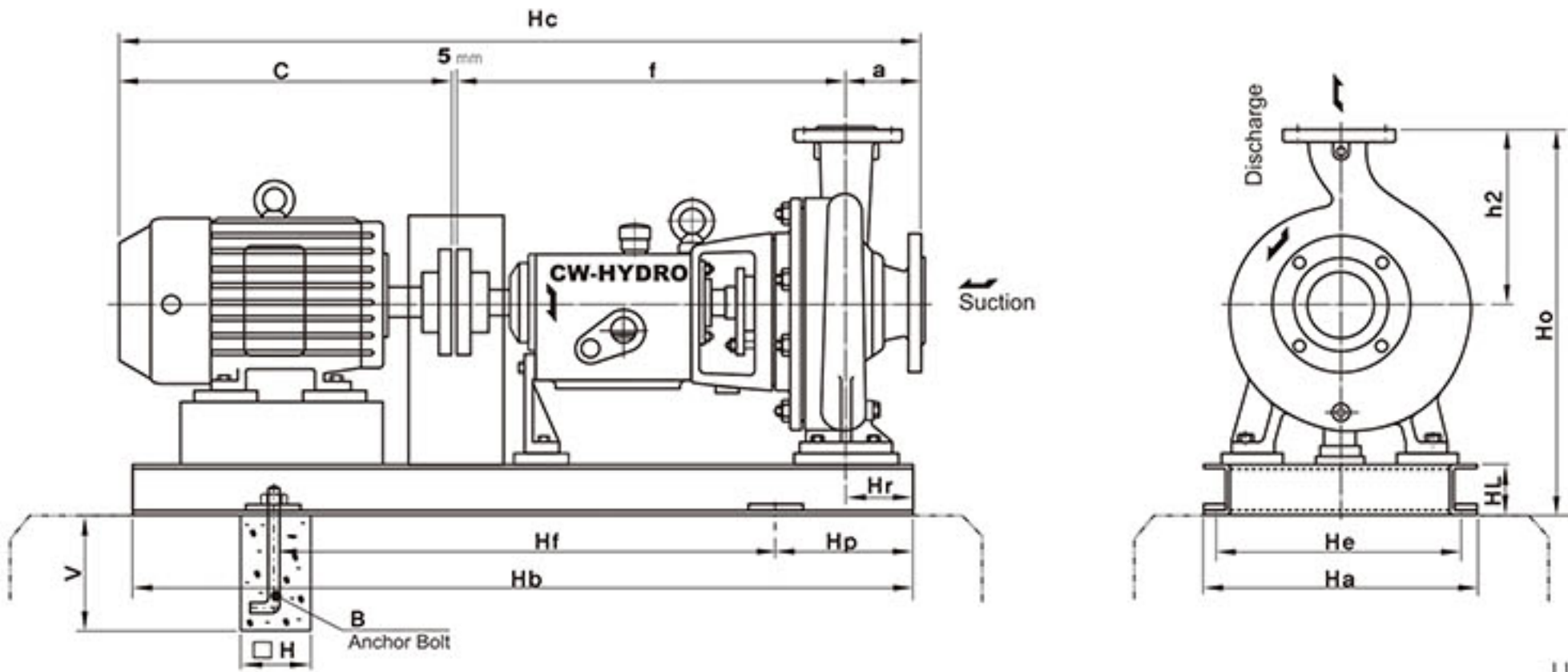
Selection Charts



참고: *, 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

* 6 Poles Models

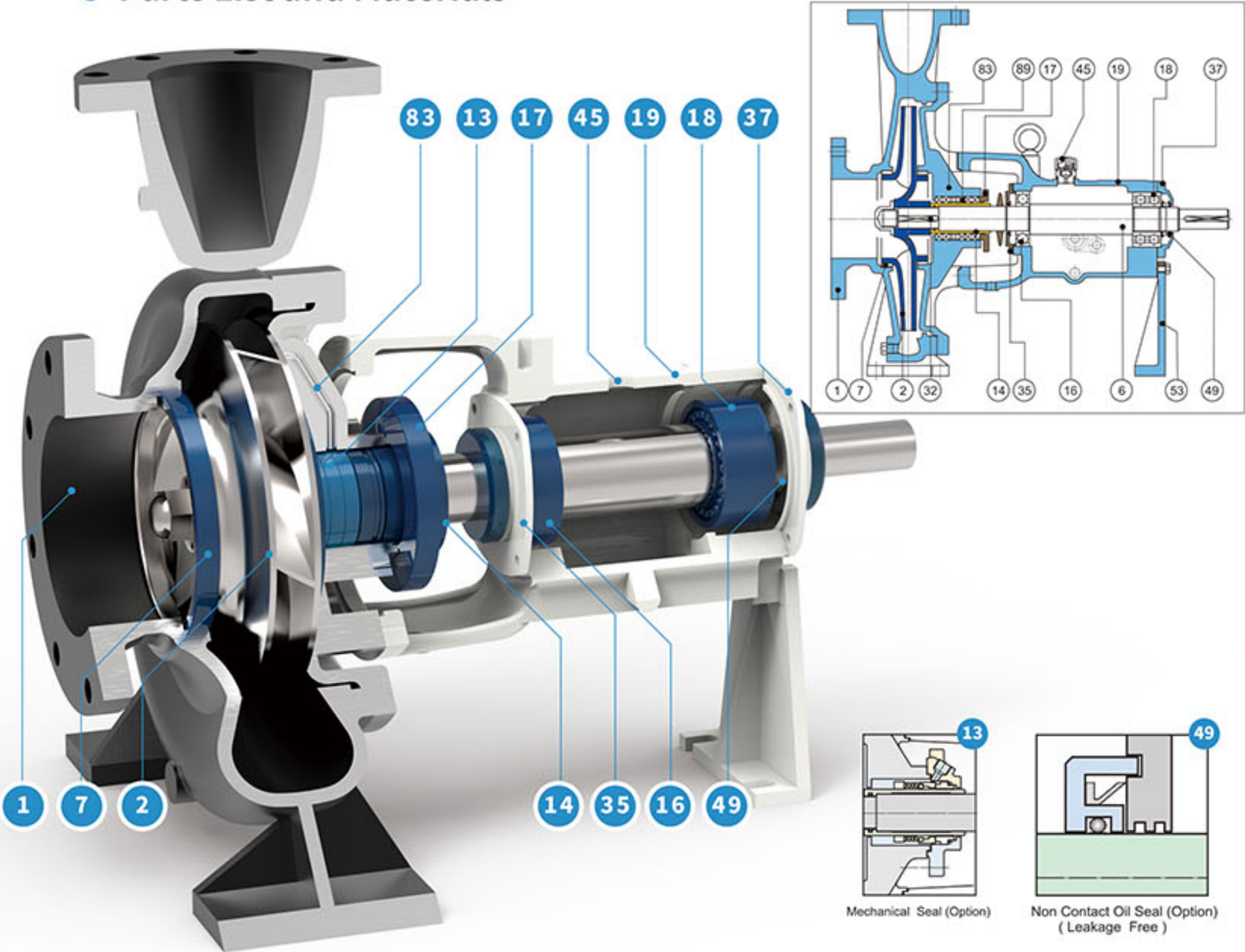
● Installation Dimension



Model	Size	Power			a	f	h2	Baseplate Size										Anchor Bolts				weight (Kg) (Lbs)	
		Frame	Kw	HP				Hc	C	Hp	Hf	Hb	Hr	He	Ha	HL	Ho	B	H	V	Pump	Total	
50 32-160	90	1.5	2	80 (3.14)	385 (15.15)	160 (6.29)	807 (31.77)	337 (13.26)	130 (5.11)	490 (19.29)	750 (29.52)	27.5	290 (11.41)	320 (12.59)	75 (2.95)	382 (15.03)	4-M12x200L (4-1/2"x7.87L)	120 (4.72)	200 (7.87)	36 (79)	95 (209)		
50 32-200	90	1.5	2			180 (7.08)	807 (31.77)	337 (13.26)								430 (16.92)			40 (88)	108 (236)			
50 32-250	132S	5.5	7.5	100 (3.93)	500 (19.68)	225 (8.85)	1047 (41.22)	442 (17.40)	160 (6.29)	630 (24.80)	950 (37.40)	85 (3.34)	320 (12.59)	350 (13.77)		495 (19.48)			68 (149)	178 (388)			
65 40-200	100L	2.2	3		385 (15.15)	180 (7.08)	866 (30.09)	376 (14.80)	140 (5.41)	520 (20.47)	800 (31.49)	70 (2.75)	290 (11.41)	320 (12.59)		430 (16.92)			49 (108)	117 (258)			
65 40-250	132S	5.5	7.5		500 (19.68)	225 (8.85)	1047 (41.22)	442 (17.40)	160 (6.29)	630 (24.80)	950 (37.40)	85 (3.34)	320 (12.59)	350 (13.77)		495 (19.48)			72 (158)	178 (388)			
80 50-200	112M	3.7	5		385 (15.15)	200 (7.87)	868 (34.17)	378 (14.88)	140 (5.41)	520 (20.47)	800 (31.49)	70 (2.75)	290 (11.41)	320 (12.59)		450 (17.71)			58 (127)	133 (293)			
80 50-250	132M	7.5	10		500 (19.68)	225 (8.85)	1086 (42.75)	481 (18.93)	170 (6.69)	660 (25.98)	1000 (39.37)	85 (3.34)	320 (12.59)	350 (13.77)		495 (19.48)			75 (165)	217 (478)			
80 50-315	160L	15	20	125 (4.92)		280 (11.02)	1262 (49.68)	632 (24.88)	195 (7.67)	760 (29.92)	1150 (45.27)		340 (13.38)	380 (14.96)	100 (3.93)	625 (24.60)	4-M16x250L (4-5/8"x9.84L)	150 (5.90)	250 (9.84)	90 (198)	321 (707)		
100 65-200	132S	5.5	7.5	100 (3.93)		225 (8.85)	1047 (41.22)	442 (17.40)	160 (6.29)	630 (24.80)	950 (37.40)		320 (12.59)	350 (13.77)	75 (2.95)	495 (19.48)	4-M12x200L (4-1/2"x7.87L)	120 (4.72)	200 (7.87)	70 (154)	201 (443)		
100 65-250	160L	15	20	125 (4.92)		250 (9.84)	1262 (49.68)	632 (24.88)	195 (7.67)	760 (29.92)	1150 (45.27)	100 (3.93)	390 (15.35)	430 (16.92)	100 (3.93)	570 (22.44)	4-M16x250L (4-5/8"x9.84L)	150 (5.90)	250 (9.84)	79 (174)	293 (645)		
100 65-315	180M	22	30		530 (20.86)	280 (11.02)	1307 (51.45)	647 (25.47)	205 (8.07)	790 (31.10)	1200 (47.24)					625 (24.60)			119 (262)	375 (826)			
125 65-200	160M	11	15		500 (19.68)	250 (9.84)	1218 (47.95)	588 (23.14)	190 (7.48)	720 (28.34)	1100 (43.30)	85 (3.34)	340 (13.38)	380 (14.96)		550 (21.65)			85 (187)	264 (581)			
125 80-250	160L	15	20		280 (11.02)	1262 (49.68)	632 (24.88)	195 (7.67)	760 (29.92)	1150 (45.27)	390 (15.35)	430 (16.92)				625 (24.60)			95 (209)	332 (731)			
125 80-315	180L	30	40		530 (20.86)	315 (12.40)	1366 (53.77)	706 (27.79)	205 (8.07)	790 (31.10)	1200 (47.24)					685 (26.96)			120 (264)	428 (943)			
125 80-400	200L	45	60		670 (26.37)	355 (13.97)	1591 (62.63)	791 (31.14)	950 (9.84)	1450 (57.08)			430 (16.92)	480 (18.89)	125 (4.92)	780 (30.70)	4-M20x315L (4-3/4"x12.4L)	180 (7.08)	315 (12.4)	130 (286)	567 (1249)		
125 100-200	160M	11	15		500 (19.68)	1218 (48.18)	588 (23.14)	190 (7.48)	720 (28.34)	1100 (43.30)			390 (15.35)	430 (16.92)	100 (3.93)	600 (23.62)	4-M16x250L (4-5/8"x9.84L)	150 (5.90)	250 (9.84)	100 (220)	305 (672)		
125 100-250	180M	19	25	140 (5.51)	530 (20.86)	280 (11.02)	1322 (52.04)	647 (25.47)	205 (8.07)	790 (31.10)	1200 (47.24)					625 (24.60)			110 (242)	378 (833)			
125 100-315	200L	45	60		315 (12.40)	1466 (57.71)	791 (31.14)	820 (26.6)	860 (33.85)	1300 (51.18)			440 (17.32)	480 (18.89)		685 (26.96)			135 (297)	533 (1175)			
125 100-400	225S	55	75		670 (26.37)	1630 (64.17)	815 (32.08)	255 (10.03)	990 (38.97)	1500 (59.05)	120 (4.72)	480 (18.89)	530 (20.86)	125 (4.92)	780 (30.70)		4-M20x315L (4-3/4"x12.4L)	180 (7.08)	315 (12.4)	160 (352)	660 (1454)		
150 125-250	180L	30	40		530 (20.86)	355 (13.97)	1381 (54.37)	706 (27.79)	820 (8.26)	1250 (32.67)	1490 (49.21)	100 (3.93)	390 (15.35)	430 (16.92)	100 (3.93)	725 (28.54)	4-M16x250L (4-5/8"x9.84L)	150 (5.90)	250 (9.84)	145 (320)	443 (976)		
150 125-315	225S	55	75			1490 (58.66)	815 (32.08)	230 (9.05)	890 (35.03)	1350 (53.14)	120 (4.72)	490 (19.29)	530 (20.86)		755 (29.72)				155 (342)	650 (1432)			
150 125-400	250S	75	100	140 (5.51)	675 (26.57)	400 (15.74)	1759 (69.25)	939 (36.96)	265 (10.43)	1020 (40.16)	1550 (61.02)		480 (18.89)	530 (20.86)	125 (4.92)	860 (33.85)	4-M20x315L (4-3/4"x12.4L)	180 (7.08)	315 (12.4)	195 (430)	845 (1862)		
150 125-500A	280M	132	175	180 (7.08)	670 (26.37)	450 (17.71)	1923 (75.70)	1068 (42.04)	280 (11.02)	1090 (42.91)	1650 (64.96)		600 (23.62)	660 (25.98)	150 (5.90)	995 (39.17)			265 (584)	1310 (2887)			
150 125-500B	280M	132	175			1923 (75.70)	1068 (42.04)												265 (584)	1310 (2887)			
200 150-250	225S	55	75	160 (6.29)	530 (20.86)	375 (14.76)	1510 (59.44)	815 (32.08)	230 (9.05)	890 (35.03)	1350 (53.14)		490 (19.29)	530 (20.86)	100 (3.93)	775 (30.51)	4-M16x250L (4-5/8"x9.84L)	150 (5.90)	250 (9.84)	235 (517)	720 (1587)		
200 150-315	250M	90	120		670 (26.37)	400 (15.74)	1774 (69.84)	939 (36.96)	265 (10.43)	1020 (40.15)	1550 (61.02)		550 (21.65)	600 (23.62)	125 (4.92)	860 (33.85)	4-M20x315L (4-3/4"x12.4L)	180 (7.08)	315 (12.4)	245 (540)	1010 (2226)		
200 150-400	280M	132	175	180 (7.08)		450 (17.71)	1923 (75.70)	1068 (42.04)	280 (11.41)	1120 (44.09)	1700 (66.92)		540 (21.25)	600 (23.62)	150 (5.90)	935 (36.81)			265 (584)	1270 (2799)			
200 150-500A	315L	180	240	200 (7.87)	820 (32.28)	560 (22.04)	2465 (97.04)	1290 (50.78)	360 (14.17)	765x2 (30.11x2)	2250 (88.58)	170 (6.69)	750 (29.52)	810 (31.88)	200 (7.87)	1215 (47.83)	6-M24x400L (4-1"x15.7L)	230 (9.05)	400 (15.7)	315 (694)	2640 (5818)		
200 150-500B	355L	315	420			2632 (103.62)	1430 (56.29)	360 (14.17)	840x2 (33.07x2)	2400 (94.48)									315 (694)	2590 (5929)			
250 200-400	250S	75	100			1964 (77.32)	939 (36.96)	290 (11.41)	1120 (44.09)	1700 (66.92)	160 (6.29)	600 (23.62)	660 (25.98)	150 (5.90)	1120 (44.09)	4-M20x315L (4-3/4"x12.4L)	180 (7.08)	315 (12.4)	310 (683)	1160 (2556)			
300 250-360	280S	110	150	230 (9.05)	855 (33.66)	520 (20.47)	2158 (84.96)	1068 (42.04)	315 (12.40)	1220 (48.03)	1850 (72.83)	155 (6.10)	750 (29.52)	810 (31.88)	1088 (42.83)				485 (1069)	1540 (3394)			
300 250-400	250M	90	120	200 (7.87)	830 (32.67)	600 (22.02)	1974 (77.71)	939 (36.96)	305 (12.00)	1190 (46.85)	1800 (70.86)	180 (7.08)	830 (32.67)	890 (35.03)	1220 (48.03)				594 (1309)	1524 (3359)			
300 250-500	280L	160	220			670 (26.37)	2403 (94.60)	1368 (53.85)	13.77 (33.77)	675x2 (26.57x2)	2050 (80.70)	160 (6.29)				1315 (51.77)	4-M24x400L (6-1"x15.7L)	230 (9.05)	400 (15.7)	602 (1326)	1937 (4267)		

● ISF / ISBF Models : Above 400 mm(15.75 in) of Impeller Diameter.
* Dimension and frame for motors differ from motor manufacturers in some cases.

● Parts List and Materials



- 1

Casing
- 2

Impeller
- 6

Shaft
- 7

Casing Ring
- 13

Packing
- 14

Sleeve
- 16

Inboard Bearing
- 17

Packing Grand
- 18

Outboard Bearing
- 19

Frame
- 35

Inboard Bearing Cover
- 37

Outboard Bearing Cover
- 45

Oil Cap (Leakage free air vent)
- 49

Oil Seal
- 83

Stuffing Box

Material Code : **Standard**

Name of Parts	MATERIALS								
	IS(F)			ISB(F)					
	KS	JIS	ASTM	KS	JIS	ASTM	KS	JIS	ASTM
1 Casing	GC200	FC20	A48 CL30	SSC13	SCS13	A743-CF8	SSC14	SCS14	A743-CF8M
2 Impeller	GC200	FC20	A48 CL30	SSC13	SCS13	A743-CF8	SSC14	SCS14	A743-CF8M
6 Shaft	SM45C	S45C	A576 1045	STS304	SUS304	A276 304	STS316	SUS316	A276 316
7 Casing Ring	BC6	BC6	B584 C836	SSC13	SUS13	A743-CF8	STS14	SUS14	A743-CF8M
14 Sleeve	BC6	BC6	B584 C836	STS304	SUS304	A276 304	STS316	SUS316	A276 316
83 Stuffing Box	GC200	FC20	A48 CL30	SSC13	SCS13	A743-CF8	SSC14	SCS14	A743-CF8M

Optional Material Code
- API Material class code.
- Other materials are available on request. (DCI, SC, 12Cr., SS316L, SCM, A20, Hcr, CD4MCU, etc.)

ISO Standard Process Pumps



ISBO

● Applications

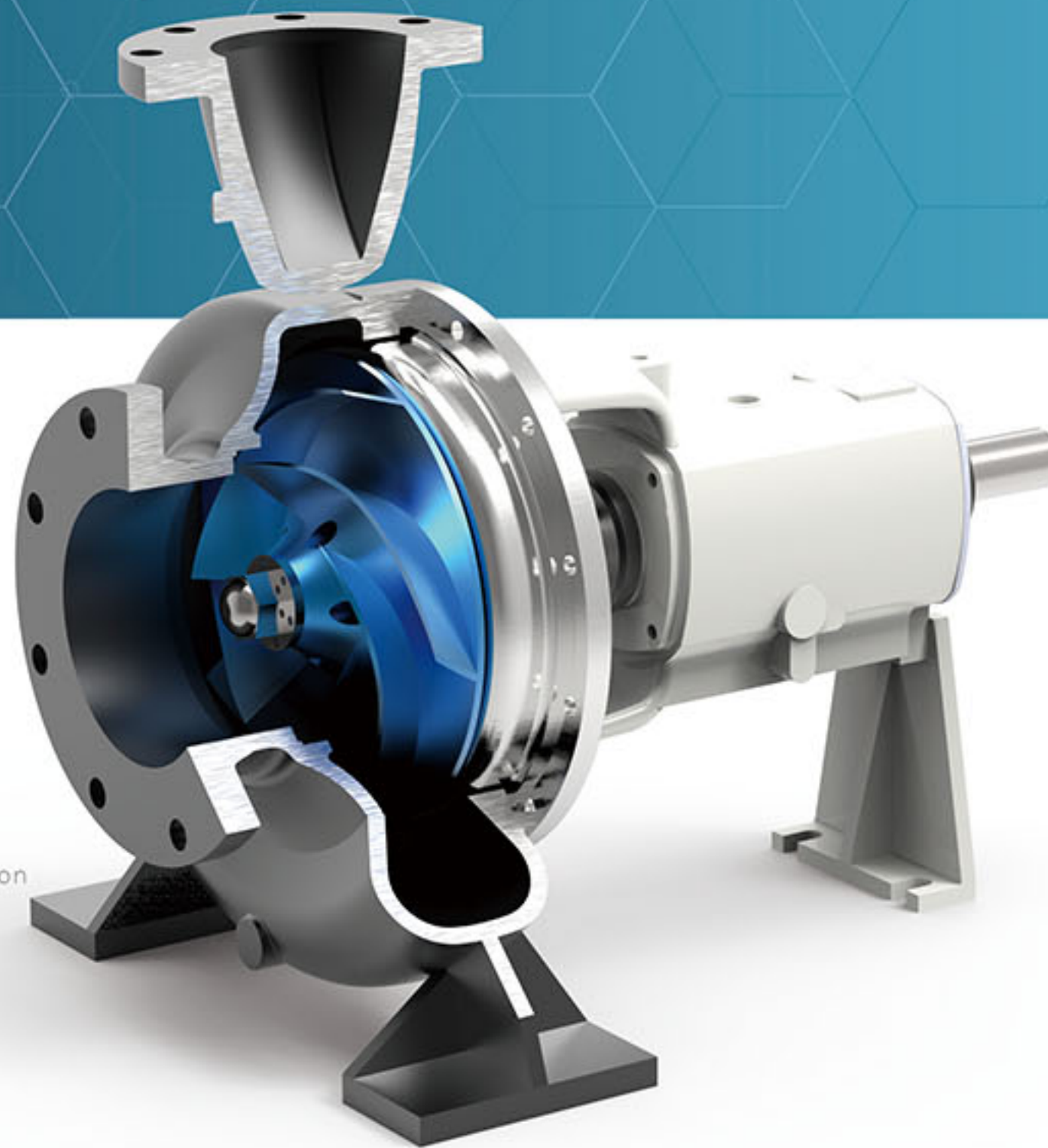
- 화학공업 Chemical industry
- 석유정제 Petroleum refinery
- 석유화학공업용 Petrochemical industry
- 기타공업 Other various industries

● Feature

- ☑ 넓은 범위의 완전 표준화
Completely standardization for wide application
- ☑ Back Pull-Out 디자인으로 설계
Foot support and back pull-out design
- ☑ 신뢰성 높은 견고한 구조
Heavy and sturdy construction
- ☑ ISO 2858 Standard 규격 준수
Compliance with ISO 2858
- ☑ 최대의 호환성
High interchangeability
- ☑ 낮은 흡입양정
Low 'NPSHr'
- ☑ 최대의 효율
Good efficiency

● Ratings

Capacity	Up to 5m ³ /min (1,321 US GPM)
Head	Up to 130m (426 ft)
Discharge Pressure	Up to 16 kgf/cm ² (227 PSIG)
Allowable Suction Pressure	Up to 9 kgf/cm ² (128 PSIG)
Revolution 60Hz (50Hz)	1750 OR 3550 min ⁻¹ (1450 or 2950min ⁻¹)
Rotation	Clockwise viewed from coupling end
Stainless Steel Temp.	-50°C~177°C (-58°F~350°F)
Cast Iron Temp.	-20°C~150°C (-4°F~302°F)
Nozzle-Raing	Steel : ANSI CLASS 150, Iron : ANSI CLASS 125
Nozzle-Facing	Steel : RF, Iron : FF
Nozzle-Location	End Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal



● ISBO Model.

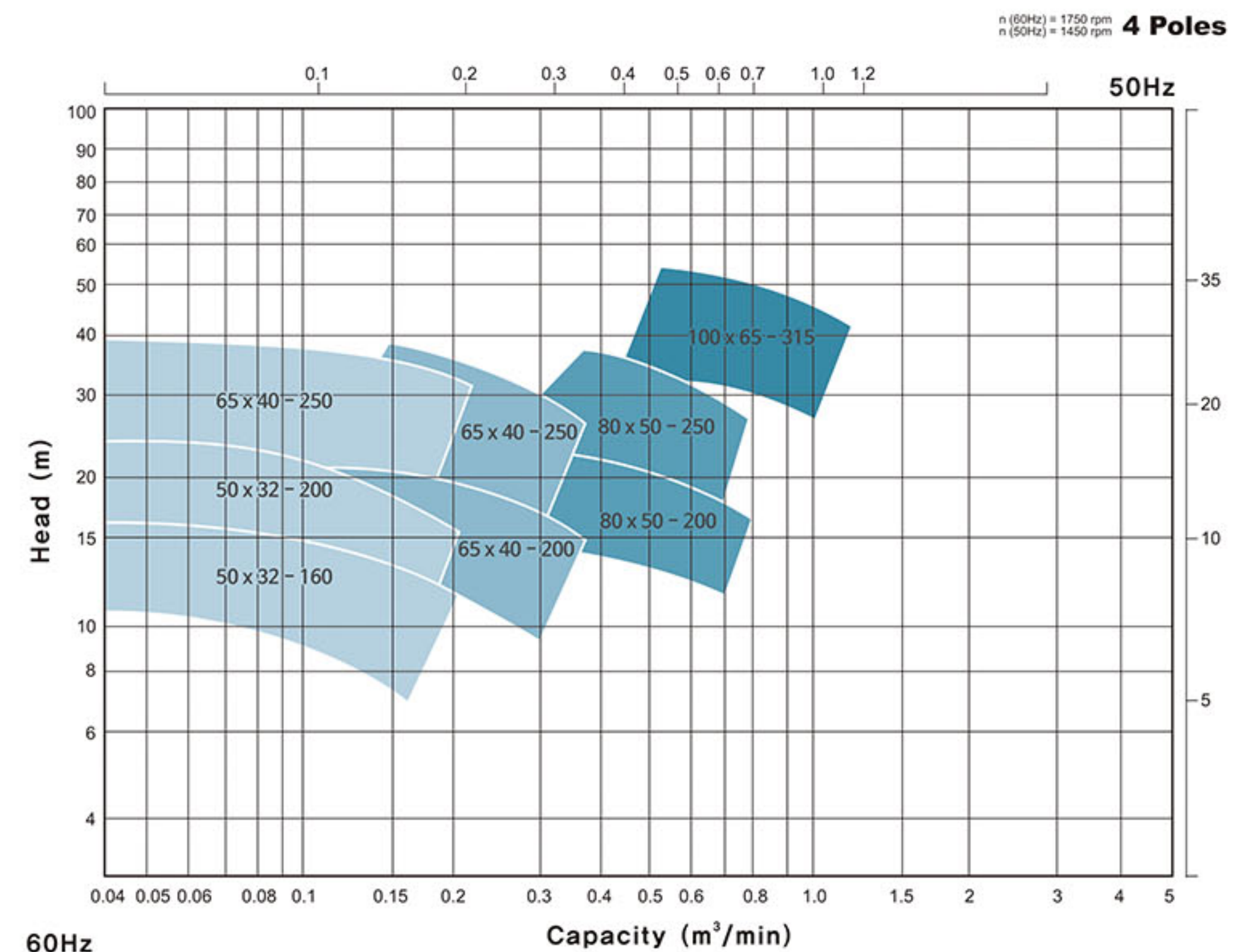
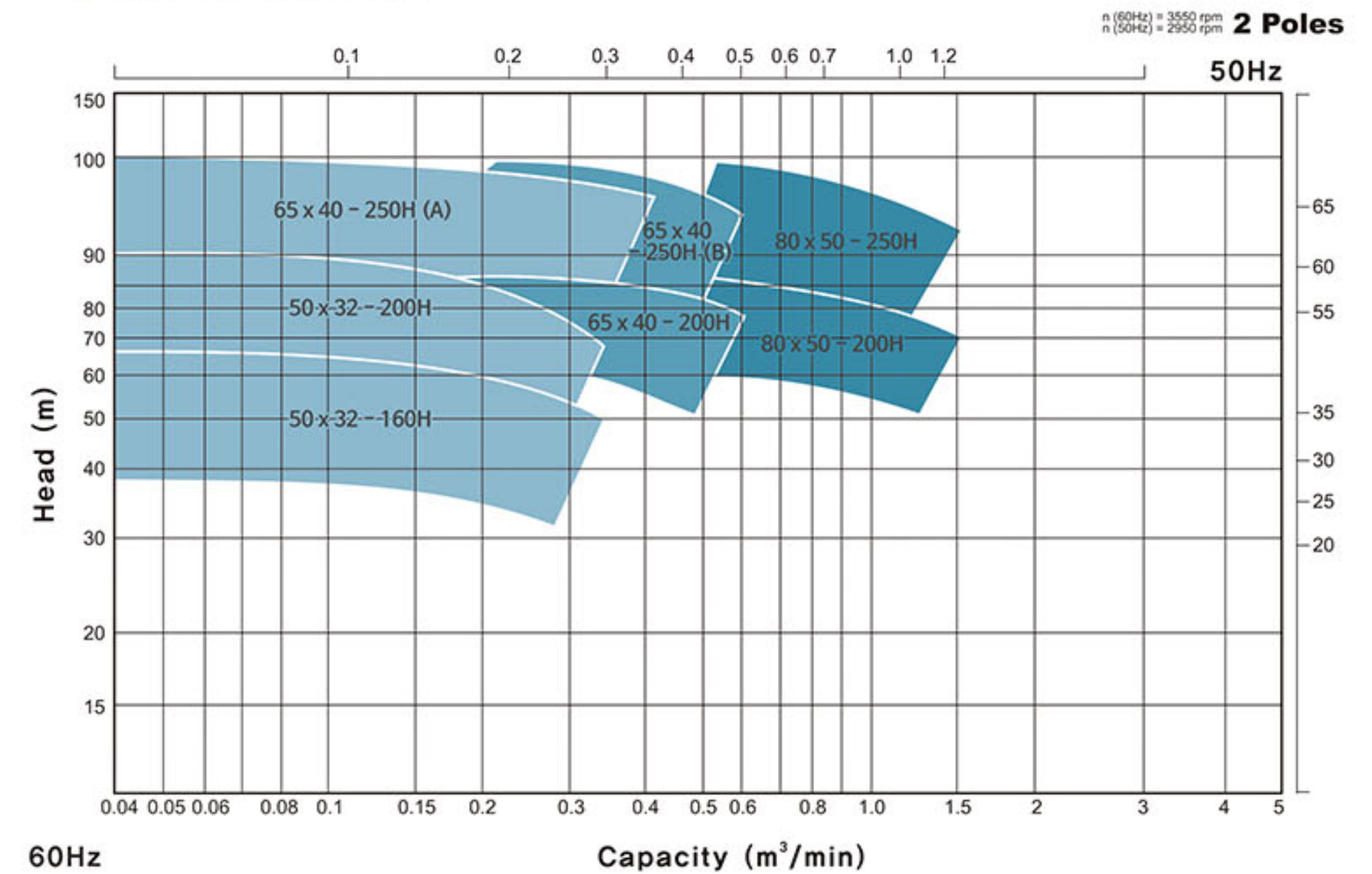


- ISBO Model.
- ☑ Open 타입 임펠러



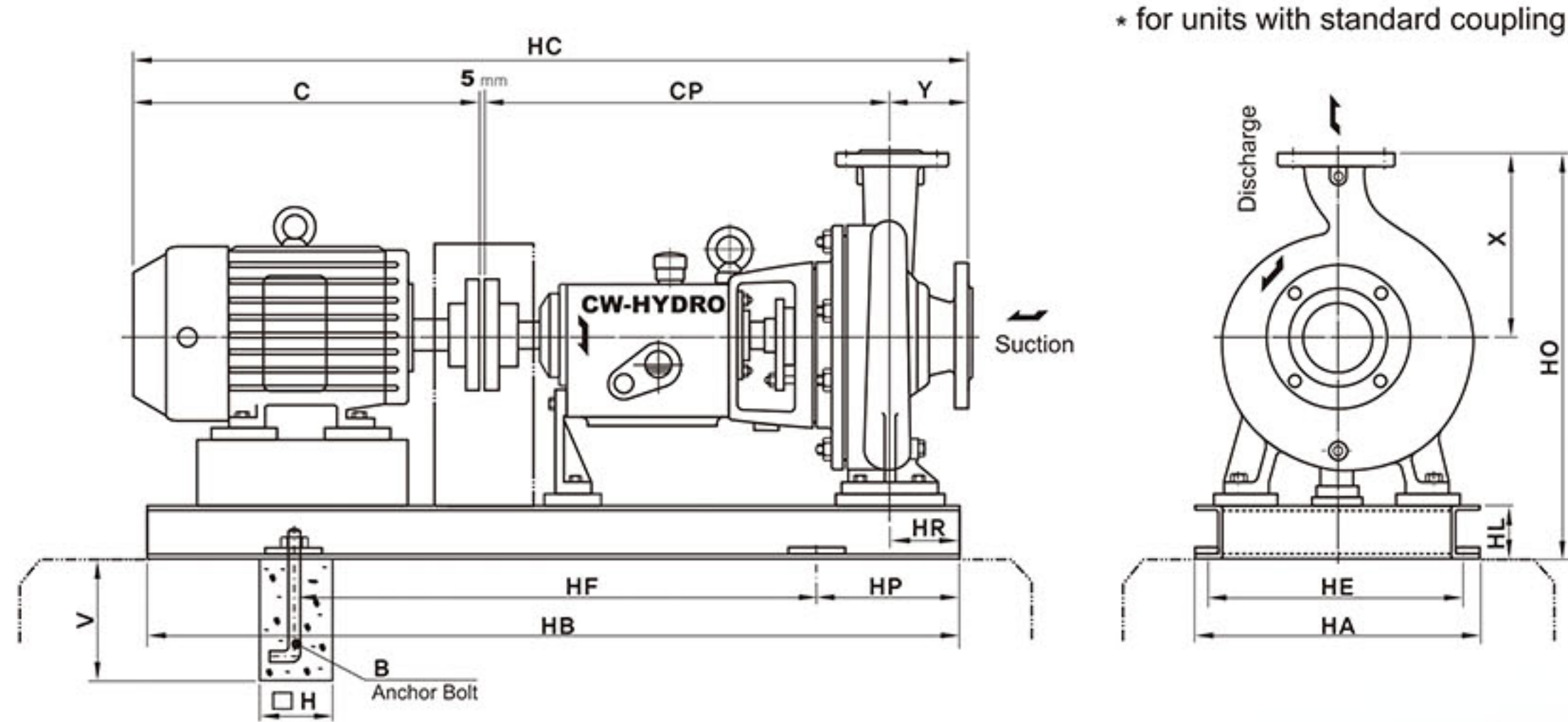
- IS, ISB, ISBF Models.
- ☑ Close 타입 임펠러

● Selection Charts



참고: *, 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

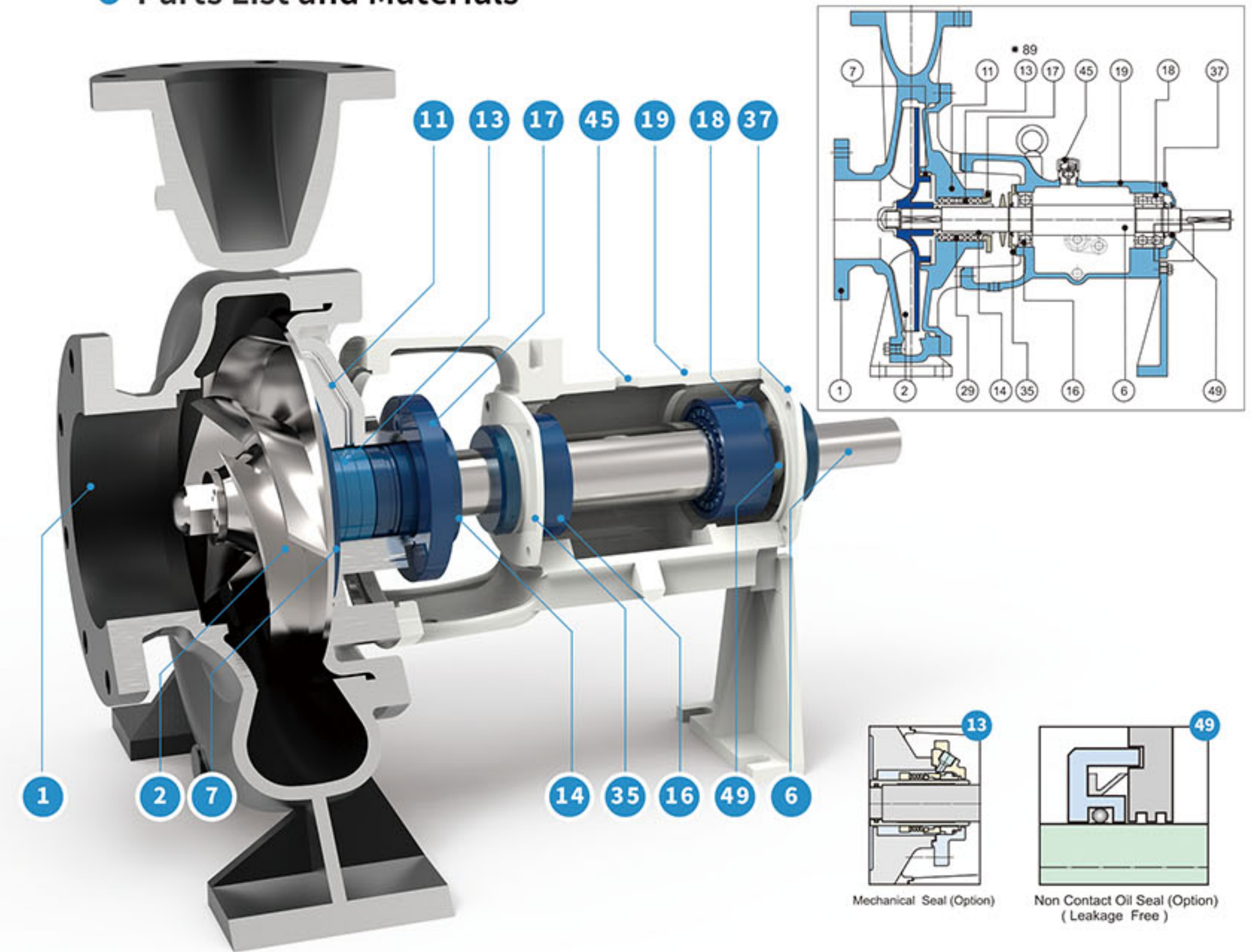
● Installation Dimension



구분 규격	Pump and Motor									Baseplate							Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	CP	Y	X	HF	HB	HR	HP	HE	HA	HO	B	H	V
50x32-160	50	32	80	0.75	740	270	385	80	160	480	710	70	115	290	320	382	4-M12x160L	130	160
50x32-200	50	32	90L	1.5	798	328	385	80	180	480	710	70	115	290	320	402	4-M12x160L	130	160
65x40-200	65	40	112M	3.7	872	382	385	100	180	540	800	75	130	320	350	430	4-M12x160L	130	160
80x50-200	80	50	112M	3.7	872	382	385	100	200	540	800	70	130	320	350	450	4-M12x160L	130	160
65x40-250	65	40	112M	3.7	987	382	500	100	225	600	900	85	150	400	430	495	4-M16x200L	130	200
100x65-200	100	65	132S	5.5	1049	444	500	100	225	660	1000	85	170	450	480	495	4-M16x200L	130	200
80x50-250	80	50	132S	5.5	1049	444	500	100	225	660	1000	85	170	400	430	495	4-M16x200L	130	200
125x80-250	125	80	132M	7.5	1112	482	500	125	250	660	1000	85	170	450	480	520	4-M16x200L	130	200
100x65-250	100	65	132M	7.5	1112	482	500	125	250	660	1000	100	170	450	480	540	4-M16x200L	130	200
125x80-250	125	80	150M	11	1223	593	500	125	280	740	1120	85	190	490	530	625	4-M20x250L	130	200
100x65-315	100	65	160L	15	1297	637	530	125	280	840	1250	100	205	490	530	625	4-M20x250L	200	250

참고: *, 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

● Parts List and Materials



No	Name of part	Material		
1	Casing	SSC13	SSC14	GC200
2	Impeller	SSC13	SSC14	GC200
6	Shaft	STS304	STS316	SM45C
7	Wearing Ring	SSC13	SSC14	BC6
11	Stuffing Box Cover	SSC13	SSC14	GC200
13	Packing	TEFLON	TEFLON	TEFLON
14	Packing Sleeve	STS304	STS304	BC6
16	Inboard Bearing	STEEL	STEEL	STEEL
17	Packing Gland	SSC13	SSC14	GC200
18	Outboard Bearing	STEEL	STEEL	STEEL
19	Frame	GC200	GC200	GC200
29	Lantern Ring	SSC13	SSC14	TEFLON
35	Inboard Bearing Cover	GC200	GC200	GC200
37	Outboard Bearing Cover	GC200	GC200	GC200
40	Deflector	NBR	NBR	NBR
49	Oil Seal	NBR	NBR	NBR
71	Adapter	GC200	GC200	GC200

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

Single-stage Overhung Pumps

H(HB)

energy API CE

● Applications

- 석유 정제용 Petroleum refinery
- 석유 화학용 Petrochemical industry
- 기타 화학용 Other chemical
- 고온/고압용 High temperature and high pressure services

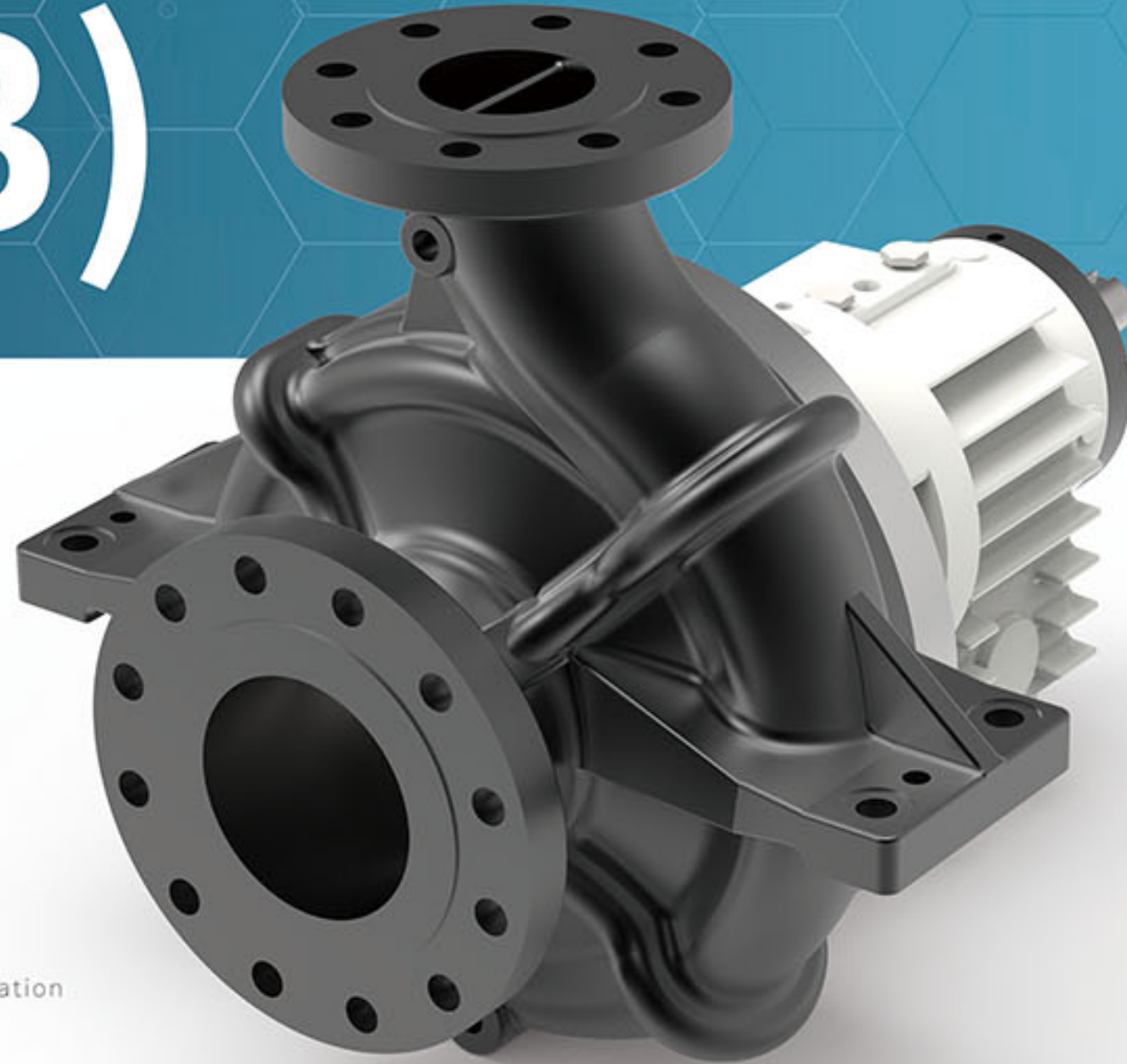
● Feature

- ☑ 넓은 범위의 완전 표준화 Completely standardization for wide application
- ☑ 백 풀 아웃 디자인 Back pull-out design
- ☑ 최대의 효율성 Maximum efficiency
- ☑ 신뢰성 높은 견고한 구조 Heavy and sturdy construction
- ☑ HB Model. API standard 610 적용 (API Code : OH2)
HB Model. API standard 610 (API Code : BB4)

● Ratings

Capacity	Up to 25 m ³ /min (6,604 US GPM)
Head	Up to 300 m (984 ft)
Discharge Pressure	Up to 52 kgf/cm ² G (739 PSIG)
Allowable Suction Pressure	Up to 45 kgf/cm ² G (640 PSIG)
Revolution 60Hz (50Hz)	1750 OR 3550 min ⁻¹ (1450 or 2950 min ⁻¹)
Rotation	Clockwise viewed from coupling end
Temperature	-100°C ~ 460°C (-148°F ~ 860°F)
Nozzle	ANSI CLASS 300
Location	End Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal

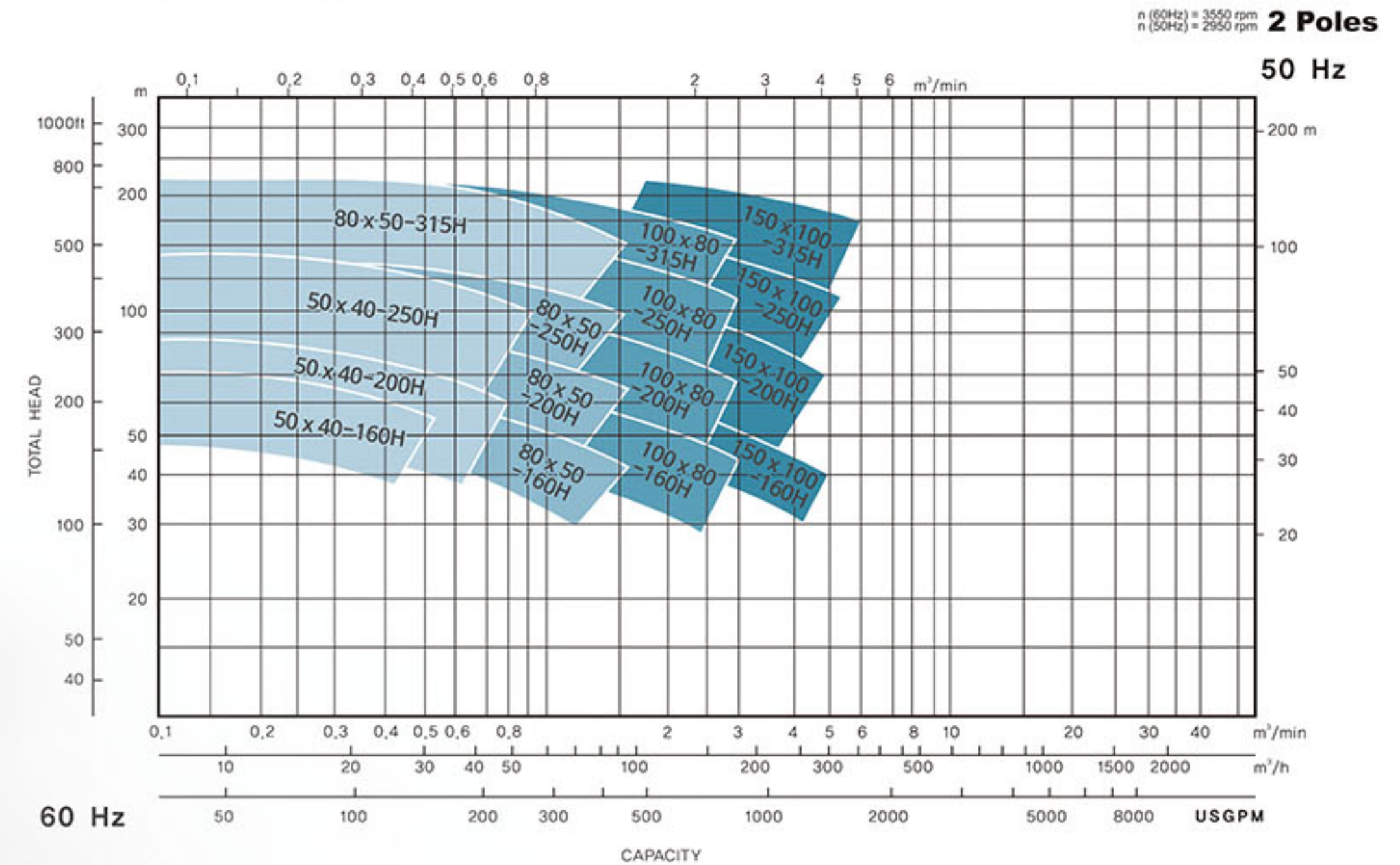
*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.



● H(HB) Type Model.

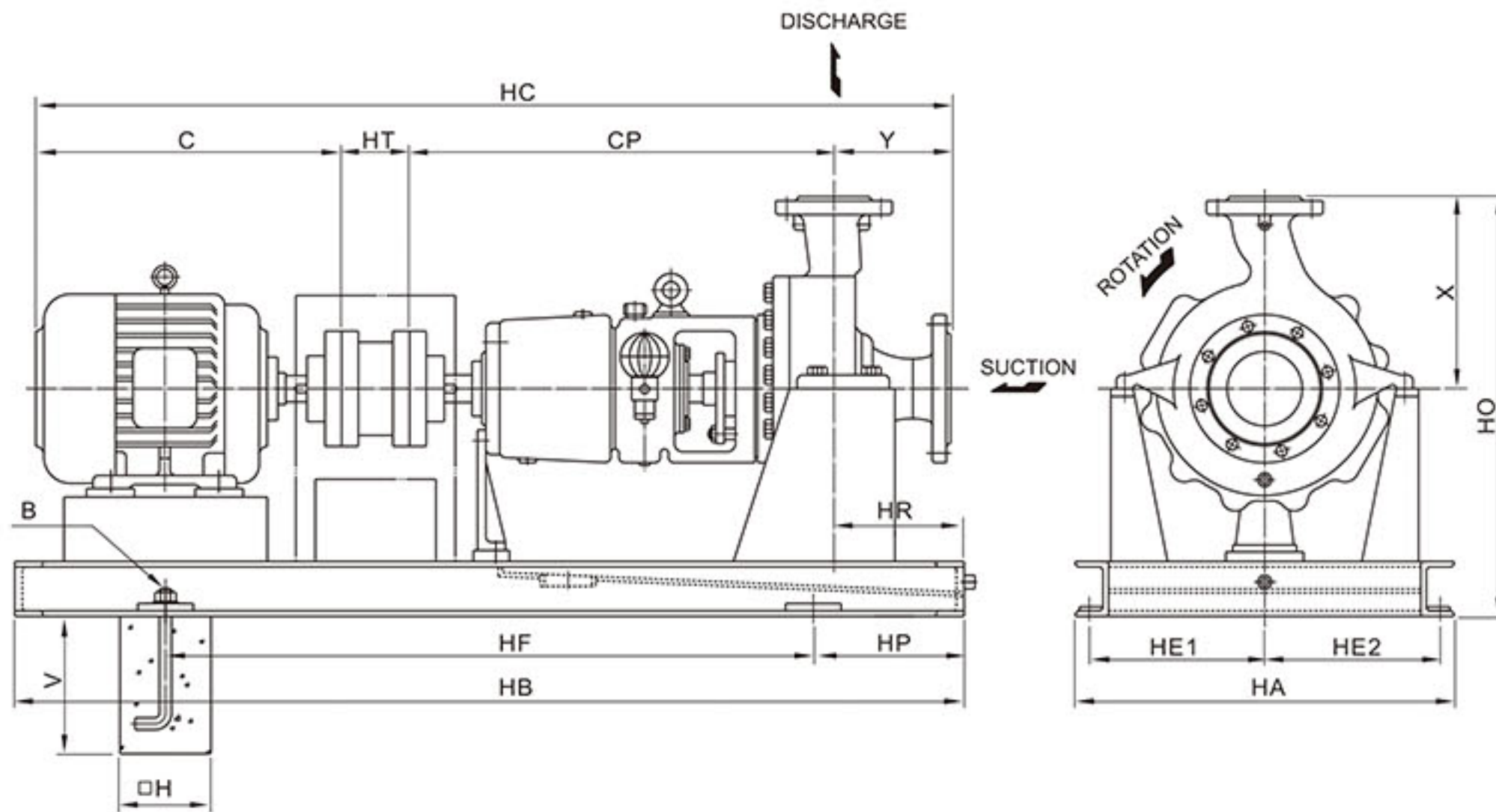


● Selection Charts



Model. H(HB)

● Installation Dimension

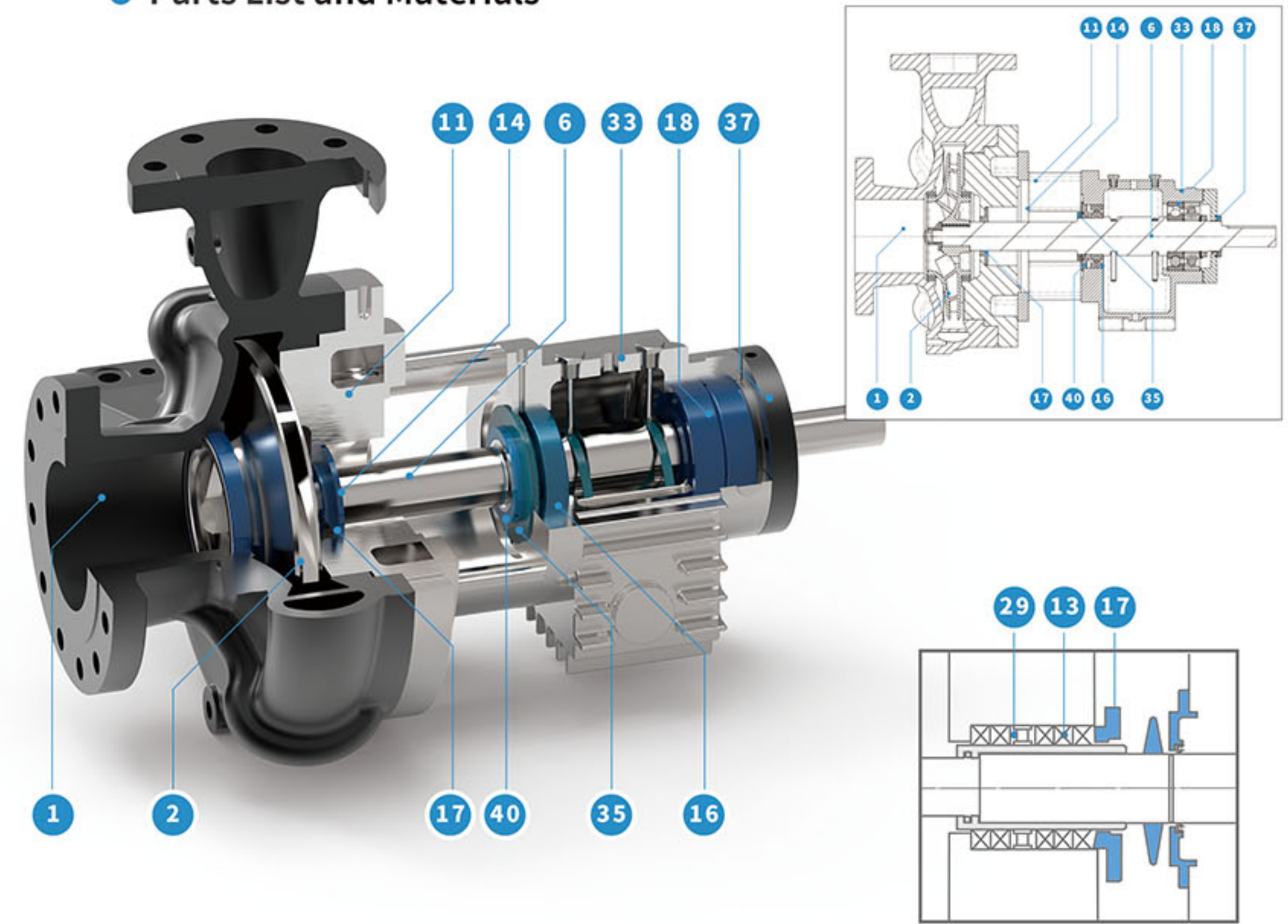


구분 규격	Pump and Motor										Baseplate								Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	HT	CP	Y	X	HR	HP	HF	HB	HO	HE1	HE2	HA	B	H	V
40x25-200	40	25	180M	19	1507	647	140	570	140	220	85	240	920	1400	600	215	215	480	4-M20x315L	150	315
50x40-160	50	40	180M	19	1507	647	140	580	140	225	85	240	920	1400	605	215	215	480	4-M20x315L	150	315
50x40-200	50	40	200M	30	1568	708	140	580	140	225	85	240	920	1400	605	215	215	480	4-M20x315L	150	315
50x40-250	50	40	225S	45	1757	817	140	650	150	265	90	255	990	1500	710	270	270	600	4-M20x315L	150	315
50x40-315	50	40	225M	55	1802	842	140	650	170	300	100	270	1060	1600	770	270	270	600	4-M20x315L	150	315
80x50-160	80	50	180L	22	1545	685	140	580	140	225	80	240	920	1400	605	215	215	480	4-M20x315L	150	315
80x50-200	80	50	200L	37	1607	747	140	580	140	225	85	240	920	1400	605	240	240	530	4-M20x315L	150	315
80x50-250	80	50	225S	45	1757	817	140	650	150	265	90	255	990	1500	685	270	270	600	4-M20x315L	150	315
80x50-315	80	50	250M	75	1935	894	140	730	170	300	90	290	1120	1700	795	300	300	660	4-M20x315L	150	315
80x50-400	80	50	280S	93	2054	1014	140	730	170	355	120	300	1200	1800	850	300	300	660	4-M20x315L	150	315
100x80-160	100	80	225M	55	1797	842	140	650	165	250	95	270	1060	1600	655	235	235	530	4-M20x315L	150	315
100x80-250	100	80	250M	75	1934	894	140	730	170	300	95	290	1120	1700	795	270	270	600	4-M20x315L	150	315
100x80-315	100	80	280M	110	2105	1065	140	730	170	400	115	300	1200	1800	920	300	300	660	4-M20x315L	150	315
150x100-160	150	100	225M	55	1902	842	140	650	190	280	105	270	1060	1600	725	270	270	600	4-M20x315L	150	315
150x100-200	150	100	280M	100	2125	1065	140	730	190	325	105	300	1200	1800	820	280	320	660	4-M20x315L	150	315
150x100-250	150	100	280L	150	2224	1154	140	730	190	340	120	325	1250	1900	835	280	320	660	4-M20x315L	150	315
150x100-315A	150	100	280M	110	2175	1065	180	730	200	370	105	325	1250	1900	890	320	350	730	4-M20x315L	150	315
150x100-315B	150	100	225M	55	1952	842	180	730	200	370	105	290	1120	1700	890	285	315	660	4-M20x315L	150	315
150x100-400	150	100	280L	150	2264	1154	180	730	200	370	120	340	1320	2000	890	375	375	810	4-M20x315L	150	315
200x150-250	200	150	250M	75	2004	894	180	730	200	425	130	290	1120	1700	975	375	375	810	4-M20x315L	150	315
200x150-400	200	150	280L	150	2409	1154	180	850	225	560	180	360	700x2	2120	1170	470	580	1110	6-M24x400L	150	400
250x200-570	250	200	6809S	350	3273	1893	280	850	250	600	180	360	1140x2	3000	1330	475	575	1110	6-M24x400L	150	400
250x150-700	250	150	6810S	450	3666	2021	280	1030	335	630	190	370	820x3	3500	1460	555	1250	1250	8-M24x400L	150	400

* 모터의 치수 및 프레임은 모터 제조업체에 따라 다를 수 있습니다.

Model. H(HB)

● Parts List and Materials



Grand Packing Type

No	Name of part	Material			
1	Casing	SCP2H	SSC13	SSC14	SSC1
2	Impeller	GC200	SSC13	SSC14	SSC1
6	Shaft	SCM440	STS304	STS316	STS420J2
11	Stuffing Box Cover	SCPH2	SSC13	SSC14	SSC1
13	Packing or Seal	TEFLON	TEFLON	TEFLON	TEFLON
14	Packing Sleeve	STS304	STS304	STS316	STS420JS
16	Inboard Bearing	STEEL	STEEL	STEEL	STEEL
17	Packing Gland	SSC13	SSC13	SSC14	SSC13
18	Outboard Bearing	STEEL	STEEL	STEEL	STEEL
29	Lantern Housing	SSC13	SSC13	SSC13	SSC13
33	Bearing Housing	GC200	GC200	GC200	GC200
35	Inboard Bearing Cover	GC200	GC200	GC200	GC200
37	Outboard Bearing Cover	GC200	GC200	GC200	GC200
40	Deflector	BC6	BC6	BC6	BC6
65	Mechanical Seal	-	-	-	-
71	Adapter	GC200	GC200	GC200	GC200

참고: *. API610 Appendix E에 따른 재질이 적용됩니다. / 이외의 기타 자료는 요청시 제공됩니다.

ISO Standard General Service Pumps



GB

Applications

- 급수, 정수용 Water supply
- 냉각수 순환용 Cooling water circulation
- 냉각탑용 Cooling tower
- 건물용 Building
- 농업용 Irrigation
- 일반 산업용 General industry

Feature

- ✓ 폭넓은 적용 범위의 완전 표준화
Completely standardization for wide application
- ✓ 신뢰성 높은 견고한 구조
Heavy and sturdy construction
- ✓ ISO2858에 따른 최대의 호환성
Compliance with ISO2858 for high interchangeability
- ✓ 높은 효율과 낮은 NPSHr.
Good efficiency and low NPSHr.
- ✓ 견고한 케이싱 발지지와 간편한 유지보수를 위한 단순한 구조
Foot support and back pull out design and simple construction for easy maintenance

Ratings

Capacity	Up to 6 m ³ /min (1,585 US GPM)
Head	Up to 60m (196 ft)
Discharge Pressure	Up to 10 kgf/cm ² (142 PSIG)
Allowable Suction Pressure	Up to 5 kgf/cm ² (71 PSIG)
Revolution 60Hz (50Hz)	1750 min ⁻¹ (1450min ⁻¹)
Rotation	Clockwise (viewed from coupling end)
Temperature	-20°C ~ 150°C (-4°F ~ 302°F)
Nozzle Rating	KS 10 Kg/ cm ² - FF
Nozzle Location	End Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal

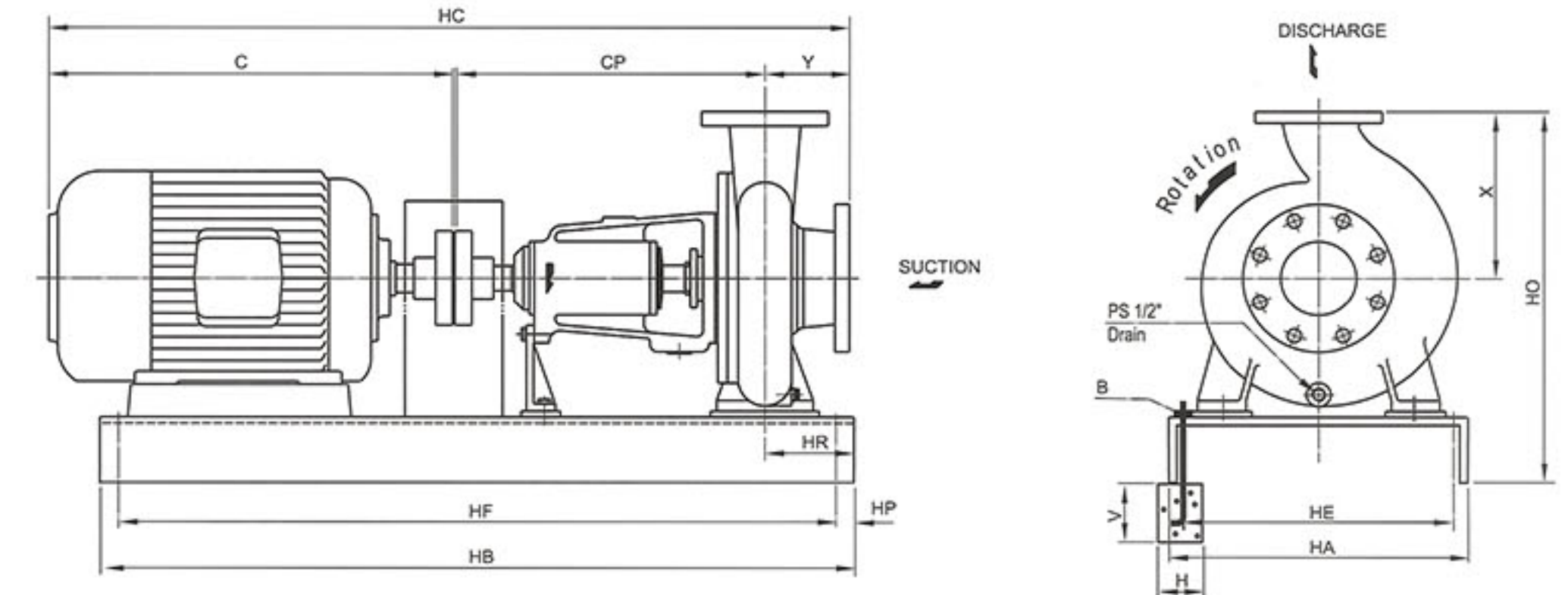


Specification

구분	POWER	CAPACITY / HEAD					
		유량 (m ³ /min)	양정 (m)	유량 (m ³ /min)	양정 (m)	유량 (m ³ /min)	양정 (m)
GB3220	1.5	0.1	9	0.15	8	0.2	6
	1.5	0.1	13	0.2	12	0.25	10
	2.2	0.1	16.5	0.2	14.5	0.3	12
GB4020	1.5	0.15	12	0.2	44.5	0.3	10
	1.5	0.15	13	0.2	13	0.3	11
	2.2	0.15	17	0.2	15	0.4	12
GB4025	3.7	0.1	18	0.25	17	0.4	13
	3.7	0.1	25	0.3	24	0.45	20
	5.5	0.1	31	0.3	30	0.5	25
GB5020	2.2	0.3	11	0.5	10	0.7	6
	3.7	0.3	19	0.6	16	0.8	12
	5.5	0.3	30	0.6	27	0.8	21
GB5031	7.5	0.3	30	0.5	29	0.7	26
	7.5	0.3	33	0.5	32	0.7	29
	11	0.3	50	0.6	47	0.8	44
GB6525	5.5	0.7	14	0.9	13	1.1	11
	5.5	0.7	18	1.0	16	1.2	14
	7.5	0.7	25	1.0	23	1.3	19
GB6531	11	0.5	32	1.2	28	1.5	25
	11	0.5	30	1.0	27	1.3	24
	15	0.5	37	1.0	33	1.3	29
GB8025	19	0.5	50	1.0	45	1.5	38
	7.5	1.0	18	1.6	15	1.9	13
	11	1.0	25	1.8	21	2.2	16
GB8036	15	1.0	31	1.8	27	2.4	19
	19	0.7	37	1.5	34	2.0	30
	22	0.7	42	1.5	40	2.2	34
GB1025	30	0.7	52	1.8	47	2.5	40
	37	0.7	64	2.0	58	2.7	48
	45	1.4	20	2.5	18	3.0	15
GB1036	15	1.6	23	2.5	20	3.2	16
	19	1.6	25	2.5	23	3.5	20
	22	1.6	31	3.0	27	3.8	23
GB1225	30	1.4	39	2.0	37	2.6	32
	30	1.4	42	2.2	40	2.8	35
	37	1.4	50	2.2	48	3.1	41
GB1231	45	1.4	58	2.5	54	3.3	48
	55	1.4	67	2.5	64	3.5	58
	19	2.0	20	3.0	18	4.5	14
GB1231	22	2.0	23	4.0	20	5.0	16
	30	2.0	30	4.5	25	6.0	16
	30	3.0	28	4.0	23	5.0	14
GB1231	30	3.0	32	4.5	24	5.2	18
	37	3.0	38	4.5	30	5.5	22
	45	3.0	45	4.5	40	6.0	26

참고: *. 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

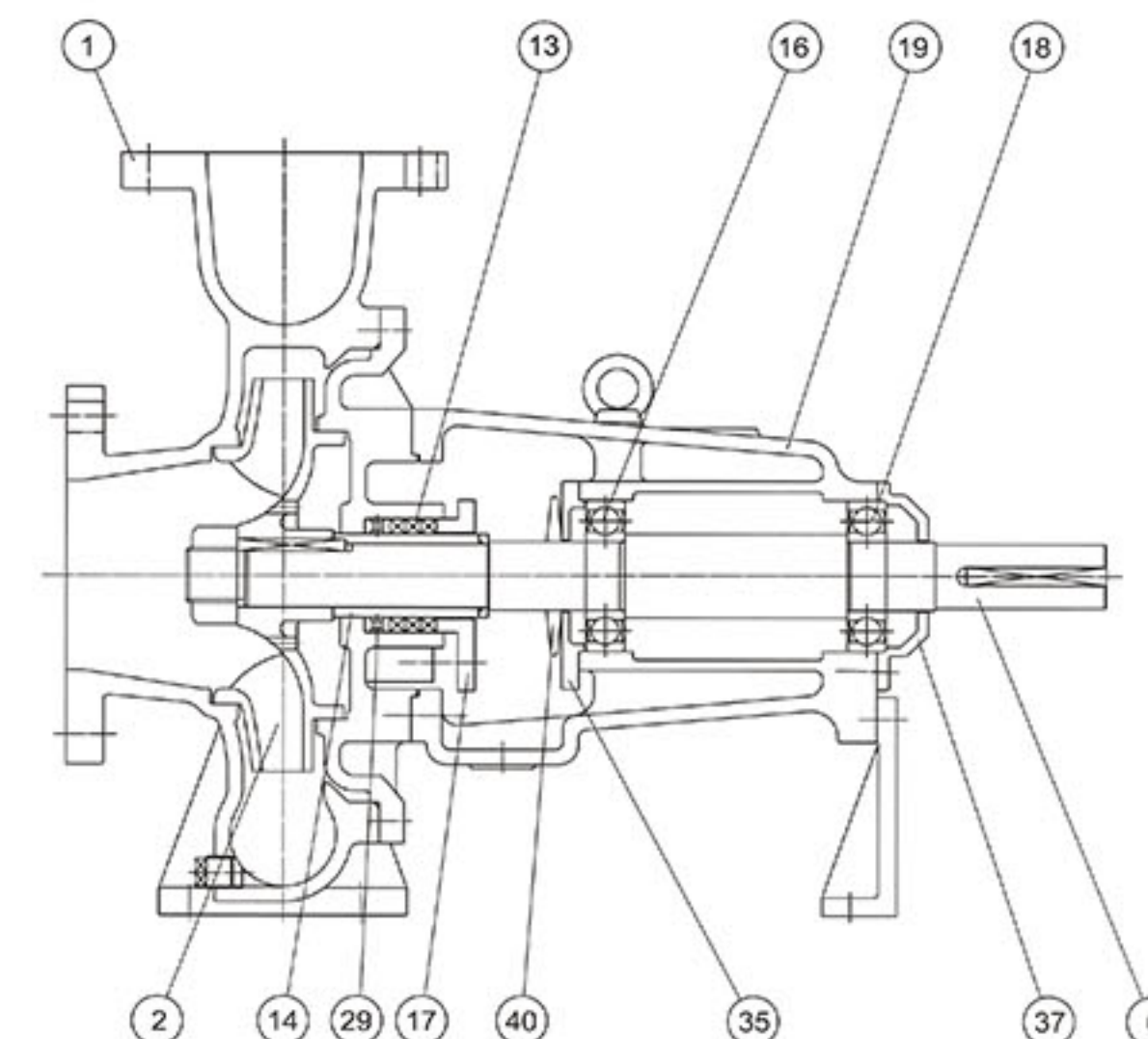
Installation Dimension



구분	Pump and motor										Baseplate						Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	CP	Y	X	HR	HF	HP	HB	HE	HA	HO	B	H	V
50×32-200	50	32	90L	1.5	798	328	385	80	180	100	750	25	800	210	260	400	4-M16×315L	150	250
65×40-200	65	40	90L	1.5	818	328	385	100	180	100	750	25	800	235	285	400	4-M16×315L	150	250
65×40-200	65	40	112M	3.7	987	382	500	100	225	110	900	25	950	290	340	465	4-M16×315L	150	250
80×50-200	80	50	112S	2.2	846	356	385	100	200	100	750	25	800	235	285	440	4-M16×315L	150	250
80×50-250	80	50	132S	5.5	1049	444	500	100	225	110	950	25	1000	290	340	465	4-M16×315L	150	250
80×50-315	80	50	160M	11	1223	593	500	125	280	110	1070	25	1120	315	365	565	4-M16×315L	150	250
100×65-250	100	65	160M	11	1218	593	495	125	250	130	1090	25	1140	330	380	525	4-M16×315L	150	250
100×65-315	100	65	160L	15	1302	637	535	125	280	130	1200	25	1250	370	420	580	4-M16×315L	150	250
125×80-250	125	80	160L	15	1267	637	500	125	280	130	1130	25	1180	370	420	580	4-M16×315L	150	250
125×80-360	125	80	200M	30	1368	708	530	125	355	130	1270	25	1320	405	455	710	4-M16×315L	150	250
125×100-250	125	100	180L	22	1355	685	525	140	280	130	1200	25	1250	370	420	580	4-M16×315L	150	250
125×100-360	125	100	225M	55	1512	842	525	140	355	150	1350	25	1400	470	420	710	4-M16×315L	200	315
150×125-250	150	125	200M	30	1383	708	530	140	355	130	1270	25	1320	390	440	680	4-M16×315L	150	250
150×125-315	150	125	225S	45	1492	817	530	140	355	150	1350	25	1400	470	520	710	4-M16×315L	200	315

참고: *. 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Parts List and Materials



NO	Name of part	METERIAL	
1	Casing	GC200	GCD450
2	Impeller	GC200	BC6
6	Shaft	SM45C	SM45C
13	Gland Packing	TEFLON	TEFLON
14	Sleeve	GC200	GC200
16	Inboard Bearing	STEEL	STEEL
17	Gland	GC200	GC200
18	Outboard Bearing	STEEL	STEEL
19	Frame	GC200	GC200
29	Lantern Ring	TEFLON	TEFLON
35	Inboard Bearing	GC200	GC200
37	Outboard Bearing	GC200	GC200
40	Deflector	NBR	NBR

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

Vortex Paper Stock Solid Process Pumps

GIV



Applications

- 폐수처리 Waste Treatment
- 제지공업 Pulp and Paper
- 식품공정용 Food processing
- 농업용 Agriculture
- 광산용 Mining
- 제조공정용 Manufacturing Process

Feature

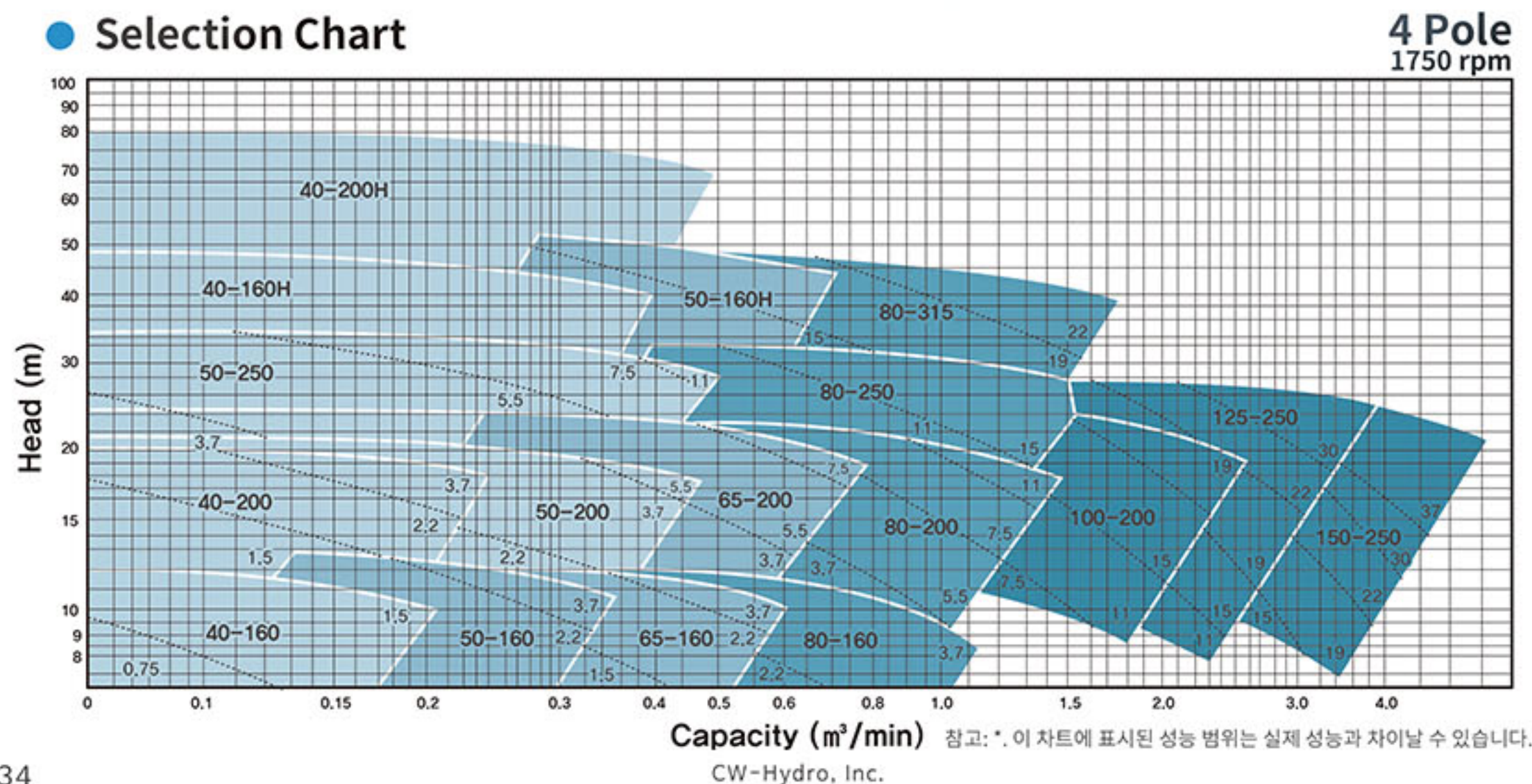
- ☑ 막히지 않음
Non-clog
- ☑ 뒤로 뽑는 설계
Back pull-out design
- ☑ 견고한 케이싱과 임펠러
Extra thick casing and impeller

Ratings

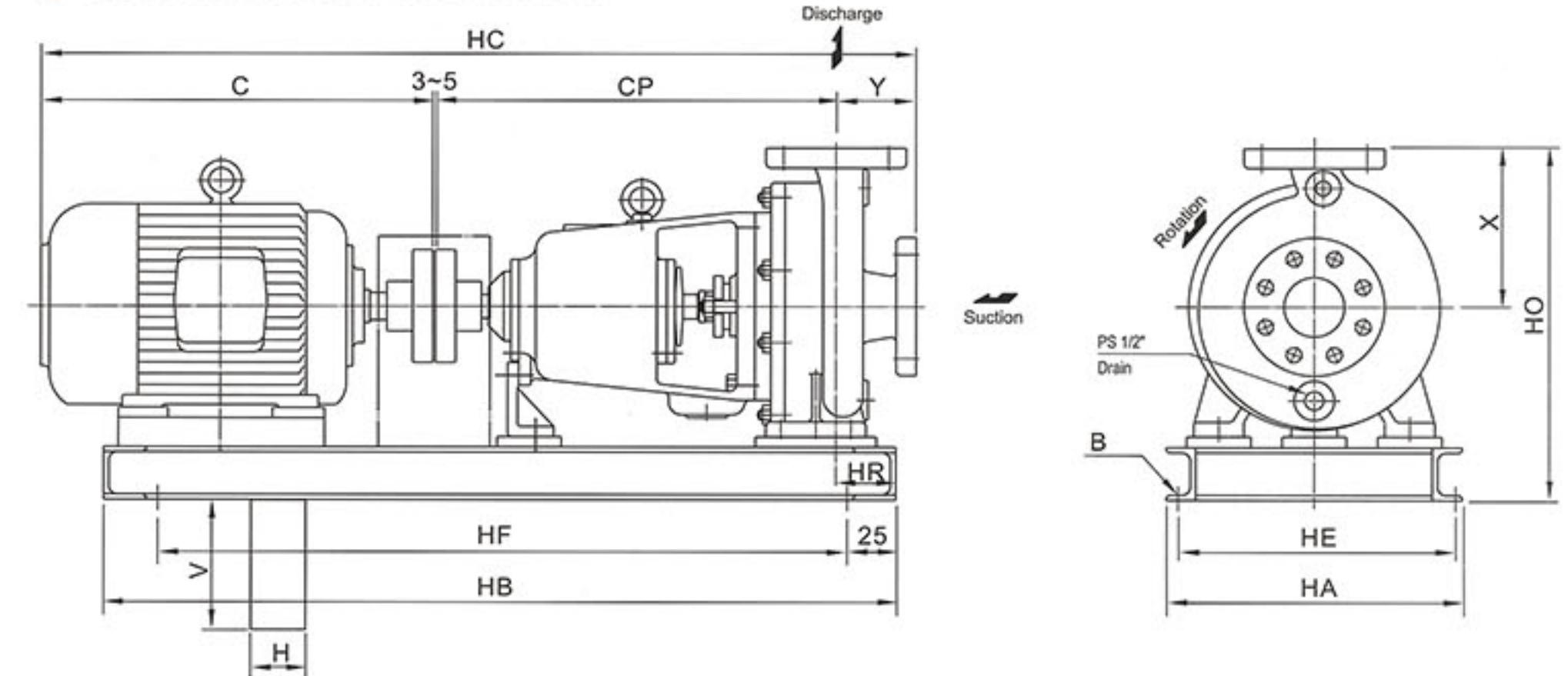
Capacity	UP to 5m ³ /min (1,321 US GPM)
Head	UP to 80m (262 ft)
Temperature	UP to 80°C (176°F)



Selection Chart



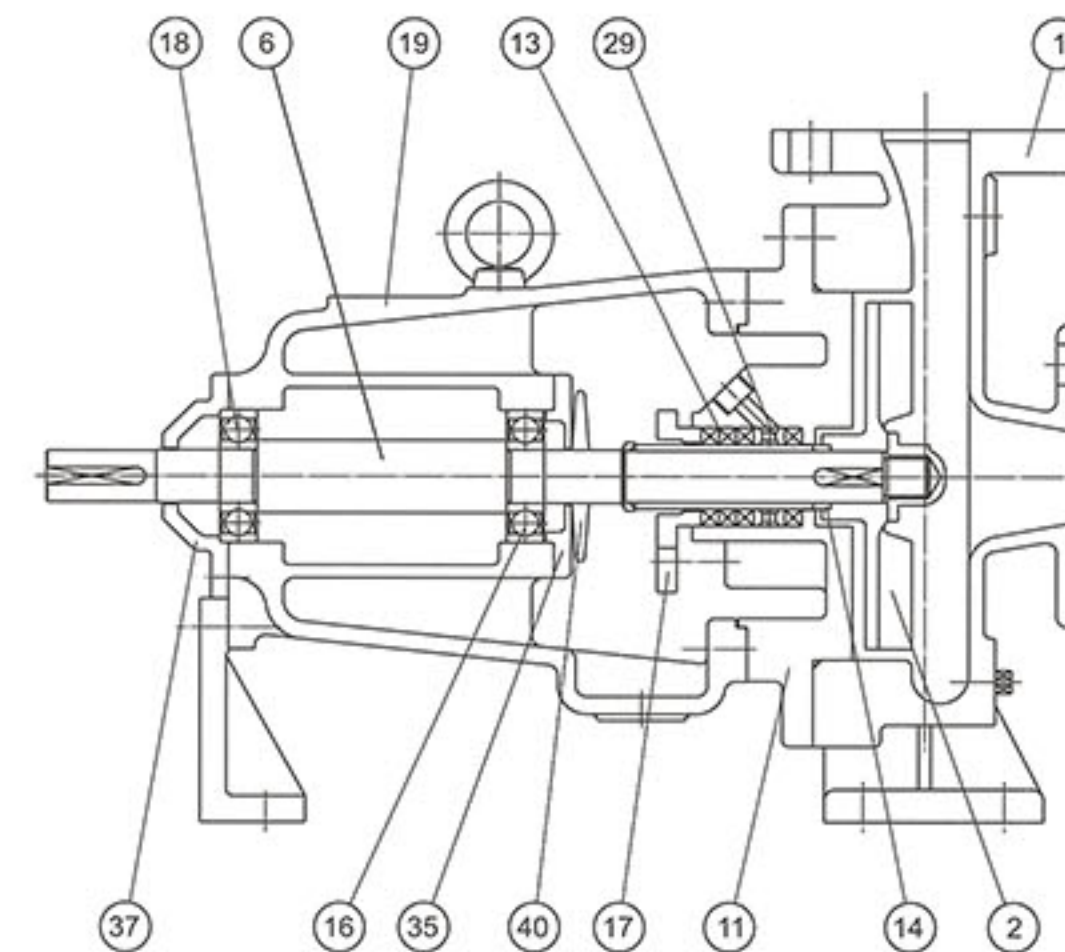
Installation Dimension



구분 규격	Pump and motor								Baseplate						Anchor Bolt		
	Disc.	Frame	kW	HC	C	CP	Y	X	HR	HF	HB	HE	HA	HO	B	H	V
40-160	40	90L	1.5	813	328	400	80	160	80	750	800	210	260	352	4-M16×315L	150	250
50-160	50	112S	2.2	841	356	400	80	160	80	750	800	210	260	352	4-M16×315L	150	250
65-160	65	112M	3.7	887	382	400	100	180	80	800	850	235	285	400	4-M16×315L	150	250
80-160	80	112M	3.7	887	382	510	100	200	90	900	950	235	285	420	4-M16×315L	150	250
40-200	40	112M	3.7	997	382	510	100	200	90	900	950	235	285	420	4-M16×315L	150	250
50-200	50	132S	5.5	1059	444	510	100	200	90	950	1000	235	285	420	4-M16×315L	150	250
65-200	65	132M	7.5	1097	482	510	125	200	90	1000	1050	235	285	420	4-M16×315L	150	250
80-200	80	160M	11	1243	593	520	125	225	95	1100	1150	290	340	465	4-M16×315L	150	250
50-250	50	160M	11	1223	593	500	125	225	95	1050	1100	290	340	465	4-M16×315L	150	250
80-250	80	160L	15	1267	637	500	125	280	110	1150	1200	370	420	580	4-M16×315L	150	250
100-200	100	160L	15	1287	637	520	125	225	95	1150	1200	315	365	500	4-M16×315L	150	250
80-315	80	180M	19	1327	649	550	125	280	110	1200	1250	370	420	580	4-M16×315L	150	250
125-250	125	200M	30	1403	708	550	140	280	110	1250	1300	370	420	580	4-M16×315L	150	250
150-250	150	200L	37	1442	747	550	140	280	110	1250	1300	370	420	605	4-M16×315L	150	250

참고: *. 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Parts List and Materials



No	Name of part	MATERIAL
1	Casing	GC200
2	Impeller	GC200
6	Shaft	SM45C
11	Stuffing Box Cover	TEFLON
13	Packing	TEFLON
14	Sleeve	GC200
16	Inboard Bearing	STEEL
17	Gland	GC200
18	Outboard Bearing	STEEL
19	Frame	GC200
29	Lantern Ring	TEFLON
35A	Inboard Bearing Cover	GC200
37	Outboard Bearing Cover	GC200
40	Deflector	NBR

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

Close-Coupled General Service Pumps

GM



Applications

- 급수, 정수용 Water supply
- 냉각수 순환용 Cooling water circulation
- 냉각탑용 Cooling tower
- 건물용 Building
- 농업용 Irrigation
- 일반 산업용 General industry

Feature

- ☑ 소형 경량의 컴팩트한 안정적 구조
Small size, compact and stable construction
- ☑ 분해 점검이 용이한 뒤로 분해하는 구조
Back pullout design for easy maintenance
- ☑ 경제적인 기계적 밀봉 장치
Mechanical seal is provided as an standard
- ☑ 설치가 간편하고 축중심 맞추기가 필요없는 일체형 구조
Easy installation, no aligning as close coupled type
- ☑ 최소의 설치공간
Minimized floor space

Ratings

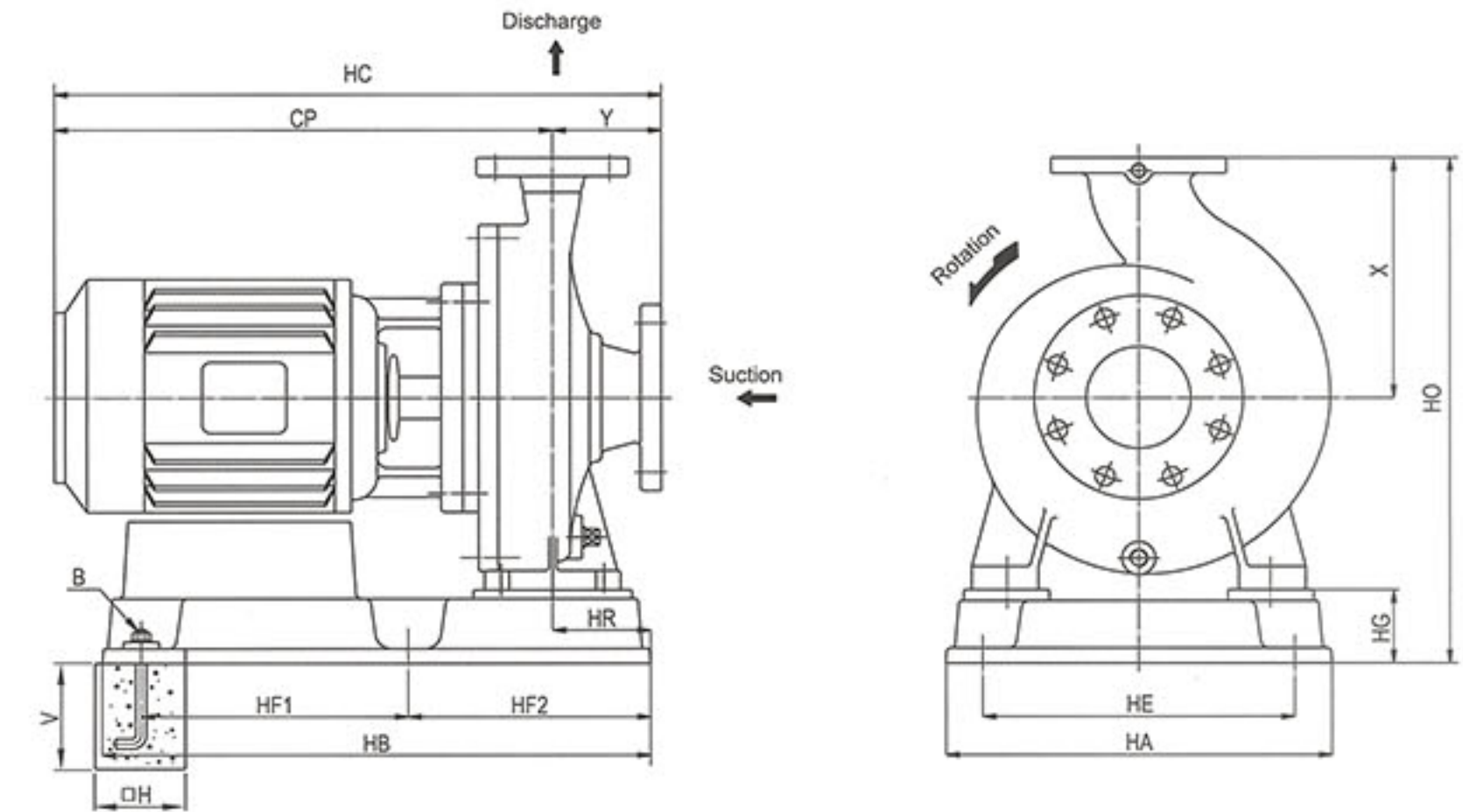
Capacity	Up to 4 m ³ /min (1,057 US GPM)
Head	Up to 35m (115 ft)
Discharge Pressure	Up to 10 kgf/cm ² (142 PSIG)
Allowable Suction Pressure	Up to 5 kgf/cm ² (71 PSIG)
Revolution 60Hz (50Hz)	1750 min ⁻¹ (1450 min ⁻¹)
Rotation	Clockwise viewed from coupling end
Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Nozzle Rating	KS 10 Kg / cm ² - FF
Nozzle Location	End Suction : Top Discharge
Seals	Mechanical Seal

Specification

구분 규격	POWER	CAPACITY / HEAD					
		유량 (m ³ /min)	양정 (m)	유량 (m ³ /min)	양정 (m)	유량 (m ³ /min)	양정 (m)
GM3220	1.5	0.1	9	0.15	8	0.2	6
	1.5	0.1	13	0.2	12	0.25	10
	2.2	0.1	16.5	0.2	14.5	0.3	12
GM4020	1.5	0.15	12	0.2	11.5	0.3	10
	1.5	0.15	13	0.2	13	0.3	11
	2.2	0.15	17	0.2	15	0.4	12
GM4025	3.7	0.1	18	0.25	17	0.4	13
	3.7	0.1	25	0.3	24	0.45	20
	5.5	0.1	31	0.3	30	0.5	25
GM5020	2.2	0.3	11	0.5	10	0.7	6
	3.7	0.3	19	0.6	16	0.8	12
	3.7	0.3	19	0.6	16	0.75	13
GM5025	5.5	0.3	30	0.6	27	0.8	21
	5.5	0.7	14	0.9	13	1.1	11
	5.5	0.7	18	1.0	16	1.2	14
GM6525	7.5	0.7	25	1.0	23	1.6	19
	11	0.7	32	1.2	28	1.5	25
	7.5	1.1	18	0.6	15	1.9	13
GM8025	11	1.1	25	1.8	21	2.2	16
	15	1	31	1.8	27	2.4	19
	15	1.6	20	2.5	16	3.0	15
GM1025	15	1.6	23	2.5	20	3.2	16
	19	1.6	25	2.5	23	3.5	20
	22	1.6	31	3.0	27	3.8	23

참고: *, 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

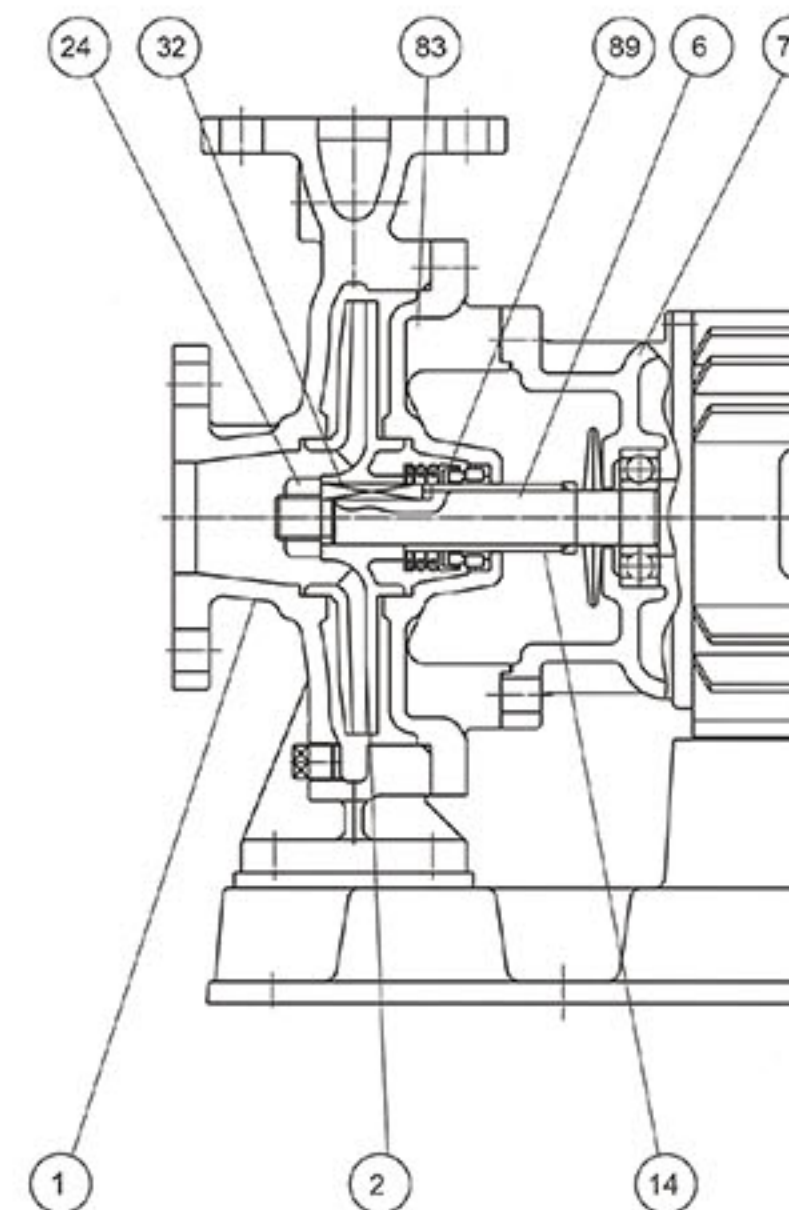
Installation Dimension



구분 규격	Pump and motor									Baseplate									Anchor Bolt		
	Suc	Dis	Frame	kW	HC	CP	Y	X	E	HP	HF1	HF2	HB	HR	HE	HA	HG	HO	B	H	V
50×32-200	50	32	90L	1.5	452	372	80	180	160	25	200	175	400	75	210	280	60	400	4-M12×160L	130	160
65×40-200	65	40	112S	2.2	488	388	100	180	160	25	225	180	430	75	235	305	60	400	4-M12×160L	130	160
65×40-200	65	40	112S	2.2	537	437	100	225	180	25	245	220	490	88	240	360	60	465	4-M12×160L	130	160
80×50-200	80	50	112M	3.7	518	418	100	200	160	25	225	180	430	75	235	305	60	420	4-M12×160L	130	160
80×50-250	80	50	112M	3.7	567	467	100	225	180	25	245	200	490	88	240	360	60	465	4-M12×160L	130	160
100×65-250	100	65	132M	7.5	661	536	125	250	200	25	285	250	560	105	275	400	60	510	4-M12×160L	130	160
125×80-250	125	80	160M	11	710	585	125	280	225	25	335	250	610	105	320	440	60	565	4-M12×160L	130	160
125×100-250	125	100	160L	15	773	633	140	280	225	25	375	260	660	105	320	440	60	565	4-M12×160L	130	160

참고: *, 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Parts List and Materials

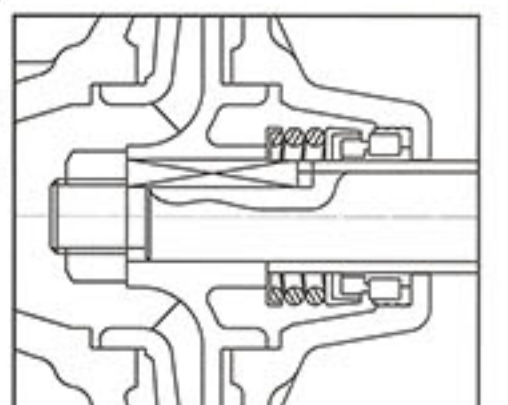


NO	Name of part	METERIAL	
1	Casing	GC200	GCD450
2	Impeller	GC200	BC6
6	Shaft	SM45C	SM45C
14	Sleeve	GC200	GC200
23	Baseplate	GC200	GC200
24	Impeller Nut	SS400	SS400
32	Impeller Key	SM45C	SM45C
71	Adapter	GC200	GC200
83	Stuffing Box	GC200	GCD450
89	Mechanical Seal	-	-

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

Standard Mechanical Seal

Bellcup형 패킹상자 구조로
DIN 규격치수를 적용한
Mono spring type Mechanical Seal을
표준으로 사용하여 이물질에 대하여
안전하고 수명이 길며 구조가 간단하여
해결이 용이합니다.



In-Line Pumps

CLP(D)



● Applications

- 산업용 Industrial
- 건축설비용 Building
- 액체이송용 Liquid transfer
- 가압용 Pressurized
- 프로세스용 Process

● Feature

- ☒ 백 풀 아웃 구조
Back full out Design
- ☒ 닫힘형 임펠러
Close Impeller
- ☒ ANSI,KS(JIS) FLANGE 준수
ANSI,KS(JIS) FLANGE
- ☒ 분할 커플링을 이용한 동력 전달
Split Coupling
- ☒ 카트리지 메카니컬 씰 사용가능
Possible to set Cartridge Mechanical Seal

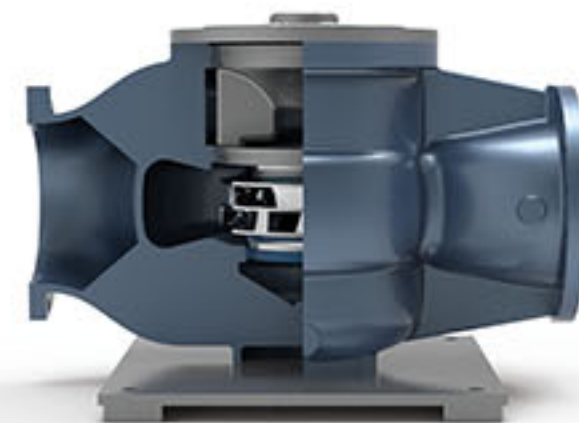
● Ratings

Capacity	0.2 ~ 30m ³ /min (52 ~ 7,925 US GPM)
Head	5 ~ 52m (16 ~ 170ft)
RPM	1750rpm (1180rpm)
Design Pressure	below 16 bar
Temperature	-10℃ ~ 150℃ (14 ~ 302°F)
Fluid	Clean Water

● CLP(D) Type Model.

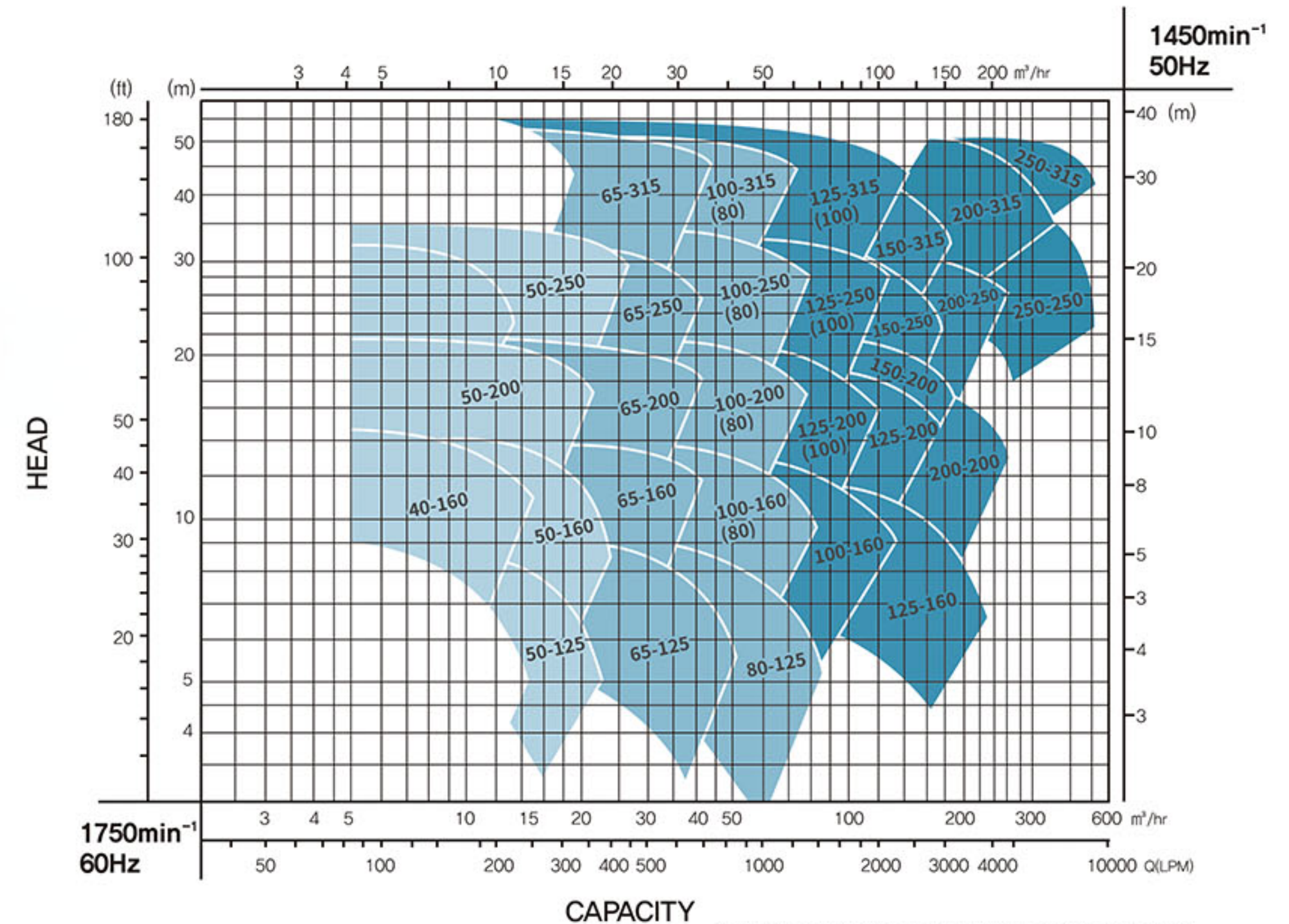
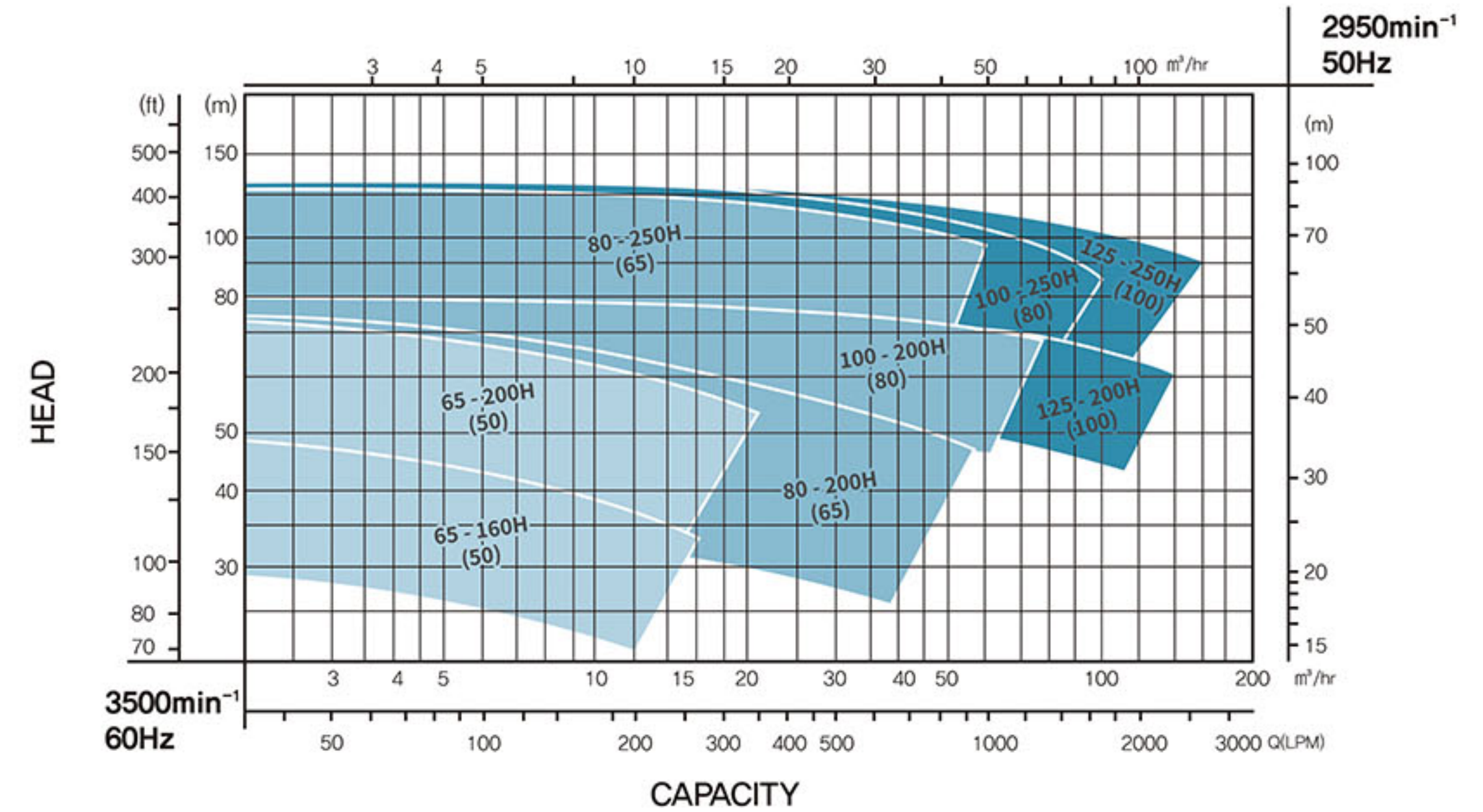


CLP Model.
☒ 편흡입 모델.



CLP(D) Model.
☒ 양흡입 모델.

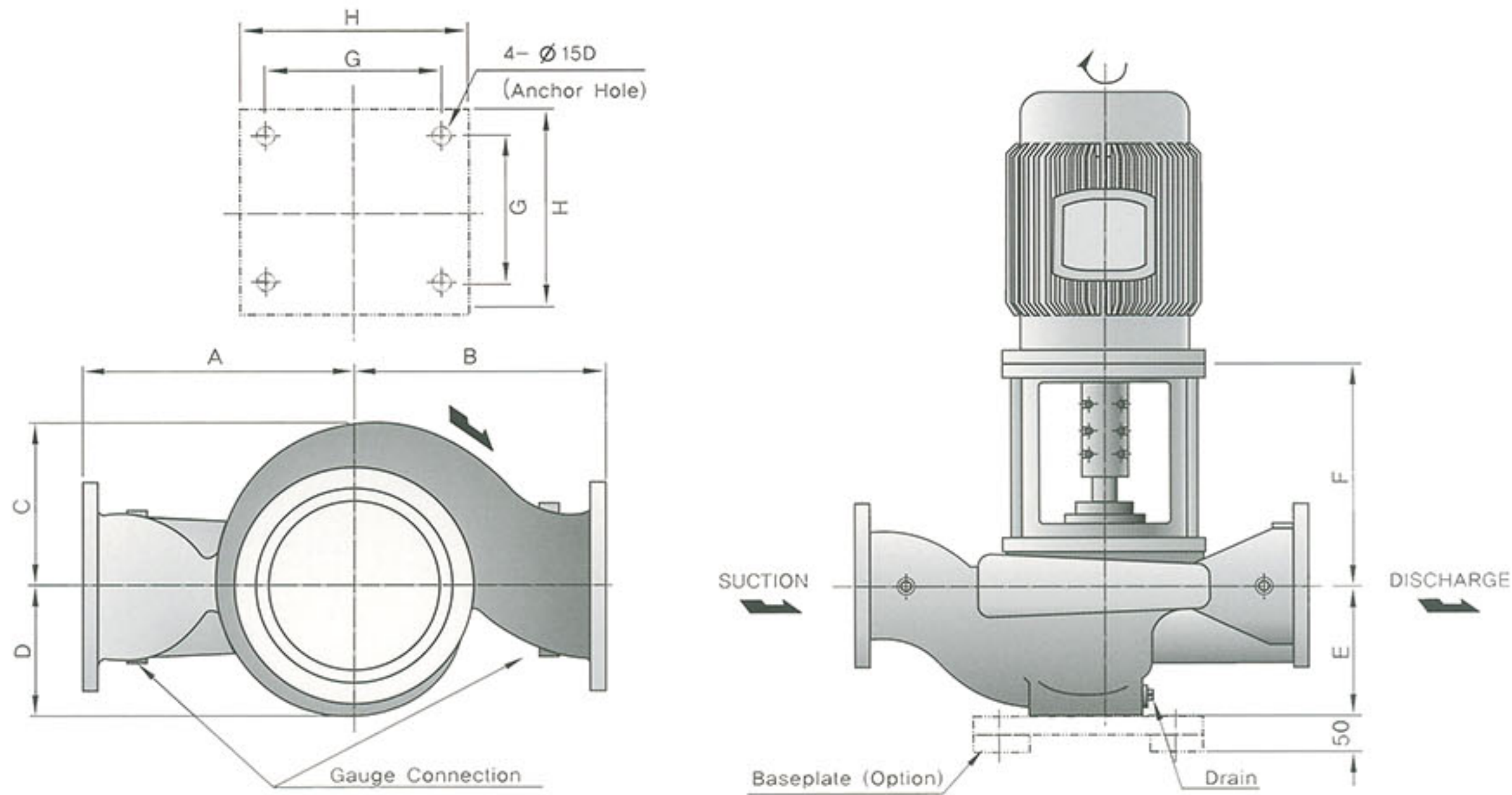
● Selection Charts



참고: *, 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Model. CLP(D)

● Installation Dimension

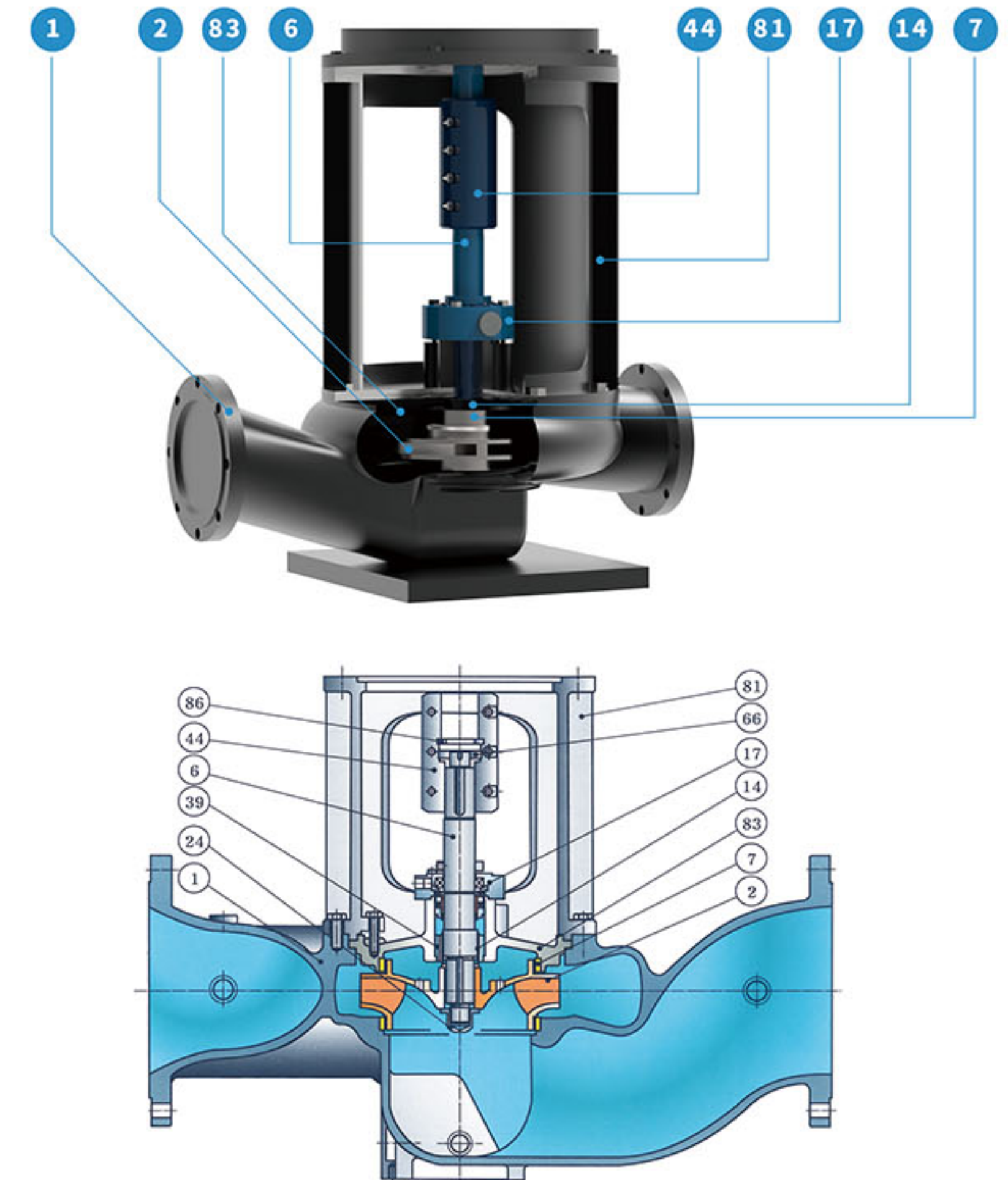


Model	Bore Size		PUMP								
	Suction	Discharge	A	B	C	D	E	F	G	H	Drain
CLP 40-160	40	40	200	200	145	140	120	-	-	-	PS 1/2"
CLP 50-160	50	50	200	200	145	140	125	-	-	-	PS 1/2"
CLP 50-200	50	50	240	210	145	140	130	-	-	-	PS 1/2"
CLP 65-200	65	65	230	200	145	140	130	-	-	-	PS 1/2"
CLP 65-250	65	65	260	230	160	150	130	-	-	-	PS 1/2"
CLP 80-200	80	80	240	210	150	140	160	-	-	-	PS 1/2"
CLP 80-250	80	80	300	250	160	150	160	-	-	-	PS 1/2"
CLP 100-200	100	100	300	280	200	160	175	-	-	-	PS 1/2"
CLP 100-250	100	100	330	300	220	180	175	-	-	-	PS 1/2"
CLP 125-200	125	125	330	280	200	160	175	420	350	430	PS 1/2"
CLP 125-250	125	125	350	300	220	180	175	420	350	430	PS 1/2"
CLP 150-200	150	150	380	330	210	160	195	420	350	430	PS 3/4"
CLP 150-250	150	150	380	330	220	180	195	432	350	430	PS 3/4"
CLP 200-250	200	200	450	380	260	210	240	445	350	430	PS 3/4"
CLP 200-315	200	200	510	430	285	235	250	502	350	430	PS 3/4"
CLP 250-250	250	250	550	460	315	245	285	470	400	480	PS 3/4"
CLP 250-315	250	250	600	500	335	270	290	580	400	480	PS 3/4"

참고: *, 기술적인 개선을 위하여 내용은 예고없이 변경 될 수 있습니다.

Model. CLP(D)

● Parts List and Materials



*Some models are little differ with above structure (Subject to modification without notice)

NO	Part	MATERIALS	Part	MATERIALS
1	Casing	GCD450/SSC13	Impeller	GC200 / BC6 / SSC13 / SSC1
2	Impeller	BC6/SSC13	Casing	GC200 / GCD450 / SSC13 / SSC1
6	Shaft	SM45C/STS304	Shaft	SM45C / SCM440 / STS304 / STS420J2
7	Casing Ring	GCD450/SSC1	Casing Ring	GCD450 / SSC1
14	Sleeve	STS304		
17	Mechanical Seal	STS304/STS316		
24	Impeller Nut	GCD450/SSC13		
39	Neck Bush	LBC5/CARBON		
44	Coupling	GCD450		
66	Control Nut	SS400		
81	Motor Plate	GC200		
83	Stuffing Box	GCD450/SSC13		
86	Split Ring	SS400		

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

Paper Stock Process Pumps



NOP

Applications

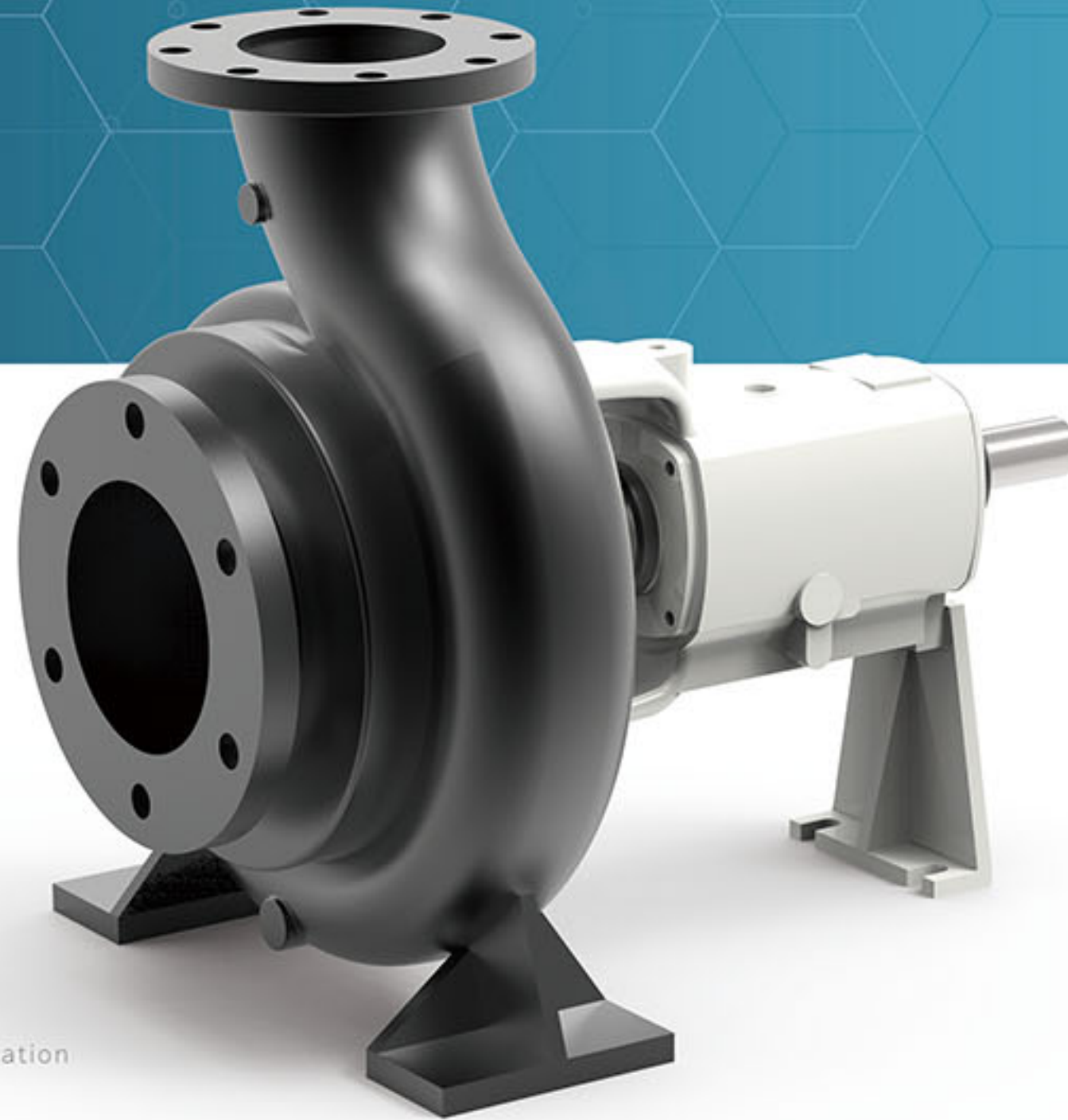
- 화학공업용 Chemical industry
- 식품산업용 Food industry
- 제지공업용 Paper industry
- 산업폐수용 Industries waste water

Feature

- ☑ 막힘이 없음
Non-clog
- ☑ 넓은 범위의 완전한 표준화
Completely standardization for wide application
- ☑ 백 풀 아웃 디자인 및 뒤로 뽑는 설계
Foot support and back pull-out design
- ☑ 신뢰성 높은 견고한 구조
Heavy and sturdy construction
- ☑ ISO 규격에 준수
Compliance with ISO 2858.
- ☑ 최대의 호환성
High Interchangeability
- ☑ 최대의 효율
Good efficiency
- ☑ 낮은 필요 흡입양정
Low NPSHr.

Ratings

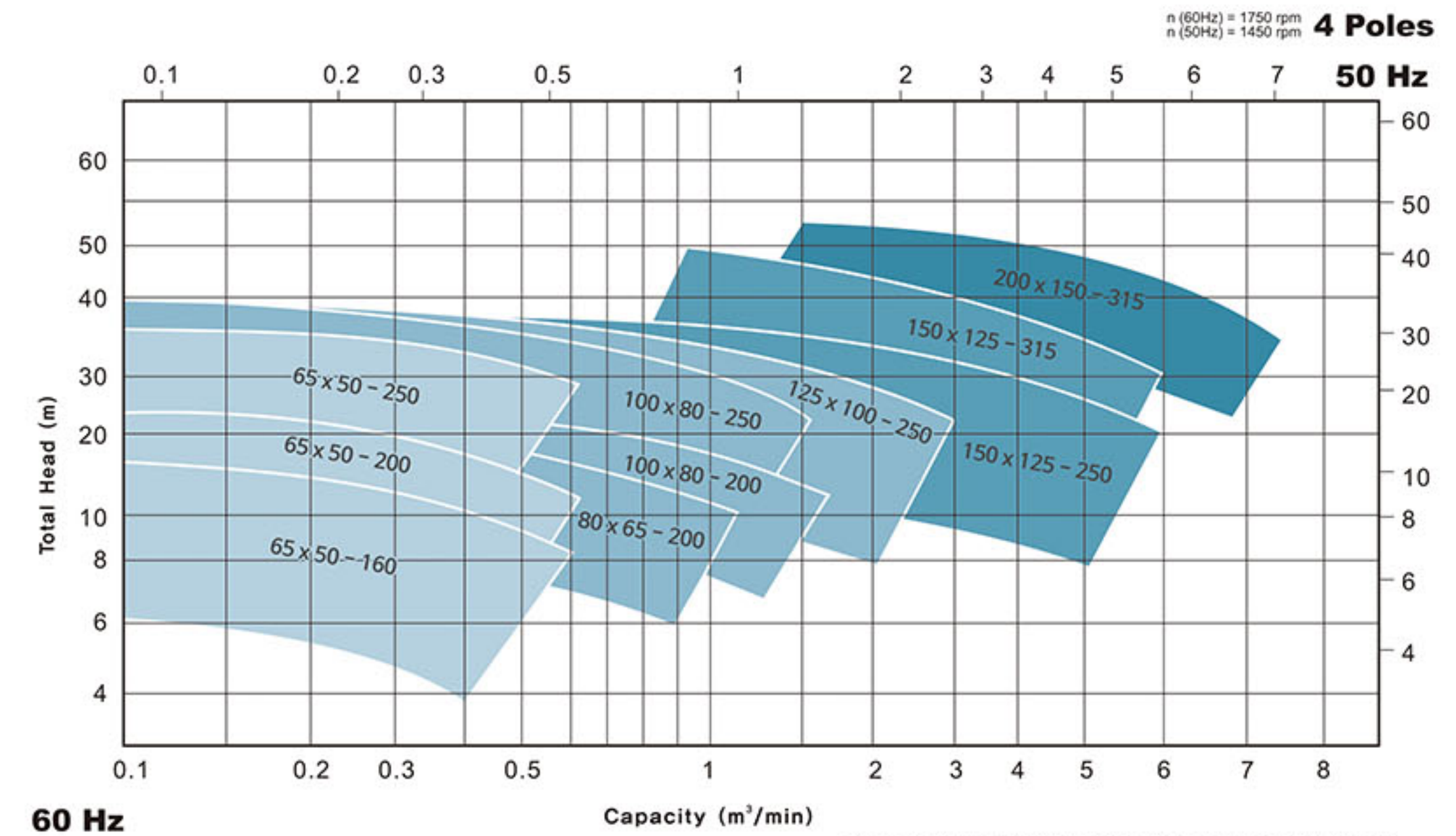
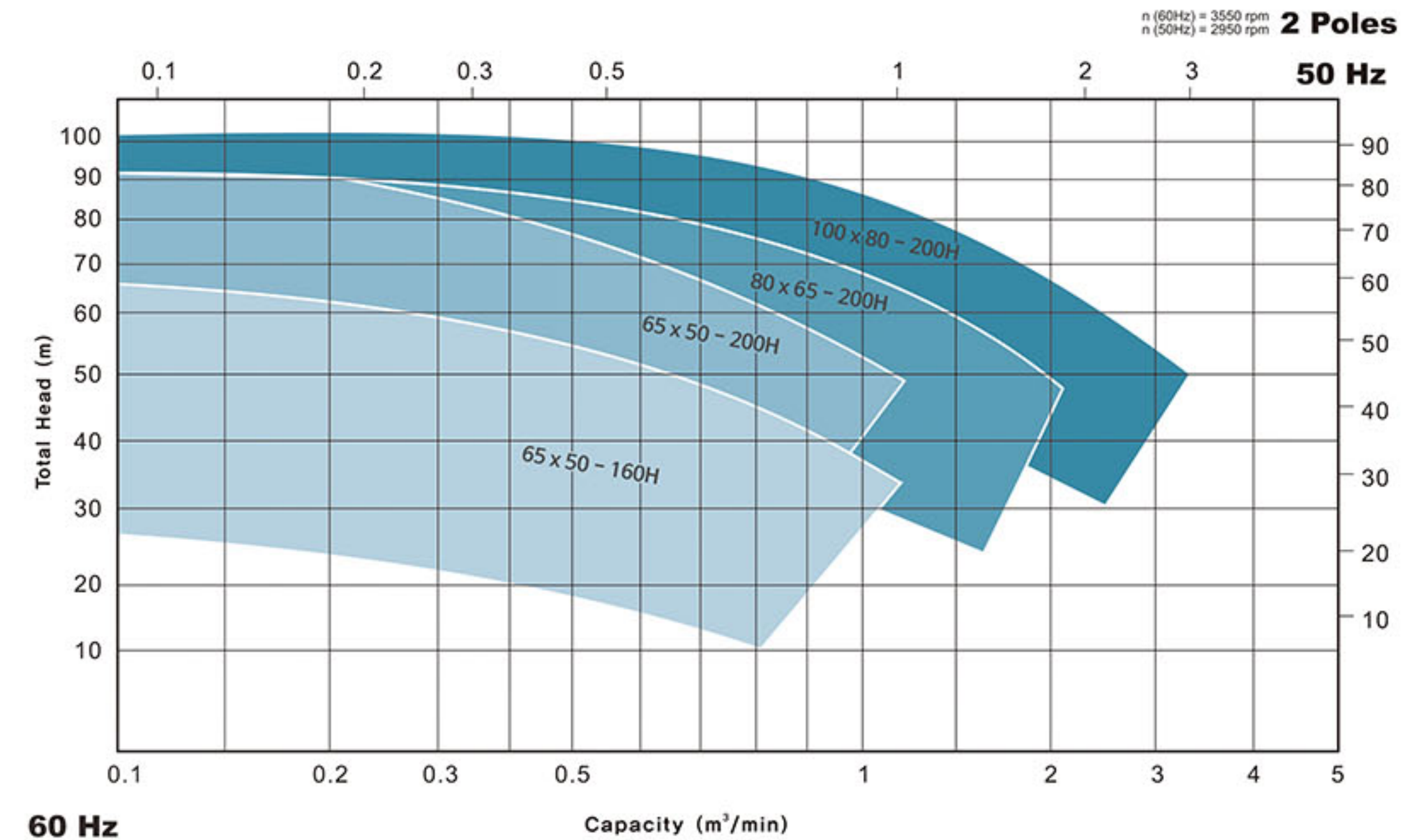
Capacity	Up to 7.5m ³ /min (1,981 US GPM)
Head	Up to 100m (328ft)
Discharge Pressure	Up to 12 kgf/cm ² (170 PSIG)
Allowable Suction Pressure	Up to 7 kgf/cm ² (99 PSIG)
Revolution 60Hz (50Hz)	1750 or 3550 min ⁻¹ (1450 or 2950min ⁻¹)
Rotation	Clockwise viewed from coupling end
Temperature Stainless Steel	-50°C~177°C (-58°F~350°F)
Temperature Cast Iron	-20°C~150°C (-4°F~302°F)
Nozzle Rating	KS 10 kgf/cm ²
Nozzle Facing	Steel : RF, Iron : FF
Nozzle Location	End Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal



Pulp & Paper

- ☑ 6%를 유지하는 페이퍼스톡
Paper stock thru 6% consistency
- ☑ 흑액 68%의 고형분
Black liquor to 68% solids
- ☑ Hydropulper 및 파손 서비스
Hydropulper and broke service
- ☑ 낮은 NPSH로 순환하는 소화조
Low NPSH digester circulation
- ☑ 블로 탱크 스크린
Blow tank to screens
- ☑ 기본 화면 거부
Primary screens rejects
- ☑ 높은 밀도의 염소 처리용 타워
High-density chlorine tower to washer

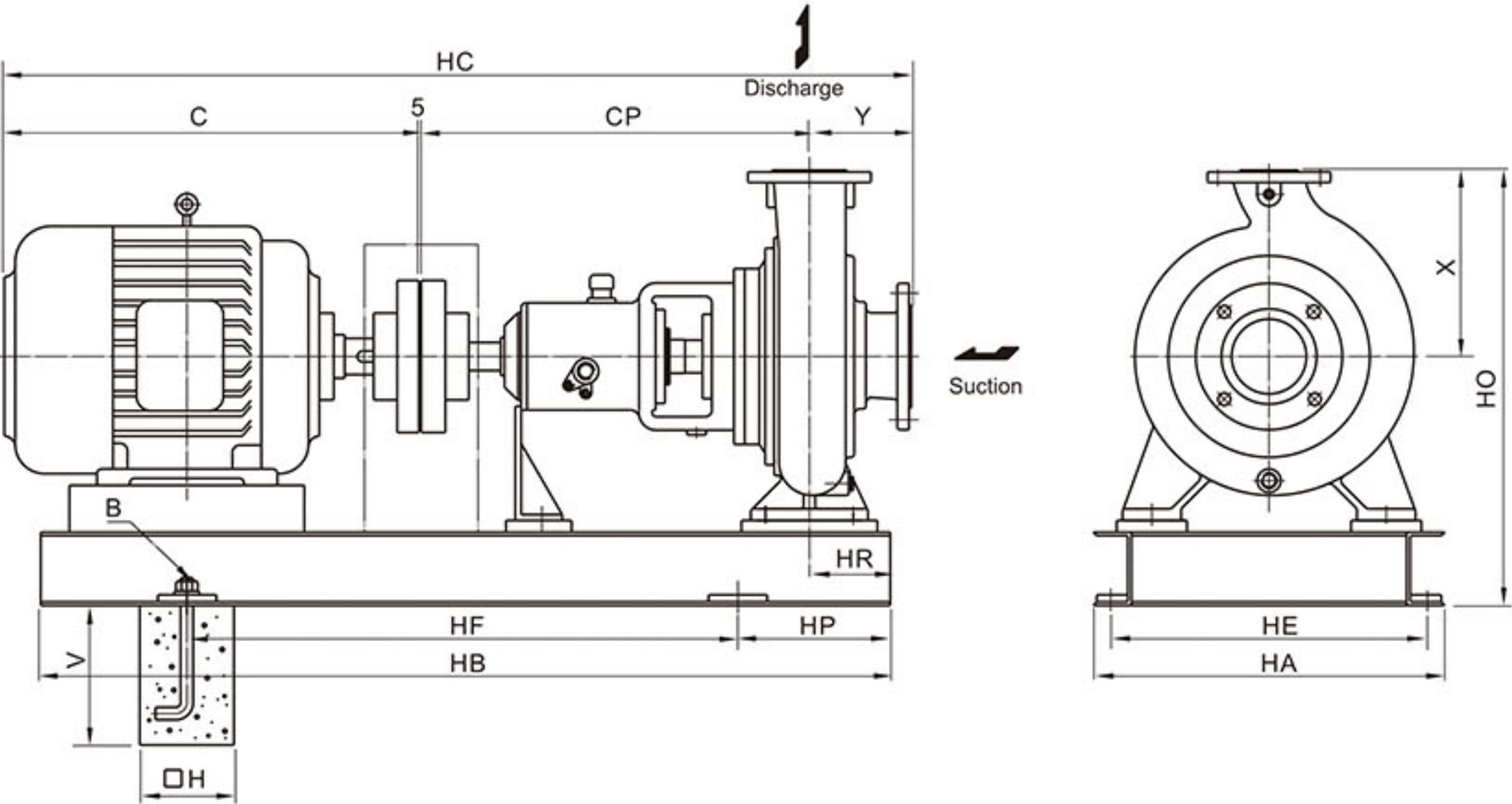
Selection Charts



참고: *, 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Model. NOP

● Installation Dimension

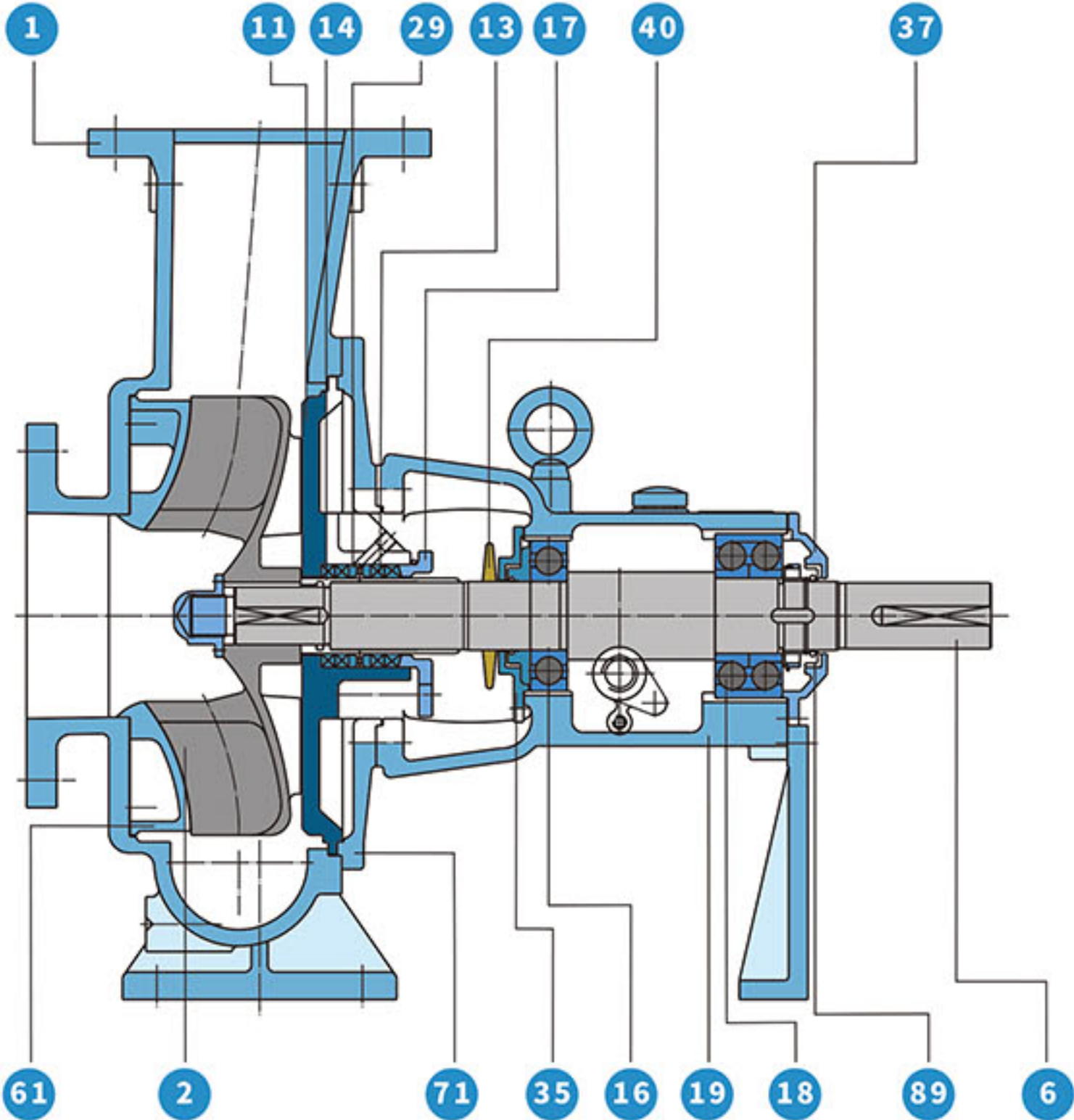


구분 규격	Pump and Motor									Baseplate							Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	CP	Y	X	HP	HR	HB	HF	HO	HE	HA	B	H	V
65×50-160	65	50	90L	1.5	817	328	385	100	132	115	80	710	480	354	290	320	4-M16×300L	150	300
65×50-200	65	50	112M	3.7	1011	382	500	125	160	150	80	900	600	410	350	380	4-M20×250L	200	250
80×65-200	80	65	132S	5.5	1088	444	500	140	160	170	80	1000	660	410	400	430	4-M20×250L	200	250
100×80-200	100	80	132M	7.5	1126	482	500	1740	180	170	95	1000	660	450	400	430	4-M20×250L	200	250
125×100-250	125	100	180M	19	1311	647	500	160	225	205	110	1250	840	570	490	530	4-M20×250L	200	250
150×125-315	150	125	180L	22	1369	685	530	180	250	205	110	1250	840	620	490	530	4-M20×250L	200	250
150×125-315	150	125	225S	45	1521	817	530	170	280	230	110	1400	940	705	550	600	4-M20×250L	200	250
200×150-315	200	150	250M	75	1768	894	670	200	315	270	130	1600	1060	800	670	730	4-M20×250L	200	250

참고: *, 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Model. NOP

● Parts List and Materials



No	Name of part	Material	
1	Casing	GCD450	SSC13
2	Impeller	SSC13	SSC13
6	Shaft	SM45C	STS304
11	Stuffing Box Cover	SSC13	SSC13
13	Packing	TEFLON	TEFLON
14	Packing Sleeve	STS304	STS304
16	Inboard Bearing	STEEL	STEEL
17	Packing Gland	GC200	SSC13
18	Outboard Bearing	STEEL	STEEL
19	Frame	GC200	GC200
29	Lantern Ring	BC6	SSC13
35	Inboard Bearing Cover	GC200	GC200
37	Outboard Bearing Cover	GC200	GC200
40	Deflector	NBR	NBR
61	Front Plate	SSC13	SSC13
71	Adapter	GC200	GC200
89	Oil Seal	NBR	NBR

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

ISO Standard Paper Stock Process Pumps



NP

Applications

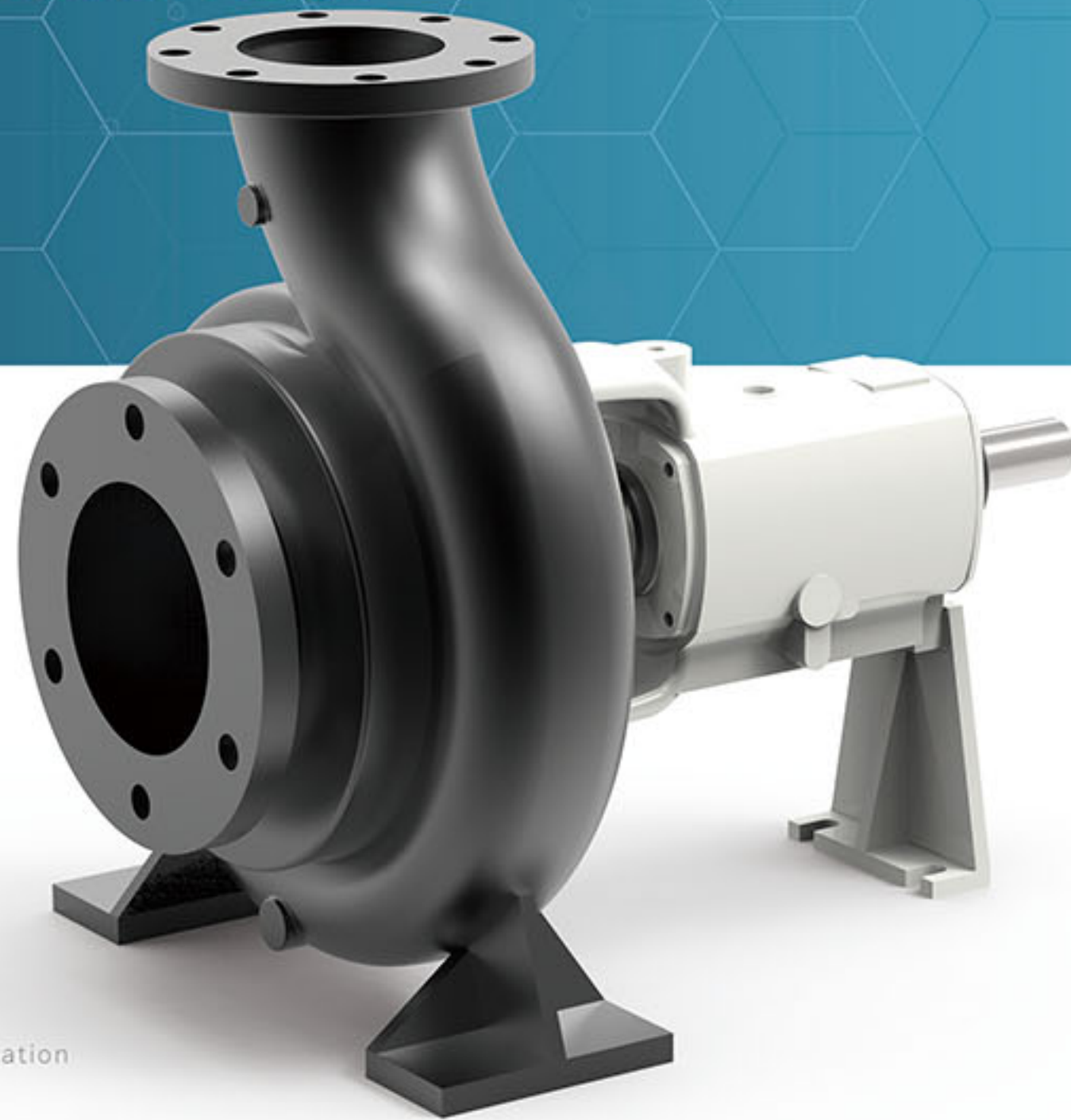
- 화학공업용 Chemical industry
- 식품산업용 Food industry
- 제지공업용 Paper industry
- 산업폐수용 Industries waste water

Feature

- ✓ 막힘이 없음
Non-clog
- ✓ 넓은 범위의 완전한 표준화
Completely standardization for wide application
- ✓ 백 풀 아웃 디자인 및 뒤로 뽑는 설계
Foot support and back pull-out design
- ✓ 신뢰성 높은 견고한 구조
Heavy and sturdy construction
- ✓ ISO 규격에 준수
Compliance with ISO 2858.
- ✓ 최대의 호환성
High Interchangeability
- ✓ 최대의 효율
Good efficiency
- ✓ 낮은 필요 흡입양정
Low NPSHr.

Ratings

Capacity	Up to 12m ³ /min (3,170 US GPM)
Head	Up to 40m (131ft)
Discharge Pressure	Up to 16 kgf/cm ² (227 PSIG)
Allowable Suction Pressure	Up to 9 kgf/cm ² (128 PSIG)
Revolution 60Hz (50Hz)	1750 or 3550 min ⁻¹ (1450 or 2950min ⁻¹)
Rotation	Clockwise viewed from coupling end
Temperature Stainless Steel	-50°C~177°C (-58°F~350°F)
Temperature Cast Iron	-20°C~150°C (-4°F~302°F)
Nozzle Rating	KS 10 kgf/cm ²
Nozzle Facing	Steel : RF, Iron : FF
Nozzle Location	End Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal

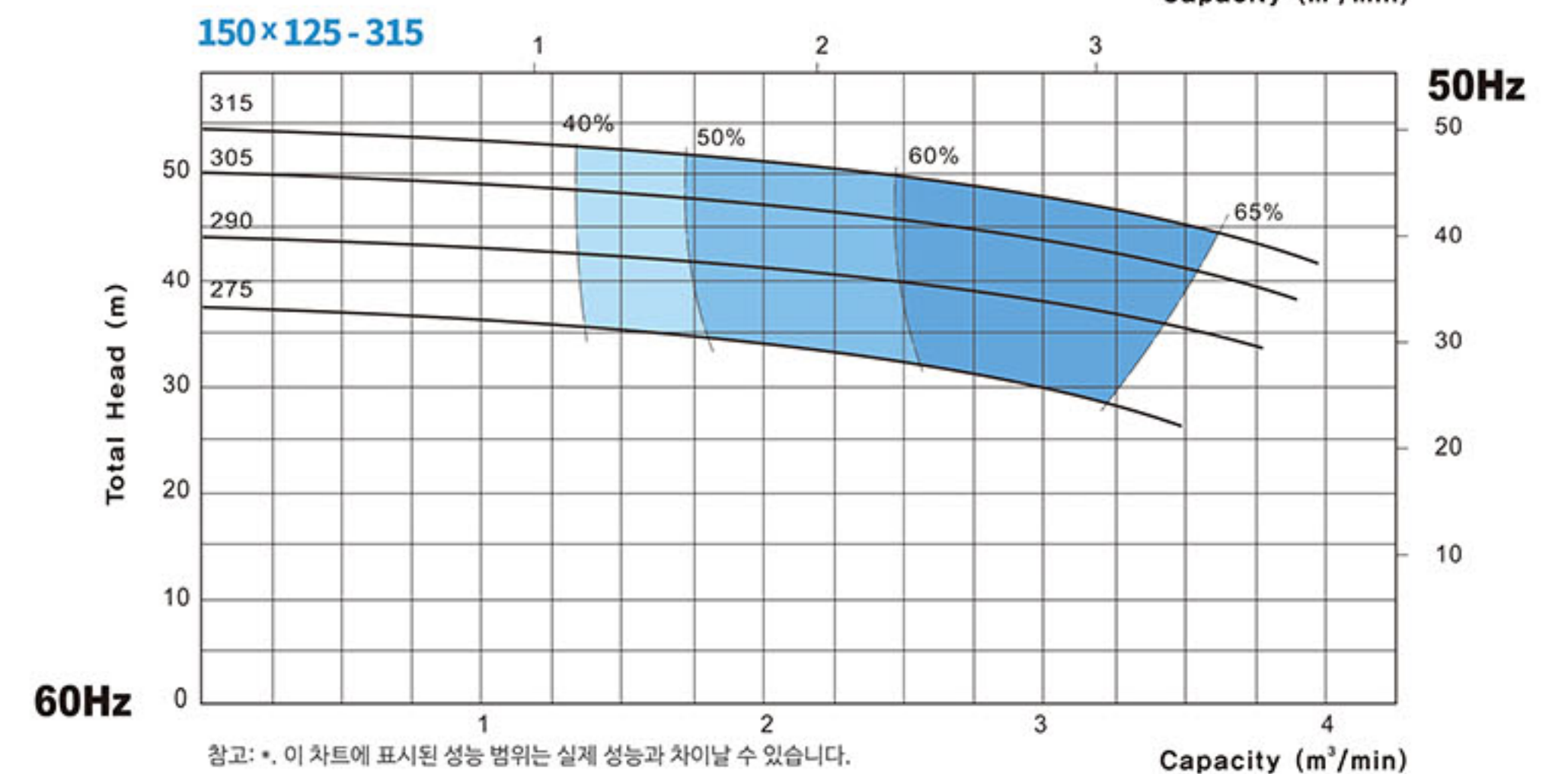
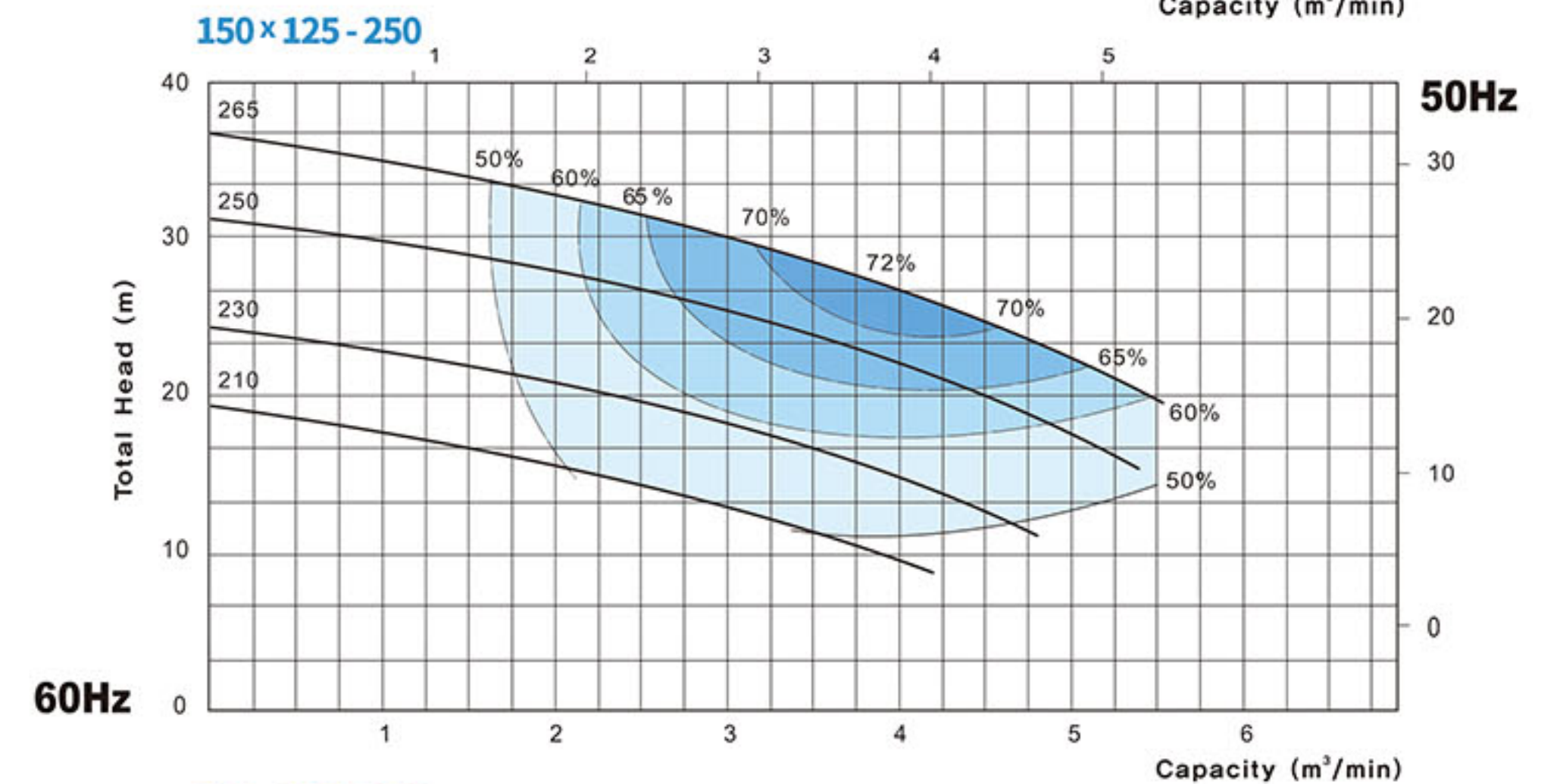
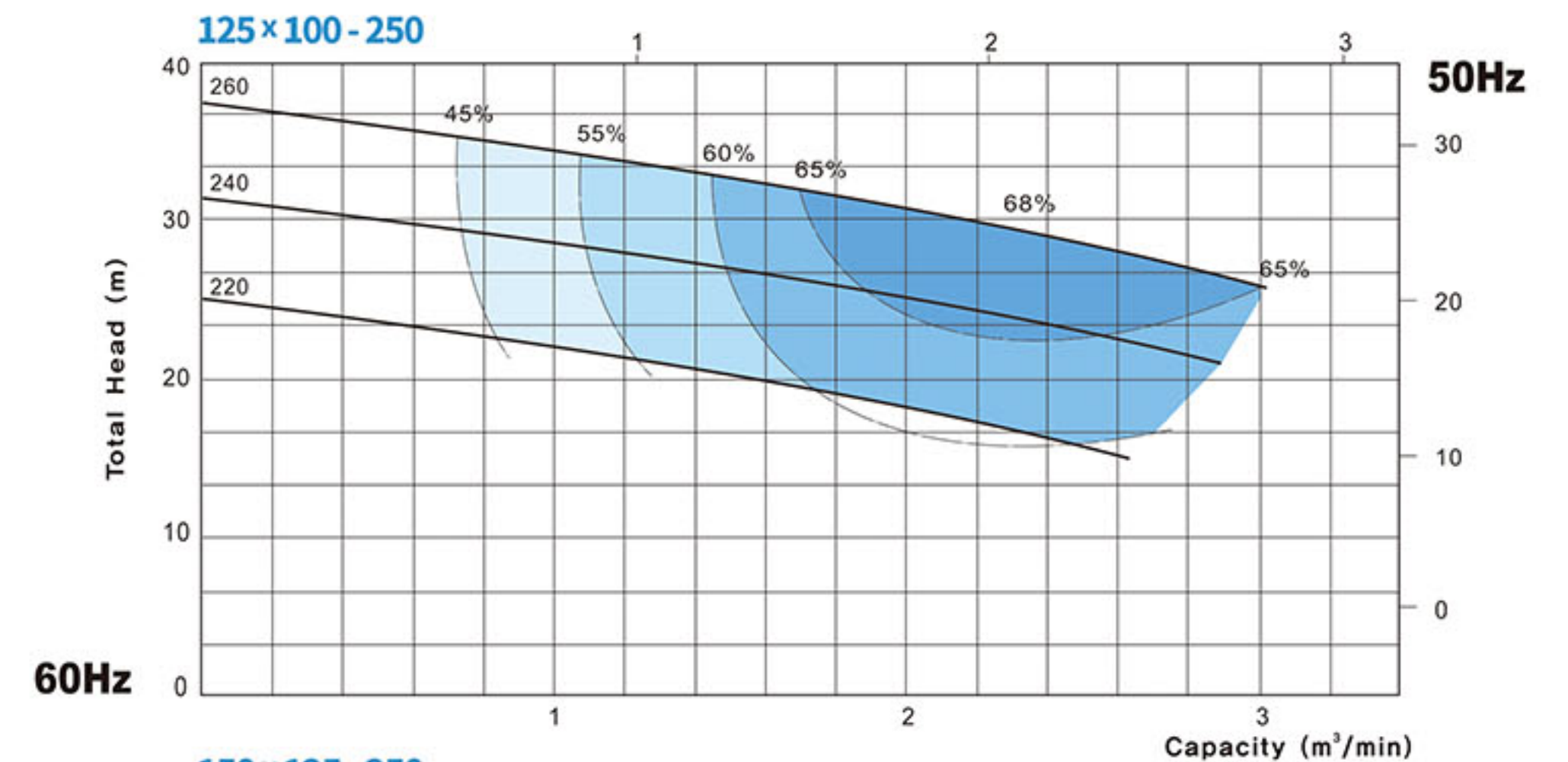


Pulp & Paper

- ✓ 6%를 유지하는 페이퍼스톡
Paper stock thru 6% consistency
- ✓ 흑액 68%의 고형분
Black liquor to 68% solids
- ✓ Hydropulper 및 파손 서비스
Hydropulper and broke service
- ✓ 낮은 NPSH로 순환하는 소화조
Low NPSH digester circulation
- ✓ 블로 탱크 스크린
Blow tank to screens
- ✓ 기본 화면 거부
Primary screens rejects
- ✓ 높은 밀도의 염소 처리용 타워
High-density chlorine tower to washer

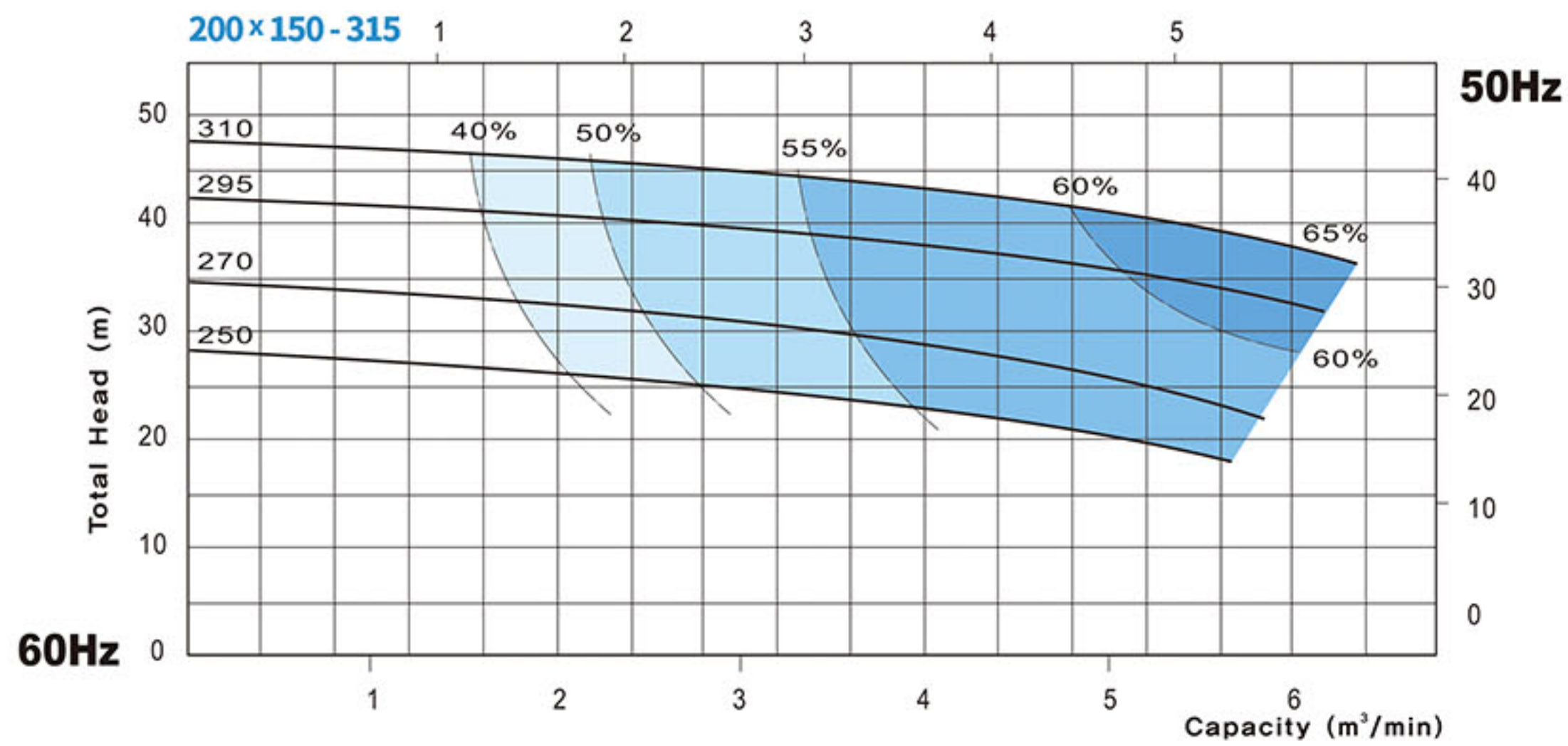
Performance Curve

n (60Hz) = 1750 rpm **4 Poles**

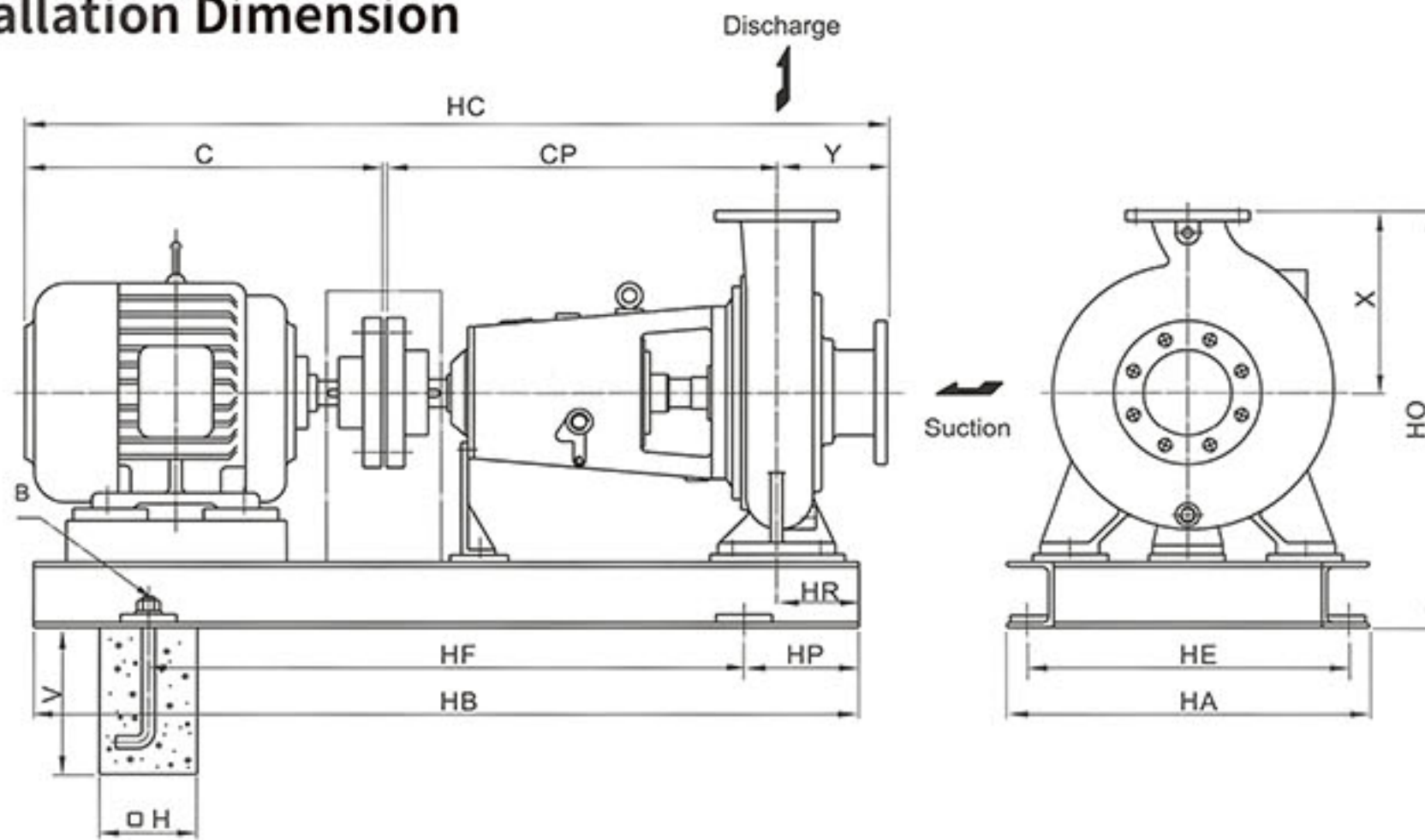


Model. NP

● Performance Curve



● Installation Dimension

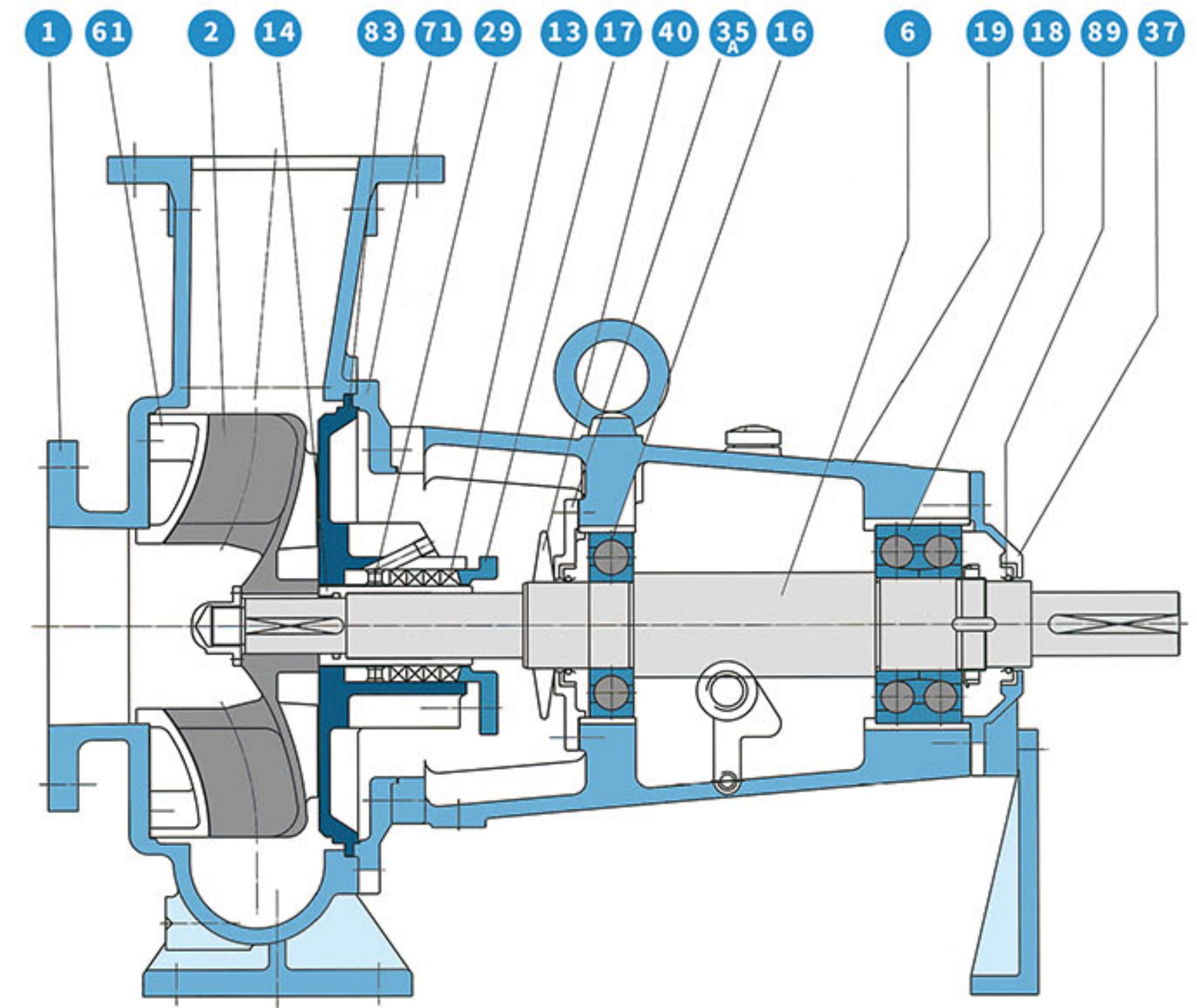


구분 규격	Pump and Motor									Baseplate							Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	CP	Y	X	HP	HR	HB	HF	HO	HE	HA	B	H	V
1210-250	125	100	160L	15	1401	637	600	160	280	205	100	1250	840	625	440	480	4-M20×315L	180	315
1512-250	150	125	200M	30	1492	708	630	180	315	230	100	1400	940	710	440	480	4-M20×315L	180	315
1512-315	150	125	225S	45	1661	817	670	170	355	230	120	1400	940	780	490	530	4-M20×315L	180	315
2015-315	200	150	250M	75	1793	894	695	200	400	270	120	1600	1060	885	490	530	4-M20×315L	180	315

참고: *. 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Model. NP

● Parts List and Materials



No	Name of part	Material	
1	Casing	GCD450	SSC13
2	Impeller	SSC13	SSC13
6	Shaft	SM45C	STS304
11	Stuffing Box Cover	SSC13	SSC13
13	Packing	TEFLON	TEFLON
14	Packing Sleeve	STS304	STS304
16	Inboard Bearing	STEEL	STEEL
17	Packing Gland	GC200	SSC13
18	Outboard Bearing	STEEL	STEEL
19	Frame	GC200	GC200
29	Lantern Ring	BC6	SSC13
35A	Inboard Bearing Cover	GC200	GC200
37	Outboard Bearing Cover	GC200	GC200
40	Deflector	NBR	NBR
61	Front Plate	SSC13	SSC13
71	Adapter	GC200	GC200
89	Oil Seal	NBR	NBR

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

Horizontal Hydro-soilds Pumps



P

● Applications

- 제지용 Pulp and paper
- 수처리용 Waste treatment
- 식음료용 Food processing
- 농업용 Agriculture
- 일반제조용 Manufacturing process

● Feature

- ☑ 막힘이 없음
Non-clog
- ☑ 백 풀 아웃 디자인
Back pull-out design
- ☑ 견고한 구조의 케이싱과 임펠러
Thick casing and impeller
- ☑ 최대의 효율
Good efficiency

● Ratings

Capacity	Up to 60m ³ /min (15,850 US GPM)
Head	Up to 85m (278ft)
Discharge Pressure	Up to 16 kgf/cm ² (227 PSIG)
Allowable Suction Pressure	Up to 9 kgf/cm ² (128 PSIG)
Revolution 60Hz (50Hz)	1750 or 3550 min ⁻¹ (1450 or 2950min ⁻¹)
Rotation	Clockwise viewed from coupling end
Temperature Stainless Steel	-50℃~177℃ (-58℉~350℉)
Temperature Cast Iron	-20℃~150℃ (-4℉~302℉)
Nozzle Rating	KS 10 kgf/cm ²
Nozzle Facing	Steel : RF, Iron : FF
Nozzle Location	End Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal

● Advantage

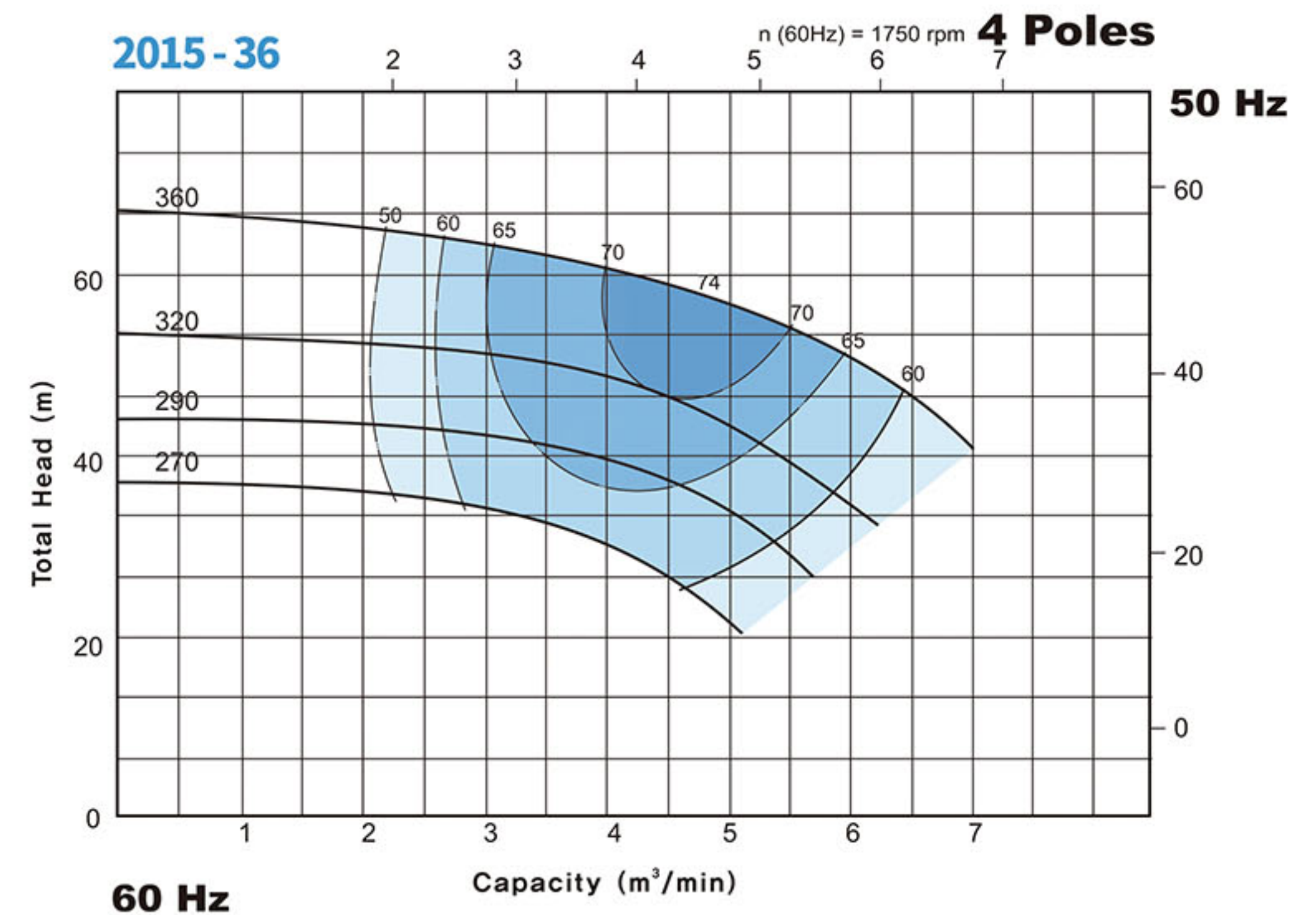
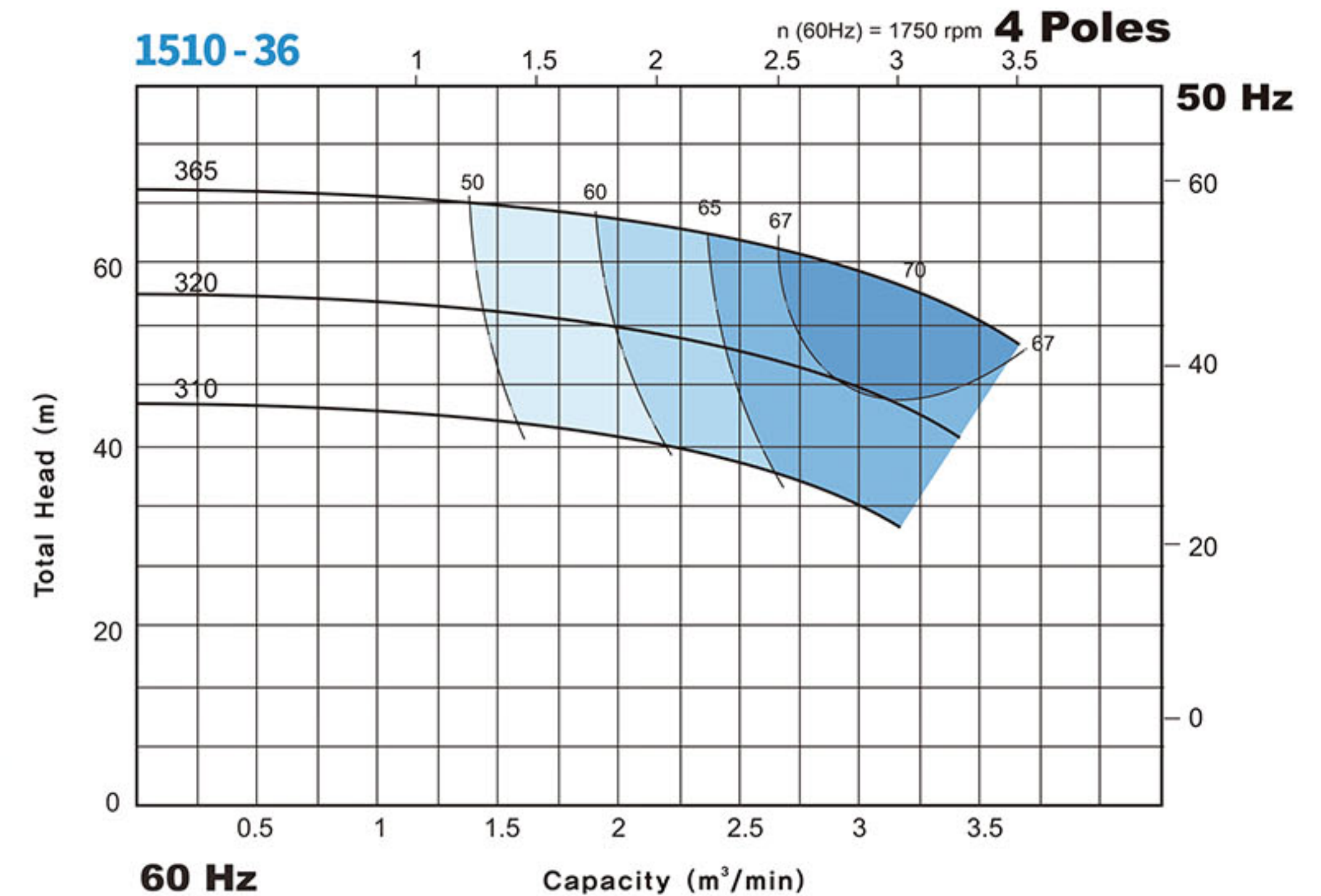


- ☑ 기존의 원심 펌프에서 발생하는 막힘 문제를 제거합니다.
Eliminates clogging problems encountered with conventional centrifugal pumps.



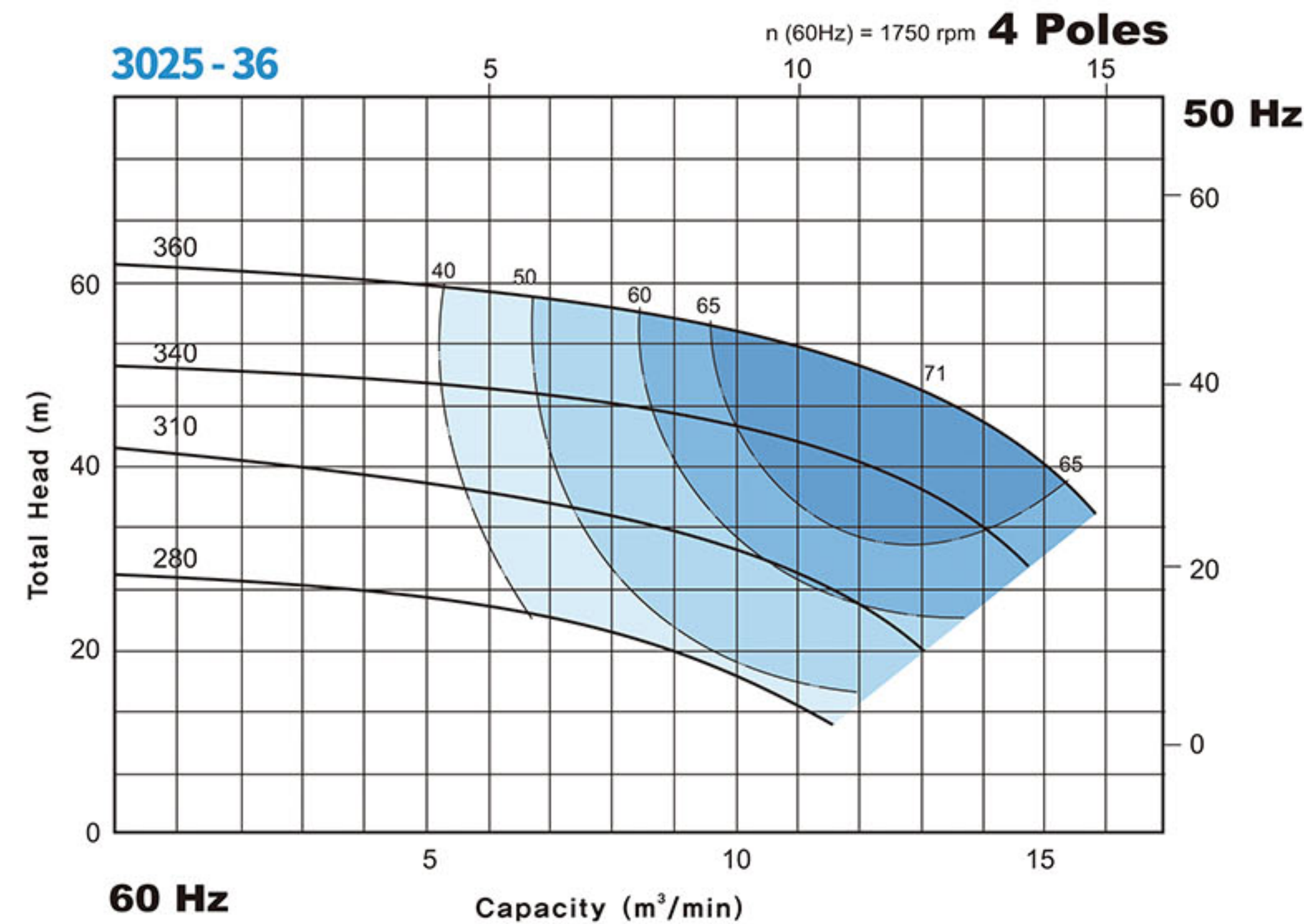
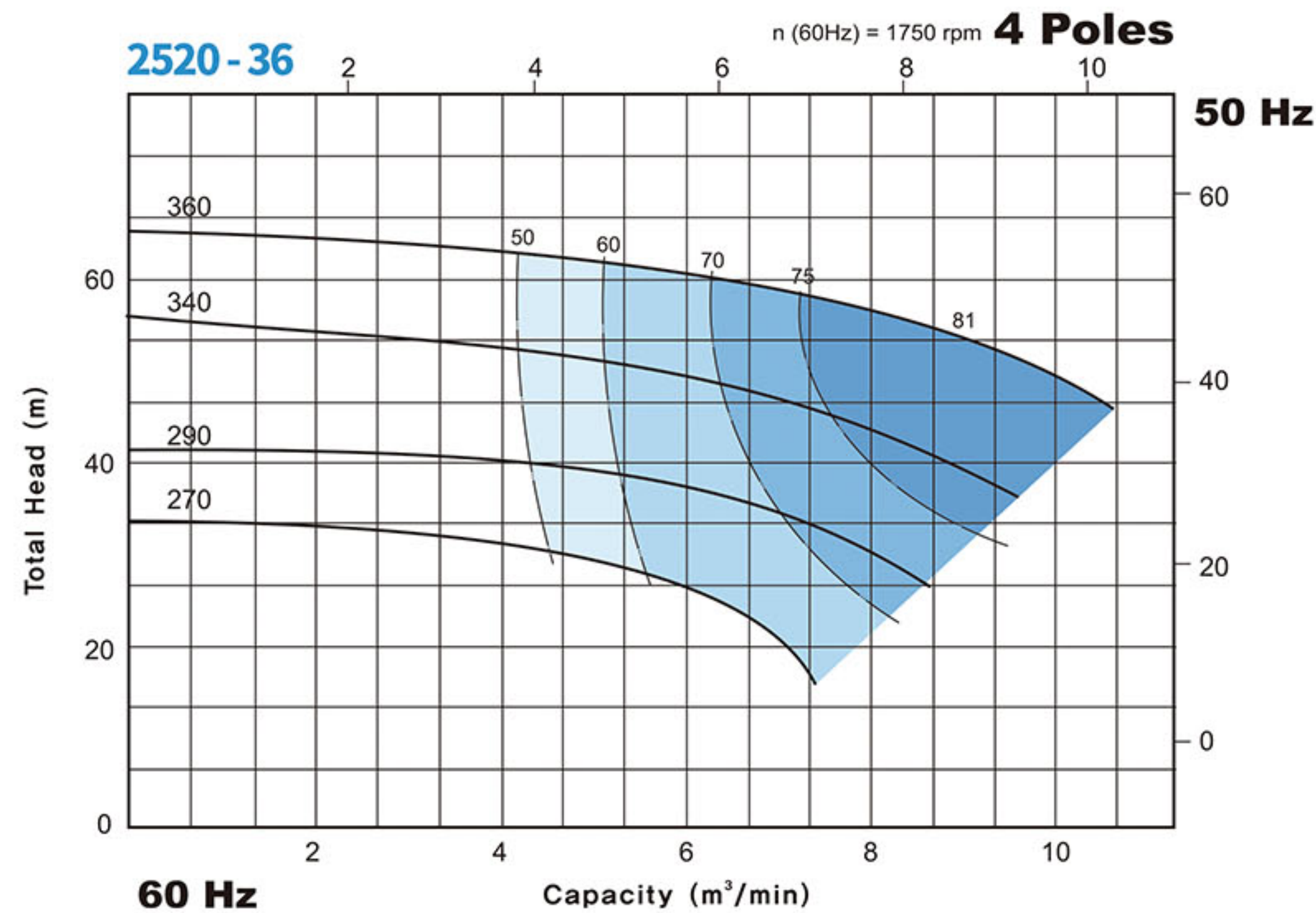
- ☑ 특수한 임펠러 디자인은 대형 입자 고형물 및 섬유/적물 재료를 취급합니다.
The special impeller design handles large particle solids and fibrous/stringy materials.

● Performance Curve



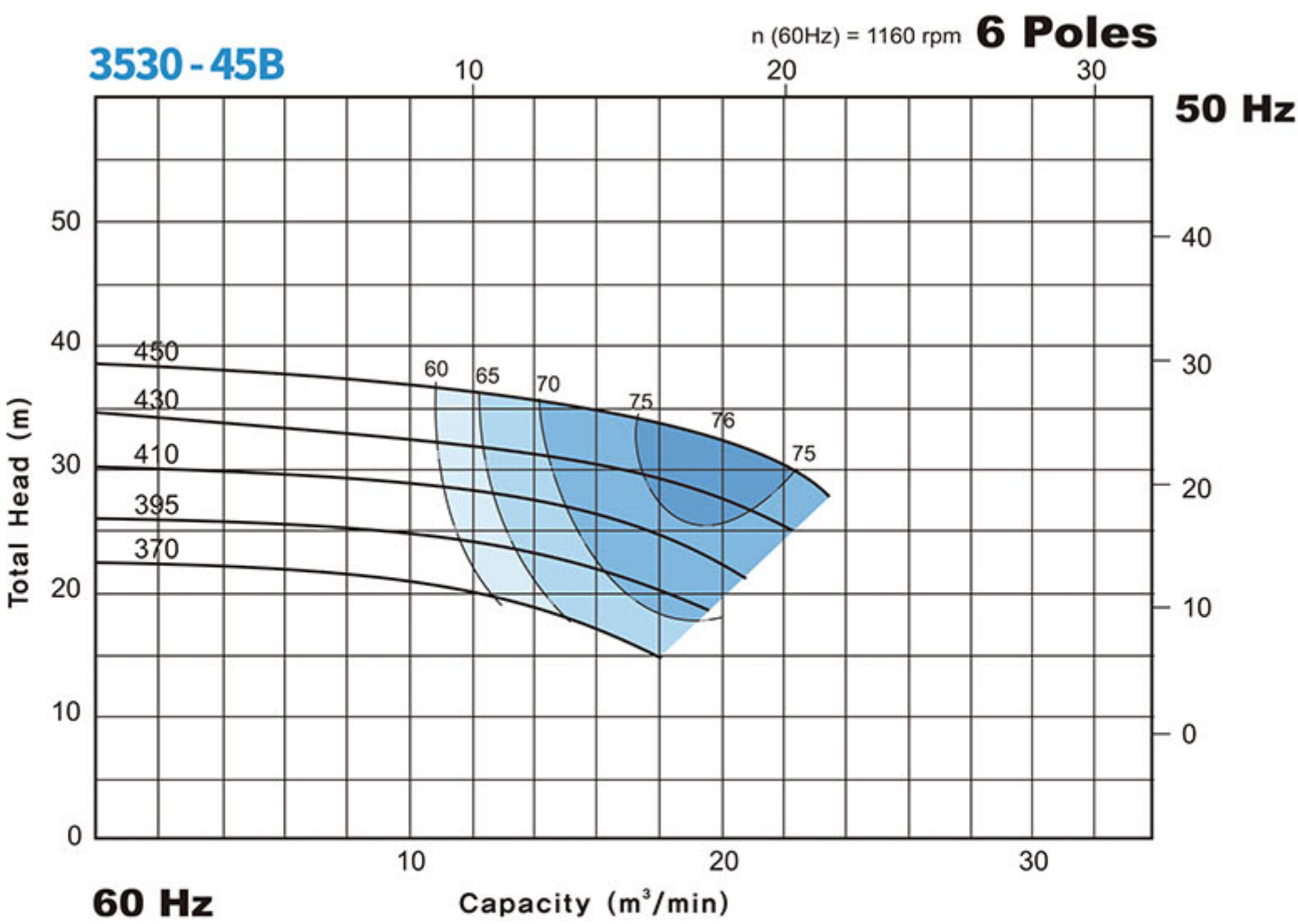
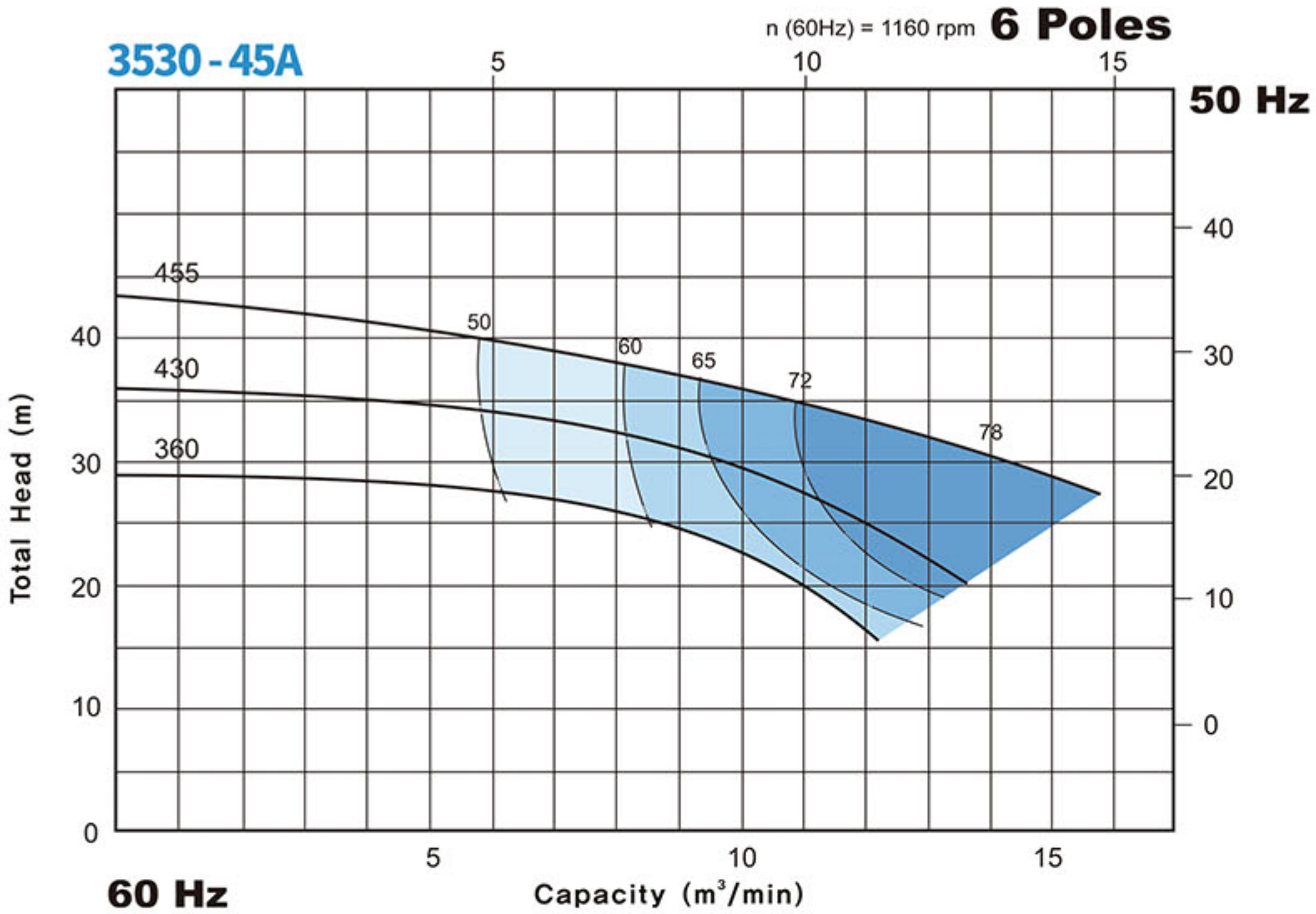
Model. P

● Performance Curve



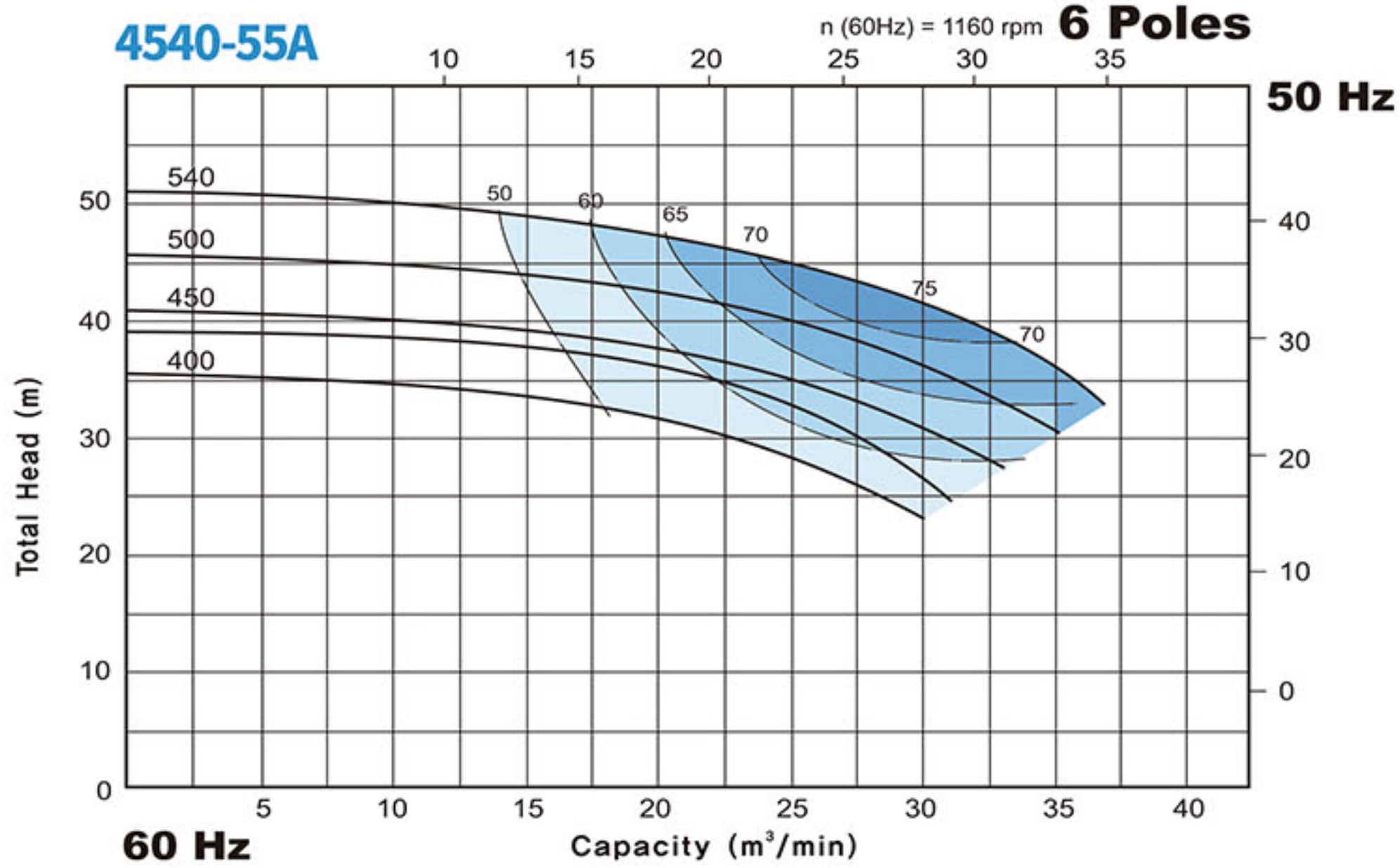
Model. P

● Performance Curve

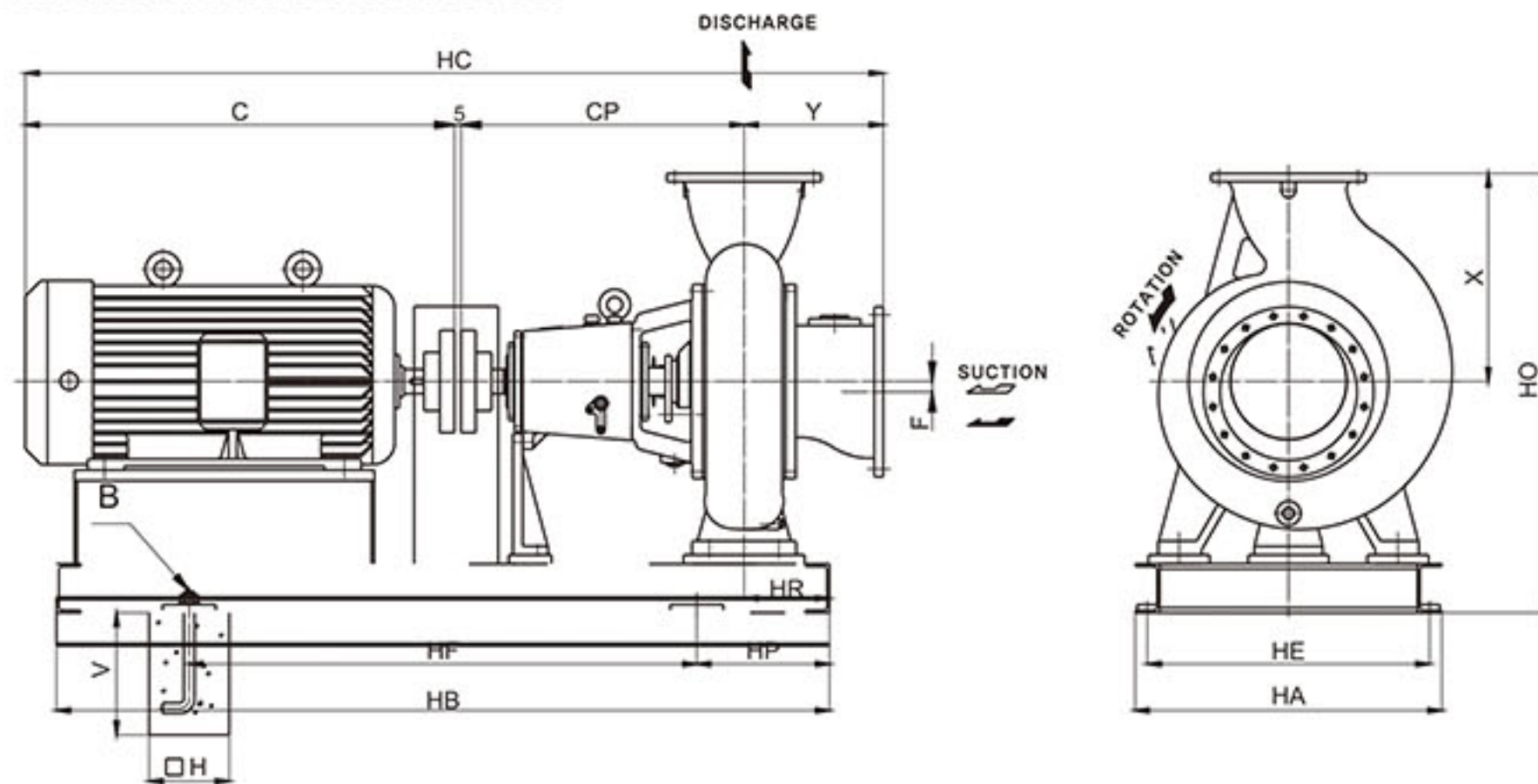


Model. P

● Performance Curve



● Installation Dimension

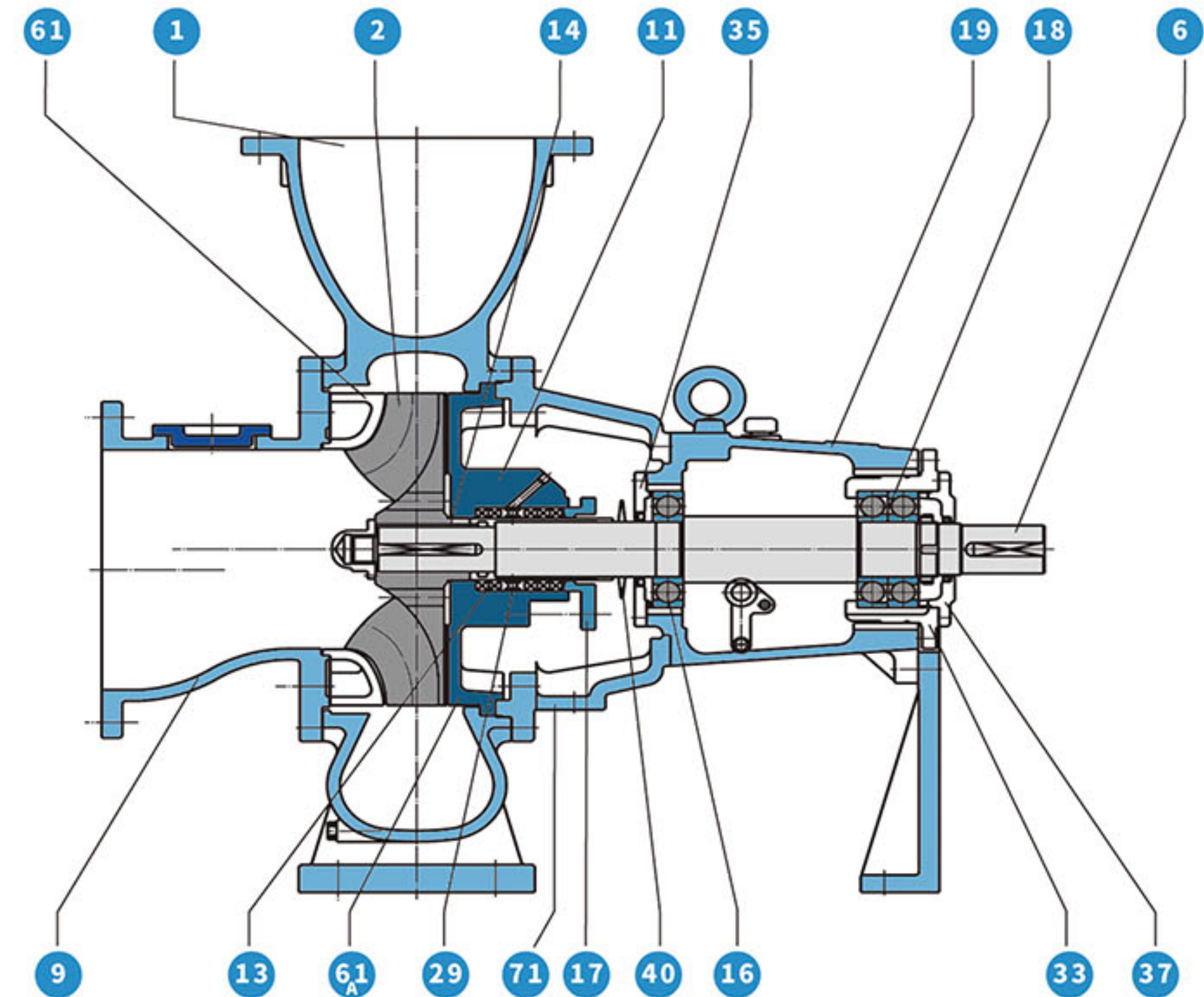


구분 규격	Pump and Motor									Baseplate							Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	CP	Y	X	HP	HR	HB	HF	HO	HE	HA	B	H	V
1510-360	150	100	225S	45	1912	817	790	300	355	255	80	1500	990	780	430	480	4-M20×315L	180	315
2015-360	200	150	250M	75	2034	894	795	340	400	270	90	1600	1060	885	540	600	4-M20×315L	180	315
2520-360	250	200	200L	37	1902	747	800	350	450	270	100	1600	1060	955	540	600	4-M20×315L	180	315
3025-360	300	250	250M	75	2359	894	800	400	500	270	120	1600	1060	1025	540	600	4-M20×315L	180	315
3530-450A	350	300	280L	150	1259	1154	800	400	600	325	170	1900	1250	1370	750	810	4-M20×315L	180	315
3530-450B	350	300	280L	150	2439	1154	880	400	600	340	170	2000	1320	1370	750	810	4-M20×315L	180	315
4540-550	450	400	5810L	300	3417	1717	1250	450	820	360	250	3000	1140×2	1170	1050	1110	6-M24×400L	230	400

참고: *. 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Model. P

● Parts List and Materials



No	Name of part	Material	
1	Casing	GCD450	SSC13
2	Impeller	SSC13	SSC13
6	Shaft	SM45C	STS304
9	Suction Cover	GCD450	SSC13
11	Stuffing Box Cover	SSC13	SSC13
13	Packing	TEFLON	TEFLON
14	Packing Sleeve	STS304	STS304
16	Inboard Bearing	STEEL	STEEL
17	Packing Gland	GC200	GC200
18	Outboard Bearing	STEEL	STEEL
19	Frame	GC200	GC200
29	Lantern Ring	BC6	SSC13
33	Bearing Housing	GC200	GC200
35	In Bearing Cover	GC200	GC200
37	Out Bearing Cover	GC200	GC200
40	Deflector	NBR	NBR
61	Front Plate	SSC13	SSC13
71	Adapter	GC200	GC200

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

One Piece solid shaft Vertical Sump Pumps

GV



● Applications

- 배수용 Sump Drainage
- 오수처리용 Sewage treatment
- 일반 산업용 General industry

● Feature

- ☑ 스테인레스 강재의 단일축
Heavy duty one-piece solid shaft
- ☑ 단순한 구조의 쉬운 유지보수
Simple construction for easy maintenance interchangeability
- ☑ 안전표준화에 의한 최대의 호환성
Completely standardization for high interchangeability
- ☑ 프라임 및 푸트 밸브 불필요
Not need priming and foot valve
- ☑ 튼튼하고 견고한 구조
Rugged, heavy duty construction

● Ratings

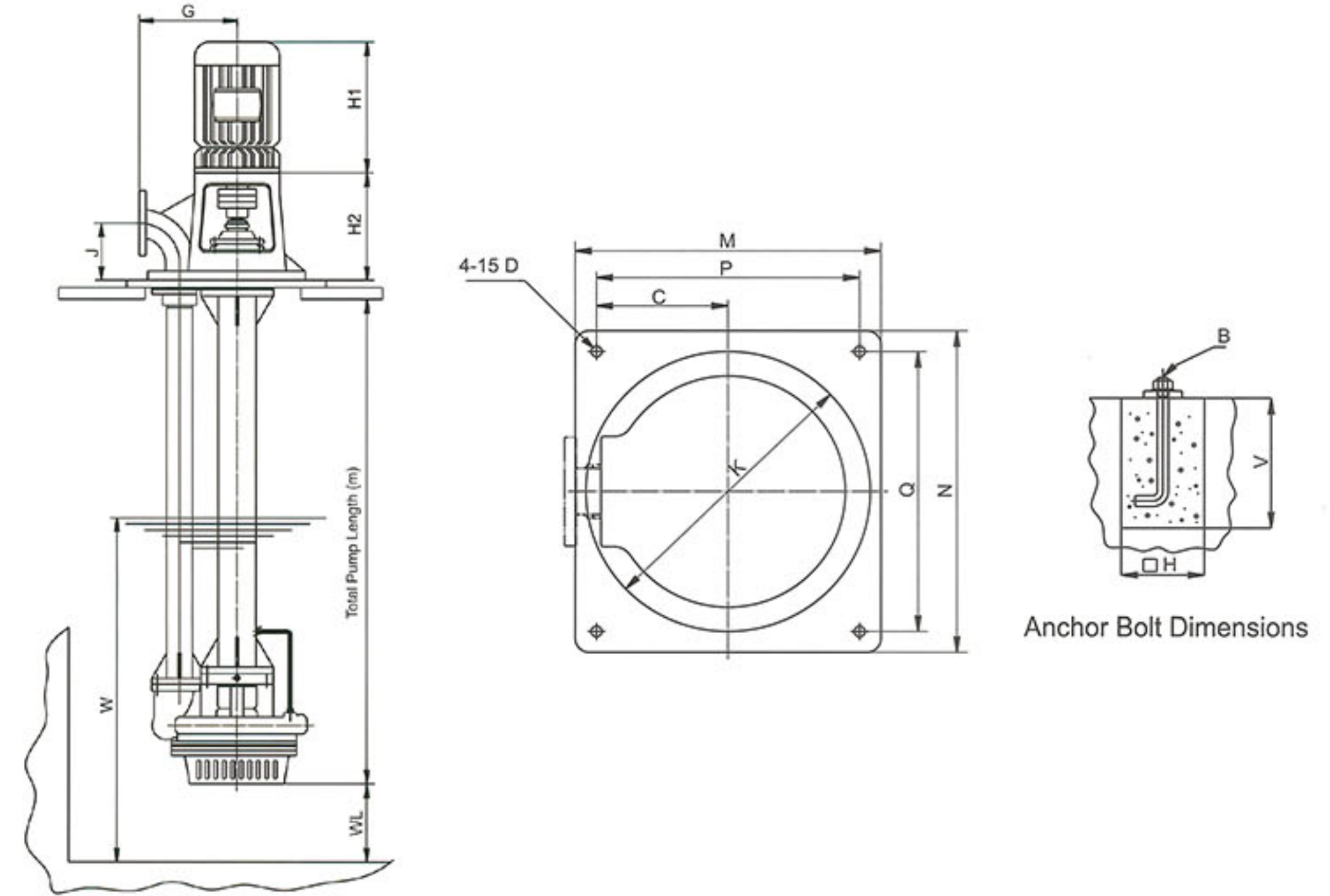
Capacity	Up to 0.7 m ³ /min (184 US GPM)
Head	Up to 30m (98ft)
Revolution 60Hz	1750 min ⁻¹
Rotation	Clockwise (viewed from coupling end)
Temperature	~60°C (140°F)
Nozzle Rating	KS 10 Kg/ cm ² - FF
Nozzle Location	Side Discharge
Max. Pump length	1.8m (5.9ft)

● Specification

구분 규격	POWER	CAPACITY / HEAD					
		유량(m ³ /min)	양정(m)	유량(m ³ /min)	양정(m)	유량(m ³ /min)	양정(m)
GV5015	0.75	0.1	9	0.2	7	0.3	4
	1.5	0.1	15	0.2	13.5	0.33	10
GV5023	2.2	0.1	22	0.2	20	0.35	15
	2.2	0.2	11	0.3	10	0.4	8
GV6516	2.2	0.2	16.5	0.3	15	0.45	12.5
	3.7	0.2	23.5	0.4	20	0.5	18
GV8015	2.2	0.3	10	0.45	9	0.6	8
	3.7	0.3	19	0.5	17	0.7	14
GV8023	5.5	0.3	23	0.6	20	0.8	16

참고: *, 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

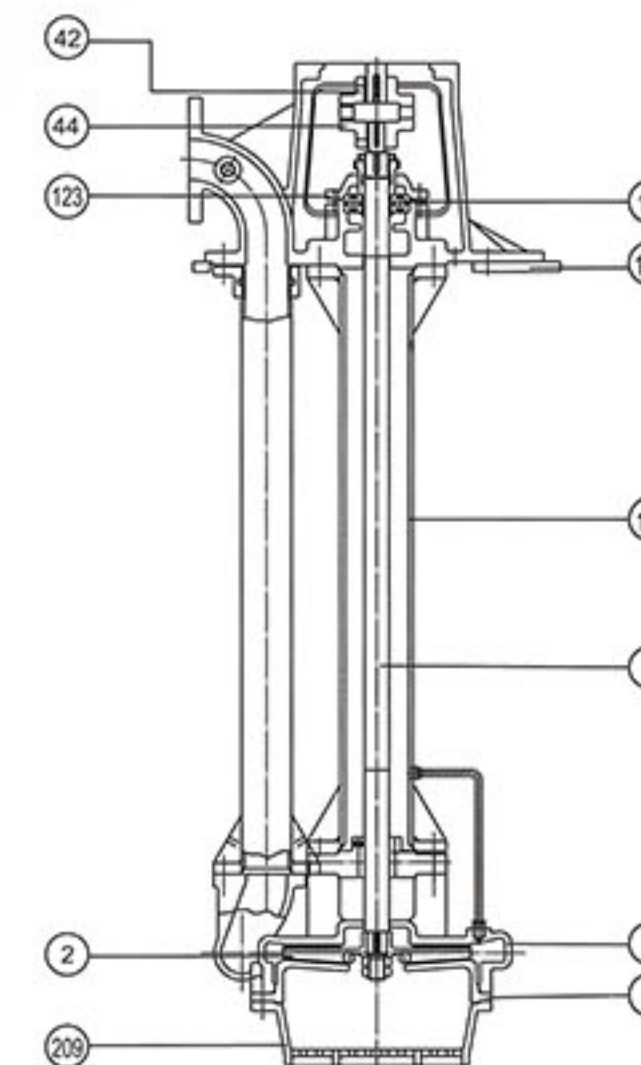
● Installation Dimension



구분 규격	Pump and motor								Baseplate						Anchor Bolt		
	Frame	kW	H1	H2	WL	G	J	W	M	P	C	Q	N	K	B	H	V
5023	112S	2.2	315	253	100	230	130	370	430	370	185	400	460	400	4-M12×200L	120	200
6526	112M	3.7	340	265	100	240	160	370	450	390	205	420	490	420	4-M12×200L	120	200
8023	132S	5.5	382	265	100	250	160	370	450	390	205	440	490	420	4-M12×200L	120	200

참고: *, 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

● Parts List and Materials



No	Name of part	MATERIAL
1	Casing	GC200
2	Impeller	GC200
6	Shaft	SM45C
9	Suction Cover	GC200
18	Bearing	STEEL
42	Motor Coupling	GC200
44	Pump Coupling	GC200
101	Column Pipe	SPPS38
123	Bearing Cover	GC200
129	Sole Plate	GC200
209	Strainer	GC200

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

Horizontal Screw Pumps

SC



● Applications

- 폐수처리 Waste treatment
- 식품이송 Food transfer
- 고농도제지액 Paper stock

● Feature

- ☑ 비닐이나 섬유류등에 엉킴이 없음
No tangles in vinyl or fibers
- ☑ 고효율, 낮은 NPSHr.
High efficiency, low NPSHr.
- ☑ 고농도 펄프액, 오니의 이송에 적합
Suitable for transferring high concentration pulp liquid and sludge
- ☑ 양정의 변화에 대한 유량의 변화가 적어 유량제어 용이
It is easy to control the flow rate because there is little change in the flow rate relative to the change of the head

● Ratings

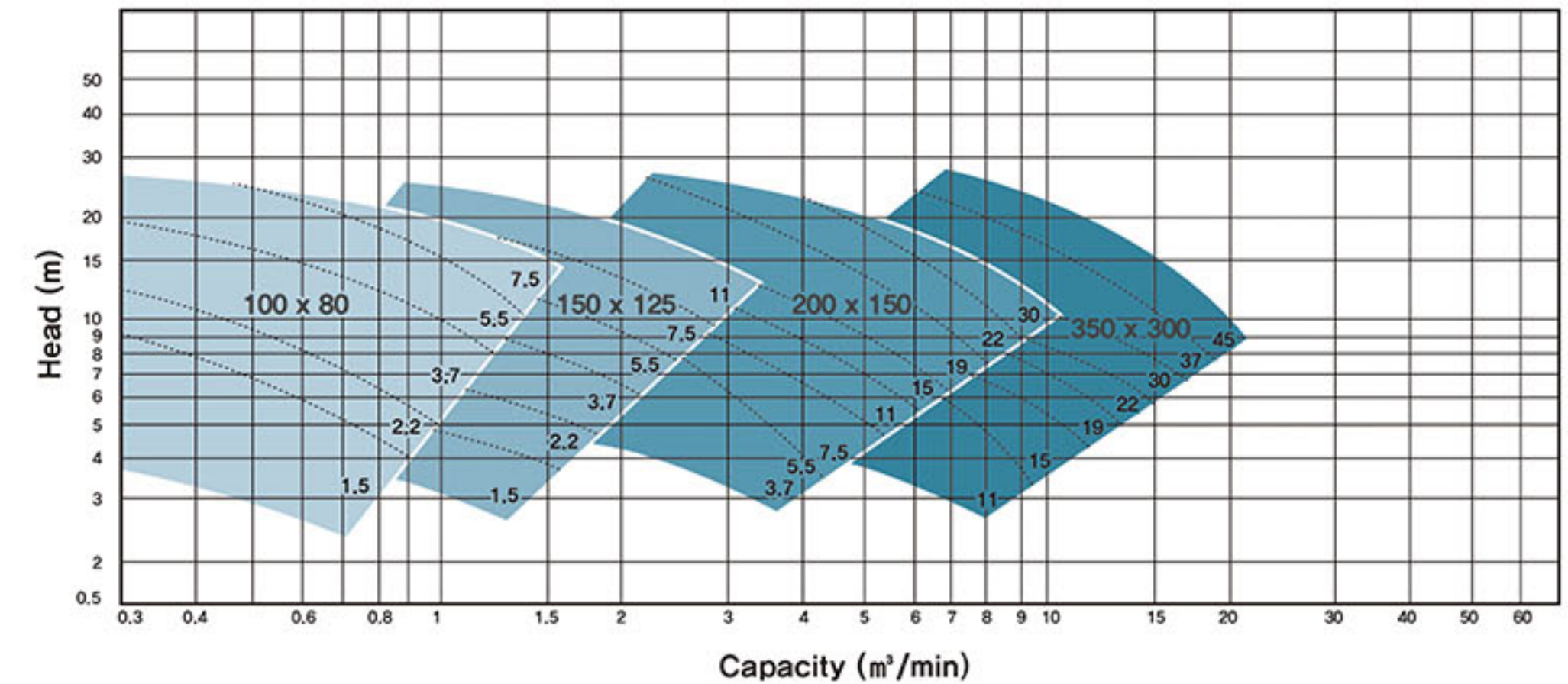
Capacity	0.2~30 m ³ /min (52 ~ 7,925 US GPM)	Temperature	~80°C (176°F)
Head	3~30m (9.8ft~98ft)	Nozzle Rating	KS 10 Kg/ cm ² - FF
Discharge Pressure	Up to 10 kgf/cm ² (142 PSIG)	Nozzle Location	End Suction : Top Discharge
Revolution 60Hz	1750 min ⁻¹ & pulley type	Seals	Conventional Packing or Mechanical Seal
Rotation	Clockwise (viewed from coupling end)		

● Mixed liquid specific gravity

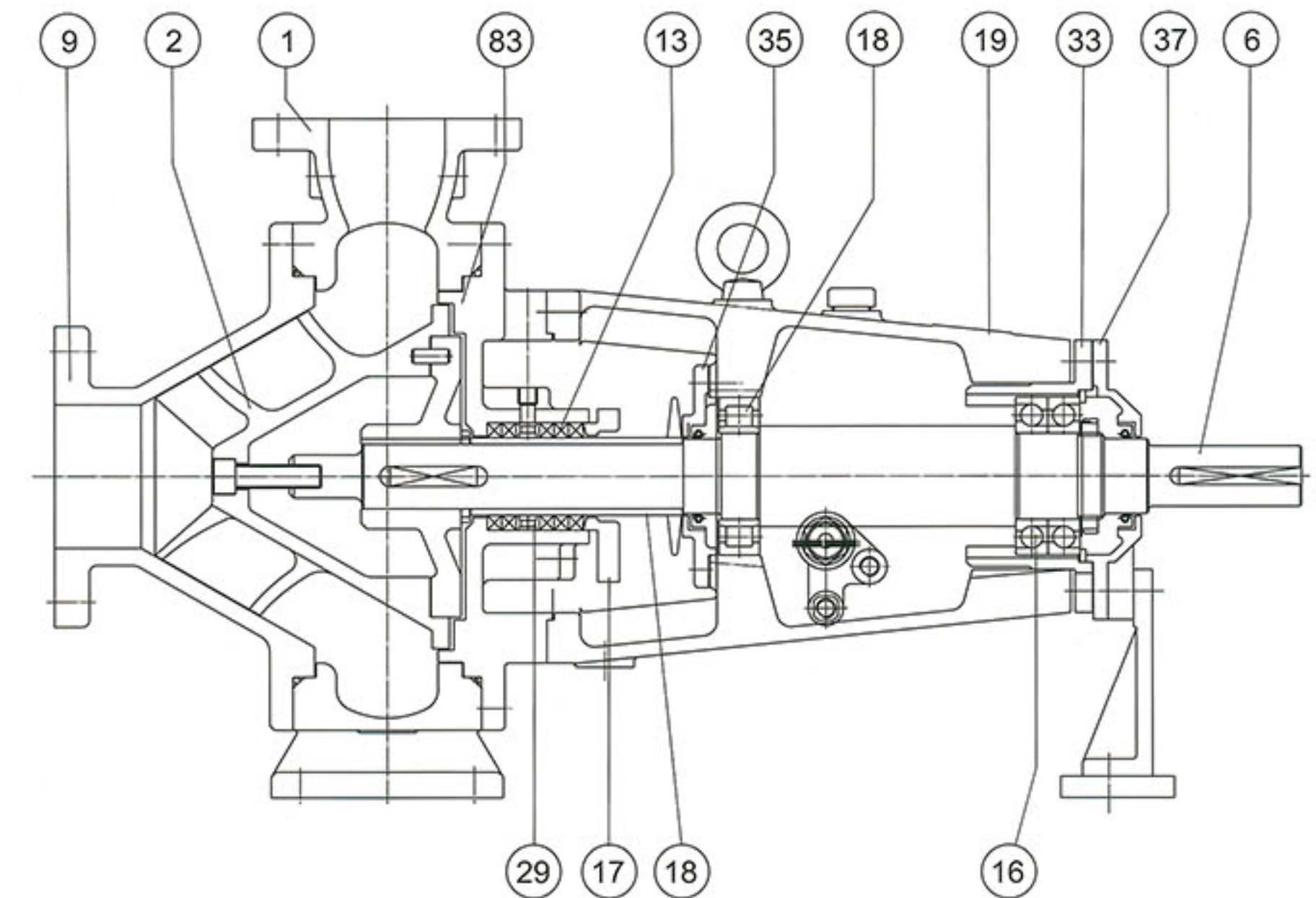
* 일반적으로 사용되는 범위

혼합농도(%) 분체비중	5%	10%	15%	20%	25%	30%	40%	50%
1.5	1.03	1.05	1.08	1.10	1.13	1.15	1.20	1.25
2.0	1.02	1.03	1.05	1.07	1.09	1.11	1.15	1.2
2.5	1.05	1.10	1.15	1.20	1.25	1.30	1.40	1.5
3.0	1.03	1.05	1.08	1.11	1.14	1.13	1.25	1.33
3.5	1.08	1.15	1.23	1.30	1.38	1.45	1.60	1.75
4.0	1.03	1.06	1.10	1.14	1.18	1.22	1.32	1.43
4.5	1.10	1.20	1.30	1.40	1.50	1.60	1.80	2.0
5.0	1.03	1.07	1.11	1.15	1.20	1.25	1.36	1.5
5.5	1.14	1.25	1.38	1.50	1.63	1.75	2.0	2.25
6.0	1.04	1.08	1.12	1.17	1.22	1.27	1.44	1.56
6.5	1.14	1.30	1.45	1.60	1.75	1.90	2.2	2.5
7.0	1.08	1.13	1.18	1.23	1.29	1.43	1.6	1.8
7.5	1.18	1.35	1.53	1.70	1.88	2.05	2.4	2.75
8.0	1.04	1.08	1.13	1.18	1.24	1.30	1.45	1.64
8.5	1.24	1.40	1.60	1.80	2.0	2.20	2.6	3.0
9.0	1.05	1.09	1.14	1.19	1.25	1.32	1.47	1.67
9.5	1.25	1.50	1.75	2.0	2.25	2.50	3.0	-
10.0	1.04	1.09	1.14	1.2	1.26	1.33	1.5	1.71
10.5	1.30	1.60	1.90	2.2	2.50	2.80	-	-
11.0	1.04	1.09	1.15	1.21	1.27	1.35	1.52	1.75
11.5	1.35	1.70	2.05	2.4	2.75	-	-	-
12.0	1.05	1.10	1.15	1.21	1.28	1.36	1.54	1.78

● Installation Dimension



● Parts List and Materials



No	Name of part	METERIAL	No	Name of part	METERIAL
1	Casing	GC200 SSC13	17	Packing Gland	GC200 SSC13
2	Impeller	SSC13 SSC13	18	Inboard Bearing	STEEL STEEL
6	Shaft	SM45C STS304	19	Frame	GC200 GC200
9	Suction Cover	GC200 SSC13	29	Lantern Ring	BC6 SSC13
13	Packing	TEFLON TEFLON	33	Bearing Housing	GC200 GC200
14	Shaft Sleeve	BC6 STS304	35	Inboard Bearing Cover	GC200 GC200
16	Outboard Bearing	STEEL STEEL	37	Outboard Bearing Cover	GC200 GC200
			83	Stuffing Box	GC200 SSC13

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

Double Suction Pumps DS/DSN

Applications

- 프로세스용 Process
- 석유화학용 Petrochemical industry
- 제지공업용 Pulp & Paper
- 일반 산업용 General Industry
- 선박용 Marine

Feature

- ☑ 양흡입 디자인
Double suction Design.
- ☑ 축 밸런스 보장
Assurance axial balance.
- ☑ 상하분리형 케이싱
Horizontally split casing.
- ☑ 검사 및 정비 용이
Easy inspection and repair.
- ☑ 축방향 쓰러스트 하중 상쇄
Offset axial thrust load.
- ☑ 케이싱 마모 방지 및 손쉬운 교체
Easily replaced, protect.
- ☑ API standard 610 규격 준수 (API 610 Code: BB1)
API standard 610 (API Code: BB1)

Ratings

Capacity	Up to 400 m ³ /min (105,669 US GPM)
Head	Up to 400 m (1,312ft)
Discharge Pressure	Up to 40 kgf/cm ² (568 PSIG)
Allowable Suction Pressure	Up to 20 kgf/cm ² (284 PSIG)
Impeller Type	Enclosed
Temperature	-50°C ~ 150°C (-58°F ~ 302°F)
Flanges	ANSI, other standards also available
Materials	According th API610 Material code



DS Model.



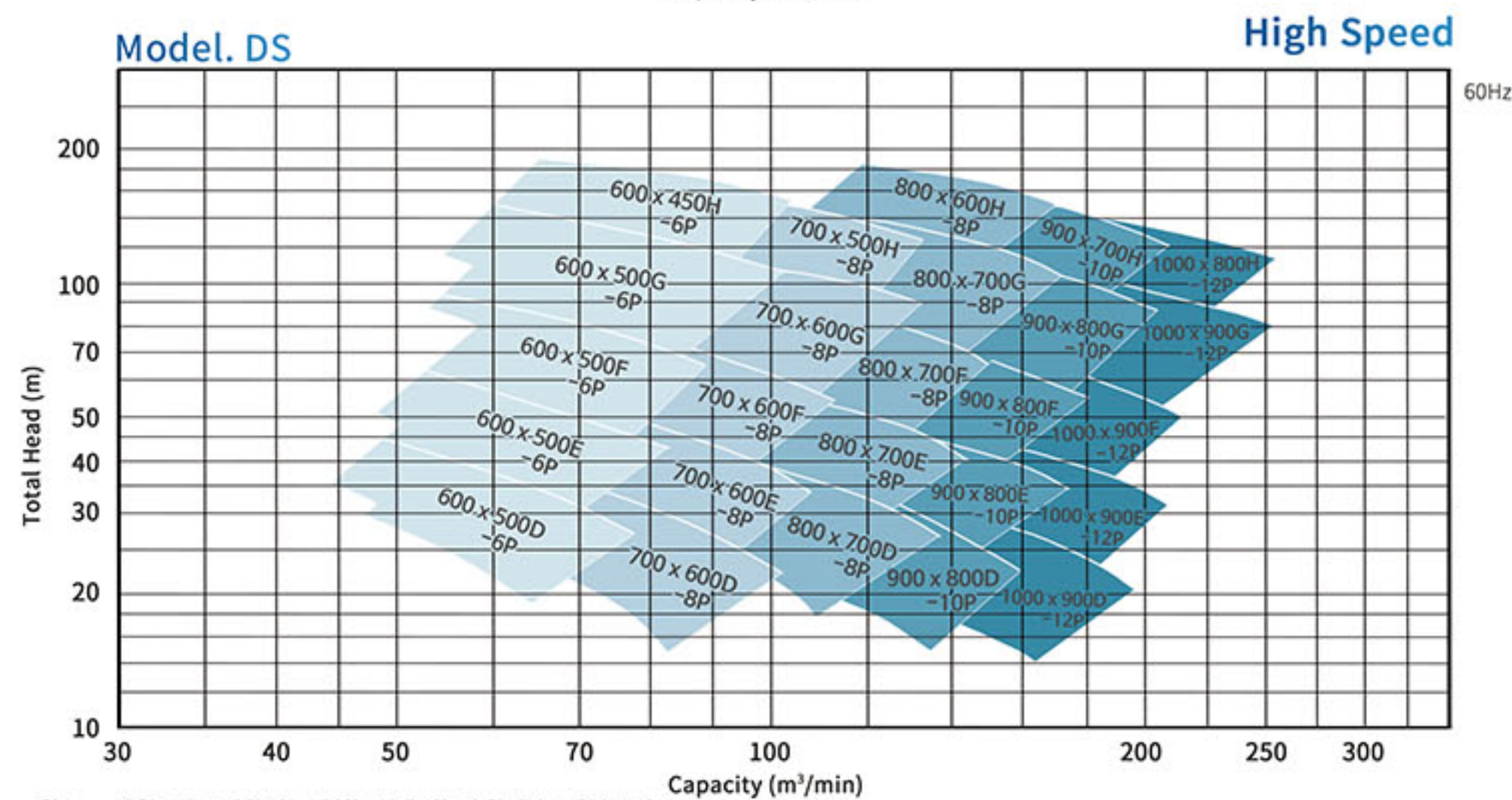
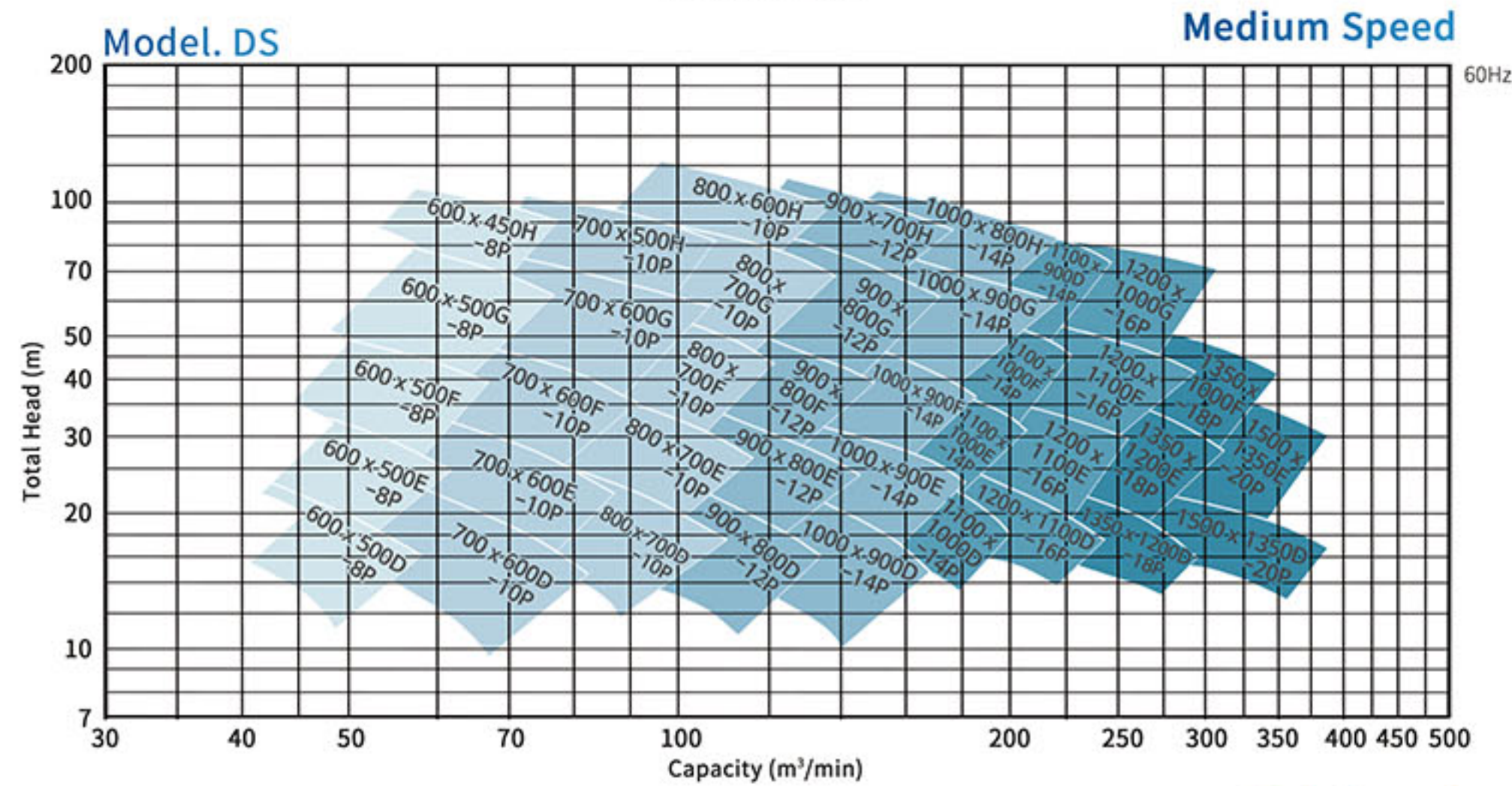
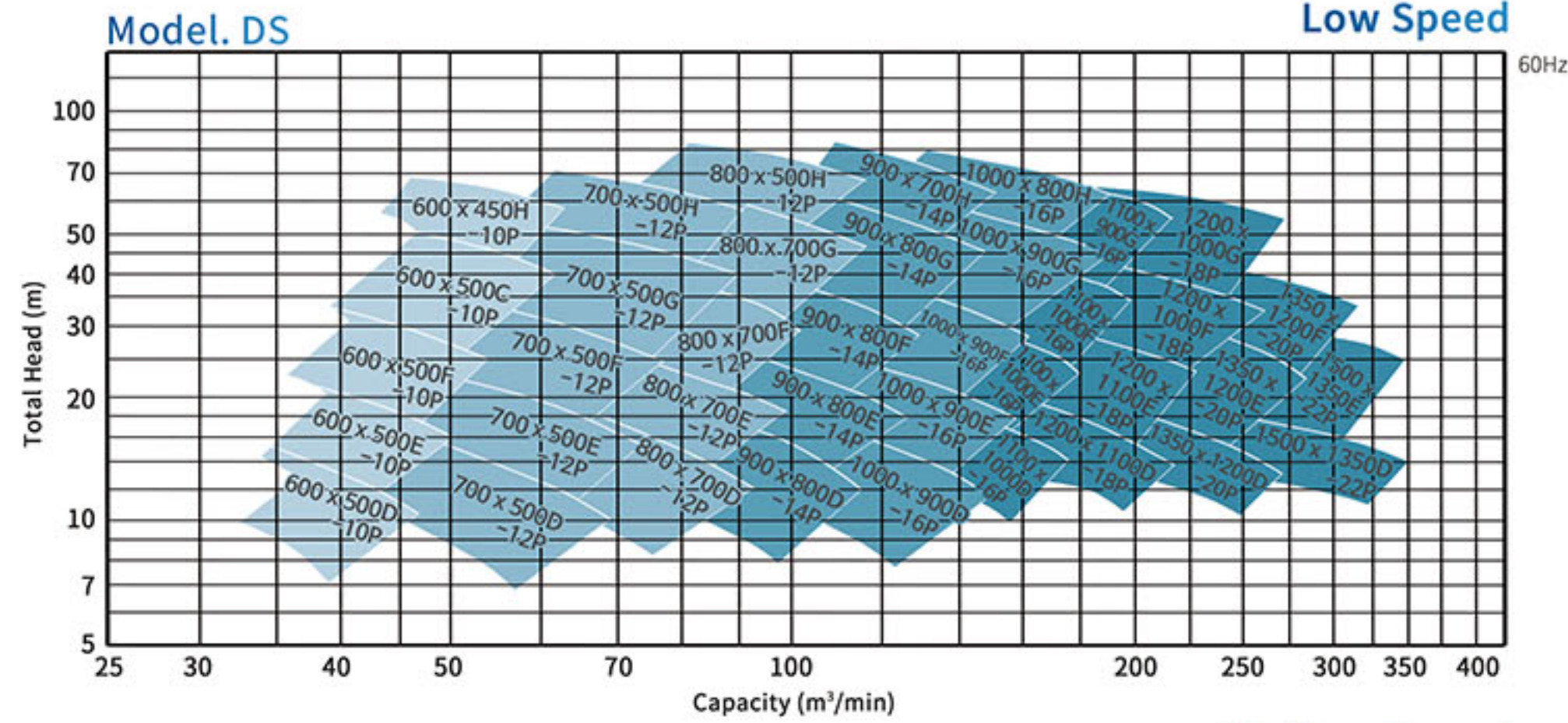
DSN Model.

Specification

Model DSN					
Size	Model	Capacity (m ³ /min)	Head (m)	Power (kW)	Revolution (rpm)
200 x 200	2020 4C 1	3.1/5.6	16 / 18	15	1750
	2	3.4/5.6	18 / 13	18.5	
	3	3.4/5.6	19.5/15	22	
	2020 6C	2.2/3.6	8.5/6.5	7.5	1180
	2015 4D 1	2.9/4.0	20 / 18	18.5	
	2	3.1/5.6	22 / 16	22	
200 x 150	3	3.2/5.6	28 / 22	30	1750
	4	4.0/5.6	30 / 26	37	
	2015 6D 1	2.1/3.8	10.7/7.5	7.5	1180
	2	2.2/4.0	14/10.5	11	
	2015 4E 1	2.9/3.9	32 / 30	30	1750
	2	3.1/5.6	35 / 28	37	
	3	3.4/5.6	41 / 34	45	
	4	3.4/5.6	50 / 42	55	1180
	5	3.4/5.6	56 / 49	75	
	2015 6E 1	2.0/3.8	15/11.5	11	1750
	2	2.1/3.8	20 / 16	15	
	3	2.2/4.0	22 / 18	18.5	
250 x 250	4	2.3/4.0	25 / 21	22	1180
	2015 4F 1	3.2/5.6	60 / 52	75	1750
	2	3.2/5.6	77 / 64	93	
	3	3.4/5.2	92 / 83	110	1180
	2015 4G	3.5/5.6	100/90	132	
	2015 6F 1	2.3/3.6	26 / 22	22	1750
	2	2.2/4.0	33 / 27	30	
	3	2.3/4.2	40 / 33	37	
	2015 6G	2.4/4.2	43 / 36	45	1180
	2525 4C 1	5.0/9.0	17 / 13	30	
	2	5.0/7.0	21 / 20	37	
	3	5.0/7.0	23 / 18	45	1750
250 x 200	2525 6C 1	4.1/5.3	9 / 8	11	1180
	2	4.1/6.2	9 / 7.5	15	
	3	4.1/6.2	9 / 7.5	15	
	2520 4D 1	6 / 8	22 / 20	37	1750
	2	6 / 9	26 / 21	45	
	3	6.5/9	33 / 27	55	
	4	6.5/9	10/9.5	75	1180
	2520 6D 1	4 / 4.7	12 / 10	11	
	2	4 / 6.2	15 / 12	15	
	3	4.1/6.2	40 / 35	18.5	1750
	2520 4E 1	6 / 9	50 / 45	75	
	2	6 / 9	60 / 52	93	
250 x 150	3	6.5/9	15 / 14	110	1180
	2520 6E 1	4 / 5.2	17 / 15	18.5	
	2	4.2/6	22/19.5	22	
	3	4 / 6	27 / 23	30	1750
	4	4.2/6	65 / 58	37	
	2515 4F 1	6 / 8	72 / 62	110	1180
	2	6 / 9	85 / 75	132	
	3	6 / 9	98 / 86	160	
	4	6 / 9	28 / 24	190	1750
	2515 6F 1	4.6/6	33 / 29	37	
	2	4 / 6	42 / 37	45	
	3	4 / 5.8	118/116	45	1180
	2515 4G 1	3.9/5.5	118/104	160	
	2	4 / 8	118/102	190	
300 x 300	3	4 / 9	50 / 47	220	1750
	2515 6G 1	2.7/4.5	50 / 42	55	
	2	2.7/6.3	123/120	75	
	2515 4H 1	4 / 5	123/110	190	1180
	2	4 / 7	137/110	220	
	3	4.1/8	137/118	260	
	4	4.5/9	150/130	300	1750
	5	4.6/8.3	180/160	370	
	6	4.7/9	180/157	400	
	2515 6H 1	2.8/5.5	57 / 50	75	1180
	2	3 / 6	68 / 57	95	
	3	3.2/6.2	80 / 68	110	
300 x 250	3030 4C 1	9.2/13	18.5/13	45	1750
	2	9.4/13	22/16.5	55	
	3030 6C 1	6.2/8.5	9 / 6.5	15	1180
	2	6.2/8.5	9.5 / 7	18.5	
	3025 4D 1	9.3/13	24 / 17	55	1750
	2	9 / 13	30 / 24	75	
	3	9.3/13	35 / 29	93	
	4	9.4/13	38 / 32	110	1180
	3025 6D 1	6 / 8.5	10 / 8	18.5	
	2	6 / 8.5	12 / 10	22	
	3	6.2/9	16 / 12	30	1750
	4	6.2/9	17 / 13	37	
300 x 150	3025 4E 1	9.5/13	44 / 37	110	1750
	2	9.5/13	50 / 44	132	
	3	9.5/13	60 / 53	160	
	4	9.5/13	65 / 58	190	1180
	3025 6E 1	6 / 7	18 / 17	30	
	2	6 / 9	20 / 16	37	
300 x 200	3	6 / 9	24 / 21	45	1180
	4	6 / 9	29 / 25	55	
	3020 4F 1	9 / 13	70 / 67	190	1750
	2	9 / 13	80 / 73	220	
	3	9 / 13	88 / 83	260	
	4	9 / 13	98 / 93	300	1180
	3020 4G 1	7.7/11	117/106	300	
	2	7.7/13	117/102	350	
	3020 6G 1	5.5/8.3	48 / 45	90	1750
	2	5.8/9	48 / 43	110	
	3020 4H 1	9.5/12	117/110	300	
	2	10/13	123/115	400	1180
	3	10/13	140/135	450	
	4	8/12.5	170/153	500	
350 x 350	5	8/12.5	195/190	550	1750
	3020 6H 1	6.5/9	52 / 47	110	
	2	6.5/9	60 / 57	132	
	3	5/9.6	75 / 65	160	1180
	4	5.5/10	87 / 77	190	
	3535 6B 1	9 / 16	10 / 7	22	1750
	2	9 / 16	12.5/9	37	
	3530 6D 1	9 / 14	19/15.5	55	
	2	9 / 16	21/16.5	75	1180
	3	9 / 16	25 / 20	93	
	3525 6E 1	9 / 17	28/24	93	1750
	2	9 / 18	24 / 28	110	
	3525 6F 1	9 / 16	35 / 32	110	
400 x 400	2	9 / 18	38 / 32	150	1180
	3	9 / 18	50 / 43	190	
	4035 6D 1	18/21	22 / 16	75	1750
	2	18/21	26 / 20	93	
	3	18/21	28 / 21	110	
	4030 6E 1	18/22	31 / 25	150	1180
	2	18/22	42 / 30	190	
	3	16/22	45 / 33	220	
	4540 6C 1	22/28	19 / 15	110	1750
	2	22/28	22 / 18	150	
	4540 6D 1	22/30	25 / 20	150	
	2	22/30	34 / 25	190	1180
	4535 6E 1	24/32	40 / 32	220	
	2	25/34	35 / 35	260	
450 x 450	3	25/34	47 / 39	300	1750
	5045 8C 1	22/34	15/9.5	75	
	2	22/36	17 / 11	93	1180
	3	24/36	20 / 14	110	
	5045 8D 1	24/36	20 / 14	150	1750
	2	20/36	20 / 14	150	
	5040 6C 1	30/40	26 / 20	190	1180
	2	30/40	30 / 24	220	
	3	30/40	32 / 26	260	
	5045 6D 1	30/40	38 / 30	260	1750
	2	30/40	45 / 36	300	
	3	30/40	52 / 43	370	

Model DS						
Size	Model	Capacity (m ³ /min)	Head (m)	Power (kW)	Revolution (rpm)	
300 x 250	3025 4E	1	9.5/13	44/3/7	110	1750
		2	9.5/13	50/4/4	132	
		3	9.5/13	60/5/3	160	
		4	9.5/13	65/5/8	190	
	3025 6E	1	6 / 7	18/1/7	30	1180
		2	6 / 9	20/1/6	37	
3		6 / 9	24/2/1	45		
4		6 / 9	29/2/5	55		
300 x 200	3020 4F	1	9 / 13	70/6/7	190	1750
		2	9 / 13	80/7/3	220	
		3	9 / 13	88/8/3	260	
		4	9 / 13	98/9/3	300	
	3020 4G	1	7.7/11	117/106	300	1180
		2	7.7/13	117/102	350	
	3020 6G	1	5.5/8.3	48/4/5	90	1750
		2	5.8/9	48/4/3	110	
	3020 4H	1	9.5/12	117/110	300	1180
		2	10/13	123/115	400	
		3	10/13	140/135	450	
		4	8/12.5	170/153	500	
		5	8/12.5	195/190	550	
	3020 6H	1	6.5/9	52/4/7	110	1750
		2	6.5/9	60/5/7	132	
3		5/9.6	75/6/5	160		
4		5.5/10	87/7/7	190		
350 x 350	3535 6B	1	9 / 16	10 / 7	22	1180
2		9 / 16	12.5/9	37		
350 x 300	3530 6D	1	9 / 14	19/15.5	55	1180
		2	9 / 16	21/16.5	75	
		3	9 / 16	25/2/0	93	
350 x 250	3525 6E	1	9 / 17	28/2/4	93	1180
		2	9 / 18	24/2/8	110	
	3525 6F	1	9 / 16	35/3/2	110	
		2	9 / 18	38/3/2	150	
		3	9 / 18	50/4/3	190	
		4	9 / 18	50/4/3	190	
400 x 350	4035 6D	1	18/21	22/1/6	75	1180
		2	18/21	26/2/0	93	
		3	18/21	28/2/1	110	
400 x 300	4030 6E	1	18/22	31/2/5	150	1180
		2	18/22	42/3/0	190	
		3	16/22	45/3/3	220	
450 x 400	4540 6C	1	22/28	19/1/5	110	1180
		2	22/28	22/1/8	150	
	4540 6D	1	22/30	25/2/0	150	
2		22/30	34/2/5	190		
450 x 350	4535 6E	1	24/32	40/3/2	220	1180
		2	25/34	35/3/5	260	
		3	25/34	47/3/9	300	
500 x 450	5045 8C	1	22/34	15/9/5	75	880
		2	22/36	17/1/1	93	
		3	24/36	20/1/4	110	
	5045 8D	1	24/36	20/1/4	150	
		2	20/36	20/1/4	150	
500 x 400	5040 6C	1	30/40	26/2/0	190	1180
		2	30/40	30/2/4	220	
		3	30/40	32/2/6	260	
500 x 450	5045 6D	1	30/40	38/3/0	260	1180
		2	30/40	45/3/6	300	
		3	30/40	52/4/3	370	

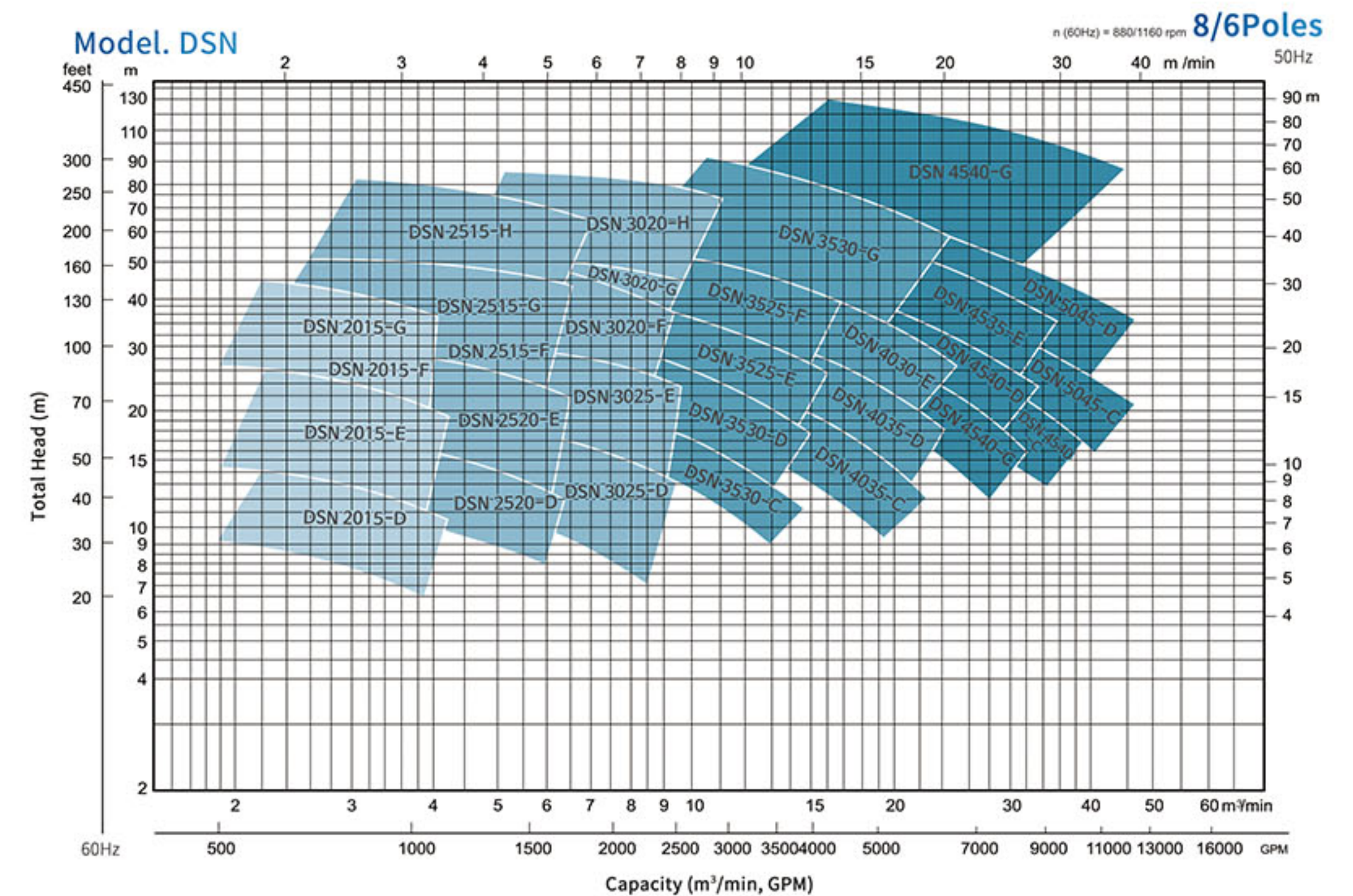
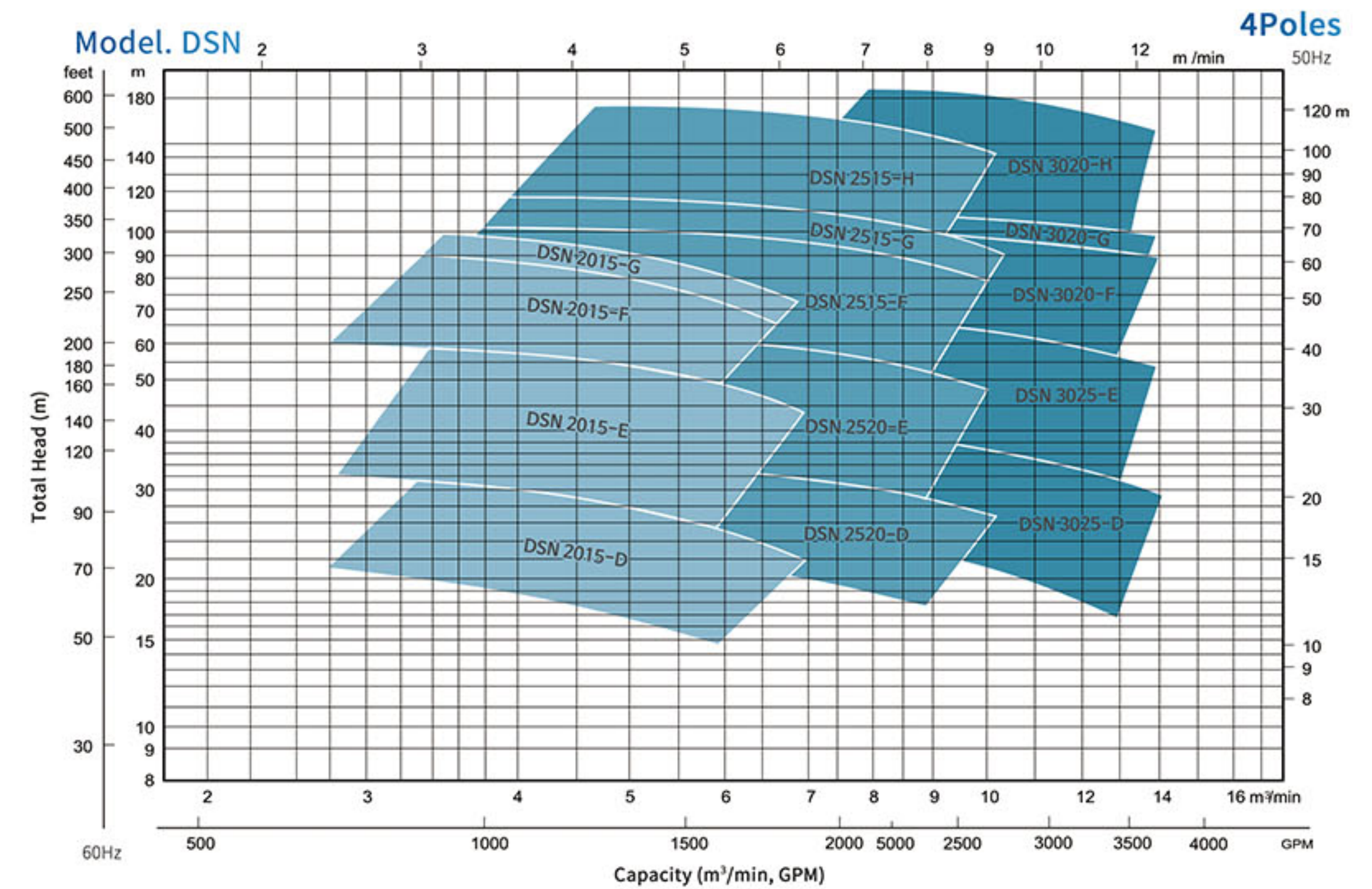
- **Selection Charts**



참고: *. 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Model. DS/DSN

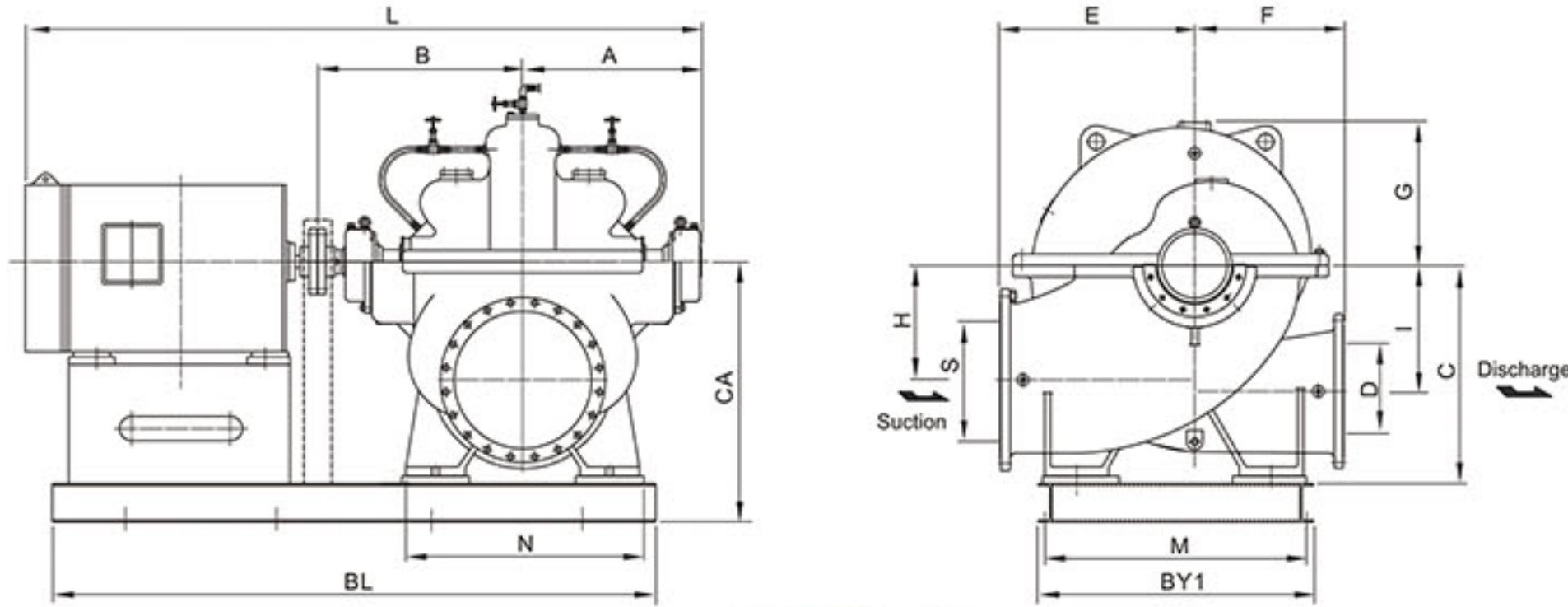
- **Selection Charts**



참고: *. 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Model. DS/DSN

● Installation Dimension



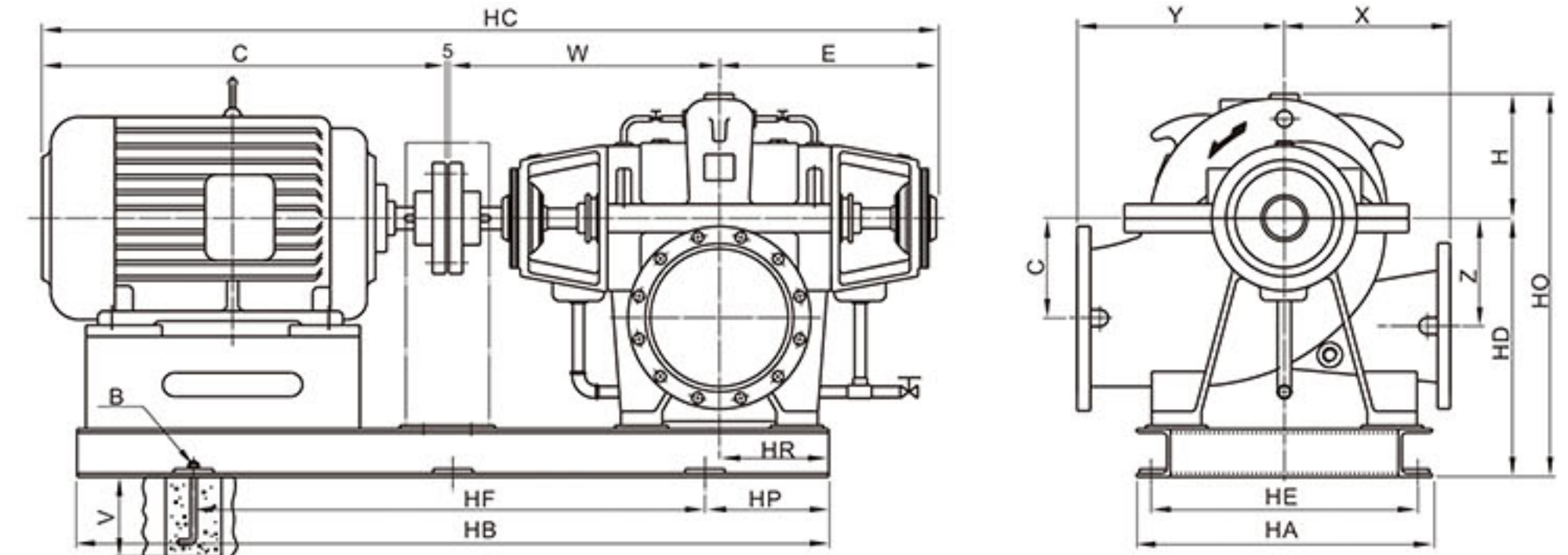
MODEL : DS

MODEL	SØ	DØ	E	F	H	I	C	G	A	B	CA	M	N	BY1	BL	L
600×500D	600	500	850	650	500	500	940	570	840	1020	1170	1000	1200	1130	3050	3400
600×500E	600	500	850	650	500	500	940	570	924	1125	1170	1000	1200	1130	3150	3500
600×500F	600	500	850	650	500	550	940	610	914	1125	1170	1000	1200	1130	3300	3700
600×500G	600	500	850	700	500	600	940	670	917	1150	1170	1000	1200	1130	3500	3900
600×450H	600	450	1000	750	550	700	970	750	1108	1325	1200	1100	1200	1230	3900	4200
700×600D	700	600	950	750	600	600	1100	670	964	1165	1330	1100	1200	1230	3350	3700
700×600E	700	600	950	750	600	600	1100	670	994	1205	1330	1100	1200	130	3400	3800
700×600F	700	600	950	750	600	650	1100	710	957	1190	1330	1100	1200	1230	3600	4000
700×600G	700	600	950	750	600	700	1100	775	1138	1355	1330	1100	1200	1230	3800	4200
700×500H	700	500	1100	800	650	820	1150	860	1170	1385	1380	1200	1200	1330	4100	4500
800×700D	800	700	1050	850	630	630	1160	720	1024	1225	1390	1300	1400	1430	3500	3900
800×700E	800	700	1050	850	630	630	1160	720	1054	1265	1390	1300	1400	1430	3600	4000
800×700F	800	700	1050	850	630	700	1160	770	987	1220	1390	1300	1400	1430	3800	4200
800×700G	800	700	1050	900	630	760	1160	840	1210	1425	1390	1300	1400	1430	4000	4400
800×600H	800	600	1250	900	710	890	1260	950	1248	1470	1490	1400	1400	1540	4250	4700
900×800D	900	800	1200	950	740	740	1340	835	1119	1330	1630	1400	1600	1540	-	-
900×800E	900	800	1200	950	740	740	1340	835	1122	1355	1630	1400	1600	1540	-	-
900×800F	900	800	1200	950	740	800	1340	890	1248	1465	1630	1400	1600	1540	-	-
900×800G	900	800	1200	1000	740	880	1340	970	1318	1540	1630	1400	1600	1540	-	-
900×700H	900	700	1400	1000	820	1040	1440	1080	1389	1610	1730	1600	1600	-	-	-
1000×900D	1000	900	1400	1100	850	850	1500	940	1222	1455	1790	1600	1700	1740	-	-
1000×900E	1000	900	1400	1100	850	850	1500	940	1413	1630	1790	1600	1700	1740	-	-
1000×900F	1000	900	1400	1100	850	930	1500	1010	1345	1560	1790	1600	1700	-	-	-
1000×900G	1000	900	1400	1200	850	1000	1500	1100	1439	1660	1790	1600	1700	-	-	-
1000×800H	1000	800	1600	1200	930	1170	1600	1240	1465	1685	1890	1800	1700	-	-	-
1100×1000D	1100	1000	1500	1150	900	900	1650	1010	1390	1590	-	1900	2300	-	-	-
1100×1000E	1100	1000	1500	1150	900	900	1650	1010	1490	1660	-	1900	2300	-	-	-
1100×1000F	1100	1000	1500	1150	900	1000	1650	1080	1540	1740	-	1900	2200	-	-	-
1100×1000G	1100	1000	1500	1250	900	1050	1650	1190	1610	1810	-	1900	2200	-	-	-
1100×900H	1100	900	1700	1250	1000	1250	1700	1320	1670	1870	-	2000	2200	-	-	-
1200×1100D	1200	100	1700	1300	1000	1000	1880	1130	1620	1820	-	2000	2500	-	-	-
1200×1100E	1200	1100	1700	1300	1000	1000	1880	1130	1690	1890	-	2000	2500	-	-	-
1200×1100F	1200	1100	1700	1300	1000	1100	1880	1210	1660	1860	-	2000	2400	-	-	-
1200×1000G	1200	1000	1700	1400	1000	1200	1880	1330	1720	1920	-	2000	2400	-	-	-
1350×1200D	1350	1200	1900	1450	1100	1100	2100	1150	1740	1940	-	2300	2700	-	-	-
1350×1200E	1350	1200	1900	1450	1100	1100	2100	1150	1810	2010	-	2300	2700	-	-	-
1350×1200F	1350	1200	1900	1450	1100	1200	2100	1340	1840	2020	-	2300	2600	-	-	-
1500×1350D	1500	1350	2100	1600	1200	1200	2300	1400	1900	2100	-	2600	2950	-	-	-
1500×1350E	1500	1350	2100	1600	1200	1200	2300	1400	1630	1830	-	2600	2950	-	-	-

주) 1) L, BL, By2, CA 치수는 전동기 형식, 출력에 따라 변동됩니다.
2) 상기 치수는 대략 치수입니다.(Above dimension is approximate)

Model. DS/DSN

● Parts List and Materials



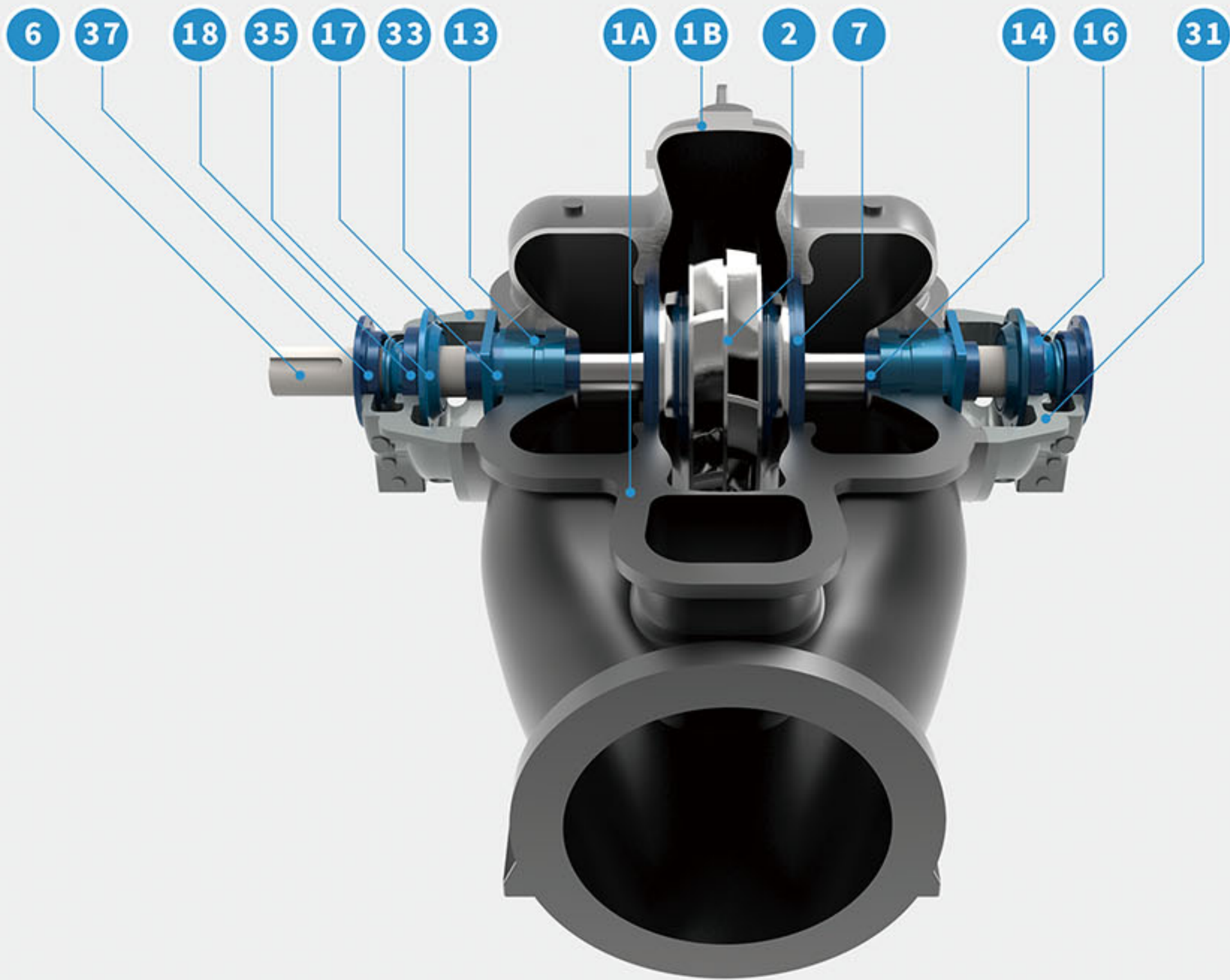
MODEL : DSN

Unit : mm (inch)

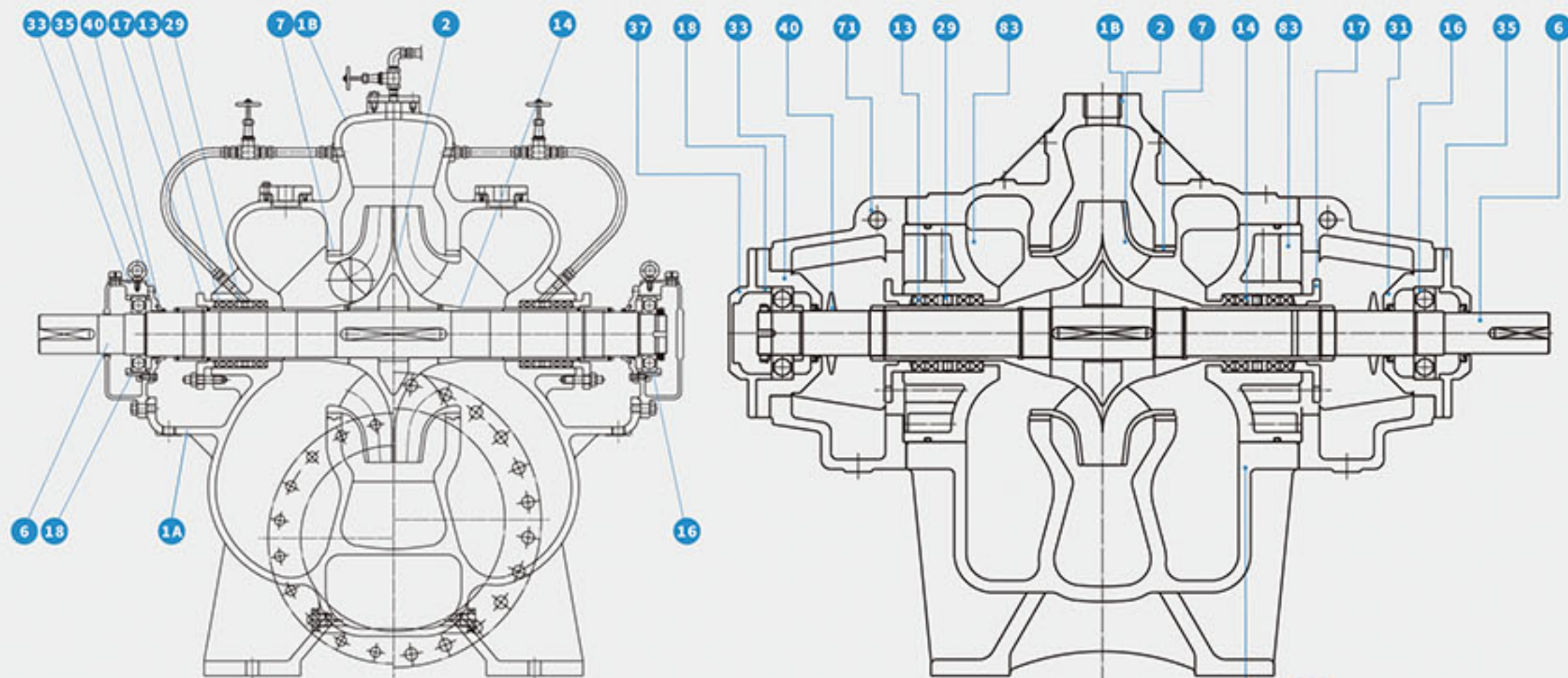
RPM	MODEL	Pump and Motor												Baseplate								Anchor Bolt		
		Suc	Dis	Frame	Kw	HC	C	W	E	Y	X	S	HO	Z	HR	HF	HP	HB	HE	HA	HD	B	H	V
1750 rpm	2015D	200 8"	150 6"	180L	30	1776 69-7/8"	706 27-7/8"	590 23-1/2"	475 18-3/4"	375 14-1/2"	280 11-1/8"	180 7-1/8"	726 28-7/8"	200 7-1/8"	230 9-1/8"	920 36-1/2"	240 9-3/4"	1400 55-1/8"	430 16-5/8"	480 18-3/8"	495 19-3/8"	4-M20x315L	200	315
	2015E	200 8"	150 6"	200L	45	1926 75-7/8"	791 31-1/2"	620 24-3/8"	510 20-3/4"	375 14-1/4"	300 11-1/8"	200 7-1/8"	810 31-1/2"	235 9-3/8"	230 9-1/8"	990 38-7/8"	255 10-1/8"	1500 59-1/8"	430 16-5/8"	480 18-3/8"	545 21-3/8"	4-M20x315L	200	315
	2015F	200 8"	150 6"	250M	93	2139 84-1/2"	939 36-7/8"	655 25-3/8"	540 21-1/4"	425 16-3/4"	355 13-3/4"	270 10-3/4"	270 10-3/4"	260 10-1/4"	1060 41-3/4"	270 10-3/4"	1600 63"	540 21-1/4"	600 23-3/8"	620 24-3/8"	4-M20x315L	200	315	
	2015G	200 8"	150 6"	280M	132	2268 89-3/4"	1068 42-1/8"	655 25-3/8"	540 21-1/4"	425 16-3/4"	355 13-3/4"	270 10-3/4"	270 10-3/4"	260 10-1/4"	1200 47-1/4"	300 11-3/8"	1800 70-1/2"	540 21-1/4"	600 23-3/8"	620 24-3/8"	4-M20x315L	200	315	
	2520D	250 10"	200 8"	225S	55	1942 76-5/8"	812 31-7/8"	620 24-3/8"	510 20-3/4"	425 16-3/4"	355 13-3/4"	210 8-3/4"	885 34-3/4"	230 9-1/8"	260 10-1/4"	1060 41-3/4"	270 10-3/4"	1600 63"	540 21-3/8"	600 24-3/8"	620 24-3/8"	4-M20x315L	200	315
	2520E	250 10"	200 8"	250M	93	2134 84-1/2"	939 36-7/8"	655 25-3/8"	540 21-1/4"	425 16-3/4"	355 13-3/4"	210 8-3/4"	905 35-3/8"	255 10-1/4"	1120 44-1/2"	290 11-3/8"	1700 66-7/8"	540 21-1/4"	600 23-3/8"	620 24-3/8"	4-M20x315L	200	315	
	2515F	250 10"	150 6"	280M	132	2378 93-1/2"	1068 42-1/8"	725 28-3/8"	580 22-3/4"	500 19-3/8"	400 15-3/8"	210 8-3/4"	1010 39-3/4"	300 11-3/8"	270 10-3/4"	1200 47-1/4"	1800 70-1/2"	670 26-3/8"	730 28-3/8"	670 26-3/8"	4-M20x315L	200	315	
	2515G	250 10"	150 6"	280L	190	2678 105-7/8"	1368 53-7/8"	725 28-3/8"	580 22-3/4"	500 19-3/8"	400 15-3/8"	210 8-3/4"	1010 39-3/4"	300 11-3/8"	270 10-3/4"	700x2 27-1/8"	360 14-3/8"	2120 83-3/8"	670 26-3/8"	730 28-3/8"	670 26-3/8"	4-M20x315L	200	315
	3025D	300 10"	250 10"	250S	75	2139 84-1/2"	939 36-7/8"	655 25-3/8"	540 21-1/4"	425 16-3/4"	355 13-3/4"	240 9-3/4"	1010 39-3/4"	260 10-3/4"	270 10-1/4"	1060 41-3/4"	270 10-3/4"	1600 63"	540 21-1/4"	600 23-3/8"	620 24-3/8"	4-M20x315L	200	315
	3025E	300 12"	250 10"	280M	132	2378 93-1/2"	1068 42-1/8"	725 28-3/8"	580 22-3/4"	500 19-3/8"	400 15-3/8"	250 9-3/4"	995 39-3/4"	285 11-1/4"	280 11-1/4"	1250 49-1/2"	325 12-3/4"	1900 74-1/2"	670 26-3/8"	730 28-3/8"	670 26-3/8"	4-M20x315L	200	315
	3020F	300 12"	200 8"	580S	220	2970 116-5/8"	1590 62-3/8"	760 29-3/8"	615 24-1/2"	530 20-3/4"	425 16-3/4"	240 9-3/4"	1120 44-1/2"	325 12-3/4"	280 11-1/4"	820x2 32-1/2"	360 14-3/8"	2360 92-7/8"	670 26-3/8"	730 28-3/8"	760 29-3/8"	6-M24x400L	200	400
	3020G	300 12"	200 8"	5810S	300	3072 120-5/8"	1692 66-1/4"	760 29-3/8"	615 24-1/2"	530 20-3/4"	425 16-3/4"	240 9-3/4"	1120 44-1/2"	325 12-3/4"	280 11-1/4"	890x2 35-1/2"	360 14-3/8"	2500 98-7/8"	670 26-3/8"	730 28-3/8"	760 29-3/8"	6-M24x400L	200	400
3020H	300 12"	200 8"	6810S	450	3521 138-7/8"	2021 79-1/2"	820 32-3/8"	675 26-3/4"	630 24-1/8"	500 19-1/8"	280 11-1/4"	1230 48-1/2"	345 13-3/8"	350 13-3/4"	1140x2 44-1/2"	360 14-3/8"	3000 118-1/2"	750 29-1/2"	810 31-3/8"	800 31-3/8"	6-M24x400L	200	400	
3530D	350 14"	300 12"	250S	75	2249 88-7/8"	939 36-7/8"	725 28-3/8"	580 22-3/4"	550 21-1/2"	450 17-1/4"	280 11-1/8"	1091 42-3/8"	315 12-3/8"	300 11-3/8"	1200 47-1/4"	300 11-3/8"	1800 70-1/2"	670 26-3/8"	730 28-3/8"	720 28-3/8"	4-M20x315L	200	315	
1150 rpm	3525F	350 14"	250 10"	280L	150	2868 112-3/4"	1368 53-3/8"	820 32-3/8"	675 26-3/4"	630 24-3/8"	475 18-3/8"	280 11-1/2"	1300 51-1/2"	370 14-3/8"	350 13-3/4"	760x2 29-3/8"	360 14-3/8"	2240 88-1/8"	750 28-3/8"	810 31-3/8"	860 33-3/8"	6-M24x400L	200	400
	3525G	350 14"	250 10"	280L	190	2868 112-3/4"	1368 53-3/8"	820 32-3/8"	675 26-3/4"	670 26-1/2"	560 22-1/4"	1365 53-1/4"	400 15-3/8"	350 13-3/4"	890x2 35-1/2"	360 14-3/8"	2500 98-7/8"	830 32-3/8"	890 35-3/8"	900 35-3/8"	6-M24x400L	200	400	
	4035D	400 16"	350 14"	280S	93	2623 103-3/4"	1068 42-1/8"	840 33-3/8"	710 27-3/8"	630 24-3/8"	475 18-3/8"	325 12-3/8"	1285 50-3/8"	365 14-3/8"	390 15-1/2"	700x2 27-1/8"	360 14-3/8"	2120 83-3/8"	750 28-3/8"	810 31-3/8"	860 33-3/8"	6-M24x400L	200	400
	4035E	400 16"	350 14"	280M	110	2582 101-7/8"	1068 42-1/8"	820 32-3/8"	689 27-3/8"	545 21-3/4"	442 17-1/4"	375 14-3/8"	1365 53-3/8"	175 14-7/8"	350 13-3/4"	690x2 27-1/2"	360 14-3/8"	2100 82-7/8"	830 32-3/8"	890 35-3/8"	900 35-3/8"	6-M24x400L	200	400
	4540D	450 18"	400 16"	280L	150	2983 117-7/8"	1368 54-3/8"	875 34-3/8"	735 28-3/4"	690 27-3/4"	550 21-3/4"	365 14-3/8"	1380 54-3/8"	400 15-3/4"	400 15-1/2"	820x2 31-3/4"	360 14-3/8"	2360 93-7/8"	930 36-3/8"	990 38-3/8"	930 36-3/8"	6-M24x400L	200	400
	5045C	450 18"	400 16"	6811L	800	3879 152-3/8"	2174 86-3/8"	980 38-3/8"	720 28-3/4"	750 28-3/4"	710 27-1/2"	400 15-3/8"	1600 63-1/2"	500 19-3/8"	380 14-3/4"	700x3 27-1/8"	370 14-3/8"	3350 131-3/4"	820 32-3/4"	890 35-3/4"	1030 40-3/8"	8-M24x400L	200	400
	5045C	500 20"	450 18"	280L	150	3098 121-7/8"	1368 53-3/8"	935 36-3/8"	790 31-3/4"	650 33-3/4"	475 23-1/2"	280 16-7/8"	1600 63"	460 18-3/8"	440 16-3/8"	1040x2 40-3/8"	360 14-3/8"	2800 110-1/2"	1050 41-3/8"	1110 43-3/8"	1030 40-3/8"	6-M24x400L	200	400
	5045D	500 20"	450 18"	280L	150	3248 128-1/2"	1368 54-3/8"	1010 34-3/8"	865 34-3/8"	710 27-3/8"	650 26-3/8"	425 16-3/4"	1600 63"	460 15-3/4"	430 20-1/4"	1140x2 44-1/2"	360 14-3/8"	3000 118-1/2"	1050 41-3/8"	1110 43-3/8"	1030 40-3/8"	8-M24x400L	200	400

Model. DS/DSN

● Parts List and Materials



DS Model. 3D drawing



DS Model.

2D drawing

DSN Model.

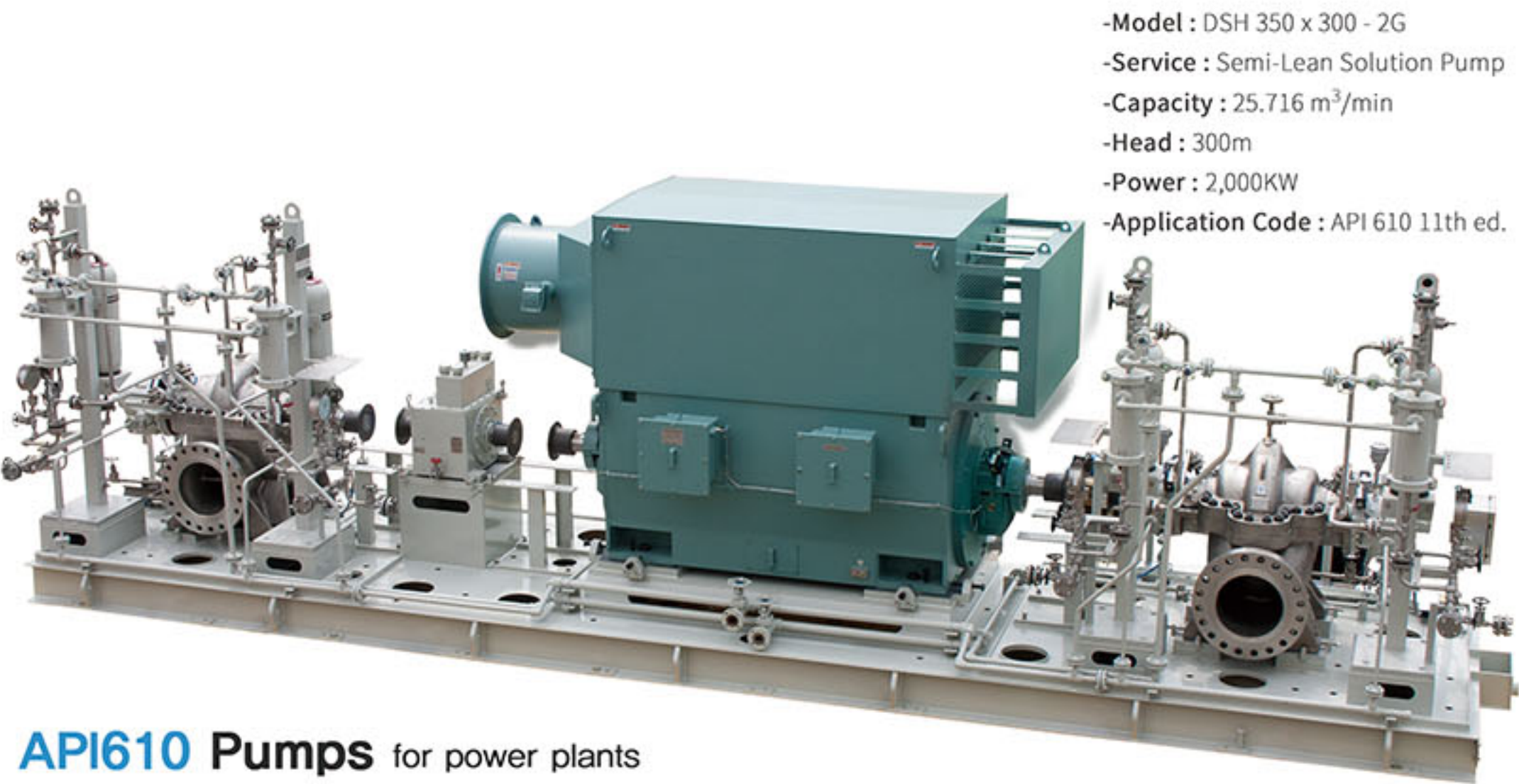
Model. DS/DSN

● Parts List and Materials

No	Name of part	Material		
1A	Lower Casing	SSC13	GC200	GC200
1B	Upper Casing	SSC13	GC200	GC200
2	Impeller	SSC13	GC200	BC6
6	Shaft	STS304	SM45C	SM45C
7	Casing Ring	SSC13	BC6	BC6
13	Packing	TEFLON	TEFLON	TEFLON
14	Shaft Sleeve	STS304	BC6	BC6
16	Inboard Bearing	STEEL	STEEL	STEEL
17	Packing Gland	SSC13	BC6	BC6
18	Outboard Bearing	STEEL	STEEL	STEEL
29	Lantern Ring	TEFLON	TEFLON	TEFLON
31	Inboard Bear. Housing	GC200	GC200	GC200
33	Outboard Bear. Housing	GC200	GC200	GC200
35	Inboard Bear. Cover	GC200	GC200	GC200
37	Outboard Bear. Cover	GC200	GC200	GC200
40	Deflector	NBR	NBR	NBR
71	Adapter	SSC13	SSC14	SSC13
83	Stuffing Box	SSC13	GC200	GC200

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

● Photo Resources



-Model : DSH 350 x 300 - 2G
-Service : Semi-Lean Solution Pump
-Capacity : 25.716 m³/min
-Head : 300m
-Power : 2,000KW
-Application Code : API 610 11th ed.

API610 Pumps for power plants

Radial Split Between Bearing Pump

energy API CE

DHB

● Applications

- 석유정제용 Petroleum Refinery
- 석유화학용 Petrochemical Industry
- 기타화학용 Other Chemical
- 고온/고압용 High Temperature /Pressure Services

● Feature

- ☑ 중심 지지 구조의 견고한 디자인
Centerline supported and heavy duty design
- ☑ 고효율 제품
High efficiency
- ☑ 다른 응용 프로그램에 대해 완전한 표준화
Completely standardization for wide application
- ☑ API 610 최신버전 요구 가능
API610 Latest edition is available on request
- ☑ API standard 610 적용 (API Code : BB2)
API standard 610 (API Code : BB2)

● Ratings

Capacity	Up to 100 m ³ /min (26,417 US GPM)
Head	Up to 550 m (1,804 ft)
Discharge Pressure	Up to 50 kgf/cm ² G (711 PSIG)
Allowable Suction Pressure	Up to 40 kgf/cm ² G (568 PSIG)
Impeller type	Enclosed
Temperature	-100°C ~ 460°C (-148°F ~ 860°F)
Flanges	ANSI, other standards also available
Location	Top Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal and Throttle bushing
Materials	According to API 610 Material code

*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.



● 2D Model Drawing

● Impeller

말뚝형 임펠러로, 케이싱 분리 및 임펠러 분리시 쉽게 교체할 수 있습니다.

● Casing

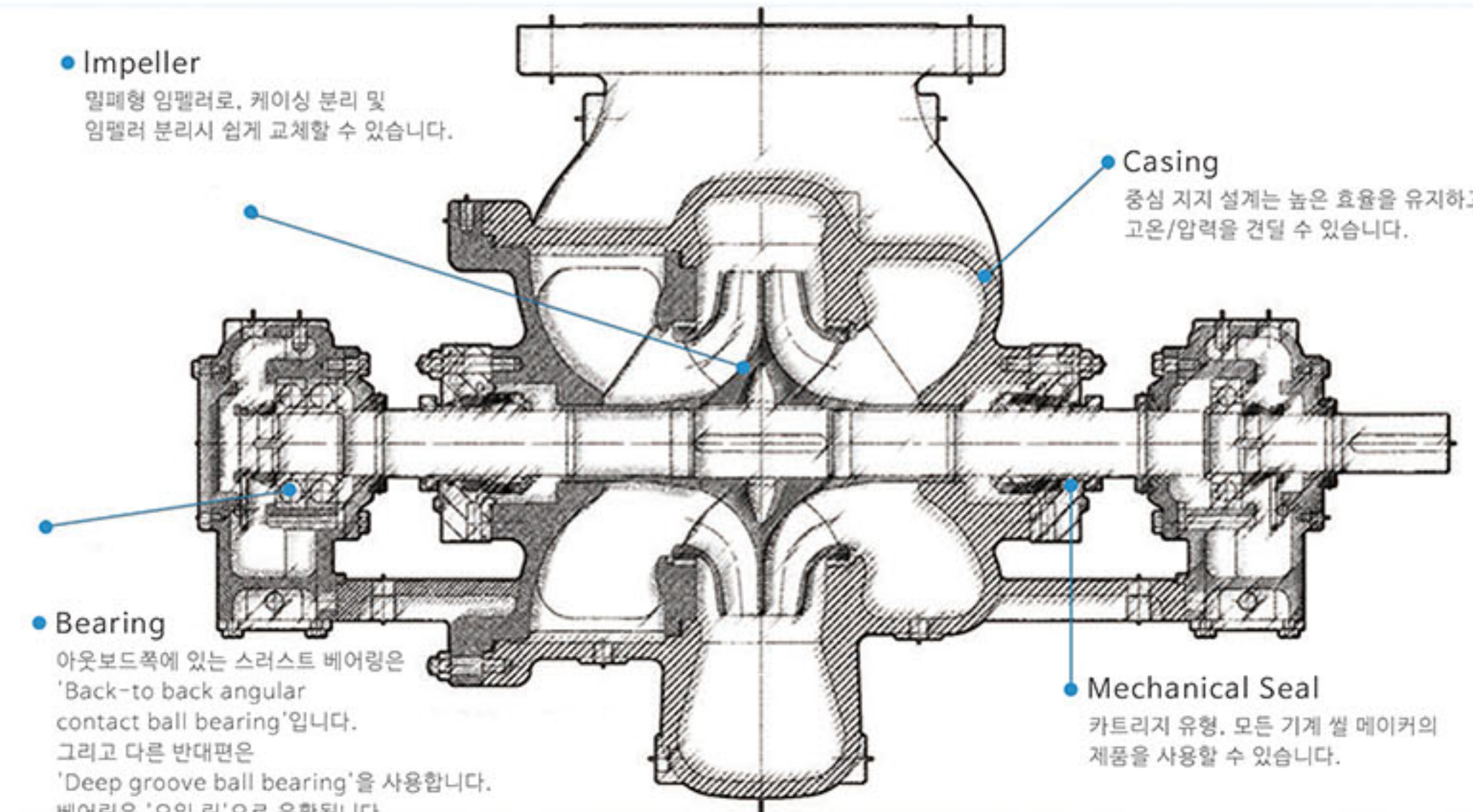
중심 지지 설계는 높은 효율을 유지하고 고온/압력을 견딜 수 있습니다.

● Bearing

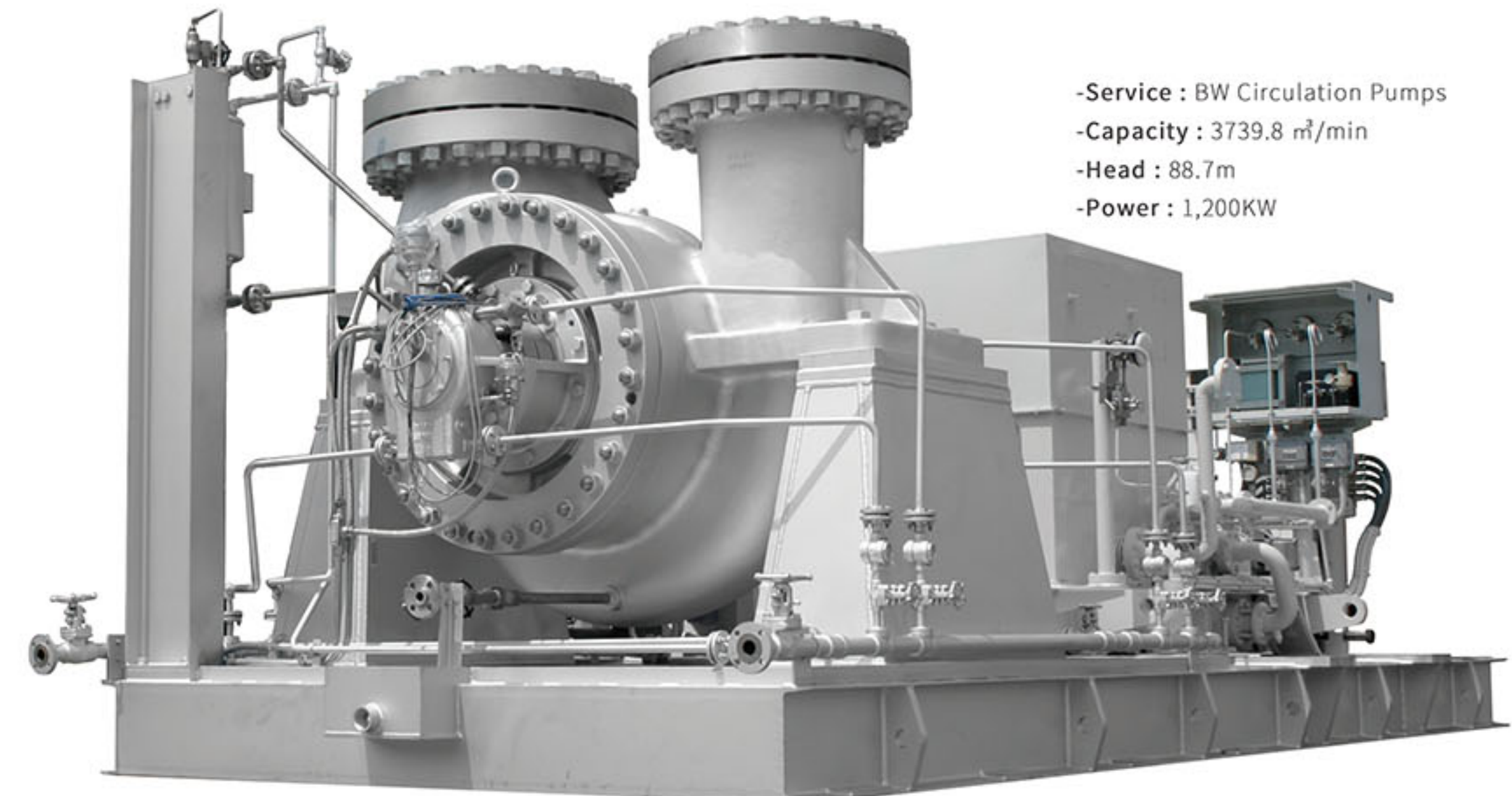
아웃보드쪽에 있는 스러스트 베어링은 'Back-to back angular contact ball bearing'입니다. 그리고 다른 반대편은 'Deep groove ball bearing'을 사용합니다. 베어링은 '오일 링'으로 윤활됩니다.

● Mechanical Seal

카트리지 유형, 모든 기계 seal 메이커의 제품을 사용할 수 있습니다.



● Photo Resources



- Service : BW Circulation Pumps
- Capacity : 3739.8 m³/min
- Head : 88.7m
- Power : 1,200KW

API610 Pumps for power plants

Double Suction Pumps Multi Stage Type

energy API CE

SMD

● Applications

- 급수, 정수용 Water Supply
- 냉각수용 Utilities cooling water
- 보일러 순환용 Boiler circulation
- 일반 산업용 General Industries
- 석유정제용 Petroleum refinery
- 석유화학공업용 Petrochemical industry

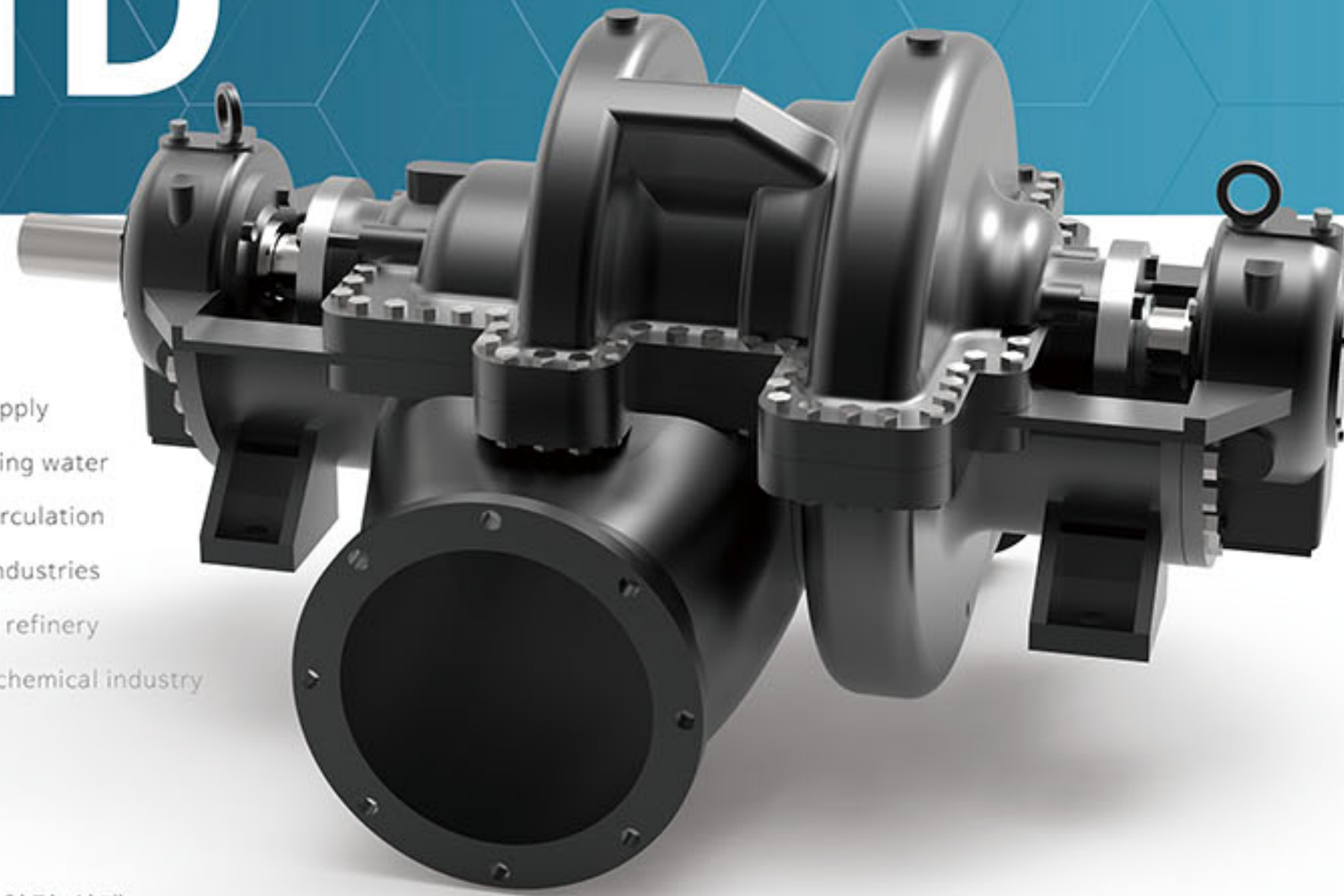
● Feature

- ✓ 향상된 용량 및 높은 압력 설계
Improved capacity and high pressure
- ✓ 축 밸런스 보장 : 수명이 길고 유지 보수가 쉬움
Assures axial balance : long-life, low-maintenance cost
- ✓ 고효율, 견고하고 견고한 구조
High efficiency, Heavy and sturdy construction
- ✓ 완전한 표준화를 통해 광범위한 적용
Completely standardization for wide application
- ✓ API standard 610 적용 (API Code : BB3)
API standard 610 (API Code : BB3)

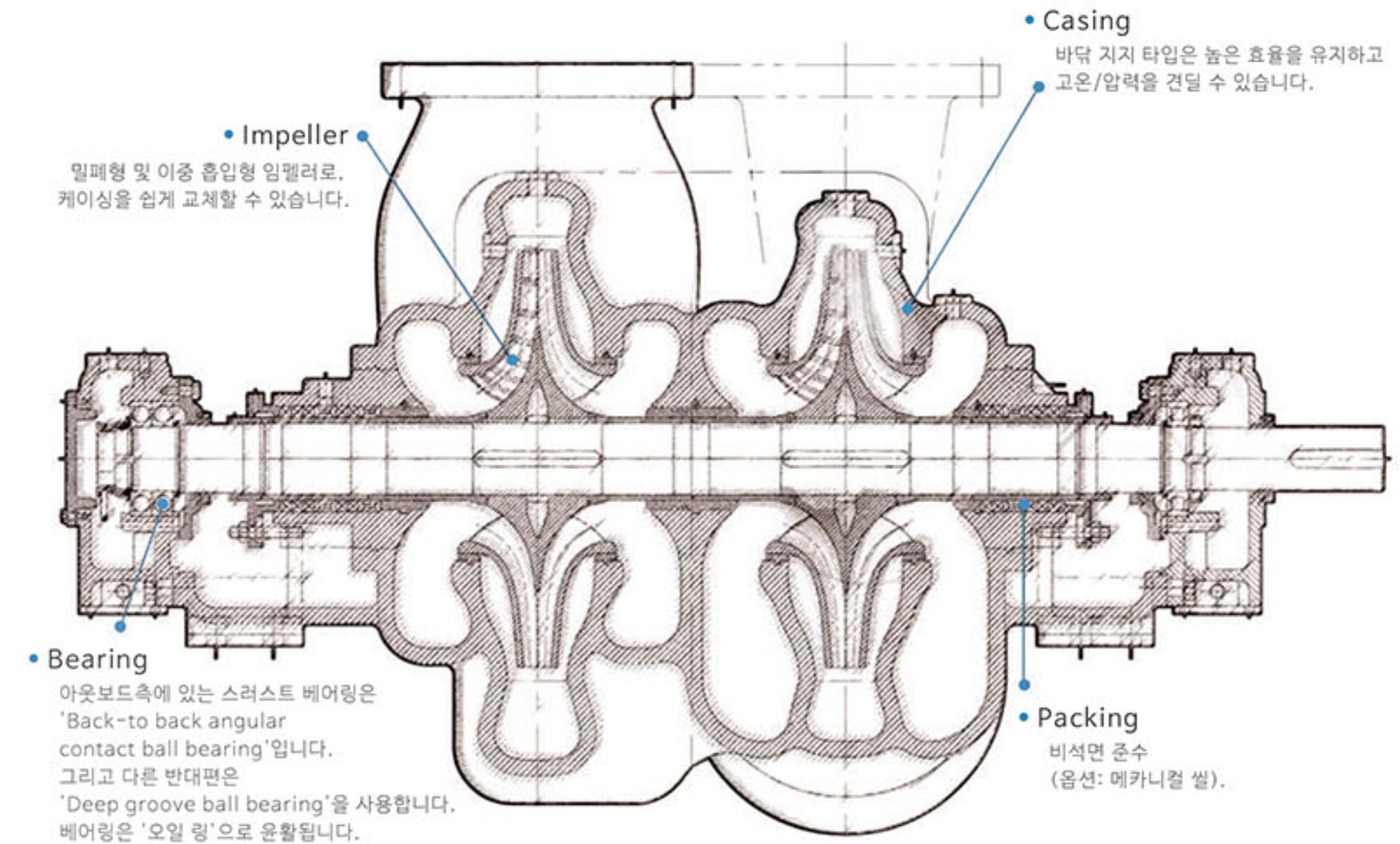
● Ratings

Capacity	Up to 35m ³ /min (9,246 US GPM)
Head	Up to 400m (1,312ft)
Discharge Pressure	Up to 60 kgf/cm ² (853 PSIG)
Allowable Suction Pressure	Up to 20 kgf/cm ² (284 PSIG)
Impeller	Enclosed
Temperature	-50°C ~ 150°C (-58°F ~ 302°F)
Flanges	ANSI, other standards also available
Materials	According to API 610 Material code

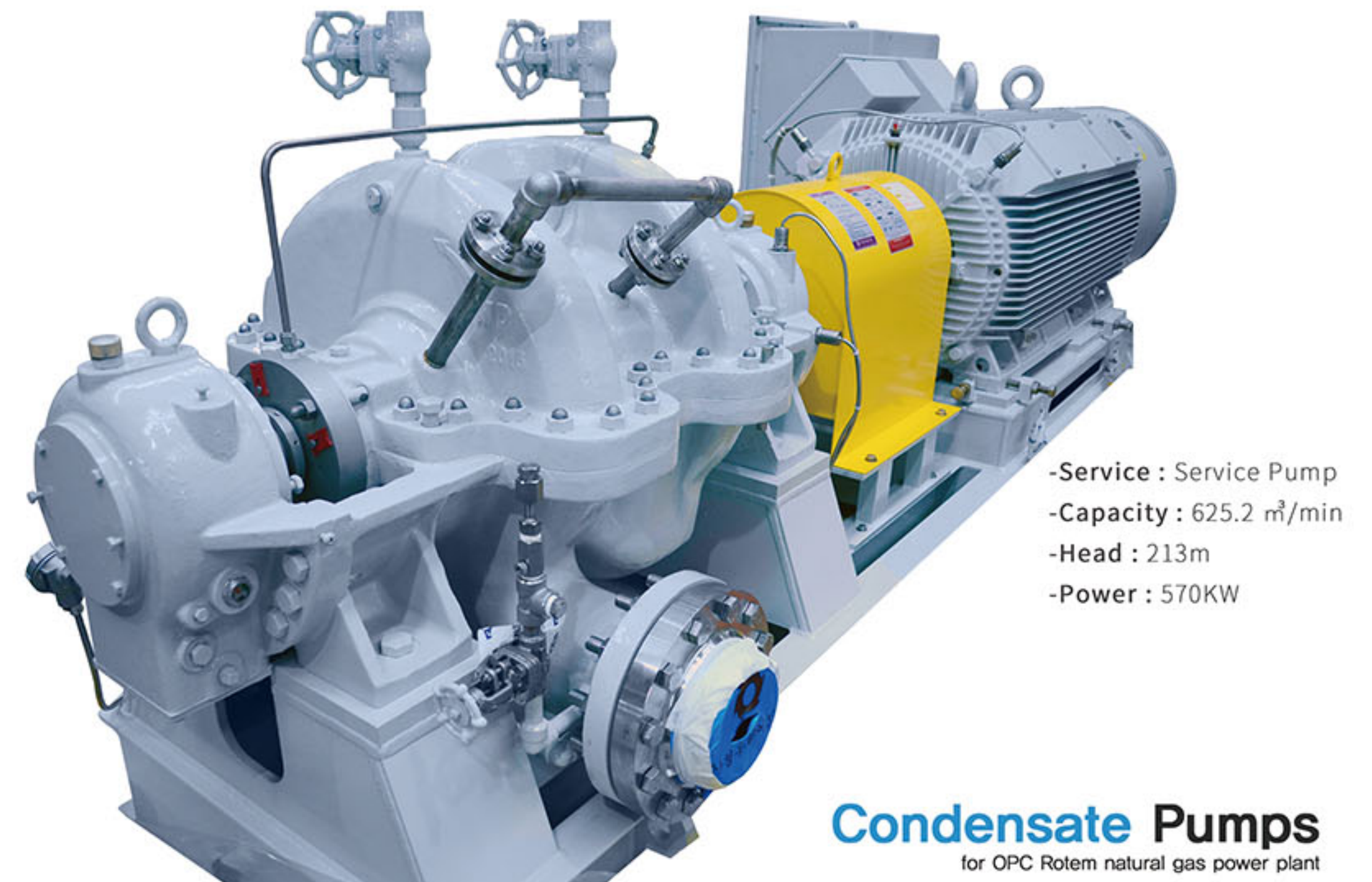
*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.



● Design drawing



● Photo Resources



Condensate Pumps
for OPC Rotem natural gas power plant

Double Suction Axial Split Pumps

GD



Applications

- 취수, 급수, 정수용 Water supply
- 냉각수 순환용 Cooling water circulation
- 냉각탑용 Cooling tower
- 건물용 Building
- 농업용 Irrigation
- 일반 산업용 General industry
- 소화설비용 Fire-fighting

Feature

- ✓ 폭넓은 적용 범위의 완전 표준화
Completely standardization for wide application
- ✓ ISO2858에 따른 최대의 호환성
Compliance with ISO2858 for high interchangeability
- ✓ 높은 효율과 낮은 NPSHr.
Good efficiency and low NPSHr.
- ✓ 배관분해가 필요없는 간편한 유지보수를 위한 상하 분할형
Axial split casing construction for easy maintenance without disturbing piping

Ratings

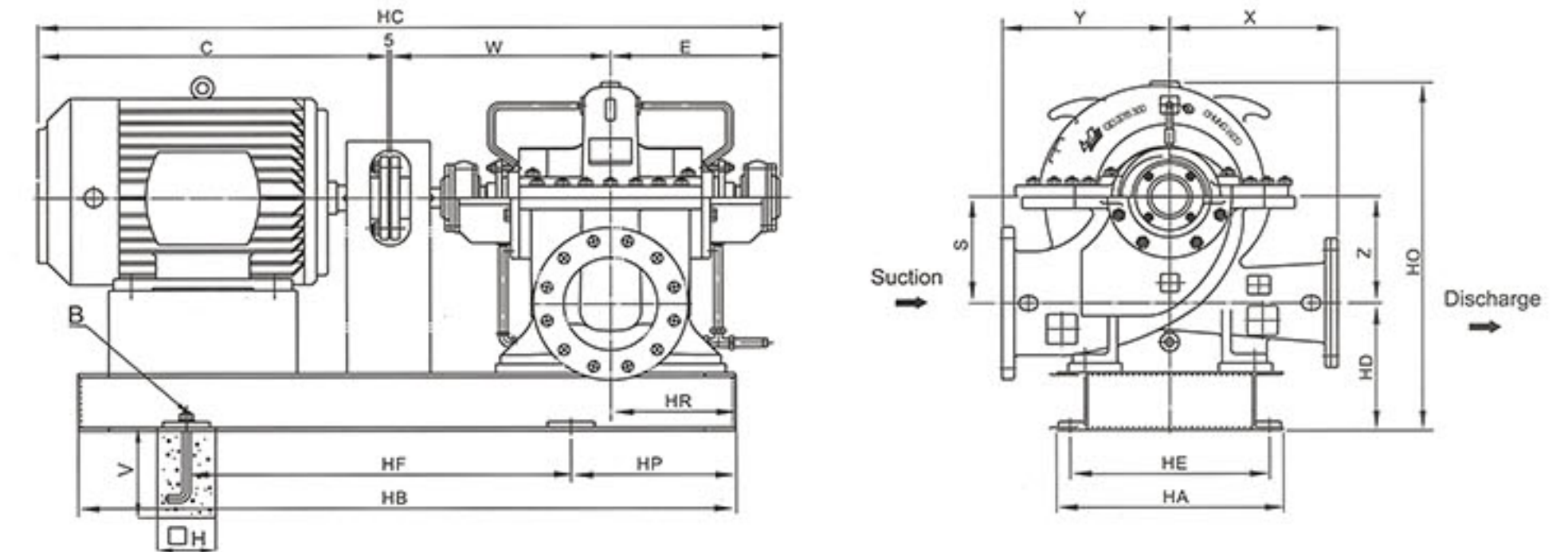
Capacity	3~18 m ³ /min (792 ~ 4,755 US GPM)
Head	Up to 70m (229ft)
Discharge Pressure	Up to 10 kgf/cm ² (142 PSIG)
Allowable Suction Pressure	Up to 5 kgf/cm ² (71 PSIG)
Revolution 60Hz (50Hz)	1750 min ⁻¹ (1180min ⁻¹)
Rotation 4P (6P)	CW or CCW
Temperature	-20°C ~ 135°C (-4°F ~ 275°F)
Nozzle Rating	KS 10 Kg/ cm ² - FF
Nozzle Location	Side Suction : Side Discharge
Seals	Conventional Packing or Mechanical Seal

Specification

구분	POWER	CAPACITY / HEAD					
		유량 (m ³ /min)	양정 (m)	유량 (m ³ /min)	양정 (m)	유량 (m ³ /min)	양정 (m)
GD2015-300	30	3.0	29	4.5	24	6.0	13
	30	3.0	31	4.5	25	6.0	15
	37	3.0	35	4.5	30	6.0	21
	45	3.0	43	5.0	38	6.5	27
GD2015-430	45	3.0	46	4.5	41	5.5	34
	55	3.0	53	4.5	48	6.0	37
	75	3.0	65	5.0	59	6.5	47
GD2520-300	55	5.0	27	8.0	21	10.5	13
	55	5.0	30	8.0	25	11.0	14
	75	5.0	38	9.0	29	12.0	18
GD2520-430	90	5.0	40	8.0	34	11.0	20
	90	5.0	46	8.0	41	11.0	30
	110	5.0	53	9.0	47	12.0	32
	132	5.0	61	10	50	12.5	39
GD3025-300	150	5.0	69	10	60	13.0	47
	75	7.5	25	9.0	22	11	16
	75	8.0	32	10	28	12	20
	90	8.5	38	11	32	13.5	25
GD3025-430	110	9.0	42	12	37	14.0	28
	132	10	47	13	39	15	30
	132	10	50	13	42	16	28
	150	10	53	14	43	17	30
	190	10	61	14	55	18	35

참고: *. 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

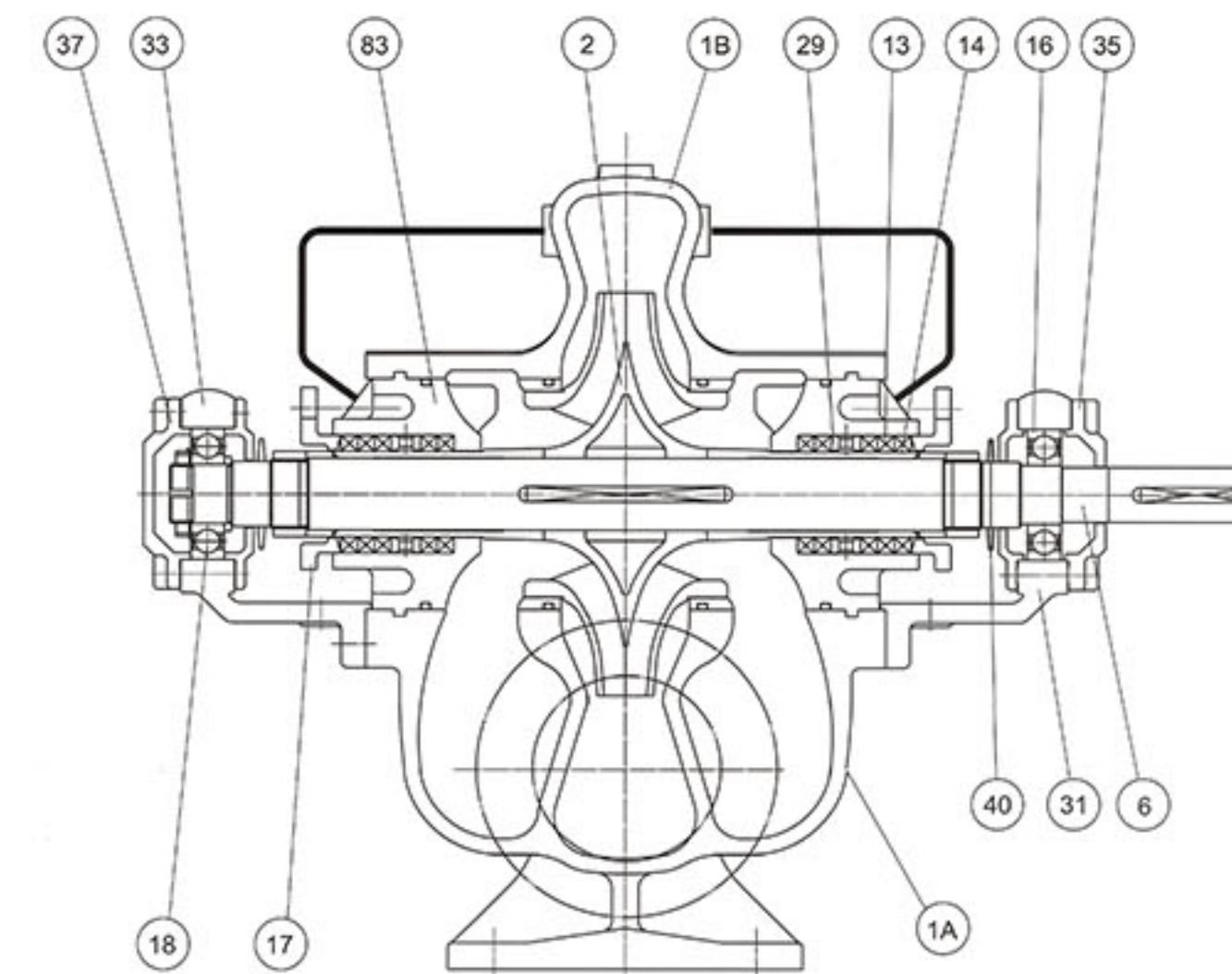
Installation Dimension



구분	Pump and motor													Baseplate								Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	W	E	Y	X	HO	S	Z	HR	HP	HF	HB	HE	HA	HD	B	H	V	
200×150-300	200	150	200L	37	620	747	488	380	356	356	755	230	230	270	230	940	1400	430	480	275	4-M20×315L	150	315	
200×150-430	200	150	225M	55	1774	842	517	410	410	356	817	230	230	270	250	1000	1500	430	480	275	4-M20×315L	150	315	
250×200-300	250	200	250M	75	1961	894	586	476	432	356	817	216	216	305	270	1060	1600	470	530	324	4-M20×315L	150	315	
250×200-430	250	200	280M	110	2132	1065	586	476	457	410	955	254	254	305	300	1200	1800	540	600	351	4-M20×315L	150	315	
300×250-300	300	250	280S	93	2163	1014	627	517	483	410	905	254	254	325	300	1200	1800	540	600	351	4-M20×315L	150	315	
300×250-430	300	250	280L	150	2303	1154	627	517	508	517	991	280	280	325	340	1320	2000	540	600	360	4-M24×400L	150	400	

참고: *. 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Parts List and Materials



NO	Name of part	MATERIAL
1A	Lower Casing	GC200
1B	Upper Casing	GC200
2	Impeller	GC200 BC6
6	Shaft	SM45C
13	Packing	TEFLON
14	Shaft Sleeve	GC200
16	Inboard Bearing	STEEL
17	Packing Gland	GC200
18	Outboard Bearing	STEEL
29	Lantern Ring	TEFLON
31	Inboard Bearing Hous.	GC200
33	Outboard Bearing Hous.	GC200
35	Inboard Bearing Cover	GC200
37	Inboard Bearing Cover	GC200
40	Deflector	NBR
83	Stuffing Box	GC200

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

Axial Split Multi-stage Pumps

energy API CE

SMC(H)

● Applications

- 보일러 급수용 Boiler feed
- 파이프라인 부스터 Pipeline booster
- 광산용 Mine pumping
- 고압용 High pressure process

● Feature

- ✓ 이중 볼류트로 반경방향 축추력 제거
Double volute for radial balance
- ✓ 임펠러 대칭배열로 축방향 축추력 제거
Opposed impeller for axial balance
- ✓ 각 임펠러는 정밀한 동 밸런싱
Impeller each impeller statically and dynamic balanced
- ✓ 글랜드 패킹이나 기계식 시일 장착을 위한 최대 호환성을 갖는 카트리지 타입의 Stuffing box
Stuffing boxes cartridge type to provide maximum packed box or mechanical seal flexibility
- ✓ API standard 610 적용 (API Code : BB3)
API standard 610 (API Code : BB3)

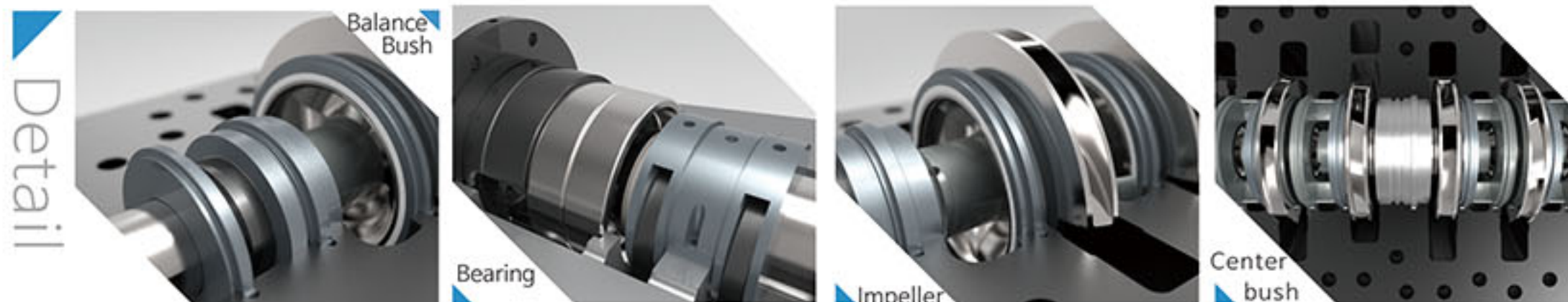
● Ratings

Capacity	Up to 30 m ³ /min (7,925 US GPM)
Head	Up to 1,500 m (4,920 ft)
Discharge Pressure	Up to 150 kgf/cm ² G (2,133 PSIG)
Hydrostatic test Pressure	Up to 225 kgf/cm ² G (3,200 PSIG)
Max. allowable Speed	Up to 3,600 min ⁻¹
Temperature	~200°C (~392°F)
Flanges	-ANSI to 2500 lb (other standards also available)
Location	Side Suction : Side Discharge
Seals	Conventional Packing or Mechanical Seal Floating Seal & Throttle Bushing
Materials	According to API610 Material code

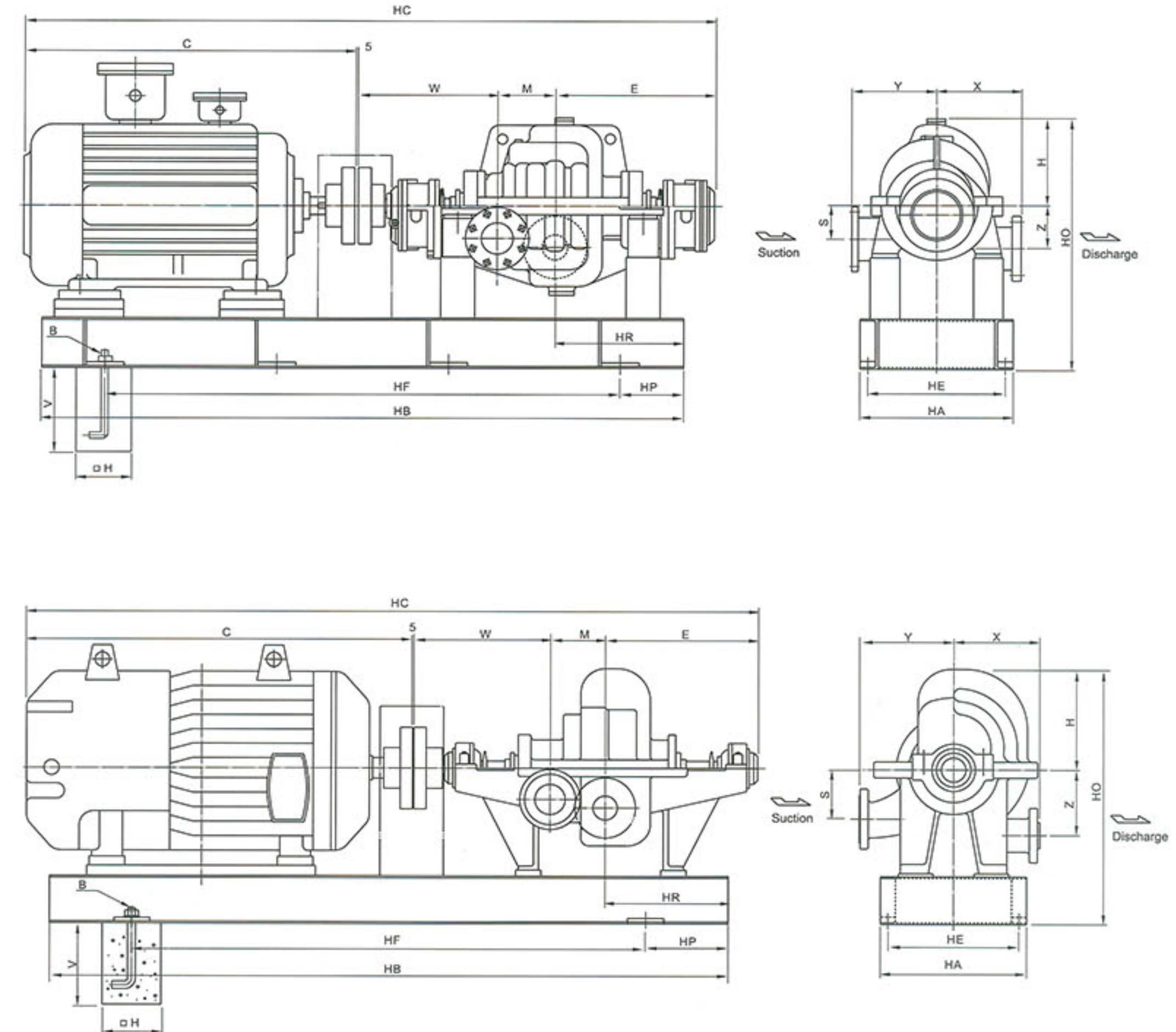
*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.

규격	Size	Stage	Capacity (m ³ /min)	Head (m)	Power (kW)	Revolution (rpm)
6540 4-2	65×40	4	0.6	200	45	3500
8050 2-2	80×50	2	0.85	220	75	3500
8050 4-2	80×50	4	0.9	280	75	3500
8050 6-2	80×50	6	0.9	420	132	3500
1080 2-2	100×80	2	1.5	220	95	3500
1210 4-2	125×100	2	1.5	450	95	3500
1512 2-4	150×125	2	3	100	95	1750
1512 4-4	150×125	4	3	240	220	1750
1512 5-4	150×125	5	3	300	250	1750
2015 2-4	200×150	2	4	150	190	1750
2015 4-4	200×150	4	5.6	280	300	1750
2015 6-4	200×150	6	5.6	420	450	1750
2520 4-4	200×150	4	7.5	200	370	1750

✓ SMC(H) : 2Poles (High speed)



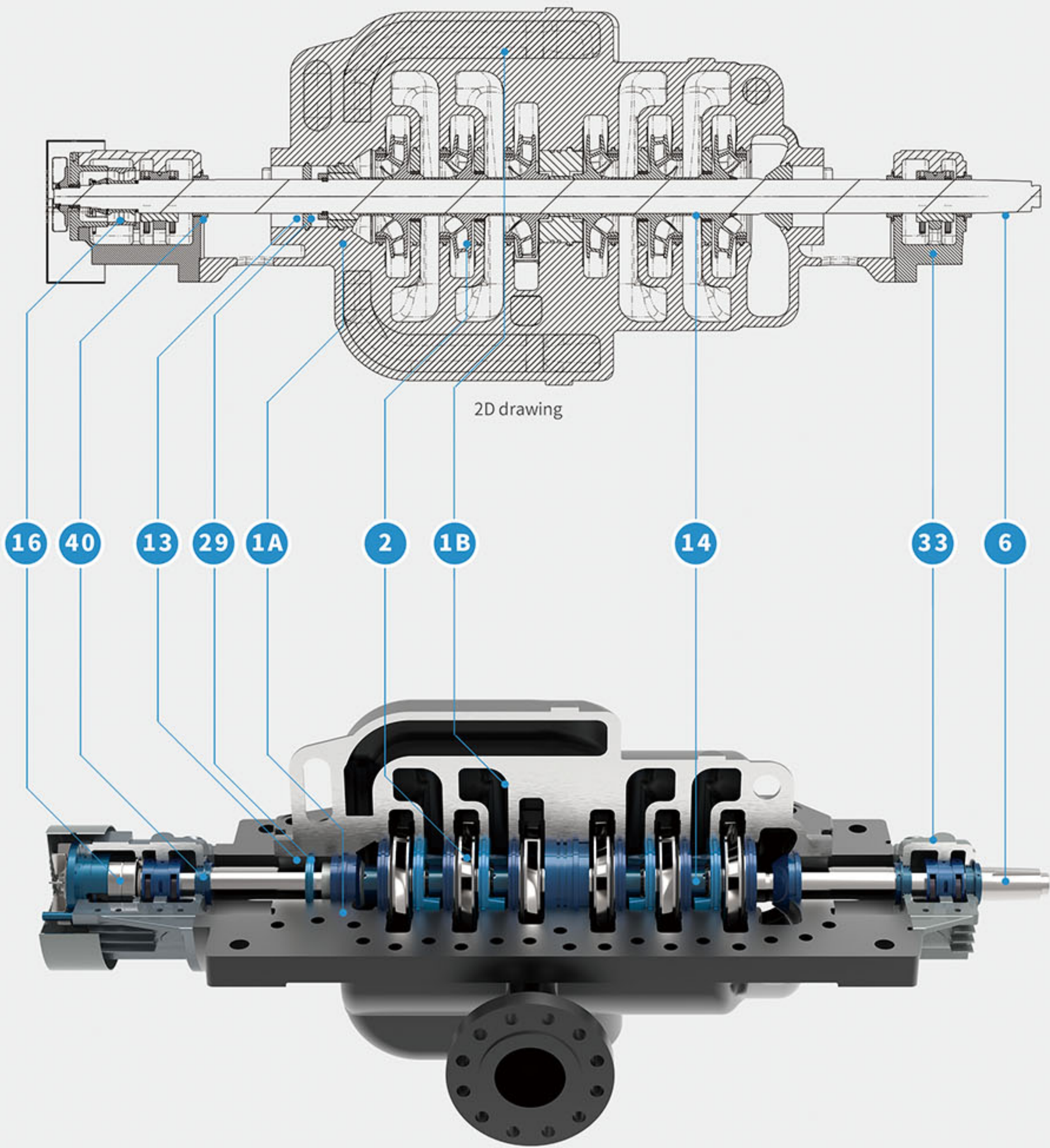
● Installation Dimension



구분	Pump and Motor												Baseplate								Anchor Bolt		
	Frame	kW	BC	C	W	M	E	X	Y	S	H	Z	HP	HR	HB	HF	HO	HE	HA	B	H	V	
65404	225S	45	1872	817	395	190	465	200	235	110	230	125	270	365	1600	1060	435	440	480	4-M20×315L	180	315	
80502	250M	75	1689	894	390	95	305	220	220	115	230	155	255	260	1500	990	430	490	530	4-M20×315L	180	315	
80504	250M	75	2054	894	450	225	480	240	240	125	285	125	325	450	1900	1250	425	550	610	4-M24×315L	180	315	
80506	280L	132	2464	1154	450	300	555	250	250	125	285	125	360	520	2240	760×2	505	550	610	6-M24×400L	230	400	
12104	280LL	190	2419	1281	550	225	625	290	320	130	315	165	360	460	2360	820×2	565	550	610	6-M24×400L	230	400	
15122	280S	95	2359	1014	600	190	550	400	375	200	460	250	360	540	2120	700	700	550	610	6-M24×400L	230	400	
15124	5809S	220	3510	1590	685	350	880	400	400	200	460	250	370	850	3350	870×3	750	750	810	8-M24×400L	230	400	
15125	5809S	250	3660	1590	685	500	880	400	400	225	455	260	370	850	3350	870×3	750	830	900	8-M24×400L	230	400	
20152	280LL	190	2581	1281	490	275	530	500	500	280	510	225	360	530	2650	965×2	700	550	610	8-M24×400L	230	400	
20154	5810S	300	3842	1692	780	420	945	450	450	200	485	275	360	980	3750	1010×3	1335	830	990	8-M24×400L	230	400	
20156	6810S	450	4531	2021	780	600	1125	450	450	200	485	275	355	1100	4250	1180×3	1335	830	990	8-M24×400L	230	400	
25204	6809S	370	3758	1893	630	390	840	450	450	250	695	280	365	850	3500	940×3	800	1050	1110	8-M24×400L	230	400	

Model. SMC(H)

● Parts List and Materials



2D drawing

3D drawing

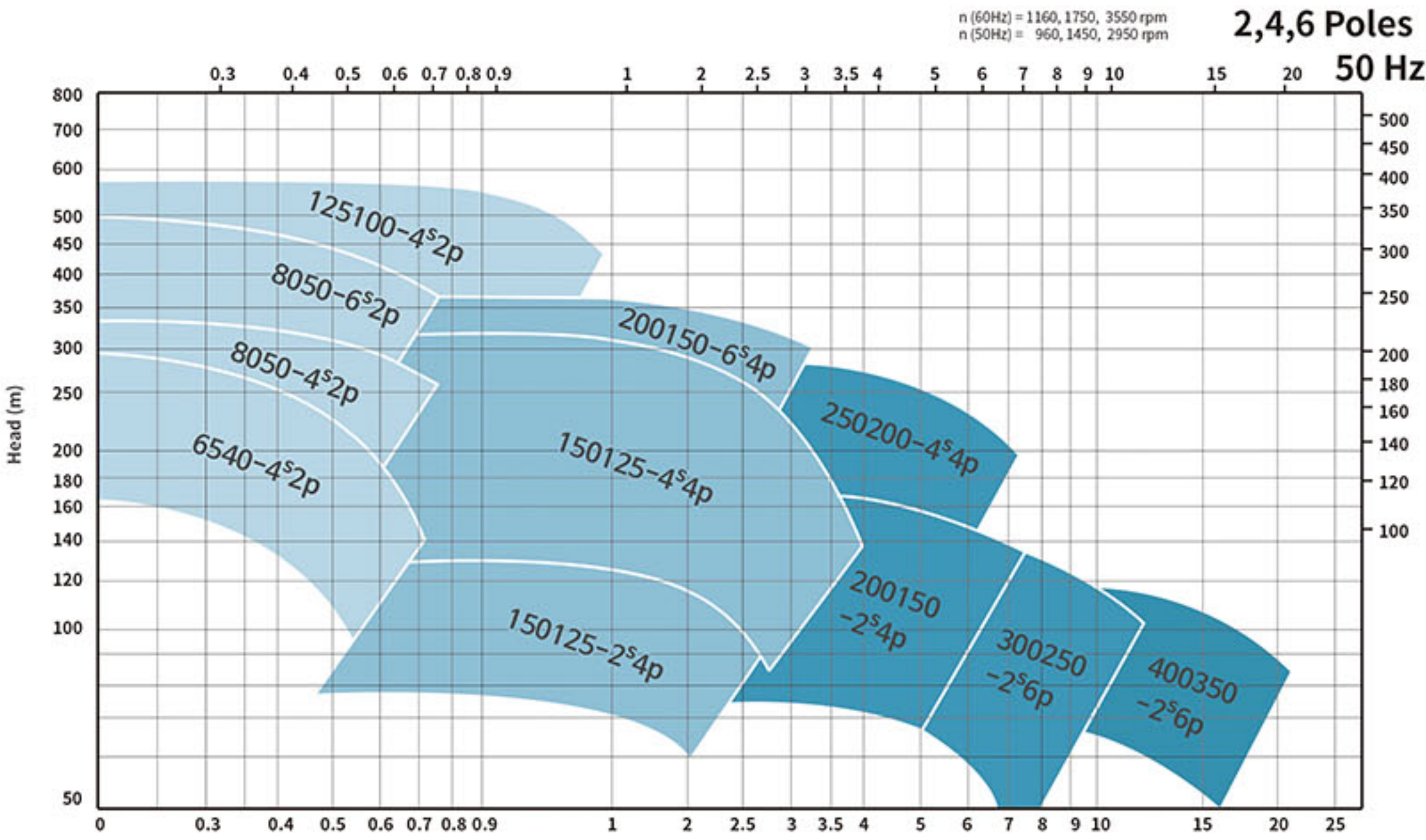
Model. SMC(H)

● Parts List and Materials

No	Name of part	Material	
1A	Lower Casing	GCD450	SSC13
1B	Upper Casing	GCD450	SSC13
2	Impeller	BC6	SSC13
6	Shaft	SM45C	STS410
13	Packing	TEFLON	TEFLON
14	Sleeve	BC6	STS304
16	Inboard Bearing	STEEL	STEEL
17	Packing Gland	GC200	SSC13
18	Outboard Bearing	STEEL	STEEL
29	Lantern Ring	BC6	SSC13
33	Bearing Housing	GC200	GC200
35	In Bearing Cover	GC200	GC200
37	Out Bearing Cover	GC200	GC200
40	Deflector	NBR	NBR
83	Stuffing Box	GCD450	SSC13

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

● Selection Charts



60 Hz

Capacity (m³/min) 참고: *. 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Super High Temperature & Pressure Boiler Feed Pumps

energy **API** CE

ST

Applications

- 보일러 급수용 Boiler feed
- 광산용 Mine drainage
- 화학용 Chemical process
- 고압용 Other high pressure services

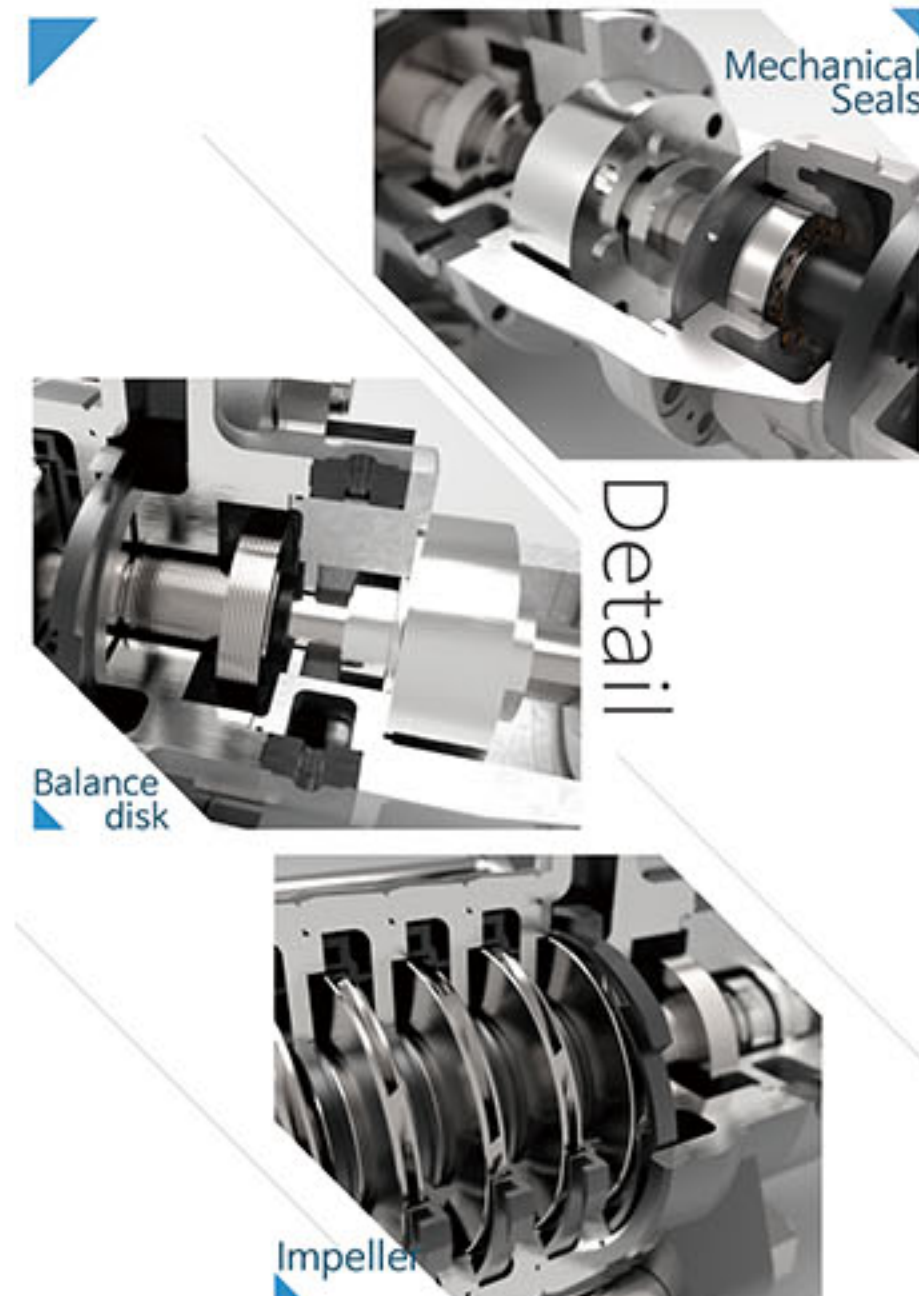
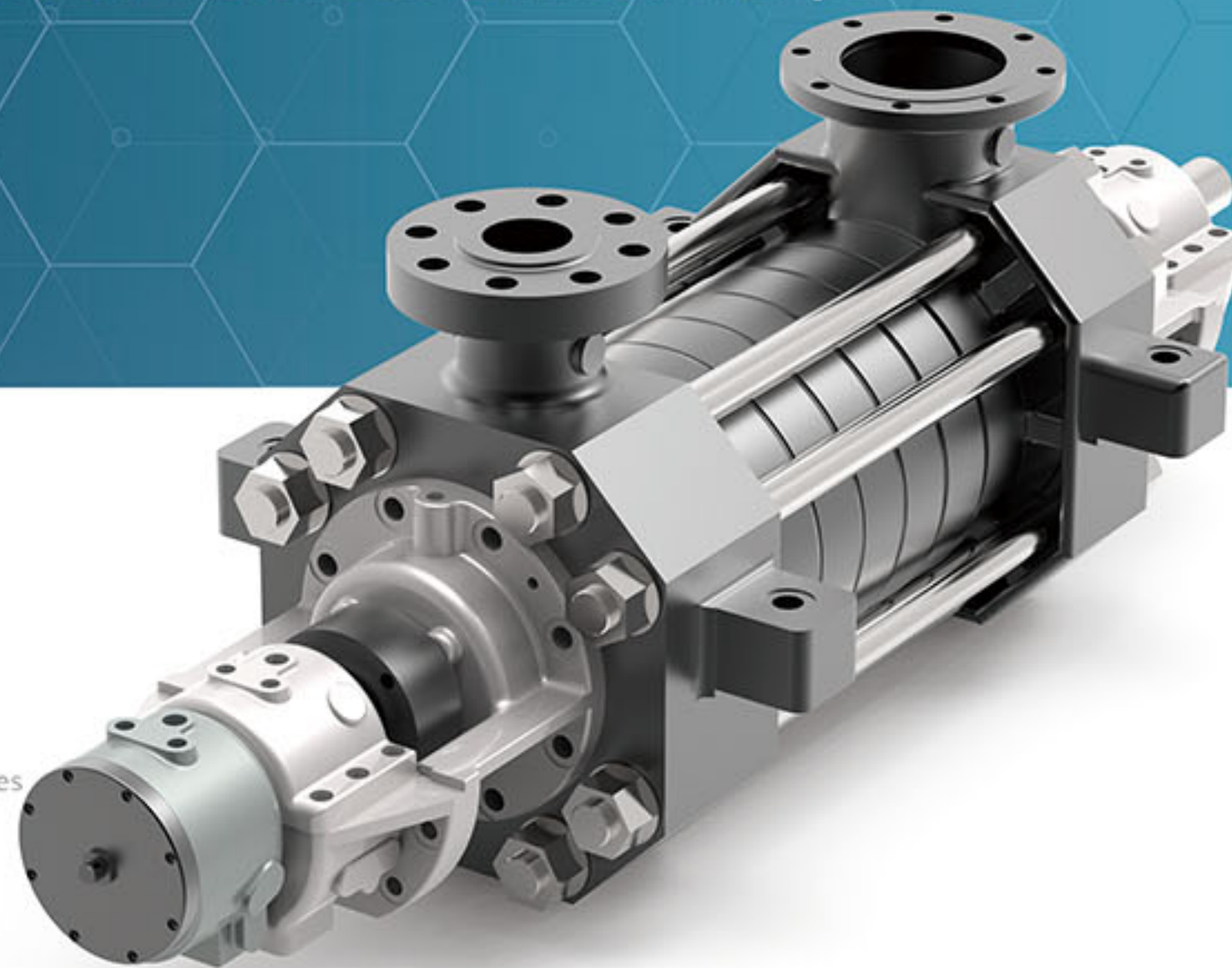
Feature

- ☑ 중심지지의 컴팩트한 디자인
Centerline supported and compact design
- ☑ 고효율, 높은 신뢰성
High efficiency, high reliability
- ☑ 폭넓은 사용범위
Flexibility of design handles wide range of liquids
- ☑ 최대의 호환성
All components have been designed for High interchangeability
- ☑ 낮은 필요흡입양정
Low NPSHr. Performance
- ☑ API standard 610 적용 (API Code : BB4)
API standard 610 (API Code : BB4)

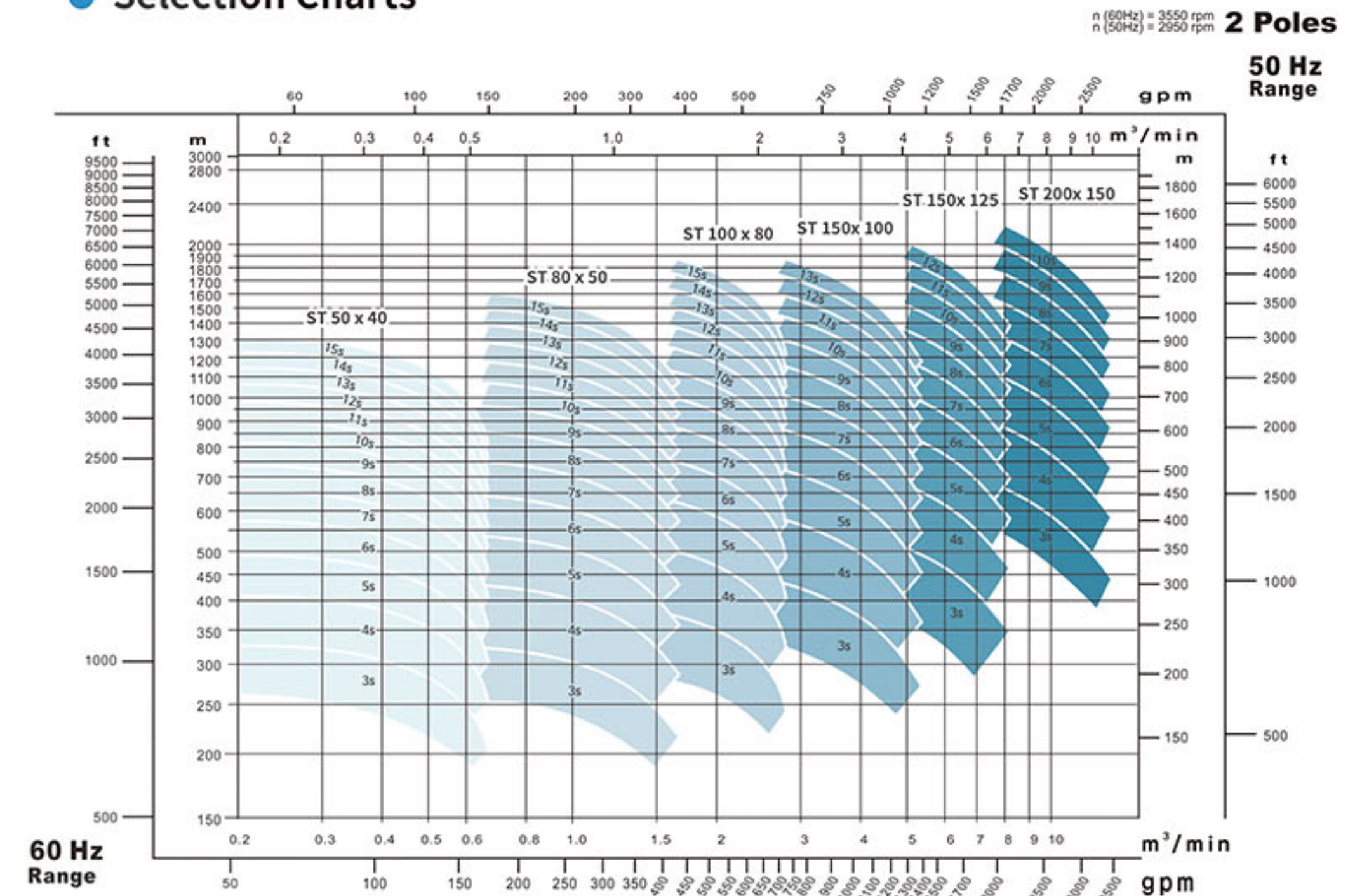
Ratings

Capacity	Up to 20 m ³ /min (5,283 US GPM)
Head	Up to 3,000m (9,842ft)
Discharge Pressure	Up to 200 kgf/cm ² (2844 PSIG)
Allowable Suction Pressure	Up to 300 kgf/cm ² (4267 PSIG)
Revolution 60Hz (50Hz)	3550 min ⁻¹ (2950 min ⁻¹)
Rotation	Clockwise viewed from inboard side
Temperature	250°C (482°F)
Nozzle-Rating	ANSI 1500 Class other standards also available
Nozzle-Facing	Raised Face
Nozzle-Location	Top Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal

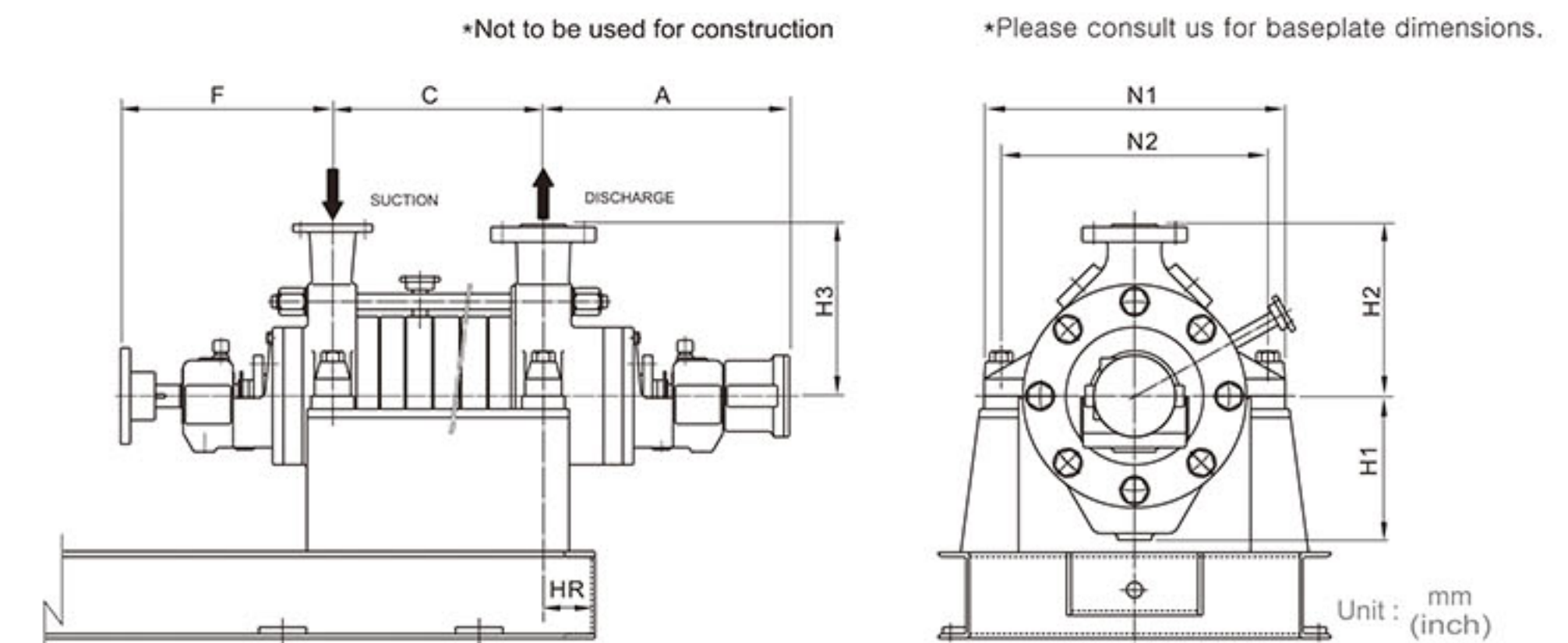
*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.



Selection Charts



Installation Dimension



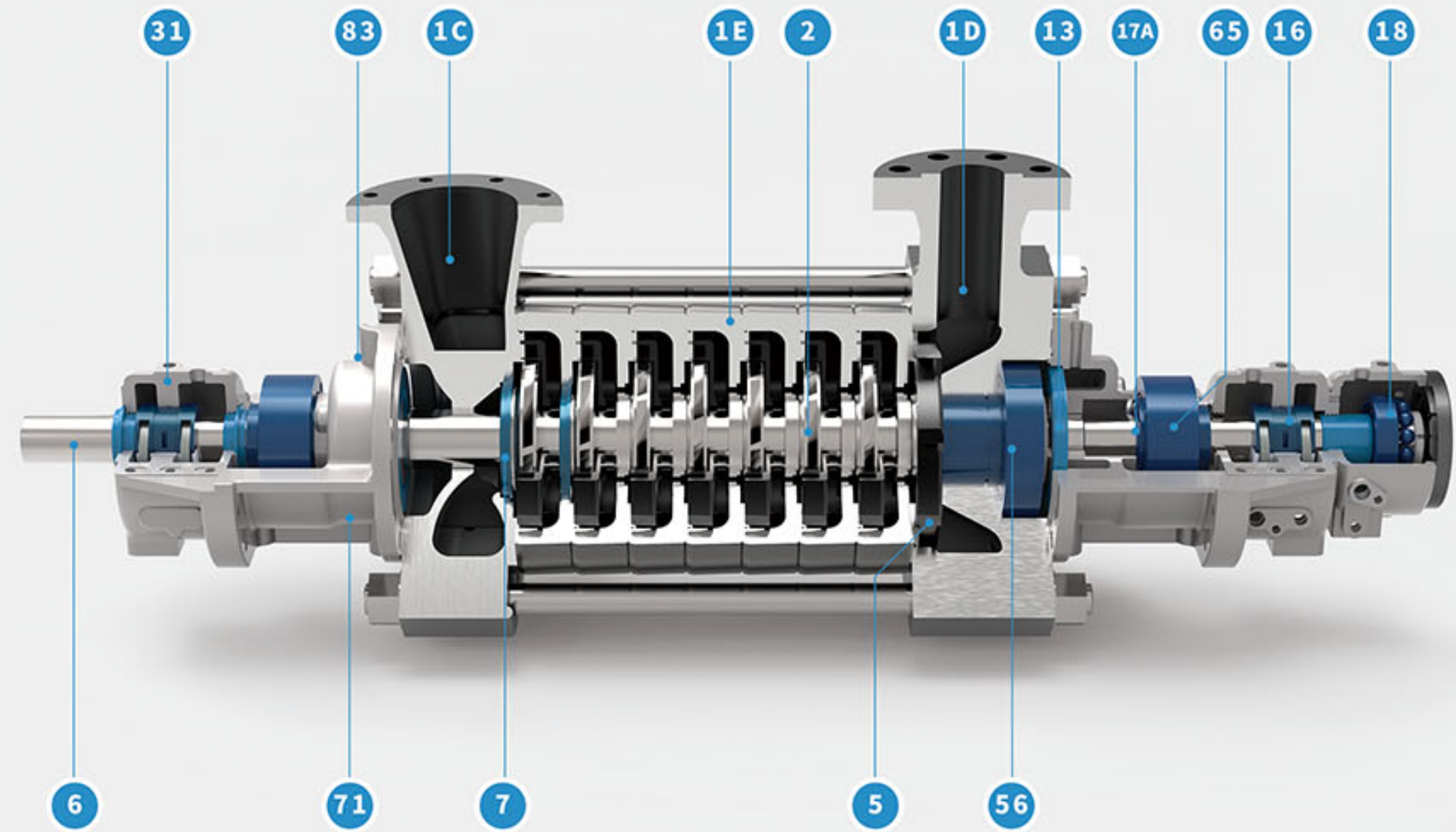
Model	A	C	F	N1	N2	H1	H2	H3
50x40	522 (20.55)	35+(SX50) (1.38+(SX1.97))	430 (16.93)	380 (14.96)	300 (11.81)	200 (7.87)	250 (9.84)	224 (8.82)
80x50	595 (23.43)	89+(SX68) (3.50+(SX2.68))	460 (18.11)	405 (15.94)	360 (14.17)	165 (6.50)	270 (10.63)	270 (10.63)
100x80	660 (25.98)	65+(SX72) (2.56+(SX2.83))	510 (20.08)	680 (26.77)	600 (23.62)	267 (10.51)	410 (16.14)	360 (14.17)
150x100	810 (31.89)	95+(SX90) (3.74+(SX3.54))	730 (28.74)	820 (32.28)	700 (27.56)	310 (12.20)	450 (17.72)	400 (15.75)
150x125	820 (32.28)	110+(SX105) (4.33+(SX4.13))	740 (29.13)	1010 (39.76)	850 (33.46)	365 (14.37)	520 (20.47)	455 (17.91)
200x150	960 (37.80)	120+(SX115) (4.72+(SX4.53))	950 (37.40)	1200 (47.24)	1000 (39.37)	425 (16.73)	580 (22.83)	520 (20.47)

ST 125x100 is available. Other flange sizes are available upon request.

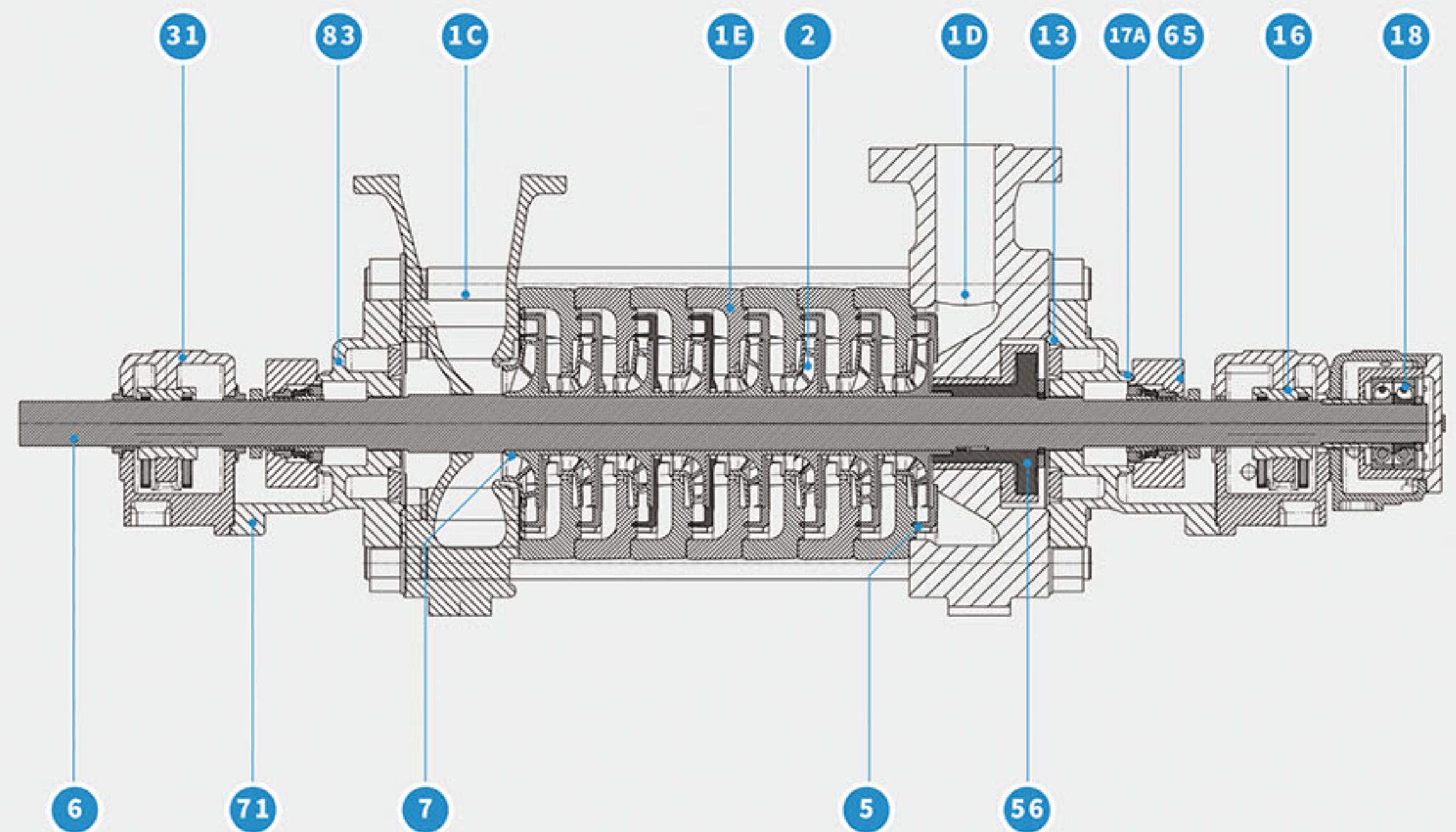
* S : Stage Number.

Model. ST

● Parts List and Materials



3D drawing



2D drawing

Model. ST

● Parts List

Name of Parts	Materials		
	KS	JIS	ASTM
1C Suction Casing	SCPH2	SCPH2	A216 WCB
1D Discharge Casing	SCPH2	SCPH2	A216 WCB
1E Stage Casing	SCPH2	SCPH2	A216 WCB
2 Impeller	SSC1	SCS1	A743 CA15
5 Diffuser	SSC1	SCS1	A743 CA15
6 Pump Shaft	STS410	SUS410	A276 410
7 Casing Ring	STS420J2	SUS420J2	A276 420
13 Packing or Seal	TEFLON	TEFLON	TEFLON
14 Shaft sleeve	STS420J2	SUS420J2	A276 420
16 Bearing	BABBIT	BABBIT	BABBIT
17 Packing Gland	SSC13	SCS13	A743 CF8
17A Seal Gland	SSC13	SCS13	A743 CF8
18 Thrust Bearing	STEEL	STEEL	STEEL
31 Bearing Housing	GC200	FC200	A48 CL30
56 Balance Drum Bushing/ Balance Disk Seat	STS420J2	SUS420J2	A276 420
65 Mechanical Seal	-	-	-
71 Drip Pocket	GC200	FC200	A48 CL30
83 Stuffing Box	SCPH2	SCPH2	A216 WCB
115 Balance Drum/ Balance Disk	STS420J2	SUS420J2	A276 420

Optional Material Code
- API Material class code.
- 기타 자료는 요청시 제공됩니다. (DCI, 12% Cr., 304SS, 316SS, 316LSS, etc)

● Construction



High Pressure Multi Stage Turbine Pumps

HT



Applications

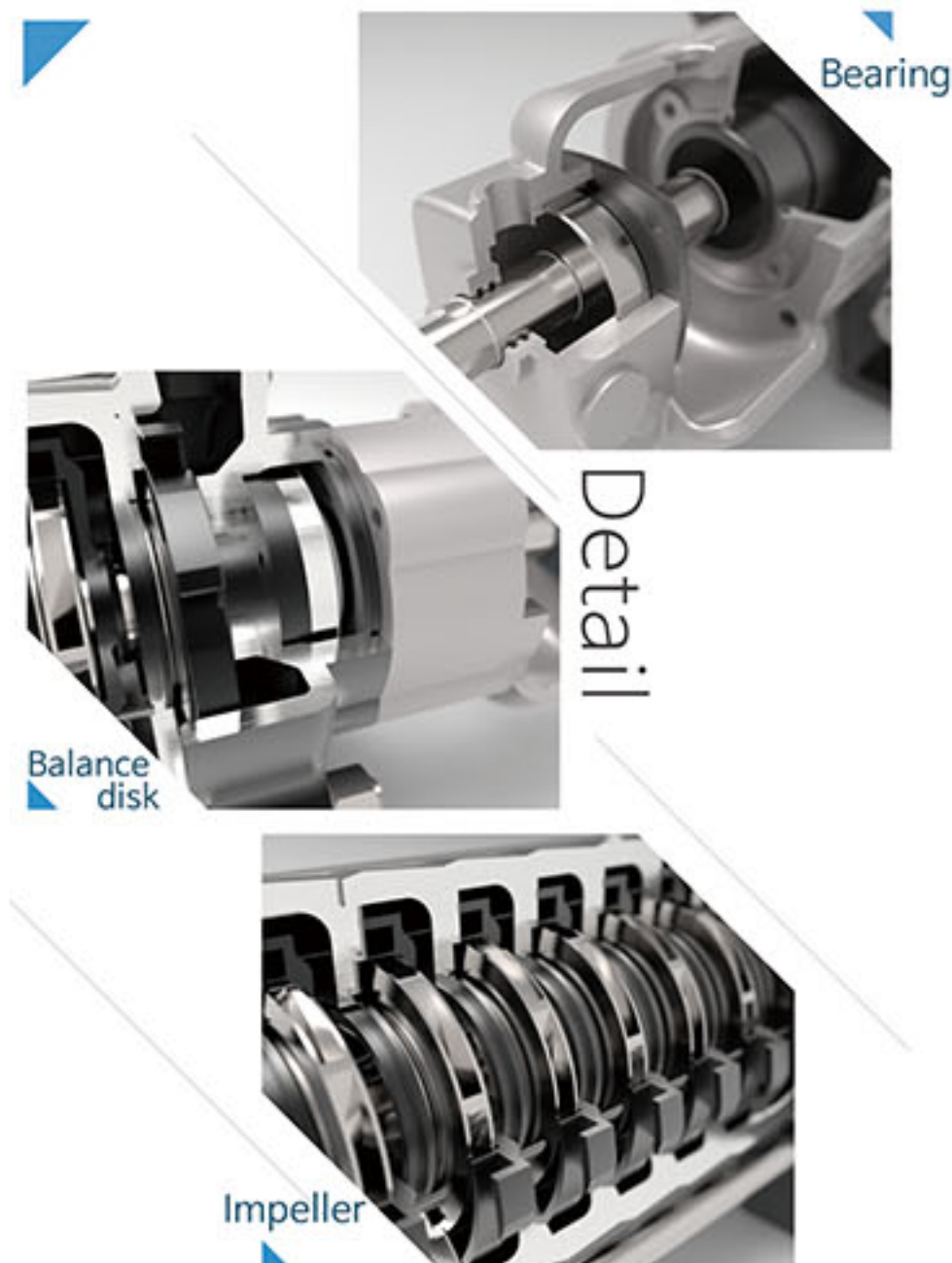
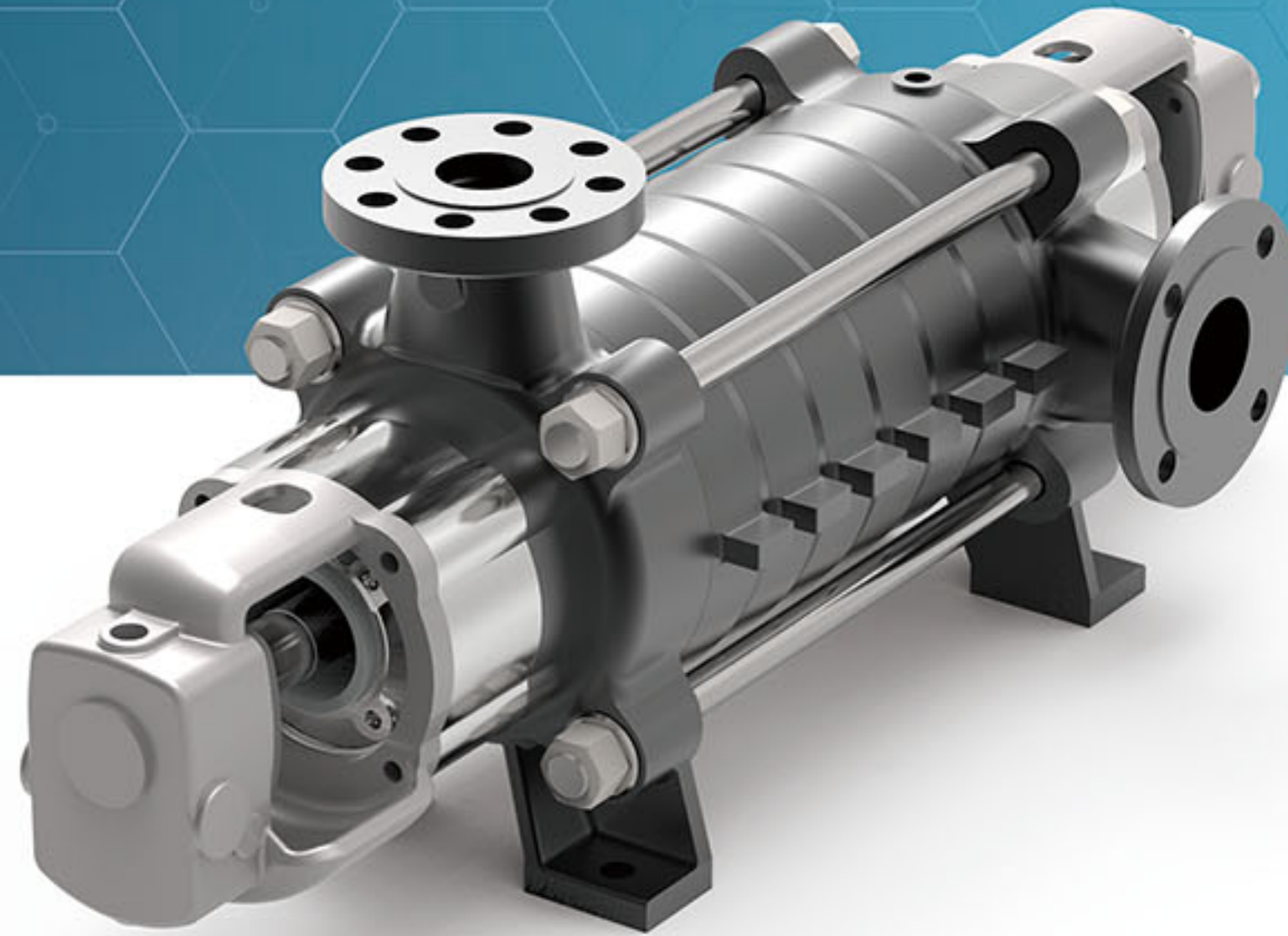
- 보일러 급수용 Boiler feed
- 공정 용수용 Processing water
- 일반 산업용 General Industry
- 고압급수 및 시수용
City water and high pressure water

Feature

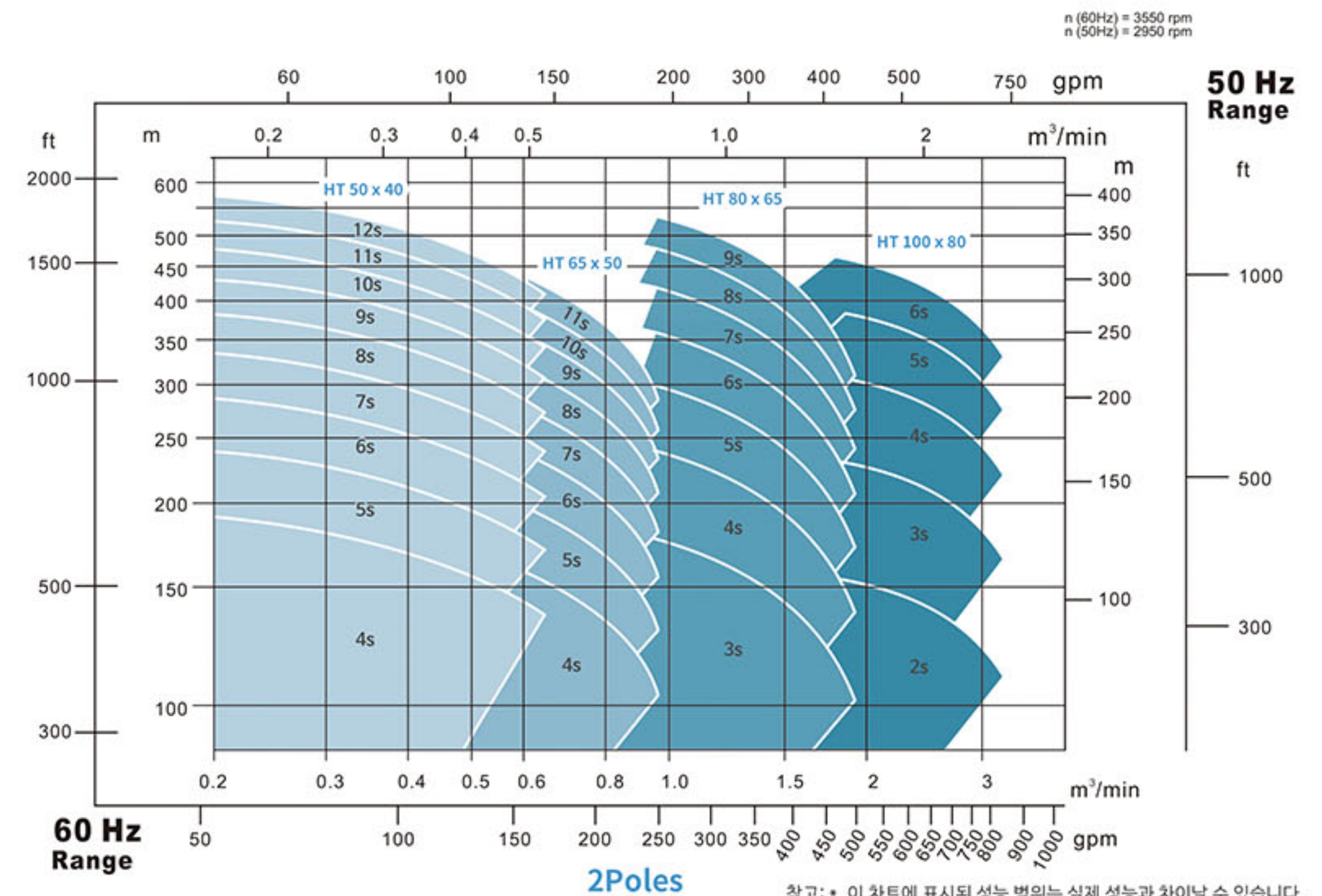
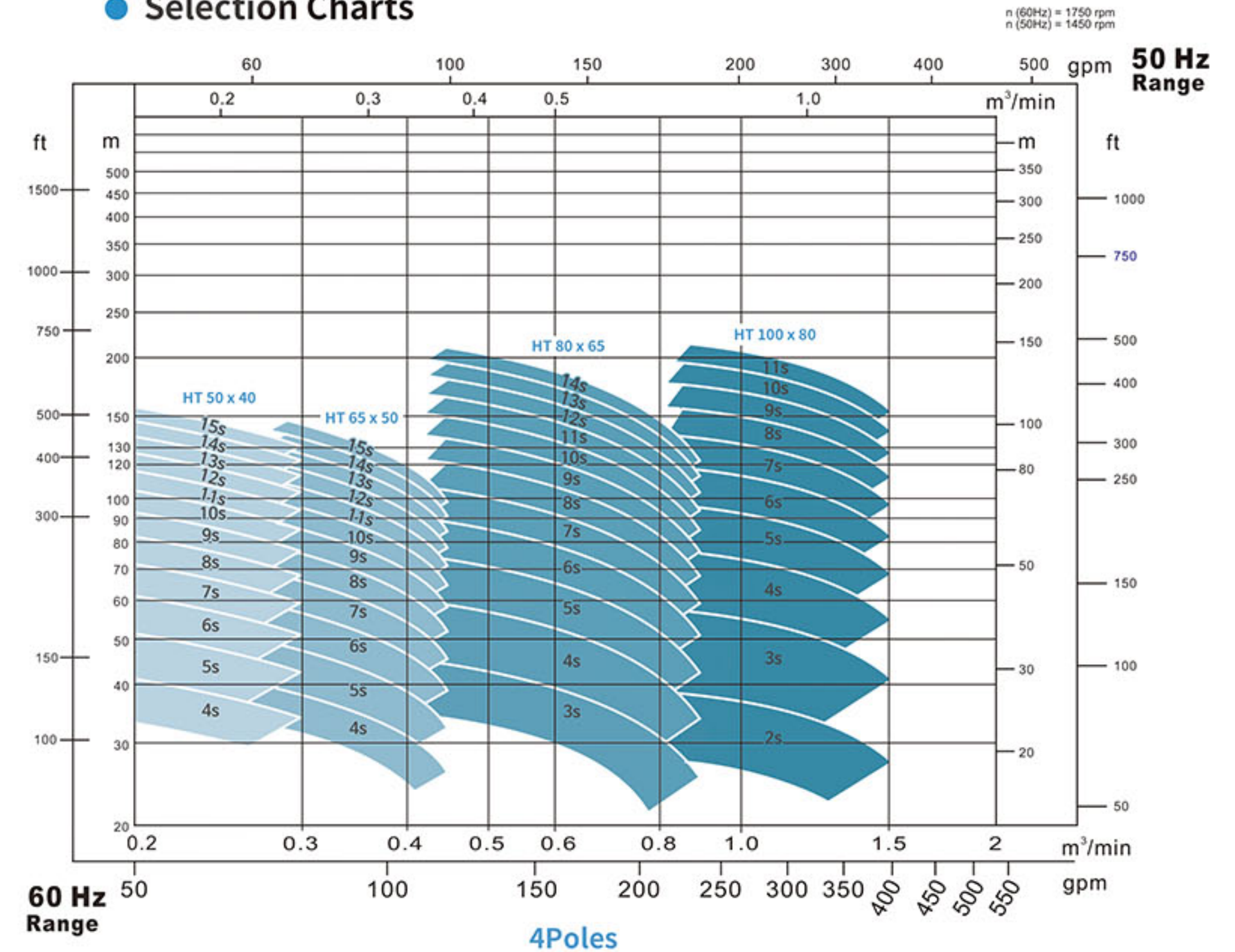
- ✓ 넓은 범위, 높은 효율
High efficiency over a wide range
- ✓ 신뢰성 높은 부품
Highly reliable components
- ✓ 간단한 구조, 편리한 유지보수
Simple construction permits easy maintenance
- ✓ 낮은 필요흡입양정에 적합
Suitable for low NPSHr operation.
- ✓ 소형 펌프, 저렴한 가격
Compact and inexpensive
- ✓ 초단 납기
Short-term delivery

Ratings

Capacity	Up to 2.5 m ³ /min (660 US GPM)
Head	Up to 500m (1,640ft)
Discharge Pressure	Up to 60 kgf/cm ² (853 PSIG)
Allowable Suction Pressure	Up to 25 kgf/cm ² (355 PSIG)
Revolution 60Hz (50Hz)	1750 or 3550 min ⁻¹ (1450 or 2950min ⁻¹)
Rotation	Clockwise viewed from inboard side
Temperature	~180°C (356°F)
Nozzle-Rating	Suction : KS 10 Kgf/cm ² Discharge KS40 kgf/cm ²
Nozzle-Facing	Raised Face
Nozzle-Location	Side Suction : Top Discharge Top Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal



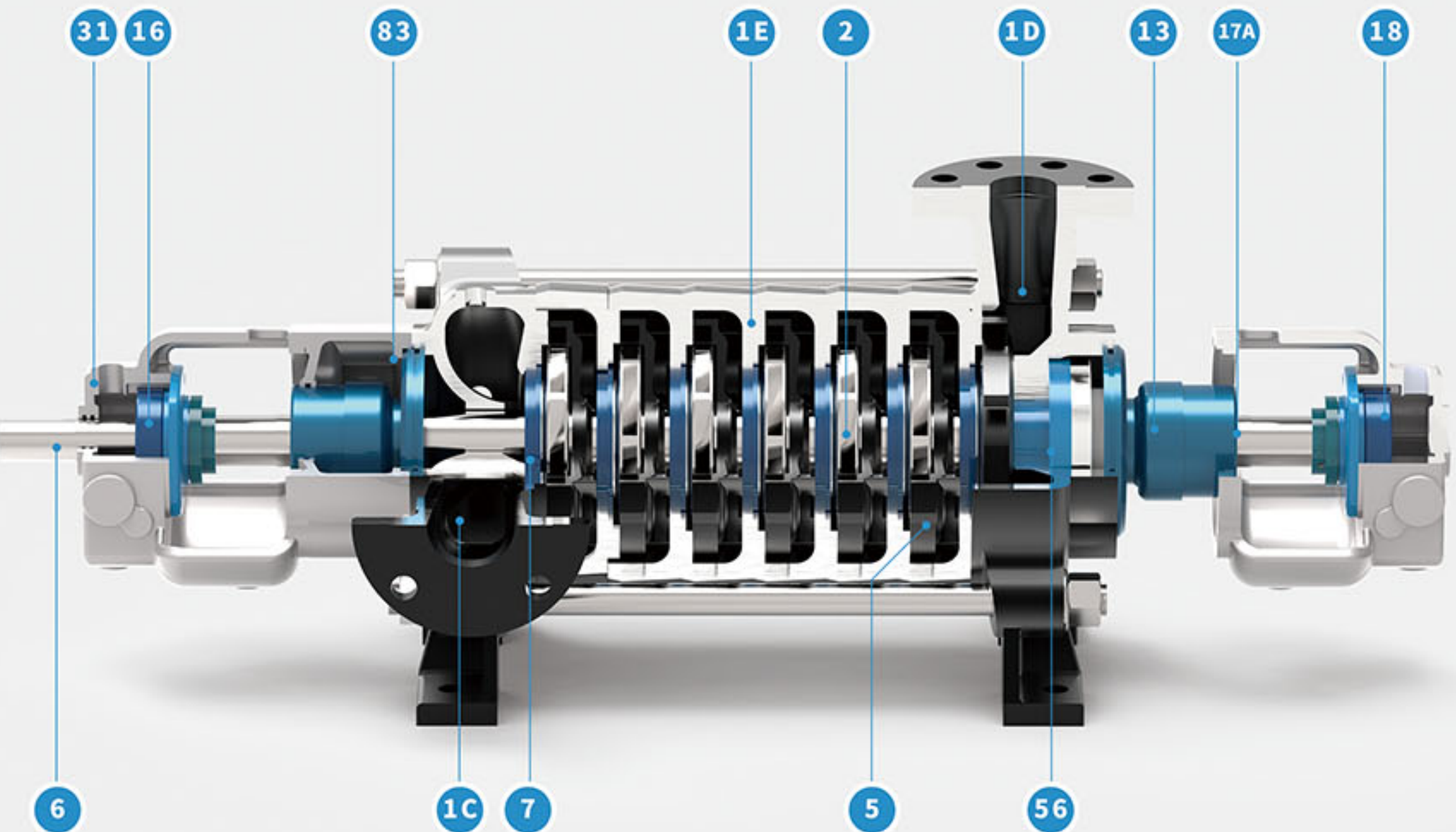
Selection Charts



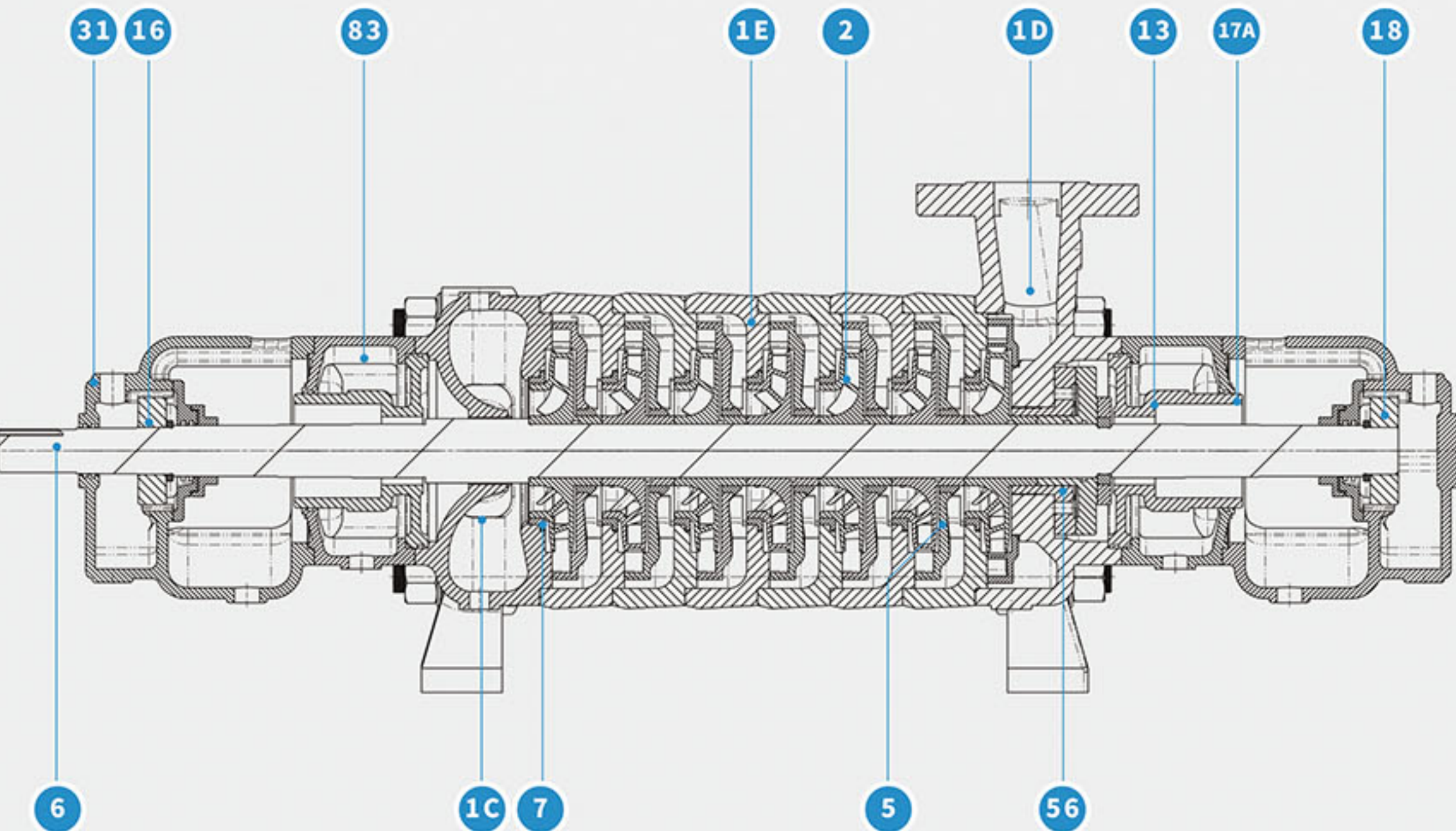
참고: *. 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Model. HT

Parts List and Materials



3D drawing



2D drawing

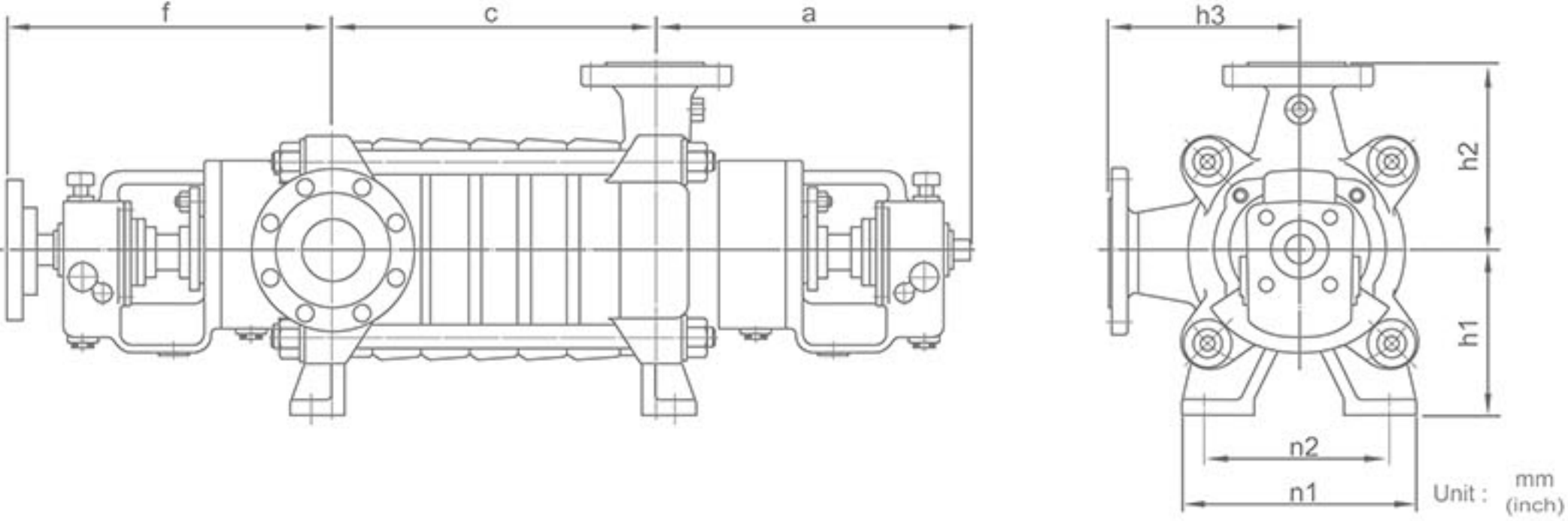
Model. HT

Parts List

Name of Parts	Materials		
	KS	JIS	ASTM
1C Suction Casing	SCPH2	SCPH2	A216 WCB
1D Discharge Casing	SCPH2	SCPH2	A216 WCB
1E Stage Casing	SCPH2	SCPH2	A216 WCB
2 Impeller	SSC1	SCS1	A743 CA15
5 Diffuser	SSC1	SCS1	A743 CA15
6 Pump Shaft	SCM440	SCM440	A322 4140
7 Casing Ring	STS420J2	SUS420J2	A276 420
13 Packing or Seal	TEFLON	TEFLON	TEFLON
14 Shaft sleeve	STS420J2	SUS420J2	A276 420
16 Bearing	STEEL	STEEL	STEEL
17 Packing Gland	SSC13	SCS13	A743 CF8
17A Seal Gland	SSC13	SCS13	A743 CF8
18 Thrust Bearing	STEEL	STEEL	STEEL
31 Bearing Housing	GC200	FC200	A48 CL30
56 Balance Drum Bushing/ Balance Disk Seat	STS420J2	SUS420J2	A276 420
65 Mechanical Seal	-	-	-
71 Drip Pocket	GC200	FC200	A48 CL30
83 Stuffing Box	SCPH2	SCPH2	A216 WCB
115 Balance Drum/ Balance Disk	STS420J2	SUS420J2	A276 420

Optional Material Code
- API Material class code.
- Other materials are available on request. (DCI, 12% Cr., 304SS, 316SS, 316LSS, etc)

Installation Dimension



Model	a	c	f	n1	n2	h1	h2	h3
50X40	338 (17.72)	20+(SX50) (0.79+(SX1.97))	350 (13.78)	265 (10.43)	200 (7.87)	180 (7.09)	180 (7.09)	180 (7.09)
65X50	343 (13.50)	28+(SX54) (1.10+(SX2.13))	360 (14.17)	265 (10.43)	200 (7.87)	180 (7.09)	200 (7.87)	200 (7.87)
80X65	386 (15.20)	35+(SX70) (1.38+(SX2.76))	428 (16.85)	300 (11.81)	236 (9.29)	210 (8.27)	224 (8.82)	224 (8.82)
100X80	403 (15.87)	50+(SX76) (1.97+(SX2.99))	453 (17.83)	400 (15.75)	320 (12.60)	250 (9.84)	280 (11.02)	280 (11.02)

No cooling jacket type (HP model) is available. Subject to modification without notice to incorporate technical improvements. * S : Stage Number

Double Casing Barrel Pumps

energy API CE

DST

● Applications

- 초고압, 고온용 High Pressure & Temperature
- 제철소 디스케일용 Steel mill Descale
- 정유, 석유화학용
Petroleum refinery
/ Petrochemical industry
- 발전소 메인 보일러 급수용
Power Plant Boiler Main Water Supply System

● Feature

- ☑ 중심 지지의 견고한 디자인
Centerline support and heavy duty design.
- ☑ 더블케이싱, 내부 케이싱의 제거를 허용
Double casing, permits removal of the inner casing.
- ☑ 폭넓은 사용범위
Flexibility of design handles wide range of liquids.
- ☑ 최대의 호환성
All components have been designed for High interchangeability.
- ☑ 낮은 필요흡입양정
Low NPSH performance.
- ☑ API standard 610 적용 (API Code : BB5)
API standard 610 (API Code : BB5)

● Ratings

Capacity	Up to 20 m ³ /min (5,283 US GPM)
Head	Up to 4,000 m (13,123 ft)
Suction/Discharge Pressure	Up to 40 kgf/cm ² / Up to 400 kgf/cm ² (568 / 5689 PSIG)
Hydrostatic Test Pressure	Up to 600 kgf/cm ² (8,534 PSIG)
Max. Allowable Revolution	7,000min ⁻¹
Temperatures	~300°C (~572°F)
Impeller type	Enclosed
Nozzles	Top-Top
Flanges	~ANSI 2500 lb, other standards also available
Shaft Seals	Mechanical Seal, Conventional Packing, Floating Seal & Throttle Bushing
Materials	According to API 610 Material code

*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.



● Exploded view

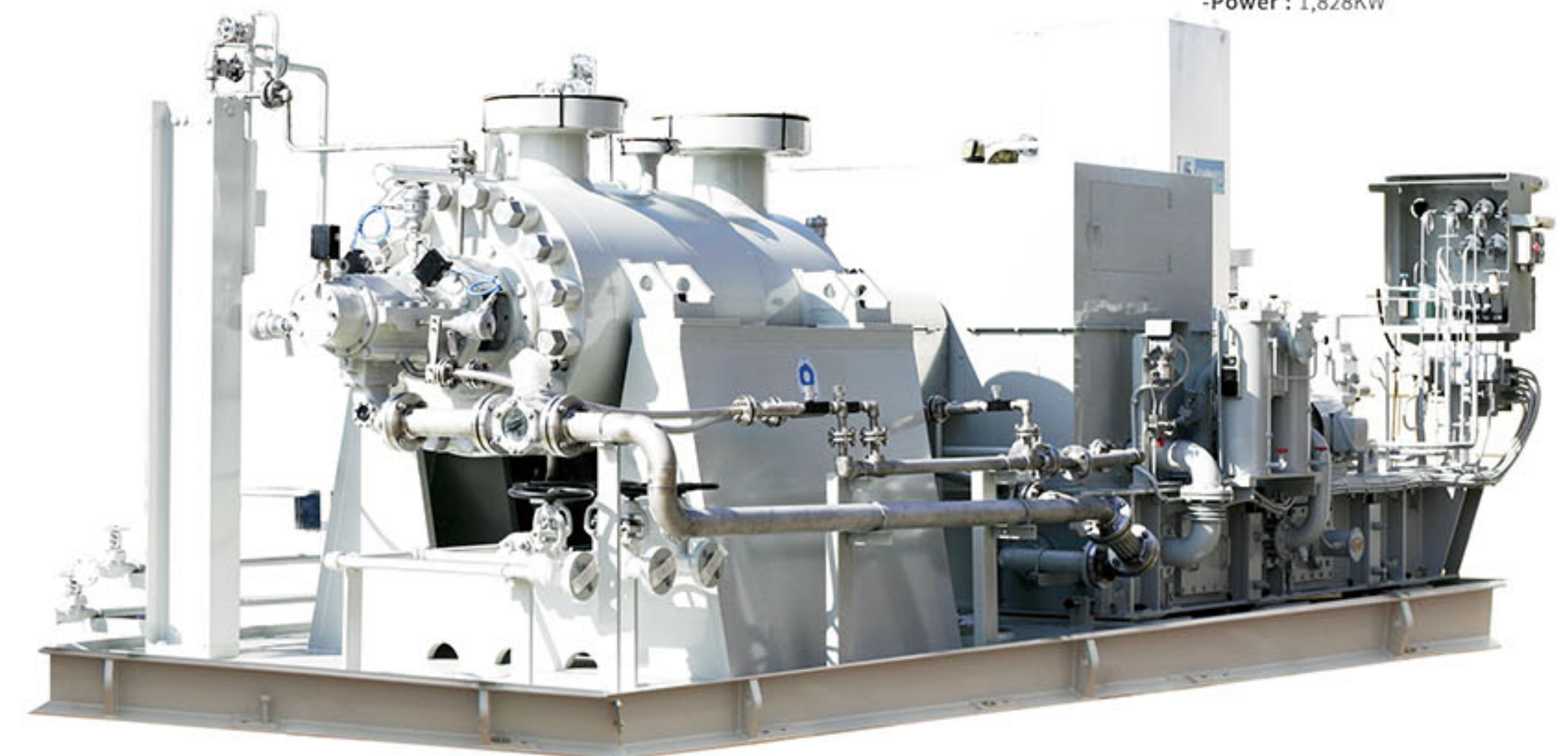


DST 250*200-6S

● Photo Resources

API610 Pumps for power plants

- Service : Startup feed pump
- Capacity : 545.1 m³/min
- Head : 883.92m
- Power : 1,828KW



High Pressure Multi Stage Turbine Pumps

MTS



Applications

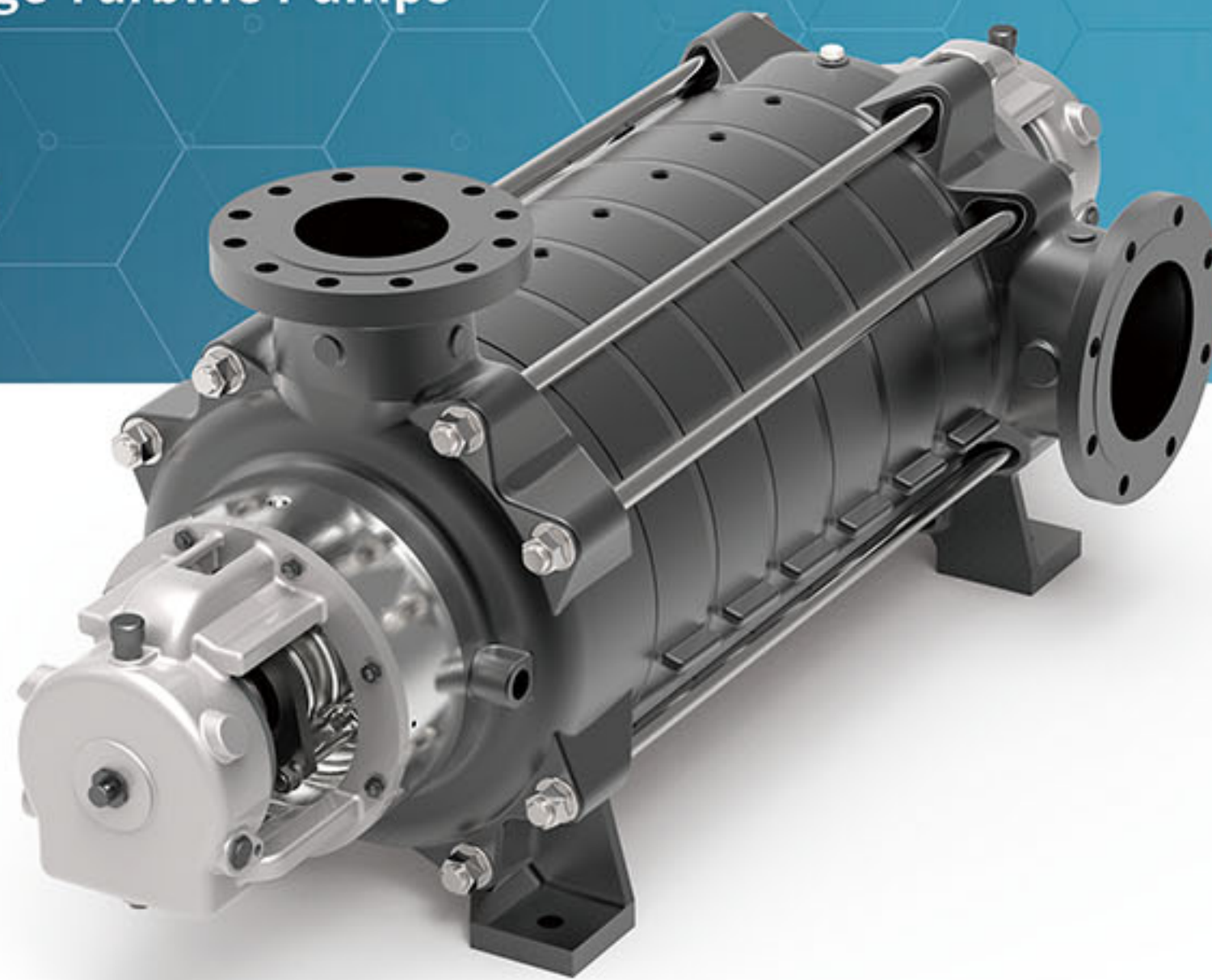
- 보일러 급수용 Boiler feed
- 공정 용수용 Processing water
- 일반 산업용 General Industry
- 고압급수 및 시수용
City water and high pressure water

Feature

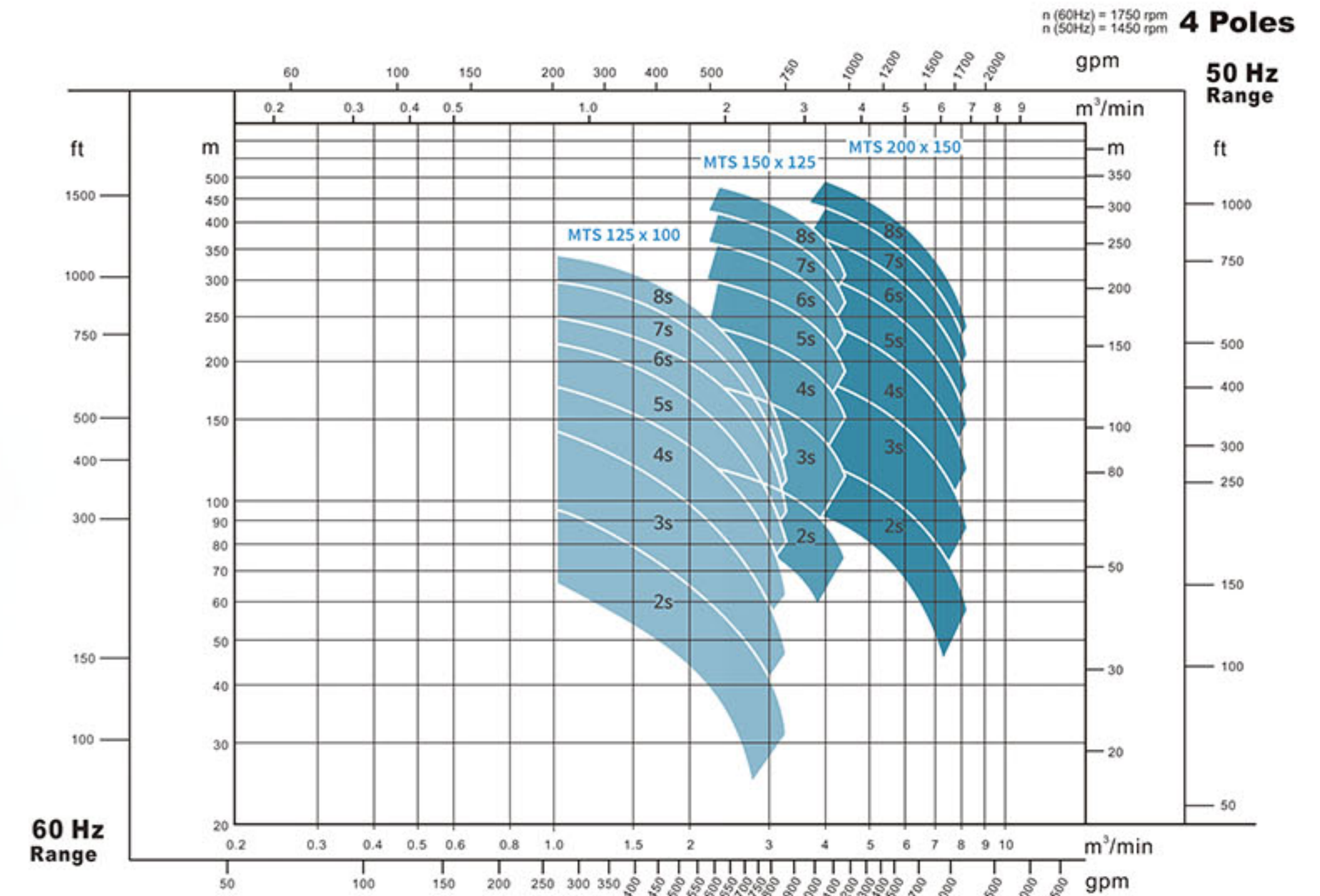
- ✓ 넓은 범위, 높은 효율
High efficiency over a wide range
- ✓ 신뢰성 높은 부품
Highly reliable components
- ✓ 간단한 구조, 편리한 유지보수
Simple construction permits easy maintenance
- ✓ 낮은 필요흡입양정에 적합
Suitable for low NPSHr operation.
- ✓ 소형 펌프, 저렴한 가격
Compact and inexpensive
- ✓ 초단 납기
Sort-term delivery

Ratings

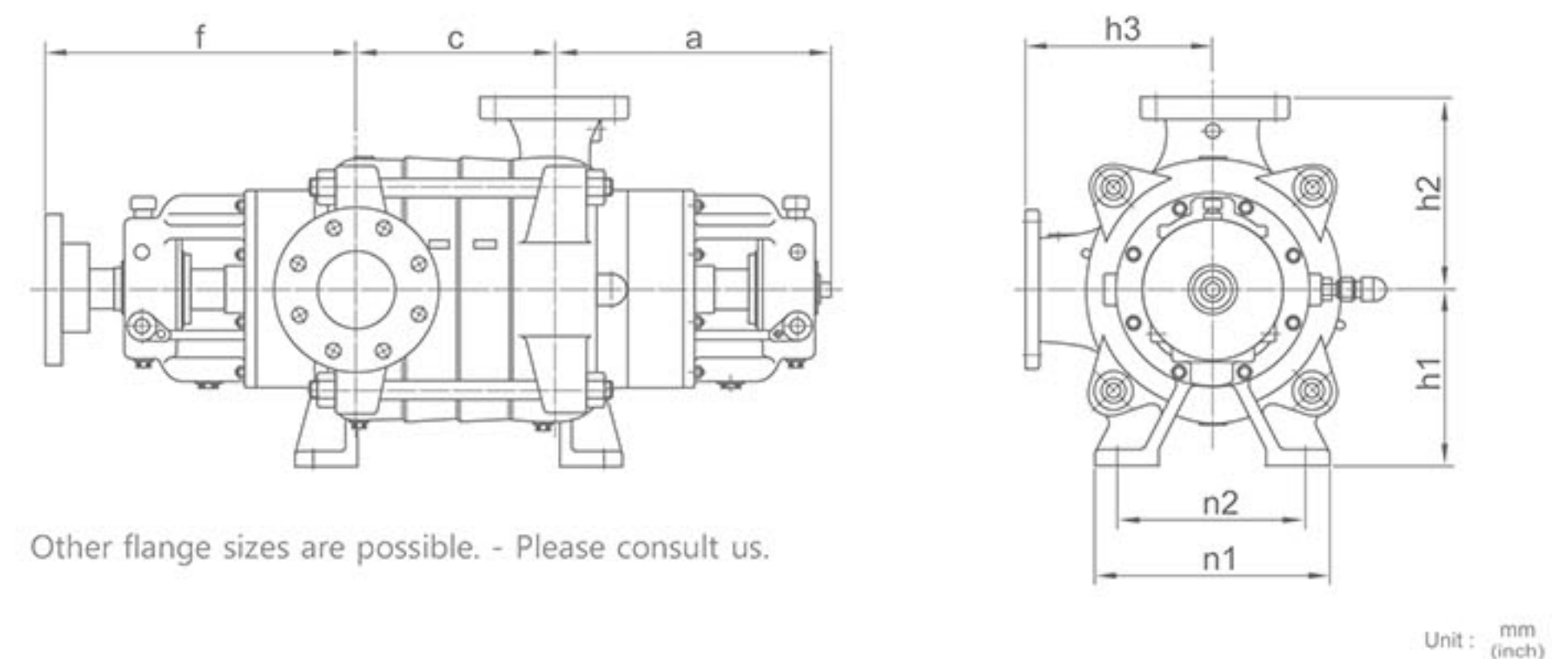
Capacity	Up to 10m ³ /min (2,642 US GPM)
Head	Up to 500m (1,640ft)
Discharge Pressure	Up to 60 kgf/cm ² (853 PSIG)
Allowable Suction Pressure	Up to 20 kgf/cm ² (284 PSIG)
Revolution 60Hz (50Hz)	1750 min ⁻¹ (1180 min ⁻¹)
Rotation	Clockwise viewed from coupling end
Temperature	~120°C (~248°F)
Nozzle-Rating	ANSI 1500 Class other standards also available
Nozzle-Facing	Raised Face
Nozzle-Location	Top Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal



Selection Charts



Installation Dimension



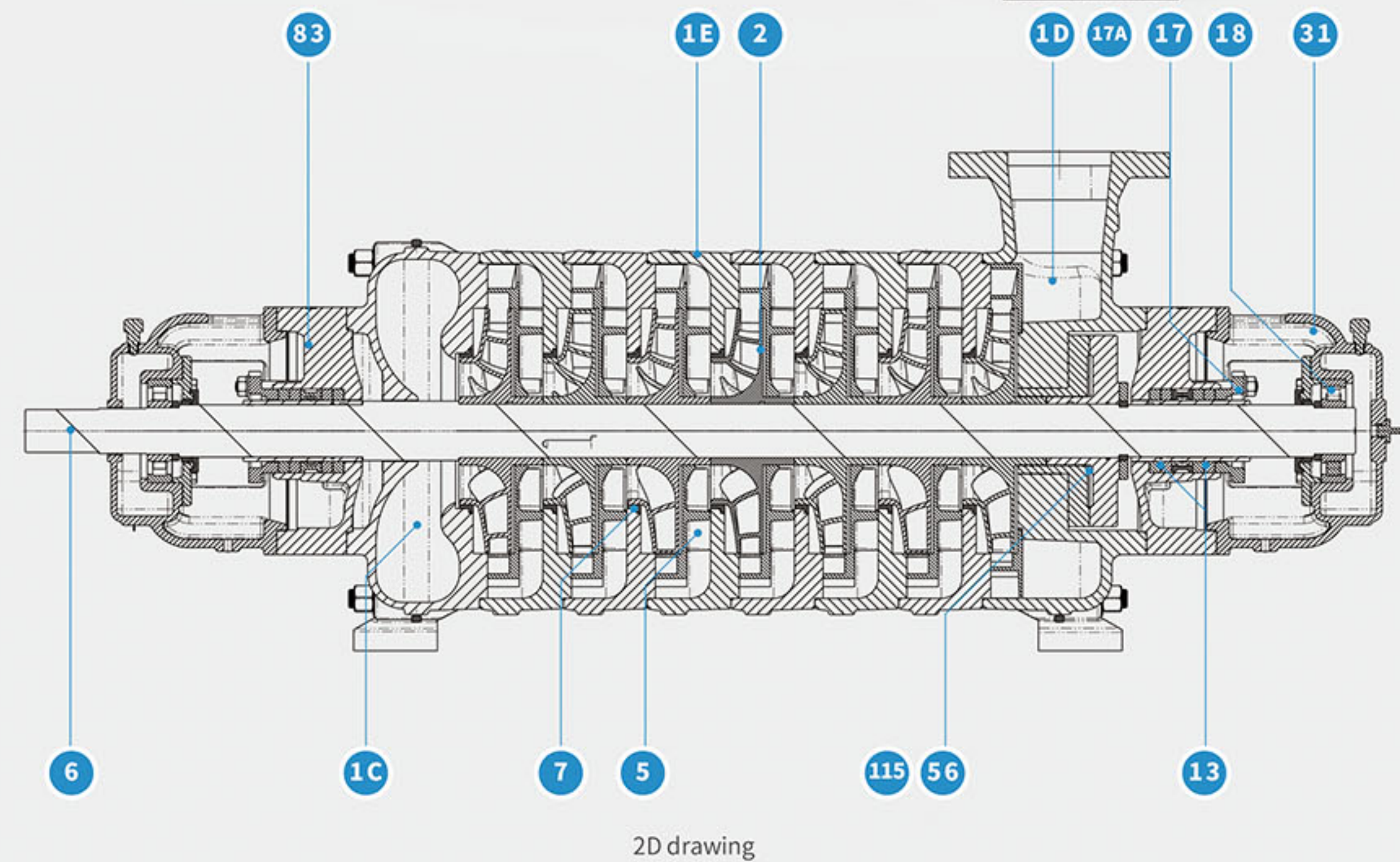
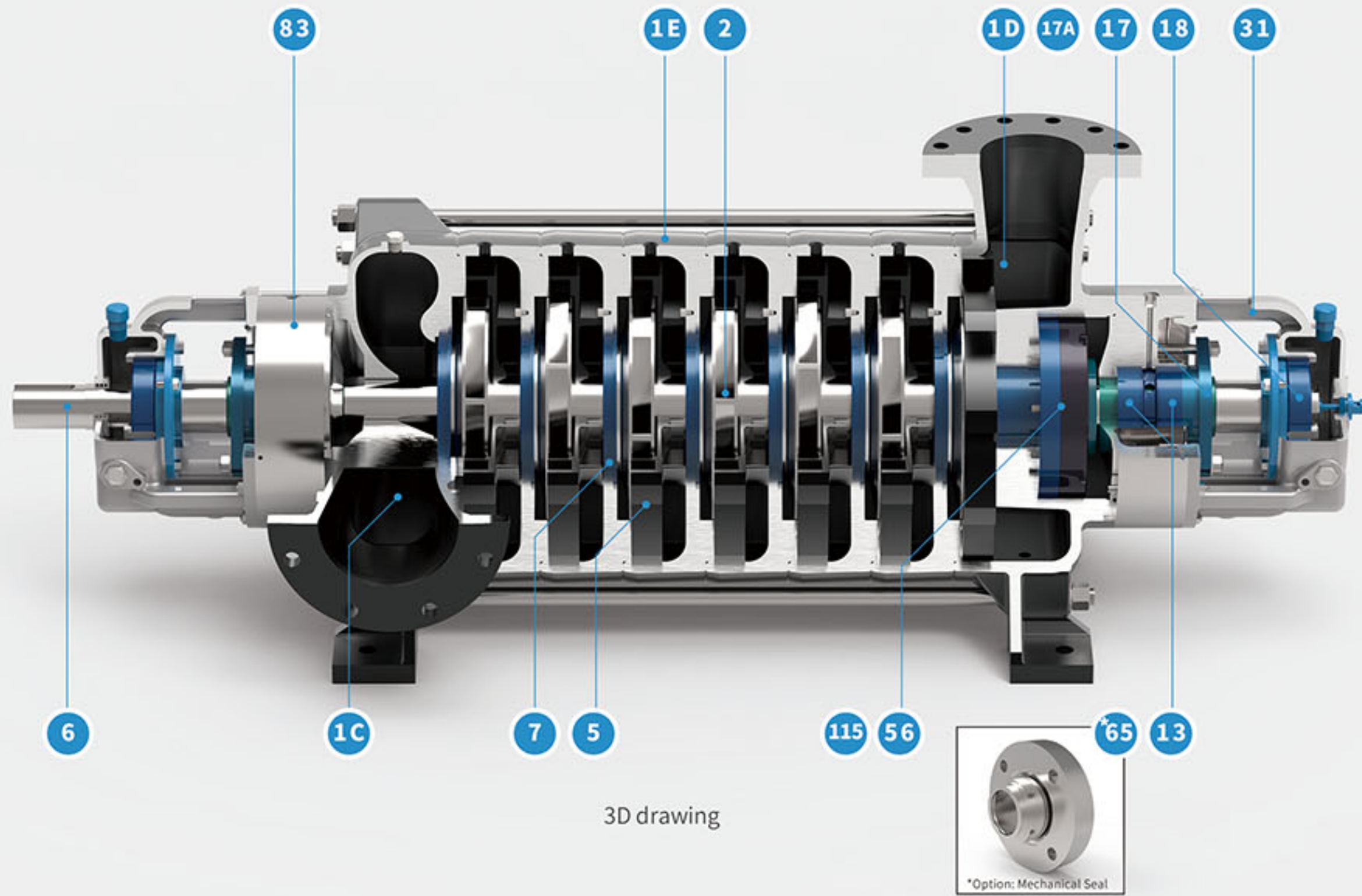
Model	a	c	f	n1	n2	h1	h2	h3
120x100	450 (17.72)	45+(SX90) (1.77+(SX3.54))	505 (19.88)	375 (14.76)	300 (11.81)	280 (11.02)	300 (11.81)	300 (11.81)
150x125	442 (17.40)	55+(SX105) (2.17+(SX4.13))	525 (20.67)	540 (21.26)	450 (17.72)	300 (11.81)	355 (13.98)	355 (13.98)
200x150	490 (19.29)	80+(SX120) (3.15+(SX4.72))	560 (22.05)	550 (21.65)	450 (17.72)	315 (12.41)	400 (15.75)	400 (15.75)

Other flange sizes (65x50 / 100x80 / 100x100 / etc.) are available.
Other options are available upon request.

* S : Stage Number.

Model. MTS

● Parts List and Materials



Model. MTS

● Parts List

Name of Parts		Materials		
		KS	JIS	ASTM
1C	Suction Casing	SCPH2	SCPH2	A216 WCB
1D	Discharge Casing	SCPH2	SCPH2	A216 WCB
1E	Stage Casing	SCPH2	SCPH2	A216 WCB
2	Impeller	SSC1	SCS1	A743 CA15
5	Diffuser	SSC1	SCS1	A743 CA15
6	Pump Shaft	SCM440	SCM440	A322 4140
7	Casing Ring	STS420J2	SUS420J2	A276 420
13	Packing	TEFLON	TEFLON	TEFLON
14	Shaft sleeve	STS420J2	SUS420J2	A276 420
16	Bearing	STEEL	STEEL	STEEL
17	Packing Gland	SSC13	SCS13	A743 CF8
17A	Seal Gland	SSC13	SCS13	A743 CF8
18	Thrust Bearing	STEEL	STEEL	STEEL
31	Bearing Housing	GC200	FC200	A48 CL30
56	Balance Drum Bushing/ Balance Disk Seat	STS420J2	SUS420J2	A276 420
65	Mechanical Seal	-	-	-
71	Drip Pocket	GC200	FC200	A48 CL30
83	Stuffing Box	SCPH2	SCPH2	A216 WCB
115	Balance Drum/ Balance Disk	STS420J2	SUS420J2	A276 420

Optional Material Code
- API Material class code.
- Other materials are available on request. (DCI, 12% Cr., 304SS, 316SS, 316LSS, etc)

● Construction



Dual Volute Multi-Stage Pumps



MV

Applications

- 보일러 급수용 Boiler feed
- 가압용 Booster
- 소화설비용 Fire-fighting jockey
- 건물용 Building
- 일반 산업용 General industry

Feature

- ☑ 단순한 구조
Simple construction
- ☑ 고효율, 낮은 NPSHr.
Good efficiency, low NPSHr.
- ☑ 견고한 구조
Heavy and sturdy construction

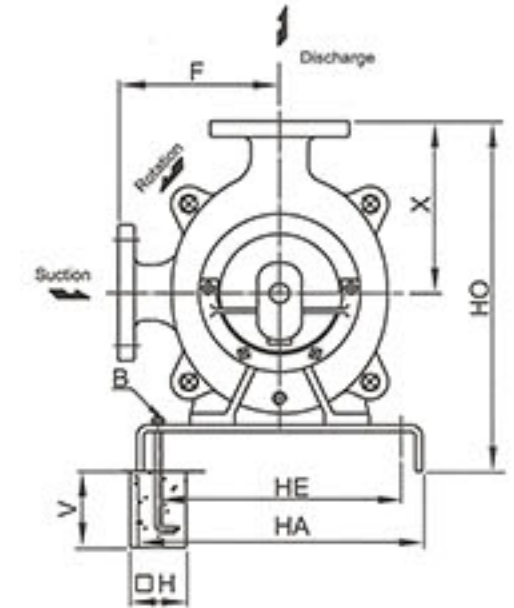
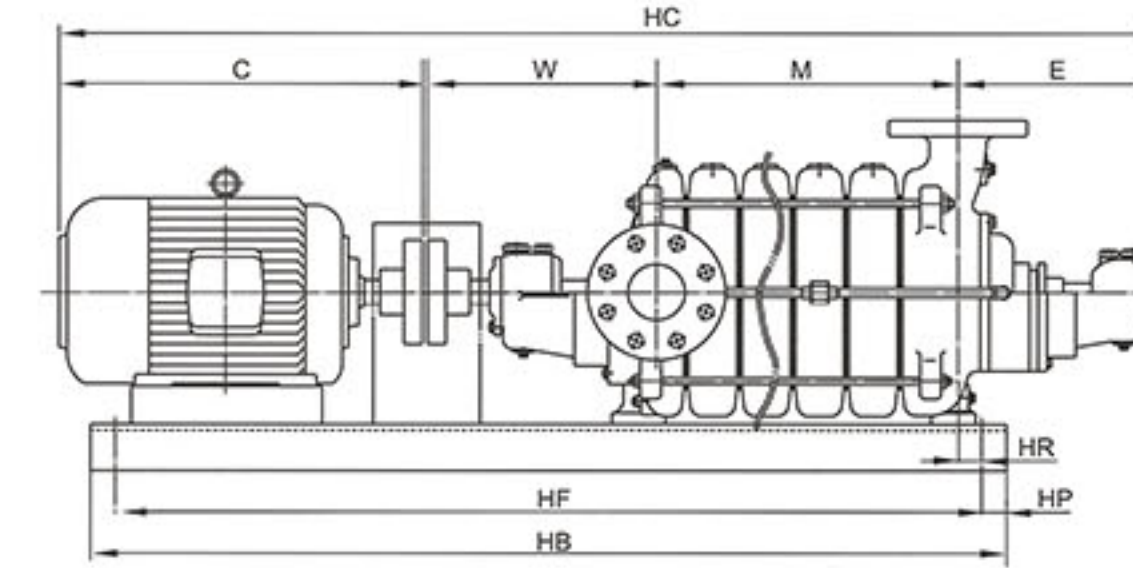
Ratings

Capacity	UP to 3m ³ /min (792 US GPM)
Head	UP to 140m (459ft)
Temperature	UP to 90°C (194°F)

Specification

1750 RPM																	
140m																	
135															3/90		
130							5/37								3/75		
125							5/30	5/37			4/45				3/75	3/90	
120					6/22		5/30	5/37			4/45	4/55			3/75	3/90	
115			7/15		6/22		5/30	5/37	5/37		4/45	4/55	4/55		3/75	3/90	
110			7/15		6/22		5/30	5/37	5/37		4/45	4/45	4/55		3/75	3/75	3/90
105			7/15	7/15	6/22		5/30	5/37	5/37		4/45	4/45	4/55		3/75	3/75	3/75
100			6/15	7/15	5/19	6/22	4/30	4/30	5/37		4/37	4/45	4/55		3/75	3/75	3/75
95	8/11	8/11	6/15	6/15	5/19	6/22	4/30	4/30	5/37		4/37	4/45	4/55		3/75	3/75	3/75
90	7/11	8/11	6/15	6/15	5/19	6/22	4/22	4/30	4/30		3/37	3/37	4/55		2/55	3/75	3/90
85	7/11	7/11	6/15	6/15	5/19	6/22	4/22	4/30	4/30		3/37	3/37	3/45		2/55	2/75	3/90
80	6/7.5	7/11	5/15	6/15	4/15	5/19	3/22	3/22	4/30		3/30	3/37	3/37		2/55	2/55	3/75
75	6/7.5	6/7.5	5/15	6/15	4/15	5/19	3/22	3/22	4/30		3/30	3/37	3/37		2/37	2/55	3/75
70	6/7.5	6/7.5	5/11	5/15	4/15	5/19	3/19	3/19	3/30		3/30	3/30	3/37		2/45	2/55	3/75
65	5/5.5	6/7.5	4/11	5/11	4/15	4/15	3/19	3/19	3/22		3/30	3/30	3/37		2/45	2/55	3/75
60	5/5.5	5/5.5	4/11	4/11	3/11	4/15	3/15	3/15	3/22		2/30	2/30	3/30		2/37	2/45	2/75
55	5/5.5	5/5.5	4/11	4/11	3/11	4/15	2/15	2/15	3/19		2/22	2/30	2/30		2/37	2/37	2/55
50	4/5.5	5/5.5	3/7.5	4/11	3/11	4/15	2/15	2/15	3/19		2/22	2/22	2/30		2/37	2/45	2/55
45	4/5.5	4/5.5	3/7.5	3/7.5	3/11	3/11	2/15	2/15	2/19		2/19	2/22	2/22				
40	3/3.7	4/5.5	3/5.5	3/5.5	2/7.5	3/11	2/11	2/15	2/15								
35	3/3.7	3/3.7	3/5.5	3/5.5	2/7.5	3/11											
30	3/3.7	3/3.7	2/5.5	2/5.5	2/7.5	2/7.5											
28	3/3.7	3/3.7	2/5.5	2/5.5	2/5.5	2/7.5											
26	2/3.7	3/3.7															
24	2/2.2	2/3.7															
22	2/2.2	2/2.2															
20	2/2.2																
H(m)	15	18	22	26	30	40	50	60	70	80	90	100	120	140	160	180	
Size (mm)	Ø50		Ø65		Ø80		Ø100				Ø125		Ø150				

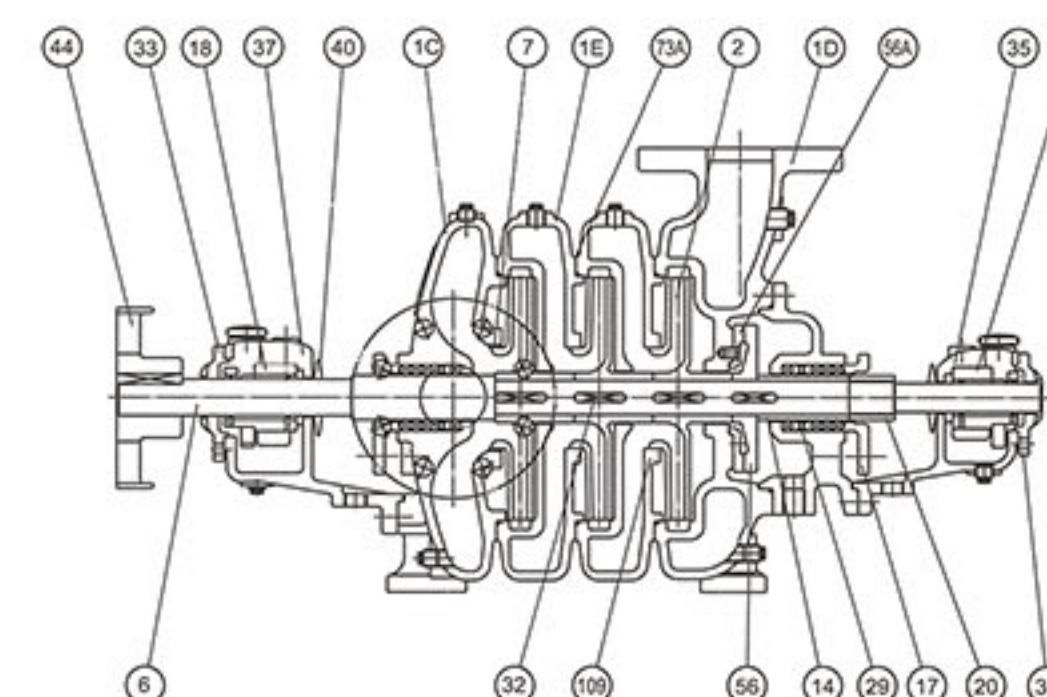
Installation Dimension



구분	Pump and motor											Baseplate							Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	W	M	E	F	X	HR	HF	HB	HP	HO	HE	HA	B	H	V
502	50	50	112S	2.2	1017	356	255	158	243	180	195	75	750	800	25	405	215	265	4-M16×400L	150	400
503	50	50	112M	3.7	1103	382	255	218	243	180	195	40	850	900	25	405	215	265	4-M16×400L	150	400
504	50	50	132S	5.5	1225	444	255	278	243	180	195	40	950	1000	25	405	255	305	4-M16×400L	150	400
505	50	50	132M	7.5	1323	482	255	338	243	180	195	40	1000	1050	25	405	255	305	4-M16×400L	150	400
506	50	50	132M	7.5	1383	482	255	398	243	180	195	40	1100	1150	25	405	255	305	4-M16×400L	150	400
507	50	50	160M	11	1554	593	255	458	243	180	195	40	1250	1300	25	430	305	355	4-M16×400L	150	400
508	50	50	160M	11	1614	593	255	518	243	180	195	40	1300	1350	25	430	305	355	4-M16×400L	150	400
652	65	65	132S	5.5	1202	444	300	176	277	200	210	90	900	950	25	440	255	305	4-M16×400L	150	400
653	65	65	123M	7.5	1311	482	300	247	277	200	210	90	950	1000	25	440	255	305	4-M16×400L	150	400
654	65	65	160M	11	1493	593	300	318	277	200	210	50	1150	1200	25	455	305	355	4-M16×400L	150	400
655	65	65	160M	11	1564	593	300	389	277	200	210	50	1200	1250	25	455	305	355	4-M16×400L	150	400
656	65	65	160L	15	1679	637	300	460	277	200	210	50	1350	1400	25	455	305	355	4-M20×500L	150	500
657	65	65	180M	19	1760	647	300	531	277	200	210	50	1400	1450	25	465	350	400	4-M16×400L	150	400
802	80	80	132M	7.5	1205	482	262	198	258	210	210	80	950	1000	25	450	255	305	4-M16×400L	150	400
803	80	80	160M	11	1386	593	262	268	258	210	210	40	1050	1100	25	450	305	355	4-M16×400L	150	400
804	80	80	160L	15	1500	637	262	338	258	210	210	40	1150	1200	25	465	305	355	4-M16×400L	150	400
805	80	80	180L	22	1618	685	262	408	258	210	210	40	1250	1300	25	465	350	400	4-M16×400L	150	400
806	80	80	180L	22	1698	685	272	478	258	210	210	40	1350	1400	25	465	350	400	4-M20×500L	150	500
807	80	80	200M	30	1791	708	272	548	258	210	210	40	1450	1500	25	485	390	440	4-M20×500L	150	500
102	100	100	160L	15	1518	637	325	225	326	250	270	80	1150	1200	25	555	305	355	4-M16×400L	150	400
103	100	100	180L	22	1651	685	325	310	326	250	270	80	1300	1350	25	555	350	400	4-M16×400L	150	400
104	100	100	200M	30	1759	708	325	395	326	250	270	40	1350	1400	25	555	390	440	4-M20×500L	150	500
105	100	100	200L	37	1883	747	325	480	326	250	270	40	1452	1500	25	555	390	440	4-M20×500L	150	500

참고: *. 단위: mm,inch / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Parts List and Materials



No	Name of part	MATERIAL	No	Name of part	MATERIAL
1C	Suct. Casing	GC200	31	Inboard Housing	GC200
1D	Dis. Casing	GC200	32	Impeller Key	SM45C
1E	Stage Casing	GC200	33	Outboard Housing	GC200
2	Impeller	BC6	35	In Bear. Cover	GC200
6	Shaft	SM45C	37	Out Bear. Cover	GC200
7	Casing Ring	BC6	40	Deflector	NBR
14	Sleeve	BC6	44	Pump Coupling	GC200
16	Inboard Bear.	WHITE METAL	56	Balance Disk	BC6
17	Packing Gland	GC200	56A	Balance Seal	BC6
18	Outboard Bear.	WHITE METAL	60	Oil Ring	BC6
20	Sleeve Nut	BC6	73A	Casing Gasket	NBR
29	Lantern Ring	TEFLON	83	Stuffing Box	GC200

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

Vertical Mixed Flow Pumps

VM/VMS

energy API CE



● Applications

- 일반 산업용 General Industrial
- 공장 배수용 Factory drainage
- 빗물 배수용 Rain water drainage
- 농업용 Agriculture

● Feature

- ☑ 고효율 / 견고하고 견고한 구조
High efficiency / Heavy and sturdy construction
- ☑ 폭 넓은 적용을 위한 완벽한 표준화
Completely standardization for wide application
- ☑ 최대 부품 상호 호환성
Maximum parts interchangeability
- ☑ API standard 610 적용 (API Code : VS1)
API standard 610 (API Code : VS1)

● Ratings

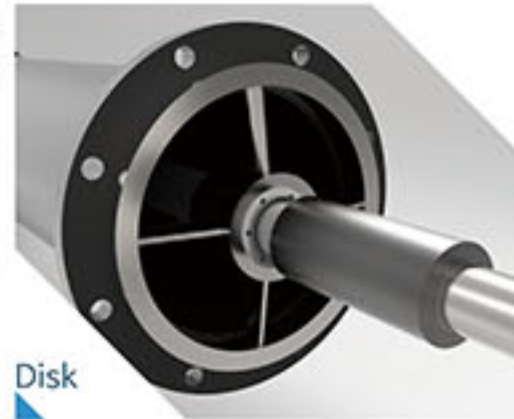
Capacity	Up to 400 m ³ /min (105,669 US GPM)
Head	Up to 500 m (1,640ft)
Discharge Pressure	Up to 60 kgf/cm ² G (853 PSIG)
Hydrostatic test Pressure	Up to 90 kgf/cm ² G (1,280 PSIG)
Max. allowable Speed	Up to 3,600 min
Temperature	~180°C (~ 356°F)
Flanges	ANSI (other standards also available)
Nozzles Location	Bottom Suction : Side Discharge
Seals	Conventional Packing or Mechanical Seal
Materials	According to API 610 Material code

*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.

Detail



Seals

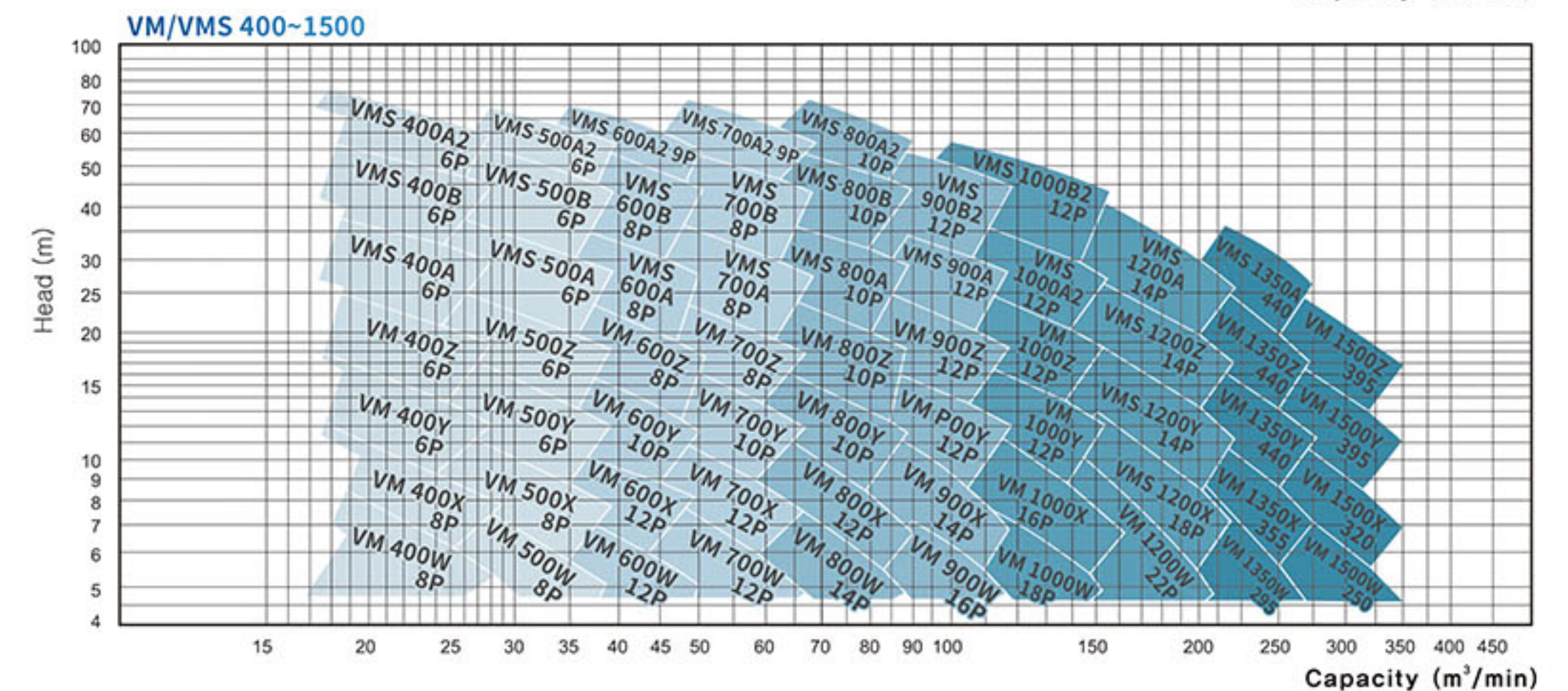
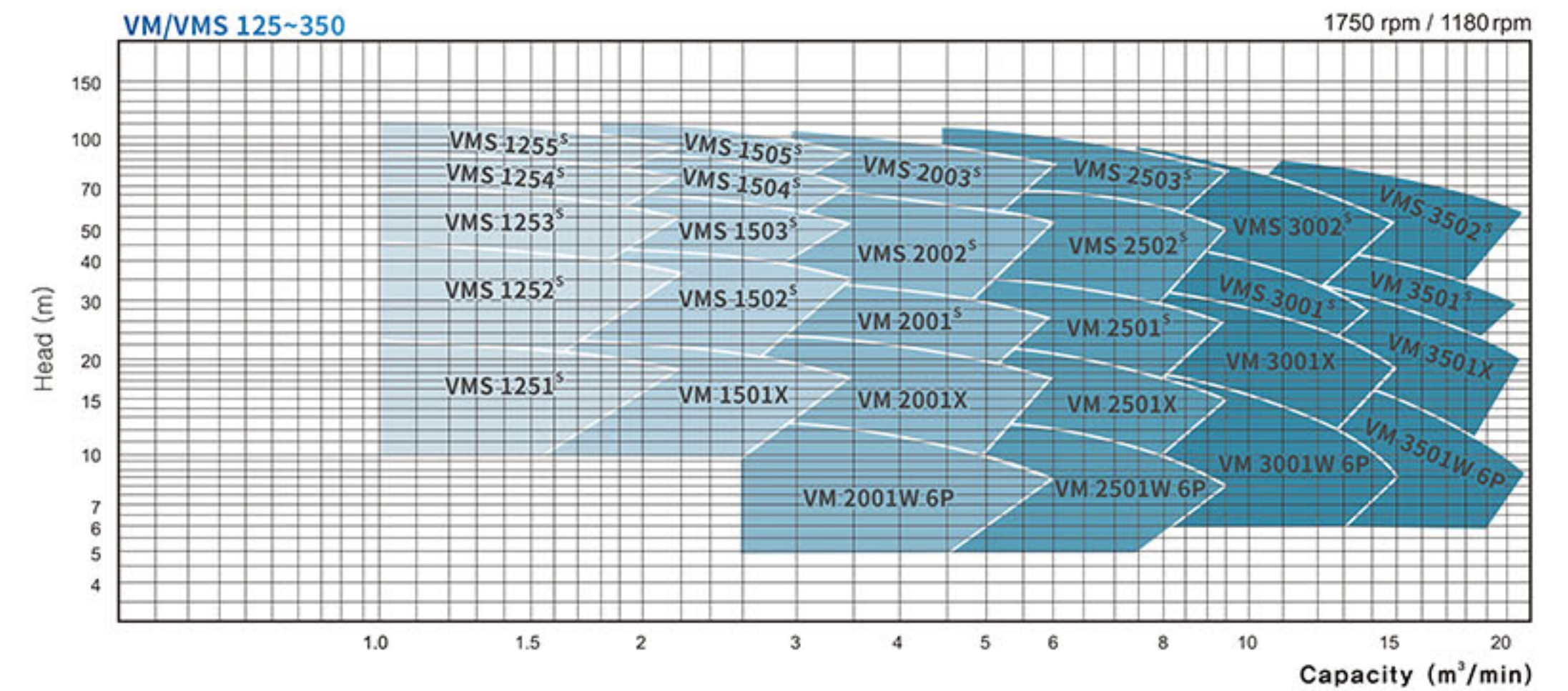
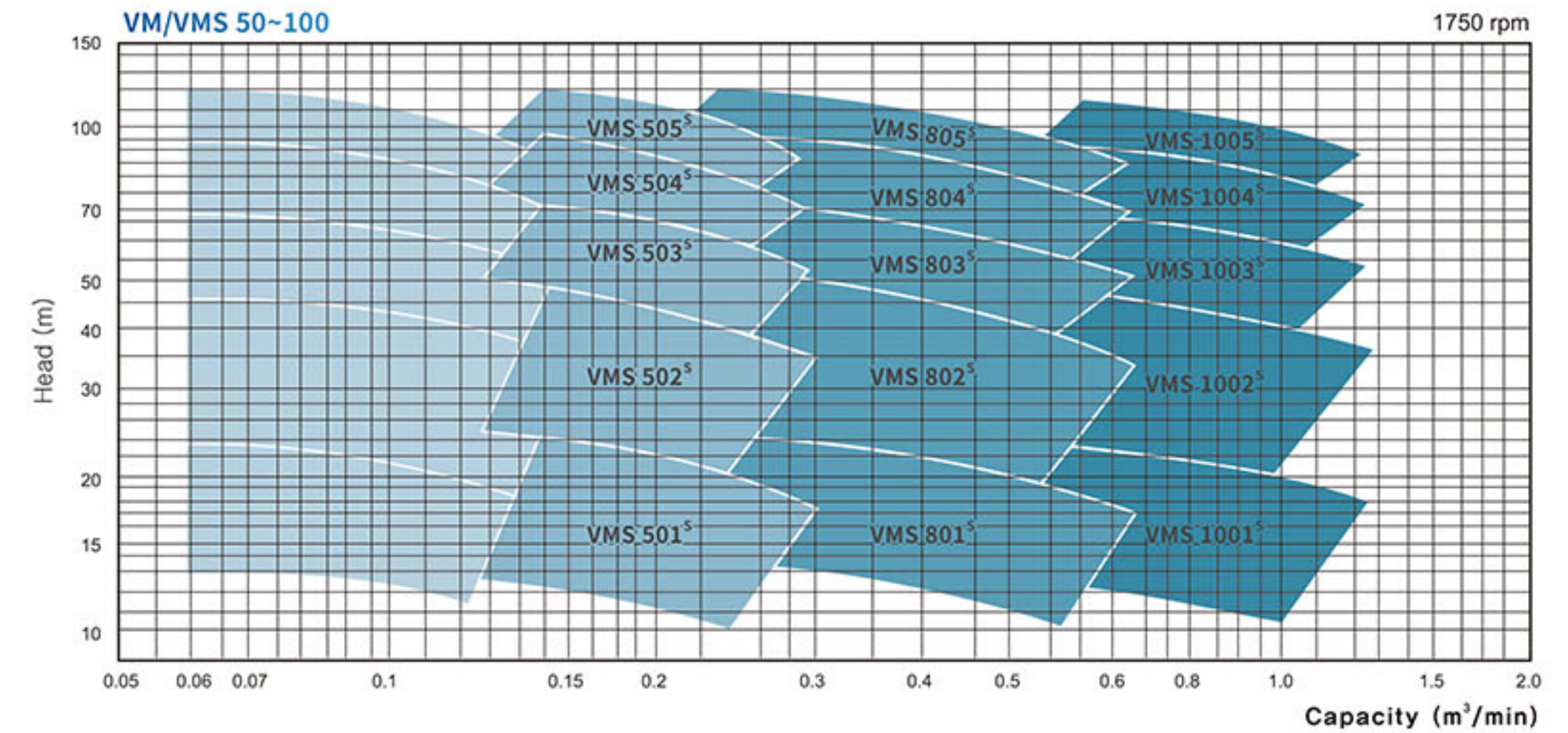


Disk



Impeller

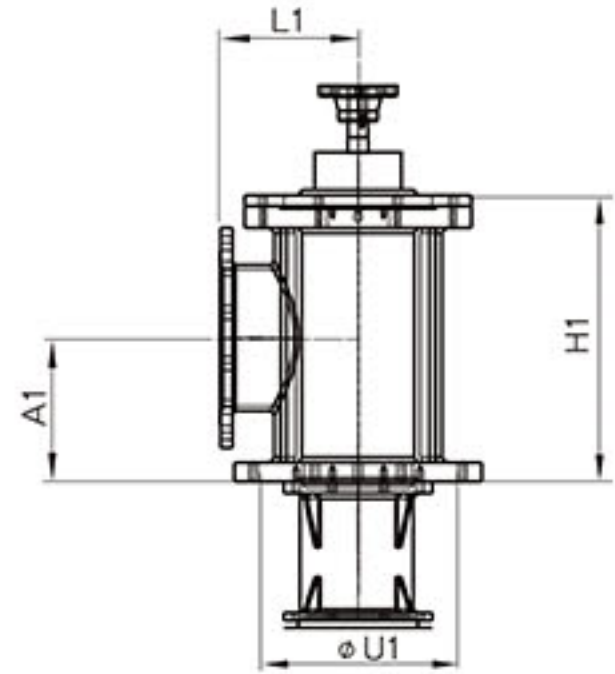
● Selection Charts



참고: *, 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Model. VM/VMS

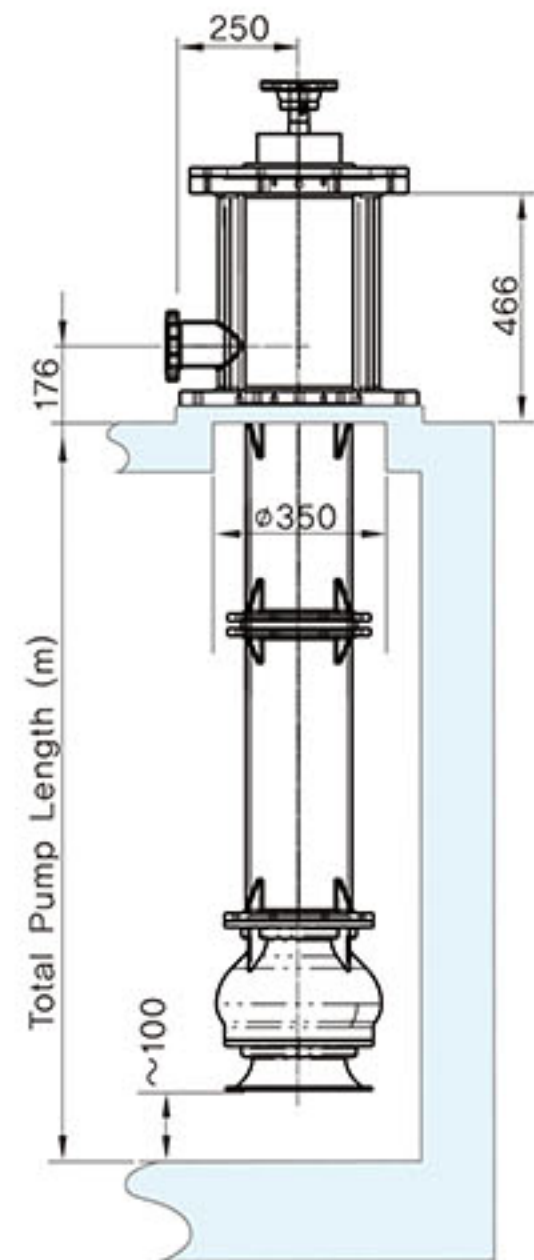
● Installation Dimension



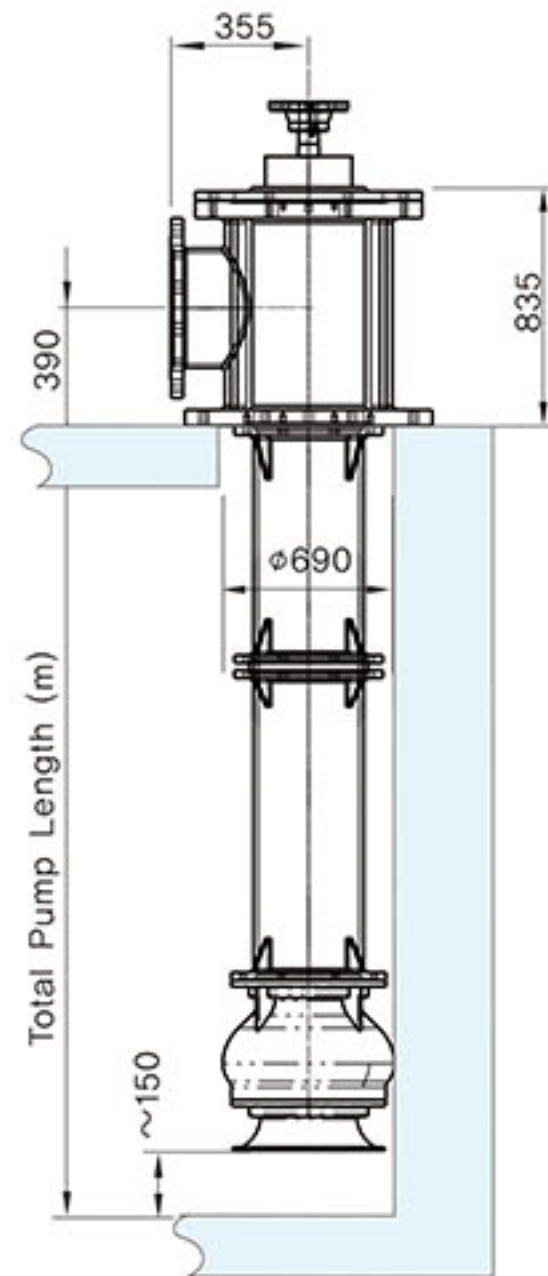
VM/VMS 125~250 Type

● VM/VMS 125~250

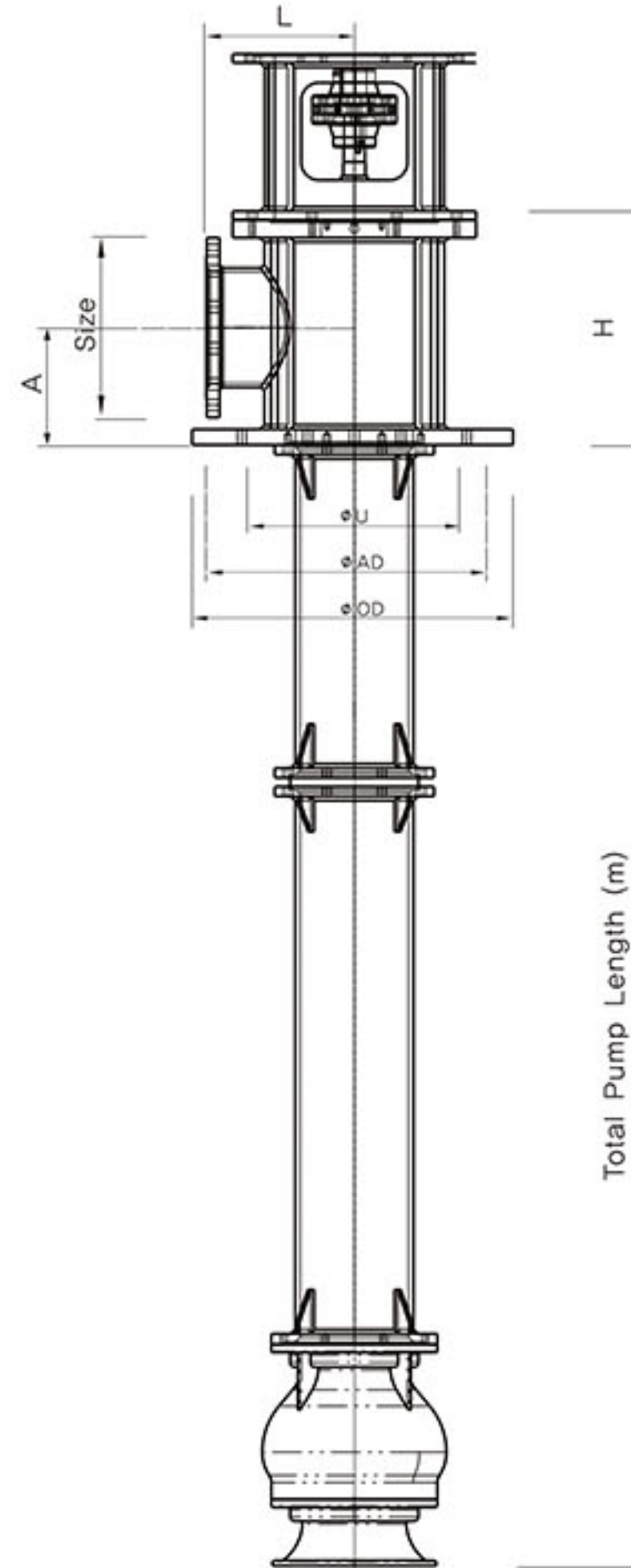
Size	A1	L1	H1	U1
125	230	280	550	480
150	230	280	550	480
200	295	315	690	580
250	295	315	690	580



VM/VMS 50~100 Type



VM/VMS 300~350 Type



VM/VMS 400~2000 Type

● VM/VMS 400~2000 (Discharge Head Dimensions)

(Unit: mm)

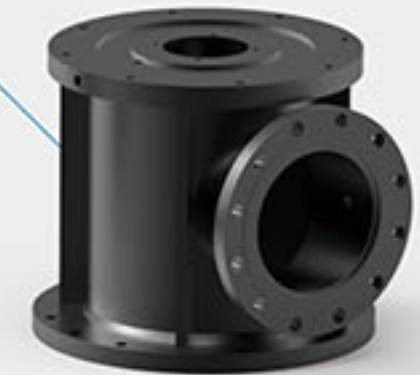
Discharge Size	A	L	H	U	OD	AD
400	450	400	900	650	950	850
450	525	425	970	800	1100	1000
500	550	450	1020	900	1200	1100
600	600	500	1150	1050	1350	1250
700	750	650	1400	1200	1500	1400
800	800	700	1550	1300	1700	1550
900	1000	900	1800	1550	1950	1800
1000	1050	950	1900	1700	2100	1950
1100	1100	1000	2050	1850	2250	2100
1200	1150	1050	2150	2000	2400	2250
1350	1375	1275	2450	2225	2725	2525
1500	1450	1350	2500	2450	2950	2750
1600	1500	1400	2600	2600	3100	2950
1700	1550	1450	2700	2750	3250	3050
1800	1600	1550	2800	2950	3500	3250
1900	1650	1550	2950	3050	3650	3400
2000	1700	1600	3000	3200	3800	3500

Model. VM/VMS

● Parts Feature

● 토출 케이싱 Discharge Casing

- 고강도 강재 재관형 토출곡관
(Option: 주조형 토출곡관)
- High strength steel re-pipe type discharge bending pipe
(Option: casting type discharge tube)



● 축 지름 65mm 미만 Axial diameter less than 65mm

- 나사형 중간 커플링 Screw the middle Coupling
(용도에 따라 분할형 중간 커플링 적용)
(Depending on the application, Split Middle coupling is applied)



● 축 지름 65mm 이상 Axial diameter 65mm or more

- 분할형 중간 커플링 Split Middle Coupling



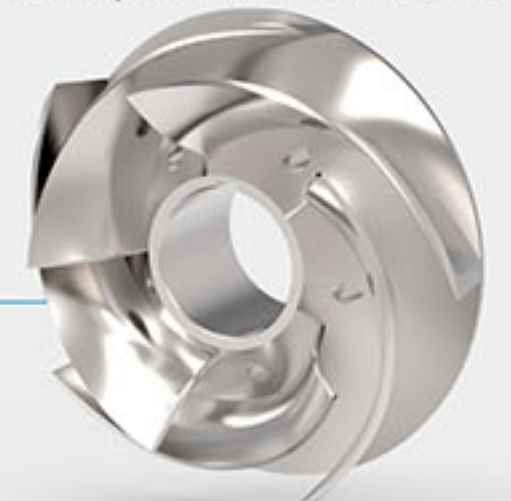
● 토출 양정 20m 이상 Discharge head 20m or more

- Enclosed impeller (용도에 따라 semi-open impeller)



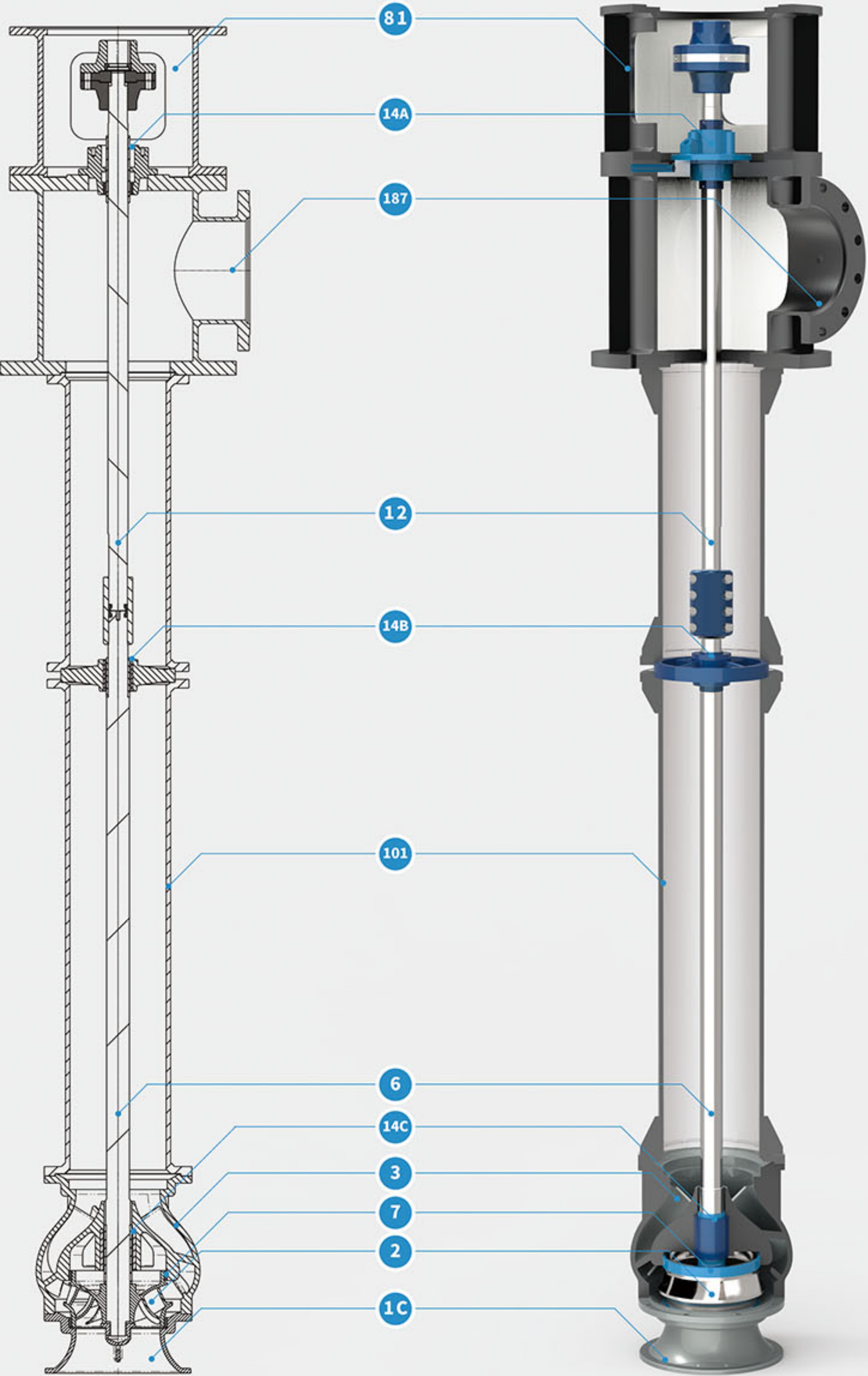
● 토출 양정 20m 이하 Discharge head 20m or less

- semi-open impeller (케이싱 마모 방지용 front plate 적용 가능)



Model. VM/VMS

● Parts List and Materials



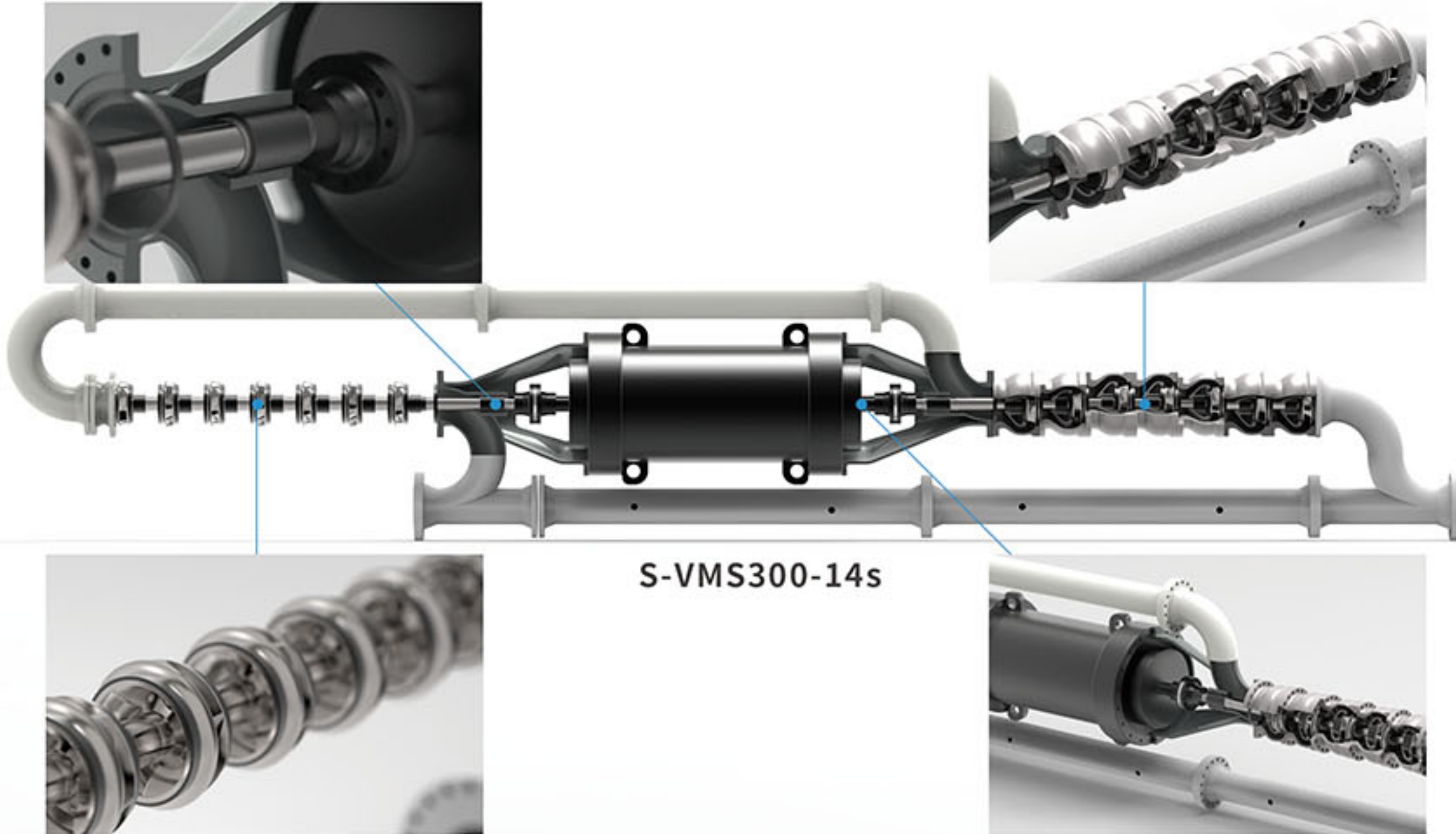
Model. VM/VMS

● Parts List

No	Name of part	Material	
1C	Suction Casing	GC200	
2	Impeller	GC200	BC6
3	Bowl	GC200	
6	Pump Shaft	SM45C	STS304
7	Casing Ring	BC6	
10	Head Shaft	SM45C	STS304
12	Line Shaft	SM45C	STS304
14A	Packing Sleeve	STS304	
14B	Retainer Sleeve	STS304	
14C	Impeller Sleeve	STS304	
37	Bear. Housing Cover	GC200	
39	Bearing Holder	GC200	
72	Thrust Bearing	STEEL	
81	Driver Pedestal	SPPS38	
99	Bearing Housing	GC200	
101	Column Pipe	SPPS38	
129	Baseplate	SS400	
187	Discharge Head	SPPS38	GC200
209	Strainer	SS400	

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

● Special Pumps



S-VMS300-14s

Vertical Axial Flow Pumps

VA

energy API CE

● Applications

- 일반 산업용 General Industrial
- 공장배수용 Factory drainage
- 빗물배수용 Rain water drainage
- 농업용 Agriculture

● Feature

- ✓ 최대 부품 호환성
Maximum parts interchangeability
- ✓ 고효율 / 견고하고 견고한 구조
High efficiency / Heavy and sturdy construction
- ✓ 폭 넓은 적용을 위한 완전히 표준화
Completely standardization for wide application
- ✓ API610 최신 버전은 요청시 제공
API610 Latest edition is available on request
- ✓ API standard 610 규격 준수 (API 610 Code: VS3)
API standard 610 (API Code : VS3)

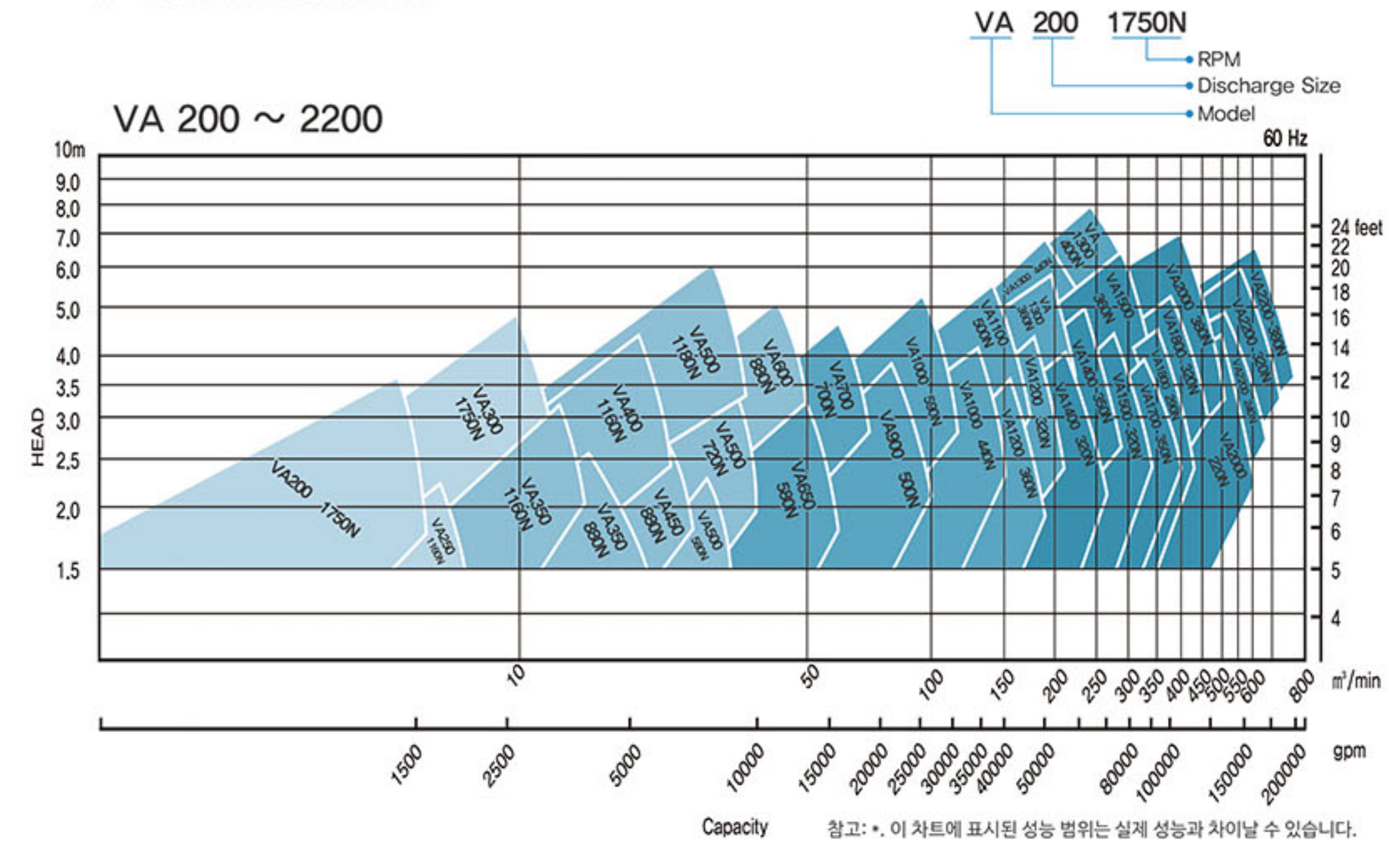
● Ratings

Capacity	Up to 500 m ³ /min (132,086 US GPM)
Head	Up to 15 m (49ft)
Discharge Pressure	Up to 5 kgf/cm ² G (71 PSIG)
Hydrostatic test Pressure	Up to 7.5 kgf/cm ² G (106 PSIG)
Max. allowable Speed	Up to 900 min ⁻¹
Temperature	~60°C (~ 140°F)
Flanges	~ANSI to (other standards also available)
Nozzles Location	Bottom Suction : Side Discharge
Seals	Conventional Packing or Mechanical Seal
Materials	According to API 610 Material code

*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.



● Selection charts



● Specification

구분	POWER	유량 (m ³ /min)	양정 (m)	회전수 (rpm)	구분	POWER	유량 (m ³ /min)	양정 (m)	회전수 (rpm)
규격					규격				
400	7.1	15	1.5	520	1200	49.6	125	1.5	170
	10.7	19	2	580		68	145	2	200
	14.7	22	2.5	650		94	170	2.5	220
	17.2	24	3	720		120	190	3	240
	9.5	21	1.5	420	1300	56	145	1.5	160
500	12.7	24	2	490		79.5	170	2	180
	17	27	2.5	550		108	195	2.5	210
	22	32	3	600		140	220	3	230
	12.8	29	1.5	360	1400	63	163	1.5	150
600	17.6	34	2	460		91	195	2	170
	23.5	39	2.5	410		121	220	2.5	190
	29.5	44	3	510		156	250	3	210
	17	40	1.5	300	1500	72	190	1.5	140
700	23	46	2	350		101	220	2	160
	31	52	2.5	400		135	250	2.5	180
	39	60	3	440		174	275	3	200
	22	53	1.5	260	1600	80	210	1.5	130
800	31	62	2	310		115	250	2	150
	40	70	2.5	350		154	280	2.5	170
	51	80	3	380		200	320	3	190
	29	70	1.5	230	1700	86	230	1.5	120
900	39	80	2	270		126	280	2	140
	51	90	2.5	300		172	320	2.5	160
	65	100	3	330		225	360	3	180
	35.5	90	1.5	200	1800	100	270	1.5	120
1000	48	100	2	240		143	315	2	140
	65	115	2.5	270		192	360	2.5	140
	82	130	3	300		250	400	3	170
	42.5	105	1.5	190	2000	123	325	1.5	110
1100	59	125	2	220		171	380	2	120
	78	140	2.5	240		235	440	2.5	130
	101	160	3	270		303	490	3	150

참고: *, 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

Vertical One Piece Solid Shaft Pumps

energy API CE

VISB/VISBO

● Applications

- 화학공업용 Chemical industry
- 공장배수용 Industrial sump drainage
- 부식성 액체이송용 Corrosive & none-corrosive liquids
- 환경장치용 Pollution control

● Feature

- ☑ 최대 부품 호환성
Maximum parts interchangeability
- ☑ 고효율 / 견고하고 견고한 구조
High efficiency / Heavy and sturdy construction
- ☑ 폭 넓은 적용을 위한 완전히 표준화
Completely standardization for wide application
- ☑ API610 최신 버전은 요청시 제공
API610 Latest edition is available on request
- ☑ API standard 610 규격 준수 (API 610 Code: VS4)
API standard 610 (API Code : VS4)

● Ratings

Capacity	Up to 50 m ³ /min (13,209 US GPM)
Head	Up to 200 m (656ft)
Discharge Pressure	Up to 25 kgf/cm ² G (355 PSIG)
Hydrostatic test Pressure	Up to 40 kgf/cm ² G (568 PSIG)
Max. allowable Speed	Up to 3,600 min ⁻¹
Temperature	~150°C (~302°F)
Flanges	ANSI (other standards also available)
Nozzles Location	Bottom Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal
Materials	According to API 610 Material code

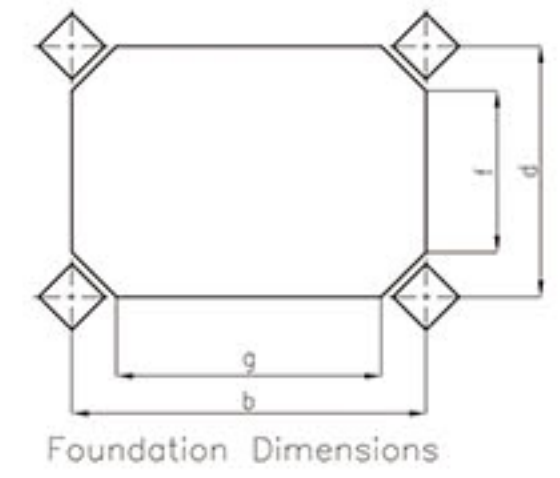
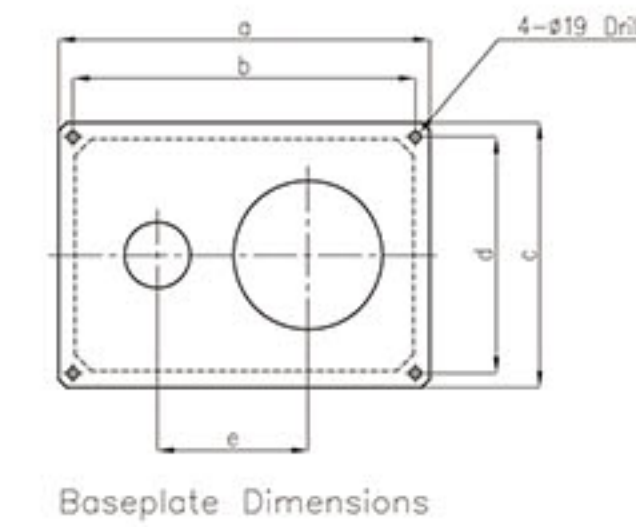
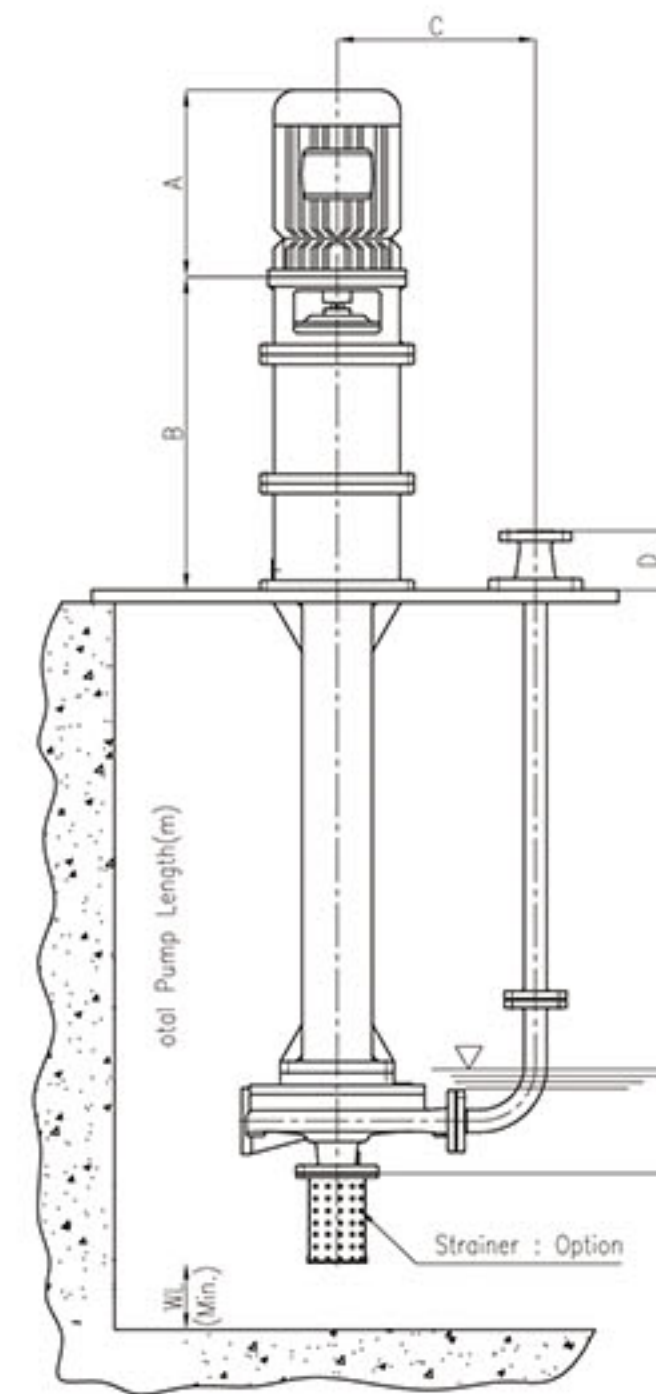
*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.

● VISBO Model.



CW-Hydro, Inc.

● Installation Dimension



FOUNDATION BOLTS	
HG	250
HJ	250
L	50
HK	150
Q-B	4-M16

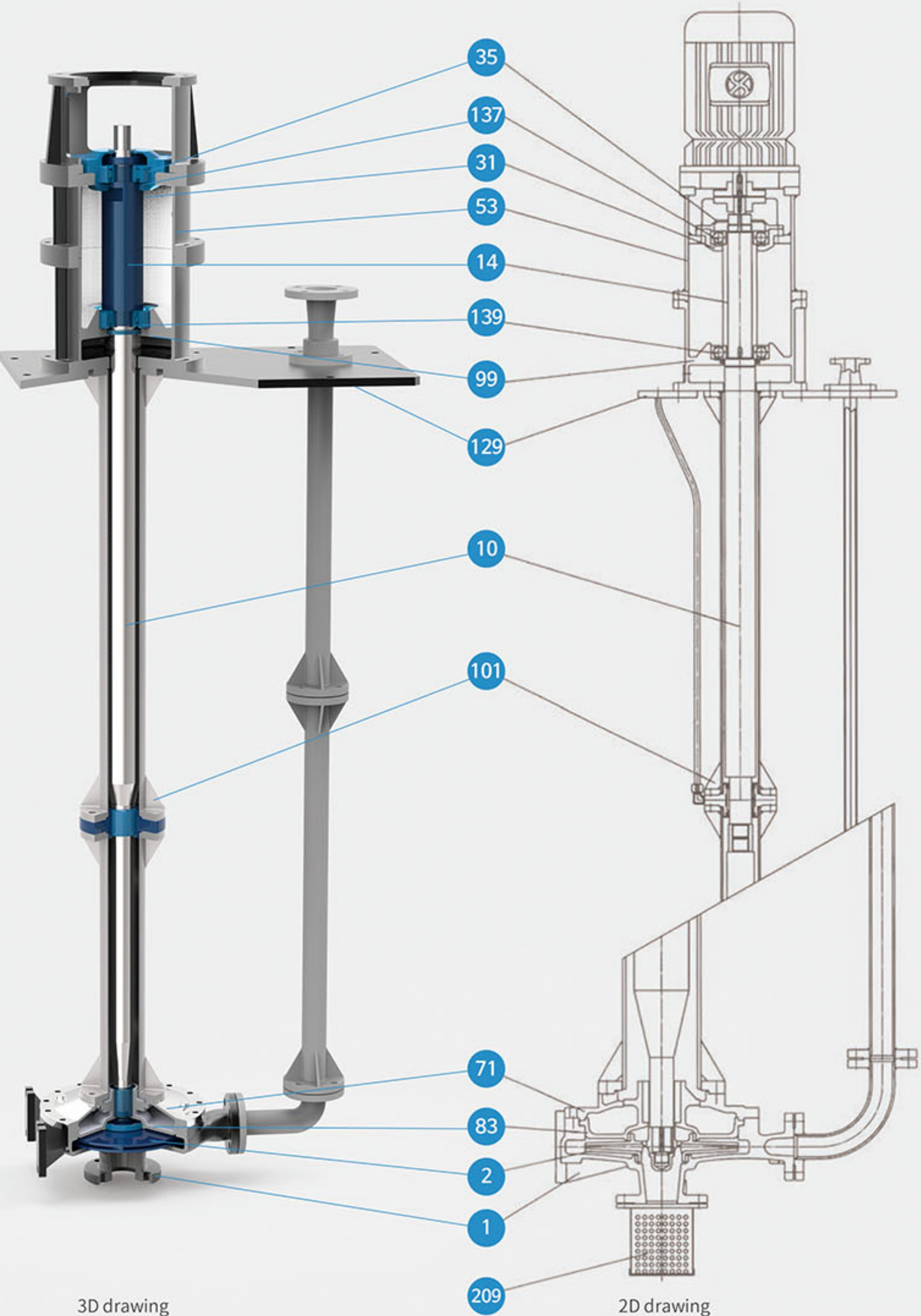
구분	Pump and Motor								Baseplate								Anchor Bolt		
	Frame	kW	H1	H2	WL	MF	J	A	B	C	D	E	F	G	H		B	H	V
3216	80	0.75	233	344	100	310	100	755	665	600	510	80	310	50	440		4-M16x200L	150	200
3220	90L	1.5	313	354	100	330	100	755	685	600	510	90	330	50	440		4-M16x200L	150	200
4020	90L	1.5	313	354	100	341	100	790	700	600	510	95	241	60	440		4-M16x200L	150	200
5020	112M	3.7	340	364	100	397	100	850	760	600	510	125	397	70	440		4-M16x200L	150	200
4025	112M	3.7	340	364	100	386	100	840	750	600	510	120	386	60	440		4-M16x200L	150	200
5025	132S	5.5	382	384	100	422	100	880	790	600	510	140	422	70	440		4-M16x200L	150	200
5031	132M	7.5	420	384	100	477	100	930	840	700	600	165	477	70	530		4-M16x200L	150	200
6520	132S	5.5	382	384	100	482	100	945	855	600	510	175	482	85	530		4-M16x200L	150	200
6525	160M	11	492	414	100	507	100	970	880	700	600	185	507	85	530		4-M16x200L	150	200
8025	180M	19	537	444	100	583	100	1050	950	700	600	225	583	95	530		4-M16x200L	150	200
8020	160M	11	492	414	100	553	100	1020	920	700	600	210	553	95	530		4-M16x200L	150	200
1020	160L	15	536	414	250	644	130	1140	1040	700	600	225	644	125	530		4-M16x200L	150	200
6531	160L	15	536	414	100	537	100	1000	980	700	600	200	537	85	530		4-M16x200L	150	200
1025	180L	22	575	444	250	644	130	1140	1040	700	600	235	644	125	530		4-M16x200L	150	200

참고: *. 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

CW-Hydro, Inc.

Model. VISB/VISBO

● Parts List and Materials



3D drawing

2D drawing

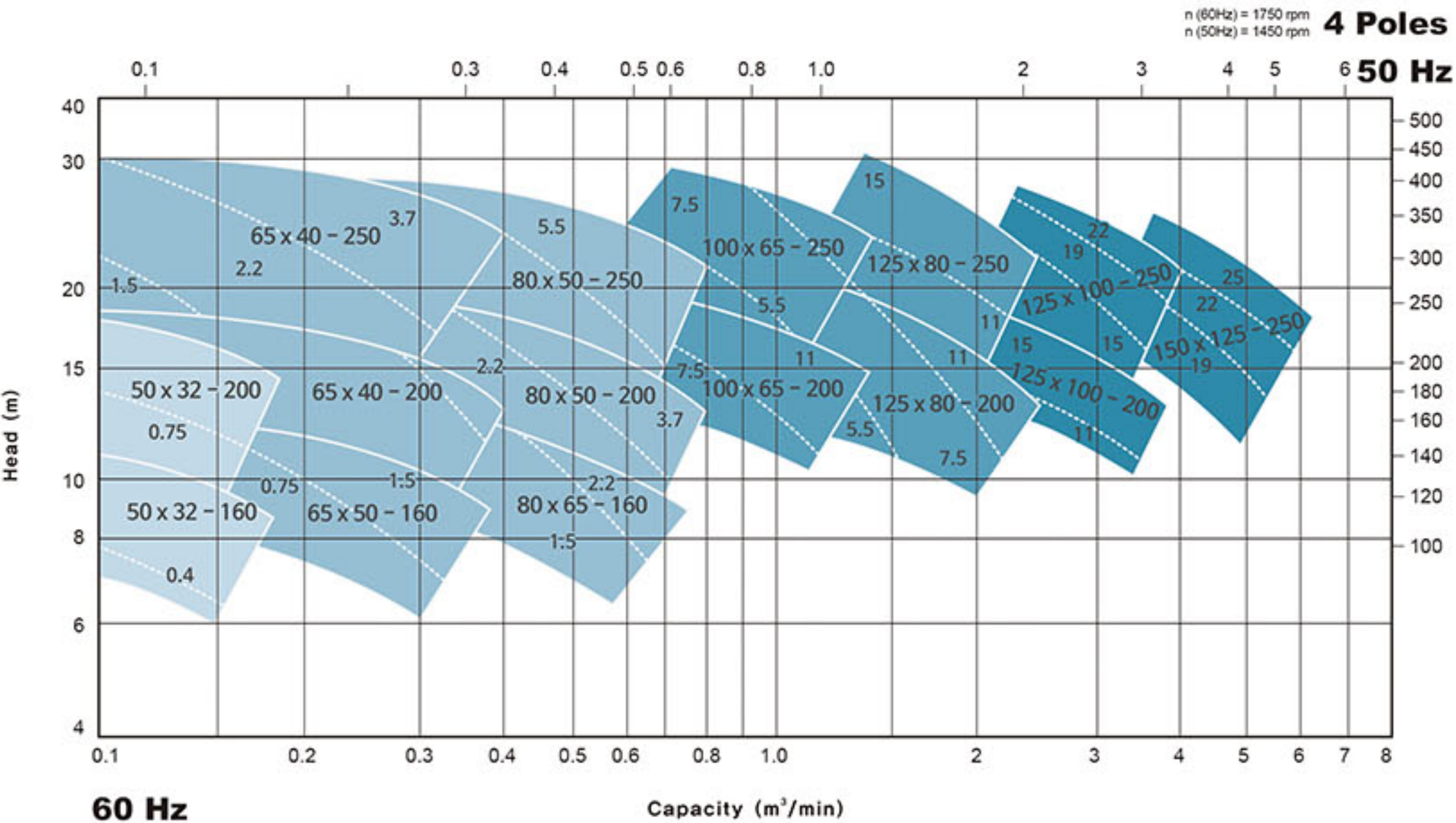
Model. VISB/VISBO

● Parts List

NO	Name of part	MATERIAL	
1	Casing	GC200	SSC13
2	Impeller	GC200	SSC13
10	Shaft	SM45C	STS304
14	Sleeve	GC200	SSC13
31	Bearing Housing	GC200	GC200
35	Bearing Cover	GC200	GC200
53	Motor Pedestal	GC200	GC200
71	Adapter	GC200	SSC13
83	Stuffing Box	GC200	SSC13
99	Bearing Housing	GC200	GC200
101	Column Pipe	SPPS38	STS304
129	Sole Plate	SS400	SS400
137	Upper Bearing	STEEL	STEEL
139	Lower Bearing	STEEL	STEEL
209	Strainer	SS400	STS304

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

● Selection Charts



참고: *. 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Vertical Multi-stage Can-Type

VCM

energy API CE



● Applications

- 파이프라인 부스터 Pipeline boosting
- 정제용 Refinery blending
- 암모니아 순환용 Ammonia transfer
- 응축수용 Condensate
- LNG 순환용 LNG transfer

● Feature

- ☑ 흡입, 토출구의 간단한 설치
In-line suction and discharge simplifies installation
- ☑ 흡입구의 유연한 호환
Optional suction in can for flexibility
- ☑ 필요흡입양정의 변화에 따라 최적의 효율
Allow efficient operation at any NPSHr. Available
- ☑ API standard 610 적용 (API Code: VS6)
API standard 610 (API Code: VS6)

● Ratings

Capacity	Up to 100 m ³ /min (26,417 US GPM)
Head	Up to 500 m (1,640 ft)
Discharge Pressure	Up to 60 kgf/cm ² G (853 PSIG)
Hydrostatic test Pressure	Up to 90 kgf/cm ² G (1,280 PSIG)
Max. allowable Speed	Up to 3,600 min ⁻¹
Temperature	~180°C (~356°F)
Flanges	ANSI (other standards also available)
Nozzles Location	Bottom Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal
Materials	According to API 610 Material code

*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.

● Material

BOWL	GCD450 / SCPH2 / SSC13
IMPELLER	SSC13 / SSC14
SHAFT	STS420 / SCM440

● Specification

구분 규격	Size	Capacity (m ³ / min)	Head (m)	Power (kW)	Revolution (rpm)
101~110	50×40	0.12	11.5~115	0.75~115	3500
201~208	50×40	0.25	18~144	2.2~15	3500
301~308	80×40	0.40	18~143	3.7~22	3500
401~408	80×50	0.60	26~208	5.5~37	3500
501~508	100×80	1.10	26~208	11~75	3500
601~609	150×100	2.0	30~180	15~90	3500
701~706	200×150	3.5	16~105	15~90	1750

참고: *, 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

● Construction



● Casing

- Vertically Suspended, 이중 케이싱 디퓨저 타입 펌프.
유압식으로 효율적인 케이싱 설계.
다년간의 경험을 바탕으로 펌프 마찰 손실을 최소화합니다.



● Impeller

- 말뚝형 임펠러, 케이싱 및 임펠러의 교체가 용이합니다.



● Bearing

- 스테리스트 베어링은 '구형 스테리스트 베어링'입니다.
축 방향 스테리스트 하중을 견딜 수 있습니다.
베어링은 오일 윤활 처리됩니다.



● Mechanical Seal

- Cartridge type, 모든 Mechanical Seal Maker의
제품을 이용할 수 있습니다.

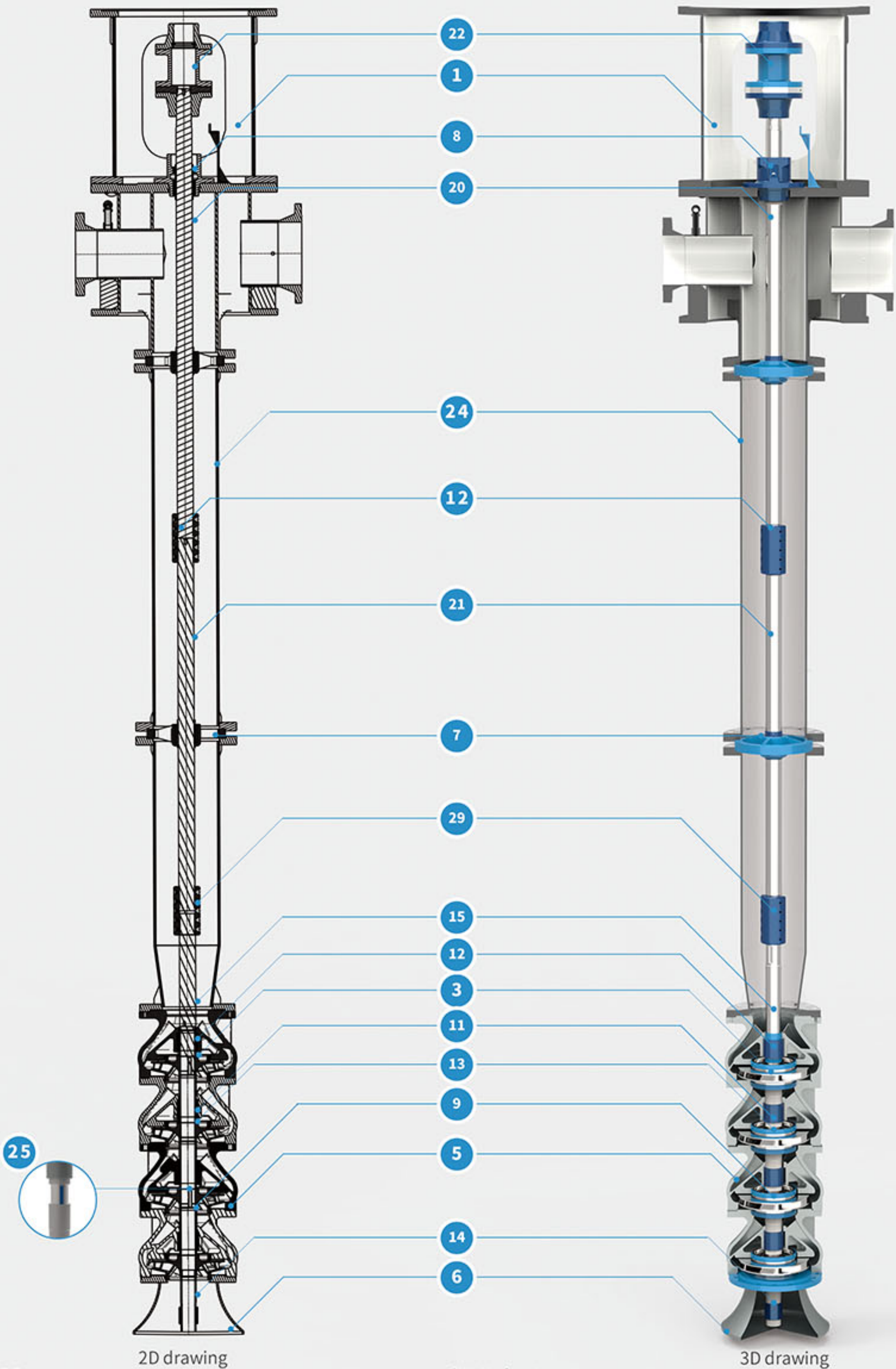


● Intermediate Bearing

- 케이싱 내에 들어간 베어링의 재료는
취급하는 액체에 따라 결정됩니다.
베어링 수는 펌프 임계 속도와 샤프트 길이에 의해 결정됩니다.

Model. VCM

● Parts List and Materials



2D drawing

3D drawing

Model. VCM

● Parts List

No	Name of part	Material	No	Name of part	Material
1	Discharge Head	SPPS38	16	Sleeve	STS304
2	Suction Can	SPPS38	18	Packing Gland	BC6
3	Impeller	SSC1	19	Packing	TEFLON
4	Inducer	SSC1	20	Head Shaft	STS304
5	Bowl	SCPH2	21	Pump Shaft	STS304
6	Suction Cover	SCPH2	22	Coupling	SM45C
7	Bearing Retainer	SCPH2	23	Packing Sleeve	STS304
8	Stuffing Box	SCPH2	24	Column Pipe	SPPS38
9	Casing Ring	STS420J2	25	Impeller & Inducer Key	STS304
10	Impeller Ring	STS420J2	26	O-Ring	NBR
11	Bearing Bush	CARBON	27	O-Ring	NBR
12	Bearing Bush	CARBON	28	Gasket	NON ASBESTOR
13	Sleeve	STS304	29	Shaft Coupling	STS304
14	Sleeve	STS304	30	Bearing Bush	CARBON
15	Discharge Casing	SCPH2			

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

● Photo Resources



Vertical Double Casing Volute Pumps

VCMD

energy API CE

Applications

- 석유 정제용 Petroleum refinery
- 석유 화학 산업 Petrochemical industry
- 일반 산업용 General industrial
- 산업 배수 장치 Industrial drainage
- 기타 화학 공업 Other chemical industries

Feature

- ☑️ 고효율 / 견고하고 견고한 구조
High efficiency / Heavy and sturdy construction
- ☑️ 완전한 표준화를 통한 광범위한 적용
Completely standardization for wide application
- ☑️ 최대의 부품 상호 교환
Maximum parts interchangeability
- ☑️ API standard 610 적용 (API Code: VS7)
API standard 610 (API Code: VS7)

Ratings

Capacity	Up to 100m ³ /min (26,417 US GPM)
Head	Up to 500m (1,640ft)
Discharge Pressure	Up to 60 kgf/cm ² (853 PSIG)
Hydrostatic Pressure	Up to 90 kgf/cm ² (1,280 PSIG)
Max. allowable Speed	Up to 3600min ⁻¹
Temperature	~180°C (356°F)
Flanges	ANSI, other standards also available
Location	Bottom Suction : Top Discharge
Seals	Conventional Packing or Mechanical Seal
Materials	According to API 610 Material code

*API 610 최신 버전은 요청에 따라 적용할 수 있습니다.

VCMD Model.



• VCM



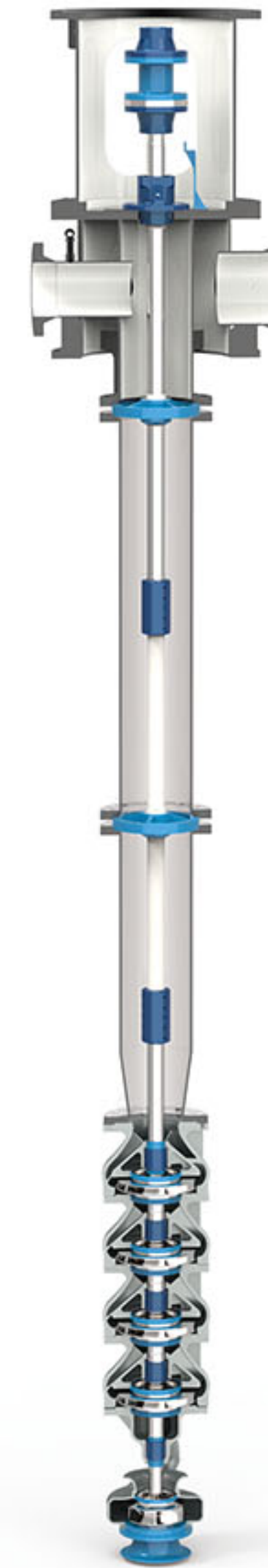
• VCMD

• Suction Casing

하부 흡입 케이싱은 이중 케이싱으로 구성됩니다.



Design drawing



• Casing

-Vertically Suspended, 이중 케이싱 디퓨저 타입 펌프. 유압식으로 효율적인 케이싱 설계. 다년간의 경험을 바탕으로 펌프 마찰 손실을 최소화합니다.

• Impeller

- 밀폐형 임펠러, 케이싱 및 임펠러의 교체가 용이합니다.



• Bearing

- 슬러스트 베어링은 '구형 슬러스트 베어링'입니다. 축 방향 슬러스트 하중을 견딜 수 있습니다. 베어링은 오일 윤활 처리됩니다.

• Mechanical Seal

- Cartridge type, 모든 Mechanical Seal Maker의 제품을 이용할 수 있습니다.



• Intermediate Bearing

- 케이싱 내에 들어간 베어링의 재료는 취급하는 액체에 따라 결정됩니다. 베어링 수는 펌프 임계 속도와 샤프트 길이에 의해 결정됩니다.

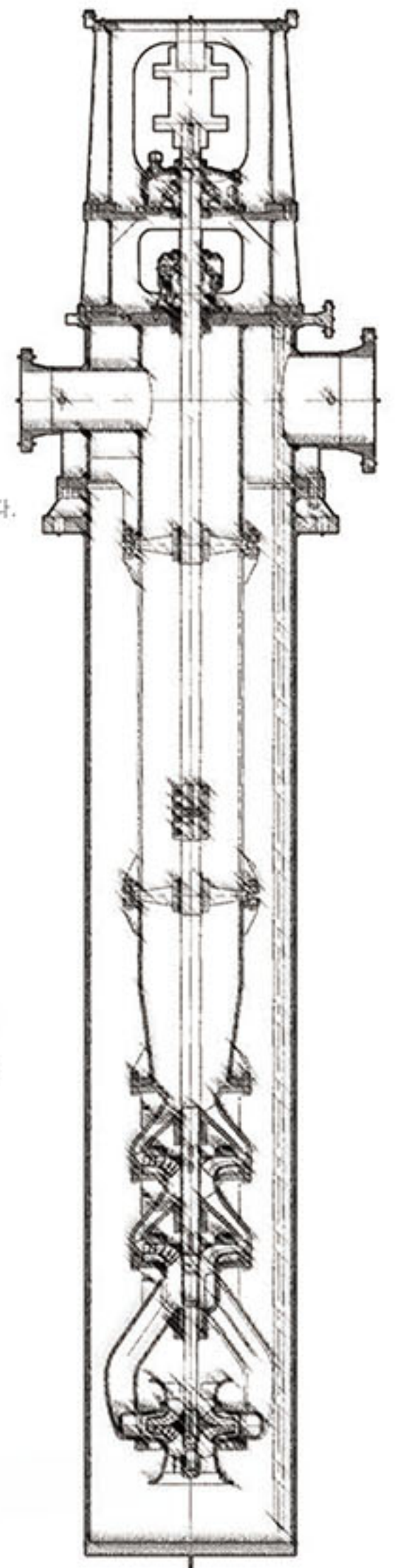


Photo Resources



-Service : CONDENSATE PUMP
-Capacity : 420 m³/min
-Head : 310m
-Power : 600KW

Condensate Pumps
for Marafiq Yanbu Hydroelectric power plant

Vertical Cantilever Bottom Suction Pumps

WNOP



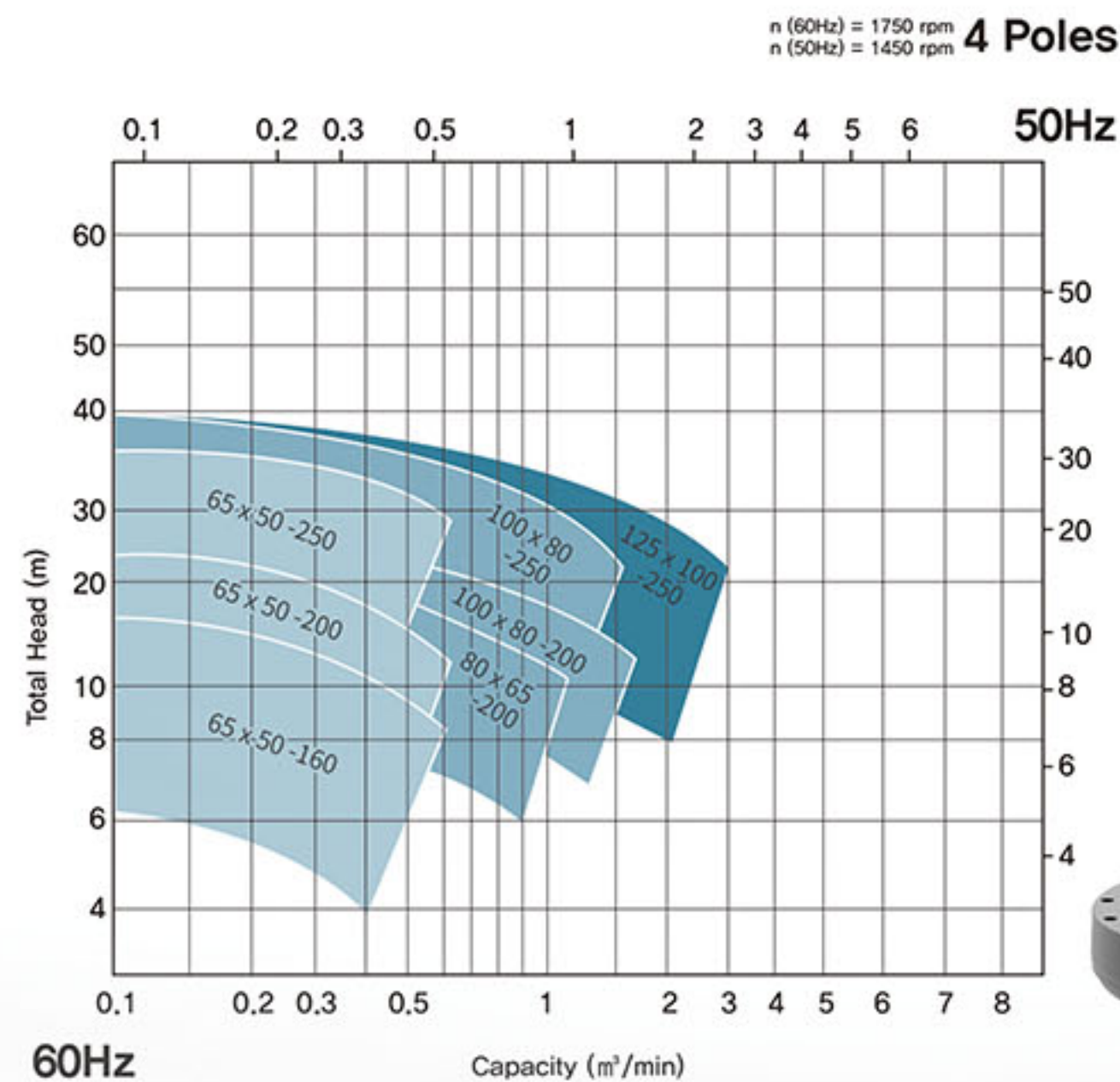
● Applications

- 화학공업 Chemical industry
- 식품산업용 Food industry
- 제지공업용 Paper industry
- 산업폐수용 Industries waste water

● Ratings

Capacity	UP to 3m ³ /min (792 US GPM)
Head	UP to 40m (131ft)
Pit Depths	to 1.2m (3.9ft)
	Depths to 2.8 meter (9.1ft) with tailpipe

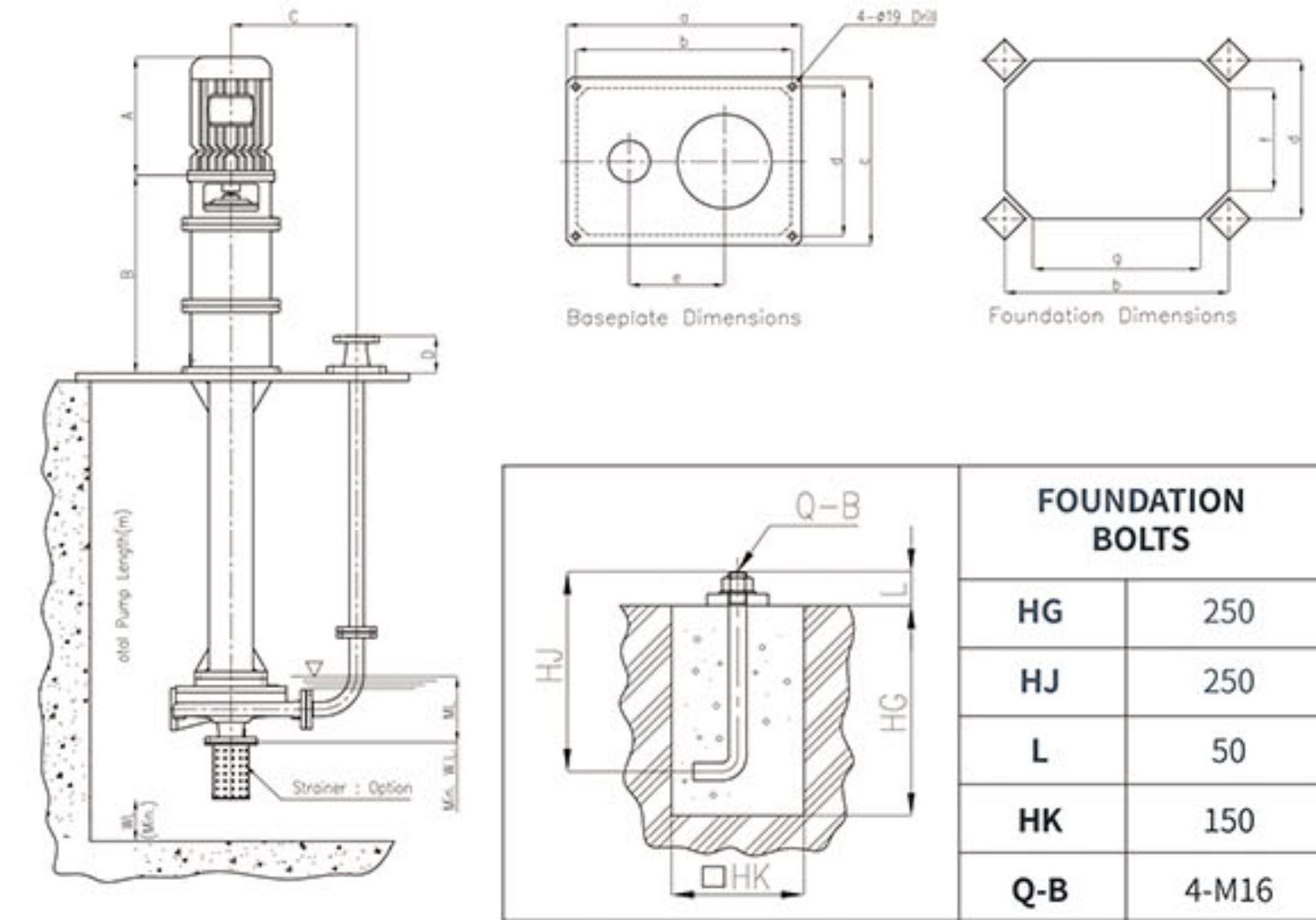
● Selection Charts



참고: *, 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

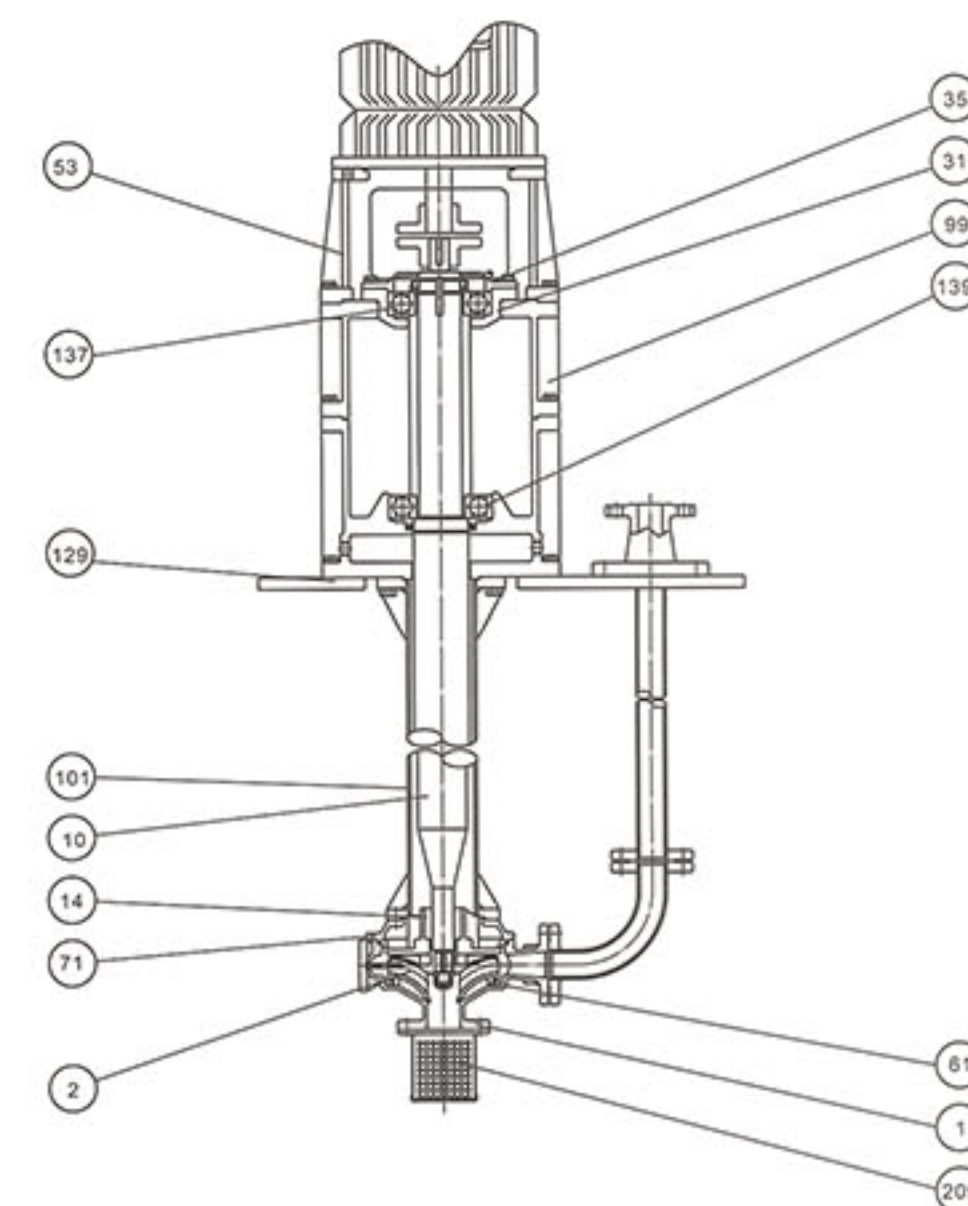
CW-Hydro, Inc.

● Installation Dimension



구분	Pump and Motor							Baseplate								Anchor Bolt		
규격	Frame	kW	H1	H2	WL	MF	J	A	B	C	D	E	F	G	H	B	H	V
5016	90L	1.5	313	354	100	357	100	820	730	600	510	110	357	70	440	4-M16×200L	150	200
5020	112M	3.7	340	364	100	397	100	860	770	600	510	130	397	70	440	4-M16×200L	150	200
6520	132S	5.5	382	384	100	457	100	920	830	600	510	160	457	85	440	4-M16×200L	150	200
8020	132M	7.5	420	384	100	526	100	900	900	600	510	195	526	95	440	4-M16×200L	150	200
1080	180M	19	537	444	130	644	130	1040	1040	600	510	255	644	125	440	4-M16×200L	150	200

● Parts List and Materials



No	Name of part	Material	
1	Casing	GCD450	SSC13
2	Impeller	SSC13	SSC13
10	Shaft	SM45C	STS304
14	Sleeve	GC200	GC200
31	Bearing Housing	GC200	GC200
35	Bearing Cover	GC200	GC200
53	Motor Pedestal	GC200	GC200
61	Front Plate	SSC13	SSC13
71	Adapter	GC200	GC200
99	Bearing Housing	GC200	GC200
101	Column Pipe	SPPS38	STS304
129	Sole Plate	SS400	SS400
137	Upper Bearing	STEEL	STEEL
139	Lower Bearing	STEEL	STEEL
209	Strainer	SS400	SS400

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

CW-Hydro, Inc.

Vertical Pump & Process Pumps

WVP



● Applications

- 산업공정용 Industrial process
- 배수용 Industrial sump drainage

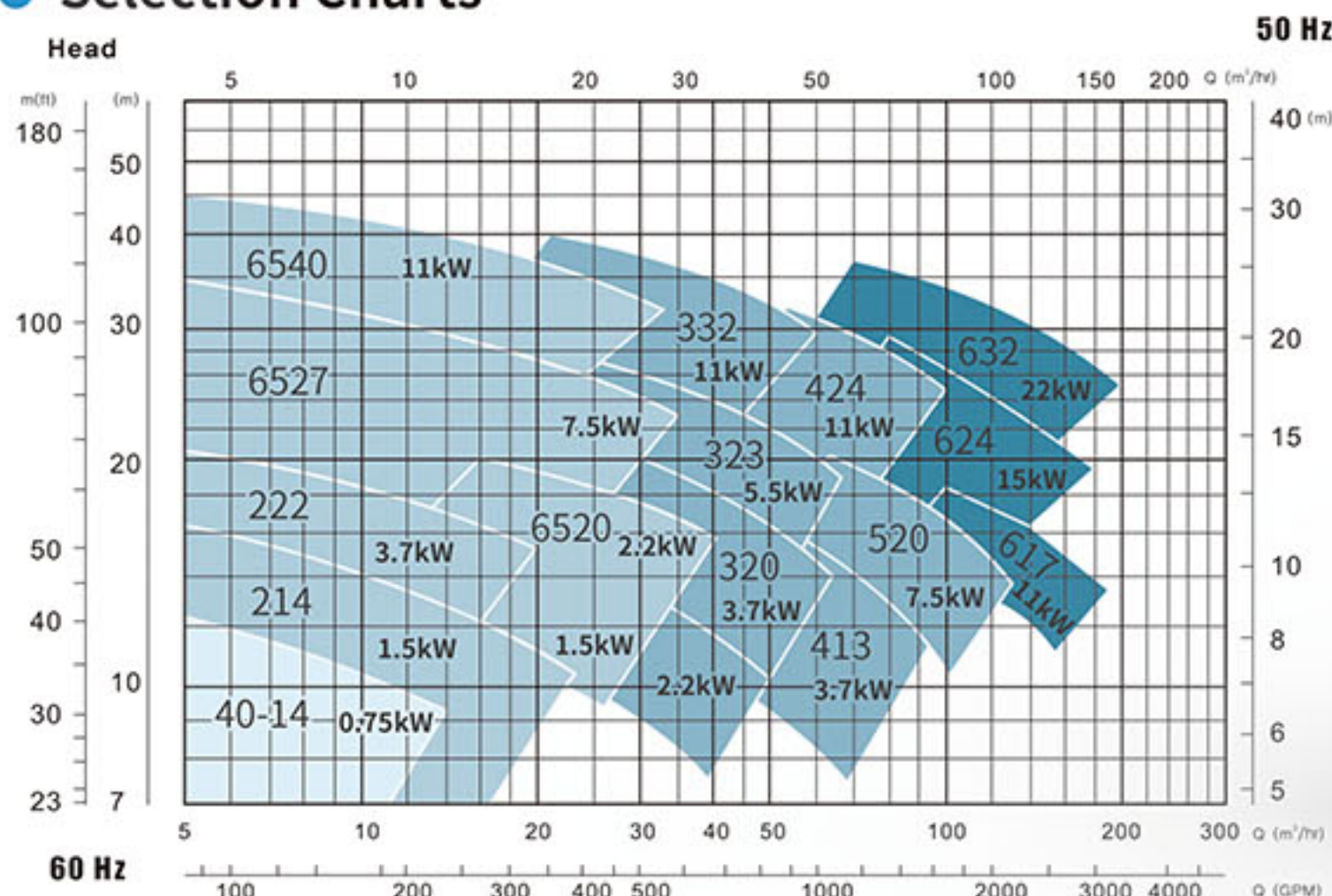
● Feature

- ☑ 물에 잠기는 펌프타입
The pump itself is soaked in the water
- ☑ 풋 밸브가 필요없고 유지보수가 쉽고 고장이 없음
The foot valve is not necessary and maintenance is easy and trouble free
- ☑ 세미 오픈형 임펠러
The impeller is semi open type
- ☑ 패키징이 필요없어 주위가 깨끗함
The gland packing is not required and dirty water does not flow around the bearing
- ☑ 자동 배수에 적합
Suitable for automatic drainage

● Ratings

Capacity	1.7 to 3.5 m ³ /min (449 to 924 US GPM)
Head	45m (147ft)
Temperature	~115°C (239°F)

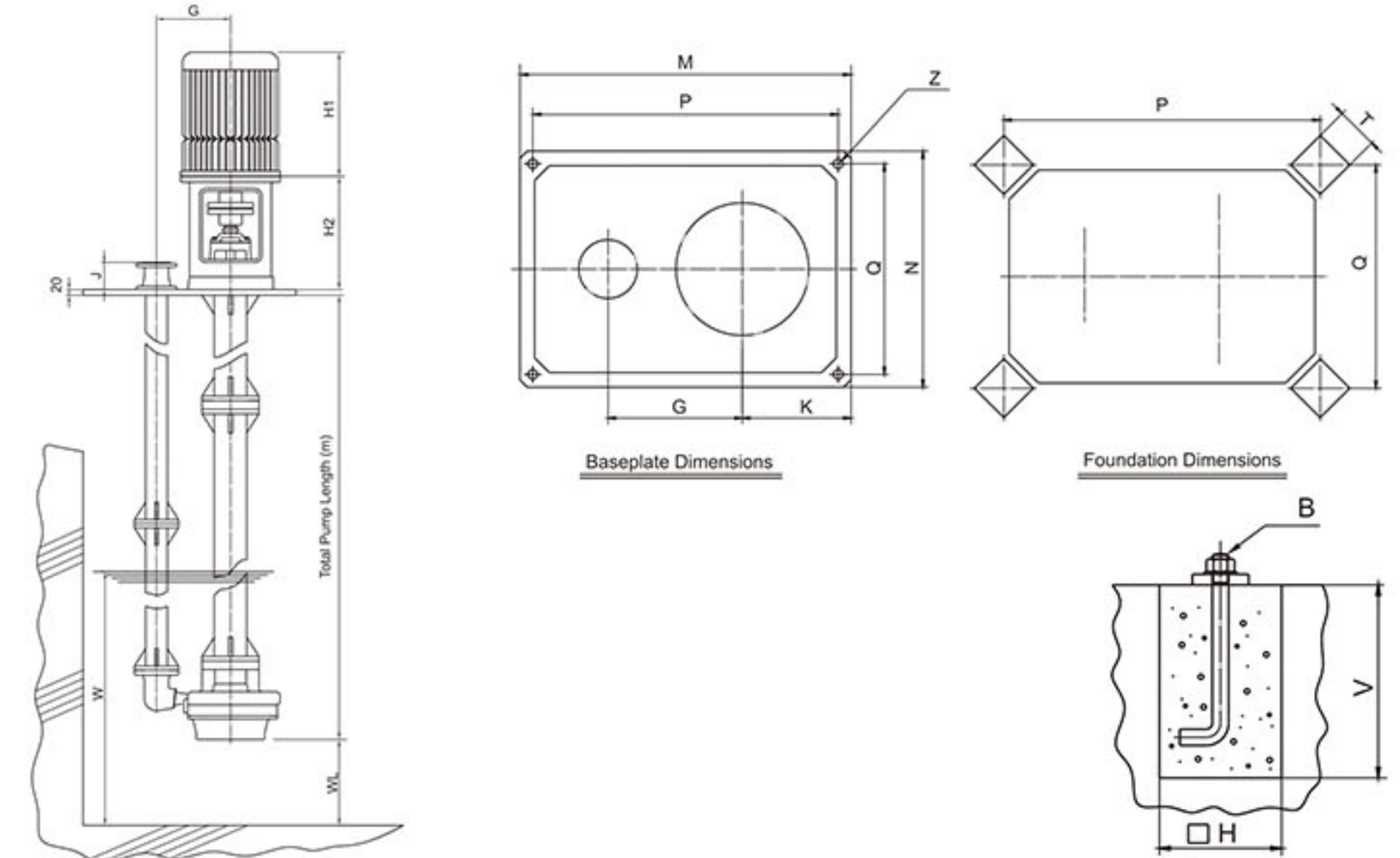
● Selection Charts



참고: *. 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다. Capacity

CW-Hydro, Inc.

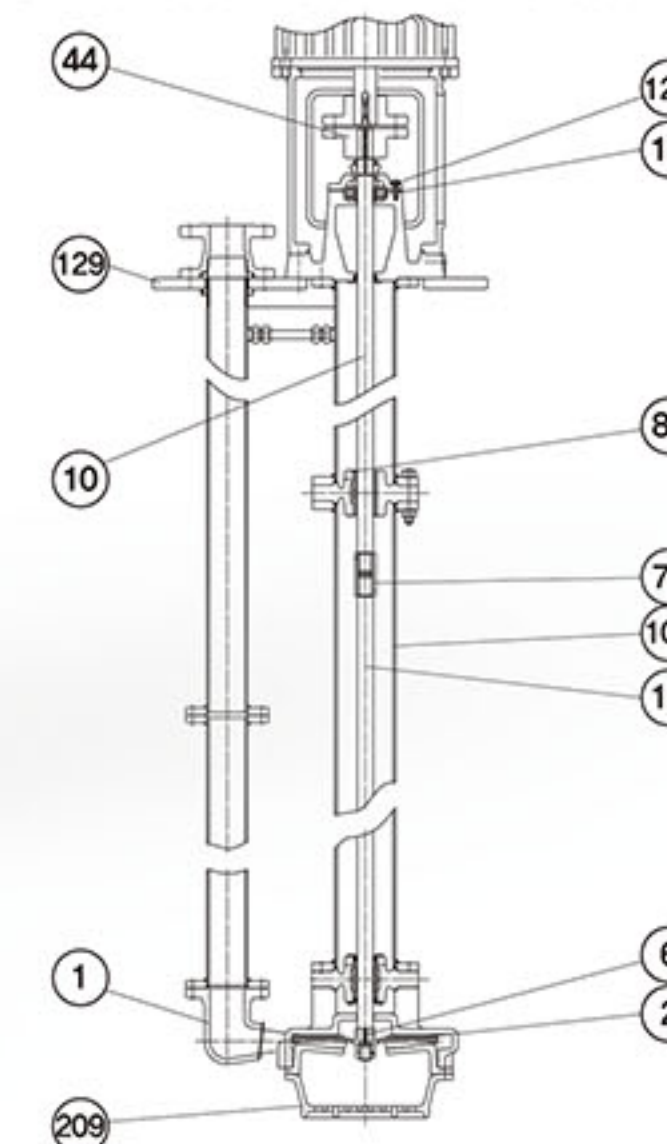
● Installation Dimension



구분 규격	Pump and Motor							Baseplate							Anchor Bolt			
	Frame	kW	H1	H2	J	W	WL	G	K	M	N	P	Q	T	Z	B	H	V
214	112S	2.2	315	345	100	370	100	260	230	630	480	560	410	130	4-Ø15D	4-M12×160L	120	160
222	112M	3.7	340	355	100	370	100	260	230	630	480	560	410	130	4-Ø15D	4-M12×160L	120	160
6515	100L	2.2	315	345	100	370	100	260	230	630	480	560	410	130	4-Ø15D	4-M12×160L	120	160
6527	132S	5.5	382	375	100	400	100	260	230	630	480	560	410	130	4-Ø15D	4-M12×160L	120	160
6532	132M	7.5	420	375	100	400	100	260	230	630	480	560	410	130	4-Ø15D	4-M12×160L	120	160
413	132M	7.5	420	417	130	500	250	330	300	810	620	710	520	165	4-Ø19D	4-M16×200L	150	200
424	160M	11	492	447	130	500	250	330	300	810	620	710	520	165	4-Ø19D	4-M16×200L	150	200
520	160M	11	492	447	130	600	300	360	305	860	600	760	500	165	4-Ø19D	4-M16×200L	150	200
526	160L	15	536	447	130	600	300	360	305	860	600	760	500	165	4-Ø19D	4-M16×200L	150	200
617	160M	15	536	447	130	620	300	460	325	1000	680	900	580	200	4-Ø24D	4-M20×315L	180	315
632	160M	22	575	447	130	650	300	490	400	1100	790	1000	690	200	4-Ø24D	4-M20×315L	180	315

참고: *. 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

● Parts List and Materials



No	Name of part	Material		
1	Casing	GC200	SSC13	SSC14
2	Impeller	BC6	SSC13	SSC14
6	Pump Shaft	SM45C	STS304	STS316
9	Suction Cover	GC200	SSC13	SSC14
10	Head Shaft	SM45C	STS304	STS316
12	Ling Shaft	SM45C	STS304	STS316
18	Bearing	STEEL	STEEL	STEEL
44	Coupling	GC200	GC200	GC200
53	Motor Pedestal	GC200	GC200	GC200
70	Line Shaft Coupling	SM45C	STS304	STS316
89	Oil Seal	NBR	NBR	NBR
101	Column Pipe	SPP	STS304	STS316
123	Bearing Cover	GC200	GC200	GC200
129	Base plate	SS400	SS400	SS400
209	Strainer	GC200	SSC13	SSC14

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

CW-Hydro, Inc.

Self Priming Pumps

SP



● Applications

- 프로세스용 Process
- 배수용 Sump drainage
- 화학용 Chemical industry
- 기타공업용 Other Various industries

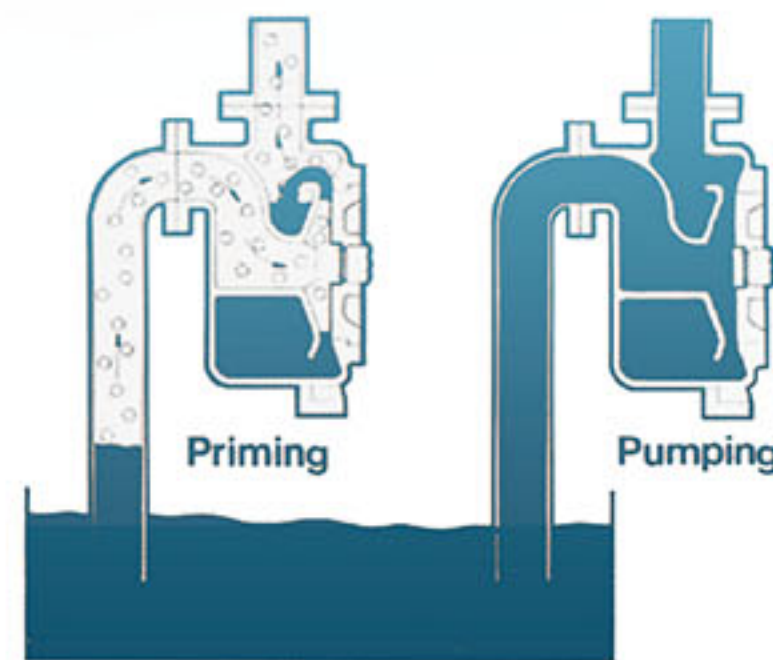
● Feature

- ☑ 광범위한 적용을 위해 완전한 표준화
Completely standardization for wide application
- ☑ 발지지 및 백 풀 아웃 디자인
Foot support and back pull-out design
- ☑ 최대의 효율
Good efficiency
- ☑ 신뢰성 높고 견고한 구조
Heavy and sturdy construction

● Ratings

Capacity	Up to 6m ³ /min (1,585 US GPM)
Head	Up to 50m (164ft)
Discharge Pressure	Up to 10kgf/cm ² (142 PSIG)
Allowable Suction Pressure	Up to 5 kgf/cm ² (71 PSIG)
Revolution 60Hz (50Hz)	1750 or 3550 min ⁻¹ (1450 or 2950min ⁻¹)
Rotation	Clockwise viewed from coupling end
Temperature	-50°C~177°C (-58°F~350.6°F)
Nozzle Rating	Steel : ANSI CLASS 150, Iron : ANSI CLASS 125
Nozzle Facing	Steel : RF, Iron : FF
Nozzle Location	End Suction : Top Discharge
Impeller Type	OPEN
Seals	Conventional Packing or Mechanical Seal

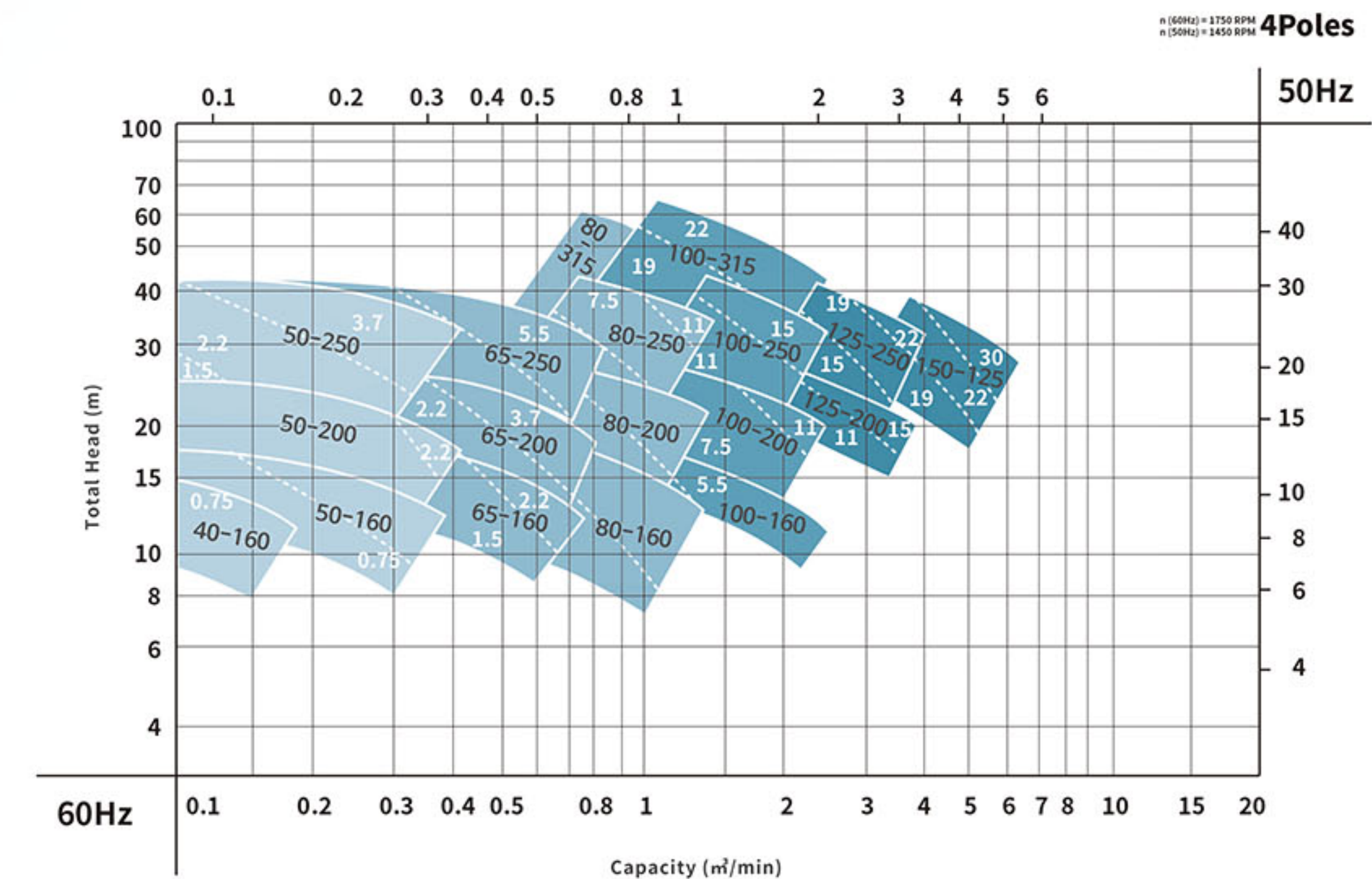
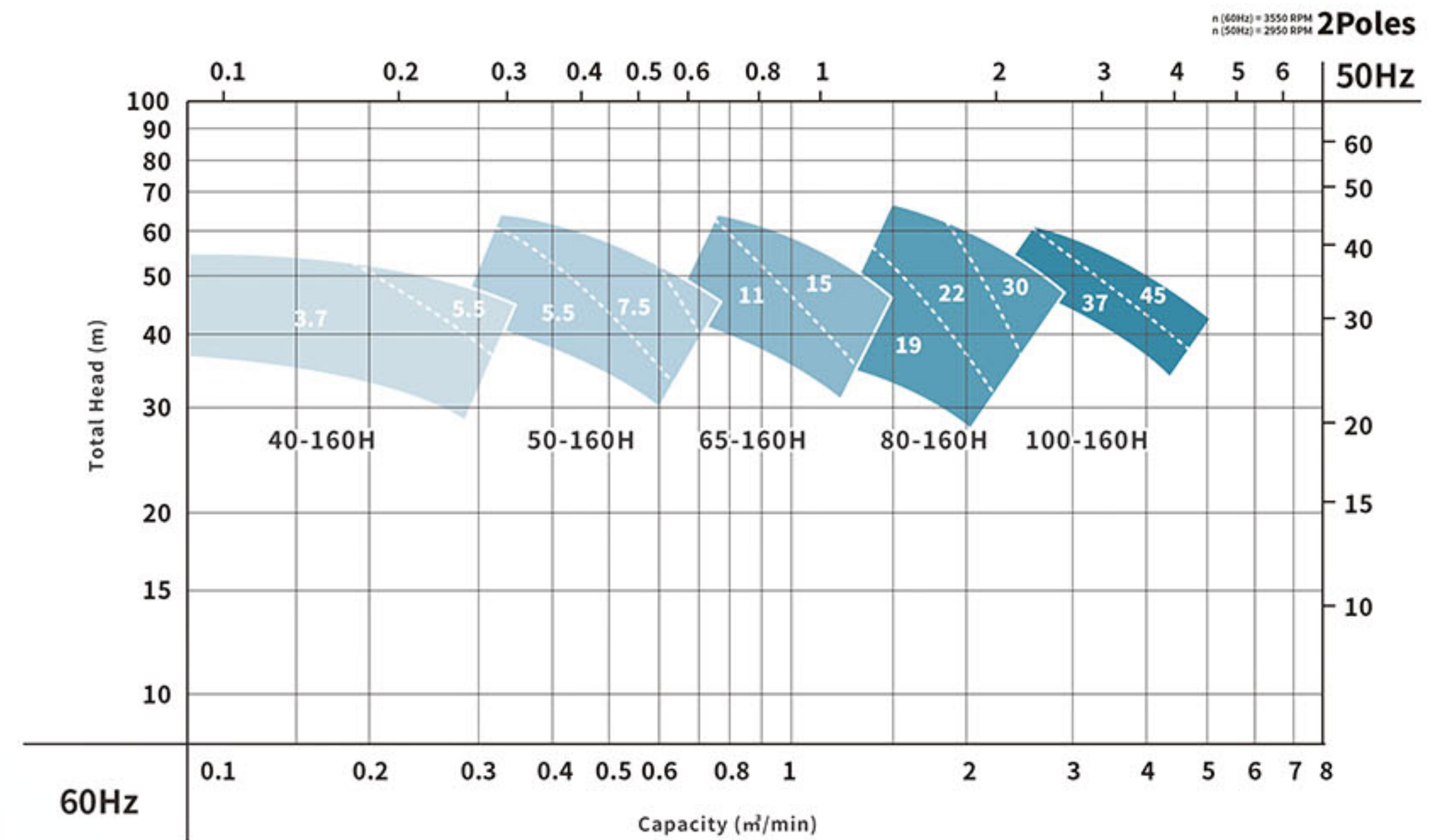
● Reliable Self-Priming Operation



☑ 케이싱 내 프라임링과 공기 분리 구성

트윈 볼 루트 디자인은 케이싱 내의 액체의 초기 프라임링 충전으로 만 흡입을 배출합니다. 프라임링주기 동안 하부 볼 루트는 흡입 작용을하고 상부 볼 루트는 액체를 배출하고 분리 챔버로 공기를 동반합니다. 공기는 펌프 배출을 통해 분리되고 배출되며 액체는 더 낮은 볼 루트로 재순환됩니다. 흡입에서 공기가 완전히 소모되고 액체가 임펠러를 채우면 펌프가 작동하지 않고 토출 기능을합니다. 케이싱은 액체가 배출원으로 다시 배출되거나 배출 및 흡입으로 공급 될 수있는 경우에도 항상 재 가동을 위한 적절한 양의 액체가 펌프에 유지되도록 설계되었습니다.

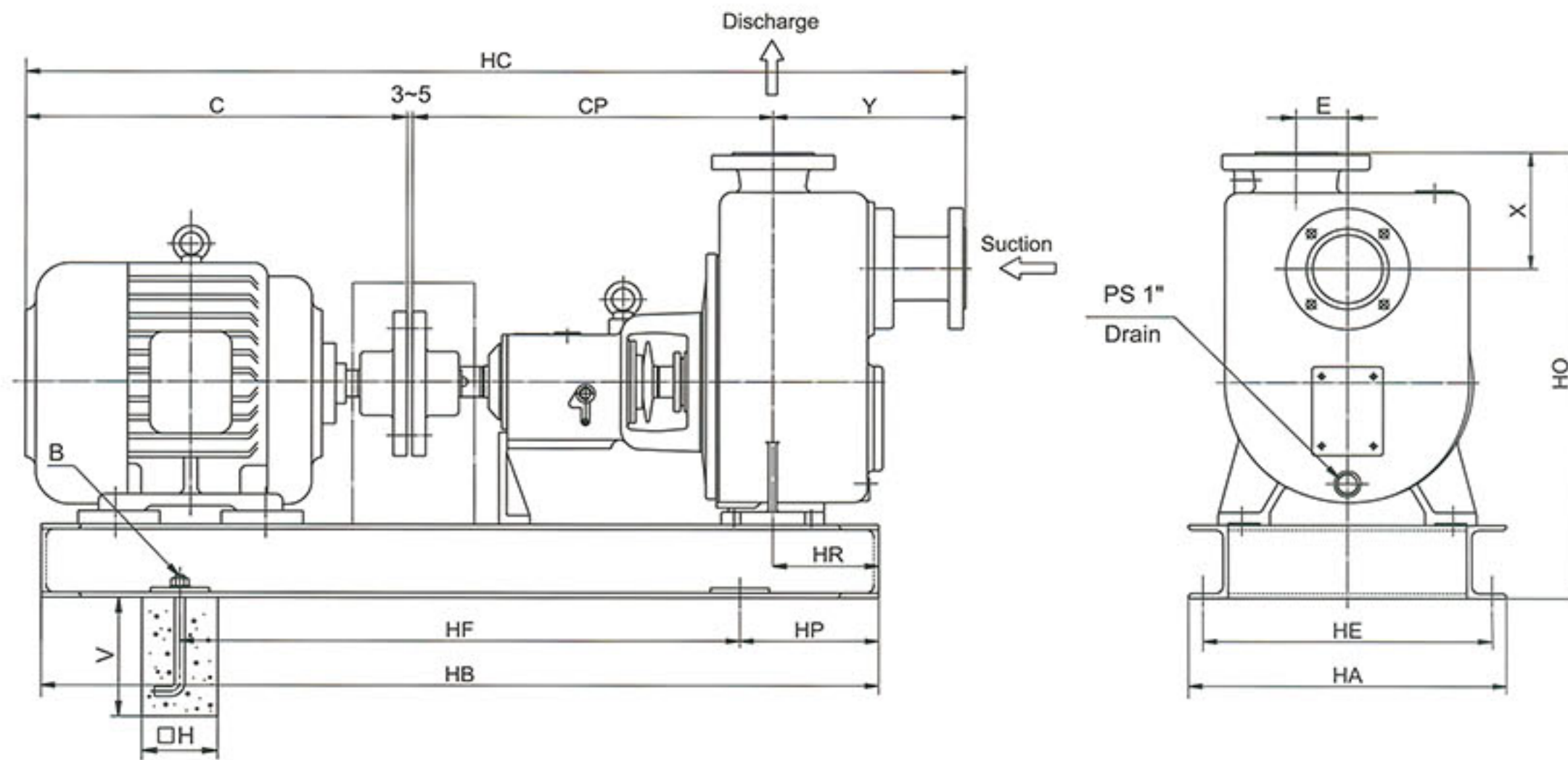
● Selection Charts



참고: *. 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Model. SP

● Installation Dimension



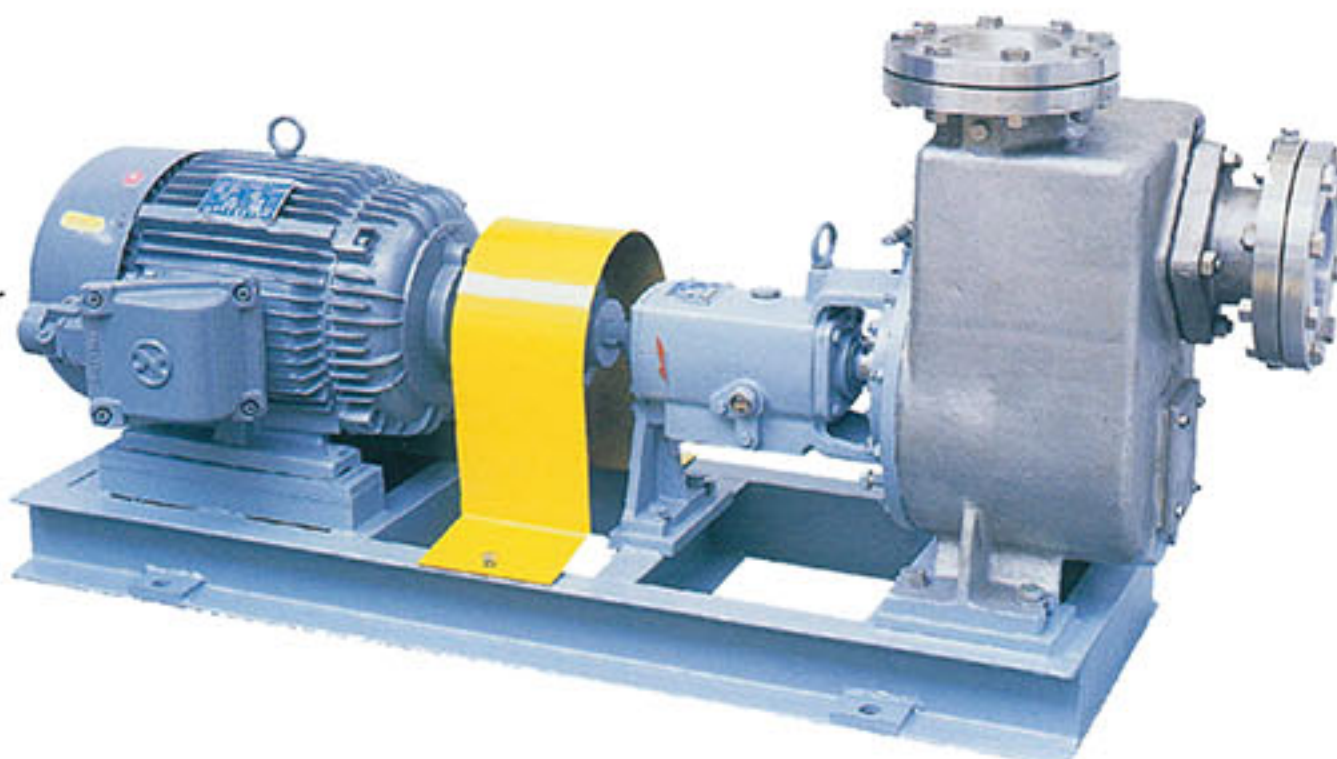
구분 규격	Pump and Motor										Baseplate							Anchor Bolt		
	Suc	Dis	Frame	kW	HC	C	CP	Y	E	X	HR	HF	HP	HB	HE	HA	HO	B	H	V
50-200	50	50	112S	2.2	1121	356	510	250	57	160	110	590	155	900	290	320	540	4-M16x250L	150	250
50-250	50	50	132M	7.5	1222	482	510	225	100	155	95	660	170	1000	350	380	585	4-M16x250L	150	250
65-200	65	65	112M	3.7	1147	382	510	250	57	160	110	630	160	950	290	320	540	4-M16x250L	150	250
80-315	80	80	160L	15	1472	593	560	270	80	180	110	830	210	1250	390	430	705	4-M16x250L	150	250
100-250	100	100	112M	3.7	1172	382	515	270	80	175	110	630	160	950	400	430	640	4-M16x250L	150	250
100-315	100	100	160L	15	1472	593	560	270	80	180	110	830	210	1250	390	430	705	4-M16x250L	150	250
125-250	125	125	180L	22	1520	685	565	265	75	195	110	830	210	1250	390	430	715	4-M16x250L	150	250

참고: *, 단위: mm / 이 카탈로그의 내용은 예고없이 변경 될 수 있습니다.

● Photo Resources

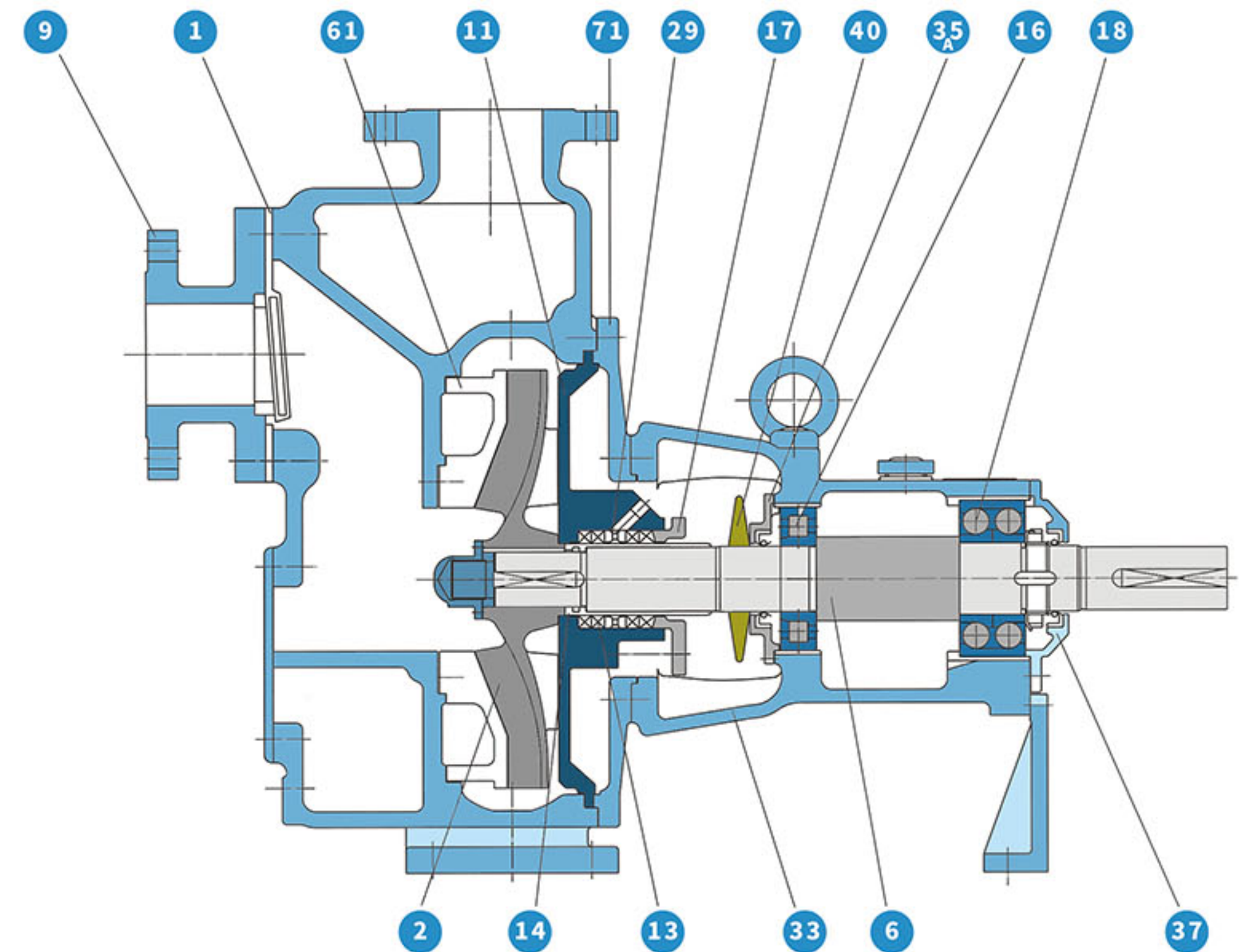
Self Priming Pumps
for Water purification center

- Service : Portable drainage pump
- Capacity : 180 m³/min
- Head : 15m
- Power : 22KW



Model. SP

● Parts List and Materials



No	Name of part	Material		
1	Casing	SSC13	SSC14	GC200
2	Impeller	SSC13	SSC14	SSC13
6	Shaft	STS304	STS316	SM45C
7	Wearing Ring	SSC13	SSC14	GC200
11	Stuffing Box Cover	SSC13	SSC14	GC200
13	Packing	TEFLON	TEFLON	TEFLON
14	Packing Sleeve	STS304	STS316	STS304
16	Inboard Bearing	STEEL	STEEL	STEEL
17	Packing Gland	SSC13	SSC14	GC200
18	Outboard Bearing	STEEL	STEEL	STEEL
29	Lantern Ring	SSC13	SSC14	TEFLON
33	Frame	GC200	GC200	GC200
35A	Inboard Bearing Cover	GC200	GC200	GC200
37	Outboard Bearing Cover	GC200	GC200	GC200
40	Deflector	NBR	NBR	NBR
61	Front Plate	SSC13	SSC14	SSC13
71	Adapter	GC200	GC200	GC200

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

ANSI Self Priming Pumps

SSP



● Applications

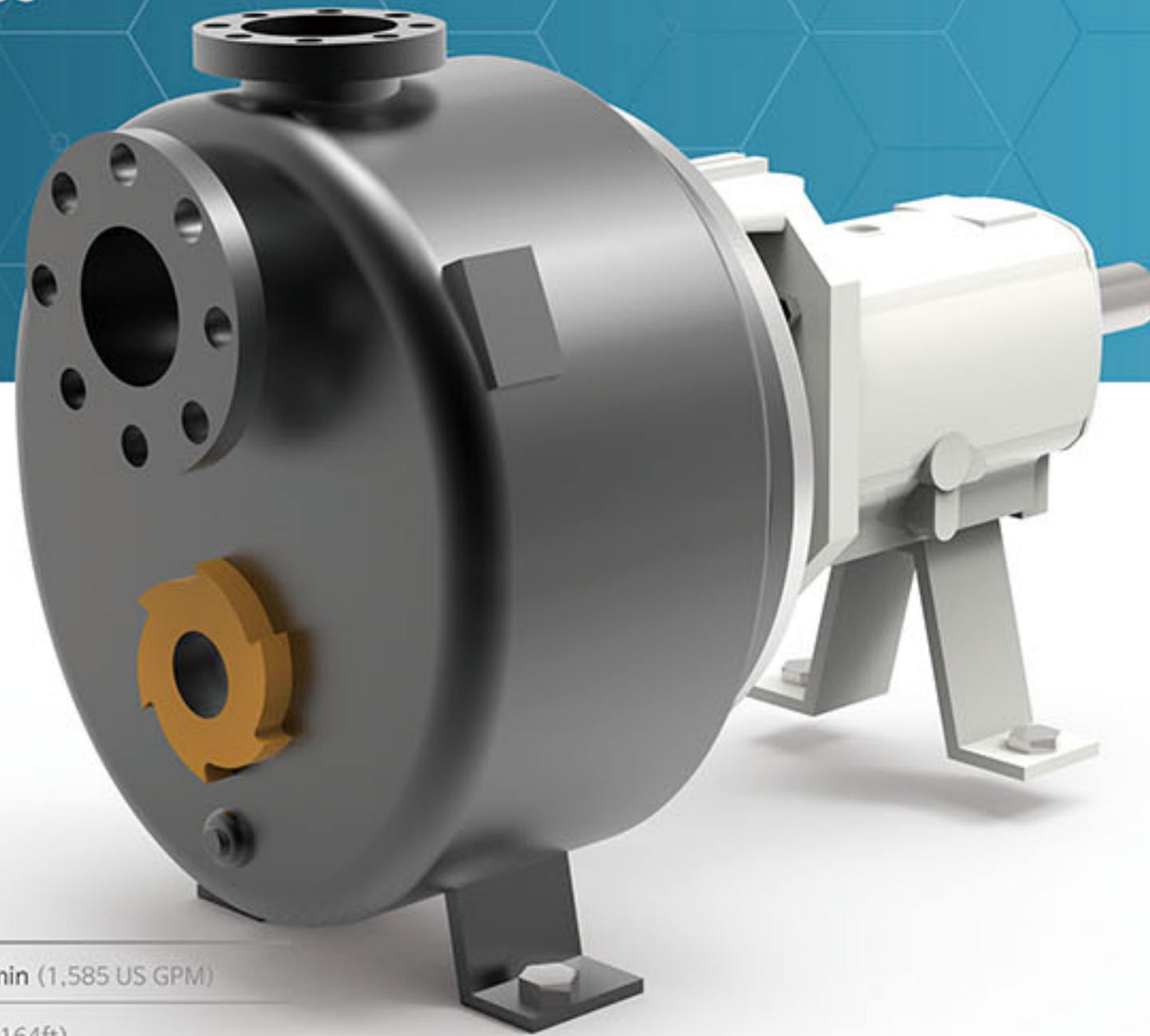
- 프로세스용 Process
- 배수용 Sump drainage
- 화학용 Chemical industry
- 기타공업용 Other Various industries

● Ratings

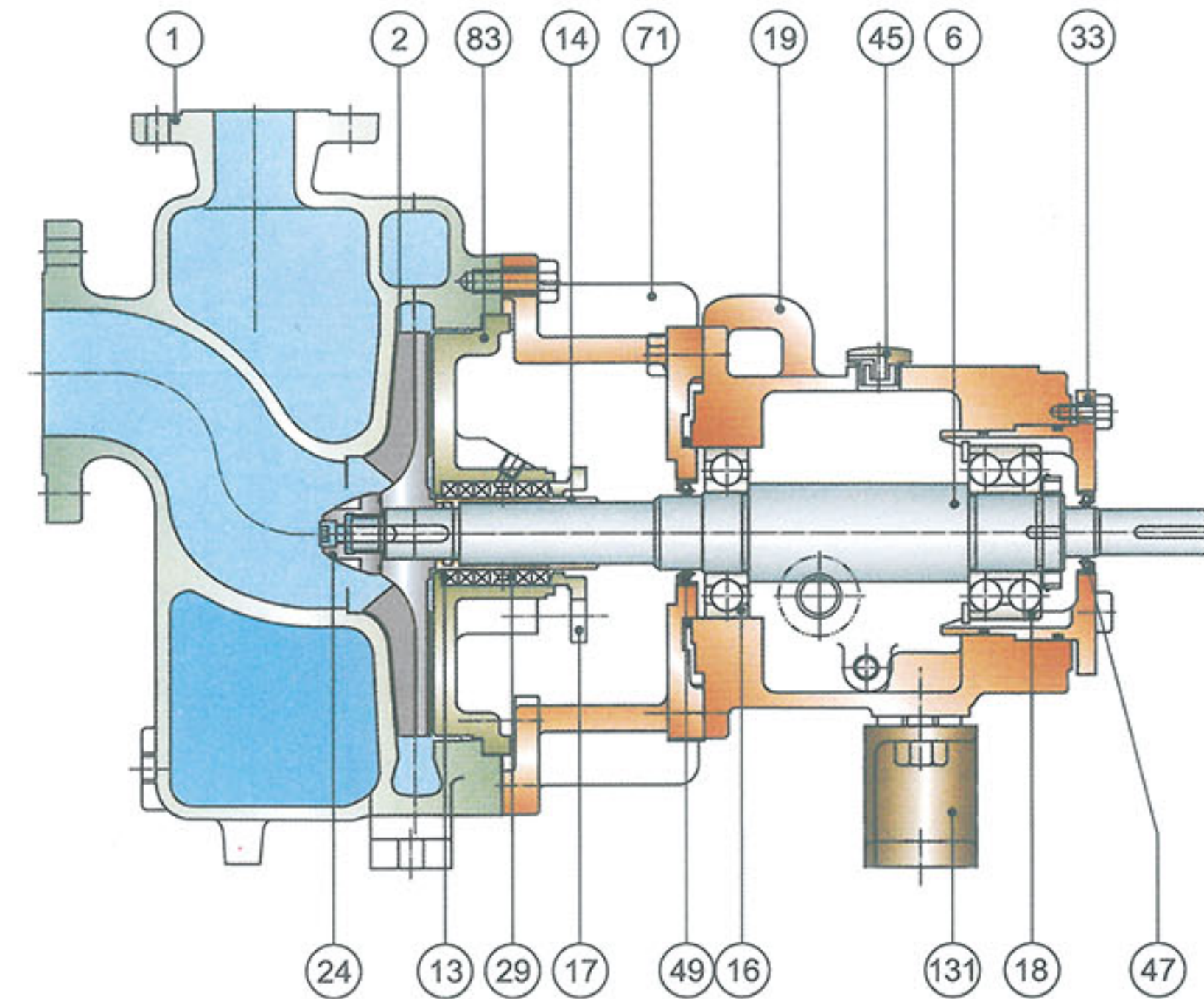
Capacity	UP to 6m ³ /min (1,585 US GPM)
Head	UP to 50m (164ft)
Temperature	UP to 177°C (350°F)

● Technical Data

Bearing size/Rec. Fit-up	Inboard: MRC (SKF) 310 S/LO (6310/C3) Outboard: MRC (SKF) 5310(CG/LO)(5310 NR/Std.)
Shaft end play Maximum	0.001"(0.03mm)
Corrosion allowance	1/8"(3mm)
Casing flange	Class 150 raised face is available
Horizontal seal ring radial clearance	0.015~0.025"(0.38~0.64mm)
Impeller setting (Cover plate to impeller)	0.018"min. (0.46mm)
Minimum liquid temperature	-20°F (-29°C) (2)
Maximum liquid temperature without cooling	350°F (117°C)
Maximum liquid temperature with cooling	500°F (260°C) (1)
Maximum allowable horsepower (at 1150 RPM)	50hp (37kW)
Maximum allowable horsepower (at 1750 RPM)	75hp (55kW)
Maximum allowable horsepower (at 3500 RPM)	150hp (110kW)
Maximum RMS finish of shaft at stuffing box	16"(0.4m)



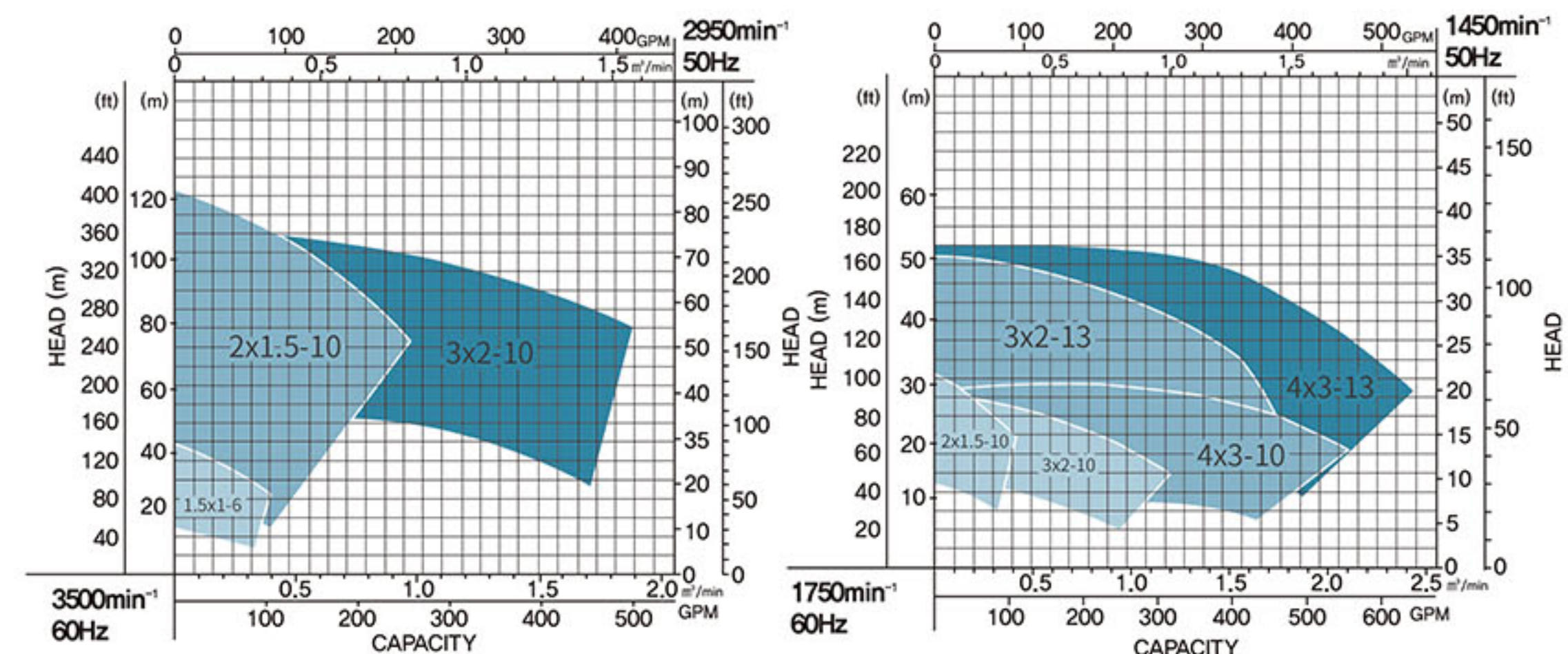
● Parts List and Materials



1 Casing	17 Packing Gland	45 Oil Cap (Leakage free air vent)
2 Impeller	18 Outboard Bearing	47 Oil Seal
6 Shaft	19 Frame	49 Oil Seal
13 Packing	24 Impeller Nut	71 Adapter
14 Sleeve	29 Lantern Ring	83 Stuffing Box
16 Inboard Bearing	33 Outboard Bearing Cover	131 Supporter

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

● Selection Charts



참고: *, 이 차트에 표시된 성능 범위는 실제 성능과 차이날 수 있습니다.

Liquid Ring Type Pumps

CNV



● Applications

- 증발용 Boiling processes
- 중앙 진공장치용 Central vacuum systems
- 응축플랜트 Condenser plants
- 탈기용 Deaerating systems
- 함침용 Impregnating plants
- 진공여과기용 Filter Plants
- 증류용 Distillation plants
- 건조기용 Drying system

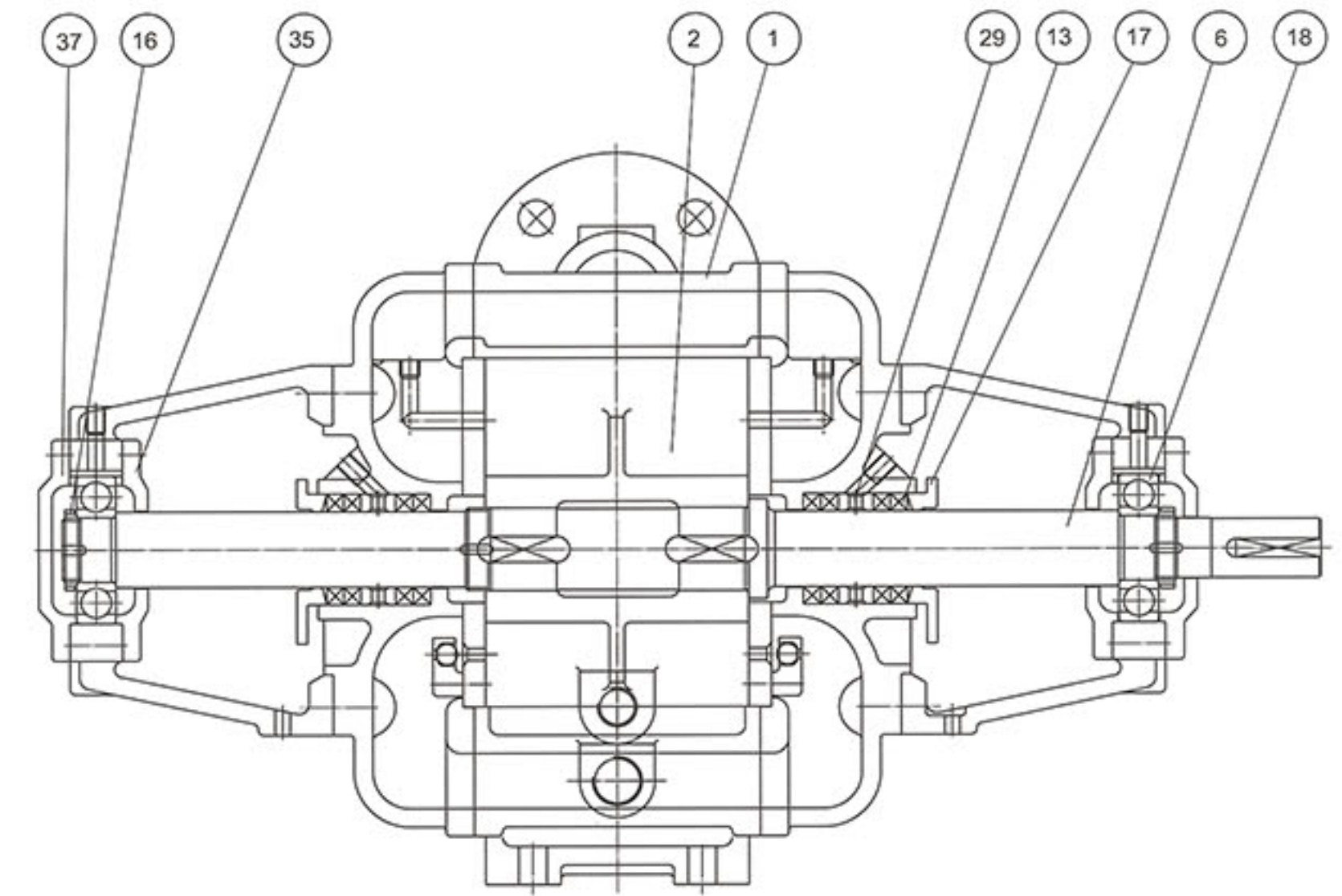
● Feature

- ☑ 높은 신뢰를 가진 펌프
Reliability
- ☑ 비맥동
Non-pulsating
- ☑ 컴팩트 사이즈
Compact

● Ratings

SIZE	Maximum Vacuum (mmHg)	Maximum Vacuum (m ³ /min)	Pump Revolution (rpm)	Power (kW)	Motor Revolution (rpm)	Power Transmission Devices	V-Belt PULLY		
							Type×Number of Belt	Pitch Diameter	Outside Diameter
40	630	1.60	1750	3.7	1750	Coupling			
50		2.50		5.5					
65		3.55		7.5					
80A		6.0		11					
80B		8.0	1160	15	1160	V-Belt	B×4	150×224	161×235
80C		6.0	880	11			B×5	150×300	161×311
100A		11.2	1160	22			C×4	158×355	194×369
100B		14.0	1160	30			C×4	236×355	250×369
125A	720	17.0	760	30			C×5	250×375	264×389
125B		19.0	854	37			C×5	280×375	294×389
150A		22.0	464	37			C×7	212×375	226×389
150B		24.0	700	45			C×7	224×375	238×389
150C		26.0	770	55			C×7	250×375	264×389
200A		38.0	493	75			D×6	315×745	334×764
200B		44.0	580	93			D×6	375×745	394×764
200C		52.0	660	110			D×6	425×745	444×764

● Parts List and Materials



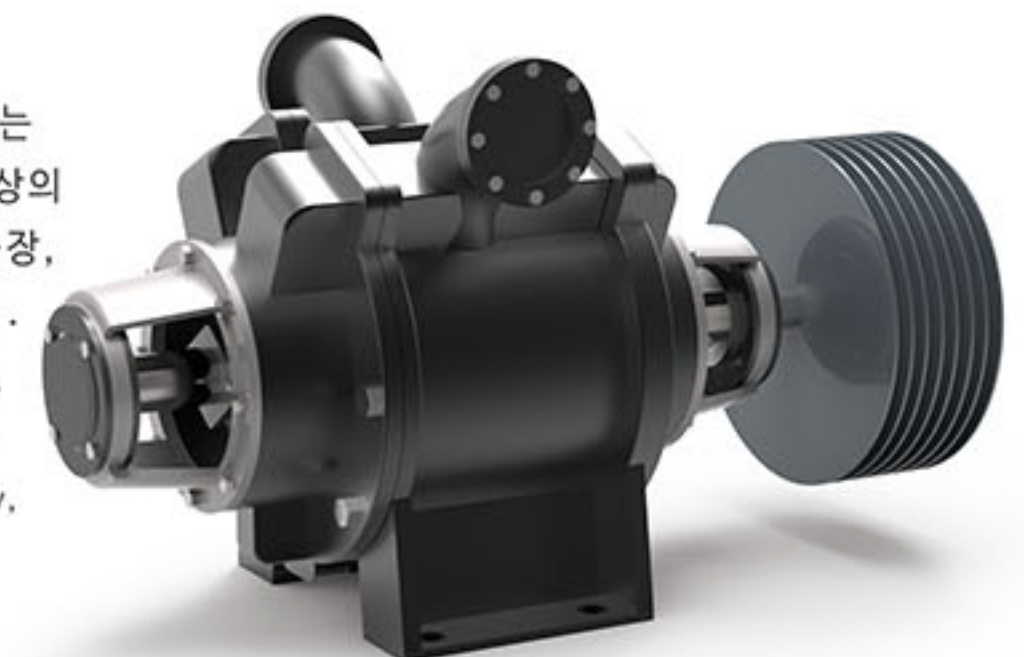
No	Name of part	METERIAL	
1	Casing	GC200	SSC13
2	Impeller	SSC13	SSC13
6	Shaft	SM45C	STS304
13	Gland Packing	TEFLON	TEFLON
16	Inboard Bearing	STEEL	STEEL
17	Packing Gland	GC200	SSC13
18	Outboard Bearing	STEEL	STEEL
29	Lantern Ring	GC200	GC200
35	Inboard Bearing Cover	GC200	GC200
37	Outboard Bearing Cover	GC200	GC200

참고: *. 이외의 기타 자료는 요청시 제공됩니다.

● CNV Pumps

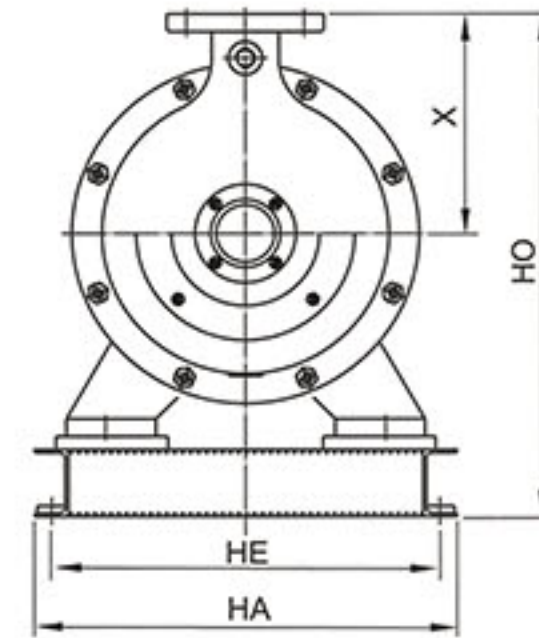
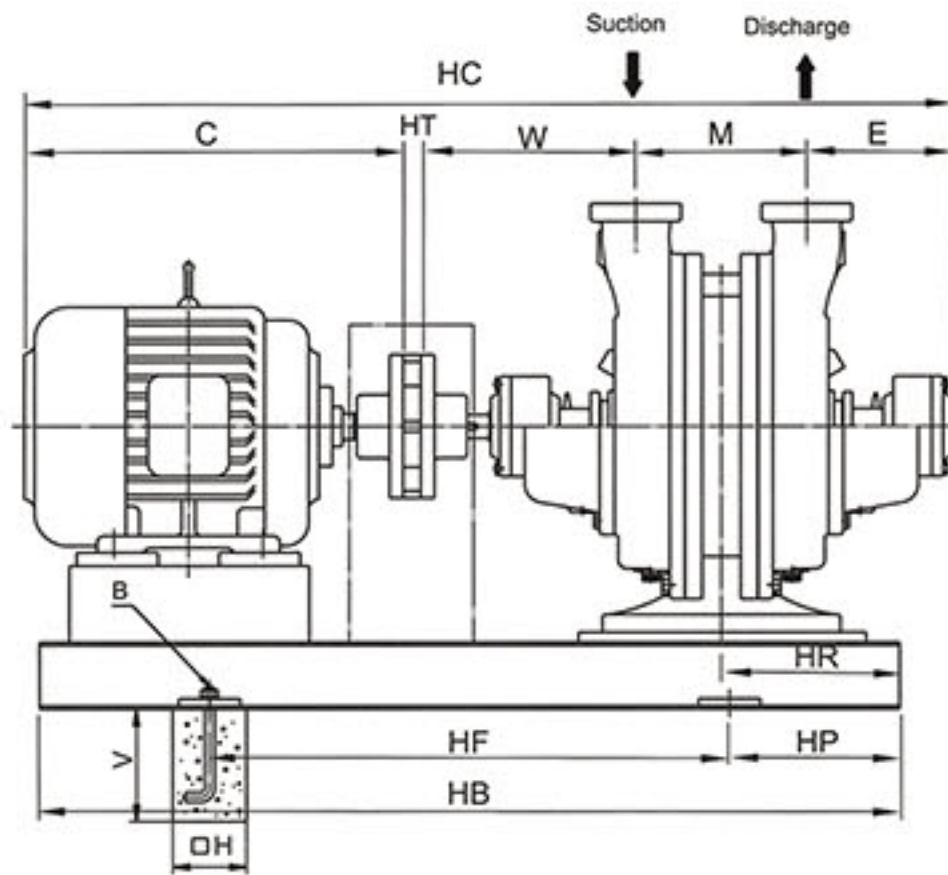
수봉식 진공펌프는 일정량의 물이 순환하면서 공기를 빨아내는 (Nash type)으로 배기량이 많고 고성능이며 특히 150mm 이상의 대형 펌프의 시동용(Priming)이나 Wellpoint 공사, 제지공장, 화학공장의 탈수 및 건조용 진공탈취기에 적합합니다.

A vacuum pump is a Nash type vacuum pump that circulates a certain amount of water and sucks in air. It is suitable for dehydration and drying dehydrator of well pump, paper factory, chemical factory, etc.

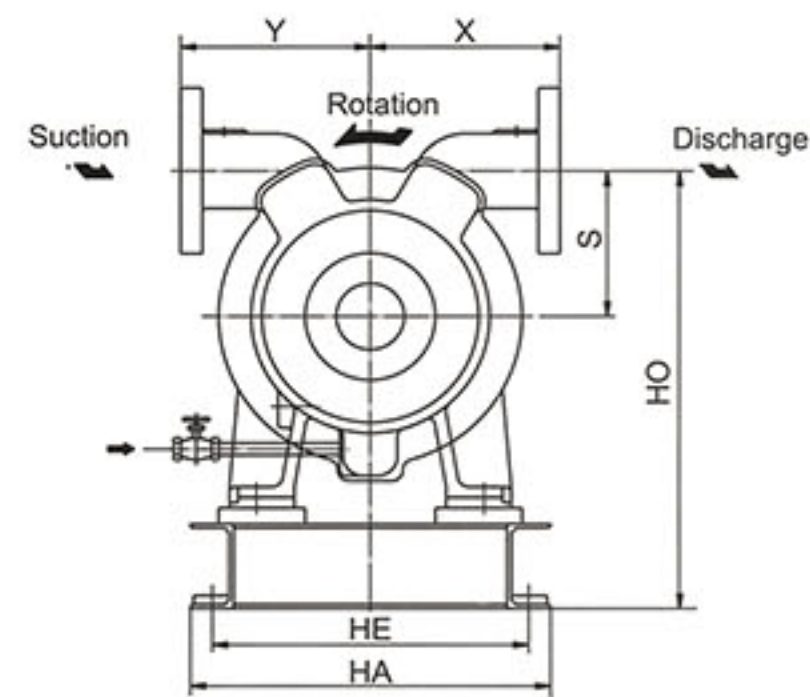
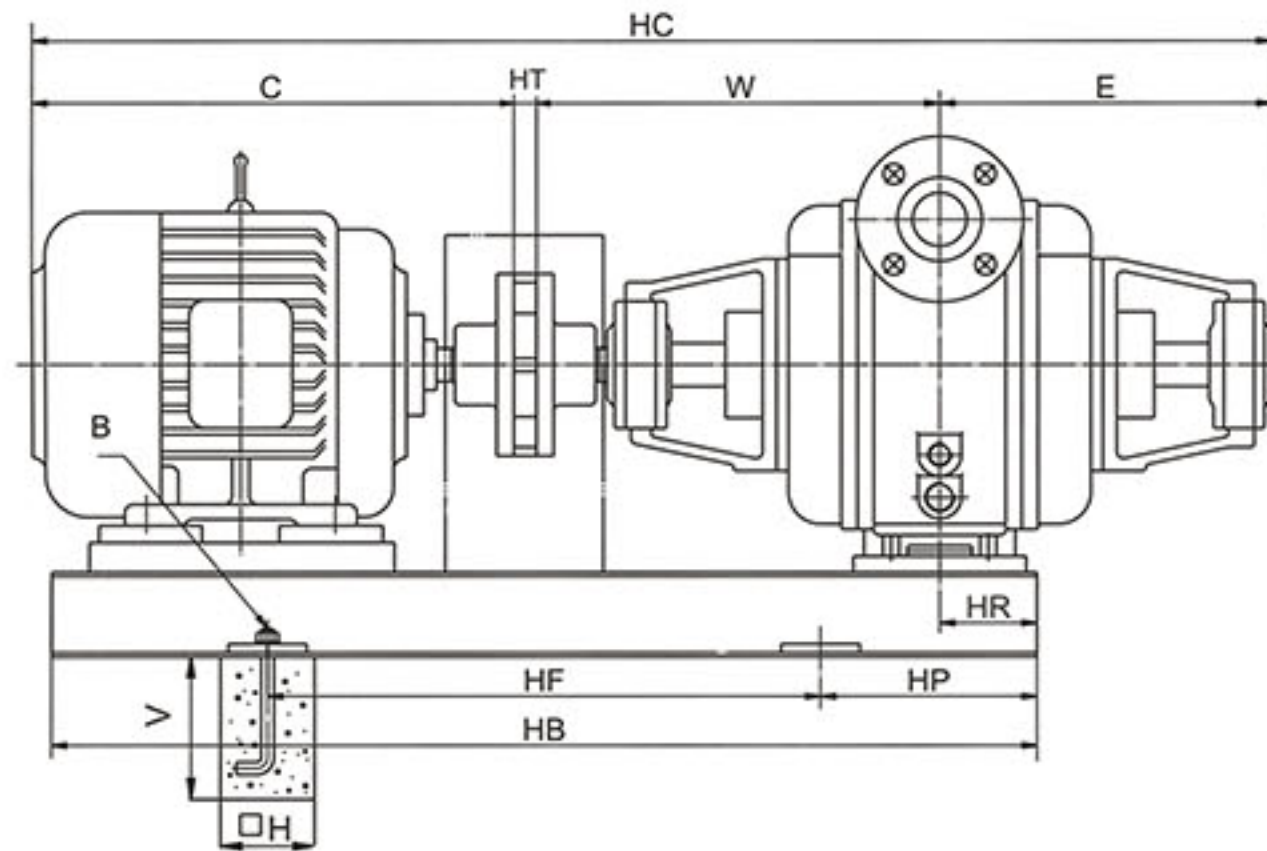


Model. CNV

● Installation Dimension



MODEL : CNV40



MODEL : CNV 50,65,80,100,125

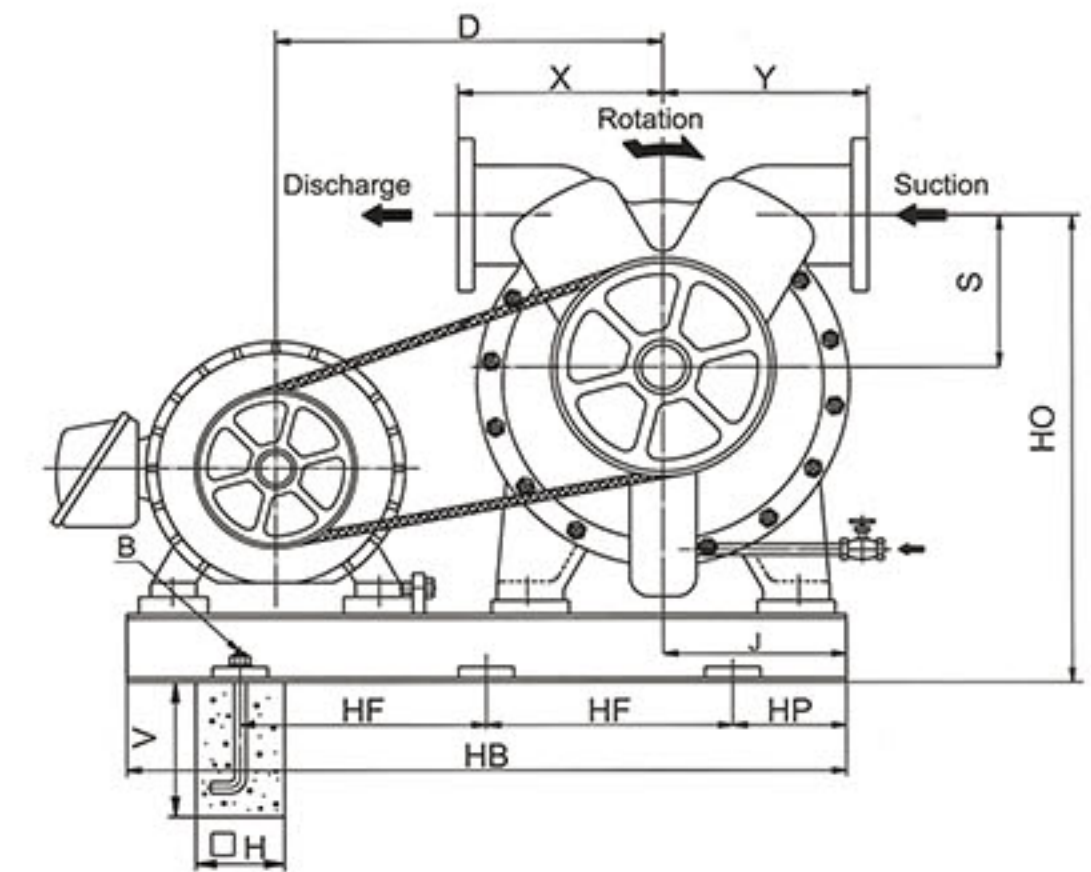
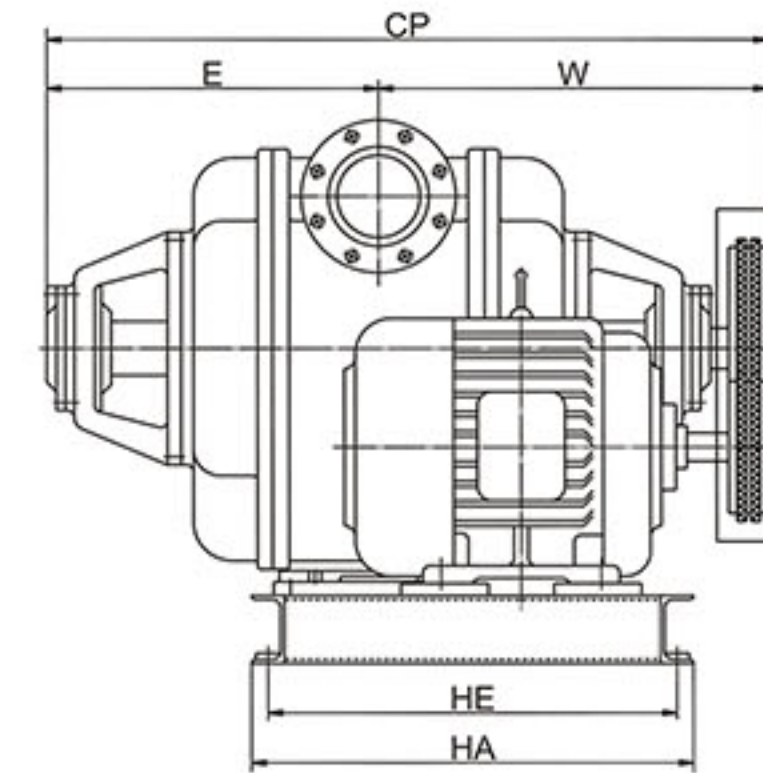
● PUMP & MOTOR 직결 type

구분	Pump and motor													Baseplate						Anchor Bolt			
	Suc	Dis	Frame	kW	HC	C	HT	W	E	Y	X	S	M	HF	HP	HB	HR	HO	HE	HA	B	H	V
40	40	40	112M	3.7	870	382	20	190	150	-	200	-	150	500	125	750	135	275	350	380	4-M16×250L	130	250
50	50	50	132S	5.5	1152	444	25	372	311	175	175	123	-	590	155	900	90	408	290	320	4-M16×250L	130	250
65	65	65	132M	7.5	1228	482	30	393	328	200	200	134	-	600	155	910	105	439	320	350	4-M16×250L	130	250
80	80	80	160M	11	1506	593	5	495	413	240	240	160	-	780	200	1180	145	550	390	430	4-M16×250L	130	250
100	100	100	200M	22	1824	747	5	470	482	285	285	194	-	920	240	1400	170	665	450	500	4-M20×3150L	150	315
125	125	125	225M	37	2205	842	5	745	593	330	330	250	-	1120	290	1700	230	820	510	560	4-M20×3150L	150	315

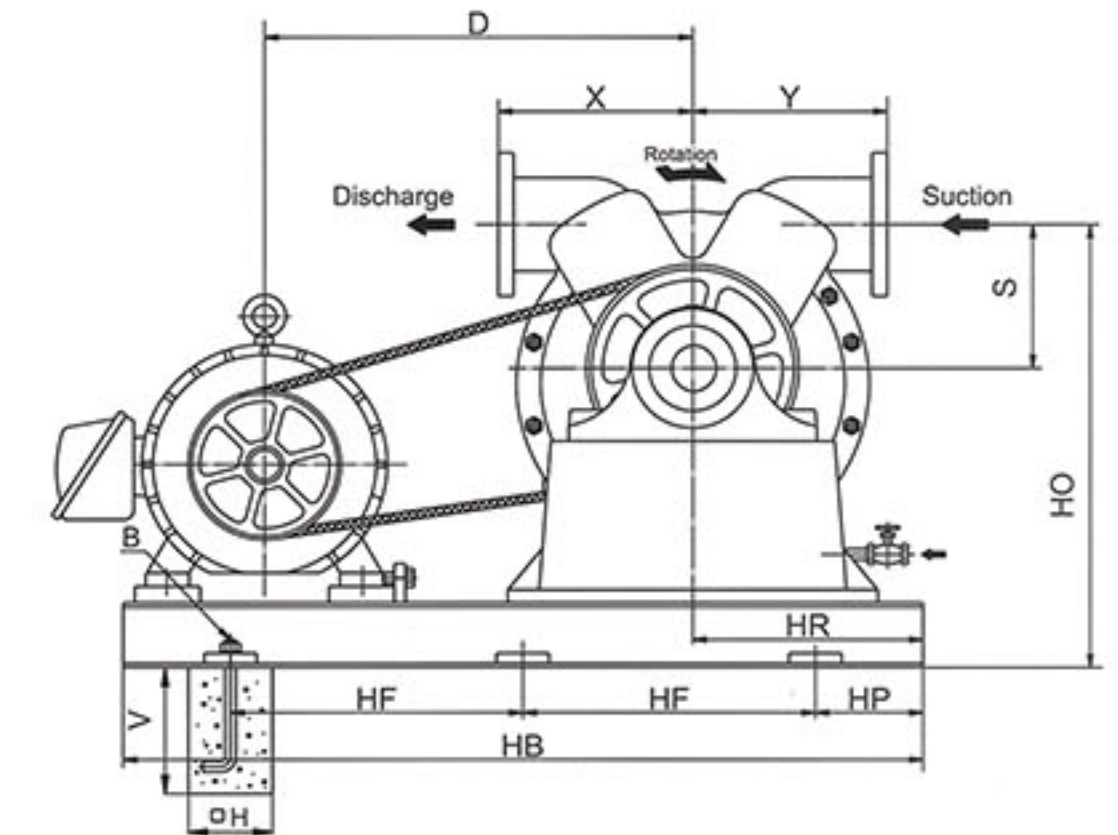
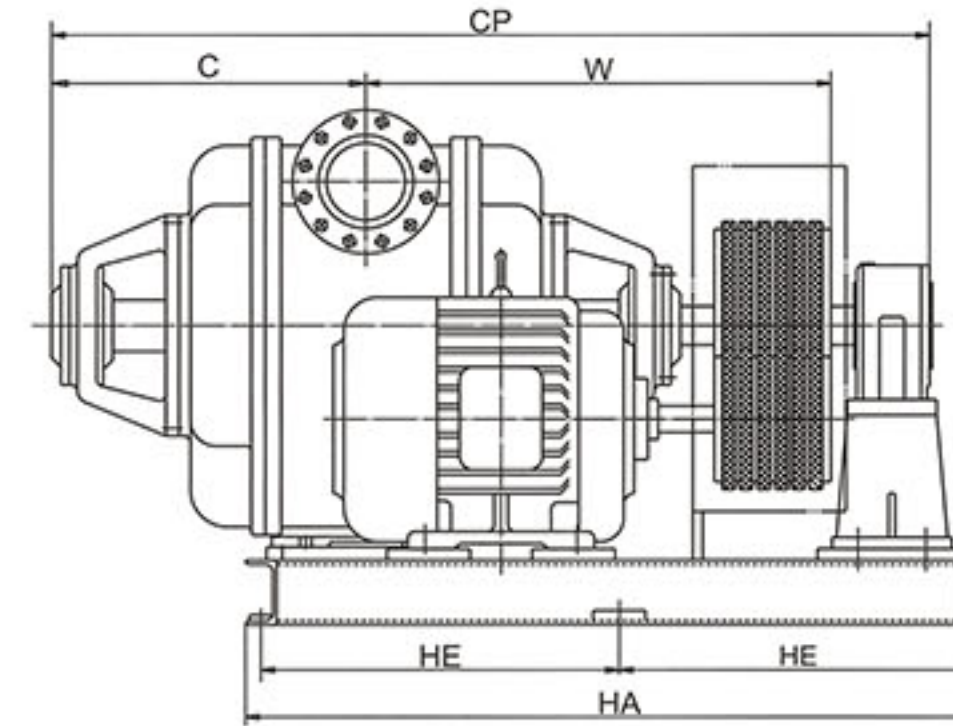
참고: *, 사이즈가 큰 펌프는 요청시 제공됩니다.

Model. CNV

● Installation Dimension



MODEL : CNV 100,125,150



MODEL : CNV 200

● V-BELT type

구분	Pump and motor										Baseplate								Anchor Bolt		
	Suc	Dis	Frame	kW	CP	E	W	D	X	Y	S	HO	HR	HP	HF	HB	HE	HA	B	H	V
100	100	100	200L	22	1052	482	570	841	285	285	194	665	245	175	500	1350	490	540	6-M20×315L	150	315
125	125	125	225M	37	1338	593	745	985	330	330	250	820	280	260	515	1550	660	720	6-M20×315L	150	315
150	150	150	250S	45	1385	600	785	1055	370	370	280	880	330	280	545	1650	700	750	6-M20×315L	150	315
200	200	200	280M	93	1960	710	990	1238	450	450	380	1170	440	340	710	2100	740	1550	6-M24×400L	200	400

참고: *, 사이즈가 큰 펌프는 요청시 제공됩니다.

High Vacuum Liquid Ring Pumps



E

Applications

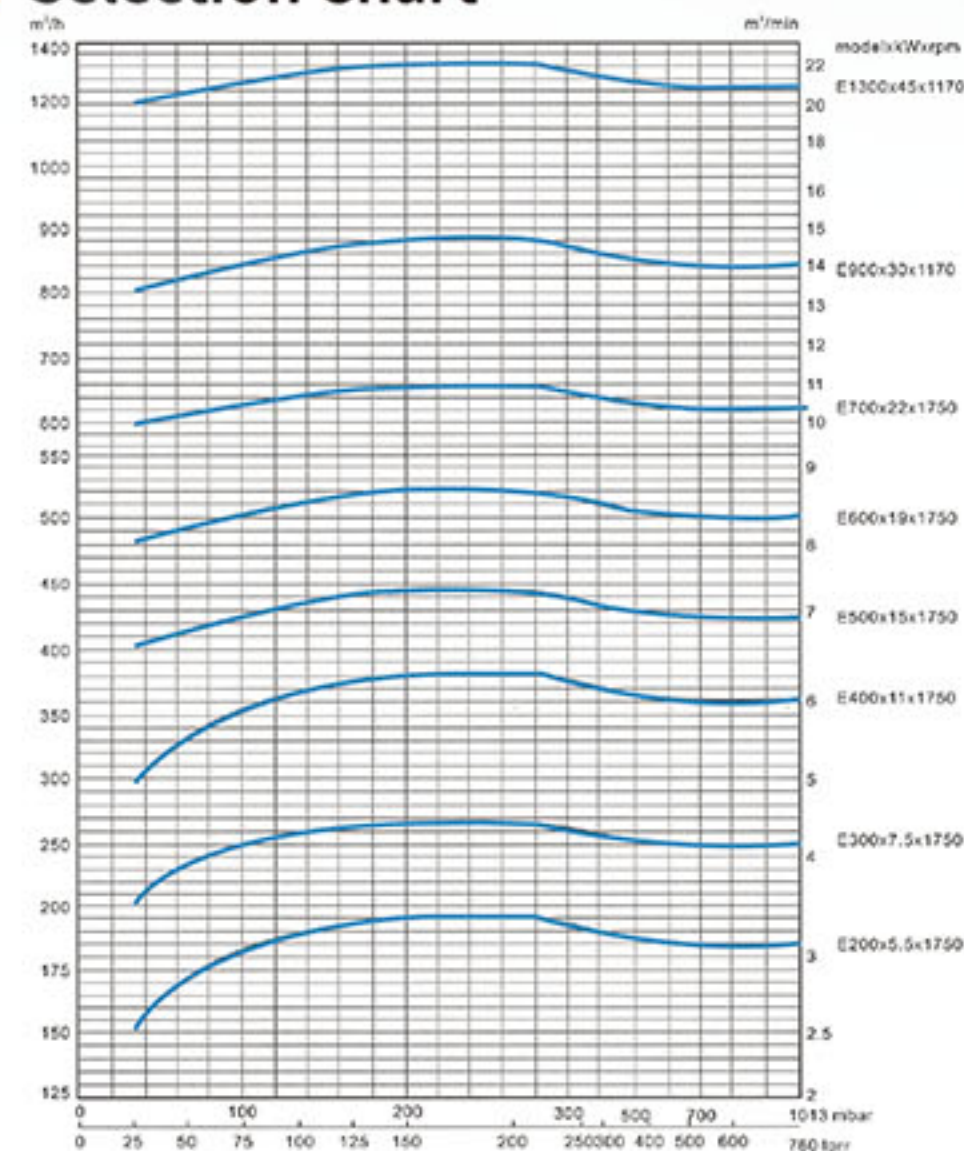
- 탈기용 Deaerating
- 함침용 Impregnating plants
- 건조기용 Drying system
- 농축용 Concentrating
- 배기용 Condenser Exhausting
- 진공여과기용 Filtering

Feature

- ☑ 높은 효율
High efficiency
- ☑ 고진공
High Vacuum
- ☑ 저소음, 저진동
Low Noise and Vibration
- ☑ 표준화
Standardization
- ☑ 간편한 유지보수
Easy Maintenance



Selection Chart



Ratings

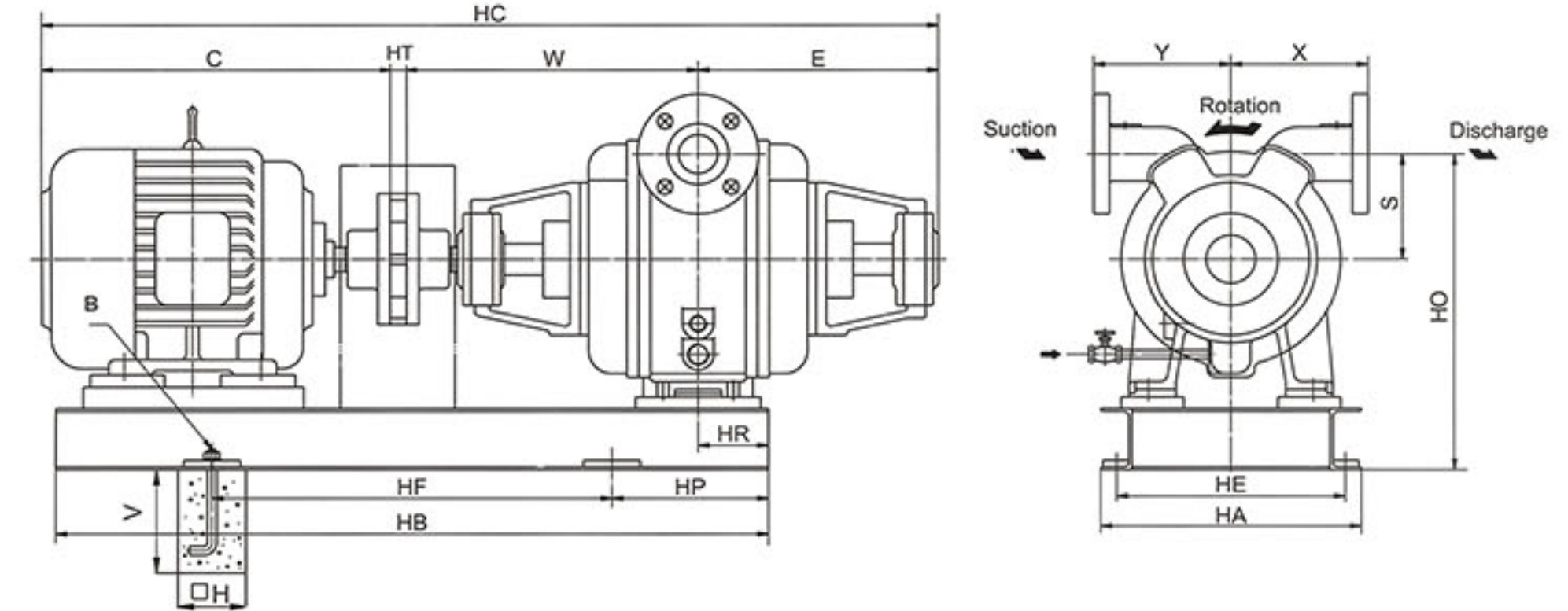
Capacity	UP to 22m³/min (5,812 US GPM)
Vacuum	UP to 720 mmHg
Temperature	UP to 60°C (140°F)

상기 성능곡선도는 20℃의 포화공기,
급수온도 15℃, 760mmHg abs 토출압 기준
(오차범위는 ± 10%).

에어 이젝터 형식 AJ를 사용하면
진공도 25 Torr(735mmHg abs.) 까지 가능

These performance curves are based on operating conditions with saturated air at a temperature of 20℃, operating water at a temperature of 15℃, and discharge pressure of 760mmHg abs (With a tolerance of ± 10%). Air ejector of the series type AJ are available for suction pressure which are less than 25 Torr (735mmHg abs)

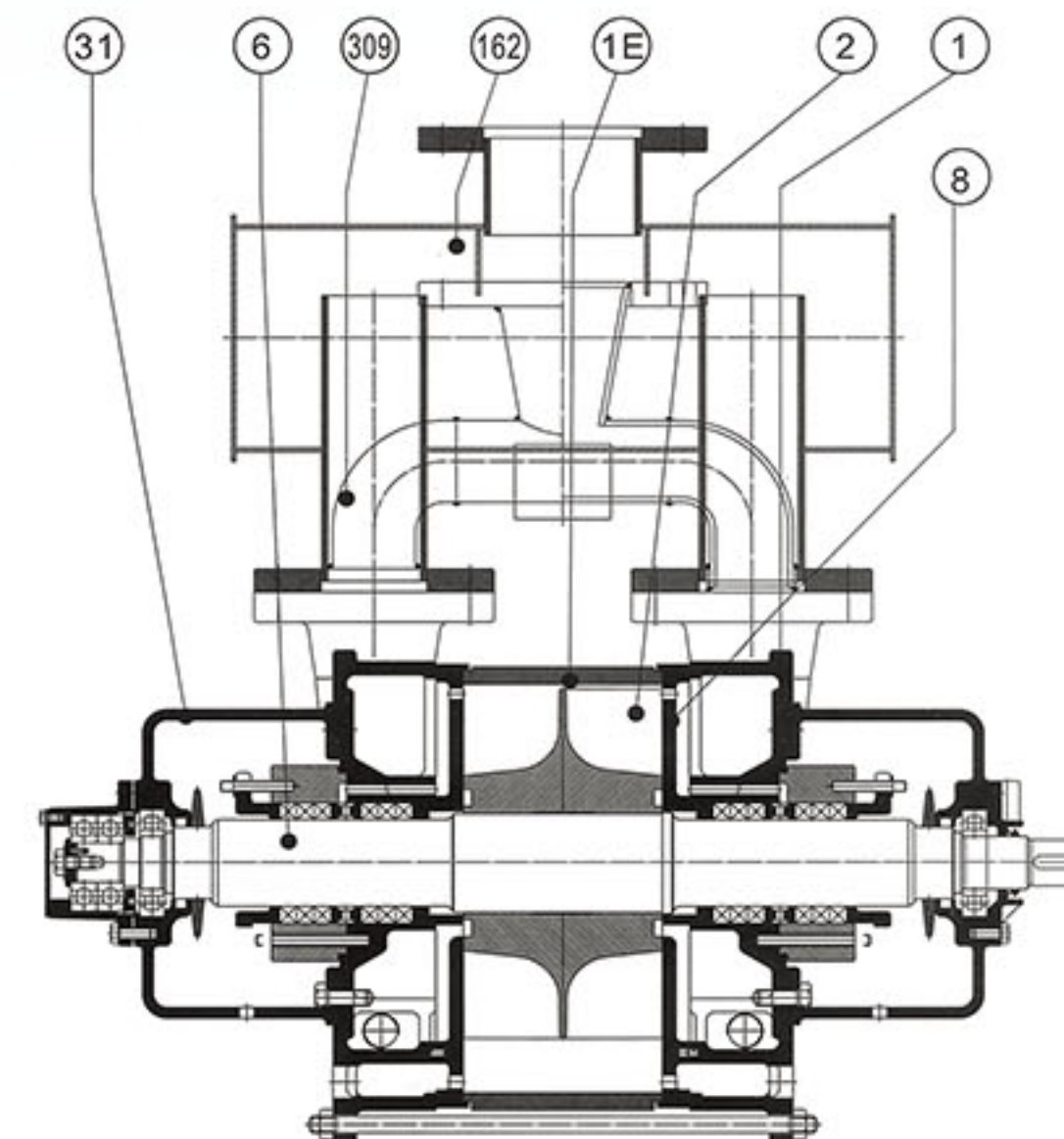
Installation Dimension



구분 규격	Dis. (mm)	HC	CP	W	X	S	Z	HA	HE	HB	HF1	HP1	HR	HH	C
E200	50	1081	637	414	210	585	765	390	350	1000	800	100	100	20	444
E300	65	1192	710	367	210	585	765	390	350	1000	800	100	150	20	482
E400	65	1363	770	397	210	585	765	390	350	1120	900	110	150	20	593
E500	100	1412	775	399	250	720	895	440	400	1250	1000	125	180	20	637
E600	100	1462	815	419	250	720	895	440	400	1250	1000	125	180	20	647
E700	100	1530	845	434	250	720	895	440	400	1250	1000	125	180	20	685
E900	125	1792	975	507	310	1010	1195	610	550	1600	1250	175	180	28	817
E1300	125	1951	1095	567	310	1010	1195	610	550	1600	1250	175	200	28	856

참고: *, 사이즈가 큰 펌프는 요청시 제공됩니다.

Parts List and Materials



No	NAME OF PART	MATERIAL		
1	Casing	GC200	SSC13	SSC14
2	Impeller	GCD450	SSC13	SSC14
6	Shaft	STS420	STS304	STS316
8	Port Plate	GCD450	SSC13	SSC14
1E	Inter Casing	SS400	SSC13	SSC14
31	Bearing Housing	GC200	GC200	GC200
309	Suction Manifold	GC200	SSC13	SSC14
162	Separator	SS400	STS304	STS304

참고: *, 이외의 기타 자료는 요청시 제공됩니다.

Horizontal Axial Flow Pumps

CE

HA

Applications

- 일반산업용 General industry
- 공장배수용 Factory Drainage
- 빗물배수용 Rain-water Drainage
- 농업용 Agriculture

Ratings

Capacity	7.5 to 350 m ³ /min (1,981 to 92,460 US GPM)
Head	1.5 to 5m (4.9 to 16.4ft)
Size	400 to 1500mm (15.74 to 59inch)



Horizontal Shaft Mixed Flow Pumps

CE

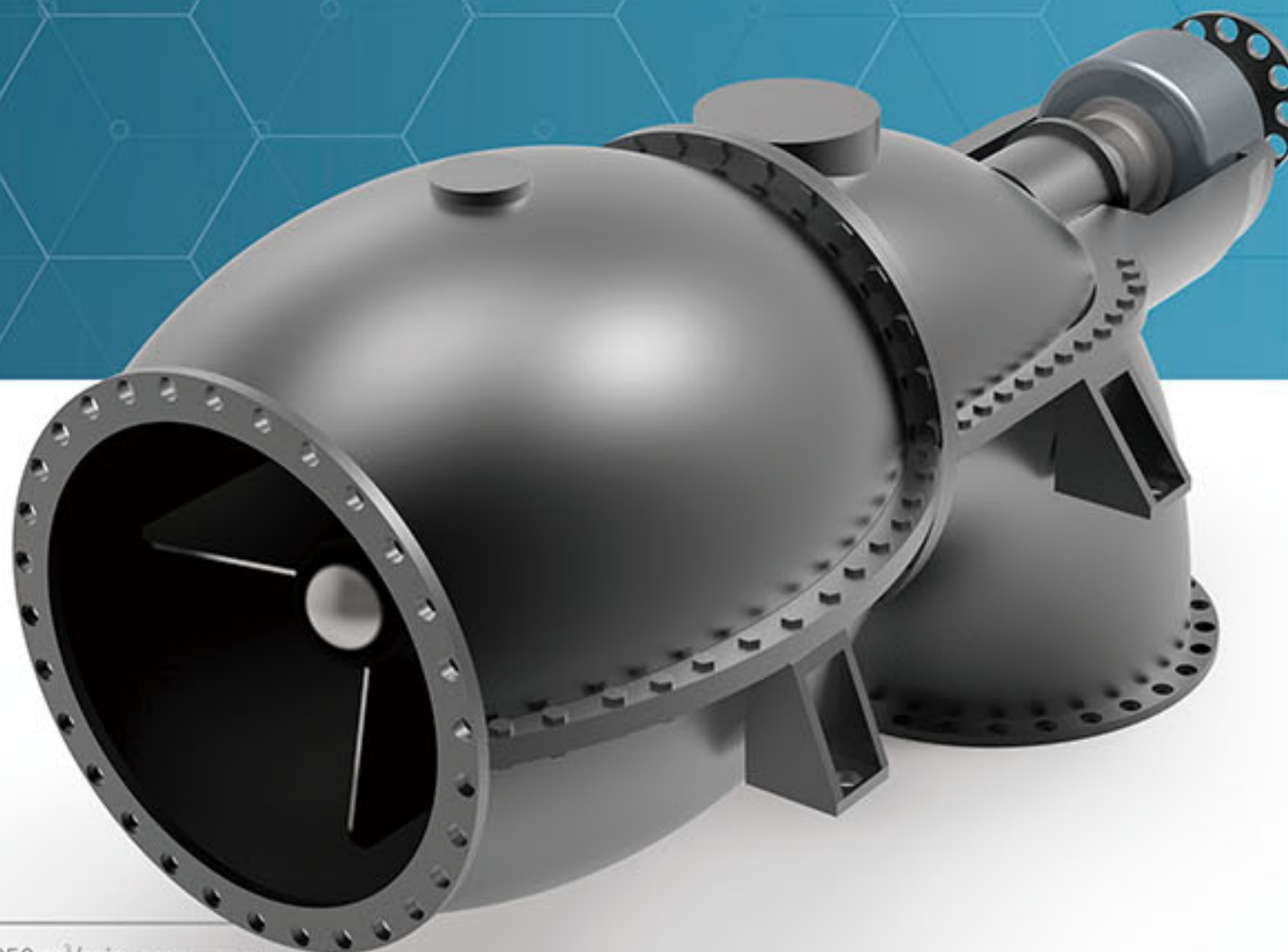
HM

Applications

- 일반산업용 General industry
- 공장배수용 Factory Drainage
- 빗물배수용 Rain-water Drainage
- 농업용 Agriculture

Ratings

Capacity	7.5 to 350 m ³ /min (1,981 to 92,460 US GPM)
Head	1.5 to 5m (4.9 to 16.4ft)
Size	400 to 1500mm (15.74 to 59inch)



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