

High-Pressure Multistage Centrifugal Pumps

■ Multi-stage Vertical Pump(Helix V/MVI/VMT)	2
■ Multi-stage Horizontal Pump(MHI)	44
■ Multi-stage Horizontal Inverter pump (MHIKE-[D])	49





Application

Water supply, pressurized facility, fire extinguishments facility, boiler water supply, industrial circular pump, coolant pump, assembling facility, high pressured washer, drinking water manufacturing facility, R/O Filtering equipment, Sprinkler etc.

Applicable fluids

Fluids that do not contain fibrous materials, or any materials which might cause abrasion, such as drinking water, cold/hot water, condensed water, glycol mixed water (Max 40%)

Motor spec.

IEC-Standard crop triple phase motor
 Motor type : TEFC
 Protection class : IP 54(IP55 as an option)
 Insulation class : F class
 Flange type : 0.55kW ~ 5.5kW, then V18
 Above 7.5kW, then V1
 Power Source : 0.37kW ~ 5.5kW, 220/380V, 60Hz
 7.5kW ~ 37kW, 380V, 60Hz
 (Different voltage and high efficient motor are optional)

Structures

It is a non self-priming inline vertical multistage pump and there are 2 types of pump, 16 bar type and 25 bar type. Impeller, diffuser, and pump case are composed of Stainless steel 304 and products which are composed of stainless steel 316L will be supplied when optional ordered. Motor shaft and pump shaft under IEC-standard are assembled firmly by flexible coupling, and oversized bearing is additionally installed in the motor support to compensate the thrust load(above 7.5kw). Replacement of motor is possible for V1-typed motor flange or V18-typed motor flange and they are coated with bi-directional cartrigemechanical seal, enabling a maintenance and repair. All materials can be applied to drinking water and are approved by KTW, Germany and WRC, England.

Pump material spec.

Impeller	Stainless Steel
Diffuser	Stainless Steel
Pump Casing	Gray Cast Iron + Cataphoresis Coating
Shaft	Stainless Steel
Gasket	EPDM/VITON*
Mechanical seal	SiC/Carbon, Tungsten carbide/Carbon

STS316L*, VITON* can be ordered separately.

Duty Charts

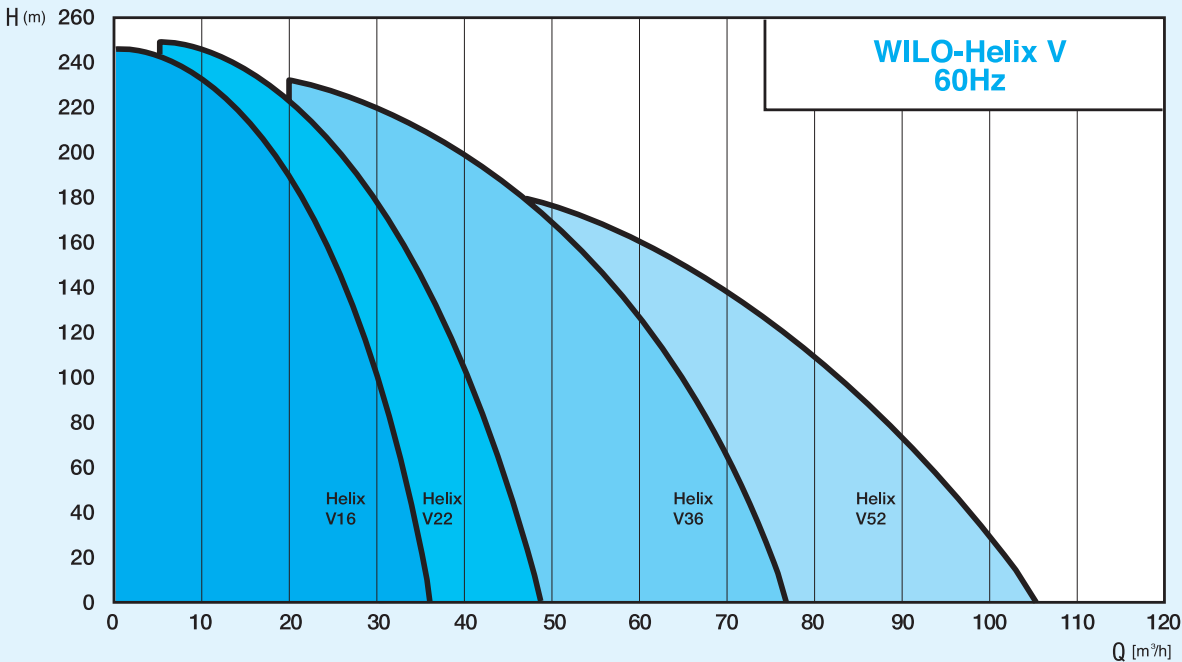


Table for function data

Data	Helix V16	Helix V22	Helix V36	Helix V52
Max Flow(m³/h)	30	40	75	100
Max Head(m)	245	250	235	220
Allowed fluid temperature(℃)	-15~ +120℃			
Ambient temperature(℃)	Max 40℃			
Max Allowed pressure(bar)	16bar, 25bar			

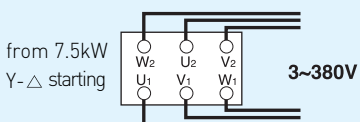
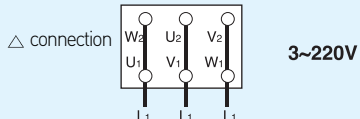
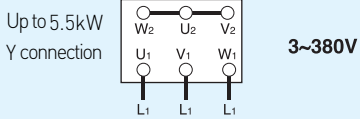
※ Please contact us if fluid temperature is above 80℃

Identification code (e.g : Helix V1605)

Helix	
16	High efficiency Vertical Multistage Stainless Centrifugal pump. Pump composed of STS 304 as standard (Option: STS 316L)
05	Normal operating rate of flow (m³/h)
	Number of stage of impeller

Wiring diagram

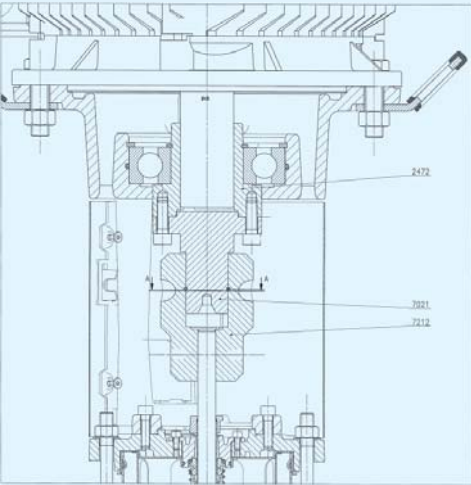
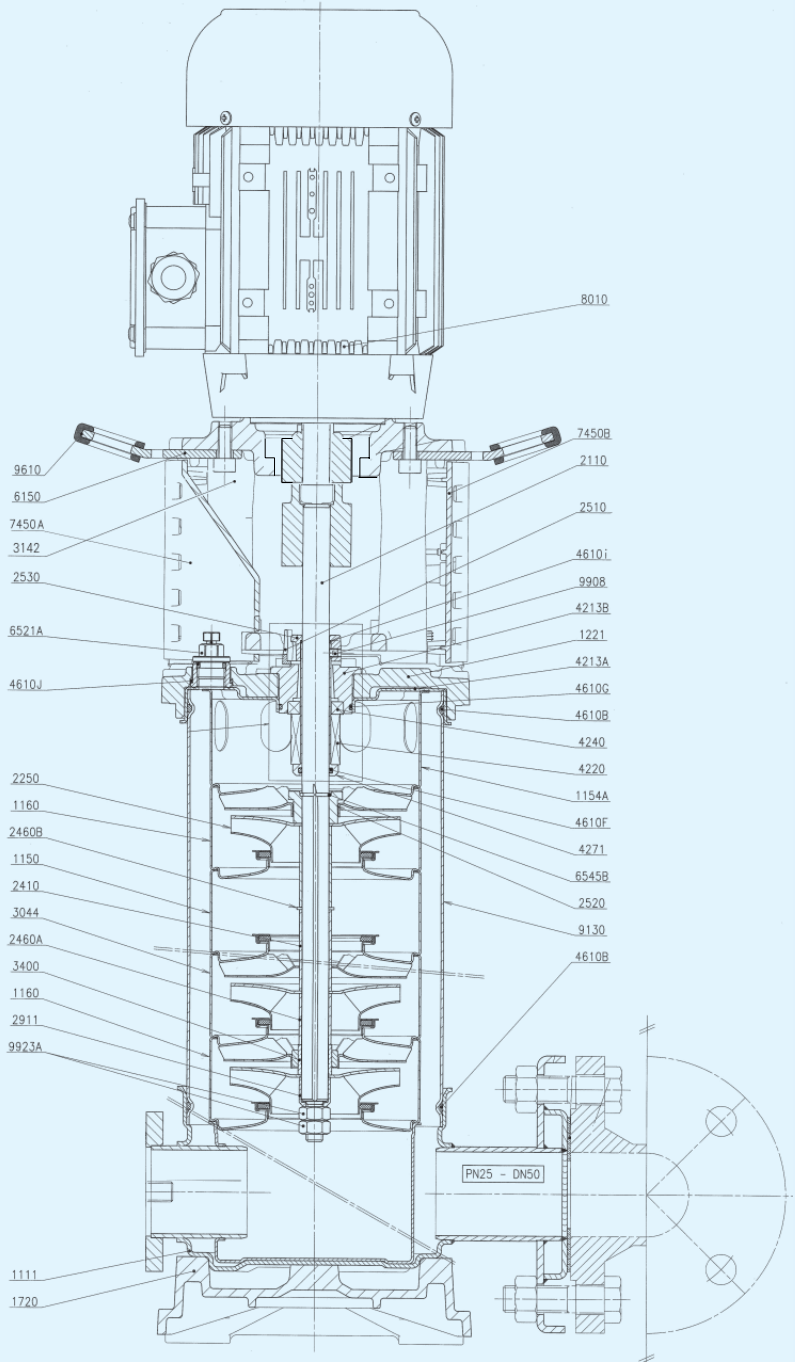
3 phase



Helix V16 Series 16/25bar Sectional Drawing

Parts List

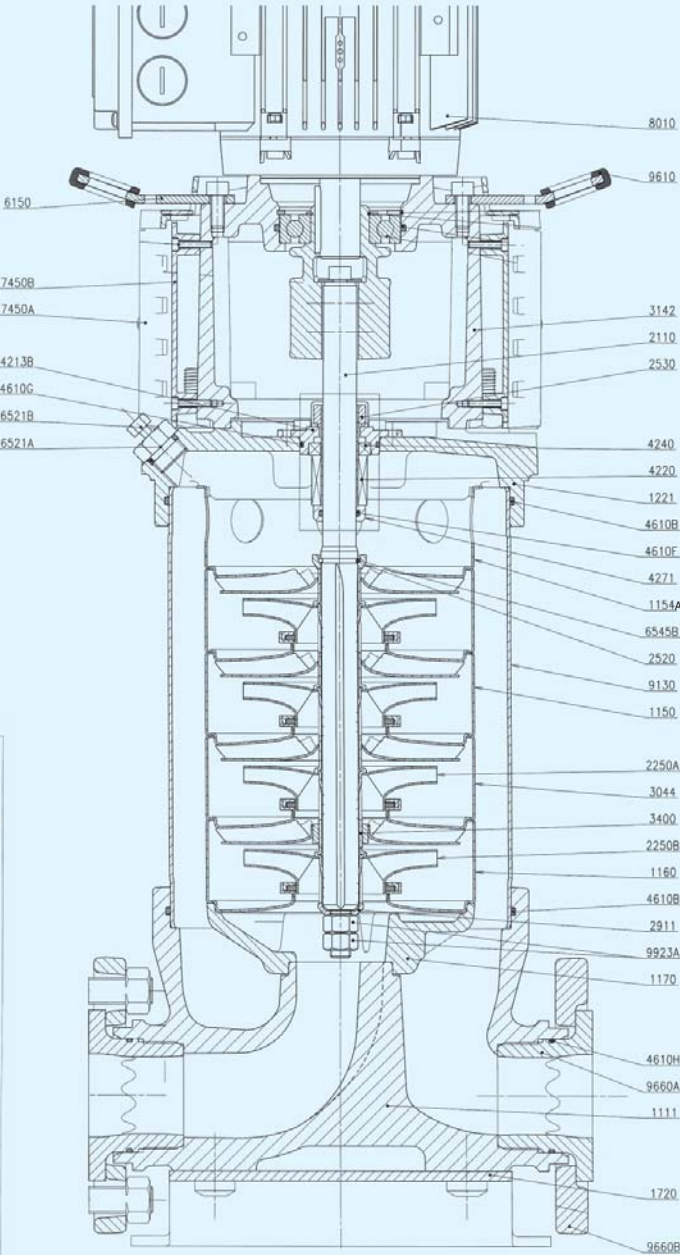
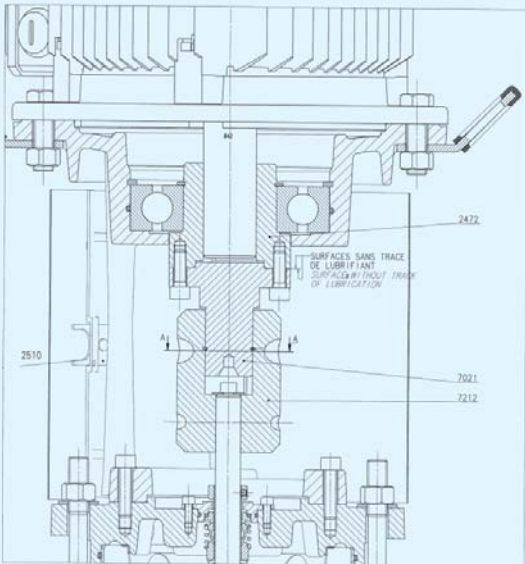
- 1111 Pump Housing
- 1150 Stage Casing (Guide Vane)
- 1154A Discharge chamber
- 1160 Stage casing
- 1221 End shield
- 1720 Base
- 2110 Shaft
- 2250 Impeller
- 2410 Sleeve spacer
- 2460A Sleeve spacer
- 2460B Washer
- 2472 Herb
- 2510 Wedge
- 2520 Impeller stop ring
- 2530 Drive ring
- 2911 Shaft end washer
- 3044 Stage casing Bearing)
- 3142 Lantern
- 3400 Sleeve (Tungsten carbide)
- 4213 Ring cover
- 4213B Ring Holder (Mechanical seal)
- 4220+4240 Mechanical seal
- 4271 Mechanical seal sleeve
- 4610B O-ring (tube)
- 4610F O-ring (seal sleeve)
- 4610G O-ring (seal cover)
- 4610I O-ring (seal drive ring)
- 4610J O-ring (plug)
- 6150 Handle for Moving
- 6521 Filling plug
- 6545B Stop rush
- 7021 Space Coupling)
- 7212 Coupling
- 7450A Coupling Guard
- 7450B Coupling guard supporting
- 8010 Motor
- 9130 Tube
- 9610 Protector ring of handle
- 9908 Screw
- 9923A Impeller nut



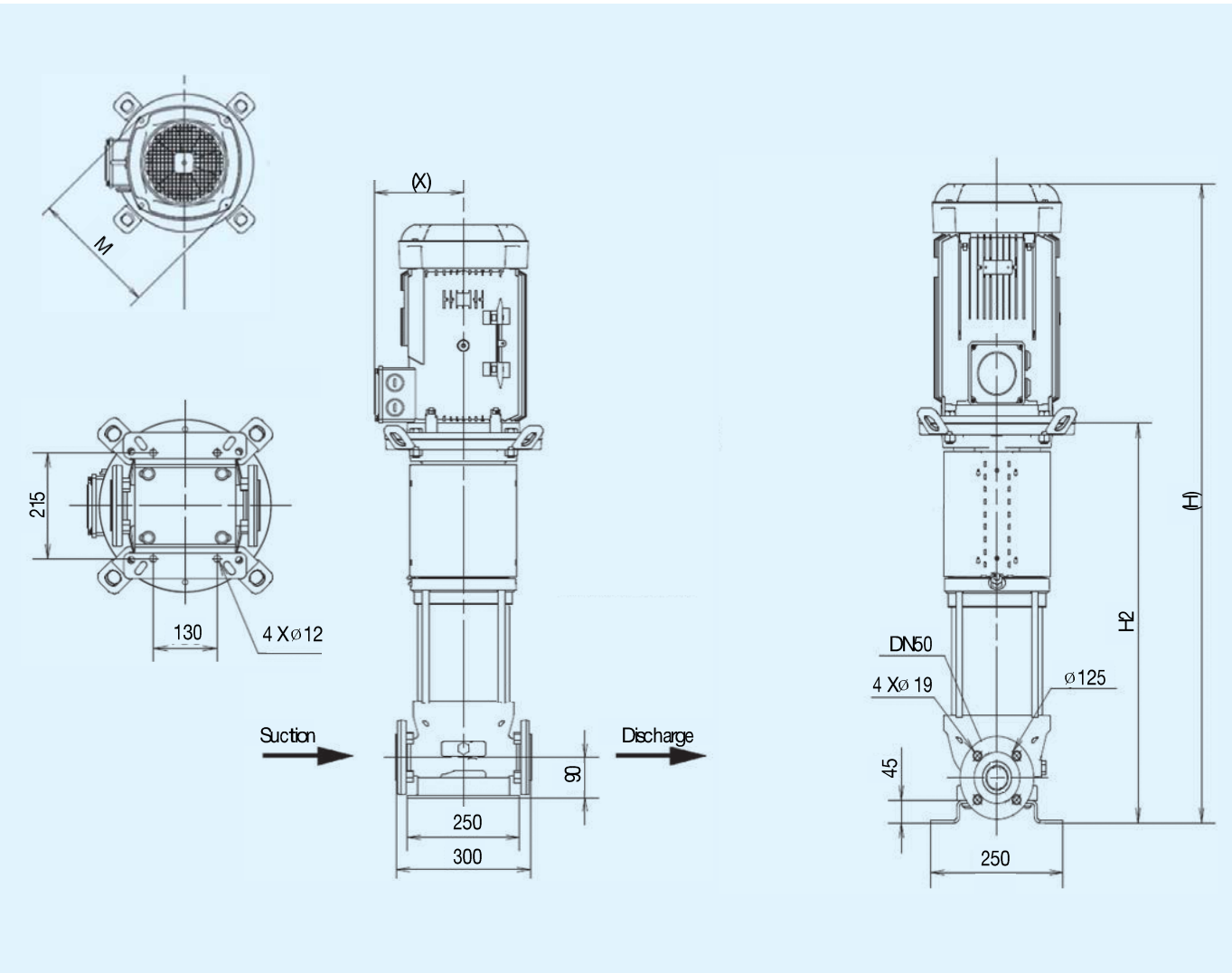
Helix V22/36/52 Series 16/25bar Sectional Drawing

Parts List

- 1111 Pump Housing
- 1150 Stage Casing (Guide Vane)
- 1154A Discharge chamber
- 1160 Stage casing
- 1170 Hydro support
- 1221 End shield
- 1720 Base
- 2110 Shaft
- 2250AB Impeller
- 2472 Herb
- 2510 Wedge
- 2520 Impeller stop ring
- 2530 Drive ring
- 2911 Shaft end washer
- 3044 Stage casing Bearing)
- 3142 Lantern
- 3400 Sleeve (Tungsten carbide)
- 4213B Ring Holder (Mechanical seal)
- 4220+4240 Mechanical seal
- 4271 Mechanical seal sleeve
- 4610B O-ring (tube)
- 4610F O-ring (seal sleeve)
- 4610G O-ring (seal cover)
- 4610H O-ring (Gasket holder)
- 6150 Handle for Moving
- 6521AB Filling plug
- 6545B Stop rush
- 7021 Coupling Guard
- 7212 Coupling guard supporting
- 7450A Space Coupling)
- 7450B Coupling
- 8010 Motor
- 9130 Tube
- 9610 Protector ring of handle
- 9923A Impeller nut
- 9660A Gasket holder
- 9660B Flange



Outline drawing

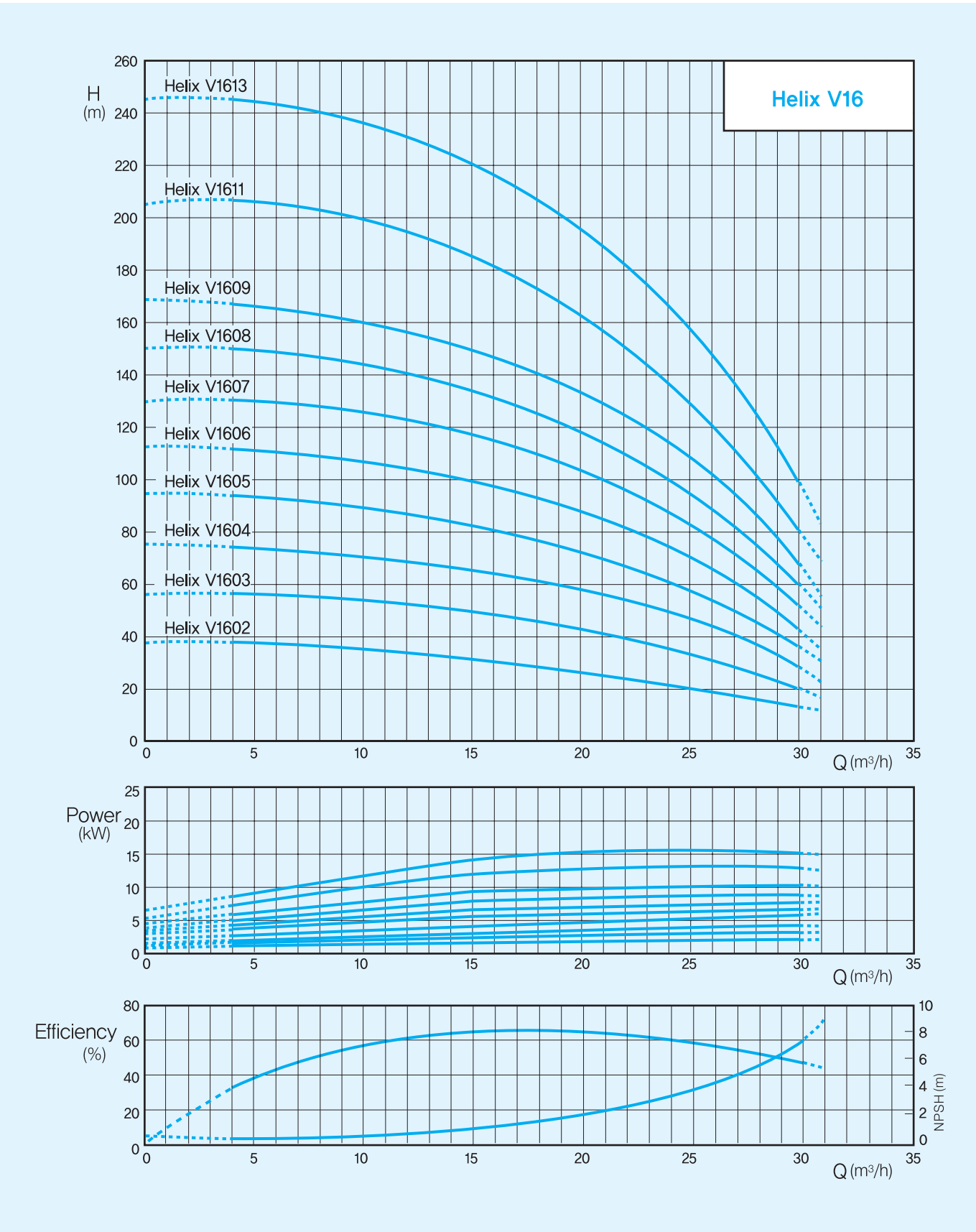


Dimension / Weight / Motor Spec. (60Hz, 2 pole)

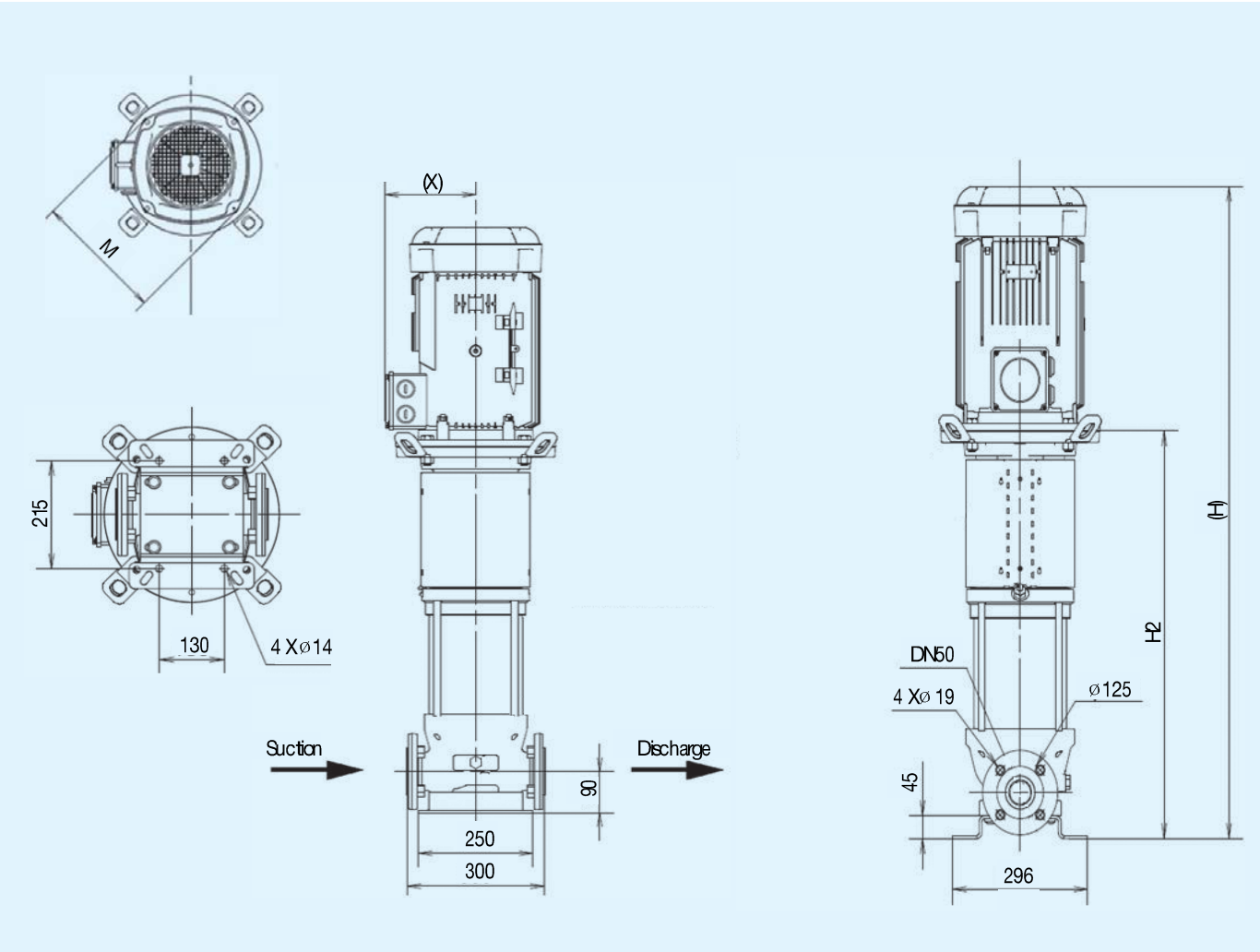
Model	Motor Frame/Flange	Ø M	(X)	PN16			PN25			Power (kW)	Max. Load Current(A)		Motor Efficiency η (%)	Power Factor COS φ
				H	H2	Weight	H	H2	Weight					
				mm	mm	kg	mm	mm	kg		220V, 3ø	380V, 3ø		
Helix V1602	100/FT130	195	148	722	472	52	722	472	52	3	10,5	6,3	89,3	86,6
Helix V1603	112/FT130	195	145	820	522	58	820	522	58	3,7	11,9	7,7	88,2	92,4
Helix V1604	112/FT130	195	145	990	692	65	990	692	65	5,5	18,8	10,9	88,6	84,5
Helix V1605	132/FF265	253	194	1113	742	106	1113	742	106	7,5	-	15,0	90,5	86
Helix V1606	132/FF265	253	194	1163	792	109	1163	792	109	7,5	-	15,0	90,5	86
Helix V1607	132/FF265	274	225	1292	842	128	1292	842	128	11	-	21,7	90,2	85,5
Helix V1608	132/FF265	274	225	1371	921	131	1371	921	131	11	-	21,7	90,2	85,5
**Helix V1609	132/FF265	274	225	-	-	-	1421	971	134	11	-	21,7	90,2	85,5
**Helix V1611	160/FF300	322	300	-	-	-	1557	1071	193	15	-	27,4	92,4	90
**Helix V1613	160/FF300	322	300	-	-	-	1801	1271	220	18,5	-	33,6	93	90

**25 bar Pump

Performance Curve



Outline drawing

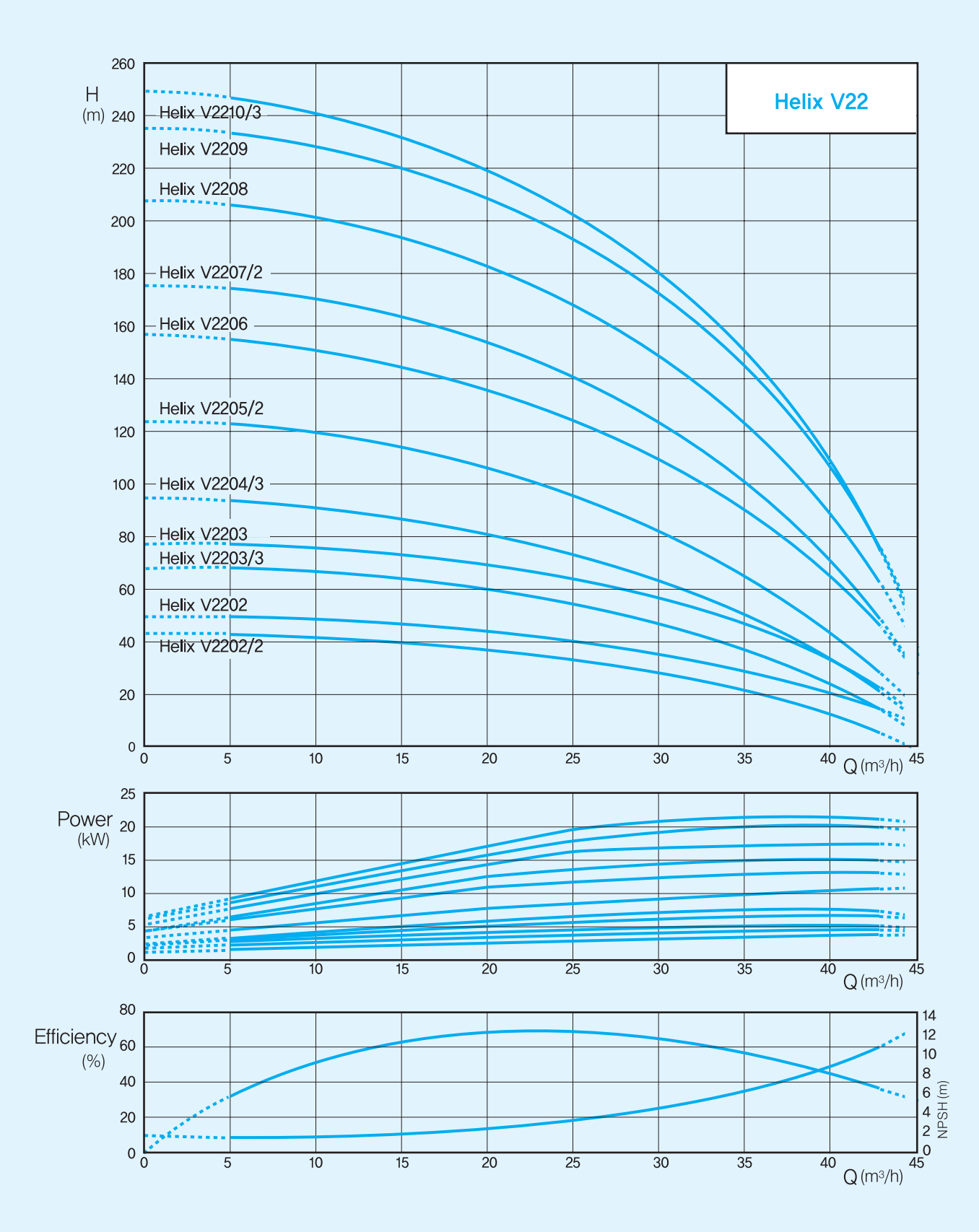


Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

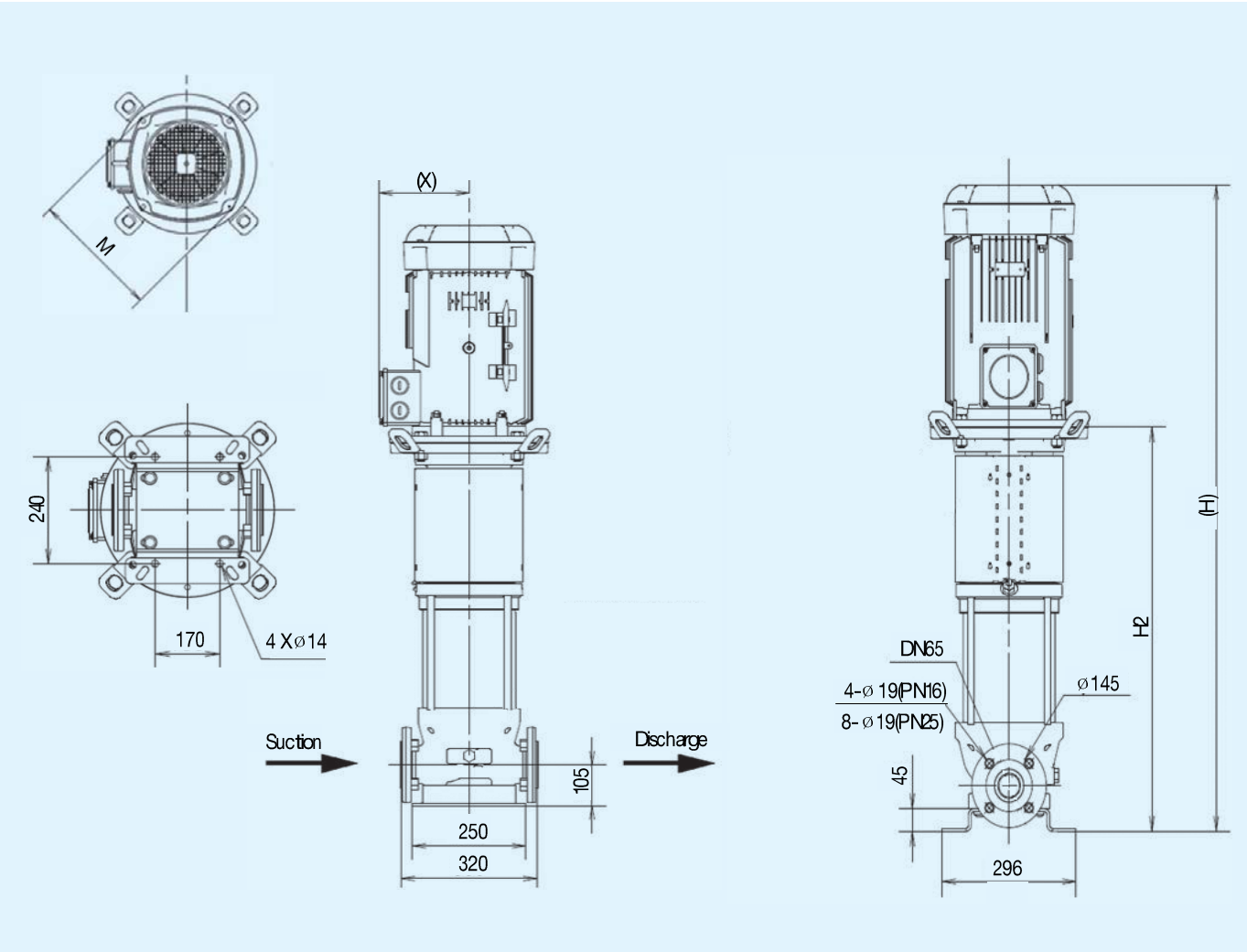
Model	Motor Frame/Flange	ø M	(X)	PUMP				WEIGHT		Power	Max. Load Current (A)		Motor Efficiency	Power Factor
				PN16		PN25		PN16	PN25					
				(H)	H2	(H)	H2							
				mm				kg		(kW)	220V, 3ø	380V, 3ø	η (%)	cos φ
Helix V2202/2	100/FT130	195	145	849	551	849	551	69	69	3,7	11,9	7,7	88,2	92,4
Helix V2202	112/FT130	195	145	965	667	965	667	83	83	5,5	18,8	10,9	88,6	84,5
Helix V2203/3	112/FT130	195	145	1015	717	1015	717	88	88	5,5	18,8	10,9	88,6	84,5
Helix V2203	132/FF265	253	194	1088	717	1088	717	115	115	7,5	-	15,0	90,5	86
Helix V2204/3	132/FF265	253	194	1138	767	1138	767	116	116	7,5	-	15,0	90,5	86
Helix V2205/2	132/FF265	274	225	1297	847	1297	847	149	149	11	-	21,7	90,2	85,5
**Helix V2206	160/FF300	322	300	-	-	1383	897	-	201	15	-	27,4	92,4	90
**Helix V2207/2	160/FF300	322	300	-	-	1433	947	-	202	15	-	27,4	92,4	90
**Helix V2208	160/FF300	322	300	-	-	1527	997	-	227	18,5	-	33,6	93	90
**Helix V2209	180/FF300	360	314	-	-	1596	1047	-	247	22	-	39,5	93	91
**Helix V2210/3	180/FF300	360	314	-	-	1646	1097	-	248	22	-	39,5	93	91

**25 bar Pump

Performance Curve



Outline drawing

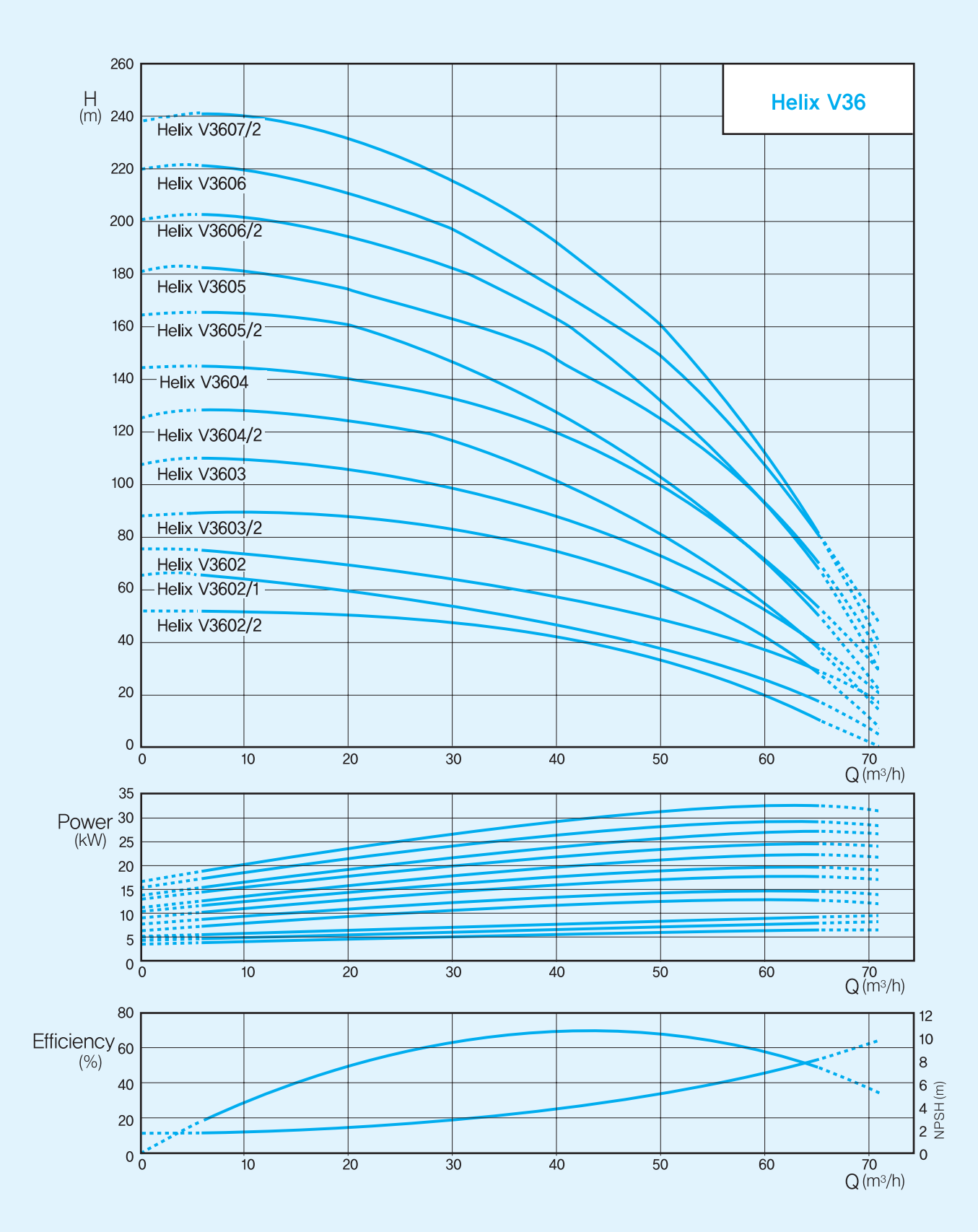


Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

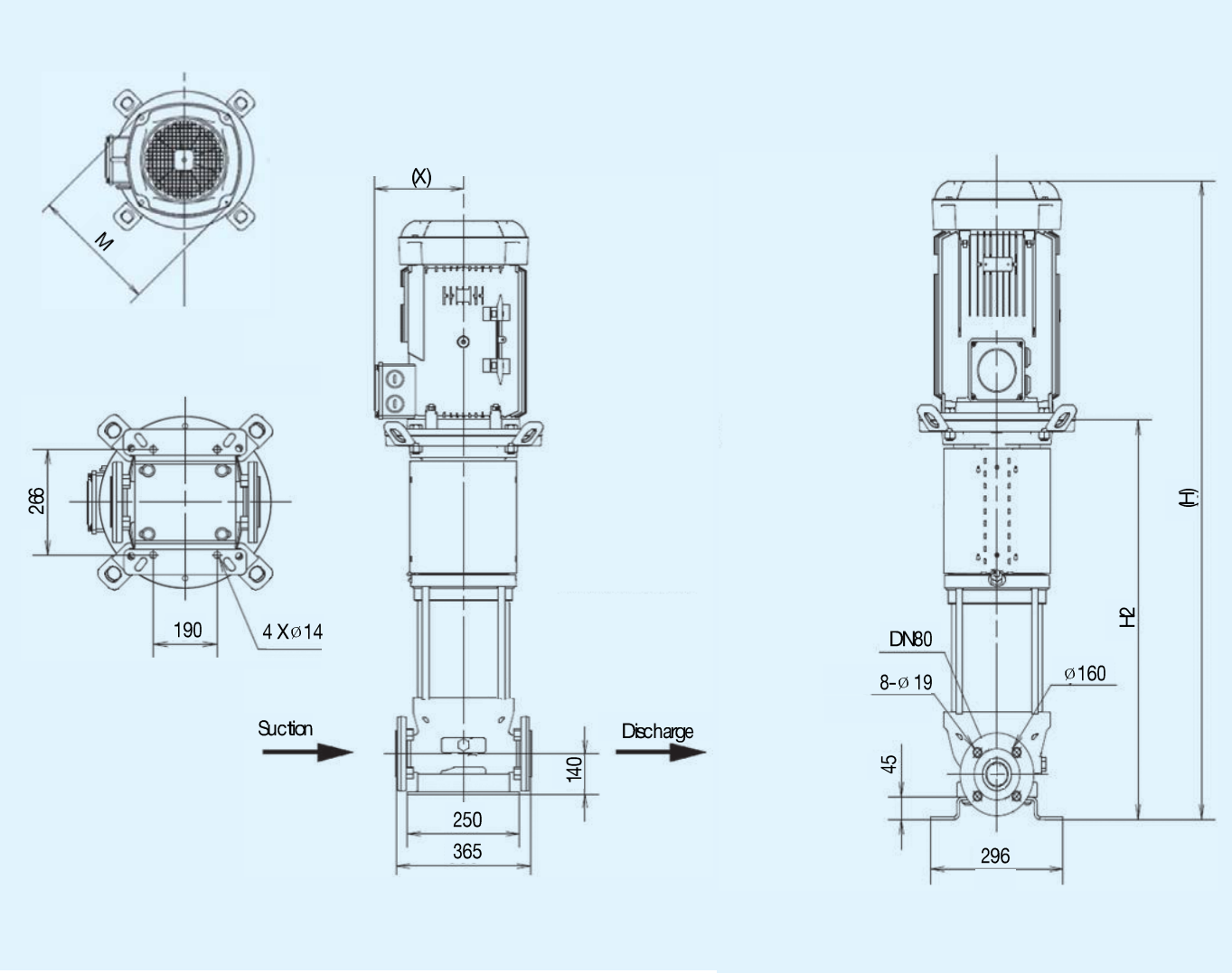
Model	Motor Frame/Flange	ø M	(X)	PUMP				WEIGHT		Power	Max. Load Current(A)		Mot or Efficiency	Power Factor
				PN16		PN25		PN16	PN25					
				(H)	H2	(H)	H2							
mm				kg		(kW)	220V, 3ø	380V, 3ø	η (%)	COS φ				
Helix V3602/2	132/FF265	253	194	1086	715	1086	715	104	104	7,5	-	15,0	90,5	86
Helix V3602/1	132/FF265	274	225	1165	715	1165	715	115	115	9	-	17,5	90	87
Helix V3602	132/FF265	274	225	1165	715	1165	715	120	120	11	-	21,7	90,2	85,5
Helix V3603/2	160/FF300	322	300	1301	815	1301	815	187	187	15	-	27,4	92,4	90
Helix V3603	160/FF300	322	300	1301	815	1301	815	187	187	15	-	27,4	92,4	90
Helix V3604/2	160/FF300	322	300	1410	880	1410	880	216	216	18,5	-	33,6	93	90
Helix V3604	180/FF300	360	314	1429	880	1429	880	236	236	22	-	39,5	93	91
**Helix V3605/2	180/FF300	360	314	-	-	1494	945	-	241	22	-	39,5	93	91
**Helix V3605	180/FF350	360	327	-	-	1592	945	-	275	30	-	53,5	93,6	91
**Helix V3606/2	180/FF350	360	327	-	-	1657	1010	-	279	30	-	53,5	93,6	91
**Helix V3606	180/FF350	360	327	-	-	1657	1010	-	279	30	-	53,5	93,6	91
**Helix V3607/2	200/FF350	405	362	-	-	1736	1080	-	401	37	-	67,1	93,6	89,5

**25 bar Pump

Performance Curve



Outline drawing

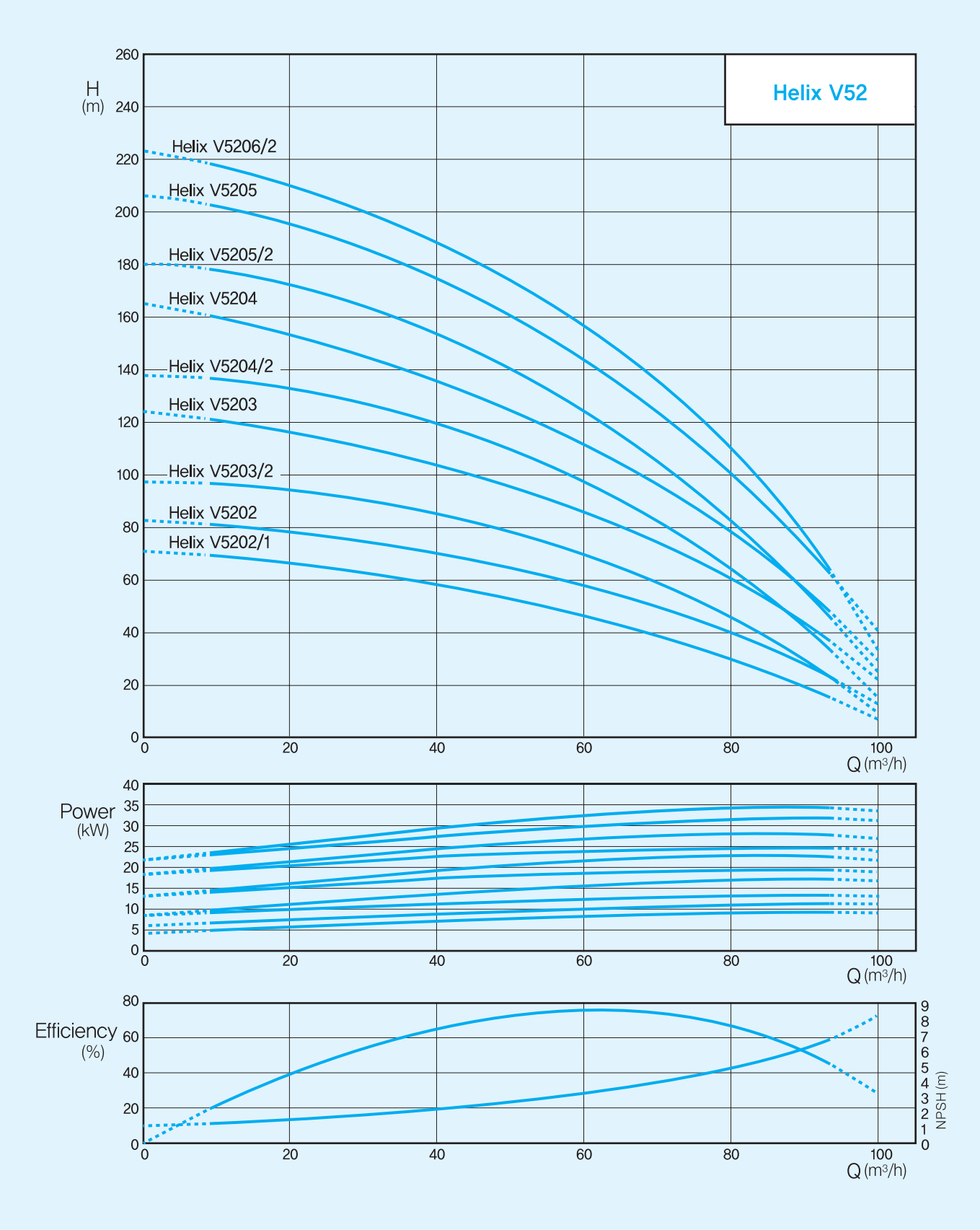


Dimension / Weight / Motor Spec. (60Hz, 3500rpm)

Model	Motor Frame/Flange	ø M	(X)	PUMP				WEIGHT		Power	Max. Load Current (A)		Mot or Efficiency	Power Factor
				PN16		PN25		PN16	PN25					
				(H)	H2	(H)	H2							
		mm				kg		(kW)	220V, 3ø	380V, 3ø	η (%)	COS φ		
Helix V5202/1	132/FF265	274	225	1263	813	1263	813	161	161	11	-	21,7	90,2	85,5
Helix V5202	160/FF300	322	300	1299	813	1299	813	210	210	15	-	27,4	92,4	90
Helix V5203/2	160/FF300	322	300	1443	913	1443	913	238	238	18,5	-	33,6	93	90
Helix V5203	180/FF300	360	314	1462	913	1462	913	257	257	22	-	39,5	93	91
Helix V5204/2	180/FF300	360	314	1562	1013	1562	1013	260	260	22	-	39,5	93	91
Helix V5204	180/FF350	360	327	1660	1013	1660	1013	281	281	30	-	53,5	93,6	91
**Helix V5205/2	180/FF350	360	327	-	-	1760	1113	-	285	30	-	53,5	93,6	91
**Helix V5205	200/FF350	405	362	-	-	1769	1113	-	401	37	-	67,1	93,6	89,5
**Helix V5206/2	200/FF350	405	362	-	-	1869	1213	-	404	37	-	67,1	93,6	89,5

**25 bar Pump

Performance Curve





High-Pressure Multistage Centrifugal Pumps

MVI Series

Product Introduction



Application

Water supply, pressurized facility, fire extinguishments facility, boiler water supply, industrial circular pump, coolant pump, assembling facility, high pressured washer, drinking water manufacturing facility, R/O Filtering equipment, Sprinkler etc.

Applicable fluids

Fluids that do not contain fibrous materials, or any materials which might cause abrasion, such as drinking water, cold/hot water, condensed water, glycol mixed water (Max 40%)

Motor spec.

IEC-Standard crop triple phase motor
Motor type : TEFC
Protection class : IP 54(IP55 as an option)
Insulation class : F class
Flange type : 0.55kW ~ 5.5kW, then V18
 Above 7.5kW, then V1
Power Source : 0.37kW ~ 5.5kW, 220/380V, 60Hz
 7.5kW ~ 45kW, 380V, 60Hz
 (different voltage and high efficient motor are optional)

Structures

It is a non self-priming inline vertical multistage pump and there are 2 types of pump, 16 bar type and 25 bar type. Impeller, diffuser, and pump case are composed of Stainless steel 304 and products which are composed of stainless steel 316L will be supplied when optional ordered. Motor shaft and pump shaft under IEC-standard are assembled firmly by ligid coupling, and oversized bearing is additionally installed in the motor support to compensate the thrust load. Replacement of motor is possible for V1-typed motor flange or V18-typed motor flange and they are coated with bi-directional mechanical seal, enabling a maintenance and repair. All materials can be applied to drinking water and are approved by KTW, Germany and WRC, England.

Pump material spec.

Impeller	STS 304 / STS 316L*
Diffuser	STS 304 / STS 316L*
Pump Case	STS 304 / GC 25** / STS 316L*
Shaft	STS 304
Gasket	EPDM/VITON*
Mechanical seal	SiC/carbon, Tungsten carbide/carbon

STS316L*, VITON* can be ordered separately.

High-Pressure Multistage Centrifugal Pumps

MVI Series



Product Introduction

Duty Charts

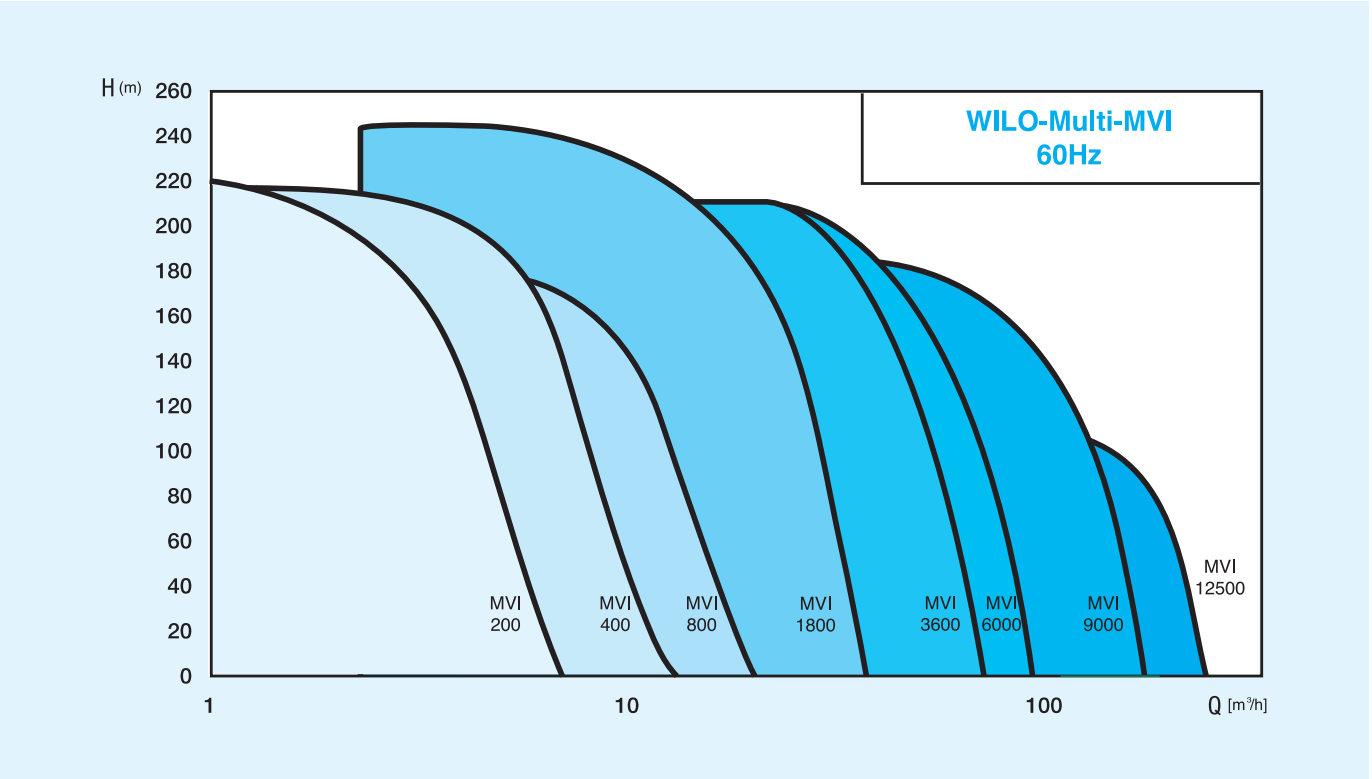


Table for function data

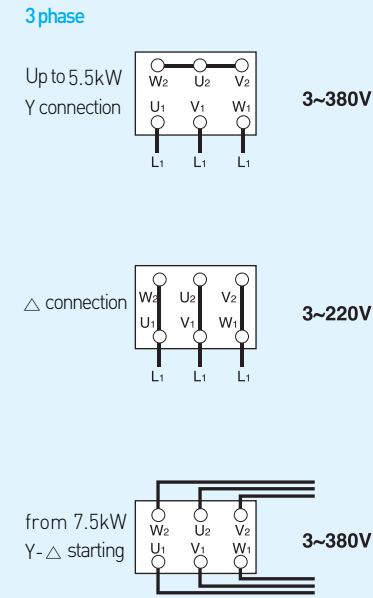
Data	MVI 200	MVI 400	MVI 800	MVI 1800	MVI 3600	MVI 6000	MVI 9000	MVI 12500
Max Flow(m³/h)	6	9	18	30	60	90	130	170
Max Head(m)	234	225	190	250	235	230	185	140
Allowed fluid temperature(℃)	-15~ +120℃							
Ambient temperature(℃)	Max 40℃							
Max Allowed pressure(bar)	16bar, 25bar							

※ Please contact us if fluid temperature is above 80℃

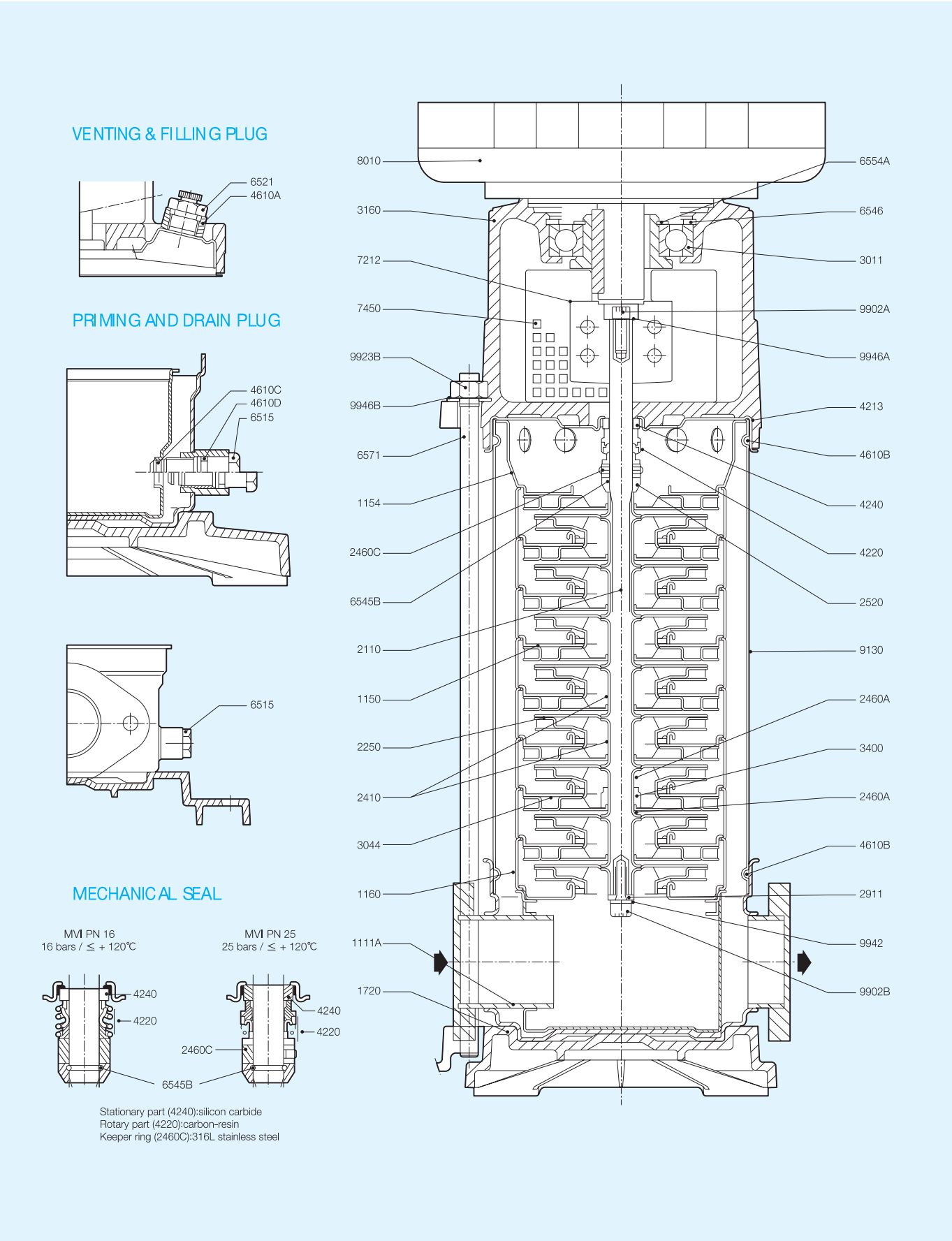
Identification code(e.g : MVI 405)

MVI	Vertical Multistage Stainless Centrifugal pump. Pump composed of STS 304 as standard (Option: STS316L)
04	Nominal operating rate of flow (m³/h)
05	Number of stage of impeller

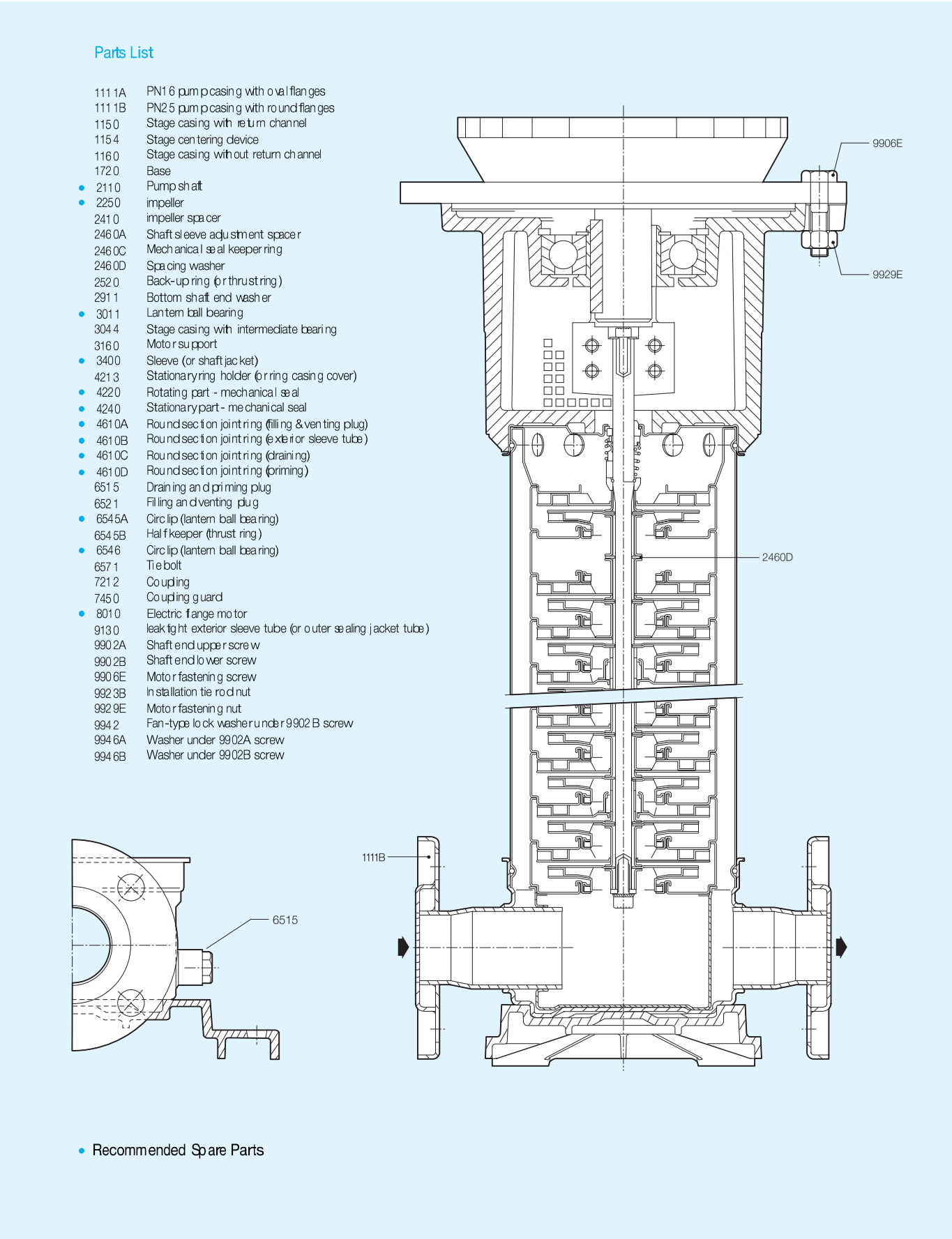
Wiring diagram



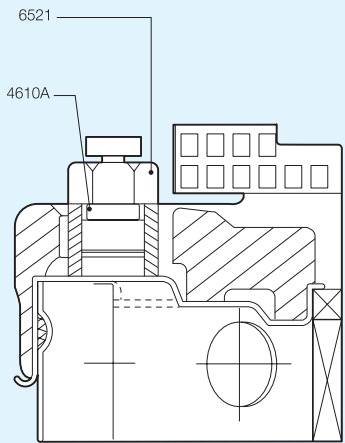
MVI 200/400/800 Series PN16bar Sectional Drawing



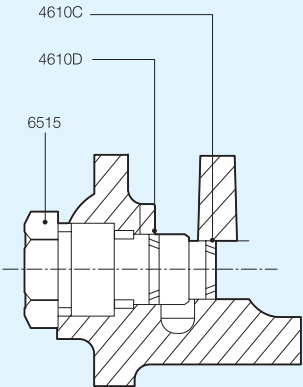
MVI 200/400/800 Series PN25bar Sectional Drawing



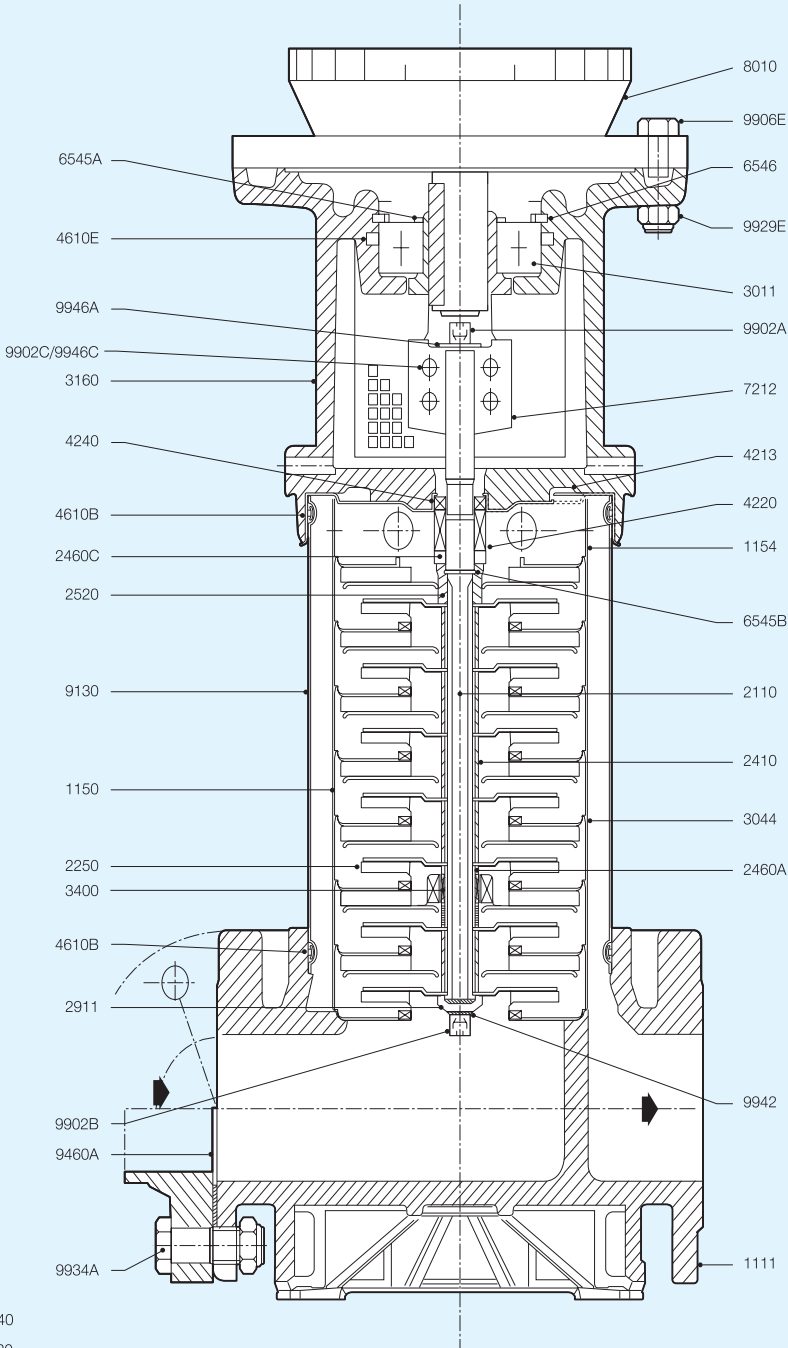
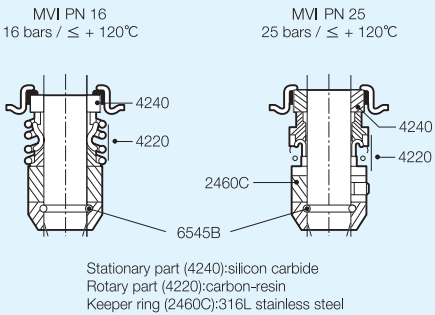
FILLING & VENTING PLUG



PRIMING AND DRAIN PLUG



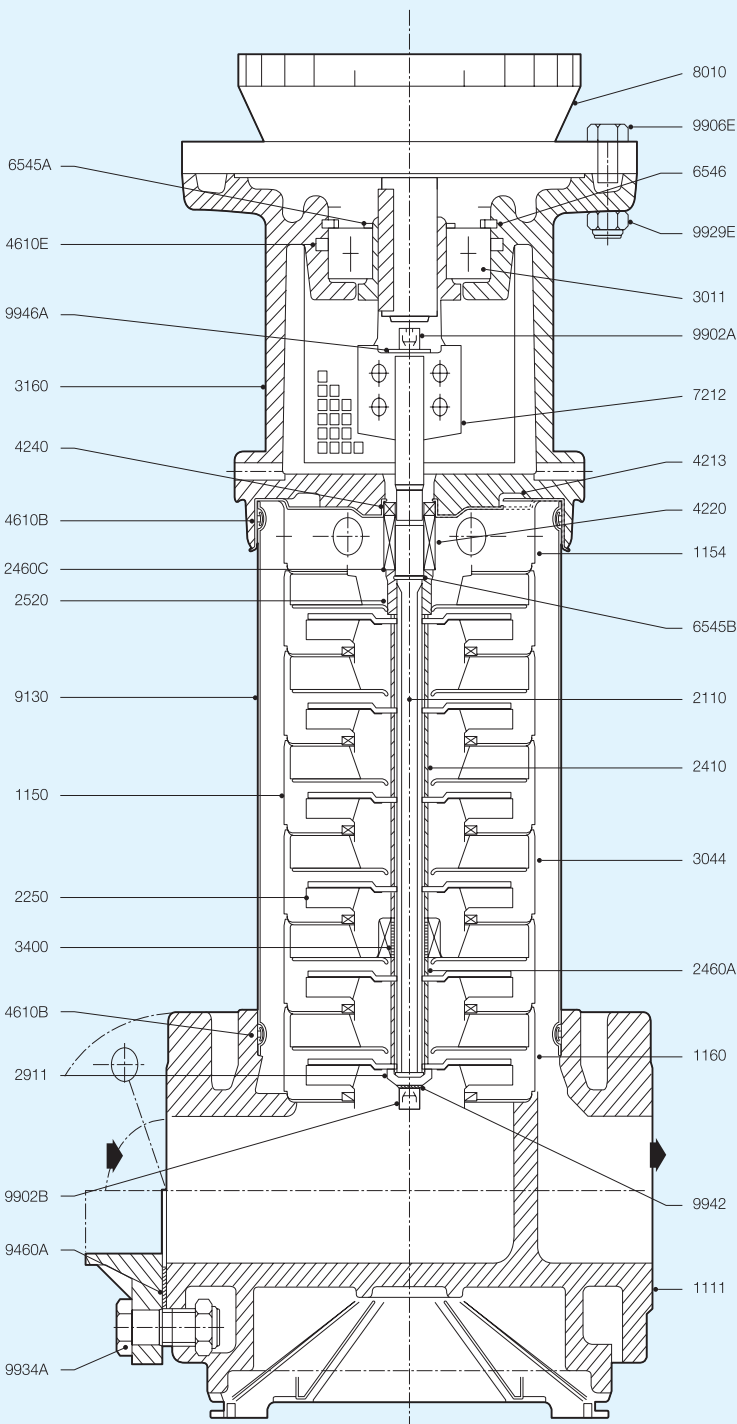
MECHANICAL SEAL



Parts List

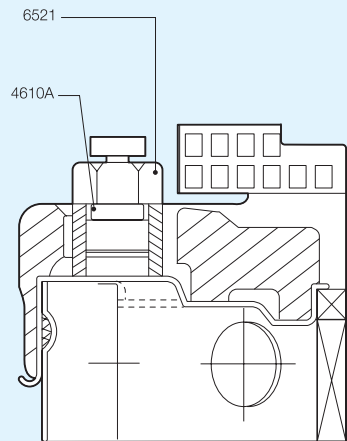
- 1111 Pump casing
- 1150 Stage casing with return channel
- 1154 Stage centering device
- 1160 Stage casing with out return channel
- 2110 Pump shaft
- 2250 impeller
- 2410 impeller spacer
- 2460 A Shaft sleeve adjustment spacer
- 2460 C Mechanical seal keeper ring
- 2460 D Spacing washer
- 2520 Back-up ring (or Thrust ring)
- 2911 Bottom shaft end washer
- 3011 Lantern ball bearing
- 3044 Stage casing with intermediate bearing
- 3160 Motor support
- 3400 Sleeve (or Shaft jacket)
- 4213 Stationary ring holder (or Ring casing cover)
- 4220 Rotating part - mechanical seal
- 4240 Stationary part - mechanical seal
- 4610 A O-ring (filling & venting plug)
- 4610 B O-ring (exterior sleeve tube)
- 4610 C O-ring (draining)
- 4610 D O-ring (priming)
- 4610 E O-ring (ball bearing)
- 6515 Draining and priming plug
- 6521 Filling and venting plug
- 6545 A Circ clip (lantern ball bearing)
- 6545 B Halfkeeper (thrust ring)
- 6546 Circ clip (lantern ball bearing)
- 6571 Tie bolt
- 7212 Coupling
- 7450 Coupling guard
- 8010 Electric flange motor
- 9130 Leak tight exterior sleeve tube (or outer sealing jacket tube)
- 9460 A Round gasket (option part)
- 9902 A Shaft end upper screw
- 9902 B Shaft end lower screw
- 9906 E Motor fastening screw
- 9923 B Installation tie rod nut
- 9929 E Motor fastening nut
- 9934 A Coupler flange bolt
- 9942 Fan-type lock washer under 9902 B screw
- 9946 A Washer under 9902 A screw

Recommended Spare Parts

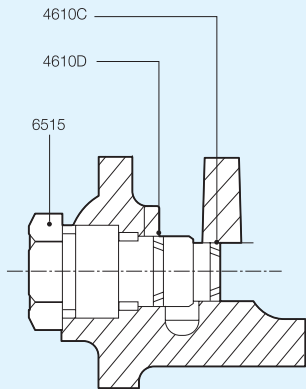


MVI 6000 Series Sectional Drawing

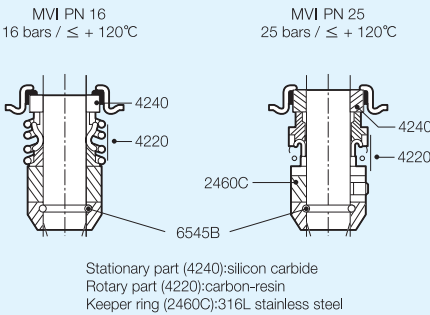
FILLING & VENTING PLUG



PRIMING AND DRAIN PLUG



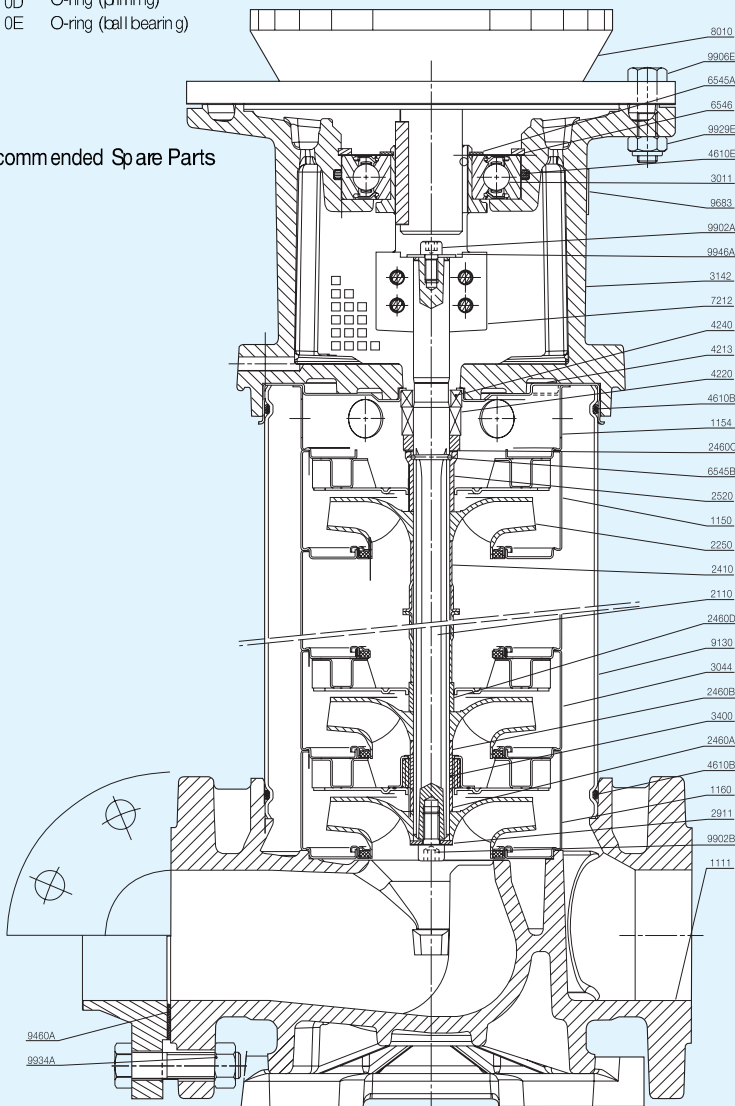
MECHANICAL SEAL



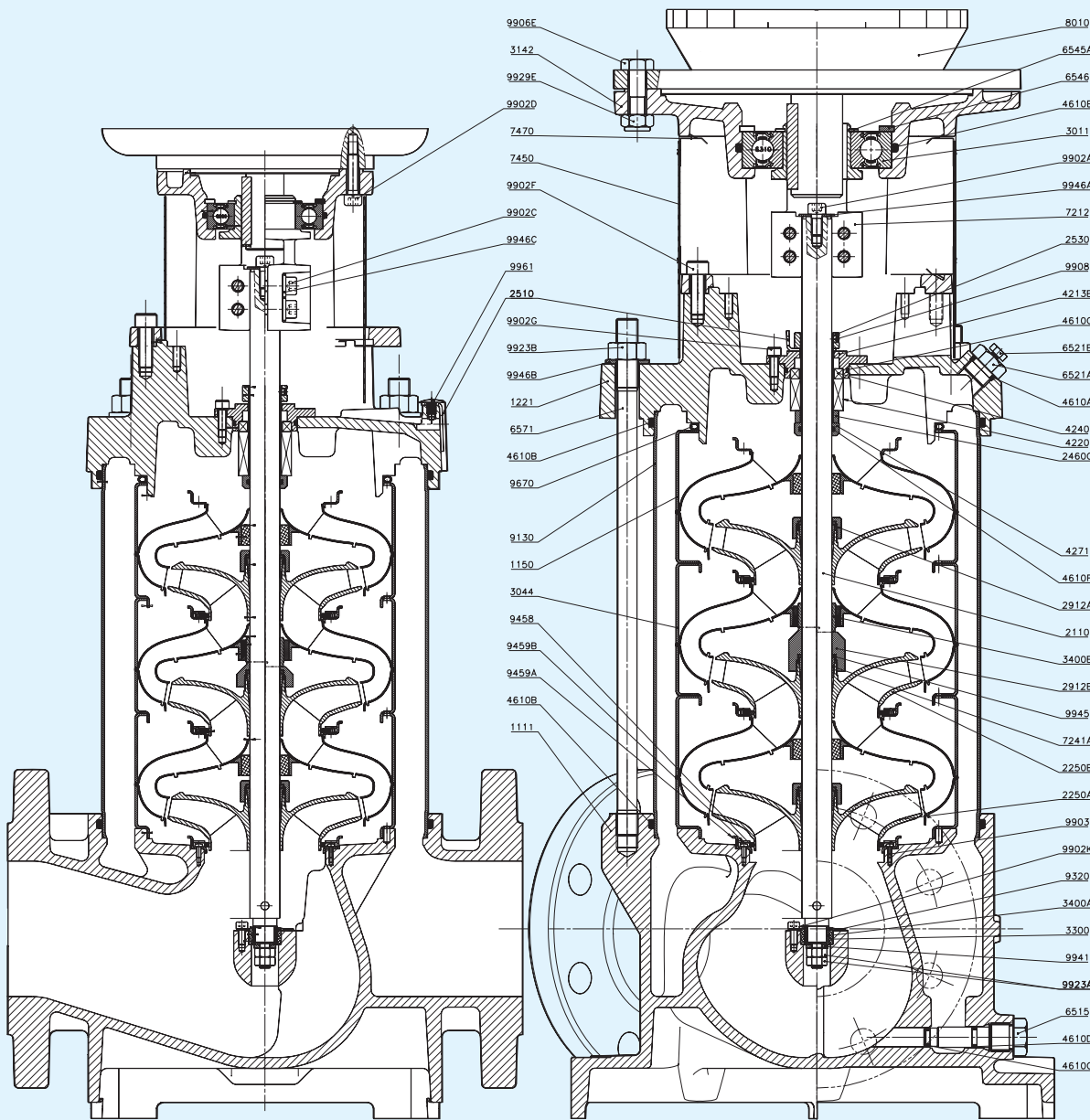
Parts List

- | | | | |
|--------|---|--------|---|
| 111 1 | Pump casing | 651 5 | Draining and priming plug |
| 115 0 | Stage casing with return channel | 652 1 | Filling and venting plug |
| 115 4 | Stage centering device | 654 5A | Circclip (lantern ball bearing) |
| 116 0 | Stage casing without return channel | 654 5B | Half keeper (thrust ring) |
| 211 0 | Pump shaft | 654 6 | Circclip (lantern ball bearing) |
| 225 0 | Impeller | 657 1 | Tie bolt |
| 241 0 | Impeller spacer | 721 2 | Coupling |
| 246 0A | Shaft sleeve adjustment spacer | 745 0 | Coupling guard |
| 246 0C | Mechanical seal keeper ring | 801 0 | Electric flange motor |
| 246 0D | Spacing washer | 913 0 | Leaktight exterior sleeve tube (or outer sealing jacket tube) |
| 252 0 | Back-up ring (or thrust ring) | 946 0A | Round gasket (option part) |
| 291 1 | Bottom shaft end washer | 990 2A | Shaft end upper screw |
| 301 1 | Lantern ball bearing | 990 2B | Shaft end lower screw |
| 304 4 | Stage casing with intermediate bearing | 990 6E | Motor fastening screw |
| 316 0 | Motor support | 992 3B | Installation tie rod nut |
| 340 0 | Sleeve (or shaft jacket) | 992 9E | Motor fastening nut |
| 421 3 | Stationary ring holder (or ring casing cover) | 993 4A | Counter flange bolt |
| 422 0 | Rotating part - mechanical seal | 994 2 | Fan-type lock washer under 9902B screw |
| 424 0 | Stationary part - mechanical seal | 994 6A | Washer under 9902A screw |
| 461 0A | O-ring (filling & venting plug) | | |
| 461 0B | O-ring (exterior sleeve tube) | | |
| 461 0C | O-ring (draining) | | |
| 461 0D | O-ring (priming) | | |
| 461 0E | O-ring (ball bearing) | | |

Recommended Spare Parts

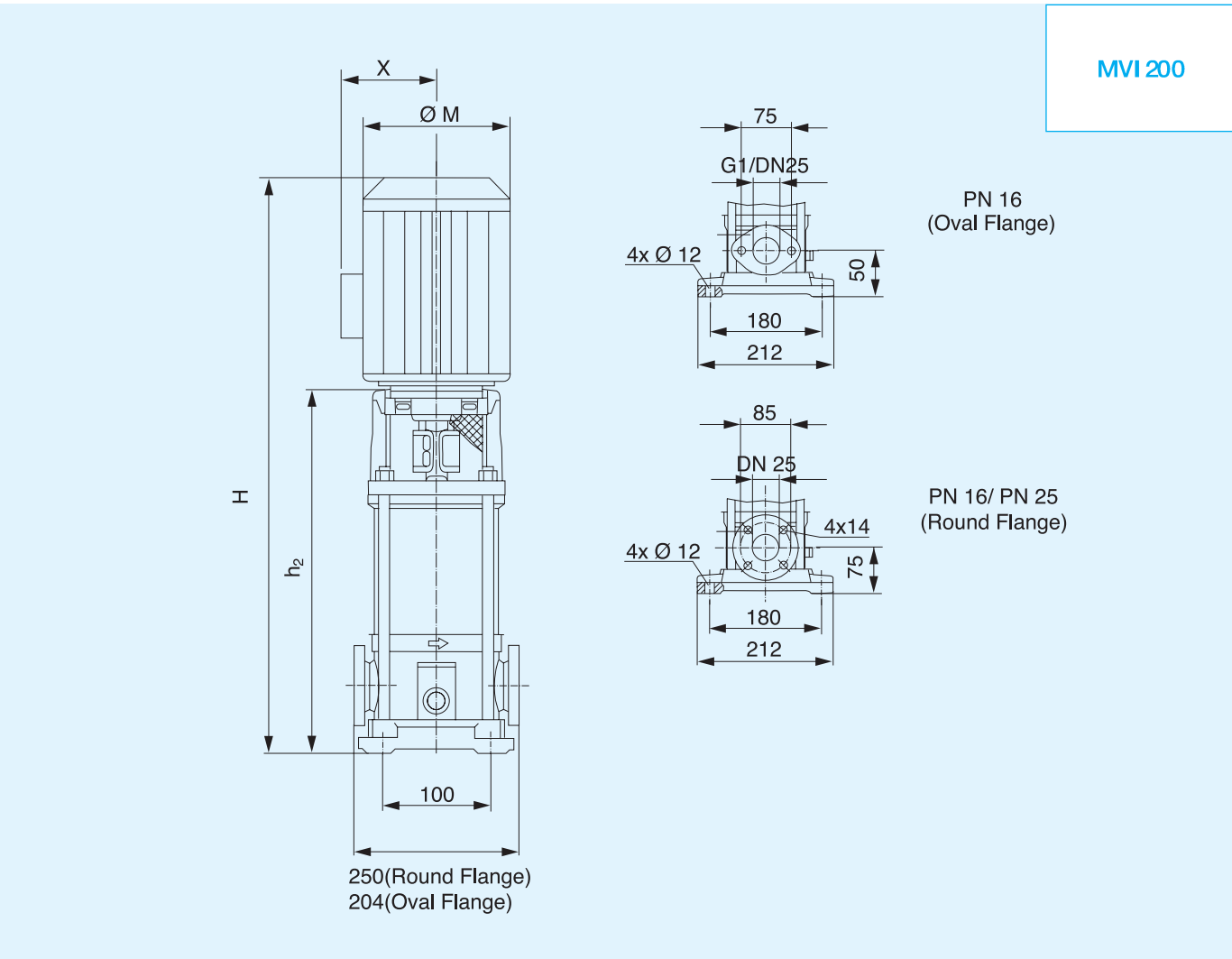


MVI 9000/12500 Series Sectional Drawing



Part List	Part Name	Part List	Part Name	Part List	Part Name
111 1	Pump Housing	427 1	Shaft sleeve	945 8	Suction side ring
115 0	Stage casing (Guide Vane)	461 0B	O-ring (exterior sleeve tube)	945 9A	Suction side ring cap
122 1	End shield	461 0A	O-ring (filling & venting plug)	945 9B	Suction side ring supporter
211 0	Shaft	461 0C	O-ring (draining)	967 0	Tube ring
225 0A	Impeller	461 0D	O-ring (priming)	990 2A	Shaft end upper screw
225 0B	Cutter impeller	461 0E	O-ring (ball bearing)	990 2F	Lantern fixing screw
246 0C	Mechanical seal keeper ring	461 0F	O-ring (Mechanical seal sleeve)	990 2G	Seal cover fixing screw
251 0	Wedge	461 0G	O-ring (Mechanical seal cover)	990 2K	Bush bearing fixing screw
253 0	Drive ring	651 5	Draining and priming plug	990 3	Suction side ring fixing screw
291 2A	Impeller fixing nut	652 1	Filling and venting plug	990 6E	Motor fixing screw
291 2B	Impeller fixing nut	654 5A	Round clip (ball bearing)	990 8	Seal fixing screw
301 1	Ball bearing	654 6	Round clip (ball bearing)	992 3A	Bush bearing fixing nut
314 2	Lantern	657 1	Tie bolt	992 3B	Tie rod nut
330 0	Bush bearing	721 2	Coupling	992 9E	Motor fixing nut
340 0A	Bearing sleeve	724 1A	Impeller conical ring	994 1	Washer
340 0B	Bearing sleeve	745 0	Coupling guard	996 1	Cramp
421 3B	Ring holder (Mechanical seal)	801 0	Motor		
422 0	Rotating part - Mechanical seal	913 0	Tube		
424 0	Stationary part - Mechanical seal	932 0	Bush bearing clamp		

Outline drawing

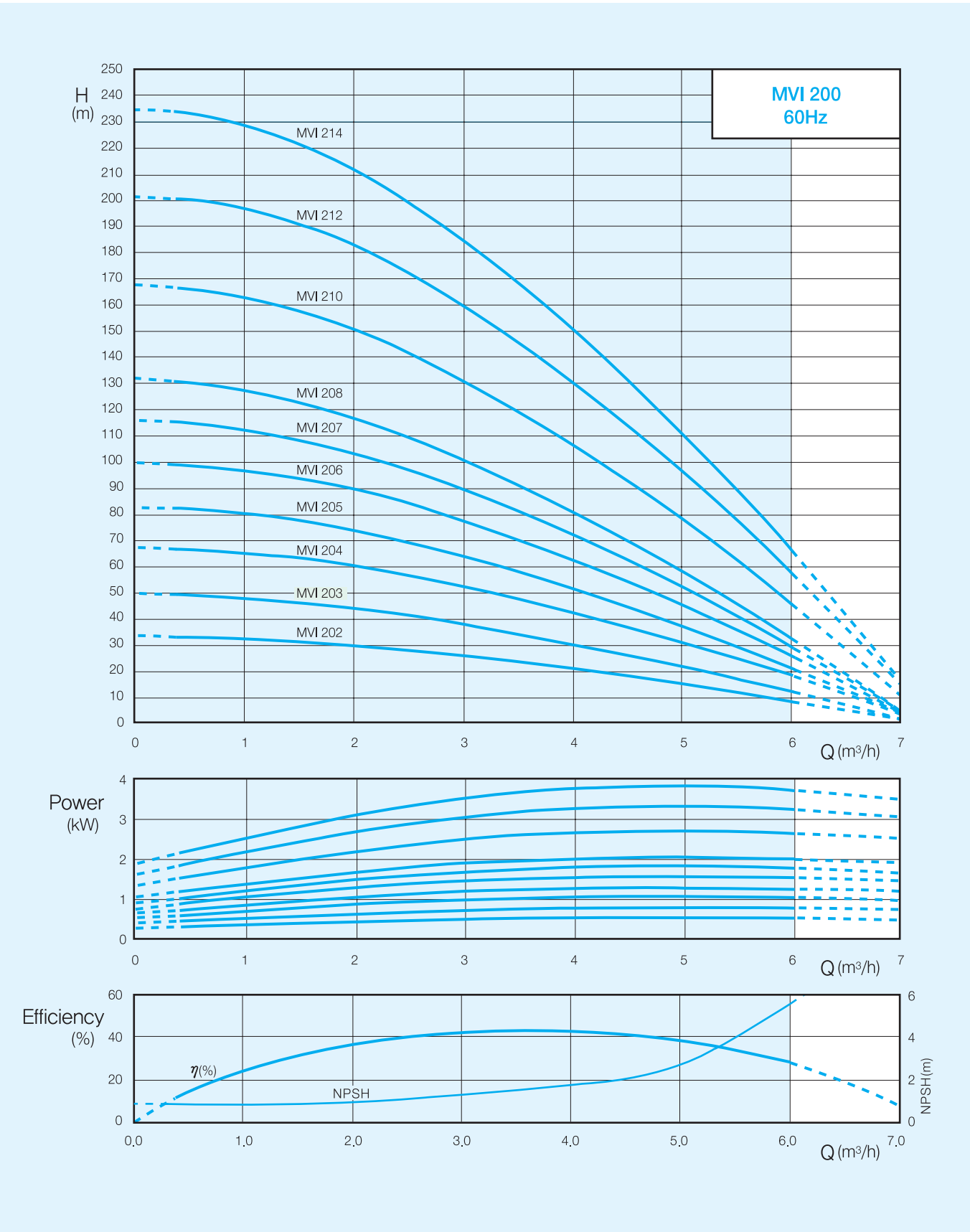


Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

Model	Motor Frame/Flange	M	(X)	PUMP				WEIGHT		Power	Max. Load Current(A)		Motor Efficiency	Power Factor
				PN16/25(Round)		PN16(Oval)		PN25	PN16					
				(H)	h ₂	(H)	h ₂							
		mm						kg		(kW)	220V, 3ø	380V, 3ø	η (%)	COS φ
MMI202	71/FT85	148	122	523	322	498	297	19,4	18	0,55	2,8	1,6	76,9	70,8
MMI203	80/FT100	170	134	542	332	517	307	22,7	21,4	0,75	3,1	1,9	81,7	77,2
MMI204	80/FT100	170	134	566	356	541	331	24,3	23	1,1	4,6	2,7	81,7	76,5
MMI205	90/FT115	170	134	610	390	585	365	28,5	27,2	1,5	5,5	3,3	84,9	82,8
MMI206	90/FT115	170	134	634	414	609	389	30,1	28,8	1,85	6,7	4,0	85,5	83,7
MMI207	90/FT115	195	137	384	438	659	413	34,7	33,4	2,2	8,0	4,9	87,8	82,6
MMI208	90/FT115	195	137	708	462	683	437	35,3	34	2,2	8,0	4,9	87,8	82,6
*MMI210	100/FT130	195	148	770	520	-	-	40,2	-	3	10,5	6,3	89,3	86,6
*MMI212	100/FT130	195	145	866	568	-	-	44,4	-	3,7	11,9	7,7	88,2	92,4
*MMI214	100/FT130	195	145	914	616	-	-	45,7	-	3,7	11,9	7,7	88,2	92,4

**25 bar Pump

Performance Curve



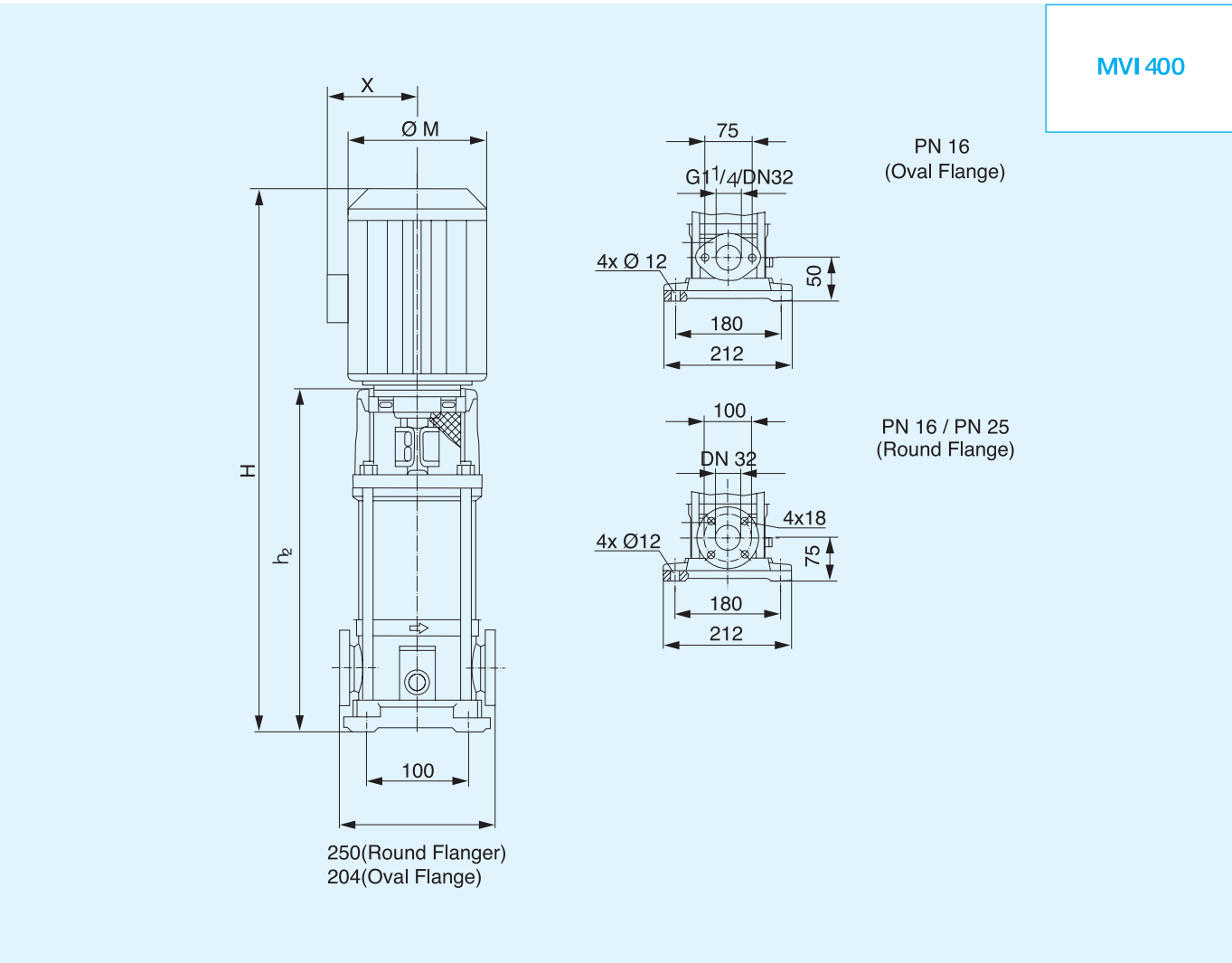


High-Pressure Multistage Centrifugal Pumps

MVI Series

MVI 400 Series Outline drawing & Dimension

Outline drawing



Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

Model	Motor Frame/Flange	M	(X)	PUMP				WEIGHT		Power	Max. Load Current(A)	Motor Efficiency	Power Factor	
				PN16/25(Round)		PN16(Oval)		PN25	PN16					
				(H)	h ₂	(H)	h ₂							
				mm										kg
MVI402	80/FT100	170	134	532	322	517	307	22	20,7	0,75	3,1	1,9	81,7	77,2
MVI403	80/FT100	170	134	542	332	517	307	23,7	22,4	1,1	4,6	2,7	81,7	76,5
MVI404	90/FT115	170	134	586	366	561	341	27,9	26,6	1,5	5,5	3,3	84,9	82,8
MVI405	90/FT115	170	134	610	390	585	365	29,5	28,2	1,85	6,7	4,0	85,5	83,7
MVI406	90/FT115	195	137	660	414	635	389	34,1	32,8	2,2	8,0	4,9	87,8	82,6
MVI407	100/FT130	195	148	698	448	673	423	38,4	37,1	3	10,5	6,3	89,3	86,6
MVI408	100/FT130	195	148	822	472	697	447	39	37,7	3	10,5	6,3	89,3	86,6
**MVI410	100/FT130	195	145	818	520	-	-	43,3	-	3,7	11,9	7,7	88,2	92,4
**MVI412	112/FT130	195	145	896	598	-	-	48,5	-	5,5	18,8	10,9	88,6	84,5
**MVI414	112/FT130	195	145	914	616	-	-	49,7	-	5,5	18,8	10,9	88,6	84,5

**25 bar Pump

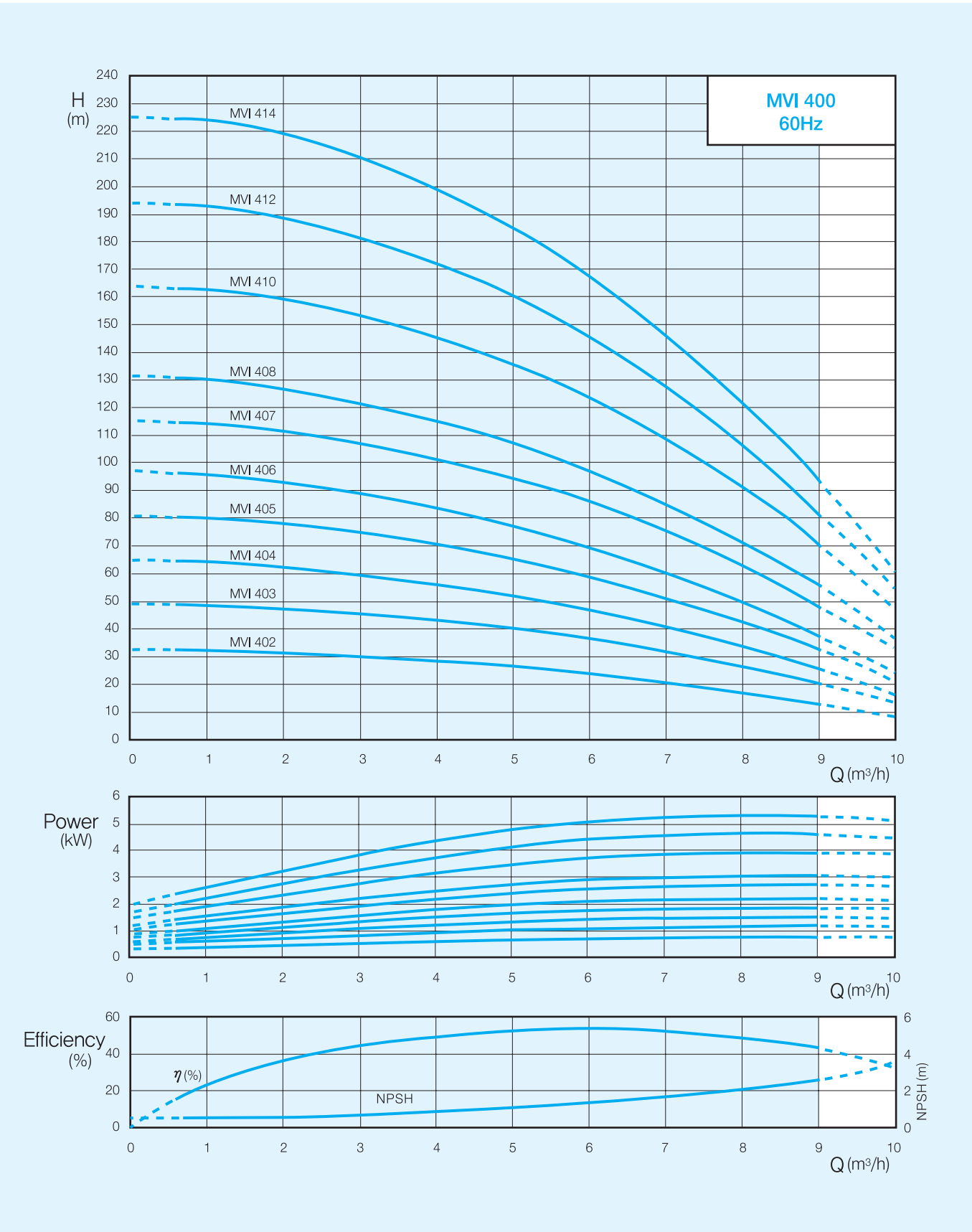
High-Pressure Multistage Centrifugal Pumps



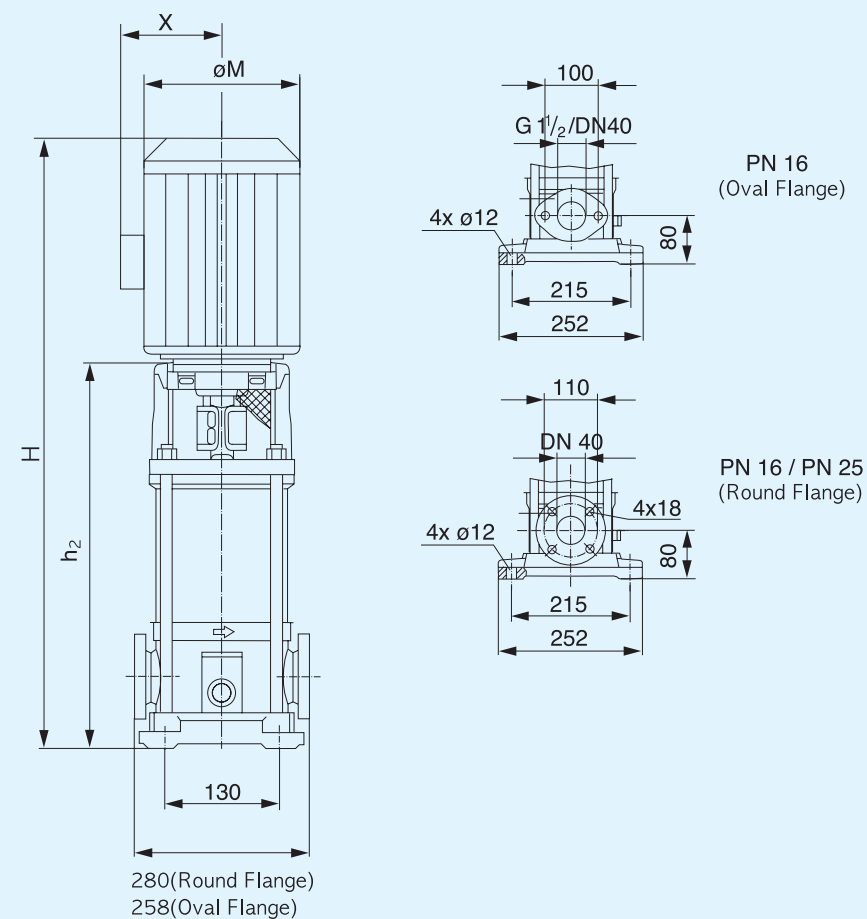
MVI Series

MVI 400 Series

Performance Curve



Outline drawing

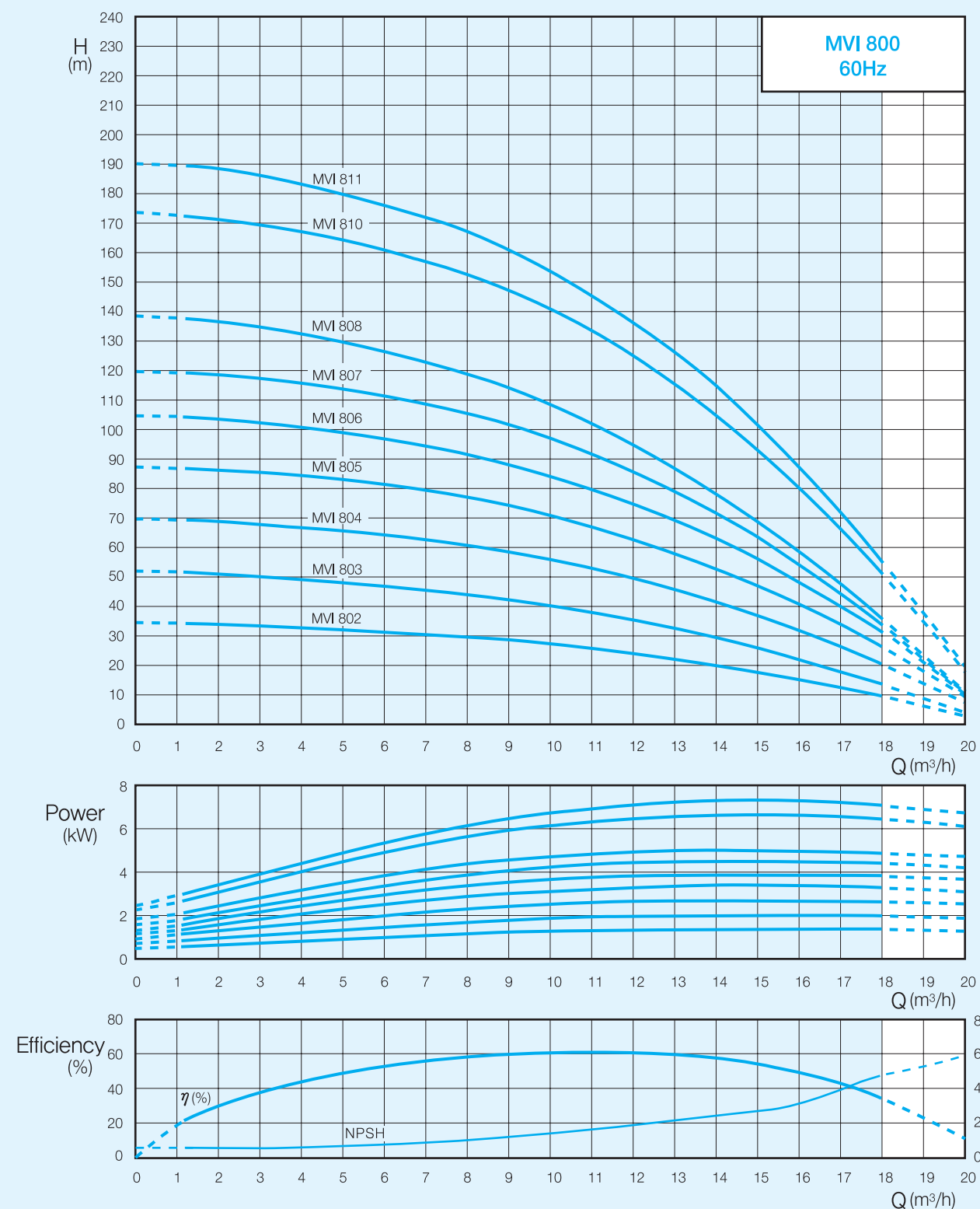


Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

Model	Motor Frame/Flange	M	(X)	PUMP				WEIGHT		Power	Max. Load Current(A)		Motor Efficiency	Power Factor
				PN16(25Pound)		PN16(Oral)		PN25	PN16					
				(H)	h2	(H)	h2							
				mm										
MM1802	90/FT115	170	134	564	344	564	344	28,4	28,1	1,5	5,5	3,3	84,9	82,8
MM1803	90/FT115	195	137	620	374	620	374	34,2	33,8	2,2	8,0	4,9	87,8	82,6
MM1804	100/FT130	195	148	664	414	664	414	38,5	38,2	3	10,5	6,3	89,3	86,6
MM1805	100/FT130	195	145	742	444	742	444	42,2	41,9	3,7	11,9	7,7	88,2	92,4
MM1806	100/FT130	195	145	772	474	772	474	44,9	44,6	4	13,9	8,0	88,1	92,4
MM1807	112/FT130	195	145	802	504	802	504	47,7	47,4	5,5	18,8	10,9	88,6	84,5
MM1808	112/FT130	195	145	832	534	832	534	48,4	48,1	5,5	18,8	10,9	88,6	84,5
**MM1810	132/FF265	253	194	984	613	-	-	83	-	7,5	-	15,0	90,5	86,0
**MM1811	132/FF265	253	194	1044	673	-	-	84,2	-	7,5	-	15,0	90,5	86,0

★★ 25 bar Pump

Performance Curve



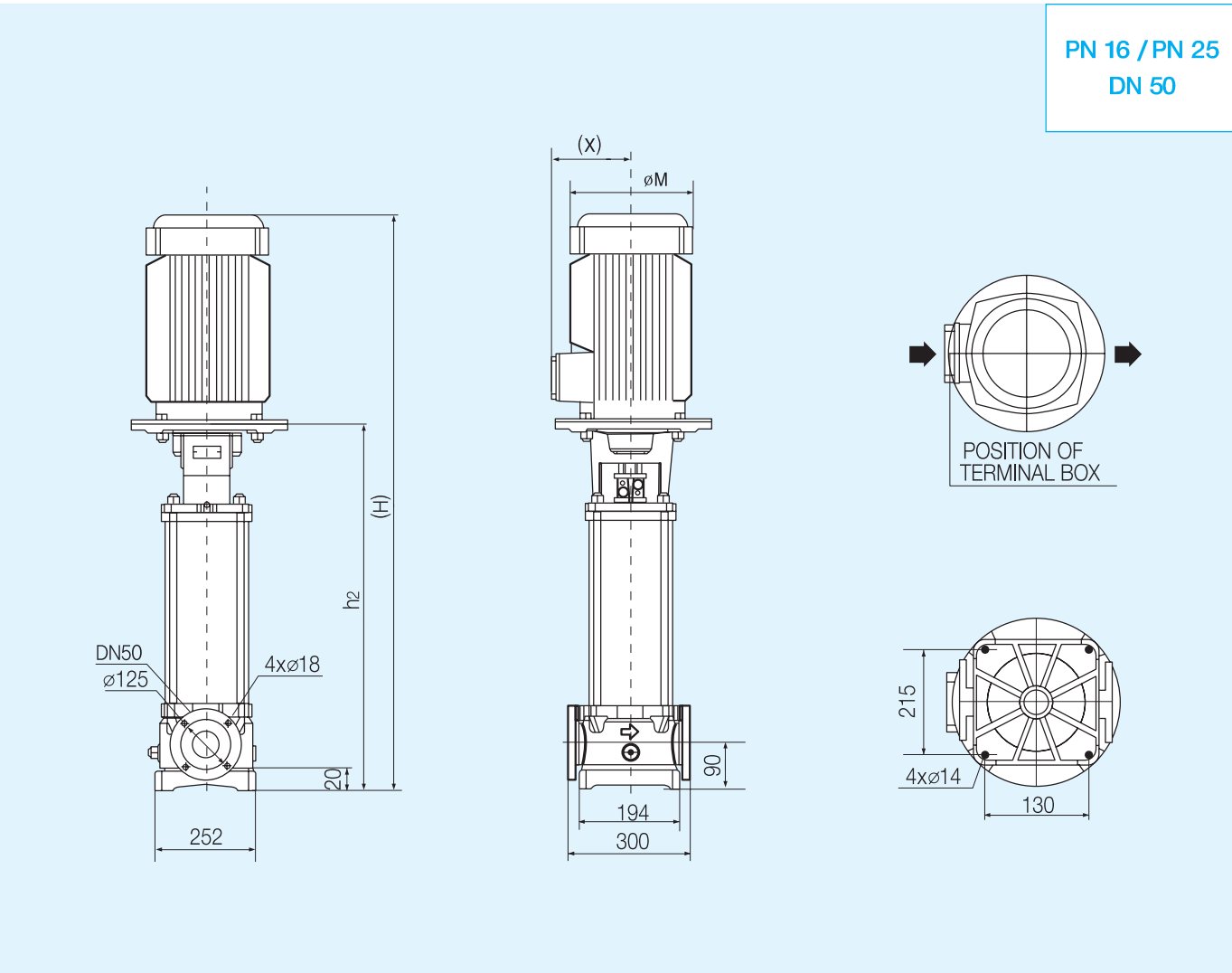


High-Pressure Multistage Centrifugal Pumps

MVI Series

MVI 1800 Series Outline drawing & Dimension

Outline drawing



Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

Model	Motor Frame/Flange	M	(X)	PUMP				WEIGHT		Power	Max. Load Current(A)	Motor Efficiency	Power Factor	
				PN16		PN25		PN16	PN25					
				(H)	h2	(H)	h2							
				mm				kg		(kW)	220V, 3ø	380V, 3ø	η(%)	COS φ
MVI1802	100/FT130	195	145	727	429	727	429	83	84	3,7	11,9	7,7	88,2	92,4
MVI1803	112/FT130	195	145	727	429	727	429	87	88	5,5	18,8	10,9	88,6	84,5
MVI1804	132/FF265	253	194	855	484	855	484	123	124	7,5	-	15,0	90,5	86,0
MVI1805	132/FF265	274	225	968	518	968	518	136	137	9	-	17,5	90,0	87,5
MVI1806	132/FF265	274	225	1003	553	1003	553	143	144	11	-	21,7	90,2	85,5
**MVI1807	160/FF300	322	300	-	-	1138	652	-	204	15	-	27,4	92,4	90,0
**MVI1808	160/FF300	322	300	-	-	1138	652	-	204	15	-	27,4	92,4	90,0
**MVI1809	160/FF300	322	300	-	-	1251	721	-	240	18,5	-	33,6	93,0	90,0
**MVI1810	160/FF300	322	300	-	-	1251	721	-	240	18,5	-	33,6	93,0	90,0

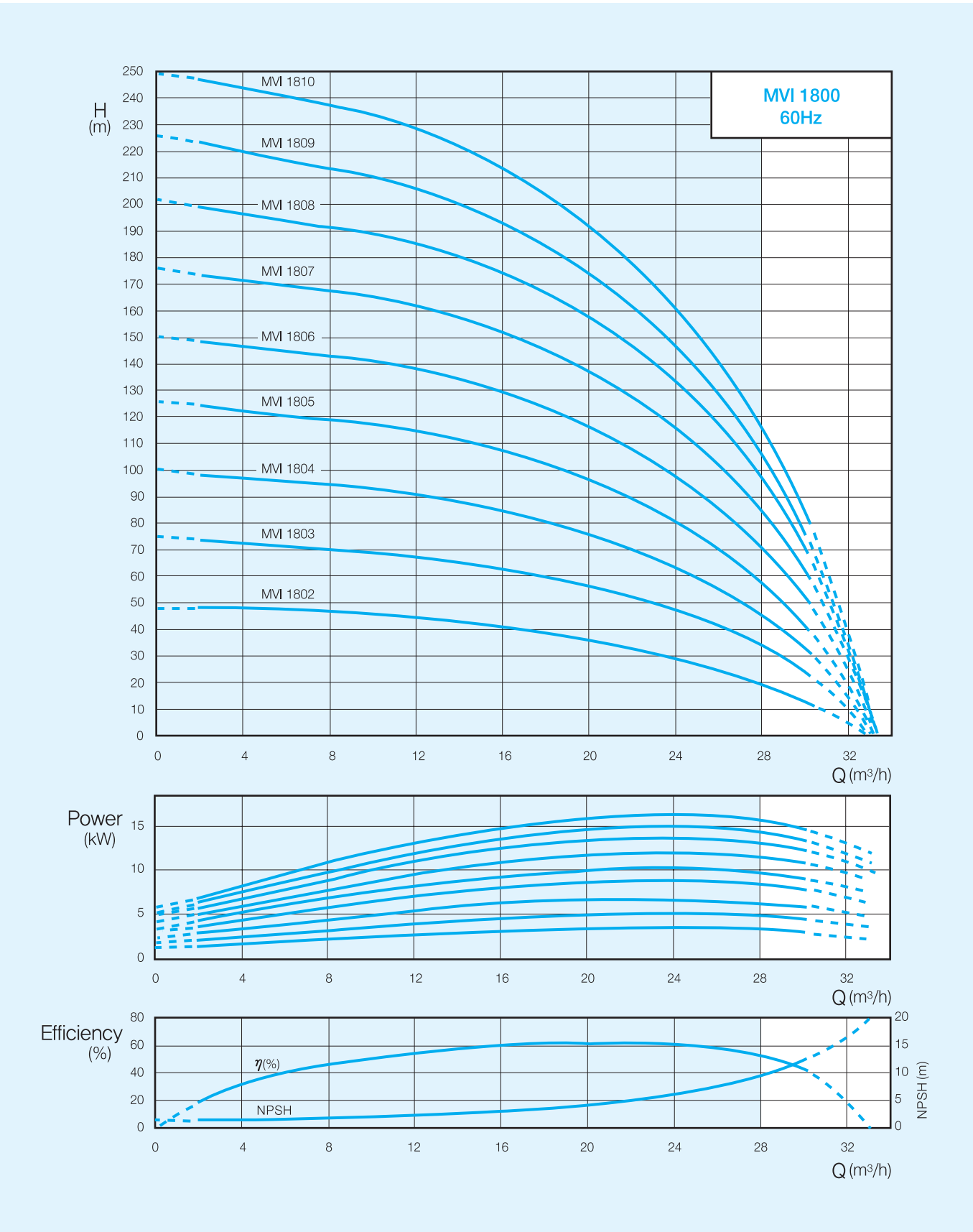
High-Pressure Multistage Centrifugal Pumps



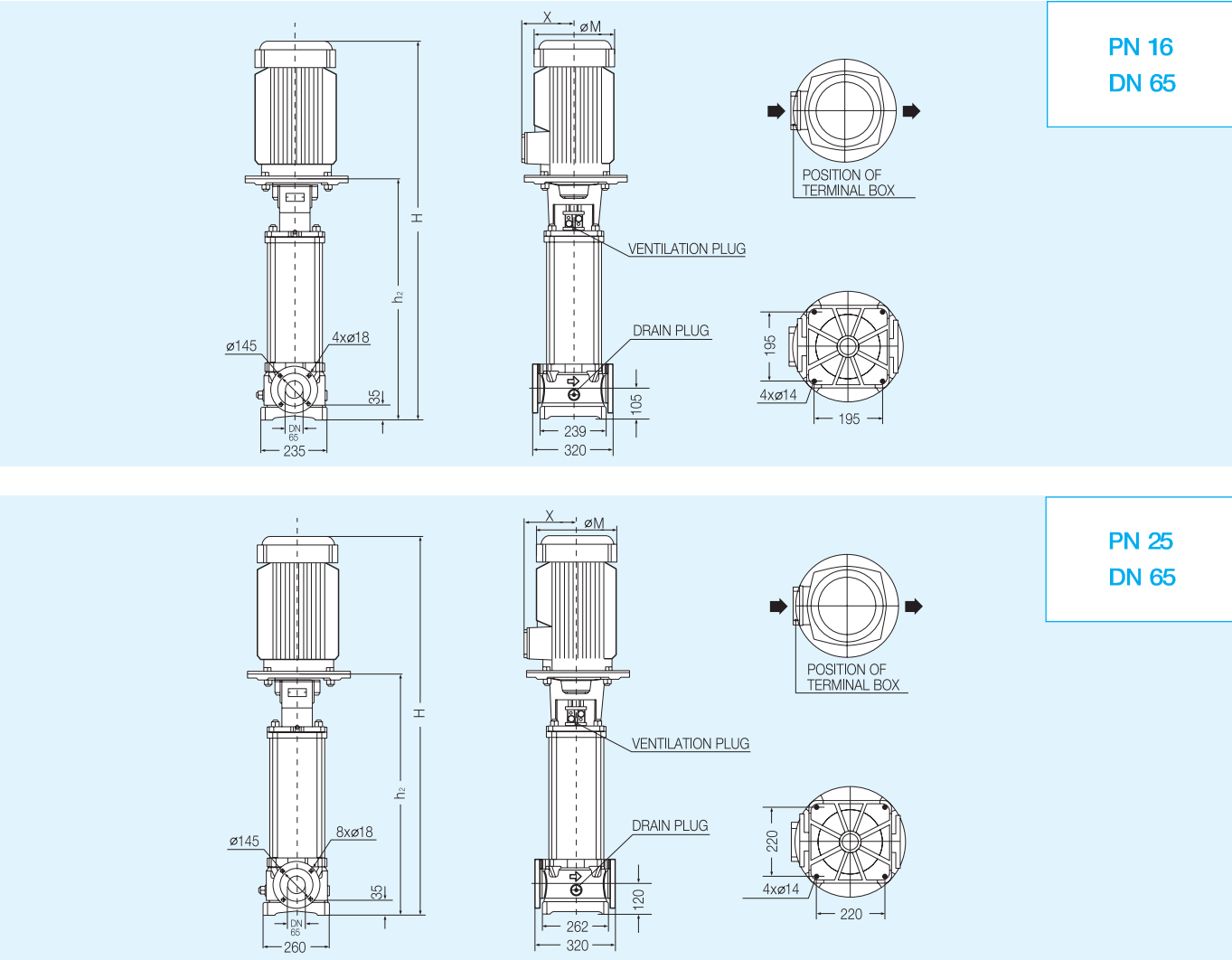
MVI Series

MVI 1800 Series

Performance Curve



Outline drawing

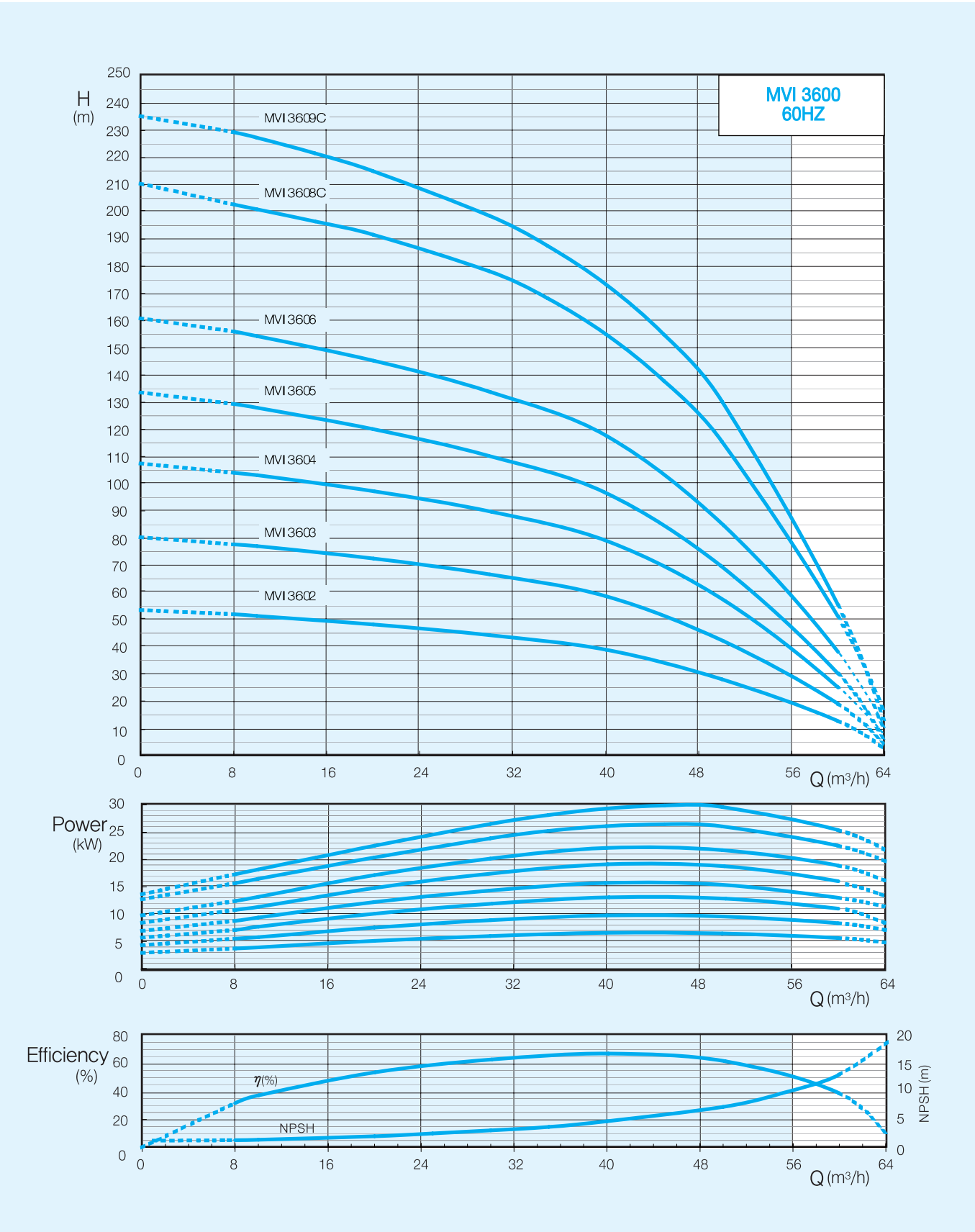


Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

Model	Motor Frame/Flange	M	(X)	PUMP				WEIGHT		Power	Max. Load Current(A)	Motor Efficiency	Power Factor
				PN16		PN25		PN16	PN25				
				(H)	h ₂	(H)	h ₂						
				mm				kg		(kW)	380V, 3ø	η (%)	cosφ
M/13602	132/FF265	253	194	831	460	846	475	126	128	7,5	15,0	90,5	86,0
M/13603	132/FF265	274	225	956	506	971	521	145	147	11	21,7	90,2	85,5
M/13604	160/FF300	322	300	1068	582	1065	579	203	205	15	27,4	92,4	90,0
M/13605	160/FF300	322	300	1204	674	1219	687	232	234	18,5	33,6	93,0	90,0
**M/13606	180/FF300	360	314	-	-	1238	687	-	254	22	39,5	93,0	91,0
**M/13608C	180/FF350	360	327	-	-	1546	899	-	284	30	53,5	93,6	91,0
**M/13609C	180/FF350	360	327	-	-	1592	945	-	287	30	53,5	93,6	91,0

**25 bar Pump

Performance Curve



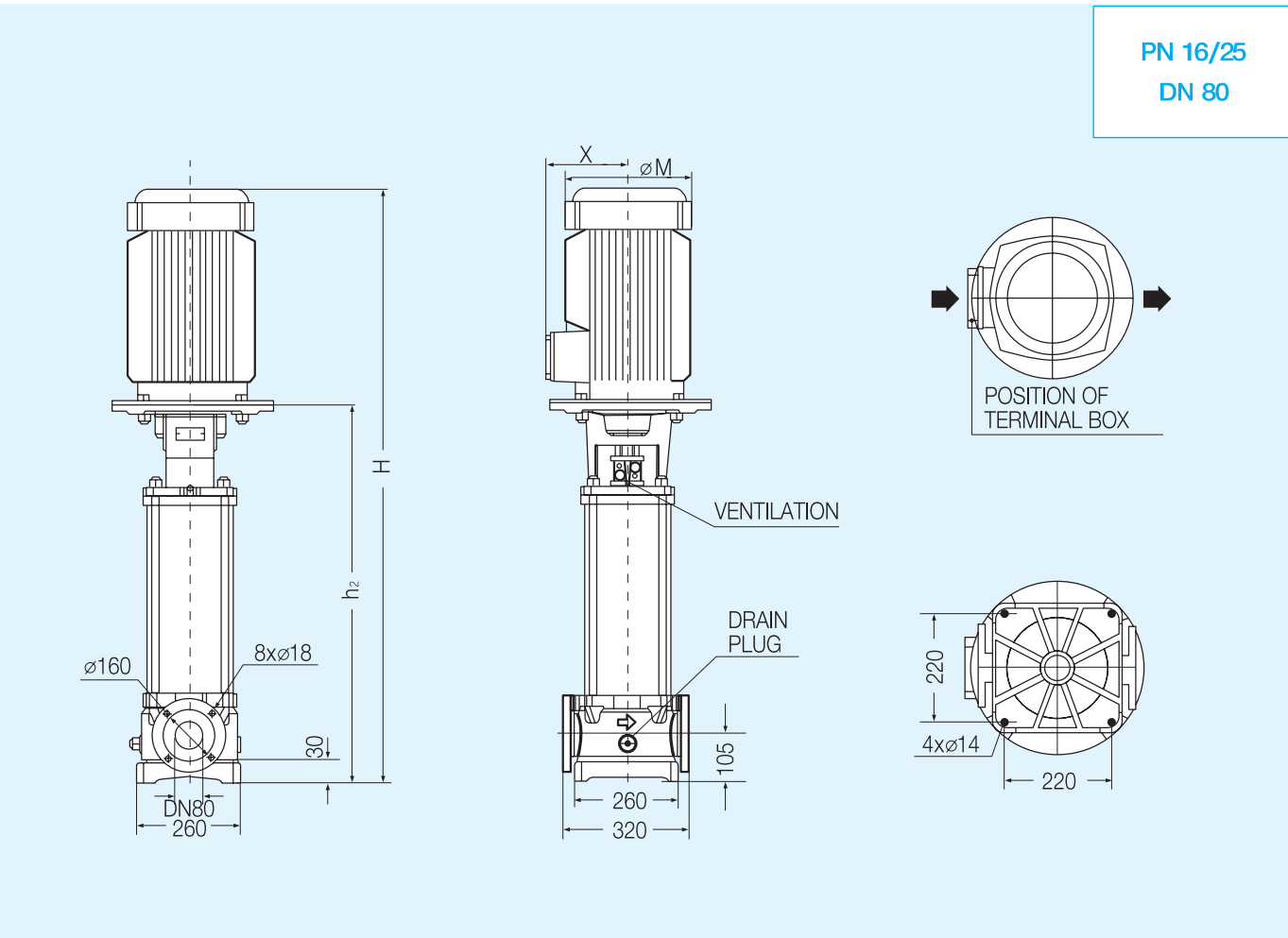


High-Pressure Multistage Centrifugal Pumps

MVI Series

MVI 6000 Series Outline drawing & Dimension

Outline drawing



Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

Model	Motor Frame/Flange	M	(X)	PUMP				WEIGHT		Power	Max. Load Current(A)	Motor Efficiency	Power Factor
				PN16		PN25		PN16	PN25				
				(H)	h2	(H)	h2						
		mm				kg		(kW)	380V, 3 ø	η(%)	COSφ		
M/16002	132/FF265	274	225	941	491	941	491	127	127	9	17,5	90,0	87,0
M/16003	160/FF300	322	300	1069	583	1069	583	191	191	15	27,4	92,4	90,0
M/16004	160/FF300	322	300	1174	644	1174	644	219	219	18,5	33,6	93,0	90,0
M/16005	180/FF300	360	314	1316	767	1316	767	243	243	22	39,5	93,0	91,0
**M/16006C	180/FF350	360	327	-	-	1533	886	-	284	30	53,5	93,6	91,0
**M/16007C	180/FF350	360	327	-	-	1656	1009	-	289	30	53,5	93,6	91,0
**M/16008C	200/FF350	405	362	-	-	1665	1009	-	406	37	67,1	93,6	89,5

**25 bar Pump

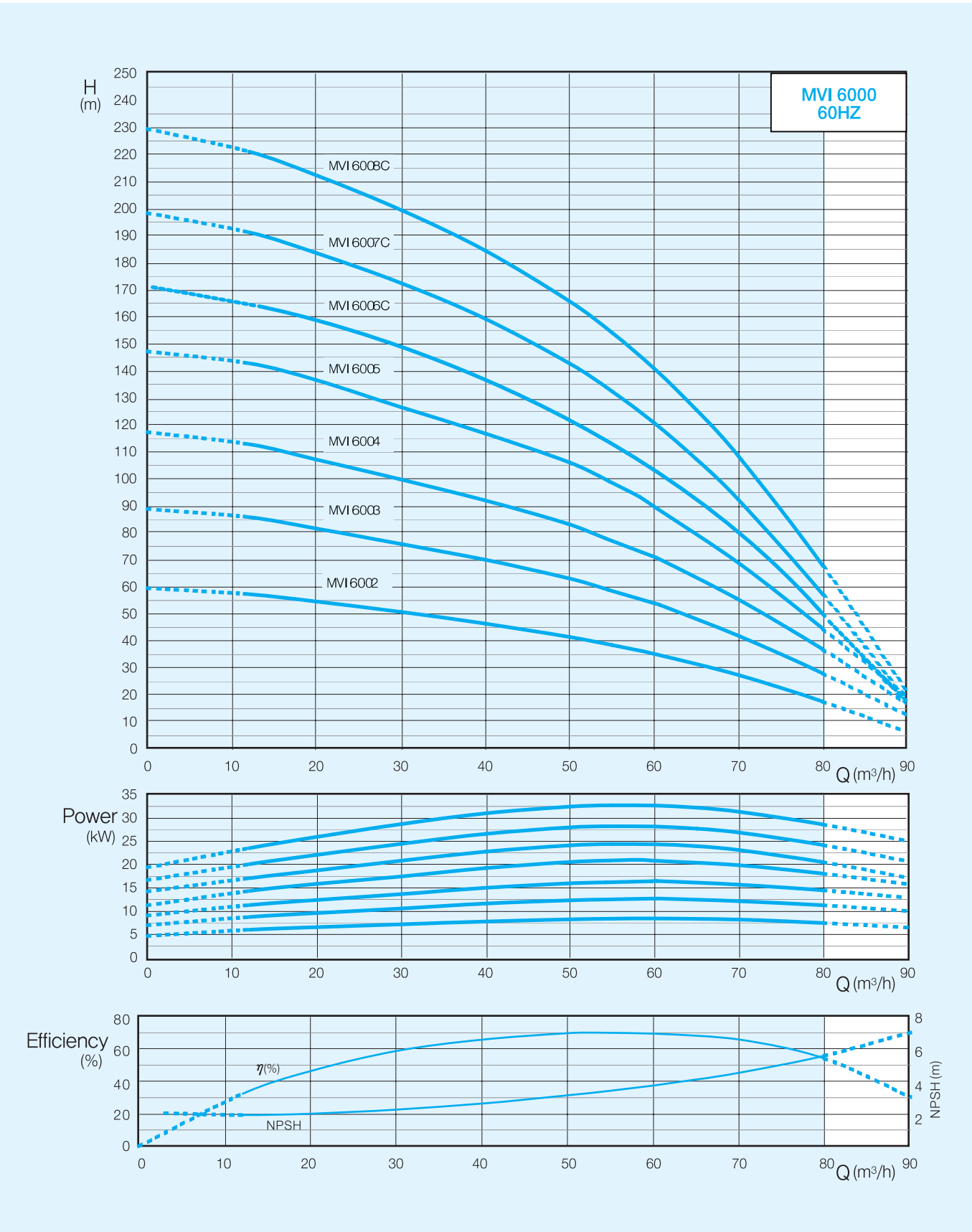
High-Pressure Multistage Centrifugal Pumps



MVI Series

MVI 6000 Series

Performance Curve



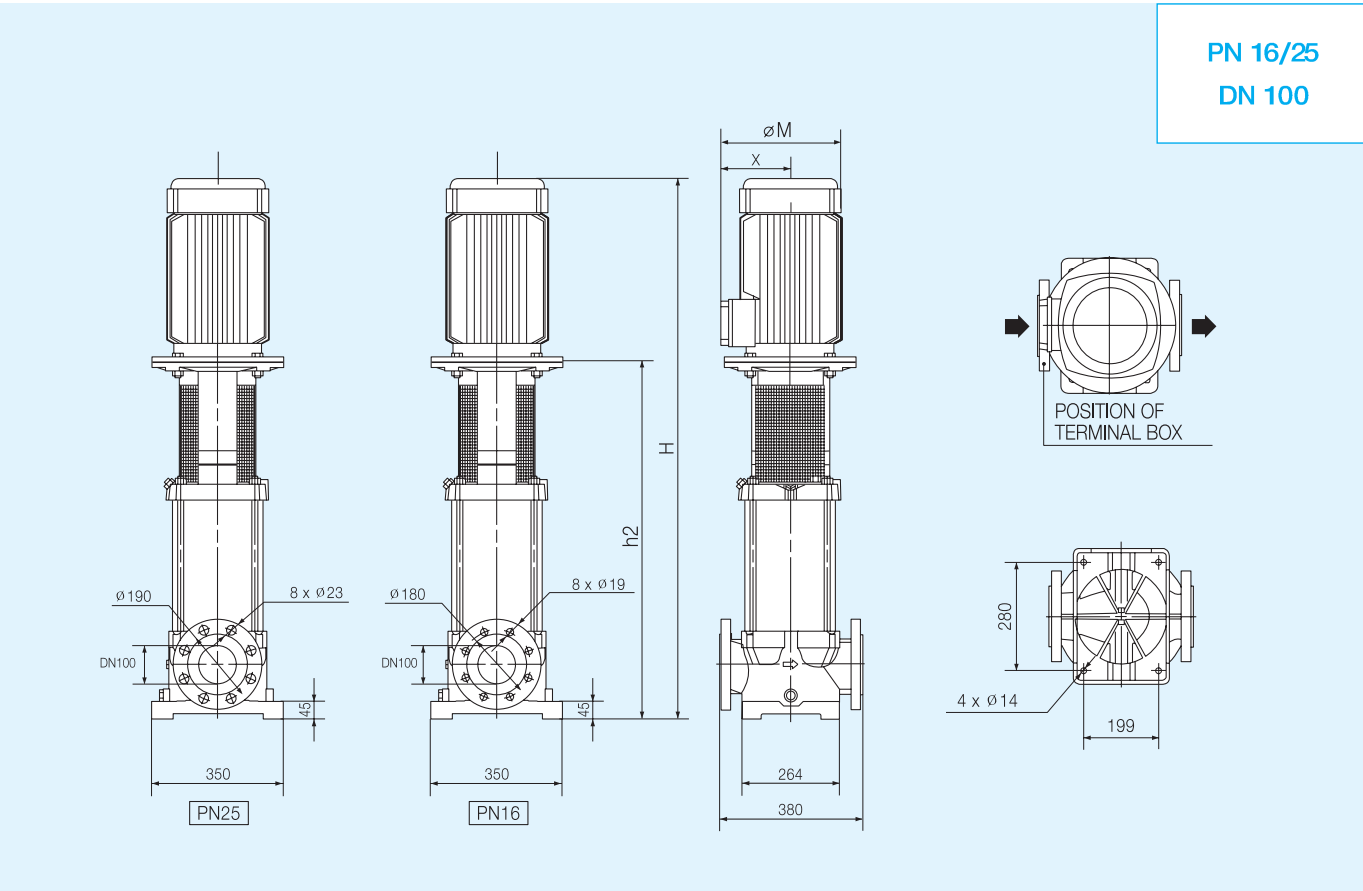


High-Pressure Multistage Centrifugal Pumps

MVI Series

MVI 9000 Series Outline drawing & Dimension

Outline drawing



Dimension / Weight / Motor Spec. (60Hz. 3500rpm)

Model	Motor Frame/Flange	M	(X)	(H)	h2	WEIGHT		Power	Max. Load Current(A)	Motor Efficiency	Power Factor
						PN16	PN25				
		mm					kg		(kW)	380V ,3 ø	η (%)
MM19001/1	132/FF265	253	194	930	559	134,5	-	7,5	15,0	90,5	86,0
MM19001	132/FF265	274	225	1009	559	150,5	-	11	21,7	90,2	85,5
MM19002/2	160/FF300	322	300	1243	757	211,5	-	15	27,4	92,4	90,0
MM19002/1	160/FF300	322	300	1287	757	235,5	-	18,5	33,6	93,0	90,0
MM19002	180/FF300	360	314	1306	757	254,5	-	22	38,5	93,0	91,0
MM19003/2	180/FF300	360	314	1391	842	258	-	22	39,5	93,0	91,0
MM19003/1	180/FF350	360	327	1489	842	280	-	30	53,5	93,6	91,0
MM19003	180/FF350	360	327	1489	842	280	-	30	53,5	93,6	91,0
MM19004/2	200/FF350	405	362	1583	927	400	-	37	67,1	93,6	89,5
MM19004/1	200/FF350	405	362	1583	927	400	-	37	67,1	93,6	89,5
MM19004	200/FF400	405	362	1638	927	425	-	45	79,8	94,1	91,0
**MM19005/2	200/FF400	405	362	1723	1012	-	429	45	79,8	94,1	91,0
**MM19005/1	200/FF400	405	362	1723	1012	-	429	45	79,8	94,1	91,0
**MM19005	200/FF400	405	362	1723	1012	-	429	45	79,8	94,1	91,0

**25 bar Pump

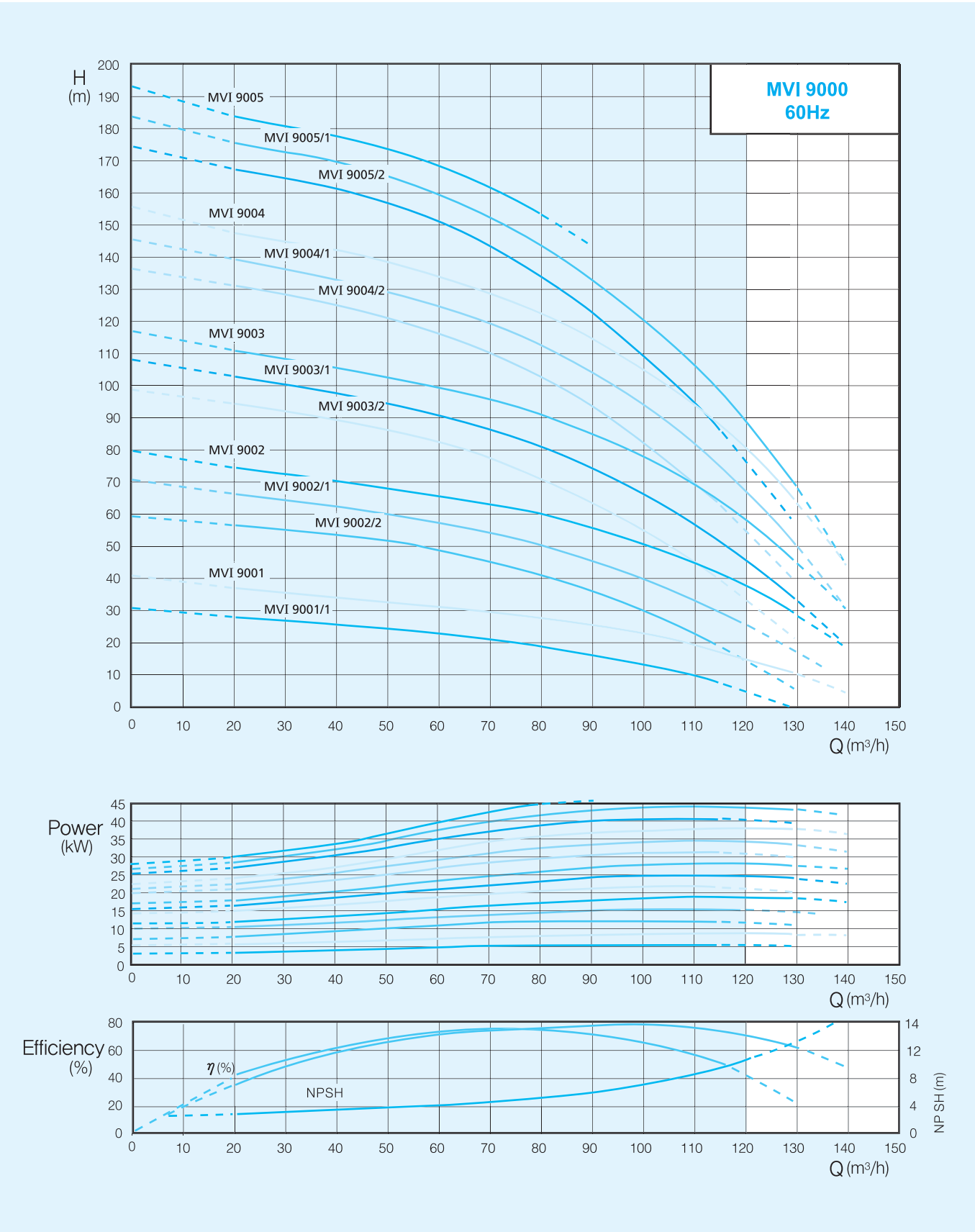
High-Pressure Multistage Centrifugal Pumps



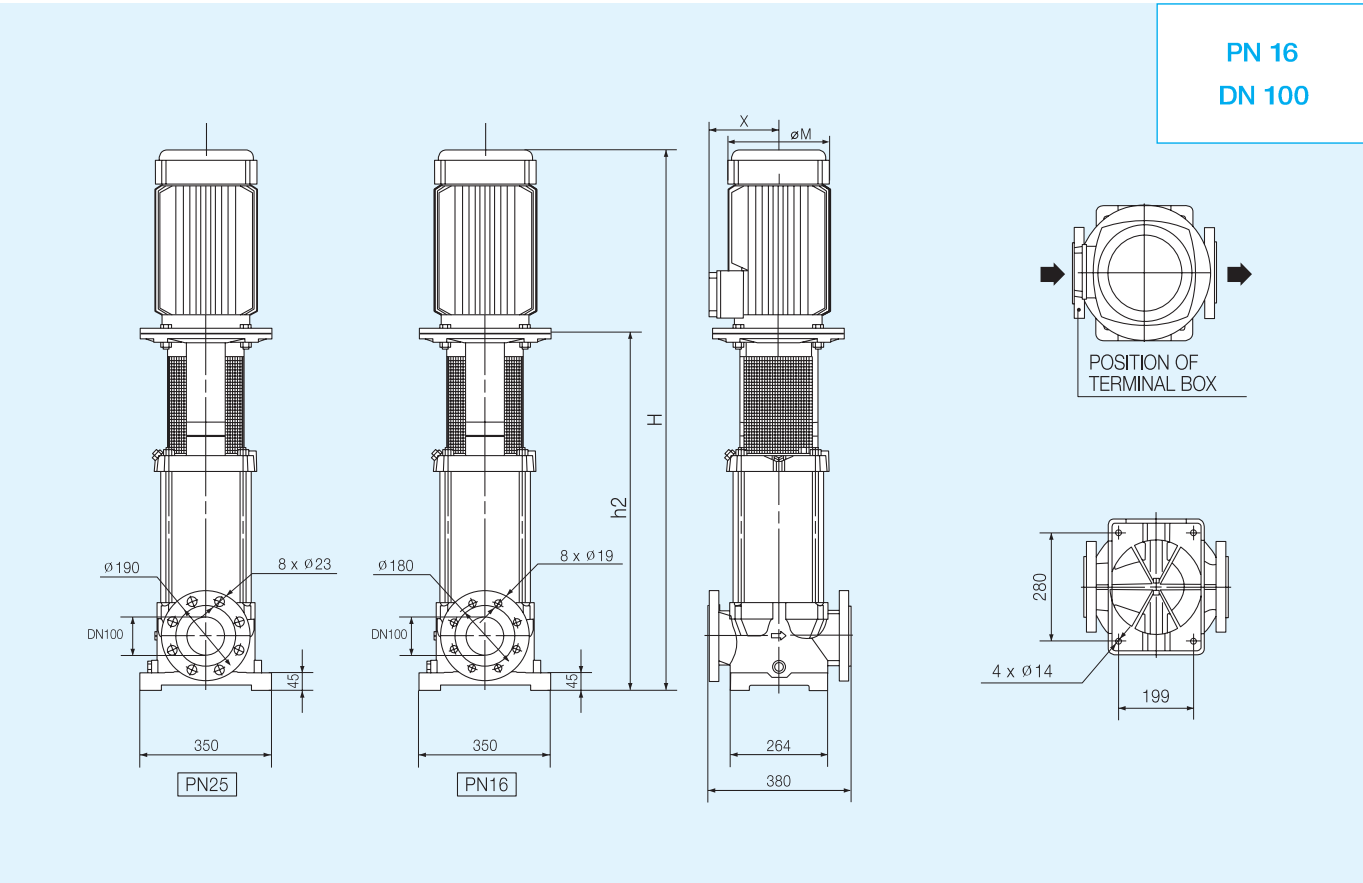
MVI Series

MVI 9000 Series

Performance Curve



Outline drawing

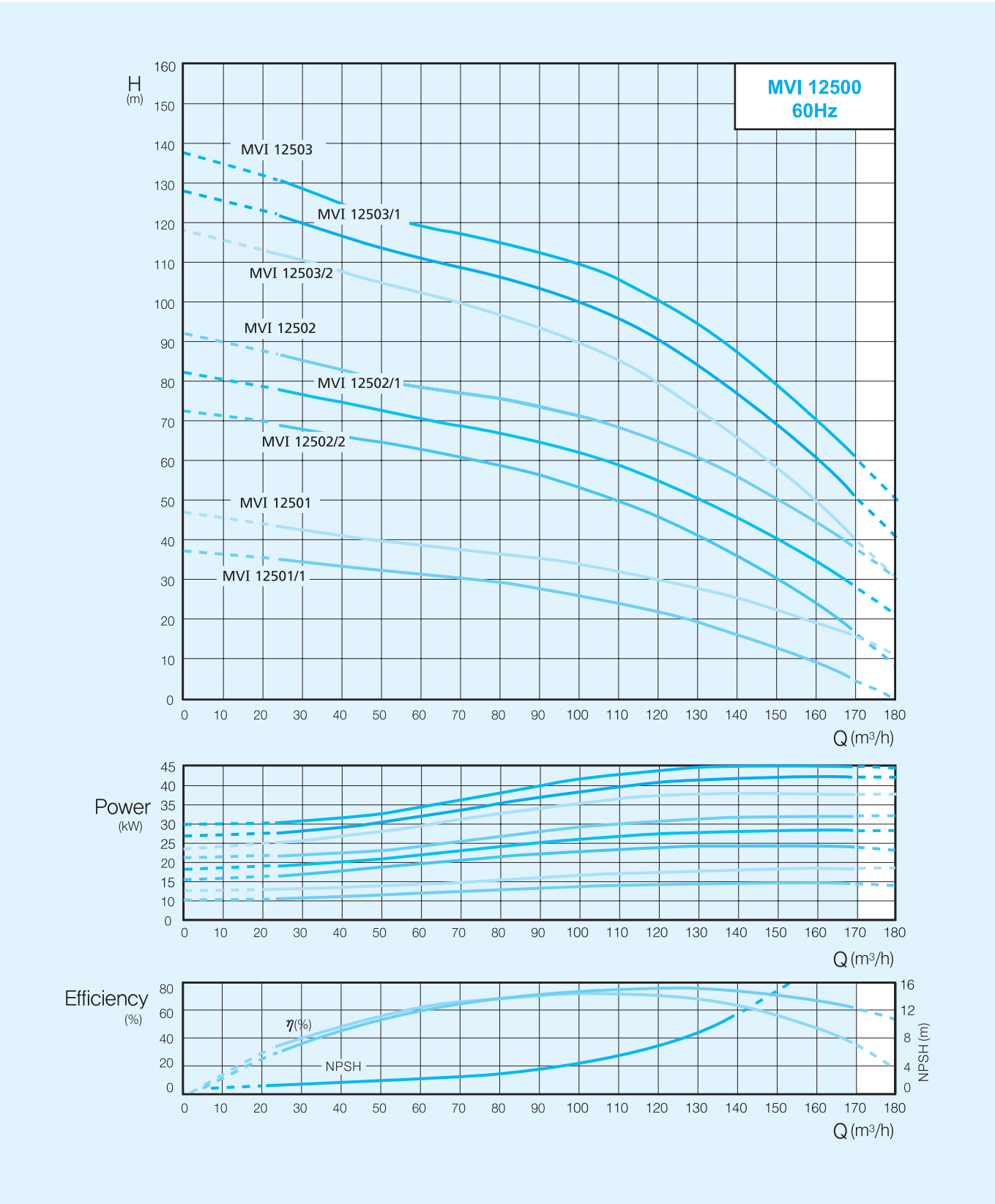


Dimension / Weight / Motor Spec. (60Hz, 3500rpm)

Model	Mtor Frame/Flange	M	(X)	(H)	h ₂	WEIGHT		Power [★]	Max. Load Current(A)	Motor Efficiency	Power Factor
						PN16	PN25				
		mm					kg		(kW)	380V, 3 ∅	η (%)
MM12501/1	160/FF300	322	300	1058	572	200	-	15	27,4	92,4	90,0
MM12501	160/FF300	322	300	1102	572	224	-	18,5	33,6	93,0	90,0
MM12502/2	180/FF300	360	314	1332	783	256	-	22	39,5	93,0	91,0
MM12502/1	180/FF350	360	327	1430	783	275	-	30	53,5	93,6	91,0
MM12502	180/FF350	360	327	1430	783	275	-	30	53,5	93,6	91,0
MM12503/2	200/FF350	405	362	1537	881	396	-	37	67,1	93,6	89,5
MM12503/1	200/FF400	405	362	1592	881	420	-	45	79,8	94,1	91,0
MM12503	200/FF400	405	362	1592	881	420	-	45	79,8	94,1	91,0

※ The above power can be changed without prior notice to improve performance.
Please contact us to confirm

Performance Curve





High-Pressure Multistage Centrifugal Pumps

VMT Series

Product Introduction



Application

Water supply, pressurized facility, fire extinguishments facility, boiler water supply, industrial circular pump, coolant pump, assembling facility, high pressured washer, manufacturing facility, R/O Filtering equipment, Sprinkler etc.

Allowed fluid

Fluids that do not contain fibrous materials, or any materials which might cause abrasion, such as drinking water, cold/hot water, condensed water, glycol mixed water (Max 40%)

Structures

- Vertical centrifugal pump (2-8 stage)
- Flexible coupling
- Adjusted sliding bearing which has resistance to abrasion
- Bearing intergrated lantern

Pump Specification

Max. Flow(m³/h)	216m³/h
Max. Head(m)	280m
Max allowed pressure	Standard 20kgf/cm²(option 28kgf/cm²)
Max allowed temperature(℃)	80℃

Material of construction

Suction Casing	Gray Cast Iron
Discharge Casing	Gray Cast Iron / Ductile Cast Iron
Diffuser	Gray Cast Iron
Impeller	Gray Cast Iron / Bronze
Shaft	Carbon Steel / Stainless Steel
Casing ring	Bronze
Sliding bearing	AL-Bronze

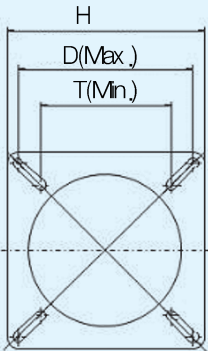
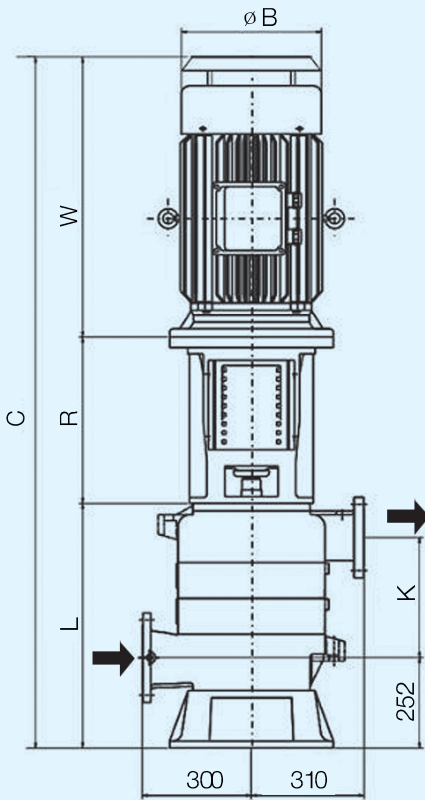
High-Pressure Multistage Centrifugal Pumps

VMT Series



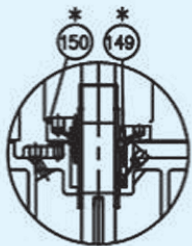
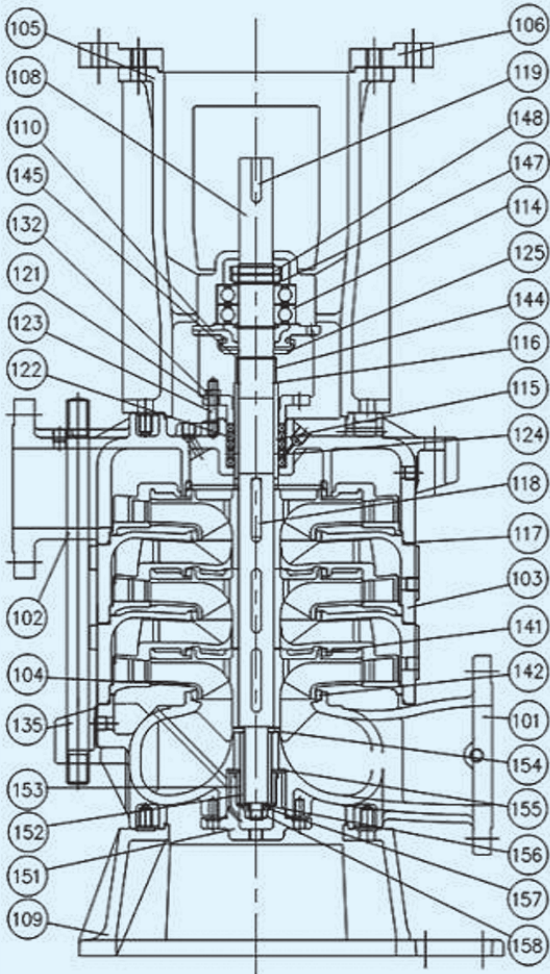
Outline Drawing & Dimension

Outline Dimensions - Complete Pump



Model	Motor (kw)	L	R	W	C	B	K	H	D	T	Flange
VMT-1002	11/15	582	434	529	1545	317	235	460	407	304	FF300
	18,5/22	582	434	565	1581	365	235	460	407	304	FF300
	30	582	434	591	1607	365	235	460	407	304	FF300
	37/45	582	464	707	1753	384	235	460	407	304	FF400
VMT-1003	18,5/22	682	434	565	1681	365	335	460	407	304	FF300
	30	682	434	591	1707	365	335	460	407	304	FF300
	37/45	682	464	707	1853	384	335	460	407	304	FF400
	55	682	464	758	1904	454	335	460	407	304	FF400
VMT-1004	75	682	464	1000	2146	510	335	600	530	400	FF500
	18,5/22	782	434	565	1781	365	435	460	407	304	FF300
	30	782	434	597	1807	365	435	460	407	304	FF300
	37/45	782	464	707	1953	384	435	460	407	304	FF400
VMT-1005	55	782	464	758	2004	454	435	460	407	304	FF400
	75	782	464	1000	2246	510	435	600	530	400	FF500
	90	782	464	1000	2246	510	435	600	530	400	FF500
	110/132	782	494	1058	2334	317	435	600	530	400	FF600
VMT-1006	18,5/22	882	434	565	1881	354	535	460	407	304	FF300
	30	882	434	591	1907	354	535	460	407	304	FF300
	37/45	882	464	707	2053	384	535	460	407	304	FF400
	55	882	464	758	2104	454	535	460	407	304	FF400
VMT-1007	75	882	464	1000	2346	510	535	600	530	400	FF500
	90	882	464	1000	2346	510	535	600	530	400	FF500
	110/132	882	494	1058	2434	317	535	600	530	400	FF600
	160	882	494	1204	2580	350	535	600	530	400	FF600
VMT-1008	37/45	982	464	707	2153	384	635	460	407	304	FF400
	55	982	464	758	2204	454	635	460	407	304	FF400
	75	982	464	1000	2446	510	635	600	530	400	FF500
	90	982	464	1000	2446	510	635	600	530	400	FF500
VMT-1009	110/132	982	494	1058	2534	317	635	600	530	400	FF600
	160	982	494	1204	2680	350	635	600	530	400	FF600
VMT-1010	37/45	1082	464	707	2253	384	735	460	407	304	FF400
	55	1082	464	758	2304	454	735	460	407	304	FF400
	75	1082	464	1000	2546	510	735	600	530	400	FF500
	90	1082	464	1000	2546	510	735	600	530	400	FF500
VMT-1011	110/132	1082	494	1058	2634	317	735	600	530	400	FF600
	160	1082	494	1204	2780	540	735	600	530	400	FF600
VMT-1012	55	1182	464	758	2404	454	835	460	407	304	FF400
	75	1182	464	1000	2646	510	835	600	530	400	FF500
	90	1182	464	1000	2646	510	835	600	530	400	FF500
	110/132	1182	494	1058	2734	617	835	600	530	400	FF600
VMT-1013	160	1182	494	1204	2880	650	835	600	530	400	FF600
	200	1182	494	1204	2880	650	835	600	530	400	FF600

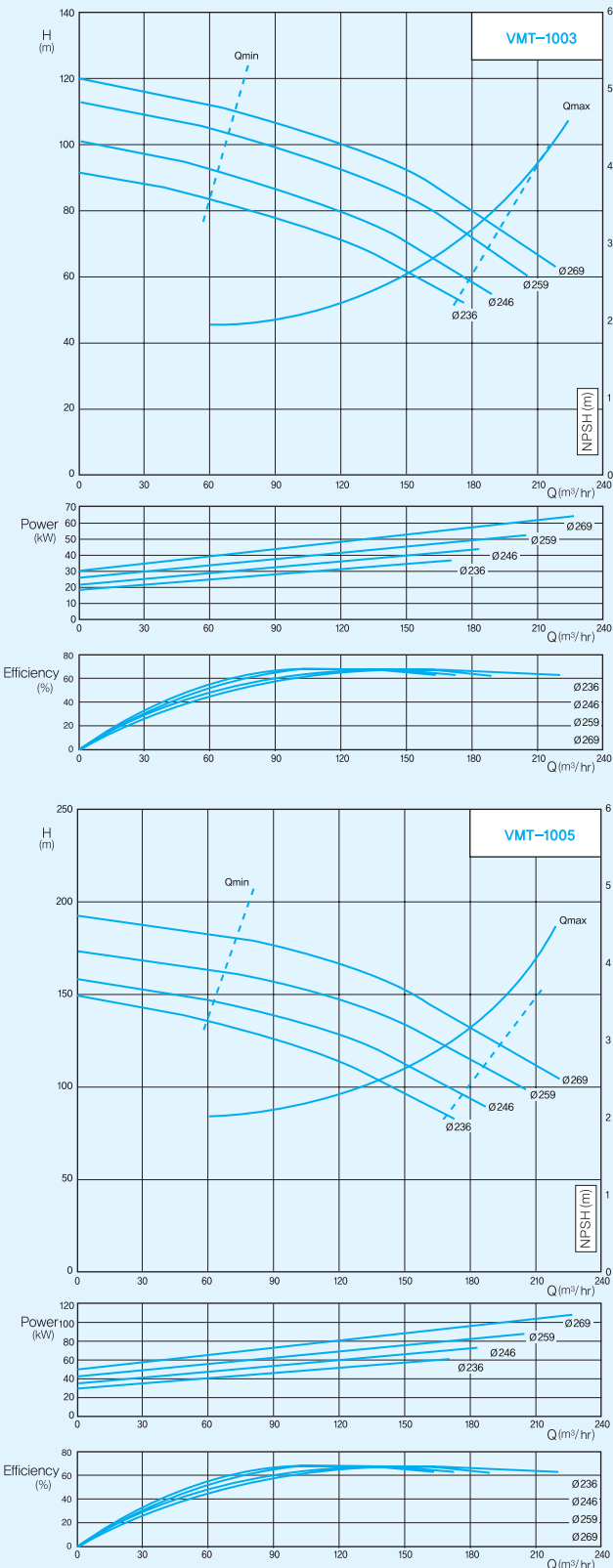
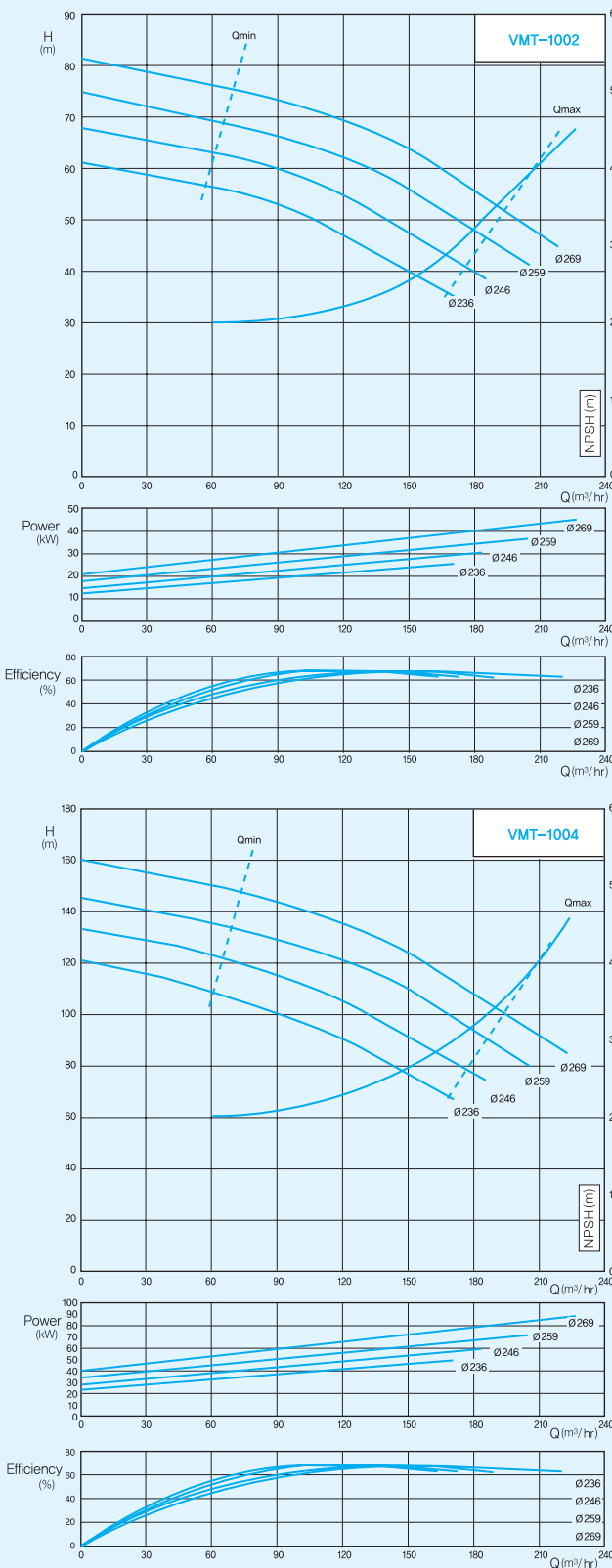
Sectional drawing - VMT Series



★: OPTION PARTS
S: Number of Stage

Nb.	PART NAME	MATERIALS
101	SUCTION CASING	Gray Cast Iron
102	DISCHARGE CASING	Gray Cast Iron
103	MIDDLE CASING	Gray Cast Iron
104	IMPELLER	Gray Cast Iron
105	LANTERN	Gray Cast Iron
106	BRACKET	Gray Cast Iron
108	SHAFT	Carbon Steel
109	BASE	Gray Cast Iron
110	BEARING COVER	Gray Cast Iron
114	BALL BEARING	STB2
115	SLEEVE	Stainless Steel
116	SLEEVE O-RING	NBR
117	CASING O-RING	NBR
118	IMPELLER KEY	Carbon Steel
119	COUPLING KEY	Carbon Steel
121	GLAND	Gray Cast Iron
122	GLAND PACKING	TEFLON
123	GLAND BOLT	Stainless Steel
124	LANTERN RING	Brass
125	DEFLECTOR	NBR
132	HEX NUT	Brass
135	TIE BOLT	Carbon Steel
141	CASING RING-A	Brass
142	CASING RING-B	Brass
144	SPACER	Bronze
145	STOP RING	SPS
147	WASHER	Carbon Steel
148	LOCK NUT	Carbon Steel
*149	MECHANICAL SEAL	
*150	M/SEAL COVER	Carbon Steel
151	SLEEVE B/R COVER	Gray Cast Iron
152	SLEEVE BEARING	Stainless Steel
153	SLIDING BEARING	AL-BRONZE
154	WASHER	Stainless Steel
155	WASHER	Stainless Steel
156	WASHER	Stainless Steel
157	SPRING WASHER	Stainless Steel
158	HEX NUT	Stainless Steel

Performance Curve 4Pole





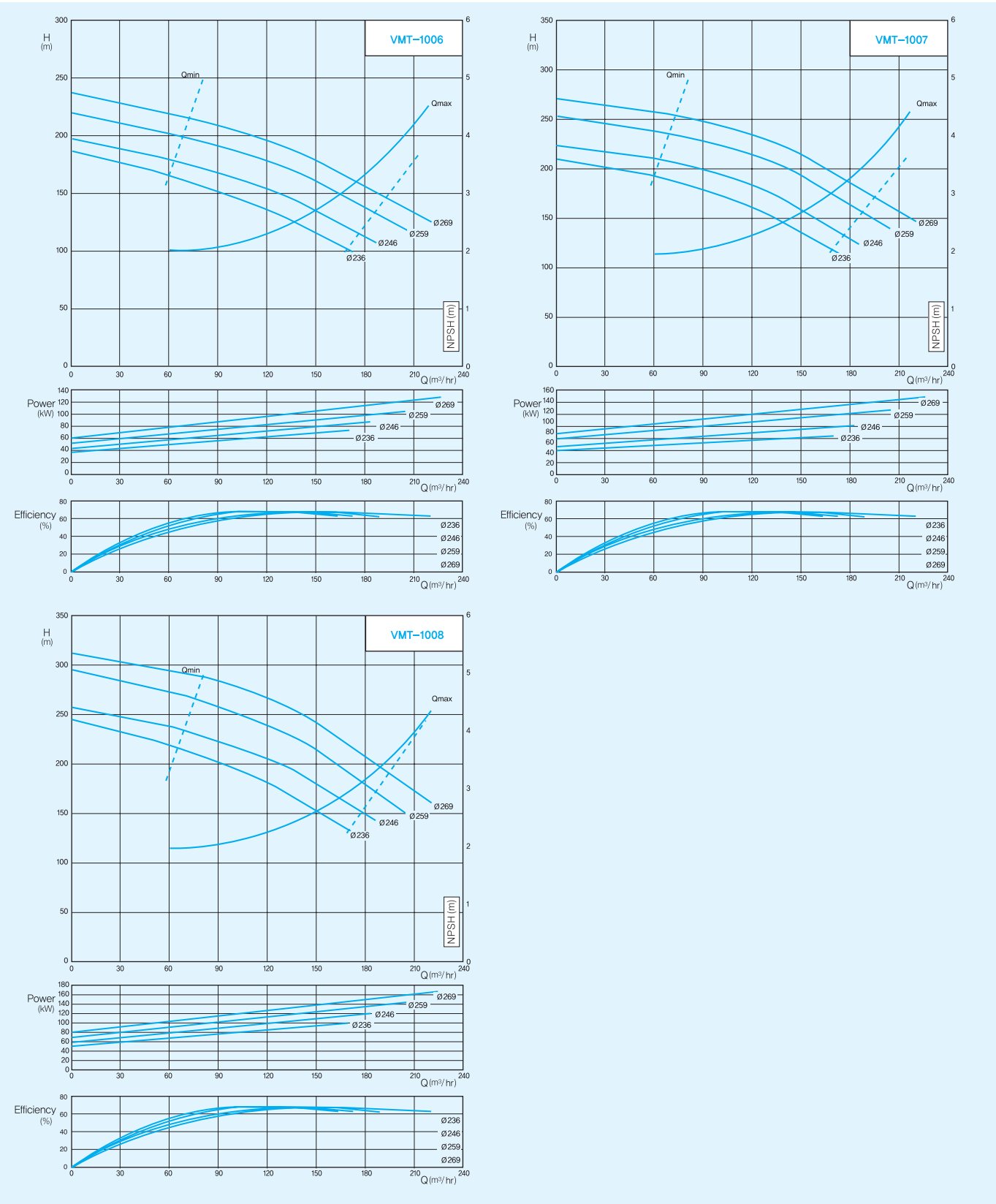
High-Pressure Multistage Centrifugal Pumps

VMT Series



Performance Curve 4pole

Performance Curve 4Pole



Pumpen Intelligenz.



Application

Common water supply and pressurized facility (booster pump), agricultural water, irrigation water, coolant circular water, etc

Applicable fluids

Drinking water, boiler water, tap water, heavy water, sewage water, condensed water, glycol mixture(max. density 44%), any fluid mixture which does not contain a piece of dirt, etc (Please contact us for other fluid mixture)

Motor spec.

- Motor type: TEFC
- Protection class: IPX4
- Insulation class: B
- Power Source: 3 phase 220V (A wiring), 380V (Y wiring), 60Hz
Single phase 220V, 60Hz
- Voltage tolerance: $\pm 10\%$

Structure

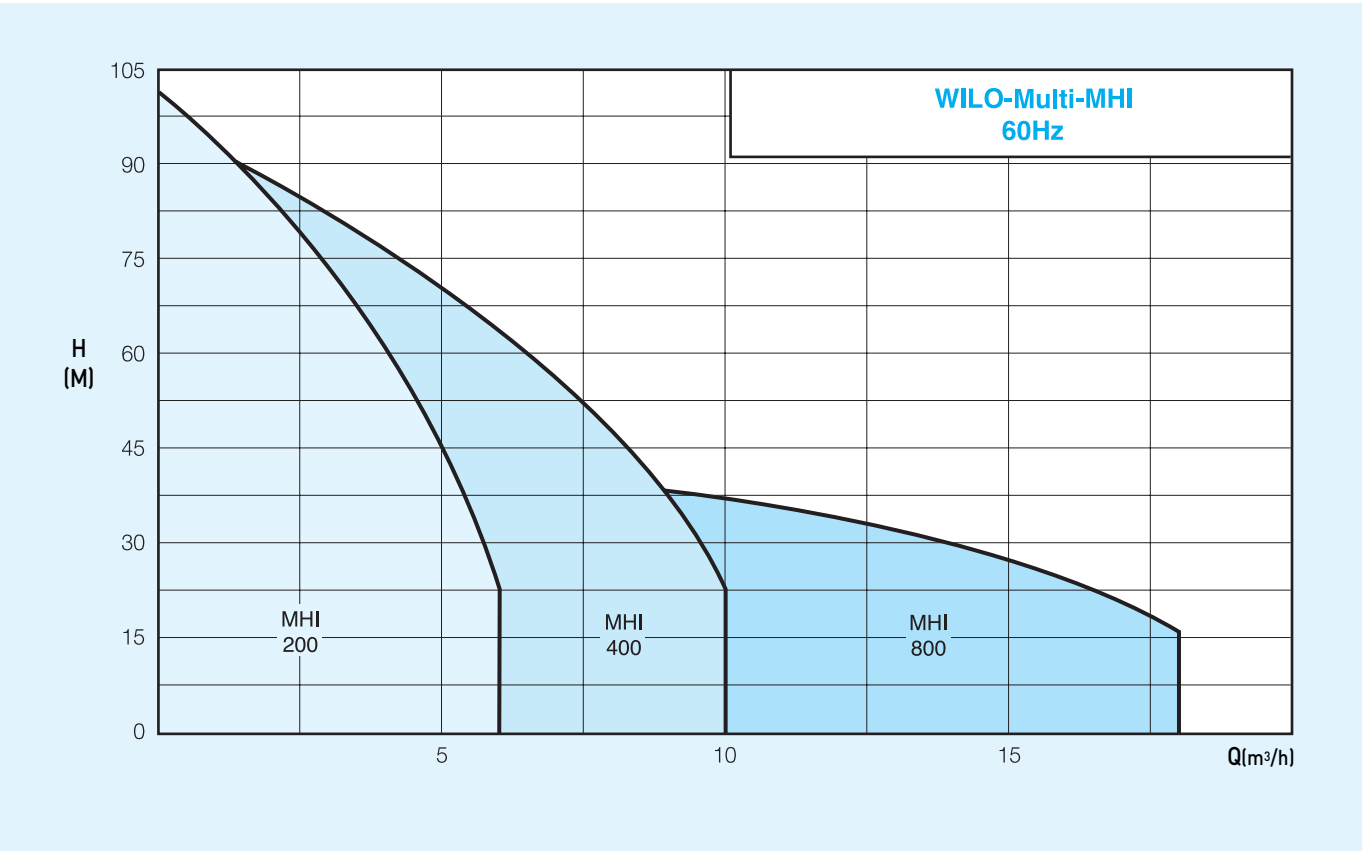
- Non-self priming horizontal multistage centrifugal pump, PN10Bar.
- End suction and top discharge
- Hydraulic material : SS304 (approved by German KTW and WRC)
- Close coupled
- Priming nozzle intergrated
- Low noise

Pump Material spec.

Impeller	STS 304 / STS 316L*
Diffuser	STS 304 / STS 316L*
Frazer case	STS 304 / GC 25** / STS 316L*
Shaft	STS 304 / STS 316L*
Gasket	EPDM
Mechanical seal	SiC / Carbon

You need to order STS 316L* additionally.

Duty Charts



Pump spec.

Data	MHI 200	MHI 400	MHI 800
Max Flow(m³/h)	6	10	18
Max Head(m)	100	100	52
Allowed fluid temperature(℃)	-15 ~ +110℃		
Ambient temperature(℃)	Max 40℃		
Max Allowed pressure(bar)	Max 10bar		

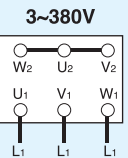
Identification code (e.g: MHI 405 M)

MHI	Horizontal multistage centrifugal pump (STS304)
4	Nominal flow rate (m³/h)
05	Number of stage of impeller
M	Single phase (M) / 3phase (I)

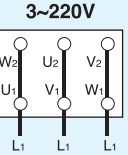
Wiring Diagram

3 phase

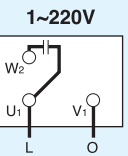
Y connection



△ connection



Single phase



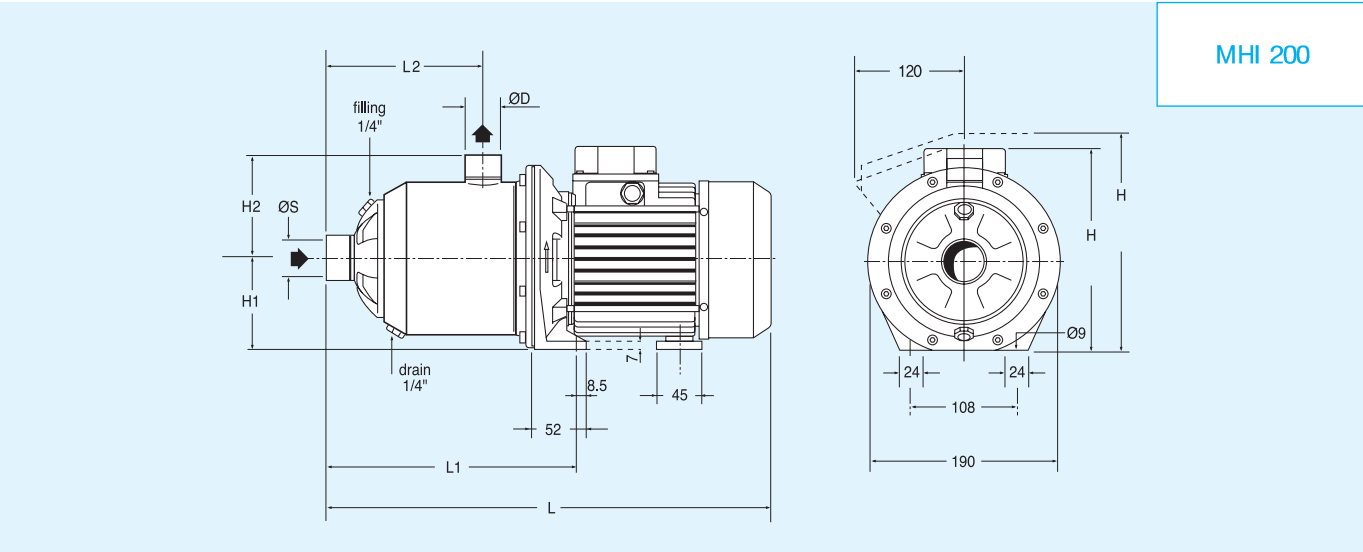


High-Pressure Multistage Centrifugal Pumps

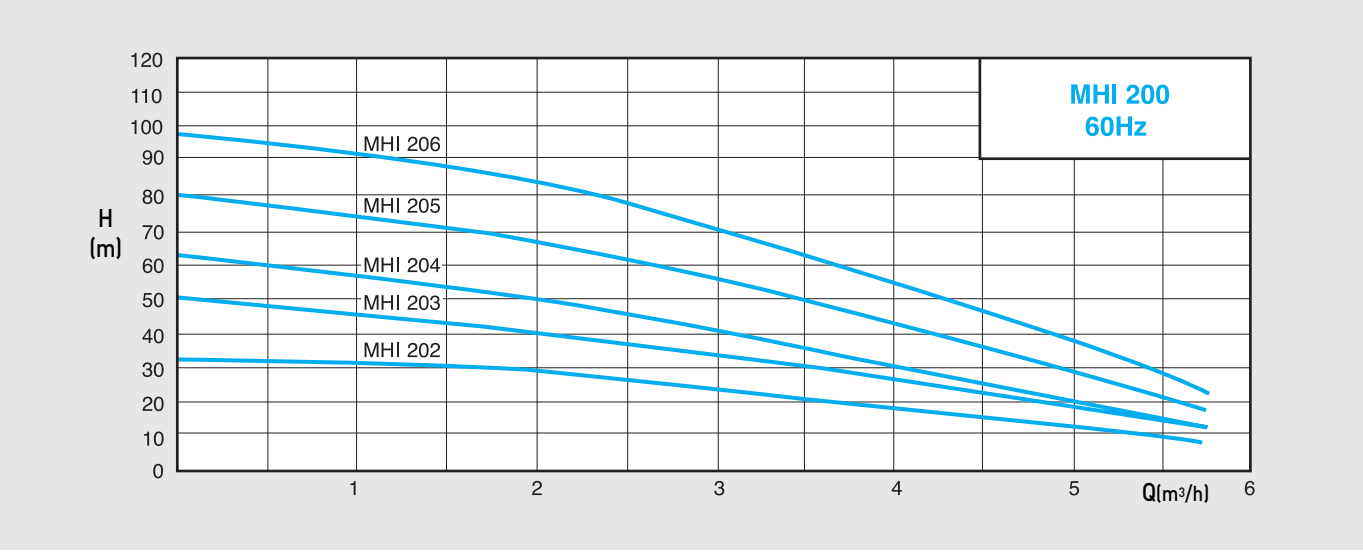
MHI Series

MHI 200 Series Outling Drawing & Dimension

Outline Drawing



Duty Charts



Dimension / Weight / Motor Spec.

Model	D1	D2	H1	H2	L	L1	L2	W	Pw	In(A)		
	mm							kg	kW	220V, 1 Ø	220V, 3 Ø	380V, 3 Ø
MHI 202M	1'' (25)	1'' (25)	90	104	354	204	109,5	12	0,55	3,2	-	-
MHI 202I	1'' (25)	1'' (25)	90	104	354	204	109,5	11	0,55	-	2,3	1,3
MHI 203M	1'' (25)	1'' (25)	90	104	354	204	109,5	14	0,75	4,6	-	-
MHI 203I	1'' (25)	1'' (25)	90	104	354	204	109,5	13	0,75	-	3	1,8
MHI 204M	1'' (25)	1'' (25)	90	104	428	252	157,5	17	1,1	8,4	-	-
MHI 204I	1'' (25)	1'' (25)	90	104	428	252	157,5	14	1,1	-	5,5	3,2
MHI 205M	1'' (25)	1'' (25)	90	104	428	252	157,5	17	1,1	10,8	-	-
MHI 205I	1'' (25)	1'' (25)	90	104	428	252	157,5	14	1,1	-	5,5	3,2
MHI 206I	1'' (25)	1'' (25)	90	104	452	276	181,5	18	1,5	-	6,9	4

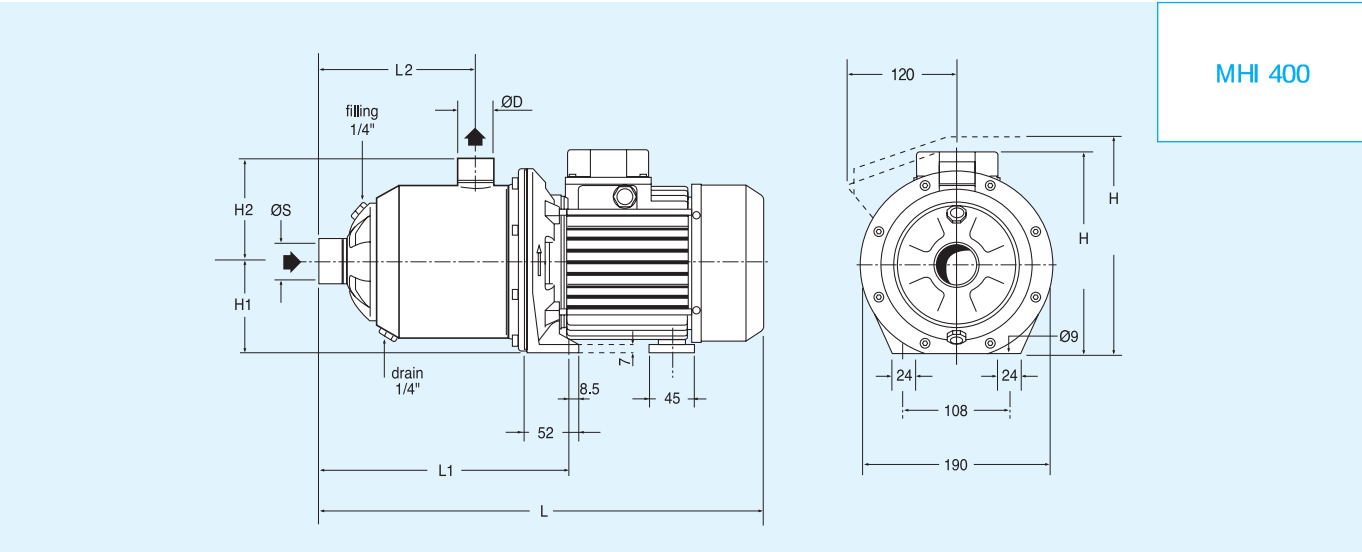
High-Pressure Multistage Centrifugal Pumps



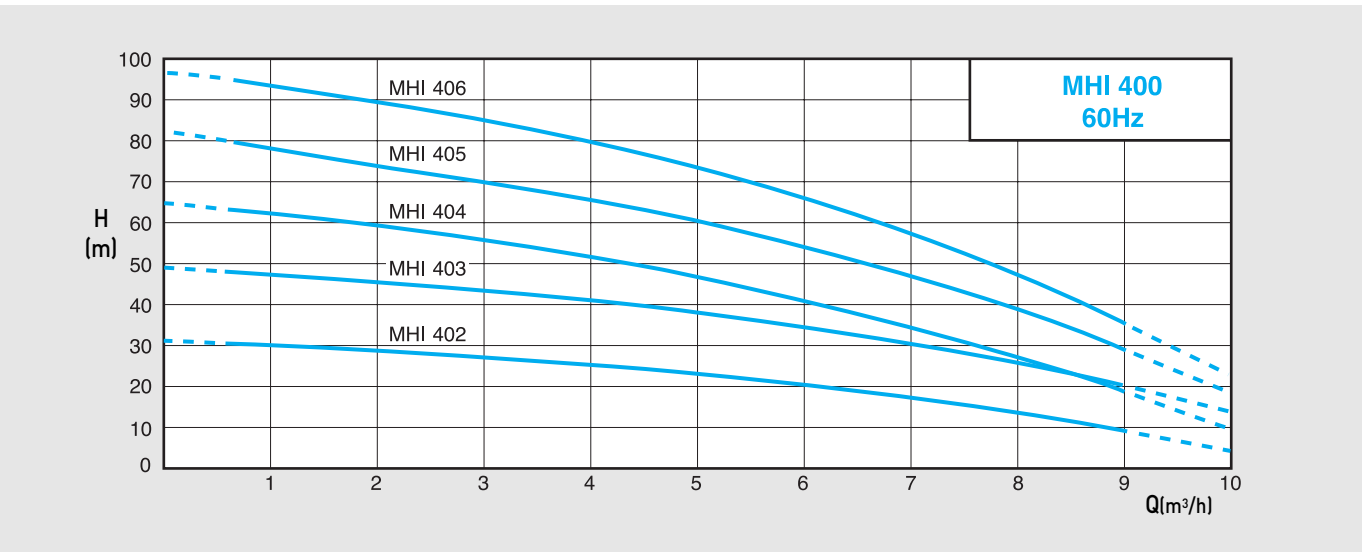
MHI Series

MHI 400 Series Outling Drawing & Dimension

Outline Drawing



Duty Charts



Dimension / Weight / Motor Spec.

Model	D1	D2	H1	H2	L	L ₁	L ₂	W	Pw kW	In(A)		
	mm							kg		220V, 1 Ø	220V, 3 Ø	380V, 3 Ø
MHI 402M	1-1/4 " (Ø2)	1 " (25)	90	104	354	204	109,5	14	0,75	4,6	-	-
MHI 402 I	1-1/4 " (Ø2)	1 " (25)	90	104	354	204	109,5	13	0,75	-	3	1,8
MHI 403M	1-1/4 " (Ø2)	1 " (25)	90	104	380	204	109,5	17	1,1	8,4	-	-
MHI 403 I	1-1/4 " (Ø2)	1 " (25)	90	104	380	204	109,5	15	1,1	-	5,5	3,2
MHI 404M	1-1/4 " (Ø2)	1 " (25)	90	104	428	252	157,5	18	1,5	10,8	-	-
MHI 404 I	1-1/4 " (Ø2)	1 " (25)	90	104	428	252	157,5	17	1,5	-	5,5	3,2
MHI 405 I	1-1/4 " (Ø2)	1 " (25)	90	104	428	252	157,5	18	1,85	-	7,8	4,5
MHI 406 I	1-1/4 " (Ø2)	1 " (25)	100	104	484	276	181,5	20	2,2	-	8,9	5,1

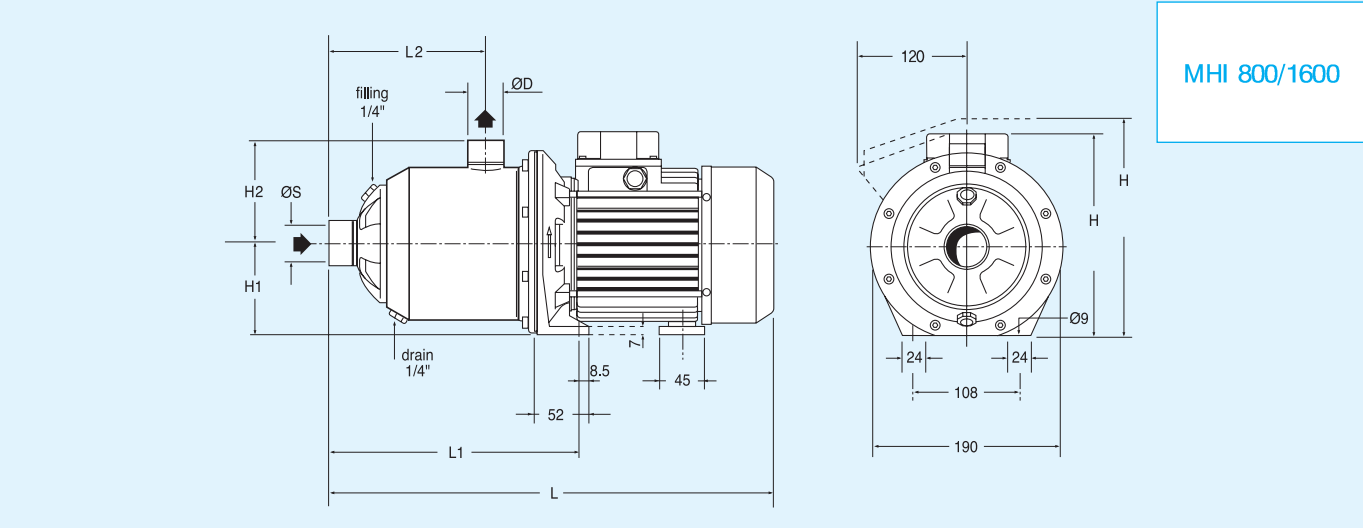


High-Pressure Multistage Centrifugal Pumps

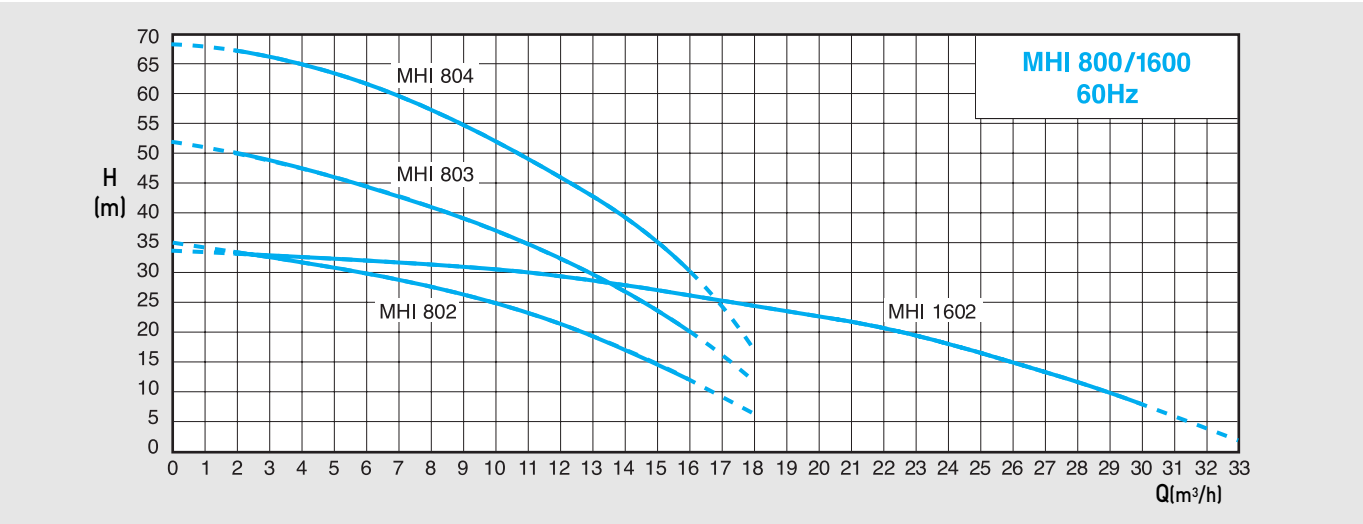
MHI Series

MHI 800 /1600 Series Outling Drawing & Dimension

Outline Drawing



Duty Charts



Dimension / Weight / Motor Spec.

Model	D1	D2	H1	H2	L	L1	L2	W	Pw	In(A)		
	mm							kg	kW	220V, 1ø	220V, 3ø	380V, 3ø
MHI 802M	1-1/2" (40)	1-1/4" (32)	90	104	392	216	121,5	17	1,5	10,8	-	-
MHI 802 I	1-1/2" (40)	1-1/4" (32)	90	104	392	216	121,5	17	1,5	-	6,9	4
MHI 803 I	1-1/2" (40)	1-1/4" (32)	90	104	392	216	121,5	18	1,85	-	7,8	4,5
MHI 804 I	1-1/2" (40)	1-1/4" (32)	100	104	484	276	181,5	19	2,5	-	9,9	5,8
MHI 1602 I	2" (50)	1-1/2" (40)	100	104	444	236	138	21	2,2	-	8,9	5,1

High-Pressure Multistage Centrifugal Pumps

MHIKE-(D) Series

Product Introduction

Horizontal multistage inverter pump

Application

- Pressurizing, water supply (pressurizing the low water pressure in upper level of buildings)
- Residential areas, motels, holiday houses, etc
- Small sprinkler, water management facility which requires a fixed pressure
- Fire extinguisher pump, industrial circulating system
- Boiler water supply, coolant system, etc

Features and Strengths

- **Excellent energy saving efficiency.** It is very economic in terms of reduced power rate as it provides efficient power saving by inverter control.
- **Able to set various operation mode.** It enables various operation modes such as operation at fixed speed, operation at fixed pressure, external control etc.
- **Various pump protection functions.** Various protection functions such as Water-hammering protection, Ticking over protection, over voltage /under voltage, and over current protection, enable a reduced number of faults and long life time.
- **Able to set RPM/Operating pressure.** It is able to set RPM/Operating pressure in a preferable way.
- **Easy and handy control.** Anyone can handle it as pressure set is handy and it re-operates after fault.
- **Fixed pressure control :** It does a perfect operation at fixed pressure by inverter with PID Controller and Sensor value.
- **Low noise, Low vibration:** Low noise and low vibration prevent accidents.
- **Stainless steel pump :** STS304 hydraulics to supply clean water all the time.
- **Energy saving:** It brings epochal energy saving by hybrid control inverter.
- **Handy installation and maintenance :** It enables a handy installation and maintenance by packaging accessory such as pipes.
- **light weight:** Easy to move and install
- **Excellent design :** Use of plastic case for the inverter comes in neat streamline external shape.
- **Prevention of water hammer :** Controlling the number of rotation of the inverter prevents water hammer

Pump spec.

- Products: MHI-Series (Stainless Steel Pump)
- Power source: single phase 220V 60Hz
- Applicable fluid: clean water and hot water (-80 ℃)
- Allowed pressure: 10bar
- Allowed suction pressure: 6bar
- Operating condition: ambient temperature (0~40℃), humidity (under 90%)
- Mechanical seal: Sic/Carbon

Motor spec.

- Motor type: TEFC
- Cooling type: Air-coolant type (cooling by fan)
- Protection class: IPX4
- Insulation class: F
- number of poles: 2
- Range of number of rotation: 1,440~3,600rpm
- Voltage tolerance: ±10%

Inverter spec.

- Power source: single phase 220V 50~60Hz
- Output frequency: max. 60Hz
- Control type: Vector + VWF
- Protection class: IPX4
- Operating condition: ambient temperature (0~40℃), humidity (under 90%)

Main functions of the inverter

- Operating pressure set
- Prevention of unusual excessive pressurizing
- Automatic restoration after power cut
- Automatic restart after fault
- Prevention of dry running
- Setting the operating mode: automatic mode (pressure control), manual mode (operation at fixed speed), external control mode
- Automatic tuning with optimized efficiency by DSP, algorithm which controls the operating pressure with optimized efficiency in real time
- Indication of various information and warning by handy FND screen
- Continuous operation without a separate control panel



High-Pressure Multistage Centrifugal Pumps

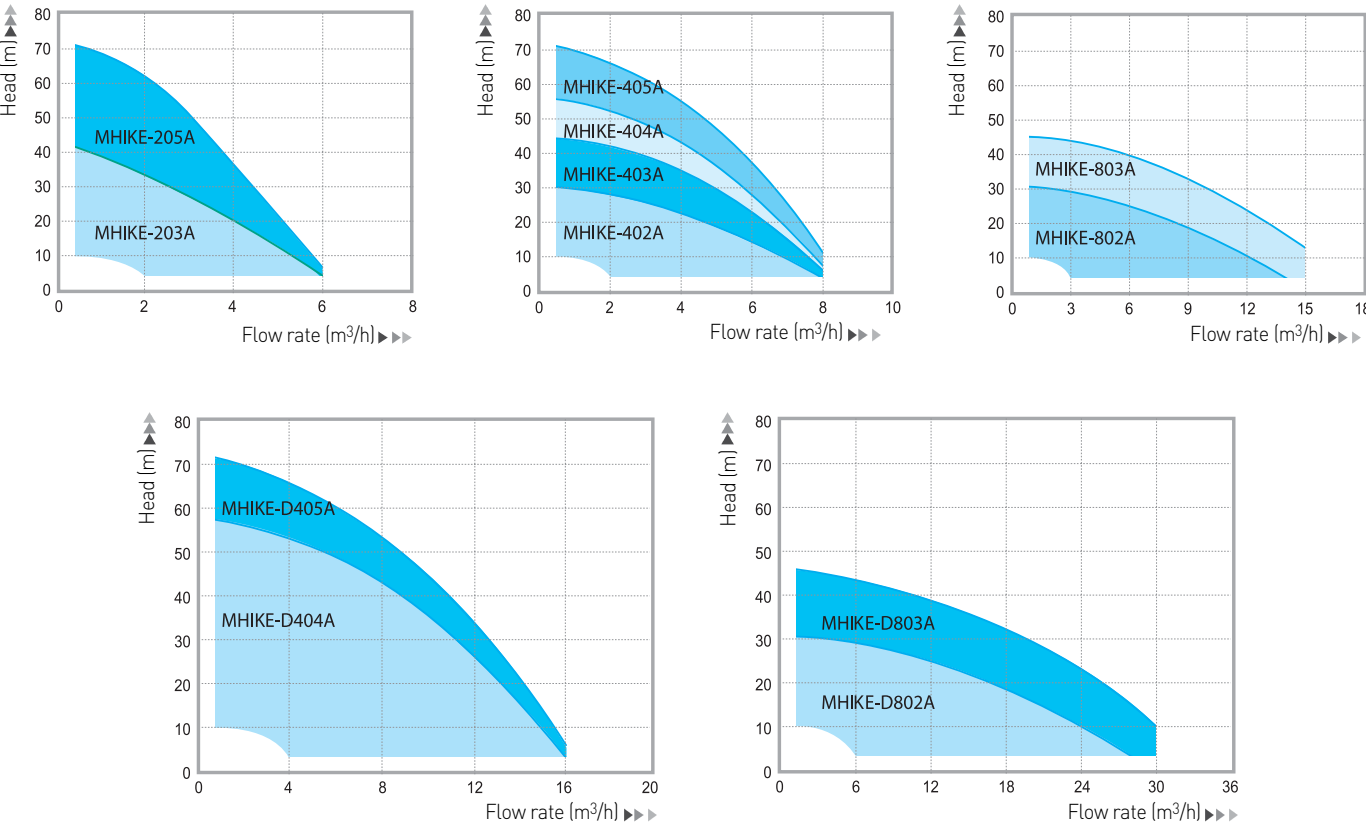
MHIKE-(D) Series

Outling Drawing & Duty Charts

Specification

Model	Power (output)	Voltage	Inverter		Pipe diameter	
			Output rating	Capacity rating	Suc.	Dis.
MHIKE-203A MHIKE-402A	0.75kW	Single Phase 220V 50&60Hz	0.75kW	2.6kVA	25A	25A
MHIKE-205A MHIKE-403A	1.1kW				30A	25A
MHIKE-404A MHIKE-802A	1.5kW		1.5kW	3.3kVA	25A	25A
MHIKE-405A MHIKE-803A	1.85kW				30A	25A
					40A	30A
MHIKE-D404A MHIKE-D802A	1.5kW x 2		1.5kW x 2	3.3kVA x 2	30A	25A
					40A	30A
MHIKE-D405A MHIKE-D803A	1.85kW x 2		2.2kW x 2	4.4kVA x 2	50A	50A
					65A	65A

Performance Curve



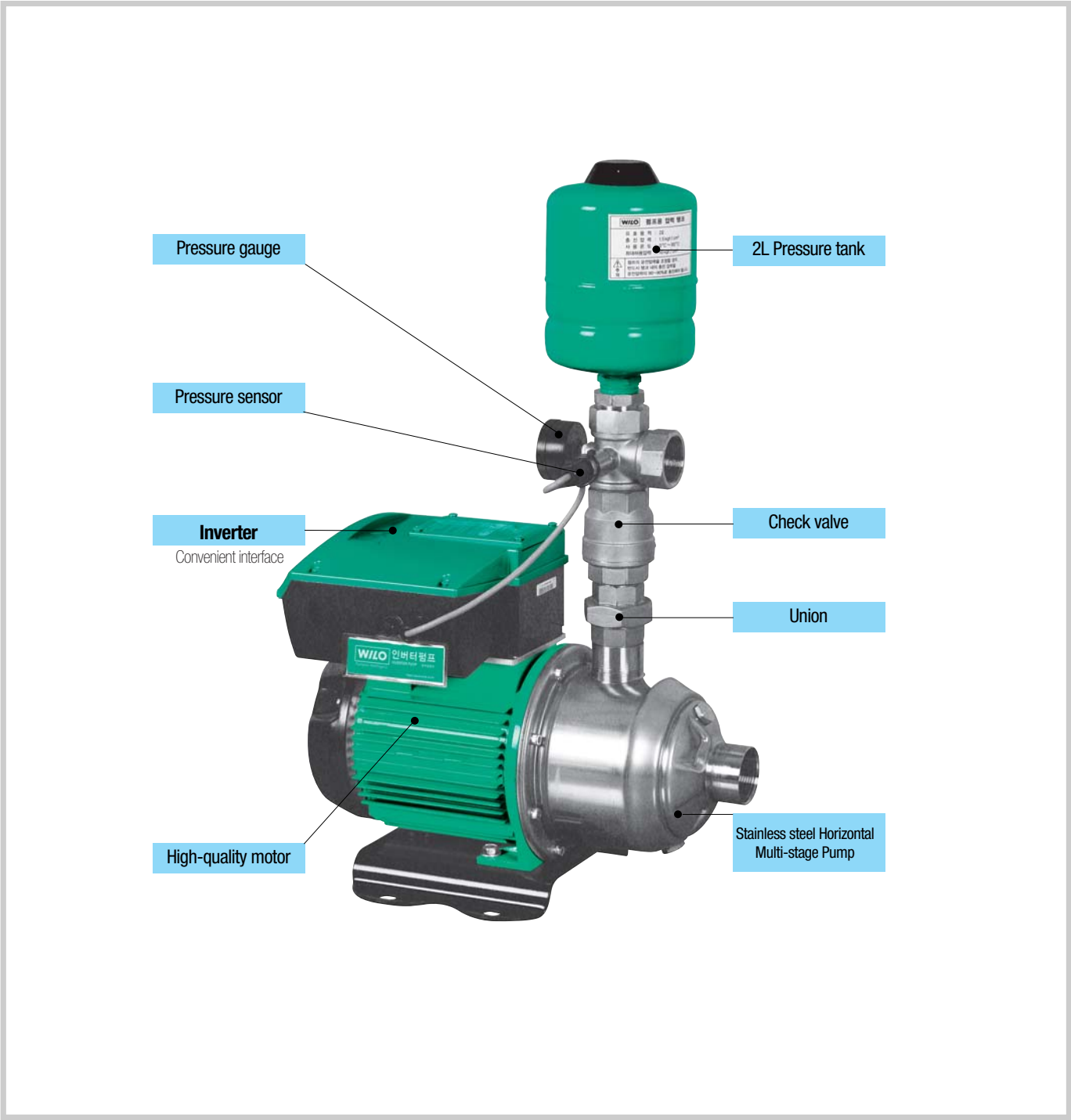
High-Pressure Multistage Centrifugal Pumps

MHIKE-(D) Series

Product Introduction

Scope of supply

It protects the pumps safely by installing various protection functions and enabling to do the multi-direction pipe work adjustable for the installation circumstances.





High-Pressure Multistage Centrifugal Pumps

MHIKE-(D) Series

MHIKE-D Series External design and Functions

Double performance & product lifetime, super-excellent safety, and available for the sufficient water supply with the efficient energy saving by utilizing the two-pump system in case the required water demand is over the capacity of one-pump system

■ Dual Multi-System

- Rotation control by two inverters
- Expand the product lifetime
- Electrical safety by the independent power system
- Double performance

■ Energy saving

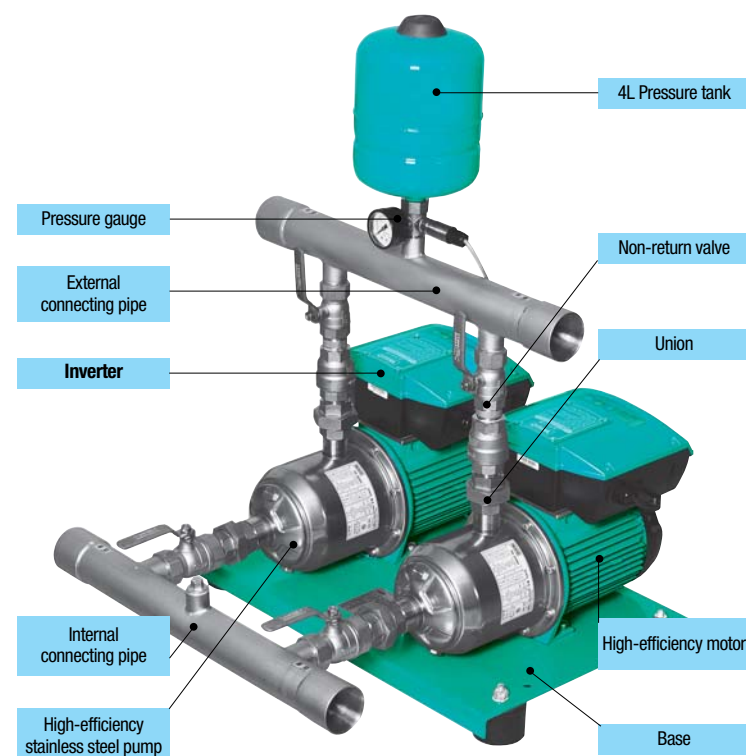
- "Low-noise and Energy-saving mode"

■ Environment-friendly Product

- Applied STS304 materials in all hydraulic parts

■ All in One

- Easy installation by connecting the pipe and plugging in the power



MHIKE-D Series