

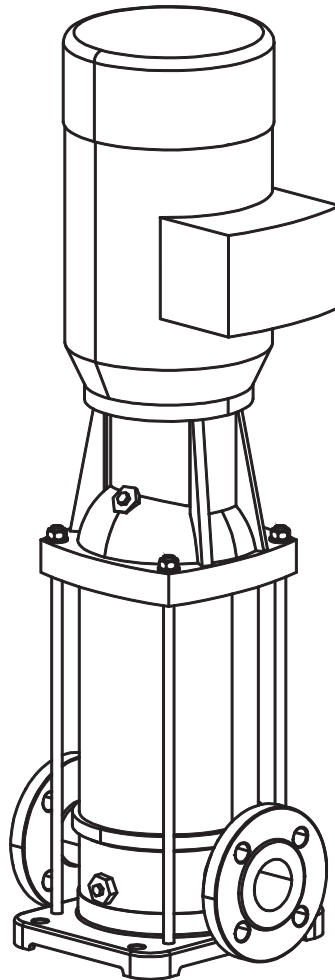


4710 SERIES

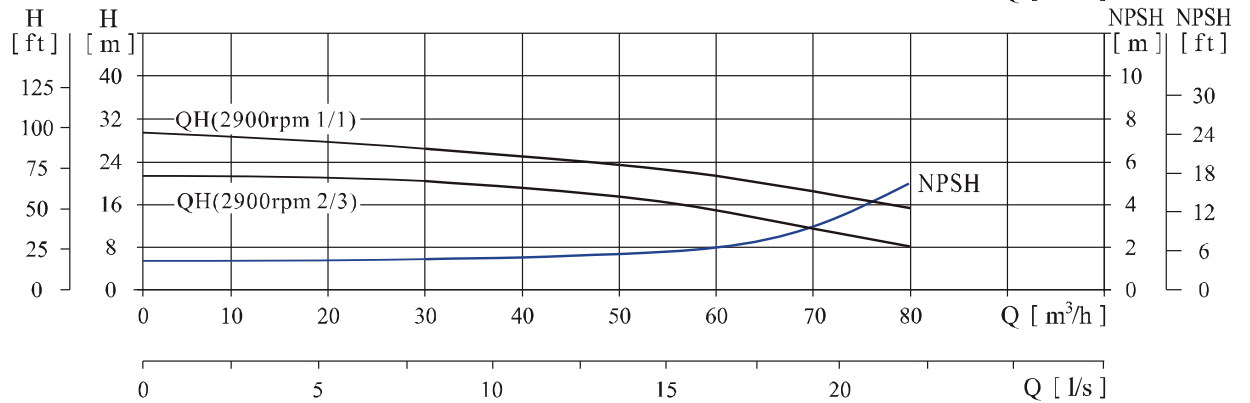
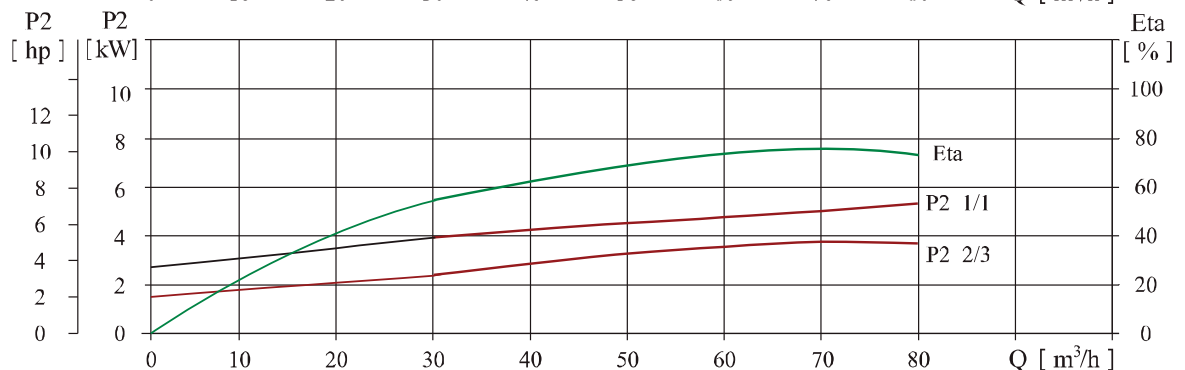
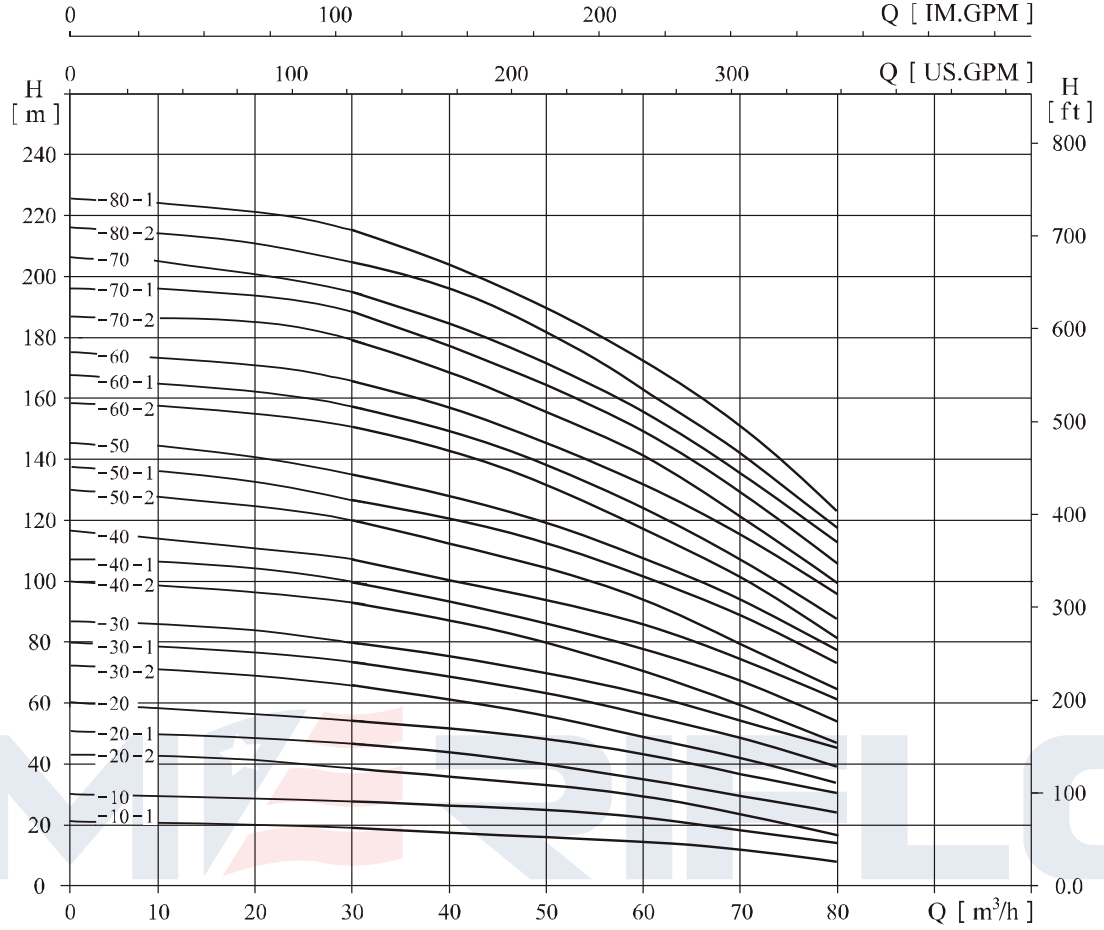
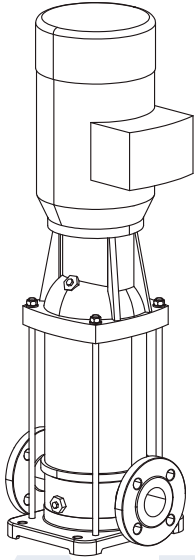
VERTICAL MULTISTAGE PUMPS

VM65

ENGINEERING INFORMATION



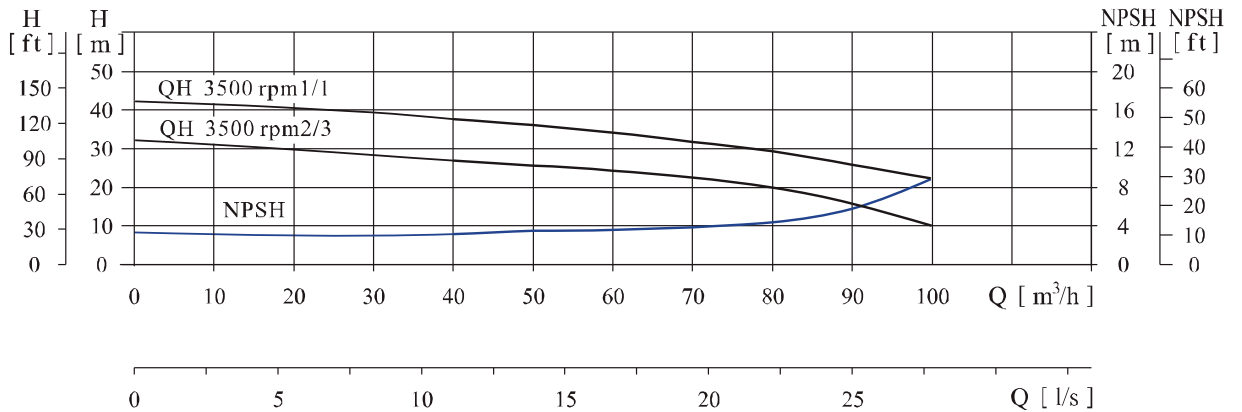
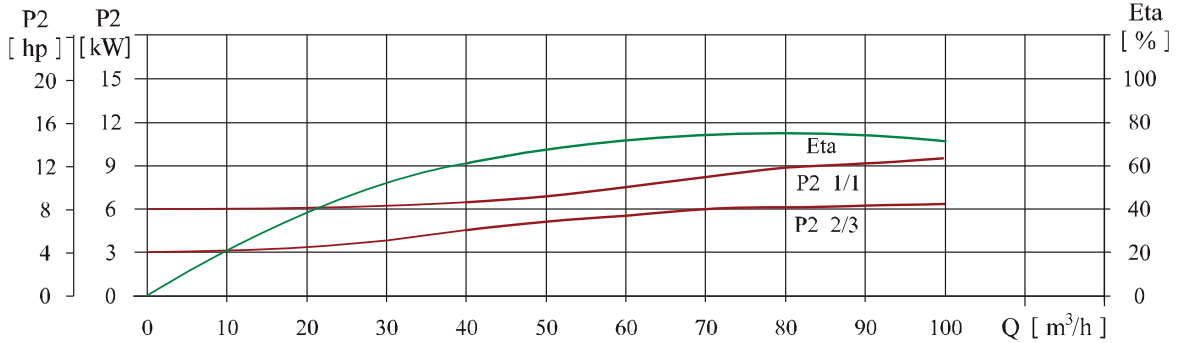
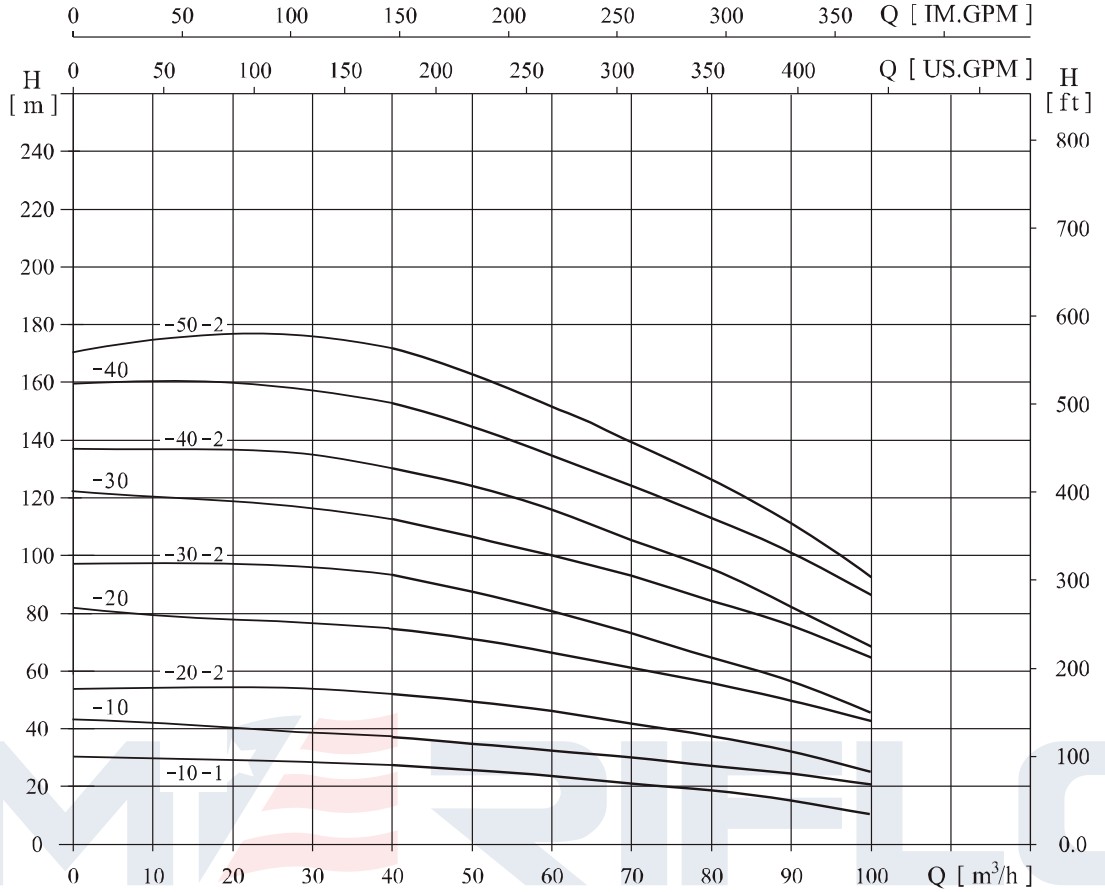
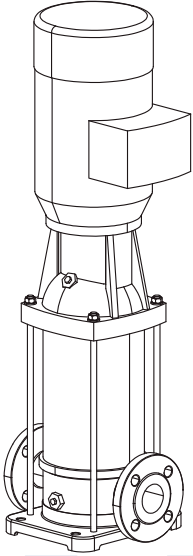
VM65 (4x4) 2900 RPM



MODEL VM65 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR	FLOW	130	175	225	250	300	350		
		HP	GPM								
VM65-10-1	2900	5	HEAD (PSI)	27	26	23	20	16	11		
VM65-10		7.5		38	36	33	30	26	21		
VM65-20-2		10		55	51	47	41	33	24		
VM65-20-1		15		65	62	57	51	43	34		
VM65-20		15		75	72	67	61	53	43		
VM65-30-2		20		94	88	80	71	58	45		
VM65-30-1		20		104	98	89	81	68	55		
VM65-30		25		114	108	99	91	78	65		
VM65-40-2		25		131	124	114	101	85	67		
VM65-40-1		30		142	134	124	111	95	77		
VM65-40		30		152	143	134	121	105	87		
VM65-50-2		40		172	162	149	135	114	91		
VM65-50-1		40		182	172	159	145	124	101		
VM65-50		40		193	183	169	155	134	111		
VM65-60-2		40		213	202	186	168	143	115		
VM65-60-1		50		223	212	196	178	153	125		
VM65-60		50		233	222	206	187	163	135		
VM65-70-2		50		254	240	222	200	172	141		
VM65-70-1		50		264	250	232	210	182	151		
VM65-70		60		274	260	241	220	192	159		
VM65-80-2	60	294	278	258	232	202	165				
VM65-80-1	60	305	288	268	243	212	175				

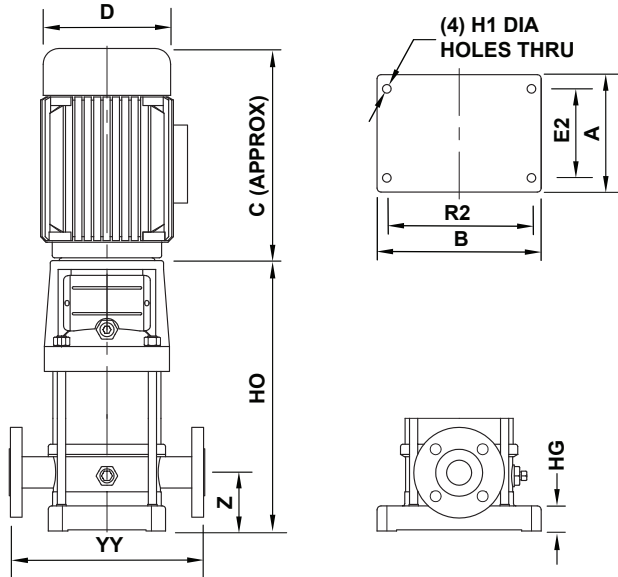
VM65 (4x4) 3500 RPM



MODEL VM65 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR	FLOW	130	175	225	250	300	350	400	450
		HP	GPM								
VM65-10-1	3500	10	HEAD (PSI)		37	36	33	30	26	20	14
VM65-10		15			53	50	47	44	40	34	30
VM65-20-2		20			75	71	67	60	53	44	33
VM65-20		30			105	102	95	88	81	72	60
VM65-30-2		30			132	125	114	102	92	80	64
VM65-30		40			159	153	142	118	122	109	92
VM65-40-2		50			185	176	163	146	134	118	94
VM65-40		60			216	205	192	175	162	145	122
VM65-50-2		60			244	230	214	195	179	159	129



AMERIFLO**MODEL VM65 - VERTICAL MULTISTAGE, ELECTRIC NEMA MOTOR****GENERAL ARRANGEMENT DRAWING**

FLANGE DRILLING STANDARD & DETAILS						
SUCT	250# ANSI		DISC	250# ANSI		
	SIZE	RF DIA	P.C.D	# HOLES	SIZE	
SUCT	4	6.188	7.875	8	0.750	
DISC	4	6.188	7.875	8	0.750	
FORCES (LBS) & MOMENTS (LB-Feet)						
	Fx	Fy	Fz	Mx	My	Mz
SUCT	320	400	260	980	500	740
DISC	320	400	260	980	500	740

VM65

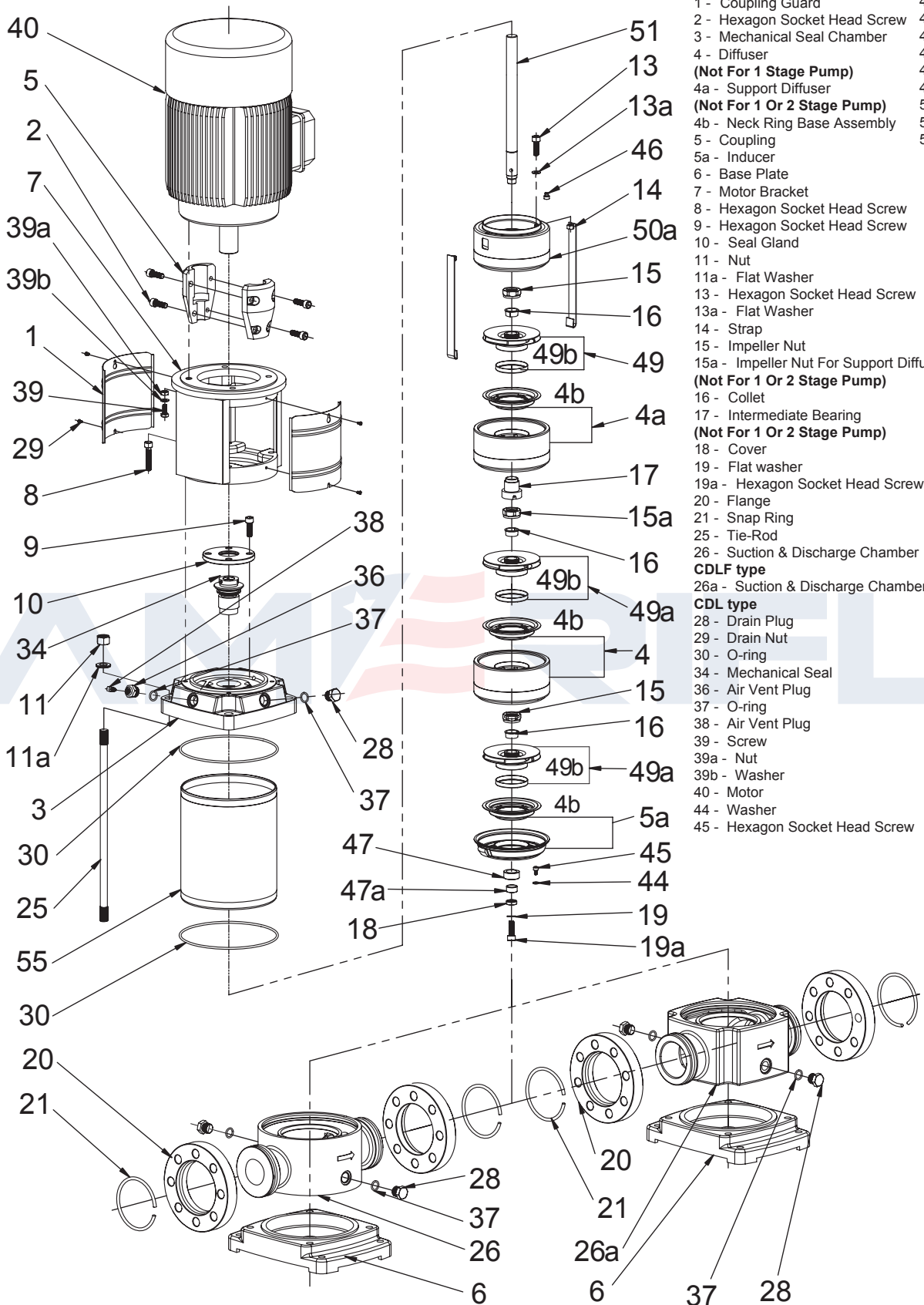
MODEL	SPEED RPM	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT
													LBS
VM65-10	2900 3500	14.375	13.000	15.375	14.188	7.500	0.500	1.750	22.000	10.500	14.375	5.500	231
VM65-20		14.375	13.000	19.688	13.000	7.500	0.500	1.750	29.688	10.500	14.375	5.500	401
VM65-30		14.375	13.000	19.688	13.000	7.500	0.500	1.750	32.938	10.500	14.375	5.500	482
VM65-40		14.375	13.000	22.625	14.188	7.500	0.500	1.750	36.188	10.500	14.375	5.500	569
VM65-50		14.375	13.000	25.625	15.750	7.500	0.500	1.750	39.438	10.500	14.375	5.500	705
VM65-60		14.375	13.000	25.625	15.750	7.500	0.500	1.750	42.625	10.500	14.375	5.500	769
VM65-70		14.375	13.000	25.625	15.750	7.500	0.500	1.750	45.938	10.500	14.375	5.500	925
VM65-80		14.375	13.000	27.000	18.125	7.500	0.500	1.750	49.188	10.500	14.375	5.500	935

NOTES:

ALL DIMENSIONS ARE IN INCHES [MM] AND MAY VARY ±0.375 INCHES.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED BY AMERIFLO.

MODEL VM65 - SECTIONAL VIEW



- 1 - Coupling Guard
- 2 - Hexagon Socket Head Screw
- 3 - Mechanical Seal Chamber
- 4 - Diffuser
- 5 - Coupling
- 5a - Inducer
- 6 - Base Plate
- 7 - Motor Bracket
- 8 - Hexagon Socket Head Screw
- 9 - Hexagon Socket Head Screw
- 10 - Seal Gland
- 11 - Nut
- 11a - Flat Washer
- 13 - Hexagon Socket Head Screw
- 13a - Flat Washer
- 14 - Strap
- 15 - Impeller Nut
- 15a - Impeller Nut For Support Diffuser
- 16 - Collet
- 17 - Intermediate Bearing
- 18 - Cover
- 19 - Flat washer
- 19a - Hexagon Socket Head Screw
- 20 - Flange
- 21 - Snap Ring
- 25 - Tie-Rod
- 26 - Suction & Discharge Chamber
- 26a - Suction & Discharge Chamber
- 28 - Drain Plug
- 29 - Drain Nut
- 30 - O-ring
- 34 - Mechanical Seal
- 36 - Air Vent Plug
- 37 - O-ring
- 38 - Air Vent Plug
- 39 - Screw
- 39a - Nut
- 39b - Washer
- 40 - Motor
- 44 - Washer
- 45 - Hexagon Socket Head Screw
- 46 - Adjusting Grommet
- 47 - Bottom Bearing
- 47a - Bottom Sleeve
- 49 - Impeller
- 49a - Impeller
- 49b - Ring For Neck Ring
- 50a - Top Diffuser
- 51 - Shaft
- 55 - Outer Casing

MODEL VM65 - SECTIONAL VIEW PART REFERENCE

ITEM NUMBER	PART NAME	MATERIAL	
		VM (304SS)	VM (316 SS)
1	Coupling Guard	304 SS (EN 1.4301)	
2	Hexagon Socket Head Screw	A2-70 UNI 7323	
3	Pump Head	304 SS (EN 1.4301)	316 SS (EN 1.4401)
4	Diffuser	304 SS (EN 1.4301)	316 SS (EN 1.4401)
4a	Support Diffuser	304 SS (EN 1.4301)	316 SS (EN 1.4401)
4b	Neck Ring Base Assembly	304 SS (EN 1.4301)	316 SS (EN 1.4401)
5	Coupling	Die Cast Aluminum EN AB-AISI11Cu ₂ (Fe)	
5a	Inducer	304 SS (EN 1.4301)	316 SS (EN 1.4401)
6	Base Plate	Die Cast Aluminum EN AB-AISI11Cu ₂ (Fe)	
7	Motor Bracket	Cast Iron EN-GJL-200-EN 1561	
8	Hexagon Socket Head Screw	A2-70 UNI 7323	
9	Hexagon Socket Head Screw	A2-70 UNI 7323	
10	Seal Gland	304 SS (EN 1.4301)	316 SS (EN 1.4401)
11	Nut	Galvanized Steel	
11a	Flat Washer	Galvanized Steel	
13	Hexagon Socket Head Screw	A2-70 UNI 7323	
13a	Flat Washer	304 SS (EN 1.4301)	316 SS (EN 1.4401)
14	Strap	304 SS (EN 1.4301)	316 SS (EN 1.4401)
15	Impeller Nut	A2-70 UNI 7323	A4-70 UNI 7323
15a	Impeller Nut For Support Diffuser	A2-70 UNI 7323	A4-70 UNI 7323
16	Collet	A2-70 UNI 7323	A4-70 UNI 7323
17	Intermediate Bearing	Tungsten Carbide	
18	Cover	304 SS (EN 1.4301)	316 SS (EN 1.4401)
19	Flat Washer	304 SS (EN 1.4301)	316 SS (EN 1.4401)
19a	Hexagon Socket Head Screw	A2-70 UNI 7323	
20	Flange	Cast Iron	
21	Snap Ring	304 SS (EN 1.4301)	
25	Tie-Rod	Galvanized Steel 6.8 Strength Class ISO 898/1	
26 & 26a	Suction & Discharge Chamber	304 SS (EN 1.4301)	316 SS (EN 1.4401)
28	Drain Plug (M10)	304 SS (EN 1.4301)	316 SS (EN 1.4401)
29	Drain Plug	304 SS (EN 1.4301)	316 SS (EN 1.4401)
30	O-Ring	FPM	
34	Mechanical Seal	Silicon Carbide / Carbon / FPM	
36	Air Vent Plug	304 SS (EN 1.4301)	316 SS (EN 1.4401)
37	O-Ring	FPM	
38	Air Vent Plug	304 SS (EN 1.4301)	316 SS (EN 1.4401)
39	Screw	Galvanized Steel	
39a	Nut	Galvanized Steel	
39b	Washer	Galvanized Steel	
40	Motor	Refer To Motor Manufacturer	
44	Washer	Galvanized Steel	
45	Hexagon Socket Head Screw	A2-70 UNI 7323	
46	Adjusting Grommet	FPM	
47	Bottom Bearing	Tungsten Carbide	
47a	Bottom Sleeve	Tungsten Carbide	
49	Impeller	304 SS (EN 1.4301)	316 SS (EN 1.4401)
49a	Impeller	304 SS (EN 1.4301)	316 SS (EN 1.4401)
49b	Ring For Neck Ring	FPM	
50a	Top Diffuser	304 SS (EN 1.4301)	316 SS (EN 1.4401)
51	Shaft	304 SS (EN 1.4301)	316 SS (EN 1.4401)
55	Outer Casing	304 SS (EN 1.4301)	316 SS (EN 1.4401)

MODEL VM65 - ENGINEERING INFORMATION

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM65	+5°F TO +248°F [-15°C TO +120°C]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	286 GPM [65 M ³ /HR]
FLOW RANGE:	176 - 440 GPM [40 - 100 M ³ /HR]
MAXIMUM PRESSURE:	261 PSI [18 BAR]
MAXIMUM POWER:	10 - 60 HP [7.5 - 45 KW]
MAXIMUM EFFICIENCY:	76%

