

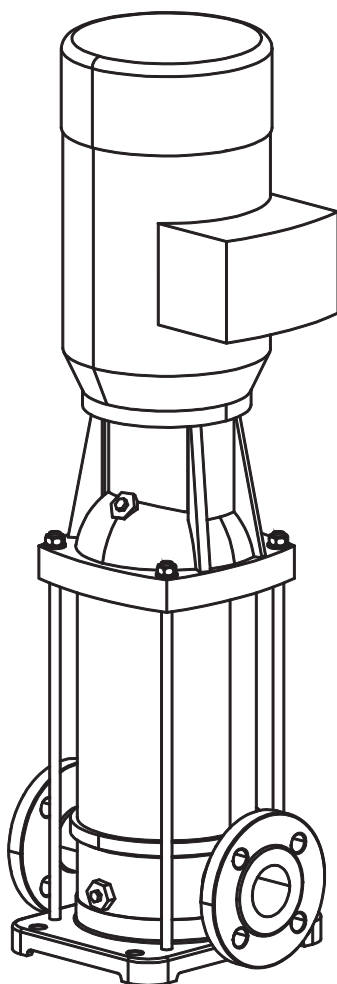


4710 SERIES

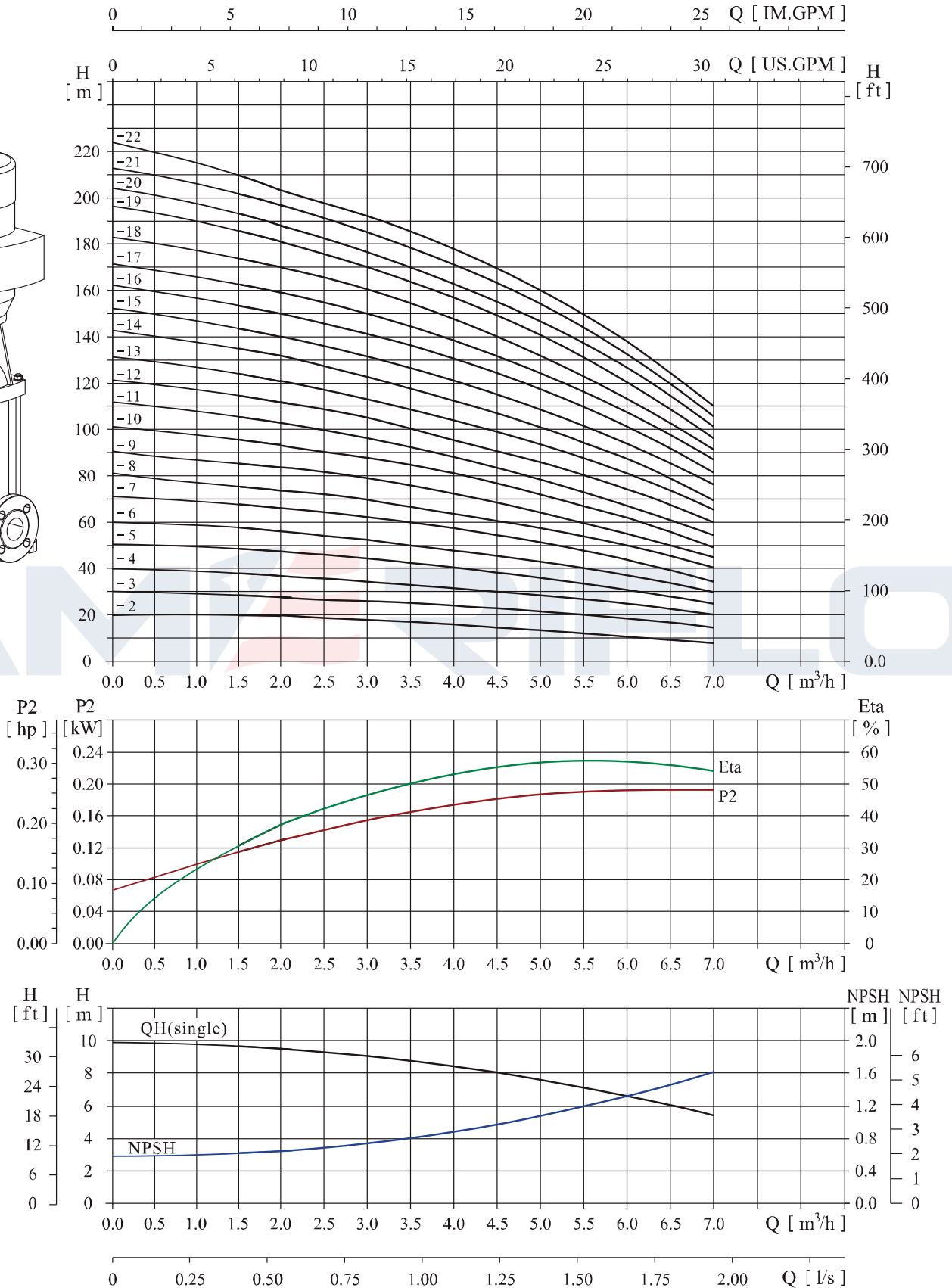
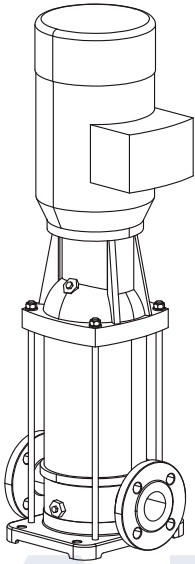
VERTICAL MULTISTAGE PUMPS

VM4

ENGINEERING INFORMATION



VM4 (1.25x1.25) 2900 RPM

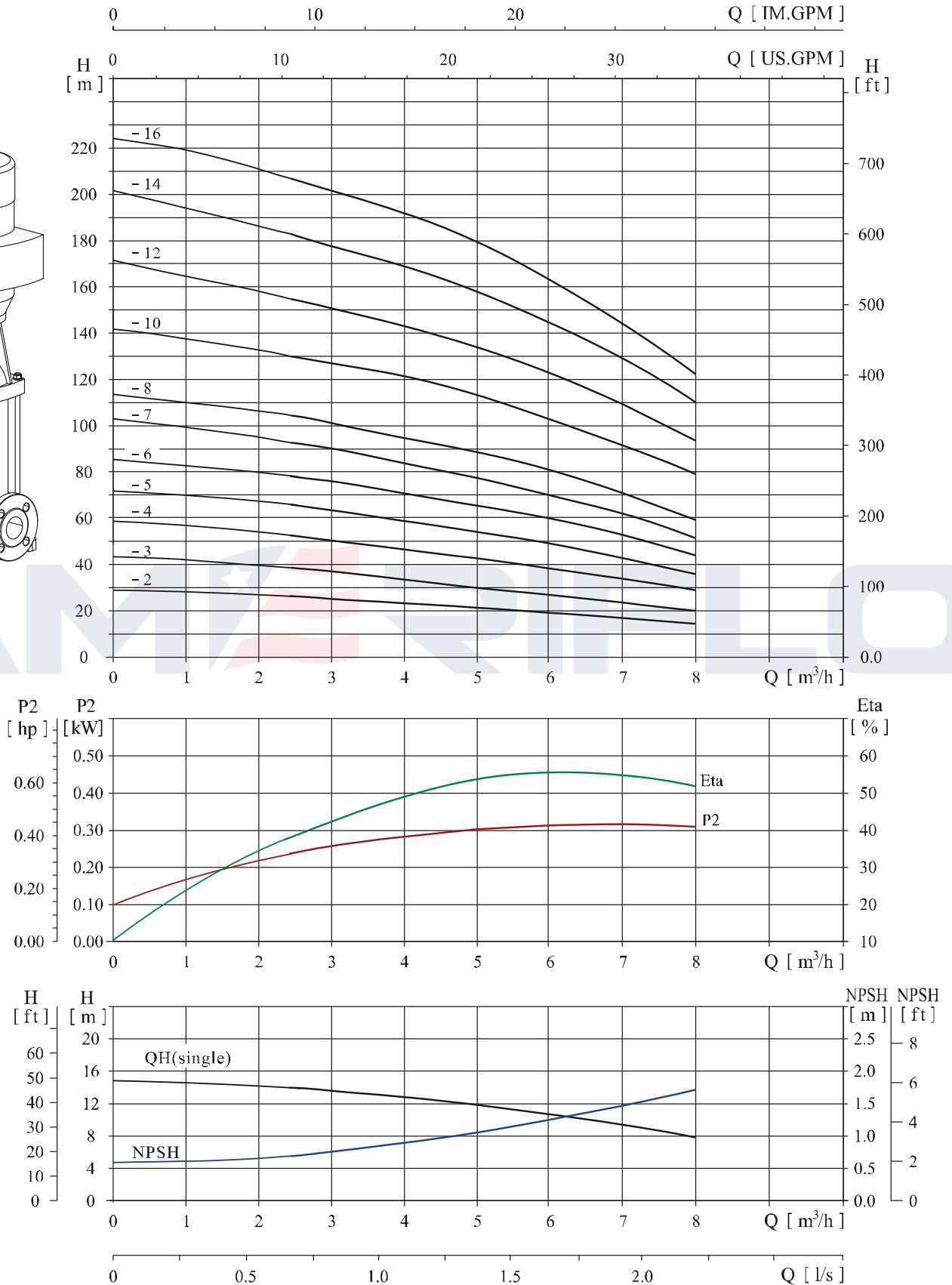
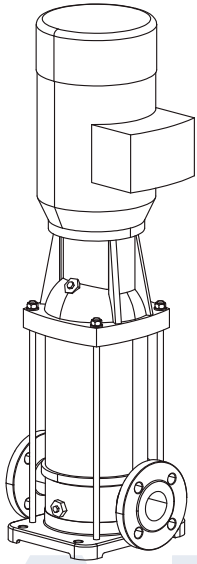


MODEL VM4 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR HP	FLOW GPM	7.5	10	12.5	15	20	25	30	
VM4-2	2900	0.5	HEAD (PSI)	27	26	24	21	18	14	11	
VM4-3		0.75		40	38	37	34	28	26	18	
VM4-4		1		54	51	48	45	38	34	27	
VM4-5		1.5		67	64	61	57	48	44	33	
VM4-6		1.5		80	77	74	68	58	53	40	
VM4-7		2		94	89	87	80	68	61	47	
VM4-8		2		105	102	99	91	78	71	54	
VM4-10		3		136	128	124	115	101	88	68	
VM4-12		3		162	153	148	135	121	107	82	
VM4-14		5		193	179	173	159	143	126	97	
VM4-16		5		216	205	199	183	163	143	111	
VM4-19		5		260	243	239	217	195	173	132	
VM4-22		5		300	284	273	253	227	196	153	



VM4 (1.25x1.25) 3500 RPM



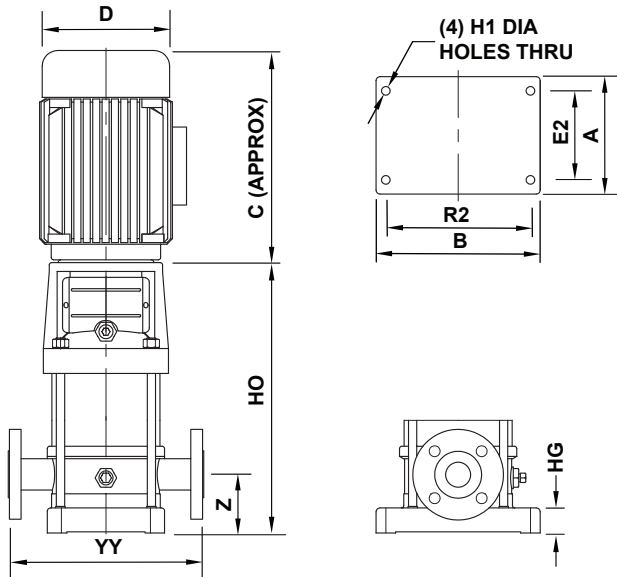
MODEL VM4 - PERFORMANCE TABLE (3500 RPM)

MODEL	SPEED	MOTOR	FLOW	7.5	10	12.5	15	20	25	30	35
		HP	GPM								
VM4-2	3500	1	HEAD (PSI)		37	36	33	30	27	23	20
VM4-3		1.5			55	54	51	45	40	34	30
VM4-4		2			74	71	68	62	54	50	44
VM4-5		3			92	88	85	78	66	62	55
VM4-6		3			111	107	102	95	84	77	67
VM4-7		5			130	125	119	111	98	88	78
VM4-8		5			148	142	135	128	112	102	89
VM4-10		5			185	178	170	160	145	128	114
VM4-12		5			222	213	206	193	173	155	136
VM4-14		7.5			258	250	241	226	206	183	159
VM4-16		7.5			294	285	278	260	234	207	182



MODEL VM4 - 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	1.25	2.500	3.875	4	0.625	
DISC	1.25	2.500	3.875	4	0.625	
FORCES (LBS) & MOMENTS (LB-Feet)						
	Fx	Fy	Fz	Mx	My	Mz
SUCT	160	130	200	340	170	260
DISC	160	130	200	340	170	260

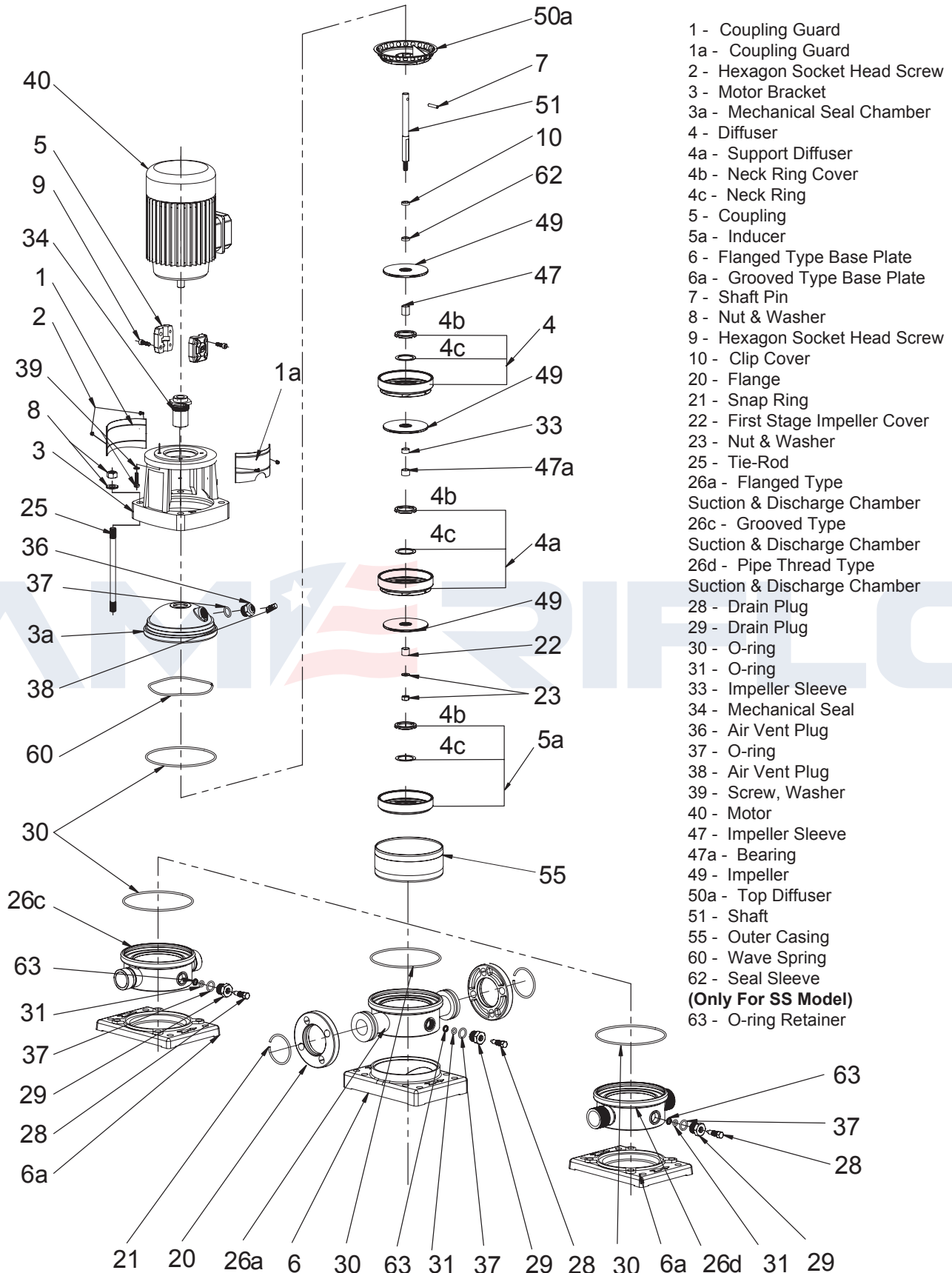
VM4

MODEL	SPEED	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT
	RPM												LBS
VM4-2	2900 3500	5.938	8.250	8.875	5.875	3.938	0.500	1.250	10.875	7.000	9.875	3.000	46
VM4-3		5.938	8.250	8.875	5.875	3.938	0.500	1.250	11.938	7.000	9.875	3.000	49
VM4-4		5.938	8.250	9.625	6.750	3.938	0.500	1.250	13.375	7.000	9.875	3.000	55
VM4-5		5.938	8.250	9.625	6.750	3.938	0.500	1.250	14.438	7.000	9.875	3.000	60
VM4-6		5.938	8.250	9.625	6.750	3.938	0.500	1.250	15.500	7.000	9.875	3.000	60
VM4-7		5.938	8.250	11.413	7.500	3.938	0.500	1.250	17.000	7.000	9.875	3.000	73
VM4-8		5.938	8.250	11.413	7.500	3.938	0.500	1.250	18.000	7.000	9.875	3.000	73
VM4-10		5.938	8.250	11.413	7.500	3.938	0.500	1.250	20.188	7.000	9.875	3.000	82
VM4-12		5.938	8.250	11.413	7.500	3.938	0.500	1.250	22.250	7.000	9.875	3.000	84
VM4-14		5.938	8.250	13.625	7.750	3.938	0.500	1.250	24.875	7.000	9.875	3.000	101
VM4-16		5.938	8.250	13.625	7.750	3.938	0.500	1.250	26.938	7.000	9.875	3.000	106
VM4-19		5.938	8.250	14.000	9.000	3.938	0.500	1.250	30.125	7.000	9.875	3.000	126
VM4-22		5.938	8.250	14.000	9.000	3.938	0.500	1.250	33.375	7.000	9.875	3.000	130

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 VM4 - SECTIONAL VIEW

MODEL VM4 - SECTIONAL VIEW PART REFERENCE

ITEM NUMBER	PART NAME	MATERIAL	
		VM (304SS)	VM (316 SS)
1 & 1a	Coupling Guard	304 SS (EN 1.4301)	
2	Hexagon Socket Head Screw	A2-70 UNI 7323	
3	Motor Bracket	304 SS (EN 1.4301)	316 SS (EN 1.4401)
3a	Mechanical Seal Chamber		
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	Flanged Type Base Plate	Die Cast Aluminum EN AB-AISI11Cu ₂ (Fe)	
6a	Grooved Type Base Plate	Die Cast Aluminum EN AB-AISI11Cu ₂ (Fe)	
7	Shaft Pin	304 SS (EN 1.4301)	316 SS (EN 1.4401)
8	Nut (M8) & Washer (M8)	A2-70 UNI 7323	
9	Hexagon Socket Head Screw	A2-70 UNI 7323	
10	Clip Cover	304 SS (EN 1.4301)	316 SS (EN 1.4401)
20	Flange	Cast Iron	
21	Snap Ring	304 SS (EN 1.4301)	
22	First Stage Impeller Cover	304 SS (EN 1.4301)	316 SS (EN 1.4401)
23	Nut (M8) & Washer (M8)	A2-70 UNI 7323	
25	Tie-Rod	Galvanized Steel 6.8 Strength Class ISO 898/1	
26a	Flanged Type Suction & Discharge Chamber	304 SS (EN 1.4301)	316 SS (EN 1.4401)
26c	Grooved Type Suction & Discharge Chamber	304 SS (EN 1.4301)	316 SS (EN 1.4401)
26d	Pipie Thread Type 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	
31	O-Ring	FPM	
33	Impeller Sleeve	Tungsten Carbide	
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 & Washer	Galvanized Steel	
40	Motor	Refer To Motor Manufacturer	
47	Impeller Sleeve	Tungsten Carbide	
47a	Bearing	Tungsten Carbide	
49	Impeller	304 SS (EN 1.4301)	316 SS (EN 1.4401)
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)
60	Wave Spring	A2-70 UNI 7323	
62	Seal Sleeve	Tungsten Carbide	
63	O-ring Retainer	304 SS (EN 1.4301)	316 SS (EN 1.4401)

MODEL VM4 - ENGINEERING INFORMATION

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM4	+5°F TO +248°F [-15°C TO +120°C]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	17.6 GPM [4 M ³ /HR]
FLOW RANGE:	11 - 35 GPM [2.5 - 8 M ³ /HR]
MAXIMUM PRESSURE:	305 PSI [21 BAR]
MAXIMUM POWER:	1 - 7.5 HP [0.75 - 5.5 KW]
MAXIMUM EFFICIENCY:	57%

