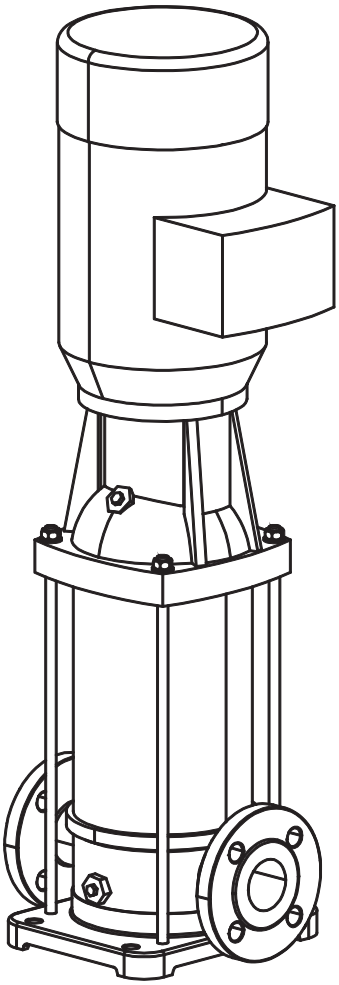
4710 SERIES

VERTICAL MULTISTAGE PUMPS

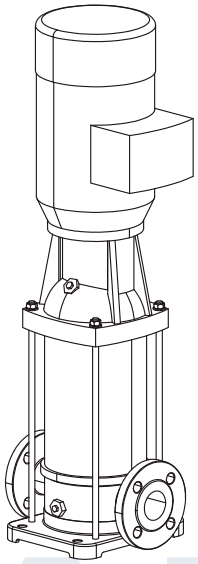
VM150

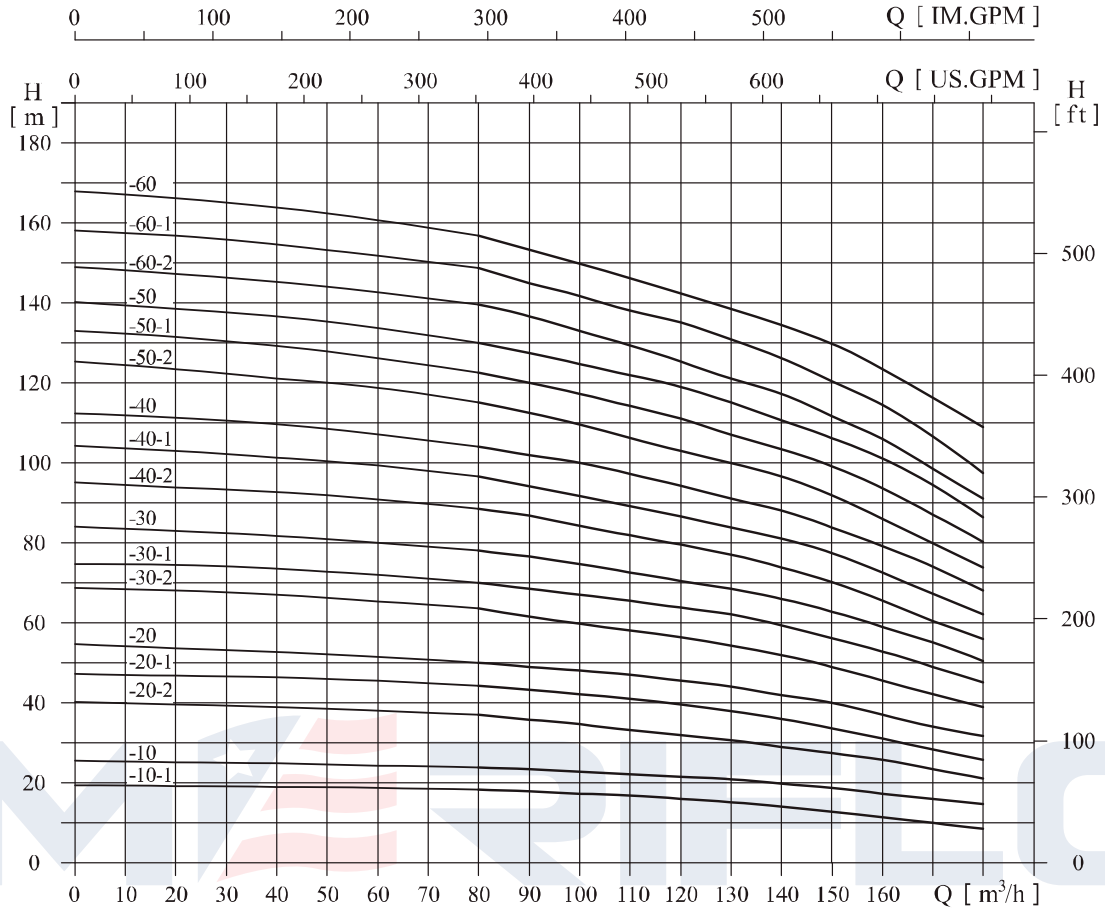
ENGINEERING INFORMATION

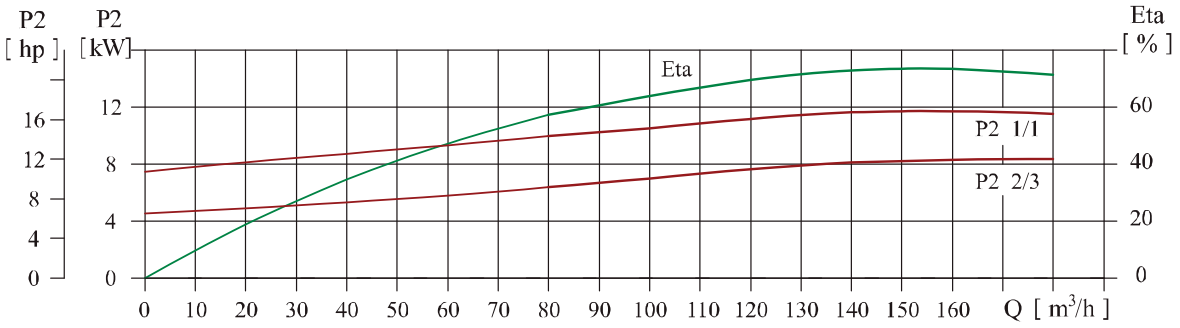


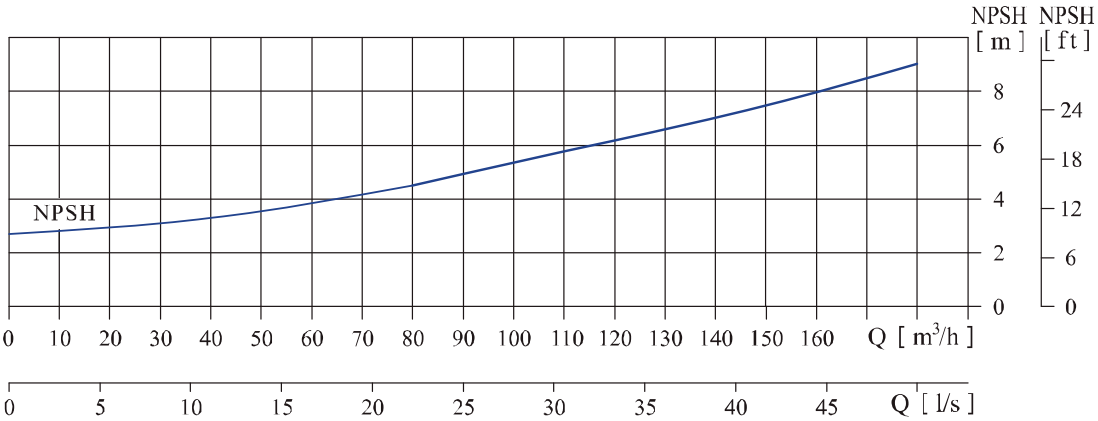
AMERIFLO
4034 Mint Way, Dallas, TX 75237
www.ameriflo-usa.com

VM150 (5x5) 2900 RPM





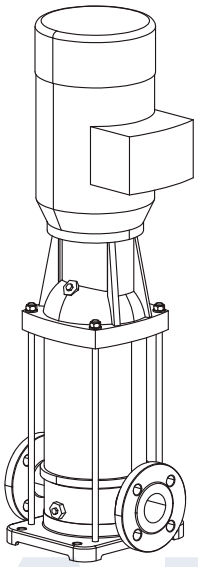


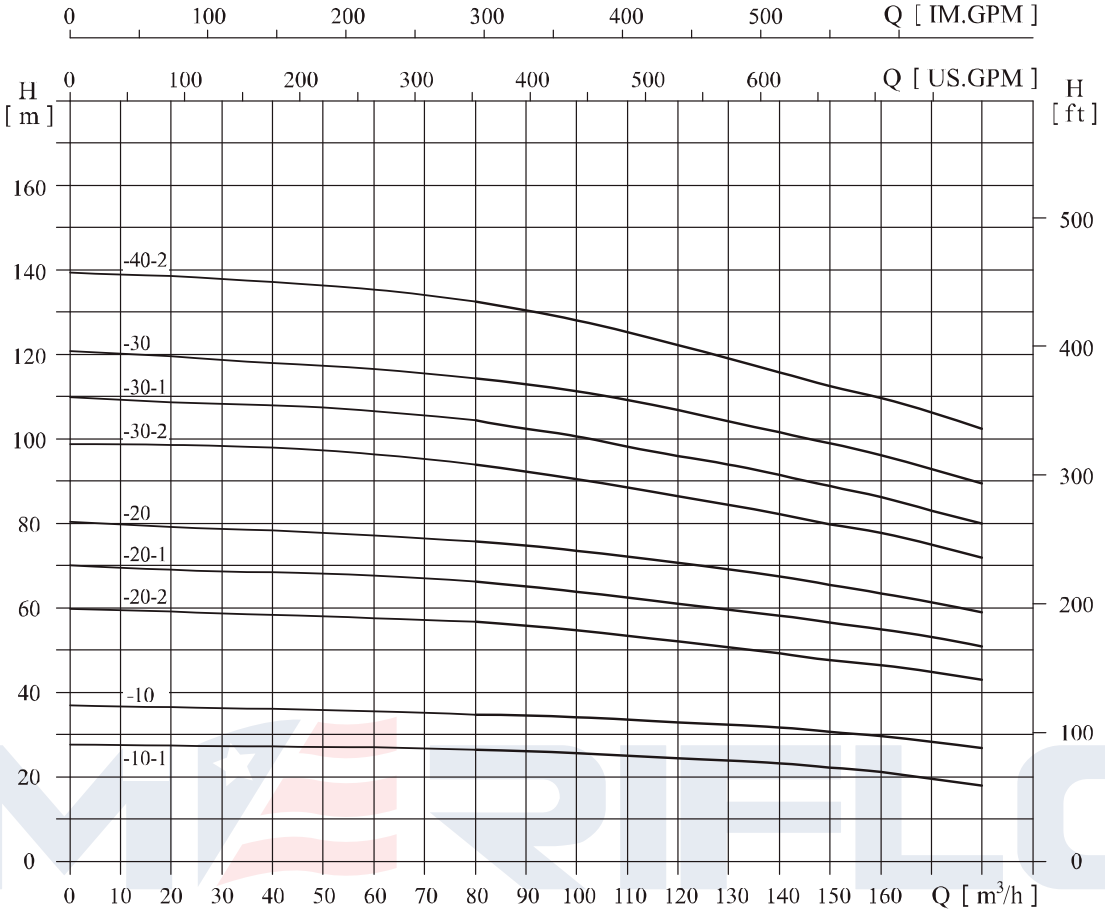


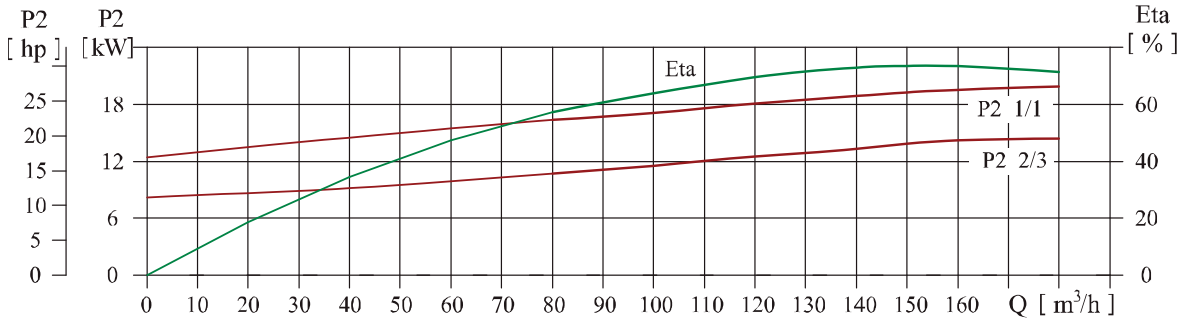
MODEL VM150 - PERFORMANCE TABLE (2900 RPM)

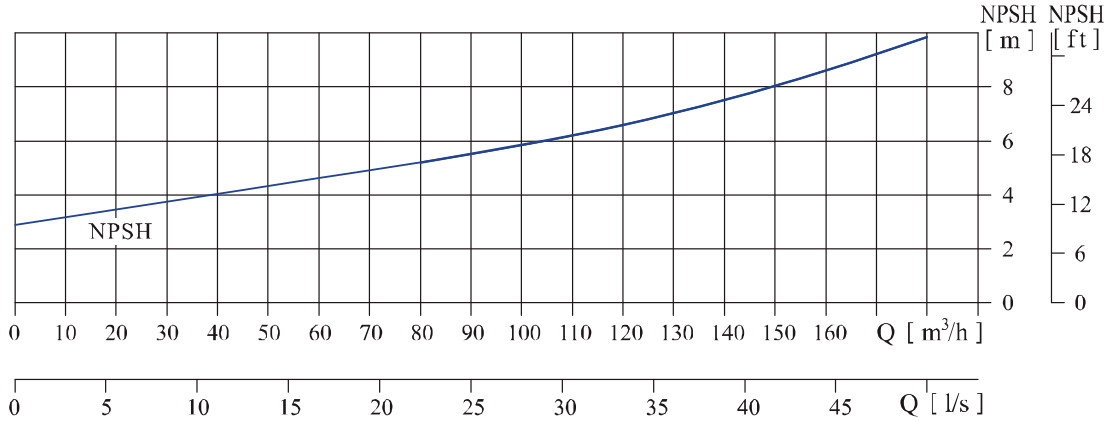
MODEL	SPEED	MOTOR HP	FLOW GPM	450	500	550	600	650	700	750	800
VM150-10-1	2900	15	HEAD (PSI)	24	23	21	20	18	16	14	13
VM150-10		20		33	31	30	28	27	24	23	21
VM150-20-2		25		48	45	44	41	40	37	33	30
VM150-20-1		30		60	55	55	54	50	47	43	38
VM150-20		40		68	65	62	60	57	53	48	45
VM150-30-2		40		84	80	78	75	70	65	60	55
VM150-30-1		50		95	89	88	85	80	75	70	64
VM150-30		50		107	101	97	94	89	84	78	72
VM150-40-2		60		119	112	109	107	101	94	85	80
VM150-40-1		60		131	124	119	116	109	104	95	88
VM150-40		75		142	135	129	125	119	114	105	97
VM150-50-2		75		155	146	142	134	131	122	112	105
VM150-50-1		100		166	159	153	149	141	134	124	114
VM150-50		100		178	169	163	159	152	143	135	124
VM150-60-2		100		189	178	172	168	159	151	139	129
VM150-60-1		100		202	192	186	180	172	163	152	139
VM150-60		100		212	202	199	165	185	176	165	155

VM150 (5x5) 3500 RPM







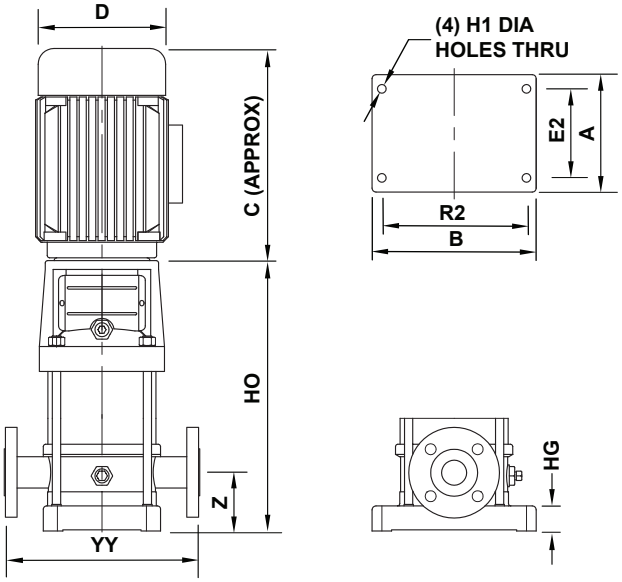


MODEL VM150 - PERFORMANCE TABLE (3500 RPM)

MODEL	SPEED	MOTOR	FLOW	450	500	550	600	650	700	750	800
		HP	GPM								
VM150-10-1	3500	20	HEAD (PSI)	37	34	34	33	31	30	28	26
VM150-10		30		48	47	45	45	44	43	40	38
VM150-20-2		40		75	74	71	70	68	67	64	61
VM150-20-1		50		91	88	85	84	80	78	75	72
VM150-20		60		105	102	98	97	94	91	87	84
VM150-30-2		75		129	125	119	115	114	111	107	104
VM150-30-1		100		142	139	134	131	126	124	119	114
VM150-30		100		158	155	148	145	141	136	132	126
VM150-40-2		100		182	178	168	163	160	156	146	146

MODEL VM150 - 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	5	7.313	9.250	8	0.750	
DISC	5	7.313	9.250	8	0.750	
FORCES (LBS) & MOMENTS (LB-FEET)						
	Fx	Fy	Fz	Mx	My	Mz
SUCT	800	400	600	1200	700	900
DISC	800	400	600	1200	700	900

VM150

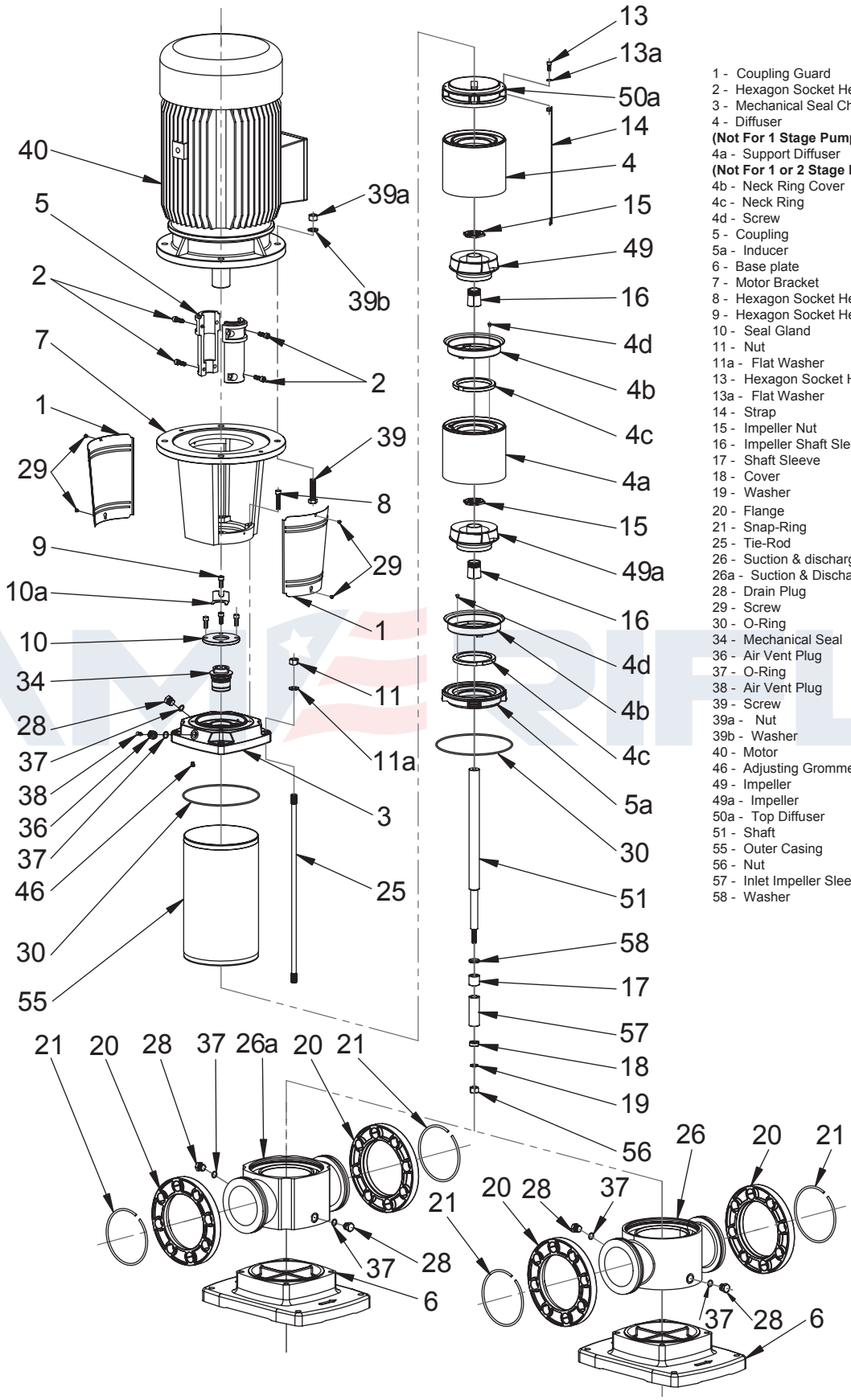
MODEL	SPEED RPM	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT LBS
VM150-10	2900	13.375	18.625	19.688	13.000	10.813	0.625	1.500	33.000	14.938	15.000	7.000	518
VM150-20		13.375	18.625	25.625	13.000	10.813	0.625	1.500	39.375	14.938	15.000	7.000	772
VM150-30		13.375	18.625	25.625	15.750	10.813	0.625	1.500	45.625	14.938	15.000	7.000	849
VM150-40	3500	13.375	18.625	29.938	21.250	10.813	0.625	1.500	53.125	14.938	15.000	7.000	1235
VM150-50		13.375	18.625	33.250	22.813	10.813	0.625	1.500	59.438	14.938	15.000	7.000	1521
VM150-60		13.375	18.625	33.250	22.813	10.813	0.625	1.500	65.750	14.938	15.000	7.000	1543

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 VM150 - SECTIONAL VIEW



1 - Coupling Guard
2 - Hexagon Socket Head Screw
3 - Mechanical Seal Chamber
4 - Diffuser
(Not For 1 Stage Pump)
4a - Support Diffuser
(Not For 1 or 2 Stage Pump)
4b - Neck Ring Cover
4c - Neck Ring
4d - Screw
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
16 - Impeller Shaft Sleeve
17 - Shaft Sleeve
18 - Cover
19 - Washer
20 - Flange
21 - Snap-Ring
25 - Tie-Rod
26 - Suction & discharge Chamber SS Type
26a - Suction & Discharge Chamber DI Type
28 - Drain Plug
29 - Screw
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
46 - Adjusting Grommet
49 - Impeller
49a - Impeller
50a - Top Diffuser
51 - Shaft
55 - Outer Casing
56 - Nut
57 - Inlet Impeller Sleeve
58 - Washer

MODEL VM150 - 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)
4c	Neck Ring	FPM	
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
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)
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	VM Suction & Discharge Chamber	304 SS (EN 1.4301)	316 SS (EN 1.4401)
26a	VMF 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	
46	Adjusting Grommet	FPM	
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)
56	Nut	A2-70 UNI 7323	
57	Impeller Sleeve	Tungsten Carbide	
58	Washer	A2-70 UNI 7323	

MODEL VM150 - ENGINEERING INFORMATION

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM150	+5ºF TO +248ºF [-15ºC TO +120ºC]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	660 GPM [150 M^3/HR]
FLOW RANGE:	352 - 793 GPM [80 - 180 M^3/HR]
MAXIMUM PRESSURE:	203 PSI [14 BAR]
MAXIMUM POWER:	20 - 100 HP [15 - 75 KW]
MAXIMUM EFFICIENCY:	73%