

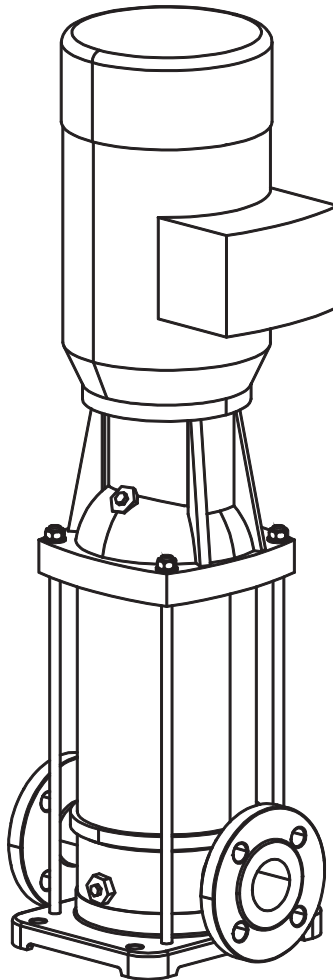


4710 SERIES

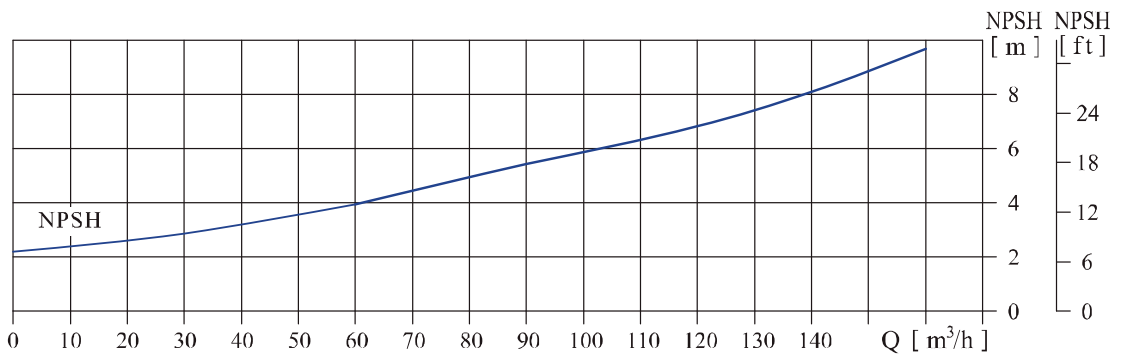
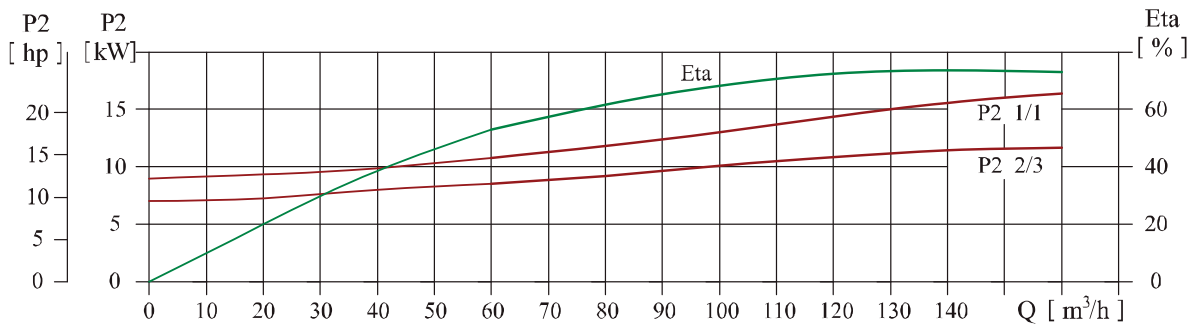
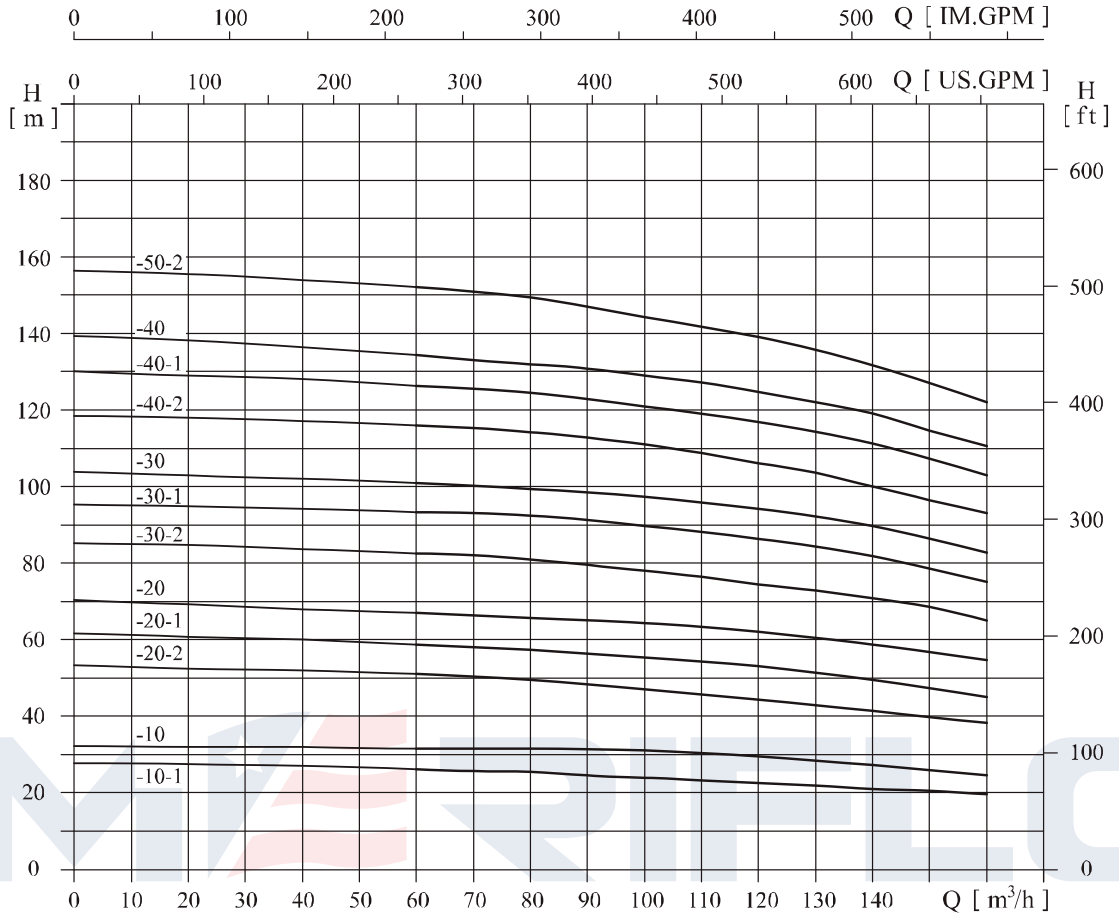
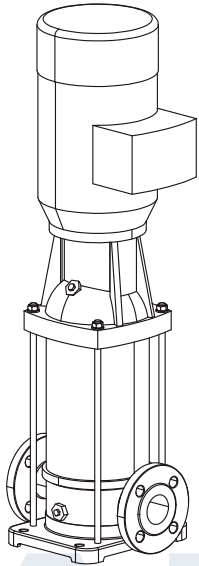
VERTICAL MULTISTAGE PUMPS

VM120

ENGINEERING INFORMATION



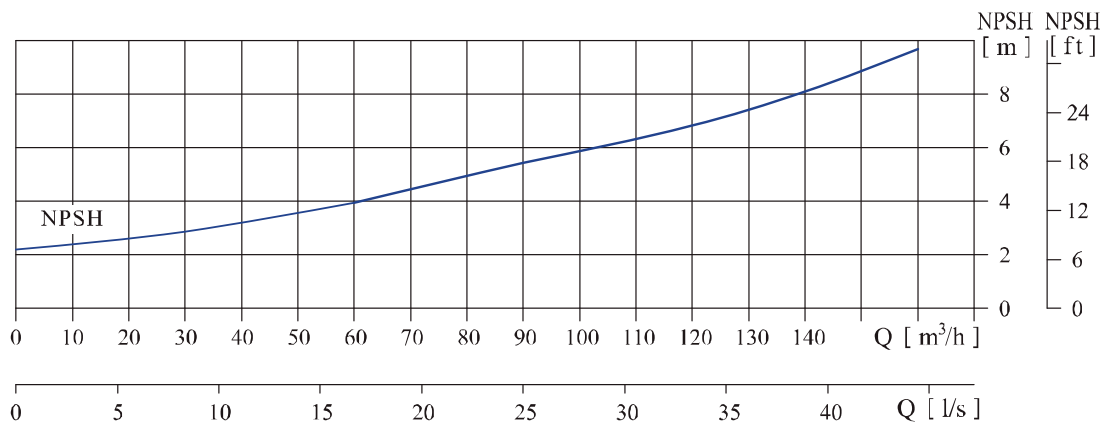
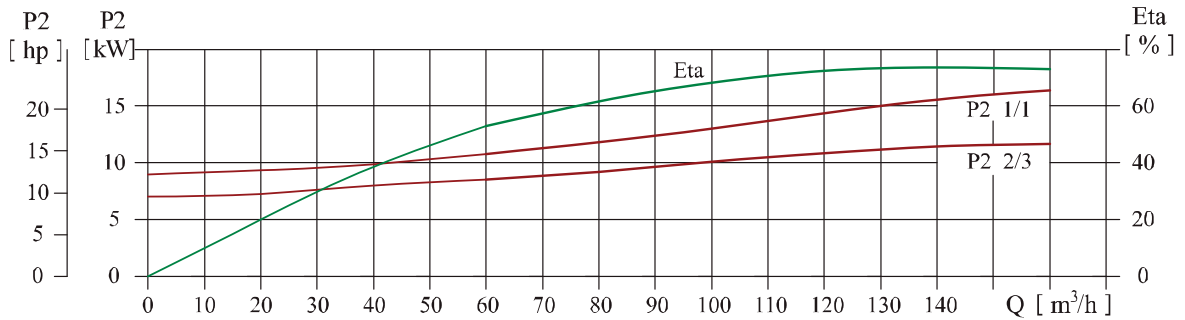
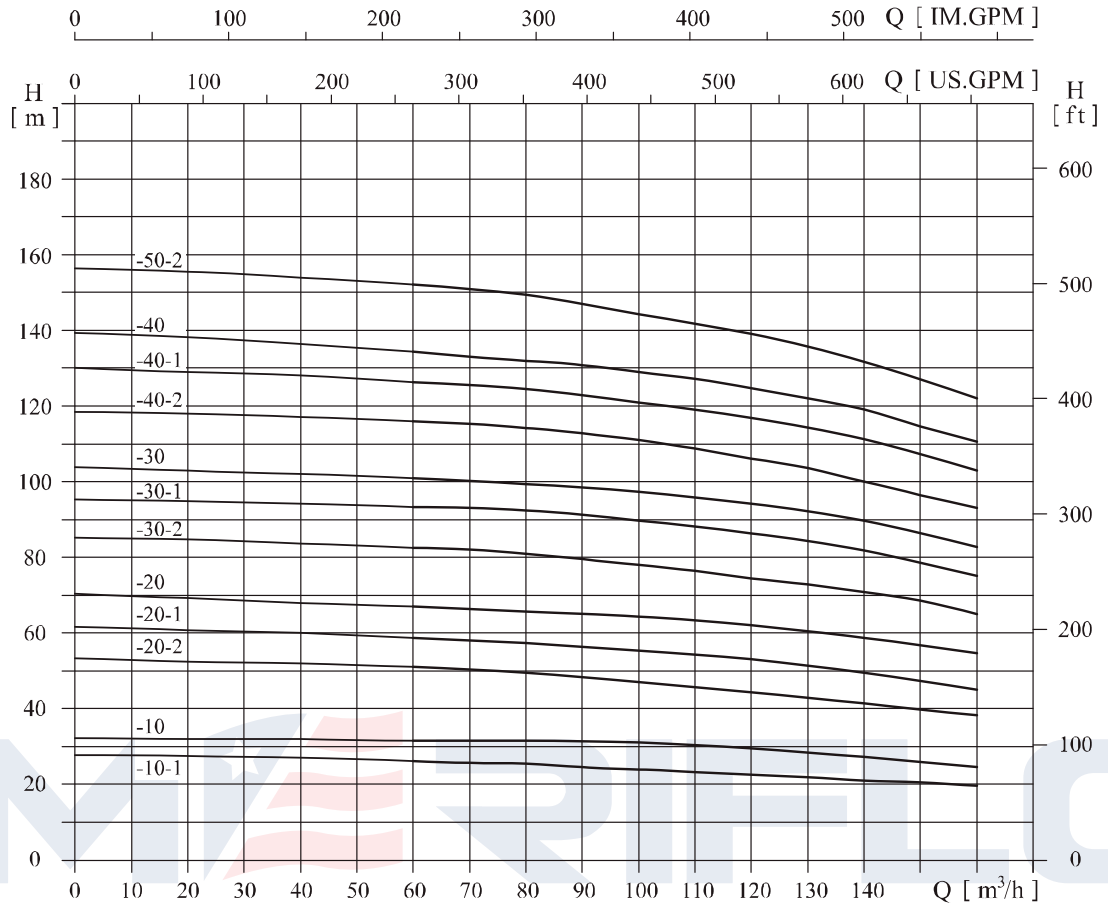
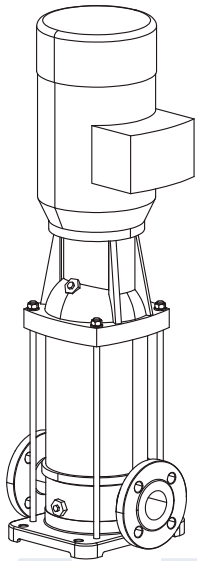
VM120 (5x5) 3500 RPM



MODEL VM120 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR	FLOW	250	300	350	400	450	500	600	700
		HP	GPM								
VM120-10	2900	15	HEAD (PSI)	31	31	31	30	30	27	23	21
VM120-20-2		20		48	48	47	44	43	41	36	34
VM120-20-1		25		58	57	57	55	53	50	43	40
VM120-20		30		65	64	64	62	58	57	51	48
VM120-30-2		40		81	80	78	77	72	70	62	58
VM120-30-1		40		91	89	88	85	82	80	70	65
VM120-30		40		99	98	97	94	89	87	78	72
VM120-40-2		50		115	112	111	108	102	98	88	82
VM120-40-1		50		124	122	121	116	111	108	97	92
VM120-40		60		132	129	128	125	118	115	104	98
VM120-50-2		60		149	146	143	141	132	128	115	108
VM120-50-1		60		158	155	153	149	142	138	124	118
VM120-50		75		165	162	160	156	149	145	129	122
VM120-60-2		75		182	179	175	172	162	156	141	132
VM120-60-1		75		190	187	186	180	172	168	149	142
VM120-60		100		197	195	192	187	179	175	156	148
VM120-70-2		100		214	210	207	203	190	185	166	155
VM120-70-1		100		223	219	216	212	200	196	175	166
VM120-70		100		232	229	226	220	210	206	183	175

VM120 (5x5) 3500 RPM



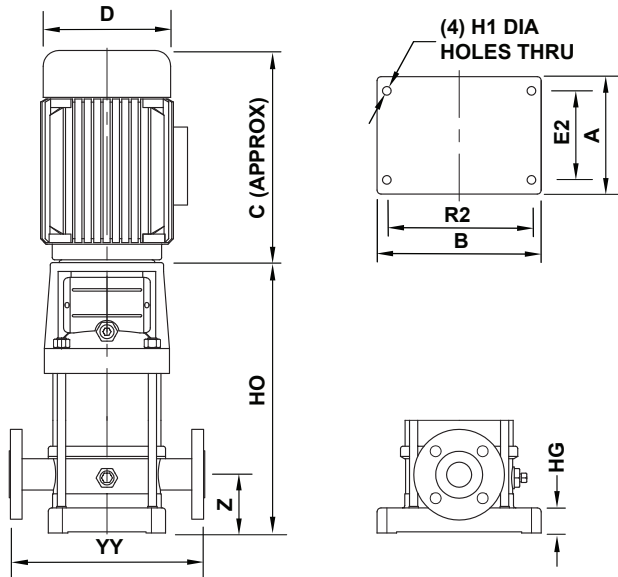
MODEL VM120 - PERFORMANCE TABLE (3500 RPM)

MODEL	SPEED	MOTOR	FLOW	250	300	350	400	450	500	600	700
		HP	GPM								
VM120-10-1	3500	20	HEAD (PSI)	38	37	36	36	34	33	30	28
VM120-10		25		44	44	44	44	43	41	37	34
VM120-20-2		40		74	72	71	68	65	64	58	55
VM120-20-1		40		82	82	81	80	78	75	71	64
VM120-20		50		94	94	94	92	91	88	85	78
VM120-30-2		60		118	116	115	114	111	107	101	92
VM120-30-1		60		129	129	128	126	125	119	114	104
VM120-30		75		142	142	141	139	138	134	128	118
VM120-40-2		100		165	165	162	161	158	151	142	132
VM120-40-1		100		179	178	178	175	172	166	158	146
VM120-40		100		190	189	187	186	185	178	169	156
VM120-50-2		100		216	214	213	209	205	197	187	173



AMERIFLO

MODEL VM120 - 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

VM120

MODEL	SPEED	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT
	RPM												LBS
VM120-10	2900 3500	13.375	18.625	19.688	13.000	10.813	0.625	1.500	33.000	14.938	15.000	7.000	507
VM120-20		13.375	18.625	22.625	13.000	10.813	0.625	1.500	39.375	14.938	15.000	7.000	540
VM120-30		13.375	18.625	25.625	15.750	10.813	0.625	1.500	45.625	14.938	15.000	7.000	794
VM120-40		13.375	18.625	26.938	18.125	10.813	0.625	1.500	52.000	14.938	15.000	7.000	882
VM120-50		13.375	18.625	29.938	21.250	10.813	0.625	1.500	59.438	14.938	15.000	7.000	1146
VM120-60		13.375	18.625	33.250	21.250	10.813	0.625	1.500	65.750	14.938	15.000	7.000	1433
VM120-70		13.375	18.625	33.250	22.813	10.813	0.625	1.500	72.000	14.938	15.000	7.000	1576

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 VM120 - 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 VM120 - ENGINEERING INFORMATION

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM120	+5°F TO +248°F [-15°C TO +120°C]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	528 GPM [120 M ³ /HR]
FLOW RANGE:	264 - 704 GPM [60 - 160 M ³ /HR]
MAXIMUM PRESSURE:	218 PSI [15 BAR]
MAXIMUM POWER:	20 - 100 HP [18.5 - 75 KW]
MAXIMUM EFFICIENCY:	74%

