

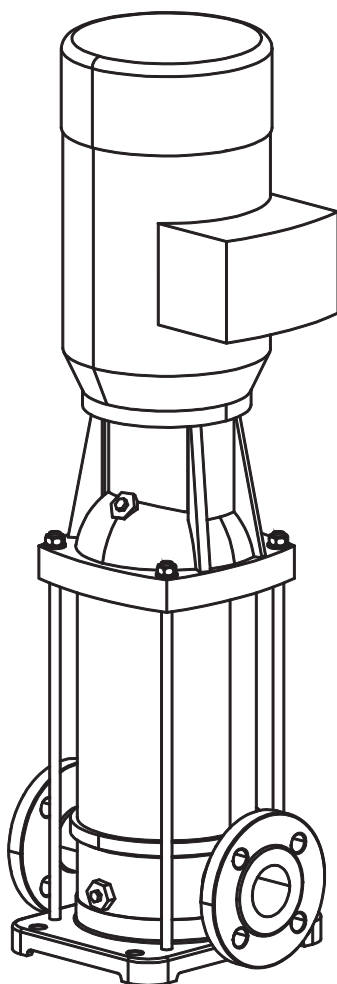


4710 SERIES

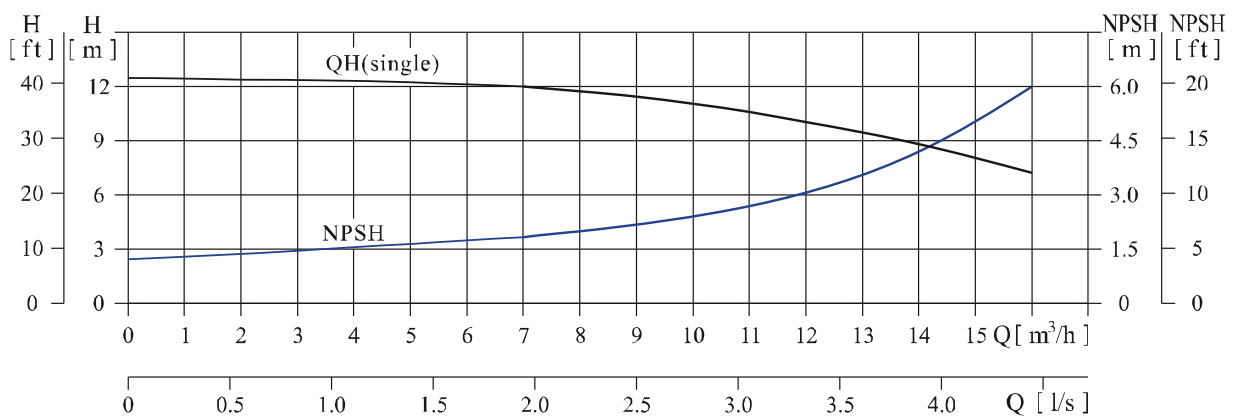
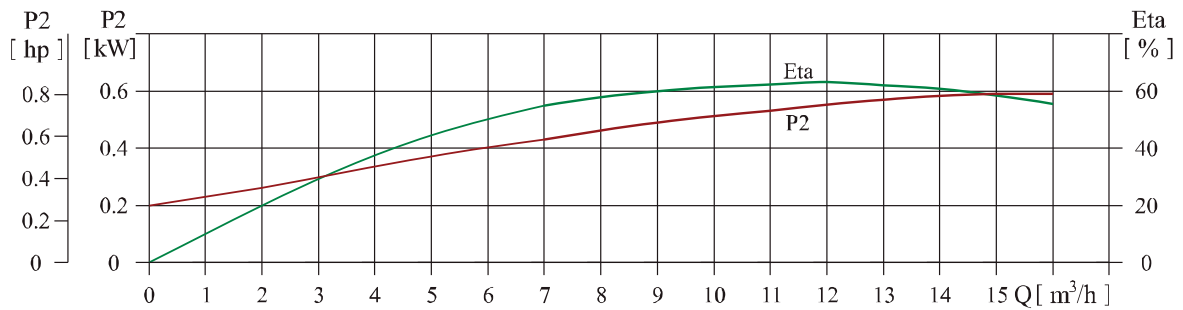
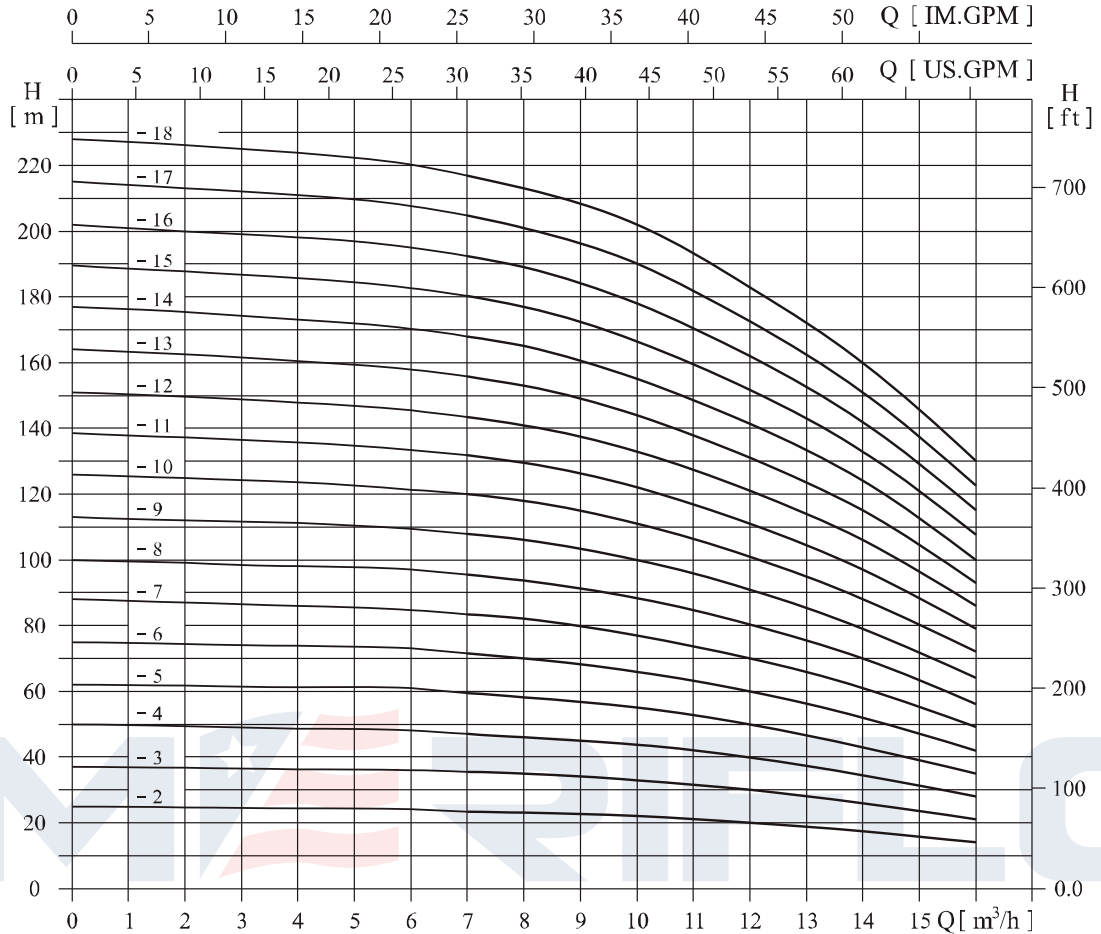
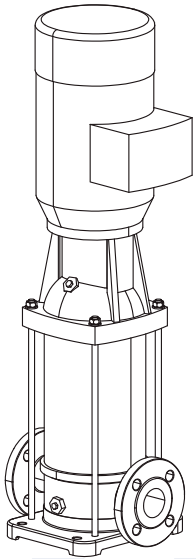
VERTICAL MULTISTAGE PUMPS

VM12

ENGINEERING INFORMATION



VM12 (2x2) 2900 RPM

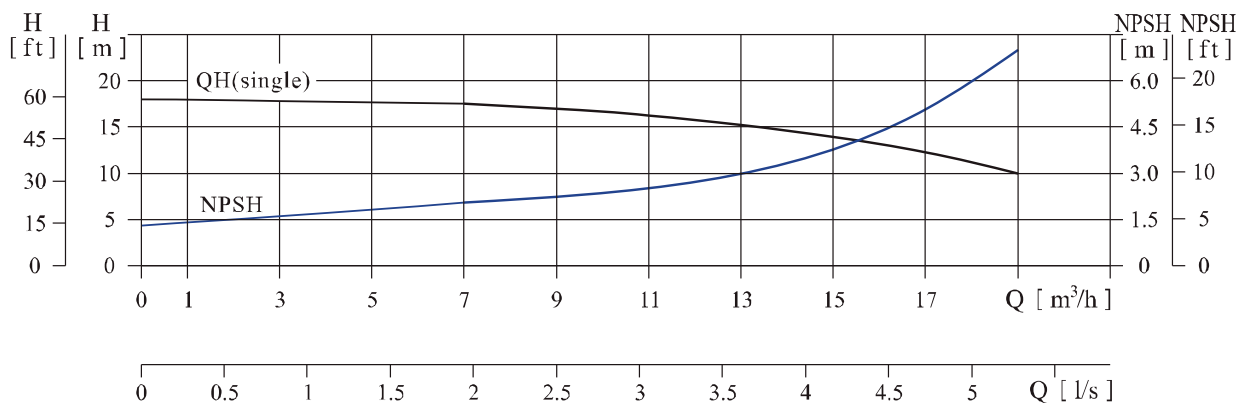
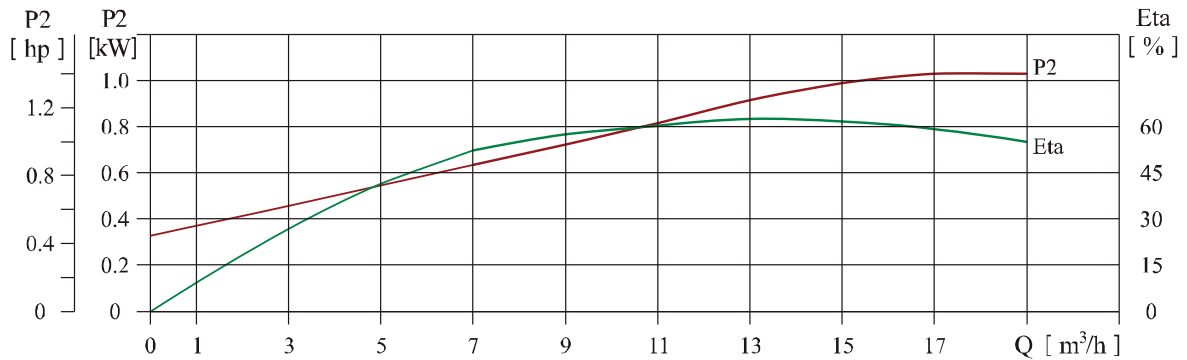
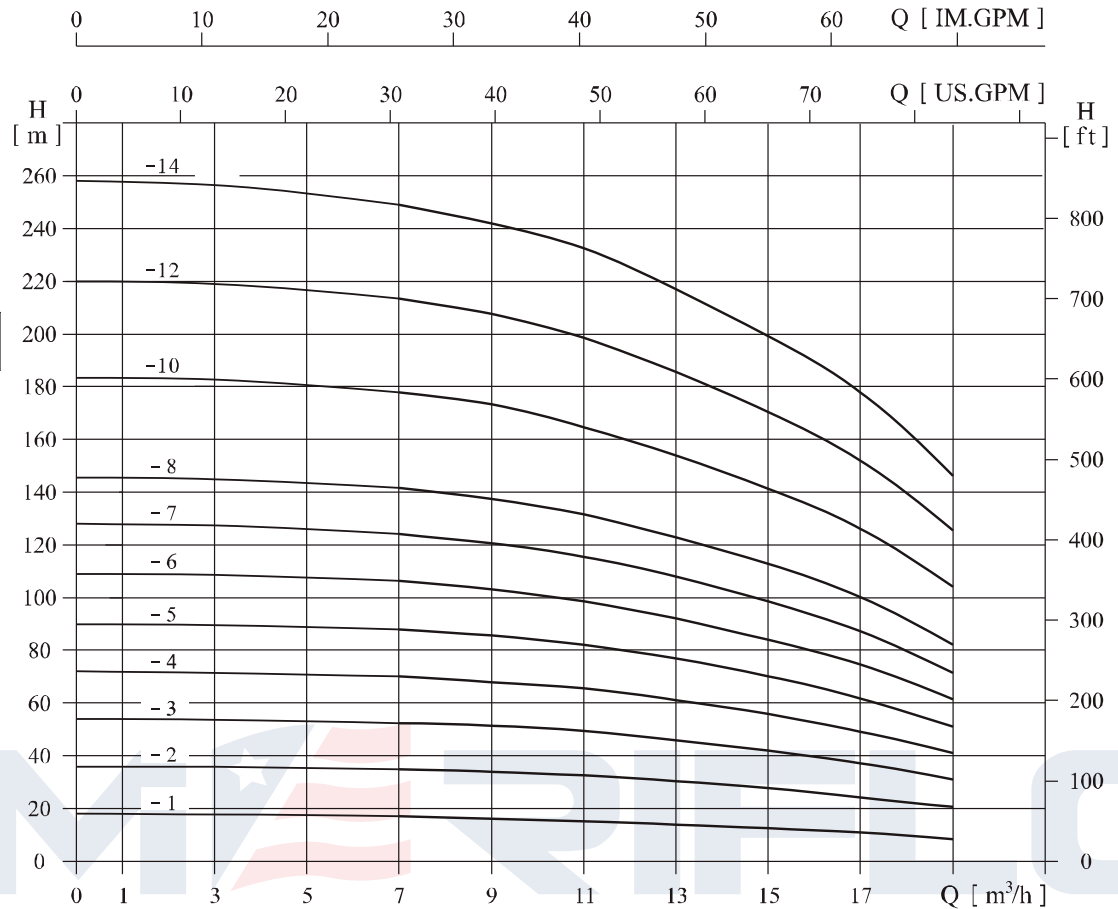
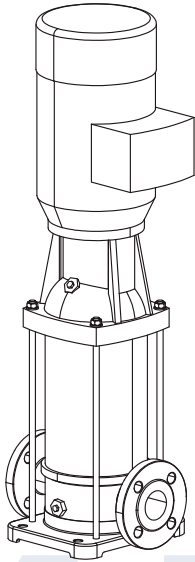


MODEL VM12 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR HP	FLOW GPM	30	40	45	50	55	60	70	
VM12-2	2900	2	HEAD (PSI)	33	32	31	30	28	24	22	
VM12-3		3		50	48	47	45	43	37	33	
VM12-4		5		67	64	62	60	57	48	44	
VM12-5		5		85	80	78	75	71	61	55	
VM12-6		5		102	97	94	89	85	74	67	
VM12-7		7.5		119	113	109	104	99	87	78	
VM12-8		7.5		136	129	125	119	114	99	89	
VM12-9		7.5		153	146	142	136	129	112	102	
VM12-10		10		170	163	158	151	143	125	102	
VM12-12		10		204	195	189	180	172	151	122	
VM12-14		15		239	227	220	210	200	176	142	
VM12-16		15		273	261	253	241	230	202	163	
VM12-18		15		308	295	287	273	260	227	185	



VM12 (2x2) 3500 RPM



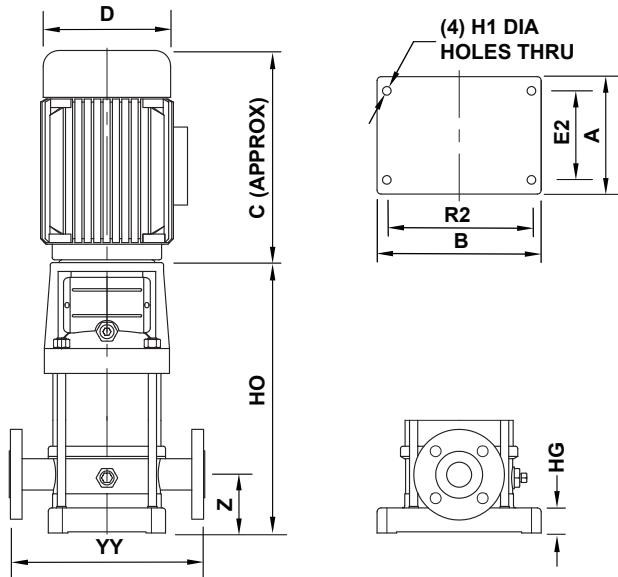
MODEL VM12 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR	FLOW	30	40	45	50	55	60	70	80
		HP	GPM								
VM12-1	3500	1.5	HEAD (PSI)	24	23	22	21	21	18	16	12
VM12-2		3		50	48	47	46	45	38	35	29
VM12-3		5		75	73	72	71	68	59	53	44
VM12-4		7.5		99	97	95	93	91	78	70	58
VM12-5		7.5		125	122	118	116	114	99	88	72
VM12-6		10		152	146	142	136	136	119	107	87
VM12-7		10		176	172	168	165	159	138	125	101
VM12-8		15		200	195	191	187	182	158	143	116
VM12-10		15		253	246	241	236	229	199	182	148
VM12-12		20		303	295	289	283	274	240	219	178
VM12-14		20		354	343	337	331	320	281	256	206



MODEL VM12 - 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	2.00	3.625	5.000	8	0.625	
DISC	2.00	3.625	5.000	8	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

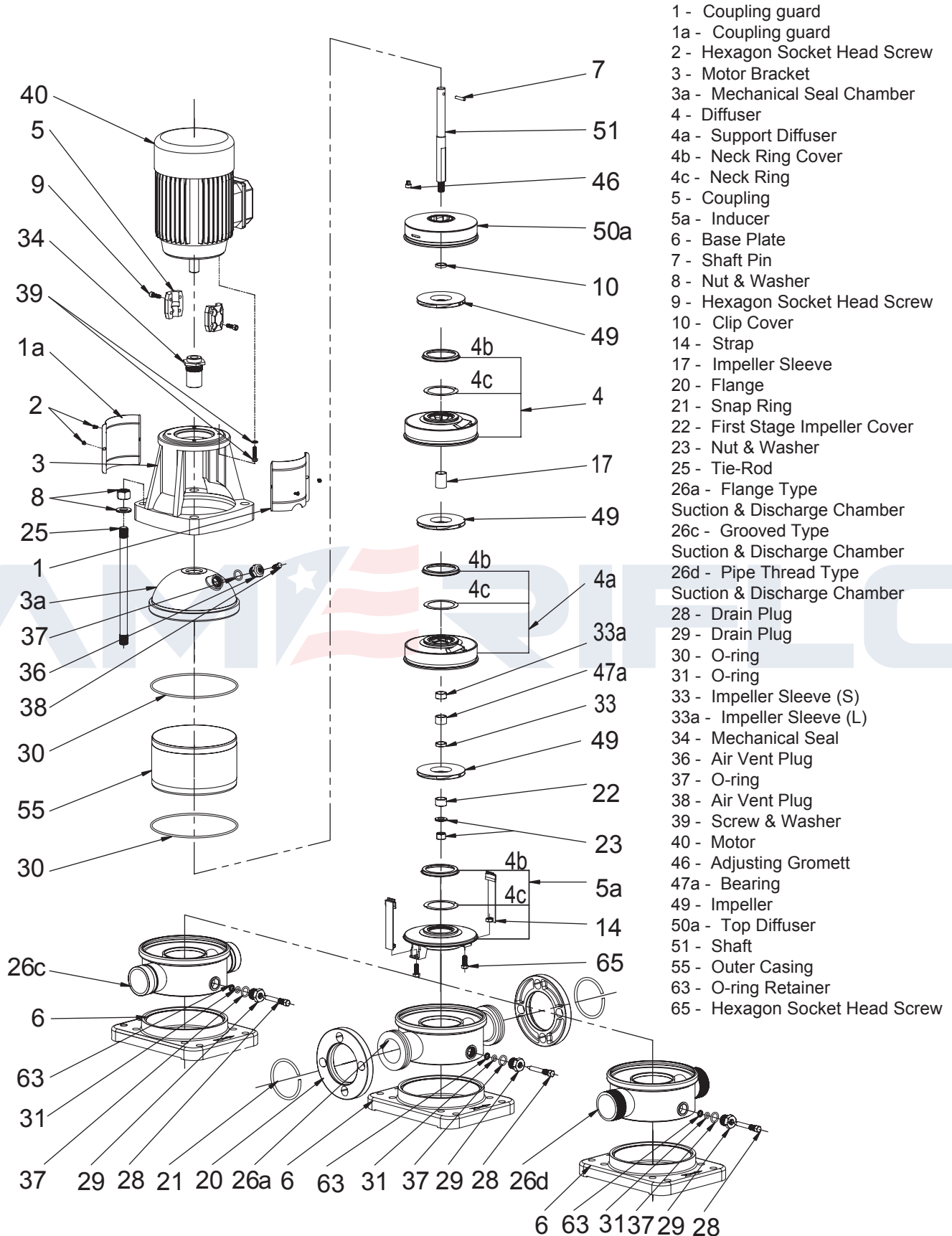
VM12

MODEL	SPEED RPM	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT LBS
VM12-1	2900 3500	7.813	9.750	11.413	7.500	5.188	0.500	1.375	14.000	8.500	11.818	3.500	71
VM12-2		7.813	9.750	11.413	7.500	5.188	0.500	1.375	14.438	8.500	11.818	3.500	86
VM12-3		7.813	9.750	13.500	7.750	5.188	0.500	1.375	15.625	8.500	11.818	3.500	95
VM12-4		7.813	9.750	13.500	7.750	5.188	0.500	1.375	17.250	8.500	11.818	3.500	112
VM12-5		7.813	9.750	14.000	9.000	5.188	0.500	1.375	18.375	8.500	11.818	3.500	117
VM12-6		7.813	9.750	15.375	10.250	5.188	0.500	1.375	19.625	8.500	11.818	3.500	134
VM12-7		7.813	9.750	15.375	10.250	5.188	0.500	1.375	21.500	8.500	11.818	3.500	161
VM12-8		7.813	9.750	15.375	10.250	5.188	0.500	1.375	22.750	8.500	11.818	3.500	163
VM12-9		7.813	9.750	15.375	10.250	5.188	0.500	1.375	23.875	8.500	11.818	3.500	168
VM12-10		7.813	9.750	15.375	10.250	5.188	0.500	1.375	25.000	8.500	11.818	3.500	183
VM12-12		7.813	9.750	15.375	10.250	5.188	0.500	1.375	27.438	8.500	11.818	3.500	183
VM12-14		7.813	9.750	19.688	13.000	5.188	0.500	1.375	33.250	8.500	11.818	3.500	192
VM12-16		7.813	9.750	19.688	13.000	5.188	0.500	1.375	35.625	8.500	11.818	3.500	355
VM12-18		7.813	9.750	19.688	13.000	5.188	0.500	1.375	38.000	8.500	11.818	3.500	362

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 VM12 - SECTIONAL VIEW

MODEL VM12 - 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)
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	Flanged 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 (Small)	Tungsten Carbide	
33a	Impeller Sleeve (Large)	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	
46	Adjusting Gromett	FPM	
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)
63	O-ring Retainer	304 SS (EN 1.4301)	316 SS (EN 1.4401)
65	Hexagon Socket Head Screw	A2-70 UNI 7323	

MODEL VM12 - ENGINEERING INFORMATION

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM12	+5°F TO +248°F [-15°C TO +120°C]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	53 GPM [12 M ³ /HR]
FLOW RANGE:	31 - 84 GPM [7 - 19 M ³ /HR]
MAXIMUM PRESSURE:	363 PSI [25 BAR]
MAXIMUM POWER:	1.5 - 2 HP [1.1 - 1.5 KW]
MAXIMUM EFFICIENCY:	63%

