

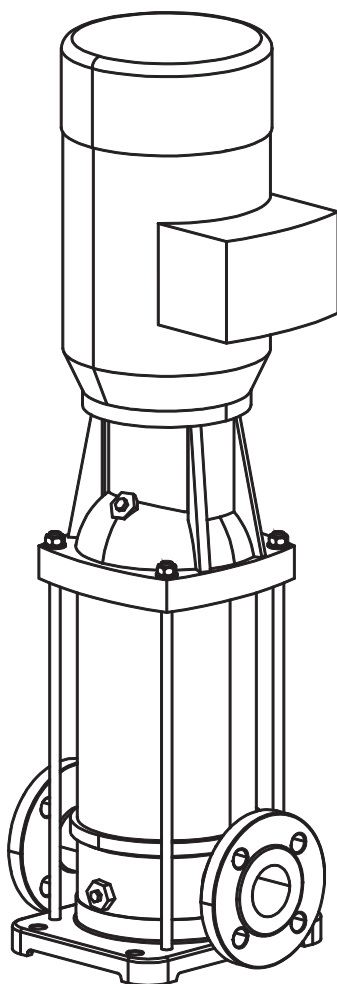


4710 SERIES

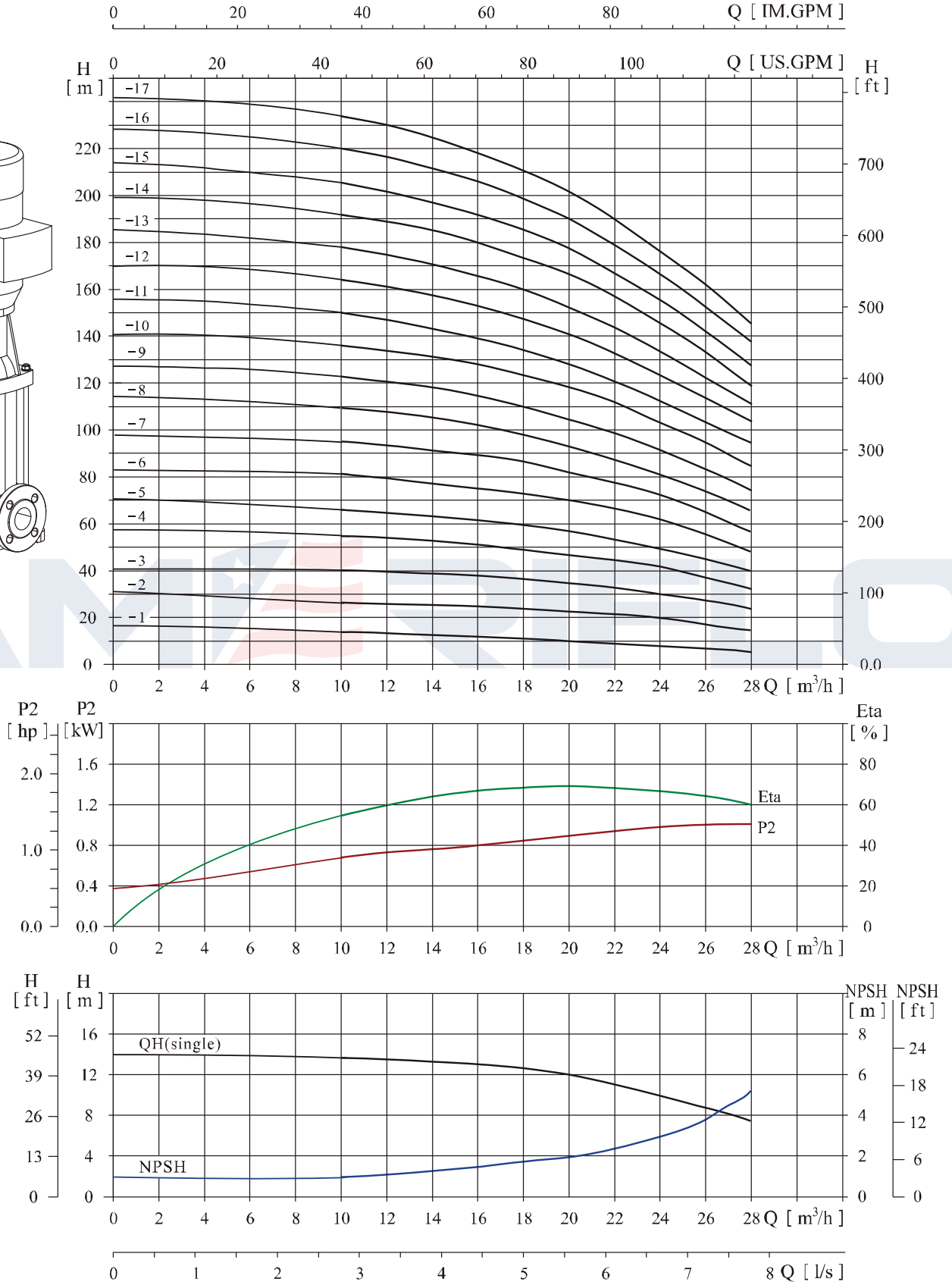
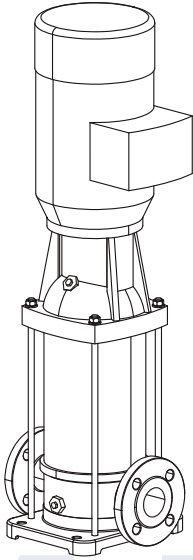
VERTICAL MULTISTAGE PUMPS

VM20

ENGINEERING INFORMATION



VM20 (2x2) 2900 RPM

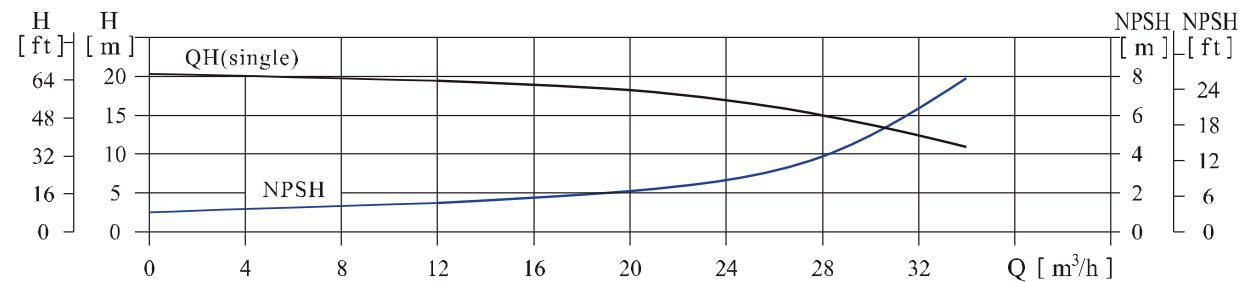
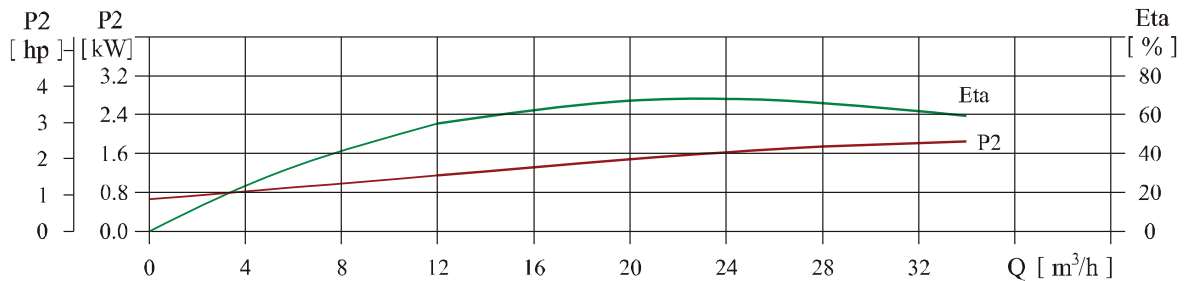
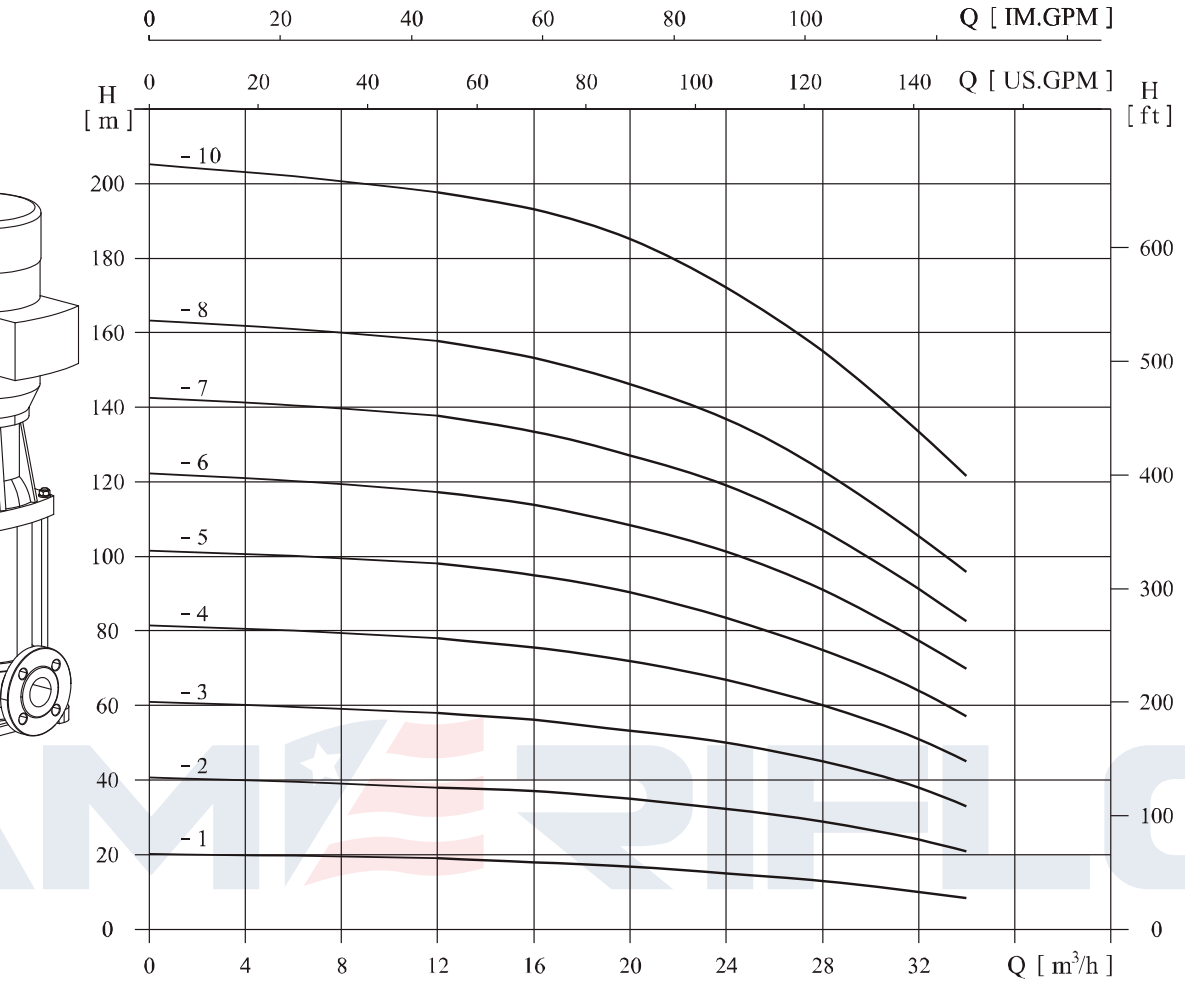
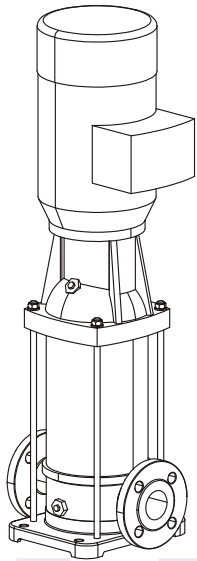


MODEL VM20 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR	FLOW	50	60	65	70	80	90	100	110
		HP	GPM								
VM20-1	2900	1.5	HEAD (PSI)	18	18	17	17	16	14	11	10
VM20-2		3		38	37	36	36	34	33	30	27
VM20-3		5		56	55	54	54	53	50	44	40
VM20-4		7.5		76	74	73	72	70	67	60	55
VM20-5		7.5		94	91	89	88	85	82	75	68
VM20-6		10		113	109	108	107	104	99	91	82
VM20-7		10		133	129	127	126	122	116	105	97
VM20-8		15		153	149	147	145	141	134	121	111
VM20-10		15		192	186	184	181	176	168	151	139
VM20-12		20		232	224	221	219	212	202	180	169
VM20-14		20		271	263	259	256	247	236	213	197
VM20-17		25		330	320	316	311	301	287	263	241



VM20 (2x2) 3500 RPM

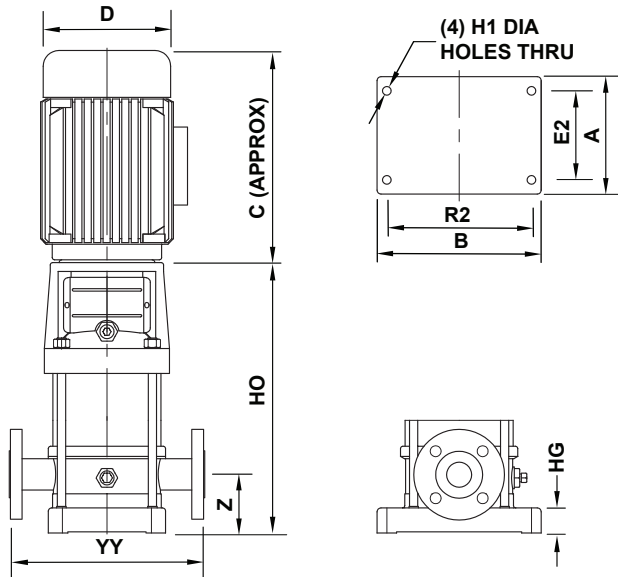


MODEL VM20 - PERFORMANCE TABLE (3500 RPM)

MODEL	SPEED	MOTOR HP	FLOW GPM	50	70	90	100	125	140	150	
VM20-1	3500	3	HEAD (PSI)	27	26	24	21	18	14	12	
VM20-2		5		54	53	50	45	41	34	30	
VM20-3		7.5		82	80	75	71	64	54	47	
VM20-4		10		111	107	102	95	85	72	64	
VM20-5		15		139	134	128	121	107	91	81	
VM20-6		15		168	160	153	145	129	109	99	
VM20-7		20		196	189	180	169	152	129	118	
VM20-8		20		224	217	207	195	175	149	136	
VM20-10		25		281	274	263	244	220	189	173	



MODEL VM20 - 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

VM20

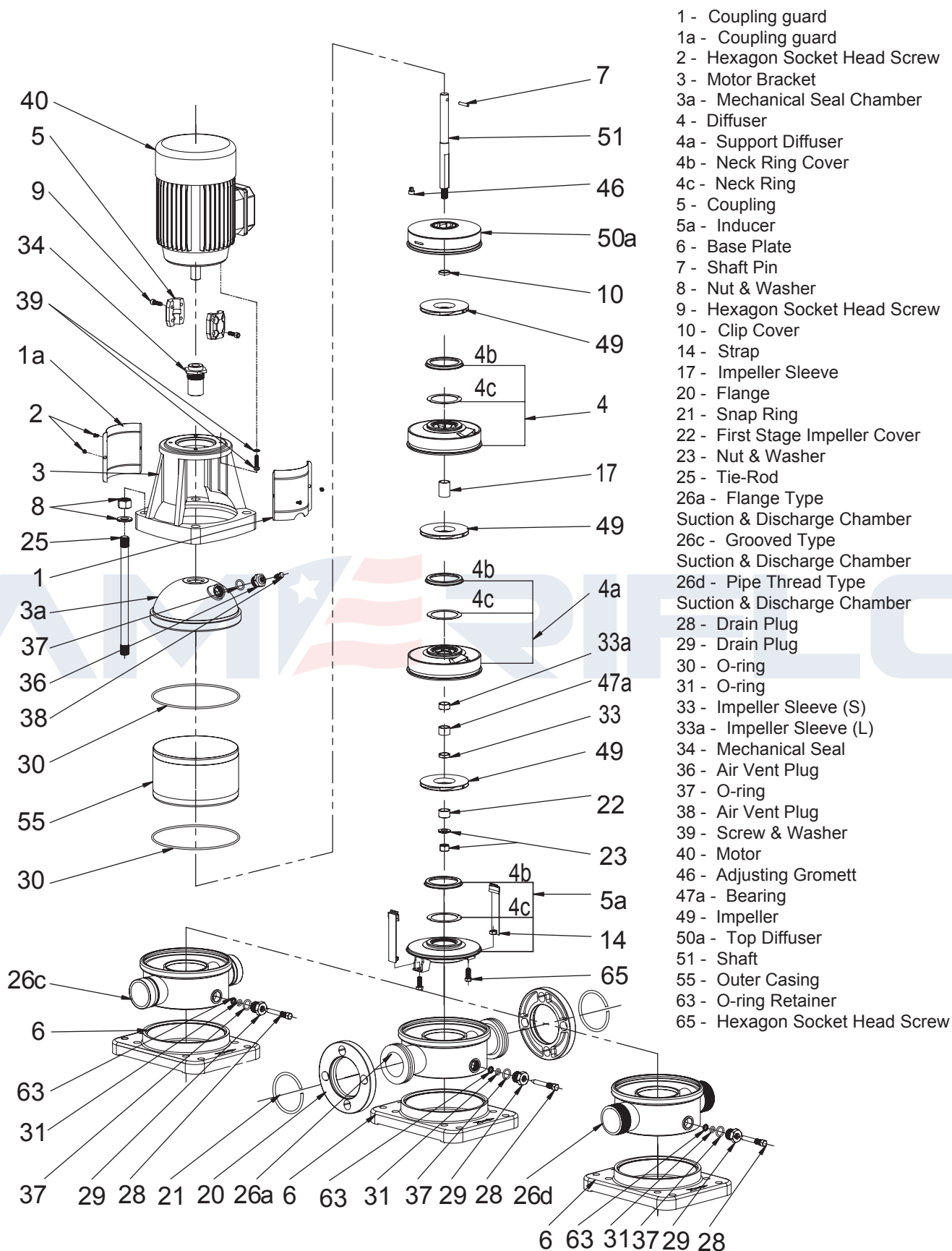
MODEL	SPEED RPM	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT LBS
VM20-1	2900 3500	7.875	9.750	9.625	6.750	5.188	0.500	1.375	15.250	8.500	11.813	3.500	73
VM20-2		7.875	9.750	11.413	7.500	5.188	0.500	1.375	15.625	8.500	11.813	3.500	93
VM20-3		7.875	9.750	14.000	9.000	5.188	0.500	1.375	17.750	8.500	11.813	3.500	128
VM20-4		7.875	9.750	15.375	10.250	5.188	0.500	1.375	20.375	8.500	11.813	3.500	163
VM20-5		7.875	9.750	15.375	10.250	5.188	0.500	1.375	22.125	8.500	11.813	3.500	168
VM20-6		7.875	9.750	15.375	10.250	5.188	0.500	1.375	23.875	8.500	11.813	3.500	181
VM20-7		7.875	9.750	15.375	10.250	5.188	0.500	1.375	25.625	8.500	11.813	3.500	185
VM20-8		7.875	9.750	19.688	13.000	5.188	0.500	1.375	30.938	8.500	11.813	3.500	337
VM20-10		7.875	9.750	19.688	13.000	5.188	0.500	1.375	34.438	8.500	11.813	3.500	346
VM20-12		7.875	9.750	19.688	13.000	5.188	0.500	1.375	38.000	8.500	11.813	3.500	375
VM20-14		7.875	9.750	19.688	13.000	5.188	0.500	1.375	41.500	8.500	11.813	3.500	379
VM20-17		7.875	9.750	21.625	13.000	5.188	0.500	1.375	46.875	8.500	11.813	3.500	430

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 VM20 - SECTIONAL VIEW



MODEL VM20 - 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 VM20 - ENGINEERING INFORMATION

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM20	+5°F TO +248°F [-15°C TO +120°C]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	88 GPM [20 M ³ /HR]
FLOW RANGE:	53 - 150 GPM [12 - 34 M ³ /HR]
MAXIMUM PRESSURE:	290 PSI [20 BAR]
MAXIMUM POWER:	3 - 20 HP [2.8 - 18.5 KW]
MAXIMUM EFFICIENCY:	69%

