

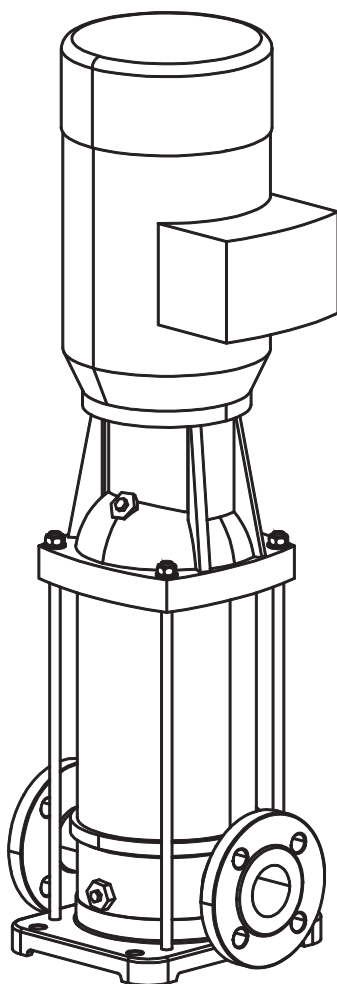


4710 SERIES

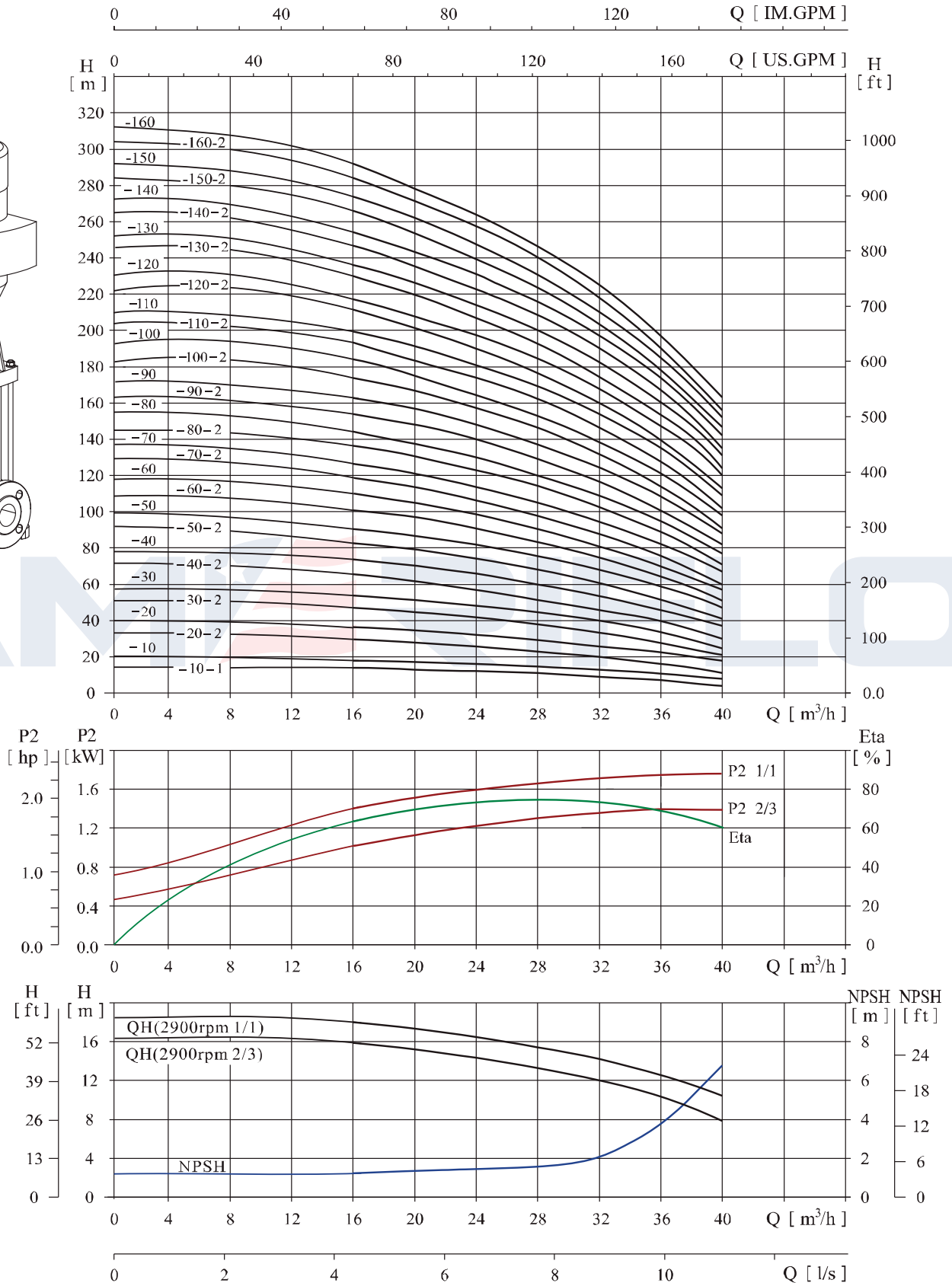
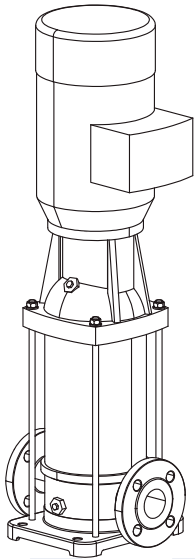
VERTICAL MULTISTAGE PUMPS

VM32 / VMF32

ENGINEERING INFORMATION



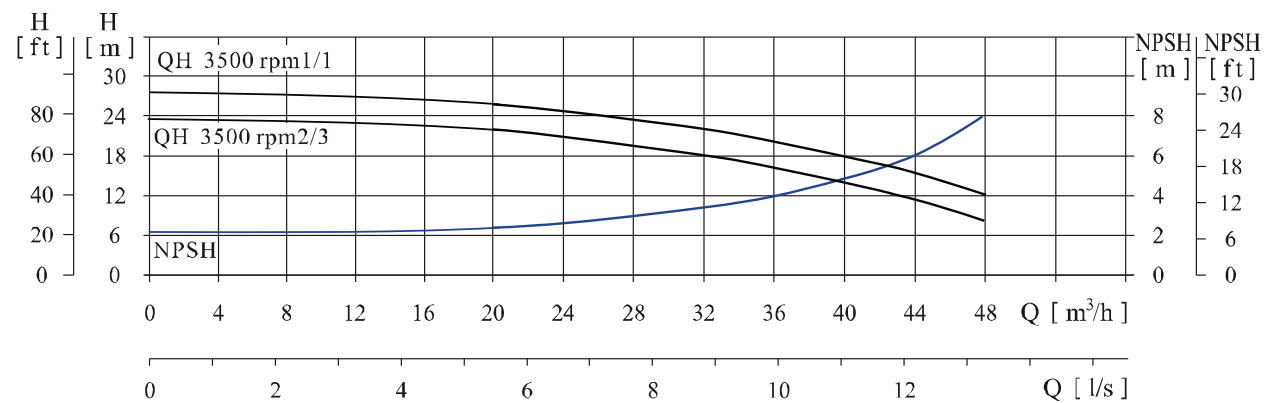
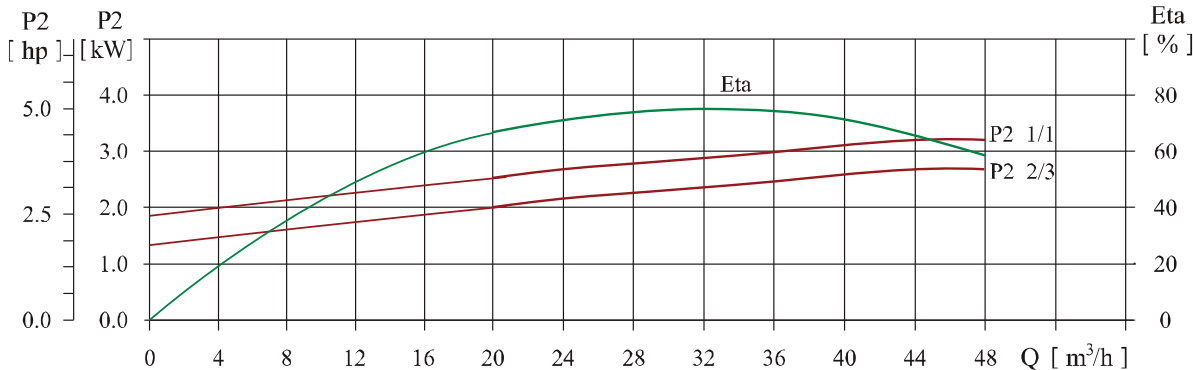
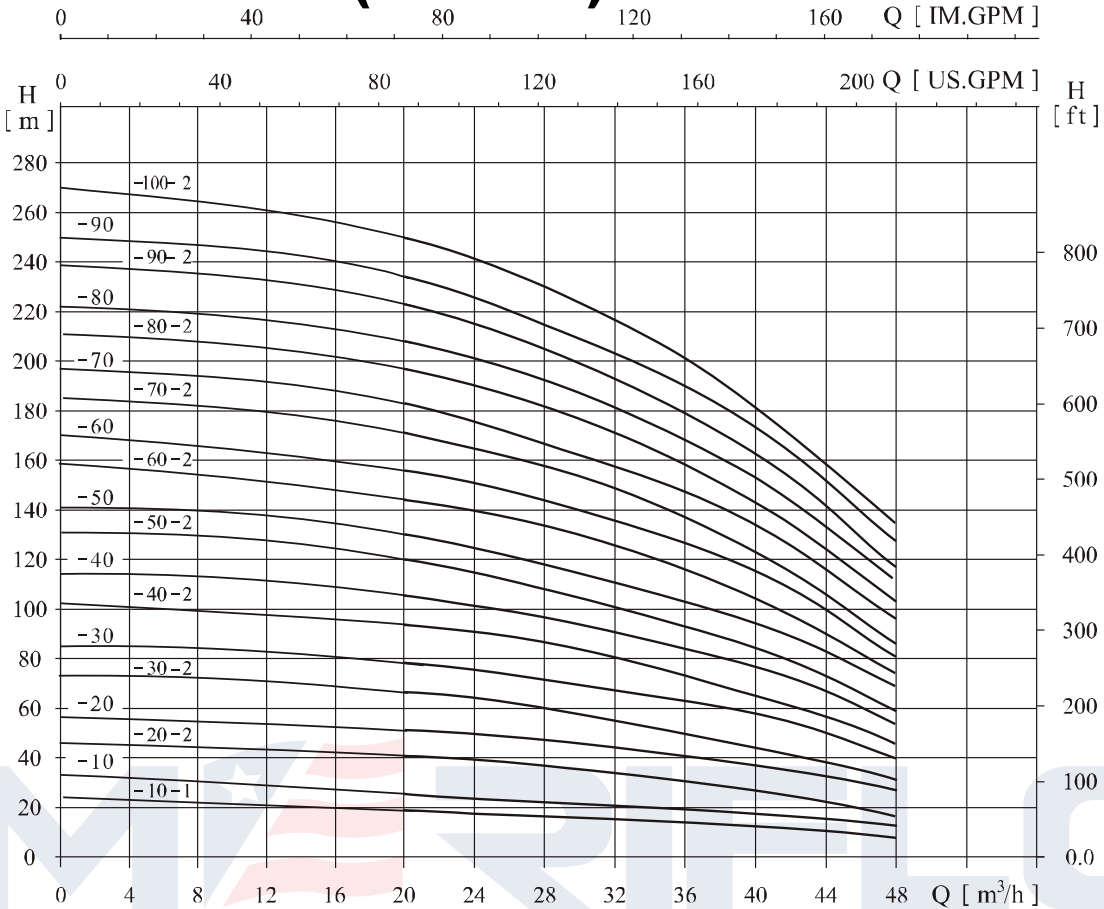
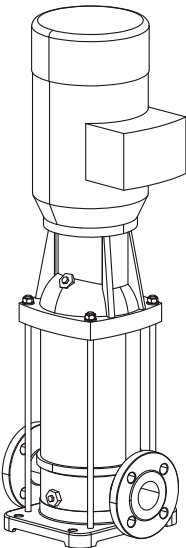
VM32 (2.5x2.5) 2900 RPM



MODEL VM32 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR HP	FLOW GPM	70	90	125	140	160	175		
VM32-10-1	2900	2	HEAD (PSI)	20	18	16	13	10	6		
VM32-10		3		26	24	20	18	16	11		
VM32-20-2		5		41	40	33	28	23	16		
VM32-20		5		51	48	41	38	33	26		
VM32-30-2		7.5		67	62	54	47	40	30		
VM32-30		7.5		77	72	62	57	50	38		
VM32-40-2		10		92	88	75	65	57	43		
VM32-40		10		102	98	84	75	67	53		
VM32-50-2		15		118	112	97	85	74	58		
VM32-50		15		128	122	105	95	84	67		
VM32-60-2		15		143	138	118	105	92	72		
VM32-60		15		153	148	128	115	102	81		
VM32-70-2		20		169	162	139	125	111	85		
VM32-70		20		179	172	149	135	121	95		
VM32-80-2		20		193	186	162	145	128	101		
VM32-80		20		205	196	170	155	138	109		
VM32-90-2		25		219	210	183	166	145	116		
VM32-90		25		230	222	193	176	155	125		
VM32-100-2		25		249	236	207	186	163	129		
VM32-100		25		258	246	216	196	173	139		
VM32-110-2		30		274	261	232	207	182	145		
VM32-110		30		284	271	238	217	192	155		
VM32-120-2		30		300	285	252	227	199	160		
VM32-120		30		310	295	261	237	209	170		
VM32-130-2		40		327	310	274	247	217	176		
VM32-130		40		337	320	284	257	227	186		
VM32-140-2		40		351	334	298	268	234	192		
VM32-140		40		362	344	307	278	244	201		
VM32-150-2		40		378	359	318	288	253	206		
VM32-150		40		389	369	328	298	263	216		
VM32-160-2		40		403	383	341	310	270	222		
VM32-160		40		414	393	349	320	280	232		

VM32 (2.5x2.5) 3500 RPM

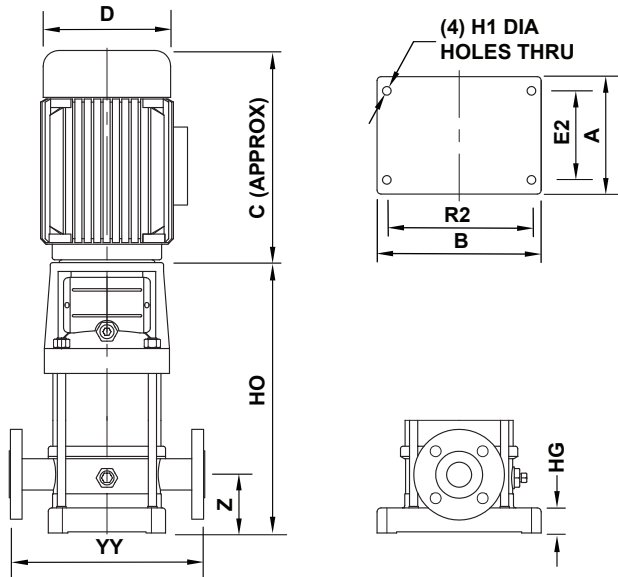


MODEL VM32 - PERFORMANCE TABLE (3500 RPM)

MODEL	SPEED	MOTOR	FLOW	90	125	140	160	175	200	210	
		HP	GPM								
VM32-10-1	3500	5	HEAD (PSI)	28	26	24	21	18	14	10	
VM32-10		5		37	34	33	30	27	24	20	
VM32-20-2		7.5		58	54	50	44	38	31	24	
VM32-20		10		74	68	64	58	53	47	38	
VM32-30-2		10		95	87	81	74	65	55	44	
VM32-30		15		111	101	95	88	80	71	57	
VM32-40-2		15		134	124	115	104	92	80	64	
VM32-40		20		147	136	129	118	107	94	78	
VM32-50-2		20		169	155	145	134	119	104	84	
VM32-50		25		185	169	159	148	134	118	98	
VM32-60-2		25		206	190	178	165	147	128	105	
VM32-60		25		220	205	193	179	162	142	115	
VM32-70-2		30		244	224	212	195	175	151	122	
VM32-70		30		258	239	226	210	189	168	138	
VM32-80-2		30		278	258	244	226	203	176	145	
VM32-80		40		295	273	257	237	216	187	158	
VM32-90-2		40		317	293	276	254	232	202	166	
VM32-90		40		332	307	290	268	244	216	180	
VM32-100-2		40		352	328	308	285	257	226	189	

MODEL VM32 - 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	2.50	4.125	5.875	8	0.750	
DISC	2.50	4.125	5.875	8	0.750	
FORCES (LBS) & MOMENTS (LB-Feet)						
	Fx	Fy	Fz	Mx	My	Mz
SUCT	240	300	200	700	350	530
DISC	240	300	200	700	350	530

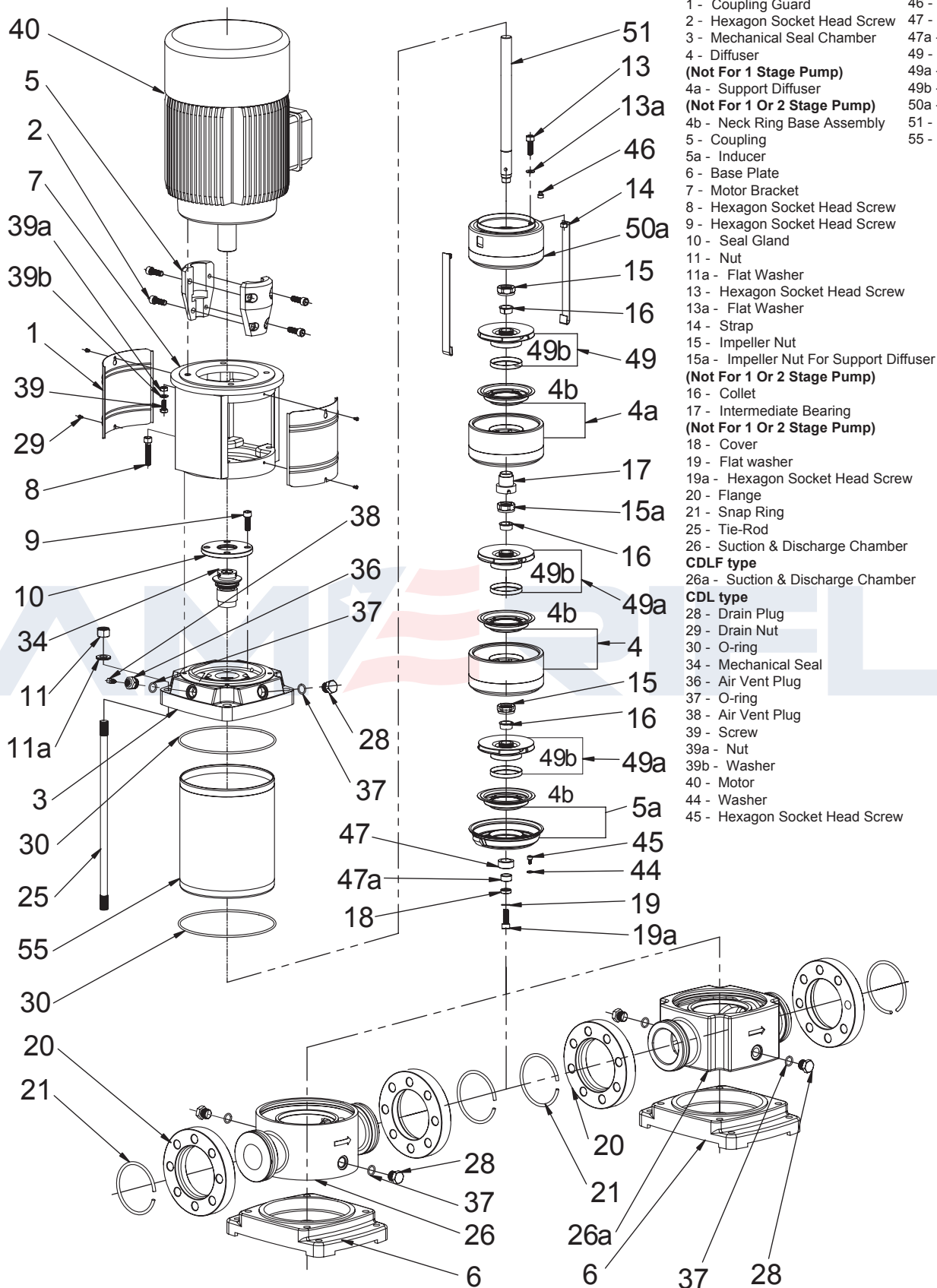
VM32

MODEL	SPEED RPM	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT LBS
VM32-10	2900 3500	8.875	11.750	11.438	7.500	6.625	0.500	1.188	19.875	9.438	12.625	4.125	150
VM32-20		8.875	11.750	14.000	9.000	6.625	0.500	1.188	22.625	9.438	12.625	4.125	187
VM32-30		8.875	11.750	15.375	10.250	6.625	0.500	1.188	25.375	9.438	12.625	4.125	220
VM32-40		8.875	11.750	15.375	10.250	6.625	0.500	1.188	28.188	9.438	12.625	4.125	240
VM32-50		8.875	11.750	19.625	13.000	6.625	0.500	1.188	35.000	9.438	12.625	4.125	399
VM32-60		8.875	11.750	19.625	13.000	6.625	0.500	1.188	37.750	9.438	12.625	4.125	407
VM32-70		8.875	11.750	19.625	13.000	6.625	0.500	1.188	40.500	9.438	12.625	4.125	421
VM32-80		8.875	11.750	19.625	13.000	6.625	0.500	1.188	43.313	9.438	12.625	4.125	447
VM32-90		8.875	11.750	21.625	13.000	6.625	0.500	1.188	45.625	9.438	12.625	4.125	489
VM32-100		8.875	11.750	21.625	13.000	6.625	0.500	1.188	48.875	9.438	12.625	4.125	500
VM32-110		8.875	11.750	22.625	14.188	6.625	0.500	1.188	51.625	9.438	12.625	4.125	600
VM32-120		8.875	11.750	22.625	14.188	6.625	0.500	1.188	54.375	9.438	12.625	4.125	608
VM32-130		8.875	11.750	25.625	15.750	6.625	0.500	1.188	57.000	9.438	12.625	4.125	743
VM32-140		8.875	11.750	25.625	15.750	6.625	0.500	1.188	59.875	9.438	12.625	4.125	752
VM32-150		8.875	11.750	25.625	15.750	6.625	0.500	1.188	62.625	9.438	12.625	4.125	761
VM32-160		8.875	11.750	25.625	15.750	6.625	0.500	1.188	65.375	9.438	12.625	4.125	772

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 VM32 - SECTIONAL VIEW

MODEL VM32 - 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)
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
15a	Impeller Nut For Support Diffuser	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)
19a	Hexagon Socket Head Screw	A2-70 UNI 7323	
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 & 26a	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	
44	Washer	Galvanized Steel	
45	Hexagon Socket Head Screw	A2-70 UNI 7323	
46	Adjusting Grommet	FPM	
47	Bottom Bearing	Tungsten Carbide	
47a	Bottom Sleeve	Tungsten Carbide	
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)

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM32	+5°F TO +248°F [-15°C TO +120°C]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	141 GPM [32 M³/HR]
FLOW RANGE:	88 - 211 GPM [20 - 48 M³/HR]
MAXIMUM PRESSURE:	363 PSI [25 BAR]
MAXIMUM POWER:	4 - 40 HP [3 - 30 KW]
MAXIMUM EFFICIENCY:	73%

