

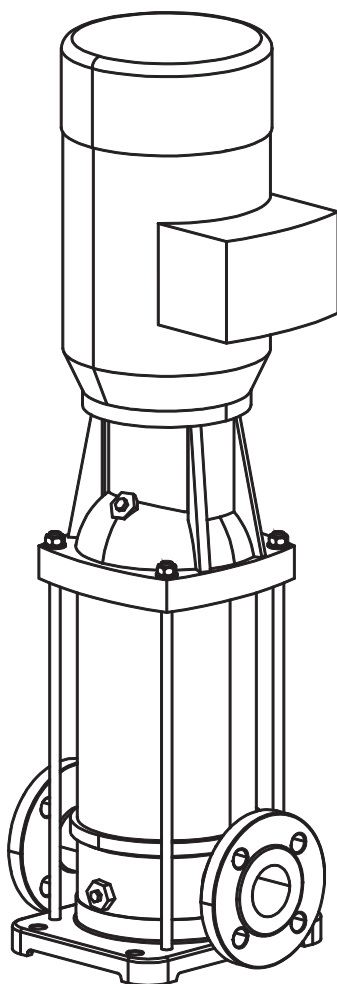


4710 SERIES

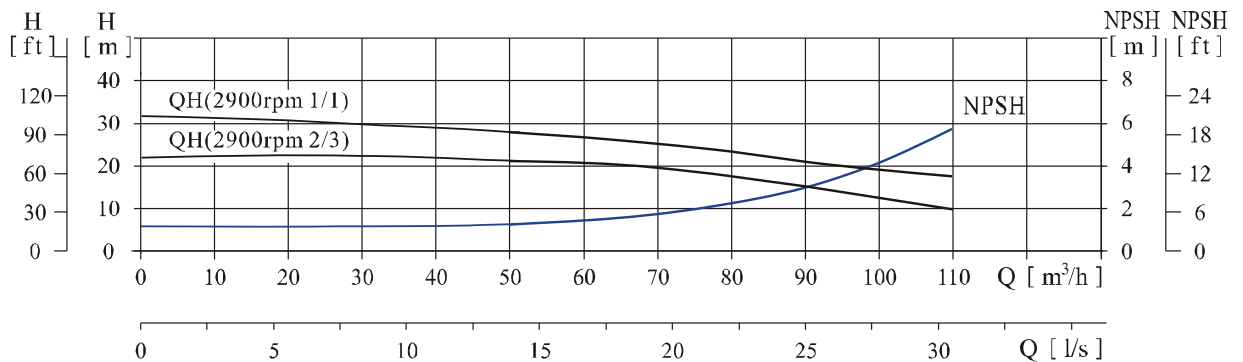
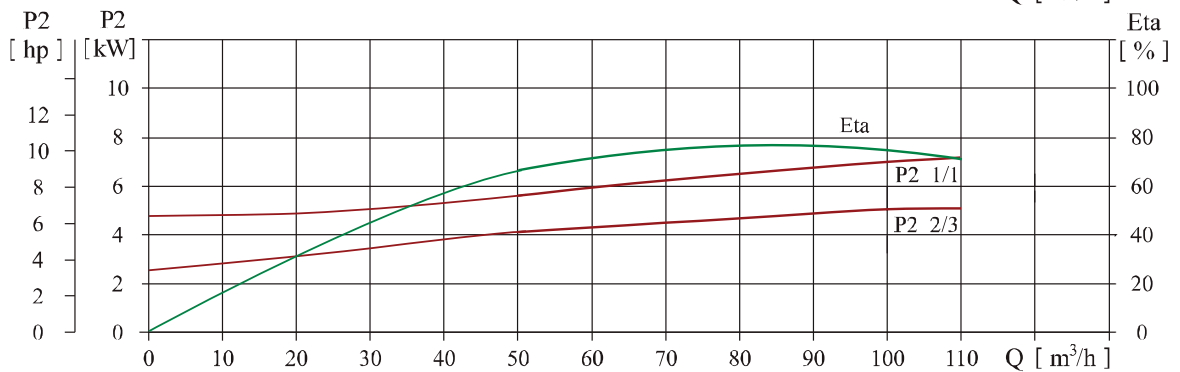
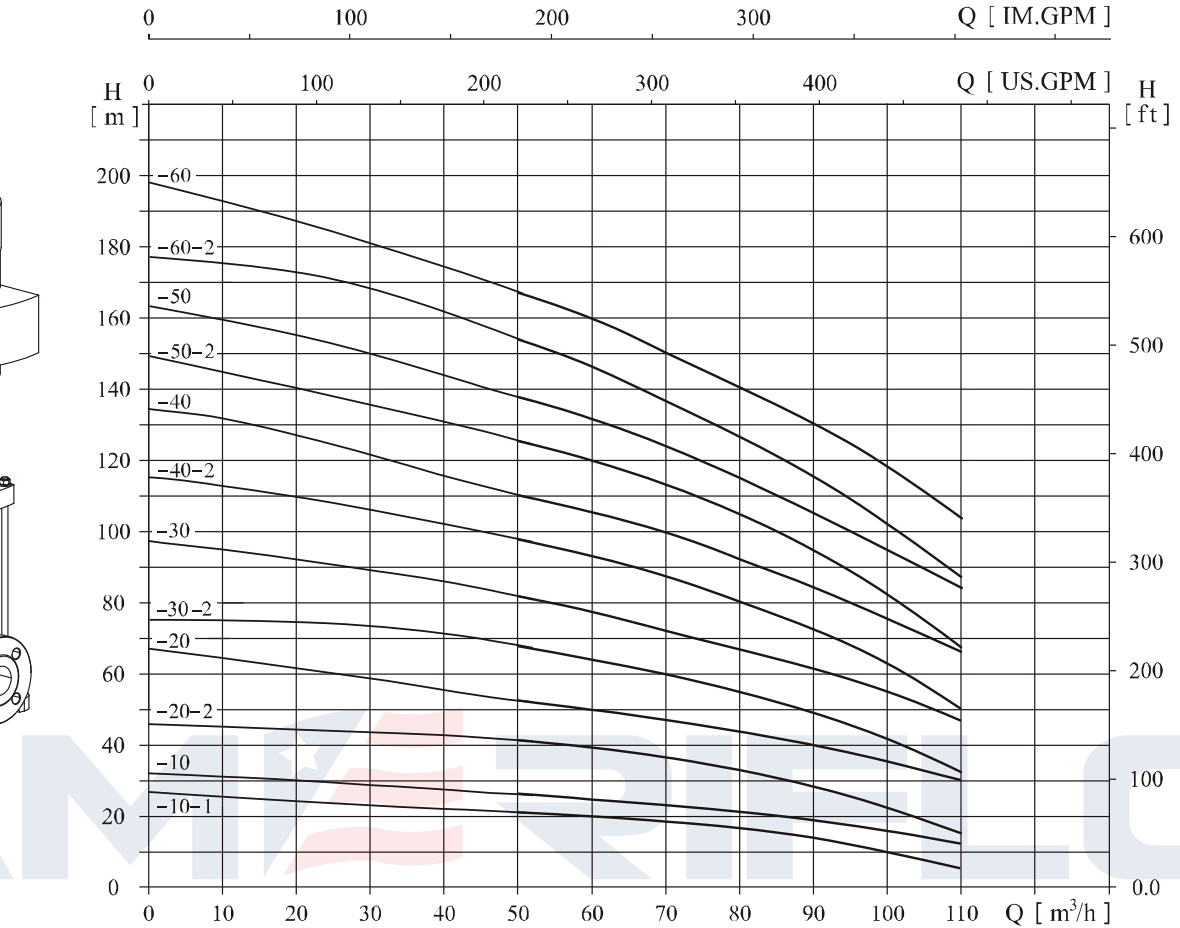
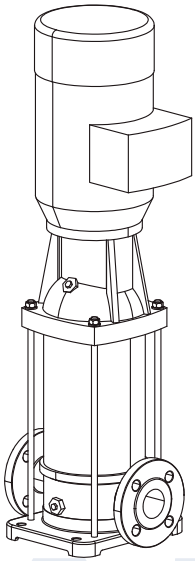
VERTICAL MULTISTAGE PUMPS

VM85

ENGINEERING INFORMATION



VM85 (4x4) 2900 RPM

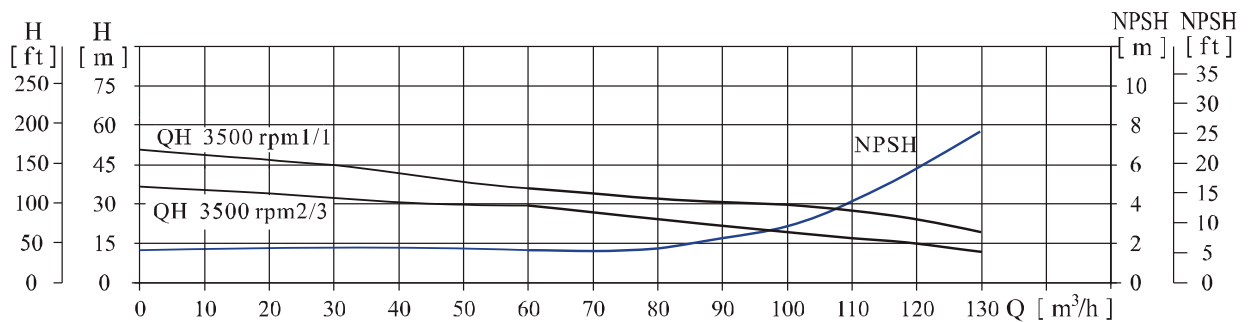
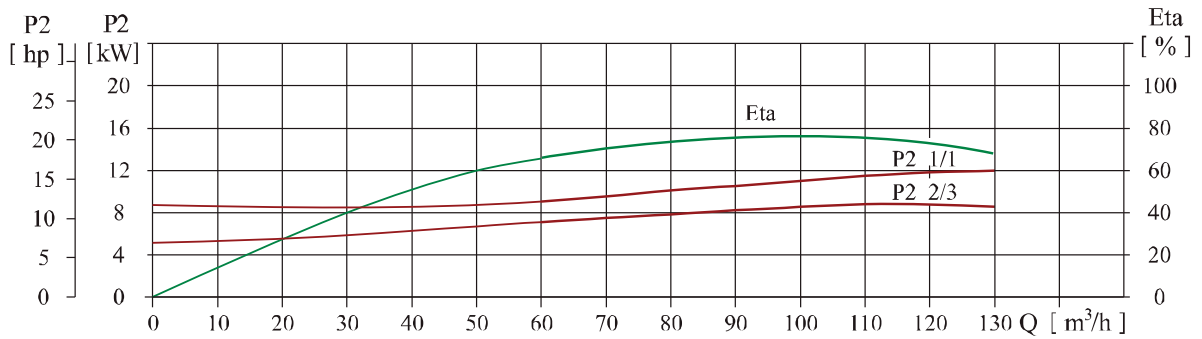
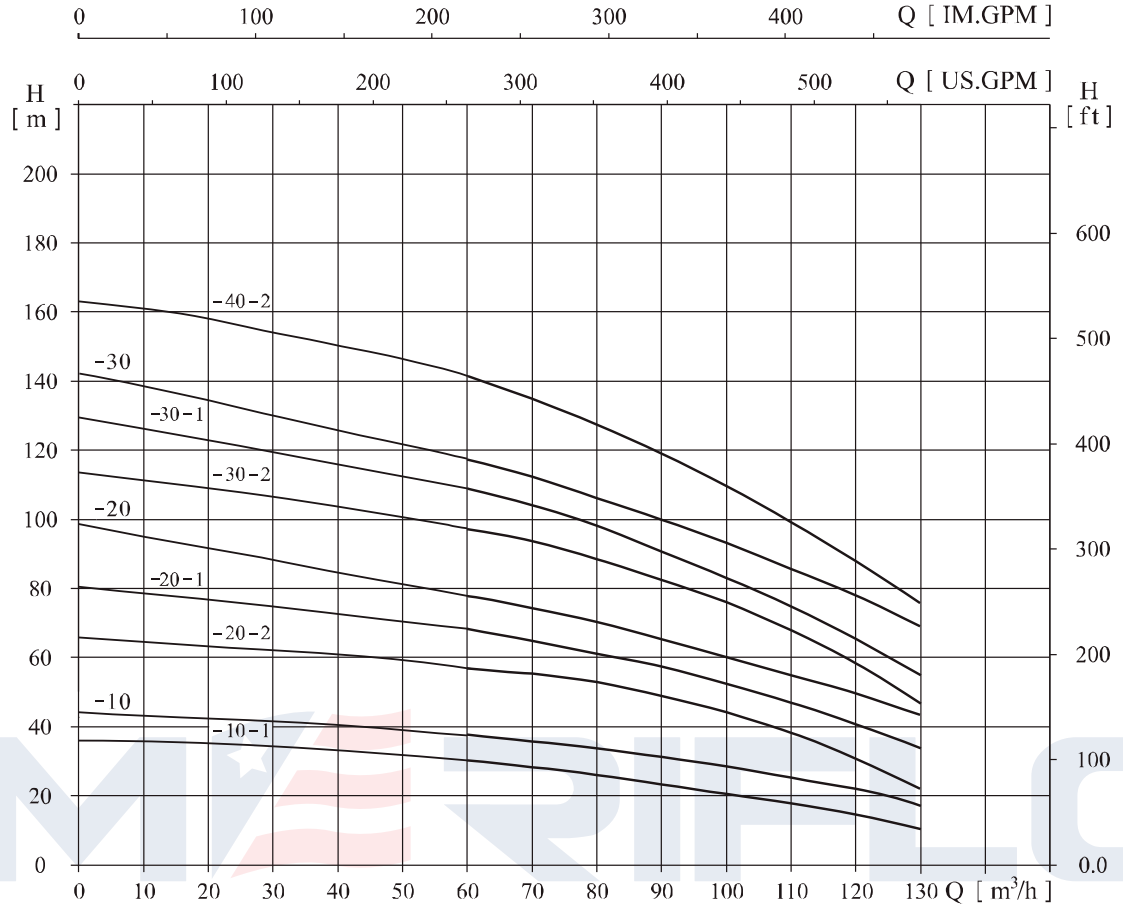
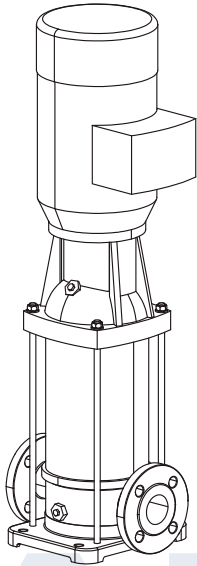


MODEL VM85 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR	FLOW	225	250	300	350	400	450		
		HP	GPM								
VM85-10-1	2900	7.5	HEAD (PSI)	31	27	24	23	18	14		
VM85-10		10		36	34	31	30	27	23		
VM85-20-2		15		58	55	51	45	40	31		
VM85-20		20		75	71	67	62	57	51		
VM85-30-2		25		96	92	85	78	70	58		
VM85-30		30		115	109	102	95	88	78		
VM85-40-2		40		139	132	124	114	102	88		
VM85-40		40		156	149	124	131	119	108		
VM85-50-2		50		179	170	142	148	132	115		
VM85-50		50		197	186	160	163	151	134		
VM85-60-2		60		220	210	176	183	166	145		
VM85-60		60		239	227	213	200	185	166		



VM85 (4x4) 3500 RPM



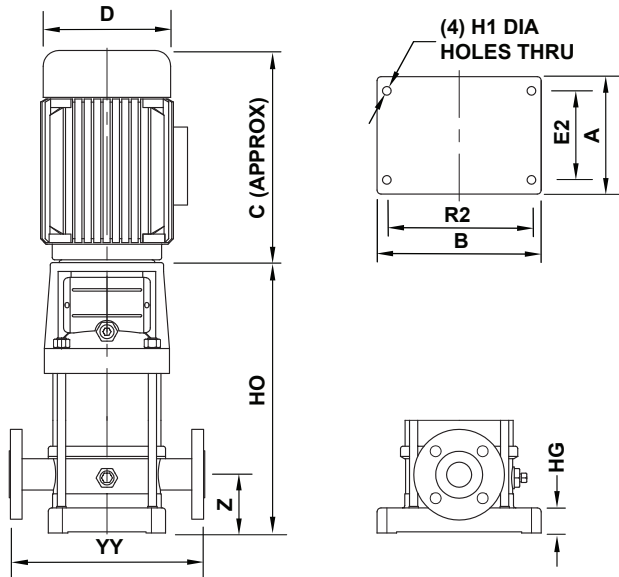
MODEL VM85 - PERFORMANCE TABLE (3500 RPM)

MODEL	SPEED	MOTOR	FLOW	250	300	350	400	450	500	575	
		HP	GPM								
VM85-10-1	3500	15	HEAD (PSI)	44	38	36	33	30	20	13	
VM85-10		20		51	50	47	43	41	33	26	
VM85-20-2		25		84	81	77	68	62	45	31	
VM85-20-1		30		95	92	88	81	72	58	47	
VM85-20		40		108	104	98	91	85	74	62	
VM85-30-2		50		139	134	125	116	107	84	65	
VM85-30-1		50		165	148	139	128	118	98	80	
VM85-30		60		165	158	149	138	132	112	98	
VM85-40-2		60		200	192	182	168	155	126	102	



MODEL VM85 - 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

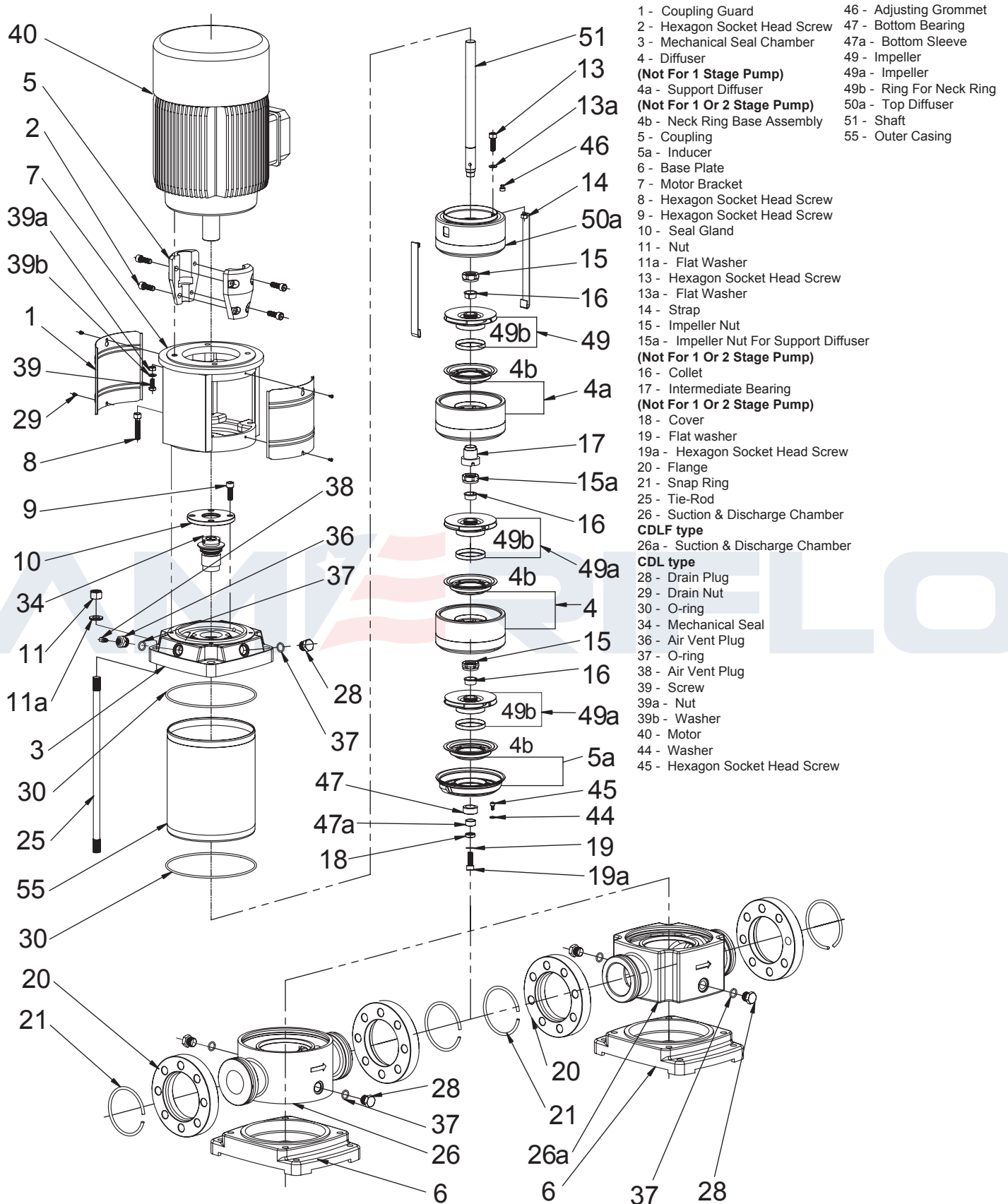
VM85

MODEL	SPEED	A	B	C	D	E2	H1	HG	HO	R2	YY	Z	WEIGHT
	RPM												LBS
VM85-10	2900	10.000	13.750	15.375	10.250	7.875	0.500	1.750	22.500	11.000	15.000	5.500	243
VM85-20		10.000	13.750	19.688	13.000	7.875	0.500	1.750	30.438	11.000	15.000	5.500	423
VM85-30		10.000	13.750	22.625	15.375	7.875	0.500	1.750	34.000	11.000	15.000	5.500	556
VM85-40	3500	10.000	13.750	25.625	15.750	7.875	0.500	1.750	37.625	11.000	15.000	5.500	688
VM85-50		10.000	13.750	25.625	15.750	7.875	0.500	1.750	41.250	11.000	15.000	5.500	741
VM85-60		10.000	13.750	27.000	18.125	7.875	0.500	1.750	44.938	11.000	15.000	5.500	897

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 VM85 - SECTIONAL VIEW

MODEL VM85 - 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)

MODEL VM85 - ENGINEERING INFORMATION

PUMP MODEL	OPERATING TEMPERATURE RANGE	MECHANICAL SEAL TYPE	MECHANICAL SEAL MATERIAL				
			ROTATING FACE	STATIONARY FACE	ELASTOMERS	SPRING	COLLAR
VM85	+5°F TO +248°F [-15°C TO +120°C]	BALANCED	SILICON CARBIDE	CARBON	FPM	316 SS	316 SS

RATED FLOW:	374 GPM [85 M ³ /HR]
FLOW RANGE:	264 - 572 GPM [60 - 130 M ³ /HR]
MAXIMUM PRESSURE:	261 PSI [15 BAR]
MAXIMUM POWER:	15 - 60 HP [11 - 45 KW]
MAXIMUM EFFICIENCY:	77%

