

VM Series



Model Number: VM15



VERTICAL IN-LINE MULTISTAGE CENTRIFUGAL PUMP

APPLICATION

Pumping of clean, non-aggressive liquids, free of fibres in suspension, suitable for applications such as water supply - domestic, rural and industrial, pressure boosting, agriculture and farming, turf water & irrigation, commercial - high pressure washing & water treatment and boiler feed.

FEATURES & BENEFITS

Vertical multistage centrifugal pump with in line suction and discharge

- Minimum floor space required and easy to install

All hydraulic parts constructed in stainless steel

- Long service life
- Corrosion and abrasion resistance

High efficiency stainless steel impeller design

- Low operating costs
- Less stages required
- Low maintenance

Raised bottom bearing

- Longer bearing life through reduced risk of damage from sediment

Teflon neck rings

- Maintains high efficiency
- Reduces vibration and noise
- Reduces sensitivity to thermal expansion

Tungsten carbide intermediate bearing/s

- Reduces possible damage from shaft misalignment or vibration

Stainless steel threaded companion flanges with gaskets, nuts, bolts & washers included with every pump

- Easier installation
- Guaranteed material quality

Vertical Multistage Pumps

OPERATING LIMITS

Capacities to	367 lpm (22m ³ /hr)	
Pressure heads to	230m	
Maximum discharge pressure	PN25 255m	
Maximum suction pressure	2 bar	
Temperature range	-15°C to +120°C	
Motor - three phase*	400V ± 10%	
Motor - single phase*	up to 2.2kW	230V ± 10%
	3.0 to 4.0kW	240/480V ± 10%
Single phase up to 1.5kw 240V motor supplied with Aust. standard plug		
Rotation	Anti-clockwise (top view)	

*Other voltages on request

ELECTRICAL DATA

Maximum ambient temperature	45°C
Single phase	
Three Phase	40°C
Minimum IP rating	IP55
Insulation class	Class F

ALTITUDE & TEMPERATURE VS LOSS OF HEAD

Guide only – altitude and temperature losses are added.

Altitude	Loss of head	Temperature	Loss of head
0m	0m	20°C	0.20m
500m	0.60m	30°C	0.40m
1000m	1.15m	40°C	0.70m
1500m	1.70m	50°C	1.20m
2000m	2.20m	60°C	1.90m
2500m	2.65m	70°C	3.10m
3000m	3.20m	80°C	4.70m
		90°C	7.10m
		100°C	10.30m

MATERIALS OF CONSTRUCTION

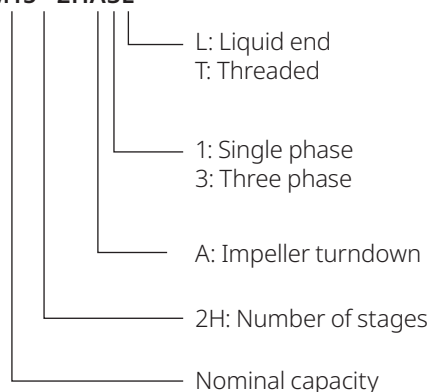
PART	MATERIAL
Pump attachment base	Cast iron
Suction & discharge casing	304 stainless steel
Motor support lantern	Cast iron
Impellers	304 stainless steel
Stages (casing)	304 stainless steel
Outside sleeve	304 stainless steel
Pump shaft	316L stainless steel
Intermediate bearing	Tungsten carbide
Mechanical seal	Silicon carbide/Carbon/EPDM
O-rings (casing)	EPDM
Plugs (drainage & priming)	316L stainless steel
Impeller neck rings	Teflon

*Special version with 316L stainless steel & viton o-rings on request

NOTE: 304 stainless steel, (Z6 CN 18.9) and **316L stainless steel** (Z2 CND 17.12) are recommended materials that are highly resistant to corrosion. Suitable for pumping clean, clear non-viscous liquids, containing no fibres or solids. Maximum sand/silica concentration 40 g/m³.

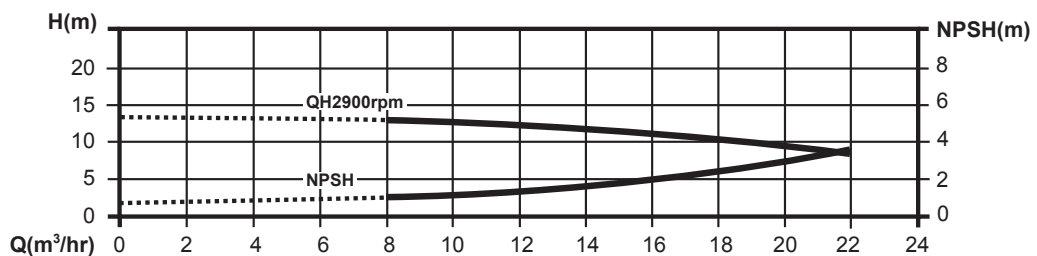
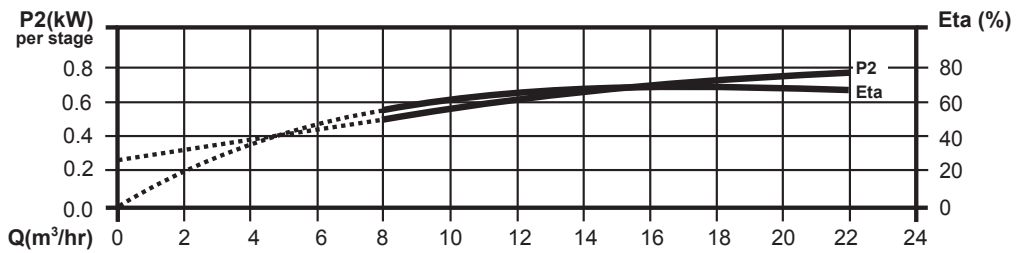
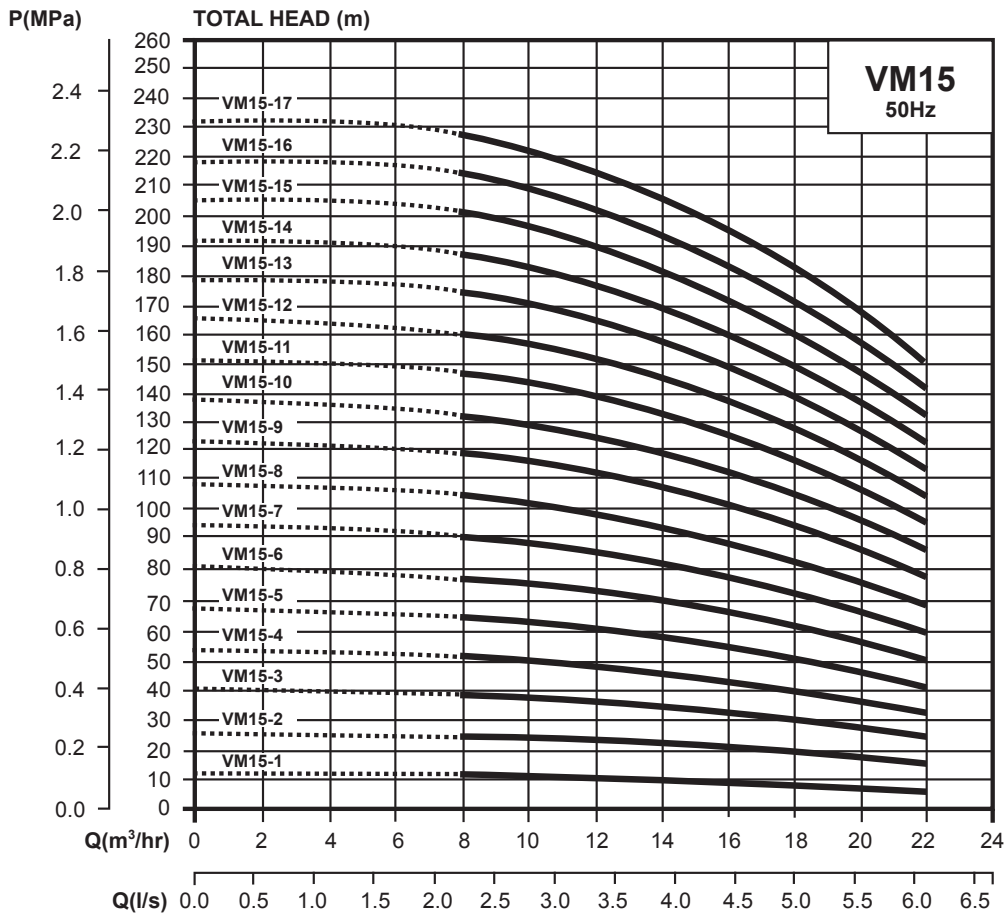
IDENTIFICATION OF THE PUMP

VM15 - 2HA3L



Vertical Multistage Pumps

HYDRAULIC PERFORMANCE

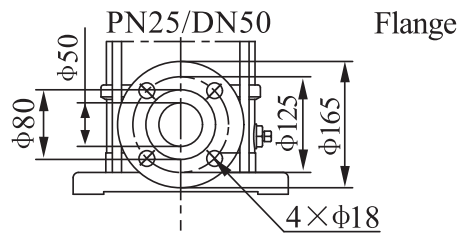
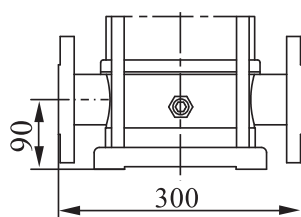
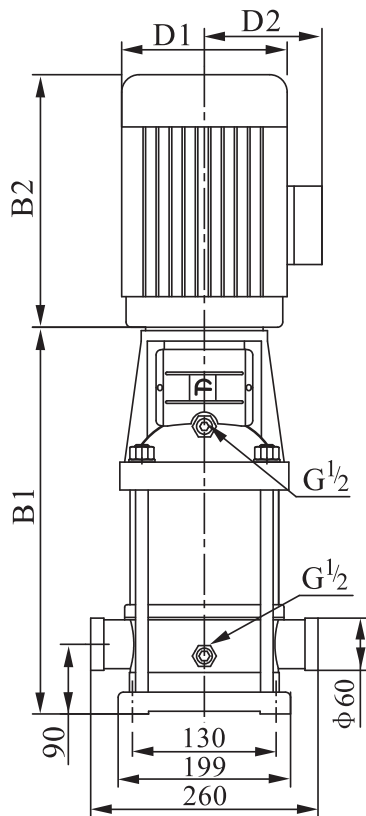


NOTE: Curve tolerance in conformity with ISO9906 Appendix A.

Vertical Multistage Pumps

DIMENSIONS

Model	Size (mm)					Weight (kg)
	B1	B2	B1 + B2	D1	D2	
VM15-1	387	2A5	632	170	142	33
VM15-2	397	290	687	190	155	42
VM15-3	452	345	797	197	165	51
VM15-4	497	355	852	230	188	60
VM15-5	542	355	897	210	188	62
VM15-6	607	390	997	260	208	78
VM15-7	652	390	1012	260	208	80
VM15-8	697	390	1027	260	208	86
VM15-9	742	390	1132	260	208	88
VM15-10	875	500	1375	330	233	137
VM15-12	965	500	1465	730	255	161
VM15-14	1055	500	1555	130	255	165
VM15-17	1190	500	1690	330	255	176



Vertical Multistage Pumps

MOTOR TECHNICAL SPECIFICATIONS – SINGLE PHASE

Motor 1Ø	Frame	IP Rating	FLC 240V	Start/LRC Ratio	RPM	Eff %	Bearings	
							Drive End	Non-D/End
1.1	80 V18	IP55	6.38	5.65	2830	75	6204-ZZ	6204-ZZ
1.5	90 V18	IP55	8.08	5.57	2850	76	6205-ZZ	6205-ZZ
2.2	90 V18	IP55	12.0	4.59	2830	77	6205-ZZ	6205-ZZ
3.0	100 V18	IP55	18.0*	5.0	2870	81	6206-ZZ	6205-ZZ
4.0	112 V18	IP55	22.0*	6.4	2910	84	6207-ZZ	6206-ZZ

*For 480V single phase operation multiply by 0.5.

MOTOR TECHNICAL SPECIFICATIONS – THREE PHASE

Motor 1Ø	Frame	IP Rating	FLC 240V	Start/LRC Ratio	RPM	Eff %	Bearings	
							Drive End	Non-D/End
0.75	80 V18	IP55	1.52	7.0	2842	80.8	6204-ZZ	6204-ZZ
1.1	80 V18	IP55	2.2	6.2	2828	82.4	6204-ZZ	6204-ZZ
1.5	90 V18	IP55	3.1	5.3	2800	78.0	6205-ZZC3	6205-ZZC3
2.2	90 V18	IP55	4.2	6.7	2800	85.0	6205-ZZC3	6205-ZZC3
3	100 V18	IP55	5.7	6.8	2853	86.2	6206-ZZC3	6206-ZZC3
4	112 V18•	IP55	7.3	6.7	2902	86.8	6306-S	6306-S
5.5	132 V18•	IP55	9.8	7.4	2916	89.9	7308B	6308ZZC3
7.5	132 V18•	IP55	13.3	7.4	2892	87.0	7308B	6308ZZC3
11.0	160 V1•	IP55	19.4	7.9	2925	88.3	7309B	6309ZZC3
15.0	160 V1•	IP55	25.5	8.4	2931	89.3	7309B	6309ZZC3

• Special motor bearings fitted for thrust management.

PERFORMANCE OVERVIEW

Model	Driving Motor kW	Q m3/h	H (m)									
			8	10	12	14	15	16	18	20	22	
VM15-1	1.1	H (m)	12.0	11.5	11.0	10.5	10.0	9.5	8.5	7.5	6.5	
VM15-2	2.2		25.0	24.5	24.0	23.0	22.5	21.5	20.0	18.0	16.0	
VM15-3	3.0		39.0	38.0	37.0	35.0	34.0	33.0	30.0	28.0	25.0	
VM15-4	4.0		52.0	51.0	49.0	46.0	45.0	44.0	40.0	37.0	33.0	
VM15-5	4.0		65.0	63.0	61.0	59.0	57.0	55.0	51.0	47.0	42.0	
VM15-6	5.5		78.0	76.0	74.0	71.0	69.0	67.0	62.0	57.0	51.0	
VM15-7	5.5		92.0	90.0	87.0	83.0	81.0	79.0	73.0	67.0	60.0	
VM15-8	7.5		106.0	103.0	100.0	96.0	93.0	90.0	84.0	77.0	69.0	
VM15-9	7.5		120.0	117.0	114.0	109.0	106.0	103.0	95.0	87.0	79.0	
VM15-10	11.0		133.0	130.0	126.0	121.0	118.0	114.0	106.0	97.0	88.0	
VM15-12	11.0		160.0	157.0	152.0	146.0	142.0	138.0	128.0	117.0	106.0	
VM15-14	11.0		187.0	182.0	177.0	169.0	165.0	160.0	149.0	137.0	124.0	
VM15-17	15.0		227.0	222.0	215.0	206.0	201.0	195.0	182.0	167.0	151.0	