

# Pentax MATER PUMPS

## Multistage Wash Down Pump From Dairy Spares

**Dairy Spares Limited** Unit 1, Civic Industrial Park Waymills, Whitchurch Shropshire SY13 1TT

Telephone: **01948 667676** Facsimile: **01948 666505** email: sales@dairyspares.co.uk

The VW100 is a three phase, 3.31kW, multistage volume wash down pump, capable of delivering up to 170 l/min (37 gals/min). It is a 9 stage pump with Noryl reinforced impellors.

This pump is suited to the larger wash down system where several take off points may be required and a more than adequate water supply can be maintained for the duration of the wash down operation. 10 mins = 1700 ltrs

**USES** - A multistage vertical pump. To pump clean non-loaded fluids in the domestic, agricultural and industrial sectors; pressurizing systems; irrigation; drinking and glycol water; water treatment; food industry; heating and air conditioning; washing system.

#### **ADVANTAGES** -

- Closed coupled and compact;
- Silent;
- Excellent efficiency that allows a reduction of running cost ad powers;
- Economical;
- Over-dimensioned bearings for longer life of the machines;
- Intermediate shaft guiding stage for concentricity of rotation.

#### **CONSTRUCTION FEATURES** -

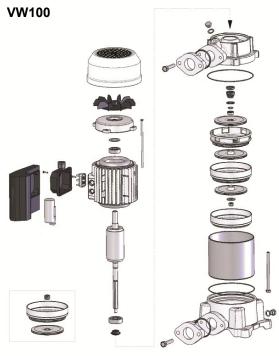
- Capacity: up to 170 l/min;
- Total Head: up to 110 m.;
- Maximum working pressure: 8 bar  $\leq$  6 impellers, 14 bar > 6 impellers;
- Maximum liquid temperature: from +5 to +35 °C; ambient temperature: max 40 °C.
- Inlet 1¼" Outlet 1¼".

MOTOR - Three phase 230-400V - 50 Hz 4.5Hp 3.31 kW; insulation class F; protection degree IP 44.

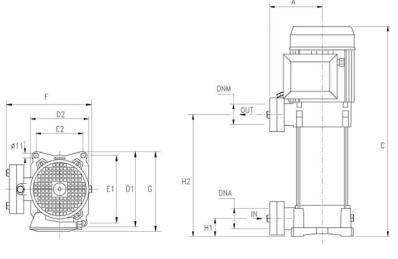
#### **MATERIALS** -

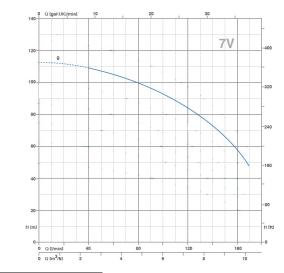
- Flanged suction pump body: cast iron;
- Flanged delivery pump body: cast iron;
- Shell: chromo-nickel steel AISI 304;
- Impellers, diffusers: Noryl® reinforced with fibre glass (GFN2V);
- Pump shaft: AISI 303 chromo-nickel steel;
- Motor bracket: cast iron; mechanical seal: graphite-silicon carbide;
- Intermediate shaft guiding stage bush: ceramic-tungsten carbide.





VW123 Service Kit





MODEL VW100	DIMENSIONS (mm)														
	Α	С	D1	D2	E1	E2	F	G	H1	H2	DNA	D	NM		
U 7V-450/9	135	633	204	162	2 178.5	125	235	250	40	304.5	1"1/4(	G 1"1	./4 G		
Model VW100					AMPERE		Q (m3/h - l/min)								
201	P2		P1	-	201	0		2.4	3.6	4.8	6	7.2	8.4	9.6	10.2
3~			(kV	v)	3~	0		40	60	80	100	120	140	160	170
230/400 V-				3x400											
50Hz	(HP)	(kW	') 3 <sup>-</sup>	~	50Hz	H (m)									
U 7V-450/9 T	4.5	3.31	4.0	)9	7	113	.2 1	09.7	105.4	4 100.3	1 93.5	84.8	73.6	59.6	49

### **Centrifugal Pumps**

A centrifugal pump uses a rotating impeller to increase the velocity of a fluid. Centrifugal pumps are commonly used to move liquids through a piping system. The fluid enters the pump impeller along or near to the rotating axis and is accelerated by the impeller, flowing radially outward into a diffuser, from where it exits into the downstream piping system. Centrifugal pumps are used for large discharge through smaller heads.

### Multistage Centrifugal Pumps

A centrifugal pump containing two or more impellers is called a multistage centrifugal pump. The impellers are mounted on the same shaft for two important functions; to produce a high head and to discharge a large quantity of liquid. The fluid enters the first or primary impellor and instead of pumping it out of the discharge outlet as with single stage pumps, the fluid exits stage one and goes into the inlet of the next stage impellor and so on increasing in kinetic energy until it reaches the last of 9th stage where it exits the pump at a large volume and increased pressure capable of being pumped to great lengths and height.