

#### **Description**

The Rapide 5000 has been developed to offer simple, reliable and cost effective pumping solutions for industrial applications. The design combines the Vantage 5000 pump head with IP55 rated gearmotors in both single and three phase options. The pump units are available in Single head or Twin head configurations.

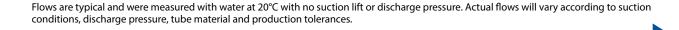
#### Your benefits

- → Simple, reliable and cost effective pumping solution
- → Adapts the Vantage 5000 pump head with an industrial drive
- → Single head and dual head options
- Maximum flow rate 4422 ml/min, 265 l/h, 70.09 GPH with single pump head
- → Single or Three Phase AC Industrial motor
- Tool lockable pump head prevents accidental opening
- Can be used with continuous tubing or tube elements. Tube elements are available with Quick Release or Tri-clamp connection.

#### **Technical Specifications**

Max. Flow Rate *	4422 ml/min, 265 l/h, 70.09 GPH				
Maximum Pump Speed	268 RPM				
Max. Discharge Pressure	2 bar (29 PSI)				
Other devel Organis	45, 134, 179 and 268 RPM @ 50Hz				
Standard Speeds	54, 161, 215, 322 RPM @ 60Hz				
Control	Inverter Optional				
Multi-Channel	Single or Dual Channel				
	Single Phase: 230V 1ph 50Hz				
Mallana	•				
Voltage	3 Phase: 230V/400V 3ph 50Hz				
	3 Phase: 265V/460V 3ph 60Hz				
Installed Motor Power	0.18 kW, 50Hz / ¼ HP 60Hz				
Protection Class	IP55				
Standard Tube Options	Verderprene, Silicon (not included with pump)				
Tube Size	3.2 x 2.4 mm, 4.8 x 2.4 mm, 6.4 x 2.4 mm, 8.0 x 2.4 mm, 9.6 x 2.4 mm				
Weight	8.3 kg (single channel) or 10.2 kg (dual channel)				
Ambient Temperature	5°C - 40°C (41°F - 104°F)				
Humidity	(condensing) 10-100% RH				
Tube Burst Detector	Optional (contact factory for more details)				

<sup>\*</sup> with standard selections





#### **Materials**

Continuous Tubing Clamps Glass Filled Nylon					
Drive Shaft	304 Stainless Steel with Thermoplastic Polyurethane (TPU) Sleeve				
Pump Head	PPS (Polyphenylene Sulphide) Rotor Body & Arms 304 Stainless Steel Main Rollers with 440C Stainless Steel Bearings Nylon Guide Rollers. Bearing Strut: Bulk Moulding Compound (BMC) - Glass Fibre Re-enforced Thermoset Polyester				
Pump Head Door	Polycarbonate				
Pump Head Enclosure	Bulk Moulding Compound (BMC) - Glass Fibre Re-enforced Thermoset Polyester				
Tube Element Connectors	PVDF				

#### **Flow Rates**

Per pump head @50Hz

Tube	RPM	ml/min	l/hr	GPM	GPH
3.2 x 2.4	45	118	7.08	0.03	1.9
3.2 x 2.4	134	353	21.18	0.09	5.6
3.2 x 2.4	179	472	28.32	0.12	7.5
3.2 x 2.4	268	707	42.42	0.19	11.21
4.8 x 2.4	45	226	13.56	0.06	3.6
4.8 x 2.4	134	675	40.5	0.18	10.7
4.8 x 2.4	179	902	54.12	0.24	14.3
4.8 x 2.4	268	1350	81.0	0.36	21.4
6.4 x 2.4	45	387	23.22	0.10	6.13
6.4 x 2.4	134	1152	69.12	0.30	18.3

Tube	RPM	ml/min	l/hr	GPM	GPH
6.4 x 2.4	179	1539	92.34	0.41	24.4
6.4 x 2.4	268	2304	138.24	0.61	36.52
8.0 x 2.4	45	562	33.72	0.15	8.91
8.0 x 2.4	134	1675	100.5	0.44	26.6
8.0 x 2.4	179	2237	134.22	0.59	35.5
8.0 x 2.4	268	3350	201.0	0.88	53.1
9.6 x 2.4	45	742	44.52	0.20	11.8
9.6 x 2.4	134	2211	132.66	0.58	35.05
9.6 x 2.4	179	2953	177.18	0.78	46.81
9.6 x 2.4	268	4422	265.0	1.17	70.09

<sup>\*</sup>actual speed and flow rates may vary depending on motor speeds, the medium being pumped and the actual application setup Nominal pump speed based on 50Hz operation

#### **Flow Rates**

Per pump head @60Hz

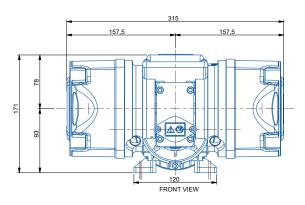
Tube	RPM	ml/min	l/hr	GPM	GPH
3.2 x 2.4	54	142	8.5	0.04	2.3
3.2 x 2.4	161	424	25.44	0.11	6.7
3.2 x 2.4	215	566	33.96	0.15	8.97
3.2 x 2.4	322	848	50.88	0.22	13.44
4.8 x 2.4	54	271	16.26	0.07	4.3
4.8 x 2.4	161	810	48.6	0.21	12.84
4.8 x 2.4	215	1082	64.92	0.30	17.15
4.8 x 2.4	322	1620	97.2	0.43	25.7
6.4 x 2.4	54	464	27.84	0.12	7.4
6.4 x 2.4	161	1382	82.92	0.37	21.91

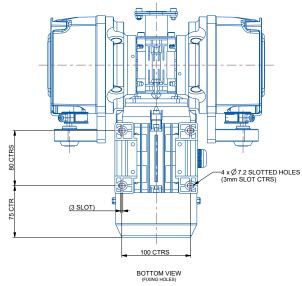
Tube	RPM	ml/min	l/hr	GPM	GPH
6.4 x 2.4	215	1847	110.82	0.49	29.28
6.4 x 2.4	322	2765	165.9	0.73	43.83
8.0 x 2.4	54	674	40.44	0.18	10.7
8.0 x 2.4	161	2010	120.6	0.53	32.0
8.0 x 2.4	215	2684	161.04	0.71	42.54
8.0 x 2.4	322	4020	241.2	1.06	63.72
9.6 x 2.4	54	890	53.4	0.24	14.11
9.6 x 2.4	161	2653	158.18	0.70	42.05
9.6 x 2.4	215	3544	212.64	0.94	56.17
9.6 x 2.4	322	5306	318.36	1.40	84.10

<sup>\*</sup>actual speed and flow rates may vary depending on motor speeds, the medium being pumped and the actual application setup Nominal pump speed based on 60Hz operation

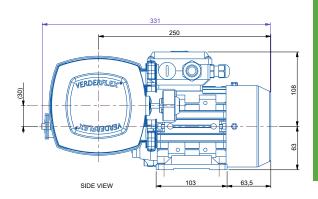
Flows are typical and were measured with water at 20°C with no suction lift or discharge pressure. Actual flows will vary according to suction conditions, discharge pressure, tube material and production tolerances.

#### **Dimensions (Dual channel)**





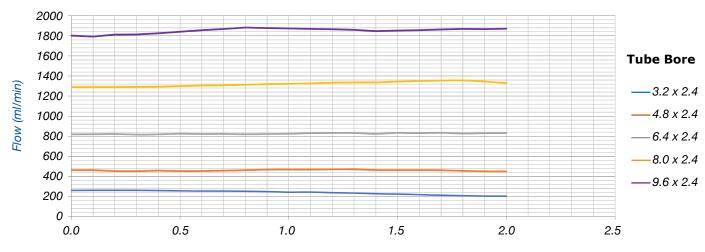
All dimensions are in mm.
All dimensions and weights are for guidance only.



ACTUAL UNIT WEIGHT = 10.20KG

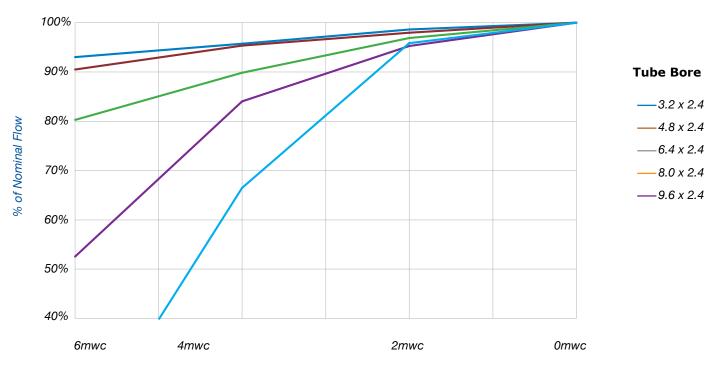


#### Discharge Curve 2.4mm WT Verderprene @ 100 RPM



Discharge Pressure (bar)

#### **Suction Performance Curve 2.4mm WT Verderprene**



Suction Lift (mwc)

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