



## Key Features

- Superior build quality
- Superior vacuum curve performance
- Zero\* oil mist/vapour
- Highly Portable
- Low Noise
- Engineered for constant operation
- Integrated power switch/lead
- Compact footprint

## Product Description

The EC.4 Compact Composites Vacuum Pump is the result of many months of development working in conjunction with leading Italian vacuum pump manufacturer DVP to produce a compact, portable vacuum pump engineered specifically for the rigours of daily use in a composites environment.

The pump is ideally suited to use in vacuum bagging (including prepregs), vacuum bonding, resin infusion and vacuum degassing. Despite the small size of this vacuum pump, its optimised vacuum curve and high performance components ensure surprisingly rapid pull-down and attainment of full vacuum.

The pump's quiet operation, continuous duty cycle, check-valve and virtually mist free operation make it suitable for all environments, including manufacturing facilities, workshops, laboratories, schools and universities.

The underlying DVP pump technology is considered to be the best on the market offering an unrivalled combination of performance and reliability - backed by a full manufacturers warranty - whilst the rugged, mobile form factor provides maximum protection and practicality.

### Superior Performance

The EC.4 is an oil-lubricated rotary vane pump capable of achieving an ultimate vacuum level in excess of 99.95%. This portable-sized EC.4 Compact Composites Vacuum Pump is recommended for almost all small to medium sized resin infusion, vacuum bagging and vacuum bonding uses. This compact pump would be suitable for use on parts up to the size of a small boat hull (rowing boat, kayak, vehicle panels).

### Zero Oil Mist/Vapour

Unlike oil-bath vacuum pumps the EC.4 features continuous gas ballast and exhaust mist eliminator to ensure that the exhausted air is almost entirely free from oil making the pump suitable for sensitive environments such as confined workshops, schools, universities and laboratories.

### Non-Return Check Valve

An integrated check-valve prevents oil and air back-flow when the pump is switched off making the pump easier to use and protecting it from user error.

### Ready to Run

The EC.4 is supplied complete with an integrad power switch and IEC socket (with choice of region-suitable power-lead) making installation quick and easy - requiring only a standard 13A wall socket. The EC.4 is suitable for use in all countries and territories with a 220-240v mains supply.

## Technical Specification

Property	Units	50Hz	60Hz
Manufacturer			DVP
Country of Manufacture			Italy
Part Number			EC.4
Nominal Capacity (Metric)	m <sup>3</sup> /h	4	4.8
Nominal Capacity (Imperial)	CFM	2.37	2.84
Total Final Pressure (Abs)	%	99.98	99.98
Motor Power	kW	0.12	0.15
Nominal RPM	n/min	2800	3300
Noise Level (UNI EN ISO 2151 - K - 3db)	dB(A)	48	52
Weight	kg		6.75
Type of Oil (DVP Original)	DVP Part #		BV32 (SW40)
Type of Oil (Compatible)	EC Part #		VPO32
Oil Capacity	litres		0.065
Pump Intake / Outlet Fitting			1/4" G/BSPT
Continuous Duty Working Range (Abs)	mbar - hPa		400—2
Operating Temperature @ 20°C	°C	50—55	55—60
Required Room Temperature	°C		12—40
Ambient Temperature for Storage	°C		-20—50
Max Humidity / Altitude	% / m s.l.m.		80 / 1000



## Recommended Uses

- Portable vacuum requirements - eg dock side, on site.
- Small/Medium Scale vacuum bagging/resin infusion
- Resin transfer moulding (RTM/RTM Light)
- Pre-preg/autoclave use
- Small/Medium scale vacuum pressing/veneering

Please note: The EC.4 is NOT suitable for frequent vacuum degassing of materials with a high water content (such as plaster) or vacuum drying without the use of an inline moisture trap.

## Optimised Vacuum Curve

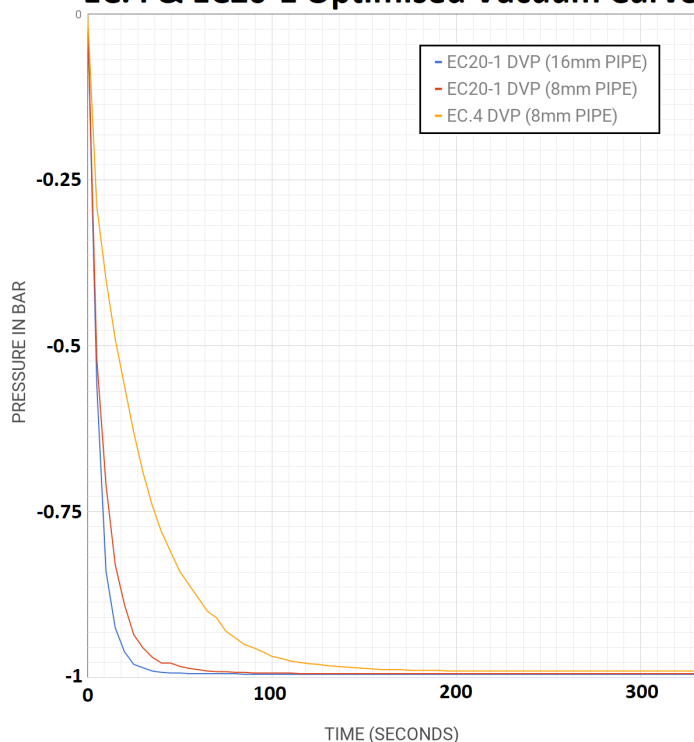
### Vacuum Degassing

For Rapid degassing of of large chambers and high reactive resins we would recommend the EC20-1 Industrial Vacuum Pump. The EC.4, although not as powerful as the EC20-1, still offers great performance and has a good punch often out performing the commonly found compact vacuum pumps.

The EC.4's free air displacement of up to 80L/m and optimised vacuum curve mean that it can pull a typical 26 litre degassing chamber down to almost total vacuum in 60 seconds; far quicker than general purpose vacuum pumps with the same stated free air displacement - compared below.

	Typical 1.5 CFM Vacuum Pump	DVP EC.4
Time to 90% Vacuum	85s	65s
Time to 99% Vacuum	4m 20s	3m 10s

### EC.4 & EC20-1 Optimised Vacuum Curve



## Included Equipment

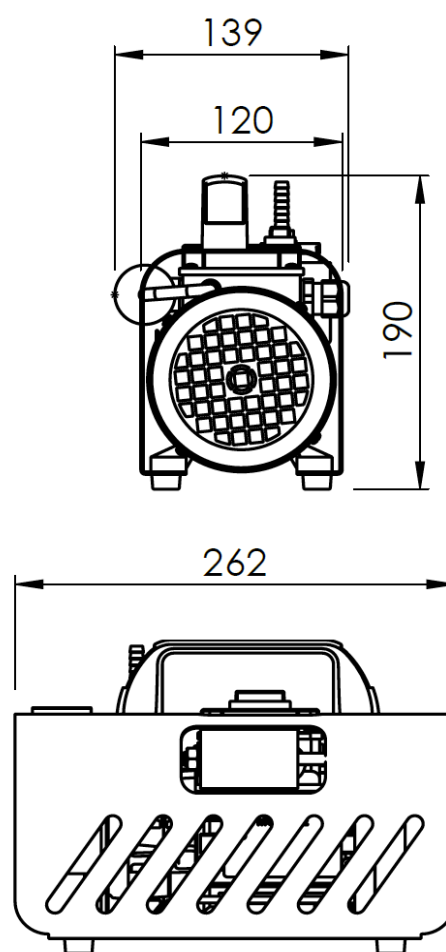
- Integral exhaust mist-eliminator
- Integral gas ballast
- Integral non-return check valve
- Pack of BV32 vacuum pump oil
- Integrated power switch and IEC socket

## Installation

The EC.4 vacuum pump includes an integrated power switch and IEC (Schuko) socket. Choose the appropriate regional power-lead when ordering.

The portable nature of the EC.4 vacuum pump means it is able to be installed virtually anywhere with access to a suitable power supply.

## Dimension Drawings



Exclusively Sold by Easy Composites Ltd



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