



Key Features

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

Product Description

Easy Composites has worked with leading Italian vacuum pump manufacturer DVP to develop an exclusive vacuum pump intended specifically for the industrial vacuum bagging and vacuum degassing market. The pump is engineered for continuous operation and delivers performance and reliability far exceeding that of general purpose vacuum pumps.

The EC.20 really does represent the very best in light industrial vacuum pumps and will deliver years of reliable service and superior performance even in the busiest workshop, university or laboratory.

Superior Performance

The EC.20 is an oil-lubricated rotary vane pump capable of achieving an ultimate vacuum level in excess of 99.95% and with a massive free-air displacement of 330L/m make it ideally suited to rapid degassing applications, very large resin infusion/vacuum bagging projects and centralised workshop vacuum systems. The optimised vacuum curve means its draw-down time can be up to 3 times that of a conventional oil-bath type pump of the same stated free air displacement (CFM).

Zero Oil Mist/Vapour

Unlike oil-bath vacuum pumps the EC.20 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

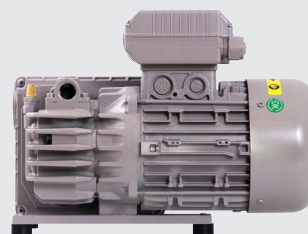
The EC.20 is supplied complete with an integrated power switch and IEC socket (with choice of region-suitable power-lead) making installation quick and easy - requiring only a standard 13A wall socket.

Technical Specification

Property	Units	50Hz	60Hz
Manufacturer		DVP	
Country of Manufacture		Italy	
Part Number		EC.20	
Nominal Capacity (Metric)	m ³ /h	20	24
Nominal Capacity (Imperial)	CFM	11.77	14.13
Total Final Pressure (Abs)	%	99.95	99.95
Motor Power	kW	0.75	0.90
Nominal RPM	n/min	2800	3300
Noise Level (UNI EN ISO 2151 - K - 3db)	dB(A)	64	67
Weight	kg	19	
Type of Oil (DVP Original)	DVP Part #	BV32 (SW40)	
Type of Oil (Compatible)	EC Part #	VPO32	
Oil Capacity Min / Max	litres	0.45 / 0.50	
Pump Intake / Outlet Fitting		1/2" G/BSPT	
Pump Outlet Fitting		1/2" G/BSPT	
Continuous Duty Working Range (Abs)	mbar - hPa	400—2	
Operating Temperature @ 20°C	°C	60—65	65—70
Required Room Temperature	°C	12—40	
Ambient Temperature for Storage	°C	-20—50	
Max Humidity / Altitude	% / m s.l.m.	80 / 1000	

Power Supply

The EC.20 is suitable for use in all countries and territories with a 220-240V mains supply. The pump is available with a choice of the most popular international mains plug types. The pump cannot be operated on a 110V mains supply such as in the USA or Japan.



Recommended Uses

- Vacuum degassing (fast pull down)
- Centralised vacuum systems (vacuum ring main)
- Large-scale vacuum bagging/resin infusion
- Resin transfer moulding (RTM/RTM Light)
- Pre-preg/autoclave use
- Large scale vacuum pressing/veneering

Please note: The EC.20 is NOT suitable for use degassing materials with a high moisture content (such as plaster) or for vacuum drying without the use of a suitable inline moisture trap.

Optimised Vacuum Curve

Vacuum Degassing

When rapid pull-down to high levels of vacuum is required, such as when degassing fast-curing resin systems, the 'vacuum curve' of the pump makes a critical difference. The EC.20's superior performance results in an optimised vacuum curve which reaches high levels of vacuum (where degassing will start to occur) far quicker in the pull-down cycle.

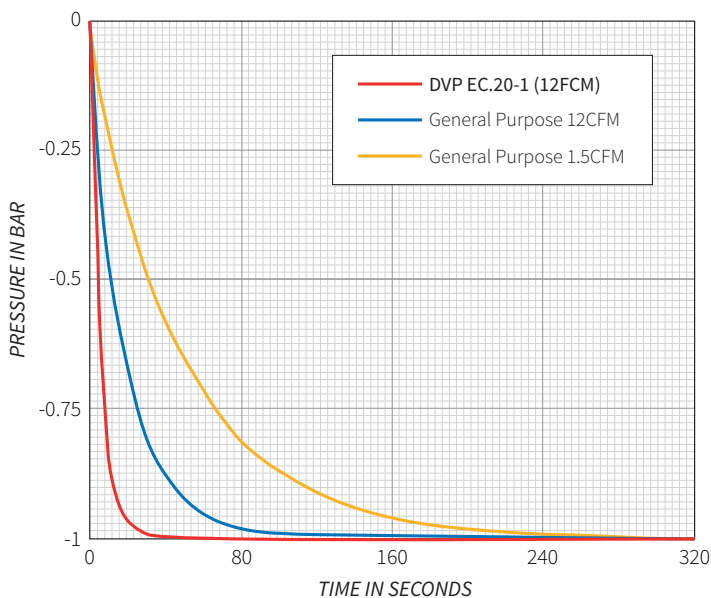
The EC.20 is ideal for rapid pull-down of large degassing chambers allowing highly reactive resins and silicones to be degassed inside of their working time.

The EC.20's free air displacement of 330L/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 12CFM Vacuum Pump*	DVP EC.20
Time to 90% Vacuum	45s	12s
Time to 99% Vacuum	1m 55s	30s
Time to 99.9% Vacuum	3m 15s	1m 25s

EC.20-1 Optimised Vacuum Curve

Real World Performance Comparison



Controlled test conditions. Pressure recorded in empty 26L vacuum chamber.

Included Equipment

- Integral exhaust mist-eliminator
- Integral gas ballast
- Integral non-return check valve
- Pack of BV32 vacuum pump oil
- 3x M8 rubber isolation bushes
- Integrated power switch and IEC socket

Installation

The EC.20 vacuum pump includes an integrated power switch and IEC (Schuko) socket. Choose the appropriate regional power-lead when ordering.

In standard form, the pump is supplied with 3 isolation mounts which screw into 3 M8 threads on the bottom of the pump. The isolation mounts have an internal M8 thread to facilitate mounting the vacuum pump using 3 M8 bolts (not included).

Optional Accessories

Baseplate for EC.20



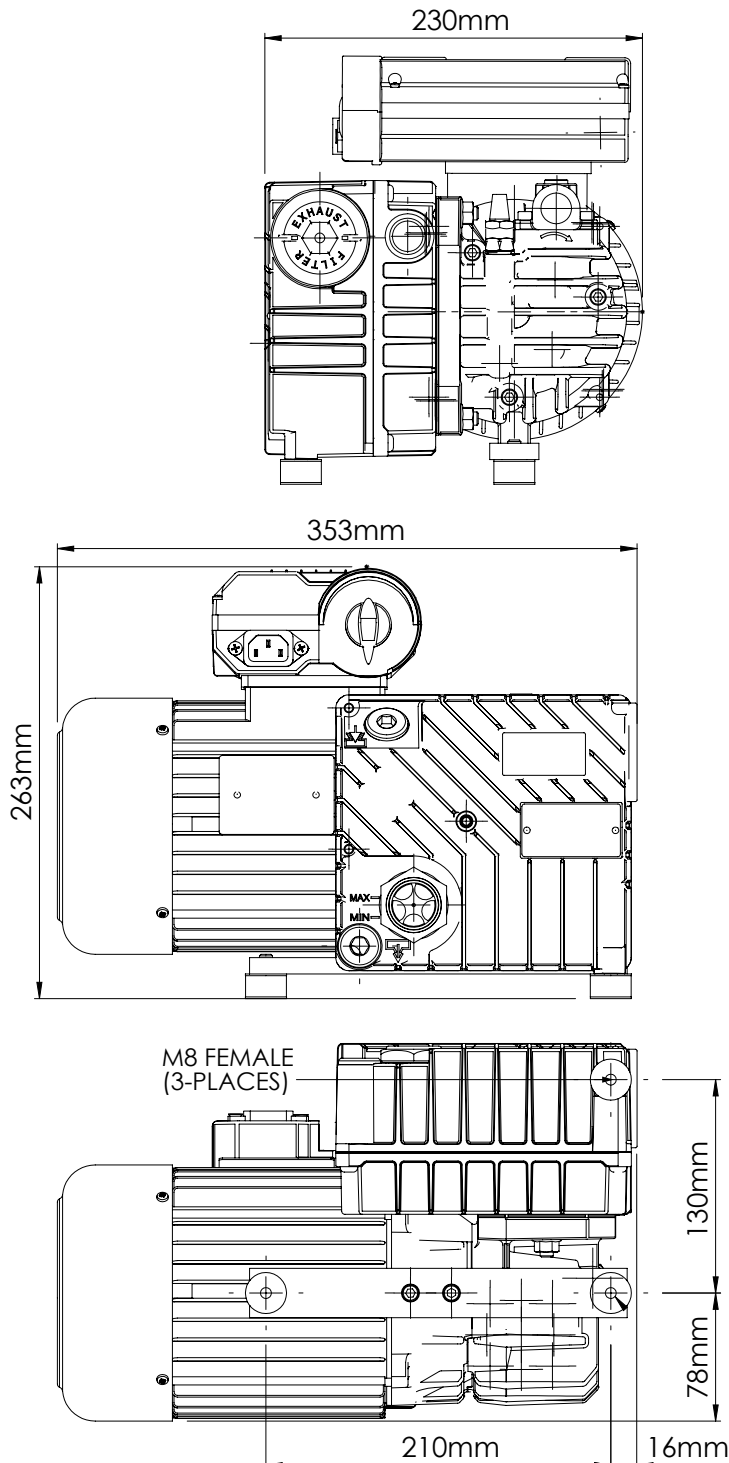
Supplied in a matching powder-coated grey finish and complete with non-slip rubber feet, this optional baseplate includes all the necessary fasteners to attach directly to the EC.20's isolation mounts, providing a very secure yet portable base.

Exhaust Silencer



Screw-in brass exhaust silencer reduces exhaust noise without restricting the performance of the pump. This simple fitting also prevents debris from accidentally entering the pump through the exhaust port.

Dimension Drawings



Exclusively Sold by Easy Composites Ltd

