87-901-042-01 June 18th, 2013

Vent accessory installation

Agilent Technologies

Model X3501-68002

The accessory X3501-68002 is a complete unit for automatic venting of the Turbo-V vent pump when it is switched off or during a power failure. The valve is a normally-open (power off) valve, electro-magnetically-actuated and Viton-sealed with an M8 and M5 thread with O-ring on the high vacuum port and a filter or tube 1/4" adapter on the air inlet.

The control unit is provided with a fixed delay time of about 2.5 seconds to avoid undesired venting during a temporary power failure and to allow closure of the system valves before venting.

1-1 Technical characteristics

Valve status	Normally open (closed when power is applied)
High vacuum	M8/M5 thread
connection	
Air intake	sintered bronze filter or tube 1/4" adapter
Orifice size	1.2 mm (0.05")
Pressure range	10 ⁻⁶ mbar to 1 bar
	(10 ⁻⁷ Torr to atm)
Leak rate	≤ 1x10 ⁻⁷ mbar l/s
Life cycle	one million cycles
Input voltage	24 Vdc +10% -5%
- power	2.5 W
Bakeout temperature	60 °C
Weight (w/o cable)	0.1 Kg (0.24 lb)

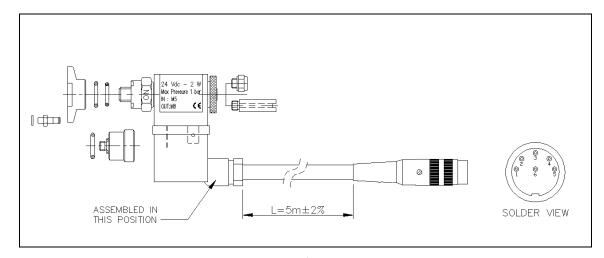


Figure 1.1 – Outline drawing

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1-2 Installation

The following figure shows the different components of the Turbo-V Vent Valve kit. These will be supplied to the client disassembled.

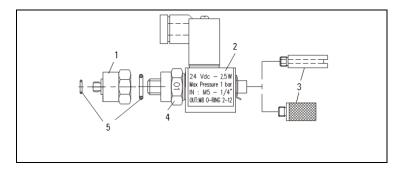


Figure 12 - vent valve

1	M8 - M5 adapter
2	Valve
3	Filter/ Tube 1/4" adapter
4	Coil securing nut
5	O-ring

The kit contains an M8 and M5 female/male adapter. It is up to the client to decide which adapter to use.

CAUTION!

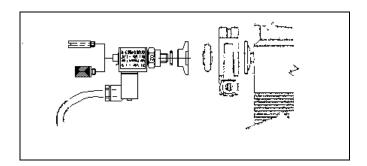
When assembling the kit, be careful not to unscrew the coil securing ring and nut inside the valve.

Once the kit is assembled, install it on the pump.

For pumps equipped with a screw cap, once the screw cap is removed use the appropriate adapter to secure the valve to the pump.

Upon completion of the mechanical installation, attach the power cord of the Vent Valve accessory to the related connector on the rear panel of the Turbo pump controller

For installation on pumps that are not equipped with a screw cap, use the flange system provided with the pump as shown in the following figure.



DISPOSAL

Meaning of the "WEEE" logo found in labels

The following symbol is applied in accordance with the EC WEEE (Waste Electrical and Electronic Equipment) Directive.

This symbol (valid only in countries of the European Community) indicates that the product it applies to must NOT be disposed of together with ordinary domestic or industrial waste but must be sent to a differentiated waste collection system.

The end user is therefore invited to contact the supplier of the device, whether the Parent Company or a retailer, to initiate the collection and disposal process after checking the contractual terms and conditions of sale.

