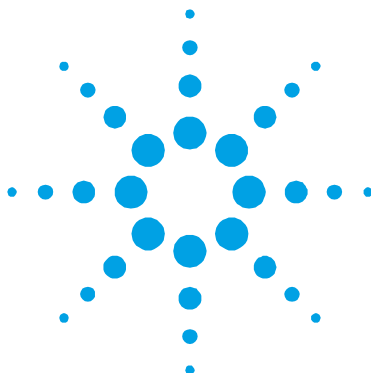




Turbo-V Vent Valve

Model
969-9843

Manuale di Istruzioni
Bedienungshandbuch
Notice de Mode D'Emploi
User Manual

87-900-947-01 (F)
04 / 2011



Agilent Technologies

Notices

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Turbo-V Vent Valve



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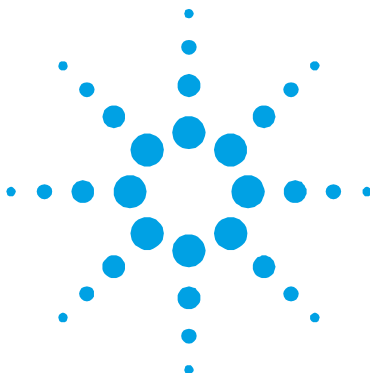
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Procedura per l’installazione

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Traduzione delle istruzioni originali



Generalità

Il Turbo-V “Vent Valve” comprende un’unità di controllo ed una valvola, che realizzano un sistema completo per la ventilazione automatica della pompa Turbo-V nella fase di spegnimento o nel caso si verifichi una caduta di tensione. La valvola in condizioni di riposo (senza alimentazione) è normalmente aperta. L’attivazione avviene in modo elettromagnetico, mentre il fissaggio (Viton-sealed) viene realizzato tramite un adattatore di tipo M8 o M5 con relativo O-ring sul foro per alto vuoto della pompa. L’aria di ingresso nella valvola, viene filtrata tramite un opportuno filtro o un adattatore da 1/4” presente sull’ingresso aria della valvola stessa.

L’unità di controllo viene alimentata dal governo Turbo-V che non è predisposto per il montaggio su rack.

L’unità di controllo viene attivata con un ritardo prefissato di circa 2,5 secondi per evitare ventilazioni inopportune durante una caduta di tensione temporanea e per permettere la chiusura delle valvole di sistema prima della ventilazione.

Caratteristiche tecniche

Unità di controllo

Tensione di ingresso	120 Vca $\pm$ 10%
- frequenza	da 50 a 60 Hz
- potenza	5 A
Tensione di uscita	24 Vcc $\pm$ 5%
- potenza (max)	11 W
Ritardo	circa 2,5 secondi
Temperatura operativa	da 0 a 40 °C
Temperatura di immagazzinamento	da -20 a 50 °C

Cavi di connessione

Ingresso	lungo 0,5 metri, 3 fili
Uscita alla valvola	lungo 5 metri, 3 fili
Peso (con cavo):	0,5 Kg (1,1 lbs)

Vent valve

Stato valvola	Normalmente aperta (chiusa quando viene alimentata)
Connessione di alto vuoto	Adattatore M8/M5
Ingresso aria	Filtro bronzo sinterizzato o un adattatore da 1/4"
Dimensione foro	1,2 mm (0,05")
Gamma di pressioni	da 10^{-6} mbar a 1 bar (da 10^{-7} Torr a atm)
Leak rate	$\leq 1 \times 10^{-7}$ mbar l/s
Vita	1 milione di cicli
Tensione di ingresso	24 Vcc +10% -5%
- potenza	2,5 W
Temperatura di bakeout	60 °C
Peso (senza cavo)	0,1 Kg (0,24 lb)

La figura seguente riporta le dimensioni di ingombro del Turbo-V Vent Valve.

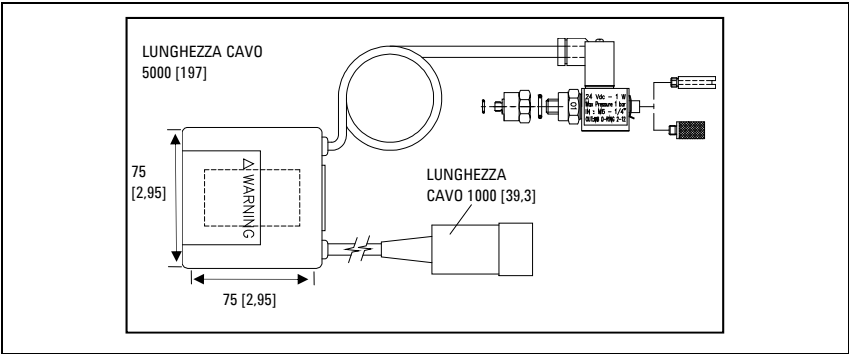


Figura 1 Dimensioni in mm [pollici]

Installazione

In figura sono riportati i vari componenti presenti nel Kit Turbo-V Vent Valve. Tali componenti sono forniti disassemblati; sarà quindi cura del cliente provvedere all'assemblaggio del Kit.

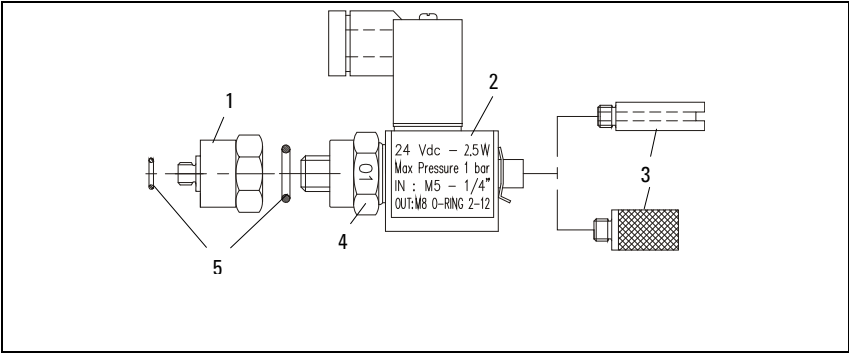


Figura 2 Kit Turbo-V Vent Valve

1	Adattatore M8 - M5
2	Valvola
3	Filtro/Adattatore da 1/4"
4	Dado di fissaggio bobina
5	O-ring

Il kit contiene due adattatori femmina/maschio, uno M8 ed uno M5. Sarà cura del cliente utilizzare quello specifico per le proprie esigenze.

ATTENZIONE!

Durante la fase di assemblaggio del kit, fare attenzione a non svitare la ghiera ed il dado di fissaggio della bobina interna alla valvola..

1 Procedura per l'installazione

Installazione

Completato l'assemblaggio, procedere con l'installazione sulla pompa.

Per pompe dotate di tappo a vite, dopo aver rimosso il tappo stesso, utilizzare l'adattatore appropriato per fissare la valvola alla pompa.

La seguente figura riporta un'installazione tipica su una pompa dotata di tappo.

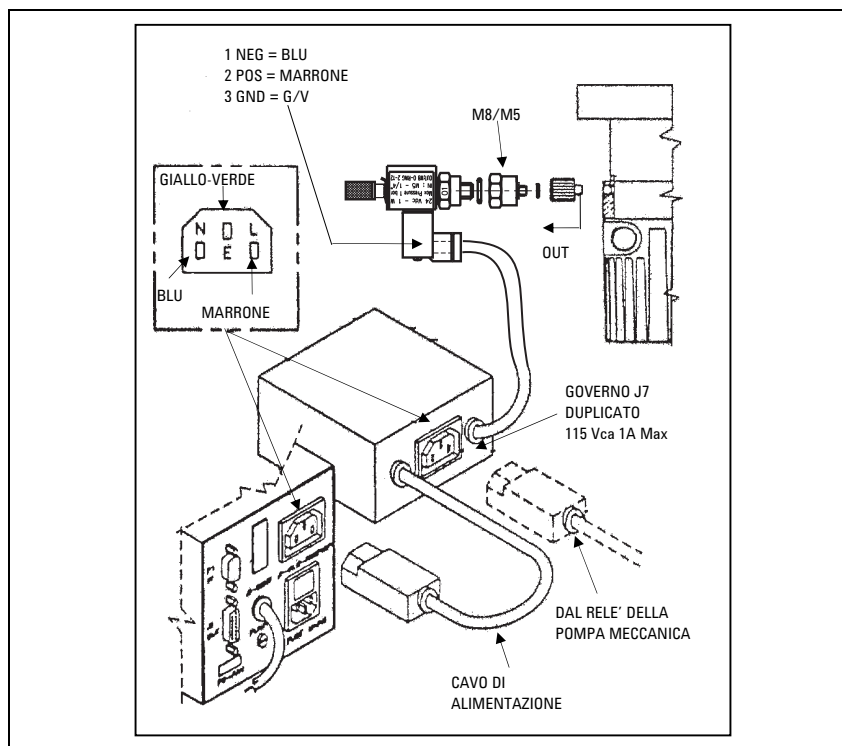


Figura 3 Installazione su pompa con tappo a vite

Dopo aver completato l'installazione meccanica, collegare il cavo di alimentazione dell'unità di controllo del Turbo-V vent valve al rispettivo connettore sul pannello posteriore del governo del Turbo pump.

ATTENZIONE! Prima di alimentare il kit, assicurarsi che la tensione di uscita presente sul connettore sia 115 Vca.

Per l'installazione su pompe non dotate di tappo a vite, occorre utilizzare il sistema di flange in dotazione alla pompa, come riportato in figura.

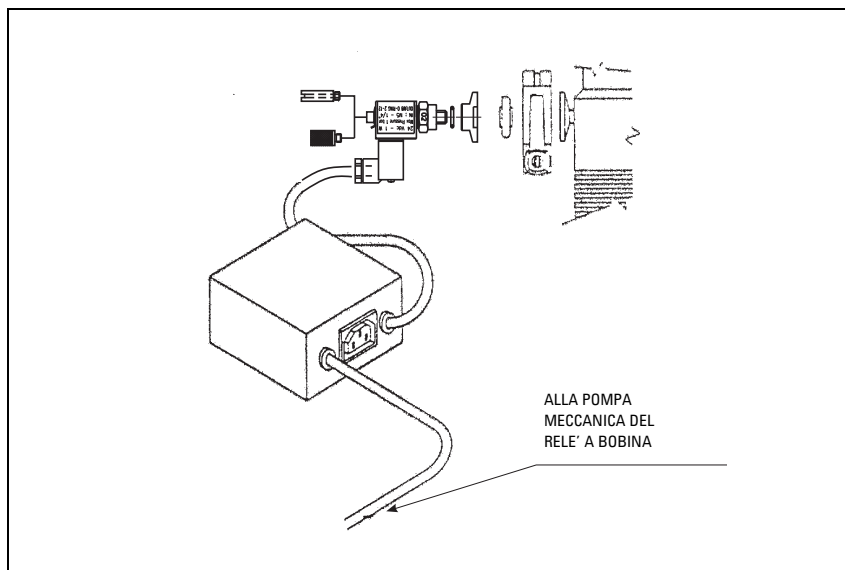
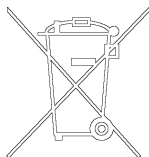


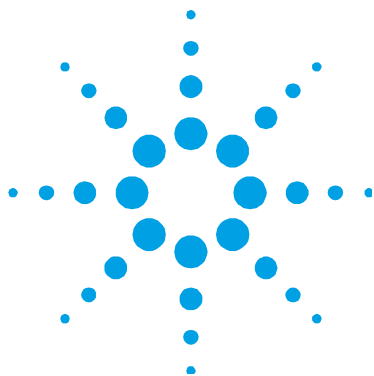
Figura 4 Installazione su pompa senza tappo a vite

Se si esegue l'installazione su una pompa il cui governo non dispone della presa di alimentazione valvola a 115 Vca, occorre rimuovere il connettore tagliando il cavo di alimentazione del governo; quindi collegarlo al modulo J21 come riportato nella figura precedente.

Smaltimento

Significato del logo "WEEE" presente sulle etichette. Il simbolo qui sotto riportato è applicato in ottemperanza alla direttiva CE denominata "WEEE". Questo simbolo (**valido solo per i paesi della Comunità Europea**) indica che il prodotto sul quale è applicato, NON deve essere smaltito insieme ai comuni rifiuti domestici o industriali, ma deve essere avviato ad un sistema di raccolta differenziata. Si invita pertanto l'utente finale a contattare il fornitore del dispositivo, sia esso la casa madre o un rivenditore, per avviare il processo di raccolta e smaltimento, dopo opportuna verifica dei termini e condizioni contrattuali di vendita.





2

Anleitung zur Installation

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Übersetzung der Originalanleitungen



Allgemeines

Die Baugruppe Turbo-V “Vent Valve” umfaßt eine Steuereinheit und ein Ventil, wodurch ein komplettes System zur automatischen Belüftung der Turbo-V - Pumpe beim Ausschalten oder bei Spannungsabfall entsteht. In Ruhestellung (ohne Versorgung) ist dieses Ventil geöffnet. Es wird elektromagnetisch betätigt. Seine Befestigung (Viton-sealed) erfolgt mit einem Adapter Typ M8 oder M5 und mit einem O-Ring an der Bohrung für Hochvakuum der Pumpe. Am Eingang des Ventils ist ein Filter oder Adapter Größe 1/4” vorhanden, der die einströmende Luft filtert.

Die Steuereinheit wird von der Turbo-V - Steuerung versorgt, die nicht zur Montage auf dem Rack vorgesehen ist.

Die Steuereinheit wird mit einer auf zirka 2,5 Sekunden voreingestellten Verzögerung eingeschaltet, um eine unerwünschte Belüftung bei zeitweisem Spannungsabfall zu verhindern und um das Schließen der Systemventile vor der Belüftung zu ermöglichen.

Technische Daten

Steuereinheit

Eingangsspannung	120 V a.c. $\pm$ 10%
- Frequenz	von 50 bis 60 Hz
- Leistung	5 A
Ausgangsspannung	24 V d.c $\pm$ 5%
- Leistung (max)	11 W
Verzögerung	ca. 2,5 Sekunden
Betriebstemperatur	von 0 bis 40 °C
Lagerungstemperatur	von -20 bis 50 °C

Anschlusskabel

Eingang	Länge = 0,5 m, 3 Adern
Ausgang zum Ventil	Länge = 5 m, 3 Adern
Gewicht (mit Kabel)	0,5 Kg (1,1 lbs)

Vent valve

Ventilzustand	offen (bei Versorgung geschlossen)
Hochvakuumanschluss	Adapter M8/M5
Lufteingang	Sinterbronzefilter oder Adapter Größe 1/4"
Bohrungsdurchmesser	1,2 mm (0,05")
Druckwerte	von 10^{-6} mbar bis 1 bar (von 10^{-7} Torr bis atm)
Leak rate	$\leq 1 \times 10^{-7}$ mbar l/s
Lebensdauer	1 Million Zyklen
Eingangsspannung	24 V d.c. +10% -5%
- Leistung	2,5 W
Bakeout - Temperatur	60 °C
Gewicht (ohne Kabel)	0,1 Kg (0,24 lb)

Auf nachstehender Abbildung sind die Abmessungen des Ventils Turbo-V Vent Valve angegeben.

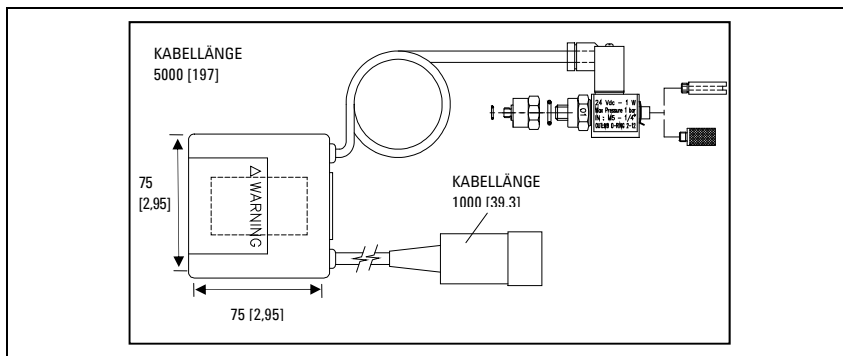


Abbildung 1 Maße in mm [Zoll]

Installation

In der Abbildung sind die verschiedenen Bauteile der Baugruppe Turbo-V Vent Valve dargestellt. Diese Bauteile werden lose geliefert und müssen daher vom Kunden zusammengebaut werden.

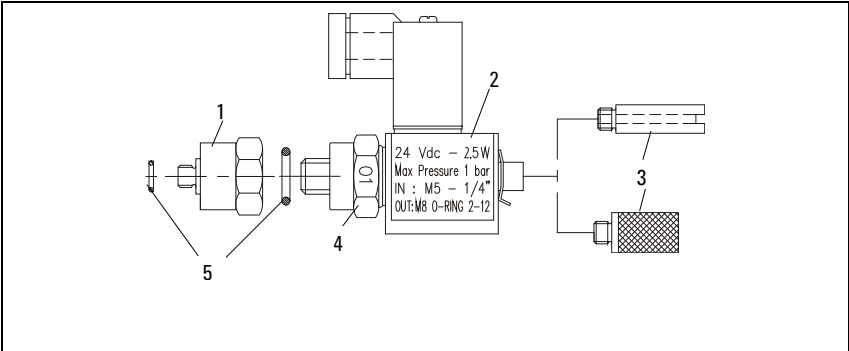


Abbildung 2 Bauteile des Ventils Turbo-V Vent Valve

1	Adapter M8- und M5
2	Ventil
3	Filter/Adapter Größe 1/4"
4	Befestigungsmutter für Spule
5	O-Ring

Die Baugruppe enthält zwei Steckstück/Schraubstück Adapter mit M8- und M5-Gewinde. Der Kunde verwendet jenen Adapter, der seinen Anforderungen entspricht.

VORSICHT!

Beim Zusammenbau dürfen die Nutmutter und die Befestigungsmutter der Spule, die sich im Ventil befindet, nicht losgeschraubt werden.

2 Anleitung zur Installation

Installation

Nach dem Zusammenbau muß das Ventil auf der Pumpe installiert werden. Bei Pumpen mit Verschlussschraube muß diese entfernt werden. Danach ist zur Befestigung des Ventils an der Pumpe der geeignete Adapter zu verwenden. Auf der folgenden Abbildung ist eine typische Installation an einer Pumpe mit Verschlussschraube dargestellt.

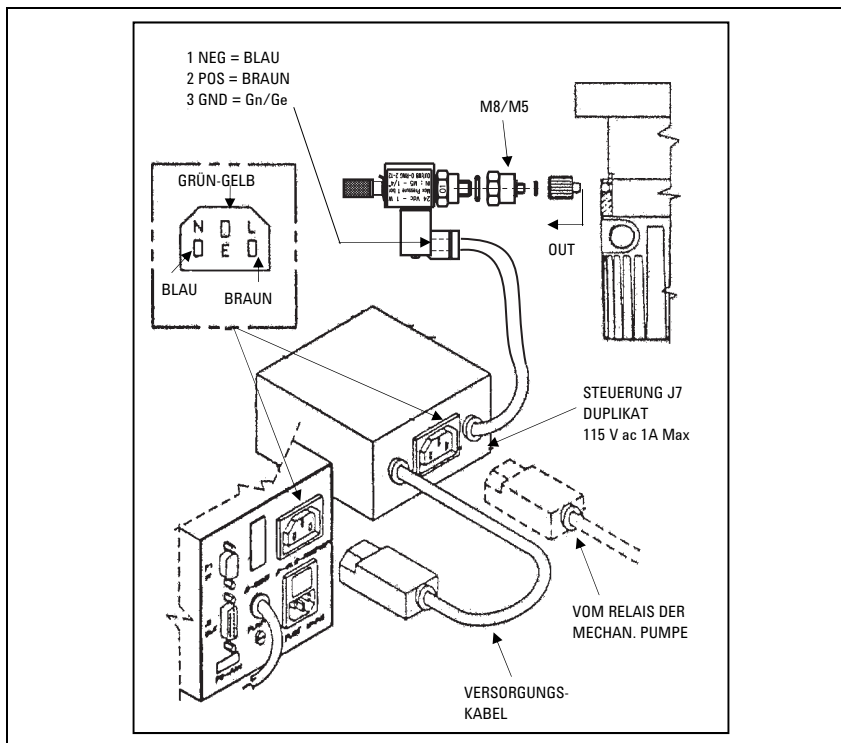


Abbildung 3 Installation auf Pumpe mit Verschlusschraube

Nach erfolgter mechanischer Installation das Verbindungskabel der Steuereinheit des "Heavy Duty Vent Valve" an den Stecker an der hinteren Platte der Steuerung der Turbopumpe anschließen.

VORSICHT!

Sicherstellen, daß die am Stecker vorhandene Ausgangsspannung 115 V a.c. beträgt, bevor die Baugruppe unter Spannung gesetzt wird.

Zur Installation an Pumpen ohne Verschlußschraube muß das mit der Pumpe gelieferte Flanschsystem verwendet werden, wie in der folgenden Abbildung dargestellt.

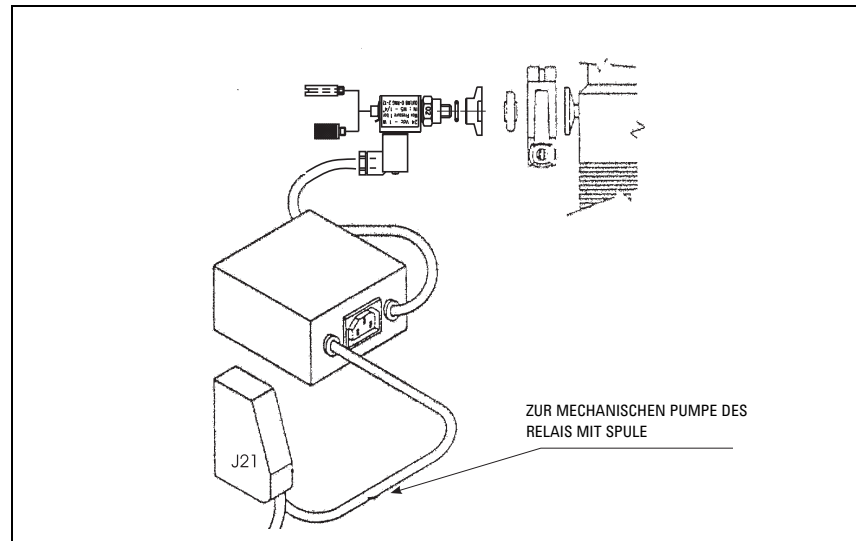


Abbildung 4 Installation an Pumpe ohne Verschlußschraube

Wenn die Installation an einer Pumpe vorgenommen wird, deren Steuerung über keinen Anschluß 115 V a.c. zur Ventilversorgung verfügt, muß der Stecker entfernt werden, indem das Versorgungskabel der Steuereinheit durchgeschnitten und an das Modul J21 angeschlossen wird, wie in obiger Abbildung dargestellt.

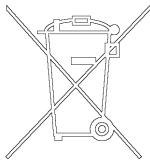
Entsorgung

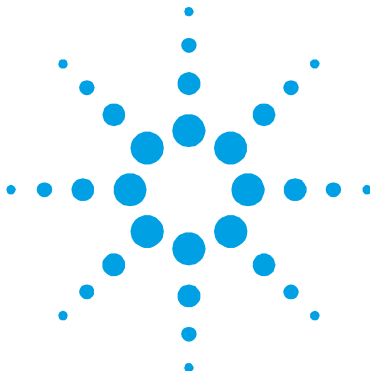
Bedeutung des "WEEE" Logos auf den Etiketten.

Das folgende Symbol ist in Übereinstimmung mit der EU-Richtlinie WEEE (Waste Electrical and Electronic Equipment) angebracht.

Dieses Symbol (**nur in den EU-Ländern gültig**) zeigt an, dass das betreffende Produkt nicht zusammen mit Hausmüll entsorgt werden darf sondern einem speziellen Sammelsystem zugeführt werden muss.

Der Endabnehmer sollte daher den Lieferanten des Geräts - d.h. die Muttergesellschaft oder den Wiederverkäufer - kontaktieren, um den Entsorgungsprozess zu starten, nachdem er die Verkaufsbedingungen geprüft hat.





3

Procédure pour l’installation

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Traduction de la mode d’emploi originale



Généralités

Le Turbo-V “Vent Valve” comporte un système de commande et une valve qui composent un dispositif complet pour la ventilation automatique de la pompe Turbo-V pendant la phase d’extinction ou en cas de chute de tension. La valve en condition de repos (non alimentée) est normalement ouverte. L’activation est réalisée de manière électromagnétique, alors que la fixation (Viton-sealed) est réalisée grâce à un adaptateur de type M8 ou M5 avec le joint torique correspondant sur l’orifice pour vide de la pompe. L’air en entrée dans la valve est filtré par un filtre ou un adaptateur de 1/4” pour tuyaux présent sur l’entrée d’air de la valve elle-même.

Le système de commande est alimenté par le gérant Turbo-V qui n’est pas prédisposé pour être monté sur rack.

Le système de commande est activé avec un retard prédéfini de 2,5 secondes environ pour éviter une ventilation inopportune pendant une chute de tension temporaire et pour permettre aux valves de système de se fermer avant la ventilation.

Caractéristiques techniques

Système de commande

Tension en entrée	120 Vca $\pm$ 10%
- fréquence	de 50 à 60 Hz
- puissance	5 A
Tension en sortie	24 Vcc $\pm$ 5%
- puissance (maxi)	11 W
Retard	2,5 secondes environ
Température d'exercice	de 0 à 40 °C
Température de stockage	de -20 à 50 °C

Câbles de connexion

Entrée	0,5 mètres de long, 3 fils
Sorties à la valve	5 mètre de long, 3 fils
Poids (avec câble)	0,5 Kg (1,1 lbs)

Vent Valve

Etat valve	Ouverte normalement (fermée sous alimentation)
Connexion du vide	Adaptateur M8/M5
Entrée d'air	Filtre bronze fritté ou un adaptateur de 1/4" pour tuyaux
Dimension orifice	1,2 mm (0,05")
Gamme de pressions	de 10^{-6} mbar à 1 bar (de 10^{-7} Torr à atm)
Leak rate	$\leq 1 \times 10^{-7}$ mbar l/s
Durée de vie	1 million de cycles
Tension en entrée	24 Vcc +10% -5%
- puissance	2,5 W
Température de bakeout	60 °C
Poids (sans câble)	0,1 Kg (0,24 lb)

La figure ci-dessous indique les dimensions d'encombrement du Turbo-V Vent Valve.

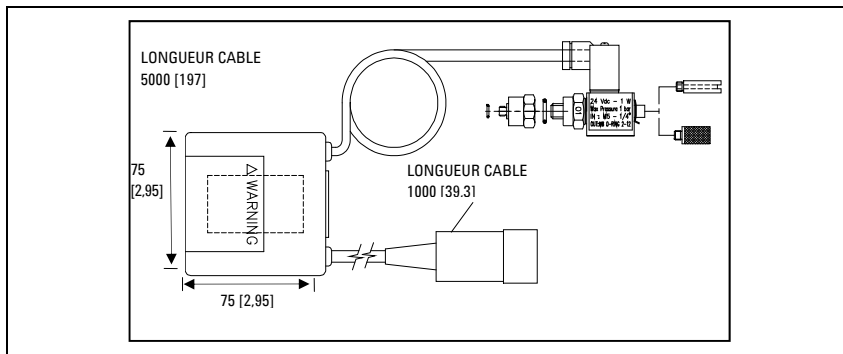


Figure 1 Dimensions en mm (pouces)

Installation

La figure illustre les différents composants présents dans le kit Turbo-V Vent Valve. Ces composants sont fournis démontés; il faudra donc que le client fasse l'assemblage du kit.

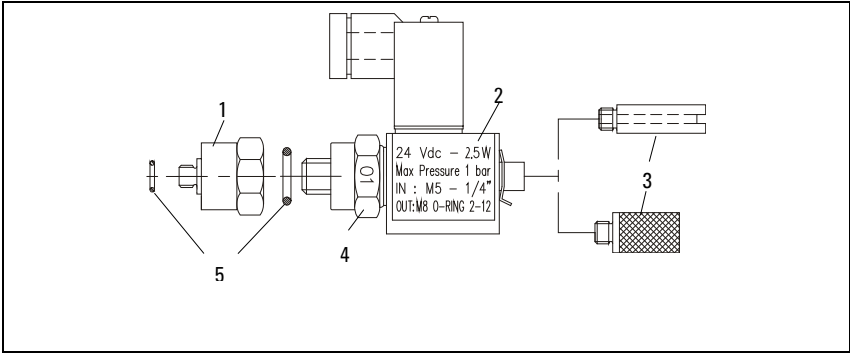


Figure 2 Kit Turbo-V Vent Valve

1	Adaptateur M8 - M5
2	Valve
3	Filtre/Adaptateur de 1/4" pour tuyaux
4	Ecrou de fixation bobine
5	Joint torique

Le kit contient deux adaptateurs femelle/mâle, un M8 et un M5. Ce sera au client d'utiliser celui qui convient à ses nécessités.

ATTENTION!

Pendant la phase d'assemblage du kit, il faut faire attention à ne pas dévisser la baïonnette et l'écrou de fixation de la bobine interne à la valve.

3 Procédure pour l'installation

Installation

Une fois l'assemblage effectué, procéder à l'installation sur la pompe.

Pour les pompes qui comportent un bouchon à vis, après avoir enlevé ce dernier, utiliser l'adaptateur approprié pour fixer la valve à la pompe.

La figure ci-après illustre une installation caractéristique sur une pompe munie de bouchon.

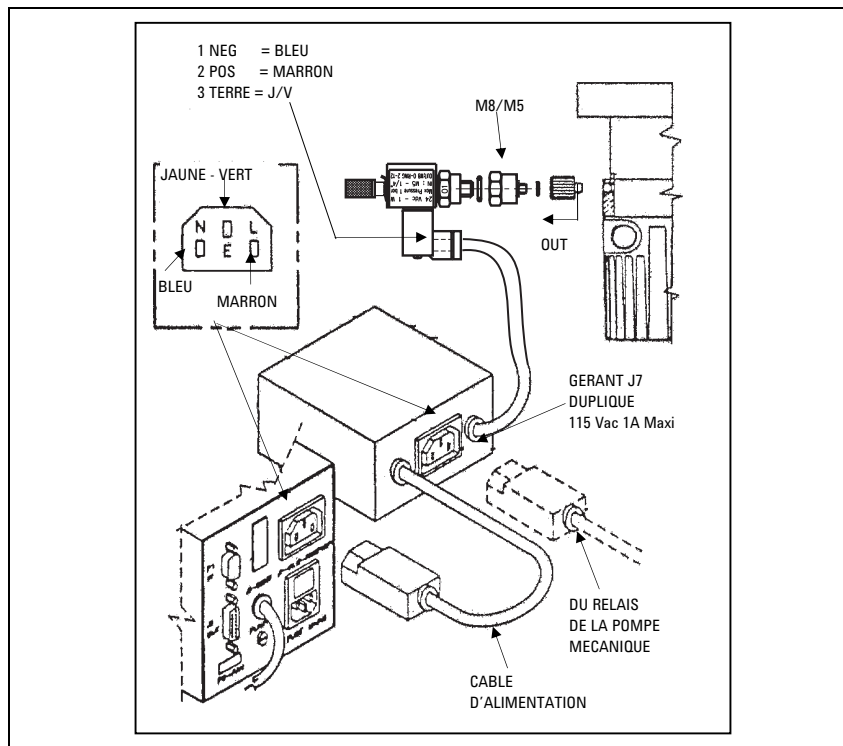


Figure 3 Installation sur pompe avec bouchon à vis

Après avoir achevé l'installation mécanique, brancher le câble d'alimentation du système de commande du Turbo-V Vent Valve à son connecteur sur le panneau arrière du gérant du Turbo pump.

ATTENTION!

Avant d'alimenter le kit, vérifier que la tension de sortie présente sur le connecteur est de 115 Vac.

Pour l'installation sur des pompes non pourvues de bouchon à vis, il faut utiliser le système de brides fourni avec la pompe, comme l'indique la figure.

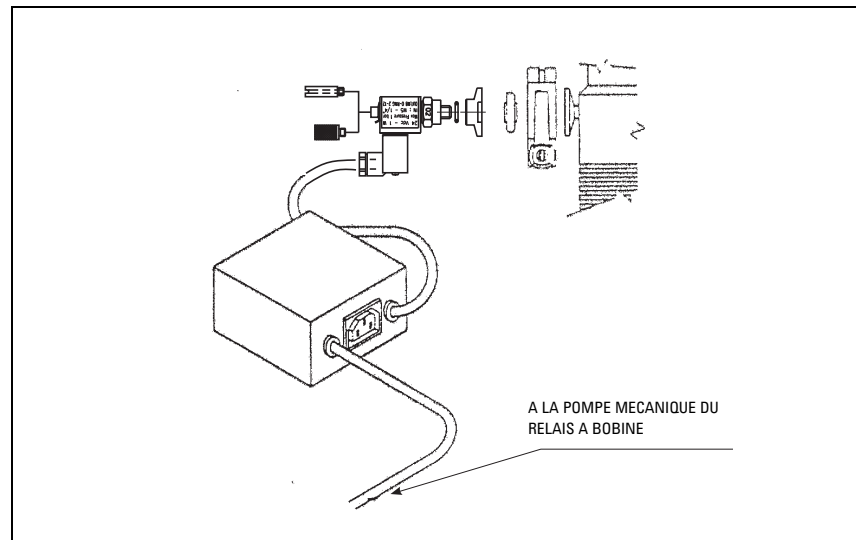


Figure 4 Installation sur pompe sans bouchon à vis

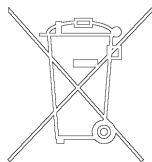
Si l'on exécute l'installation sur une pompe dont le gérant ne dispose pas de la prise d'alimentation valve à 115 Vac, il faut enlever le connecteur en coupant le câble d'alimentation du gérant; puis le brancher au module J21 ainsi que sur la figure ci-dessus.

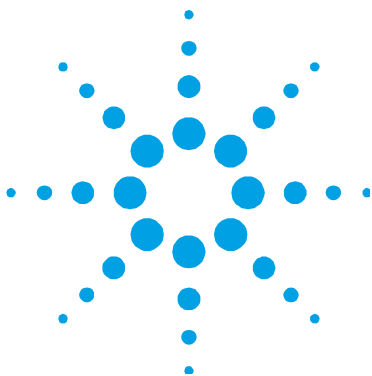
Mise au Rebut

Signification du logo "WEEE" figurant sur les étiquettes.

Le symbole ci-dessous est appliqué conformément à la directive CE nommée "WEEE".

Ce symbole (**uniquement valide pour les pays de la Communauté européenne**) indique que le produit sur lequel il est appliqué NE doit PAS être mis au rebut avec les ordures ménagères ou les déchets industriels ordinaires, mais passer par un système de collecte sélective. Après avoir vérifié les termes et conditions du contrat de vente, l'utilisateur final est donc prié de contacter le fournisseur du dispositif, maison mère ou revendeur, pour mettre en oeuvre le processus de collecte et mise au rebut.





4

Installation procedure

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Original Instructions



Overview

The Turbo-V “Vent Valve”, consisting of a control unit and a valve, 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 powered by the Turbo-V controller and is not suitable for rack mounting.

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.

Technical characteristics

Control unit

Input voltage	120 Vac $\pm$ 10%
- frequency	50 to 60 Hz
- power	5 A
Output voltage	24 Vdc $\pm$ 5%
- power (max)	11 W
Delay time	about 2.5 sec.
Operating temperature	0 to 40 °C
Storage temperature	-20 to 50 °C

Connection Cables

Input	0.5 meter long, 3 wire
Output to valve	5 meters long, 3 wire
Weight (with cable)	0.5 Kg (1.1 lbs)

Vent Valve

Valve status	Normally open (closed when power is applied)
High vacuum connection	M8/M5 thread
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)

The following figure gives the overall dimensions of the Turbo-V Vent Valve.

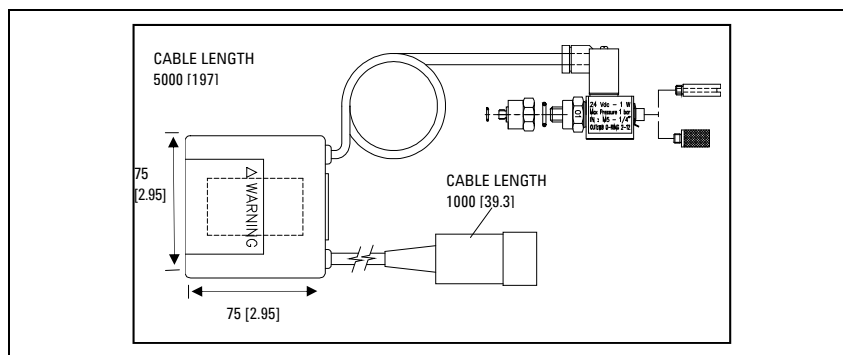


Figure 1 Dimensions in mm [inches]

Installation

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

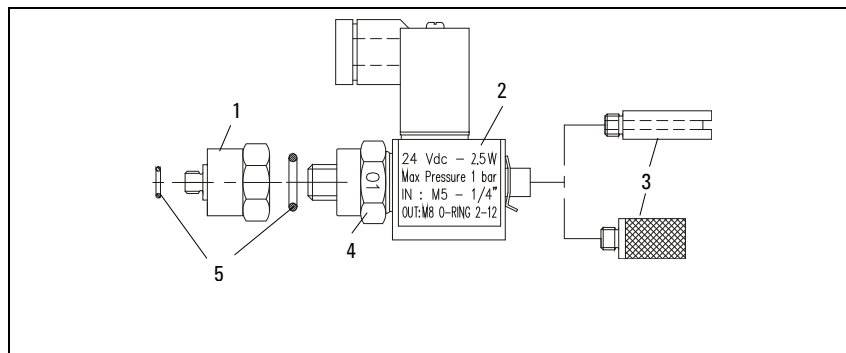


Figure 2 Turbo-V Vent Valve Kit

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.

Installation

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.

The following figure shows a typical installation on a pump equipped with a screw cap.

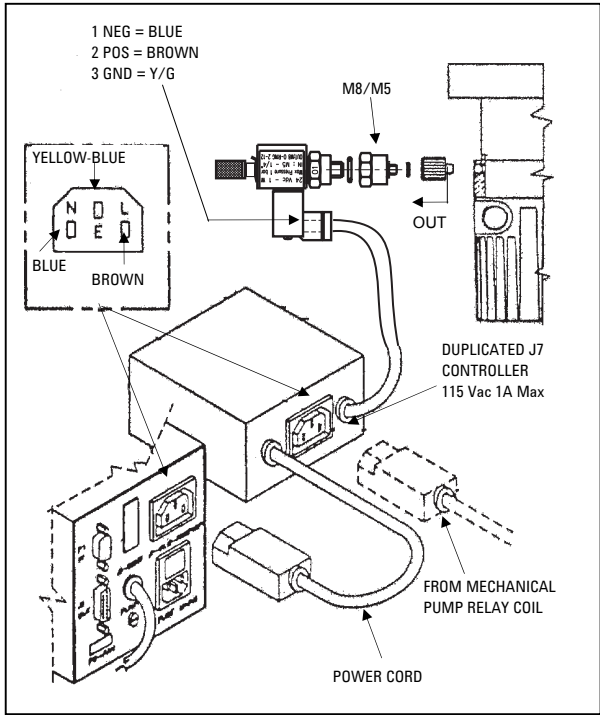


Figure 3 Installation on a Pump Equipped with a Screw Cap

Upon completion of the mechanical installation, attach the Turbo-V vent valve controller unit power cord to the related connector on the rear panel of the Turbo pump controller.

CAUTION!

Before powering on the kit, be sure that the output voltage on the connector is 115 Vac.

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.

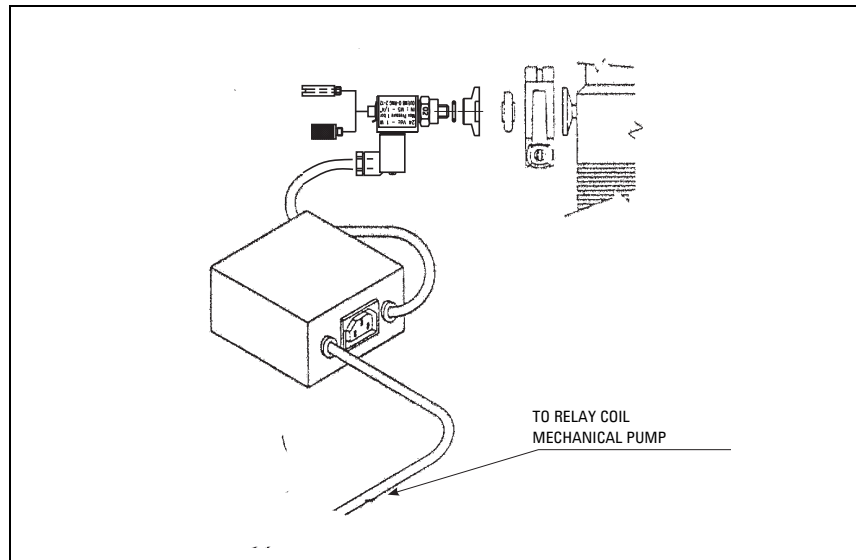


Figure 4 Installation on a Pump not Equipped with a Screw Cap

For installation on a pump whose controller is not equipped with a 115 Vac valve power supply socket, remove the connector after cutting the controller power cord and connect it to module J21 as shown in the previous 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.



Agilent Technologies

Vacuum Products Division

Dear Customer,

Thank you for purchasing an Agilent vacuum product. At Agilent Vacuum Products Division we make every effort to ensure that you will be satisfied with the product and/or service you have purchased.

As part of our Continuous Improvement effort, we ask that you report to us any problem you may have had with the purchase or operation of our products. On the back side you find a Corrective Action request form that you may fill out in the first part and return to us.

This form is intended to supplement normal lines of communications and to resolve problems that existing systems are not addressing in an adequate or timely manner.

Upon receipt of your Corrective Action Request we will determine the Root Cause of the problem and take the necessary actions to eliminate it. You will be contacted by one of our employees who will review the problem with you and update you, with the second part of the same form, on our actions.

Your business is very important to us. Please, take the time and let us know how we can improve.

Sincerely,

Giampaolo LEVI

***Vice President and General Manager
Agilent Vacuum Products Division***

Note: Fax or mail the Customer Request for Action (see backside page) to Agilent Vacuum Products Division (Torino) – Quality Assurance or to your nearest Agilent representative for onward transmission to the same address.

CUSTOMER REQUEST FOR CORRECTIVE / PREVENTIVE / IMPROVEMENT ACTION

TO: AGILENT VACUUM PRODUCTS DIVISION TORINO – QUALITY ASSURANCE

FAX N°: XXXX-011-9979350

ADDRESS: AGILENT TECHNOLOGIES ITALIA S.p.A. – Vacuum Products Division –

Via F.lli Varian, 54 – 10040 Leinì (TO) – Italy

E-MAIL: vpd-qualityassurance_pdl-ext@agilent.com

NAME _____	COMPANY _____	FUNCTION _____
ADDRESS: _____ _____		
TEL. N° : _____ FAX N° : _____		
E-MAIL: _____		
PROBLEM / SUGGESTION : _____ _____ _____ _____ _____		
REFERENCE INFORMATION (model n°, serial n°, ordering information, time to failure after installation, etc.): _____ _____ _____ _____		
		DATE _____
CORRECTIVE ACTION PLAN / ACTUATION (by AGILENT VPD) _____ _____ _____ _____ _____ _____		LOG N° _____

XXX = Code for dialing Italy from your country (es. 01139 from USA; 00139 from Japan, etc.)



Agilent Technologies



Vacuum Products Division Instructions for returning products

Dear Customer:

Please follow these instructions whenever one of our products needs to be returned.

- 1) Complete the attached Request for Return form and send it to Agilent Technologies (see below), taking particular care to identify all products that have pumped or been exposed to any toxic or hazardous materials.

- 2) After evaluating the information, Agilent Technologies will provide you with a Return Authorization (RA) number via email or fax, as requested.

Note: Depending on the type of return, a Purchase Order may be required at the time the Request for Return is submitted. We will quote any necessary services (evaluation, repair, special cleaning, eg).

- 3) **Important steps for the shipment of returning product:**

- Remove all accessories from the core product (e.g. inlet screens, vent valves).
- Prior to shipment, drain any oils or other liquids, purge or flush all gasses, and wipe off any excess residue.
- If ordering an Advance Exchange product, please use the packaging from the Advance Exchange to return the defective product.
- Seal the product in a plastic bag, and package product carefully to avoid damage in transit. You are responsible for loss or damage in transit.
- Agilent Technologies is not responsible for returning customer provided packaging or containers.
- **Clearly label package with RA number.** Using the shipping label provided will ensure the proper address and RA number are on the package. Packages shipped to Agilent without a RA clearly written on the outside cannot be accepted and will be returned.

- 4) Return only products for which the RA was issued.

- 5) **Product being returned under a RA must be received within 15 business days.**

- 6) **Ship to the location specified on the printable label, which will be sent, along with the RA number, as soon as we have received all of the required information.** Customer is responsible for freight charges on returning product.

- 7) Return shipments must comply with all applicable **Shipping Regulations** (IATA, DOT, etc.) and carrier requirements.

RETURN THE COMPLETED REQUEST FOR RETURN FORM TO YOUR NEAREST LOCATION:

EUROPE:

Fax: 00 39 011 9979 330

Fax Free: 00 800 345 345 00

Toll Free: 00 800 234 234 00

vpt-customer@agilent.com

NORTH AMERICA:

Fax: 1 781 860 9252

Toll Free: 800 882 7426, Option 3

vpl-ra@agilent.com

PACIFIC RIM:

please visit our website for individual office information

<http://www.agilent.com>



Vacuum Products Division Request for Return Form (Health and Safety Certification)

Please read important policy information on Page 3 that applies to all returns.

1) CUSTOMER INFORMATION

Company Name:		Contact Name:
Tel:	Email:	Fax:
Customer Ship To:		Customer Bill To:
Europe only: VAT reg. Number:		USA/Canada only: ☐ Taxable ☐ Non-taxable

2) PRODUCT IDENTIFICATION

Product Description	Agilent P/N	Agilent S/N	Original Purchasing Reference

3) TYPE OF RETURN (Choose one from each row and supply Purchase Order if requesting a billable service)

- 3A. ☐ Non-Billable ☐ Billable ➡ New PO # (hard copy must be submitted with this form):
- 3B. ☐ Exchange ☐ Repair ☐ Upgrade ☐ Consignment/Demo ☐ Calibration ☐ Evaluation ☐ Return for Credit

4) HEALTH and SAFETY CERTIFICATION

AGILENT TECHNOLOGIES CANNOT ACCEPT ANY PRODUCTS CONTAMINATED WITH BIOLOGICAL OR EXPLOSIVE HAZARDS, RADIOACTIVE MATERIAL, OR MERCURY AT ITS FACILITY.

Call Agilent Technologies to discuss alternatives if this requirement presents a problem.

The equipment listed above (check one):

☐

HAS NOT pumped or been exposed to any toxic or hazardous materials. OR

☐

HAS pumped or been exposed to the following toxic or hazardous materials. If this box is checked, the following information must also be filled out. Check boxes for all materials to which product(s) pumped or was exposed:

☐ Toxic☐ Corrosive☐ Reactive☐ Flammable☐ Explosive☐ Biological☐ Radioactive

List all toxic/hazardous materials. Include product name, chemical name, and chemical symbol or formula:

NOTE: If a product is received at Agilent which is contaminated with a toxic or hazardous material that was not disclosed, the customer will be held responsible for all costs incurred to ensure the safe handling of the product, and is liable for any harm or injury to Agilent employees as well as to any third party occurring as a result of exposure to toxic or hazardous materials present in the product.

Print Name:

Authorized Signature:

Date:

5) FAILURE INFORMATION:

Failure Mode (REQUIRED FIELD. See next page for suggestions of failure terms):
Detailed Description of Malfunction: (Please provide the error message)
Application (system and model):

I understand and agree to the terms of Section 6, Page 3/3.

Print Name:

Authorized Signature:

Date:



Vacuum Products Division Request for Return Form (Health and Safety Certification)

Please use these Failure Mode to describe the concern about the product on Page 2.

TURBO PUMPS and TURBO CONTROLLERS

APPARENT DEFECT/MALFUNCTION	POSITION	PARAMETERS
- Does not start - Does not spin freely - Does not reach full speed - Mechanical Contact - Cooling defective	- Noise - Vibrations - Leak - Overtemperature - Clogging	- Vertical - Horizontal - Upside-down - Other:
		Power: Rotational Speed: Current: Inlet Pressure: Temp 1: Foreline Pressure: Temp 2: Purge flow: OPERATING TIME:

ION PUMPS/CONTROLLERS

- Bad feedthrough - Vacuum leak - Error code on display	- Poor vacuum - High voltage problem - Other
---	--

VALVES/COMPONENTS

- Main seal leak - Solenoid failure - Damaged sealing area	- Bellows leak - Damaged flange - Other
--	---

LEAK DETECTORS

- Cannot calibrate - Vacuum system unstable - Failed to start	- No zero/high background - Cannot reach test mode - Other
---	--

INSTRUMENTS

- Gauge tube not working - Communication failure - Error code on display	- Display problem - Degass not working - Other
--	--

SCROLL AND ROTARY VANE PUMPS

- Pump doesn't start - Doesn't reach vacuum - Pump seized	- Noisy pump (describe) - Over temperature - Other
---	--

DIFFUSION PUMPS

- Heater failure - Doesn't reach vacuum - Vacuum leak	- Electrical problem - Cooling coil damage - Other
---	--

Section 6) ADDITIONAL TERMS

Please read the terms and conditions below as they apply to all returns and are in addition to the Agilent Technologies Vacuum Product Division – Products and Services Terms of Sale.

- Customer is responsible for the freight charges for the returning product. Return shipments must comply with all applicable **Shipping Regulations** (IATA, DOT, etc.) and carrier requirements.
- Customers receiving an Advance Exchange product agree to return the defective, rebuildable part to Agilent Technologies **within 15 business days**. Failure to do so, or returning a non-rebuildable part (crashed), will result in an invoice for the non-returned/non-rebuildable part.
- Returns for credit toward the purchase of new or refurbished Products are subject to prior Agilent approval and may incur a restocking fee. Please reference the original purchase order number.
- Units returned for evaluation will be evaluated, and a quote for repair will be issued. If you choose to have the unit repaired, the cost of the evaluation will be deducted from the final repair pricing. A Purchase Order for the final repair price should be issued within 3 weeks of quotation date. Units without a Purchase Order for repair will be returned to the customer, and the evaluation fee will be invoiced.
- A Special Cleaning fee will apply to all exposed products per Section 4 of this document.
- If requesting a calibration service, units must be functionally capable of being calibrated.

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