

# Agilent Vaclon Plus 300 Pump

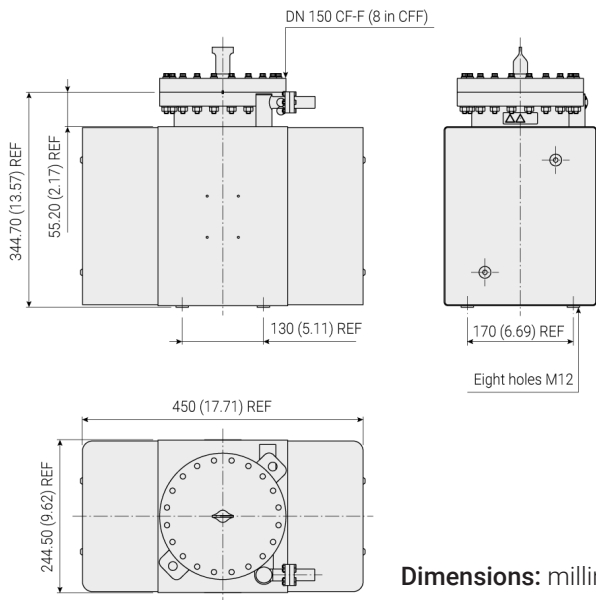


## Product description

The Vaclon Plus 300 L/s pump provides high pumping speed in a moderate footprint and weight and is used in laboratories where ultrahigh and extreme high vacuum conditions are crucial. This pump is available with three types of elements. Diode elements are for general-purpose UHV and XHV applications where the highest hydrogen pumping speed is critical and the system is seldom vented or prone to atmospheric leaks. StarCell elements handle a high amount of noble gases (better than noble diode) and hydrogen (comparable to the diode). StarCell also provides the highest speed and capacity for methane, argon, and helium. Noble diode elements are for general-purpose UHV and XHV where pumping of residual argon and other noble gases is required.

## Features and benefits

- Available with StarCell, diode, and noble diode elements to provide the best pumping speed for different gases
- Available with ConFlat 8" nonrotatable flange, additional 8" ConFlat port, double-ended and side ports available with a choice of feedthroughs (Fischer, King, DESY, Varian, Safeconn) in different orientations
- No moving parts ensures vibration-free operation for sensitive applications
- Low leakage current provides stable vacuum pressure reading
- Low magnetic field minimizes system interference
- Vacuum processed at >400 °C and pinched off under vacuum to ensure cleanliness and vacuum integrity prior to installation
- Customizable with different high-voltage feedthroughs, body geometries, additional ports, and pumping cell arrangements, and available with optically shielded baffles, external heaters, and magnetic shielding to meet your needs

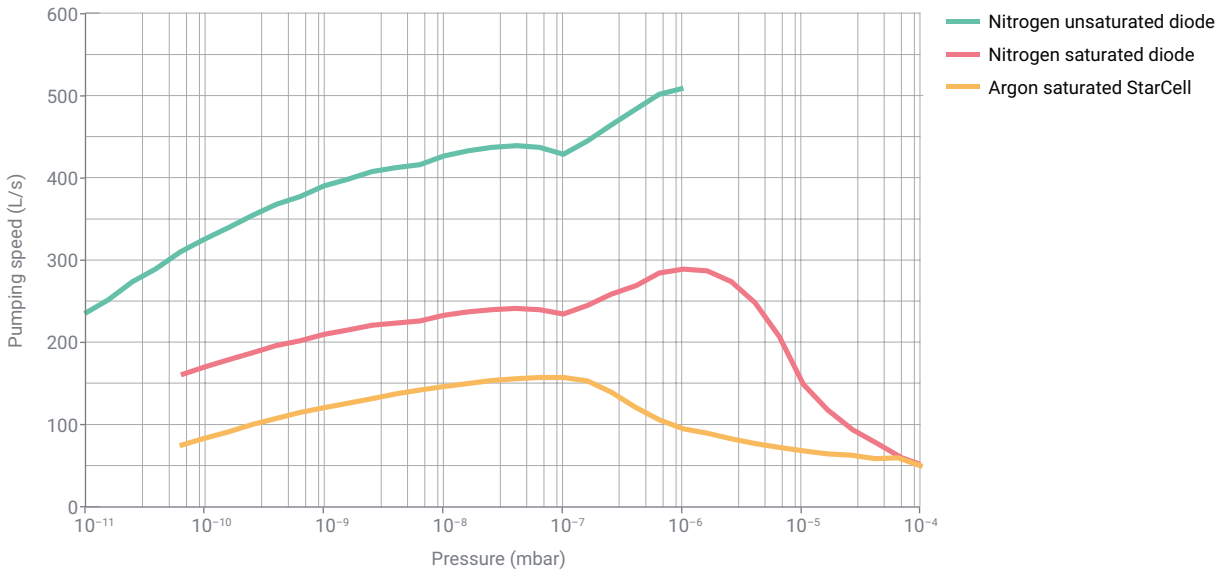


Dimensions: millimeters (inches)

Vaclon Plus 300 Technical Specifications			
	StarCell	Noble Diode	Diode
Nominal Pumping Speed for Nitrogen*	240 L/s	260 L/s	300 L/s
Operating Life at $1 \times 10^{-6}$ mbar	80,000 hrs	50,000 hrs	50,000 hrs
Maximum Starting Pressure	$\leq 5 \times 10^{-2}$ mbar	$\leq 1 \times 10^{-3}$ mbar	$\leq 1 \times 10^{-3}$ mbar
Ultimate Pressure	Below $10^{-11}$		
Inlet Flange	DN 150 CF-F (8 in CFF) AISI 304 ESR		
Maximum Baking Temperature	Pump without magnets Pump with magnets HV cable	450 °C 350 °C 220 °C	
Weight	69 kg (149 lb)		

\* Tested according to ISO/DIS 3556-1-1992. Customized design available on request.

### Vaclon Plus 300 pumping speed versus pressure



## Ordering information

Description	Part Number
<b>Vaclon Plus 300 Pumps</b>	
Diode	9191610
Diode with 120 V Heaters Installed	9191611
Diode with 220 V Heaters Installed	9191612
Diode, Double-Ended	9191650
Diode, Double-Ended with 120 V Heaters Installed	9191651
Diode, Double-Ended with 220 V Heaters Installed	9191652
StarCell	9191640
StarCell with 120 V Heaters Installed	9191641
StarCell with 220 V Heaters Installed	9191642
StarCell, Double-Ended	9191680
StarCell, Double-Ended with 120 V Heaters Installed	9191681
StarCell, Double-Ended with 220 V Heaters Installed	9191682
Noble Diode	9191620
Noble Diode with 120 V Heaters Installed	9191621
Noble Diode with 220 V Heaters Installed	9191622
Noble Diode, Double-Ended	9191660
Agilent offers these pumps with the SHV 10kV (SAFECONN) feedthrough option. Please contact Agilent or your local representative.	

Description	Part Number
<b>4UHV Controller</b>	
200 W neg	9299010
200 W pos	9299011
<b>IPCMini Controller</b>	
IPCMini, 110/220 V Fischer HV, neg	X3602-64000
IPCMini, 110/220 V Fischer HV, pos	X3602-64001
Ion pump controllers (4UHV and IPCMini) are available in multiple configurations. For a complete list of part numbers, please refer to their respective data sheets.	
<b>HV Cables</b>	
HV Cable, 4 m (13 ft), Fischer Controller to Fischer Pump Side, Bakeable, Radiation Resistant, with Interlock	9290705
HV Cable, 7 m (23 ft), Fischer Controller to Fischer Pump Side, Bakeable, Radiation Resistant, with Interlock	9290707
HV Cable, 10 m (33 ft), Fischer Controller to Fischer Pump Side, Bakeable, Radiation Resistant, with Interlock	9290708
HV Cable, 20 m (66 ft), Fischer Controller to Fischer Pump Side, Bakeable, Radiation Resistant, with Interlock	9290709
<b>Replacement Parts</b>	
HV Pump Feedthrough, Fischer with Interlock	9595125
Pumping Element* Diode	9199040
Pumping Element* Noble Diode	9199045
Pumping Element* StarCell	9199030
Heaters**, 120 V, Input Power 580 W	9190075
Heaters**, 220 V, Input Power 580 W	9190074
* Quantity required: 4 ** Contact your local Agilent representative to order replacement heaters or upgrade existing pumps.	

## Contact information

### Americas

Agilent Technologies  
121 Hartwell Avenue,  
Lexington, MA 02421 USA  
Toll free: +1 800 882 7426  
vpl-customer@agilent.com

[www.agilent.com/en/product/vacuum-technologies/ion-pumps-controllers/large-ion-pumps/vacion-plus-300-pump](http://www.agilent.com/en/product/vacuum-technologies/ion-pumps-controllers/large-ion-pumps/vacion-plus-300-pump)

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This information is subject to change without notice.

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### Europe, Middle East, Africa, India

Agilent Technologies Italia SpA  
Via F.lli Varian 54,  
10040 Leini (Torino), Italy  
Tel: +39 011 9979 111  
Toll free: 00 800 234 234 00  
vpt-customer@agilent.com

### China

Beijing Office Agilent Technologies  
(China) Co. Ltd.  
No.3, Wang Jing Bei Lu,  
Chao Yang District,  
Beijing, 100102, China  
Toll free: 800 820 6778  
contacts.vacuum@agilent.com

For more information, please contact your Agilent representative or visit [www.agilent.com/chem/vacuum](http://www.agilent.com/chem/vacuum) where you can chat live with a vacuum expert.

