

Agilent Vaclon Plus 500 Pump

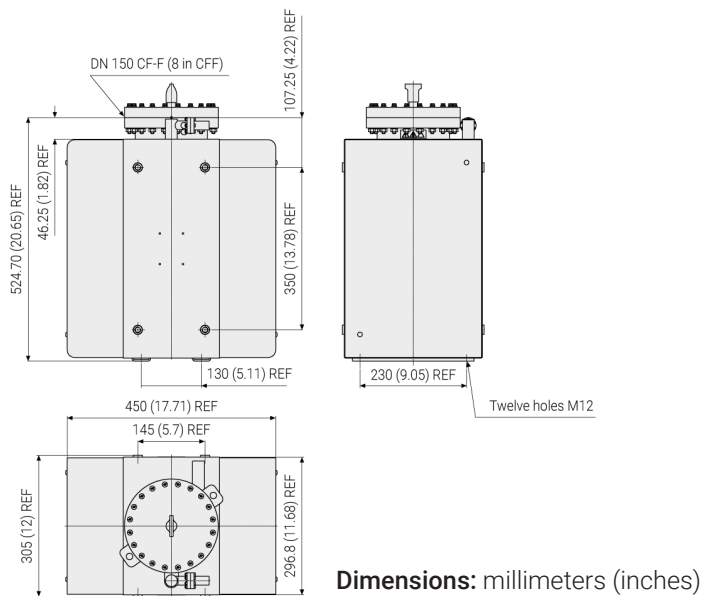


Product description

The Vaclon Plus 500 L/s pump provides exceptional pumping speed for larger applications. Used where ultrahigh and extreme high vacuum conditions are crucial, it is the pump of choice for particle accelerators and interferometers. This pump is available with three types of elements. Diode elements are for general-purpose UHV and XHV 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 diode) and provide the highest speed and capacity for methane, argon, and helium. Noble diode elements are for general-purpose UHV and XHV where pumping of residual noble gases is required.

Features and benefits

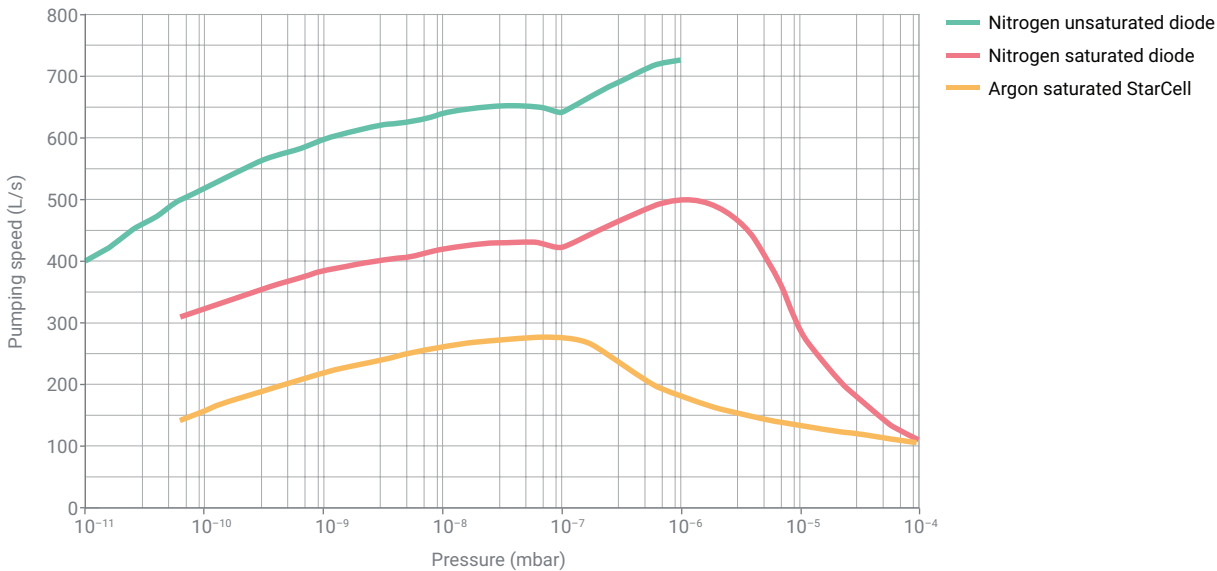
- Available with StarCell, diode, and noble diode elements to provide the best pumping speed for different gases
- Available with ConFlat 8" nonrotatable flange, additional 8" ConFlat port, double-ended, and side ports available with a choice of feedthroughs (Fischer, King, DESY, Varian, Safeconn) in 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 $> 400\text{ }^{\circ}\text{C}$ 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



Vaclon Plus 500 Technical Specifications			
	StarCell	Noble Diode	Diode
Nominal Pumping Speed for Nitrogen*	410 L/s	440 L/s	500 L/s
Operating Life at 1×10^{-6} mbar	80,000 hr	50,000 hr	50,000 hr
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 160 CF-F (8 in CFF) AISI 304 ESR		
Maximum Baking Temperature	Pump without magnets 450 °C Pump with magnets 350 °C HV cable 220 °C		
Weight	120 kg (264 lb)		

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

Vaclon Plus 500 pumping speed versus pressure



Ordering information

Description	Part Number
Vaclon Plus 500 Pumps	
Diode	9191710
Diode with 120 V Heaters Installed	9191711
Diode with 220 V Heaters Installed	9191712
Diode, Double-Ended	9191750
Diode, Double-Ended with 120 V Heaters Installed	9191751
Diode, Double-Ended with 220 V Heaters Installed	9191752
StarCell	9191740
StarCell, with 120 V Heaters Installed	9191741
StarCell, with 220 V Heaters Installed	9191742
StarCell, Double-Ended	9191780
StarCell, Double-Ended with 120 V Heaters Installed	9191781
StarCell, Double-Ended with 220 V Heaters Installed	9191782
Noble Diode, with 120 V Heaters Installed	9191721
Noble Diode, with 220 V Heaters Installed	9191722
Noble Diode, Double-Ended	9191760
Agilent offers these pumps with the SHV 10kV (SAFECONN) feedthrough option. Please contact Agilent or your local representative.	
4UHV Controller	
200 W neg	9299010
200 W pos	9299011
IPCMini Controller	
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.	

Description	Part Number
HV Cables	
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
Replacement Parts	
HV Pump Feedthrough, Fischer, with Interlock	9595125
Pumping Element* for Diode	9199040
Pumping Element* for Noble Diode	9199045
Pumping Element* for StarCell	9199030
Heaters**, 120 V, Input Power 780 W	9190077
Heaters**, 220 V, Input Power 780 W	9190076
* Quantity required: 8 ** Contact your local Agilent representative to order replacement heaters or upgrade existing pumps.	

Contact information

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

