

Agilent Vaclon Plus 200 Pump

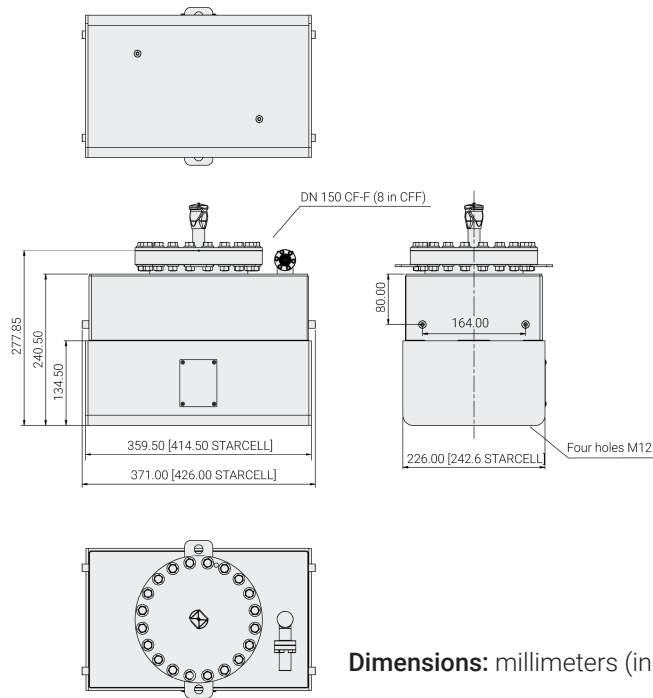


Product description

The Vaclon Plus 200 L/s pump delivers faster pumpdown (peak pumping speed: 10^{-8} mbar) due to an optimized magnetic field, and is ideal where UHV and XHV conditions are crucial. The pump undergoes a vacuum firing process to minimize hydrogen outgassing. It is available with three types of elements. Diode elements are for general-purpose UHV and XHV applications where highest hydrogen pumping speed is critical, and the system is seldom vented or prone to leaks. StarCell elements handle more noble gases than noble diode and more hydrogen than diode, with 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 2.75" 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 external heaters and magnetic shielding to meet your needs

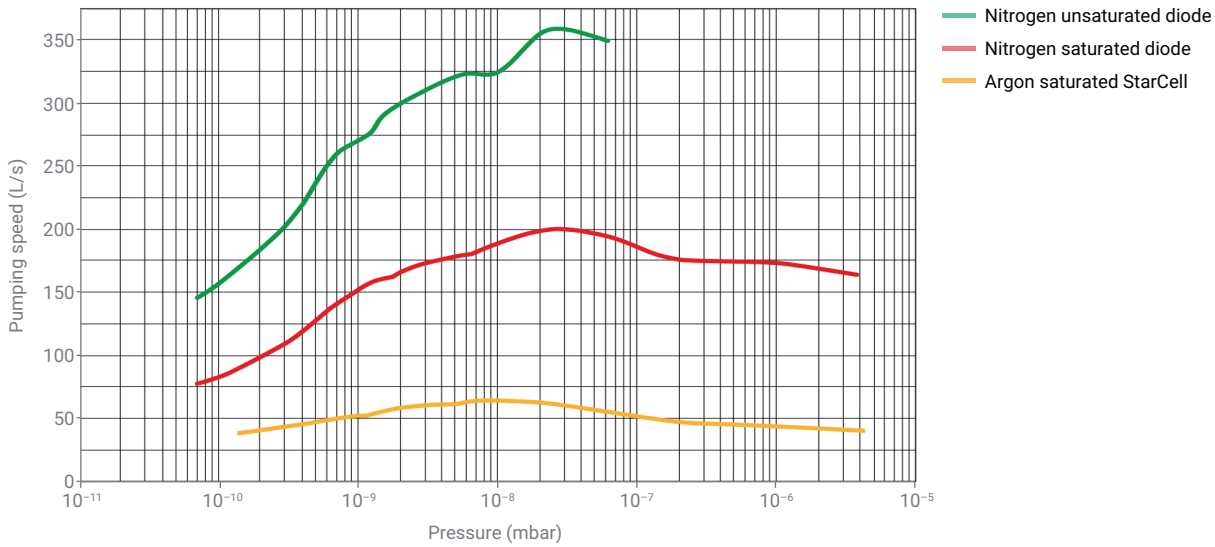


Dimensions: millimeters (inches)

Vaclon Plus 200 Technical Specifications			
	StarCell	Noble Diode	Diode
Nominal Pumping Speed for Nitrogen*	180 L/s	185 L/s	200 L/s
Saturated Pumping Speed For Argon*	63 L/s	60 L/s	
Operating Life at 1×10^{-6} mbar	80,000 hrs	50,000 hrs	50,000 hrs
Protect Current	50 mA	50 mA	50 mA
Maximum Starting Pressure	$\leq 5 \times 10^{-2}$ mbar	$\leq 1 \times 10^{-3}$ mbar	$\leq 1 \times 10^{-3}$ mbar
Ultimate Pressure	10^{-11}	10^{-11}	10^{-11}
Inlet Flange	DN 150 CF-F (8 in CFF) AISI 304 ESR		
Internal Volume	14 L	12.2 L	12.2 L
Maximum Baking Temperature	Pump without magnets Pump with magnets HV cable	450 °C 350 °C 220 °C	
Weight	51 kg (112 lb)	45 kg (99 lb)	45 kg (99 lb)

* Tested according to ISO/DIS 3556-1-1992

Vaclon Plus 200 pumping speed versus pressure



Ordering information

Description	Part Number
VacIon Plus 200 Pumps	
Diode	X3601-64000
Diode, with 120 V Heaters Installed	X3601-64002
Diode, with 220 V Heaters Installed	X3601-64004
Diode with Side Port (DN 40 CF-F (2.75 in CFF))	X3601-64001
Diode, with Side Port (DN 40 CF-F (2.75 in CFF)) and 120 V Heaters Installed	X3601-64003
Diode, Double-Ended with 220 V Heaters Installed	X3601-64005
StarCell	X3601-64040
StarCell, with 120 V Heaters Installed	X3601-64042
StarCell, with 220 V Heaters Installed	X3601-64044
StarCell with Side Port (DN 40 CF-F (2.75 in CFF))	X3601-64041
StarCell, with Side Port (DN 40 CF-F (2.75 in CFF)) and 120 V Heaters Installed	X3601-64043
StarCell, with Side Port (DN 40 CF-F (2.75 in CFF)) and 220 V Heaters Installed	X3601-64045
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
Heaters, 120 V, (2/pk), Diode	X3601-68003
Heaters, 220 V, (2/pk), Diode	X3601-68004
Heaters, 120 V, for Side Port Version (2/pk), Diode	X3601-68007
Heaters, 220 V, for Side Port Version (2/pk), Diode	X3601-68008
Heaters, 120 V, (2/pk), StarCell	X3601-68005
Heaters, 220 V, (2/pk), StarCell	X3601-68006
Heaters, 120 V, for Side Port Version (2/pk), StarCell	X3601-68009
Heaters, 220 V, for Side Port Version (2/pk), StarCell	X3601-68010
Diode Element Replacement Kit	X3601-68000
Noble Diode Element Replacement Kit	X3601-68001
StarCell Element Replacement Kit	X3601-68002
* Please contact your local Agilent representative to order heaters for pump replacements or upgrades.	

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