

Agilent Ion Pumps

Solutions for Ultra and Extreme-High Vacuum

Dynapumps®



	Miniature Pump	2 L/s Pump	10 L/s Pump	Vaclon Plus 20		
Inlet flange				DN 40 CF-F (2.75 in CFF)		
Element type	Diode	Diode and Noble Diode	Diode	StarCell	Noble Diode	Diode
Pumping speed (L/s) (saturated pump at 1×10^{-6} mbar) nitrogen	0.4	2	10	20	22	27
Operating life (h) (1×10^{-6} mbar)	N/A	8,000	40,000	80,000	50,000	50,000
Maximum starting pressure (mbar)	1×10^{-4}	1×10^{-4}	$\leq 1 \times 10^{-4}$	$\leq 5 \times 10^{-2}$	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$
Maximum baking temperature without HV cable (°C)	400 (no magnet) 150 (with magnet)	400 (no magnet) 150 (with magnet)	350	350	350	350
Maximum baking temperature with HV cable (°C)	220	220	220	220	220	220
Weight kg (lb)	Net 0.3 (0.66) Shipping 0.6 (1.33)	Net 0.3 (0.66) Shipping 0.6 (1.33)	Without magnet 4 (9)	Net 7 (15) Shipping 11 (24)		
SEM version available: Y for all pumps that offer SEM versions; N for all pumps that do not offer SEM versions.	N	N	Y	Y		



	Vaclon Plus 40*			Vaclon Plus 55*			Vaclon Plus 75*		
Inlet flange	DN 40 CF-F (2.75 in CFF)			DN 63 CF-F (4.5 in CFF)			DN 100 CF-F (6 in CFF)		
Element type	StarCell	Noble Diode	Diode	StarCell	Noble Diode	Diode	StarCell	Noble Diode	Diode
Pumping speed (L/s) (saturated pump at 1 x 10 ⁻⁶ mbar) nitrogen	34	36	40	50	53	60	65	68	75
Operating life (h) (1 x 10 ⁻⁶ mbar)	80,000	50,000	50,000	80,000	50,000	50,000	80,000	50,000	50,000
Maximum starting pressure (mbar)	≤ 5x10 ⁻²	≤ 1x10 ⁻³	≤ 1x10 ⁻³	≤ 5x10 ⁻²	≤ 1x10 ⁻³	≤ 1x10 ⁻³	≤ 5x10 ⁻²	≤ 1x10 ⁻³	≤ 1x10 ⁻³
Maximum baking temperature (°C)	350	350	350	350	350	350	350	350	350
Maximum baking temperature with HV cable (°C)	220	220	220	220	220	220	220	220	220
Weight kg (lb)	Net 17 (37) Shipping 21 (46)			Net 18 (39) Shipping 22 (48)			Net 19 (42) Shipping 23 (51)		
SEM version available: Y for all pumps that offer SEM versions; N for all pumps that do not offer SEM versions.	Y			Y			Y		
*Version with particle shield available				*Version with particle shield available			*Version with particle shield available		



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	Vaclon Plus 150*			Vaclon Plus 200			Vaclon Plus 300		
Inlet flange	DN 100 CF-F (6 in CFF)			DN 160 CF-F (8 in CFF)			DN 160 CF-F (8 in CFF)		
Element type	StarCell	Noble Diode	Diode	StarCell	Noble Diode	Diode	StarCell	Noble Diode	Diode
Pumping speed (L/s) (saturated pump at 1×10^{-6} mbar) nitrogen	125	135	150	180	185	200	240	260	300
Operating life (h) (1×10^{-6} mbar)	80,000	50,000	50,000	80,000	50,000	50,000	80,000	50,000	50,000
Maximum starting pressure (mbar)	$\leq 5 \times 10^{-2}$	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$	$\leq 5 \times 10^{-2}$	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$	$\leq 5 \times 10^{-2}$	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$
Maximum baking temperature without HV cable (°C)	350	350	350	350	350	350	350	350	350
Maximum baking temperature with HV cable (°C)	220	220	220	220	220	220	220	220	220
Weight kg (lb)	Net 43 (94) Shipping 53 (110)			Net 45 (99) Shipping 51 (112)			Net 69 (149) Shipping 94 (207)		
	*150 "slim body" available								



Vaclon Plus 150



Vaclon Plus 150 slim body



	Vaclon Plus 500			Vaclon Plus 800		Vaclon Plus 1000	
Inlet flange	DN 160 CF-F (8 in CFF)			DN 160 CF-F (8 in CFF)	DN 200 CF-F (10 in CFF)	DN 250 CF-F (12 in CFF)	
Element type	StarCell	Noble Diode	Diode	StarCell		StarCell	Diode
Pumping speed (L/s) (saturated pump at 1×10^{-6} mbar) nitrogen	410	440	500	685	910	800	1000
Operating life (h) (1×10^{-6} mbar)	80,000	50,000	50,000	80,000		80,000	50,000
Maximum starting pressure (mbar)	$\leq 5 \times 10^{-2}$	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$	$\leq 5 \times 10^{-2}$		$\leq 5 \times 10^{-2}$	$\leq 1 \times 10^{-3}$
Maximum baking temperature without HV cable (°C)	350	350	350	350	350	450 350	450 350
Maximum baking temperature with HV cable (°C)	220	220	220	220	220	220	220
Weight kg (lb)	Net 120 (264) Shipping 138 (204)			Net 198 (437) Shipping 213 (470)		Net 265 (585) Shipping 308 (679)	

