



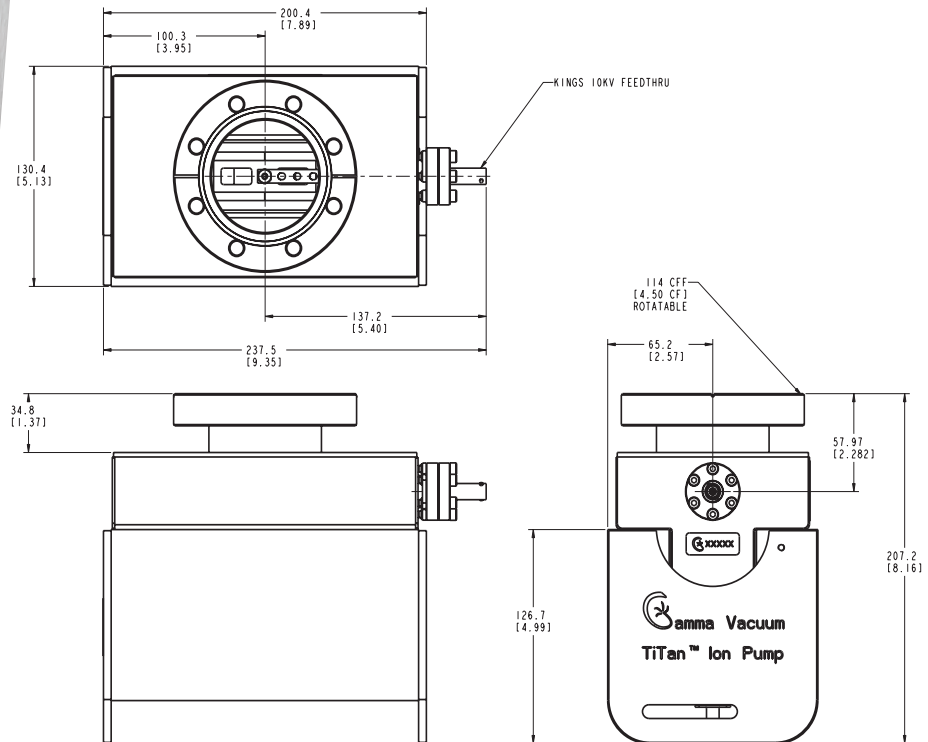
TiTan™ 45S Ion Pump



TECHNICAL SPECIFICATIONS

Element Type	CV/CVX	DI/DIX	TR
Pumping Speed (l/s, Nitrogen)	40	35	35
Starting Pressure (mbar)	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$	$\leq 5 \times 10^{-2}$
Lifetime (hours @ 10^{-6} mbar)	50,000	50,000	80,000
Ultimate Pressure (mbar)	$< 1 \times 10^{-11}$		
Maximum Baking Temperature (°C)	250 / 450 (without magnets)		
Inlet Flange	DN 63 (4.75 in.) CFR		
Weight, kg (lbs)	16 (34)		

DIMENSIONAL DETAILS*



*Single inlet flange shown. Alternative configurations available at www.gammavacuum.com

STANDARD OPTIONS*

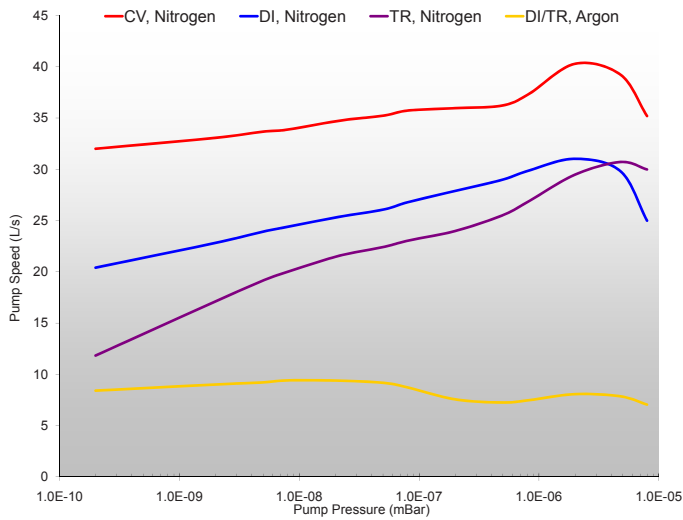
Element Styles		Ports		Feedthroughs		Heaters		TSP/NEG	
CV	Conventional 100% Titanium	4V	Single DN 63 (4.5 in. CFR) Vertically oriented	SC	SAFECONN™ 10kV SHV	N	No Heaters	N	Not Available
CVX	Conventional SEM Shielding	2V	Single DN 35 (2.75 in. CFR) Vertically oriented	OP	Perkin Elmer	110	110-volt 90-130 nominal		
DI	Differential 50% Titanium 50% Tantalum	2H	Single DN 35 (2.75 in. CFR) Horizontally oriented	OV	Old Varian	220	220-volt 200-240 nominal		
DIX	Differential SEM Shielding	2D	Double DN 35 (2.75 in. CFR)	VR	StarCell				
TR	Triode Slotted Titanium	4D	Double DN 63 (4.5 in. CFR) DN 35 (2.75 in. CFR)	FI	Fisher				

*Configured part numbers and pricing are available at www.gammavacuum.com. Contact us directly for custom engineered options.

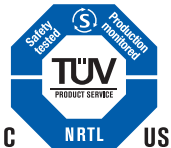
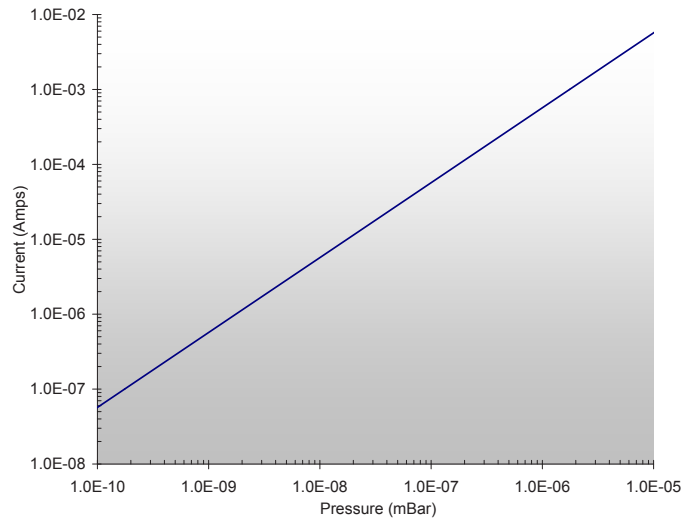
PERFORMANCE CHARACTERISTICS

Pumping Speed vs. Pressure

measured in accordance with ISO/DIS 3556-1.2-1192



Current vs. Pressure



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