Oil Free Turbomolecular Pumping Systems | CDK/STP



CDK and STP turbomolecular pumping systems are completely oil-free. Both systems incorporate an oil-free SST turbomolecular pump using dry-running, solid-lubricated ceramic bearings. The backing pump is an oil-free diaphragm vacuum pump.

Both turbomolecular pumping systems have a unique, built-in automatic shut-off device for the backing pump. The backing pump is switched off as soon as the ultimate vacuum pressure is reached in the chamber. The solenoid valve in the fore-line piping to the turbomolecular pump is closed simultaneously to prevent back venting of the turbomolecular pump and the connected vacuum system. If there is a renewed gas load at the inlet port of the turbomolecular pump, that is the pressure rises, then the backing pump is first switched on and then the solenoid valve opened.

If the pump system works continually at the ultimate pressure, and if the connected vacuum system has a low real and virtual leak rate (wall degassing), then it is possible that the backing pump will remain switched off for hours.

- Oil-free vacuum
- Vacuum to 5 x 10⁻⁸ mbar
- User friendly
- Automatic shut-off device for the backing pump
- Lightweight, compact and portable

The CDK systems have all components housed inside a casing, making them very compact and portable. The components include turbomolecular pump, backing pump, controller, and connecting tubing. A simple On/Off button makes operation simple. CDK systems employ a Model MPC104Tp three-stage chemical duty diaphragm pump as the backing pump.

The STP systems consist of a turbomolecular vacuum pump, backing pump, controller, connecting tubing and vacuum gauge. All components are mounted on a mobile base plate to which the profile pillar is attached. The vacuum chamber may be mounted either directly to the suction port of the turbomolecular pump or the turbomolecular pump can be removed from its holder on the profile pillar and connected to the chamber are larger and mounted on a mobile trolley for smooth relocation between applications. A three-stage Model MP601T diaphragm pump is the backing pump.

Specifications						
Model	CDK 240	CDK 240 UHV	CDK 263	CDK 263 UHV	STP D1.1	STP D5.1
Inlet connection flange	DN 40 KF	DN 40 CF	DN 63 ISO-K	DN 63 CF	DN 63 ISO-K	DN 100 ISO-K
Pumping Speed, I/s (N2)	49	56	67	67	67	250
Pumping Speed, I/s (He)	38	46	63	63	63	255
Pumping Speed, I/s (H2)	36	40	53	53	53	220
Ultimate pressure, mbar	5x10-7	5x10-8	5x10-7	5x10 ⁻⁸	5x10-7	5x10-7
Backing pump FAD, lpm (50/60Hz)	13 / 15	13 / 15	13 / 15	13 / 15	75 / 81	75 / 81
Dimensions, LxWxH, in. (cm)	7.5x13.4x15.7 (19x34x40)	7.5x13.4x15.7 (19x34x40)	7.5x13.4x15.7 (19x34x40)	7.5x13.4x15.7 (19x34x40)	18.9x19.7x27.6 (48x50x70)	18.9x19.7x27.6 (48x50x70)
Weight, kg (230V / 115V)	13.7 / 14.4	14.7 / 15.4	13.7 / 14.4	14.7 / 15.4	20	25
Shipping dimensions, LxWxH, mm	XxXxX	XxXxX	XxXxX	XxXxX	XxXxX	XxXxX
Shipping weight, kg	XxXxX	XxXxX	XxXxX	XxXxX	XxXxX	XxXxX
Ordering Information						
230V, 50/60Hz	101250	101251	101252	101253	101353	101354
115V, 50/60Hz	101250-01	101251-01	101252-01	101253-01		