

EPX500LE Dry pump



The new compact EPX500 high vacuum drypump offers enhanced performance with reduced cost of ownership. Using a unique patent protected mechanism the EPX500 is capable of pumping from atmosphere to ultimate pressures of $<7 \times 10^{-5}$ Torr.

Based on the successful award winning IPX range, the modular EPX500 offers outstanding performance in a package that is 20% lighter, 30% smaller and requires 40% less power than the IPX.

The EPX LE series of pumps has an End User Controller (EUC). The End User Controller enables local control for stand-alone use as well as the ability to connect to a fab-wide

Features & Benefits

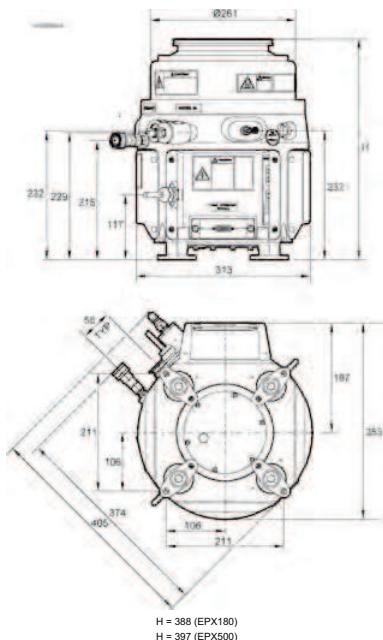
- Compact footprint - as one of the smallest on-tool pumps available, the EPX offers outstanding savings in footprint. EPX can be mounted directly onto the tool saving foreline and installations costs or remotely if preferred.
- Low cost of ownership - EPX requires only 1.4 kW of power and incorporating idle mode to maximize power efficiency.
- Unique patent protected pumping mechanism - the EPX can pump down from atmosphere to turbomolecular base pressure and can operate continuously at all inlet pressures.
- Ultra clean mechanism - conventional high vacuum bearings under grease use grease lubrication which can be a source of contamination in process tools. EPX pumps have no high vacuum bearings under grease and present no other source of potential contamination.
- Extremely reliable - based on field proven IPX technology, the EPX has a $MTBF_p = 13$ years (SEMI E10) with service periods of around every 5 years to maximize the life of the pump.

Applications

The EPX series covers a broad range of applications from wafer handling through to medium duty processes.

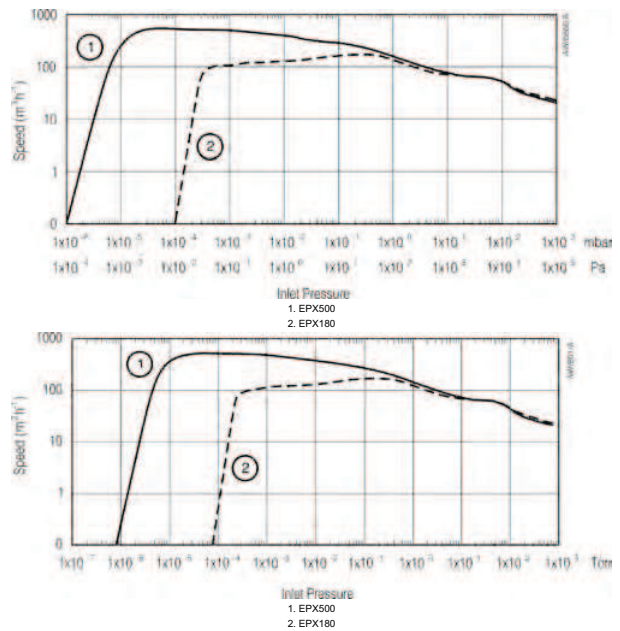
The EPX 'LE' Series has been designed for use clean duty applications pumping inert gas mixtures, such as loadlock, whereby control is provided by the process tool interface.

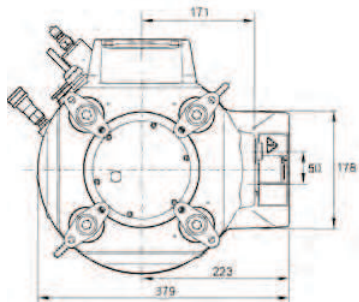
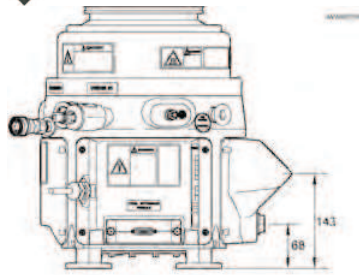
Dimensions



For all remaining dimensions, please refer to the next dimensional image.

Performance Curves





For all remaining dimensions, please refer to the previous dimensional image.

Technical Data

Peak speed	500 m ³ h ⁻¹ 295 ft ³ min ⁻¹ 8338 l min ⁻¹
Ultimate vacuum	<1 x 10 ⁻⁶ mbar <7.5 x 10 ⁻⁷ Torr <1 x 10 ⁻⁴ Pa
Warm-up time (to nominal performance)	30 min
Inlet flange	ISO160
Outlet flange	NW25
Noise	<59 dB(A)
Minimum cooling water flow rate	2 l min ⁻¹
Cooling water temperature	15 – 35 °C
Electrical Supply	200/208 V, 50/60 Hz 3 phase
Power at ultimate	1.4 kW
Rated motor power	3.0 kW
TIM	None
Weight	45.2 kg

Ordering Information

Product Description	Order No.
EPX500LE Dry pump 208V No TIM 3/8 water connector	A41953012
EPX500LE Dry pump 400V No TIM 3/8 water connectors	A41953014
EPX500LE Dry pump 208V E73 TIM 3/8 water connector	A41953312
EPX500LE Dry pump 208V TEL TIM 3/8 water connector	A41953412
EPX500LE Dry pump 208V MCM TIM 3/8 water connector	A41953712