

# iXM SERIES LOW ENERGY DRY PUMPS

Giving you a clear edge

## PRODUCT DATASHEET

**Edwards iXM series, the new global benchmark in vacuum innovation, are the low energy dry pumps that bring real process improvements and cost benefits to the most critical of applications.**

iXM is a new range of dry pumps built for green manufacturing; the energy efficient roots mechanism has been developed to dramatically reduce input power to 1.3 kW, 60% lower than the previous generation of dry pump, reducing environmental impact and lowering cost of ownership <sup>(1)</sup>.

Gas barrier technology and thermal design improvements enable four times greater corrosion resistance than iH Series product. Advanced powder handling features mean iXM

will deliver maximum reliability and extended pump life for multi-layer etch processes and reduced power consumption for CVD processes.

Its compact and light-weight design, combined with exceptionally low noise and vibration, makes iXM the most versatile dry pump in the Edwards range. iXM will transform your expectations of dry vacuum pump technology, deliver real benefits and increased uptime, with minimal environmental impact.

## Summary by process

iXM pumps are designed for use in most semiconductor processes while delivering significant reductions in input power.

### Processes and their Challenges

Process	Corrosion	Powder	Plating	Condensation	Recommendation
Conductor Etch	•				iXM
Metal Etch	•			•	iXM
HDP-CVD	•	•			iXM
PECVD	•	•	•		iXM
RTP					iXM
Diffusion Poly/Oxide		•			iXM
Implant Source				•	iXM

**iXM is the future, the future is now.**



## Features and benefits

- 1 LOW POWER**
  - Exceptionally low power input at only 1.3 kW for 1200 class pump
  - Up to 60% less power compared to alternative dry pumps<sup>(1)</sup>
  - Green Mode enabled for power and nitrogen savings while idle
- 2 INCREASED LIFESPAN**
  - 4x lower corrosion rate compared to previous generation product
  - Exceptional powder handling
  - 30% increased starting torque compared to iGX pumps.
- 3 REDUCED ENVIRONMENTAL IMPACT**
  - Whisper quiet at only 58 dB(A)
  - 34% smaller footprint compared to alternative dry pumps <sup>(1)</sup>

## Technical data and dimensions

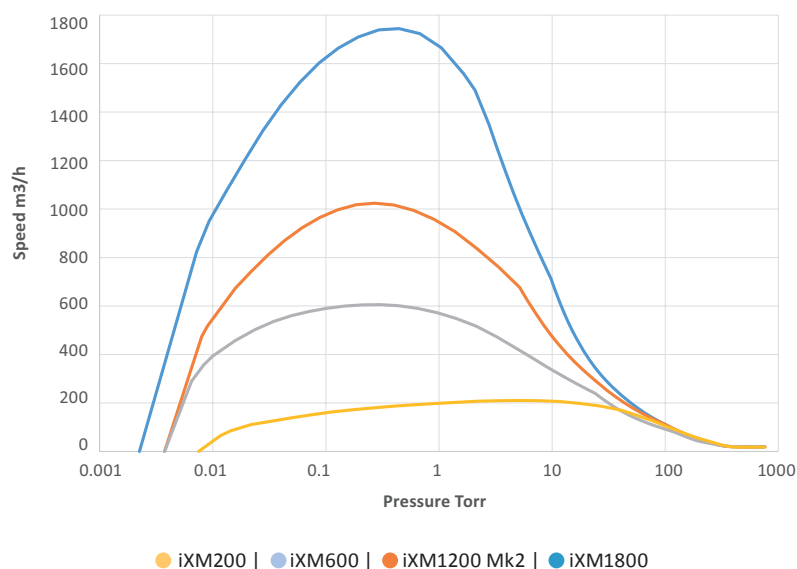
			iXM200	iXM600	iXM1200	iXM1800
Ultimate pressure <sup>(1)</sup>	50 Hz / 60 Hz	mbar / Torr / Pa	0.01 / 0.0075 / 1.00	0.005 / 0.00375 / 0.50	0.005 / 0.00375 / 0.50	0.003 / 0.00225 / 0.30
Peak speed <sup>(1)</sup>	50 Hz / 60 Hz	m <sup>3</sup> /h / cfm / l/m	200 / 118 / 3333	600 / 353 / 10000	1030 / 606 / 17167	1720 / 1012 / 28667
Power at ultimate <sup>(2)</sup>	50 Hz / 60 Hz	kW	0.8	1.1	1.3	2.3
Power in Green Modes	50 Hz / 60 Hz	kW	0.02, 0.5, 0.7	0.03, 0.5, 1.0	0.03, 0.5, 1.0	0.03, 0.7, 1.8
Inlet connection			ISO63	ISO100	ISO100	ISO160
Outlet connection			NW25	NW25	NW25	NW40
Nitrogen connection			1/4" tube fitting	1/4" tube fitting	1/4" tube fitting	1/4" tube fitting
Water connection			3/8" Quick Conn.	3/8" Quick Conn.	3/8" Quick Conn.	3/8" Quick Conn.
Typical Water flow <sup>(3)</sup>		l/m	1.9	2.1	2.1	3.6
Footprint (exc. exhaust)		m <sup>2</sup>	0.202	0.202	0.202	0.351
Noise <sup>(1)</sup>		dB(A)	63	57	57	63
Weight		kg	145	245	245	378

<sup>(1)</sup> Average value

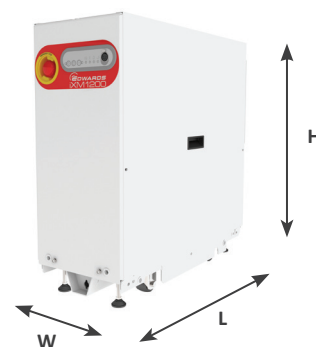
<sup>(2)</sup> Average power at 700T exhaust pressure and zero purge

<sup>(3)</sup> Average at 20 °C water temperature and 20 °C ambient

## Performance curve



## Dimensions



Dimensions (mm)	L	W	H
iXM200	695	290	468
iXM600	695	290	706
iXM1200	695	290	706
iXM1800	901	390	780

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Publication Number: M56632895, Issue A  
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