

# GX NEXT GENERATION DRY PUMPS

Giving you a clear edge



## PRODUCT DATASHEET

The GX dry vacuum pump series sets new standards for zero maintenance between major overhauls. Improved efficiency lowers the cost of ownership and provides continuous pumping duty throughout the pressure range. GX dry pumps include Ethernet connectivity allowing key data to be viewed via web pages, as well as a comprehensive set of networking options to assure continuous pump availability.

GX pumps are available in a wide range of peak speeds and variants to address applications from clean through to medium-duty processes. A modular design allows users to configure GX dry pumps to suit individual fab requirements. A compact footprint allows installation options including on-tool, close proximity, or remote.



## Features and benefits

### Reduced cost of ownership

- Low power consumption
- Zero preventative maintenance

### Flexible installation options

- Small and light for easy installation
- On-tool, close proximity, or remote

### Consistent pumping performance globally

- Pumping speed identical at 50 and 60 Hz

## Specification

	GX	100	600	1000
<b>Performance</b>				
<b>Peak speed</b>	m <sup>3</sup> h <sup>-1</sup>	105	620	800
	cfm	62	365	471
	l min <sup>-1</sup>	1750	10333	13333
<b>Ultimate pressure (typical)</b>	mbar	5.00E <sup>-03</sup>	7.00E <sup>-04</sup>	1.00E <sup>-03</sup>
	torr	3.75E <sup>-03</sup>	5.25E <sup>-04</sup>	7.50E <sup>-04</sup>
	Pa	0.50	0.07	0.10
<b>System power at ultimate <sup>(1)</sup></b>				
<b>Ultimate</b>	kW	1.0	1.6	1.6
<b>Green Mode</b>	kW	0.05	0.05	0.05
<b>Water <sup>(2)</sup></b>				
<b>Water flow</b>	slm	1.0	2.0	2.0
<b>Nitrogen</b>				
<b>L Variant</b>	slm	0	0	N/A
<b>N Variant <sup>(3)</sup></b>	slm	4 to 39	4 to 39	4 to 39
<b>Installation details</b>				
<b>Footprint (excl. exhaust)</b>	m <sup>2</sup>	0.195	0.195	0.195
<b>Weight</b>	Kg	120	220	230
<b>Inlet connection</b>		ISO63	ISO100	ISO100
<b>Outlet connection</b>		NW25	NW25	NW25
<b>Noise at ultimate</b>	dB(A)	<60	<60	<60

(1) Average power at 700 T exhaust pressure

(2) Flow with optional Constant Flow Valve fitted

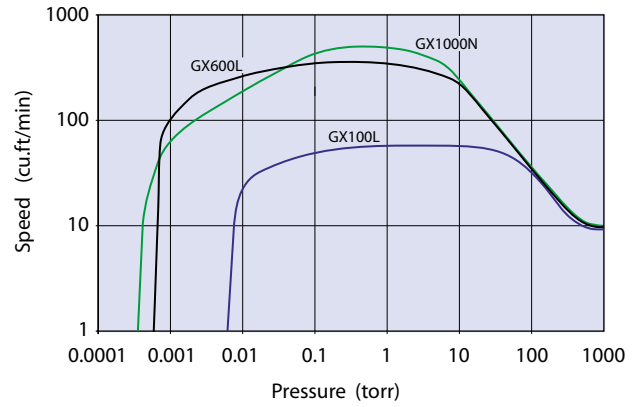
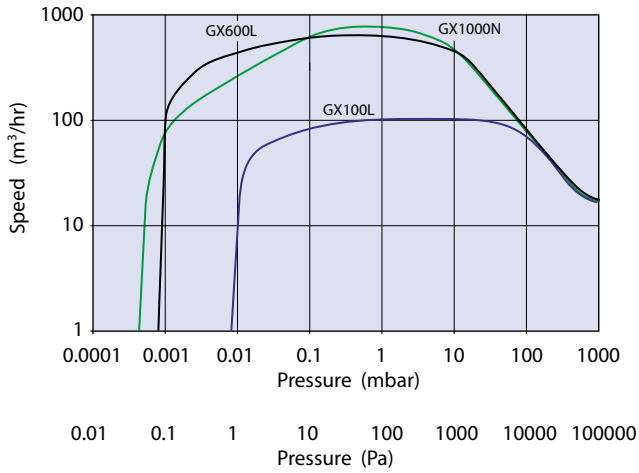
(3) Nitrogen purge can be manually adjusted to a maximum flow of 39 slm

## Applications

Load Lock	Transfer	Metrology	Lithography	PVD Process	PVD Pre-Clean	RTA	Strip/Ashing	Oxide Etch	Silicon Etch	Metal Etch	Implant Source	HDP-CVD	RTP	SACVD	MOCVD	PECVD	LPCVD	ALD
iXH can be used												iXH recommended						
GX can be used						GX recommended												
iXL recommended																		
Clean Applications												Harsh Applications						
Non-reactive gases used												Corrosive or reactive gases used						

Contact Edwards for additional technical information on a particular application.

## Speed curves



## Designed for Energy Efficiency

- High performance motors and inverter drives
  - Low operating power consumption
  - Lower power standby mode using Green Mode
- Nitrogen dilution can be tuned to the application requirement
  - Minimizes gas usage
- Highly efficient cooling
  - High conductivity materials and good design enables low water flow
- Precision ceramic bearings
  - Very high load capability for reliability
  - Low noise and vibration

## Ethernet Connectivity

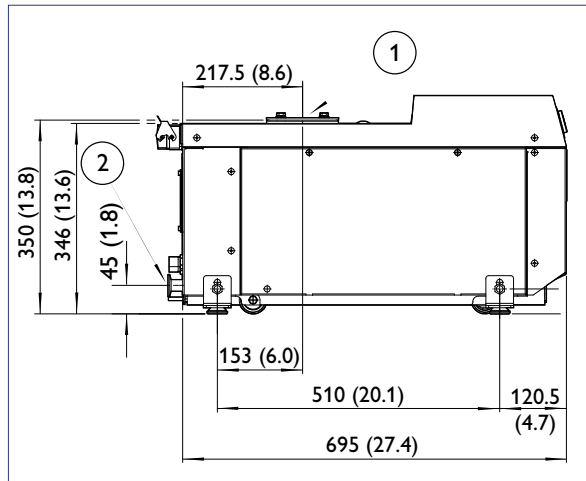
The GX Series includes unique web serving functionality that allows viewing of key parameters through a simple Ethernet connection and browser.

A user can connect to the pump using a browser and pump address to view a range of information, such as:

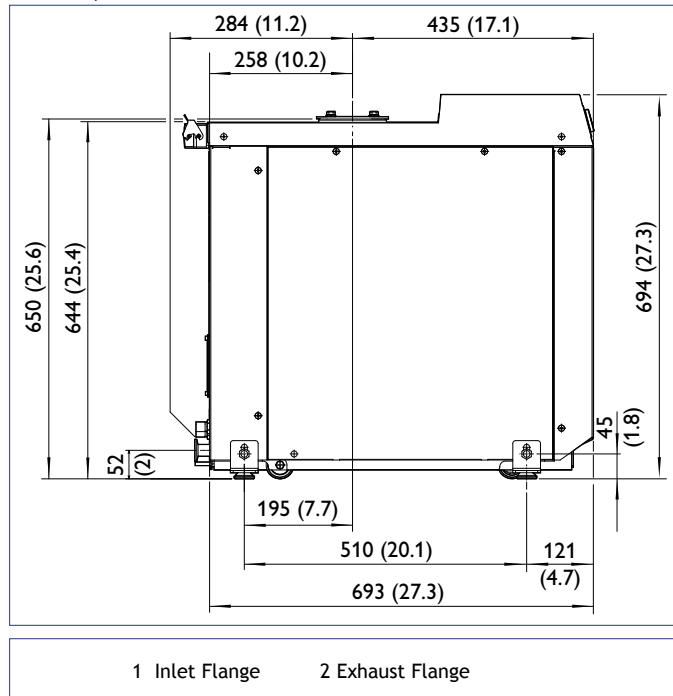
- Operating status
- Key parameters
- Parameter setpoints
- Alert summary

## Dimensions - mm (inches)

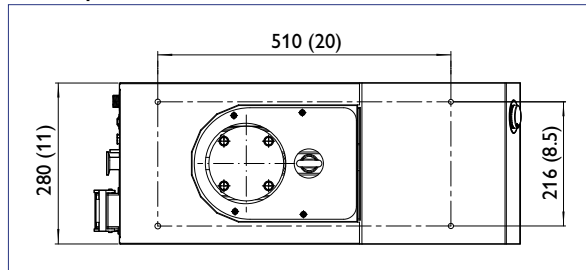
GX100 Side View



GX600, 1000 Side View



GX Top View



## Ordering information

GX100L 200 - 230V 50/60Hz	A54710958	GX600L 200 - 230V 50/60Hz	A54730958	GX1000N 200 - 230V 50/60Hz	A54781958
GX100L 380 - 460V 50/60Hz	A54710959	GX600L 380 - 460V 50/60Hz	A54730959	GX1000N 380 - 460V 50/60Hz	A54781959
GX100N 200 - 230V 50/60Hz	A54711958	GX600N 200 - 230V 50/60Hz	A54731958	GX100TI 200 - 230V 50/60Hz	A54746958
GX100N 380 - 460V 50/60Hz	A54711959	GX600N 380 - 460V 50/60Hz	A54731959		

Edwards continually updates its products to match the evolving needs of the semiconductor industry. Specifications given here are subject to change without notice.

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