

# STP-iXA4506 LARGE CAPACITY TURBOMOLECULAR PUMP

edwardsvacuum.com

Edwards STP-iXA4506 series magnetically levitated turbomolecular pump (TMP) uses state-of-the-art technology to provide industry-leading performance, improved gas flow capability and high temperature management for today's challenging applications.

Achieving world-class pumping speed of 4300 l/s (N<sub>2</sub>) and throughput up to 4300 sccm (N<sub>2</sub>), on a 12-16 inch (300-400 mm) inlet flange, makes the STP-iXA4506 TMP the ideal choice for a wide range of large-volume, high-flow applications including semiconductor etch, LCD etch, glass coating, solar PVD and coating PVD.

Its tightly-integrated design includes a completely sealed electronic module for robust, reliable operation in the most demanding factory environments. And, like all of our magnetically levitated TMPs, the absence of mechanical bearings practically eliminates the cost of periodic maintenance.



## Features and benefits

### Additional Options

- Temperature Management System (TMS) unit is available for processes generating by-products.
- Optional B\* Coating can be applicable for high throughput processes with TMS.

### Communication

- I/O Remote, RS232C, RS485, STP-Link are standard ports.
- Profibus, DeviceNet, Lonworks and EtherCAT can be selected as optional alternatives.

### All-in-one solution

- The fully integrated controller and power supply eliminates the need for cables and a separate controller rack, resulting in a cost effective, compact TMP package that is fast and easy to install in a small footprint.

### Energy efficient

- The pump will operate efficiently with cooling water supply up to 35°C.

### High performance, high throughput

- Maximum continuous flow capability of 4300 sccm (N<sub>2</sub>), achieving a performance increase of more than 50%, when compared to STP-XA4503.

### Compliant Standards

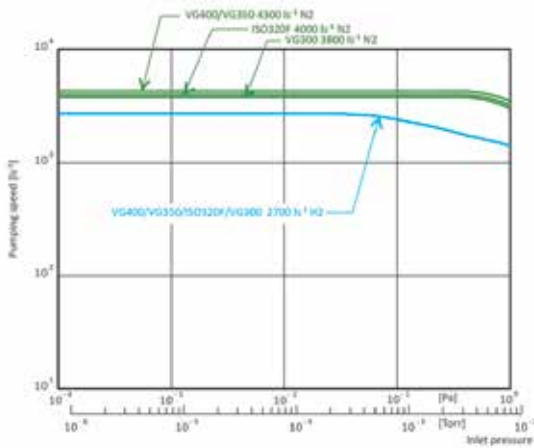
- UL marked, CE marked, SEMI-S2 and RoHS compliant.

Technical Data

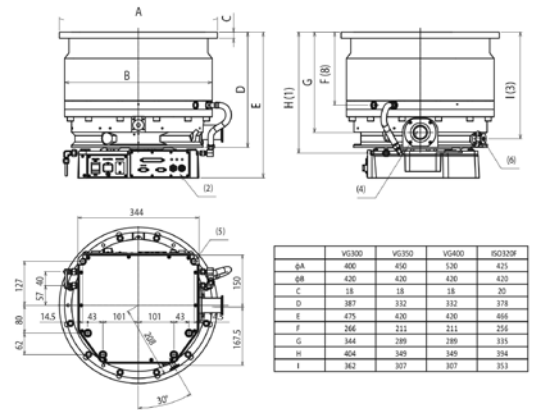
Inlet Port Flange		VG300	ISO320F	ICF350	VG400
Outlet port flange			KF40		
Pump Speed					
N <sub>2</sub> /H <sub>2</sub>	Litres/second	3800/2700	4000/2700	4300/2700	4300/2700
Compression ratio N <sub>2</sub> /H <sub>2</sub>			>10 <sup>9</sup> /10 <sup>3</sup>		
Ultimate pressure	Pa(Torr)		10 <sup>-7</sup> /10 <sup>-9</sup>		
Allowable backing pressure	Pa(Torr)		266(2)		
Max gas flow N <sub>2</sub> <sup>(1)</sup>			4300		
(water cooled only)	(Pa m <sup>3</sup> /sec)		(7.26)		
Max gas flow Ar <sup>(1)</sup>			2600		
(water cooled only)	(Pa m <sup>3</sup> /sec)		(4.39)		
Rated Speed	rpm		24,240		
Starting time	minutes		≤11		
Mounting position			Any orientation		
Input voltage	V		200-240		
Maximum input power					
without TMS	VA		1700		
with TMS	VA		2200		
Weight	kg	109	111	104	111

(1) The maximum gas flow value applies for N<sub>2</sub> or Ar gas pumped continuously, with water cooling temperature under 25° C and a backing pump of 10,000 l/min size or larger used. The value is changed if operated under different conditions

STP-iXA4506 Series/Pumping Speed Against Inlet Pressure



Dimensions - mm



No.	Item	Description
1	Height of water cooling port	Rc1/4
2	Control unit	
3	Height of the purge port	
4	Outlet port flange	KF40
5	Screw hole for securing the base	6-M16 depth 30
6	Purge port	KF10
7	Cooling water port	2-Rc1/4
8	Height of water cooling port (OUT)	Rc1/4

GLOBAL CONTACTS

Publication Number: YT6300895, Issue B  
 © Edwards Limited 2016. All rights reserved Edwards and the Edwards logo are trademarks of Edwards Limited

Whilst we make every effort to ensure that we accurately describe our products and services, we give no guarantee as to the accuracy or completeness of any information provided in this datasheet.

Edwards Ltd, registered in England and Wales  
 No. 6124750, registered office: Manor Royal,  
 Crawley, West Sussex RH10 9LW, United Kingdom.

EMEA

**UK** +44 1293 528844  
 (local rate) 08459 212223  
**Belgium** +32 2 300 0730  
**France** +33 1 4121 1256  
**Germany** 0800 000 1456  
**Italy** + 39 02 48 4471  
**Israel** + 972 8 681 0633

ASIA PACIFIC

**China** +86 400 111 9618  
**India** +91 20 4075 2222  
**Japan** +81 47 458 8836  
**Korea** +82 31 716 7070  
**Singapore** +65 6546 8408  
**Taiwan** +886 3758 1000

AMERICAS

**USA** +1 800 848 9800  
**Brazil** +55 11 3952 5000

