

# VACUUM TECHNOLOGY Hositrاد

## ***NEW – Ion Pumps from Hositrاد Vacuum Technology***

Hositrاد Vacuum Technology offers a completely updated line of Ion Pump products. We have incorporated our extensive experience with a wide variety of ion pumps to provide an improved offering for our customers.

- ***Pumping Speeds - 10 to 400 liters per second***
- ***Choice of: Diode/Galaxy/Noble Diode Elements***
- ***Choice of: Type of High Voltage Feedthrough***



### **Features**

- Improved Element Design
- Choice of Element Technology - Standard Diode - Galaxy Diode - Noble Diode
- Efficient, Modular Design
- Choice of High Voltage Feedthrough Standard: HVFT-5125 Fischer-Style Fault-Safe  
Optional: HVFT-5143 Varian-Style HVFT-5120 Varian Starcell Style FT-PE-133 PE-Style

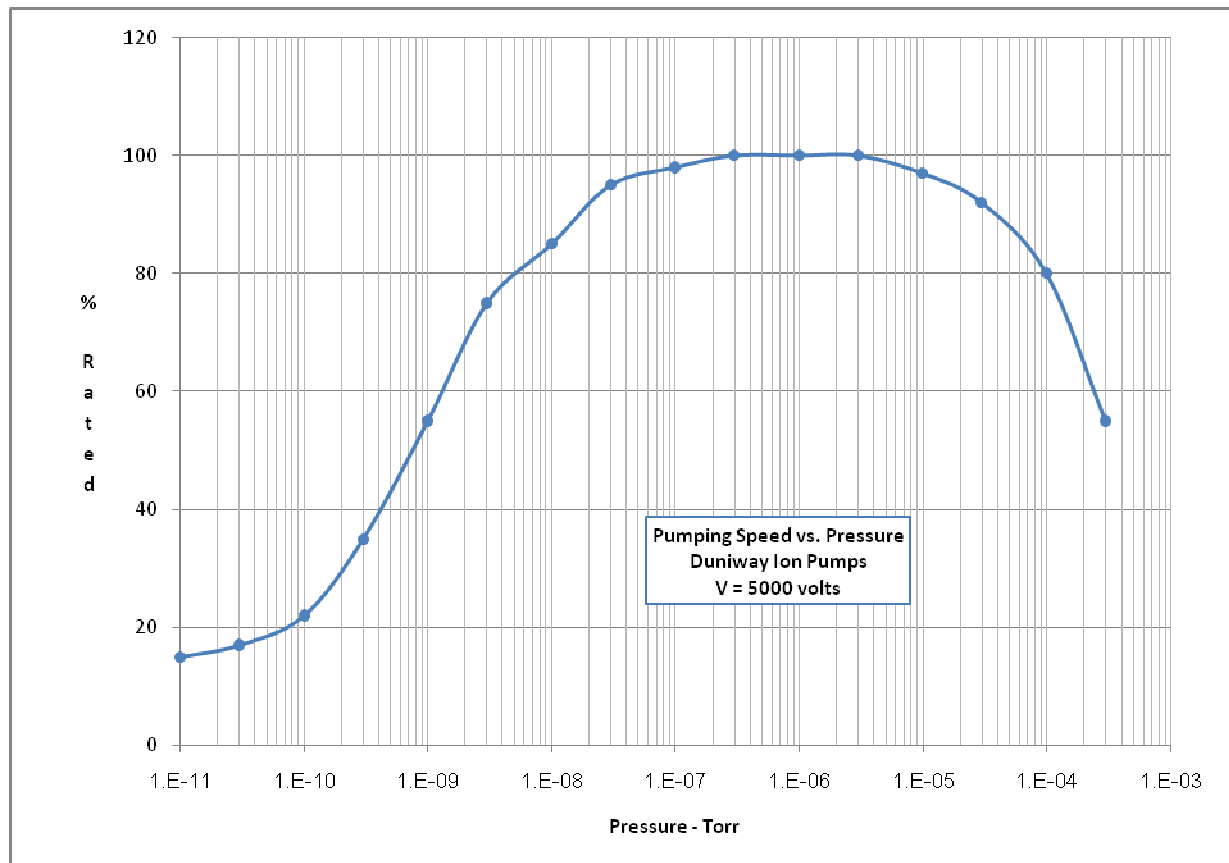
### **Benefits**

- Higher Pumping Speed/Volume Ratio
- Low Cost, Long Life for UHV
- Stable Pumping for Air Load/Leaks
- Stable Pumping for Argon Loads
- Smaller Size
- Lower Profile
- Match Application/Control Unit

**Double-Ended configuration available on 200 and 400 l/s models.** Please inquire.

All pumps are shipped processed and under vacuum.

## New Ion Pump Products Pumping Speed Vs Pressure



### Notes:

- Speed is % of Rated Pumping Speed
- Pressure is in Torr
- Pumping Speed Above  $10^{-5}$  Torr is Influenced by Current Capacity of Power Supply
- Pumping Speed Below  $10^{-8}$  Torr is Influenced by Magnetic Field and Anode Cell Diameter

## Ordering Informations

Ion Pump P/N with Magnet	Pumping Speed N <sub>2</sub>	Element P/N	Element Qty	Magnet P/N	Magnet Qty
DSD-010-5125-M	10	PE-10-STD	1	MAG-1010	1
DGD-010-5125-M	10	PE-10-GXY	1	MAG-1010	1
DND-010-5125-M	8	PE-10-ND	1	MAG-1010	1
DSD-020-5125-M	20	PE-20-STD	1	MAG-2020	1
DGD-020-5125-M	20	PE-20-GXY	1	MAG-2020	1
DND-020-5125-M	16	PE-20-ND	1	MAG-2020	1
DSD-030-5125-M	30	PE-38-STD	1	MAG-0114	1
DGD-030-5125-M	30	PE-38-GXY	1	MAG-0114	1
DND-030-5125-M	24	PE-38-ND	1	MAG-0114	1
DSD-050-5125-M	50	PE-38-STD	1	MAG-0114	1
DGD-050-5125-M	50	PE-38-GXY	1	MAG-0114	1
DND-050-5125-M	40	PE-38-ND	1	MAG-0114	1
DSD-100-5125-M	100	PE-38-STD	2	MAG-0114	2
DGD-100-5125-M	100	PE-38-GXY	2	MAG-0114	2
DND-100-5125-M	80	PE-38-ND	2	MAG-0114	2
DSD-200-5125-M	200	PE-38-STD	4	MAG-0114	4
DGD-200-5125-M	200	PE-38-GXY	4	MAG-0114	4
DND-200-5125-M	160	PE-38-ND	4	MAG-0114	4
DSD-400-5125-M	400	PE-38-STD	8	MAG-0400	4
DGD-400-5125-M	400	PE-38-GXY	8	MAG-0400	4
DND-400-5125-M	320	PE-38-ND	8	MAG-0400	4

*STD: Diode ; GXY: Galaxy ; ND: Noble Diode*

### Ion Pump Related Products

In addition to the new ion pumps described above, Hositrاد Vacuum Technology offers a full line of products and services related to ion pumps. Please go to our catalog or web site:

[www.hositrاد.com](http://www.hositrاد.com)

- New Varian-Style and PE style Ion Pumps from appendage pumps to 500 l/s versions
- Customized ion pumps and controls for specialized applications
- Re-building services available for all ion pumps and elements.
- Spare parts: magnets, feedthroughs cathodes, insulators
- High Voltage Cables – bakeable, radiation resistant, custom lengths. choice of connectors
- New Terranova Ion Pump Controls with digital display, process control and computer Interface
- ✚ Terranova 751A – Single Ion Pump Control/Display
- ✚ Terranova 752 – Dual Ion Pump Control/Display
- Variety of Rebuilt Ion Pump Controls
- Small Pump Controller (SPC)
- ForelineTraps
- Titan Sublimation Pumps and Supplies
- Magnetically Levitated Wide range Turbo-Molecular-Pumps

## Technical Specifications

### Pump Dimensions and Weights

<u>Pump Speed</u> (L/S)	<u>Flange OD</u> Inches (mm)	<u>Height</u> Inches (mm)	<u>Width</u> Inches (mm)	<u>Depth</u> Inches (mm)	<u>Weight</u> Pounds (kg)
10	2.75 (70)	8.3 (210)	4.0 (100)	4.0 (100)	8.7 (3.9)
20	2.75 (70)	8.3 (210)	4.0 (100)	5.3 (140)	10.8 (4.9)
30	2.75 (70)	7.5 (190)	8.5 (220)	5.3 (140)	23.8 (10.8)
50	4.50 (114)	8.5 (220)	11.0 (280)	5.3 (140)	30.5 (13.9)
100	6.00 (154)	11.5 (290)	14.0 (312)	5.3 (140)	56.0 (25.4)
200	8.00 (203)	11.5 (290)	17.0 (430)	17.0 (430)	105.1 (47.7)
400	8.00 (203)	18.0 (450)	17.0 (430)	17.0 (430)	185.6 (84.3)

### Relative Pumping Speeds for Various Gases and Pump Element Technologies

<u>Gas Species</u>	<u>Diode</u> Speed % of Rated	<u>Galaxy™</u> Speed % of Rated	<u>Noble Diode</u> Speed % of Rated
<u>Nitrogen</u> N <sub>2</sub>	100	100	83
<u>Oxygen</u> O <sub>2</sub>	70	70	70
<u>Hydrogen</u> H <sub>2</sub>	220	220	160
<u>Argon</u> Ar	~1	5	20
<u>Helium</u> He	10	15	15
<u>Carbon Dioxide</u> CO <sub>2</sub>	100	100	85
<u>Water Vapor</u> H <sub>2</sub> O	100	100	85