



HIGHLIGHTS



General features

- High pumping speed for all active gases
- Constant pumping speed in HV and UHV pressure region
- No low pressure limitation (down to  $10^{-12}$  Torr region)
- Reversible pumping of hydrogen and its isotopes
- Possibility of operation at room temperature after activation, without power
- Operation in the presence of high magnetic fields
- Oil free and vibration free ultra high vacuum
- Low weight

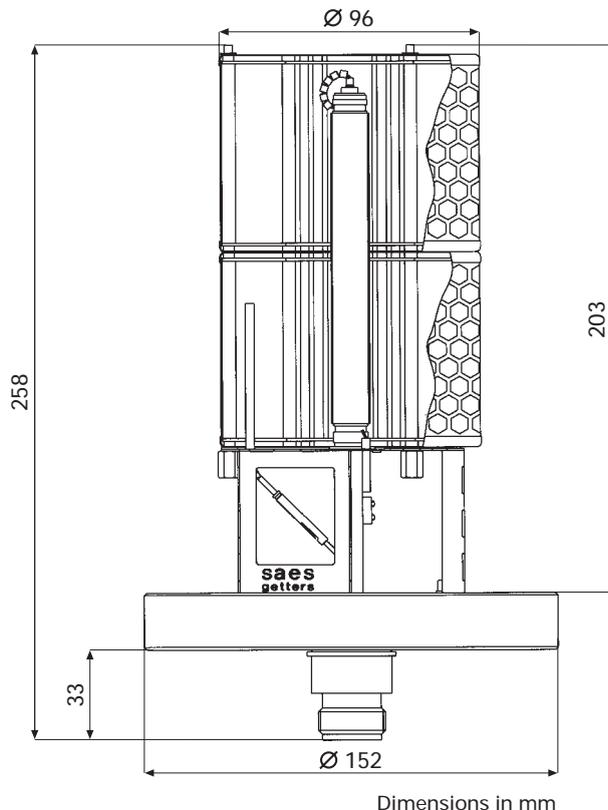
Applications

- Improving ultimate vacuum in combination with ion, diffusion, cryogenetic or turbomolecular pumps
- Surface analysis systems
- Particle accelerators, synchrotron, radiation sources and related equipment
- Process pumps for vacuum devices
- Portable vacuum instrumentation
- Pumping, storing and releasing hydrogen isotopes
- Plasma machines
- Hydrogen traps
- Impurities removal in rare gas filled devices

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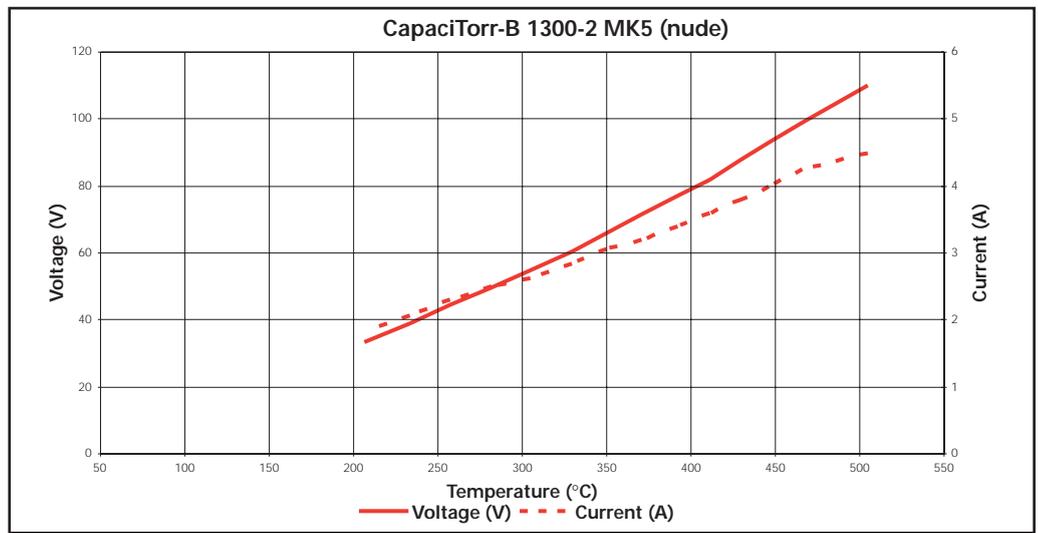
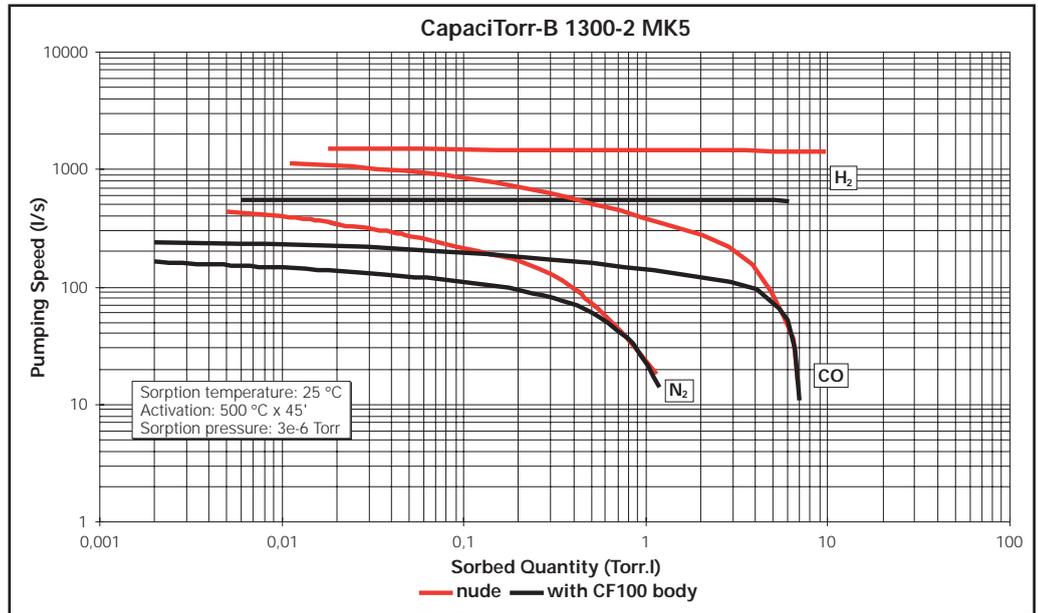
CapaciTorr® -B 1300-2 MK5

The CapaciTorr® B 1300-2 MK5 pump combines the high sorption performance and the best mechanical characteristics of the St 185, a Ti-V porous sintered material. The St 185 getter cartridge is mounted on a heater structure based on a single heater element, and it is available on CF100 (6") and CF150 (8") flanges. The flanges are conveniently supplied with a custom made, bakeable electrical connector which combines power and thermocouple pins, for best integration and minimum footprint. St 185 is particularly suited when room temperature operation is envisaged. The pump sorption speed is at its maximum when mounted directly in the vacuum system without a body. The pumping speed curves related to different mounting positions and the activation curves are shown in the enclosed graphs.

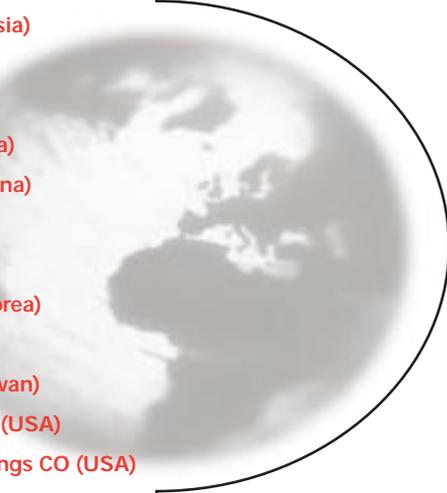


Ordering Information

4H0439	CapaciTorr CF100 MK5	Base Flange with Connector and Heater
4H0438	CapaciTorr CF150 MK5	Base Flange with Connector and Heater
4H0441	CapaciTorr CF100 MK5 J	Base Flange with Connector, Heater and Body
4H0442	CapaciTorr CF150 MK5 J	Base Flange with Connector, Heater and Body
4H0426	C 1300-2 BLD	St 185 Getter Cartridge



- Lainate (Italy)
- Avezzano (Italy)
- Köln (Germany)
- Moscow (Russia)
- Paris (France)
- Daventry (UK)
- Nanjing (China)
- Shanghai (China)
- Tokyo (Japan)
- Seoul (Korea)
- Chin Chon (Korea)
- Singapore
- Hsin Chu (Taiwan)
- Cleveland OH (USA)
- Colorado Springs CO (USA)
- Menlo Park CA (USA)
- San Luis Obispo CA (USA)
- Sparks MD (USA)



**Typical Pump Characteristics**

Alloy Type	St 185®	
Alloy Composition	TiV	
Getter Mass(g)	560	
Getter Surface (cm²)	5530	
Pumping Speed (l/s)	H <sub>2</sub>	1300
	CO	1000
Sorption Capacity (Torr l)	H <sub>2</sub>	18000
	CO Room Temperature	6
	CO Total	5400

Note: Pumping speed data refer to the initial values of the pump without the pump body. CO capacity based on speed below 50 l/s.

**Conversion table**

sought/given	Pa	mbar	Torr
1 Pa	1	10 <sup>-2</sup>	750.06x 10 <sup>-2</sup>
1 mbar	10 <sup>-2</sup>	1	0.75006
1 Torr	133.322	1.333	1

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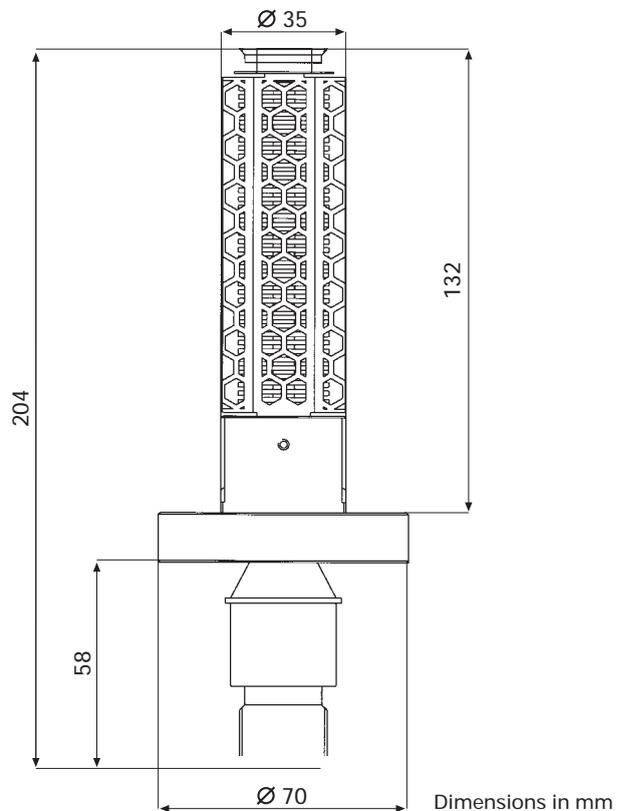
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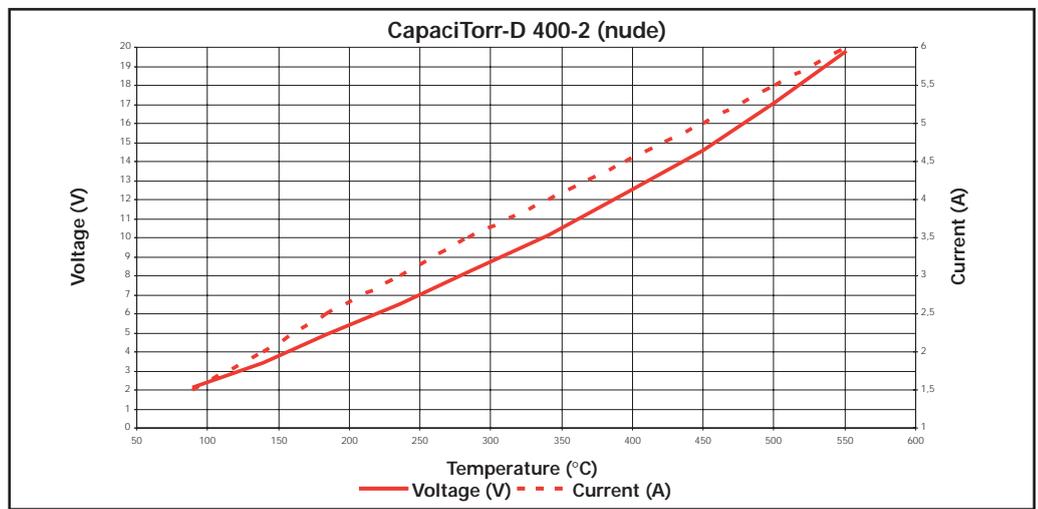
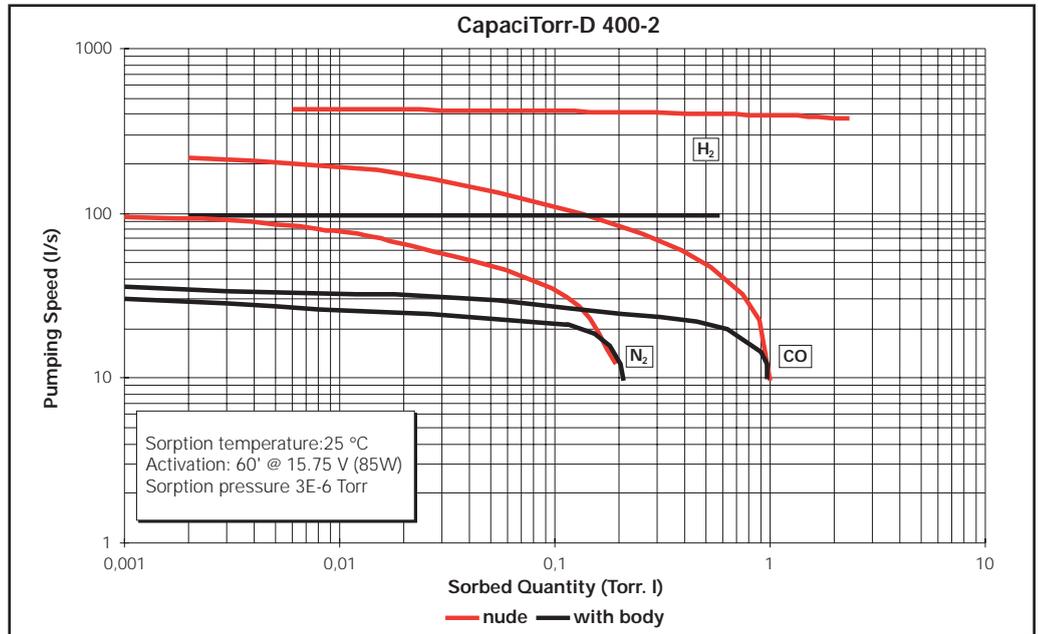
CapaciTorr® D 400-2

The CapaciTorr® D 400-2 pump uses the high performing St 172 (Zr-V-Fe) material in form of disks to achieve high pumping performances in a very compact configuration. It is indicated when maximum pumping speed is needed. The getter cartridge has a built-in heater that directly connects to the flange power feedthrough. A bakeable connector provides an easy and fast connection to the pump power supply for activation purposes. The CapaciTorr® D 400-2 pump offers its best performance when mounted directly in the vacuum system using the standard CF 35 flange. Alternatively the pump can be mounted as an appendage using a custom-made pump body. The pumping speed curves related to different mounting positions and the activation curves are shown in the enclosed graphs.

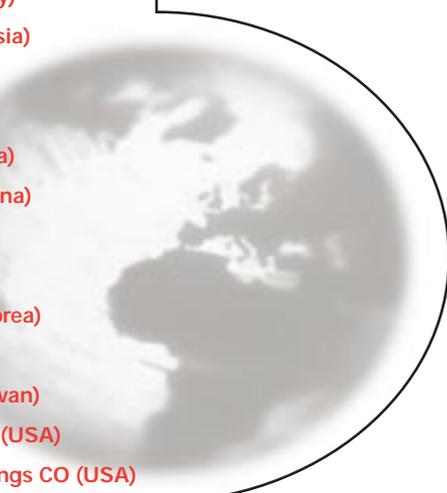


Ordering Information

4H0402	CapaciTorr CF 35	Base Flange with Connector
4H0423	CapaciTorr CF 35 J	Base Flange with Connector and Body
4H0419	C 400-2 DSK	St 172 Cartridge with built-in Heater



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- Tokyo (Japan)
- Seoul (Korea)
- Chin Chon (Korea)
- Singapore
- Hsin Chu (Taiwan)
- Cleveland OH (USA)
- Colorado Springs CO (USA)
- Menlo Park CA (USA)
- San Luis Obispo CA (USA)
- Sparks MD (USA)



### Typical Pump Characteristics

Alloy Type	St 172®	
Alloy Composition	ZrVFe	
Getter Mass(g)	45	
Getter Surface (cm²)	380	
Pumping Speed (l/s)	H <sub>2</sub>	400
	CO	180
Sorption Capacity (Torr l)	H <sub>2</sub>	900
	CO Room Temperature	0.9
	CO Total	400

Note: Pumping speed data refer to the initial values of the pump without the pump body. CO capacity based on speed below 20 l/s.

### Conversion table

sought/given	Pa	mbar	Torr
1 Pa	1	10 <sup>-2</sup>	750.06x 10 <sup>-2</sup>
1 mbar	10 <sup>2</sup>	1	0.75006
1 Torr	133.322	1.333	1

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## General Information

Established in 1940, **SAES Getters** is the world leader and pioneer of getter, gas purification and trace impurity analysis technologies.

The Group focuses on development and expansion of core areas of scientific expertise. This is a key part of our history and future as these core competencies expand and facilitate ongoing development of high-tech niche market products.

We have a much more variety of pumps available for the applications of accelerators. For more information on our products and office locations, visit our website at [www.saesgetters.com](http://www.saesgetters.com).

The logo for SAES Getters, featuring the word "saes" in white lowercase letters on a red rectangular background, with "getters" in white lowercase letters on a white rectangular background below it. A small registered trademark symbol (®) is located to the right of "saes".

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