



# Pfeiffer HiPace 300 with TC-110

## Technical Specifications

HiPace® 300 with TC 110, DN 100 ISO-K	
Bearing	Hybrid
Compression ratio for Ar	$> 1 \cdot 10^{11}$
Compression ratio for H <sub>2</sub>	$9 \cdot 10^5$
Compression ratio for He	$> 1 \cdot 10^8$
Compression ratio for N <sub>2</sub>	$> 1 \cdot 10^{11}$
Cooling method, optional	Water
Cooling method, standard	Air
Cooling water flow	50 l/h
Cooling water flow, max	50 l/h
Cooling water flow, min	50 l/h
Cooling water temperature	15-35 °C   59-95 °F   288-308 K
Current max.	7,5 A
Electronic drive unit	with TC 110
Flange (in)	DN 100 ISO-K
Flange (out)	DN 16 ISO-KF/G ¼"
Fore-vacuum max. for N <sub>2</sub>	15 hPa   11.25 Torr   15 mbar
Gas throughput at full rotational speed for Ar	2 hPa·l/s
Gas throughput at full rotational speed for H <sub>2</sub>	$> 14$ hPa·l/s
Gas throughput at full rotational speed for He	8 hPa·l/s
Gas throughput at full rotational speed for N <sub>2</sub>	5 hPa·l/s
I/O interfaces	RS-485, Remote
Interface, extended	Profibus, DeviceNet, E74
Mounting orientation	Any
Operating voltage: V DC	24 (± 5 %) V DC
Permissible radial magnetic field max.	5.5 mT
Power consumption max.	180 W
Protection category	IP54
Pumping speed for Ar	255 l/s
Pumping speed for H <sub>2</sub>	220 l/s
Pumping speed for He	255 l/s
Pumping speed for N <sub>2</sub>	260 l/s
Rotation speed ± 2 %	60,000 rpm   60,000 min <sup>-1</sup>
Rotation speed variable	35 – 100 %
Run-up time	3.5 min
Sound pressure level	≤50 dB(A)
Ultimate pressure according to PNEUROP	$< 1 \cdot 10^{-7}$ hPa   $< 7.5 \cdot 10^{-8}$ Torr   $< 1 \cdot 10^{-7}$ mbar
Ultimate pressure without gas ballast	$< 1 \cdot 10^{-7}$ hPa   $< 7.5 \cdot 10^{-8}$ Torr   $< 1 \cdot 10^{-7}$ mbar
Venting connection	G 1/8"
Weight	6.2 kg   13.67 lb



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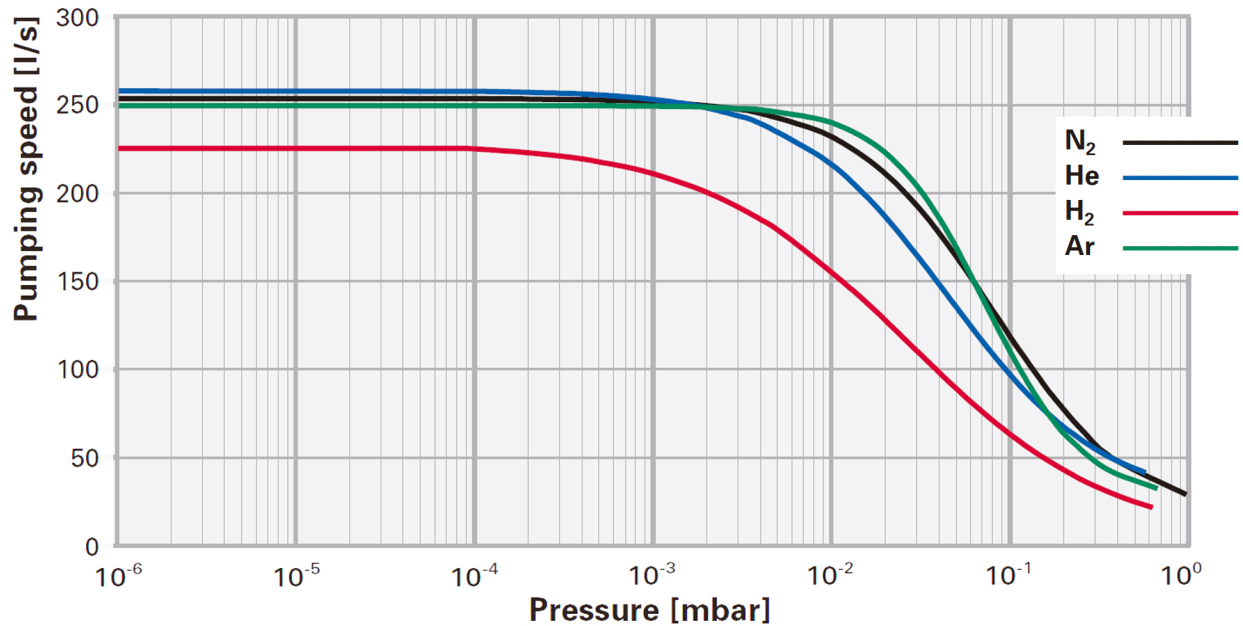
## SALES

PHONE: 831-462-8900

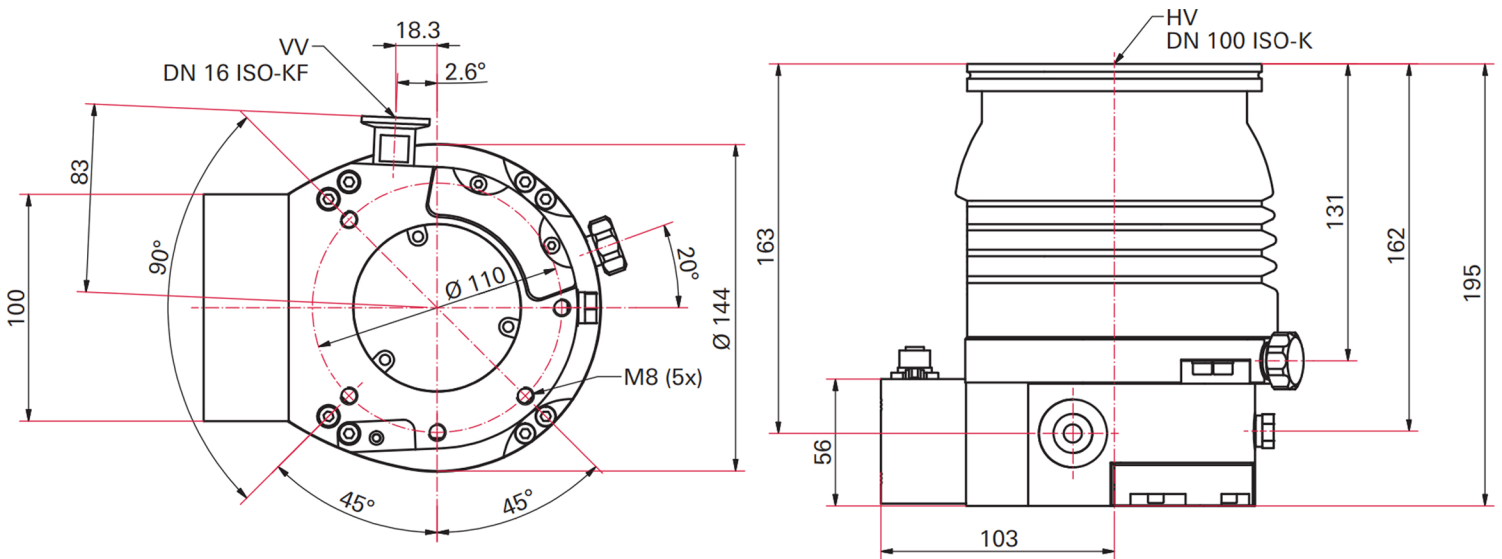
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# Pfeiffer HiPace 300 with TC-110 Pumping Curves



## Dimensions





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## S A L E S

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## Pfeiffer HiPace 300 with TC-110 Features & Benefits

- higher pumping speeds, backing pump capability & gas throughputs
- protected against particulate matter or oxidizing gases
- integrated drive electronics reduce need for cables
- compact design makes for minimum footprint
- proven bearing system, improved rotor design
- expanded remote & sensor functionalities
- installation in any orientation
- reduced run-up time
- on-site bearing changes
- quiet operation



## Applications

- electron microscopy • leak detection • mass spectrometry • surface analysis • residual gas analysis • coating (PVD/CVD) • beamline implantation • inspection • bonding • transfer chambers & load-locks
- handling systems • harddisc coating • photovoltaics • CD/DVD/Blu Ray manufacturing • optical coating • wear protection • medical technology
- electron beam welding • lamp & tube manufacturing • nuclear & plasma research • particle accelerators • cryo/nano/bio technology