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Pfeiffer HiPace 300M with TC-700

Technical Specifications

HiPace® 300 M with TC 700, DN 100 ISO-K	
Bearing	Magnetically
Compression ratio for Ar	$> 1 \cdot 10^{11}$
Compression ratio for H ₂	$5 \cdot 10^5$
Compression ratio for He	$> 1 \cdot 10^8$
Compression ratio for N ₂	$> 1 \cdot 10^{11}$
Cooling method, optional	Air, convection
Cooling method, standard	Water
Cooling water flow	80 l/h
Cooling water temperature	15-35 °C 59-95 °F 288-308 K
Electronic drive unit	TM 700
Flange (in)	DN 100 ISO-K
Flange (out)	DN 16 ISO-KF
Fore-vacuum max. for N ₂	20 hPa 15 Torr 20 mbar
Gas throughput at 0.1 hPa HV for Ar	11 hPa·l/s
Gas throughput at 0.1 hPa HV for H ₂	5 hPa·l/s
Gas throughput at 0.1 hPa HV for He	8 hPa·l/s
Gas throughput at 0.1 hPa HV for N ₂	10 hPa·l/s
Gas throughput at full rotational speed for Ar	13 hPa·l/s
Gas throughput at full rotational speed for N ₂	28 hPa·l/s
Interfaces	RS-485, Remote
Low vibrations	YES
Mounting orientation	Any
Operating voltage: V DC	48 (± 5 %) V DC
Permissible magnetic field max.	5 mT
Protection category	IP54
Pumping speed for Ar	250 l/s
Pumping speed for H ₂	170 l/s
Pumping speed for He	215 l/s
Pumping speed for N ₂	255 l/s
Rotation speed ± 2 %	60,000 rpm 60,000 min ⁻¹
Rotation speed variable	20 – 100 %
Run-up time	2 min
Sound pressure level	≤ 45 dB(A)
Ultimate pressure according to PNEUROP	$< 1 \cdot 10^{-7}$ hPa $< 7.5 \cdot 10^{-8}$ Torr $< 1 \cdot 10^{-7}$ mbar
Venting connection	G 1/8"
Voltage: Range	90 – 265 V AC
Weight	13.1 kg 28.88 lb



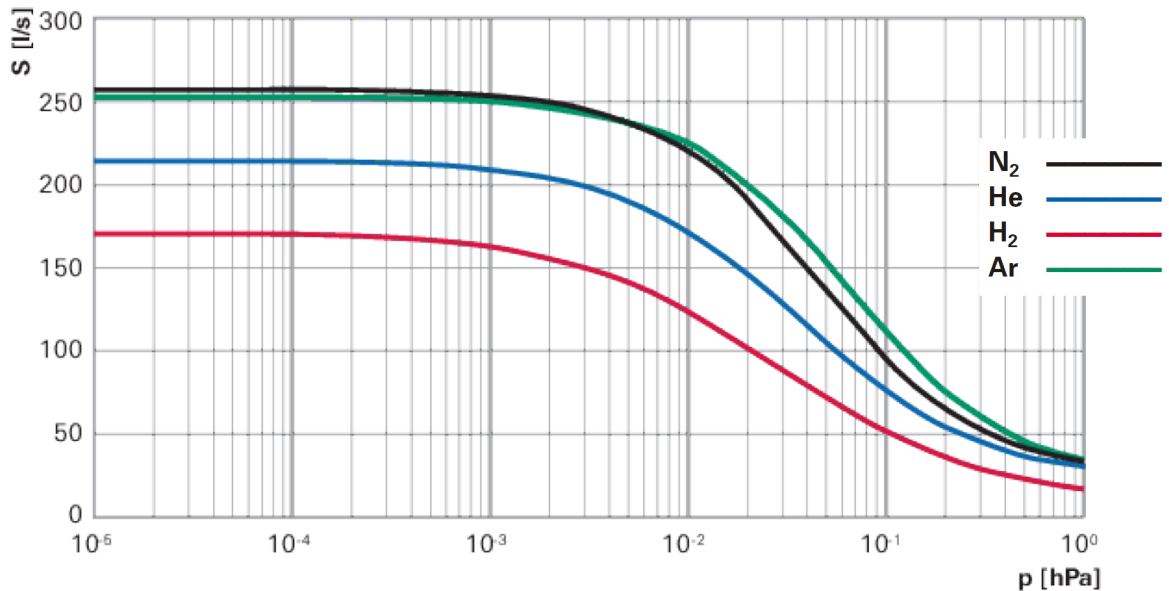
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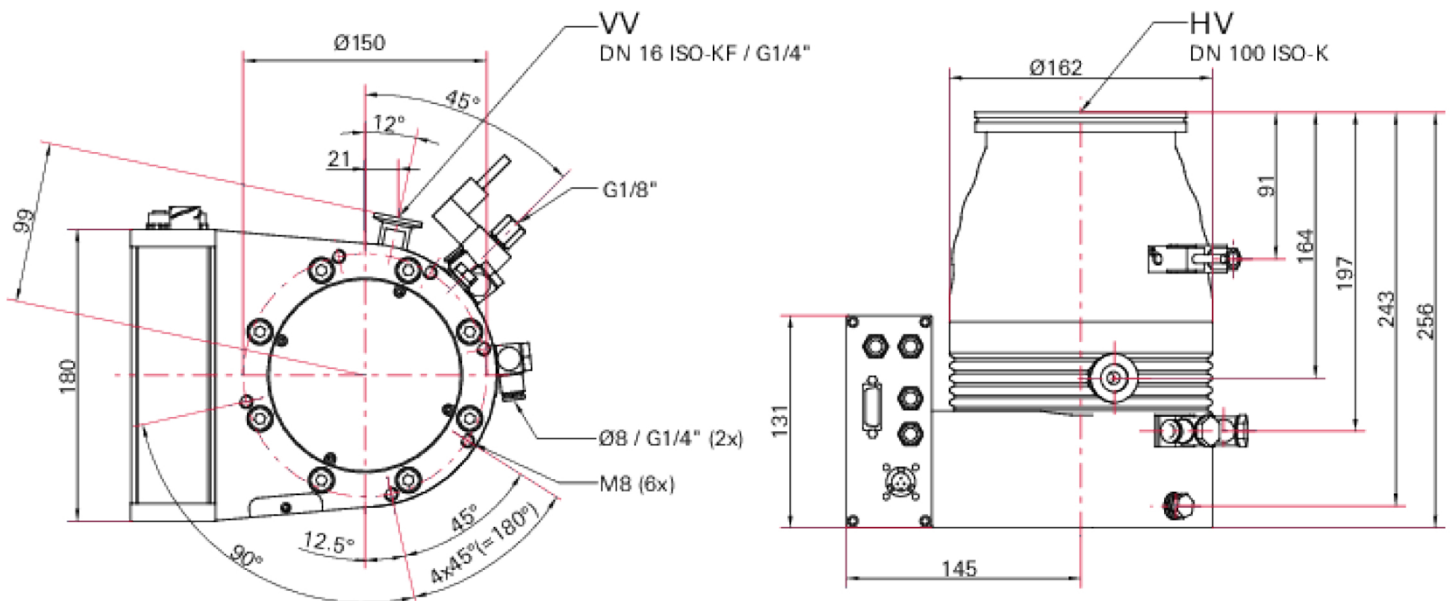
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Pfeiffer HiPace 300M with TC-700 Pumping Curves



Dimensions





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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