



# HiPace® 300 Plus with TC 110, DN 100 ISO-F

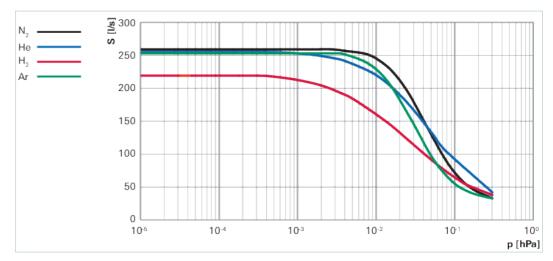


# HEIFER) VACUUM

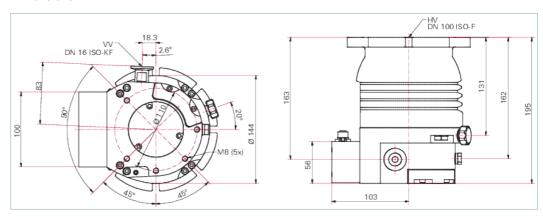
Similar Image

### HiPace® 300 Plus with TC 110, DN 100 ISO-F

- Compact yet powerful turbopump with a pumping speed of up to 260 l/s for N<sub>2</sub>
- Integrated TC 110 drive electronics
- Low vibration and magnetic field ideal for analytical systems with high requirements
- Extensive accessories expand the range of applications
- Perfectly matching with Pfeiffer Vacuum vibration insulator



#### Dimensions



Technical Data	HiPace® 300 Plus with TC 110, DN 100 ISO-F
Bearing	Hybrid
Compression ratio for Ar	> 1 · 10 <sup>11</sup>
Compression ratio for H <sub>2</sub>	9 · 10 <sup>5</sup>
Compression ratio for He	> 1 · 108
Compression ratio for N <sub>2</sub>	> 1 · 10 <sup>11</sup>
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
Electronic drive unit	with TC 110
Flange (in)	DN 100 ISO-F
Flange (out)	DN 16 ISO-KF/G 1/4"
Fore-vacuum max. for ${\rm N_2}$	15 hPa   11.25 Torr   15 mbar

Technical Data	HiPace® 300 Plus with TC 110, DN 100 ISO-F
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
Low vibrations	YES
Mounting orientation	"0° (HV flange top)"
Operating voltage: V DC	24 (± 5 %) V DC
Permissible magnetic field max.	5.5 mT
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	$< 1 \cdot 10^{-7} \text{ hPa} \mid < 7.5 \cdot 10^{-8} \text{ Torr} \mid < 1 \cdot 10^{-7} \text{ mbar}$
Venting connection	G 1/8"
Weight	6.1 kg   13.45 lb

Order number	
HiPace® 300 Plus	PM P03 982

Accessories	
Adapters (electrical) PV-Can	
TIC 010, Adapter for two sensors	PT R70 000
Adapters (electrical) Remote	
Enclosure for plug, spraywater-protected, 15-	
pole, D-Sub	P 0998 016
Mains power plug for TC 110/120 and mating	D 4700 440
plug for E74 interface, straight	P 4723 110
Mains power plug angled for TC 110/120 and mating plug for interface E74	P 4723 111
TCS 11, adapter for TC 110/120 with RS-485	1 4720 111
interface	PM 061 636 -U
TCS 12, adapter for TC 110/120 with interface	
RS-485, 4 accessory ports and coupling set	PM 061 638 -U
TCS 13, adapter for TC 110/120 with interface	
RS-485, 2 accessory ports and coupling set	PM 061 856 -U
Adapters (electrical) RS-232/485	
Coupling M12 for RS-485	PM 061 270 -X
Termination resistor for RS-485	PT 348 105 -T
Power separator for RS-485	PT 348 132 -T
Cables Backing pump control cables	DM 004 007 T
Control cable for valve	PM 074 442 V
HiPace – ACP connection cable	PM 071 142 -X
Cables Connection cables	
Connection cable with RS-485 interface for TC 110/120 to power supply pack	PM 061 350 -T
Connection cable with RS-485 interface and 2	1 111 001 330 -1
accessory ports for TC110/120 to power supply	
pack	PM 061 351 -T
Connection cable with RS-485 interface and 3	
accessory ports for TC110/120 to power supply	
pack	PM 061 512 -T
Connection cable for HiPace with TC 110/120	PM 061 543 -T
Connection cable incl. 2 accessory ports for TC	PM 061 552 -T
110/120 to power supply pack  Cables Extension cables	FWI 001 332 -1
Extension cable M8 on M8	PM 061 783 -T
Cables Mains cables / Power cords	1 111 001 100 1
Mains cable 208 V AC, NEMA 6-15 to C13, 3 m	P 4564 309 ZF
Cables RS-485 Interface cables	
Interface cable, M12 m straight/ M12 m angled,	
0.7 m	PM 061 791 -T
Control Devices Backing pump	
Relay box for backing pumps, 1-phase 20 A for	
TC 110/120 and TCP 350, plug M8	PM 061 373 -T
Relay box, shielded, for backing pumps, 1-	
phase 7A for TC 110/120 and TCP 350, plug M8	PM 071 282 -X
Control Devices Power supplies and control	1 III VI I ZUZ -A
displays	
Accessories package for HPU 001/PC	PM 061 005 -T
TPS 180, power supply pack for wall/standard	
rail fitting	PM 061 341 -T
TPS 181, power supply pack 19" rack module	
3HU	PM 061 345 -T
Front panel kit for TPS 181	PM 061 394 -T
DCU 180, Display control unit incl. power supply	DM C04 924
pack 19"  Control Units without Power supply	PM C01 821
Control Units without Power supply HPU 001, Handheld programming unit	PM 051 510 -T
DCU 002, Display Control Unit	PM 061 348 -T
500 002, Display Control Offic	1 10 001 090 -1

Accessories	
Cooling Air cooling	
Air cooling for HiPace 300/450 with TC 110/120	PM Z01 301
Air cooling for HiPace 300/450, 115 V	PM Z01 308
Air cooling for HiPace 300/450, 230 V	PM Z01 309
Cooling Water cooling	
Water cooling for HiPace 300 with push-in fitting	
8 mm	PM 016 624 -T
Water cooling for HiPace 300 with 6 mm push-	
in fitting	PM 016 636 -T
Water cooling for HiPace 300 with tube fitting 1/4"	PM 016 637 -T
Water cooling for HiPace 300 with hose nozzle,	1 111 010 007 -1
9.5 mm	PM 016 655 -T
Monitoring Pressure Sensors	
RPT 010, Digital Piezo/Pirani Sensor	PT R71 100
IKT 010, Digital cold cathode sensor, low	
current	PT R72 100
IKT 011, Digital cold cathode sensor, high	DT D70 400
current	PT R73 100
Mounting DN ISO-F, Mounting kits	
Mounting kit for DN 100 ISO-F, including coated centering ring, hexagon screws	PM 016 450 -T
Mounting kit for DN 100 ISO-F, including coated	1 11 0 10 1
centering ring, splinter shield, hexagon screws	PM 016 451 -T
Mounting kit for DN 100 ISO-F, including coated	
centering ring, protective screen, hexagon	
screws	PM 016 452 -T
Mounting kit for DN 100 ISO-F, including coated	DM 040 455 T
centering ring, stud screws  Mounting kit for DN 100 ISO-F, including coated	PM 016 455 -T
centering ring, splinter shield, stud screws	PM 016 456 -T
Mounting kit for DN 100 ISO-F, including coated	
centering ring, protection screen, stud screws	PM 016 457 -T
Mounting DN ISO-K/-F, sealings	
Centering ring with multifunction coating, DN	
100 ISO-K/-F	PM 016 210 -U
Mounting Wall rail fittings	
Wall rail fitting for TPS 110/180/310/400	PM 061 392 -T
Protection DN ISO-K/-F, sealings, splinter shields, protection screens	
Centering ring with multifunction coating and	
integrated splinter shield, DN 100 ISO-K/-F	PM 016 807 -U
Centering ring with multifunction coating and	
integrated protection screen, DN 100 ISO-K/-F	PM 016 212 -U
Protection Sealing gas throttles	
Sealing gas throttle for HiPace 300	PM Z01 317
Turbopumps	
Mains cable 230 V AC, CEE 7/7 to C13, 3 m	P 4564 309 ZA
Mains cable 115 V AC, NEMA 5-15 to C13, 3 m	P 4564 309 ZE
Y-Connector M12 to RS-485 USB converter to RS-485 interface	P 4723 010 PM 061 207 -T
Turbopumps/Measurement	FIW 001 ZU/ -1
Interface cable, M12 m straight/M12 m straight,	
3 m	PM 061 283 -T
Valves Fore-vacuum safety valves	
TVV 001, fore-vacuum safety valve, 230 V AC	PM Z01 205
TVV 001, fore-vacuum safety valve, 115 V AC	PM Z01 206
Valves Sealing gas valves, shielded	
(normally closed)	
Sealing gas valve, shielded for HiPace 300 with TC 110/120	PM Z01 311
10 110/120	I III ZUI JII

Accessories	
Venting Power failure venting units (normally open)	
Shielded power failure venting unit, 24 V DC, G 1/8", for connection to TC 110/120	PM Z01 330
Venting Venting accessories	
Screw-on flange, DN 16 ISO-KF, G 1/8"	PM 016 780 -T
Push-in fitting for 6 mm tube, G 1/8"	PM 016 781 -T
Push-in fitting for 8 mm tube, G 1/8"	PM 016 782 -T
Hose nozzle for 9 mm hose, G 1/8"	PM 016 783 -T
Banjo fitting	PM 016 787 -T
Screw-in flange, DN 10 ISO-KF, G 1/8"	PM 033 737 -T
Banjo fitting, small	PM 143 877 -T
TTV 001, Drier for Venting Turbopumps	PM Z00 121
Venting Venting valves (normally closed)	
Venting valve, shielded, 24 V DC, G 1/8", for connection to TC 110/120	PM Z01 290
Venting valve, 24 V DC, G 1/8" without cable	PM Z01 293
Vibration Reduction Vibration dampers	
Vibration damper for HiPace 300/400, DN 100 ISO-K/F	PM 006 459 -X
Vibration Reduction Vibration isolators	
Vibration isolator for DN 100 ISO-F/K	PM 016 600 -U

## **VACUUM SOLUTIONS FROM A SINGLE SOURCE**

Pfeiffer Vacuum stands for innovative and custom vacuum solutions worldwide, technological perfection, competent advice and reliable service.

# **COMPLETE RANGE OF PRODUCTS**

From a single component to complex systems:

We are the only supplier of vacuum technology that provides a complete product portfolio.

# **COMPETENCE IN THEORY AND PRACTICE**

Benefit from our know-how and our portfolio of training opportunities! We support you with your plant layout and provide first-class on-site service worldwide.

Are you looking for a perfect vacuum solution? Please contact us:

Pfeiffer Vacuum GmbH Headquarters · Germany T +49 6441 802-0 info@pfeiffer-vacuum.de

www.pfeiffer-vacuum.com

