PFEIFFER VACUUM

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HiPace® 80

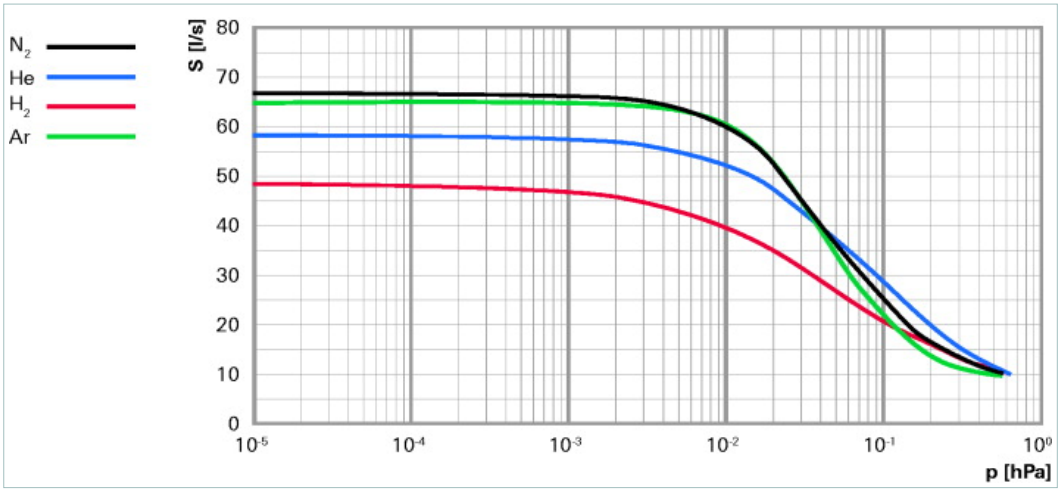
Compact yet powerful turbopumps with pumping speeds of up to 71 l/s for N_2



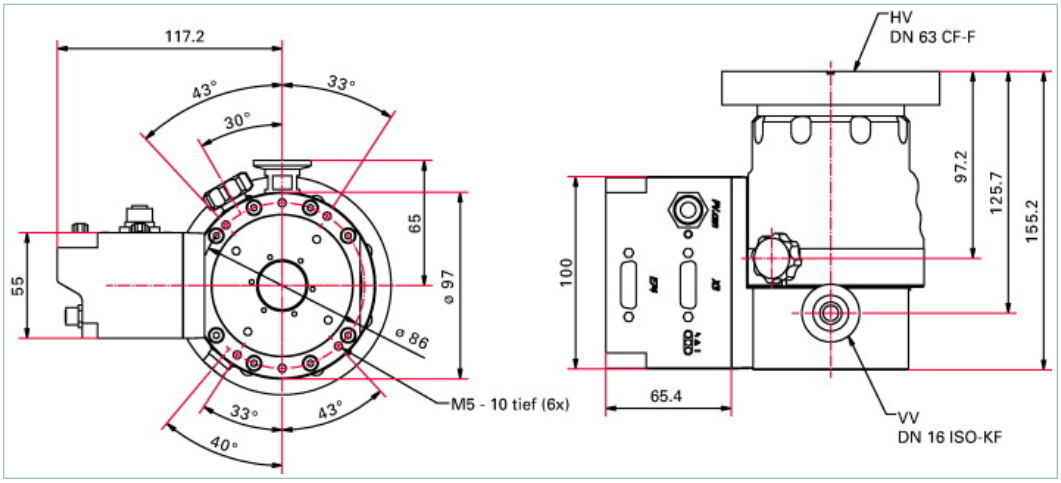
Similar Image

HiPace® 80 with TC 110, E74, DN 63 CF-F

- Small yet powerful turbopump with a pumping speed of up to 67 l/s for N_2
- Integrated drive electronics TC 110 and interface E 74
- For installation in any orientation
- Ideal for dependable systems integration
- Extensive accessories expand the range of applications



Dimensions



Technical Data	HiPace® 80 with TC 110, E74, DN 63 CF-F
Bearing	Hybrid
Compression ratio for Ar	> $1 \cdot 10^{11}$
Compression ratio for H_2	$1.4 \cdot 10^5$
Compression ratio for He	$1.3 \cdot 10^7$
Compression ratio for N_2	> $1 \cdot 10^{11}$
Cooling method, optional	Air/water
Cooling method, standard	Convection
Cooling water consumption	75 l/h
Cooling water temperature	5-25 °C | 41-77 °F | 278-298 K
Electronic drive unit	with TC 110
Flange (in)	DN 63 CF-F
Flange (out)	DN 16 ISO-KF / G 1/4"
Fore-vacuum max. for N_2	22 hPa | 16.5 Torr | 22 mbar
Gas throughput at full rotational speed for Ar	0.54 hPa l/s | 0.41 Torr l/s | 0.54 mbar l/s

Technical Data	HiPace® 80 with TC 110, E74, DN 63 CF-F
Gas throughput at full rotational speed for H_2	15.3 hPa l/s | 11.47 Torr l/s | 15.3 mbar l/s
Gas throughput at full rotational speed for He	2.7 hPa l/s | 2.02 Torr l/s | 2.7 mbar l/s
Gas throughput at full rotational speed for N_2	1.3 hPa l/s | 0.97 Torr l/s | 1.3 mbar l/s
Interface, extended	E74
Interfaces	RS-485, Remote, E74
Mounting orientation	in any orientation
Operating voltage	24 (± 5 %) V DC
Permissible magnetic field max.	3.8 mT
Protection category	IP 54
Pumping speed for Ar	66 l/s
Pumping speed for H_2	48 l/s
Pumping speed for He	58 l/s
Pumping speed for N_2	67 l/s
Rotation speed ± 2 %	90,000 min^{-1}
Rotation speed variable	50-100 %
Run-up time	1.5 min
Sound pressure level	48 dB (A)
Ultimate pressure according to PNEUROP	< 5 · 10^{-10} hPa | < 3.75 · 10^{-10} Torr | < 5 · 10^{-10} mbar
Venting connection	G 1/8"
Weight	4 kg | 8.82 lb

Order number	
HiPace® 80	**PM P04 391**

Accessories	
Accessory for TC 110	
Enclosure for plug, spraywater-protected, 15-pole, D-sub	**P 0998 016**
Mains power plug angled for TC 110/120 and mating plug for interface E74	**P 4723 111**
Mains power plug for TC 110/120 and mating plug for E74 interface, straight	**P 4723 110**
TCS 11, adapter for TC 110/120 with RS-485 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**
Adapter and control cables	
Control cable for valve	**PM 061 687 -T**
HiPace - ACP connection cable	**PM 071 142 -X**
Air cooling	
Air cooling for HiPace 60/80, SplitFlow 50/80, 230 V	**PM Z01 343**
Air cooling for HiPace 60 P, HiPace 80 and SplitFlow 50/80 with TC 110/120	**PM Z01 300**
Air cooling for HiPace 60 P and 80, SplitFlow 50/80, 115 V	**PM Z01 344**
CF-F, Mounting kit	
Set of hexagon screws for trough hole, DN 63 CF-F	**PM 016 683 -T**
Set of stud screws for tapped hole, 8 count M8, DN 63 CF-F	**PM 016 684 -T**
Set of stud screws for trough hole, DN 63 CF-F	**PM 016 733 -T**
CF-F, Sealings, splinter shields, protection screens	
Protection screen for DN 63 CF-F	**PM 016 333**
Splinter shield for turbopumps, DN 63 CF-F	**PM 016 312**
Connection cables	
Connection cable for HiPace with TC 110/120	**PM 061 543 -T**
Connection cable incl. 2 accessory ports for TC 110/120 to power supply	**PM 061 552 -T**
Connection cable with RS-485 interface and 2 accessory ports for TC110/120 to power supply	**PM 061 351 -T**
Connection cable with RS-485 interface and 3 accessory ports for TC 110/120 to power supply	**PM 061 512 -T**
Connection cable with RS-485 interface for TC 110/120 to power supply	**PM 061 350 -T**
Control and display units	
Accessories package for HPU 001/PC	**PM 061 005 -T**
DCU 002, Display Control Unit	**PM 061 348 -T**
HPU 001, Handheld Programming Unit	**PM 051 510 -T**
RJ 45 interface cable on M12 for HiPace	**PM 051 726 -T**
DCU with integrated power supply	
DCU 110, Display control unit incl. power supply	**PM C01 820**
DCU 180, Display control unit incl. power supply	**PM C01 821**
Fore-vacuum safety valves	
TVV 001 fore-vacuum safety valve, 115 V AC	**PM Z01 206**
TVV 001 fore-vacuum safety valve, 230 V AC	**PM Z01 205**
Heating suitable for TC 110 and TC 400	
Heating jacket for HiPace 80 with TC 110, 115 V AC, UL plug	**PM 061 362 -T**
Heating jacket for HiPace 80 with TC 110, 208 V AC, UL plug	**PM 061 361 -T**
Heating sleeve for HiPace 80 with TC 110, 230 V AC, safety plug	**PM 061 360 -T**

Accessories	
Interface and extension cables	
Extension cable M8 on M8	**PM 061 783 -T**
Interface cable, M12 m straight/ M12 m angled 0.7 m	**PM 061 791 -T**
Interface cable, M12 m straight / M12 m straight, 3 m	**PM 061 283 -T**
Mains cables	
Mains cable 115 V AC, NEMA 5-15 to C13, 3 m	**P 4564 309 ZE**
Mains cable 208 V AC, NEMA 6-15 to C13, 3 m	**P 4564 309 ZF**
Mains cable 230 V AC, CEE 7/7 to C13, 3 m	**P 4564 309 ZA**
Power failure venting units (normally open)	
Schielded power failure venting unit, 24 V DC, G 1/8", for connection to TC 110/120	**PM Z01 330**
Relay boxes	
Relay box, shielded, for backing pumps, 1-phase 7A for TC 110/120 and TCP 350, plug M8	**PM 071 282 -X**
Relay box for backing pump, single phase 20 A for TC 110/120 and TCP 350, M8 plug	**PM 061 373 -T**
RS-485	
Connector M12 to RS-485	**PM 061 270 -X**
Power separator for RS-485	**PT 348 132 -T**
Termination resistor for RS-485	**PT 348 105 -T**
USB converter to RS-485 interface	**PM 061 207 -T**
Y-Connector M12 to RS-485	**P 4723 010**
Sealing gas	
Sealing gas throttle for HiPace 60/80	**PM Z01 316**
Sealing gas valve, shielded for HiPace 60/80 with TC 110	**PM Z01 310**
TPS-19" rack module	
Front panel kit for TPS 111	**PM 061 393 -T**
Front panel kit for TPS 181	**PM 061 394 -T**
TPS 111, mains pack 19" rack module 3HU	**PM 061 344 -T**
TPS 181, mains pack 19" rack module 3HU	**PM 061 345 -T**
TPS wall rail fitting	
TPS 110, mains pack for wall/standard rail fitting	**PM 061 340 -T**
TPS 180, mains pack for wall/standard rail fitting	**PM 061 341 -T**
Wall rail fitting for TPS 110/180/310/400	**PM 061 392 -T**
Venting accessory with small flange, G 1/8", hoses, air drier	
Banjo fitting	**PM 016 787 -T**
Banjo fitting, small	**PM 143 877 -T**
Hose nozzle for 9 mm hose, G 1/8"	**PM 016 783 -T**
Plug-in fitting for 6 mm hose, G 1/8"	**PM 016 781 -T**
Plug-in fitting for 8 mm hose, G 1/8"	**PM 016 782 -T**
Screw-in flange, DN 10 ISO-KF, G 1/8"	**PM 033 737 -T**
Screw-on flange, DN 16 ISO-KF, G 1/8"	**PM 016 780 -T**
TTV 001, dryer for venting turbopumps	**PM Z00 121**
Venting valve (normally closed)	
Venting valve, 24 V DC, G 1/8" without cable	**PM Z01 293**
Venting valve, shielded, 24 V DC, G 1/8", for connection to TC 110/120	**PM Z01 290**
Vibration damper	
Vibration damper for HiPace 60/80, DN 63 CF-F	**PM 006 801 -X**
Water cooling	
Water cooling for HiPace 60 P, HiPace 80 and for SplitFlow 50/80 with plug-in connection, 8 mm	**PM 016 623 -T**