

HiPace®; 300

Compact yet powerful turbopumps with pumping speeds of up to 260 l/s for N₂



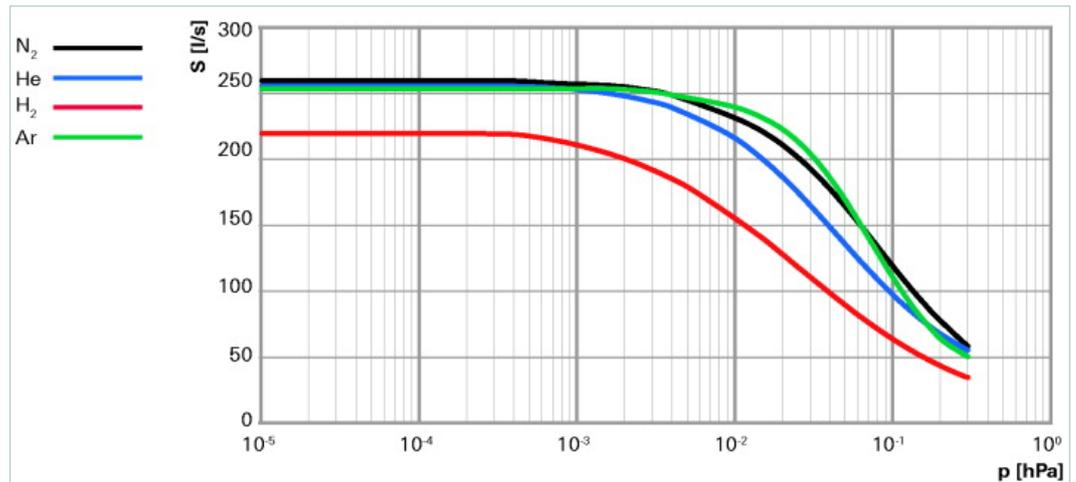


Similar Image

HiPace® 300 for TCP 350, DN 100 CF-F

- Rugged, powerful turbopump with a pumping speed of up to 260 l/s for N₂
- For external TCP 350 drive electronics
- For installation in any orientation
- For installation in any orientation
- Extensive accessories expand the range of applications

C=Corrosive gas version



Technical Data	HiPace® 300 for TCP 350, DN 100 CF-F
Bearing	Hybrid
Compression ratio for Ar	$> 1 \cdot 10^{11}$
Compression ratio for H ₂	$9 \cdot 10^5$
Compression ratio for He	$> 1 \cdot 10^8$
Compression ratio for N ₂	$> 1 \cdot 10^{11}$
Cooling method, optional	Air
Cooling method, standard	Water
Cooling water consumption	50 l/h
Cooling water temperature	15-35 °C 59-95 °F 288-308 K
Electronic drive unit	for TCP 350
Flange (in)	DN 100 CF-F
Flange (out)	DN 16 ISO-KF / G 1/4"
Fore-vacuum max. for N ₂	17 hPa 12.75 Torr 17 mbar
Gas throughput at full rotational speed for Ar	4 hPa l/s 3 Torr l/s 4 mbar l/s
Gas throughput at full rotational speed for H ₂	> 14 hPa l/s > 10.5 Torr l/s > 14 mbar l/s
Gas throughput at full rotational speed for He	11 hPa l/s 8.25 Torr l/s 11 mbar l/s
Gas throughput at full rotational speed for N ₂	7 hPa l/s 5.25 Torr l/s 7 mbar l/s
Interfaces	RS-485, Remote
Mounting orientation	in any orientation
Permissible magnetic field max.	5.5 mT
Protection category	IP54
Pumping speed for Ar	255 l/s
Pumping speed for H ₂	220 l/s
Pumping speed for He	255 l/s
Pumping speed for N ₂	260 l/s
Rotation speed ± 2 %	60000 min ⁻¹
Rotation speed variable	35-100 %
Run-up time	2.5 min
Separate electronic drive unit	yes

Technical Data		HiPace® 300 for TCP 350, DN 100 CF-F
Sound pressure level		≤ 50 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		7.8 kg 17.2 lb
Order number		
HiPace® 300		PM P03 994

Accessories	
Accessory external drive units	
Adapter cable, TCP 350 - backing pump relay box, M12	PM 061 377 -T
Adapter cable, TCP 350 - backing pump relay box, M8	PM 061 376 -T
Air cooling	
Air cooling for HiPace 300/450, 115 V	PM Z01 308
Air cooling for HiPace 300/450, 230 V	PM Z01 309
Air cooling for HiPace 300/450 with TC 110/120	PM Z01 301
Air cooling for HiPace 300 with TC 400	PM Z01 302
CF-F, Mounting kit	
Set of hexagon screws for through hole, DN 100 CF-F	PM 016 690 -T
Set of stud screws for tapped hole, DN 100 CF-F	PM 016 866 -T
Set of stud screws for through hole, DN 100 CF-F	PM 016 734 -T
CF-F, Sealings, splinter shields, protection screens	
Protection screen for DN 100 CF-F	PM 016 336
Splinter shield for turbopumps, DN 100 CF-F	PM 016 315
Connection cables	
Connection cable from TCP 350 to HiPace with 2 accessory ports M12, 3 m	PM 061 356 -T
Connection cable from TCP 350 to HiPace with 2 accessory ports M8, 3 m	PM 061 353 -T
Control and display units	
RJ 45 interface cable on M12 for HiPace	PM 051 726 -T
External drive units	
TCP 350 DN, drive electronics, DeviceNet	PM C01 742
TCP 350 electronic drive unit	PM C01 740
TCP 350 PB, drive electronics, Profibus	PM C01 741
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 300 with TC 110, 115 V AC, UL plug	PM 061 365 -T
Heating jacket for HiPace 300 with TC 110, 208 V AC, UL plug	PM 061 364 -T
Heating jacket for HiPace 300 with TC 110, 230 V AC, safety plug	PM 061 363 -T
Heating jacket for HiPace 300 with TC 400, 115 V AC, UL plug	PM 061 368 -T
Heating jacket for HiPace 300 with TC 400, 208 V AC, UL plug	PM 061 367 -T
Heating jacket for HiPace 300 with TC 400, 230 V AC, safety plug	PM 061 366 -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)	
Power failure venting valve, shielded, 24 V DC, G 1/8" for connection to TC 400, TM 700 and TC 1200	PM Z01 331
Shielded power failure venting unit, 24 V DC, G 1/8", for connection to TC 110/120	PM Z01 330

Accessories	
Relay boxes	
Backing pump relay box, single phase 20 A, for TC 400 and TCP 350, M12 plug	PM 061 375 -T
Relay box, shielded, for backing pumps, 1-phase 7 A for TC 110/120 and TCP 350, plug M8	PM 071 282 -X
Relay box, shielded, for backing pumps, 1-phase 7 A for TC 400/1200, TM 700 and TCP 350, M12	PM 071 284 -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	
USB converter to RS-485 interface	PM 061 207 -T
Sealing gas	
Sealing gas throttle for HiPace 300 - 800	PM Z01 317
Sealing gas valve, shielded for HiPace 300/400/700 and 800 with TC 400 and TM 700	PM Z01 312
Sealing gas valve, shielded for HiPace 300/450 with TC 110/120	PM Z01 311
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
Push-in fitting for 6 mm hose, G 1/8"	PM 016 781 -T
Push-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, shielded, 24 V DC, G 1/8", for connecting to TC 400,1200 and TM 700 with twisted plug 270°	PM Z01 292
Venting valve, shielded, 24 V DC, G 1/8", for connection to TC 110/120	PM Z01 290
Venting valve, shielded, 24 V DC, G 1/8", for connection to TC 400/1200 and TM 700	PM Z01 291
Vibration damper	
Vibration damper for HiPace 300/400, DN 100 CF-F	PM 006 488 -X