

HiPace™ 3400 MC

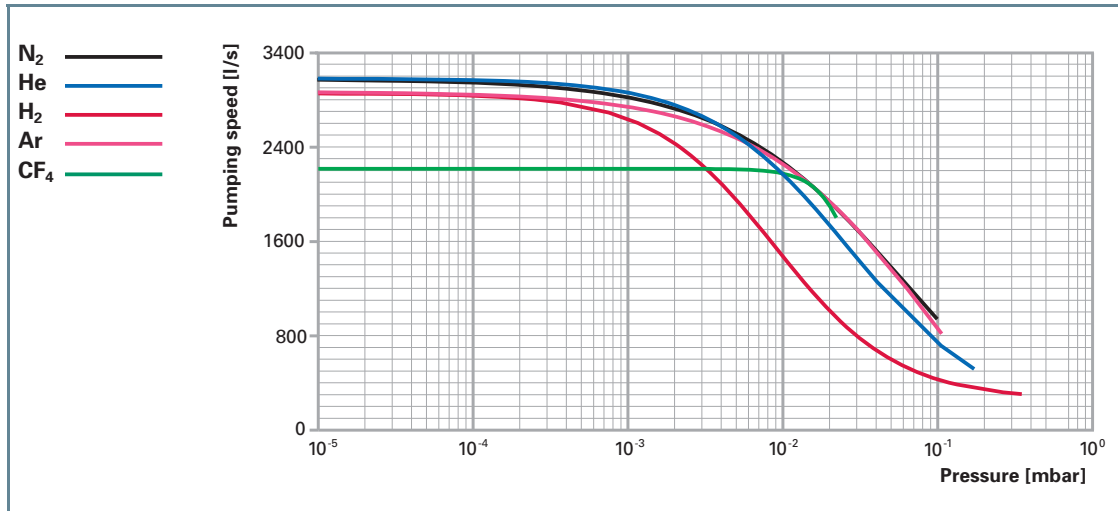
Powerful magnetically levitated turbo-pumps with pumping speeds of 3000 l/s.



- ▶ Active 5-axis magnetic levitation system
- ▶ Maintenance-free, hydrocarbon-free
- ▶ Very low vibration and noise levels
- ▶ High pumping speed and gas throughput for both light and heavy gases

M = Magnetically levitated
C = Suitable for corrosive gases
Systems with DeviceNet fieldbus interface instead of Profibus available upon request.

Pumping speed

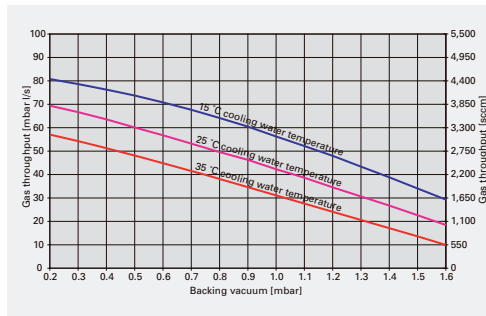


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Gas throughput

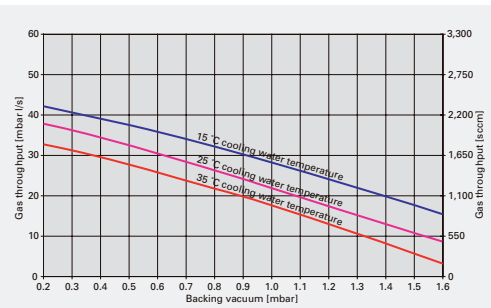
Gases with molecular mass of < 40

at nominal speed, cooling water throughput 100 l/h



Gases with molecular mass of ≥ 40

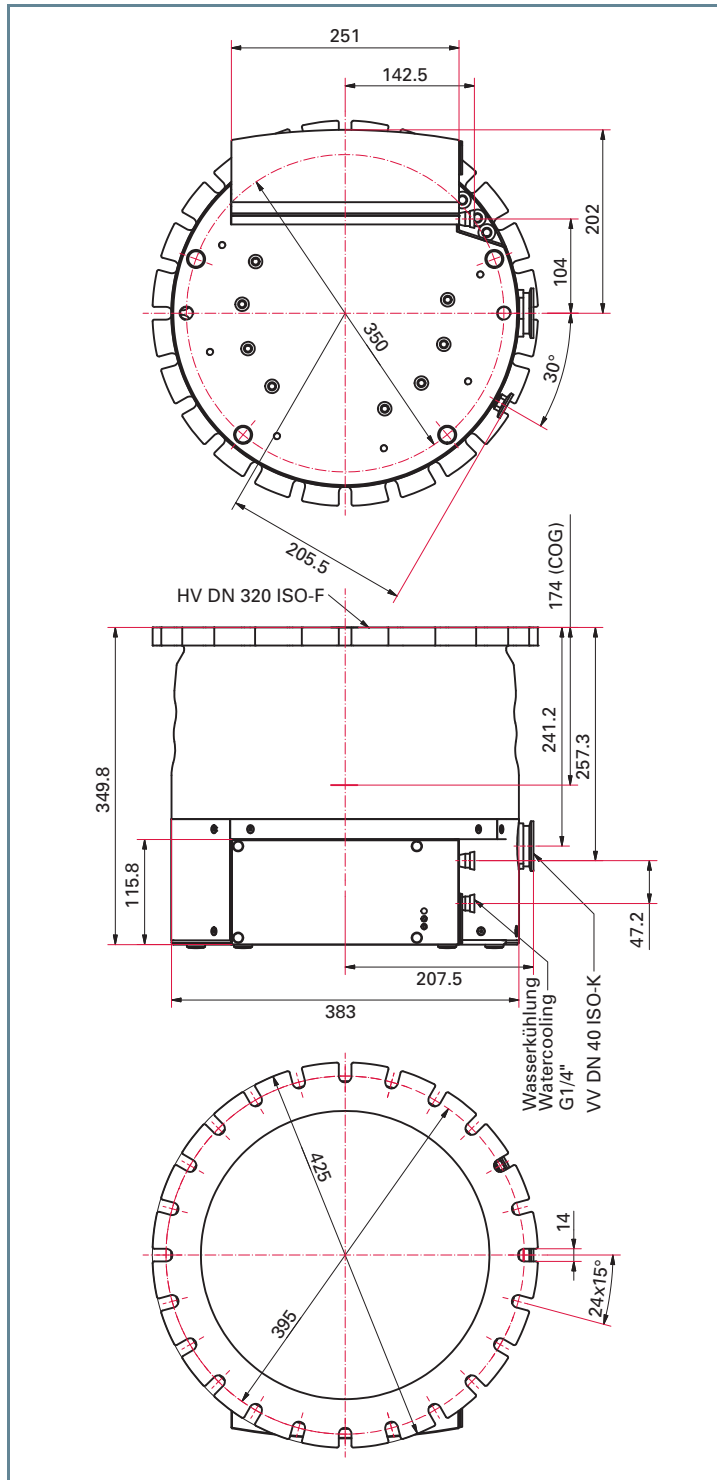
at nominal speed, sealing gas 20 sccm, cooling water throughput 100 l/h



HiPace™ 3400 MC, DN 320 ISO-F¹⁾

¹⁾ Gas throughput relative to backing vacuum and kind of gas

Dimensions



Technical data	HiPace™ 3400, with TM 3000, DN 320 ISO-F	HiPace™ 3400 MC, with TM 3000, DN 320 ISO-F
Connection nominal diameter		
Flange (in)	DN 320 ISO-F	DN 320 ISO-F
Flange (out)	DN 40 ISO-KF	DN 40 ISO-KF
Venting connection	DN 10 ISO-KF	DN 10 ISO-KF
Pumping speed		
Pumping speed for H ₂	2850 l/s	2850 l/s
Pumping speed for He	2950 l/s	2850 l/s
Pumping speed for N ₂	2950 l/s	2850 l/s
Pumping speed for Ar	2850 l/s	2850 l/s
Pumping speed for CF ₄	2200 l/s	2200 l/s
Compression		
Compression ratio for H ₂	4·10 ⁴	4·10 ⁴
Compression ratio for He	4·10 ⁵	4·10 ⁵
Compression ratio for N ₂	> 1·10 ⁹	> 1·10 ⁹
Compression ratio for Ar	> 1·10 ⁹	> 1·10 ⁹
Compression ratio for CF ₄	> 1·10 ⁹	> 1·10 ⁹
Fore Vacuum max. for N₂	2 mbar	2 mbar
Ultimate pressure with OnTool™ DryPump	< 1·10 ⁻⁹ mbar	< 1·10 ⁻⁹ mbar
Rotation speed ±2%	24000 rpm	24000 rpm
Run-up time	11 min	11 min
Cooling method, standard	Water	Water
Cooling water consumption	100 l/h	100 l/h
Cooling water temperature	15-35 °C	15-35 °C
Permissible magnetic field max.	10 mT	10 mT
Sound pressure level	45 dB (A)	45 dB (A)
Protection category	IP 54	IP 54
Interfaces	RS-485, Remote	RS-485, Remote, Profibus
Weight	94 kg	94 kg
Order number pump	PM P03 501	PM P03 504

Accessories	HiPace™ 3400, with TM 3000, DN 320 ISO-F	HiPace™ 3400 MC, with TM 3000, DN 320 ISO-F
Order number pump	PM P03 501	PM P03 504
Power supplies/power		
TPS - mains pack for wall/standard rail fitting	PM C01 760	PM C01 760
TPS - mains pack 19" rack module 3 RU	PM C01 761	PM C01 761
Control units		
DCU - Display Control Unit	PM 061 348-T	PM 061 348-T
HPU - Handheld Programming Unit	PM 051 510-T	PM 051 510-T
Accessories for HPU	PM 061 005-T	PM 061 005-T
Mains cable DCU/TPS/TCP, 3 m		
230 V AC mains cable with Euro-style safety plug	P4 564 309 HA	P4 564 309 HA
208 V AC mains cable with UL plug	P4 564 309 HB	P4 564 309 HB
Connection cable, length 3 m between		
TPS 1400 - TM 3000	PM 051 983-T	PM 051 983-T
Connection cable TM 3000 - backing pump relay box, Length 2 m	PM 061 630-X	PM 061 630-X
Venting accessories		
Air drier TTV 001	PM Z00 121	PM Z00 121
Backing pump control		
Backing pump relay box, single phase 20 A	PM 061 375-T	PM 061 375-T
TVV 001 backing vacuum safety valve, 230 V AC	PM Z01 205	PM Z01 205
TVV 001 backing vacuum safety valve, 115 V AC	PM Z01 206	PM Z01 206
General accessories		
Coated centering ring	PM 016 232 AU	PM 016 232 AU
Coated centering ring with protection screen	PM 016 234-U	PM 016 234-U
Coated centering ring with integrated splinter shield	PM 016 233-U	PM 016 233-U
Interface cable, 3 m, M 12	PM 061 283-T	PM 061 283-T
Connection cable for HiPace MC with TM 3000, 3 m	PM 051 983-T	PM 051 983-T
TIC 001, Serial Interface Converter RS-232/RS-485	PM 051 054-T	PM 051 054-T
Connection cable, RJ 45 on M12	PM 051 726-T	PM 051 726-T
Mounting materials		
Coated centering ring, hexagon bolts	PM 016 490-T	PM 016 490-T
Coated centering ring with protection screen, hexagon bolts	PM 016 492-T	PM 016 492-T
Coated centering ring with splinter shield, hexagon bolts	PM 016 491 -T	PM 016 491 -T
Coated centering ring, stud screws	PM 016 495-T	PM 016 495-T
Coated centering ring with protection screen, stud screws	PM 016 497-T	PM 016 497-T