



## HiPace<sup>®</sup> 700

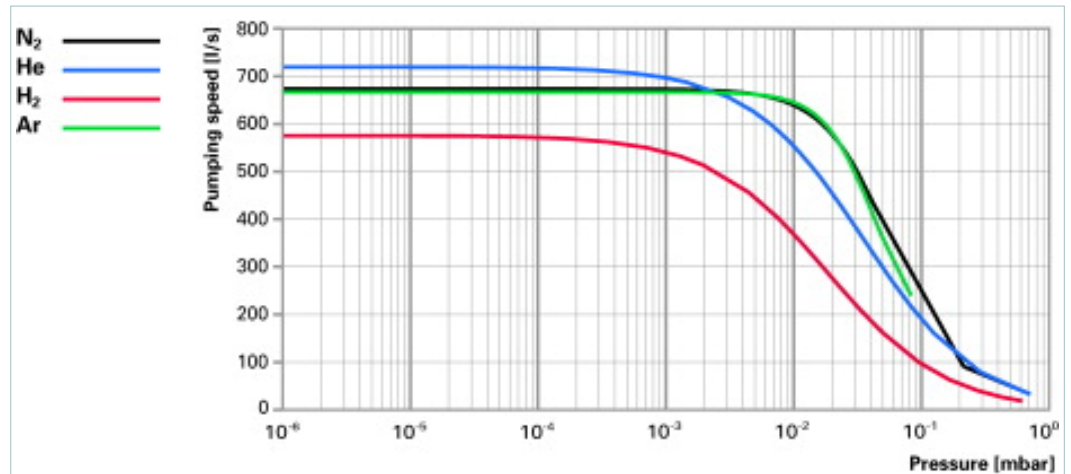
Maximum vacuum performance in a compact design with a pumping speed of 685 l/s for N<sub>2</sub>



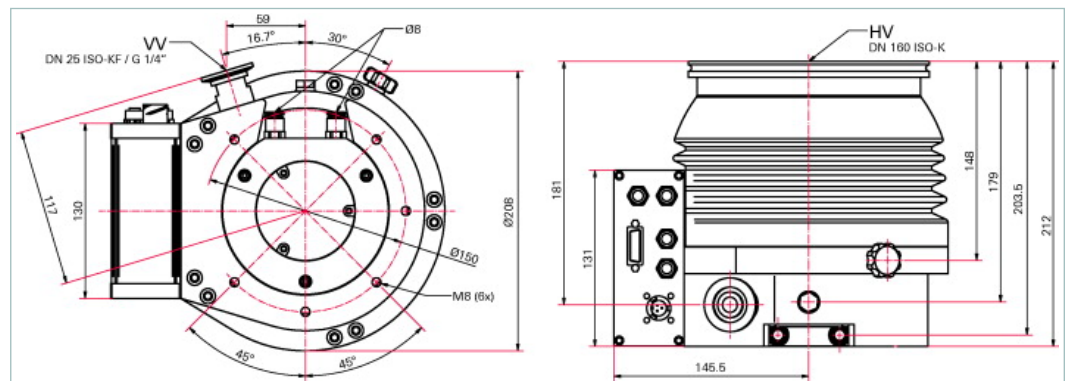
Similar Image

## HiPace® 700, for TCP 350, DN 160 ISO-F

- Compact yet powerful turbopump with a pumping speed of up to 685 l/s for N<sub>2</sub>
- Maximum vacuum performance with minimum power consumption
- For installation in any orientation
- External TCP 350 drive electronics
- Integrated, powerful cooling system



### Dimensions



Technical Data	HiPace® 700, for TCP 350, DN 160 ISO-F
Bearing	Hybrid
Compression ratio for Ar	$> 1 \cdot 10^{11}$
Compression ratio for H <sub>2</sub>	$4 \cdot 10^5$
Compression ratio for He	$3 \cdot 10^7$
Compression ratio for N <sub>2</sub>	$> 1 \cdot 10^{11}$
Cooling method, optional	Air
Cooling method, standard	Water
Cooling water consumption	100 l/h
Cooling water temperature	15-35 °C   59-95 °F   288-308 K
Electronic drive unit	for TCP 350
Flange (in)	DN 160 ISO-F
Flange (out)	DN 25 ISO-KF / G 1/4"
Fore-vacuum max. for N <sub>2</sub>	10 hPa   7.5 Torr   10 mbar
Gas throughput at full rotational speed for Ar	1.5 hPa l/s   1.12 Torr l/s   1.5 mbar l/s
Gas throughput at full rotational speed for H <sub>2</sub>	$> 8$ hPa l/s   $> 6$ Torr l/s   $> 8$ mbar l/s
Gas throughput at full rotational speed for He	5 hPa l/s   3.75 Torr l/s   5 mbar l/s
Gas throughput at full rotational speed for N <sub>2</sub>	3 hPa l/s   2.25 Torr l/s   3 mbar l/s

Technical Data		HiPace® 700, for TCP 350, DN 160 ISO-F
Interfaces		RS-485, Remote
Mounting orientation		in any orientation
Permissible magnetic field max.		6 mT
Protection category		IP 54
Pumping speed for Ar		665 l/s
Pumping speed for H <sub>2</sub>		555 l/s
Pumping speed for He		655 l/s
Pumping speed for N <sub>2</sub>		685 l/s
Rotation speed ± 2 %		49200 min <sup>-1</sup>
Rotation speed variable		60-100 %
Run-up time		5.5 min
Separate electronic drive unit		yes
Sound pressure level		50 dB (A)
Ultimate pressure according to PNEUROP		< 1 · 10 <sup>-7</sup> hPa   < 7.5 · 10 <sup>-8</sup> Torr   < 1 · 10 <sup>-7</sup> mbar
Venting connection		G 1/8"
Weight		11.2 kg   24.69 lb

Order number	
HiPace® 700	PM P04 082

Accessories	
<b>Accessory external drive units</b>	
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
<b>Air cooling</b>	
Air cooling for HiPace 400/700 and 800 with TC 400	PM Z01 303
<b>Connection cables</b>	
Connection cable from TCP 350 to HiPace with 2 accessory ports M12, 3 m	PM 061 356 -T
<b>Control and display units</b>	
RJ 45 interface cable on M12 for HiPace	PM 051 726 -T
<b>DN ISO-F, Mounting kit</b>	
Mounting kit for DN 160 ISO-F, including coated centering ring, hexagon screws	PM 016 460 -T
Mounting kit for DN 160 ISO-F, including coated centering ring, protection screen, hexagon screws	PM 016 462 -T
Mounting kit for DN 160 ISO-F, including coated centering ring, protection screen, stud screws	PM 016 467 -T
Mounting kit for DN 160 ISO-F, including coated centering ring, splinter shield, hexagon screws	PM 016 461 -T
Mounting kit for DN 160 ISO-F, including coated centering ring, splinter shield, stud screws	PM 016 466 -T
Mounting kit for DN 160 ISO-F, including coated centering ring, stud screws	PM 016 465 -T
<b>DN ISO-K / -F, sealings, splinter shields, protection screens</b>	
Centering ring with multifunction coating, DN 160 ISO-K/-F	PM 016 216 -U
Centering ring with multifunction coating and integrated protection screen, DN 160 ISO-K/-F	PM 016 218 -U
Centering ring with multifunction coating and integrated splinter shield, DN 160 ISO-K/-F	PM 016 217 -U
<b>External drive units</b>	
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
<b>Fore-vacuum safety valves</b>	
TVV 001 fore-vacuum safety valve, 115 V AC	PM Z01 206
TVV 001 fore-vacuum safety valve, 230 V AC	PM Z01 205
<b>Interface and extension cables</b>	
Interface cable, M12 m straight / M12 m straight, 3 m	PM 061 283 -T
<b>Mains cables</b>	
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
<b>Relay boxes</b>	
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 400/1200, TM 700 and TCP 350, M12	PM 071 284 -X
<b>RS-485</b>	
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

<b>Accessories</b>	
<b>Sealing gas</b>	
Sealing gas throttle for HiPace 300 - 800	<b>PM Z01 317</b>
Sealing gas valve, shielded for HiPace 300/400/700 and 800 with TC 400 and TM 700	<b>PM Z01 312</b>
<b>Venting accessory with small flange, G 1/8", hoses, air drier</b>	
TTV 001, dryer for venting turbopumps	<b>PM Z00 121</b>
<b>Venting valve (normally closed)</b>	
Venting valve, shielded, 24 V DC, G 1/8", for connection to TC 400/1200 and TM 700	<b>PM Z01 291</b>
<b>Vibration damper</b>	
Vibration damper for HiPace with DN 160 ISO-K/F	<b>PM 006 492 -X</b>