



# HiPace<sup>®</sup> 1800

Powerful turbopumps with pumping speeds of up to 1700 l/s.





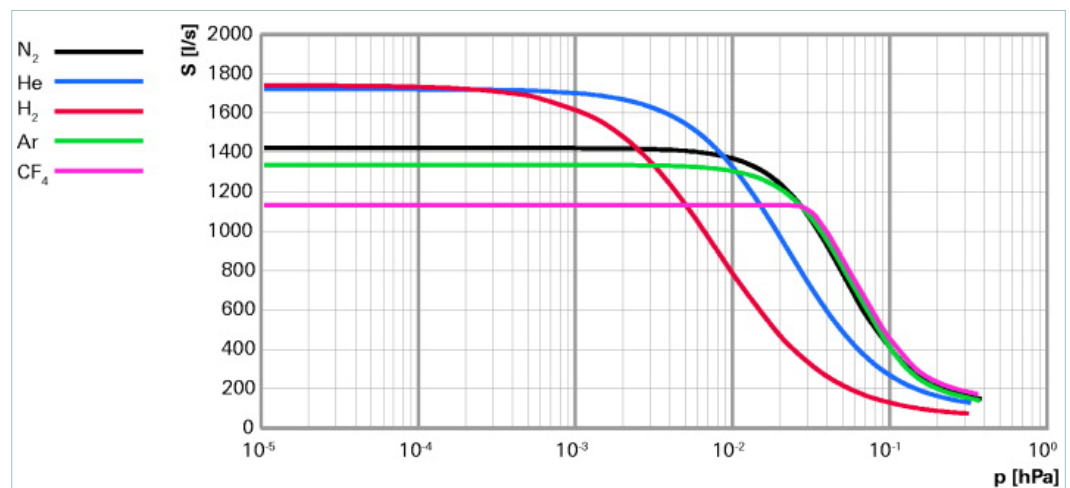
Similar Image

## HiPace® 1800 with TC 1200, Profibus, DN 200 ISO-K

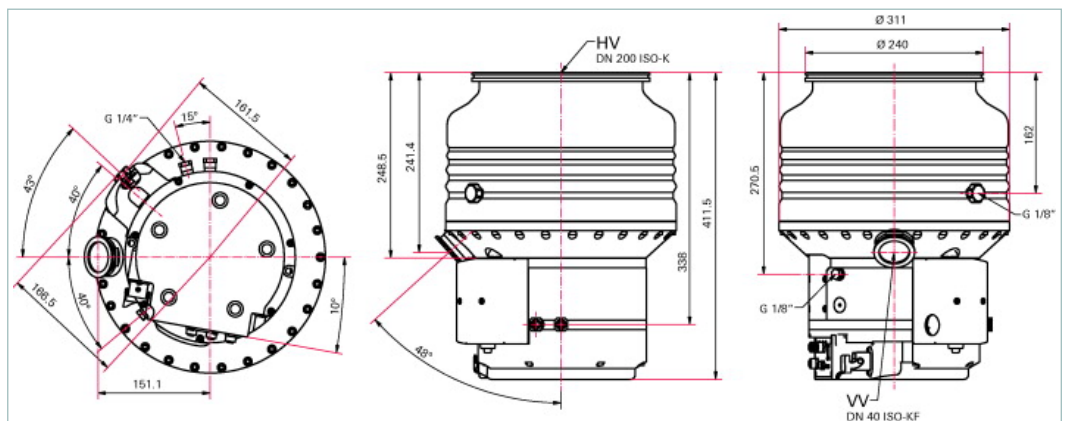
- Powerful turbopump with a pumping speed of up to 1450 l/s for N<sub>2</sub>
- DN 200 ISO-K flange
- Integrated TC 1200 drive electronics with Profibus and power supply
- Integrated sealing gas system with electric sealing gas valve 24 V DC
- Cooling: Water cooling
- Installation orientation: Standard (0° to 90°)
- Protection Class: IP 54
- Interfaces: Profibus, RS-485, Remote
- Extensive accessories expand the range of applications

C = Corrosive gas version

U = Upside-down installation orientation



### Dimensions



### Technical Data

### HiPace® 1800 with TC 1200, Profibus, DN 200 ISO-K

|                                      |                  |
|--------------------------------------|------------------|
| Bearing                              | Hybrid           |
| Compression ratio for Ar             | $> 1 \cdot 10^8$ |
| Compression ratio for H <sub>2</sub> | $2 \cdot 10^4$   |
| Compression ratio for He             | $3 \cdot 10^5$   |
| Compression ratio for N <sub>2</sub> | $> 1 \cdot 10^8$ |
| Cooling method, standard             | Water            |
| Cooling water consumption            | 100 l/h          |

| Technical Data   |  | HiPace® 1800 with TC 1200, Profibus, DN 200 ISO-K  |
|--|--|--|
| Cooling water temperature                                  |  | 15-35 °C   59-95 °F   288-308 K  |
| Electronic drive unit                                      |  | with TC 1200   |
| Flange (in)  |  | DN 200 ISO-K   |
| Flange (out)   |  | DN 40 ISO-KF   |
| Fore-vacuum max. for N <sub>2</sub>                        |  | 1.8 hPa   1.35 Torr   1.8 mbar   |
| Gas throughput at full rotational speed for Ar             |  | 16 hPa l/s   12 Torr l/s   16 mbar l/s   |
| Gas throughput at full rotational speed for H <sub>2</sub> |  | > 30 hPa l/s   > 22.5 Torr l/s   > 30 mbar l/s   |
| Gas throughput at full rotational speed for He             |  | 20 hPa l/s   15 Torr l/s   20 mbar l/s   |
| Gas throughput at full rotational speed for N <sub>2</sub> |  | 20 hPa l/s   15 Torr l/s   20 mbar l/s   |
| Integrated power supply                                    |  | yes  |
| Interface, extended  |  | Profibus   |
| Interfaces   |  | RS-485, Remote   |
| Mounting orientation                                       |  | Standard (0°-90°)  |
| Operating voltage  |  | 100-120/200-240 V AC, 50/60 Hz   |
| Particulate matter   |  | yes  |
| Permissible magnetic field max.                            |  | 7 mT   |
| Protection category  |  | IP 54  |
| Pumping speed for Ar                                       |  | 1370 l/s   |
| Pumping speed for H <sub>2</sub>                           |  | 1700 l/s   |
| Pumping speed for He                                       |  | 1650 l/s   |
| Pumping speed for N <sub>2</sub>                           |  | 1450 l/s   |
| Rotation speed ± 2 %                                       |  | 31500 min <sup>-1</sup>  |
| Rotation speed variable                                    |  | 50-100 %   |
| Run-up time  |  | 4 min  |
| 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   |  | 33 kg   72.75 lb   |
| Order number   |  |  |
| HiPace® 1800   |  | PM P04 130   |

| Accessories  |               |
|--|---------------|
| <b>Accessory for TC 400/1200 and TM 700</b>  |               |
| Y-connector, shielded, M12 for accessories   | P 4723 013    |
| <b>Adapter and control cables</b>  |               |
| Control cable for pumping stations 0.7 m   | PM 061 675 AT |
| HiPace - ACP connection cable  | PM 071 142 -X |
| <b>Control and display units</b>   |               |
| 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 |
| <b>DN ISO-K, Mounting kit, bracket screws</b>  |               |
| Mounting kit for HiPace 1800, DN 200 ISO-K, including coated centering ring, bracket screws                    | PM 016 410 -T |
| Mounting kit for HiPace 1800, DN 200 ISO-K, including coated centering ring, protection screen, bracket screws | PM 016 412 -T |
| Mounting kit for HiPace 1800, DN 200 ISO-K, including coated centering ring, splinter shield, bracket screws   | PM 016 411 -T |
| <b>DN ISO-K / -F, sealings, splinter shields, protection screens</b>   |               |
| Centering ring with multifunction coating, DN 200 ISO-K/-F   | PM 016 220 -U |
| Centering ring with multifunction coating and integrated protection screen, DN 200 ISO-K/-F                    | PM 016 222 -U |
| Centering ring with multifunction coating and integrated splinter shield, DN 200 ISO-K/-F                      | PM 016 221 -U |
| <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 HAN 3A, 3 m   | PM 061 187 -X |
| Mains cable 208 V AC, NEMA 6-15 to HAN 3A, 3 m   | P 4564 309 HB |
| Mains cable 230 V AC, CEE 7/7 to HAN 3A, 3 m   | P 4564 309 HA |
| <b>Relay boxes</b>   |               |
| Relay box, shielded, for backing pumps, 1-phase 20 A for TC 400/1200, TM 700 and TCP 350, M12                  | PM 071 285 -X |
| <b>RS-485</b>  |               |
| USB converter to RS-485 interface  | PM 061 207 -T |
| Y-Connector M12 to RS-485  | P 4723 010    |
| <b>Sealing gas</b>   |               |
| Sealing gas throttle for HiPace 400/700/800 P and C version and HiPace 1200 - 2300                             | PM Z01 318    |
| Sealing gas valve, shielded, HiPace 400/700/800 P and C with TC 400 and HiPace 1200 - 2300 with TC 1200        | PM Z01 313    |
| <b>Venting accessory with small flange, G 1/8", hoses, air drier</b>   |               |
| TTV 001, dryer for venting turbopumps  | PM Z00 121    |
| <b>Venting valve (normally closed)</b>   |               |
| Venting valve, shielded, 24 V DC, G 1/8", for connection to TC 400/1200 and TM 700                             | PM Z01 291    |
| <b>Vibration damper</b>  |               |
| Vibration damper for HiPace 800/1200/1800, DN 200 ISO-K/F  | PM 006 668 -X |