PFEIFFER VACUUM

Hakuto 伯東



HiPace® 2300

Powerful turbopumps with pumping speeds of up to 2050 l/s.



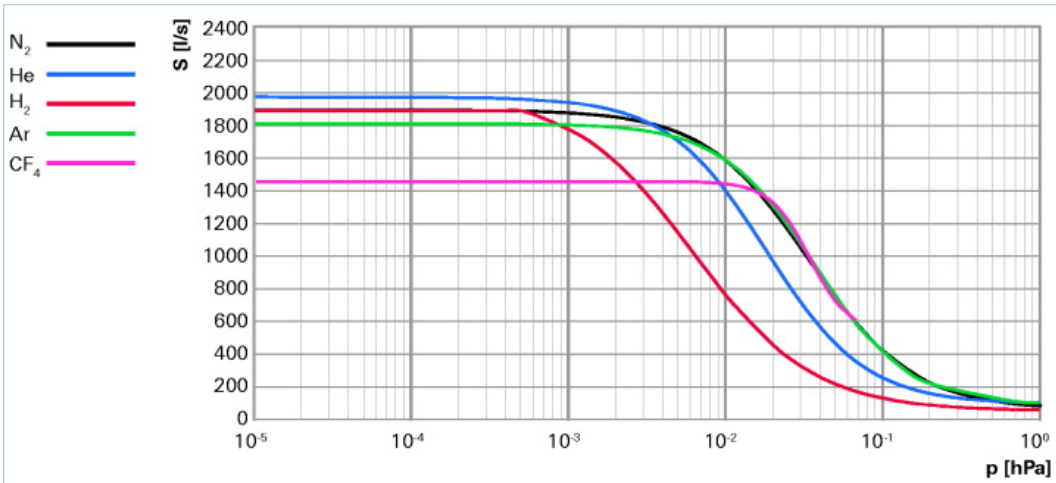
Similar Image

HiPace® 2300 U with TC 1200 Profibus, DN 250 ISO-F, upside down version

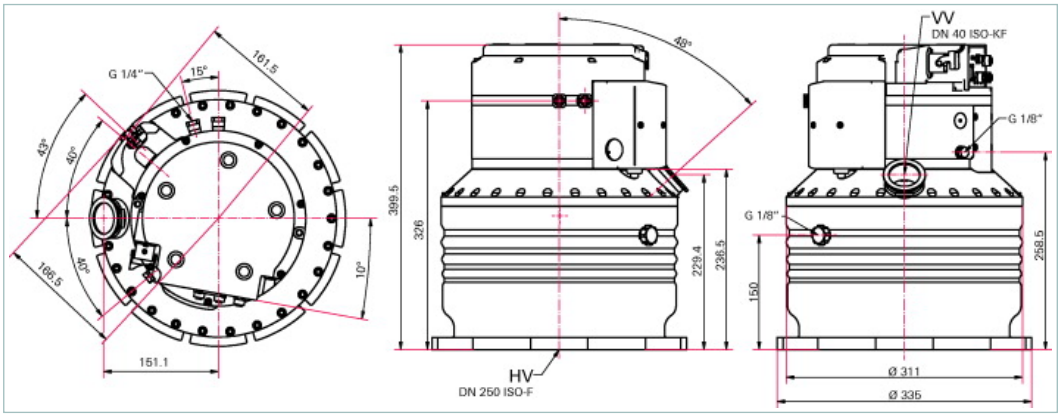
- Powerful turbopump with a pumping speed of up to 1900 l/s for N_2
- DN 250 ISO-F flange
- Integrated TC 1200 drive electronics with Profibus and power supply
- Integrated sealing gas system with electric sealing gas valve 24 V DC
- Cooling: Water cooling
- Installation orientation: Upside-down (90° - 180°)
- 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® 2300 U with TC 1200 Profibus, DN 250 ISO-F, upside down version
Bearing	Hybrid
Compression ratio for Ar	> $1 \cdot 10^8$
Compression ratio for H_2	$2 \cdot 10^4$
Compression ratio for He	$3 \cdot 10^5$
Compression ratio for N_2	> $1 \cdot 10^8$
Cooling method, standard	Water
Cooling water consumption	100 l/h
Cooling water temperature	15-35 °C | 59-95 °F | 288-308 K

Technical Data	HiPace® 2300 U with TC 1200 Profibus, DN 250 ISO-F, upside down version
Electronic drive unit	with TC 1200
Flange (in)	DN 250 ISO-F
Flange (out)	DN 40 ISO-KF
Fore-vacuum max. for N_2	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_2	> 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_2	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	Upside down (90°-180°)
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	1800 l/s
Pumping speed for H_2	1850 l/s
Pumping speed for He	2000 l/s
Pumping speed for N_2	1900 l/s
Rotation speed ± 2 %	31500 min^{-1}
Rotation speed variable	50-100 %
Run-up time	4 min
Sound pressure level	50 dB (A)
Ultimate pressure according to PNEUROP	< 1 · 10^{-7} hPa | < 7.5 · 10^{-8} Torr | < 1 · 10^{-7} mbar
Venting connection	G 1/8"
Weight	35 kg | 77.16 lb

Order number	
HiPace® 2300	**PM P04 144**

Accessories	
Accessory for TC 400/1200 and TM 700	
Y-connector, shielded, M12 for accessories	**P 4723 013**
Adapter and control cables	
Control cable for pumping stations 0.7 m	**PM 061 675 AT**
HiPace - ACP connection cable	**PM 071 142 -X**
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**
DN ISO-F, Mounting kit	
Mounting kit for DN 250 ISO-F, including coated centering ring, hexagon screws	**PM 016 480 -T**
Mounting kit for DN 250 ISO-F, including coated centering ring, protective screen, hexagon screws	**PM 016 482 -T**
Mounting kit for DN 250 ISO-F, including coated centering ring, protective screen, stud screws	**PM 016 487 -T**
Mounting kit for DN 250 ISO-F, including coated centering ring, splinter shield, hexagon screws	**PM 016 481 -T**
Mounting kit for DN 250 ISO-F, including coated centering ring, splinter shield, stud screws	**PM 016 486 -T**
Mounting kit for DN 250 ISO-F, including coated centering ring, stud screws	**PM 016 485 -T**
DN ISO-K / -F, sealings, splinter shields, protection screens	
Centering ring with multifunction coating, DN 250 ISO-K/-F	**PM 016 225 -U**
Centering ring with multifunction coating and integrated protection screen, DN 250 ISO-K/-F	**PM 016 227 -U**
Centering ring with multifunction coating and integrated splinter shield, DN 250 ISO-K/-F	**PM 016 226 -U**
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**
Interface and extension cables	
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 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**
Profibus	
Line filter for cable fitting	**PM 061 806**
Plug and socket M12B for Profibus	**PM 051 927 -T**
T-Connector M12B to Profibus	**P 4723 020**
Termination resistor M12B for Profibus	**P 4723 030**
Y-Connector M12B to Profibus	**P 4723 015**
Y-Connector with cable M12B to Profibus, 0.5 m	**P 4723 018**
Relay boxes	
Relay box, shielded, for backing pumps, 1-phase 20 A for TC 400/1200, TM 700 and TCP 350, M12	**PM 071 285 -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**

Accessories	
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 1200–2300, 52.5 ± 7.5 sccm	**PM Z01 325**
Sealing gas throttle for HiPace 1200 - 2300	**PM Z01 319**
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**
Venting accessory with small flange, G 1/8", hoses, air drier	
TTV 001, dryer for venting turbopumps	**PM Z00 121**
Venting valve (normally closed)	
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 1500/2300, DN 250 ISO-K/F	**PM 006 670 -X**