



Pfeiffer TPH-261PC, TPU-261PC

Technical Specifications

Größe	Einheit	TPH 261 P C	TPU 261 P C
Connection nominal diameter: Inlet		DN 100 ISO-K	DN 100 CF-F
Outlet Venting connection		DN 25 ISO-KF/G 1/4" G 1/8"	DN 25 ISO-KF/G 1/4" G 1/8"
Nominal rotation speed	Hz (1/min)	833 (50 000)	833 (50 000)
Standby rotation speed	Hz (1/min)	550 (33 000)	550 (33 000)
Start-up time (up to 90% of the nominal rotation speed fore-vacuum pressure ≤ 0.1 mbar)	min	2	2
Maximum noise level ¹⁾	dB (A)	50	50
Final pressure, backing pump	mbar	< 10 ⁻²	< 10 ⁻²
Integral leak rate (He) ²⁾	mbar l/s	< 1 · 10 ⁻⁷	< 1 · 10 ⁻⁷
Maximum permissible rotor temperature	°C	120	120
Permissible heat radiaten power	W	8	8
Volum flow rate for:			
Nitrogen N ₂	l/s	175	175
Helium He	l/s	156	156
Hydrogen H ₂	l/s	92	92
Argon Ar	l/s	170	170
Tetrafluoromethane CF ₄	l/s	155	155
Compression ration for:			
N ₂		> 10 ⁷	> 10 ⁷
He		3,5 · 10 ³	3,5 · 10 ³
H ₂		3,0 · 10 ²	3,0 · 10 ²
Ar		> 6 · 10 ⁶	> 6 · 10 ⁶
CF ₄		> 10 ⁷	> 10 ⁷
Maximum fore-vacuum pressure			
N ₂	mbar	1.0	1.0
He	mbar	0.8	0.8
H ₂	mbar	0.4	0.4
Ar	mbar	1.4	1.4
CF ₄	mbar	1.4	1.4
Maximum gas throughput ³⁾ at final rotation speed			
N ₂	mbar l/s	8.0	8.0
He	mbar l/s	16.5	16.5
H ₂	mbar l/s	> 50	> 50
Ar	mbar l/s	4.7	4.7
CF ₄	mbar l/s	5.5	5.5
Maximum gas throughput at intake pressure of 0.1 mbar ⁴⁾			
N ₂	mbar l/s	3.0	3.0
He	mbar l/s	2.0	2.0
H ₂	mbar l/s	1.0	1.0
Ar	mbar l/s	4.0	4.0
CF ₄	mbar l/s	5.0	5.0
Vertex power characteristics line ⁵⁾			
A	W / Hz	170/833	170/833
B	W / Hz	170/833	170/833
C	W / Hz	170/833	170/833
D	W / Hz	170/833	170/833
Final pressure ⁶⁾ with rotary vane vacuum pump	mbar	< 1 · 10 ⁻⁸	< 5 · 10 ⁻¹⁰
Lubricant Type ⁷⁾		F3	F3
Filling volume	ml	35	35
Maximum cooling water consumption with water at 15 °C ⁸⁾	l/h	100	100
Cooling water temperature	°C	5 - 25	5 - 25
Power consumption, casing heating unit	W	100	100
Weight	kg	9.8	10.1
Permissible magnetic field	mT	6.0	6.0
Operating voltage	VDC	48 ± 5%	48 ± 5%
Duration ⁸⁾ / max. current consumption	A	4.1	4.6
Duration ⁸⁾ / max. power	W	200	220
Protection class ⁹⁾		IP 30	IP 30
Shipping and storage temperature	°C	-25 to +55	-25 to +55
Relative humidity of air	%	5-85 non-condensing	5-85 non-condensing

1) Distance from the pump 1 m

2) Measured at a helium concentration of 100 %, 10 s measurement time

3) Measured with the Rotary vane Vacuum Pump DUO 10

4) Rotation speed of pump may drop below the nominal rotation speed.

5) For gas type characteristic lines please refer to section 4.4.

6) In accordance with DIN 28 428 the final pressure is that pressure which is attained in a measuring dome 48 hours after backing out.

7) Please see type plate.

8) With maximum gas throughput.

9) Protection class IP 54 is afforded for the Electronic Drive Unit TC 600 by retrofitting a cover plate

