



# PROVAC

## SALES

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# Pfeiffer TPH-2101PC, TPU-2101PC

## Technical Specifications

Feature	Unit	TPH 2101 P TPH 2101 P C		TPU 2101 P TPU 2101 P C
Connection nominal diameter: Inlet Outlet Venting connection		DN 200 ISO-K DN 40 ISO-KF G 1/8"	DN 250 ISO-K	DN 250 CF-F DN 40 ISO-KF G 1/8"
Nominal rotation speed	Hz (1/min)	525 (31 500)		525 (31 500)
Standby rotation speed	Hz (1/min)	350 (21 000)		350 (21 000)
Start-up time (up to 90% of the nominal rotation speed fore-vacuum pressure $\leq 0,1$ mbar)	min	8		8
Noise level	dB (A)	47		47
Final pressure, backing pump	mbar	$\leq 0.2$		$\leq 0.2$
Maximum permissible rotor temperature	°C	120		120
Permissible heat radiation power	W	80		80
Volume flow rate for: Nitrogen N <sub>2</sub> Helium He Hydrogen H <sub>2</sub>	l/s	1400 1700 1650	1900 1900 1850	1900 1900 1850
Compression ratio for: N <sub>2</sub> He H <sub>2</sub>		$>1 \cdot 10^8$ $2 \cdot 10^5$ $3 \cdot 10^4$		$>1 \cdot 10^8$ $2 \cdot 10^5$ $3 \cdot 10^4$
Maximum fore-vacuum pressure N <sub>2</sub> He H <sub>2</sub>	mbar	1.5 1 0.5		1.5 1 0.5
Maximum gas throughput <sup>1) 2)</sup> with HV pressure of 0.1 mbar N <sub>2</sub> Ar with nominal rotation speed (water cooling) N <sub>2</sub> Ar with voltage range 90 - 132 VAC N <sub>2</sub>	mbar/s	ca. 20 ca. 20 15.0 14.5 8.1	15.0 14.5 8.1	ca. 20 ca. 20 15.0 14.5 8.1
Vertex power characteristics lines <sup>3)</sup> A B C D	W / Hz	750 / 525 750 / 525 750 / 525 750 / 525		750 / 525 750 / 525 750 / 525 750 / 525
Final pressure <sup>4)</sup> with rotary vane vacuum pump with UniDry <sup>TM</sup> 050	mbar	$< 1 \cdot 10^{-7}$ $< 1 \cdot 10^{-7}$		$< 5 \cdot 10^{-10}$ $< 5 \cdot 10^{-10}$
Lubricant Type Filling volume	ml	F3 40		F3 40
Cooling water consumption with water at 15 °C <sup>5)</sup> Cooling water temperature	l/h °C	100 5 - 25		100 5 - 25
Weight Permissible magnetic field	kg mT	39 7	38	49 7
Connection voltage Current consumption Power Protection class <sup>6)</sup>	VDC A W	140 $\pm$ 5% 5.4 750 IP 30		140 $\pm$ 5% 5.4 750 IP 30
Relative humidity of air	%	5 - 85 non condensing		5 - 85 non condensing

1) If the pump is to be operated with more than 50% of the maximum gas load, sealing gas must be used.

2) Backing pump 120 m<sup>3</sup>/h.

3) For gas typ characteristics lines please refer to Section 4.4.

4) In accordance with DIN 28 428 the final pressure of a turbomolecular pump is that pressure which is attained in a measuring dome 48 hours after baking out.

5) With maximum gas throughput.

6) Protection class IP 54 is afforded for the Electronic Drive Unit TC 750 by installing the provided cover plate (see Section 3.8.).



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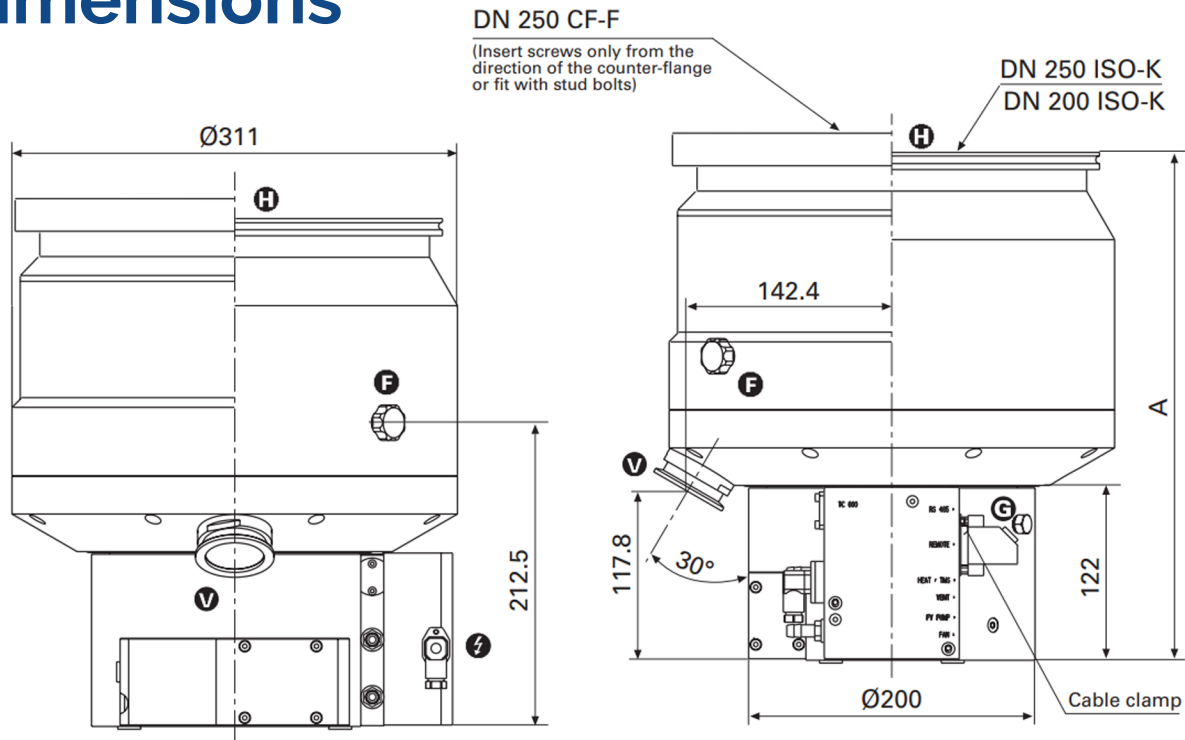
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## Dimensions



Cooling water connection

Diameter	A
DN 200 ISO-K	374.5
DN 250 ISO-KF	354.5
DN 250 CF-F	375

