



Pfeiffer TPH-510, TPU-510

Technical Specifications

			TPH 330	TPU 330	TPH 510	TPU 510
Intake flange			DN 100 ISO-K		DN 160 ISO-K	DN 150 CF-F
Fore-vacuum flange			DN 25 KF		DN 40 KF	
Volume flow rate for						
Nitrogen	N ₂	l/s	300		500	
Helium	He	l/s	370		570	
Hydrogen	H ₂	l/s	330		500	
Recommended backing pump			12		12	
accompanying			TCP 121		-	
electronic drive unit			TCP 300		TCP 300	
			TCP 310		TCP 310	
			TCP 380		TCP 380	
Compression ratio for						
	N ₂		1 · 10 ⁹		8 · 10 ⁸	
	He		3 · 10 ⁴		1,5 · 10 ⁴	
	H ₂		1,7 · 10 ³		1 · 10 ³	
Ultimate pressure, theor. ²⁾			10 ⁻¹¹		10 ⁻¹¹	
Ultimate operating	①	mbar	< 1 · 10 ⁻¹⁰		< 1 · 10 ⁻¹⁰	
pressure	②	mbar	< 1 · 10 ⁻⁹		< 1 · 10 ⁻⁹	
	③	mbar	< 1 · 10 ⁻⁸		< 1 · 10 ⁻⁸	
Speed		rpm	60.000		60.000	
Start-up time						
with TCP 300/310 ¹⁾		min	3		6	
Start-up time						
with TCP 120/121		min	4,5		-	
Permissible magnetic						
field ³⁾		mT	6		6	
Oil filling		cm ³	2 x 10		2 x 10	
Cooling water						
requirement		l/h	15		15	
Cooling water temperatur		°C	5 - 25		5 - 25	
Permissible ambient						
temperature for		°C	0 - 35		0 - 35	
air cooling						
Power input of						
heater		Watt	-	180	-	250
Weight		kg	19	20	28	30

¹⁾ to 90% of the rated speed

²⁾ Comments under 3.1

³⁾ Screening for strongest magnetic fields on request



PROVAC

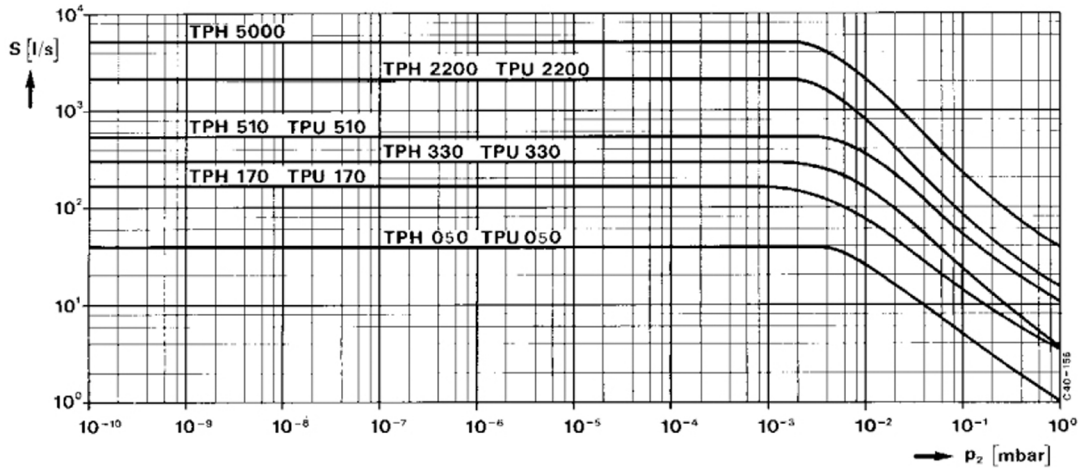
SALES

PHONE: 831-462-8900

FAX: 831-462-3536

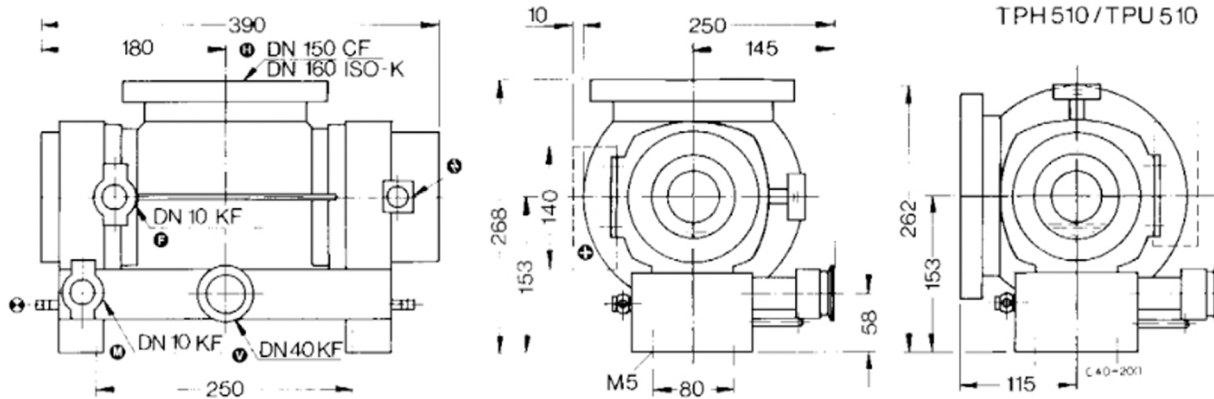
WWW.PROVAC.COM

Pfeiffer TPH-510, TPU-510 Pumping Curves



Volume flow rate for nitrogen N_2
 TPH 050 – TPH 5000
 TPU 050 – TPU 2200

Dimensions



- H** High-Vacuum Connection
- V** Fore-Vacuum Flange
- C** Coolant Connection
- A** Air cooling
- E** Connection for electronic drive unit
- F** Flooding connection
- M** Connection for measuring instrument



PROVAC

SALES

PHONE: 831-462-8900

FAX: 831-462-3536

WWW.PROVAC.COM

Pfeiffer TPH-510, TPU-510

Applications

- freeze drying - packaging industry • degassing, casting, dry vacuum smelting (super-pure metals) • incandescent lamp manufacturing
- electronic tubes • thin film deposition • space simulation • cryogenic research • electron microscopy • nuclear/plasma/high energy physics
- particle accelerators - storage rings

Recommended controller/backing pump

- controller: TCP-121 • TCP-300 • TCP-310 • TCP-380
- backing pump: DUO 016B • DUO 030A

