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Pfeiffer TPH-180H, TPU-180H Technical Specifications

clamping flange CF flange		TPH 180 H	TPU 180 H
Connection diameter			
Inlet		DN 100 ISO-K	DN 100 CF-F
Outlet		DN 25 ISO-KF	DN 25 ISO-KF
Volume flow rate ¹⁾ for			
Nitrogen N ₂	l/s	180	180
Helium He	l/s	170	170
Hydrogen H ₂	l/s	140	140
Compression ratio for			
N ₂		>10 ¹²	>10 ¹²
He		5·10 ⁷	5·10 ⁷
H ₂		5·10 ⁵	5·10 ⁵
Recomm. backing pump ¹⁾ , min.	m ³ /h	3	3
Sealing gas quantity, max.	mbar l/s	0,25	0,25
Theor. ultimate pressure ²⁾	mbar	10 ⁻¹²	10 ⁻¹²
Rated speed	rpm	50 000	50 000
Run-up time ³⁾	min	4	4
Oil filling	cm ³	8	8
Type of cooling			
Standard		Water	Water
Conversion kit for		Air	Air
Gas throughput			
3 m ³ /h backing pump	mbar l/s	6	6
30 m ³ /h backing pump	mbar l/s	10	10
Cooling water requirement	l/h	15	15
Power input			
Heater	W	60	60
Weight			
Standard pump	kg	10	10
Pump for corrosive gas	kg	13.5	14



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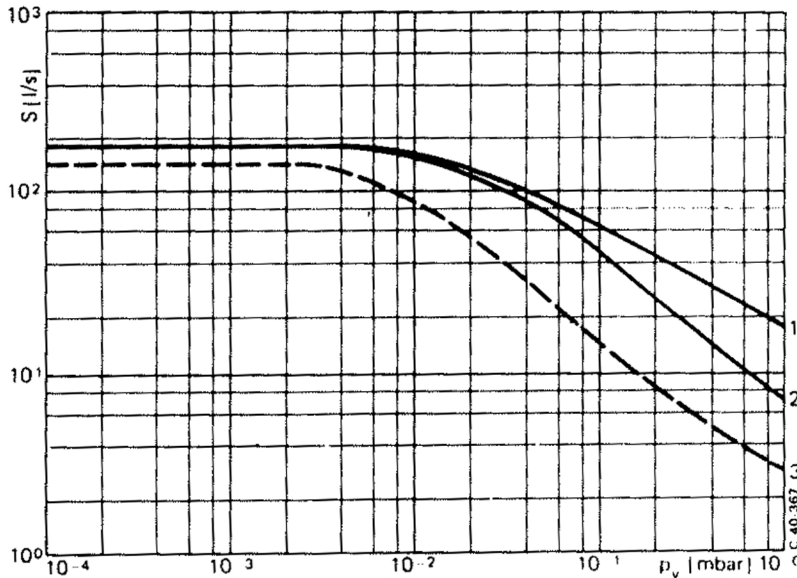
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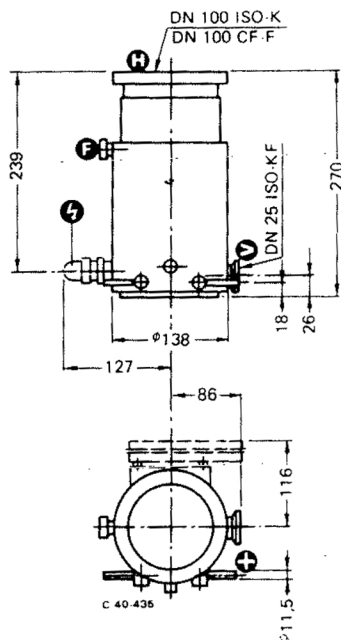
Pfeiffer TPH-180H, TPU-180H Pumping Curves



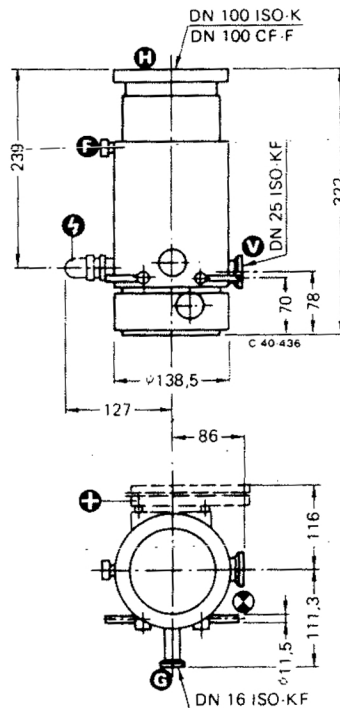
- 1 30 m³/h backing pump, for N₂
- 2 3 m³/h backing pump, for N₂
- 3 3 m³/h backing pump, for H₂

Dimensions

Turbo 180 H Standard



Turbo 180 H Corrosive gas applications



- H High vacuum flange
- V Roughing vacuum flange
- F Venting connection
- L Voltage connection
- W Water connection
- A Air cooling



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Pfeiffer TPH-180H, TPU-180H

Features & Benefits

- high gas throughput with low volume flow rate of backing pump
- designed for corrosive gas applications
- can be employed as universal vacuum pump for hydrocarbon-free & high/ultra-high vacuum
- temperature monitoring
- non-wearing permanent magnet bearing on high vacuum side
- lubricated ball bearing on forevacuum side
- with water cooling as standard feature (conversion to air cooling possible)
- dry backing pump usable
- single flow pump with an additional pumping system on the backing pressure side

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