

SplitFlow 270
PM P03 628 F

Operating Instructions

Validity

This supplementary information describes important variations to the standard product and is only valid together with its prevailing operating instructions.

- SplitFlow 270
–Pfeiffer Vacuum product number PM P03 628 F

This present version of a turbomolecular drag pump has been designed for a special application on the basis of the SplitFlow™ principle. This turbopump can only be operated in conjunction with its designated components.

Applicable documents

SplitFlow 270	Operating instructions
Operating instructions standard pump "HiPace 300"	PT 0200 BN*
Operating instructions "Electronic drive unit TC 400"	PT 0203 BN*
Declaration of conformity	Part of this document

*also available via www.pfeiffer-vacuum.com

Installation



WARNING

Danger of tear-off the turbopump

In case the rotor blocks suddenly, torque levels up to 2730 Nm can occur, which cause the turbopump twist or tear off, if the flange is not properly installed.

- Never mount the turbopump on its base part.
- The connected system has to compensate completely any occurring torque levels.
- Installation elements must be mounted accordingly on the pump in the customer's responsibility.
- Observe closely the installation instructions given in the valid operating instructions.

Commissioning

Deviating from the standard product the following important settings are programmed in the electronic drive unit ex factory.

- Parameter **[P:027]** Gas mode: 1 = light gases
- Parameter **[P:708]** Set value power consumption: 56 %



NOTICE

Danger of the pump being destroyed

Pumping of gases with a higher molecular mass in the wrong gas mode can lead to destruction of the pump.

- Ensure the gas mode is correctly set.
- Contact Pfeiffer Vacuum before using gases with a greater molecular mass (> 80).

Technical data

Parameter	SplitFlow 270
Flange (in)	
• High vacuum connection "H"	137.7 x 99 mm
• Intermediate stage "H1"	63 x 99 mm
• Intermediate stage "H2"	63 x 99 mm
• Intermediate stage "H3"	18 x 99 mm
Flange (out)	DN 16 ISO- KF
Rotational speed	1000 Hz (60000 rpm)
Standby rotational speed	667 Hz (40000 rpm)
Run-up time	4 min
Pumping speed for N ₂ on "H"	200 l/s
Pumping speed for N ₂ on "H1"	155 l/s
Pumping speed for N ₂ on "H2"	155 l/s
Pumping speed for N ₂ on "H3"	30 l/s
Compression ratio for N ₂ of "H1"/"H"	250
Compression ratio for N ₂ of "H2"/"H1"	250
Compression ratio for N ₂ of "H3"/"H2"	250
Compression ratio for N ₂ of "VV"/"H"	$> 1 \cdot 10^9$
Gas throughput at full rotational speed for N ₂ on "H", "H1", "H2"	4 mbar l/s
Gas throughput at full rotational speed for N ₂ on "H3"	10 mbar l/s
Fore-vacuum max. for N ₂ with gas load zero at "VV"	10 mbar (7.5 Torr)
Pumping speed backing pump for the listed gas throughputs at least	30 m ³ /h
Weight	15 kg (33 lbs)

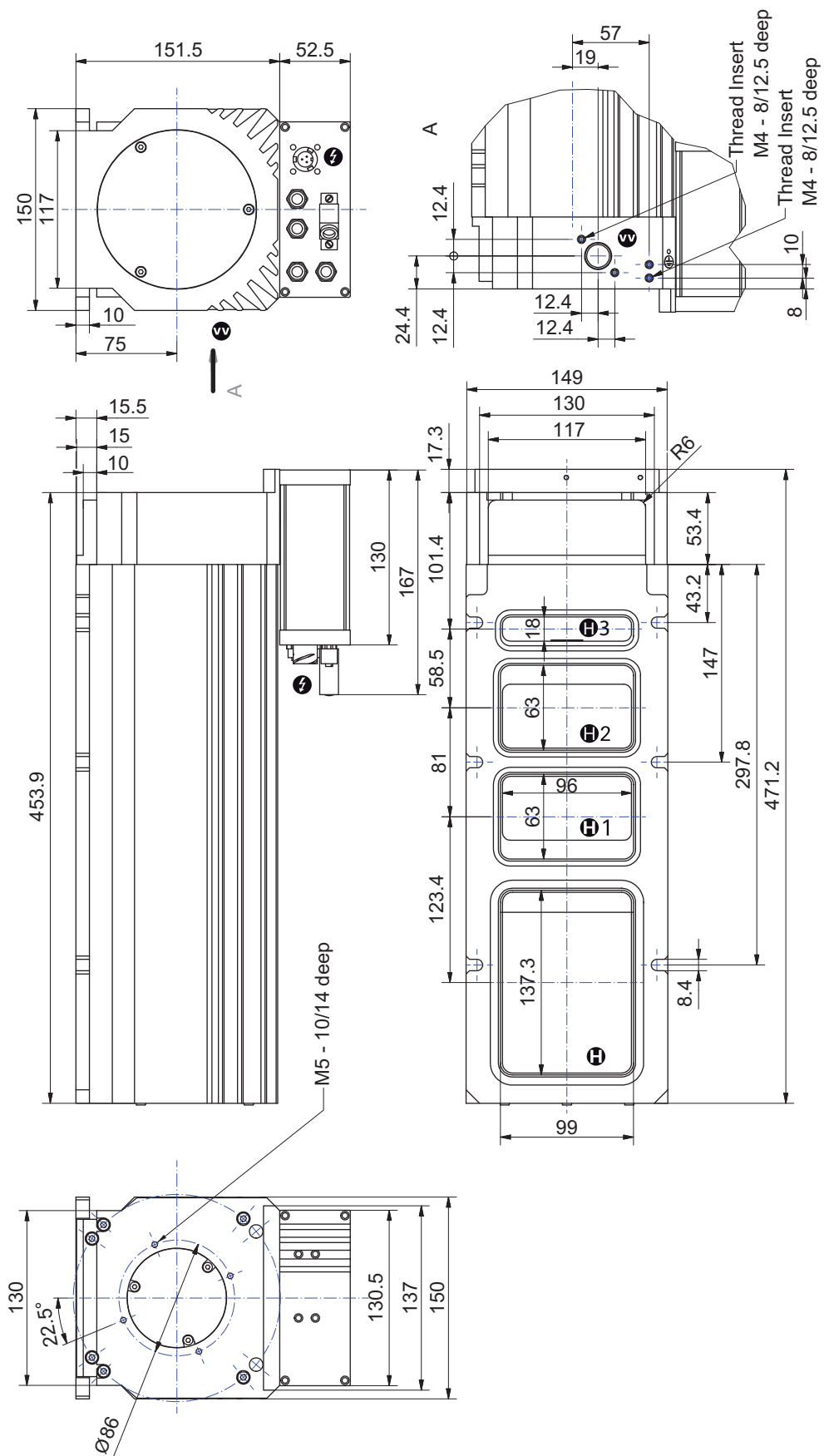


Fig. 1:SplitFlow 270, PM P03 628 F



Declaration of conformity

according to the EC directive:

- **Machinery 2006/42/EC (Annex II, no. 1 A)**

We hereby declare that the product cited below satisfies all relevant provisions of EC directive "Machinery" **2006/42/EC**.

In addition, the product cited below satisfies all relevant provisions of EC directive "Electromagnetic Compatibility" **2004/108/EC**.

The agent responsible for compiling the technical documentation is Mr. Jörg Stanzel, Pfeiffer Vacuum GmbH, Berliner Straße 43, 35614 Asslar.

SplitFlow 270

Guidelines, harmonised standards and national standards and specifications which have been applied:

DIN EN ISO 12100 : 2011-03

DIN EN 1012-2 : 1996

DIN EN 61010-1 : 2002

Signatures:

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CE/2012

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