

SUPPLEMENTARY INFORMATION

EN

Translation of the original instructions

SPLITFLOW 80

PM P04 316

PFEIFFER  **VACUUM**

Validity

- SplitFlow 80
 - Pfeiffer Vacuum product number PM P04 316

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

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 80 | Operating instructions |
|-------------------------------------------------------|------------------------|
| Operating instructions standard pump "HiPace 80" | PT 0208 BN* |
| Operating instructions "Electronic drive unit TC 110" | PT 0204 BN* |
| Declaration of conformity | Part of this document |

*also available via www.pfeiffer-vacuum.com

Installation



WARNING

Danger from the turbopump being ripped off

If the rotor is suddenly blocked, torques of up to 820 Nm could occur, which could cause the turbopump to be ripped off if it is not properly affixed. The energy that this would release could throw the entire pump or pieces from its interior through the room. That would cause severe, possibly fatal, injuries as well as serious property damage.

- Carefully follow the installation instructions in this handbook.
- Only use approved original parts from Pfeiffer Vacuum (Accessories) for the installation.

- Mind that the sealing surfaces are not damaged.
- Use the required number of 4 screws (M6) with washers.
 - Class minimum 8.8 or 70.
- Screw hex screws 1.5 x d into the threaded holes.
 - The tensile strength of the flange material must be at least 270 N/mm² in all operating conditions.
- Tighten the screws crosswise in three steps.
- Tightening torque: 8 Nm.

Technical data

| Parameter | SplitFlow 80 |
|----------------------------------------------|-------------------------|
| Flange (in) | |
| • High vacuum connection "H" | 58 x 60 mm |
| • Intermediate stage "H1" | 20 x 60 mm |
| Flange (out) "VV" | hose connection 12 mm |
| Rotation speed ±2% | 90000 min ⁻¹ |
| Standby rotation speed | 59400 min ⁻¹ |
| Run-up time | 1.75 min |
| Pumping speed for N ₂ at "H" | 60 l/s |
| Pumping speed for He at "H" | 53 l/s |
| Pumping speed for N ₂ at "H1" | 27 l/s |
| Pumping speed for He at "H1" | 22 l/s |
| Compression ratio for N ₂ (H1/H) | 4.3 · 10 ² |
| Compression ratio for He (H1/H) | 6.7 · 10 ¹ |
| Compression ratio for N ₂ (VV/H1) | 1 · 10 ⁸ |

| Parameter | SplitFlow 80 |
|---------------------------------------------|------------------|
| Compression ratio for He (VV/H1) | $1.3 \cdot 10^5$ |
| Fore vacuum max. for N ₂ at "VV" | 22 hPa |
| Fore vacuum max. for He at "VV" | 22 hPa |
| Weight | 3.35 kg |

Dimensions

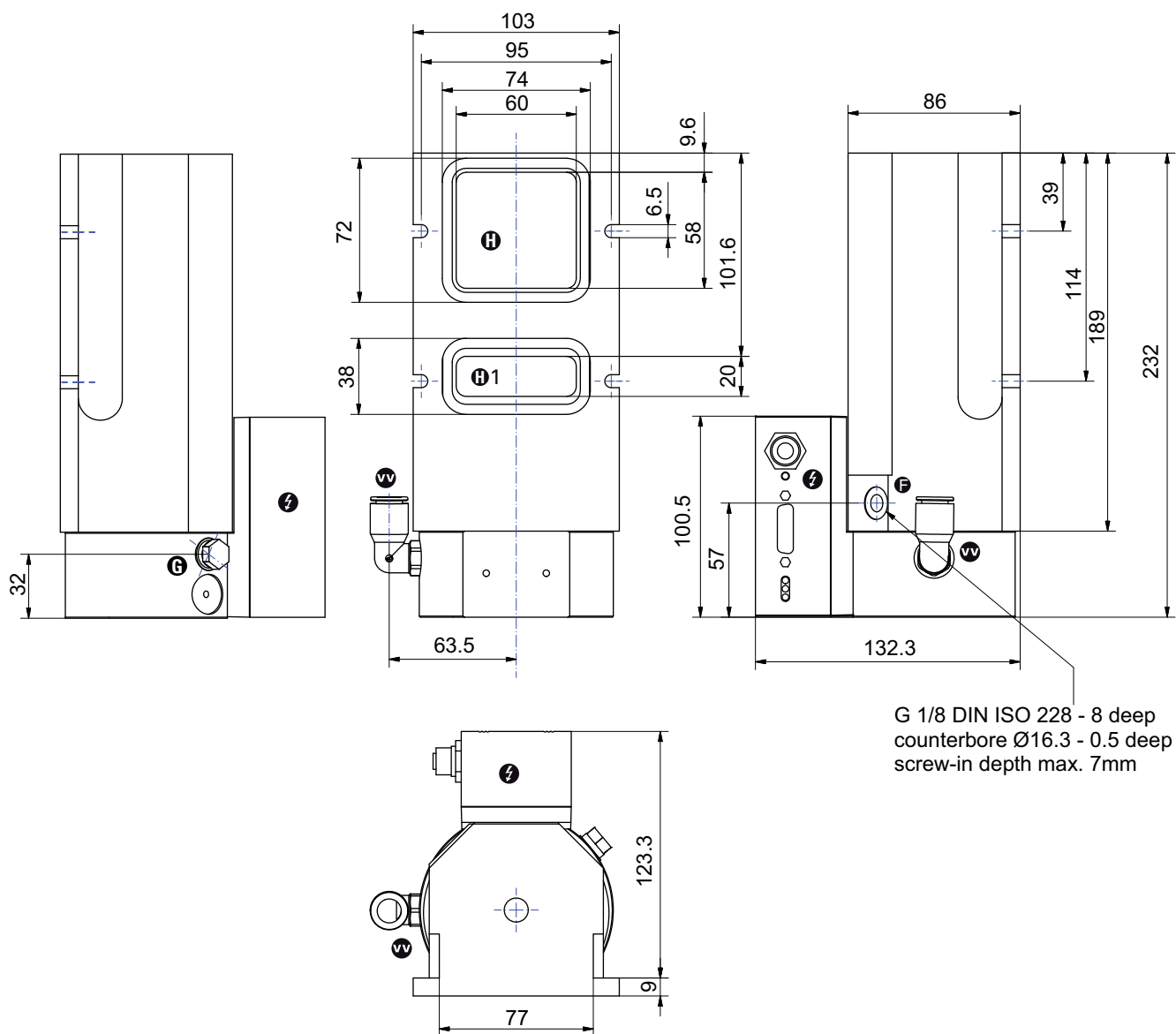


Fig. 1: SplitFlow 80, PM P04 316



Declaration of conformity

We hereby declare that the product cited below satisfies all relevant provisions according to the following **EC directives**:

- **Machinery 2006/42/EC (Annex II, no. 1 A)**
- **Electromagnetic Compatibility 2014/30/EU**

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

SplitFlow 80

Harmonised standards and national standards and specifications which have been applied:

DIN EN ISO 12100 : 2011-03
DIN EN 1012-2 : 1996
DIN EN 61000-3-2 : 2010
DIN EN 61000-3-3 : 2009
DIN EN 61010-1 : 2010
DIN EN 61326-1 : 2013
DIN EN 62061 : 2013

Signature:

Pfeiffer Vacuum GmbH
Berliner Straße 43
35614 Asslar
Germany

(Dr. Ulrich von Hülsen)
Managing Director

2016-04-25

VACUUM SOLUTIONS FROM A SINGLE SOURCE

Pfeiffer Vacuum stands for innovative and custom vacuum solutions worldwide, technological perfection, competent advice and reliable service.

COMPLETE RANGE OF PRODUCTS

From a single component to complex systems:

We are the only supplier of vacuum technology that provides a complete product portfolio.

COMPETENCE IN THEORY AND PRACTICE

Benefit from our know-how and our portfolio of training opportunities!

We support you with your plant layout and provide first-class on-site service worldwide.

Are you looking for a
perfect vacuum solution?
Please contact us:

Pfeiffer Vacuum GmbH
Headquarters • Germany
T +49 6441 802-0
info@pfeiffer-vacuum.de

www.pfeiffer-vacuum.com

PFEIFFER  **VACUUM**