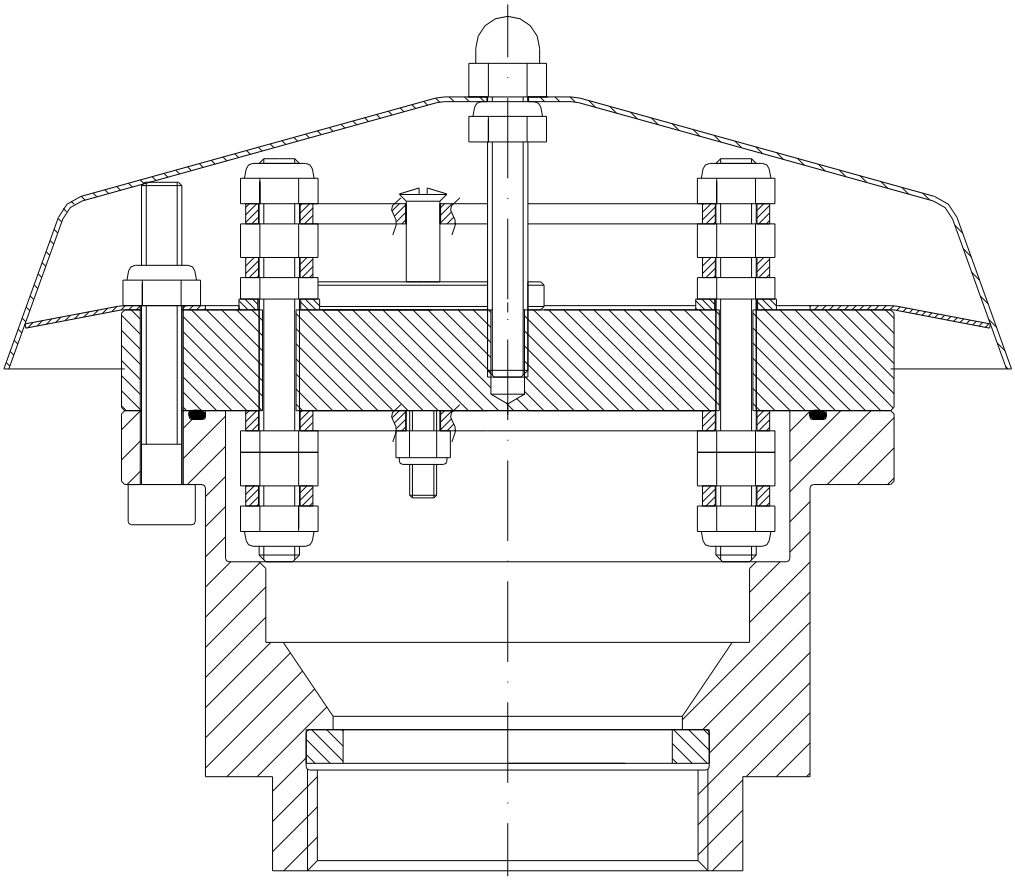
Operating Instruction
End of line Pressure/Vacuum Valve 1040-0001



1. Preface

This operating instruction apply to End of line Pressure/Vacuum Valve 1040–0001, provided the fact that your End of line Pressure/Vacuum Valve meets all technical standards described in this document.
Any information required for the assembly, use and maintenance of the End of line Pressure/Vacuum Valve may be obtained from these instructions.
Please read the operating instructions on hand carefully to ensure the safe use of this armature.
All assembly and maintenance work needs to be carried out by qualified staff.
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In case of dispute, the German text shall prevail.

2. Symbols

Take note of the accompanying documents!
Important instructions for safe usage

3. Safety regulations and safety instructions

3.1 Safety regulations

The following regulations and guidelines are to be observed for the use of this End of line Pressure/Vacuum Valve:

- National safety regulations
- National workers' protection regulations

3.2 Safety instructions

The following instructions are to be observed to guarantee workers protection and occupational safety:

- Safety regulations in compliance with section 3.1
- Observation of laws and provisions in force at the place of application. Operators and supervising staff are responsible for the fact that these provisions are observed.
- Assembly and maintenance work is to be carried out by qualified staff.

4. Purpose of use

The End of line Pressure/Vacuum Valve 1040-0001 mounted at the end of vent pipes limits the storage tank pressure up to the adjusted pressures.

5. Technical specifications

(See fig.1)

Connection : Thread DIN ISO 228-1 G2" internal

Standard settings pressure valve

Switch back pressure : 30 mbar (3000 Pa)
Maximum flow rate : 75 m³/h (Air)

Standard settings vacuum valve

Switch back pressure : 5 mbar (500 Pa)
Maximum flow rate : 30 m³/h (Air)

Pressure loss : see fig. 2 and fig.3

6. Assembly

(See figure 1)

The Pressure/Vacuum Valve is to be fully joined to the respective connecting part at the end of the vent pipe.

- Note requirements of chapter 4.
- To ensure best sealant, screw the armature fully against the integrated flat sealing (2). Check connection for leakage.
- Pay attention to professional earthing!
- Due to possible bimetallic corrosion (contact corrosion), we advise against use galvanized steel fittings in connection with stainless steel installations.

7. Maintenance

(See figure 1)

Disassembling

Unscrew nut (11) to remove rain cover (7).
After disassembling the screws (5) remove grid (8) and valve plate (12)
Petroleum ether is often a applicable cleaning agent, although the instructions of the corresponding safety data sheet in accordance with directive 91/155/EC need to be observed.

Assembly

After cleaning, reassemble in reverse order.

Tightening moment for screw M6 (5, 9) : 5 ± 1 Nm
Tightening moment for nut M6 (11) : 2 + 1 Nm

Note!

- Change O-Ring (6) if damaged.
- Only use original spare parts of Flammer GmbH.

8.Spare parts

For ordering spare parts please declare:

- Type of product
- Complete serial number
- Spare part no. (Please refer to **fig. 1** for items**)**

Item	Product	Spare part no.
2	Gasket	3021-0003-00
6	O-Ring	9013-0008-00
7	Rain cover	3017-0003-00
22	V-Ring	9027-0001-00

9. Technical Consultations

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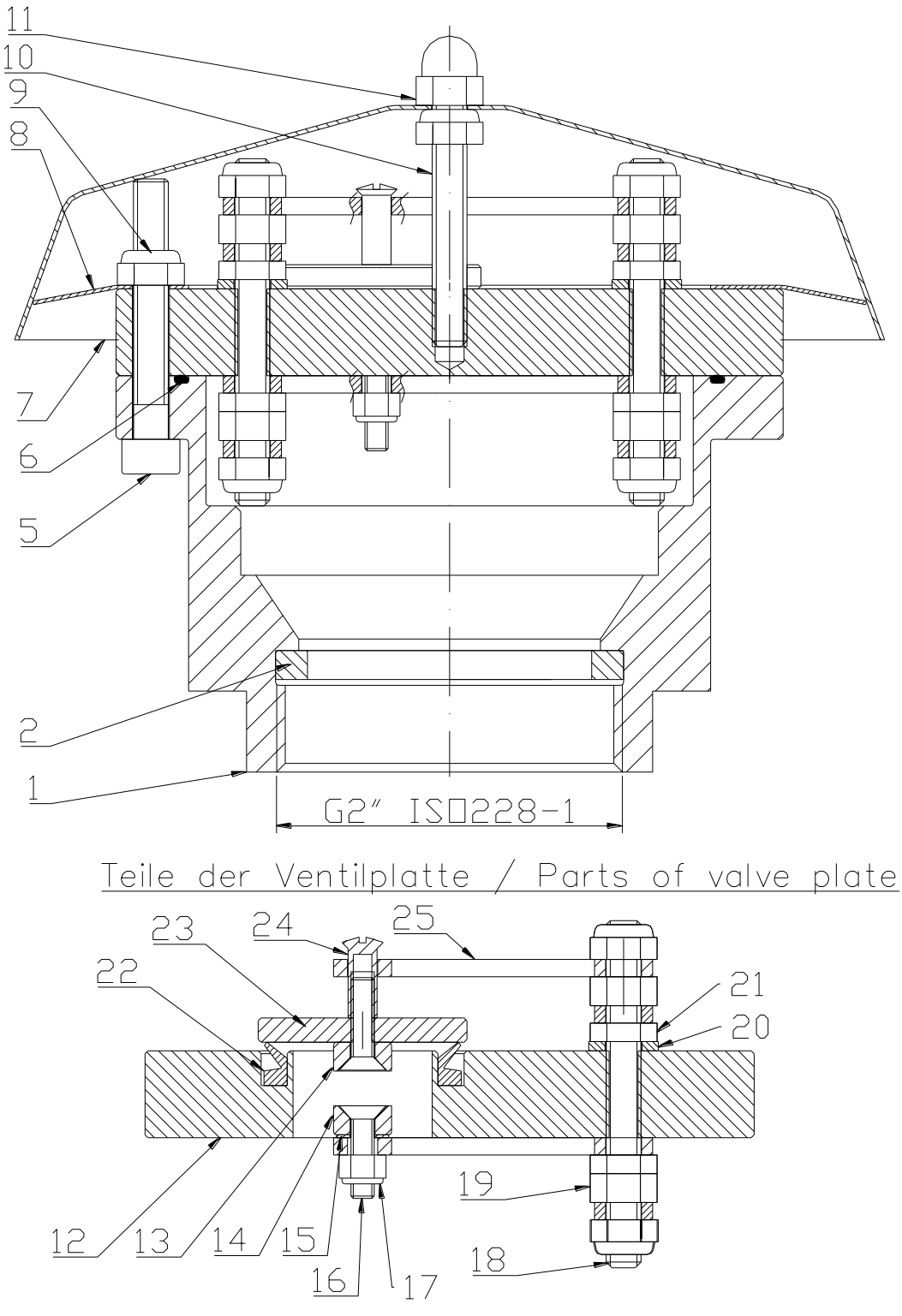

Fig. 1
Construction

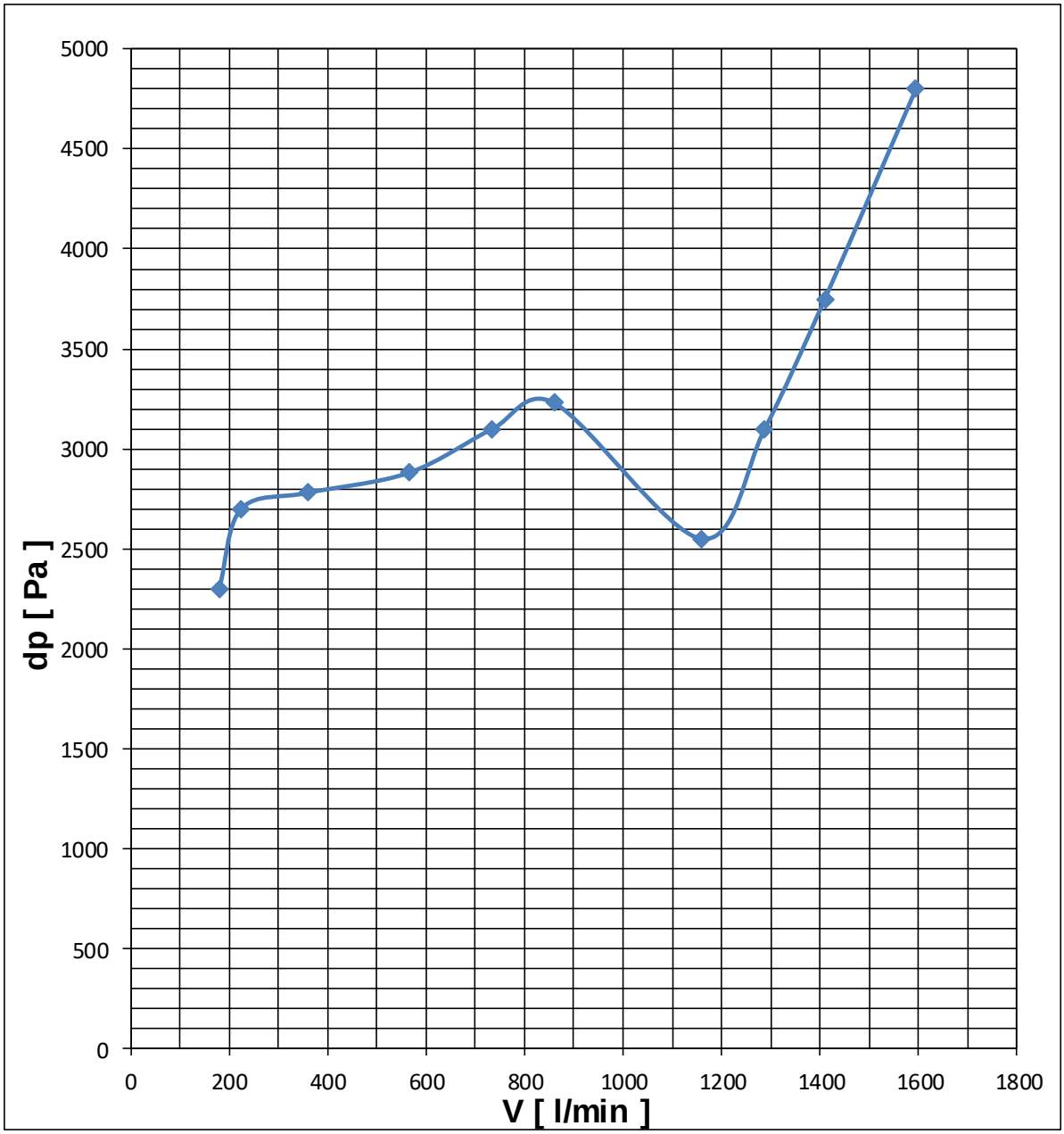

Fig. 2
Pressure loss of pressure valve
Switch back pressure: 3000 Pa (30 mbar)
Medium : Air at po = 1013 mbar, To = 293K, density = 1,205 kg/m³

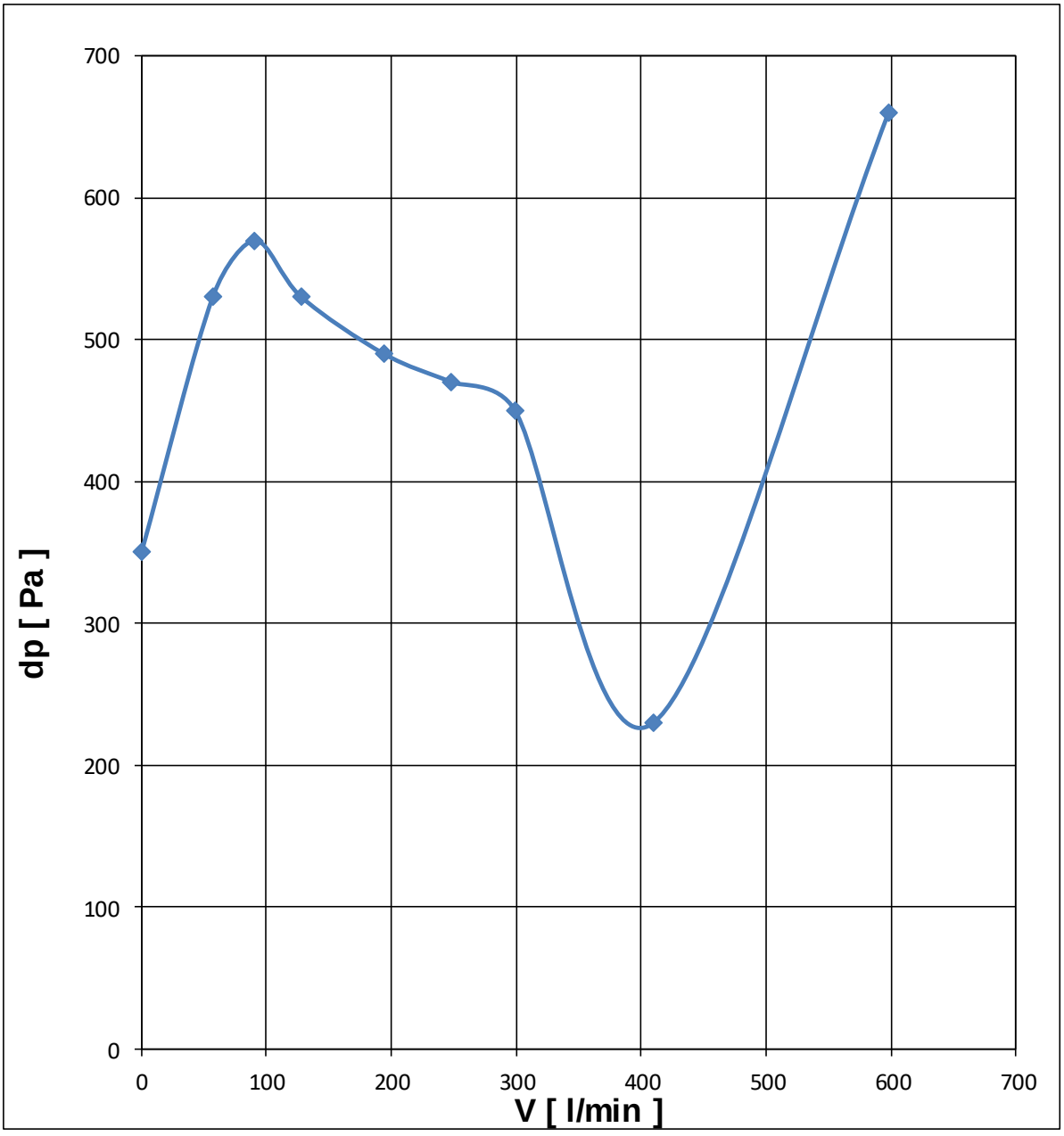

Fig. 3
Pressure loss of vacuum valve
Switch back pressure: 500 Pa (5 mbar)
Medium : Air at po = 1013 mbar, To = 293K, density = 1,205 kg/m³