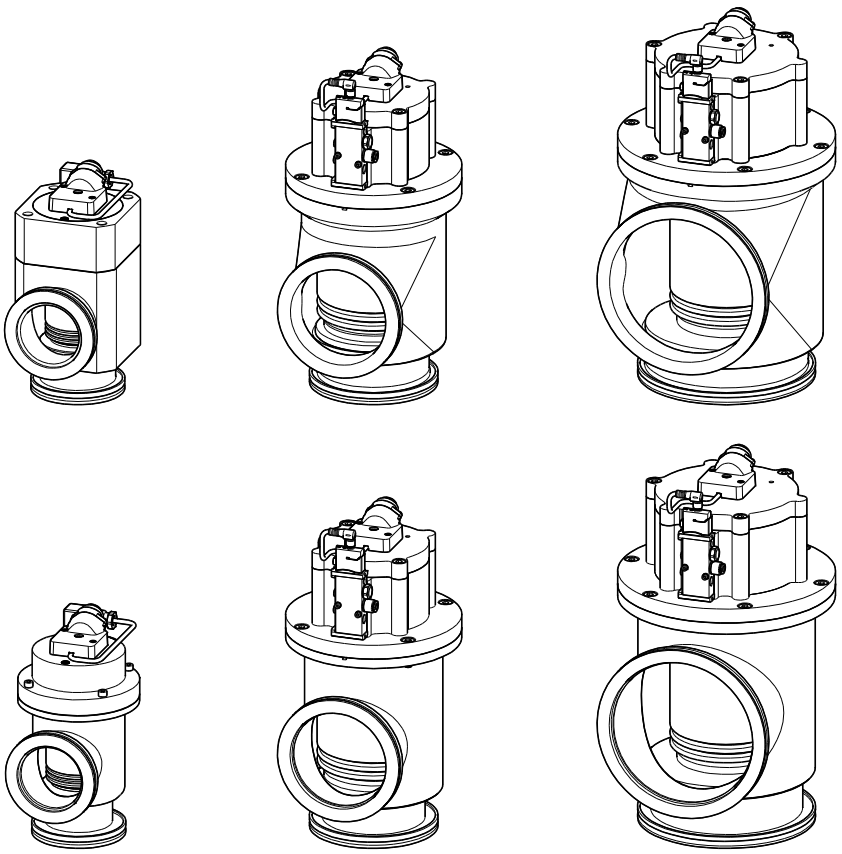


Operating Instructions

EN

Translation of the original instructions

EVB 063…160 PA/X

Angle valve

pneumatically actuated, bellows sealed, with closing spring (NC), with position indicator, and control valve (optional)

PFEIFFER VACUUM

VP0002BEN_A

Table of contents

1 About these instructions

1.1 Validity

These operating instructions are a customer document of Pfeiffer Vacuum.
The operating instructions describe the function of the designated product and provides the most important information for safe use of the device. The description follows the applicable EU guidelines. All information provided in these operating instructions refer to the product's current state of development. The documentation remains valid as long as the customer does not make any modifications to the product.

Recent versions of operating instructions are available at www.pfeiffer-vacuum.com.

These operating instructions are valid for products with the following order numbers:

Aluminium housing without control valve, angle valve pneumatically actuated (NC)

Order no.	Description
310VEP063	EVB 063 PA, DN 63 ISO-K
310VEP100	EVB 100 PA, DN 100 ISO-K
310VEP160	EVB 160 PA, DN 160 ISO-K

Stainless steel housing without control valve, angle valve pneumatically actuated (NC)

Order no.	Description
320VEP063	EVB 063 PX, DN 63 ISO-K
320VEP100	EVB 100 PX, DN 100 ISO-K
320VEP160	EVB 160 PX, DN 160 ISO-K

Aluminium housing with control valve, angle valve pneumatically actuated (NC)

Order no.	Description
310VEP063-01	EVB 063 PA, DN 63 ISO-K, 24VAC
310VEP063-02	EVB 063 PA, DN 63 ISO-K, 24VDC
310VEP063-03	EVB 063 PA, DN 63 ISO-K, 100-115VAC
310VEP063-04	EVB 063 PA, DN 63 ISO-K, 200-240VAC
310VEP100-01	EVB 100 PA, DN 100 ISO-K, 24VAC
310VEP100-02	EVB 100 PA, DN 100 ISO-K, 24VDC
310VEP100-03	EVB 100 PA, DN 100 ISO-K, 100-115VAC
310VEP100-04	EVB 100 PA, DN 100 ISO-K, 200-240VAC
310VEP160-01	EVB 160 PA, DN 160 ISO-K, 24VAC
310VEP160-02	EVB 160 PA, DN 160 ISO-K, 24VDC
310VEP160-03	EVB 160 PA, DN 160 ISO-K, 100-115VAC
310VEP160-04	EVB 160 PA, DN 160 ISO-K, 200-240VAC

Stainless steel housing with control valve, angle valve pneumatically actuated (NC)

Order no.	Description
320VEP063-01	EVB 063 PX, DN 63 ISO-K, 24VAC
320VEP063-02	EVB 063 PX, DN 63 ISO-K, 24VDC
320VEP063-03	EVB 063 PX, DN 63 ISO-K, 100-115VAC
320VEP063-04	EVB 063 PX, DN 63 ISO-K, 200-240VAC
320VEP100-01	EVB 100 PX, DN 100 ISO-K, 24VAC
320VEP100-02	EVB 100 PX, DN 100 ISO-K, 24VDC
320VEP100-03	EVB 100 PX, DN 100 ISO-K, 100-115VAC
320VEP100-04	EVB 100 PX, DN 100 ISO-K, 200-240VAC
320VEP160-01	EVB 160 PX, DN 160 ISO-K, 24VAC
320VEP160-02	EVB 160 PX, DN 160 ISO-K, 24VDC
320VEP160-03	EVB 160 PX, DN 160 ISO-K, 100-115VAC
320VEP160-04	EVB 160 PX, DN 160 ISO-K, 200-240VAC

The order number (No) can be found on the valve label. Refer to chapter 4.1 „Product identification“.

Subject to technical modifications without prior notice.

All dimensions in mm.

2 Safety

2.1 Compulsory reading material

Read this chapter prior to performing any work with or on the product.
It contains important information that is significant for your own personal safety. This chapter must have been read and understood by all persons who perform any kind of work with or on the product during any stage of its serviceable life.

NOTICE

Lack of knowledge

Failing to read these instructions may result in property damage.

Read instructions before use.

These operating instructions are an integral part of a comprehensive documentation belonging to a complete technical system. They must be stored together with the other documentation and accessible for anybody who is authorized to work with the system at any time.

2.2 General safety instructions

- Adhere to the relevant regulations and take the necessary protective measures for the process media used.
- Consider possible reactions between materials and process media.
- All work is permitted only when following the relevant regulations and taking the appropriate precautions. Pay attention to the safety instructions in these operating instructions.
- Inform yourself about possible contamination before beginning to work. Adhere to the relevant regulations and take the necessary protective measures when handling contaminated parts.
- Provide the safety instructions to all other users of the product.

2.1 Safety precautions

The safety instructions in the operating instructions from Pfeiffer Vacuum are based on the certification standards CSA, ANSI Z-535, SEMI S2, ISO 3864 and DIN 4844. The following hazard levels and instructions are considered in this document:

DANGER

High risk

Indicates an imminently hazardous situation which, if not avoided, will result in death or severe injury.

WARNING

Medium risk

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Low risk

Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Command

Indicates a hazardous situation which, if not avoided, may result in property damage.

2.2 Personnel qualifications

WARNING

Unqualified personnel

Inappropriate handling may cause serious injury or property damage.

Only qualified personnel are allowed to carry out the described work.

2.3 Safety labels

Label	Order no.	Location on valve
	DN 063: T-9001-155 DN 100: T-9001-155 DN 160: T-9001-156	On the protective foil covering the valve opening

2.4 Intended use

NOTICE

CE conformity

The manufacturer's declaration of conformity becomes invalid if the operator modifies the original product or installs additional components!

Following installation into a plant and before commissioning, the operator must check the entire system for compliance with the valid EU directives and reassess it accordingly.

- The angle valve is used as shut-off or venting device.
- Use product only for clean and dry vacuum applications. All other applications require written permission from Pfeiffer Vacuum.

2.5 Unintended use

Unintended use will cause all claims for liability and warranty to be forfeited. Unintended use is deemed to be all use for purposes deviating from those mentioned above, especially:

- Use of accessories and spare parts which are not listed in these operating instructions.

2.6 Liability and warranty

Pfeiffer Vacuum disclaims all liability and warranty, if the end user or third party users:

- Disregard the information in this document.
- Use the product in an unintended manner.
- Make any kind of interventions (modifications, alterations etc.) on the product
- Use the product with accessories not listed in the product documentation.

The end user is responsible for the process media used.

Failures due to contamination or wear-and- tear, as well as expendable parts (e.g. seals), are not covered by warranty.

3 Packaging and Transport

With acceptance of the delivery, check that the product has not been damaged during transport. If the product is damaged, take the necessary measures with the shipping carrier and inform the manufacturer. We recommend in any case:

- Leave the product in its original packaging, so that it remains in the clean state in which it was shipped from our factory. Unpack the product only at the final location of use.
- Store packaging material (recyclable material) for further transport or storage.
- Do not remove covers from the valve openings as long as the product is not in use.

3.1 Packaging

NOTICE

Inappropriate packaging

Product may get damaged if inappropriate packaging material is used.

Always use the original packaging material and handle product with care.

➔ Cover all valve openings with protective foil.

➔ Pack valve using original packaging material.

Pfeiffer Vacuum disclaims any liability for damages resulting from inappropriate packaging.

3.2 Transport

WARNING

Harmful substances

Risk of injury in case of contact with harmful substances.

Remove harmful substances (e.g. toxic, caustic or microbiological) from valve before returning the valve to Pfeiffer Vacuum.

NOTICE

Inappropriate packaging

Product may get damaged if inappropriate packaging material is used.

Always use the original packaging material and handle product with care.

Returning contaminated valves:

Microbiologically, explosively or radioactively contaminated valves will not be accepted. “Harmful substances” are substances and compounds according to the ordinance on hazardous substances in its current version.

➔ Hermetically seal all openings.

➔ Shrink-wrap valve into suitable protective foil.

➔ Ship valve only in appropriate transport containers and in compliance with the effective transportation conditions.

In case of a missing or incomplete declaration of contamination and/or use of inappropriate transport packaging, Pfeiffer Vacuum reserves the right to perform a paid decontamination and/or to return the product at sender’s expense.

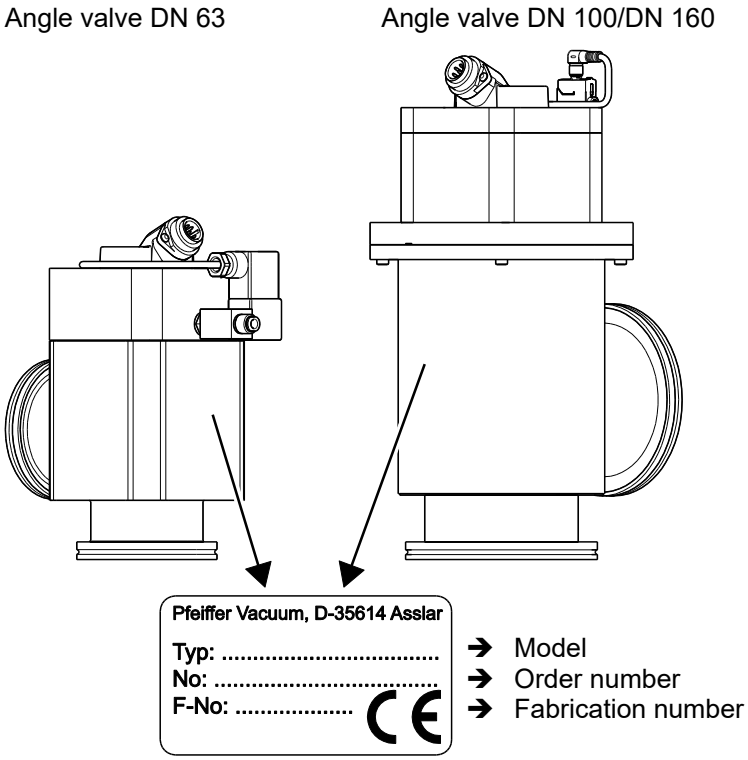
For detailed information, addresses and forms visit:
www.pfeiffer-vacuum.com (Service)

Pfeiffer Vacuum disclaims any liability for damages resulting from inappropriate packaging.

4 Product description

4.1 Product identification

Information to clearly identify the product and to get in contact with Pfeiffer Vacuum can be found on the valve label of the product.



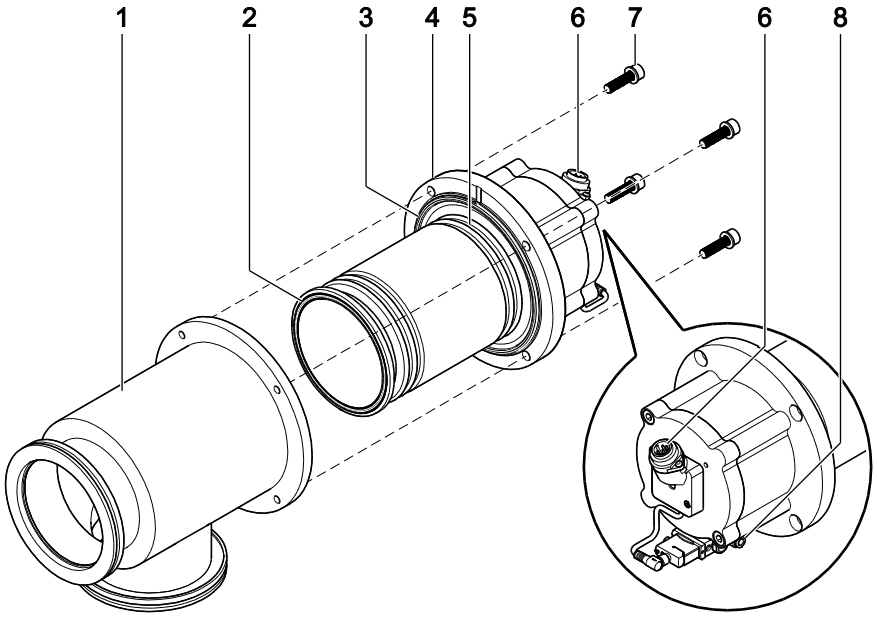
Symbolic image

4.2 Scope of delivery

1x angle valve

1x operating instructions

4.3 Components



Symbolic image

1	Housing	5	Bellows feedthrough
2	Plate seal	6	Connection control valve/position indicator
3	Bonnet seal	7	Screws
4	Pneumatic drive unit	8	Compressed air connection

The function of the angle valve is described in chapter 6.1 „Normal operation“.

5 Installation

WARNING

Unqualified personnel

Inappropriate handling may cause serious injury or property damage.

Only qualified personnel are allowed to carry out the described work.

5.1 Unpacking

➔ Make sure that the delivered products are in accordance with your order.

➔ Inspect the quality of the supplied products visually. If it does not meet your requirements, please contact Pfeiffer Vacuum immediately.

➔ Store the original packaging material. It may be useful if products must be returned to Pfeiffer Vacuum.

➔ The protective covers may only be removed immediately before the valve is mounted into the system. Unprotected sealing surfaces must be treated with care and keep clean.

NOTICE

Sensitive product

Product may get damaged if not handled carefully.

Handle product with care. Do not touch solid objects when lifting the product.

➔ Place the angle valve on a clean surface or install it to a clean connection flange on a system.

5.2 Installation on a system

WARNING

Movable parts

Human body parts may get jammed and severely injured.

Do not connect or supply electrical power and compressed air before the product is completely mounted in the system.

NOTICE

Contamination

The angle valve may get contaminated.

Always wear cleanroom gloves when installing or uninstalling the angle valve.

NOTICE

Inappropriate tools

Sealing surfaces may get damaged.

Do not use sharp-edged tools.

➔ Check and carefully clean the sealing surfaces on the valve flanges and counter flanges.

➔ Install the angle valve with connection components appropriate for ISO-K flanges according to the specification.

5.3 Compressed air connection

WARNING

Valve in open position

Risk of injury when compressed air is connected to the valve.

Connect compressed air only when:
→ valve is installed in the vacuum system
→ moving parts cannot be touched

➔ Use clean, dry or slightly oiled air only.

➔ Admissible air pressure range, refer to chapter 12.2 „Technical Data“.

➔ Connect compressed air according to chapter 12.2 „Technical Data“.

5.4 Electrical connection

NOTICE

Wrong voltage

Electrical components may get damaged.

Supply electrical components with the correct voltage (refer to chapter 12 Technical Data).

➔ Connect control valve according to chapter 12.3 „Pin assignment“.

➔ Connect position indicator (optional) according to chapter 12.3 „Pin assignment“.

6 Operation

WARNING

Unqualified personnel

Inappropriate handling may cause serious injury or property damage.

Only qualified personnel are allowed to carry out the described work.

WARNING

Movable parts

Human body parts may get jammed and severely injured.

Do not connect or supply electrical power and compressed air before the product is completely mounted in the system.

6.1 Normal operation

The angle valve is closed by a closing spring (NC) and opened with a pneumatically actuated control valve.
The optional position indicator provides feedback signal of the actual valve position (open or closed).

6.2 Operation under increased temperature

Maximum allowed operation temperature refer to chapter 12 “Technical Data”.

6.3 Behavior in case of compressed air pressure drop

The angle valve is closed by the closing spring (NC) in case of compressed air pressure drop.

Refer to chapter 6.5 „Trouble shooting“ for further information.

6.4 Behavior in case of power failure

The angle valve is closed by the closing spring (NC) in case of power failure.

Refer to chapter 6.5 „Trouble shooting“ for further information.

6.5 Trouble shooting

Failure	Check	Action	Refer to
Valve does not close/open	Compressed air connected correctly?	Check compressed air connection and air pressure.	Chapter 5.3
	Control valve connected correctly?	Check electrical supply and wiring.	Chapter 5.4
No or wrong positon indicator signal	Position indicator connected correctly?	Check electrical supply and wiring.	Chapter 5.4
Leak at plate or bonnet seal	Are the sealing surfaces contaminated?	Clean or replace O-rings	Chapter 7.2

7 Maintenance

WARNING

Unqualified personnel

Inappropriate handling may cause serious injury or property damage.

Only qualified personnel are allowed to carry out the described work.

WARNING

Movable parts

Human body parts may get jammed and severely injured.

Do not connect or supply electrical power and compressed air before the product is completely mounted in the system.

WARNING

Contaminated parts

Contaminated parts can be detrimental to health and environment.

Inform yourself about possible contamination before beginning to work. Adhere to the relevant regulations and take the necessary protective measures when handling contaminated parts.

NOTICE

Contamination

The angle valve may get contaminated.

Always wear cleanroom gloves when installing or uninstalling the angle valve.

NOTICE

Inappropriate tools

Sealing surfaces may get damaged.

Do not use sharp-edged tools.

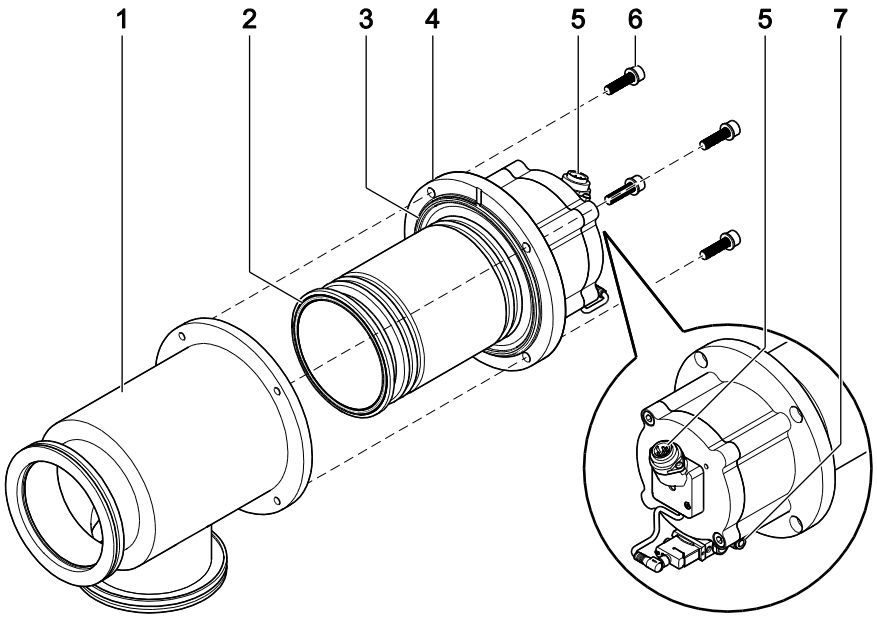
7.1 Maintenance intervals

The angle valve requires cleaning/maintenance before reaching its serviceable life if operated under high-wearing or contaminating operating conditions.

Contamination resulting from process can affect the function of the angle valve and may require shorter maintenance cycles.

Failures due to contamination or wear-and-tear, as well as expendable parts (e.g. seals), are not covered by warranty.

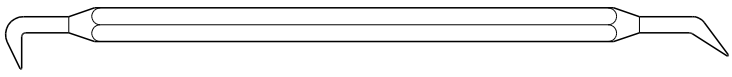
7.2 Exchanging/cleaning O-rings



Symbolic image

1 Housing
2 Plate seal
3 Bonnet seal
4 Pneumatic drive unit
5 Connection control valve/position indicator
6 Screws
7 Compressed air connection

It is recommended to use the O-ring removal tool (order number: V-TOOL-1) for removing O-rings. Push one end of the O-ring removal tool between the O-ring and the O-ring groove. The sealing surface of the O-ring groove does not get damaged.



O-ring removal tool

7.2.1 Dismounting angle valve

➔ Vent system to atmospheric pressure.

➔ Disconnect compressed air supply from compressed air connection (7).

➔ Disconnect electrical supply from control valve/position indicator connection (5).

➔ Loosen ISO-K connection parts.

➔ Remove angle valve carefully from the system.

➔ Place angle valve on a clean, dry and flat surface.

7.2.2 Dismounting pneumatic drive unit

WARNING

Movable parts

Human body parts may get jammed and severely injured.

Do not connect or supply electrical power and compressed air before the product is completely mounted in the system.

➔ Loosen and remove screws (6) in cross diagonal pattern.

➔ Pull pneumatic drive unit (4) carefully off the housing (1).

➔ Use the O-ring removal tool to remove bonnet seal (3) from the O-ring groove.

7.2.3 Replacing plate seal

➔ Use the O-ring removal tool to remove plate seal (2) from O-ring groove.

➔ Visually inspect the sealing surfaces and wipe with an alcohol soaked (2% methyl ethyl ketone) cleanroom wipe.

➔ Position new plate seal (2) over O-ring groove and press it at 4 opposite positions into groove.

➔ Press O-ring twist-free into O-ring groove.

➔ Press remaining O-ring sections uniformly into O-ring groove.

7.2.4 Mounting pneumatic drive unit

➔ Visually inspect the sealing surfaces and wipe with an alcohol soaked (2% methyl ethyl ketone) cleanroom wipe.

➔ Clean and visually inspect bonnet seal (3) → replace if required.

➔ Position bonnet seal (3) over O-ring groove and press it at 4 opposite positions into groove.

➔ Press O-ring twist free into O-ring groove.

➔ Press remaining O-ring sections into O-ring groove

➔ Carefully insert the pneumatic drive unit (4) into the housing (1).

➔ Insert screws (6) in cross diagonal pattern and fasten hand tight.

➔ Fasten screws (6) in cross diagonal pattern in 2 to 3 passes.

Nominal diameter	DN 63	DN 100	DN 160
Torque [Nm]	5	20	20

➔ The angle valve is ready to use.

8 Spare parts

NOTICE

Non-original spare parts

Non-original spare parts may cause damage to the product.

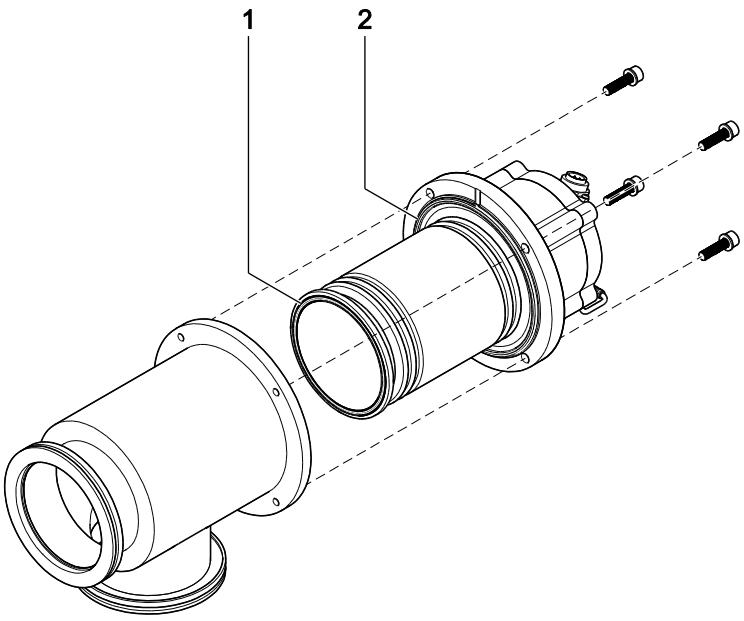
Only use original spare parts from Pfeiffer Vacuum.

Always provide the fabrication number when ordering spare parts. This ensures appropriate spare parts delivery.

Pfeiffer Vacuum differentiates between spare parts which can be replaced by the end user and spare parts which can only be replaced by Pfeiffer Vacuum customer support.

The following table only shows spare parts which can be replaced by the end user. If you need other spare parts, please contact Pfeiffer Vacuum customer support.

8.1 Overview



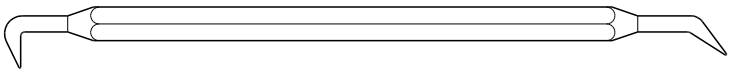
Symbolic image

1 Plate seal

2 Bonnet seal

8.2 O-ring removal tool

It is recommended to use the O-ring removal tool (order number: V-TOOL-1) for removing O-rings.



O-ring removal tool

8.3 Sealing kits

8.3.1 DN 63 ISO-K

Sealing kit for aluminium housing (EVB 063 PA) and stainless steel housing (EVB 063 PX):

Description	Order number	Quantity per valve	Maintenance procedure see chapter
Sealing kit (consists of bonnet and plate seal)	302VEM063-DS	1	7.2

8.3.2 DN 100 ISO-K

Sealing kit for aluminium housing (EVB 100 PA) and stainless steel housing (EVB 100 PX):

Description	Order number	Quantity per valve	Maintenance procedure see chapter
Sealing kit (consists of bonnet and plate seal)	302VEM100-DS	1	7.2

8.3.3 DN 160 ISO-K

Sealing kit for aluminium housing (EVB 160 PA) and stainless steel housing (EVB 160 PX):

Description	Order number	Quantity per valve	Maintenance procedure see chapter
Sealing kit (consists of bonnet and plate seal)	302VEM160-DS	1	7.2

9 Repairs

Only Pfeiffer Vacuum is allowed to carry out repair work.

Repairs in the Pfeiffer Vacuum service center:

We recommend the following steps for a quick and smooth repair process:

➔ Fill out form „Service Request“ and send it to your local service center.

➔ Attach the service request confirmation from Pfeiffer Vacuum to the shipment.

➔ Fill out form „Declaration of Contamination“ and attach it to the shipment (mandatory!). Each product/device requires a separate declaration of contamination.

➔ Dismount all accessory parts and store them at a safe place.

➔ Use airtight metal blank flanges for contaminated angle valves.

➔ Ship angle valve in original packaging material.

For detailed information, addresses and forms visit:
www.pfeiffer-vacuum.com (Service)

10 Dismounting and Storage

WARNING

Unqualified personnel

Inappropriate handling may cause serious injury or property damage.

Only qualified personnel are allowed to carry out the described work.

WARNING

Movable parts

Human body parts may get jammed and severely injured.

Do not connect or supply electrical power and compressed air before the product is completely mounted in the system.

WARNING

Contaminated parts

Contaminated parts can be detrimental to health and environment.

Inform yourself about possible contamination before beginning to work. Adhere to the relevant regulations and take the necessary protective measures when handling contaminated parts.

NOTICE

Contamination

The angle valve may get contaminated.

Always wear cleanroom gloves when installing or uninstalling the angle valve.

10.1 Dismounting

NOTICE

Angle valve in open position

Valve body and plate may get damaged if valve is in open position.

Close the angle valve before dismounting from the system.

➔ Vent system to atmospheric pressure.

➔ Disconnect compressed air supply from compressed air connection.

➔ Disconnect electrical supply from control valve/position indicator connection.

➔ Loosen ISO-K connection parts.

➔ Remove angle valve carefully from the system.

➔ Place angle valve on a clean, dry and flat surface.

10.2 Storage

NOTICE

Wrong storage

Inappropriate temperatures and air humidity may cause damage to the product.

Valve must be stored at:
- relative air humidity between 10% and 70%
- temperature between 10 °C and 50 °C
- non-condensing environment

NOTICE

Inappropriate packaging

Product may get damaged if inappropriate packaging material is used.

Always use the original packaging material and handle product with care.

➔ Clean angle valve → decontaminate if necessary.

➔ Cover all valve openings with protective foil.

➔ Pack valve using original packaging material.

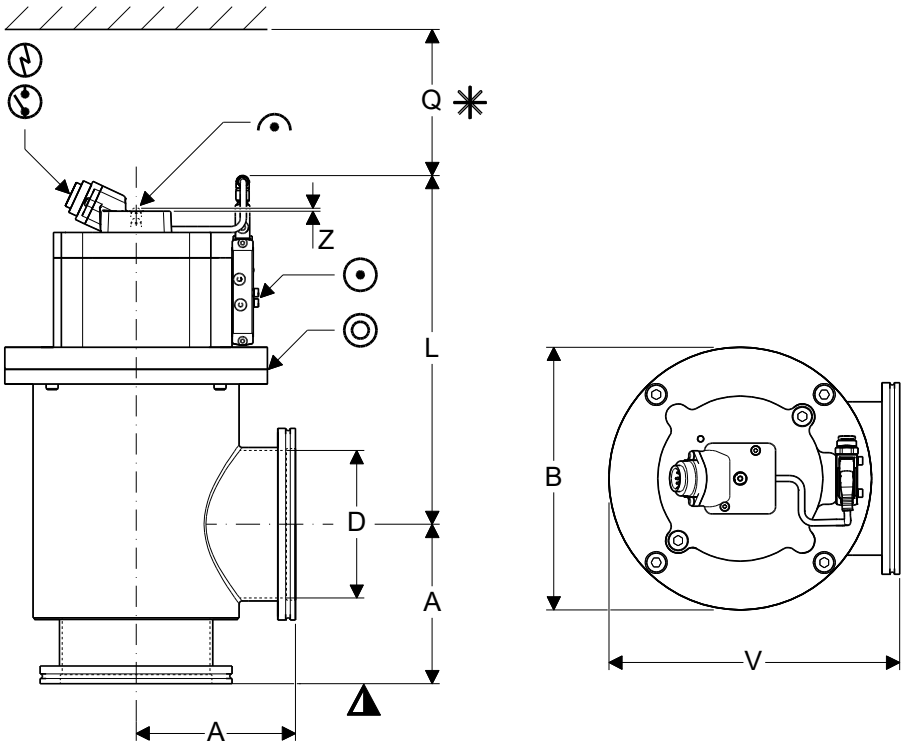
Pfeiffer Vacuum disclaims any liability for damages resulting from inappropriate packaging.

11 Disposal

	**WARNING** **Harmful substances** Environmental pollution. Dispose products and parts according to the local regulations.

12 Technical Data

12.1 Dimensions



Symbolic image

- Valve seat side
- Height required to dismount valve
- Mechanical position indicator
- Leak detection slot
- Compressed air connection
- Electrical supply connection
- Contactors position indicator

12.1.1 Aluminium Housing

DN	A	B	D	L	Q	V	Z
DN 63 ISO-K	88	□107.6	Ø63	144	105	190.8	16.9
DN 100 ISO-K	108	Ø178	Ø102	243	170	197	1.9
DN 160 ISO-K	138	Ø220	Ø153	242.5	200	248	1.9

12.1.2 Stainless steel housing

DN	A	B	D	L	Q	V	Z
DN 63 ISO-K	88	Ø123	Ø66	144	105	198.8	16.9
DN 100 ISO-K	108	Ø178	Ø102	236.4	170	197	1.9
DN 160 ISO-K	138	Ø220	Ø153	249	200	248	1.9

12.2 Technical Data

Vacuum flange size	DN 63 ISO-K	DN 100 ISO-K	DN 160 ISO-K
Actuator	pneumatically, with closing spring		
Stroke valve plate	22 mm	38 mm	45 mm
Conductance [1])	160 l/s	440 l/s	1000 l/s
Serviceable life [2])	3 Mio. cycles	1 Mio. cycles	1 Mio. cycles
Leak rate	$1x10^{-9}$ mbar l/s		
Compressive strength (absolute)	4 bar	2 bar	
Operating pressure min.	$1x10^{-8}$ mbar		
Operating pressure max.	4 bar	2 bar	
Differential pressure → when opening	≤ 1 bar in both directions		
→ in opening direction	1.2 bar		
→ in closing direction	4 bar	2 bar	
Temperature Environment: Bake-out: → Aluminium housing → Stainless steel housing → Position indicator → Control valve	0 °C…50 °C 150 °C 150 °C 80 °C 50 °C		
Usage	Altitude up to 2500 m NN		
Mounting position	any		
Flow direction [3])	any		
Compressed air pressure (min. / max.)	4-8 bar / 58-116 psi	4.5-7 bar / 65-102 psi	
Compressed air connection	Ø 6 mm tubing connection		
Position indicator: Type Voltage Power Overvoltage protection	 Micro switch ≤ 50V AC/DC 5 to 100 mA no		
Control valve: Voltage	see coil at control valve		
Emergency manual operation	yes		

[1]) For air at molecular flow

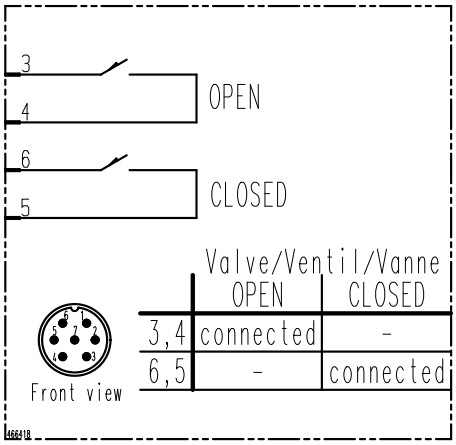
[2]) Number of cycles without extendable parts (sealings) and under clean operation conditions.
The angle valve requires cleaning/maintenance before reaching its serviceable life if operated under high wearing or contaminating operating conditions.

[3]) Recommended mounting position: Valve seat facing towards vacuum chamber

12.3 Pin assignment

12.3.1 Valve with position indicator

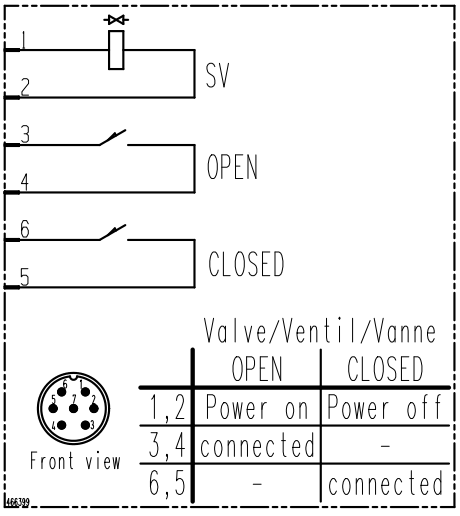
Connector 7 pin



Valve/Ventil/Vanne	OPEN	CLOSED
3,4	connected	-
6,5	-	connected

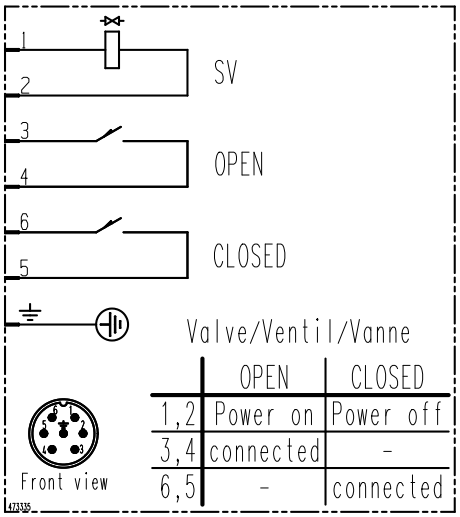
12.3.2 Valve with control valve and position indicator

Connector 7 pin < 50 V



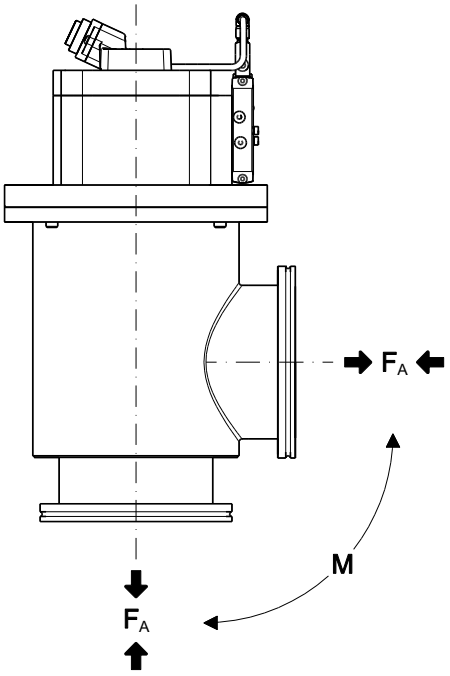
Valve/Ventil/Vanne	OPEN	CLOSED
1,2	Power on	Power off
3,4	connected	-
6,5	-	connected

Connector 7 pin > 50 V



Valve/Ventil/Vanne	OPEN	CLOSED
1,2	Power on	Power off
3,4	connected	-
6,5	-	connected

12.4 Admissible forces and bending moments



Symbolic image

DN (nominal diameter)		Axial tensile or compressive force «F_A»		Bending moment «M»	
mm	inch	N	lbf	Nm	lbf ft
63	2½	200	45	18	13
100	4	250	56	27	20
160	6	300	68	42	31

A combination of both forces («F_A» und «M») is not allowed.

12.5 Materials

Aluminium housing	EN AW 6060 / EN AC-42100K T6
Stainless steel housing	1.4404
Bellows/valve plate	1.4571 / 1.4404
Sealings	FKM
Protective cover	PE
Packaging	Cardboard, PE

12.6 Weight

Angle valve type	DN 63 ISO-K	DN 100 ISO-K	DN 160 ISO-K
Aluminium housing	3.9 kg	8.8 kg	13.8 kg
Stainless steel housing	4.8 kg	9.1 kg	13.7 kg

PFEIFFER VACUUM	EU Konformitätserklärung **EU *Declaration of Conformity*** gemäß den Richtlinien 2014/30/EU, 2011/65/EU ***as defined by the Directives 2014/30/EU, 2011/65/EU***	**831820** Page 1 of 1

Hiermit erklären wir, dass das nachfolgend bezeichnete Produkt aufgrund seiner Konzipierung und Bauart, sowie in der von uns in Verkehr gebrachten Ausführung den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der EU-Richtlinie entspricht. Bei einer nicht mit uns abgestimmten Änderung des Produkts verliert diese Erklärung ihre Gültigkeit.

Herewith we declare that the product named below is in accordance with the relevant safety and health requirements of the EU guideline regarding design and version when delivered from our factory. This declaration becomes invalid whenever the product has been modified without our consent.

Bezeichnung / ***Designation*** HV Eckventil mit Pneumatik-Antrieb
HV angle valve with pneumatic actuator

Artikelnummer / ***Article number***

310VEP063	320VEP063	310VEP100	320VEP100	310VEP160	320VEP160
310VEP063-01	320VEP063-01	310VEP100-01	320VEP100-01	310VEP160-01	320VEP160-01
310VEP063-02	320VEP063-02	310VEP100-02	320VEP100-02	310VEP160-02	320VEP160-02
310VEP063-03	320VEP063-03	310VEP100-03	320VEP100-03	310VEP160-03	320VEP160-03
310VEP063-04	320VEP063-04	310VEP100-04	320VEP100-04	310VEP160-04	320VEP160-04

Das Produkt entspricht folgenden harmonisierten, internationalen Normen:
The product is in conformity with the following harmonized, international standards:

EMV-Richtlinie 2014/30/EU / ***EMC Directive 2014/30/EU***

- EN 61000-6-2 :2006 Elektromagnetische Verträglichkeit (EMV) – Teil 6-2: Fachgrundnormen – Störfestigkeit für Industriebereich
- ***EN 61000-6-2 :2006*** ***Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments***
- EN 61000-6-3 :2011 Elektromagnetische Verträglichkeit (EMV) – Teil 6-3: Fachgrundnormen – Störaussendung für Wohnbereich, Geschäfts- und Gewerbebereich, sowie Kleinbetriebe
- ***EN 61000-6-3 :2011*** ***Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments***

Das Produkt entspricht weiterhin allen Bestimmungen der RoHS-Richtlinie 2011/65/EU.
The products ensure furthermore all regulations of the RoHS-directive 2011/65/EU.

Unterschrift / ***Signature***

Pfeiffer Vacuum GmbH
Berliner Straße 43
35614 Asslar
Deutschland / Germany

Dr. Ulrich von Hülsen
Managing Director

14. April 2016

PFEIFFER VACUUM	EG Einbauerklärung **EU *Declaration of Incorporation*** gemäß der Maschinenrichtlinien 2006/42/EG, Anhang II B ***as defined by the Machinery Directive 2006/42/EC, Annex II B***	**831829** Page 1 of 1

Hiermit erklären wir, dass die nachfolgend bezeichnete unvollständige Maschine zum Zusammenbau mit anderen unvollständigen Maschinen zu einer Maschine bestimmt ist und dass ihre Inbetriebnahme solange untersagt ist, bis festgestellt wurde, dass die durch den Zusammenbau erstellte Maschine den Bestimmungen der EG-Maschinenrichtlinie entspricht.

Herewith we declare that the partly completed machinery named below is intended to be assembled with partly completed machinery components to constitute machinery, which shall not be put into service until the assembled machinery has been declared to be in conformity with the provisions of the EC Council Directive on Machinery.

Bezeichnung / ***Designation*** HV Eckventil mit Pneumatik-Antrieb
HV angle valve with pneumatic actuator

Artikelnummer / ***Article number***

310VEP063	320VEP063	310VEP100	320VEP100	310VEP160	320VEP160
310VEP063-01	320VEP063-01	310VEP100-01	320VEP100-01	310VEP160-01	320VEP160-01
310VEP063-02	320VEP063-02	310VEP100-02	320VEP100-02	310VEP160-02	320VEP160-02
310VEP063-03	320VEP063-03	310VEP100-03	320VEP100-03	310VEP160-03	320VEP160-03
310VEP063-04	320VEP063-04	310VEP100-04	320VEP100-04	310VEP160-04	320VEP160-04

Hinweis: Ferner erklären wir, dass folgende grundlegenden Anforderungen gemäß Anhang 1 der Maschinenrichtlinie zur Anwendung kommen und eingehalten werden:
1.1.2, 1.1.3, 1.1.5, 1.3.1, 1.3.2, 1.3.4, 1.5.1, 1.5.3, 1.5.4;

Die speziellen technischen Unterlagen für diese unvollständige Maschine wurden gemäß Anhang VII Teil B erstellt. Wir verpflichten uns, den zuständigen Behörden auf begründetes Verlangen die speziellen technischen Unterlagen vorzulegen.

Remark: ***We also declare that the following fundamental requirements according to Annex 1 of the Machinery Directive are applicable and met:***
1.1.2, 1.1.3, 1.1.5, 1.3.1, 1.3.2, 1.3.4, 1.5.1, 1.5.3, 1.5.4;

The relevant technical documentation for this partly completed machinery has been created according to Annex VII, Part B. We contract ourselves to present the relevant technical documentation on reasoned demand to the competent authorities.

Bevollmächtigte für die Zusammenstellung der technischen Unterlagen ist:
Represented for the compilation of technical documents is:
Frau Stephanie Tümmel, Anna-Vandenhoeck-Ring 44, 37081 Göttingen

Unterschrift / ***Signature***

Pfeiffer Vacuum GmbH
Berliner Straße 43
35614 Asslar
Deutschland / Germany

Dr. Ulrich von Hülsen
Managing Director

14. April 2016

Notes:

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