

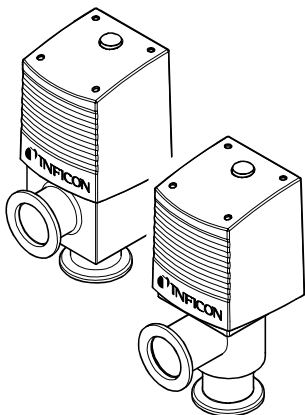
Angle Valve

pneumatically operated
bellows sealed
with position indicator

VAP016-A/X

VAP025-A/X

VAP040-A/X



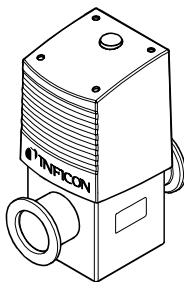
Inline Valve

pneumatically operated
bellows sealed
with position indicator

VIP016-X

VIP025-X

VIP040-X



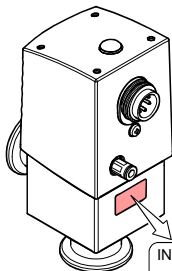
CE

Operating Manual
Incl. Declaration of Incorporation

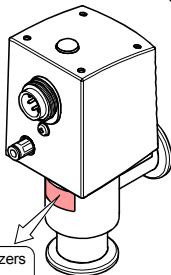
Product Identification

In all communications with INFICON, please specify the information on the product nameplate. For convenient reference copy that information into the space provided below:

Angle Valve
Aluminum housing



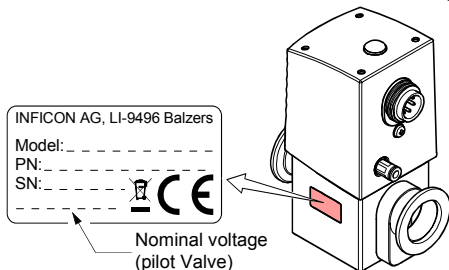
Angle Valve
Stainless steel housing



INFICON AG, LI-9496 Balzers
 Model:
 PN:
 SN:
 IEC

Nominal voltage
(pilot valve)

Inline Valve
Stainless steel housing



INFICON AG, LI-9496 Balzers
 Model:
 PN:
 SN:
 IEC

Nominal voltage
(pilot Valve)

Validity

This document applies to products with the following part numbers:



Angle valves ...

... with pilot valve, normally closed (n.c.)

- Aluminum housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	Nominal voltage or voltage range (pilot valve)
253-211	253-311	253-411	24 VDC
253-212	253-312	253-412	24 VAC
253-213	253-313	253-413	100 ... 115 VAC
253-214	253-314	253-414	200 ... 230 VAC

- Stainless steel housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	Nominal voltage or voltage range (pilot valve)
253-251	253-351	253-451	24 VDC
253-252	253-352	253-452	24 VAC
253-253	253-353	253-453	100 ... 115 VAC
253-254	253-354	253-454	200 ... 230 VAC

... with pilot valve, normally open (n.o.)

- Aluminum housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	Nominal voltage (pilot valve)
253-215	253-315	253-415	24 VDC

- Stainless steel housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	Nominal voltage (pilot valve)
253-255	253-355	253-455	24 VDC

... without pilot valve

- Aluminum housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF
253-210	253-310	253-410

- Stainless steel housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF
253-250	253-350	253-450



Inline Valve ...

... with pilot valve, normally closed (n.c.)

- Stainless steel housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	Nominal voltage or voltage range (pilot valve)
253-271	253-371	253-471	24 VDC
253-272	253-372	253-472	24 VAC
253-273	253-373	253-473	100 ... 115 VAC
253-274	253-374	253-474	200 ... 230 VAC

... with pilot valve, normally open (n.o.)

- Stainless steel housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	Nominal voltage (pilot valve)
253-275	253-375	253-475	24 VDC

... without pilot valve

- Stainless steel housing

DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF
253-270	253-370	253-470

The part number (PN) can be taken from the product nameplate.

If not indicated otherwise in the legends, the illustrations in this document correspond to the valve with part number 253-311. They apply to the other valves by analogy.

We reserve the right to make technical changes without prior notice.

All dimensions are indicated in mm.

Intended Use

The angle valves are used as shut-off and venting devices for vacuum applications.

Scope of Delivery

- Valve
- Female cable connector
- Operating Manual sina98e1
- Gebrauchsanleitung sina98d1


Contents

Product Identification	2
Validity	3
Intended Use	5
Scope of Delivery	5
1 Functional Principle	8
1.1 Valve with Pilot Valve, Normally Closed	8
1.2 Valve with Pilot Valve, Normally Open	10
1.3 Valve without Pilot Valve	12
2 Safety	14
2.1 Symbols Used	14
2.2 Personnel Qualifications	14
2.3 General Safety Instructions	15
2.4 Liability and Warranty	15
3 Technical Data	16
4 Installation	21
4.1 Vacuum Connection	21
4.2 Compressed Air Connection	23
4.3 Power Connection	26
5 Operation	31
5.1 Valve with Pilot Valve, Normally Closed	31
5.2 Valve with Pilot Valve, Normally Open	32
5.3 Valve without Pilot Valve	32
6 Deinstallation	33
6.1 Power Connection	33
6.2 Compressed Air Connection	35
6.3 Vacuum Connections	37
7 Maintenance / Repair	39
7.1 Cleaning / Replacing Bellows and Seals	40
7.2 Replacing the Cover	43
8 Spare Parts	45
9 Accessories	46
10 Returning the Product	47

11 Disposal 48

Declaration of Contamination 49

Declaration of Incorporation 50

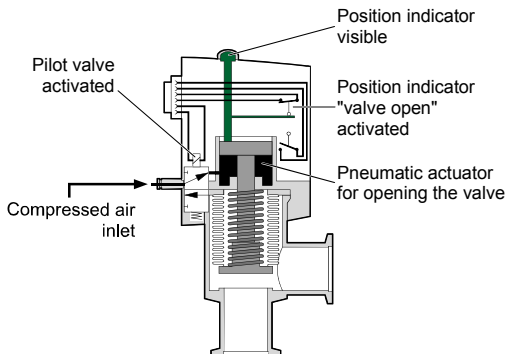
For cross references within this document, the symbol (→  XY) is used.

1 Functional Principle

1.1 Valve with Pilot Valve, Normally Closed

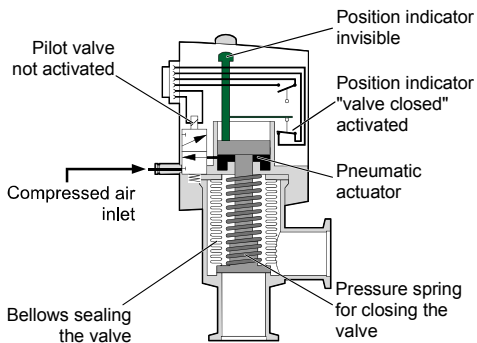
Opening action

When the pilot valve is activated, the angle valve is opened by the pneumatic actuator. The visual position indicator becomes visible and the electrical position indicator "valve open" is activated.



Closing action

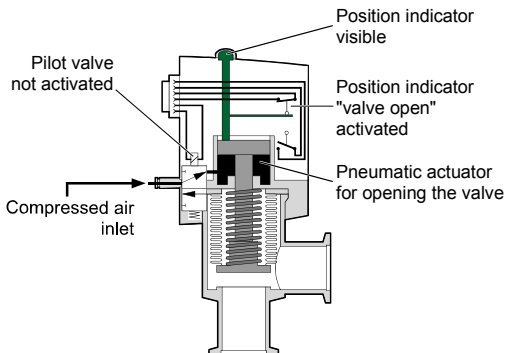
When the pilot valve is deactivated, the angle valve is closed by the pressure spring. The visual position indicator is no longer visible and the electrical position indicator "valve closed" is activated.



1.2 Valve with Pilot Valve, Normally Open

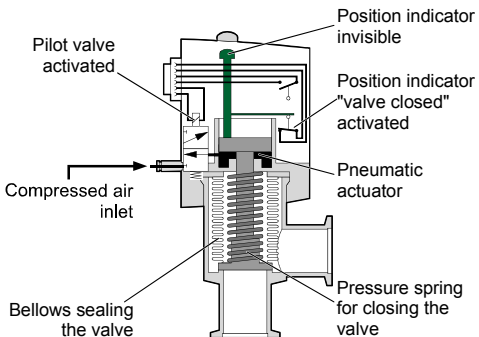
Opening action

When the pilot valve is deactivated, the angle valve is opened by the pneumatic actuator. The position indicator becomes visible and the electrical position indicator "valve open" is activated.



Closing action

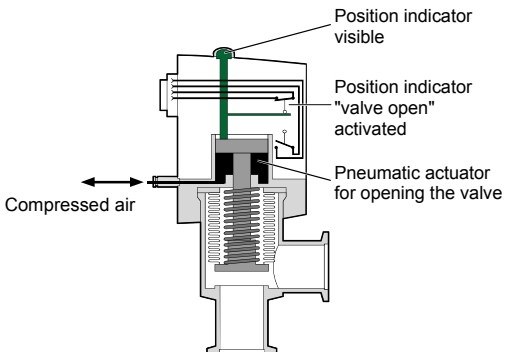
When the pilot valve is activated, the angle valve is closed by the pressure spring. The position indicator is invisible and the electrical position indicator "valve closed" is activated.



1.3 Valve without Pilot Valve

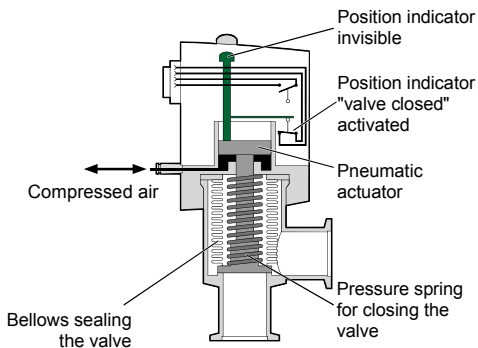
Opening action

When compressed air is admitted, the angle valve opens. The visual position indicator becomes visible and the electrical position indicator "valve open" is activated.



Closing action

When no compressed air is admitted, the angle valve is closed by the pressure spring. The visual position indicator is no longer visible and the electrical position indicator "valve closed" is activated.



2 Safety

2.1 Symbols Used



DANGER

Information on preventing any kind of physical injury.



WARNING

Information on preventing extensive equipment and environmental damage.



Caution

Information on correct handling or use. Disregard can lead to malfunctions or minor equipment damage.


2.2 Personnel Qualifications



Skilled personnel

All work described in this document may only be carried out by persons who have suitable technical training and the necessary experience or who have been instructed by the end-user of the product.

2.3 General Safety Instructions

- Adhere to the applicable regulations and take the necessary precautions for the process media used.
Consider possible reactions between the materials (→  18) and the process media.
- Adhere to the applicable regulations and take the necessary precautions for all work you are going to do and consider the safety instructions in this document.
- Before beginning to work, find out whether any vacuum components are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

Communicate the safety instructions to all other users.

2.4 Liability and Warranty

INFICON assumes no liability and the warranty becomes null and void if the end-user or third parties

- disregard the information in this document
- use the product in a non-conforming 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 assumes the responsibility in conjunction with the process media used.

3 Technical Data

Pilot valve			
Nominal voltage	→ product nameplate		
Power			
DC voltage	2.5 W		
AC voltage	4.8 / 3.6 VA		
Duty cycle	100%		
Nominal diameter	1.2 mm		
Electrical position indicator			
Connection	soldered joints		
Rating	250 VAC / 25 VA / 0.1 A 50 VDC / 12.5 W / 0.25 A		
Vacuum connection	DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF
Actuation	opening: pneumatic closing: by pressure spring		
Compressed air supply			
Tube connection	ø4 mm		
Pressure range	4 ... 8 bar (overpressure)		
Purity classes	2 4 1 (ISO 8573-1)		
Piston displacement	4 cm ³	11 cm ³	35 cm ³
Stroke of valve plate	6 mm	8 mm	13 mm
Conductance ¹⁾			
Angle valve	5 l/s	14 l/s	45 l/s
Inline valve	2.5 l/s	7 l/s	20 l/s
Switching frequency ²⁾	100 / min	100 / min	75 / min
Opening time ³⁾	100 ms	120 ms	260 ms
Closing time ⁴⁾	100 ms	160 ms	540 ms

¹⁾ For air with molecular flow.

²⁾ With pressure difference $\Delta p=0$ and compressed air = 5 bar (overpressure).

³⁾ With compressed air = 4 bar (overpressure) and vacuum in the valve.

Cycle life ⁵⁾	10 million
Tightness	1×10^{-9} mbar l/s
Pressure max.	5 bar (absolute)
Operating pressure min.	1×10^{-8} mbar
Operating pressure max.	2 bar
Pressure difference Δp In closing direction	5 bar
In opening direction	2 bar
Temperature Ambiance	0 °C ... +50 °C
Bakeout	
Housing	
Aluminum	80 °C
Stainless steel	150 °C
Actuator	50 °C
Pilot valve	50 °C
Use	altitude up to 2500 m NN
Type of protection	IP 50
Protection class	II
Mounting orientation	any
Flow direction ⁶⁾	any

⁴⁾ With compressed = 8 bar (overpressure) and atmosphere in the valve.

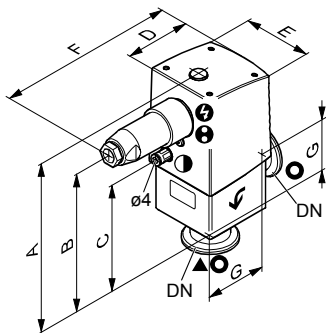
⁵⁾ Cycles without expendable parts (seals) and under clean operating conditions.

⁶⁾ Recommended mounting orientation: valve seat toward vacuum chamber.

Materials			
Housing			
Aluminum	EN AW-6082 T6		
Stainless steel	1.4301		
Bellows / valve plate	1.4404 / 1.4435		
Pressure spring	spring steel		
Seals	FPM		
Cover	ABS		
Visual position indicator	POM		
Cylinder unit	EN AW-6082 T6		
Protective lid	PE		
Packing material	carton box, PE		
Weight			
Angle valve			
Aluminum	0.49 kg	0.68 kg	1.21 kg
Stainless steel	0.52 kg	0.75 kg	1.33 kg
Inline valve			
Stainless steel	0.89 kg	1.35 kg	2.2 kg

Dimensions [mm]

- Angle valve



- | | | | |
|--|-------------------------------|--|-----------------|
| | Visual position indicator | | Valve seat site |
| | Compressed air connection | | Flow direction |
| | Position indicator connection | | Protective lid |
| | Electrical connection | | |

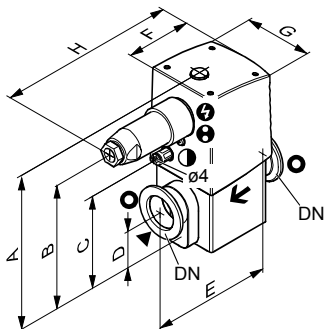
Aluminum housing








DN	A	B	C	D	E	F	G
DN 16 ISO-KF	142	112.9	75.1	55	51.4	93.2	40
DN 25 ISO-KF	146.9	117.8	79	64.3	60.1	97.8	50
DN 40 ISO-KF	188.8	159.7	114.9	81.3	75.7	105.3	65

Stainless steel housing

DN	A	B	C	D	E	F	G
DN 16 ISO-KF	144.5	112.9	75.1	55	51.4	93.2	40
DN 25 ISO-KF	150.3	117.8	79	64.3	60.1	97.8	50
DN 40 ISO-KF	191.8	159.7	114.9	81.3	75.7	105.3	65

- Inline valve





- | | | | |
|---|-------------------------------|---|-----------------|
|  | Visual position indicator |  | Valve seat site |
|  | Compressed air connection |  | Flow direction |
|  | Position indicator connection |  | Protective lid |
|  | Electrical connection | | |

DN	A	B	C	D	E	F	G	H
DN 16 ISO-KF	126.1	97	59.2	20	80	55	51.4	93.2
DN 25 ISO-KF	133.6	104.5	65.7	31.8	100	64.3	60.1	97.8
DN 40 ISO-KF	169.1	140	95.2	40.8	130	81.3	75.7	105.3

4 Installation

4.1 Vacuum Connection


 **DANGER**




DANGER: overpressure in the vacuum system
>1 bar

Injury caused by released parts and harm caused by escaping process gases can result if clamps are opened while the vacuum system is pressurized.

Do not open any clamps while the vacuum system is pressurized. Use the type clamps which are suited to overpressure.


 **DANGER**




DANGER: overpressure in the vacuum system
>2.5 bar

KF flange connections with elastomer seals (e.g. O-rings) cannot withstand such pressures. Process media can thus leak and possibly damage your health.

Use O-rings provided with an outer centering ring.

 **Caution**



Caution: vacuum component

Dirt and damages impair the function of the vacuum component.

When handling vacuum components, take appropriate measures to ensure cleanliness and prevent damages.



Caution

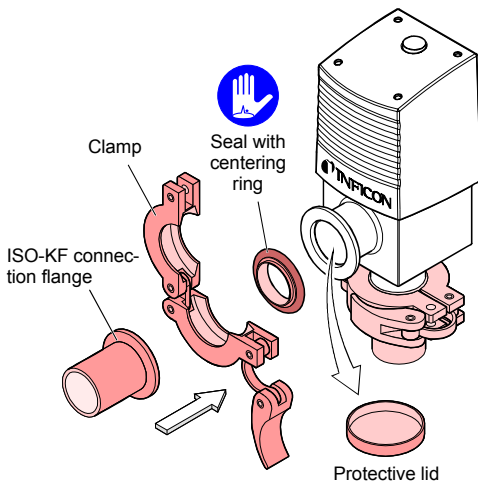


Caution: dirt sensitive area

Touching the product or parts thereof with bare hands increases the desorption rate.

Always wear clean, lint-free gloves and use clean tools when working in this area.

Remove the protective lids and connect the product to the vacuum system.



Keep the protective lids.

4.2 Compressed Air Connection



DANGER



DANGER: compressed air

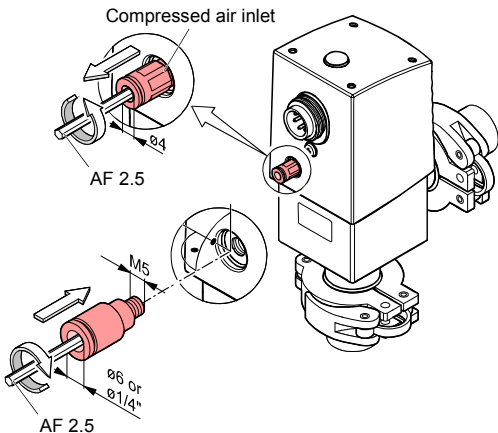
Unprofessionally handling compressed air can cause physical injury.

Adhere to the relevant regulations and take the necessary precautions when handling compressed air.

Instant push-in fitting

The standard product is equipped with an instant push-in fitting for a plastic tube $\varnothing 4$ mm.

If you are using a $\varnothing 6$ mm or a $\varnothing 1/4$ " plastic tube, exchange the instant push-in fitting.



Plastic tube

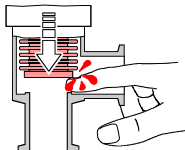


DANGER



DANGER: moving parts

When the product is connected to the supply media, parts can start moving. Moving parts can catch parts of the body and cause injuries.



The connection to the compressed air supply may only be established if

- the compressed air line is not pressurized
- the product is installed in a vacuum system or
- the moving parts are protected to avoid accidental contact.



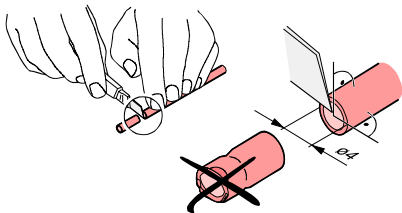
Specifications for the plastic tube:

- bursting pressure ≥ 10 bar overpressure
- material: PA soft or PU

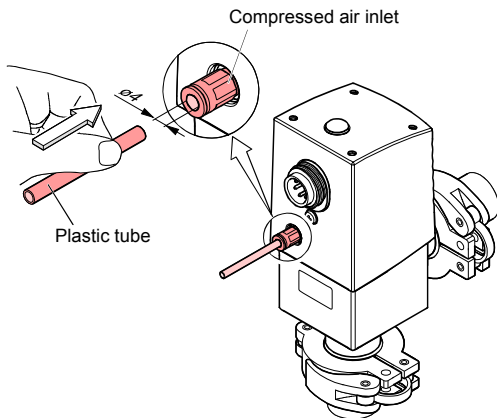


To ensure leak tightness:

- cut the plastic tube orthogonally
- make sure the outside of the plastic tube is not damaged



Push the plastic tubes into the instant push-in fittings until the stop position is reached and check for correct mounting by slightly pulling.



Compressed air control system

The compressed air control system has to be supplied by the end-user.



The compressed air must meet the following specifications:

- purity classes ISO 8573-1 2 4 1
- 4 ... 8 bar overpressure

To reach the opening and closing times indicated in the "Technical Data", a pilot valve with a nominal diameter of >2 mm is required.

4.3 Power Connection



Caution



Caution: supply voltage

Incorrect voltages can destroy the product.

The supply voltage ratings must correspond to the nominal voltage of the product (→ product nameplate). If they do not correspond, exchange the product.

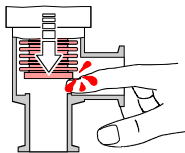


DANGER



DANGER: moving parts

When the product is connected to the supply media, parts can start moving. Moving parts can catch parts of the body and cause injuries.



The connection to the power supply may only be established if

- the power supply is de-energized
- the product is installed in a vacuum system or
- the moving parts are protected to avoid accidental contact.



The cable must meet the following specifications:

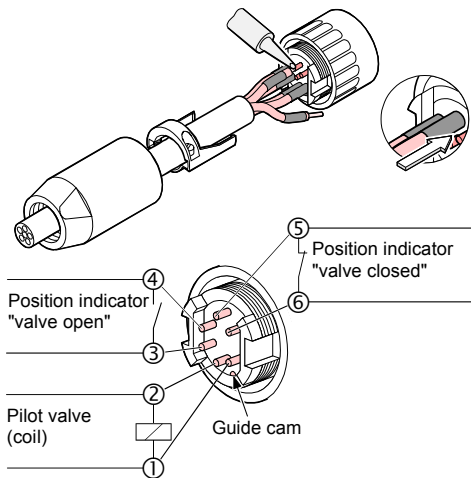
- flexible
- conductor cross-section $\leq 0.75 \text{ mm}^2$
- cable cross-section $\leq 10 \text{ mm}$
- 6-pole (with pilot valve)
4-pole (without pilot valve).

- 1** Prepare the connector.

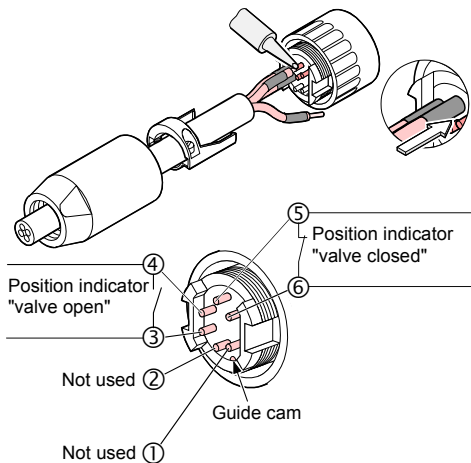
Valve with pilot valve



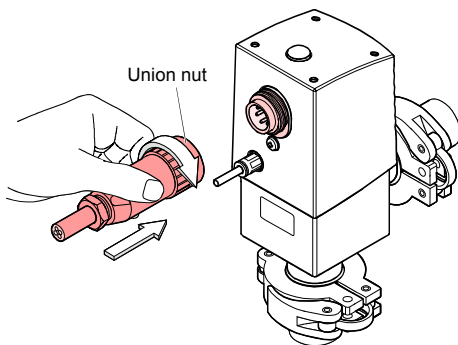
The polarity of the pilot valve (solenoid coil) need not be taken into consideration.



Valve without pilot valve



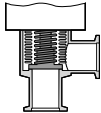
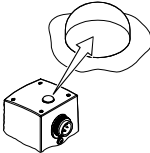
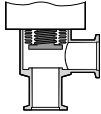
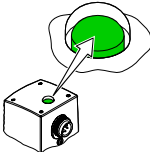
- 2** Plug in the connector and secure it with the union nut.



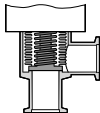
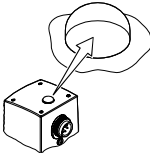
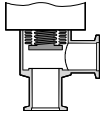
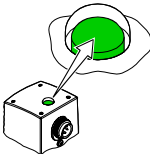
5 Operation

The product is ready for operation as soon as it has been installed.

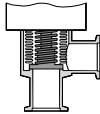
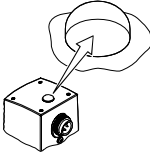
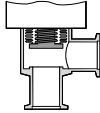
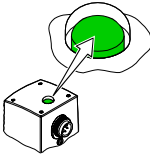
5.1 Valve with Pilot Valve, Normally Closed

Valve position	Compressed air	Pilot valve	Position indicator
closed 	available	deactivated	
	not available	activated	
	not available	deactivated	
open 	available	activated	

5.2 Valve with Pilot Valve, Normally Open

Valve position	Compressed air	Pilot valve	Position indicator
closed 	available	activated	
	not available	activated	
	not available	deactivated	
open 	available	deactivated	

5.3 Valve without Pilot Valve


Valve position	Compressed air	Position indicator
closed 	not available	
open 	available	

6 Deinstallation


Precondition

- Vacuum system vented.

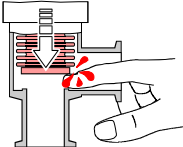
6.1 Power Connection



DANGER



DANGER: moving parts
When the product is disconnected from the supply media, parts can start moving. Moving parts can catch parts of the body and cause injuries.



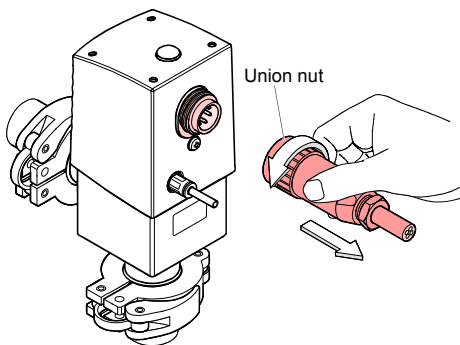
The product may only be disconnected from the power supply if

- the product is installed in a vacuum system or
- the moving parts are protected to avoid accidental contact.





Before connecting or disconnecting the product, turn off the control system.

Loosen the connector and unplug it.



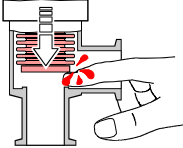
6.2 Compressed Air Connection


DANGER




DANGER: moving parts


When the product is disconnected from the supply media, parts can start moving. Moving parts can catch parts of the body and cause injuries.



The product may only be disconnected from the compressed air if

- the product is installed in a vacuum system or
- the moving parts are protected to avoid accidental contact.


DANGER

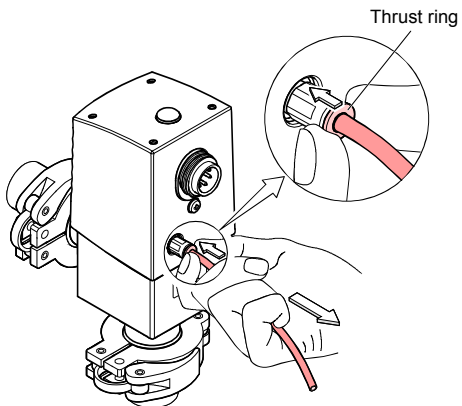


DANGER: compressed air


Physical injury can result if a pressurized compressed air line is disconnected.

Before doing any work, turn off the compressed air supply and relieve the compressed air lines.


Pull out the tube while depressing the thrust ring.




6.3 Vacuum Connections




DANGER




DANGER: contaminated parts
 Contaminated parts can be detrimental to health and environment.
 Before beginning to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.




Caution



Caution: vacuum component
 Dirt and damages impair the function of the vacuum component.
 When handling vacuum components, take appropriate measures to ensure cleanliness and prevent damages.

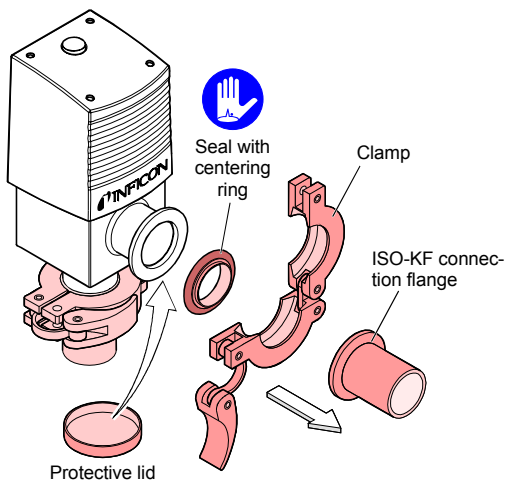


Caution



Caution: dirt sensitive area
 Touching the product or parts thereof with bare hands increases the desorption rate.
 Always wear clean, lint-free gloves and use clean tools when working in this area.

Remove the valve from the vacuum system and install the protective lids.



7 Maintenance / Repair



DANGER



DANGER: contaminated parts

Contaminated parts can be detrimental to health and environment.

Before beginning to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.



Caution



Caution: vacuum component

Dirt and damages impair the function of the vacuum component.

When handling vacuum components, take appropriate measures to ensure cleanliness and prevent damages.



Caution



Caution: dirt sensitive area

Touching the product or parts thereof with bare hands increases the desorption rate.


Always wear clean, lint-free gloves and use clean tools when working in this area.

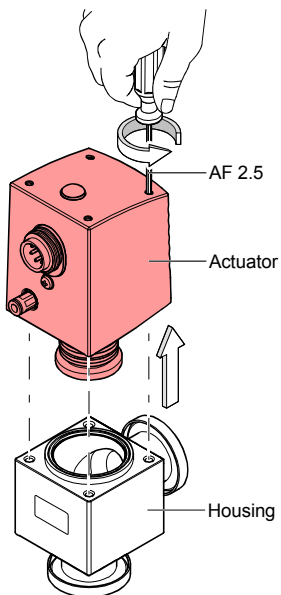
7.1 Cleaning / Replacing Bellows and Seals

Precondition

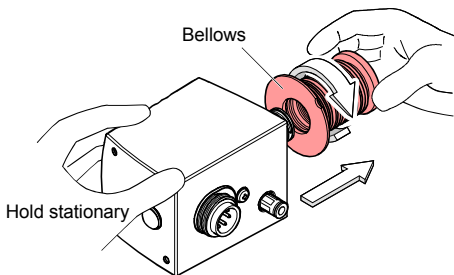
- Valve deinstalled (Deinstallation → 33)

- 1 Unscrew the hexagon socket head screws and remove the actuator from the housing.

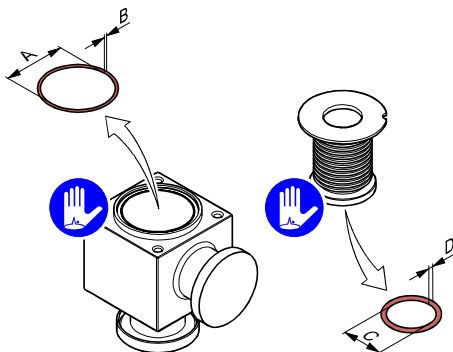
 The actuator can be rotated in steps of 90 °.



- 2** Unscrew the bellows (Spare Parts → 45).






- 3** Remove the seals (Spare Parts → 45).



O-ring, FPM	$\varnothing A \times B$	$\varnothing C \times D$
DN 16 ISO-KF	$\varnothing 28.3 \times 1.78$	$\varnothing 17.04 \times 3.53$
DN 25 ISO-KF	$\varnothing 37.82 \times 1.78$	$\varnothing 24.99 \times 3.53$
DN 40 ISO-KF	$\varnothing 56.87 \times 1.78$	$\varnothing 40.87 \times 3.53$

- 4** Remove the protective lids and clean the parts.

	 DANGER
<p>DANGER: cleaning agents Cleaning agents can be detrimental to health and environment.</p> <p>Adhere to the relevant regulations and take the necessary precautions when handling and disposing of cleaning agents. Consider possible reactions with the product materials (→  18).</p>	

Procedure

- Carefully clean the parts with a grease solving, non-scouring cleaner.
- After cleaning the parts should preferably be rinsed with alcohol and subsequently heated to $\approx 50^{\circ}$ C in an oven or with an industrial blower.
- Carefully clean the sealing surfaces with a lint-free cloth soaked with alcohol. Allow them to dry.

- 5** Proceed in reverse order to reassemble the product.



Be careful to insert the O-rings level into the grooves without twisting them.

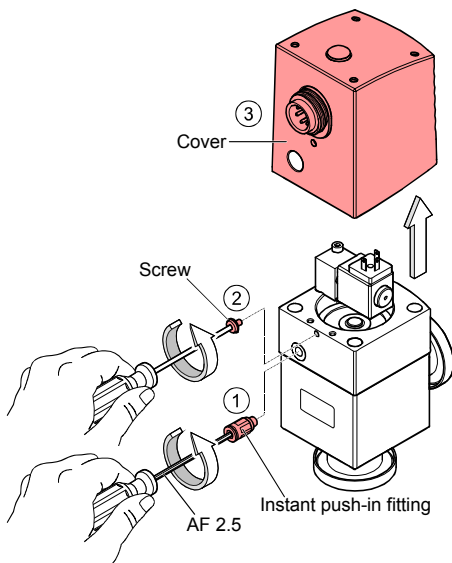
After reassembly, a few switching cycles should be performed in order for the O-rings to perfectly adapt to the sealing surfaces. Take the necessary precautions for this procedure.

7.2 Replacing the Cover

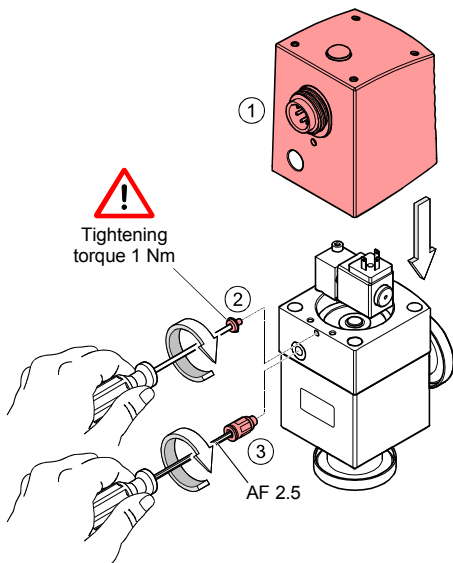
Precondition

- Disconnected from the power supply (→ 33)
- Disconnected from the compressed air supply (→ 35)

- 1 Unscrew the instant push-in fitting and the screw and remove the cover.

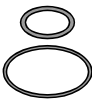


- 2** Place the cover and screw in the screw and instant push-in fitting.

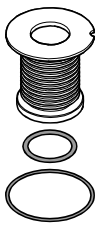


8 Spare Parts

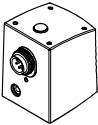
Seal kit

	Ordering number	
	DN 16 ISO-KF, comprising 1 O-ring, $\varnothing 17.04 \times 3.53$ 1 O-ring, $\varnothing 28.3 \times 1.78$	299-001
	DN 25 ISO-KF, comprising 1 O-ring, $\varnothing 24.99 \times 3.53$ 1 O-ring, $\varnothing 37.82 \times 1.78$	299-006
	DN 40 ISO-KF, comprising 1 O-ring, $\varnothing 40.87 \times 3.53$ 1 O-ring, $\varnothing 56.87 \times 1.78$	299-011

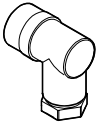
Bellows cpl.

	Ordering number	
	DN 16 ISO-KF, comprising 1 bellows 1 O-ring, $\varnothing 17.04 \times 3.53$ 1 O-ring, $\varnothing 28.3 \times 1.78$	299-002
	DN 25 ISO-KF, comprising 1 bellows 1 O-ring, $\varnothing 24.99 \times 3.53$ 1 O-ring, $\varnothing 37.82 \times 1.78$	299-007
	DN 40 ISO-KF, comprising 1 bellows 1 O-ring, $\varnothing 40.87 \times 3.53$ 1 O-ring, $\varnothing 56.87 \times 1.78$	299-012

Cover cpl.

		Ordering number
	DN 16 ISO-KF, comprising 1 cover with receptacles 1 visual position indicator 1 electrical position indicator	299-003
	DN 25 ISO-KF, comprising 1 cover with receptacles 1 visual position indicator 1 electrical position indicator	299-008
	DN 40 ISO-KF, comprising 1 cover with receptacles 1 visual position indicator 1 electrical position indicator	299-013

9 Accessories

		Ordering number
	Female cable connector right angled, type C16-1	215-165

10 Returning the Product



WARNING



WARNING: forwarding contaminated products
Contaminated products (e.g. radioactive, toxic, caustic or microbiological hazard) can be detrimental to health and environment.

Products returned to INFICON should preferably be free of harmful substances. Adhere to the forwarding regulations of all involved countries and forwarding companies and enclose a duly completed declaration of contamination.

Products that are not clearly declared as "free of harmful substances" are decontaminated at the expense of the customer. Products not accompanied by a duly completed declaration of contamination are returned to the sender at his own expense.

11 Disposal



DANGER



DANGER: contaminated parts

Contaminated parts can be detrimental to health and environment.

Before beginning to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.



WARNING



WARNING: substances detrimental to the environment

Products or parts thereof (mechanical and electric components, operating fluids etc.) can be detrimental to the environment.

Dispose of such substances in accordance with the relevant local regulations.

Separating the components

After disassembling the product, separate its components according to the following criteria:

- Contaminated components
Contaminated components (radioactive, toxic, caustic or biological hazard etc.) must be decontaminated in accordance with the relevant national regulations, separated according to their materials, and disposed of.
- Other components
Such components must be separated according to their materials and recycled.

Declaration of Contamination

The service, repair, and/or disposal of vacuum equipment and components will only be carried out if a correctly completed declaration has been submitted. Non-completion will result in delay.

This declaration may only be completed (in block letters) and signed by authorized and qualified staff.

1 Description of product
 Type _____
 Part number _____
 Serial number _____

2 Reason for return

3 Operating fluid(s) used (Must be drained before shipping.)


4 Used in copper process
 no yes **Seal product in plastic bag and mark it with a corresponding label.**

5 Process related contamination of product:

toxic	no <input type="checkbox"/> 1)	yes <input type="checkbox"/>
caustic	no <input type="checkbox"/> 1)	yes <input type="checkbox"/>
biological hazard	no <input type="checkbox"/>	yes <input type="checkbox"/> 2)
explosive	no <input type="checkbox"/>	yes <input type="checkbox"/> 2)
radioactive	no <input type="checkbox"/>	yes <input type="checkbox"/> 2)
other harmful substances	no <input type="checkbox"/> 1)	yes <input type="checkbox"/>

1) or not containing any amount of hazardous residues that exceed the permissible exposure limits

2) Products thus contaminated will not be accepted without written evidence of decontamination.



The product is free of any substances which are damaging to health. yes

6 Harmful substances, gases and/or by-products
 Please list all substances, gases, and by-products which the product may have come into contact with:

Trade/product name	Chemical name (or symbol)	Precautions associated with substance	Action if human contact

7 Legally binding declaration:
 We hereby declare that the information on this form is complete and accurate and that we will assume any further costs that may arise. The contaminated product will be dispatched in accordance with the applicable regulations.

Organization/company _____
 Address _____ Post code, place _____
 Phone _____ Fax _____
 Email _____
 Name _____

Date and legally binding signature _____ Company stamp _____

This form can be downloaded from our website.

Copies:
 Original for addressee - 1 copy for accompanying documents - 1 copy for file of sender

Declaration of Incorporation

as defined by the Directive relating to machinery 2006/42/EC, Appendix IIB.



We, INFICON, hereby declare that putting the incomplete equipment mentioned below into operation is not permitted until evidence is given that the system into which that incomplete equipment shall be installed is in conformity with the provisions of the EC Directive relating to machinery.

We also declare that the equipment mentioned below complies with the provisions of the Directive relating to electrical equipment designed for use within certain voltage limits 73/23/EEC.

Products

Angle Valve

VAP016-A/X

VAP025-A/X

VAP040-A/X

Inline Valve

VIP016-X

VIP025-X

VIP040-X

Part numbers

253-210	253-310	253-410	253-270	253-370	253-470
253-211	253-311	253-411	253-271	253-371	253-471
253-212	253-312	253-412	253-272	253-372	253-472
253-213	253-313	253-413	253-273	253-373	253-473
253-214	253-314	253-414	253-274	253-374	253-474
253-215	253-315	253-415	253-275	253-375	253-475
253-250	253-350	253-450			
253-251	253-351	253-451			
253-252	253-352	253-452			
253-253	253-353	253-453			
253-254	253-354	253-454			
253-255	253-355	253-455			

Standards

Harmonized and international/national standards and specifications:

- EN ISO 12100-1/-2 (Safety of machinery)
- EN 294 (Safety distances to prevent danger zones being reached by the upper limits)
- EN 349 (Minimum gaps to avoid crushing of parts of the human body)
- EN 60204-1 (Electrical equipment of machines)

Signatures

INFICON AG, Balzers

9 October 2006



Marco Kern
Product Manager

9 October 2006



Dr. Georg Sele
Quality Representative

Original: German sina98d1 (2006-10)



si na98e1



LI-9496 Balzers
Liechtenstein
Tel +423 / 388 3111
Fax +423 / 388 3700
reachus@inficon.com

www.inficon.com