

VAP016 ... 040-A/X

VIP016 ... 040-A/X

Angle (VAP) and Inline (VIP) Valves Pneumatically actuated

The new INFICON ISO-KF and CF-R valve line, VAP / VIP016 ... 040-A/X performs as a gauge isolation, bypass, roughing or venting valve and is perfectly suited for all general high vacuum and semiconductor processes. The improved industrial design is very robust, compact and highly reliable with a low cost of ownership. This pneumatic actuated valve is designed for system manufacturers who need a compact and space saving valve unit. This valve comes with an outstanding long service life time and is very easy to maintain. It is equipped with the same approved high quality components like INFICON is using for its very successful All-in-One concept valve line.



ADVANTAGES

- Robust and very compact design
- Visual position indicator, standard
- 10 million cycle 316L stainless steel bellows
- Easy maintenance due to fast bellows and seal replacement
- Fast opening and closing time
- High conductance for fast pump down or venting
- High differential pressure resistance
- FPM sealing standard. Other sealing materials available upon request
- High purity aluminum or stainless steel housing
- CF-R flanges for stainless steel housings available

ORDERING INFORMATION SELECTION DATA

Vacuum connection		DN 16		DN 25		DN 40	
Aluminum housing	AISI/DIN	-/EN AW-6060		-/EN AW-6060		-/EN AW-6060	
Stainless steel housing	AISI/DIN		304/1.4301		304/1.4301		304/1.4301

ANGLE VALVE ISO-KF

Type		VAP016-A	VAP016-X	VAP025-A	VAP025-X	VAP040-A	VAP040-X
Compressed air connection	ø4 mm	253-220	253-260	253-320	253-360	253-420	253-460
Compressed air connection	ø¼"	253-222	253-262	253-322	253-362	253-422	253-462

ANGLE VALVE CF-R

Type		VAP016-A	VAP016-X	VAP025-A	VAP025-X	VAP040-A	VAP040-X
Compressed air connection	ø¼"	–	253-261	–	–	–	253-461

INLINE VALVE ISO-KF

Type		VIP016-A	VIP016-X	VIP025-A	VIP025-X	VIP040-A	VIP040-X
Compressed air connection	ø4 mm	253-240	253-280	253-340	253-380	253-440	253-480

SPECIFICATIONS

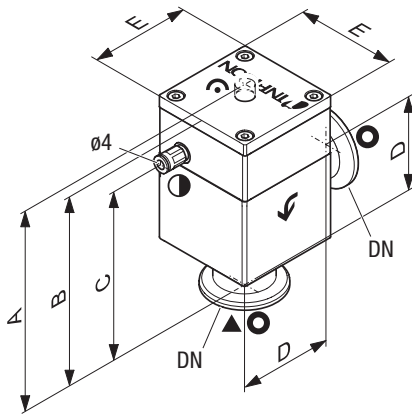
Cycle life	Mio cycles	10		10		10	
Conductance for molecular flow							
Angle valve	l/s	5		14		45	
Inline Valve	l/s	2.5		7		20	
Tightness	mbar l/s	1 x 10 ⁻⁹		1 x 10 ⁻⁹		1 x 10 ⁻⁹	
Operating pressure min. / max.	mbar / bar	1 x 10 ⁻⁸ / 2		1 x 10 ⁻⁸ / 2		1 x 10 ⁻⁸ / 2	
Pressure, max. (absolute)	bar	5		5		5	
Pressure difference							
In closing direction	bar	5		5		5	
In opening direction	bar	2		2		2	
Ambiance temperature	°C	0 ... +50		0 ... +50		0 ... +50	
Bakeout temperature							
Housing	°C	120	150	120	150	120	150
Actuator	°C	120	120	120	120	120	120
Switching frequency	1/min	100		100		75	
Opening time	ms	100		120		260	
Closing time	ms	100		160		540	
Compressed air, overpressure	bar	4 ... 8		4 ... 8		4 ... 8	
Piston displacement	cm ³	4		11		35	
Mounting orientation		any		any		any	
Seals		FPM		FPM		FPM	
Weight							
Angle valve ISO-KF	kg	0.38	0.42	0.57	0.66	1.17	1.28
Angle valve CF-R	kg	–	0.43	–	–	–	1.46
Inline valve ISO-KF	kg	0.45	0.83	0.67	1.27	1.38	2.48

SPARE PARTS

Vacuum connection	DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF
Seal kit	299-001	299-006	299-011
O-rings for one valve			
Bellows cpl.	299-002	299-007	299-012
Bellows & seal kit			

DIMENSIONS ANGLE VALVE ISO-KF

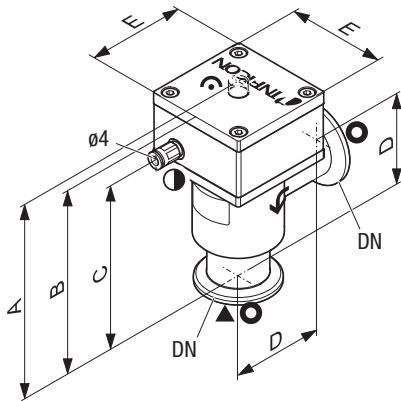
Aluminum housing



- Compressed air connection
- Protective lid
- ↻ Flow direction
- ▼ Valve seat site
- ⤵ Visual position indicator

DN	A	B	C	D	E
DN 16 ISO-KF	100.5	95.7	75.6	40	45
DN 25 ISO-KF	108.5	102.6	80.6	50	54
DN 40 ISO-KF	150.5	144.7	116.6	65	69

Stainless steel housing

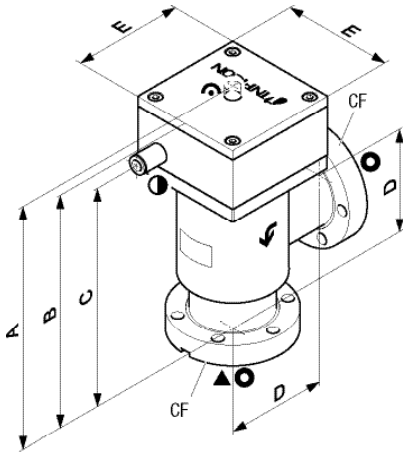


- Compressed air connection
- Protective lid
- ↻ Flow direction
- ▼ Valve seat site
- ⤵ Visual position indicator

DN	A	B	C	D	E
DN 16 ISO-KF	103	98.2	78.1	40	45
DN 25 ISO-KF	112	106	84	50	54
DN 40 ISO-KF	153.5	147.7	119.6	65	69

DIMENSIONS ANGLE VALVE CF-R

Stainless steel housing

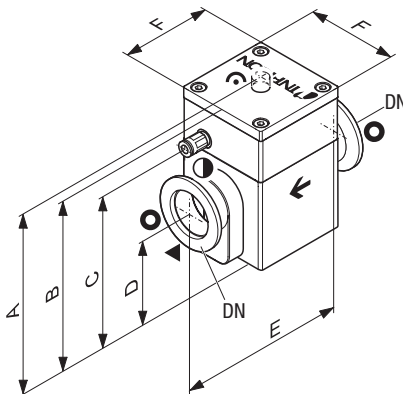


DN	A	B	C	D	E
DN 16 CF-R	101	96.3	76.2	38	45
DN 40 CF-R	151.6	145.8	117.7	63	69

[mm]

- Compressed air connection
- Protective lid
- ↷ Flow direction
- ▼ Valve seat site
- ⤵ Visual position indicator

DIMENSIONS INLINE VALVE ISO-KF



DN	A	B	C	D	E	F
DN 16 ISO-KF	91.8	86.8	66.7	18.7	80	45
DN 25 ISO-KF	98.5	93.3	71.3	25	100	54
DN 40 ISO-KF	138	133	104.9	30	130	69

[mm]

DN	A	B	C	D	E	F
DN 16 ISO-KF	84.5	79.8	59.7	20	80	45
DN 25 ISO-KF	95.5	89.3	67.3	31.8	100	54
DN 40 ISO-KF	131	125	96.9	40.8	130	69

[mm]

- Compressed air connection
- Protective lid
- ← Flow direction
- ▼ Valve seat site
- ⤵ Visual position indicator

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Due to our continuing program of product improvements, specifications are subject to change without notice.

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