

# VAH016 ... 040-A/X VIH016 ... 040-A/X

## Angle (VAH) and Inline (VIH) Valves Manually actuated

The INFICON ISO-KF valve line, VAH / VIH016 ... 040-A/X performs as a gauge isolation, bypass, roughing or venting valve and is well suited for all general high vacuum and semiconductor processes. The improved industrial design results in a rugged, compact, easy to operate valve. The visual position indicator shows the open / close status of the valve for clear understanding of valve status. The extremely long service life and easy to maintain design results in a highly reliable valve with low cost of ownership. The new line is compatible with the current INFICON VAH / VIH016 ... 040-A/X valve line.

### ADVANTAGES

- Ergonomically designed knob for secure grip
- Fast open / close actuation with one 130° turn; or a soft continuously variable actuation for controlled venting / pumping of vacuum systems
- Low operating force required, even if the valve is opened against vacuum
- Drive locks into final open / close position
- Visual position indicator, standard
- 316L stainless steel bellows
- Easy maintenance, fast bellows and seal replacement
- 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



## ORDERING INFORMATION SELECTION DATA

Vacuum connection		DN 16 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF
Aluminum housing	AISI/DIN	-/EN AW-6082	-/EN AW-6082	-/EN AW-6082
Stainless steel housing	AISI/DIN	304/1.4301	304/1.4301	304/1.4301

## ANGLE VALVE

Type	VAH016-A	VAH016-X	VAH025-A	VAH025-X	VAH040-A	VAH040-X
	253-200	253-245	253-300	253-345	253-400	253-445

## INLINE VALVE

Type	VIH016-A	VIH016-X	VIH025-A	VIH025-X	VIH040-A	VIH040-X
	253-225	253-265	253-325	253-365	253-425	253-465

## SPECIFICATIONS

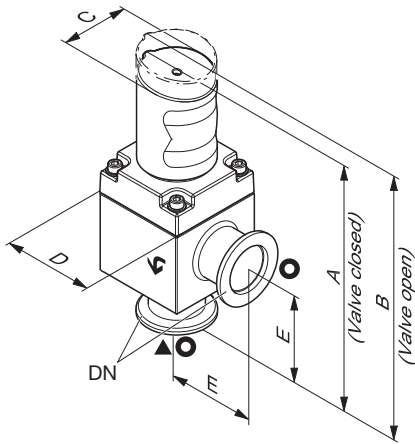
Cycle life	Cycles	10000	10000	10000			
Conductance for molecular flow							
Angle valve	l/s	5	14	45			
Inline Valve	l/s	2.5	7	20			
Tightness	mbar l/s	$1 \times 10^{-9}$	$1 \times 10^{-9}$	$1 \times 10^{-9}$			
Operating pressure min. / max.	mbar / bar	$1 \times 10^{-8} / 2$	$1 \times 10^{-8} / 2$	$1 \times 10^{-8} / 1.5$			
Pressure, max. (absolute)	bar	4	4	4			
Pressure difference							
In closing direction	bar	4	4	2			
In opening direction	bar	2	1.5	2			
Ambiance temperature	°C	0 ... +50	0 ... +50	0 ... +50			
Mounting orientation		any	any	any			
Seals		FPM	FPM	FPM			
Weight							
Angle valve	kg	0.31	0.34	0.42	0.49	0.85	0.96
Inline valve	kg	0.38	0.71	0.52	1.09	1.06	1.83




## 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

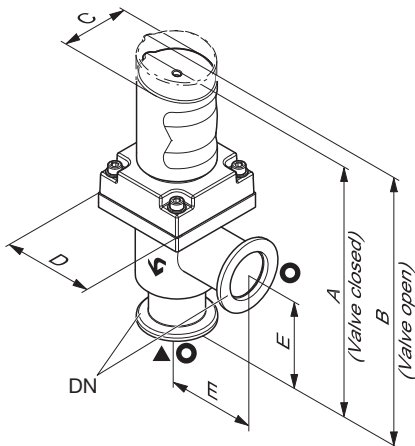
Aluminum housing






-  Protective lid
-  Valve seat site
-  Flow direction

DN	A	B	C	D	E
DN 16 ISO-KF	141.3	149.5	39.6	45	40
DN 25 ISO-KF	145.3	155.7	39.6	54	50
DN 40 ISO-KF	186.2	201.4	50	69	65

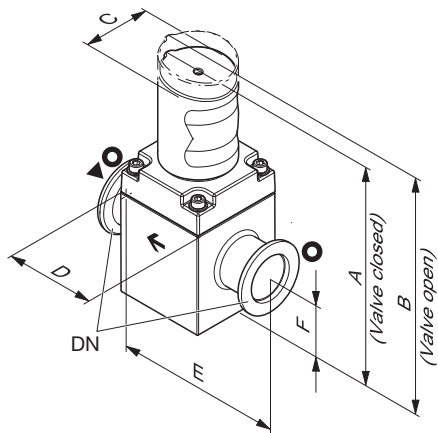
Stainless steel housing



-  Protective lid
-  Valve seat site
-  Flow direction

DN	A	B	C	D	E
DN 16 ISO-KF	143.9	152.1	39.6	45	40
DN 25 ISO-KF	148.7	159.1	39.6	54	50
DN 40 ISO-KF	189.2	204.4	50	69	65

## DIMENSIONS INLINE VALVE



- Protective lid
- ▼ Valve seat site
- ← Flow direction

### Aluminum housing

DN	[mm]					
	A	B	C	D	E	F
DN 16 ISO-KF	132.4	140.6	39.6	45	80	18.7
DN 25 ISO-KF	136	146.4	39.6	54	100	25
DN 40 ISO-KF	174.5	189.7	50	69	130	30

### Stainless steel housing

DN	[mm]					
	A	B	C	D	E	F
DN 16 ISO-KF	125.4	133.6	39.6	45	80	20
DN 25 ISO-KF	132	142.4	39.6	54	100	31.8
DN 40 ISO-KF	166.5	181.7	50	69	130	40.8