

VIP016 ... 040-A/X

Angle (VAP) Pneumatically actuated

The INFICON ISO-KF valve line, VAP / VIP016 ... 040-A/X performs as 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, highly reliable valve with a low cost of ownership. The All-in-One concept means the valve is fast and easy to install and the pilot valve and electrical position indicator are integrated for convenient "plug and play" use. The proven All-in-One design and extremely long service lifetime makes this valve easy to maintain. The new line is fully compatible with the current INFICON VAP / VIP016 ... 040-A/X valve xline.



BENEFITS

- All-in-One design for fast and easy installation; one connector for pilot valve and electrical position indicator for easiest **"plug and play"**
- Direct pneumatic actuation or via integrated pilot valve
- Normally open and normally closed versions available
- Electrical and visual position indicator, standard
- 10 million cycle 316L stainless steel bellows
- Easy maintenance, 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

FEATURES

- Testfeature 1
- Testfeature 2

ORDERING INFORMATION SELECTION DATA

Vacuum connection	DN 16 ISO-KF	DN 16 ISO-KF	DN 25 ISO-KF	DN 25 ISO-KF	DN 40 ISO-KF	DN 40 ISO-KF
Aluminium 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

Type	VIP016-A	VIP016-X	VIP025-A	VIP025-X	VIP040-A	VIP040-X
VIP016-A, P, opt. PI	253-240					
VIP016-X 100-115V-50/60Hz In-line valve		250-312				
VIP016-X 200-230V-50/60Hz In-line valve		250-313				
VIP016-X 24V-50/60HZ In-line valve		250-311				
VIP016-X 24VDC In-line valve		250-310				
VIP016-X with indicator, without pilot v		250-314				
VIP016-X, P, opt. PI		253-280				
VIP025-A, P, opt. PI			253-340			
VIP025-X 100-115V-50/60Hz In-line valve				250-332		
VIP025-X 200-230V-50/60Hz In-line valve				250-333		
VIP025-X 24V-50/60HZ In-line valve				250-331		
VIP025-X 24VDC In-line valve				250-330		
VIP025-X with indicator, without pilot v				250-334		
VIP025-X, P, opt. PI				253-380		
VIP040-A, P, opt. PI					253-440	
VIP040-X 24VDC In-line valve						250-350
VIP040-X 100-115V-50/60Hz In-line valve						250-352
VIP040-X 200-230V-50/60Hz In-line valve						250-353
VIP040-X 24V-50/60Hz In-line valve						250-351

VIP040-X with indicator, without pilot v						250-354
VIP040-X, P, opt. PI						253-480
With pilot valve, with position indicator 100 ... 115 V AC / 50 ... 60 Hz (n.c.)	253-233	253-273	253-333	253-373	253-433	253-473
With pilot valve, with position indicator 200 ... 230 V AC / 50 ... 60 Hz (n.c.)	253-234	253-274	253-334	253-374	253-434	253-474
With pilot valve, with position indicator 24 V AC / 50 ... 60 Hz (n.c.)	253-232	253-272	253-332	253-372	253-432	253-472
With pilot valve, with position indicator 24 V DC (n.c.)	253-231	253-271	253-331	253-371	253-431	253-471
Without pilot valve, with position indicator	253-230	253-270	253-330	253-370	253-430	253-470

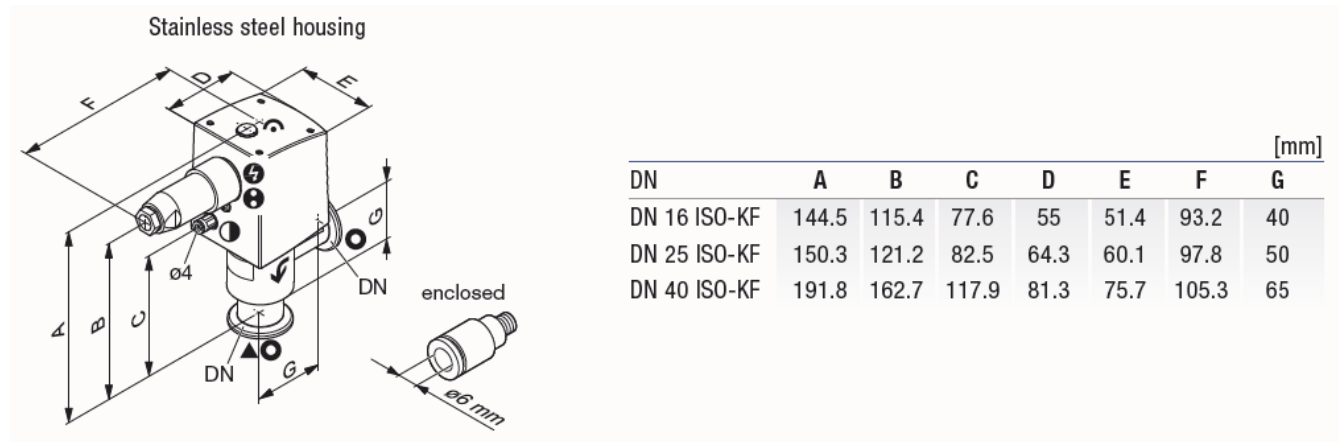
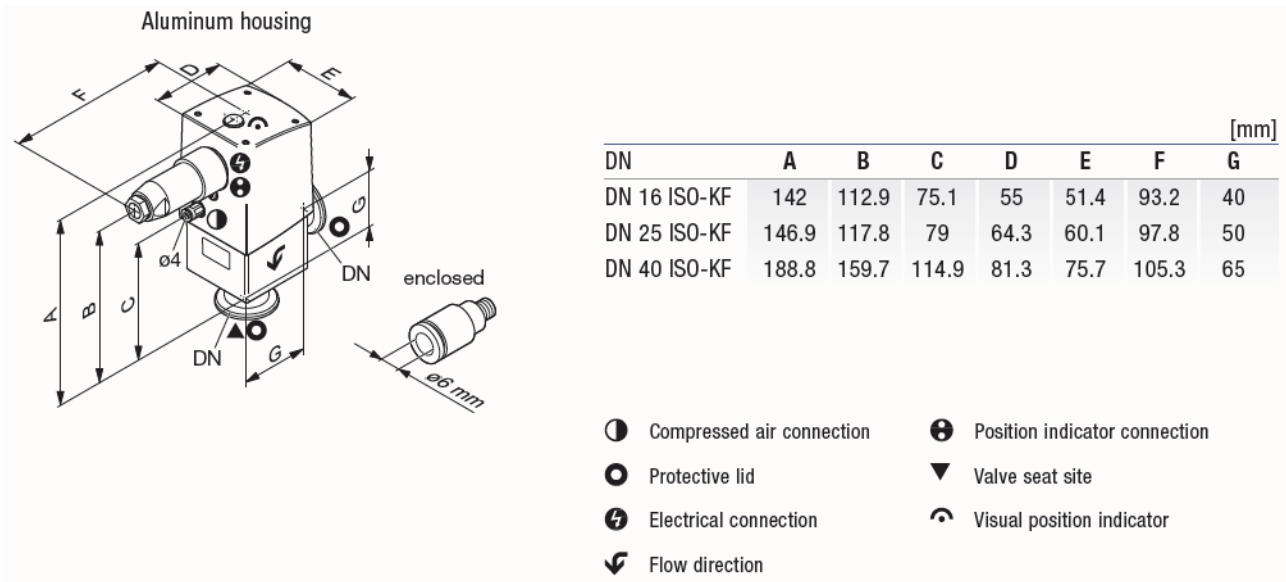
SPECIFICATIONS

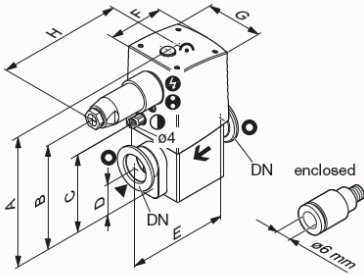
Type		VIP016-A	VIP016-X	VIP025-A	VIP025-X	VIP040-A	VIP040-X
Cycle life		10	10	10	10	10	10
Conductance for molecular flow							
Angle Valve		5	5	14	14	45	45
Inline valve		2.5	2.5	7	7	20	20
Tightness		1×10^{-9}	1×10^{-9}	$1 \times 10(-9)$	$1 \times 10(-9)$	$1 \times 10(-9)$	$1 \times 10(-9)$
Operating pressure min. /max.		$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$
Pressure, max. (absolute)	bar	5	5	5	5	5	5
Pressure difference							
In closing direction	bar	5	5	5	5	5	5
In opening direction	bar	2	2	2	2	2	2
Ambiance temperature		0 ... +50	0 ... +50	0 ... +50	0 ... +50	0 ... +50	0 ... +50
Switching frequency		100	100	100	100	75	75
Opening time		100	100	120	120	260	260
Closing time		100	100	160	160	540	540
Electrical position indicator							
Rating		250/25/0.1	250/25/0.1	250/25/0.1	250/25/0.1	250/25/0.1	250/25/0.1
-		50/12.5/0.25	50/12.5/0.25	50/12.5/0.25	50/12.5/0.25	50/12.5/0.25	50/12.5/0.25
Compressed air, overpressure	bar	4 ... 8	4 ... 8	4 ... 8	4 ... 8	4 ... 8	4 ... 8
Piston displacement	cm ³	4	4	11	11	35	35
Piston displacement		1000	1000	1000	1000	1000	1000
Mounting orientation		any	any	any	any	any	any
Seals		FPM	FPM	FPM	FPM	FPM	FPM
Weight							
Angle Value		0.49	0.52	0.68	0.75	1.21	1.33
Inline Value		0.56	0.89	0.78	1.35	1.41	2.2

ACCESSORIES

Vacuum connection	VIP016-A	VIP016-X	VIP025-A	VIP025-X	VIP040-A	VIP040-X
Plug 90°, 6P+E, T3105.081	-	-	215-165	-	-	-

DIMENSIONS





- ① Compressed air connection
- ⊙ Protective lid
- ⚡ Electrical connection
- ← Flow direction
- ⊕ Position indicator connection
- ▼ Valve seat site
- ⌚ Visual position indicator

Aluminum housing

[mm]

DN	A	B	C	D	E	F	G	H
DN 16 ISO-KF	133.1	104	66.2	18.7	80	55	51.4	93.2
DN 25 ISO-KF	137.6	108.5	69.7	25	100	64.3	60	97.8
DN 40 ISO-KF	177.1	148	103.2	30	130	81.2	75.7	105.3

Stainless steel housing

[mm]

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



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