

VAP016 ... 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 line.



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

Connection	Modelname	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	
Construction	Construction Value					
Stainless steel housing AISI/DIN		304/1.4301		304/1.4301		304/1.4301

Type	Modeltype	VAP016-X	VAP025-A	VAP025-X	VAP040-A	VAP040-X
05VAP016-X 24VAC Angle valve		250-211				
Angle valve VAP025-A, AIO, P			253-310			
Angle valve VAP040-A, AIO, P					253-410	
VAP016-A, AIO, 100-115 VAC	253-213					
VAP016-A, AIO, 200-230 VAC	253-214					
VAP016-A, AIO, 24 VAC	253-212					
VAP016-A, AIO, 24 VDC	253-211					
VAP016-A, AIO, 24 VDC, N.O.	253-215					
VAP016-X 100-115V-50/60HZ Angle valve		250-212				
VAP016-X 200-230V-50/60Hz Angle valve		250-213				
VAP016-X 24VDC Angle valve		250-210				
VAP016-X Angle valve		250-295				
VAP016-X with indicator, without pilot v		250-214				
VAP016-X, AIO, 100-115 VAC		253-253				
VAP016-X, AIO, 200-230 VAC		253-254				
VAP016-X, AIO, 24 VAC		253-252				
VAP016-X, AIO, 24 VDC		253-251				
VAP016-X, AIO, 24 VDC, N.O.		253-255				
VAP016-X, AIO, P		253-250				

VAP016-X, P, opt. PI	253-260	
VAP016-X, P, opt. PI, CF-R	253-261	
VAP025-A 24VDC Angle valve		250-220
VAP025-A 100-115V-50/60Hz Angle valve		250-222
VAP025-A 200-230V-50/60Hz Angle valve		250-223
VAP025-A 24VAC Angle valve		250-221
VAP025-A Angle valve AI without valve,		250-291
VAP025-A Eckventil ALU o.SV,mit opt. LM		250-691
VAP025-A with indicator, without pilot v		250-224
VAP025-A, AIO, 100-115 VAC		253-313
VAP025-A, AIO, 200-230 VAC		253-314
VAP025-A, AIO, 24 VAC		253-312
VAP025-A, AIO, 24 VDC		253-311
VAP025-A, AIO, 24 VDC Kalrez		253-881
VAP025-A, AIO, 24 VDC, N.O.		253-315
VAP025-A, AIO, P, CR		253-610
VAP025-A, P, opt. PI		253-320
VAP025-X 24VDC Angle valve		250-230
VAP025-X 100-115V-50/60HZ Angle valve		250-232
VAP025-X 200-230V-50/60Hz Angle valve		250-233
VAP025-X 24V 50/60HZ Angle valve		250-231
VAP025-X Angle valve		250-296
VAP025-X w/indic w/o pilot - USE 253-350		250-234
VAP025-X, AIO, 100-115 VAC		253-353
VAP025-X, AIO, 200-230 VAC		253-354
VAP025-X, AIO, 24 VAC		253-352
VAP025-X, AIO, 24 VDC		253-351
VAP025-X, AIO, 24 VDC, N.O.		253-355
VAP025-X, AIO, P		253-350
VAP025-X, P, opt. PI		253-360
VAP040-A 100-115V-50/60Hz Angle valve		250-242

VAP040-A 200-230V-50/60Hz Angle valve		250-243
VAP040-A 24VAC Angle valve		250-241
VAP040-A 24VDC Angle valve		250-240
VAP040-A Angle valve		250-292
VAP040-A Eckventil ALU o.SV,mit opt. LM		250-692
VAP040-A w.CR seals,w.PO,wo.PV		250-248
VAP040-A with indicator, without pilot v		250-244
VAP040-A, AIO, 100-115 VAC		253-413
VAP040-A, AIO, 200-230 VAC		253-414
VAP040-A, AIO, 24 VAC		253-412
VAP040-A, AIO, 24 VDC		253-411
VAP040-A, AIO, 24 VDC, CR		253-711
VAP040-A, AIO, 24 VDC, N.O.		253-415
VAP040-A, AIO, P, CR		253-710
VAP040-A, P, opt. PI		253-420
VAP040-X 100-115V-50/60HZ Angle valve		250-252
VAP040-X 200-230V-50/60Hz Angle valve		250-253
VAP040-X 24V 50/60HZ Angle valve		250-251
VAP040-X 24VDC Angle valve		250-250
VAP040-X Angle valve		250-297
VAP040-X w/indic w/o pilot - USE 253-450		250-254
VAP040-X, AIO, 100-115 VAC		253-453
VAP040-X, AIO, 200-230 VAC		253-454
VAP040-X, AIO, 24 VAC		253-452
VAP040-X, AIO, 24 VDC		253-451
VAP040-X, AIO, 24 VDC, N.O.		253-455
VAP040-X, AIO, P		253-450
VAP040-X, P, opt. PI		253-460
VAP040-X, P, opt. PI, CF-R		253-461
Without pilot valve, with position indicatory	253-210	

ORDERING INFORMATION

VAP016-A, AIO, 24 VAC

253-212

SPECIFICATIONS

Type	Modeltype	VAP016-X	VAP025-A	VAP025-X	VAP040-A	VAP040-X
Cycle life		10	10	10	10	10
Conductance for molecular flow						
Angle Valve		5	5	14	14	45
Inline valve		2.5	2.5	7	7	20
Tightness		1×10^{-9}	1×10^{-9}	$1 \times 10(-9)$	$1 \times 10(-9)$	$1 \times 10(-9)$
Operating pressure min. /max.		$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$	$1 \times 10(-8) / 2$
Pressure, max. (absolute)	bar	5	5	5	5	5
Pressure difference						
In closing direction	bar	5	5	5	5	5
In opening direction	bar	2	2	2	2	2
Ambiance temperature		0 ... +50	0 ... +50	0 ... +50	0 ... +50	0 ... +50
Switching frequency		100	100	100	100	75
Opening time		100	100	120	120	260
Closing time		100	100	160	160	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
-		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
Piston displacement	cm ³	4	4	11	11	35
Piston displacement		1000	1000	1000	1000	1000
Mounting orientation		any	any	any	any	any
Seals		FPM	FPM	FPM	FPM	FPM
Weight						
Angle Value		0.49	0.52	0.68	0.75	1.21
Inline Value		0.56	0.89	0.78	1.35	2.2

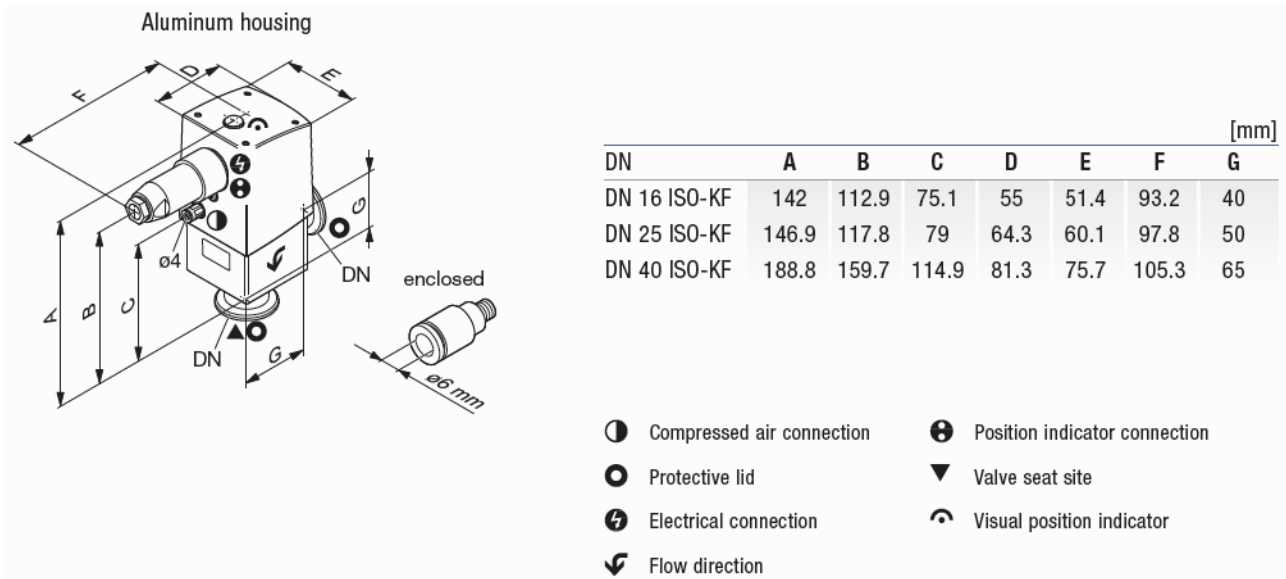
SPAREPARTS

Connection	Modeltype	VAP016-X	VAP025-A	VAP025-X	VAP040-A	VAP040-X
Bellows cpl. Bellows & seal kit	299-002	299-002	-	-	-	-
Cover cpl. Receptacle, visual & electrical position indicator already assembled	299-003	299-003	-	-	-	-

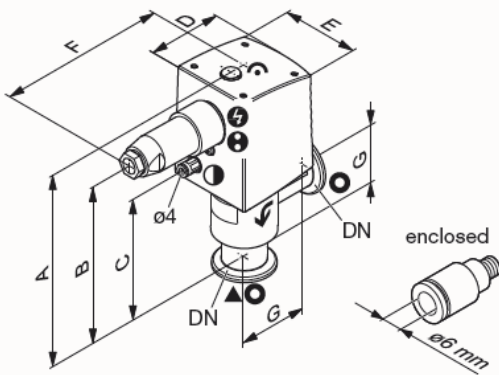
SPAREPARTS

Bellows cpl. Bellows & seal kit	299-002
VAP016-A, AIO, P	253-210

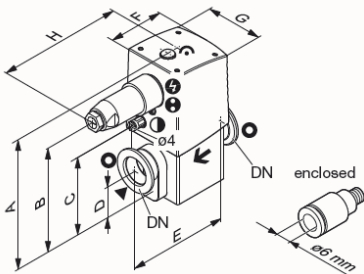
DIMENSIONS



Stainless steel housing



DN	[mm]						
	A	B	C	D	E	F	G
DN 16 ISO-KF	144.5	115.4	77.6	55	51.4	93.2	40
DN 25 ISO-KF	150.3	121.2	82.5	64.3	60.1	97.8	50
DN 40 ISO-KF	191.8	162.7	117.9	81.3	75.7	105.3	65



Aluminum housing

DN	[mm]							
	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

DN	[mm]							
	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

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



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