



VAT Vakuumentile AG  
CH-9469 Haag, Schweiz

## Product data sheet

Series 214 & 216, DN 5

Ordering No. 21.14-XE...-....

### Angle and Inline Valves

Hand wheel,

Pneumatic actuator without position indicator with or without solenoid valve, single acting, opening or closing spring,

Electromagnetic without position indicator, single acting, closing or opening spring, vacuum tight.

#### Advantages

##### Manually Actuated

- Angle valve
- Spindle drive with hand wheel

##### Pneumatically Actuated

- Angle valves
- With and without pilot valve

##### Solenoid Actuated

- Angle and inline valves
- Normally closed and normally open versions



Created by: T. Eugster	Release date: 2013-09-25	1 of 4
Modified by:	Release date:	<b>603184EA</b>



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### Ordering Information

#### Selection Data

Actuation	manual	pneumatic	el.-pneumatic	solenoid	solenoid	solenoid
Attributes	angle valve	angle valve w/o pilot valve	angle valve with pilot valve	angle valve	inline valve normally closed	inline valve normally open
Feedthrough	bellows	bellows	bellows	without	without	without
Materials						
Housing	304/1.4301	304/1.4301	304/1.4301	304/1.4301	304/1.4301	304/1.4301
Actuator	Al & plastic	anodized Al	anodized Al	-	-	-
Bellows	304/1.4301	304/1.4301	304/1.4301	-	-	-
Valve plate	304/1.4301	304/1.4301	304/1.4301	-	-	-
Guiding tube	-	-	-	303/1.4105	303/1.4105	303/1.4105
Armature	-	-	-	303/1.4105	303/1.4105	303/1.4105
Vacuum connection	mm	Ø5 / M14×1	Ø5 / M14×1	Ø5 / M14×1	Ø5 / M14×1	Ø5 / M14×1

#### HV Angle and Inline Valve

Valve	21614-XE01-000.	21614-XE11-000.	-	-	-	-
Normally closed	-	-	21614-XE31-000.	21414-XE64-000.	21414-XE64-AAB.	-
Normally open	-	-	21614-XE32-000.	-	-	21414-XE66-AAB.

#### Specifications

Service life	cycles	-	5 Mio <sup>1)</sup>	5 Mio <sup>1)</sup>	2 Mio <sup>1)</sup>	2 Mio <sup>1)</sup>	2 Mio <sup>1)</sup>
Actuation		manual	pneumatic	el.-pneumatic	solenoid	solenoid	solenoid
Leak rate	mbar l/s	1×10 <sup>-9</sup>	1×10 <sup>-9</sup>	1×10 <sup>-9</sup>	1×10 <sup>-9</sup>	1×10 <sup>-9</sup>	1×10 <sup>-9</sup>
Conductance for air							
Molecular flow	l/s	0.4	0.4	0.4	0.3	0.2	0.2
Laminar flow	l/s	4	4	4	3	2	2
Pressure range	mbar / bar min / max	1×10 <sup>-8</sup> / 4(abs)	1×10 <sup>-8</sup> / 4(abs)	1×10 <sup>-8</sup> / 4(abs)	1×10 <sup>-8</sup> / 10(abs)	1×10 <sup>-8</sup> / 10(abs)	1×10 <sup>-8</sup> / 10(abs)
Differential pressure on the plate							
in closing direction	bar	4	3	3	5	5	4
in opening direction	bar	4	3	3	1.5	1.5	2
Diff. pressure at opening	bar	4 <sup>2)</sup>	3 <sup>2)</sup>	3 <sup>2)</sup>	1 <sup>2)</sup>	1 <sup>2)</sup>	4 <sup>2)</sup>
Compressed air, overpressure		-	4 – 8	4 – 8	-	-	-
Ambient Temperature	°C	5 <sup>3)</sup> - 70	5 <sup>3)</sup> - 80	5 <sup>3)</sup> - 40	5 <sup>3)</sup> - 40	5 <sup>3)</sup> - 40	5 <sup>3)</sup> - 40
Closing / Opening time	ms	-	35 / 35	35 / 35	7 / 30	7 / 30	30 / 10
Switching frequency	1/min	-	150	150	300	300	300
Degree of protection		-	IP 65	IP 65	IP 65	IP 65	IP 65

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### Specifications

Supply voltage	V DC	-	-	24	24	24	24
Power consumption	W	-	-	1	10	10	10
Seals		FKM	FKM	FKM	FKM	FKM	FKM
Weight		0.15	0.20	0.20	0.26	0.28	0.30

### Spare Parts

Seal set	585869	586694	586694	586395	586395	586395
Spare parts set	585863	586689	586689	586391	587961	587996

### Connection Elements

Type	Flange DN 10 ISO-KF	For pipe OD 1/4"	For pipe OD 6mm
Part. No.	579211	579257	579292

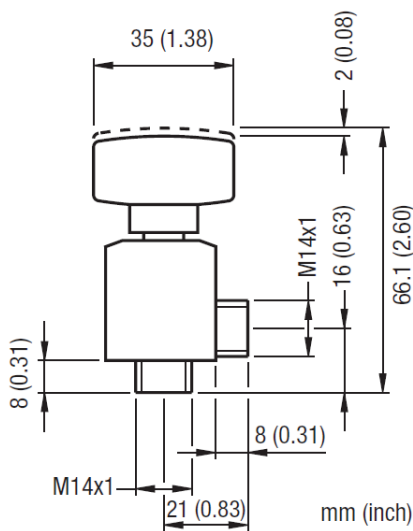
<sup>1)</sup> Cycle life tested at room temperature and under clean and static conditions. Expandable parts are excluded

<sup>2)</sup> Compressed air: overpressure 4 bar

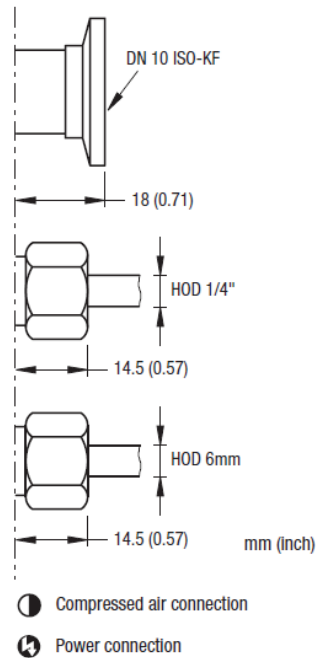
<sup>3)</sup> -15°C, if the ambience is free of condensable gases

### Dimensions

#### Manually Actuated



#### Connection Elements (for all valve types)





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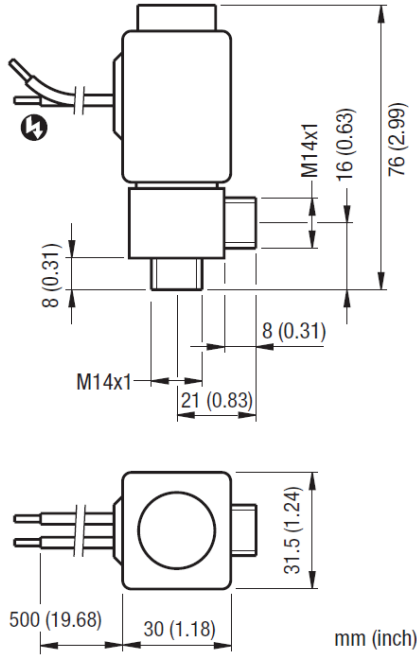
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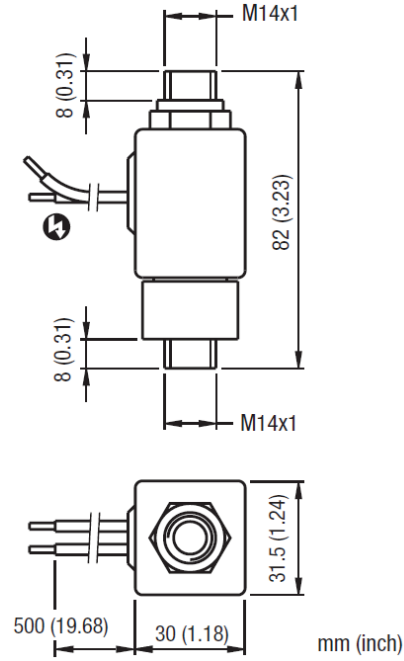
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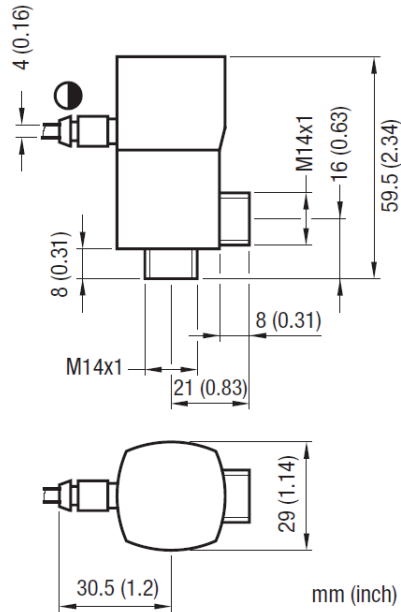
#### Solenoid Actuated



#### Solenoid Actuated Inline Valve (normally closed and normally open version)



#### Pneumatically Actuated



#### Pneumatically Actuated with Solenoid Valve

