

Air operated Pinch Valves



Connection options:

Flange Connection

Internal Thread Connection

Tri-Clamp Connection

Weld-on ends

RJT Connection



AKO – Innovative Pinch Valve Technology

 **The valve solution for abrasive, corrosive and fibrous products like granules, powders and slurries.**

Advantages:

- Optimum tightness
- Free passage
- Low resistance
- Easy maintenance
- Low air consumption
- Low weight
- No plugging

Valve function:

The pinch valve closes by using air / fluid* (min.2bar differential pressure) supplied to the valve body. The specially designed sleeve will then close 100%.

Max. operating pressure: 2 to 6 bar (depending on valve diameter).

Construction:

A wide variety of materials, connection types and sleeve qualities allow for a wide range of applications. Optional accessory control systems enable applications on vacuum systems and increase the safety in case of pressure and power failure.

Furthermore a special variation of the AKO pinch valve enables a use into the ex-zones pursuant with the ATEX directive 94/9/EG.

Pinch Valves comply with PED (97/23/EC)

Industrial areas:

- Pneumatic conveying systems
- Cement/silo branch
- Pigments and granulates
- Ceramic/glass/plastic industry
- Sewage water industry
- Pharmaceutical-/food industry
- Vacuum toilet systems
- Dosing/weighing systems
- Powder coating systems
- Vacuum conveying systems



* Please ask for suitable fluids.

Technical details subject to change without notice.

AKO UK Ltd.

13 Alvis Way, Royal Oak Trading Estate, Daventry, Northamptonshire NN11 8PG

Tel: 0 13 27 31 27 47 • Fax: 0 13 27 31 25 65 • E-mail: sales@ako-valves.com • Web: www.pinch-valve.com

Flange Types



VF

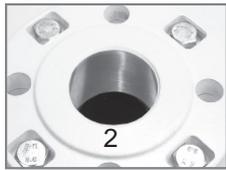
Flange variations:



1) Aluminium / stainless steel

Body:

Aluminium, stainless steel, steel (DN 250)

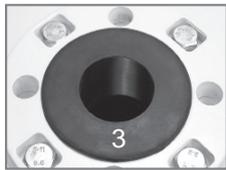


VF



2) Stainless steel/ steel bushing

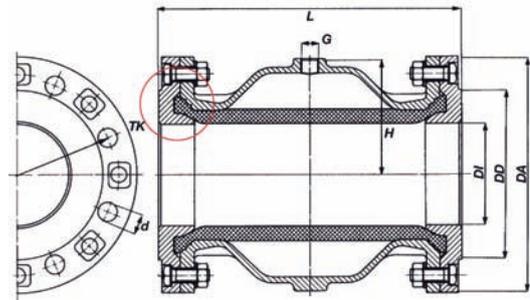
Flange connection according to DIN 1092 PN 10. ANSI 150lbs (see **VMC data sheet**).



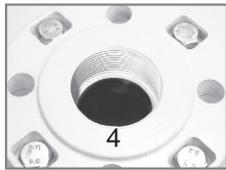
VF



3) With flange sleeve*



exemplary view



VF



4) Internal thread

series	DN (mm)	DI (mm)	DA (mm)	DD (mm)	d (mm)	Screws	TK (mm)	L (mm)	H (mm)	G (inch)	PS max. (bar)	Internal thread
VMC	25	25	115	68	14	4	85	125	36,5	1/8"	6	-
VMC	32	32	145	78	18	4	100	130	45	1/4"	6	-
VF	40	40	150	88	18	4	110	155	50	1/4"	6	G 1½"
VMC	40	40	150	88	18	4	110	155	50	1/4"	6	-
VF	50	50	165	102	18	4	125	183	60	1/4"	6	G2"
VMC	50	50	165	106	18	4	125	185	60	1/4"	6	-
VF	65	65	185	122	18	4	145	183	76	1/4"	6	G 2½"
VMC	65	65	185	122	18	4	145	170	73,5	1/4"	6	-
VF	80	80	200	138	18	8	160	228	90	1/4"	6	G3"
VMC	80	80	200	138	18	4	160	213	90	1/4"	6	-
VF	100	100	220	158	18	8	180	281	107	1/4"	6	G4"
VMC	100	100	220	158	18	8	180	264	107	1/4"	6	-
VA	100	100	220	158	18	8	180	260	110	3/8"	6	-
VF	125	118	250	188	18	8	210	350	130	1/4"	6	-
VA	125	125	250	188	18	8	210	340	134	3/8"	6	-
VF	150	145	285	212	22	8	240	420	155	1/4"	6	-
VA	150	150	285	212	22	8	240	406	160	1/2"	6	-
VF	200	190	340	268	22	8	295	560	200	3/8"	4	-
V	250	250	395	320	22	12	350	610	258	1/2"	2	-

* Flange sleeve sealing increases the Dimension L (DN 40 - 100)

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Internal Thread Types



VMC

Socket ends:

1) Stainless steel



VMC

2) Plastic POM natural white



VMP

3) Plastic POM black* /
conductive for hazardous areas

*available with VMP series



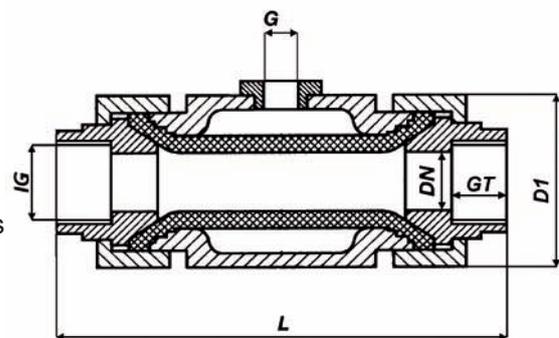
VM**

4) PVC

Body:

Stainless steel, aluminium, POM, PVC

Internal thread connection acc. to DIN EN ISO 226 (G) or ANSI/ASME B1.20 (NPT).



exemplary view

****VM valve dimensions, please see p.6**

series	DN (mm)	IG (inch)	GT (mm)	L (mm)	D1 (mm)	D2 (mm)	G (inch)	PS max. (bar)
VMC	10	G $\frac{3}{8}$ "	12	80	46	35	1/8"	6,0
VMP	10	G $\frac{3}{8}$ "	12	80	45	34	1/8"	6,0
VMC	15	G $\frac{1}{2}$ "	15	95	56	47	1/8"	6,0
VMP	15	G $\frac{1}{2}$ "	14	95	55	46	1/8"	6,0
VMC	20	G $\frac{3}{4}$ "	17	103	62	49	1/8"	6,0
VMP	20	G $\frac{3}{4}$ "	17	103	63	56	1/8"	6,0
VMC	25	G1"	20	120	72	57	1/8"	6,0
VMP	25	G1"	17	120	75	70	1/8"	6,0
VMC	32	G1 $\frac{1}{4}$ "	21	140	80	66	1/4"	6,0
VMP	32	G1 $\frac{1}{4}$ "	18	135	90	98	1/4"	4,5
VMC	40	G1 $\frac{1}{2}$ "	21	160*	90	77	1/4"	6,0
VMP	40	G1 $\frac{1}{2}$ "	18	160	103	111	1/4"	4,5
VMC	50	G2"	25	185	110	88	1/4"	6,0
VMP	50	G2"	24	170	120	130	1/4"	4,5
VMC	65	G2 $\frac{1}{2}$ "	30	200	139	115	1/4"	6,0
VMC	80	G3"	33	230	172	133	1/4"	6,0
VMC	100	G4"	20	280	198	141	1/4"	6,0

* Alternatively available is our K-variant → length = 150mm

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Further models → aseptic / hygienic



VMC

Socket ends:

- 1) Tri-Clamp stainless steel

Body:

Stainless steel, aluminium, POM

Tri-clamp connection acc. to DIN 32676.
 DIN 11853-3 / 11864-3 form A on request



VMC

- 2) Weld-on ends stainl. steel

Weld-on ends acc. to DIN 11850 row 2.



VMC

- 3) Threaded spigot stainl. steel
 RJT connection

Threaded spigot (RJT) acc. to DIN 11851.
 DIN 11853-1 / 11864-1 form A on request.

For detailed information please see separate data sheet VMC.

Sleeve materials

Sleeves:

Natural rubber antiabrasive, natural rubber food quality, natural rubber high temp., EPDM, EPDM food black, EPDM food white, Nitrile, Nitrile food black, Nitrile food white, Viton, Silicone, (CR) Neoprene, CSM, Butyle

Sleeve qualities electrically conductive:

- EPDM food black
- Natural rubber
- Nitrile

Food mixtures of the a.m. rubber sleeves correspond with the regulations of **food & drug administration**, USA, FDA CFR § 177.2600.

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Phased-out models VM/VMF



VM

Internal Thread:

1) Plastic POM natural white

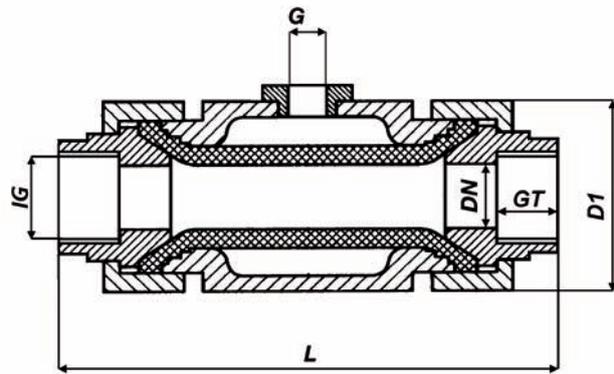
Body:

Stainless steel, aluminium, PVC



VMF

2) Stainless steel



exemplary view

series	DN (mm)	IG (inch)	T (mm)	SW (mm)	L (mm)	DA (mm)	PS max. (bar)
VM	10	G $\frac{3}{8}$ "	16	24	122	46	6
VM	15	G $\frac{1}{2}$ "	18	36	134	60	6
VM	20	G $\frac{3}{4}$ "	19	36	140	60	6
VM	25	G1"	20	46	145	75	6
VM / VMF	32	G1 $\frac{1}{4}$ "	25	52	170	85	6
VM / VMF	40	G1 $\frac{1}{2}$ "	26	65	200	100	6
VM / VMF	50	G2"	24	80	213	120	6

VM → replaced by → **VMP/VMC**

VMF → replaced by → **VMC**

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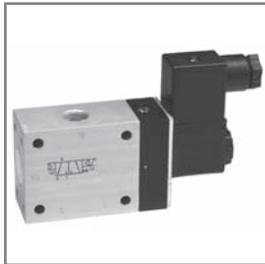
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Valve Accessories → we offer complete solutions!



Solenoid valve, filter regulator, pressure switch, quick exhaust valve, mounting bracket mounted on pinch valve, VF series.

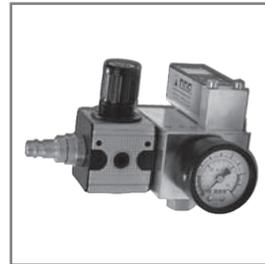
Please contact us. We are happy to supply you with the Pinch Valve/s fitted with the accessories of your choice.



Solenoid valve



safety arrangement



pressure Relief section



quick exhaust valve



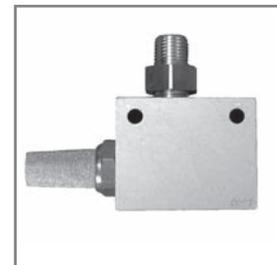
pressure regulator



mech. pressure switch



digital pressure switch



non return flow arrangement



filter regulator



AKO VAC basic



AKO VAC comfort



hand-lever valve

Further Pinch Valve Accessories and more detailed information available on our data sheet "Z01-Valve Accessories".

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