

**Servo actuated**

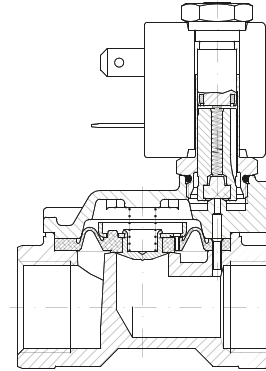
With large-sized passage orifices, the static pressure value that needs to be overcome by the magnetic field produced by the coil increases.

These solenoid valves are used to control high-pressure values with large diameter bores. In these models, the fluid helps in the opening or closing of the main plunger.

They can be normally closed (2/2 NC) and have an input and a utilisation connection machined into the valve body and at rest the fluid is intercepted by the main plunger, which can be either diaphragm or a piston. In this condition, the fluid acts on both faces of the main plunger through a pinhole contributing to closure of the plunger.

Applying electrical power, the secondary, or pilot, orifice opens leading to the exhaust of the fluid, which acts to close the main plunger. Greater force is thus applied when opening, the plunger is raised from the orifice and allows the media to flow to the output.

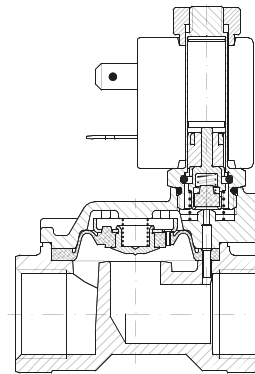
In these versions, performance does not depend solely on the magnetic field produced by the coil; a minimum input pressure is also needed so as to move the diaphragm or the piston overcoming its rigidity and to keep it raised from the main orifice. ( $\Delta p$  minimum performance).



They can be **normally open (2/2 NA)**, and have an input and output connection machined into the valve body, and at rest the secondary plunger communicates with output, a minimum-pressure difference between the feed and the output causes the main shutter to rise, leading to it opening.

Applying electrical power, the secondary orifice closes and equilibrium between the pressure on the two faces of the main shutter is reinstated, and so it returns to its closed position on the main orifice.

In this version a minimum working pressure is also needed.



**Sealing materials**

Designation	Trade names	General characteristics	Field of use
FPM (Fluorocarbon)	VITON TECNOFLO FLUOREL	A synthetic hexa-fluoropropylene-based elastomer. Excellent resistance to high temperatures. Excellent resistance to ozone, oxygen, mineral oils, hydrocarbons and many chemical products. Not specific for superheated steam.	For general use up to 130 °C

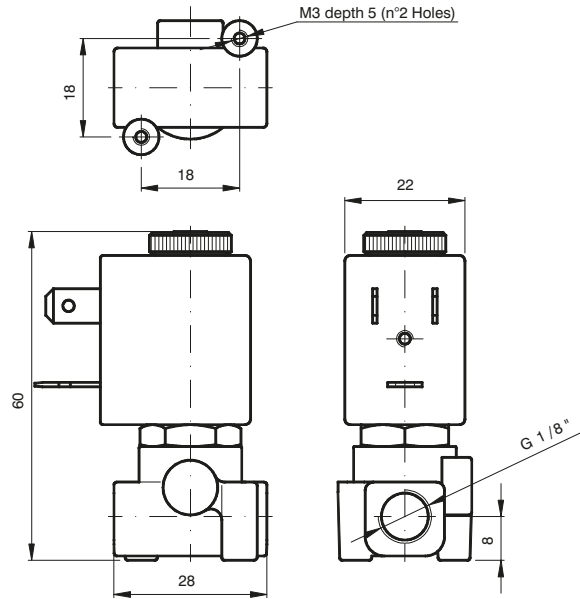


### Resistance to fluids

The table below serves to general information relating to the compatibility between FPM (fluorocarbon) and a number of neutral fluids. Where there are corrosive fluids, in order to establish compatibility, it is important to be aware of all the data relating to use: temperature, concentration and composition of the fluid.

Fluido	
Ethyl acetate	Non Compatible
Acetylene	Compatible
Vinegar	Non Compatible
Acetone	Non Compatible
Calcareous water	Compatible
Hot water <75°C	Compatible
Hot water and steam <140°C	Non Compatible
Water with glycol	Compatible
Deionised water	Compatible
Demineralised water	Compatible
Hydrogen peroxide	Compatible
Soapy water	Compatible
Carbon dioxide (liquid)	Non Compatible
Dry carbon dioxide (gas)	Compatible
Argon	Compatible
Nitrogen	Compatible
Petrol/Gasoline	Compatible
Benzol	Non Compatible
Butane	Compatible
Chloroform	Non Compatible
Ethyl Chloride	Compatible
Methyl chloride	Non Compatible
Helium	Compatible
Heptane	Compatible
Hexane	Compatible
Ethane	Compatible
Ethanol	Non Compatible
Formaldehyde	Compatible
Freon	Non Compatible
Natural gas	Compatible
Diesel oil	Compatible
Glycerine	Compatible
Ethylene glycol	Compatible
Hydrogen	Compatible
Isobutane	Compatible
Isopentane	Compatible
Methane	Compatible
Methanol	Non Compatible
Calcium monoxide	Compatible
Neon	Compatible
Nitrobenzene	Non Compatible
Mineral oil	Compatible
Oxygen	Compatible
Pentane-n	Compatible
Propanol-n	Compatible
Propane-n	Compatible
Carbon sulphide	Non Compatible
Toluene	Compatible
Dry trichloroethylene	Compatible
Xylene	Compatible

2-way solenoid normally closed valve, direct plunger operation

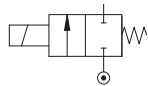


CODE	Connection G ISO 228	Orifice (mm)	KV (m <sup>3</sup> /h)	Differential pressure (bar)			Power Consumption			Coil Ⓢ		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3105AV25Ⓢ	1/8"	2,5	0,14	0	8	5,5	12	8	6,5	MI	22	-10 +130

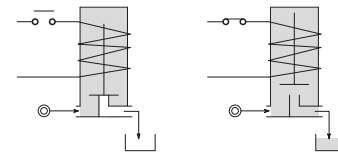
N.B. For use with steam, maximum admitted pressure PS is 6 bar (relative pressure) with seals in FPM  
Esempio: F3105AV25Ⓢ => F3105AV25MI58:

2-way normally closed, direct acting solenoid valve with G connector (ISO228) 1/8", Seals in FPM, Orifice 2,5 mm, Coil 220V 50/60Hz (MI58, size 22).

Pneumatic symbol



Diagram



Operational characteristic

- Brass Body
- Guide pipe in Brass
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

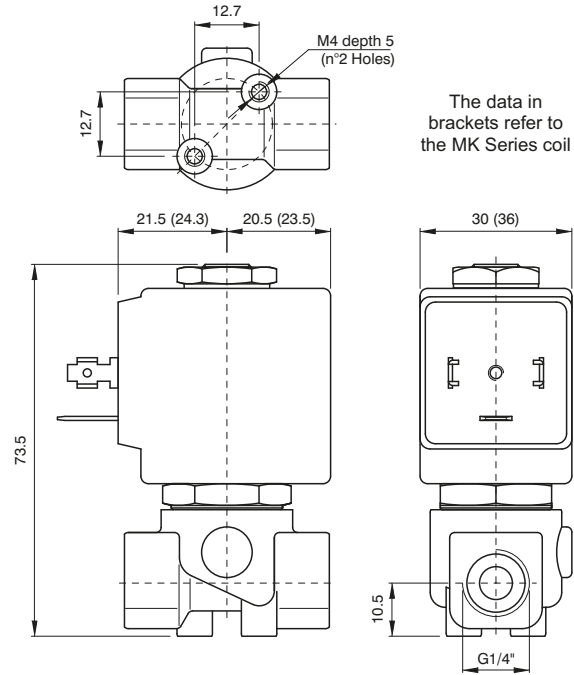
- OPTIONS (if requested):

- Manual operation
- Surface treatment in chemical nickel-plating
- Guide pipe in Stainless Steel
- For use with oxygen

Technical characteristic

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Mounting position	indifferent
Weight (gr.) with MI Series Coil	130

► 2-way solenoid normally closed valve, direct plunger operation



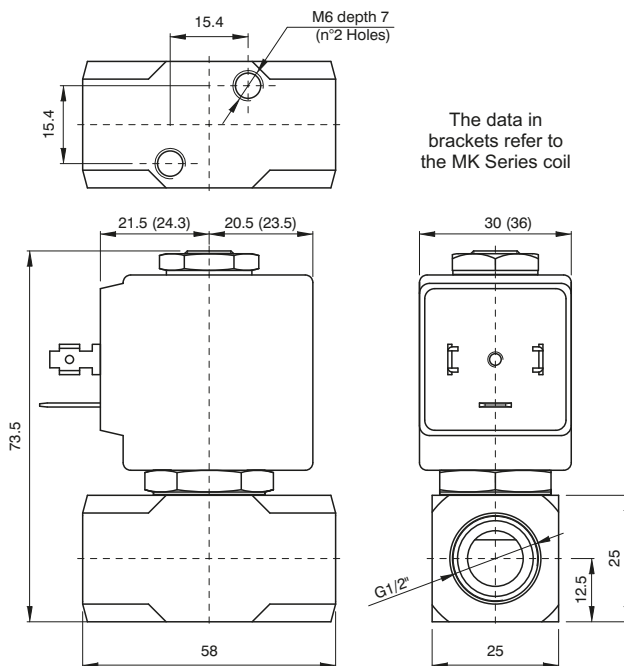
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CODE "V" = Seals in FPM "⊕" = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3106BV15⊕	1/4"	1,5	0,07	0	30	26	20	15	10	MG	30	-10 +140
F3106BV20⊕	1/4"	2,0	0,1	0	22	20	20	15	10	MG	30	
F3106BV25⊕	1/4"	2,5	0,15	0	16	14	20	15	10	MG	30	
F3106BV35⊕	1/4"	3,5	0,32	0	10	8	20	15	10	MG	30	
F3106BV45⊕	1/4"	4,5	0,41	0	6,5	3,5	20	15	10	MG	30	
F3106BV52⊕	1/4"	5,2	0,47	0	4	1,8	20	15	10	MG	30	
F3106BV64⊕	1/4"	6,4	0,64	0	3	1	20	15	10	MG	30	
F3106BV15⊕	1/4"	1,5	0,07	0	80	80	40	30	27	MK	36	
F3106BV20⊕	1/4"	2,0	0,1	0	50	40	40	30	27	MK	36	
F3106BV25⊕	1/4"	2,5	0,15	0	35	33	40	30	27	MK	36	
F3106BV35⊕	1/4"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3106BV45⊕	1/4"	4,5	0,41	0	14	13	40	30	27	MK	36	
F3106BV52⊕	1/4"	5,2	0,47	0	10	9	40	30	27	MK	36	
F3106BV64⊕	1/4"	6,4	0,64	0	5	4,5	40	30	27	MK	36	

N.B. For use with steam, maximum admitted pressure PS is 6 bar (relative pressure) with seals in PTFE and 2.5 bar with seals in EPDM.  
Example: F3106BV52⊕ => F3106BV52MG58:  
2-way normally closed, direct acting solenoid valve with G connector (ISO228) 1/4", Seals in FPM, Orifice 5.2 mm, Coil 220V 50/60Hz (MG58, size 30).

Pneumatic symbol		Diagram	
<b>Operational characteristic</b>		<b>Technical characteristic</b>	
<ul style="list-style-type: none"> <li>- Brass Body</li> <li>- Guide pipe in Stainless Steel</li> <li>- Mobile and fixed core in Stainless Steel</li> <li>- Springs in Stainless Steel</li> <li>- Sealing assemblies in FPM</li> <li><b>- OPTIONS (if requested):</b> <ul style="list-style-type: none"> <li>- Manual operation</li> <li>- Surface treatment in chemical nickel-plating</li> <li>- Inserted stainless steel seating</li> <li>- For use with oxygen</li> </ul> </li> </ul>		Maximum admitted pressure (bar)	
		Maximum fluid viscosity (mm <sup>2</sup> /s)	
		Ambient temperature: with class F coil (°C)	
		Ambient temperature: with class H coil (°C)	
		Mounting position	
		Weight (gr.) with MG Series Coil	
		Weight (gr.) with MK Series Coil	

2-way solenoid normally closed valve, direct plunger operation



The data in brackets refer to the MK Series coil

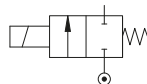
CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m <sup>3</sup> /h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3106DV45⊕	1/2"	4,5	0,41	0	6,5	3,5	20	15	10	MG	30	-10 +140
F3106DV52⊕	1/2"	5,2	0,47	0	4	1,8	20	15	10	MG	30	
F3106DV64⊕	1/2"	6,4	0,64	0	3	1	20	15	10	MG	30	
F3106DV45⊕	1/2"	4,5	0,41	0	14	13	40	30	27	MK	36	
F3106DV52⊕	1/2"	5,2	0,47	0	10	9	40	30	27	MK	36	
F3106DV64⊕	1/2"	6,4	0,64	0	5	4,5	40	30	27	MK	36	

N.B. For use with steam, maximum admitted pressure PS is 6 bar (relative pressure) with seals in PTFE and 2.5 bar with seals in EPDM.

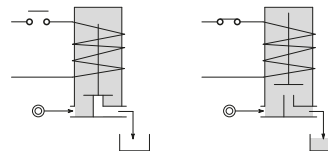
Example: F3106DV52⊕ => F3106DV52MK5:

2-way normally closed, direct acting solenoid valve with G connector (ISO228) 1/2", Seals in FPM, Orifice 5.2 mm, Coil 24V DC (MK5, size 36).

Pneumatic symbol



Diagram



Operational characteristic

- Brass Body
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

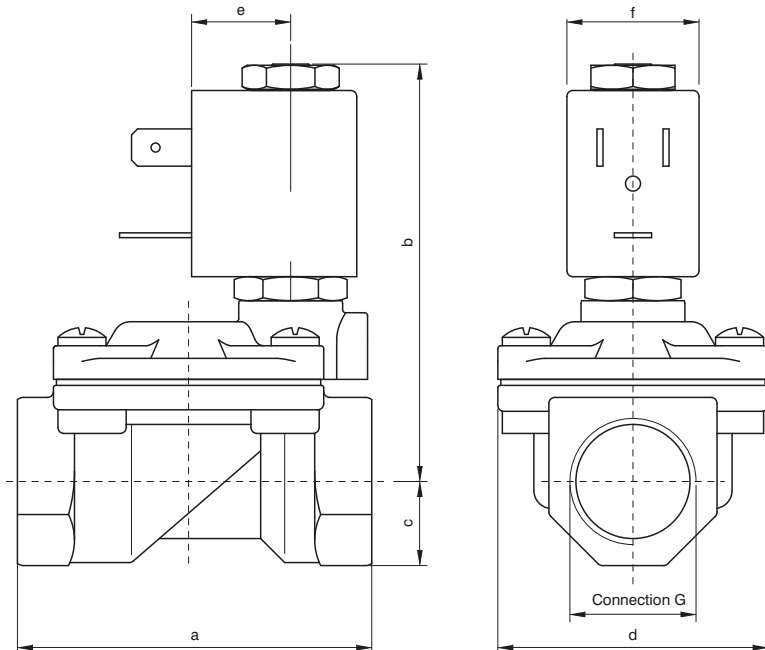
- OPTIONS (if requested):

- Manual operation
- Surface treatment in chemical nickel-plating
- For use with oxygen

Technical characteristic

Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (gr.) with MG Series Coil	300
Weight (gr.) with MK Series Coil	380

► 2-Way normally closed solenoid valve, servo-actuated diaphragm



Connection	a	b	c	d	e	f	Weight (g)
G1/4" Ø10	49	65	11	32	16	22	230
G3/8" Ø12	59	70	14	45	16	22	420
G1/2" Ø12	59	70	14	45	16	22	390
G3/4"	79	76	18	55	16	22	650
G1"	96	85	20	72	16	22	1050
G1" 1/4	119	92	25	85	16	22	1700

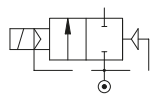
CODE "V" = Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3107BV10⊕	1/4"	10	1,5	0,15	15	15	12	8	6,5	MI	22	-10 +140
F3107CV12⊕	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22	
F3107DV12⊕	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	
F3107EV18⊕	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22	
F3107FV25⊕	1"	24	10,2	0,15	10	10	12	8	6,5	MI	22	
F3107GV30⊕	1" 1/4	30	15	0,15	10	10	12	8	6,5	MI	22	

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

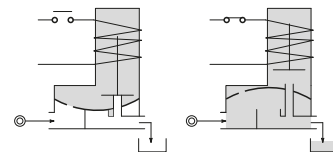
Example: F3107BV10⊕ => F3107BV10MI5:

2-Way normally closed solenoid valve, servo-actuated diaphragm with Connector G (ISO228) 1/4", Seals in FPM, Orifice 10 mm, Coil 24V DC (MI5, size 22).

Pneumatic symbol



Diagram



**Operational characteristic**

- Body and cover in Brass
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

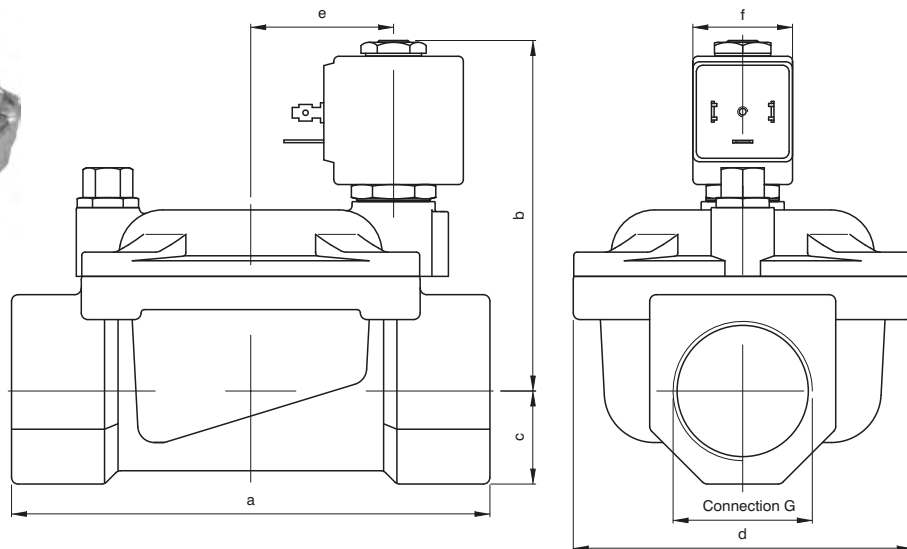
**- OPTIONS (if requested):**

- Manual operation
- Surface treatment in chemical nickel-plating
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
- Version with slowed commutation
- Version for vacuum (air/gas)
- Version for use with oxygen
- "SVGW/SSIGE" approved versions.

**Technical characteristic**

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm²/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	Preferably with coil upwards

2-Way normally closed solenoid valve, servo-actuated diaphragm



Connection	a	b	c	d	e	f	Weight (g)
G1" 1/4	142	105	28	102	21	30	3000
G1" 1/2	142	105	28	102	21	30	2850
G2"	158	115	35	119	21	30	4300

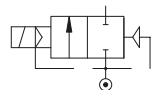
CODE "V"=Seals in FPM "C" = Coil	Connection G ISO 228	Orifice (mm)	KV (m <sup>3</sup> /h)	Differential pressure (bar)			Power Consumption			Coil "C"		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3107GV37"V	1 1/4"	37	18	0,15	10	10	20	15	10	MG	30	-10 +140
F3107HV37"V	1" 1/2"	37	21	0,15	10	10	20	15	10	MG	30	
F3107IV50"V	2"	50	36	0,15	10	10	20	15	10	MG	30	

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

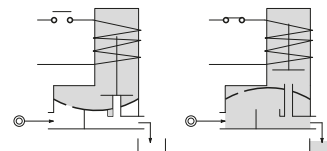
Example: F3107GV37"V => F3107GV37MG5:

2-Way normally closed solenoid valve, servo-actuated diaphragm with Connector G (ISO228) 1" 1/4", Seals in FPM, Orifice 37 mm, Coil 24V DC (MG5, size 30).

Pneumatic symbol



Diagram



Operational characteristic

- Body and cover in Brass
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

- OPTIONS (if requested):

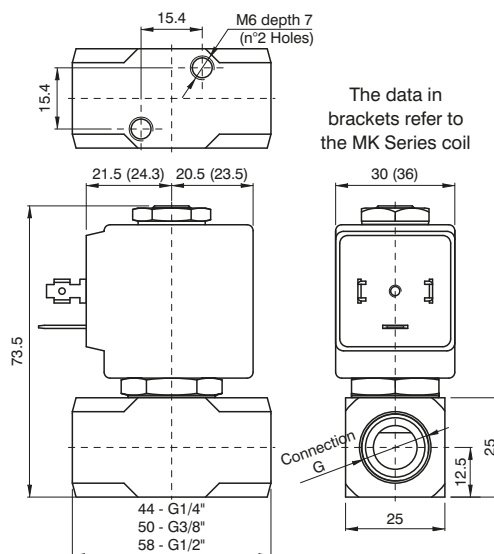
- Manual operation
- Surface treatment in chemical nickel-plating
- Version for vacuum (air/gas)

Technical characteristic

Minimum differential pressure (bar)	0,15 ÷ 3
Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	Preferably with coil upwards



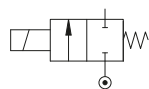
► 2-way solenoid normally closed valve, direct plunger operation



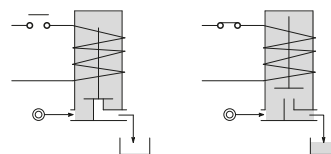
CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3110BV25⊕	1/4"	2,5	0,15	0	16	14	20	15	10	MG	30	-10 +140
F3110BV35⊕	1/4"	3,5	0,32	0	10	8	20	15	10	MG	30	
F3110BV45⊕	1/4"	4,5	0,41	0	6,5	3,5	20	15	10	MG	30	
F3110CV35⊕	3/8"	3,5	0,32	0	10	8	20	15	10	MG	30	
F3110CV52⊕	3/8"	5,2	0,47	0	4	1,8	20	15	10	MG	30	
F3110DV35⊕	1/2"	3,5	0,32	0	10	8	20	15	10	MG	30	
F3110DV52⊕	1/2"	5,2	0,47	0	4	1,8	20	15	10	MG	30	
F3110DV64⊕	1/2"	6,4	0,64	0	3,5	1	20	15	10	MG	30	
F3110BV25⊕	1/4"	2,5	0,15	0	35	33	40	30	27	MK	36	
F3110BV35⊕	1/4"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3110BV45⊕	1/4"	4,5	0,41	0	14	13	40	30	27	MK	36	
F3110CV35⊕	3/8"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3110CV52⊕	3/8"	5,2	0,47	0	10	9	40	30	27	MK	36	
F3110DV35⊕	1/2"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3110DV52⊕	1/2"	5,2	0,47	0	10	9	40	30	27	MK	36	
F3110DV64⊕	1/2"	6,4	0,64	0	5	4,5	40	30	27	MK	36	

N.B. For use with steam, maximum admitted pressure PS is 6 bar (relative pressure)  
Example: F3110BV25⊕ => F3110BV25MG5:  
2-way solenoid normally closed valve, direct plunger operation with Connector G (ISO228) 1/4", Seals in FPM, Orifice 2,5 mm, Coil 24V DC (MG5, size 30).

Pneumatic symbol



Diagram



Operational characteristic

- Stainless Steel Body
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

- OPTIONS (if requested):

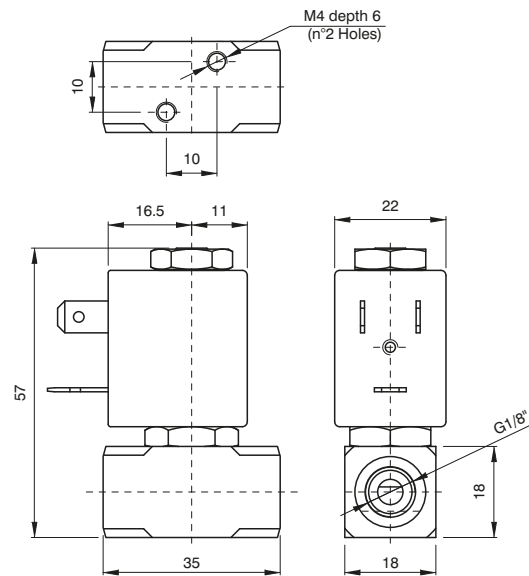
- Manual operation
- Advance ring in silver
- For use with oxygen

Technical characteristic

Maximum admitted pressure (bar)	100
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (gr.) with MG Series Coil	360
Weight (gr.) with MK Series Coil	440



► 2-way solenoid normally closed valve, direct plunger operation



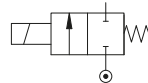
CODE "V" = Seals in FPM "C" = Coil	Connection G ISO 228	Orifice (mm)	KV (m <sup>3</sup> /h)	Differential pressure (bar)				Power Consumption			Coil C		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size		
					AC	DC							
F3111AV12C	1/8"	1,2	0,04	0	25	25	12	8	6,5	MI	22	-10 +140	
F3111AV15C	1/8"	1,5	0,06	0	16	16	12	8	6,5	MI	22		
F3111AV20C	1/8"	2	0,09	0	12	10	12	8	6,5	MI	22		

N.B. For use with steam, maximum admitted pressure PS is 6 bar (relative pressure)

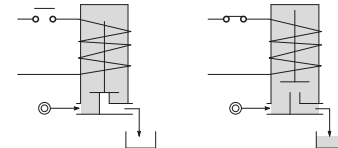
Example: F3111AV12C => F3111AV12MI56:

2-way solenoid normally closed valve, direct plunger operation with Connector G (ISO228) 1/8", Seals in FPM, Orifice 1,2 mm, Coil 24V 50/60Hz (MI56, size 22).

Pneumatic symbol



Diagram



**Operational characteristic**

- Stainless Steel Body
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

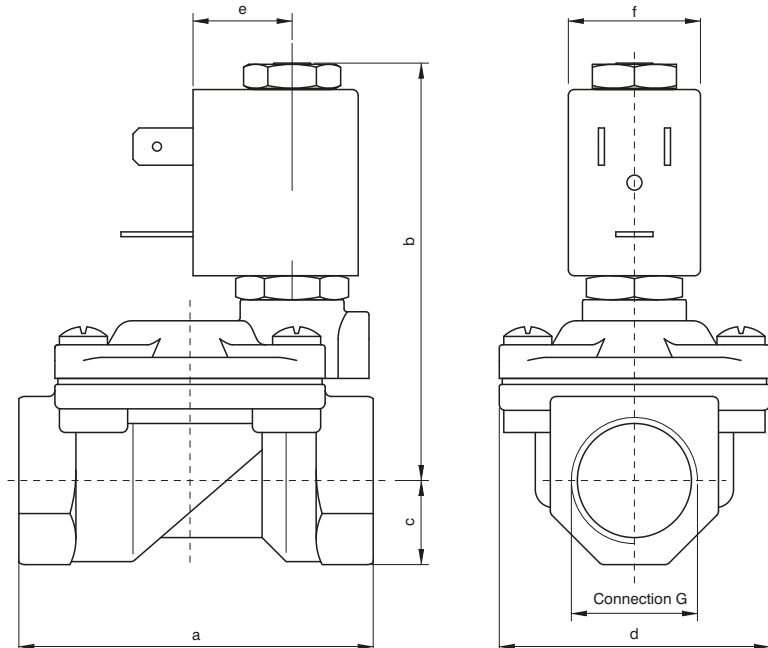
**- OPTIONS (if requested):**

- Advance ring in silver
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME':
- For use with oxygen

**Technical characteristic**

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (g.)	150

► 2-way normally closed diaphragm solenoid valve in stainless steel AISI 316, servo-actuated



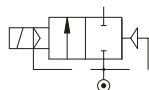
Connection	a	b	c	d	e	f	Weight (g)
G3/8"	59	70	11	45	16	22	300
G1/2"	59	70	13	45	16	22	320
G3/4"	80	75	16	55	16	22	550
G1"	100	84	20	72	16	22	950

CODE "V" = Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3177CV12⊕	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22	-10 +140
F3177DV12⊕	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	
F3177EV18⊕	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22	
F3177FV25⊕	1"	24	10,2	0,15	10	10	12	8	6,5	MI	22	

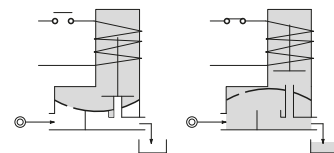
N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)  
Example: F3177CV12⊕ => F3177CV12MI5:

2-way normally closed diaphragm solenoid valve in stainless steel AISI 316, servo-actuated with Connector G (ISO228) 3/8", Seals in FPM, Orifice 12 mm, Coil 24V DC (MI5, size 22).

Pneumatic symbol



Diagram



**Operational characteristic**

- Body and cover in Stainless Steel.
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

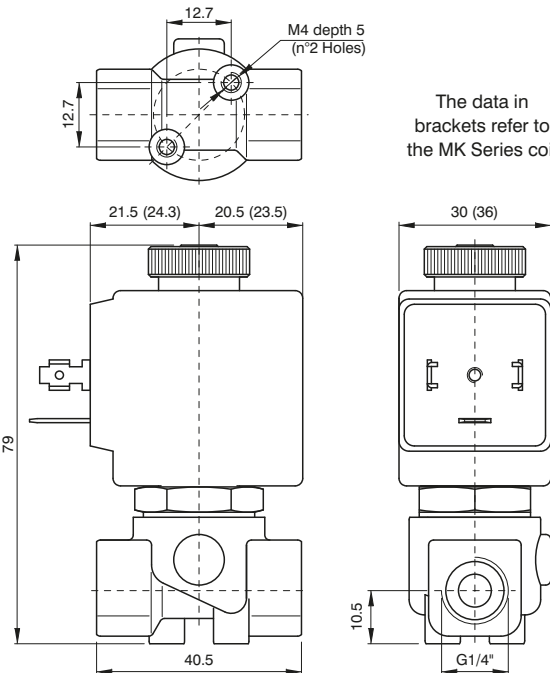
**- OPTIONS (if requested):**

- Manual operation
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
- Seals for use with foodstuff fluids.
- Version with slowed commutation
- Version for use with oxygen
- Advance ring in silver

**Technical characteristic**

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	Preferably with coil upwards

► 2-way normally open with direct operated plunger solenoid valve



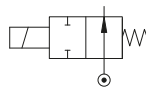
CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)				Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size		
					AC	DC							
F3206BV15⊕	1/4"	1,5	0,07	0	23	-	20	15	-	MG	30	-10 +140	
F3206BV20⊕	1/4"	2,0	0,1	0	17	-	20	15	-	MG	30		
F3206BV25⊕	1/4"	2,5	0,15	0	12	-	20	15	-	MG	30		
F3206BV35⊕	1/4"	3,5	0,32	0	7	-	20	15	-	MG	30		
F3206BV45⊕	1/4"	4,5	0,41	0	4,5	-	20	15	-	MG	30		
F3206BV52⊕	1/4"	5,2	0,47	0	3	-	20	15	-	MG	30		
F3206BV15⊕	1/4"	1,5	0,07	0	23	23	20	15	-	MK	36		
F3206BV20⊕	1/4"	2,0	0,1	0	17	17	40	30	27	MK	36		
F3206BV25⊕	1/4"	2,5	0,15	0	12	12	40	30	27	MK	36		
F3206BV35⊕	1/4"	3,5	0,32	0	7	7	40	30	27	MK	36		
F3206BV45⊕	1/4"	4,5	0,41	0	4,5	4,5	40	30	27	MK	36		
F3206BV52⊕	1/4"	5,2	0,47	0	3	3	40	30	27	MK	36		
F3206BV64⊕	1/4"	6,4	0,64	0	3,5	3,5	40	30	27	MK	36		

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

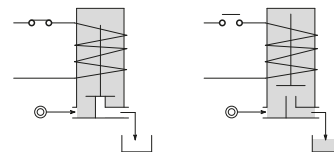
Example: F3206BV15⊕ => F3206BV15MG58:

2-way normally open with direct operated plunger solenoid valve with Connector G (ISO228) 1/4", Seals in FPM, Orifice 1,5 mm, Coil 220V 50/60Hz (MG58, size 30).

Pneumatic symbol



Diagram



**Operational characteristic**

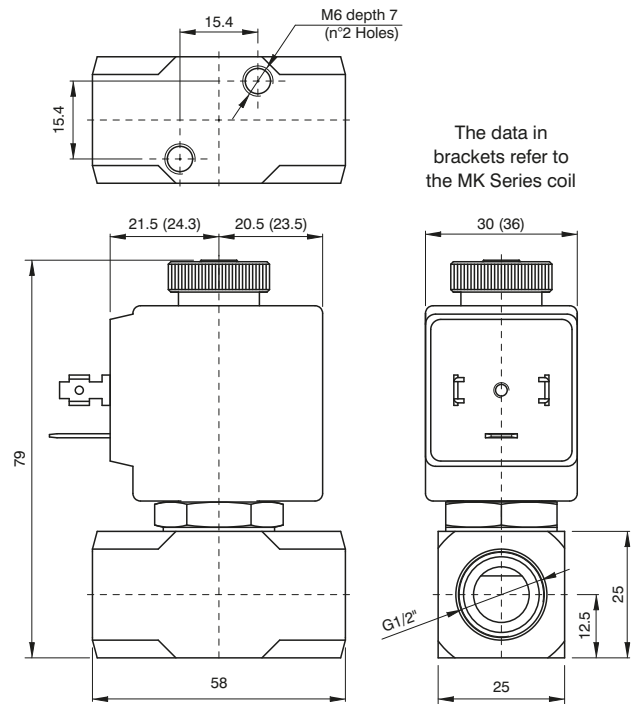
- Brass Body.
- Guide pipe in Brass.
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM
- **OPTIONS (if requested):**
- Surface treatment in chemical nickel-plating
- Guide pipe in Stainless Steel

**Technical characteristic**

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (gr.) with MG Series Coil	300
Weight (gr.) with MK Series Coil	380



► 2-way normally open with direct operated plunger solenoid valve



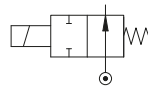
CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3206DV52⊕	1/2"	5,2	0,47	0	3	-	20	15	-	MG	30	-10 +140
F3206DV52⊕	1/2"	5,2	0,47	0	3	3	40	30	27	MK	36	
F3206DV64⊕	1/2"	6,4	0,64	0	3,5	3,5	40	30	27	MK	36	

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

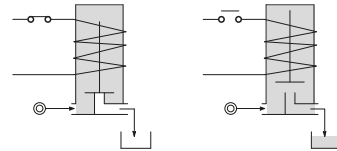
Example: F3206DV30⊕ => F3206DV30MG58:

2-way normally open with direct operated plunger solenoid valve with Connector G (ISO228) 1/2", Seals in FPM, Orifice 3 mm, Coil) 220V 50/60Hz (MG58, size 30).

Pneumatic symbol



Diagram



**Operational characteristic**

- Brass Body.
- Guide pipe in Brass.
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

**- OPTIONS (if requested):**

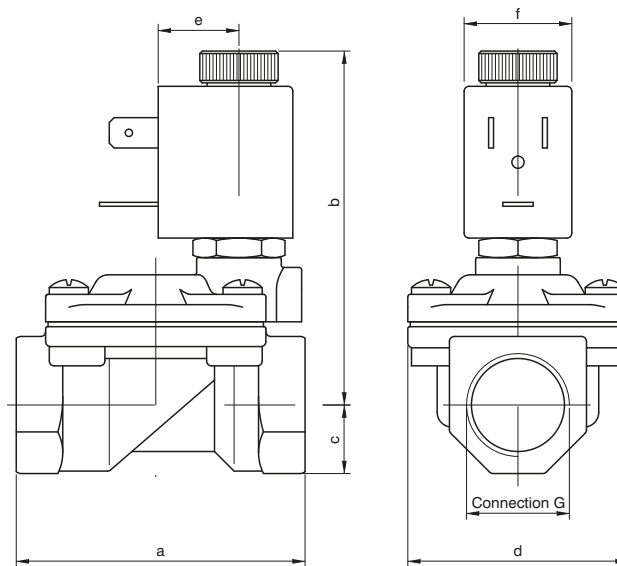
- Surface treatment in chemical nickel-plating
- Guide pipe in Stainless Steel

**Technical characteristic**

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (gr.) with MG Series Coil	360
Weight (gr.) with MK Series Coil	440

1  
AIR DISTRIBUTION

▶ 2-way normally open servo-actuated diaphragm solenoid valve



Connection	a	b	c	d	e	f	Weight (g)
G1/4" Ø10	49	69	11	32	16	22	230
G3/8" Ø10	49	69	11	32	16	22	240
G1/2" Ø12	59	74	14	45	16	22	390
G3/4"	79	81	18	55	16	22	650
G1"	96	89	20	72	16	22	1050

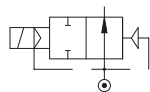
CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3207BV10⊕	1/4"	10	1,5	0,15	15	15	12	8	6,5	MI	22	-10 +140
F3207CV10⊕	3/8"	10	1,7	0,15	15	15	12	8	6,5	MI	22	
F3207DV12⊕	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	
F3207EV18⊕	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22	
F3207FV25⊕	1"	24	10,2	0,15	10	10	12	8	6,5	MI	22	

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

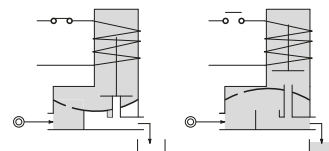
Example: F3207BV10⊕ => F3207BV10MI5.

2-way normally open servo-actuated diaphragm solenoid valve with Connector G (ISO228) 1/4", Seals in FPM, Orifice 10 mm, Coil 24V DC (MI5, size 22).

Pneumatic symbol



Diagram



**Operational characteristic**

- Body and cover in Brass
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

**- OPTIONS (if requested):**

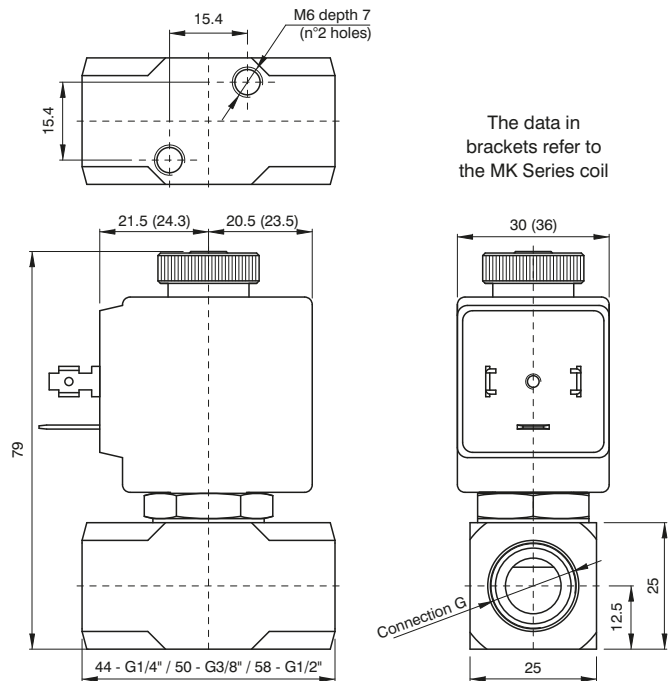
- Surface treatment in chemical nickel-plating
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.

**Technical characteristic**

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent



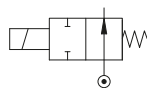
2-way normally open with direct operated plunger solenoid valve



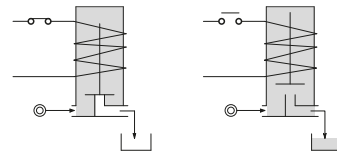
CODE "V" = Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3210BV25⊕	1/4"	2,5	0,15	0	10	-	20	15	-	MG	30	-10 +140
F3210BV35⊕	1/4"	3,5	0,32	0	7	-	20	15	-	MG	30	
F3210BV45⊕	1/4"	4,5	0,41	0	4,5	-	20	15	-	MG	30	
F3210CV35⊕	3/8"	3,5	0,32	0	7	-	20	15	-	MG	30	
F3210CV52⊕	3/8"	5,2	0,47	0	3	-	20	15	-	MG	30	
F3210DV35⊕	1/2"	3,5	0,32	0	7	-	20	15	-	MG	30	
F3210DV52⊕	1/2"	5,2	0,47	0	3	-	20	15	-	MG	30	
F3210BV25⊕	1/4"	2,5	0,15	0	10	10	40	30	27	MK	36	
F3210BV35⊕	1/4"	3,5	0,32	0	7	7	40	30	27	MK	36	
F3210BV45⊕	1/4"	4,5	0,41	0	4,5	4,5	40	30	27	MK	36	
F3210CV35⊕	3/8"	3,5	0,32	0	7	7	40	30	27	MK	36	
F3210CV52⊕	3/8"	5,2	0,47	0	3	3	40	30	27	MK	36	
F3210DV35⊕	1/2"	3,5	0,32	0	7	7	40	30	27	MK	36	
F3210DV52⊕	1/2"	5,2	0,47	0	3	3	40	30	27	MK	36	
F3210DV64⊕	1/2"	6,4	0,64	0	3,5	3,5	40	30	27	MK	36	

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)  
Example: F3210BV25⊕ => F3210BV25MG56:  
2-way normally open with direct operated plunger solenoid valve with Connector G (ISO228) 1/4", Seals in FPM, Orifice 2,5 mm, Coil 24V 50/60Hz (MG56, size 30).

Pneumatic symbol



Diagram



Operational characteristic

- Stainless Steel Body
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

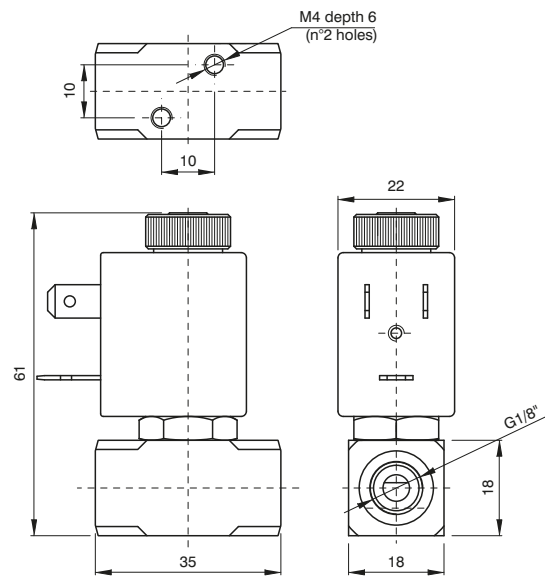
- OPTIONS (if requested):

- Advance ring in silver

Technical characteristic

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm <sup>2</sup> /s) 25cSt	25cSt
Ambient temperature: with class F coil (°C) -10 +55	-10 +55
Ambient temperature: with class H coil (°C) -10 +80	-10 +80
Mounting position	indifferent

▶ 2-way normally open with direct operated plunger solenoid valve



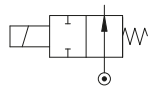
CODE "V" = Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m <sup>3</sup> /h)	Differential pressure (bar)				Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size		
					AC	DC							
F3211AV12⊕	1/8"	1,2	0,04	0	19	19	12	8	6,5	MI	22	-10 +140	
F3211AV15⊕	1/8"	1,5	0,06	0	14	14	12	8	6,5	MI	22		
F3211AV20⊕	1/8"	2	0,09	0	8	8	12	8	6,5	MI	22		

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

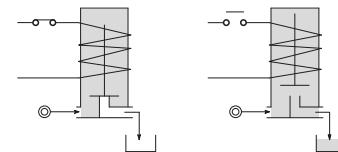
Example: F3211AV12⊕ => F3211AV12MI56:

2-way normally open with direct operated plunger solenoid valve with Connector G (ISO228) 1/8", Seals in FPM, Orifice 1,2 mm, Coil 24V 50/60Hz (MI56, size 22).

Pneumatic symbol



Diagram



**Operational characteristic**

- Stainless Steel Body
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing elements in FPM

**- OPTIONS (if requested):**

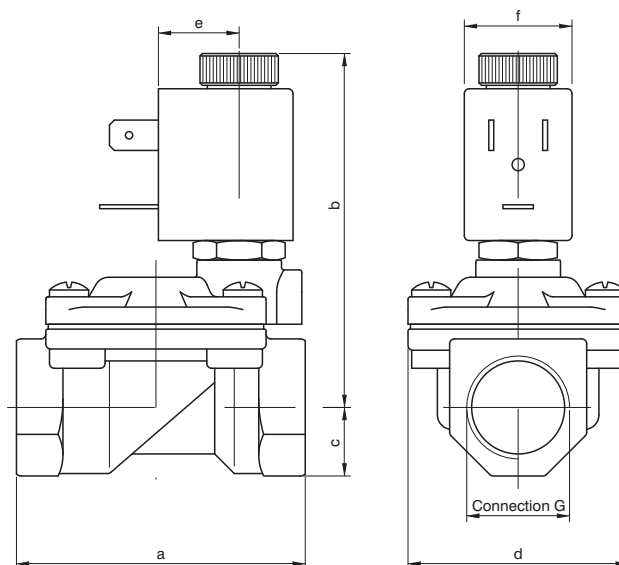
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.

**Technical characteristic**

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent



▶ 2-way normally open servo-actuated diaphragm solenoid valve in stainless steel AISI 316



Connection	a	b	c	d	e	f	Weight (g)
G3/8"	59	74	11	45	16	22	300
G1/2"	59	74	13	45	16	22	320
G3/4"	80	78	16	55	16	22	550
G1"	100	88	20	72	16	22	1350

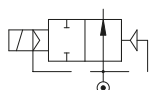
CODE "V" = Seals in FPM "C" = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil "C"		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3277CV12C	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22	-10 +140
F3277DV12C	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	
F3277EV18C	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22	
F3277FV25C	1"	24	10,2	0,15	10	10	12	8	6,5	MI	22	

N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

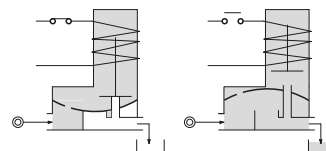
Example: F3277CV12C => F3277CV12MI5:

2-way normally open servo-actuated diaphragm solenoid valve in stainless steel AISI 316 with Connector G (ISO228) 3/8", Seals in FPM, Orifice 12 mm, Coil 24V DC (MI5, size 22).

Pneumatic symbol



Diagram



**Operational characteristic**

- Body and cover in Stainless Steel.
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

**- OPTIONS (if requested):**

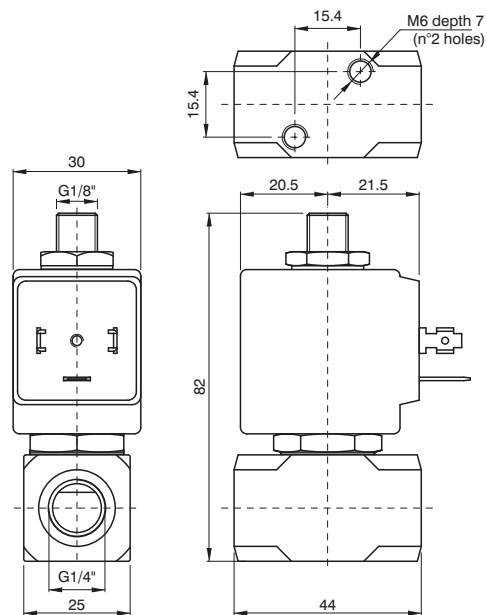
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
- Seals for use with foodstuff fluids.
- Advance ring in silver

**Technical characteristic**

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	Preferably with coil upwards



▶ 3-way direct acting solenoid valve



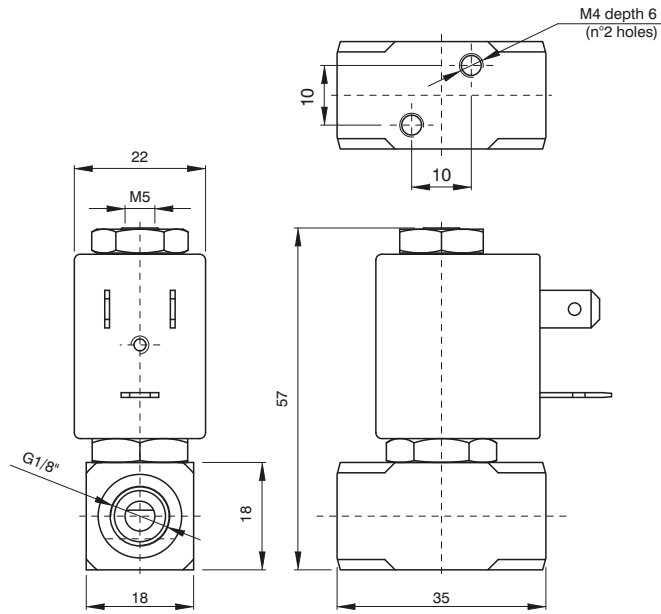
CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm) alim.   scar.		KV (m³/h)	Differential pressure (bar)				Power Consumption			Coil ⊕		Temp. range (°C)
					Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size		
						AC	DC							
<b>U Universal</b>														
F3310BV25U⊕	1/4"	2,5	2,4	0,16	0	5	4	20	15	10	MG	30	-10 +140	

Example: F3310BV25G⊕ => F3310BV25GMG5:  
3-way direct acting solenoid valve with Connector G (ISO228) 1/4", Seals in FPM, Feed bore 2,5 mm, Exhaust bore 2,4 mm Coil 24V DC (MG5, size 30), N.O.

Pneumatic symbol		Diagram	N.C.		N.O.	
<b>Operational characteristic</b>		<b>Technical characteristic</b>				
<ul style="list-style-type: none"> <li>- Stainless Steel body</li> <li>- Guide pipe in Stainless Steel</li> <li>- Mobile and fixed core in Stainless Steel</li> <li>- Springs in Stainless Steel</li> <li>- Sealing assemblies in FPM</li> </ul> <b>- OPTIONS (if requested):</b> <ul style="list-style-type: none"> <li>- Advance ring in silver</li> </ul>		Maximum admitted pressure (bar)			Maximum running pressure + 10%	
		Maximum fluid viscosity (mm²/s)			25cSt	
		Ambient temperature: with class F coil (°C)			-10 +55	
		Ambient temperature: with class H coil (°C)			-10 +80	
		Mounting position			indifferent	
		Weight (g.)			150	

1 AIR DISTRIBUTION

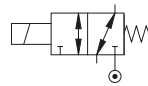
3-way direct acting solenoid valve



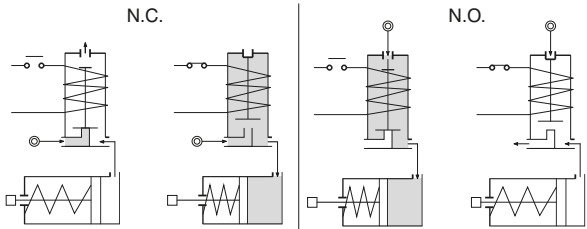
CODE "V"=Seals in FPM ⊕ = Bobna	Connection G ISO 228	Orifice (mm)		KV (m <sup>3</sup> /h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
		alim.	scar.		Min	Max		AC Spunto	VA Regime	DC Watt	Series	Size	
						AC	DC						
<b>U Universal</b>													
F3311AV15U⊕	1/8"	1,5	1,5	0,06	0	6	6	12	8	6,5	MI	22	-10 +140

Example: F3311AV15G⊕ => F3311AV15GM15:  
3-way direct acting solenoid valve with Connector G (ISO228) 1/8", Seals in FPM, Feed bore 1,5 mm, Exhaust bore 1,5 mm Coil 24V DC (MI5, size 22), N.O.

Pneumatic symbol



Diagram



Operational characteristic

- Stainless Steel Body
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

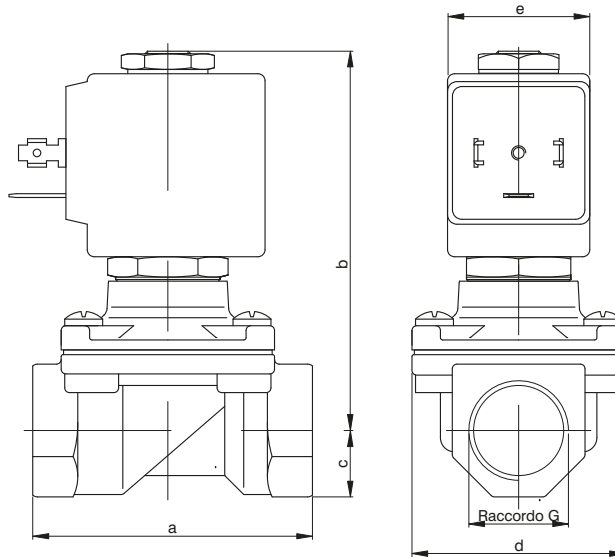
- OPTIONS (if requested):

- Advance ring in silver
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
- Exhaust with hose mount.

Technical characteristic

Maximum admitted pressure (bar)	Maximum running pressure + 10%
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (g.)	150

► 2-way normally closed servo-actuated towed membrane solenoid valve



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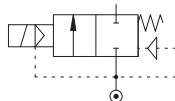
Connection	a	b	c	d	e	f	Weight (g) Series 2	Weight (g) Series 5
G3/8" Ø12	59	83	14	45	16	36	0,50	0,58
G1/2"	59	83	14	45	16	36	0,45	0,53
G3/4"	79	90	18	55		36	-	0,75
G1"	96	101	20	72		36	-	1,10

CODE "V"=Seals in FPM "E" = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil Ⓜ		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3108CV12Ⓜ	3/8"	12	2	0	10	-	20	15	-	MG	30	-10 +140
F3108DV12Ⓜ	1/2"	12	2.2	0	10	-	20	15	-	MG	30	
F3108CV12Ⓜ	3/8"	12	2	0	12	10	40	30	27	MK	36	
F3108DV12Ⓜ	1/2"	12	2.2	0	12	10	40	30	27	MK	36	
F3108EV18Ⓜ	3/4"	18	4.5	0	9	-	40	30	-	MK	36	
F3108FV25Ⓜ	1"	24	8.5	0	7	-	40	30	-	MK	36	
F3108EV18CⓂ	3/4"	18	4.5	0	-	9	-	-	27	MK	36	
F3108FV25CⓂ	1"	24	8.5	0	-	8	-	-	27	MK	36	

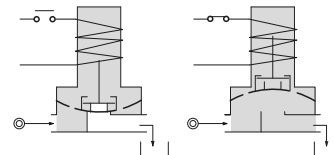
Example: F3108DV12Ⓜ => F3108DV12MG5:

2-way normally closed in brass with towed membrane solenoid valve with Connector G (ISO228) 1/2", Seals in FPM, Orifice 12 mm, Coil 24V DC (MG5, size 30).

Pneumatic symbol



Diagram



**Operational characteristic**

- Body and cover in Brass
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Sealing assemblies in FPM

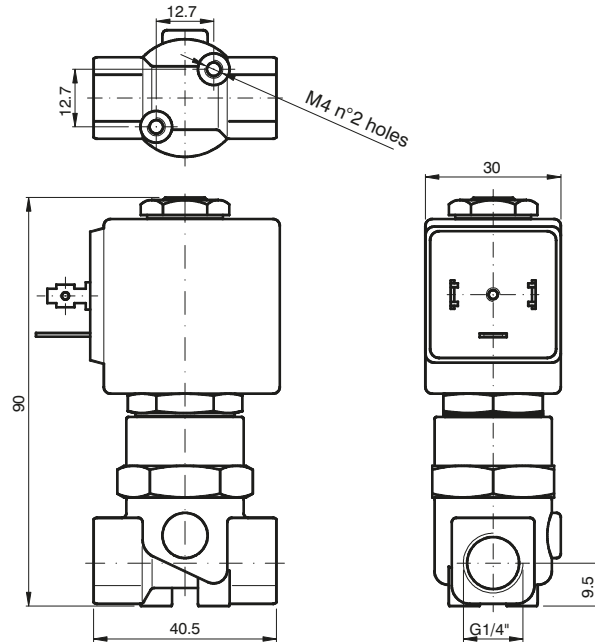
**- OPTIONS (if requested):**

- Surface treatment in chemical nickel-plating

**Technical characteristic**

Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm²/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	Preferably with coil upwards

▶ 2-way normally closed servo-actuated piston solenoid valve 1/4"

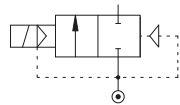


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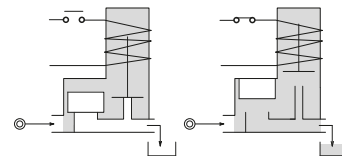
CODE "V" = Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3119BV52⊕	1/4"	5,2	0,47	1,5	50	50	20	15	10	MG	30	-10 +140

Example: F3119BV52⊕ => F3119BV52MG5:  
2-way normally closed servo-actuated piston solenoid valve in brass with Connector G (ISO228) 1/4", Seals in FPM, Orifice 5,2 mm, Coil 24V DC (MG5, size 30).

Pneumatic symbol



Diagram



**Operational characteristic**

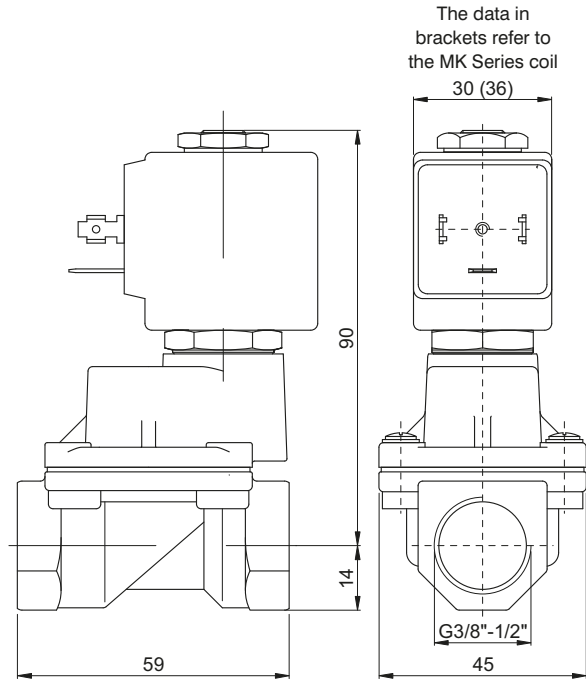
- Body and cover in Brass
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Piston in Brass.
- Guide slide in loaded PTFE.
- Main shutter in PTFE.
- Remaining sealing elements in FPM.

- OPTIONS (if requested):**
- Surface treatment in chemical nickel-plating

**Technical characteristic**

Minimum differential pressure (bar)	1
Maximum admitted pressure (bar)	40
Maximum running pressure Versione /1 (bar)	60
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	630
Weight (g.)	Preferably with coil upwards

► 2-way normally closed, servo-actuated piston solenoid valve

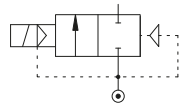


CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m <sup>3</sup> /h)	Differential pressure (bar)				Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size		
					AC	DC							
F3119CV12⊕	3/8"	12	2	1	30	30	20	15	10	MG	30	-10 +140	
F3119DV12⊕	1/2"	12	2.2	1	30	30	20	15	10	MG	30		
F3119CV12/1⊕	3/8"	12	2	1	50	50	40	30	27	MK	36		
F3119DV12/1⊕	1/2"	12	2.2	1	50	50	40	30	27	MK	36		

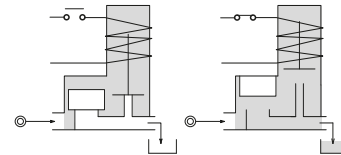
Example: F3119DV12⊕ => F3108DV12MG5:

2-way normally closed servo-actuated piston solenoid valve in brass with Connector G (ISO228) 1/2", Seals in FPM, Orifice 12 mm, Coil 24V DC (MG5, size 30).

Pneumatic symbol



Diagram



**Operational characteristic**

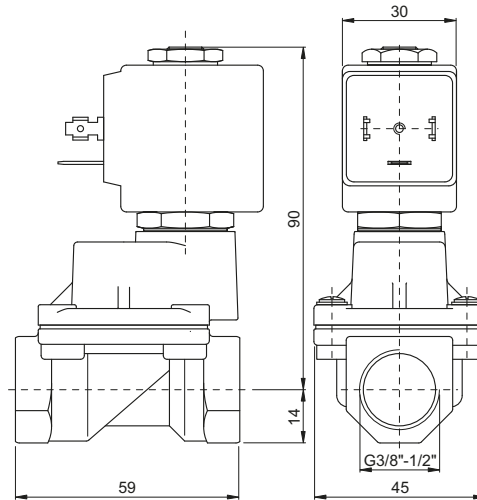
- Body and cover in Brass
- Guide pipe in Stainless Steel
- Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel
- Piston in Brass.
- Guide slide in loaded PTFE.
- Main shutter in PTFE.
- Remaining sealing elements in FPM.

- **OPTIONS (if requested):**
- Surface treatment in chemical nickel-plating

**Technical characteristic**

Minimum differential pressure (bar)	1
Maximum admitted pressure (bar)	40
Maximum running pressure Versione /1 (bar)	60
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	Preferably with coil upwards
Weight (gr.) with MG Series Coil	630
Weight (gr.) with MK Series Coil	710

► 2-way normally closed servo-actuated piston solenoid valve for use with steam



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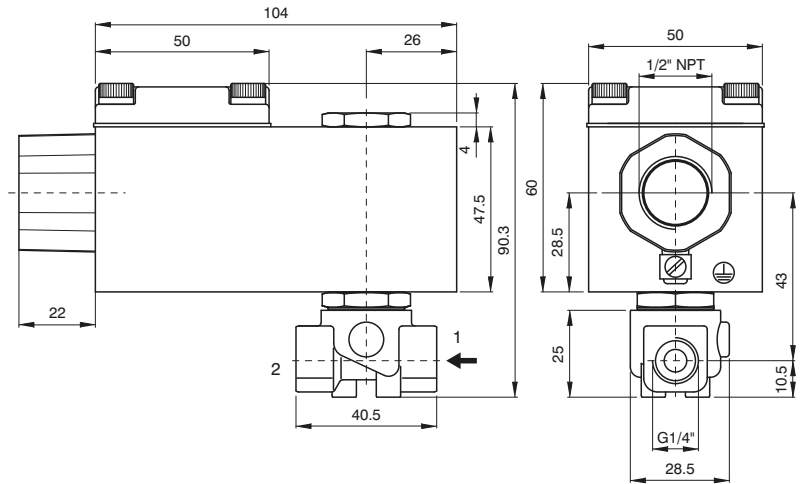
CODE "V"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption			Coil ⊕		Temp. range (°C)
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Size	
					AC	DC						
F3119CW12/1⊕	3/8"	12	2	2,5	9	9	20	15	10	MG	30	-10 +180
F3119DW12/1⊕	1/2"	12	2.2	2,5	9	9	20	15	10	MG	30	-10 +180

Example: F3119DW12/1⊕ => F3119DW12/1MG5:  
2-way normally closed servo-actuated piston solenoid valve in brass with Connector G (ISO228) 1/2", Seals in FPM, Orifice 12 mm, Coil 24V DC (MG5, size 30).

Pneumatic symbol		Diagram	
<b>Operational characteristic</b>		<b>Technical characteristic</b>	
<ul style="list-style-type: none"> <li>- Body and cover in Brass</li> <li>- Guide pipe in Stainless Steel</li> <li>- Mobile and fixed core in Stainless Steel</li> <li>- Springs in Stainless Steel</li> <li>- Piston in Stainless Steel.</li> <li>- Guide slide in loaded PTFE.</li> <li>- Sealing elements in PTFE/FPM.</li> </ul> <p><b>- OPTIONS (if requested):</b></p> <ul style="list-style-type: none"> <li>- Surface treatment in chemical nickel-plating</li> <li>- Steam sealing up to +160°C</li> </ul>		Minimum differential pressure (bar)	2,5
		Ambient temperature: only with class H Coil (°C)	-10 +80
		Mounting position	Preferably with coil upwards
		Weight (g.)	630



2-way solenoid normally closed valve, direct plunger operation, with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6



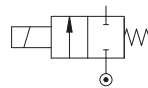
CODE	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption		Temp. range (°C)	Coil Ⓢ Series A6 (CURRENT)
				Min	Max		AC Inrush	DC Watt		
					AC	DC				
FX3106BV35Ⓢ	1/4"	3,5	0,32	0	10	8	12	8	-10 +140	A6B=24 Volt (AC 50/60Hz)
FX3106BV45Ⓢ	1/4"	4,5	0,41	0	6,5	3,5	12	8		A6E=220/230 Volt (AC 50/60Hz)
										A60=12 Volt (DC)
										A61=24 Volt (DC)

N.B. The solenoid valve is suited for intercepting only fluids that are NOT potentially explosive.

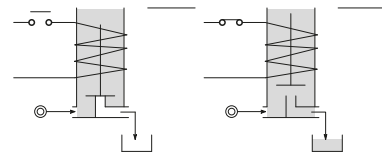
Example: FX3106BV35b => FX3106BV35A60:

2-way solenoid normally closed valve, direct plunger operation, with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6 with Connector G (ISO228) 1/4", Seals in FPM, Orifice 3,5 mm, Coil 12V DC (A60).

Pneumatic symbol



Diagram



**Operational characteristic**

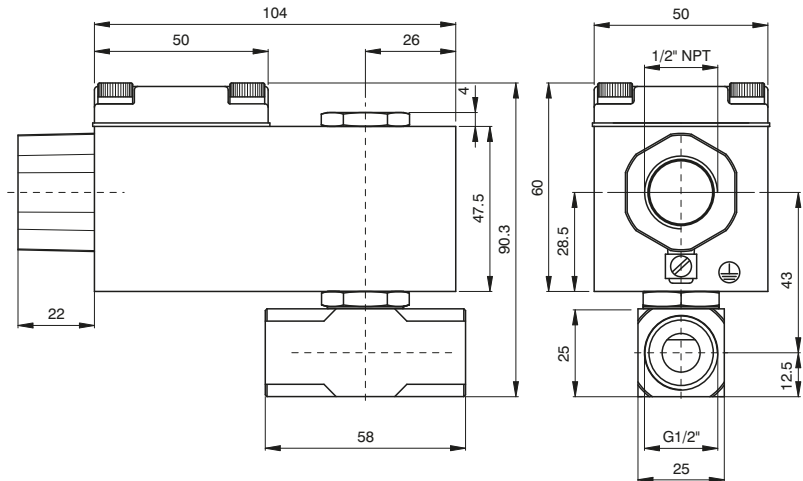
- Brass Body
- Container in light red coloured alloy
- Electrical connection 1/2" NPT
- Sealing elements in FPM
- **OPTIONS (if requested):**
- Manual operation
- Surface treatment in chemical nickel-plating
- Inserted stainless steel seating

**Technical characteristic**

Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature (°C)	-10 +40
Mounting position	With coil upwards
Weight (g.)	600



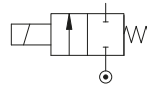
2-way normally closed direct acting solenoid valve with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6



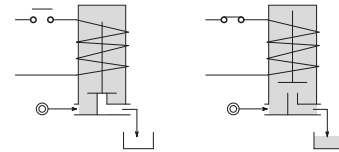
CODE "v"=Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption		Temp. range (°C)	Coil ⊕ Series A6 (CURRENT)
				Min	Max		AC Inrush	DC Watt		
					AC	DC				
FX3106DV52⊕	1/2"	5,2	0,47	0	4	1,8	12	8	-10 +140	A6B=24 Volt (AC 50/60Hz)
FX3106DV64⊕	1/2"	6,4	0,64	0	3	1	12	8		A6E=220/230 Volt (AC 50/60Hz)
										A60=12 Volt (DC)
										A61=24 Volt (DC)

N.B. The solenoid valve is suited for intercepting only fluids that are NOT potentially explosive.  
Example: FX3106DV52⊕ => FX3106DV52A60:  
2-way solenoid normally closed valve, direct plunger operation, with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6, with Connector G (ISO228) 1/2", Seals in FPM, Orifice 5,2 mm, Coil 12V DC (A60).

Pneumatic symbol



Diagram



Operational characteristic

- Brass Body
- Container in light red coloured alloy
- Electrical connection 1/2" NPT
- Sealing elements in FPM
- **OPTIONS (if requested):**
  - Manual operation
  - Surface treatment in chemical nickel-plating
  - Inserted stainless steel seating

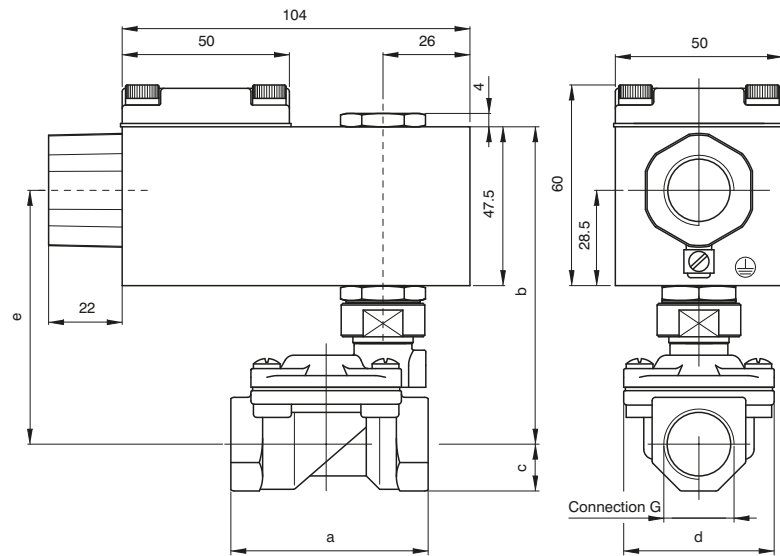
Technical characteristic

Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature (°C)	-10 +40
Mounting position	With coil upwards
Weight (g.)	660

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2-Way normally closed solenoid valve, servo-actuated diaphragm, with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/ D Eex "d" IIC T6



Connection G	a	b	c	d	e	Weight (g)
G1/4" Ø10	49	90	11	32	71	720
G3/8" Ø12	59	95	14	45	76	920
G1/2" Ø12	59	95	14	45	76	920
G3/4"	79	101	18	54	82	1100
G1"	96	110	20	72	91	1500

CODE "V" = Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption		Temp. range (°C)
				Min	Max		AC Inrush	DC Watt	
					AC	DC			
FX3107BV10⊕	1/4"	10	1,5	0,15	15	15	12	8	-10 +140
FX3107CV12⊕	3/8"	12	2,2	0,15	15	15	12	8	
FX3107DV12⊕	1/2"	12	2,5	0,15	15	15	12	8	
FX3107EV18⊕	3/4"	18	5,5	0,15	13	13	12	8	
FX3107FV25⊕	1"	24	10,2	0,15	10	10	12	8	

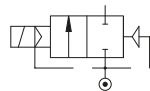
Coil ⊕ Series A6 CURRENT
A6B=24 Volt (AC 50/60Hz)
A6E=220/230 Volt (AC 50/60Hz)
A60=12 Volt (DC)
A61=24 Volt (DC)

N.B. The solenoid valve is suited for intercepting only fluids that are NOT potentially explosive.

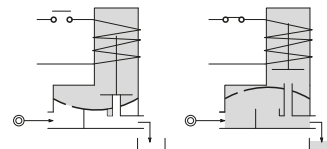
Example: FX3107BV101⊕ => FX3107BV101A60.

2-Way normally closed solenoid valve, servo-actuated diaphragm, with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6, with Connector G (ISO228) 1/4", Seals in FPM, Orifice 10 mm, Coil 12V DC (A60).

Pneumatic symbol



Diagram



Operational characteristic

- Body and cover in Brass
- Container in light red coloured alloy
- Electrical connection 1/2" NPT
- Sealing elements in FPM

- OPTIONS (if requested):

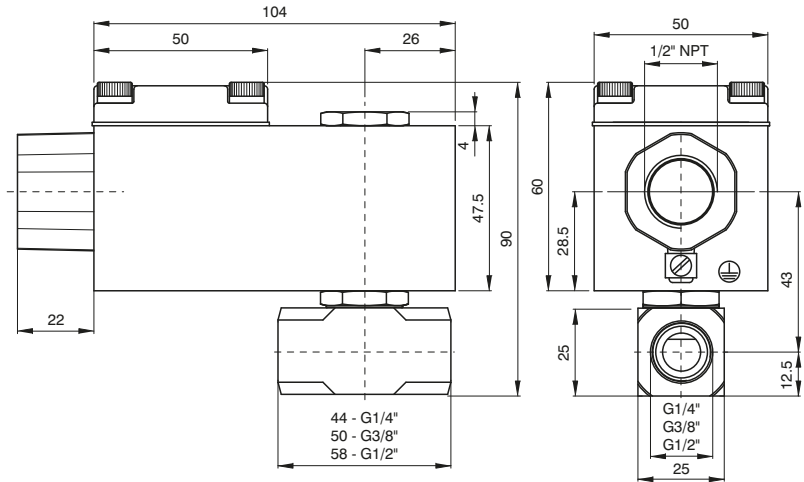
- Surface treatment in chemical nickel-plating
- Version with slowed commutation

Technical characteristic

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature (°C)	-10 +40
Mounting position	Preferably with coil upwards



► **2-Way normally closed direct acting solenoid valve with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6**



CODE "V"= Seals in FPM ⊕ = Coil	Connection G ISO 228	Orifice (mm)	KV (m <sup>3</sup> /h)	Differential pressure (bar)			Power Consumption		Temp. range (°C)	Coil ⊕ Series A6  CURRENT
				Min	Max		AC Inrush	DC Watt		
					AC	DC				
FX3110BV25⊕	1/4"	2,5	0,15	0	16	14	12	8	-10 +140	A6B=24 Volt (AC 50/60Hz) A6E=220/230 Volt (AC 50/60Hz) A60=12 Volt (DC) A61=24 Volt (DC)
FX3110BV35⊕	1/4"	3,5	0,32	0	10	8	12	8		
FX3110BV45⊕	1/4"	4,5	0,41	0	6,5	3,5	12	8		
FX3110CV35⊕	3/8"	3,5	0,32	0	10	8	12	8		
FX3110CV52⊕	3/8"	5,2	0,47	0	4	1,8	12	8		
FX3110DV35⊕	1/2"	3,5	0,32	0	10	8	12	8		
FX3110DV52⊕	1/2"	5,2	0,47	0	4	1,8	12	8		
FX3110DV64⊕	1/2"	6,4	0,64	0	3,5	1	12	8		

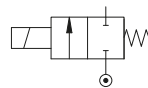
N.B. The solenoid valve is suited for intercepting only fluids that are NOT potentially explosive.

Example: FX3110BV25⊕ => FX3110BV25A60:

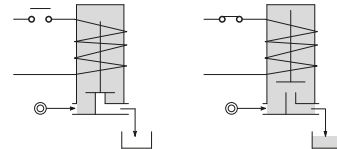
2-Way normally closed direct acting solenoid valve with housing for potentially explosive environments certified:

CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6, with Connector G (ISO228) 1/4", Seals in FPM, Orifice 2,5 mm, Coil 12V DC (A60).

Pneumatic symbol



Diagram



**Operational characteristic**

- Stainless Steel Body
- Container in light red coloured alloy
- Electrical connection 1/2" NPT
- Sealing elements in FPM

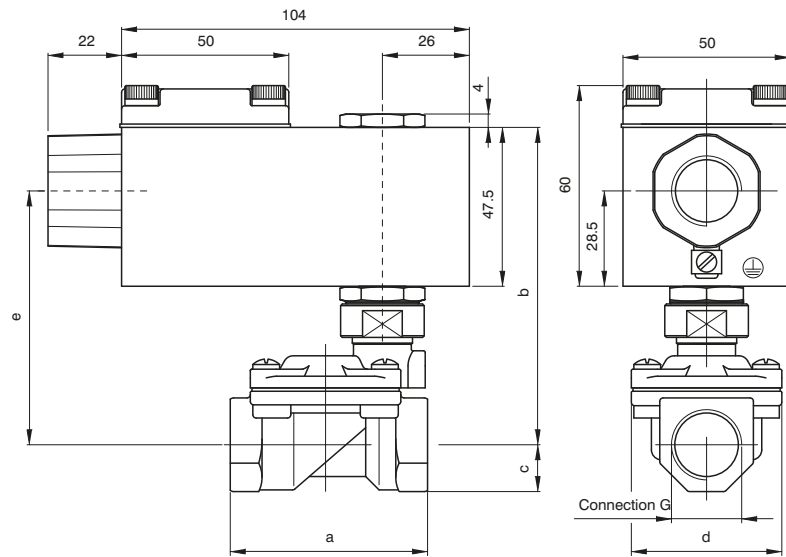
- OPTIONS (if requested):**
- Advance ring in silver

**Technical characteristic**

Maximum admitted pressure (bar)	100
Maximum fluid viscosity (mm <sup>2</sup> /s)	25cSt
Ambient temperature (°C)	-10 +40
Mounting position	with coil upwards
Weight (g.)	660

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2-Way normally closed servo-actuated diaphragm solenoid valve in stainless steel AISI 316, with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6



Connection G	a	b	c	d	e	Weight (g)
G3/8"	59	95	14	45	76	1120
G1/2"	59	95	14	45	76	1110
G3/4"	79	101	18	54	82	1100
G1"	96	110	20	72	91	1500

CODE	Connection G ISO 228	Orifice (mm)	KV (m³/h)	Differential pressure (bar)			Power Consumption		Temp. range (°C)
				Min	Max		AC Inrush	DC Watt	
					AC	DC			
FX3177CV121Ⓢ	3/8"	12	2,2	0,15	15	15	12	8	-10 +140
FX3177DV121Ⓢ	1/2"	12	2,5	0,15	15	15	12	8	
FX3177EV181Ⓢ	3/4"	18	5,5	0,15	13	13	12	8	
FX3177FV251Ⓢ	1"	24	10,2	0,15	10	10	12	8	

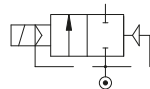
Coil Ⓢ Series A6
CURRENT
A6B=24 Volt (AC 50/60Hz)
A6E=220/230 Volt (AC 50/60Hz)
A6O=12 Volt (DC)
A6I=24 Volt (DC)

N.B. The solenoid valve is suited for intercepting only fluids that are NOT potentially explosive.

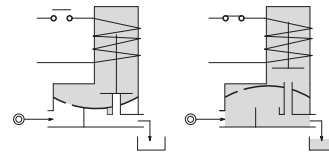
Example: FX3177CV121Ⓢ => FX3177CV121A60:

2-Way normally closed servo-actuated diaphragm solenoid valve in stainless steel AISI 316, with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6, with Connector G (ISO228) 3/8", Seals in FPM, Orifice 12 mm, Coil 12V DC (A6O).

Pneumatic symbol



Diagram



Operational characteristic

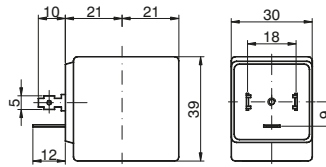
- Body and cover in Stainless Steel
- Container in light red coloured alloy
- Electrical connection 1/2" NPT
- Sealing elements in FPM

- **OPTIONS (if requested):**
- Version with slowed commutation

Technical characteristic

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm²/s)	25cSt
Ambient temperature (°C)	-10 +40
Mounting position	Preferably with coil upwards

► **MG Series coil (Size 30 mm), class F**

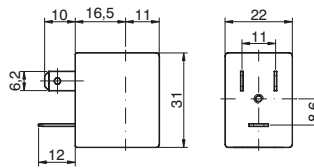


Ordering code	
<b>MG</b> <sup>T</sup>	
VOLTAGE	
56=24 Volt (AC 50/60Hz)	
<sup>T</sup>	58=220/230 Volt (AC 50/60Hz)
5=24 Volt (DC)	
4=12 Volt (DC)	

Options:  
Electrical connection via cables  
Special voltages and powers.

Operational characteristic							
Class of insulation	Tolerance on AC voltage	Tolerance on DC voltage	Degree of protection with connector fitted	Continuous service	Electrical conn.	Connectors	Weight (g.)
F	+15% -10%	± 10%	IP65	ED100%	DIN 43650A	PG9 Codice 10349000	120

► **MI Series coil (Size 22 mm), class F**

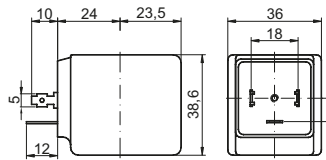


Ordering code	
<b>MI</b> <sup>T</sup>	
VOLTAGE	
56=24 Volt (AC 50/60Hz)	
<sup>T</sup>	58=220/230 Volt (AC 50/60Hz)
5=24 Volt (DC)	
4=12 Volt (DC)	
21=48-50 Volt (AC 50/60Hz)	

Options:  
Electrical connection via cables  
Special voltages and powers.

Operational characteristic							
Class of insulation	Tolerance on AC voltage	Tolerance on DC voltage	Degree of protection with connector fitted	Continuous service	Electrical conn.	Connectors	Weight (g.)
F	+15% -10%	± 10%	IP65	ED100%	DIN 43650A	PG9 Codice 10349000	120

► **MK Series coil (Size 36 mm), class H**

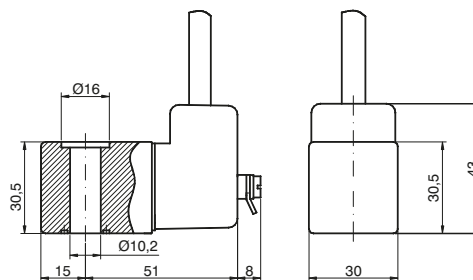


Ordering code	
<b>MK</b> <sup>T</sup>	
VOLTAGE	
56=24 Volt (AC 50/60Hz)	
<sup>T</sup>	58=220/230 Volt (AC 50/60Hz)
5=24 Volt (DC)	
4 =12 Volt (DC)	

Options:  
Electrical connection via cables  
Special voltages and powers.

Operational characteristic							
Class of insulation	Tolerance on AC voltage	Tolerance on DC voltage	Degree of protection with connector fitted	Continuous service	Electrical conn.	Connectors	Weight (g.)
F	+15% -10%	± 10%	IP00	ED100%	DIN 43650A	PG9 Codice 10349000	200

► **Coils 2G Ex mb IIC T4-T6; II2D Ex mb IIIC T85°C-T135°C (Size 30 mm), Class H**



Ordering code	
<b>XME</b> <sup>T</sup>	
VOLTAGE	
56=24 Volt (AC 50/60Hz)	
<sup>T</sup>	58=220/230 Volt (AC 50/60Hz)
5=24 Volt (DC)	
4 =12 Volt (DC)	

Options:  
Electrical connection via cables  
Special voltages and powers.

Operational characteristic						
Class of insulation	Tolerance on AC voltage	Tolerance on DC voltage	Degree of protection with connector fitted	Continuous service	Electrical conn.	Weight (g.)
F	+15% -10%	± 10%	Ip00	ED100%	3m cable	250

2way angle seat valve pneumatically operated

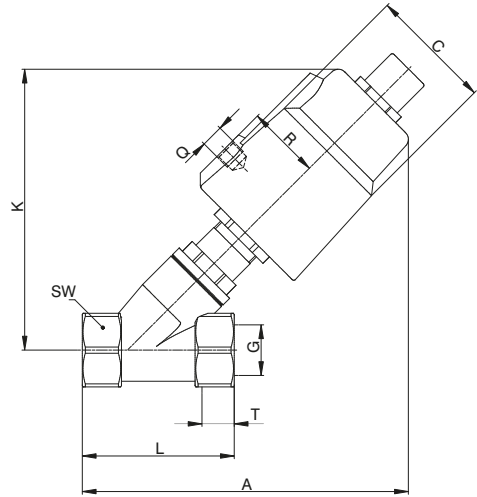


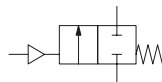
Table of dimensions

CODE AISI316	CODE AISI304	Connection G	Actuator (mm)	C (mm)	R (mm)	K (mm)	Q (mm)	T (mm)	A (mm)	L (mm)	SW (mm)
PVF40115-316	PVF40115-304	1/2"	40	50,5	27	111	1/8"	15	119	68	27
PVF50115-316	PVF50115-304	1/2"	50	60	33	124	1/8"	15	131	68	27
PVF50120-316	PVF50120-304	3/4"	50	60	33	128	1/8"	16	136	75	32
PVF50125-316	PVF50125-304	1"	50	60	33	136	1/8"	17	145	90	40
PVF63125-316	PVF63125-304	1"	63	75	41	162	1/8"	17	169	90	40
PVF63132-316	PVF63132-304	1 -1/4"	63	75	41	174	1/8"	21	187	116	50
PVF63140-316	PVF63140-304	1 -1/2"	63	75	41	175	1/8"	21	187	116	56
PVF63150-316	PVF63150-304	2"	63	75	41	183	1/8"	22	201	138	69
PVF125AL165-316	PVF125AL165-304	2-1/2"	125-Aluminium	148	74	302	1/4"	26	320	178	85
PVF125AL180-316	PVF125AL180-304	3"	125-Aluminium	148	74	313	1/4"	27	372	210	100

Technicals data

CODE AISI316	CODE AISI304	Connection G	KV m/h	Actuator (mm)	Maximum ΔP (bar)		Piloting pressure (bar)	Weight (g.)
					Above seat	Under seat		
PVF40115-316	PVF40115-304	1/2"	4,8	40	16	13	3 ÷ 8	765
PVF50115-316	PVF50115-304	1/2"	4,8	50	16	14		952
PVF50120-316	PVF50120-304	3/4"	10	50	16	14		1062
PVF50125-316	PVF50125-304	1"	14	50	16	8		1371
PVF63125-316	PVF63125-304	1"	14	63	16	13		2006
PVF63132-316	PVF63132-304	1 -1/4"	23	63	16	8		2575
PVF63140-316	PVF63140-304	1 -1/2"	30	63	16	5		2714
PVF63150-316	PVF63150-304	2"	70	63	9	3		3634
PVF125AL165-316	PVF125AL165-304	2-1/2"	107	125-Aluminium	16	9		9713
PVF125AL180-316	PVF125AL180-304	3"	157	125-Aluminium	16	5	13003	

Pneumatic symbol



Operational characteristic

- High flow rate thanks to Body configuration with inclined seating.
- Anti water hammer functioning with input below shutter.
- Pneumatically operated valve with stainless steel Body, resistant to ambient corrosion.
- Self-levelling shutter to ensure improved sealing.
- Optical position indicator.
- May be used with back pressure for gaseous fluids.
- Self-adjusting maintenance free stuffer gasket package.
- Valves may be mounted in all positions.
- **OPTIONS:**
- Connection type: GAS ISO / NPT

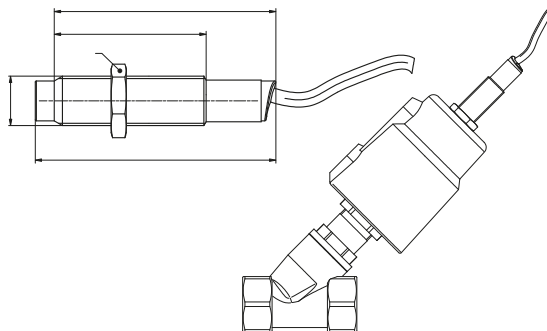
Valve Body technical characteristics

- Fluid temperature: -10°C ÷ + 180°C
- Temperature: -10°C ÷ + 80°C
- Fluid viscosity: max. 600cSt.
- Shutter: PTFE.
- Gasket packet with PTFE, FKM stuffer

Actuator technical characteristics

- Body AISI 304
- Pilot fluid dry or lubricated Air, gas and neutral fluids.
- Temperature fluid max. + 60°C.

Proximity Sensor



Ordering code

PVF.1.S

OUTPUT TYPE

- 01 = NPN (N.C.)
- 02 = NPN (N.O.)
- 03 = PNP (N.C.)
- 04 = PNP (N.O.)

Nickel brass sensor, usable on valves up to size 2 inches for detection ON - OFF  
Cable: 2m

Operational characteristic

Maximum current	Voltage field	Temperature (°C)	Detection Distance	Protection grade	Weight (g)
100 mA	10 ÷ 30V DC	-10°C ÷ +70°C	3mm (max) ± 10 %	IP67	68