-10 / + 70

Series PVA - Pad valve for air 2/2

General

Pad Valves offer a reliable and economic solution to fluid control. The valve is manufactured with a 2 way Bronze body and actuated pneumatically using either a single or double acting compact cylinder which can be rotated 360°.

Versions are available with NBR, FPM or PTFE valve seals.

Temperature °C, magnetic piston,, NBR, FPM, PTFE seals

The barrel profile allows the use of magnetic sensors code "1500._", "RS._", "HS._", for slots "A" type. (see the Pneumax Genaral catalogue, chapter 3).

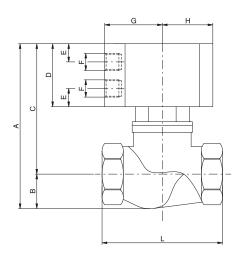
Construction characteristics							
Bushing, Bushing pad, Nut pad	Brass						
Cylinder	Aluminium alloy Anodized						
Rear eye, Piston and Rod bushing	Anodized aluminium						
Seals in contact with fluid	NBR, FPM, PTFE						
Pneumatic cylinder seals	NBR, FPM, PTFE						
Springs	Zinc plated steel						
Piston rod	Chromed stainelss steel						

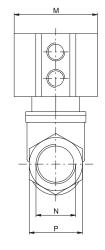
Technical characteristics								
Pneumatic cylinder fluid	Filtered air. No lubrication needed, if applied it shall be continuous							
Valve fluid	Fluid compatible with gasket compounds available							
Working pressure (Cylinder) (bar)	10							
Temperature °C, non magnetic piston, NBR seals	-10 / + 70							
Temperature °C, non magnetic piston, FPM seals	-10 / + 150							
Temperature °C, non magnetic piston, PTFE seals	-10 / + 150							
·								



"T" body version Pad valves





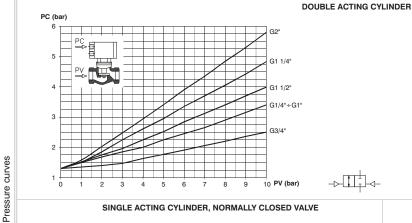


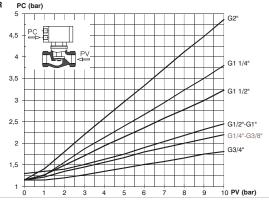
Ordering code							
F	PVA.B. @. P.T. @. S						
	ACTING						
A	DE=Double acting						
•	SC=Normally closed						
	SA=Normally OPEN						
_	PISTON						
B	N=Non magnetic						
	M= Magnetic						
	CONNECTIONS						
	A=G1/4"						
	B=G3/8"						
	C=G1/2"						
0	D=G3/4"						
	E=G1"						
	F=G1 1/4"						
	G=G1 1/2"						
	H=G2"						
	SEALS						
8	N=NBR						
	V=FPM						
	F=PTFE						

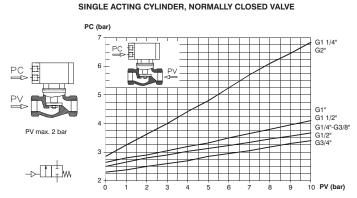
TABLE OF DIMENSIONS

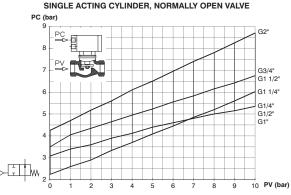
	Non magnetic version Magnetic version														TEC	HNICAL D	ATA
Connection (N)	Α	С	D	Α	С	D	В	Е	F	G	Н	L	М	Р	Actuator (Ø)	Nominal Valve (Ø)	Weight (gr.)
G1/4"	93,5	77,5	41	97,5	81,5	45	16	10,25	G1/8"	32,5	28,5	64	47	25	Ø40	Ø13,5	350
G3/8"	93,5	77,5	41	97,5	81,5	45	16	10,25	G1/8"	32,5	28,5	64	47	25	Ø40	Ø13,5	350
G1/2"	93,5	78	41	99,5	82	45	17,5	10,25	G1/8"	32,5	28,5	68	47	30	Ø40	Ø15	400
G 3/4"	105	83	41	113	90	48	22	11,25	G1/8"	44	40	79	70	36	Ø63	Ø20,5	850
G1"	117	89	41	125	101	53	28	11,25	G1/8"	44	40	94	70	44	Ø63	Ø25	1100
G1 1/4"	131	103	48	136	108	53	28	11,25	G1/8"	44	40	110	70	55	Ø63	Ø30	1400
G1 1/2"	154	118	57	166	130	69	36	13,75	G1/8"	56	49	120	90	60	Ø80	Ø38	2100
G2"	169	124	57	181	136	69	45	13,75	G1/8"	56	49	140	90	73	Ø80	Ø49,5	3000

Pad valves, 2-ways, are a reliable and economic solution to control fluid. Pneumatically actuated by a compact double or single acting cylinder with 360° revolving connections. Standard seals in contact with fluid are made in NBR, FPM or PTFE. The barrel profile allows the use of Pneumax magnetic sensors series 1500 (see the Sensors Section).









Operational characteristics

- Rear eye, Piston and Rod bushing = Anodized aluminium
 Cylinder = Aluminium alloy Anodized
 Spring = Zinc plated steel
 Seals = NBR, FPM, PTFE

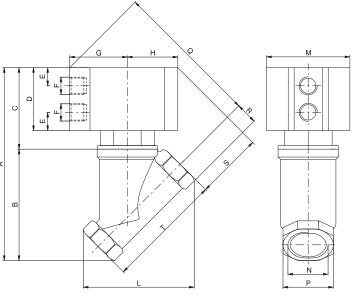
- Piston rod = Chromed stainelss steel- Bushing, Bushing pad, Nut pad = Brass

Technical characteristics	
Fluid	Filtered air.
	No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar) 10	10
Temperature °C (non magnetic piston, NBR seals) -5 / + 70	-10 / +70
Temperature °C (non magnetic piston, FPM seals) -5 / + 150	-10 / +150
Temperature °C (non magnetic piston, PTFE seals) -5 / + 150	-10 / +150
Temperature °C (magnetic histon, NBR, EPM, PTEF seals)	-10 / +70



"Y" body version Pad valves



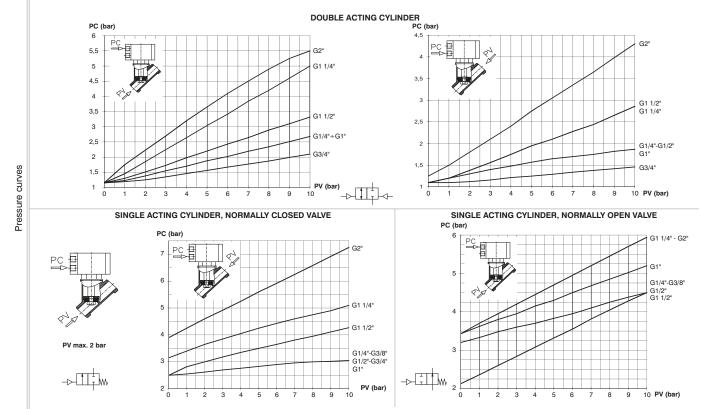


	Ordering code
F	PVA.B. @. .P.Y. @. S
	ACTING
Α	DE=Double acting
•	SC=Normally closed
	SA=Normally OPEN
_	PISTON
P	N=Non magnetic
	M= Magnetic
	CONNECTIONS
	A=G1/4"
	B=G3/8"
_	C=G1/2"
0	D=G3/4"
	E=G1"
	F=G1 1/4"
	G=G1 1/2"
	H=G2"
	SEALS
8	N=NBR
9	V=FPM
	F=PTFE

TABLE OF DIMENSIONS

	Non m	agnetic v	ersion/	Mag	netic ve	rsion									TEC	HNICAL D	ATA
Connection (N)	Α	С	D	Α	С	D	В	E	F	G	Н	L	М	Р	Actuator (Ø)	Nominal Valve (Ø)	Weight (gr.)
G1/4"	93,5	77,5	41	97,5	81,5	45	16	10,25	G1/8"	32,5	28,5	64	47	25	Ø40	Ø13,5	350
G3/8"	93,5	77,5	41	97,5	81,5	45	16	10,25	G1/8"	32,5	28,5	64	47	25	Ø40	Ø13,5	350
G1/2"	93,5	78	41	99,5	82	45	17,5	10,25	G1/8"	32,5	28,5	68	47	30	Ø40	Ø15	400
G 3/4"	105	83	41	113	90	48	22	11,25	G1/8"	44	40	79	70	36	Ø63	Ø20,5	850
G1"	117	89	41	125	101	53	28	11,25	G1/8"	44	40	94	70	44	Ø63	Ø25	1100
G1 1/4"	131	103	48	136	108	53	28	11,25	G1/8"	44	40	110	70	55	Ø63	Ø30	1400
G1 1/2"	154	118	57	166	130	69	36	13,75	G1/8"	56	49	120	90	60	Ø80	Ø38	2100
G2"	169	124	57	181	136	69	45	13,75	G1/8"	56	49	140	90	73	Ø80	Ø49,5	3000

Pad valves, 2-ways, are a reliable and economic solution to control fluid. Pneumatically actuated by a compact double or single acting cylinder with 360° revolving connections. Standard seals in contact with fluid are made in NBR, FPM or PTFE. The barrel profile allows the use of Pneumax magnetic sensors series 1500 (see the Sensors Section).



Operational characteristics

- Rear eye, Piston and Rod bushing = Anodized aluminium
 Cylinder = Aluminium alloy Anodized
 Spring = Zinc plated steel
 Seals = NBR, FPM, PTFE

- Piston rod = Chromed stainelss steel Bushing, Bushing pad, Nut pad = Brass

Technical characteristics	
Fluid	Filtered air.
	No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar) 10	10
Temperature °C (non magnetic piston, NBR seals) -5 / + 70	-10 / +70
Temperature °C (non magnetic piston, FPM seals) -5 / + 150	-10 / +150
Temperature °C (non magnetic piston, PTFE seals) -5 / + 150	-10 / +150
Temperature °C (magnetic piston, NBR, FPM, PTFE seals)	-10 / +70

F300 Series, Solenoid valves for fluids

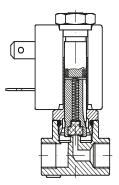
General details

PNEUMAX offer a vast range of solenoid valves in brass and stainless steel designed to control air, water, steam and all fluids that are compatible with the materials (body and seals) used in the range. The solenoid valves are 2 or 3-way, normally closed, normally open, general service, direct acting or servo-actuated, with connections available in NPT & BSP threads from G1/8" up to G2", with a working pressure range from vacuum to 100 bar. Solenoid valves are available with coils that conform to CESI 03 ATEX 344 certification for explosive environments. Our technical office ensures the highest standard of skill and understanding for the widest variety of applications, ensuring that the best possible solutions are found.

Versions manufactured

Direct action 2-way: 2-way solenoid valves have an input connection and an output connection machined in the valve body, the orifice being intercepted by the plunger mounted in the core tube.

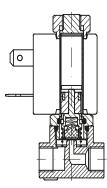
They can be **normally closed (2/2 NC)**, in this case the fluid is intercepted by the plunger at rest, with electricity applied, the input orifice is opened and the media reaches the intended use.



They can be **normally open (2/2 NO)**, in this case at rest the orifice remains open without electricity applied, the media reaches the intended use. When electricity is applied the input orifice closes.

Performance in both cases depends solely on the magnetic field produced by the solenoid coil.

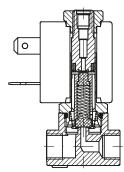
The solenoid valves can also work at zero pressure.



Direct action 3-way: 3-way solenoid valves have an input and an output connection in the valve body and an exhaust connection fitted in the fixed core. The input and exhaust orifices are intercepted directly by the plunger fitted within the core tube.

They can be **normally closed (3/2 NC)** and in this case, at rest, the incoming fluid is intercepted by the plunger and output port in connected to the exhaust port.

Applying electrical power, the input orifice is opened and feed is supplied to the output. Exhaust is closed.

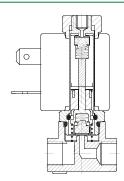


They can be **normally open (3/2 NA)** and in this case, at rest, the input orifice is open without electricity applied, the media reaches the intended use. Exhaust is closed.

Applying power, the input orifice closes and the output discharges through the exhaust port.

Performance in both cases depends solely on the magnetic field produced by the solenoid coil.

The solenoid valves can also work at zero pressure.





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.

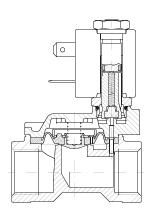
These solenoid valves are used to control high-pressure values with large diameter bores.

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 though 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 flows to the output.

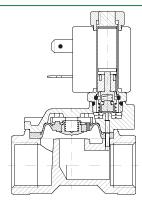
In these versions, performance does not depend solely on the magnetic field produced by the coil; a minimum input pressure is also needed so as to move the diaphragm or the piston overcoming its rigidity and to keep it raised from the main orifice. (Δp minimum performance).



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 minimumpressure 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 TECNOFLON FLUOREL	A synthetic hexa-fluoropropylene-based elastomer. Excellent resistance to high temperatures. Excellent resistance to ozone, oxygen, mineral oils, synthetic hydraulic fluids, fuels, 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.

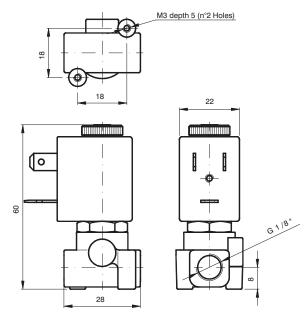
Fluido						
Ethyl acetate	Non Compatible					
Acetylene	Compatible					
Vinegar	Non Compatible					
Acetone	Non Compatible					
Calcareous water	Compatible					
Hot water <75°C	Compatible					
Hot water and steam <140°C	Non Compatible					
Water with glycol	Compatible					
Deionised water	Compatible					
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					
··y·-··-	Compando					



Valves and solenoid valves poppet system Series F300 - Brass body

2-way solenoid normally closed valve, direct plunger operation

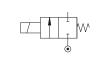


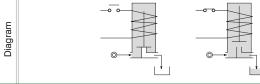


CODE Connection		Orifice	кv	Diff	ferential p (bar)	ressure	Power	Consun	ption	Co	il 😉	Temp.
"V"=Seals in FPM			(m³/h)	Min Max		ax	AC	VA	DC	Series	Size	range
3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Jenes	OIZO	(°C)
F3105AV25 B	1/8"	2,5	0,14	0	8	5,5	12	8	6,5	MI	22	-10 +130

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





Operational characteristic

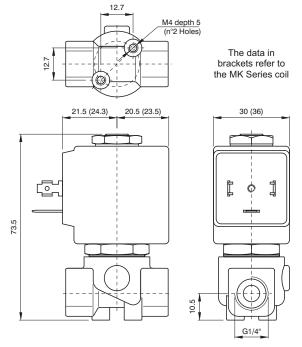
- Brass Body
 Guide pipe in Brass
 Mobile and fixed core in Stainless Steel
 Springs in Stainless Steel
- Sealing assemblies in FPM
- OPTIONS (if requested):
 Manual operation
- Surface treatment in chemical nickel-plating
- Guide pipe in Stainless Steel For use with oxygen

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm 2/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





CODE	Connection	Orifice	ку	Differential pressu (bar)		ressure	Power Consumption			Co	Temp.	
"V"=Seals in FPM	G	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range
3 = Coil	ISO 228		' '	IVIIII	AC	DC	Inrush	Holding	Watt	Selles	0126	(°C)
F3106BV15 ®	1/4"	1,5	0,07	0	30	26	20	15	10	MG	30	
F3106BV20 B	1/4"	2,0	0,1	0	22	20	20	15	10	MG	30	
F3106BV25 B	1/4"	2,5	0,15	0	16	14	20	15	10	MG	30	
F3106BV35 B	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 B	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	-10 +140
F3106BV15 B	1/4"	1,5	0,07	0	80	80	40	30	27	MK	36	-10 +140
F3106BV20 B	1/4"	2,0	0,1	0	50	40	40	30	27	MK	36	
F3106BV25 B	1/4"	2,5	0,15	0	35	33	40	30	27	MK	36	
F3106BV35 B	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 B	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).

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Operational characteristic

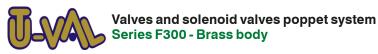
- Brass Body
- Guide pipe in Stainless Steel
 Mobile and fixed core in Stainless Steel
- Springs in Stainless Steel Sealing assemblies in FPM

- OPTIONS (if requested):

- Manual operationSurface treatment in chemical nickel-plating
- Inserted stainless steel seating
- For use with oxygen

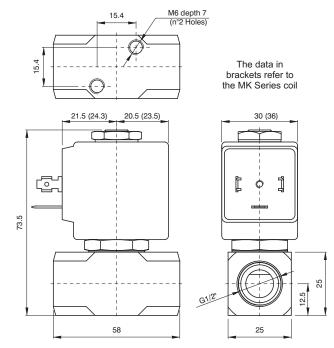
Technical	characteristic

Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm 2/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 solenoid normally closed valve, direct plunger operation





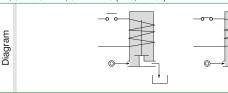
CODE	Connection Orifice KV		κv	Diff	erential p (bar)	ressure	Power Consumption			Co	Temp.	
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range
9 – Coli	100 220				AC	DC	Inrush	Holding	Watt	0000		(°C)
F3106DV45 B	1/2"	4,5	0,41	0	6,5	3,5	20	15	10	MG	30	
F3106DV52 ®	1/2"	5,2	0,47	0	4	1,8	20	15	10	MG	30	
F3106DV64 ®	1/2"	6,4	0,64	0	3	1	20	15	10	MG	30	-10 +140
F3106DV45 ®	1/2"	4,5	0,41	0	14	13	40	30	27	MK	36	-10 +140
F3106DV52 B	1/2"	5,2	0,47	0	10	9	40	30	27	MK	36	
F3106DV64 B	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)







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):

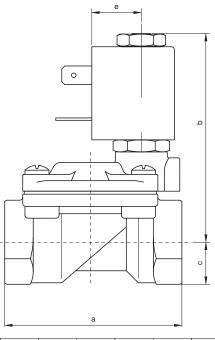
- Manual operation Surface treatment in chemical nickel-plating
- For use with oxygen

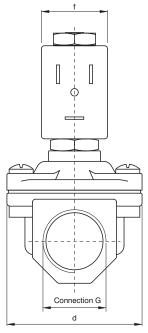
Technical characteristic	
Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (gr.) with MG Series Coil	300
Weight (gr.) with MK Series Coil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



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







Connection	a	b	С	d	е	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	Connection Orifice		кv	Diff	erential p (bar)	ressure	Power	Consun	ption	Co	il 😉	Temp.
"V"=Seals in FPM	M G (mm)		(m ³ /h)	Min	М	ax	AC	VA	DC	Series	Size	range
6 - Coll					AC	DC	Inrush	Holding	Watt	0000		(°C)
F3107BV10 B	1/4"	10	1,5	0,15	15	15	12	8	6,5	MI	22	
F3107CV12 6	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22]
F3107DV12 B	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	-10 +140
F3107EV18 ®	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22	-10 +140
F3107FV25 ®	1"	24	10,2	0,15	10	10	12	8	6,5	MI	22]
F3107GV30 B	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).









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

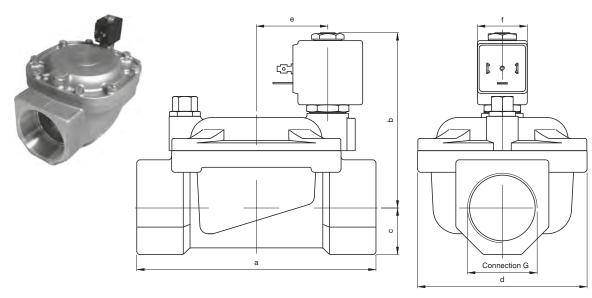
- Version for vacuum (air/gas)
 Version for use with oxygen
 "SVGW/SSIGE" approved versions.

0,15
25
25cSt
-10 +55
-10 +80
Preferably with coil upwards



Valves and solenoid valves poppet system Series F300 - Body and cover in Brass

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



Connection	а	b	С	d	е	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	Connection	Orifice	кv	Differential pressure (bar)			Power Consumption			Co	il 😉	Temp.			
"V"=Seals in FPM		(mm)	(m³/h)		1		(ma3/h)	Min	М	ax	AC	VA	DC Series	Size	range
3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Jenes	Size	(°C)			
F3107GV37 B	1 1/4"	37	18	0,15	10	10	20	15	10	MG	30				
F3107HV378	1" 1/2"	37	21	0,15	10	10	20	15	10	MG	30	-10 +140			
F3107IV50 ®	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 \oplus => 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
- 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

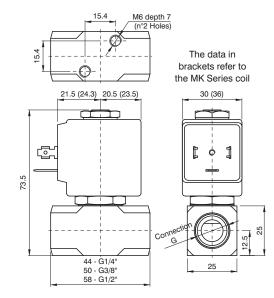
- OPTIONS (if requested):
- Manual operation
 Surface treatment in chemical nickel-plating
- Version for vacuum (air/gas)

Minimum differential pressure (bar)	0,15 ÷ 3
Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm 2/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	Connection	Orifice	ΚV	Diff	ferential p (bar)	ressure	Power	Consun	ption	Coil 3		Temp.
"V"=Seals in FPM	G ISO 228	(mm)	(m ³ /h)	Min		ax	AC	VA	DC	Series	Size	range (°C)
• • • • • • • • • • • • • • • • • • • •					AC	DC	Inrush	Holding	Watt			(0)
F3110BV25 6	1/4"	2,5	0,15	0	16	14	20	15	10	MG	30	
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 B	3/8"	3,5	0,32	0	10	8	20	15	10	MG	30	
F3110CV52 B	3/8"	5,2	0,47	0	4	1,8	20	15	10	MG	30	
F3110DV35 B	1/2"	3,5	0,32	0	10	8	20	15	10	MG	30	
F3110DV52 B	1/2"	5,2	0,47	0	4	1,8	20	15	10	MG	30	
F3110DV64 B	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	-10 +140
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 B	3/8"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3110CV52 B	3/8"	5,2	0,47	0	10	9	40	30	27	MK	36	
F3110DV35 B	1/2"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3110DV52 B	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).



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

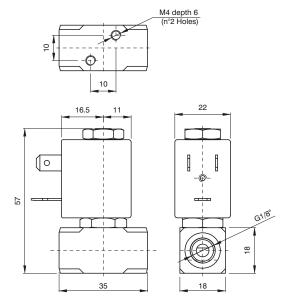
Technical cl	haracteristic
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Maximum admitted pressure (bar)	100
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (gr.)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



2-way solenoid normally closed valve, direct plunger operation





CODE	Connection	Orifice	кv	Differential pressure (bar)			Power	Consun	ption	Coil ®		Temp.
"V"=Seals in FPM	G	(mm)	(m³/h) Min	M	ax	AC	VA	DC	Series	Size	range	
3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	Size	(°C)
F3111AV12 ®	1/8"	1,2	0,04	0	25	25	12	8	6,5	MI	22	
F3111AV15 ®	1/8"	1,5	0,06	0	16	16	12	8	6,5	MI	22	-10 +140
F3111AV20 3	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: F3111AV12@ => F3111AV12M156:

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).



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):

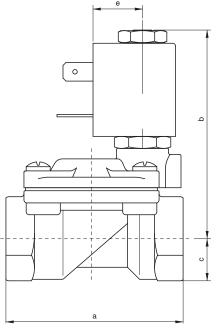
- Advance ring in silver
 Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
 For use with oxygen

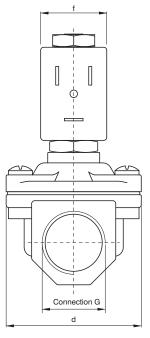
Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (g.)	150



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







Connection	а	b	С	d	е	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	Connection	Orifice	кv	Diff	erential p (bar)	rential pressure (bar)			ption	Coil ³		Temp.
"V"=Seals in FPM B = Coil	G ISO 228	(mm)	(m3/h)	Min	М	ax	AC	VA	DC	Series	Size	range
G = Coll	150 226			IVIIII	AC	DC	Inrush	Holding	Watt	061163		(°C)
F3177CV12 B	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22	
F3177DV12 6	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	-10 +140
F3177EV18 ®	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22	-10 +140
F3177FV25 B	1"	24	10,2	0,15	10	10	12	8	6,5	MI	22	

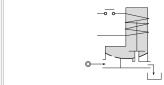
N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure) Example: F3177CV12@ => F3177CV12MI5:

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).

Diagram

Pneumatic symbol







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

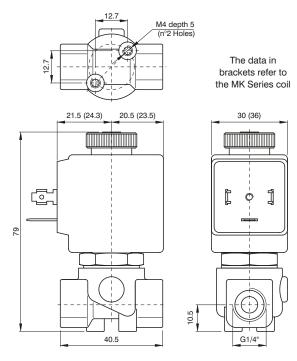
Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	Preferably with coil upwards



Valves and solenoid valves poppet system Series F300 - Brass body

2-way normally open with direct operated plunger solenoid valve





CODE	Connection	Orifice	кv	Diff	ferential p (bar)	ressure	Power	Consun	ption	Coil 3		Temp.
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range
G = Coll	3 = Coil ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Jenes	0.20	(°C)
F3206BV15 ®	1/4"	1,5	0,07	0	23	-	20	15	-	MG	30	
F3206BV20 B	1/4"	2,0	0,1	0	17	-	20	15	-	MG	30	
F3206BV25 B	1/4"	2,5	0,15	0	12	-	20	15	-	MG	30	
F3206BV35 B	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 B	1/4"	5,2	0,47	0	3	-	20	15	-	MG	30	
F3206BV15 B	1/4"	1,5	0,07	0	23	23	20	15	-	MK	36	-10 +140
F3206BV20 8	1/4"	2,0	0,1	0	17	17	40	30	27	MK	36	
F3206BV25 B	1/4"	2,5	0,15	0	12	12	40	30	27	MK	36	
F3206BV35 B	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 B	1/4"	5,2	0,47	0	3	3	40	30	27	MK	36	
F3206BV64 6	1/4"	6,4	0,64	0	3,5	3,5	40	30	27	MK	36	

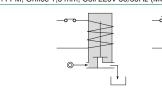
N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

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





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

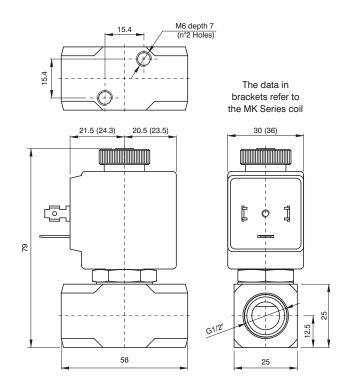
Diagram

Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm ² /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	Connection	Orifice	Orifice KV Differential pressure (bar) Power Consumption				ption	Co	Temp.			
ı	"V"=Seals in FPM	G	(mm)	(m3/h)	Min	М	ax	AC	VA	DC	Series	Size	range
ı	3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Series	OIZ6	(°C)
	F3206DV528	1/2"	5,2	0,47	0	3	-	20	15	-	MG	30	
I	F3206DV52 B	1/2"	5,2	0,47	0	3	3	40	30	27	MK	36	-10 +140
	F3206DV64 B	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).





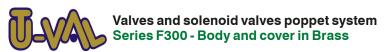




Operational characteristic

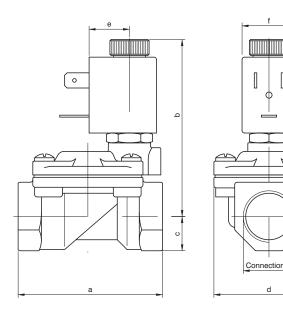
- Brass Body.
 Guide pipe in Brass.
 Mobile and fixed core in Stainless Steel
- Springs in Stainless SteelSealing assemblies in FPM
- OPTIONS (if requested):
- Surface treatment in chemical nickel-plating Guide pipe in Stainless Steel

50
25cSt
-10 +55
-10 +80
indifferent
360
440
-



2-way normally open servo-actuated diaphragm solenoid valve





Connection	а	b	С	d	е	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	Connection	Orifice	κv	Diff	erential p (bar)	ressure	Power	Consun	ption	Coil 3		Temp.	
"V"=Seals in FPM	G	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range	
3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	0120	(°C)	
F3207BV10 ®	1/4"	10	1,5	0,15	15	15	12	8	6,5	MI	22		
F3207CV10 B	3/8"	10	1,7	0,15	15	15	12	8	6,5	MI	22		
F3207DV12 6	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	-10 +140	
F3207EV18 ®	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22		
F3207FV25 B	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
- 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

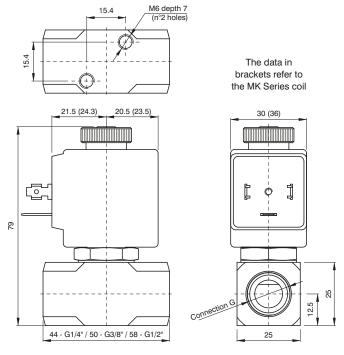
- OPTIONS (if requested):
 Surface treatment in chemical nickel-plating
 Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm 2/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	Connection	Orifice	κv	Diff	erential p (bar)	ressure	Power	Consun	nption	Co	Temp.	
"V"=Seals in FPM	G	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range (°C)
3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	0120	
F3210BV25 6	1/4"	2,5	0,15	0	10	-	20	15	-	MG	30	
F3210BV35 B	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	
F3210CV528	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	
F3210DV528	1/2"	5,2	0,47	0	3	-	20	15	-	MG	30	
F3210BV25 B	1/4"	2,5	0,15	0	10	10	40	30	27	MK	36	-10 +140
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	
F3210CV528	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 B	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**9** = > F3210BV25MG56:

2.	-way	normally open with direct operated plunger sciencia valve with Connector G (ISO228)	1/4",	, Seals in FPM, Oritice 2,5 mm, Coll 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

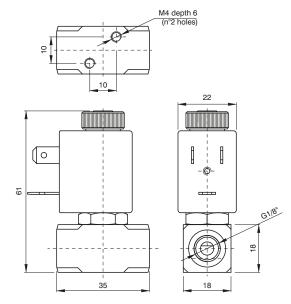
Tec	hnical	characteristic	

Maximum admitted pressure (bar) 50	50
Maximum fluid viscosity (mm 2/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	Connection	Orifice	κv	Diff	erential p (bar)	ressure	Power	Consun	ption	Coil 3		Temp.
"V"=Seals in FPM		(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range (°C)
3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Selles		
F3211AV12 B	1/8"	1,2	0,04	0	19	19	12	8	6,5	MI	22	
F3211AV15 B	1/8"	1,5	0,06	0	14	14	12	8	6,5	MI	22	-10 +140
F3211AV20 B	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'.

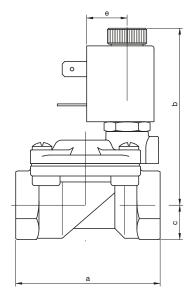
Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent

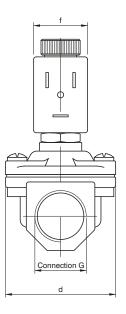




2-way normally open servo-actuated diaphragm solenoid valve in stainless steel AISI 316







Connection	а	b	С	d	е	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

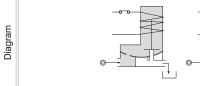
CODE	Connection	Orifice	κv	Diff	erential p (bar)	ressure	Power	Consum	ption	Co	il 😉	Temp.	
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range	
G - Coll	130 226				AC	DC	Inrush	Holding	Watt	Ochoo		(°C)	
F3277CV12 B	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22		
F3277DV12 B	1/2"	12	2,5	0,15	15	15	12	8	6,5	MI	22	-10 +140	
F3277EV18 ®	3/4"	18	5,5	0,15	13	13	12	8	6,5	MI	22	-10 +140	
F3277FV25 ®	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: F3277CV12@ => 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).

atic symbol





Operatio
Pneum

al 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):

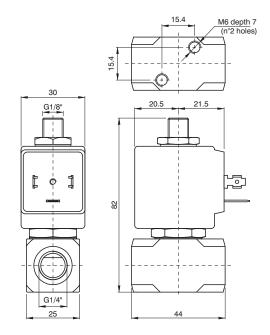
- Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
 Seals for use with foodstuff fluids.

Technical characteristic	
Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm 2/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

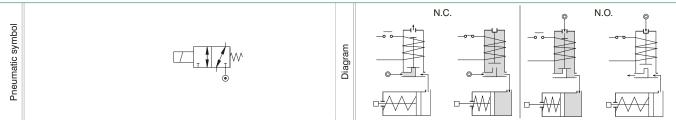




CODE	Connection	Ori	fice	ку	Diff	erential p (bar)	ressure	Power	Consum	ption	Coi	I ③	Temp.
"V"=Seals in FPM	G ISO 228	(m		(m³/h)	Min	М		AC	VA	DC	Series	Size	range
3 = Coil	100 220	alim.	scar.		IVIIII	AC	DC	Inrush	Holding	Watt	Selles	OIZO	(°C)
U Universal													
F3310BV25U ®	1/4"	2,5	2,4	0,16	0	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.



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

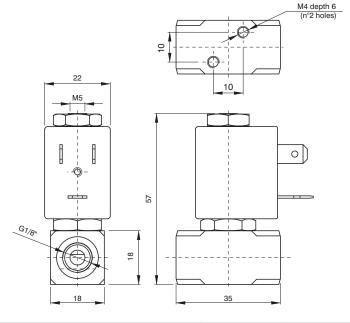
Technical characteristic Maximum admitted pressure (bar)

Maximum admitted pressure (bar)	Maximum running pressure
	+ 10%
Maximum fluid viscosity (mm 2/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



3-way direct acting solenoid valve

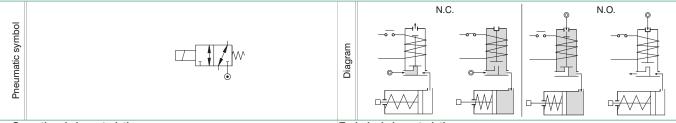




CODE	Connection	Ori	Orifice		Dif	Differential pressure (bar)		Power Consumption			C	oil 😉	Temp.
"V"=Seals in FPM 3 = Bobna	G ISO 228	(m	m)	KV (m³/h)	Min	М		AC	VA	DC	Series	Size	range (°C)
O - Dobila	100 220	alim.	scar.			AC	DC	Spunto	Regime	Watt	Ochos		(0)
U Universal													
F3311AV15U 3	1/8"	1,5	1,5	0,06	0	6	6	12	8	6,5	MI	22	-10 +140

Example: F3311AV15G(3) => F3311AV15GMI5:

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.



Operational characteristic

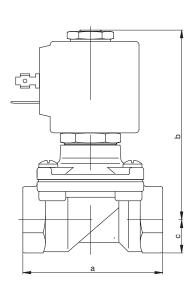
- Stainless Steel Body
- Guide pipe in Stainless Steel Mobile and fixed core in Stainless Steel
- Springs in Stainless SteelSealing assemblies in FPM
- OPTIONS (if requested):
- Advance ring in silver
 Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
- Exhaust with hose mount.

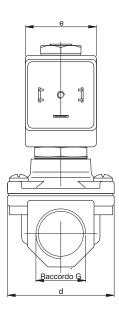
Maximum admitted pressure (bar)	Maximum running pressure
	+ 10%
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (g.)	150



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







Connection	а	b	С	d	е	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	Oritice		Onnection Orifice KV Differential pressure (bar) Power Consumption		nption	Co	Temp.					
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)	Min	М		AC	VA	DC	Series	Size	range
9 - 0011	100 220				AC	DC	Inrush	Holding	Watt			(°C)
F3108CV12 B	3/8"	12	2	0	10	-	20	15	-	MG	30	
F3108DV12 B	1/2"	12	2.2	0	10	-	20	15	-	MG	30	
F3108CV12 B	3/8"	12	2	0	12	10	40	30	27	MK	36	
F3108DV12 B	1/2"	12	2.2	0	12	10	40	30	27	MK	36	-10 +140
F3108EV18 ®	3/4"	18	4.5	0	9	-	40	30	-	MK	36	-10 + 140
F3108FV25 B	1"	24	8.5	0	7	-	40	30	-	MK	36	
F3108EV18C 3	3/4"	18	4.5	0	-	9	-	-	27	MK	36	
F3108FV25C B	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).



- 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

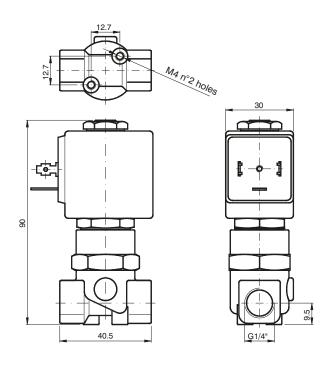
- OPTIONS (if requested):
- Surface treatment in chemical nickel-plating

Maximum admitted pressure (bar)	20
Maximum fluid viscosity (mm 2/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"

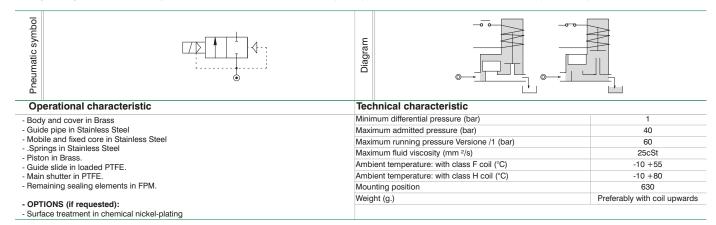




ſ	CODE "V"=Seals in FPM G = Coil SO 228	Connection	Connection	Connection	Connection	Connection	Orifice	кv	Diff	erential p (bar)	ressure	Power	Consun	nption	Co	il 😉	Temp.
		(mm)	(m³/h)	Min	М	ax	AC	AC VA		Series	Size	range					
	(a) = Coll	150 228		' '	IVIIII	AC	DC	Inrush	Holding	Watt	Selles	OIZO	(°C)				
Г	F3119BV52 B	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).



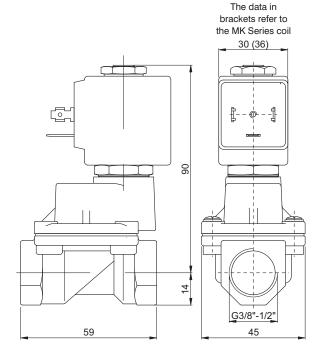
Series F300 - Brass body



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

Valves and solenoid valves poppet system





	CODE	Connection	Orifice	ΚV	Differential pressure (bar)			Power	Consum	ption	Co	il 😉	Temp.
11"	V"=Seals in FPM	G	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range
	3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Series	0126	(°C)
	F3119CV12 B	3/8"	12	2	1	30	30	20	15	10	MG	30	
	F3119DV12 B	1/2"	12	2.2	1	30	30	20	15	10	MG	30	-10 +140
	F3119CV12/1 B	3/8"	12	2	1	50	50	40	30	27	MK	36	-10 +140
	-3119DV12/1 ®	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).



Operational characteristic

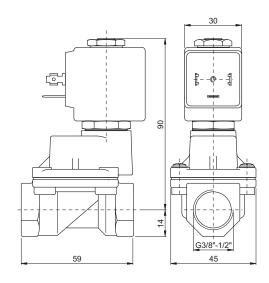
- Body and cover in Brass
 Guide pipe in Stainless Steel
 Mobile and fixed core in Stainless Steel
- .Springs in Stainless Steel
 Piston in Brass.
- Guide slide in loaded PTFE.
 Main shutter in PTFE.
- Remaining sealing elements in FPM.
- OPTIONS (if requested):
 Surface treatment in chemical nickel-plating

Minimum differential pressure (bar)	1
Maximum admitted pressure (bar)	40
Maximum running pressure Versione /1 (bar)	60
Maximum fluid viscosity (mm 2/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



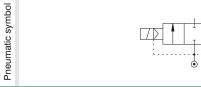
2-way normally closed servo-actuated piston solenoid valve for use with steam

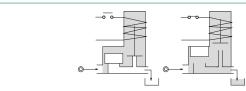




CODE	Connection	Orifice	кv	Diff	erential p (bar)	ressure	Power	Consum	ption	Co	il 😉	Temp.	
"V"=Seals in FPM		(mm)	(m³/h)	Min	M		AC	VA	DC	Series	Size	range	
3 = Coil	ISO 228			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	0120	(°C)	
F3119CW12/18	3/8"	12	2	2,5	9	9	20	15	10	MG	30	-10 +180	1
F3119DW12/1 B	1/2"	12	2.2	2,5	9	9	20	15	10	MG	30	-10 +100	l

Example: F3119DW12/16 => 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).





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 Stainless Steel.
- Guide slide in loaded PTFE.
 Sealing elements in PFTE/FPM.

- OPTIONS (if requested):
 Surface treatment in chemical nickel-plating
 Steam sealing up to +160°C

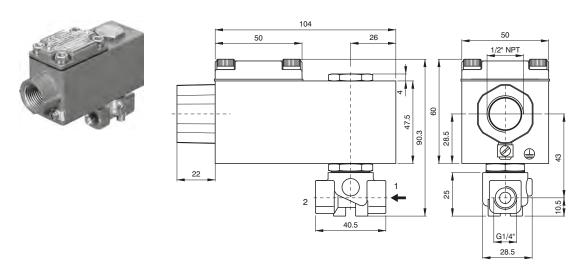
Technical characteristic

Diagram

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 "V"=Seals	Connection	Orifice	ice KV		Differential pressure (bar)		Power Consumption		Temp.
in FPM	G ISO 228	(mm)	(m³/h)	Min	M	ax	AC	DC	range
Coil	100 220				AC	DC	Inrush	Watt	(°C)
FX3106BV35 ®	1/4"	3,5	0,32	0	10	8	12	8	-10 +140
FX3106BV45 ®	1/4"	4,5	0,41	0	6,5	3,5	12	8	-10 -140

Coil 3 Series A6 (CURRENT)
A6B=24 Volt (AC 50/60Hz)
A6E=220/230 Volt (AC 50/60Hz)
A60=12 Volt (DC)
A61=24 Volt (DC)

Valves and solenoid valves poppet system

Series F300 - Brass body

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).



Operational characteristic

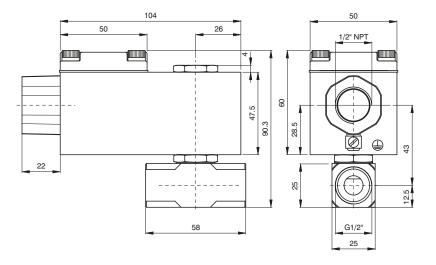
- Brass Body Container in light red coloured alloy
- Electrical connection 1/2" NPT Sealing elements in FPM
- OPTIONS (if requested):
- Manual operation
 Surface treatment in chemical nickel-plating
- Inserted stainless steel seating

Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm 2/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	Connection	Orifice	Orifice	ction Orifice		Diffe	erential p (bar)	ressure	_	wer imption	Temp.
in FPM	G ISO 228	(mm)	KV (m³/h)	Min	М	ax	AC	DC	range		
3 = Coil	130 220			IVIIII	AC	DC	Inrush	Watt	(°C)		
FX3106DV52 6	1/2"	5,2	0,47	0	4	1,8	12	8	-10 +140		
FX3106DV64 6	1/2"	6,4	0,64	0	3	1	12	8	-10 -140		

Coil 3 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.

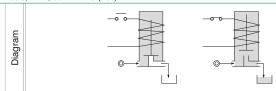
Example: FX3106DV52@ => FX3106DV52A60:

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





Operational characteristic

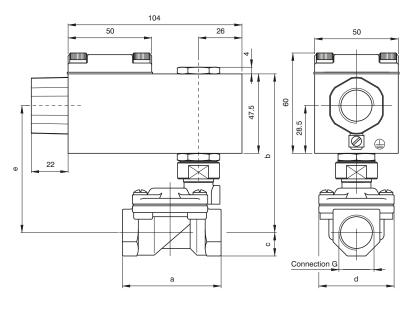
- Brass Body Container in light red coloured alloy
- Electrical connection 1/2" NPT Sealing elements in FPM
- OPTIONS (if requested):
- Manual operation
 Surface treatment in chemical nickel-plating
- Inserted stainless steel seating

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



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	а	b	С	d	е	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	Connection	Orifice KV		Orifice KV		Dif	ferential p (bar)		Power Co	Temp.
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC	DC	range	
3 = Coil	130 226			IVIIII	AC	DC	Inrush	Watt	(°C)	
FX3107BV10 ®	1/4"	10	1,5	0,15	15	15	12	8		
FX3107CV12 B	3/8"	12	2,2	0,15	15	15	12	8		
FX3107DV12 8	1/2"	12	2,5	0,15	15	15	12	8	-10 +140	
FX3107EV18 B	3/4"	18	5,5	0,15	13	13	12	8		
FX3107FV25@	1"	24	10.2	0.15	10	10	12	8		

Diagram

Coil 3
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.

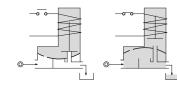
 Example: FX3107BV101@ => FX3107BV101A60:

 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





Operational characteristic

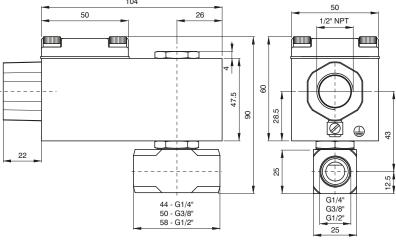
- Body and cover in Brass
- Container in light red coloured alloy
- Electrical connection 1/2" NPTSealing elements in FPM
- OPTIONS (if requested):
- Surface treatment in chemical nickel-plating
- Version with slowed commutation

Minimum differential pressure (bar)	0,15
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm 2/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	Connection	Orifice	Orifice KV		ferential p (bar)	ressure	Power Co	Temp.	
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)	Min	Max		AC	DC	range
3 = Coil	130 220			IVIIII	AC	DC	Inrush	Watt	(°C)
FX3110BV25 B	1/4"	2,5	0,15	0	16	14	12	8	
FX3110BV35 B	1/4"	3,5	0,32	0	10	8	12	8	
FX3110BV45 B	1/4"	4,5	0,41	0	6,5	3,5	12	8	
FX3110CV35 B	3/8"	3,5	0,32	0	10	8	12	8	-10 +140
FX3110CV52 B	3/8"	5,2	0,47	0	4	1,8	12	8	-10 +140
FX3110DV35 B	1/2"	3,5	0,32	0	10	8	12	8	
FX3110DV52 B	1/2"	5,2	0,47	0	4	1,8	12	8	
FX3110DV64 B	1/2"	6,4	0,64	0	3,5	1	12	8	

Coil 3 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.

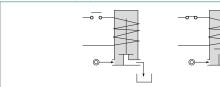
Example: FX3110BV25@ => FX3110BV25A60:

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





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

Diagram

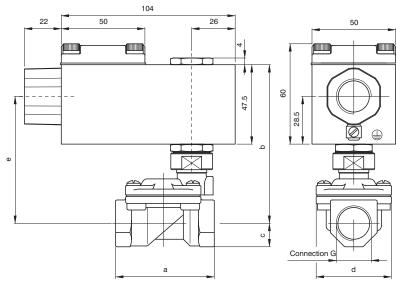
Maximum admitted pressure (bar)	100
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature (°C)	-10 +40
Mounting position	with coil upwards
Weight (g.)	660



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



Valves and solenoid valves poppet system Series F300 - Body and cover in Stainless Steel



Connection G	а	b	С	d	е	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	Orifice	κv	Diff	erential p (bar)	ressure	Power Co	nsumption	Temp.						
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h) Min		(m3/h)		(m3/h)		(m3/h)		М	ax	AC	DC	range
3 = Coil				IVIII		DC	Inrush	Watt	(°C)						
FX3177CV121 B	3/8"	12	2,2	0,15	15	15	12	8							
FX3177DV121 B	1/2"	12	2,5	0,15	15	15	12	8	-10 +140						
FX3177EV181 B	3/4"	18	5,5	0,15	13	13	12	8	-10 +140						
FX3177FV251 B	1"	24	10,2	0,15	10	10	12	8							

Diagram

Coil 3 Series A6 CURRENT **A6B**=24 Volt (AC 50/60Hz) **A6E**=220/230 Volt (AC 50/60Hz) A60=12 Volt (DC) A61=24 Volt (DC)

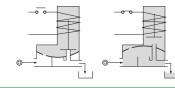
N.B. The solenoid valve is suited for intercepting only fluids that are NOT potentially explosive.

Example: FX3177CV1216 => 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 (A60).

Pneumatic symbol





Operational characteristic

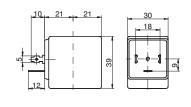
- Body and cover in Stainless Steel
- Container in light red coloured alloy
 Electrical connection 1/2" NPT
 Sealing elements in FPM

- OPTIONS (if requested):
 Version with slowed commutation

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

MG Series coil (Size 30 mm), class F





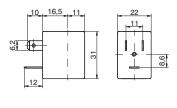


Options: Electrical connection via cables Special voltages and powers.

Operational cha	racteristic						
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





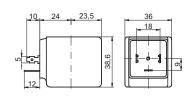


Options: Electrical connection via cables Special voltages and powers.

Operational char	acteristic						
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 **XME**

56=24 Volt (AC 50/60Hz) 58=220/230 Volt (AC 50/60Hz)

VOLTEGE

5=24 Volt (DC) 4 = 12 Volt (DC)

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Options: Electrical connection via cables Special voltages and powers.

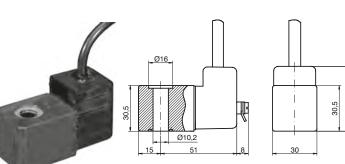
Operational char	acteristic						
Class of insulation	Tolerance on AC voltage	Tolerance on DC voltage	Degree of protection with connector fitted	Continuous service	Electrical conn.	Connectors	Weight (g.)
F	+15% -10%	± 10%	IP00	ED100%	DIN 43650A	PG9 Codice 10349000	200

Options:

Electrical connection via cables

Special voltages and powers.

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



Operational char	acteristic					
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

Operational chara	acteristic					
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

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Α	

CODE	CODE	Connection	Actuator	С	R	К	Q	Т	Α	L	sw
AISI316	AISI304	G	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(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	CODE	Connection	ΚV	Actuator	Maximum ΔP (bar)		Piloting	Weight
AISI316	AISI304	G	m³h	(mm)	Above seat	Under seat	pressure (bar)	(g.)
PVF40115-316	PVF40115-304	1/2"	4,8	40	16	13		765
PVF50115-316	PVF50115-304	1/2"	4,8	50	16	14		952
PVF50120-316	PVF50120-304	3/4"	10	50	16	14	3 ÷ 8	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	3 ÷ 10	13003



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: $-10^{\circ}\text{C} \div + 80^{\circ}\text{C}$
- 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





Nicke Cable: 2m

XIIIIII Selisoi	· ·
el brass sensor, usable on valves size 2 inches for detection ON - OFF	

PVF. ⊕ .S					
	OUTPUT TYPE				
_	01 = NPN (N.C.)				
Ū	02= NPN (N.O.)				
	03 = PNP (N.C.)				
	04 = PNP (N.O.)				

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	