



SERIES F300, PVF and PVA COMPONENTS FOR FLUID CONTROL





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.

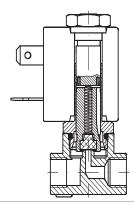
Solenoid valves are available with coils that conform to CESI 03 ATEX 344 certification for explosive environments.

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.

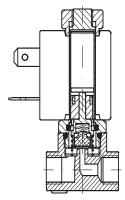
They can be **normally closed (2/2 NC)**, in this case the fluid is intercepted by the plunger at rest, with electricity applied, the input orifice is opened and the media reaches the intended use.



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.

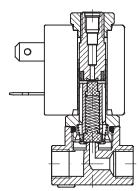
The solenoid valves can also work at zero pressure.



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.

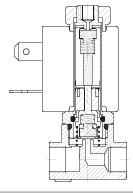


They can be **normally open (3/2 NO)** and in this case, at rest, the input orifice is open without electricity applied, the media reaches the intended use. Exhaust is closed.

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.



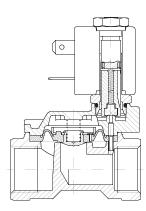


Servo actuated

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.

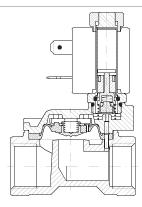
Applying electrical power, the secondary, or pilot, orifice opens leading to the exhaust of the fluid, which acts to close the main plunger. Greater force is thus applied when opening, the plunger is raised from the orifice and allows the media to flows to the output. In these versions, performance does 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 NO)**, 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 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



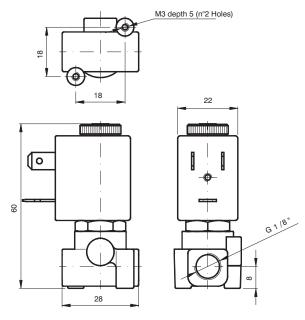
Resistance to fluids

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.

Fluid								
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 Hexane	Compatible							
Ethane	Compatible Compatible							
Ethanol	Non Compatible							
	Compatible							
Formaldehyde 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							







	CODE Connecti		Orifice	1 1		Differential pressure (bar)			Power Consumption			Coil (3)	
	"V"=Seals in FPM B = Bobina	PM G (mm)		(m³/h)	Min	Max		AC VA		DC Series		Size	range (°C)
	6 – воріна	100 220			IVIIII	AC	DC	Inrush	Holding	Watt	Series	OIZO	(0)
Ī	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 Example: F3105AV25b => 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).



Operational characteristic

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

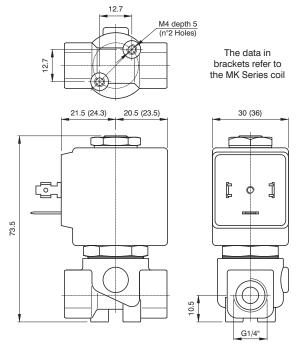
- OPTIONS (if requested):
- Manual operation
 Surface treatment in chemical nickel-plating
 Guide pipe in Stainless Steel
 For use with oxygen

Technical	characteristic

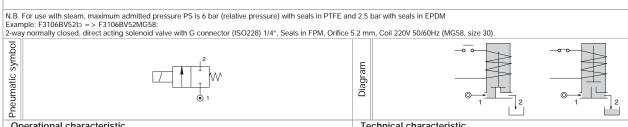
Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm ²/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Mounting position	indifferent
Weight (gr.) with MI Series Coil	130







CODE "V"=Seals in FPM	Connection	Orifice	KV	Dif	erential p (bar)	ressure	Power Consumption			Coil 3		Temp.
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	M	ax	AC	VA	DC	0:	Size	range
	150 228			IVIII	AC	DC	Inrush	Holding	Watt	Series	Size	(°C)
F3106BV15 ®	1/4"	1,5	0,07	0	30	26	20	15	10	MG	30	
F3106BV20 3	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 ®	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 6	1/4"	6,4	0,64	0	3	1	20	15	10	MG	30	-10 +140
F3106BV15 ®	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 6	1/4"	2,5	0,15	0	35	33	40	30	27	MK	36	
F3106BV356	1/4"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3106BV45 B	1/4"	4,5	0,41	0	14	13	40	30	27	MK	36	
F3106BV52 6	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	



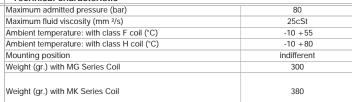
Operational characteristic

- 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):

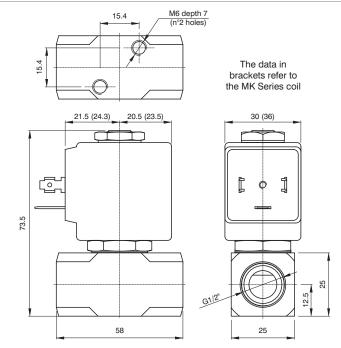
- Manual operation
- Surface treatment in chemical nickel-plating Inserted stainless steel seating
- For use with oxygen

Technical	characteristic







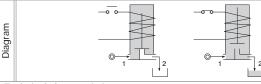


CODE "V"=Seals in FPM	Connection G	Orifice	κv	Differential pressure (bar)			Power Consumption			Coil (9		Temp.				
3 = Coil					G ISO 228	(mm)		(mm)	(m³/h)	Min	М	ax	AC	VA DC	Series	Size
	100 220			IVIIII	AC	DC	Inrush	Holding	Watt	Jenes	Oize	(0)				
F3106DV45 B	1/2"	4,5	0,41	0	6,5	3,5	20	15	10	MG	30					
F3106DV52 ®	1/2"	5,2	0,47	0	4	1,8	20	15	10	MG	30					
F3106DV64 B	1/2"	6,4	0,64	0	3	1	20	15	10	MG	30	-10 +140				
F3106DV45 B	1/2"	4,5	0,41	0	14	13	40	30	27	MK	36	-10 +140				
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: F3106DV52b = > 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).





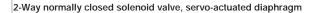
Operational characteristic

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

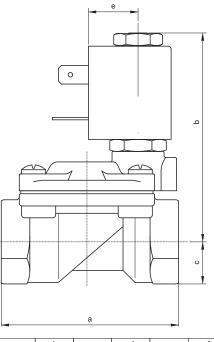
- OPTIONS (if requested): Manual operation Surface treatment in chemical nickel-plating For use with oxygen

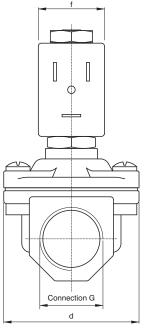
Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm ² /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent
Weight (gr.) with MG Series Coil	300
Weight (gr.) with MK Series Coil	380











CONNECTION	а	b	С	d	е	f	Weight (gr.)
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	Connection	Orifice	κv	Diff	erential p (bar)	ressure	Power Consumption			Co	Temp.	
B = Coil			(m³/h)	Min	Max		AC	VA	DC	Series	Size	range
150	130 220	130 226		IVIIII	AC	DC	Inrush	Holding	Watt	Selles	OIZE	(°C)
F3107BV10 ®	1/4"	10	1,5	0,15	15	15	12	8	6,5	MI	22	
F3107CV12 B	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	-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)

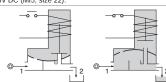
Example: F3107BV10b = > F3107BV10MI5:

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).



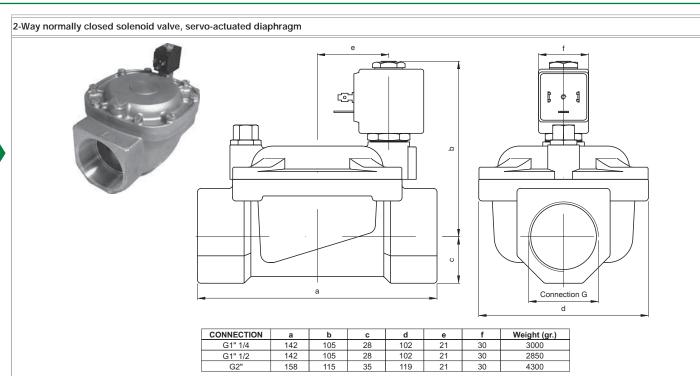






Operational characteristic Technical characteristic Body and cover in Brass Guide pipe in Stainless Steel Mobile and fixed core in Stainless Steel Springs in Stainless Steel Sealing assemblies in FPM 0,15 Minimum differential pressure (bar) Maximum admitted pressure (bar) 25 25cSt Maximum fluid viscosity (mm 2/s) Ambient temperature: with class F coil (°C) -10 +55 Ambient temperature: with class H coil (°C) -10 +80 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 (cit (1992)) Mounting position Preferably with coil upwards Version for vacuum (air/gas) Version for use with oxygen "SVGW/SSIGE" approved versions.





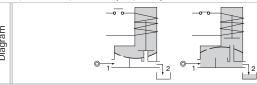
CODE "V"=Seals in FPM	Connection	Orifice	Orifice	KV	Diff	erential p (bar)	ressure	Power Consumption			Co	Temp.
B = Coil	G ISO 228	(mm) _(m3)		Min	Max		AC VA		DC	Series	Size	range
	100 220			'''''	AC	DC	Inrush	Holding	Watt	Selles	SIZO	(°C)
F3107GV37 B	1" 1/4"	37	18	0,15	10	10	20	15	10	MG	30	
F3107HV378	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: F3107GV37b => 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



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

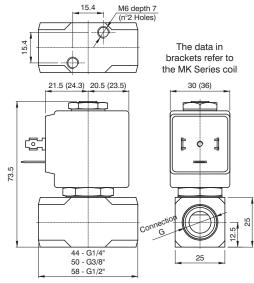
Minimum differential pressure (bar)	0,15 - 3
Maximum admitted pressure (bar)	80
Maximum fluid viscosity (mm ² /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80

Mounting position

Preferably with coil upwards







CODE "V"=Seals in FPM	Connection	Orifice	ΚV	Diff	erential p (bar)	ressure	Power	Consum	ption	Co	il 😉	Temp.
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	М	ах	AC	VA	DC	0:	Size	range
	150 226			IVIII	AC	DC	Inrush	Holding	Watt	Series	SIZE	(°C)
F3110BV25 ®	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®	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 B	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 B	1/2"	6,4	0,64	0	3,5	1	20	15	10	MG	30	
F3110BV25 B	1/4"	2,5	0,15	0	35	33	40	30	27	MK	36	-10 +140
F3110BV35 B	1/4"	3,5	0,32	0	20	19	40	30	27	MK	36	
F3110BV45 B	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 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) Example: F3110BV25b = > F3110BV25MG5; 2-way solengid pormally closed value direct plunger operation with Connector G. (IS)

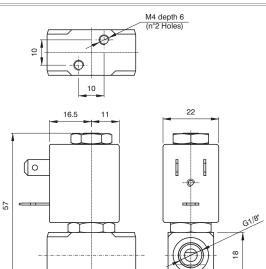
er operation with Connector G (ISO228) 1/4", Seals in FPM, Orifice 2,5 mm, Coil 24V DC (MG5, size 30).

2-11	ay solehold normally closed valve, direct plunger operation with connector of (150220) 174., Seals III 1	i ivi, c	51 IIICE 2,5 11III, COII 244 DC (NOS, SIZE 50).	
Pneumatic symbol		Diagram		2

Operational characteristic Technical characteristic Stainless Steel Body Guide pipe in Stainless Steel Maximum admitted pressure (bar) 100 Maximum fluid viscosity (mm ²/s) 25cSt Mobile and fixed core in Stainless Steel Springs in Stainless Steel Sealing assemblies in FPM 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 OPTIONS (if requested): 360 Manual operation Advance ring in silver For use with oxygen 440 Weight (gr.) with MK Series Coil







CODE "V"=Seals in FPM	Connection	Orifice	ΚV	Diff	ferential p (bar)	ressure	Power Consumption			Co	Temp.	
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC	VA	DC	Series	Size	range (°C)
	100 220		l lv		AC	DC	Inrush Holdin		Watt	Selles	0.20	(0)
F3111AV12 B	1/8"	1,2	0,04	0	25	25	12	8	6,5	MI	22	
F3111AV15 B	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	1

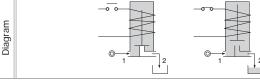
N.B. For use with steam, maximum admitted pressure PS is 6 bar (relative pressure)

Example: F3111AV12b = > 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).





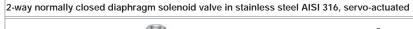


Operational characteristic

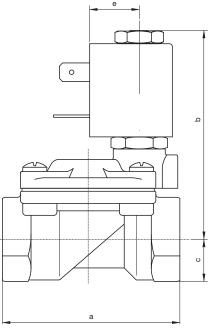
- Stainless Steel Body
 Guide pipe in Stainless Steel
 Mobile and fixed core in Stainless Steel
 Springs in Stainless Steel
 Sealing assemblies in FPM

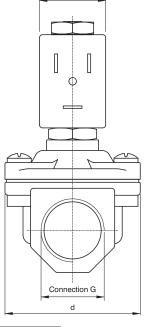
- OPTIONS (if requested):
- Advance ring in silver
 Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
 For use with oxygen

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









CONNECTION	а	b	С	d	е	f	Weight (gr.)
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	Connection	Orifice	κv	Diff	erential p (bar)	ressure	Power Consumption			Co	Temp.				
(B) = Coil	G ISO 228	(mm)	(m3/h)			mm)	Min	М	ax	AC	VA	DC	Series	Size	range (°C)
	100 220			IVIIII	AC	DC	Inrush Ho	Holding	olding Watt	Series	0.20	(0)			
F3177CV12 B	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22				
F3177DV12 B	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 ®	1"	24	10,2	0,15	10	10	12	8	6,5	MI	22				

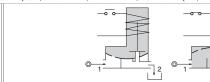
N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

Example: F3177CV12b = > 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).







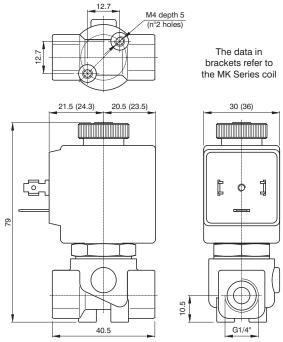
Operational characteristic Technical characteristic Body and cover in Stainless Steel. Guide pipe in Stainless Steel Mobile and fixed core in Stainless Steel Minimum differential pressure (bar) 0,15 Maximum admitted pressure (bar) 25 25cSt Maximum fluid viscosity (mm 2/s) Springs in Stainless Steel Sealing assemblies in FPM Ambient temperature: with class F coil (°C) -10 +55 Ambient temperature: with class H coil (°C) -10 +80 OPTIONS (if requested): Manual operation Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'. Seals for use with foodstuff fluids. Mounting position Preferably with coil upwards Version with slowed commutation Version for use with oxygen Advance ring in silver

Diagram



2-way normally open with direct operated plunger solenoid valve





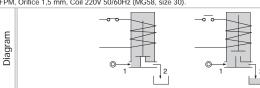
CODE "V"=Seals in FPM	Connection	Orifice	κv	Differential pressure (bar) Power C				Consum	ption	Co	Temp.	
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	М	Max		VA	DC	Series	Size	range
	130 226			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	0126	(°C)
F3206BV15 6	1/4"	1,5	0,07	0	23	-	20	15	-	MG	30	
F3206BV20 3	1/4"	2,0	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 B	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 B	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 B	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: F3206BV15b => 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).

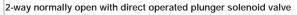




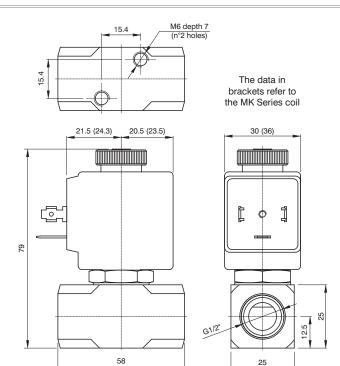
Operational characteristic

- 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 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







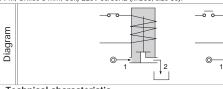
CODE "V"=Seals in FPM	Connection	Orifice	KV	Diff	Differential pressure (bar)			Power Consumption			Coil 3			
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC	VA				Series	Size	range
	150 220			IVIIII	AC	DC	Inrush Holding		Watt	Selles	OIZO	(°C)		
F3206DV52 ®	1/2"	5,2	0,47	0	3	-	20	15	-	MG	30			
F3206DV52 6	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: F3206DV30b => 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



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

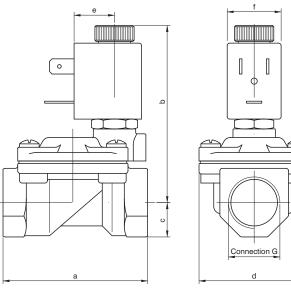
Technica	l characteristic

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	360
Weight (gr.) with MK Series Coil	440



2-way normally open servo-actuated diaphragm solenoid valve





							101 1 1 1 1 1
CONNECTION	а	b	С	d	е	f	Weight (gr.)
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	Connection	Orifice	ку	Diff	erential p (bar)	ressure	Power Consumption			Co	Temp.		
B = Coil	G ISO 228	(mm)	(m³/h)		Min	М	ax	AC	VA	DC	Series	Size	range (°C)
	100 220			IVIIII	AC	DC	Inrush	Holding	Watt	Jenes	0.20	(0)	
F3207BV10 B	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 ®	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		

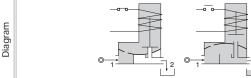
N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

Example: F3207BV10b = > 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).







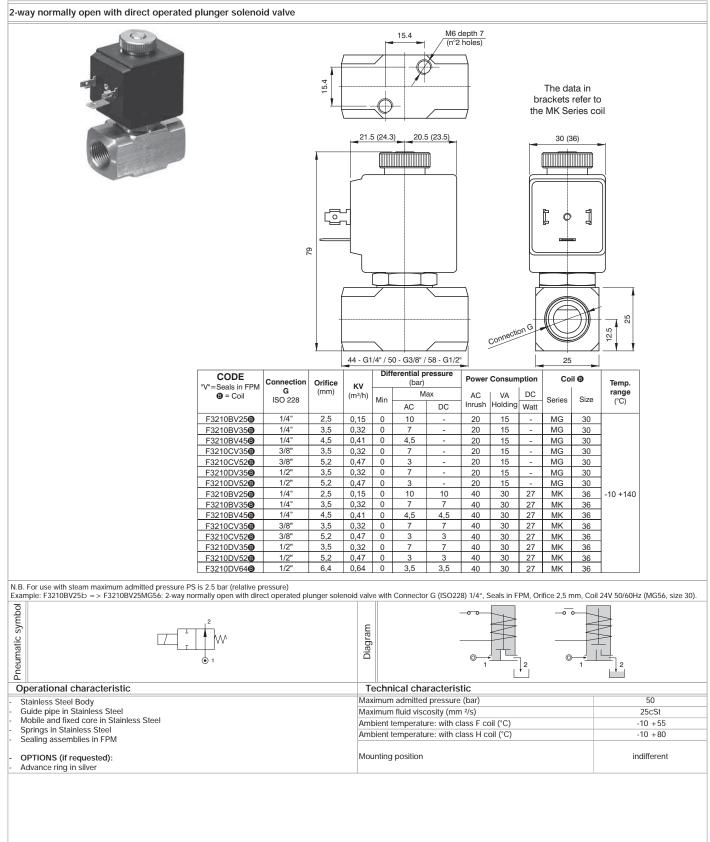
Operational characteristic

- 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'.

recrimed 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	indifferent

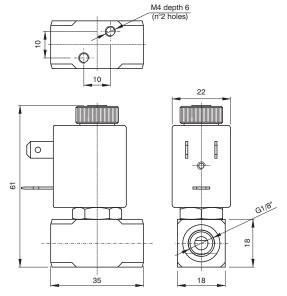






2-way normally open with direct operated plunger solenoid valve





CODE "V"=Seals in FPM Connection Orifice		Drifice KV Differential pro		ressure	Power	Consum	ption	Co	Temp.					
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC					Series	Size	range
	100 220			I WIIN		DC	Inrush	Holding Wa	Watt	Deries	0.20	(°C)		
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			

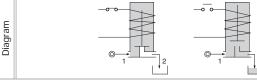
N.B. For use with steam maximum admitted pressure PS is 2.5 bar (relative pressure)

Example: F3211AV12b = > 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).







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'.

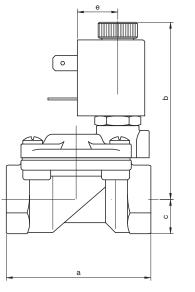
recrifical characteristic	
Maximum admitted pressure (bar)	50
Maximum fluid viscosity (mm 2/s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80
Mounting position	indifferent

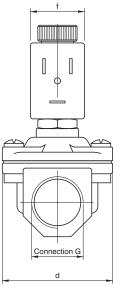
Body and cover in Stainless Steel, with Connector G (ISO228) 3/8" - 1"



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







CONNECTION	а	b	С	d	е	f	Weight (gr.)
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

Diagram

CODE "V"=Seals in FPM	Connection	Orifice	KV	Diff	erential p (bar)	ressure	Power Consumption			Co	Temp.		
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	М	ax	AC VA				Size	range (°C)	
	100 220			IVIIII	AC	DC	Inrush	Holding	Watt	Series	0.20	(0)	
F3277CV12 6	3/8"	12	2,2	0,15	15	15	12	8	6,5	MI	22		
F3277DV12 6	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 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: F3277CV12b => 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).









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 ² /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80

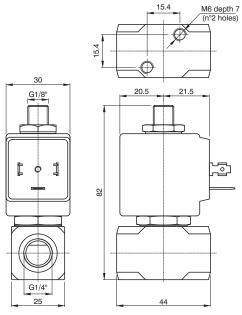
Mounting position

Preferably with coil upwards







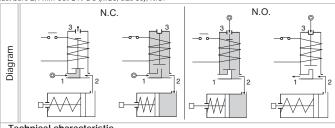


CODE	Connection	Ori	Orifice		Diff	erential p (bar)	ressure	Power	Power Consump		Power Consumption			Coil (3)		
"V"=Seals in FPM B = Coil	G ISO 228		nm)	KV (m³/h)	Min	М		AC	VA	DC	Series	Size	range			
G = Coll	130 220	Inlet	Exhaust		IVIIII	AC	DC	Inrush	Holding	Watt	Selles	Size	(°C)			
U Universal																
F3310BV25U8	1/4"	2,5	2,4	0,16	0	5	4	20	15	10	MG	30	-10 +140			

Example: F3310BV25Gb = > 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.







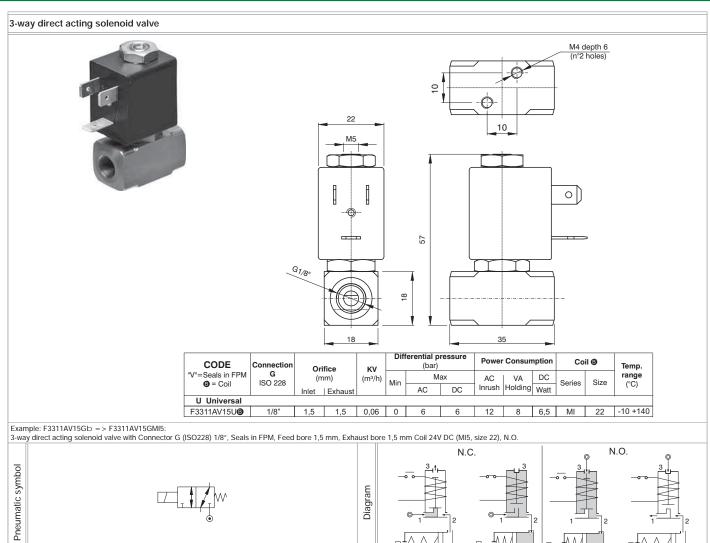
Operational characteristic

- 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

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.)	360





Technical characteristic

	Operational characteristic
-	Stainless Steel Body
-	Guide pipe in Stainless Steel
l	Mobile and fixed core in Stainless S

Springs in Stainless Steel Sealing assemblies in FPM

OPTIONS (if requested):

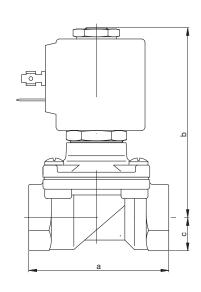
Advance ring in silver
Coil for potentially explosive environments meeting 'ATEX standards Ex m Serie XME'.
Exhaust with hose mount.

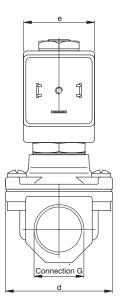
recrimed characteristic						
Maximum admitted pressure (bar)	Maximum running pressure + 10%					
Maximum fluid viscosity (mm ² /s)	25cSt					
Ambient temperature: with class F coil (°C)	-10 +55					
Ambient temperature: with class H coil (°C)	-10 +80					
Mounting position	indifferent					
Weight (g.)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



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





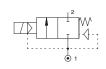


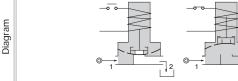
CONNECTION	а	b	C	d	е	f	Weight (g.) size 2	Weight (g.) size 5
G3/8" Ø12	59	83	14	45	16	36	0,50	0,58
G1/2"	59	83	14	45	16	36	0,45	0,53
G3/4"	79	90	18	55		36	-	0,75
G1"	96	101	20	72		36	-	1,10

CODE "V"=Seals in FPM	Connection Orifice		κv	Differential pressure (bar)			Power	Consum	ption	Coil (3		Temp.
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	Max		AC VA		DC	Series	Size	range
	130 226			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	OIZO	(°C)
F3108CV12 6	3/8"	12	2	0	10	-	20	15	-	MG	30	
F3108DV12 ®	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 ®	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 ®	3/4"	18	4.5	0	-	9	-	-	27	MK	36	
F3108FV25C 3	1"	24	8.5	0	-	8	-	-	27	MK	36	

Example: F3108DV12b => 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).







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

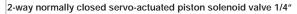
OPTIONS (if requested): Surface treatment in chemical nickel-plating

Technical characteristic

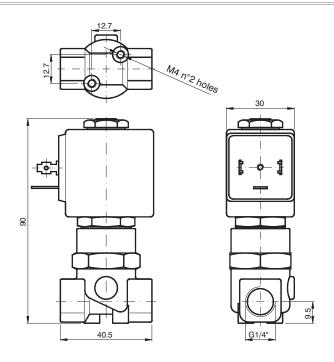
Maximum admitted pressure (bar)	25
Maximum fluid viscosity (mm ² /s)	25cSt
Ambient temperature: with class F coil (°C)	-10 +55
Ambient temperature: with class H coil (°C)	-10 +80

Mounting position Preferably with coil upwards





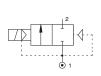




CODE "V"=Seals in FPM	Connection Orifice		ΚV	Differential pressure (bar)			Power	Consum	ption	Coil 3		Temp.
3 = Coil	G ISO 228	(mm)	(m³/h)	Min	Max		AC	VA	DC	Series	Size	range
	100 220			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	OIZO	(°C)
F3119BV52 ®	1/4"	5.2	0.47	1.5	50	50	20	15	10	MG	30	-10 +140

Example: F3119BV52b = > 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





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 Braiss.
 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

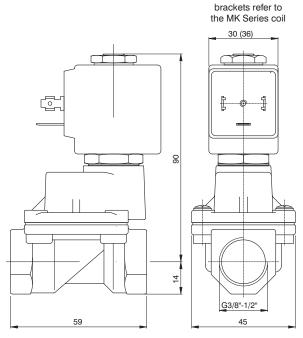
Diagram

Minimum differential pressure (bar)	1
Maximum admitted pressure (bar)	40
Maximum running pressure Version /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 (g.)	630



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

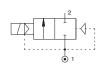


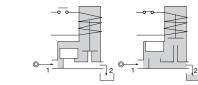


CODE "V"=Seals in FPM	Connection Orifice		κv	Differential pressure (bar)			Power Consumption			Coil 3		Temp.
B = Coil	G ISO 228	(mm)	(m³/h)	Min	Min		AC VA		DC	Series	Size	range
	100 220			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	0120	(°C)
F3119CV12 6	3/8"	12	2	1	30	30	20	15	10	MG	30	
F3119DV12 6	1/2"	12	2.2	1	30	30	20	15	10	MG	30	-10 +140
F3119CV12/1 B	3/8"	12	2	1	50	30	40	30	27	MK	36	-10 +140
F3119DV12/1 B	1/2"	12	2.2	1	50	30	40	30	27	MK	36	

Example: F3119DV12b = > 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).







The data in

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..

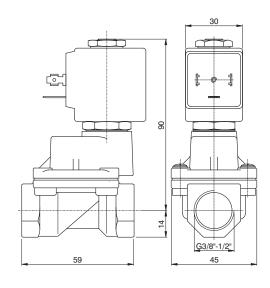
OPTIONS (if requested): Surface treatment in chemical nickel-plating

Minimum differential pressure (bar)	1
Maximum admitted pressure (bar)	40
Maximum running pressure Version /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

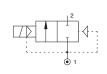


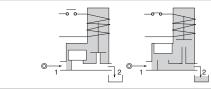


	CODE "V"=Seals in FPM	Connection	Orifice	ΚV	Differential pressure (bar)			Power Consumption			Coil ®		Temp.
	3 = Coil	G ISO 228	(mm)	(m³/h)	Min	M	ax	AC	VA	DC	Series	Size	range
		130 220			IVIIII	AC	DC	Inrush	Holding	Watt	Selles	J JIZE	(°C)
Ī	F3119CW12/1 B	3/8"	12	2	2,5	9	9	20	15	10	MG	30	-10 +180
Ī	F3119DW12/16	1/2"	12	2.2	2.5	9	9	20	15	10	MG	30	-10 +160

Example: F3119DW12/1b => 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





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):

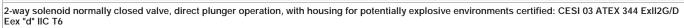
- Surface treatment in chemical nickel-plating Steam sealing up to +160°C

Technical characteristic

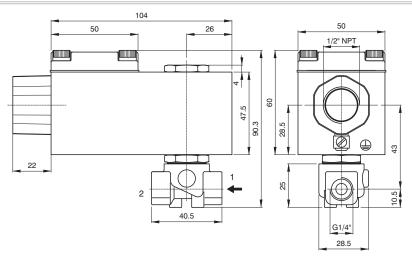
Diagram

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









	CODE "V"=Seals	Connection	Orifice	ce KV	l .	Differen ressure		Pov Consu		Temp.
	in FPM ISO 2		(mm)	(m³/h)	Min	Max		AC	DC	range (°C)
	B = Coil	100 220			IVIIII	AC	DC	Inrush	Watt	(0)
F	X3106BV35 6	1/4"	3,5	0,32	0	10	8	12	8	-10 +140
F	X3106BV45 ®	1/4"	4,5	0,41	0	6,5	3,5	12	8	-10 +140

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



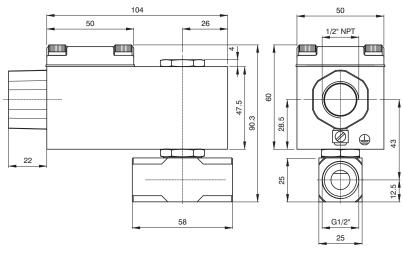
- Brass Body Container in light red coloured alloy Electrical connection 1/2" NPT
- Sealing elements in FPM
- OPTIONS (if requested):
- Manual operation
 Surface treatment in chemical nickel-plating
 Inserted stainless steel seating

rechnical characteristic	
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









CODE "V"=Seals	Connection	Orifice	κv	Differential pressure (bar)			Pov Consu		Temp.	
in FPM	G ISO 228	(mm)	(m³/h)	Min	Max		AC DC		range (°C)	
3 = Coil	100 220			IVIIII	AC	DC	Inrush	Watt	(0)	
FX3106DV52 B	1/2"	5,2	0,47	0	4	1,8	12	8	-10 +140	
FX3106DV64 B	1/2"	6.4	0.64	0	3	1	12	8	-10 +140	

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

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

Example: FX3106DV52b => 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 24V 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

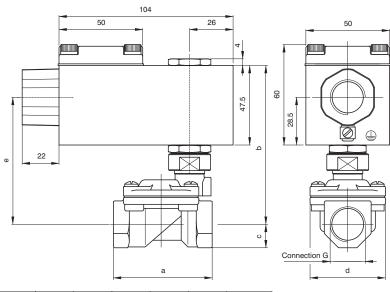
ı	ech	ınıcal	ch	arac	teristic

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		Diff	erential p (bar)	ressure	Power Co	nsumption	Temp.					
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)	(m3/h)		(m3/h)		(m3/h)		Min		AC	DC	range
3 = Coil	130 220			iviin	AC	DC	Inrush	Watt	(°C)					
FX3107BV10 6	1/4"	10	1,5	0,15	15	15	12	8						
FX3107CV12 8	3/8"	12	2,2	0,15	15	15	12	8						
FX3107DV12 6	1/2"	12	2,5	0,15	15	15	12	8	-10 +140					
FX3107EV186	3/4"	18	5,5	0,15	13	13	12	8						
FX3107FV25 ®	1"	24	10,2	0,15	10	10	12	8						

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

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

Example: FX3107BV101b => 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 24V DC (A60).



Diagram

Operational characteristic

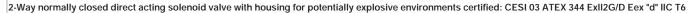
- Body and cover in Brass
- Container in light red coloured alloy Electrical connection 1/2" NPT
- Sealing elements in FPM
- OPTIONS (if requested): Surface treatment in chemical nickel-plating
- Version with slowed commutation

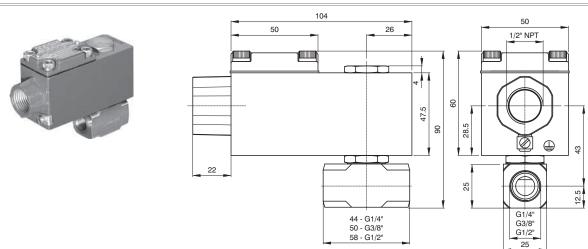
Technical characteristic

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

Mounting position Preferably with coil upwards







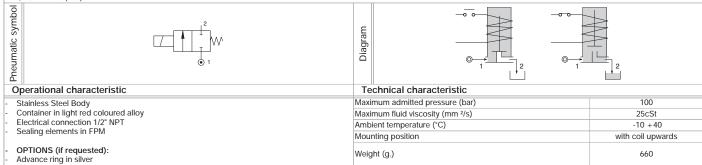
CODE	Connection	Orifice	κv	Differential pressure (bar)				wer Consumption	
"V"=Seals in FPM	G	(mm)	(m³/h)	N 41:	Max		AC	AC DC	
3 = Coil	ISO 228			Min	AC	DC	Inrush	Watt	(°C)
FX3110BV25 6	1/4"	2,5	0,15	0	16	14	12	8	
FX3110BV35 B	1/4"	3,5	0,32	0	10	8	12	8	
FX3110BV45 B	1/4"	4,5	0,41	0	6,5	3,5	12	8	
FX3110CV356	3/8"	3,5	0,32	0	10	8	12	8	-10 +140
FX3110CV528	3/8"	5,2	0,47	0	4	1,8	12	8	-10 +140
FX3110DV35 6	1/2"	3,5	0,32	0	10	8	12	8	
FX3110DV52 6	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	

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

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

 Example: FX3110BV25b => FX3110BV25A60:

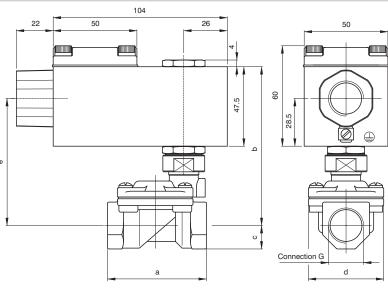
 2-Way normally closed direct acting solenoid valve with housing for potentially explosive environments certified: CESI 03 ATEX 344 ExII2G/D Eex "d" IIC T6, with Connector G (ISO228) 1/4", Seals in FPM, Orifice 2,5 mm, Coil 24V DC (A60).





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	а	b	С	d	е	Weight (gr.)
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

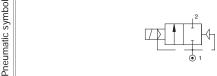
CODE	Connection	Orifice	κv	Diff	erential p (bar)	ressure	Power Co	ower Consumption						
"V"=Seals in FPM	G ISO 228	(mm)	(m³/h)							Max		AC	DC	range
3 = Coil	130 220			IVIIII	AC	DC	Inrush	Watt	(°C)					
FX3177CV121 B	3/8"	12	2,2	0,15	15	15	12	8						
FX3177DV121 3	1/2"	12	2,5	0,15	15	15	12	8	-10 +140					
FX3177EV181 3	3/4"	18	5,5	0,15	13	13	12	8	-10 +140					
FX3177FV251 6	1"	24	10,2	0,15	10	10	12	8						

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

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

Example: FX3177CV121b => 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 24V DC (A60).



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

Manualla a a a 101 - a	Destant be with a sile or
Ambient temperature (°C)	-10 +40
Maximum fluid viscosity (mm ² /s)	25cSt
Maximum admitted pressure (bar)	25
Minimum differential pressure (bar)	0,15

Mounting position Preferably with coil upwards



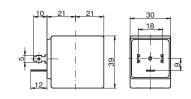
MG Series coil (Size 30 mm), class F

Ordering code

MGt

VOLTAGE 56=24 Volt (AC 50/60Hz) † 58=220/230 Volt (AC 50/60Hz) 5=24 Volt (DC)





Options: Electrical connection via cables

Special voltages and powers.

4=12 Volt (DC)

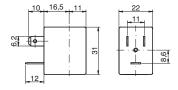
Operational char	acteristic						
Class of insulation	Tolerance on AC voltage	Tolerance on DC voltage	Degree of protection with connector fitted	Continuous service	Electrical conn.	Connectors	Weight (g.)
F	F +15% -10% ± 10%		IP65	ED100%	DIN 43650A	PG9 Code 10349000	120

MI Series coil (Size 22 mm), class F

Ordering code

	MIT
	VOLTAGE
	56=24 Volt (AC 50/60Hz)
t	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.

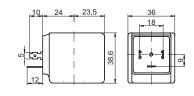
	Operational chara	cteristic						
Class of insulation Tolerance or		Tolerance on AC voltage	Tolerance on DC voltage	Degree of protection with connector fitted	Continuous service	Electrical conn.	Connectors	Weight (g.)
	F	+15% -10%	± 10%	IP65	ED100%	DIN 43650A	PG9 Code 10349000	50

MK Series coil (Size 36 mm), class H

Ordering code

	MKT
	VOLTAGE
	56=24 Volt (AC 50/60Hz)
t	58=220/230 Volt (AC 50/60Hz)
	5=24 Volt (DC)
	4 = 12 Volt (DC)





Options: Electrical connection via cables Special voltages and powers.

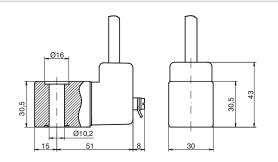
Operational chara	acteristic						
Class of insulation Tolerance on AC voltage Tolerance on DC voltage		Degree of protection without con- nector	Continuous service	Electrical conn.	Connectors	Weight (g.)	
Н	H +15% -10% ± 10%		IP00	ED100%	DIN 43650A	PG9 Code 10349001	200

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

Ordering code

	XMET								
	VOLTAGE								
	56=24 Volt (AC 50/60Hz)								
t	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 chara	cteristic					
Class of insulation Tolerance on AC voltage		Tolerance on DC voltage	Degree of protection without con- nector	Continuous service	Electrical conn.	Weight (g.)
Н	+15% -10%	± 10%	IP65	ED100%	3m cable.	250



Pneumatic valve with inclined seating



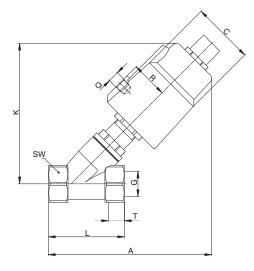


Table of dimensions

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	CODE	Connection	KV	Actuator	Maximum ΔP (bar)		Piloting	Weight
AISI316	AISI304	G	m³/h	(mm)	Above seat	Under seat	pressure (bar)	(gr.)
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		1062
PVF50125-316	PVF50125-304	1"	14	50	16	8		1371
PVF63125-316	PVF63125-304	1"	14	63	16	13	3 - 8	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

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 Material: Stainless Steel AISI 316/304
 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

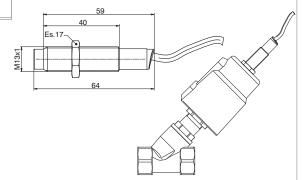
Ordering code

PVF.t.S

	OUTPUT TYPE
	01 = NPN (N.C.)
t	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



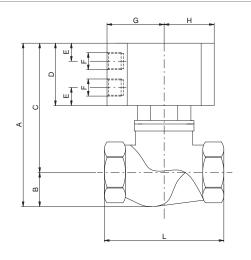


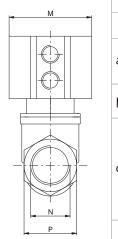
Operational characterist	ic				
Maximum current	Voltage field	Temperature (°C)	Detection Distance	Protection grade	Weight (gr.)
100 mA	10 - 30V DC	-10°C - +70°C	3mm (max) ± 10 %	IP67	68



"T" body version Pad valves







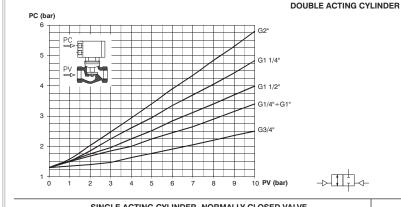
	Ordering code											
	PVA.B.a.p.T.c.s											
		ACTING										
	а	DE=Double acting										
	а	SC=Normally closed										
		SA=Normally open										
		PISTON										
	р	N=Non magnetic										
	·	M= Magnetic										
		CONNECTIONS										
		A=G1/4"										
		B=G3/8"										
		C=G1/2"										
	С	D=G3/4"										
		E=G1"										
		F=G1 1/4"										
		G=G1 1/2"										
		H=G2"										
		SEALS										
	_	N=NBR										
	3	V=FPM										

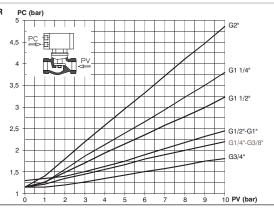
F=PTFE

TABLE OF DIMENSIONS

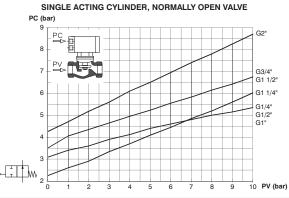
	Non m	agnetic v	ersion	Mag	netic ver	sion				TECHNICAL DATA							
Connection (N)	Α	С	D	Α	С	D	В	Е	F	G	Н	L	М	Р		Nominal Valve (Ø)	Weight (gr.)
G1/4"	93,5	77,5	41	97,5	81,5	45	16	10,25	G1/8"	32,5	28,5	64	47	25	Ø40	Ø13,5	350
G3/8"	93,5	77,5	41	97,5	81,5	45	16	10,25	G1/8"	32,5	28,5	64	47	25	Ø40	Ø13,5	350
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 Pneumax Genaral catalogue, chapter 4).





SINGLE ACTING CYLINDER, NORMALLY CLOSED VALVE G1" G1 1/2" G1/4"-G3/8" G1/2" G3/4"



Operational characteristic

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

Pressure curves

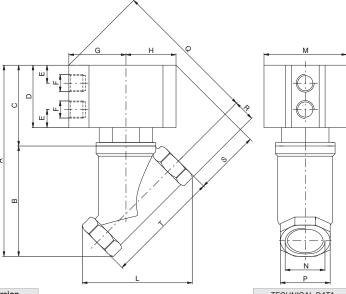
- Piston rod = Chromed stainelss steel Bushing, Bushing pad, Nut pad = Brass

Pneumatic cylinder fluid	Filtered and lubricated air or non
Valve fluid	Compatible fluid with gasket compounds available
Maximum working pressure (bar)	10
Temperature °C (non magnetic piston, NBR seals)	-5 / + 70
Temperature °C (non magnetic piston, FPM seals)	-5 / + 150
Temperature °C (non magnetic piston, PTFE seals)	-5 / + 150
Temperature °C (magnetic piston, NBR, FPM, PTFE seals)	-5 / + 70



"Y" body version Pad valves





Ordering code

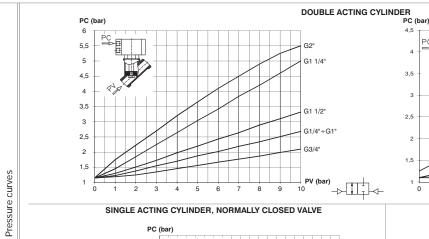
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	ACTING
2	DE=Double acting
	SC=Normally closed
	SA=Normally open
	PISTON
p	N=Non magnetic
ľ	M= Magnetic
	CONNECTIONS
	A=G1/4"
	B=G3/8"
	C=G1/2"
C	D=G3/4"
	E=G1"
	F=G1 1/4"
	G=G1 1/2"
	H=G2"
	SEALS
	N=NBR
3	V=FPM
	F=PTFE

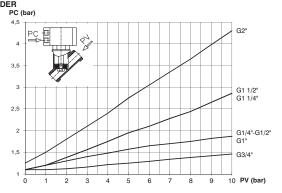
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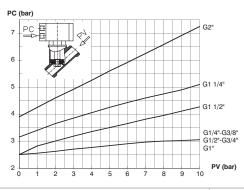
IADLL OF	DIVIDING TO STATE OF THE STATE																						
	Non magnetic version Magnetic version																TECHNICAL DATA						
Connection (N)	Α	С	D	Q	s	Α	С	D	Q	s	В	E	F	G	н	L	М	Р	R	Т	Actuator (Ø)	Nominal Valve (Ø)	
G1/4"	121	71	45	95	51	124	74	48	97	53	50	10,3	G1/8"	32,5	28,5	52	47	21	10,5	50	Ø40	Ø13	350
G3/8"	121	71	45	95	51	124	74	48	97	53	50	10,3	G1/8"	32,5	28,5	52	47	21	10,5	50	Ø40	Ø13	350
G1/2"	127	71	45	97	54	130	74	48	99	56	56	10,3	G1/8"	32,5	28,5	57	47	27	13,5	56	Ø40	Ø13	400
G 3/4"	148	80	48	119	66	201	133	104	175	92	68	11,3	G1/8"	44	40	70	70	32	16	66	Ø63	Ø18	850
G1"	159	75	48	123	75	215	131	104	175	92	84	11,3	G1/8"	44	40	82	70	38	19	78	Ø63	Ø21,5	850
G1 1/4"	184	91	65	140	70	231	138	112	172	96	93	11,3	G1/8"	44	40	105	70	47	23,5	101	Ø63	Ø30	1200
G1 1/2"	180	99	81	173	85	255	129	111	187	107	126	13,8	G1/8"	56	49	125	90	55	27,5	113	Ø80	Ø36	2000
G2"	246	106	88	182	88	269	129	111	203	109	140	13,8	G1/8"	56	49	136	90	68	34	125	Ø80	Ø46	2300

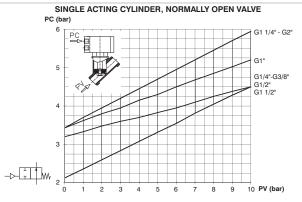
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SINGLE ACTING CYLINDER, NORMALLY CLOSED VALVE







Operational characteristic

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

Technical characteristic	
Pneumatic cylinder fluid	Filtered and lubricated air or non
Valve fluid	Compatible fluid with gasket compounds available
Maximum working pressure (bar)	10
Temperature °C (non magnetic piston, NBR seals)	-5 / + 70
Temperature °C (non magnetic piston, FPM seals)	-5 / + 150
Temperature °C (non magnetic piston, PTFE seals)	-5 / + 150
Temperature °C (magnetic piston, NBR, FPM, PTFE seals)	-5 / + 70





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