

Series PG - for compressed air and vacuum



The large flow valves and solenoid poppet valves for compressed air and vacuum. Are manufactured for 3/2 and 2/2 versions only, either normally close and normally open.

Construction characteristics				
	G 1/2"	G 3/4"	G 1"	G 1 1/2"
Body, operator and end cover		Alumi	nium	
Actuators rod		Ste	eel	
Bottom plates		Alumi	nium	
Seals and poppets		NB	BR	
Springs	Stainless steel Stainless steel			
Pin guide		Stainles	ss steel	
Pistons	Acetal resin			

Use and maintenance

These valves have a mean life of 10 to 15 million cycles under normal operating conditions.

Lubrication is not required for good operation but we recommend good filtration to avoid dirty deposit causing malfunction.

Please ensure that the valve is being used according with the manufacturers specification, such as air pressure and temperature.

The exhaust port of the distributor has to be protected in a dusty and dirty environment.

For these products, according to the construction technique and special application, is not required any maintenance with parts replacement. When necessary it is sufficient to clean the internal parts.

When it is used the solenoid valves with internal pilot, either for air or vacuum, inlet flow rate must be equal or higher that the required consumption flow rate.

Otherwise is better choose the external pilot version.



Pneumatic - Spring

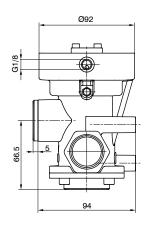
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Operational characteristics				
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous			
Max working pressure (bar)	10			
Minimum piloting pressure (bar)	2,5			
Temperature °C	-5 + 7 0			
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	12500			
Orifice size (mm)	25			
Working ports size	G1"			
Dilat parta siza	G1/9"			

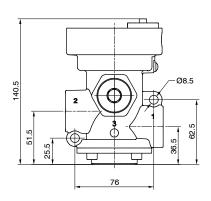
Coding: PG1A****11E****000000

	WAYS NUMBER
0	2 = 2 ways, 2 positions
	3 = 3 ways, 2 positions
9	FUNCTION
	A = Normally Open (only for 3 ways)
	C = Normally Closed
	•

2/2







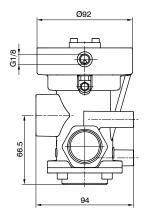
N.C. Inlet port 1 Outlet port 2 Exhaust port 3 (closed)

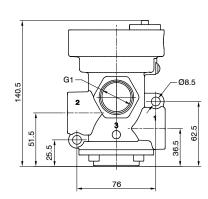
Weight 1231,5 g

PG1A211E**6**00000

3/2







N.O. Inlet port 3 Outlet port 2 Outlet port 1



N.C. Inlet port 1 Outlet port 2 Exhaust port 3



Weight 1139,5 g

PG1A311E**@**00000

Solenoid-Spring

Coding: PG1A 001 000

WAYSNUMBER 2 = 2 ways, 2 positions 3 = 3 ways, 2 positions

Operational characteristics		
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous	
Max working pressure (bar)	10	
Minimum piloting pressure (bar)	2,5	
Temperature °C	-5 +50	
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	12500	
Orifice size (mm)	25	
Working ports size	G1/2"	
Pilot ports size	G1/8"	
Responce time according to ISO 12238, activation time (ms)	27 (internal pilot version)	
Responce time according to ISO 12238, deactivation time (ms)	88 (internal pilot version)	

30 mm SOLENOID COIL

Connection: DIN 43650 "A" SHAPE

VERSION V A = Selffeeding E = External feeding **FUNCTION** $\mathbf{A} = \text{Normally Open (only for 3 ways)}$ $\mathbf{C} = \mathsf{Normally}\,\mathsf{Closed}$ VOLTAGE (22 MM SOLENOID COIL)

S40B0 = 12 VDC **S50B0** = 24 VDC

S60B0 = 24 V 50/60 Hz **S70B0** = 110 V 50/60 Hz **S80B0** = 230 V 50/60 Hz 10000 = Without solenoid coil VOLTAGE (30 MM SOLENOID COIL) **S40C0** = 12 VDC

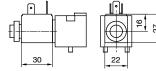
S50C0 = 24 VDC **S60C0** = 24 V 50/60 Hz O S70C0 = 110 V 50/60 Hz

S80C0 = 230 V 50/60 Hz 10000 = Without solenoid coil

2/2





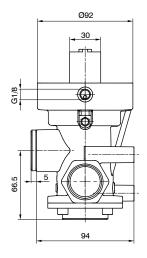


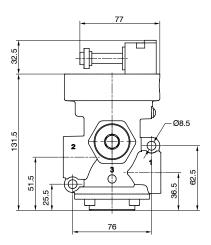
22 mm SOLENOID COIL

Connection: DIN 43650 INDUSTRIAL "B" SHAPE









Internal pilot - N.C.

Inlet port 1 Outlet port 2 Exhaust port 3 (closed)



External pilot - N.C. Outlet port 2 Exhaust port 3 (closed)



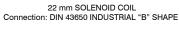
Weight 1290 g

PG1A201**000**

3/2

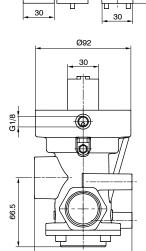
30 mm SOLENOID COIL Connection: DIN 43650 "A" SHAPE

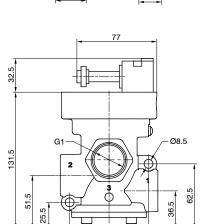




16 27







76

Internal pilot - N.O. Inlet port 3 Outlet port 2 Outlet port 1



Internal pilot - N.C.

Inlet port 1 Outlet port 2 Exhaust port 3



External pilot - N.O. Inlet port 3 Outlet port 2

Outlet port 1



External pilot - N.C. Inlet port 1 Outlet port 2 Exhaust port 3



Weight 1198 g

PG1A301**Ø₽**



Pneumatic - Spring

Minimum piloting pressure (bar)

		W
Vacuum	0	2
2		3
-5 +70		F
25	9	Α
G1"		С

	WAYS NUMBER
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	C = Normally Closed

Coding: PG1V****11E****00000

2/2

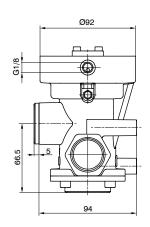
Fluid

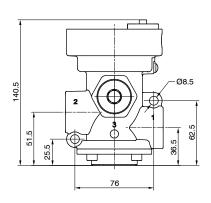
Temperature °C Orifice size (mm) Working ports size

Pilot ports size

Max. vacuum (mmHg)







G1/8"

758,5

N.C. Pump 1 Outlet port 2 Exhaust port 3 (closed)

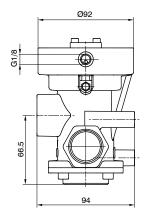
12 - 1

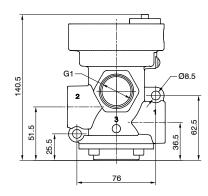
Weight 1231,5 g

PG1V211E**6**00000

3/2







N.O. Pump 3 Outlet port 2 Outlet port 1

12 - 12 - 10 10

N.C. Pump 1 Outlet port 2 Exhaust port 3



Weight 1139,5 g

PG1V311E**@**00000



Solenoid-Spring

Coding: PG1V 1001 1000

Operational characteristics		
Fluid	Vacuum	
Minimum piloting pressure (bar)	2 (external pilot version)	
Temperature °C	-5 +50	
Orifice size (mm)	25	
Working ports size	G1"	
Pilot ports size	G1/8"	
Max. vacuum (mmHg)	758,5	
Minimum operating vacuum (mmHg)	250 (internal pilot version)	

30 mm SOLENOID COIL

Connection: DIN 43650 "A" SHAPE

WAYS NUMBER 2 = 2 ways, 2 positions 3 = 3 ways, 2 positions VERSION V A = Selffeeding $\mathbf{E} = \mathsf{External} \, \mathsf{feeding}$ **FUNCTION** $\mathbf{A} = \text{Normally Open (only for 3 ways)}$

 $\mathbf{C} = \mathsf{Normally}\,\mathsf{Closed}$ VOLTAGE (22 MM SOLENOID COIL) **S40B0** = 12 VDC **S50B0** = 24 VDC

O **S60B0** = 24 V 50/60 Hz **S70B0** = 110 V 50/60 Hz **S80B0** = 230 V 50/60 Hz 10000 = Without solenoid coil

VOLTAGE (30 MM SOLENOID COIL) **S40C0** = 12 VDC **S50C0** = 24 VDC

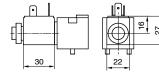
S70C0 = 110 V 50/60 Hz **S80C0** = 230 V 50/60 Hz

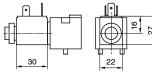
S60C0 = 24 V 50/60 Hz O 10000 = Without solenoid coil

2/2





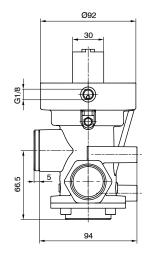


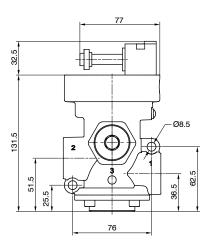


22 mm SOLENOID COIL

Connection: DIN 43650 INDUSTRIAL "B" SHAPE







Internal pilot - N.C.

Pump 3 Outlet port 2 Exhaust port 1 (closed)



External pilot - N.C.

Outlet port 2 Exhaust port 3 (closed)



Weight 1290 g

PG1V201**Ø@**

3/2

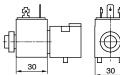
30 mm SOLENOID COIL Connection: DIN 43650 "A" SHAPE

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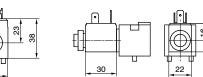
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22 mm SOLENOID COIL Connection: DIN 43650 INDUSTRIAL "B" SHAPE

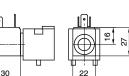
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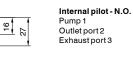


66.5



G1





Ø8.5

62.5





Pump 3 Outlet port 2 Outlet port 1



External pilot - N.O. Pump 3 Outlet port 2

Outlet port 1



External pilot - N.C.

Pump 1 Outlet port 2 Exhaust port 3





Weight 1198 g



131.5

51.5 25.5