

## 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			Aluminium	
Actuators rod			Steel	
Bottom plates			Aluminium	
Seals and poppets			NBR	
Springs			Stainless steel	
Pin guide			Stainless 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.



**Valves and solenoid valves poppet system**  
**Series PG - for compressed air - G3/4"**

Coding: PG3A(N)11E(F)00000

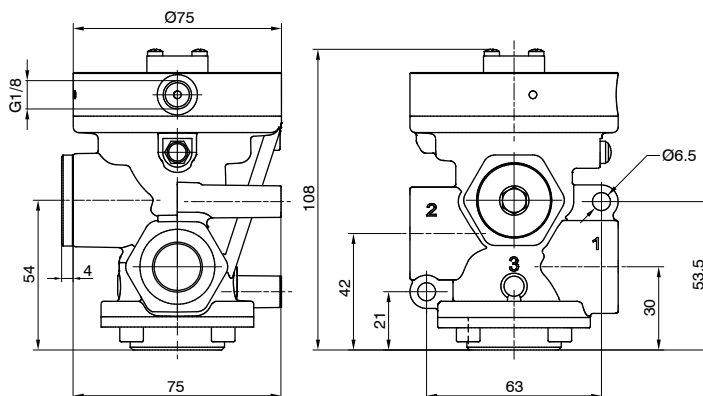
**Pneumatic - Spring**

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 ... +70
Flow rate at 6 bar with Δp=1 (NI/min)	6100
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"

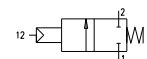
WAYS NUMBER	
<b>N</b>	<b>2</b> = 2 ways, 2 positions
	<b>3</b> = 3 ways, 2 positions
FUNCTION	
<b>F</b>	<b>A</b> = Normally Open (only for 3 ways)
	<b>C</b> = Normally Closed

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AIR DISTRIBUTION



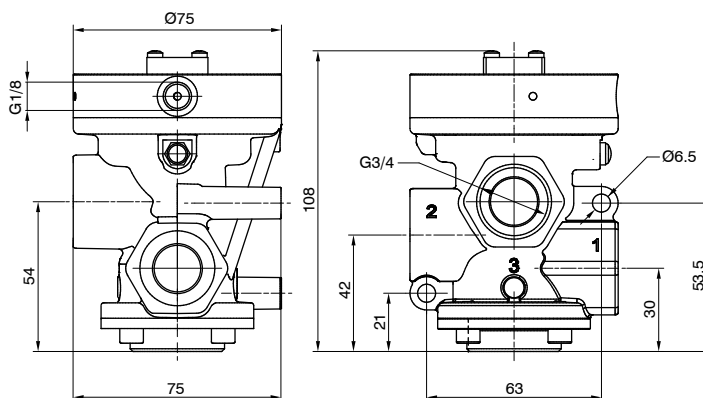
**N.C.**  
 Inlet port 1  
 Outlet port 2  
 Exhaust port 3 (closed)



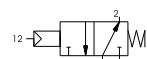
Weight 576,5 g

PG3A211E(F)00000

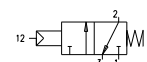
3/2



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



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



Weight 522,5 g

PG3A311E(F)00000

Solenoid-Spring

Coding: PG3A001VET

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)	6100
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"
Response time according to ISO 12238, activation time (ms)	22 (internal pilot version)
Response time according to ISO 12238, deactivation time (ms)	81 (internal pilot version)

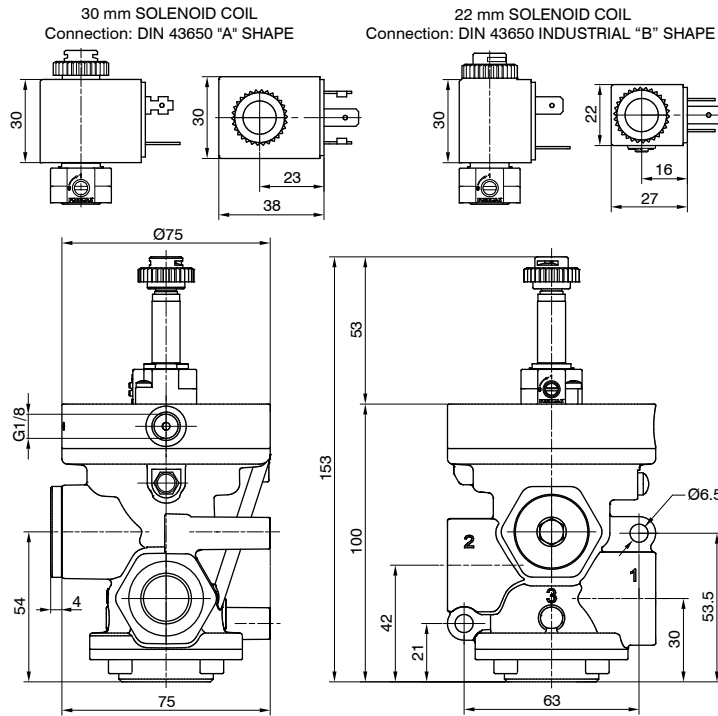
2/2

WAYS NUMBER	2 = 2 ways, 2 positions 3 = 3 ways, 2 positions
VERSION	A = Self feeding E = External feeding
FUNCTION	A = Normally Open (only for 3 ways) C = Normally 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 S70C0 = 110 V 50/60 Hz S80C0 = 230 V 50/60 Hz 10000 = Without solenoid coil

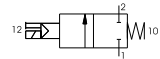


Weight 621,5 g

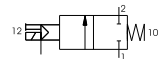
PG3A201VET



**Internal pilot - N.C.**  
Inlet port 1  
Outlet port 2  
Exhaust port 3 (closed)



**External pilot - N.C.**  
Inlet port 1  
Outlet port 2  
Exhaust port 3 (closed)

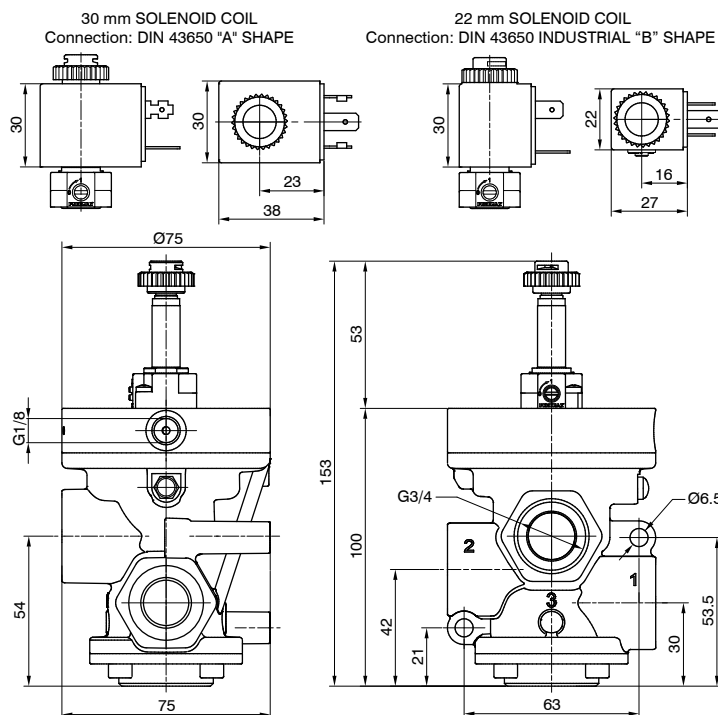


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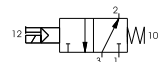


Weight 567,5 g

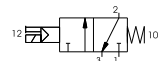
PG3A301VET



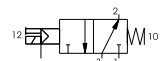
**Internal pilot - N.O.**  
Inlet port 3  
Outlet port 2  
Outlet port 1



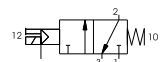
**Internal pilot - N.C.**  
Inlet port 1  
Outlet port 2  
Exhaust port 3



**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





Coding: PG3V $\mathbb{N}$ 11E $\mathbb{F}$ 00000

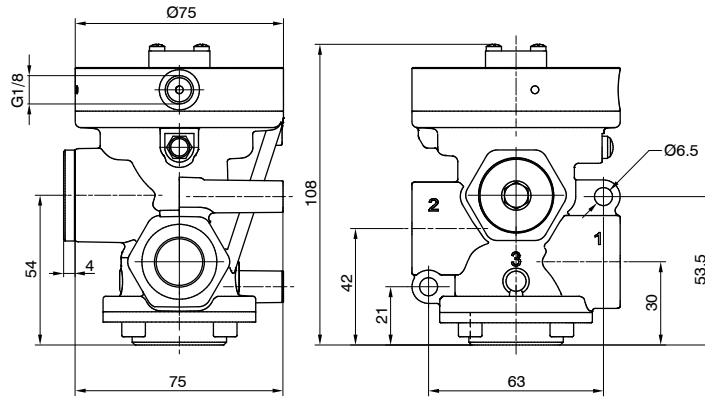
**Pneumatic - Spring**

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +70
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"
Max. vacuum (mmHg)	758,5

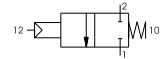
<b>N</b>	WAYS NUMBER
	<b>2</b> = 2 ways, 2 positions
	<b>3</b> = 3 ways, 2 positions
<b>F</b>	FUNCTION
	<b>A</b> = Normally Open (only for 3 ways)
	<b>C</b> = Normally Closed

2/2

AIR DISTRIBUTION



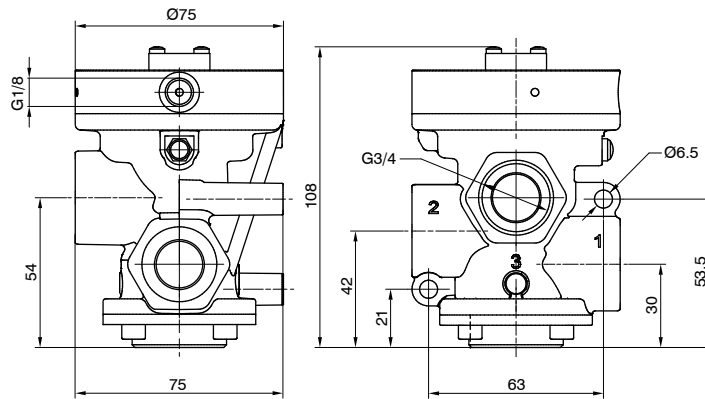
**N.C.**  
Pump 1  
Outlet port 2  
Exhaust port 3 (closed)



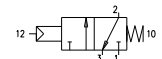
Weight 576,5 g

PG3V211E $\mathbb{F}$ 00000

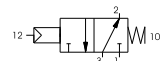
3/2



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



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



Weight 522,5 g

PG3V311E $\mathbb{F}$ 00000

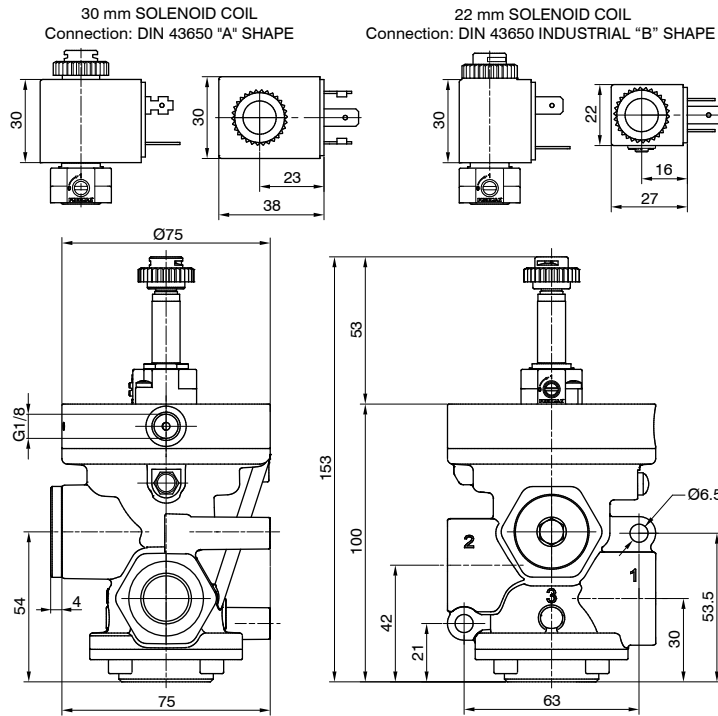
Solenoid-Spring

Coding: PG3V001VET

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (external pilot version)
Temperature °C	-5 ... +50
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"
Max. vacuum (mmHg)	758,5
Minimum operating vacuum (mmHg)	250 (internal pilot version)

WAYS NUMBER	2 = 2 ways, 2 positions 3 = 3 ways, 2 positions
VERSION	A = Self feeding E = External feeding
FUNCTION	A = Normally Open (only for 3 ways) C = Normally 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 S70C0 = 110 V 50/60 Hz S80C0 = 230 V 50/60 Hz 10000 = Without solenoid coil

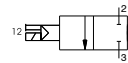
2/2



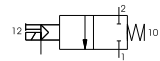
Weight 621,5 g

PG3V201VET

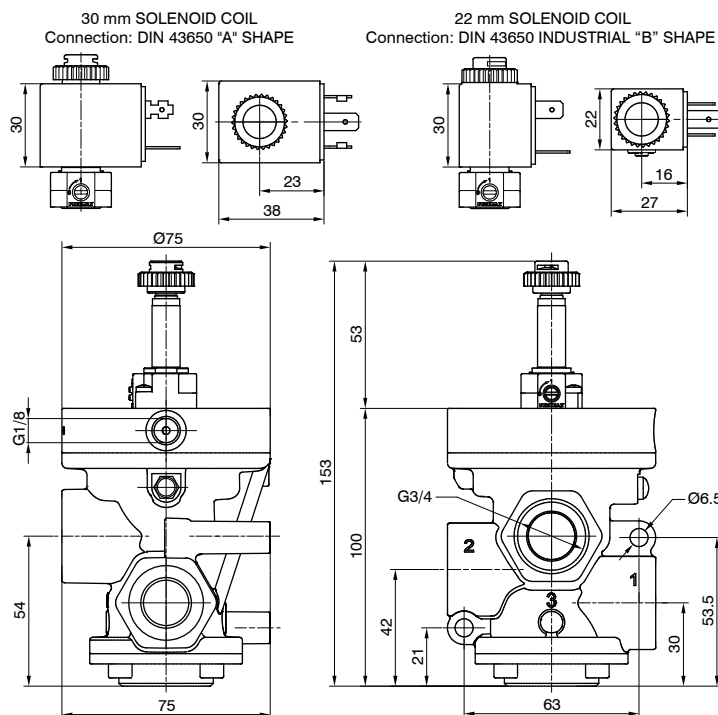
**Internal pilot - N.C.**  
Pump 3  
Outlet port 2  
Exhaust port 1 (closed)



**External pilot - N.C.**  
Pump 1  
Outlet port 2  
Exhaust port 3 (closed)



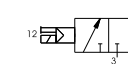
3/2



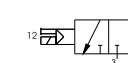
Weight 567,5 g

PG3V301VET

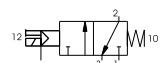
**Internal pilot - N.O.**  
Pump 1  
Outlet port 2  
Exhaust port 3



**Internal pilot - N.C.**  
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

