


POPPET VALVES AIR/VACUUM Series 700/PG

General

Our main concern in constructing these poppet type valves and solenoid valves is reliability. Poppet type valves, as opposed to spool type valves, offer superior resistance to adverse operating conditions, such as dust particles in the compressed air and insufficient lubrication, and provide the only alternative for use in "at risk" systems.

One of the qualities of this type of valves is its change-over speed, which, because of the quick poppet travel, is always at least twice that of the spool type. These valves are not bistable and do not operate with closed centers. Therefore, the pilot signal must remain on as long as the valve is being commutated. The air flow inlet/outlet and exhaust ports are mandatory and do not allow normally closed (N.C.) or normally open (N.O.) 3 way valve as do the spool type valves. It is possible to have a 2 way valve without exhaust by plugging port 3 of a 3 way valve.

Ordering codes are referred to solenoid valves with M2 assembled (see Series 300, section 1). (Coils are not included and have to be ordered separately).

Coils  **US** homologated are available (see 300 Series)

Construction characteristics

G 1/8" ÷ G 1/4"

Body	Anodized aluminium
Actuators	Anodized aluminium
Spool	Hardened nickel plated steel
Seals	Polyurethane + Nitrile
Spacers	Brass
Springs	Stainless steel AISI 302



Use and maintenance


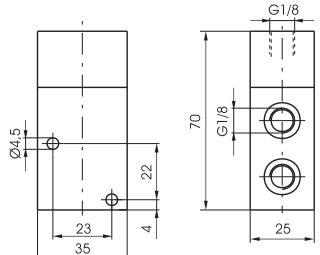

These valves are a mean life of 10 to 15 millions of cycles depending on application. Proper lubrication with specified oil reduces dramatically the wear of the seals as well as a good filtration ensures long and trouble free operating. Check that the operating conditions are according to the suggested pressure, temperature and so on. The exhaust ports of the distributor have to be protected in a dusty and dirty environment. A spare parts kit including the spool complete of with seals and actuators is available for overhauling the valve. This simple operation does not require a skilled worker. Although particular care is needed for assembling the valve.

ATTENTION: use hydraulic oil class H for lubrication such as MAGNAGC 32 (Castrol).




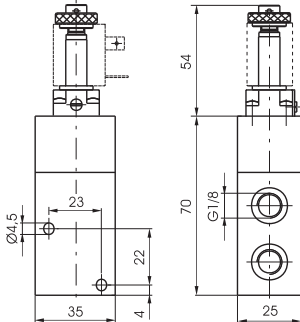
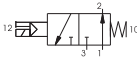
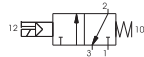
Pneumatic - Spring

3/2

Ordering code		STD						
778.32.11.F								
F	FUNCTION							
	1C = normally closed							
	1A = normally open							
Weight gr. 170 Minimum working pressure 2,5 bar								
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	840 NI/min	mm 6	G 1/8"	G 1/8"


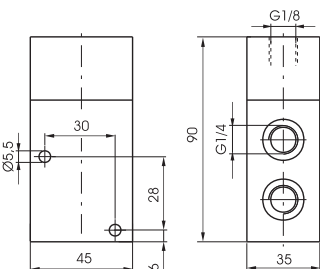

Solenoid - Spring

3/2

Ordering code		STD STD						
778.32.0.F.M2								
FUNCTION								
1C = normally closed 1A = normally open								
Weight gr. 240 Minimum working pressure 3 bar								
 								
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with $\Delta p=1$	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +50°C		840 NI/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Spring

3/2

Pneumatic Spring		3/2					
Ordering code							
774.32.11.F							
F	FUNCTION	STD					
	1C = normally closed						
	1A = normally open						
							
Weight gr. 395 Minimum working pressure 2,5 bar							
Operational characteristic	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +70°C	1560 NI/min	mm 8	G 1/4"	G 1/8"

Technical modifications keep in reserve !

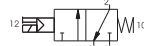
(2020/10)

Solenoid - Spring

3/2

Ordering code		
774.32.0.F.M2		
FUNCTION		
1C = normally closed 1A = normally open		
	STD	STD

Weight gr. 460
Minimum working pressure 3 bar



Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +50°C	1560 NI/min	mm 8	G 1/4"	G 1/8"





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.

Vacuum valves connections

NORMALLY CLOSED INTERNAL PILOT		NORMALLY OPEN INTERNAL PILOT	
779/V.32.0.1.AC PG3V301AC10000 PG1V301AC10000	P = 1 = EXHAUST A = 2 = OUTLET R = 3 = PUMP	779/V.32.0.1AA PG3V301AA10000 PG1V301AA10000	P = 1 = PUMP A = 2 = OUTLET R = 3 = EXHAUST
NORMALLY CLOSED EXTERNAL PILOT		NORMALLY OPEN EXTERNAL PILOT	
779/V.32.0.1.C PG3V301EC10000 PG1V301EC10000 779V.32.11.1C PG3V311EC00000 PG1V311EC00000	P = 1 = PUMP A = 2 = OUTLET R = 3 = EXHAUST	779/V.32.0.1A PG3V301EA10000 PG1V301EA10000 779V.32.11.1A PG3V311EA00000 PG1V311EA00000	P = 1 = EXHAUST A = 2 = OUTLET R = 3 = PUMP
































































Technical modifications keep in reserve !

(2024/04)

Valves and solenoid valves poppet system

Series PG - for compressed air and vacuum



		Symbol	Description	Code	Max. pressure	Flow at 6 bar, Δp=1	Orifice size			
G3/8" 	air		Pneumatic - Spring N.O.	779.32.11.1A	2,5-10 bar	1800NI/min	mm 10			
			Pneumatic - Spring N.C. STD	779.32.11.1C						
			Solenoid - Spring, internal pilot N.C. STD	779.32.0.1AC.M2	3-10 bar					
			Solenoid - Spring external pilot N.C.	779.32.0.1C.M2	2,5-10 bar					
			Solenoid - Spring, internal pilot N.O. STD	779.32.0.1AA.M2	3-10 bar					
			Solenoid - Spring external pilot N.O.	779.32.0.1A.M2	2,5-10 bar					
	vacuum		Pneumatic - Spring N.O.	779V.32.11.1A	min.2 bar	/				
			Pneumatic - Spring N.C. STD	779V.32.11.1C						
			Solenoid - Spring, internal pilot N.O.	779V.32.0.1AA.M2V	min.2 bar					
			Solenoid - Spring, internal pilot N.C. STD	779V.32.0.1AC.M2V						
			Solenoid - Spring, external pilot N.O.	779V.32.0.1A.M2	min.2 bar					
			Solenoid - Spring, external pilot N.C. STD	779V.32.0.1C.M2						
G 1/2"  	air		Pneumatic - Spring N.C. STD	PG2A311EC00000	2,5-10 bar	/	mm 15			
			Solenoid - Spring, internal pilot N.C. STD	PG2A301AC10000	3-10 bar					
			Solenoid - Spring, external pilot N.C.	PG2A301EC10000	2,5-10 bar					
	vacuum		Pneumatic - Spring N.O.	PG2V311EA00000	min.2 bar	/				
			Pneumatic - Spring N.C. STD	PG2V311EC00000						
			Solenoid - Spring, internal pilot N.O.	PG2V301AA10000	/					
			Solenoid - Spring, internal pilot N.C.	PG2V301AC10000						
			Solenoid - Spring, external pilot N.O. STD	PG2V301EA10000	min.2 bar					
			Solenoid - Spring, external pilot N.C. STD	PG2V301EC10000						
			Solenoid - Spring, external pilot N.C. STD	PG2V301EC10000						
	G3/4"  	air		Pneumatic - Spring N.C. STD	PG3A311EC00000	2,5-10 bar		6100NI/min	mm 20	
				Solenoid - Spring, internal pilot N.C. STD	PG3A301AC10000	3-10 bar				
			Solenoid - Spring, external pilot N.C.	PG3A301EC10000	2,5-10 bar					
vacuum			Pneumatic - Spring N.O.	PG3V311EA00000	min.2 bar	/				
			Pneumatic - Spring N.C. STD	PG3V311EC00000						
			Solenoid - Spring, internal pilot N.O.	PG3V301AA10000	/					
			Solenoid - Spring, internal pilot N.C.	PG3V301AC10000						
			Solenoid - Spring, external pilot N.O. STD	PG3V301EA10000	min.2 bar					
			Solenoid - Spring, external pilot N.C. STD	PG3V301EC10000						
			Solenoid - Spring, external pilot N.C. STD	PG3V301EC10000						
G1"  		air		Pneumatic - Spring N.C. STD	PG1A311EC00000	2,5-10 bar	12000NI/min	mm 25		
				Solenoid - Spring, internal pilot N.C. STD	PG1A301AC10000	3-10 bar				
			Solenoid - Spring, external pilot N.C.	PG1A301EC10000	2,5-10 bar					
	vacuum		Pneumatic - Spring N.O.	PG1V311EA00000	min 2 bar	/				
			Pneumatic - Spring N.C. STD	PG1V311EC00000						
			Solenoid - Spring, internal pilot N.O.	PG1V301AA10000	/					
			Solenoid - Spring, internal pilot N.C.	PG1V301AC10000						
			Solenoid - Spring, external pilot N.O. STD	PG1V301EA10000	min 2 bar					
			Solenoid - Spring, external pilot N.C. STD	PG1V301EC10000						
			Solenoid - Spring, external pilot N.C. STD	PG1V301EC10000						
	G 1 1/2"   	air		Pneumatic - Spring N.C.	ON REQUEST	2,5-10 bar	33500NI/min		mm 38	
				Solenoid - Spring, internal pilot N.C.	ON REQUEST	3-10 bar				
			Solenoid - Spring, external pilot N.C.	ON REQUEST	2,5-10 bar					
			Pneumatic - Spring N.C.	ON REQUEST	2,5-10 bar					
			Solenoid - Spring, internal pilot N.C.	ON REQUEST	3-10 bar					
			Solenoid - Spring, external pilot N.C.	ON REQUEST	2,5-10 bar					
vacuum			Pneumatic - Spring N.C.	ON REQUEST	min 2 bar	/				
			Solenoid - Spring, external pilot N.C.	ON REQUEST						
			Pneumatic - Spring N.O.	ON REQUEST						
			Pneumatic - Spring N.C.	ON REQUEST						
			Solenoid - Spring, external pilot N.O.	ON REQUEST						
			Solenoid - Spring, external pilot N.C.	ON REQUEST						

Technical modifications keep in reserve !

(2024/04)

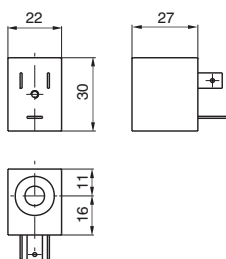
Coil

Coil type U1



Weight 54 gr.

* Use only with M2/9



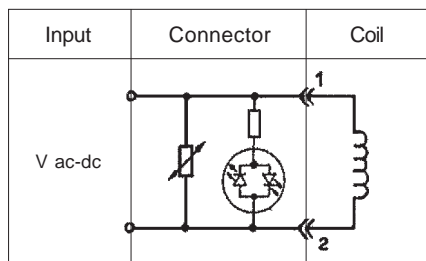
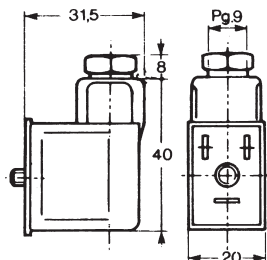
Ordering code	Available voltages Coils	
MB 4	12 D.C.	STD
MB 5	24 D.C.	STD
MB 6	48 D.C.	STD
MB 9*	24 D.C. (2 Watt) (Direct current, low consumption)	
MB 17	24/50	STD
MB 21	48/50	STD
MB 22	110/50	STD
MB 24	230/50	STD
MB 37	24/60	Alternating current 60 Hz
MB 39	110/60	
MB 41	230/60	
MB 56	24/50-60	Alternating current 50/60 Hz
MB 57	110/50-60	
MB 58	230/50-60	
MB 66	24/50-60	Alternating current (low consumption) 50/60 Hz
MB 67	110/50-60	
MB 68	230/50-60	

Connector for coil (DIN 43650)



Ordering code	Supply voltage until	Coil type	Protection class	Remarks
MP1	0-250V~/300V=	U1	IP 65	CONNECTOR
MP1-LED-24V	24V	U1	IP 65	+LED
MP1-LED-24V-5M	24V	U1	IP 65	+LED+CABLE
MP1-LED-230V	230V	U1	IP 65	+LED

Electronic circuit for MP-LED



Bipolar LED and VDR to protect supply and switch.
(The energy in the coil is limited by the VDR).
Voltage: 24 or 230V.





PNEUMAX



VALVES POPPET SYSTEM **SERIES PG**

HIGH FLOW RATES FOR COMPRESSED AIR AND VACUUM



Valves and solenoid valves poppet system
Series PG - for compressed air - G1/2"

Pneumatic - Spring

Coding: PG2A^N11E^F00000

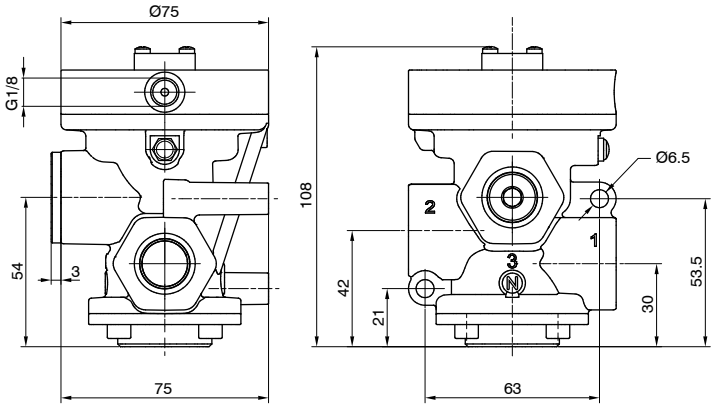
Operational characteristics

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)	4800
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

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

2/2

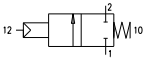
AIR DISTRIBUTION



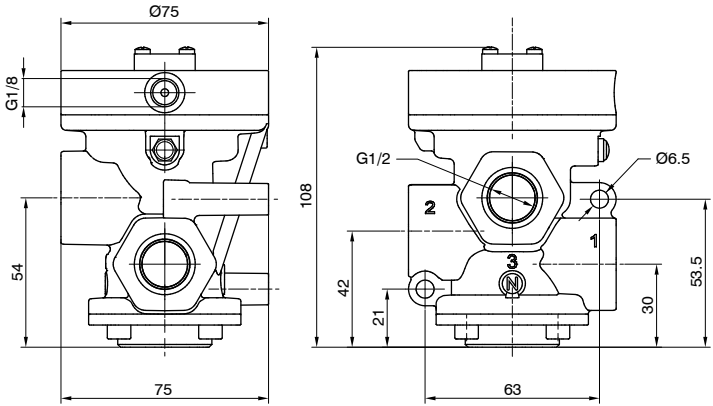
Weight 675 g

PG2A211E^F00000

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



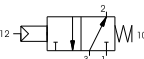
3/2



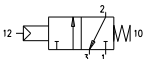
Weight 648,5 g

PG2A311E^F00000

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



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



Solenoid-Spring

Coding: PG2A001VFF

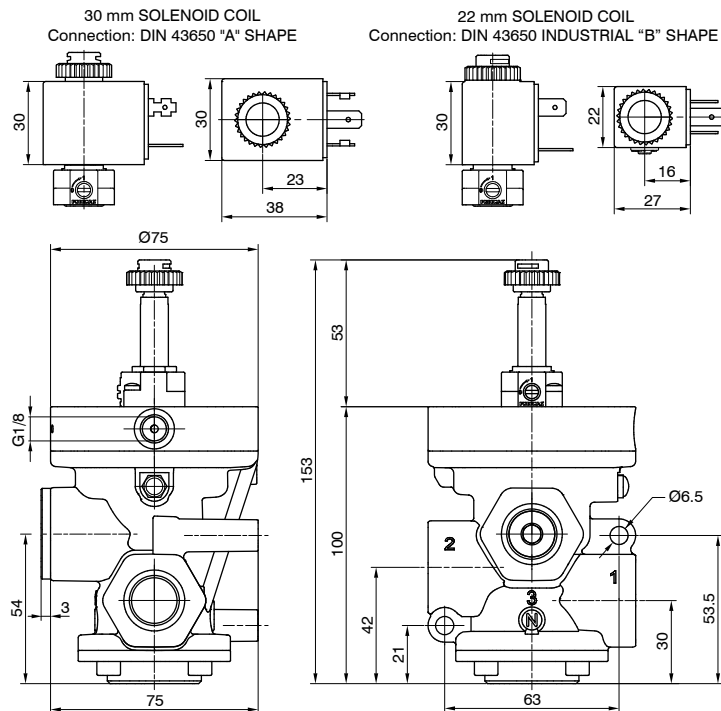
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	4800
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"
Response time according to ISO 12238, activation time (ms)	21 (self feeding version)
Response time according to ISO 12238, deactivation time (ms)	83 (self feeding version)

2/2



Weight 720,5 g

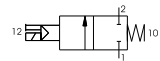
PG2A201VFF



WAYS NUMBER	
N	2 = 2 ways, 2 positions
3	3 = 3 ways, 2 positions
VERSION	
V	A = Self feeding
E	External feeding
FUNCTION	
F	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

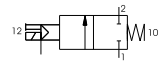
Self feeding - N.C.

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



External feeding - N.C.

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

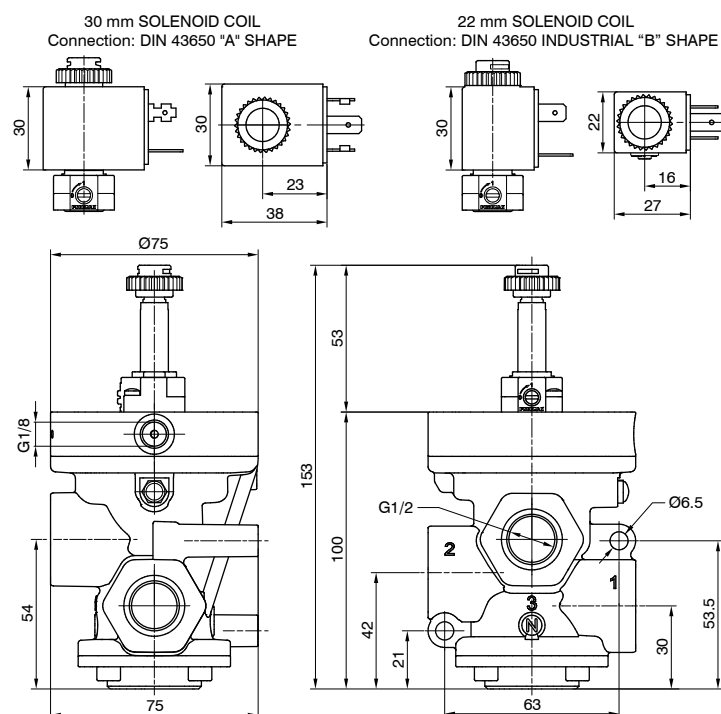


3/2



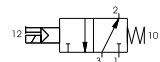
Weight 693,5 g

PG2A301VFF



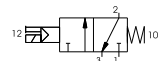
Self feeding - N.O.

Inlet port 3
Outlet port 2
Exhaust port 1



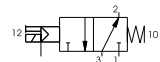
Self feeding - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



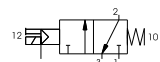
External feeding - N.O.

Inlet port 3
Outlet port 2
Exhaust port 1



External feeding - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3





Pneumatic - Spring

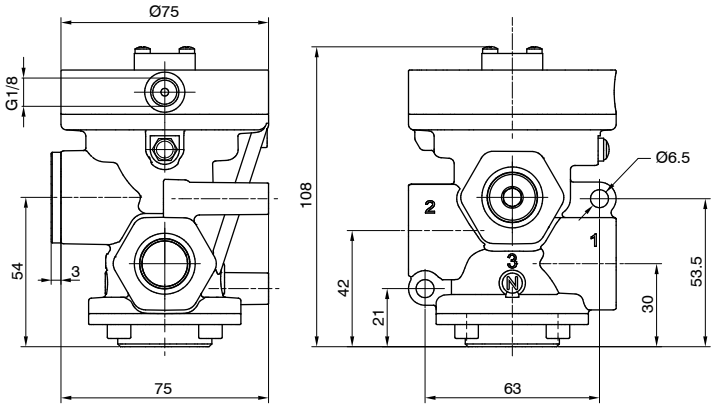
Coding: PG2V^N11E^F00000

Operational characteristics		
Fluid		Vacuum
Minimum piloting pressure (bar)		2
Temperature °C		-5 ... +70
Orifice size (mm)		15
Working ports size		G1/2"
Pilot ports size		G1/8"
Max. vacuum (mmHg)		758,5

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

2/2

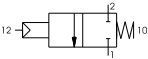
AIR DISTRIBUTION



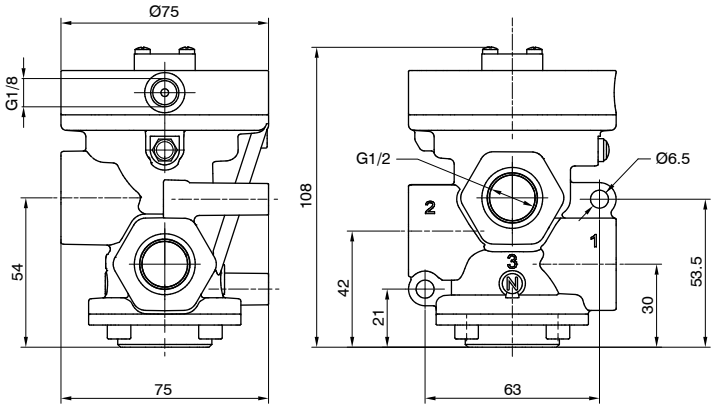
Weight 675,5 g

PG2V211E^F00000

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



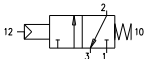
3/2



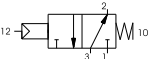
Weight 648,5 g

PG2V311E^F00000

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



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



Solenoid-Spring

Coding: PG2V^N01^V^E^F^T

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (external feeding version)
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"
Max. vacuum (mmHg)	758,5
Minimum operating vacuum (mmHg)	250 (self feeding version)

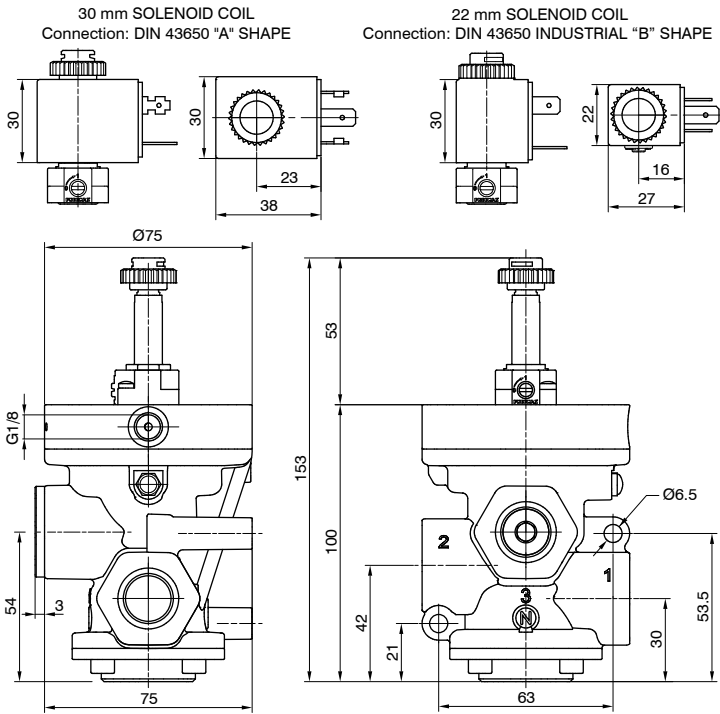
WAYS NUMBER	
N	2 = 2 ways, 2 positions
	3 = 3 ways, 2 positions
VERSION	
V	A = Self feeding
	E = External feeding
FUNCTION	
F	A = Normally Open (only for 3 ways)
	C = Normally Closed
VOLTAGE (22 MM SOLENOID COIL)	
S40B0	= 12 VDC
S50B0	= 24 VDC
S60B0	= 24 V 50/60 Hz
S70B0	= 110 V 50/60 Hz
S80B0	= 230 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

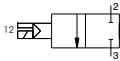


Weight 720,5 g

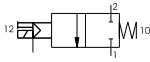
PG2V201^V^E^F^T



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



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

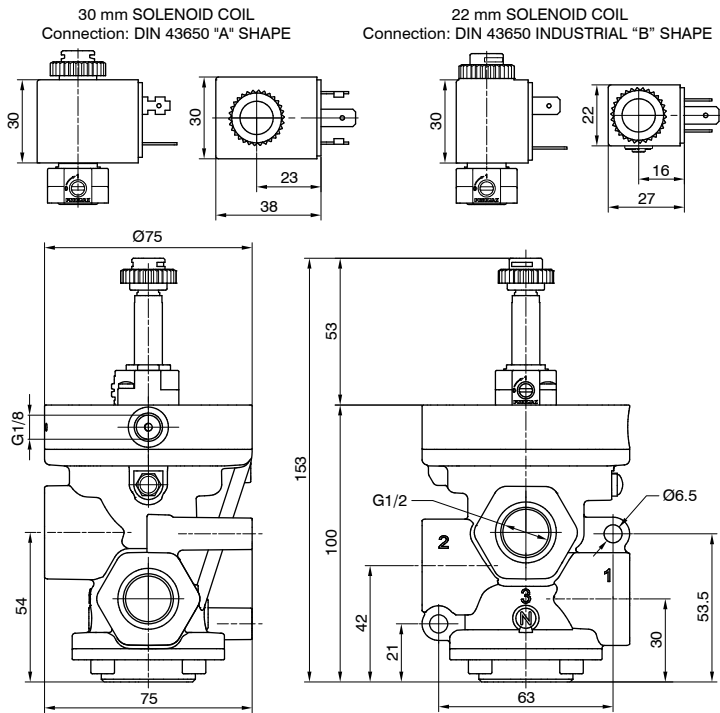


3/2

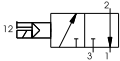


Weight 693,5 g

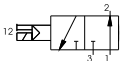
PG2V301^V^E^F^T



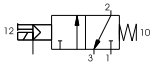
Self feeding - N.O.
Pump 1
Outlet port 2
Exhaust port 3



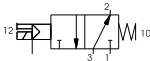
Self feeding - N.C.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.O.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.C.
Pump 1
Outlet port 2
Exhaust port 3





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

Pneumatic - Spring

Coding: PG3A**N**11E**F**00000

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 $\Delta p=1$ (NI/min)	6100
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"

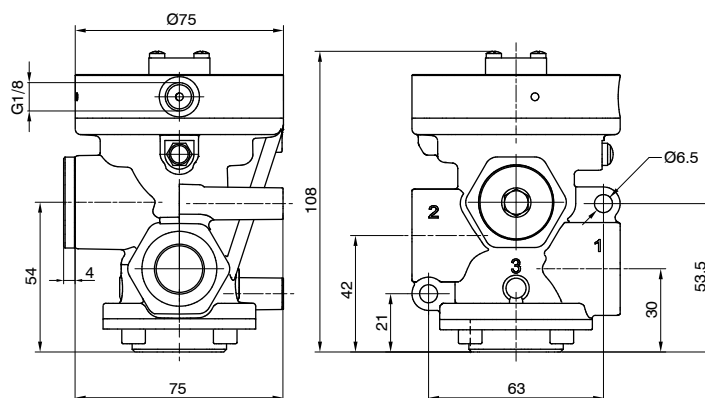
WAYS NUMBER

N 2 = 2 ways, 2 positions
3 = 3 ways, 2 positions

FUNCTION

F A = Normally Open (only for 3 ways)
C = Normally Closed

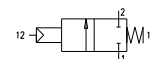
2/2



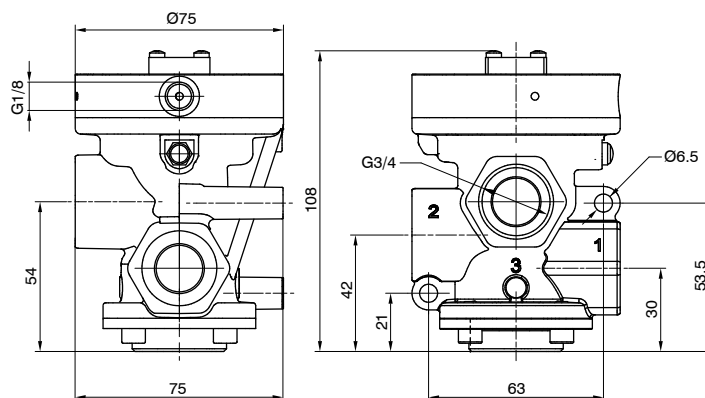
Weight 576,5 g

PG3A211E**F**00000

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



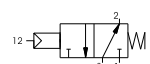
3/2



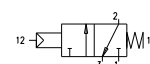
Weight 522,5 g

PG3A311E**F**00000

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



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



Coding: PG3A**N01VFT**

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 $\Delta p=1$ (Nl/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 (self feeding version)
Response time according to ISO 12238, deactivation time (ms)	81 (self feeding version)

2/2



Weight 621,5 g

PG3A201VFT

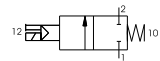
3/2

	WAYS NUMBER
N	2 = 2 ways, 2 positions 3 = 3 ways, 2 positions
	VERSION
V	A = Self feeding E = External feeding
	FUNCTION
F	A = Normally Open (only for 3 ways) C = Normally Closed
	VOLTAGE (22 MM SOLENOID COIL)
	S40B0 = 12 VDC S50B0 = 24 VDC
T	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
T	S60C0 = 24 V 50/60 Hz S70C0 = 110 V 50/60 Hz S80C0 = 230 V 50/60 Hz 10000 = Without solenoid coil

AIR DISTRIBUTION

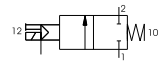
Self feeding - N.C.

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

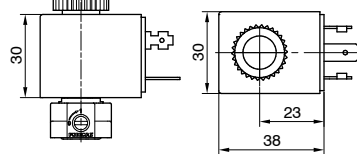


External feeding - N.C.

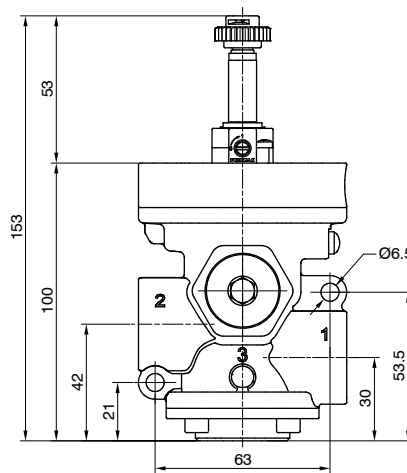
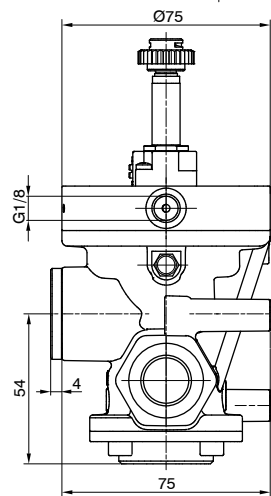
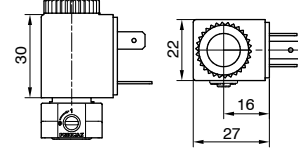
Inlet port 1
Outlet port 2
Exhaust port 3 (closed)



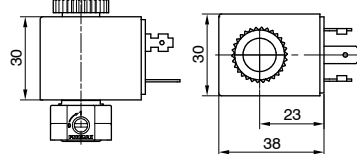
30 mm SOLENOID COIL
Connection: DIN 43650 "A" SHAPE



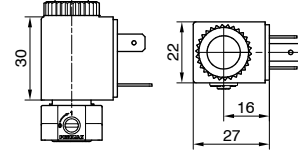
22 mm SOLENOID COIL
Connection: DIN 43650 INDUSTRIAL "B" SHAPE



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



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

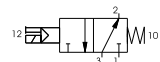


Weight 567,5 g

PG3A301VFT

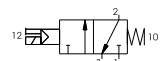
Self feeding - N.O.

Inlet port 3
Outlet port 2
Exhaust port 1



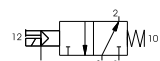
Self feeding - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



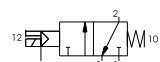
External feeding - N.O.

External feed
Inlet port 3
Outlet port 2
Exhaust port 1



External feeding - N.C.

External feed
Inlet port 1
Outlet port 2
Exhaust port 3





Valves and solenoid valves poppet system

Series PG - for Vacuum - G3/4"

Pneumatic - Spring

Coding: PG3V^N11E^F00000

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

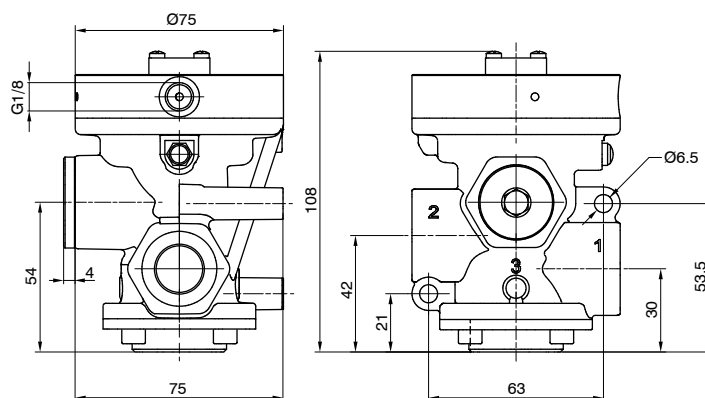
WAYS NUMBER

- N** 2 = 2 ways, 2 positions
3 = 3 ways, 2 positions

FUNCTION

- F** A = Normally Open (only for 3 ways)
C = Normally Closed

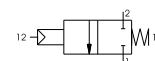
2/2



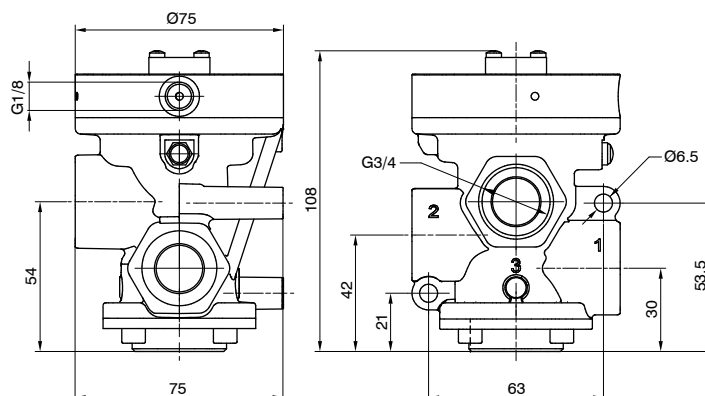
Weight 576,5 g

PG3V211E^F00000

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



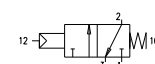
3/2



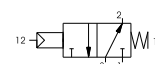
Weight 522,5 g

PG3V311E^F00000

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



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



Solenoid-Spring

Coding: PG3V^N01^{VET}

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (external feeding 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 (self feeding version)

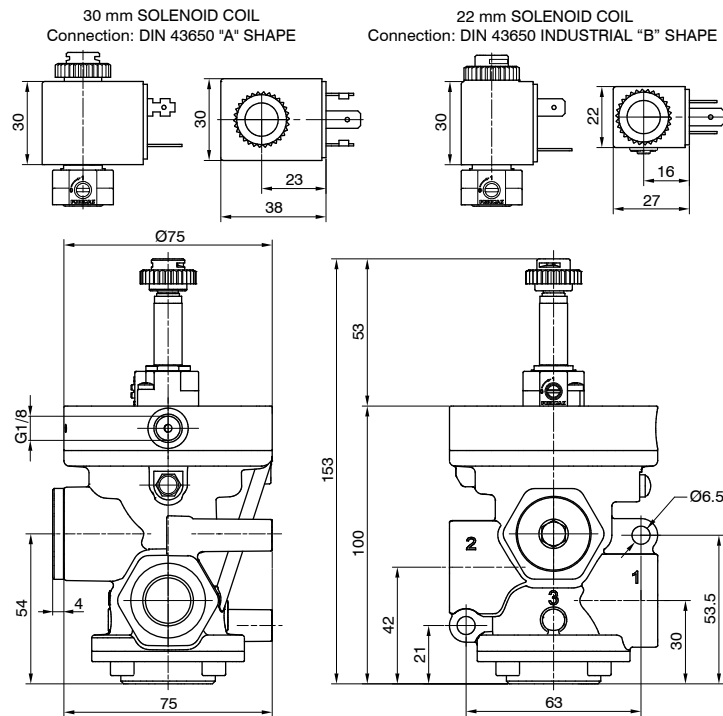
WAYS NUMBER	
N	2 = 2 ways, 2 positions
	3 = 3 ways, 2 positions
VERSION	
V	A = Self feeding
	E = External feeding
FUNCTION	
F	A = Normally Open (only for 3 ways)
	C = Normally Closed
VOLTAGE (22 MM SOLENOID COIL)	
S40B0	= 12 VDC
S50B0	= 24 VDC
S60B0	= 24 V 50/60 Hz
S70B0	= 110 V 50/60 Hz
S80B0	= 230 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

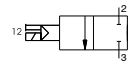


Weight 621,5 g

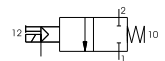
PG3V201^{VET}



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



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

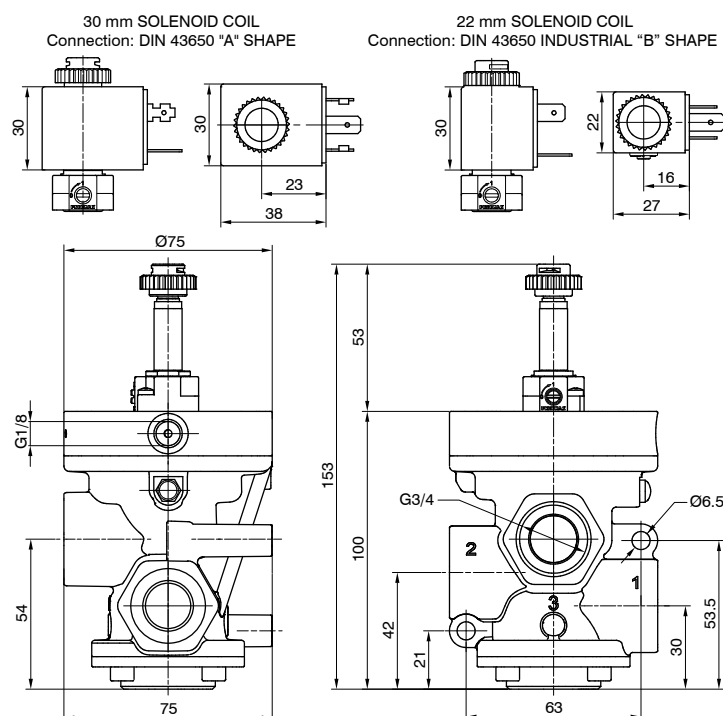


3/2

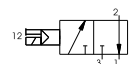


Weight 567,5 g

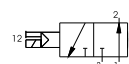
PG3V301^{VET}



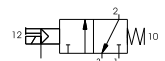
Self feeding - N.O.
Pump 1
Outlet port 2
Exhaust port 3



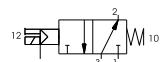
Self feeding - N.C.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.O.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.C.
Pump 1
Outlet port 2
Exhaust port 3





Valves and solenoid valves poppet system

Series PG - for compressed air - G1"

Pneumatic - Spring

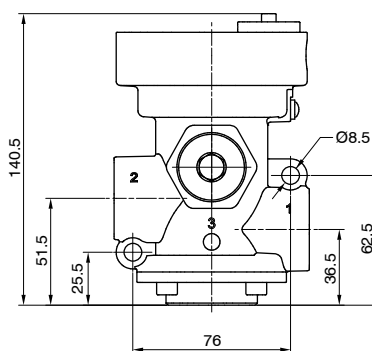
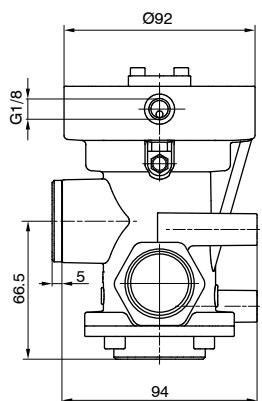
Coding: PG1A**N**11E**F**00000

Operational characteristics

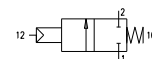
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

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

2/2



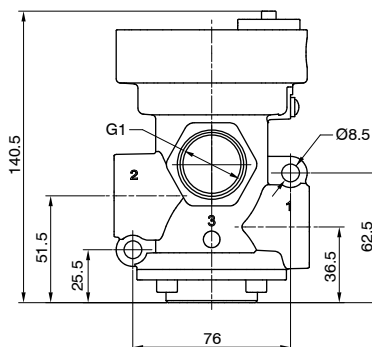
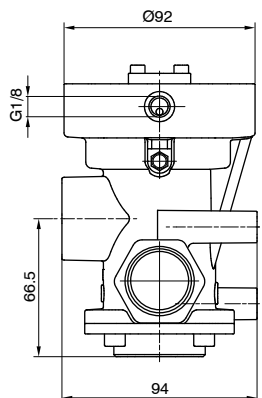
N.C.
Inlet port 1
Outlet port 2
Exhaust port 3 (closed)



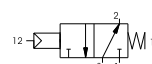
Weight 1231,5 g

PG1A211E**F**00000

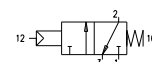
3/2



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



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



Weight 1139,5 g

PG1A311E**F**00000

Solenoid-Spring

Coding: PG1A001VET

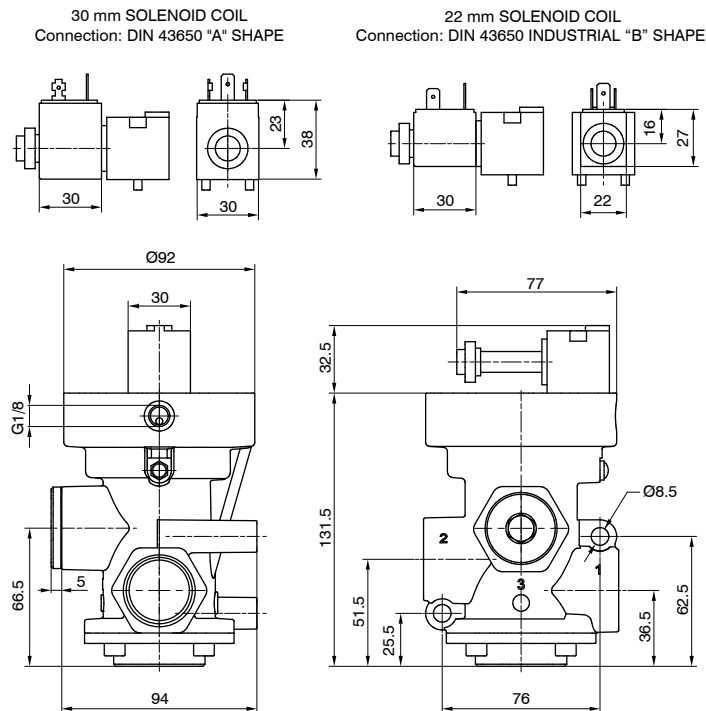
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1/2"
Pilot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

2/2



Weight 1290 g

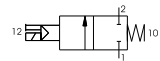
PG1A201VET



WAYS NUMBER	
N	2 = 2 ways, 2 positions
3	3 = 3 ways, 2 positions
VERSION	
V	A = Self feeding
E	External feeding
FUNCTION	
F	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

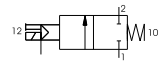
Self feeding - N.C.

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



External feeding - N.C.

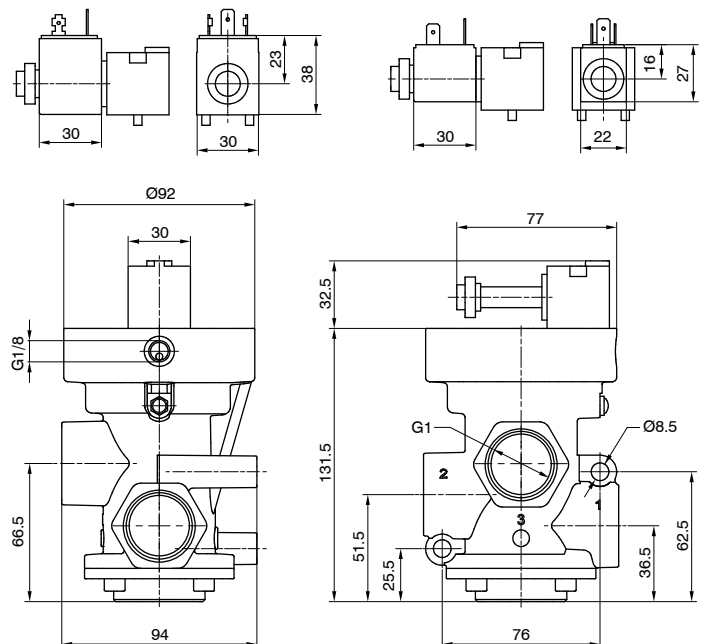
Inlet port 1
Outlet port 2
Exhaust port 3 (closed)



3/2

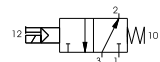
AIR DISTRIBUTION

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



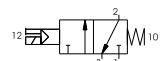
Self feeding - N.O.

Inlet port 3
Outlet port 2
Exhaust port 1



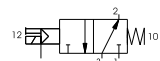
Self feeding - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



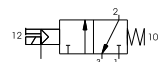
External feeding - N.O.

Inlet port 3
Outlet port 2
Exhaust port 1



External feeding - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



Weight 1198 g

PG1A301VET



Valves and solenoid valves poppet system Series PG - for Vacuum - G1"

Pneumatic - Spring

Coding: PG1V N 11E F 00000

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +70
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"
Max. vacuum (mmHg)	758,5

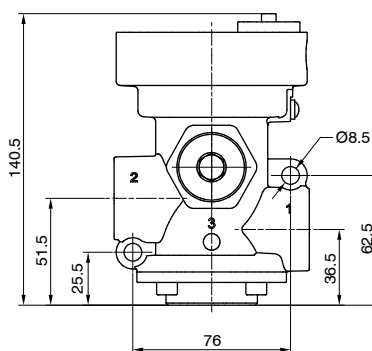
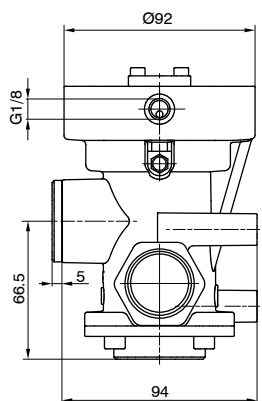
WAYS NUMBER

N 2 = 2 ways, 2 positions
3 = 3 ways, 2 positions

FUNCTION

F A = Normally Open (only for 3 ways)
C = Normally Closed

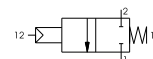
2/2



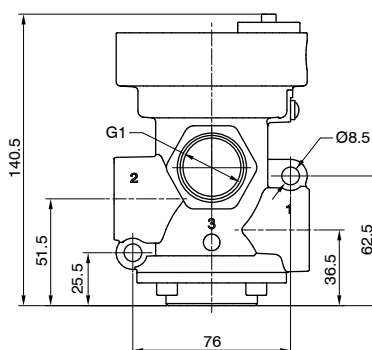
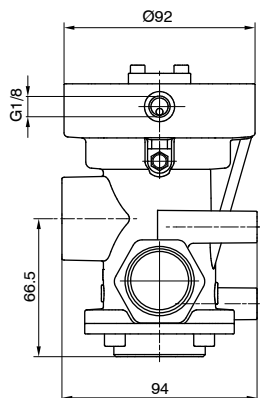
Weight 1231,5 g

PG1V211E F 00000

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



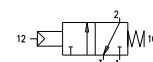
3/2



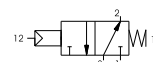
Weight 1139,5 g

PG1V311E F 00000

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



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



Solenoid-Spring

Coding: PG1V001VFF

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (external feeding 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 (self feeding version)

WAYS NUMBER	
N	2 = 2 ways, 2 positions
	3 = 3 ways, 2 positions
VERSION	
V	A = Self feeding
	E = External feeding
FUNCTION	
F	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

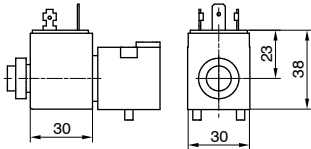


Weight 1290 g

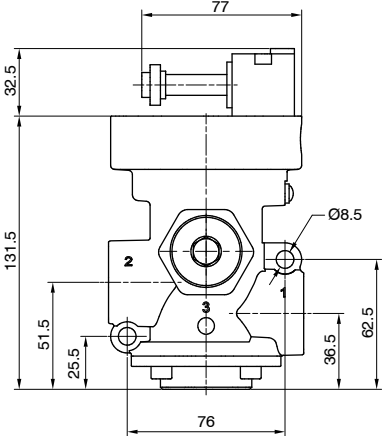
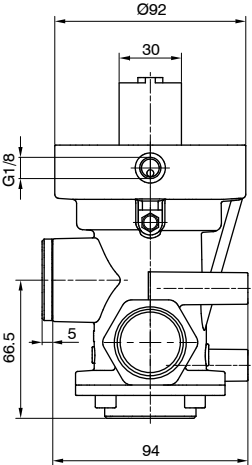
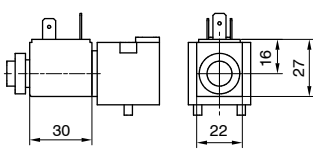
PG1V201VFF

3/2

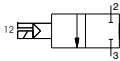
30 mm SOLENOID COIL
Connection: DIN 43650 "A" SHAPE



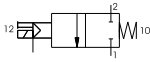
22 mm SOLENOID COIL
Connection: DIN 43650 INDUSTRIAL "B" SHAPE



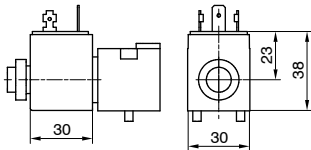
Self feeding - N.C.
Pump 3
Outlet port 2
Exhaust port 1 (closed)



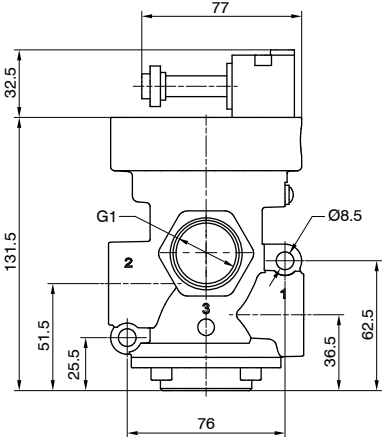
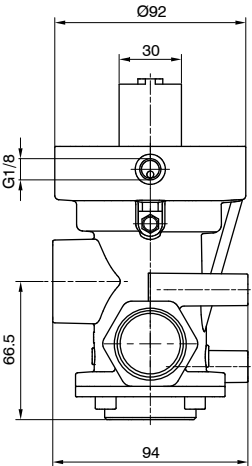
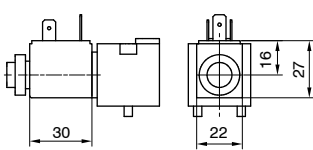
External feeding - N.C.
Pump 1
Outlet port 2
Exhaust port 3 (closed)



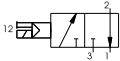
30 mm SOLENOID COIL
Connection: DIN 43650 "A" SHAPE



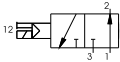
22 mm SOLENOID COIL
Connection: DIN 43650 INDUSTRIAL "B" SHAPE



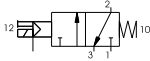
Self feeding - N.O.
Pump 1
Outlet port 2
Exhaust port 3



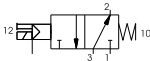
Self feeding - N.C.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.O.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.C.
Pump 1
Outlet port 2
Exhaust port 3



Weight 1198 g

PG1V301VFF



Valves and solenoid valves poppet system

Series PG - for compressed air - G1 1/2"

Pneumatic - Spring

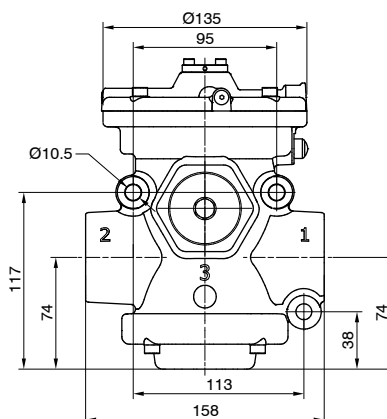
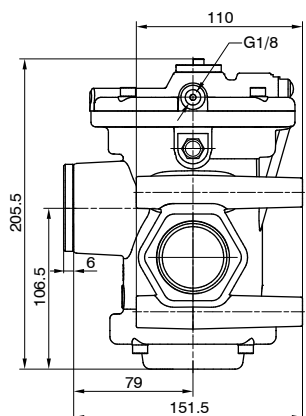
Coding: PG6A**N**11E**F**00000

Operational characteristics

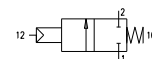
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	3
Temperature °C	-5 ... +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"

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

2/2



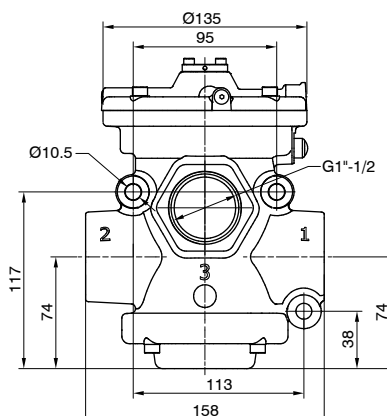
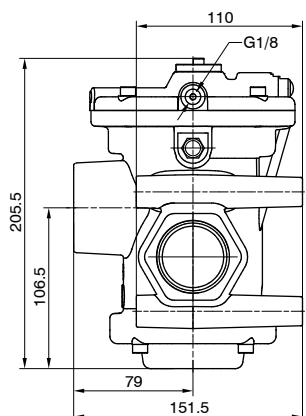
N.C.
Inlet port 1
Outlet port 2
Exhaust port 3 (closed)



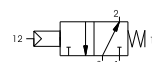
Weight 3417 g

PG6A211E00000

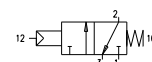
3/2



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



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



Weight 3168 g

PG6A311E00000

Solenoid-Spring

Coding: PG6A001VFF

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	3
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"
Response time according to ISO 12238, activation time (ms)	182 (self feeding version)
Response time according to ISO 12238, deactivation time (ms)	78 (self feeding version)

2/2

WAYS NUMBER	
N	2 = 2 ways, 2 positions
3	3 = 3 ways, 2 positions
VERSION	
V	A = Self feeding
E	External feeding
FUNCTION	
F	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

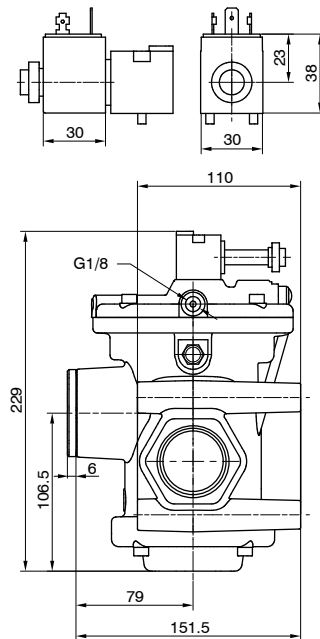
AIR DISTRIBUTION



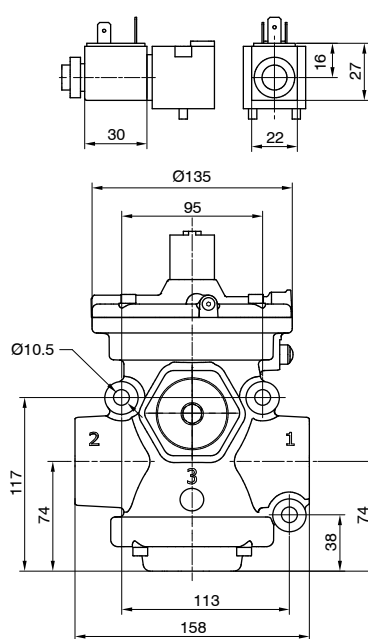
Weight 3491,5 g

PG6A201VFF

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

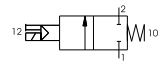


22 mm SOLENOID COIL
Connection: DIN 43650 INDUSTRIAL "B" SHAPE



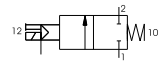
Self feeding - N.C.

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



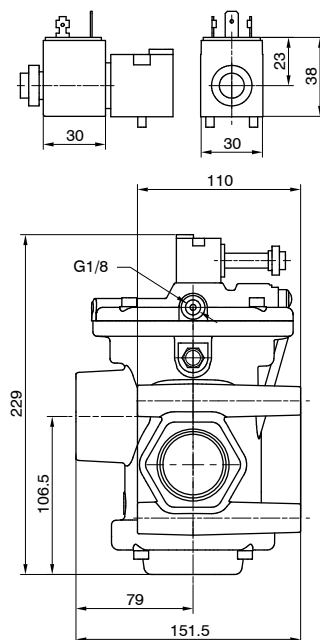
External feeding - N.C.

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

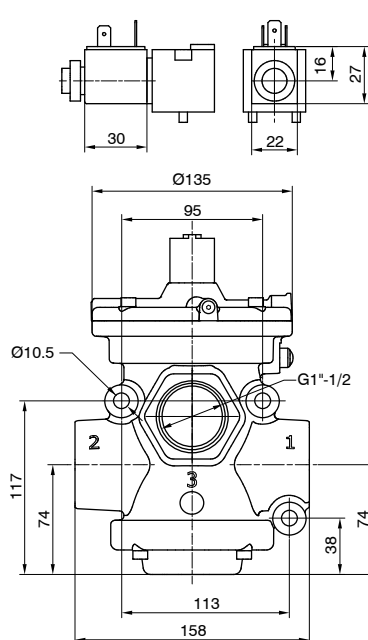


3/2

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

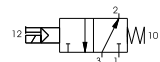


22 mm SOLENOID COIL
Connection: DIN 43650 INDUSTRIAL "B" SHAPE



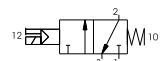
Self feeding - N.O.

Inlet port 3
Outlet port 2
Exhaust port 1



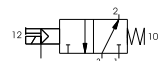
Self feeding - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



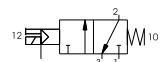
External feeding - N.O.

Inlet port 3
Outlet port 2
Exhaust port 1



External feeding - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



Weight 3242,5 g

PG6A301VFF



Valves and solenoid valves poppet system

Series PG - for Vacuum - G1 1/2"

Pneumatic - Spring

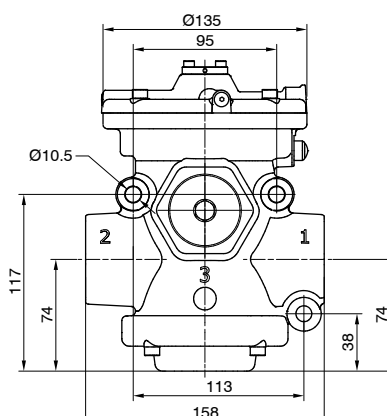
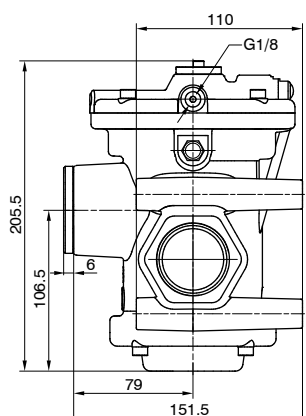
Coding: PG6V^N11E^F00000

Operational characteristics

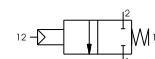
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +70
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"
Max. vacuum (mmHg)	758,5

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

2/2



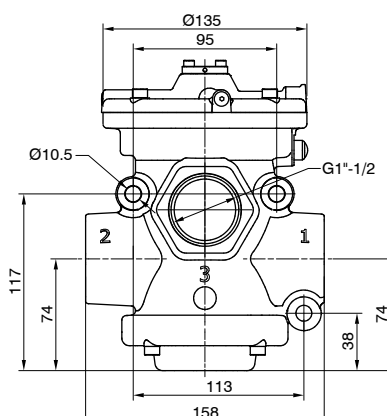
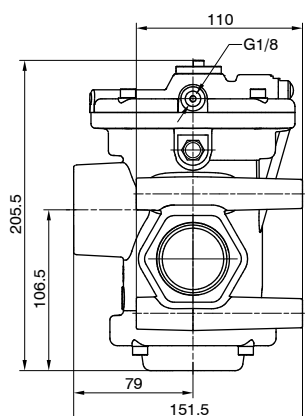
N.C.
Pump 1
Outlet port 2
Exhaust port 3 (closed)



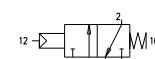
Weight 3417 g

PG6V211E^F00000

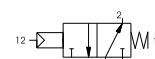
3/2



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



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



Weight 3168 g

PG6V311E^F00000

Solenoid-Spring

Coding: PG6V^N01^V^E^T

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (external feeding version)
Temperature °C	-5 ... +50
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"
Max. vacuum (mmHg)	758,5
Minimum operating vacuum (mmHg)	250 (self feeding version)

WAYS NUMBER	
N	2 = 2 ways, 2 positions
	3 = 3 ways, 2 positions
VERSION	
V	A = Self feeding
	E = External feeding
FUNCTION	
F	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

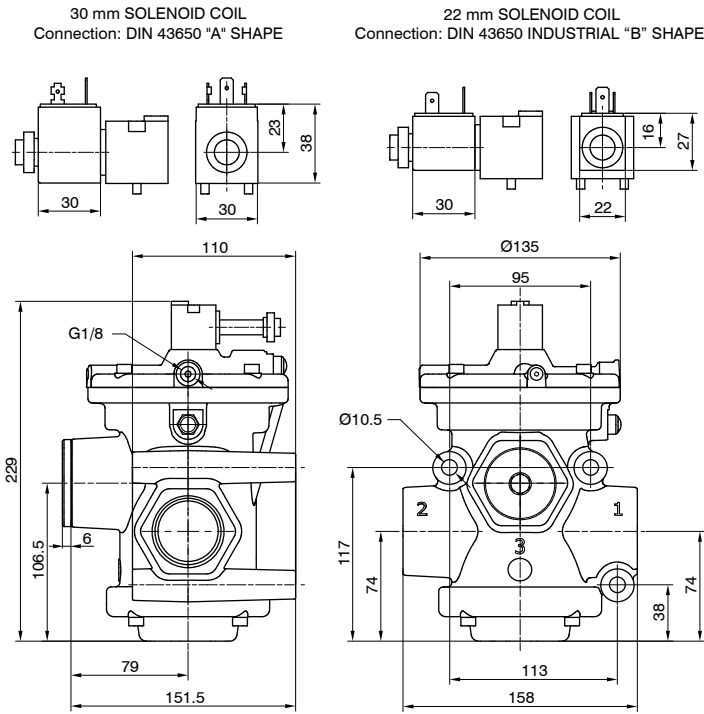
2/2



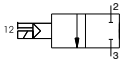
Weight 3491,5 g

PG6V201^V^E^T

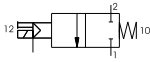
3/2



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



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



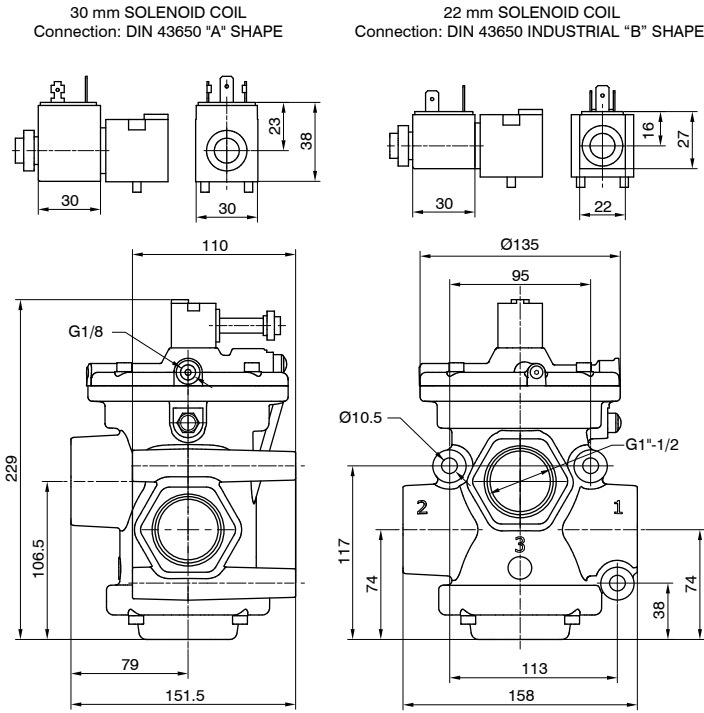
30 mm SOLENOID COIL
Connection: DIN 43650 "A" SHAPE

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

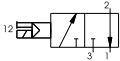


Weight 3242,5 g

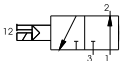
PG6V301^V^E^T



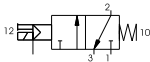
Self feeding - N.O.
Pump 1
Outlet port 2
Exhaust port 3



Self feeding - N.C.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.O.
Pump 3
Outlet port 2
Exhaust port 1



External feeding - N.C.
Pump 1
Outlet port 2
Exhaust port 3

