



## VALVES POPPET SYSTEM SERIES PG

HIGH FLOW RATES FOR COMPRESSED AIR AND VACUUM



## 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" - 1/2" NPT G 3/4" - 3/4" NPT G 1" - 1" NPT G 1 1/2" - 1 1/2" NPT Body, operator and end Aluminium cover 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.

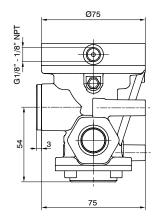


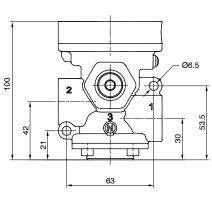
Coding: P@2A\11E\00000

| Operational characteristics                   |  |   | CONNECTIONS                         |
|---|--|---|-------------------------------------|
| Fluid   | Filtered air. No lubrication needed, if applied it shall be continuous | • | <b>G</b> = Gas thread               |
| Max. working pressure (bar)                   | 10   |   | N = NPT thread                      |
| Minimum pilot pressure (bar)                  | 2,5  |   | WAYS NUMBER                         |
| Temperature °C                                | -5 +70   | 0 | 2 = 2 ways, 2 positions             |
| Flow rate at 6 bar with $\Delta p=1$ (NI/min) | 4800   |   | 3 = 3 ways, 2 positions             |
| Orifice size (mm)                             | 15   |   | FUNCTION                            |
| Working ports size                            | G1/2" - 1/2" NPT   |   | A = Normally Open (only for 3 ways) |
| Pilot ports size                              | G1/8" - 1/8" NPT   |   | C = Normally Closed                 |

2/2







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

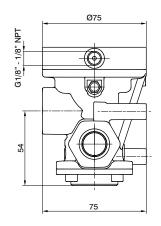
12 T

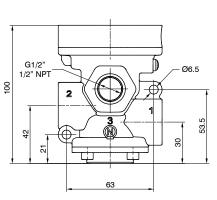
Weight 675 g

P@2A211E@00000

3/2







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

12 T 3 1

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

Weight 648,5 g

P**⊚**2A311E**G**00000

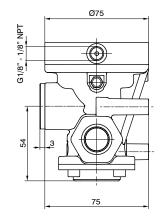


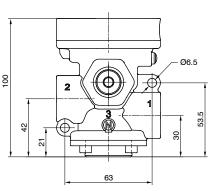
## Coding: P@2A\11E\100000

| Operational characteristics                   |  |   | CONNECTIONS                         |
|---|--|---|-------------------------------------|
| Fluid   | Filtered air. No lubrication needed, if applied it shall be continuous |   | G = Gasthread                       |
| Max. working pressure (bar)                   | 10   |   | N = NPT thread                      |
| Minimum pilot pressure (bar)                  | 2,5  |   | WAYS NUMBER                         |
| Temperature °C                                | -5 +70   | 0 | 2 = 2 ways, 2 positions             |
| Flow rate at 6 bar with $\Delta p=1$ (NI/min) | 4800   |   | 3 = 3 ways, 2 positions             |
| Orifice size (mm)                             | 15   |   | FUNCTION                            |
| Working ports size                            | G1/2" - 1/2" NPT   | • | A = Normally Open (only for 3 ways) |
| Pilot ports size                              | G1/8" - 1/8" NPT   |   | C = Normally Closed                 |

2/2







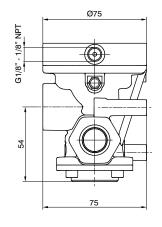
N.C. Inlet port 1 Outlet port 2 Exhaust port 3 (closed)

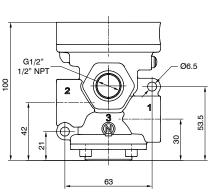
Weight 675 g

P@2A211E@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 648,5 g

P@2A311E@00000



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

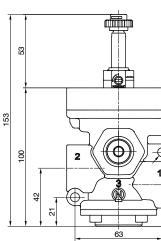
2/2

Fluid

3 = 3 ways, 2 positions VERSION Ø A = Selffeeding E = External feeding 21 (selffeeding version) FUNCTION Responce time according to ISO 12238, deactivation time (ms) 83 (selffeeding version) 0 A = Normally Open (only for 3 ways) C = Normally Closed VOLTAGE (22 MM SOLENOID COIL) **S40B0** = 12 VDC 22 mm SOLENOID COIL Connection: DIN 43650 INDUSTRIAL "B" SHAPE 30 mm SOLENOID COIL **S50B0** = 24 VDC Connection: DIN 43650 "A" SHAPE Û **S60B0** = 24 V 50/60 Hz S70B0 = 110 V 50/60 Hz**S80B0** = 230 V 50/60 Hz • 30 10000 = Without solenoid coil VOLTAGE (30 MM SOLENOID COIL) 16 **S40C0** = 12 VDC 23 FøH <del>l</del>iel **S50C0** = 24 VDC 27 38  $\textbf{S60C0} = 24\,\text{V}\,50/60\,\text{Hz}$ Ø75 **S70C0** = 110 V 50/60 Hz **S80C0** = 230 V 50/60 Hz 10000 = Without solenoid coil

G1/8" - 1/8" NPT

75



Self feeding - N.C.

Ø6.5

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



Coding: **P@**2A**\**01**\\$** 

CONNECTIONS  $\mathbf{G} = \mathsf{Gasthread}$ 

N = NPT thread

WAYS NUMBER

2 = 2 ways, 2 positions

0

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

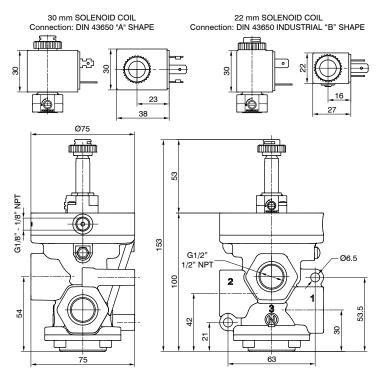


Weight 720,5 g

P**@**2A201**Ø9** 

3/2





Self feeding - N.O. Inlet port 3

Outlet port 2 Outlet 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 Outlet port 1



External feeding - N.C.

Inlet port 1 Outlet port 2 Exhaust port 3



Weight 693,5 g

P@2A301@@@



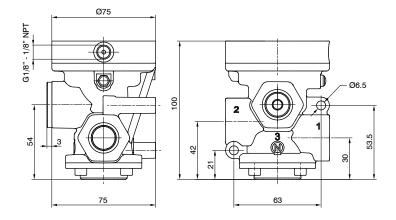
## Coding: P@2V**\**11E**@**00000

| Operational characteristics  |                  |   |
|------------------------------|------------------|---|
| Fluid Vacuum                 |                  |   |
| Minimum pilot pressure (bar) | 2                |   |
| Temperature °C               | -5 +70           |   |
| Orifice size (mm)            | 15               | 0 |
| Working ports size           | G1/2" - 1/2" NPT |   |
| Pilot ports size             | G1/8" - 1/8" NPT |   |
| Max. vacuum (mmHg)           | 758,5            | G |

| Г                       |               | CONNECTIONS                         |
|-------------------------|---------------|-------------------------------------|
| 11                      | G = Gasthread |                                     |
|                         |               | N = NPT thread                      |
| Γ                       |               | WAYSNUMBER                          |
| 2 = 2 ways, 2 positions |               | 2 = 2 ways, 2 positions             |
|                         |               | 3 = 3 ways, 2 positions             |
| Г                       |               | FUNCTION                            |
|                         | •             | A = Normally Open (only for 3 ways) |
|                         |               | C = Normally Closed                 |

2/2





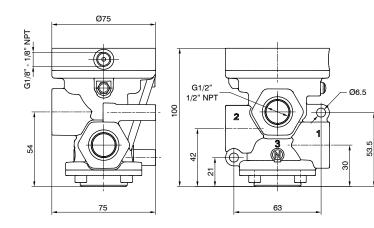
N.C. Pump 1 Outlet port 2 Exhaust port 3 (closed)

Weight 675,5 g

P@2V211E@00000

3/2





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



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

Weight 648,5 g

P@2V311E@00000



Max. vacuum (mmHa)

Minimum operating vacuum (mmHg)

## Solenoid-Spring

### Fluid Vacuum Minimum pilot pressure (bar) 2 (external feeding version) Temperature °C -5 ... +50 Orifice size (mm) 15 G1/2" - 1/2" NPT Working ports size G1/8" - G1/8" NPT Pilot ports size

23

23

100

42

53

38

30 mm SOLENOID COIL

Connection: DIN 43650 "A" SHAPE

Ø75

75

FøH

G1/8" - 1/8" NPT

54

758.5 250 (self feeding version)

30

<del>l</del>iel

HøF

Ф

63

2

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

•

16

Ø6.5

27

Coding: P@2V\001\0001\00000

CONNECTIONS

| Θ | G = Gasthread                       |
|---|-------------------------------------|
|   | N = NPT thread                      |
|   | WAYS NUMBER                         |
| 0 | 2 = 2 ways, 2 positions             |
|   | 3 = 3 ways, 2 positions             |
|   | VERSION                             |
| V | A = Selffeeding                     |
|   | E = External feeding                |
|   | FUNCTION                            |
| • | A = Normally Open (only for 3 ways) |

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

**S50B0** = 24 VDC Ū **S60B0** = 24 V 50/60 Hz  $\textbf{S70B0} = 110\,\text{V}\,50/60\,\text{Hz}$ 

**S80B0** = 230 V 50/60 Hz 10000 = Without solenoid coil VOLTAGE (30 MM SOLENOID COIL) **S40C0** = 12 VDC **S50C0** = 24 VDC

ø  $\textbf{S60C0} = 24\,\text{V}\,50/60\,\text{Hz}$ **S70C0** = 110 V 50/60 Hz **S80C0** = 230 V 50/60 Hz 10000 = Without solenoid coil

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)

2/2

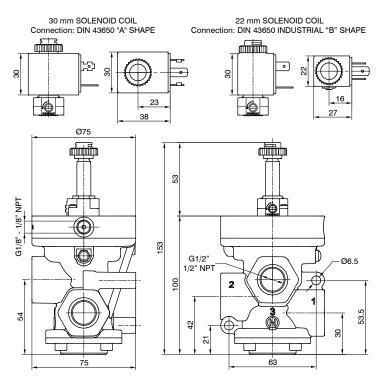


P**@**2V201**V9** 

Weight 720,5 g

3/2





Self feeding - N.O.

Pump 1 Outlet port 2 Exhaust port 3



Self feeding - N.C.

Pump 3 Outlet port 2 Outlet port 1



External feeding - N.O.

Pump 3 Outlet port 2 Outlet port 1



External feeding - N.C. Pump 1

Outlet port 2 Exhaust port 3

Weight 693,5 g

P@2V301**000** 

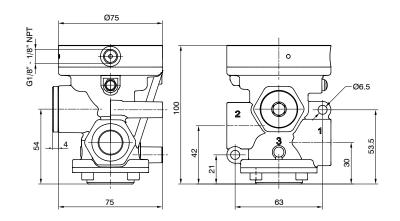


## Coding: PG3A**\**11E**\**00000

| Operational characteristics                   |  |   | CONNECTIONS                         |
|---|--|---|-------------------------------------|
| Fluid   | Filtered air. No lubrication needed, if applied it shall be continuous | • | G = Gasthread                       |
| Max. working pressure (bar)                   | 10   |   | N = NPT thread                      |
| Minimum pilot pressure (bar)                  | 2,5  |   | WAYS NUMBER                         |
| Temperature °C                                | -5 +70   | 0 | 2 = 2 ways, 2 positions             |
| Flow rate at 6 bar with $\Delta p=1$ (NI/min) | 6100   |   | 3 = 3 ways, 2 positions             |
| Orifice size (mm)                             | 20   |   | FUNCTION                            |
| Working ports size                            | G3/4" - 3/4" NPT   | • | A = Normally Open (only for 3 ways) |
| Pilot ports size                              | G1/8" - 1/8" NPT   |   | C = Normally Closed                 |

2/2



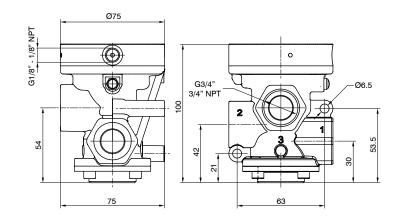


N.C. Inlet port 1 Outlet port 2 Exhaust port 3 (closed)

Weight 576,5 g

P@3A211E@00000





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

P@3A311E@00000



## Coding: **P@**3A**0**01**00**

| Operational characteristics                                  |  |  |
|--|--|--|
| Fluid  | Filtered air. No lubrication needed, if applied it shall be continuous |  |
| Max. working pressure (bar)                                  | 10   |  |
| Minimum pilot 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" - 3/4" NPT   |  |
| Pilot ports size   | G1/8" - 1/8" NPT   |  |
| Responce time according to ISO 12238, activation time (ms)   | 22 (self feeding version)  |  |
| Responce time according to ISO 12238, deactivation time (ms) | 81 (selffeeding version)   |  |

CONNECTIONS Θ  $\mathbf{G} = \mathsf{Gasthread}$ N = NPT thread WAYS NUMBER 0 V

2/2

Connection: DIN 43650 "A" SHAPE 23 HOH 38 Ø75

G1/8" - 1/8" NPT

54

53

100

42

2

53

30 mm SOLENOID COIL

22 mm SOLENOID COIL Connection: DIN 43650 INDUSTRIAL "B" SHAPE • 30 16 <del>l</del>iel 27

<del>l</del>eh

63

2 = 2 ways, 2 positions 3 = 3 ways, 2 positions VERSION A = Selffeeding  $\mathbf{E} = \mathsf{External} \, \mathsf{feeding}$ FUNCTION A = Normally Open (only for 3 ways)  $\mathbf{C} = \text{Normally Closed}$ VOLTAGE (22 MM SOLENOID COIL) **S40B0** = 12 VDC **S50B0** = 24 VDC Ū **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  $\textbf{S60C0} = 24\,\text{V}\,50/60\,\text{Hz}$ **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)

Ø6.5

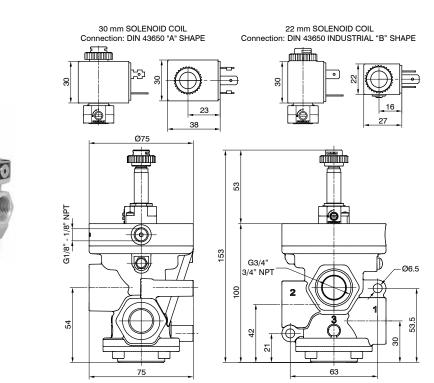


External feeding - N.C. Inlet port 1 Outlet port 2 Exhaust port 3 (closed)

Weight 621,5 g

P@3A201**0@** 

3/2



Self feeding - N.O. Inlet port 3

Outlet port 2 Outlet 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 Outlet port 1



External feeding - N.C. Inlet port 1

Outlet port 2 Exhaust port 3



Weight 567,5 g

P@3A301**0@** 



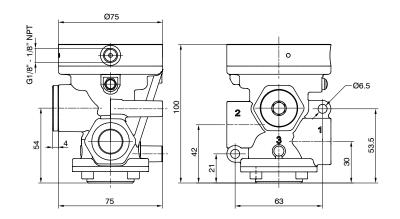
## Coding: P@3V**\**11E**@**00000

| Operational characteristics    |                  |    | CON                       |
|--------------------------------|------------------|----|---------------------------|
| Fluid                          | Vacuum           | ∣⊚ | $\mathbf{G} = \mathbf{G}$ |
| Minimum pilot pressure (bar) 2 |                  | ]  | N = N                     |
| Temperature °C                 | -5 +70           |    | WAYS                      |
| Orifice size (mm)              | 20               |    | <b>2</b> = 2              |
| Working ports size             | G3/4" - 3/4" NPT | ]  | <b>3</b> = 3              |
| Pilot ports size               | G1/8" - 1/8" NPT |    | FUNC                      |
| Max. vacuum (mmHg)             | 758,5            |    | $\mathbf{A} = N$          |

|   |                                     | CONNECTIONS             |
|---|-------------------------------------|-------------------------|
| ٦ | Θ                                   | <b>G</b> = Gasthread    |
|   |                                     | N = NPT thread          |
| ٦ |                                     | WAYSNUMBER              |
|   | 2 = 2 ways, 2 positions             |                         |
|   |                                     | 3 = 3 ways, 2 positions |
|   |                                     | FUNCTION                |
|   | A = Normally Open (only for 3 ways) |                         |
|   |                                     | C = Normally Closed     |

2/2





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

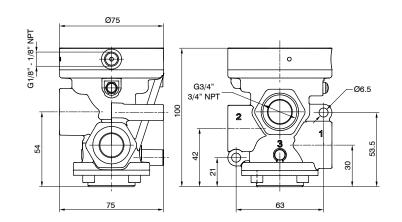


Weight 576,5 g

P@3V211E**@**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

P@3V311E@00000

2/2

## PREUMAX

## Solenoid-Spring

## Operational characteristics Fluid Vacuum Minimum pilot pressure (bar) 2 (external feeding version) Temperature \*\*C -5 ... +50 Orifice size (mm) 20 Working ports size G3/4" - 3/4" NPT Pilot ports size G1/8" - 1/8" NPT Max. vacuum (mmHg) 758,5 Minimum operating vacuum (mmHg) 250 (self feeding version)

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

Coding: P@3V**0**01**0**00

|          | CONNECTIONS                         |
|----------|-------------------------------------|
| 0        | <b>G</b> = Gas thread               |
|          | N = NPT thread                      |
|          | WAYS NUMBER                         |
| 0        | 2 = 2 ways, 2 positions             |
|          | 3 = 3 ways, 2 positions             |
|          | VERSION                             |
| V        | A = Selffeeding                     |
|          | E = External feeding                |
|          | FUNCTION                            |
| <b>9</b> | A = Normally Open (only for 3 ways) |
|          | C = Normally Closed                 |
|          | VOLTAGE (22 MM SOLENOID COIL)       |
|          | <b>S40B0</b> = 12 VDC               |
|          | \$50B0 = 24 VDC                     |
| O        | <b>S60B0</b> = 24 V 50/60 Hz        |
|          | S70B0 = 110 V 50/60 Hz              |
|          | COOPO - 020 V E0/60 H=              |

\$60B0 = 24 V 50/60 Hz

\$70B0 = 110 V 50/60 Hz

\$80B0 = 230 V 50/60 Hz

10000 = Without solenoid coil

VOLTAGE (30 MM SOLENOID COIL)

\$40C0 = 12 VDC

\$50C0 = 24 VDC

\$60C0 = 24 V 50/60 Hz

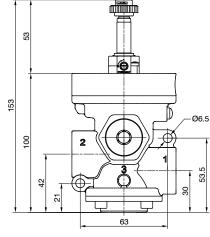
\$70C0 = 110 V 50/60 Hz

S70C0 = 110 V 50/60 Hz

S80C0 = 230 V 50/60 Hz

10000 = Without solenoid coil

23 38 075



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

16

30

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)

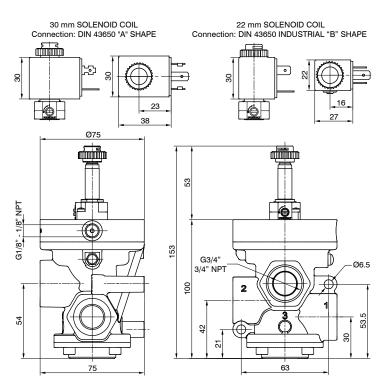


Weight 621,5 g

P@3V201**V@** 

3/2





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



**Self feeding - N.C.** Pump 3

Pump 3 Outlet port 2 Outlet port 1



External feeding - N.O. Pump 3

Pump 3 Outlet port 2 Outlet port 1



External feeding - N.C.
Pump 1

Pump 1 Outlet port 2 Exhaust port 3



Weight 567,5 g

P@3V301**Ø@** 

# AIR DISTRIBUTION

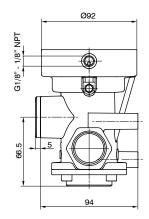
## Pneumatic - Spring

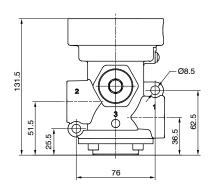
## Coding: P@1A**\**11E**\**00000

| Operational characteristics                   |  |   | CONNECTIONS                         |
|---|--|---|-------------------------------------|
| Fluid   | Filtered air. No lubrication needed, if applied it shall be continuous | ● | <b>G</b> = Gasthread                |
| Max. working pressure (bar)                   | 10   |   | N = NPT thread                      |
| Minimum pilot pressure (bar)                  | 2,5  |   | WAYS NUMBER                         |
| Temperature °C                                | -5 +70   |   | 2 = 2 ways, 2 positions             |
| Flow rate at 6 bar with $\Delta p=1$ (NI/min) | 12500  |   | 3 = 3 ways, 2 positions             |
| Orifice size (mm)                             | 25   |   | FUNCTION                            |
| Working ports size                            | G1" - 1" NPT   |   | A = Normally Open (only for 3 ways) |
| Pilot ports size                              | G1/8" - 1/8" NPT   |   | C = Normally Closed                 |

2/2







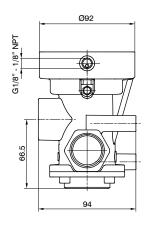
N.C. Inlet port 1 Outlet port 2 Exhaust port 3 (closed)

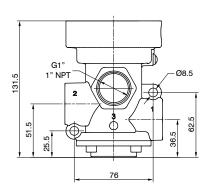
Weight 1231,5 g

P@1A211E@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

P@1A311E@00000



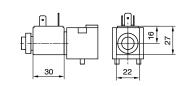
| Operational characteristics                                  |  |  |
|--|--|--|
| Fluid  | Filtered air. No lubrication needed, if applied it shall be continuous |  |
| Max. working pressure (bar)                                  | 10   |  |
| Minimum pilot pressure (bar)                                 | 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" - 1/2" NPT   |  |
| Pilot ports size   | G1/8" - 1/8" NPT   |  |
| Responce time according to ISO 12238, activation time (ms)   | 27 (self feeding version)  |  |
| Responce time according to ISO 12238, deactivation time (ms) | 88 (self feeding version)  |  |

2/2

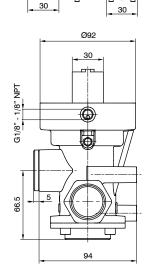
30 mm SOLENOID COIL

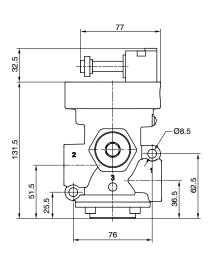
Connection: DIN 43650 "A" SHAPE

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









N = NPT thread WAYS NUMBER 0 2 = 2 ways, 2 positions 3 = 3 ways, 2 positions VERSION V A = Self feeding  $\mathbf{E} = \mathsf{External} \, \mathsf{feeding}$ FUNCTION A = Normally Open (only for 3 ways)  $\mathbf{C} = \text{Normally Closed}$ VOLTAGE (22 MM SOLENOID COIL) **S40B0** = 12 VDC **S50B0** = 24 VDC Ū **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  $\textbf{S60C0} = 24\,\text{V}\,50/60\,\text{Hz}$ **S70C0** = 110 V 50/60 Hz **S80C0** = 230 V 50/60 Hz 10000 = Without solenoid coil

Coding: P@1A001000

CONNECTIONS

 $\mathbf{G} = \mathsf{Gasthread}$ 

Θ

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)

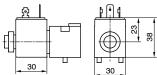


Weight 1290 g

P@1A201**0@** 

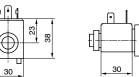
3/2

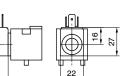
## 30 mm SOLENOID COIL Connection: DIN 43650 "A" SHAPE



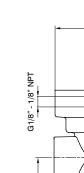
Ø92

94

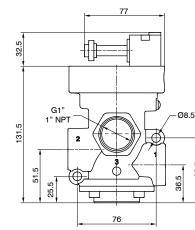




22 mm SOLENOID COIL Connection: DIN 43650 INDUSTRIAL "B" SHAPE



66.5





Inlet port 3 Outlet port 2 Outlet 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 Outlet port 1

62.5



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



Weight 1198 g

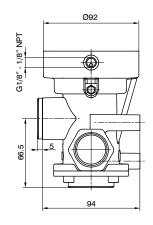
P@1A301**0@** 

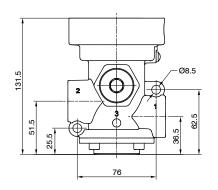
## Coding: P@1V**\**11E**\**00000

| Operational characteristics  |                  |   | CONNECTIONS                         |
|------------------------------|------------------|---|-------------------------------------|
| Fluid                        | Vacuum           | Θ | <b>G</b> = Gasthread                |
| Minimum pilot pressure (bar) | 2                |   | N = NPT thread                      |
| Temperature °C               | -5 +70           |   | WAYS NUMBER                         |
| Orifice size (mm)            | 25               | 0 | 2 = 2 ways, 2 positions             |
| Working ports size           | G1" - 1" NPT     |   | 3 = 3 ways, 2 positions             |
| Pilot ports size             | G1/8" - 1/8" NPT |   | FUNCTION                            |
| Max. vacuum (mmHg)           | 758,5            | • | A = Normally Open (only for 3 ways) |
|                              |                  |   | C = Normally Closed                 |

2/2







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

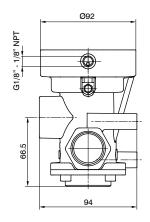


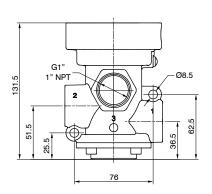
Weight 1231,5 g

P**@**1V211E**@**00000

3/2







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



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



Weight 1139,5 g

P@1V311E@00000



## Operational characteristics Fluid Vacuum Minimum pilot pressure (bar) 2 (external feeding version) Temperature °C -5 ... +50 Orifice size (mm) 25 Working ports size G1"-1"NPT Pilot ports size G1/8" -1/8"NPT Max. vacuum (mmHg) 758,5 Minimum operating vacuum (mmHg) 250 (self feeding version)

Coding: P@1V@01**V@** 

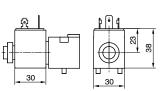
CONNECTIONS

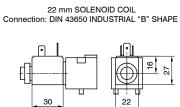
| 0 | G = Gasthread                       |
|---|-------------------------------------|
|   | N = NPT thread                      |
| 0 | WAYS NUMBER                         |
|   | 2 = 2 ways, 2 positions             |
|   | 3 = 3 ways, 2 positions             |
| Ø | VERSION                             |
|   | A = Selffeeding                     |
| - | E = External feeding                |
|   | FUNCTION                            |
| • | A = Normally Open (only for 3 ways) |
|   | C = Normally Closed                 |
|   | VOLTAGE (22 MM SOLENOID COIL)       |
|   | <b>S40B0</b> = 12 VDC               |
|   | <b>S50B0</b> = 24 VDC               |
| 0 | <b>S60B0</b> = 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)       |
| • | <b>S40C0</b> = 12 VDC               |
|   | <b>S50C0</b> = 24 VDC               |
|   | S60C0 = 24 V 50/60 Hz               |
| - | S70C0 = 110 V 50/60 Hz              |
|   | S80C0 = 230 V 50/60 Hz              |
|   |                                     |

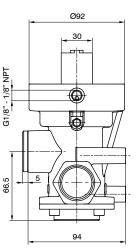
2/2

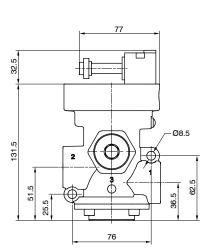


30 mm SOLENOID COIL Connection: DIN 43650 "A" SHAPE









Self feeding - N.C.

Pump 3
Outlet port 2
Exhaust port 1 (closed)



10000 = Without solenoid coil

External feeding - N.C.

Pump 1 Outlet port 2 Exhaust port 3 (closed)

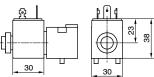


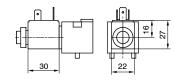
Weight 1290 g

P@1V201**0@0** 

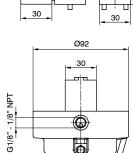
3/2

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



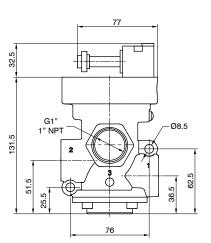


22 mm SOLENOID COIL Connection: DIN 43650 INDUSTRIAL "B" SHAPE



94

66.5



**Self feeding - N.O.** Pump 1

Pump 1 Outlet port 2 Exhaust port 3



Self feeding - N.C.

Pump 3 Outlet port 2 Outlet port 1



External feeding - N.O.

Pump 3 Outlet port 2 Outlet port 1



External feeding - N.C.

Pump 1 Outlet port 2 Exhaust port 3



Weight 1198 g

P@1V301**000** 

# AIR DISTRIBUTION

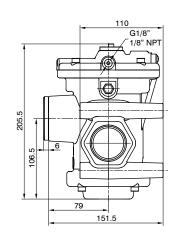
## Pneumatic - Spring

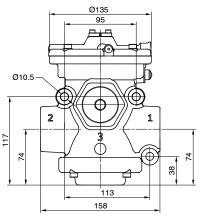
Coding: P@6A**\**11E**\**00000

| Operational characteristics                   |  |   | CONNECTIONS                         |
|---|--|---|-------------------------------------|
| Fluid   | Filtered air. No lubrication needed, if applied it shall be continuous | ● | G = Gasthread                       |
| Max. working pressure (bar)                   | 10   |   | N = NPT thread                      |
| Minimum pilot pressure (bar)                  | 3  |   | WAYS NUMBER                         |
| Temperature °C                                | -5 +70   |   | 2 = 2 ways, 2 positions             |
| Flow rate at 6 bar with $\Delta p=1$ (NI/min) | 33500  |   | 3 = 3 ways, 2 positions             |
| Orifice size (mm)                             | 38   |   | FUNCTION                            |
| Working ports size                            | G1 1/2" - 1 1/2" NPT   |   | A = Normally Open (only for 3 ways) |
| Pilot ports size                              | G1/8" - 1/8" NPT   |   | C = Normally Closed                 |

2/2







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

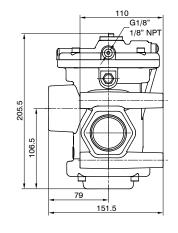


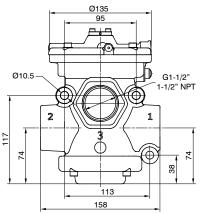
Weight 3417 g

P@6A211E@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 3168 g

P@6A311E@00000

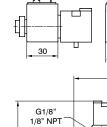


| •  |  |  |
|--|--|--|
| Operational characteristics                                  |  |  |
| Fluid  | Filtered air. No lubrication needed, if applied it shall be continuous |  |
| Max. working pressure (bar)                                  | 10   |  |
| Minimum pilot pressure (bar)                                 | 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" - 1 1/2" NPT   |  |
| Pilot ports size   | G1/8" - 1/8" NPT   |  |
| Responce time according to ISO 12238, activation time (ms)   | 182 (selffeeding version)  |  |
| Responce time according to ISO 12238, deactivation time (ms) | 78 (selffeeding version)   |  |

2/2

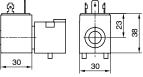
## 30 mm SOLENOID COIL Connection: DIN 43650 "A" SHAPE

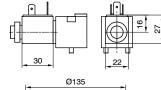
22 mm SOLENOID COIL Connection: DIN 43650 INDUSTRIAL "B" SHAPE



229

106.5







27





Coding: **P6A0**01**71** 

2 = 2 ways, 2 positions 3 = 3 ways, 2 positions VERSION

 $\mathbf{C} = \text{Normally Closed}$ 

**S60B0** = 24 V 50/60 Hz  $\textbf{S70B0} = 110\,\text{V}\,50/60\,\text{Hz}$ **S80B0** = 230 V 50/60 Hz 10000 = Without solenoid coil

**S40B0** = 12 VDC

**S50B0** = 24 VDC

**S40C0** = 12 VDC **S50C0** = 24 VDC

 $\textbf{S60C0} = 24\,\text{V}\,50/60\,\text{Hz}$ **S70C0** = 110 V 50/60 Hz

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

A = Normally Open (only for 3 ways)

VOLTAGE (22 MM SOLENOID COIL)

VOLTAGE (30 MM SOLENOID COIL)

CONNECTIONS  $\mathbf{G} = \mathsf{Gasthread}$ N = NPT thread WAYS NUMBER

A = Selffeeding  $\mathbf{E} = \mathsf{External} \, \mathsf{feeding}$ FUNCTION

0

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



Weight 3491,5 g

3/2

P@6A201**0@** 

30 mm SQL ENQID CQL Connection: DIN 43650 "A" SHAPE

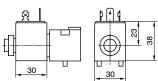
151.5

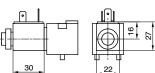
79

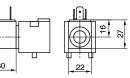
22 mm SQI ENQID CQII Connection: DIN 43650 INDUSTRIAL "B" SHAPE

113

158







1

38





Self feeding - N.O.

Inlet port 3 Outlet port 2 Outlet port 1



External feeding - N.O. Inlet port 3 Outlet port 2 Outlet port 1



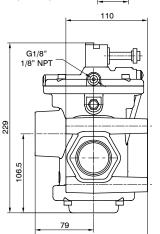
External feeding - N.C. Inlet port 1 Outlet port 2 Exhaust port 3



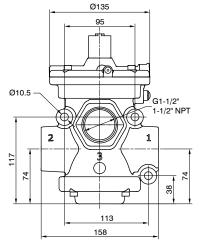


Weight 3242,5 g

P@6A301**0G0** 



151.5



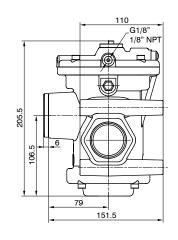


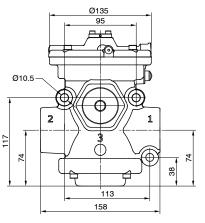
## Coding: P@6V**\**11E**@**00000

| Operational characteristics  |                      |          | CONNECTIONS                         |
|------------------------------|----------------------|----------|-------------------------------------|
| Fluid                        | Vacuum               | <b>⊚</b> | <b>G</b> = Gas thread               |
| Minimum pilot pressure (bar) | 2                    | 1        | N = NPT thread                      |
| Temperature °C               | -5 +70               |          | WAYSNUMBER                          |
| Orifice size (mm)            | 38                   | 0        | 2 = 2 ways, 2 positions             |
| Working ports size           | G1 1/2" - 1 1/2" NPT | 11 -     | 3 = 3 ways, 2 positions             |
| Pilot ports size             | G1/8" - 1/8" NPT     |          | FUNCTION                            |
| Max. vacuum (mmHg)           | 758,5                | G        | A = Normally Open (only for 3 ways) |
|                              |                      |          | C = Normally Closed                 |

2/2







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

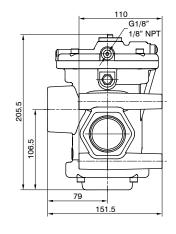


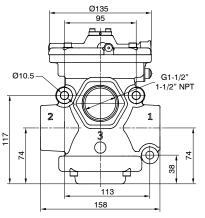
Weight 3417 g

P@6V211E@00000

3/2







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



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



Weight 3168 g

P@6V311E@00000



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

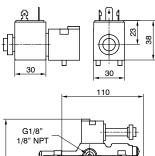
CONNECTIONS

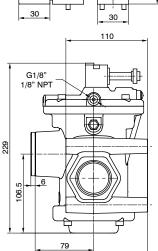
| ⊕        | <b>G</b> = Gas thread               |
|----------|-------------------------------------|
|          | N = NPT thread                      |
|          | WAYSNUMBER                          |
| 0        | 2 = 2 ways, 2 positions             |
|          | 3 = 3 ways, 2 positions             |
|          | VERSION                             |
| V        | A = Selffeeding                     |
|          | E = External feeding                |
|          | FUNCTION                            |
| <b>9</b> | A = Normally Open (only for 3 ways) |
|          | C = Normally Closed                 |
|          | VOLTAGE (22 MM SOLENOID COIL)       |
|          | <b>S40B0</b> = 12 VDC               |
|          | <b>S50B0</b> = 24 VDC               |
| 0        | <b>S60B0</b> = 24 V 50/60 Hz        |
|          | <b>S70B0</b> = 110 V 50/60 Hz       |
|          | <b>S80B0</b> = 230 V 50/60 Hz       |
|          | 10000 = Without solenoid coil       |
|          | VOLTAGE (30 MM SOLENOID COIL)       |
|          | <b>S40C0</b> = 12 VDC               |
|          | <b>S50C0</b> = 24 VDC               |
| 0        | <b>S60C0</b> = 24 V 50/60 Hz        |
|          | S70C0 = 110 V 50/60 Hz              |
|          | S80C0 = 230 V 50/60 Hz              |
|          |                                     |

2/2



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)



10000 = Without solenoid coil

External feeding - N.C.

Pump 1 Outlet port 2 Exhaust port 3 (closed)



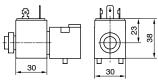
Weight 3491,5 g

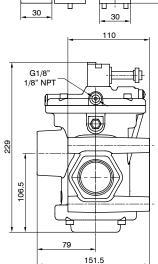
P**@**6V201**V30** 

3/2

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

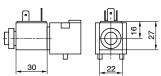
151.5

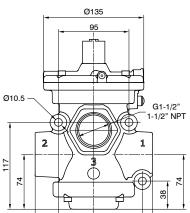




22 mm SOLENOID COIL Connection: DIN 43650 INDUSTRIAL "B" SHAPE

158





113

158

Self feeding - N.O.

Pump 1 Outlet port 2 Exhaust port 3



Self feeding - N.C.

Pump 3 Outlet port 2 Outlet port 1



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



External feeding - N.C.

Pump 1 Outlet port 2 Exhaust port 3



Weight 3242,5 g

P**@**6V301**V30** 



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