EPP4 Series

ELECTROPNEUMATIC PRESSURE REGULATORS





aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding

| Basic | 1/4 $1/2$ |
|-----------------|--|
| Comfort | 1/4 $1/2$ |
| Comfort | ¹ / ₂ "HP 1" 2" |
| Comfort ATEX | ¹ / ₂ " 1" 2" |





ELECTROPNEUMATIC PRESSURE REGULATORS

Lucifer[®] EPP4 Programmable Pressure Regulator

EPP4 is an electro pneumatic pressure regulator with integrated electronic system.

A pulsed width modulated solenoid valve controls the output pressure proportionally to an analog input signal.

Very high accuracy is guaranteed thanks to a high precision closed loop signal provided by a built in pressure sensor.



Market

Robotics Paper industry Machine tools Mobile Buildings Textile Instrumentation Semi conductor







Parker Hannifin Corporation Fluid Control Division Europe General Catalogue FCDE/0110/UK/V2.0

Description of Applications

Welding Speed and brake control Sanding Cutting Humidification Tension regulation Painting Presses Polishing Adaptative suspension control



Value Propositions for the Lucifer® EPP4 Range of Proportional Pressure Regulators

- All parameters fully adjustable through the PC software Calys
- Easy to use software
- Long life expectancy
- Compact and light
- Limited inventory
- Low power
- Flexible remote display positioning
- Proven expertise of Parker, a pioneer in pressure regulation technology



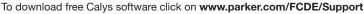


calys Software for EPP Comfort

Calys is a unique software in house developed to configurate all the parameters of the EPP4 Comfort range. Calys is an option of the EPP4. To use CALYS, you need to order cable reference 496449 wich permits the communication between the EPP4 and a PC.

Calys offers many capabilities:

- It enables distributors to reduce inventory by keeping a generic EPP4 in stock and adjust it to the needs of each customer application. They can switch for example from 0-10 V to 4-20 mA, or from 0-7 bar pressure range to 0-5 bar.
- Engineers designing a pneumatic system are able to monitor precisely all the important values (electrical or pneumatical) directly on their laptop.
- After sales technicians are able to receive via email all the parameters measured by the EPP4 installed on a machine wherever its location allowing remote ma intenance operation.
- PID regulation parameters can be adjusted with Calys to match required regulator response (like slow or reactive).









ELECTROPNEUMATIC PRESSURE REGULATORS









TABLE OF CONTENT







INTRODUCTION

Description Operation

The EPP4 Series is a family of electrically remotecontrolled pneumatic pressure regulators with closed loop integrated electronic control.

It allows regulating the outlet pressure proportionally to an electrical control signal.

The EPP4 regulator comprises a traditional servo-operated pneumatic pressure regulator, where the pilot chamber is fed y one or the other of two pulse width modulated 2-way solenoid valves.

The pressure sensor measures the outlet pressure of the regulator and provides a feedback signal to the controller.

Any difference between the control signal and the feedback signal is converted to a digital signal to energise the coil of one or the other 2-way valves to correct the position of the regulator.

The control signal can be a voltage (0-10 V) or a current (4-20 mA). The inlet of the **"Filling Valve"** is connected directly to the main inlet P of the

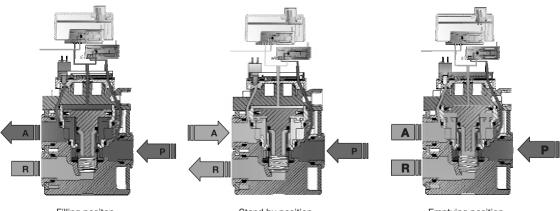
regulator; when energised this valve will fill the servo-chamber for increasing the pressure at the outlet A of the regulator.

When the other **"exhaust valve"** is energised (reduction of pressure at the outlet A of the regulator), the pressure of the servo-chamber will be exhausted through a discharge orifice located between the cover and the body and directly fed to the atmosphere without silencer.

The exhaust of the main regulated pressure will be made through the quick exhaust R.

The use of a conventional silencer is recommended. Both solenoid valves assure the Filling or Emptying of the servo-chamber in order to increase or decrease the pressure at the outlet of the regulator.

In rest position of the valves all ports are blocked.



Filling positon

Stand by position

Emptying position

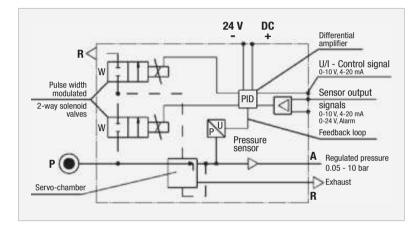


Block Diagram

The controller receives both the control signal (set pressure) and the feedback signal from the sensor (outlet pressure).

Any difference between the two amplifier inputs results in a corresponding output which drives the appropriate 2-way pulse width modulated solenoid valve so that the pilot piston moves to correct the pressure. The same feedback signal from the sensor is used for the output feedback in voltage and current.

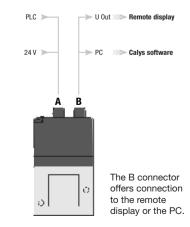
The digital signal (alarm) is activated when the conditions (out of pressure or time tolerance) are met.



EPP4 possible executions : Basic and Comfort

EPP4 Basic and Comfort ranges share the same reliable mechanical parts. Proportional regulation is also identical for the two different executions, giving the same characteristics for hysteresis or precision for instance.

Comfort range regulators have a second M12 connector, that can be used to connect a remote display showing the current regulated pressure, or a PC to easily set the regulation's parameters. These are the key feature options for a comfortable use.



TECHNICAL DATA

| | Basic 1/4" | Basic 1/2" | | | | |
|--|---|--|--|--|--|--|
| Fluids: | Lubricated or non lubricated air and neutral gases Recommended fi Itration: 50 µm | | | | | |
| Temperature range: | Ambient: 0°C to +50°C Fluid: 0°C to +50°C | | | | | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | 1 to 12 bar | 1 to 12 bar | | | | |
| Outlet pressure range: | 0.05 to | 10 bar | | | | |
| Hysteresis: | \pm 50 mbar (fa | actory set up) | | | | |
| Air consumption at constant control signal: | 0 | | | | | |
| Supply voltage: | $24\text{V}\text{DC}\pm15\%$ | (Max. ripple 1 V) | | | | |
| Power consumption: | Max. 2.8 W with 24 V DC and constant changes of the control signal < 1.5 W without change of control signal | | | | | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | | | | | |
| Max. flow: Indicative response time: With a volume of 330 cm ³ at the outlet of the regulator | 70 m³/h | 150 m³/h | | | | |
| Filling 2 to 4 bar: Filling 2 to 8 bar: Emptying 4 to 2 bar: Emptying 8 to 2 bar: | 50 msec 100 msec 70 msec 130 msec | 60 msec 120 msec 90 msec 190 msec | | | | |
| Safety position: | In case of control signal failure or if it is les automatically to 0 bar (atmospheric pre- the regulated pressure | ssure). In case of voltage supply failure. | | | | |
| Electrical connection: | M12 - 4 pin; 4 | 4 x 0.34 mm ² | | | | |
| Life expectancy: | > 50 Million changes | of control signal steps | | | | |
| Mounting position: | Indifferent (recommended positio | n: upright; electronic part on top) | | | | |
| Resistance to vibrations: | 30 g in all | directions | | | | |
| Degree of protection: | IP | 65 | | | | |
| Assembly: | Silicon | e free | | | | |
| Electromagnetic compatibility: In accordance with: | EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 EN 61000-6-4: 2001 | | | | | |
| Installation and setting instructions: | See our "Notice 408038, 408014" and | d appendix supplied with the product. | | | | |

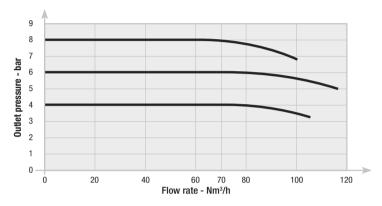
Note: Parker reserves the right to change specifications without notification.





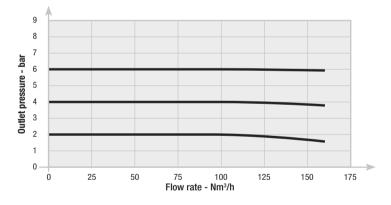
FLOW CURVES

Flow Curve Basic 1/4"





Flow Curve Basic 1/2"





REFERENCES

| Codes | Ріре | | re Range bar) | Control Signal (see options) | Drawing Number |
|------------------|-----------|---|------------------|---------------------------------|-------------------|
| P4BG2001A001 | G 1/4" | 0 | 4 bar | 4 - 20 mA | 1 |
| P4BG2001A002 | G 1/4" | 0 | 10 bar | 0 - 10 V | 1 |
| P4BG2001A003 | G 1/4" | 0 | 10 bar | 4 - 20 mA | 1 |
| P4BG2001A004 | G 1/4" | 0 | 6 bar | 0 - 10 V | 1 |
| P4BG2001A005 | G 1/4" | 0 | 6 bar | 4 - 20 mA | 1 |
| P4BG2001A006 | G 1/4" | 0 | 5 bar | 0 - 10 V | 1 |
| P4BG2001A007 | G 1/4" | 0 | 5 bar | 4 - 20 mA | 1 |
| P4BG2001A008 | G 1/4" | 0 | 7 bar | 0 - 10 V | 1 |
| P4BG2001A009 | G 1/4" | 0 | 7 bar | 4 - 20 mA | 1 |
| P4BG2003A002 * | G 1/4" | 0 | 10 bar | 0 - 10 V | 1 |
| P4BG2003A003 * | G 1/4" | 0 | 10 bar | 4 - 20 mA | 1 |
| P4BG4001A002 | G 1/2" | 0 | 10 bar | 0 - 10 V | 2 |
| P4BG4001A003 | G 1/2" | 0 | 10 bar | 4 - 20 mA | 2 |
| P4BG4001A004 | G 1/2" | 0 | 6 bar | 0 - 10 V | 2 |
| P4BG4001A005 | G 1/2" | 0 | 6 bar | 4 - 20 mA | 2 |
| P4BG4001A006 | G 1/2" | 0 | 5 bar | 0 - 10 V | 2 |
| P4BG4001A007 | G 1/2" | 0 | 5 bar | 4 - 20 mA | 2 |
| P4BG4001A008 | G 1/2" | 0 | 7 bar | 0 - 10 V | 2 |
| P4BG4001A009 | G 1/2" | 0 | 7 bar | 4 - 20 mA | 2 |
| P4BG4004A010 *** | G 1/2" | 0 | 4 bar | 0 - 10 V | 2 |
| P4BG4051A002 ** | G 1/2" | 0 | 10 bar | 4 - 20 mA | 2 |
| P4BN2001A002 | NPT 1/4'' | 0 | 10 bar | 0 - 10 V | 2 |
| P4BN2001A003 | NPT 1/4'' | 0 | 10 bar | 4 - 20 mA | 2 |
| P4BN4001A002 | NPT 1/2'' | 0 | 10 bar | 0 - 10 V | 2 |
| P4BN4001A003 | NPT 1/2'' | 0 | 10 bar | 4 - 20 mA | 2 |

* Integrated pilot exhaust

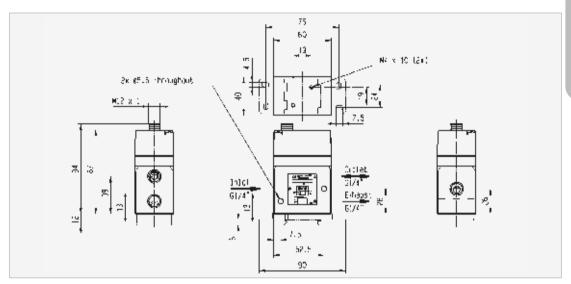
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*** External pressure supply



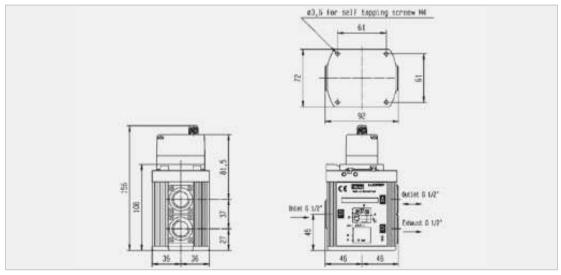


DIMENSIONS DRAWINGS EPP4 BASIC 1/4"



Drawing 1

DIMENSIONS DRAWINGS EPP4 BASIC 1/2"



Drawing 2



LUCIFER® EPP4 COMFORT 1/4" & 1/2"

TECHNICAL DATA

| Basic | 1/4 $1/2$ |
|---------|--|
| Comfort | 1/4" $1/2$ " |
| | |
| Comfort | ¹ / ₂ HP 1 2" |

| | Comfort 1/4" | Comfort 1/2" | | | | |
|--|---|--|--|--|--|--|
| Fluids: | Lubricated or non lubricated air and neutra | al gases - Recommended fi Itration: 50 µm | | | | |
| Temperature range: | Ambient: 0° Fluid: 0°C | | | | | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | 1 to 12 bar | 1 to 12 bar | | | | |
| Outlet pressure range: | 0.05 bis | 10 bar | | | | |
| Hysteresis: | ± 50 mbar (factory set up) | | | | | |
| Air consumption at constant control signal: | (| | | | | |
| Supply voltage: | 24 V DC ± 15 % | (Max. ripple 1 V) | | | | |
| Power consumption: | Max. 2.8 W with 24 V DC and constant changes of the control signal < 1.5 W without change of control signal | | | | | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | | | | | |
| Outlet sensor signal: | Analog 0 - 10 V Standard for 0 - 10 bar; Adjustable Analog 4 - 20 mA Standard for 0 - 10 bar; Adjustable | Digital 0/24 V for alarm features: Adjustable pressure error (+/-) Adjustable delay ON Adjustable delay OFF Adjustable logic (+/-) | | | | |
| Max. flow: | 70 m³/h | 150 m³/h | | | | |
| Indicative response time: | With a volume of 330 cm ³ a | t the outlet of the regulator | | | | |
| Filling 2 to 4 bar : Filling 2 to 8 bar: Emptying 4 to 2 bar: Emptying 8 to 2 bar: | 50 msec 100 msec 70 msec 130 msec | 60 msec 120 msec 90 msec 190 msec | | | | |
| Safety position: | In case of control signal failu the regulated pressure dru (atmospheri In case of voltage supply failure, the re | ops automatically to 0 bar c pressure). | | | | |
| Electrical connection: | M12 - 8 pin; male connector M12 - 5 pin; male con | | | | | |
| Life expectancy: | > 50 Million changes | of control signal steps | | | | |
| Mounting position: | Indifferent (recommended positio | | | | | |
| Resistance to vibrations: | 30 g in all | | | | | |
| Degree of protection: | IP | •• | | | | |
| Assembly: | Silicon | ie free | | | | |
| Electromagnetic compatibility: In accordance with: | EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 + A11 2004 edition (01/07/07) EN 61000-6-4: 2001 | | | | | |
| Installation and setting instructions: | | d appendix supplied with the product. | | | | |

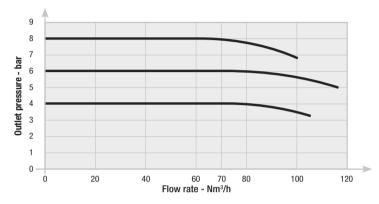
Note: Parker reserves the right to change specifications without notification.



LUCIFER® EPP4 COMFORT 1/4" & 1/2"

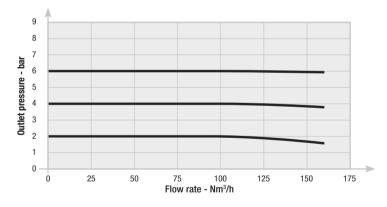
Flow Curves







Flow Curve 1/2"





LUCIFER® EPP4 COMFORT1/4" & 1/2"

REFERENCES

| Codes | Pipe | | re Range bar) | Control Signal (see options) | Display | Drawing Number |
|-----------------|---------|---|------------------|---------------------------------|----------|-------------------|
| P4CG2001C001 | G 1/4 | 0 | 10 | 0-10 V | - | 3 |
| P4CG2001C002 | G 1/4 | 0 | 10 | 4-20 mA | - | 3 |
| P4CG2001C005 | G 1/4 | 0 | 7 | 0-10 V | - | 3 |
| P4CG2001C006 | G 1/4 | 0 | 7 | 4-20 mA | - | 3 |
| P4CG2002C001 | G 1/4 | 0 | 10 | 0-10 V | included | 3 |
| P4CG2002C002 | G 1/4 | 0 | 10 | 4-20 mA | included | 3 |
| P4CG2003C001 * | G 1/4 | 0 | 10 | 0-10 V | - | 3 |
| P4CG2003C002 * | G 1/4 | 0 | 10 | 4-20 mA | - | 3 |
| P4CG2002C007 | G 1/4 | 0 | 7 | 0-10 V | - | 3 |
| P4CG2002C008 | G 1/4 | 0 | 7 | 4-20 mA | - | 3 |
| P4CN2001C001 | 1/4 NPT | 0 | 10 | 0-10 V | - | 3 |
| P4CN2001C002 | 1/4 NPT | 0 | 10 | 4-20 mA | - | 3 |
| P4CN2002C001 | 1/4 NPT | 0 | 10 | 0-10 V | included | 3 |
| P4CN2002C002 | 1/4 NPT | 0 | 10 | 4-20 mA | included | 3 |
| P4CG4001C001 | G 1/2 | 0 | 10 | 0-10 V | - | 4 |
| P4CG4001C002 | G 1/2 | 0 | 10 | 4-20 mA | - | 4 |
| P4CG4001C005 | G 1/2 | 0 | 7 | 0-10 V | - | 4 |
| P4CG4001C006 | G 1/2 | 0 | 7 | 4-20 mA | - | 4 |
| P4CG4002C001 | G 1/2 | 0 | 10 | 0-10 V | included | 4 |
| P4CG4002C002 | G 1/2 | 0 | 10 | 4-20 mA | included | 4 |
| P4CG4002C005 | G 1/2 | 0 | 7 | 0-10 V | - | 4 |
| P4CG4002C006 | G 1/2 | 0 | 7 | 4-20 mA | - | 4 |
| P4CG4051C001 ** | G 1/2 | 0 | 10 | 0-10 V | - | 4 |
| P4CG4051C002 ** | G 1/2 | 0 | 10 | 4-20 mA | - | 4 |
| P4CN4001C001 | 1/2 NPT | 0 | 10 | 0-10 V | - | 4 |
| P4CN4001C002 | 1/2 NPT | 0 | 10 | 4-20 mA | - | 4 |
| P4CN4002C001 | 1/2 NPT | 0 | 10 | 0-10 V | included | 4 |
| P4CN4002C002 | 1/2 NPT | 0 | 10 | 4-20 mA | included | 4 |

* Integrated pilot exhaust

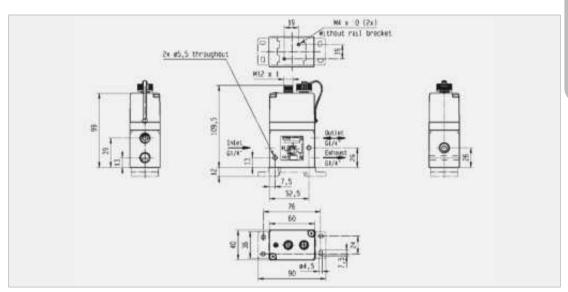
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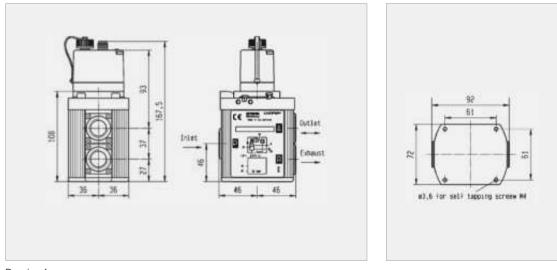
LUCIFER® EPP4 COMFORT 1/4" & 1/2"

DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 1/4"



Drawing 3

DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 1/2"



Drawing 4



LUCIFER® EPP4 COMFORT 1/2"HP, 1" & 2"

TECHNICAL DATA

| Basic | 1/4 $1/2$ |
|---------|---|
| Comfort | 1/4 $1/2$ |
| Comfort | ¹ / ₂ ["] HP 1 " 2 " |
| Comfort | ¹ / ₂ " 1" 2" |

| | Comfort 1/2" HP | Comfort 2" | | | | | | |
|--|---|---|---------------------------------------|--|--|--|--|--|
| Fluids: | Lubricated or non lubricated air and neutral gases - Recommended fi Itration: 50 μm | | | | | | | |
| Temperature range: | Ambient: 0°C to +50°C Fluid: 0°C to +50°C | | | | | | | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | 1 to 21 bar | 1 to 21 bar | 1 to 12 bar | | | | | |
| Outlet pressure range: | 0.05 to 20 bar 0.05 to 20 bar 0.05 to - | | | | | | | |
| Hysteresis: | | \leq 100 mbar if P inlet \leq 10 bar \leq 200 mbar if P inlet > 10 bar | | | | | | |
| Air consumption at constant control signal: | | 0 | | | | | | |
| Supply voltage: | | 24V DC ± 15% | | | | | | |
| Power consumption: | Max. 6 W with 24 V DC and constant changes of thecontrol signal < 2 W without change of control signal | | | | | | | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | | | | | | | |
| Outlet sensor signal: | Analog 0 - 10 V Standard for 0 - 10 bar; Adjustable Analog 4 - 20 mA Standard for 0 - 10 bar; Adjustable Analog 4 - 20 mA Standard for 0 - 10 bar; Adjustable Adjustable delay OFF Adjustable logic (+/-) | | | | | | | |
| Max. flow: | 150 m³/h | 1 000 m³/h | 2 700 m³/h | | | | | |
| Indicative response time: Filling 2 to 8 bar: Emptying 8 to 2 bar: | With a volun 120 msec 190 msec | ne of 330 cm ³ at the outlet of 250 msec 400 msec | the regulator 250 msec 400 msec | | | | | |
| Safety position: | In case of control signal failure or if it is less than 50 mV, the regulated pressure drops automatically to 0 bar atmospheric pressure (for pressure ranges from 0-10 bar, 100 mV for pressure range over 10 bar). In case of voltage supply failure, the regulated pressure will be kept constant. | | | | | | | |
| Electrical connection: | | male connector power supply/ 5 pin; male connector commu | | | | | | |
| Life expectancy: | | lillion changes of control signa | | | | | | |
| Mounting position: | Indifferent (recom | mended position: upright; elec | ctronic part on top) | | | | | |
| Resistance to vibrations: | | 30 g in all directions | | | | | | |
| Degree of protection: | | IP 65 | | | | | | |
| Assembly: Electromagnetic compatibility: In accordance with: | Silicone free EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 + A11 2004 edition (01/07/07) EN 61000-6-4: 2001 | | | | | | | |
| Installation and setting instructions: | See our "408 1 | 93" and appendix supplied w | ith the product. | | | | | |

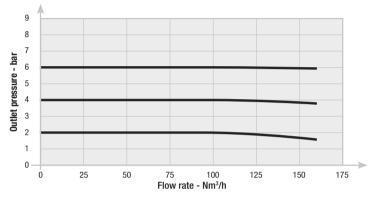
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LUCIFER® EPP4 COMFORT 1/2"HP, 1" & 2"

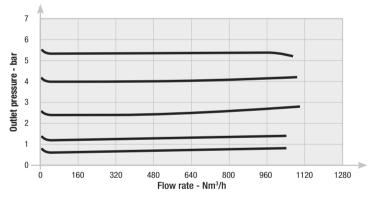
FLOW CURVES

Flow Curve 1/2"HP

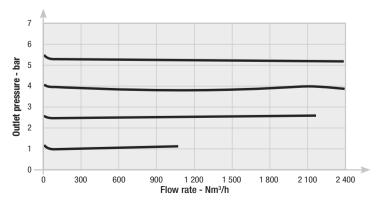




Flow Curve 1"



Flow Curve 2"



LUCIFER® EPP4 COMFORT 1/2"HP

REFERENCES

| Codes | Pipe | Max inlet pressure (bar) | Pressure range (bar) | | Control signal (see options) | Dimensional Drawing |
|--------------|------|-----------------------------|-------------------------|----|---------------------------------|------------------------|
| P4CG4101D001 | G1/2 | 15 | 0 | 12 | 0-10 V | 5 |
| P4CG4201D005 | G1/2 | 21 | 0 | 16 | 0-10 V | 6 |
| P4CG4201D003 | G1/2 | 21 | 0 | 20 | 0-10 V | 6 |
| P4CG4201D004 | G1/2 | 21 | 0 | 20 | 4-20 mA | 6 |

Other specific settings or specialties are available, please contact us.





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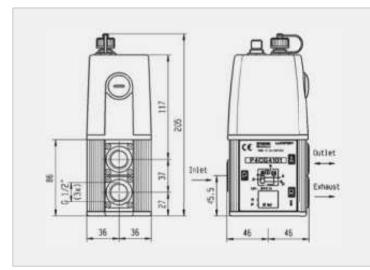
#3.6 for self tapping screek #4

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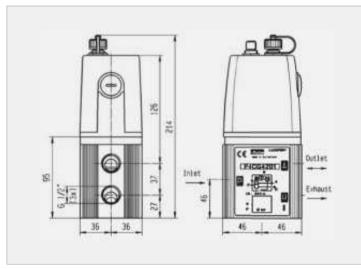
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LUCIFER® EPP4 COMFORT 1/2"HP

DIMENSIONS DRAWINGS



Drawing 5



Drawing 6



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#3.6 for self tapping screew #4

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LUCIFER® EPP4 COMFORT 1" & 2"

REFERENCES

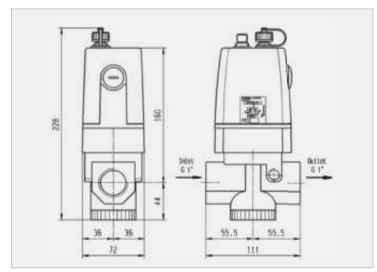
| Codes | Pipe | Max inlet pressure (bar) | | ire range bar) | Control signal (see options) | Dimensional Drawing |
|--------------|------|-----------------------------|---|-------------------|---------------------------------|------------------------|
| P4CG6101C009 | G1 | 12 | 0 | 3.5 | 4-20 mA | 7 |
| P4CG6101C011 | G1 | 12 | 0 | 5.0 | 0-10 V | 7 |
| P4CG6101C010 | G1 | 12 | 0 | 6.0 | 4-20 mA | 7 |
| P4CG6101C001 | G1 | 12 | 0 | 10 | 0-10 V | 7 |
| P4CG6101C002 | G1 | 12 | 0 | 10 | 4-20 mA | 7 |
| P4CG6201D001 | G1 | 21 | 0 | 12 | 0-10 V | 7 |
| P4CG6201D003 | G1 | 21 | 0 | 20 | 0-10 V | 7 |
| P4CG9101C012 | G2 | 12 | 0 | 4.0 | 4-20 mA | 8 |
| P4CG9101C010 | G2 | 12 | 0 | 6.0 | 4-20 mA | 8 |
| P4CG9101C001 | G2 | 12 | 0 | 10 | 0-10 V | 8 |
| P4CG9101C002 | G2 | 12 | 0 | 10 | 4-20 mA | 8 |

Other specific settings or specialties are available, please contact us.



LUCIFER® EPP4 COMFORT 1" & 2"

DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 1"

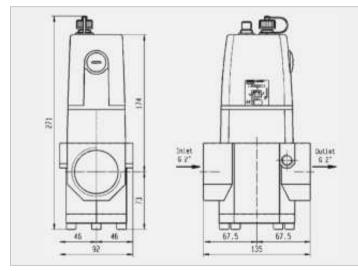




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Drawing 7

DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 2"



Drawing 8



LUCIFER® EPP4 COMFORT 1/2", 1" & 2" ATEX

TECHNICAL DATA



| | Comfort 1/2" ATEX | Comfort 1" ATEX | Comfort 2" ATEX | | | |
|--|--|--|---------------------------------------|--|--|--|
| Fluids: | Lubricated or non lubricated air and neutral gases - Recommended fi Itration: 50 μm | | | | | |
| Temperature range: | Ambient: 0°C to +50°C Fluid: 0°C to +50°C | | | | | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | Inlet pressure range: 1 to 12 bar | | | | | |
| Outlet pressure range: | Out | et pressure range: 0.05 to 10 | bar | | | |
| Hysteresis: | | \leq 100 mbar | | | | |
| Air consumption at constant control signal: | | 0 | | | | |
| ATEX certification: | Ex II 3 G/D Ex nA IIC T4 Gc Ex tc IIIB T130°C Dc | | | | | |
| Supply voltage: | | 24V DC ± 15 % | | | | |
| Power consumption: | Max. 6 W with 24 V DC and constant changes of thecontrol signal < 2 W without change of control signal | | | | | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | | | | | |
| Outlet sensor signal: | Analog 0 - 10 V Standard for 0 - 10 bar; Adjustable Analog 4 - 20 mA Standard for 0 - 10 bar; Adjustable Adjustable delay ON Adjustable delay OFF Adjustable logic (+/-) | | | | | |
| Max. flow: | 150 m³/h | 1 000 m³/h | 2 700 m³/h | | | |
| Indicative response time: Filling 2 to 8 bar: Emptying 8 to 2 bar: | With a volum 120 msec 190 msec | ne of 330 cm³ at the outlet of 250 msec 400 msce | the regulator 250 msec 400 msec | | | |
| Safety position: | automatically to from 0-10 b | lure or if it is less than 50 mV, th 0 bar atmospheric pressure (for par, 100 mV for pressure range o ply failure, the regulated pressure | pressure ranges over 10 bar). | | | |
| Electrical connection: | | male connector power supply/ 5 pin; male connector commu | | | | |
| Life expectancy: | | lillion changes of control signa | | | | |
| Mounting position: | Indifferent (recom | mended position: upright; elec | ctronic part on top) | | | |
| Resistance to vibrations: | | 30 g in all directions | | | | |
| Degree of protection: | | IP 54 | | | | |
| Assembly: | | Silicone free | | | | |
| Electromagnetic compatibility: In accordance with: | EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 + A11 2004 edition (01/07/07) EN 61000-6-4: 2001 | | | | | |
| Installation and setting instructions: | See our "408 2 | 83" and appendix supplied w | ith the product. | | | |

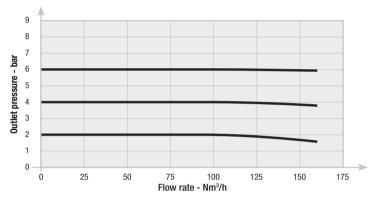
Note: Parker reserves the right to change specifications without notification.



LUCIFER[®] EPP4 COMFORT 1/2", 1" & 2" ATEX

FLOW CURVES

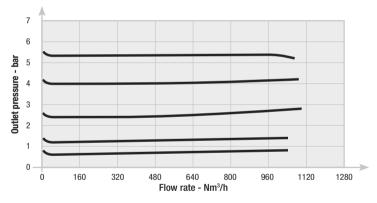
Flow Curve 1/2"



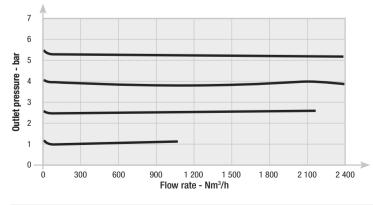


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Flow Curve 1"



Flow Curve 2"



--Parker

LUCIFER® EPP4 COMFORT 1/2" ATEX

REFERENCES

| Codes | Pipe | Max inlet pressure (bar) | Pressure range (bar) | | Control signal (see options) | Dimensional Drawing |
|-----------------|------|-----------------------------|-------------------------|----|---------------------------------|------------------------|
| P4CG4461C001 | G1/2 | 12 | 0 | 10 | 0-10 V | 9 |
| P4CG4461C002 | G1/2 | 12 | 0 | 10 | 4-20 mA | 9 |
| P4CG4465C001 ** | G1/2 | 12 | 0 | 10 | 0-10 V | 9 |
| P4CG4465C002 ** | G1/2 | 12 | 0 | 10 | 4-20 mA | 9 |

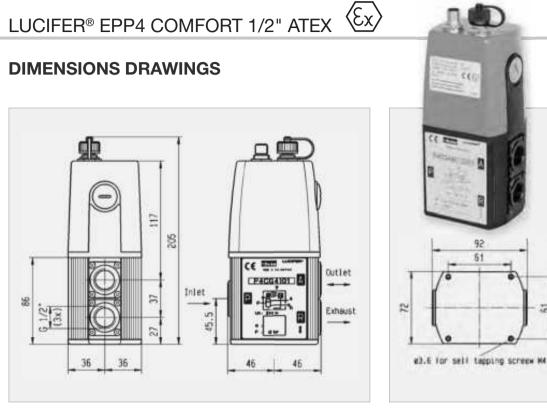
** O2

Other specific settings or specialties are available, please contact us.





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Drawing 9



LUCIFER® EPP4 COMFORT 1" & 2" ATEX

REFERENCES

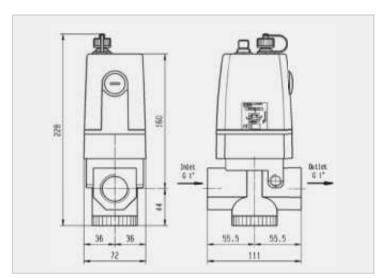
| Codes | Pipe | Max inlet pressure (bar) | | re range ar) | Control signal (see options) | Dimensional Drawing |
|--------------|------|-----------------------------|---|-----------------|---------------------------------|------------------------|
| P4CG6161C001 | G1 | 12 | 0 | 10 | 0-10 V | 11 |
| P4CG6161C002 | G1 | 12 | 0 | 10 | 4-20 mA | 11 |
| P4CG9161C001 | G2 | 12 | 0 | 10 | 0-10 V | 12 |
| P4CG9161C002 | G2 | 12 | 0 | 10 | 4-20 mA | 12 |

Other specific settings or specialties are available, please contact us.





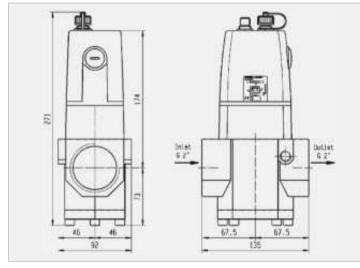
DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 1"





Drawing 11

DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 2"





Drawing 12



LUCIFER[®] EPP4 ACCESSORIES

MOUNTING BRACKETS FOR EPP4 1/4" BASIC / COMFORT

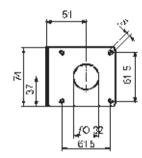


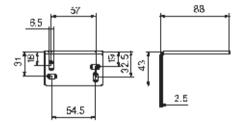
This mounting bracket is delivered as a standard with all EPP4 1/4".



LUCIFER® EPP4 ACCESSORIES

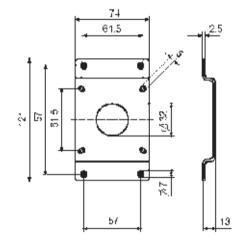
MOUNTING BRACKETS FOR EPP4 1/2" BASIC / COMFORT







Order reference 491367





Order reference 491366



LUCIFER® EPP4 ACCESSORIES

POWER SUPPLY/CONTROL SIGNAL CABLE FOR BASIC AND COMFORT VERSIONS.

Cable for Basic EPP4

• 2 m cable with moulded straight M12-4 pole

Order Ref. P8L-MC04A2A-M12

Cable for Comfort EPP4

• 2 m cable with moulded straight M12-8 pole

Order Reference 496796







LUCIFER® EPP4 COMFORT ACCESSORIES

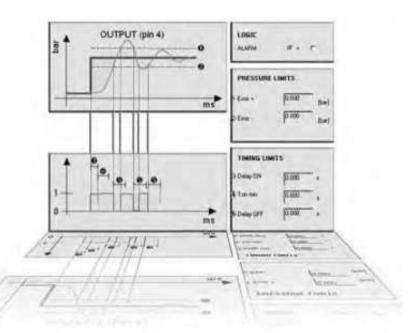
calys software

Calys is a unique software in house developed to configurate all the parameters of the EPP4 Comfort range. Calys is an option of the EPP4. A specific cable is needed for the communication between the EPP4 and a PC.

Calys offers many capabilities:

- Live monitoring (control signal, regulated pressure, supply voltage,...)
- Recording of the main parameters (control signal, regulated pressure, supply voltage,...) in an Excel file
- Free calibration for the inputs and outputs
- Adjustable alarm (positivenegative, pressure limits, delays)
- Configuration files easy to duplicate
- Complete and interactive help file
- Data in 4 different pressure units
- Menus in 4 languages (English, German, French and Italian)





Specific communication cable PC-EPP4 with RS232 and USB connection

Order Reference 496449

This option is for safe area only.

To download free Calys software click on www.parker.com/FCDE/Support



LUCIFER® EPP4 COMFORT ACCESSORIES

REMOTE DISPLAY

This option includes the Remote Display and 1.5 meter connecting cable. Connected to the pressure regulator, it offers flexible monitoring. This option only works with EPP4 0-10 bar.

Compact and highly readable remote LED display:

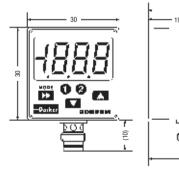
- Bar and PSI scales
- Security lock
- 1.5 m cable
- Mounting brackets

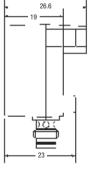
Order the Remote Display under reference 496490

This option is for safe area only.



PANEL MOUNTING KIT





Order the Panel Mounting Kit under reference 496601

