

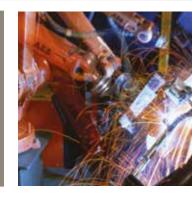


aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Basic	1'," 1'," 1" 2"
Comfort	1/4" 1/2"
Comfort	¹ / ₂ "HP 1" 2"
Comfort ATEX	¹ / ₂ " 1 " 2 "



Lucifer® EPP4 Proportional Pressure Regulator Range





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



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).

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









Summary



Lucifer® EPP4 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 servooperated 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

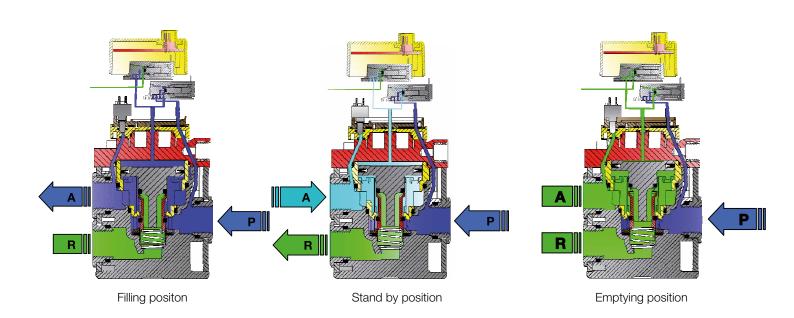
regulator; when energised this valve will fill the servo-chamber for increasing the pressure at the outlet A of the regulator.

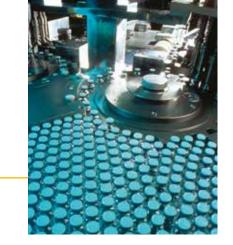
When the other "exhaust valve" is energised (reduction of pressure at the outlet A of the regulator), the pressure of the servo-chamber will be exhausted through a discharge orifice located between the cover and the body and directly fed to the atmosphere without silencer.

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.



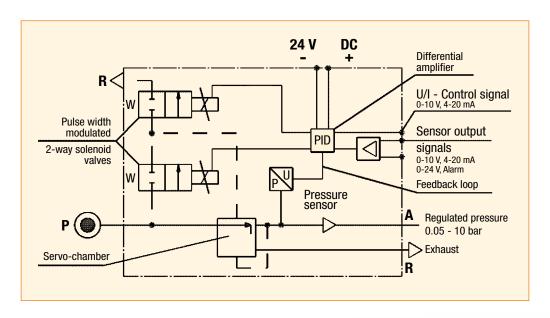


Block Diagram

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.

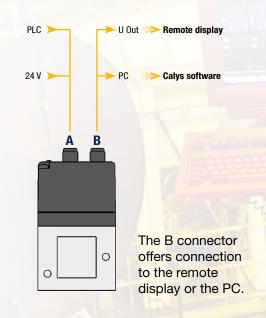
The same feedback signal from the sensor is used for the output feedback in voltage and current. The digital signal (alarm) is activated when the conditions (out of pressure or time tolerance) are met.



EPP4 possible executions: Basic and Comfort

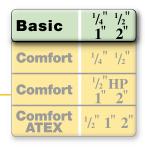
EPP4 Basic and Comfort ranges share the same reliable mechanical parts. Proportional regulation is also identical for the two different executions, giving the same characteristics for hysteresis or precision for instance.

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.



Lucifer® EPP4 Basic 1/4", 1/2", 1" & 2"

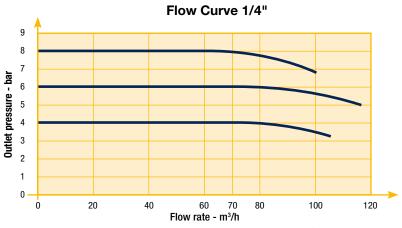
Technical Data

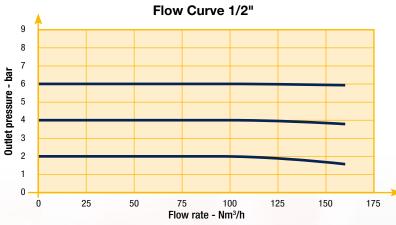


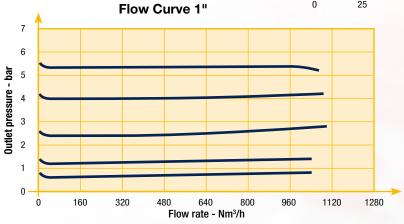
	Basic 1/4" Basic 1/2" Basic 1" Basic 2"					
Fluids:	Lubricated or non lubricated air and neutral gases Recommended filtration: 50 μm					
Temperature range:	Ambient: 0°C to +50 °C Fluid: 0°C to +50 °C					
Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure.		1 to 1	2 bar			
Outlet pressure range:		0.05 to	10 bar			
Hysteresis:		± 50 mbar (fa	actory set up)			
Air consumption at constant control signal:		()			
Supply voltage:		24 V DC ± 15 %	(Max. ripple 1 V)			
Power consumption:		C and constant changes .5 W without change of signal	of the control signal <	and constant changes 2 W without change of signal		
Control signal:		Analog 0 - 10	V or 4 - 20 mA			
Max. flow:	70 m³/h 150 m³/h		1 000 m³/h	2 700 m³/h		
Response Time:	V	/ith a volume of 330 cm³ a	at the outlet of the regulate	or		
Filling 2 to 4 bar: Filling 2 to 8 bar: Emptying 4 to 2 bar: Emptying 8 to 2 bar:	50 ms 100 ms 70 ms 130 ms	60 ms 120 ms 90 ms 190 ms		- 9 ms - 9 ms		
Safety position:		(atmospheric pressure). In	OmV, the regulated pressunces of voltage supply factorial be kept constant.			
Electrical connection:		M12 - 4 pin; male con	nector communication			
Life expectancy:	> 50 Million changes	of control signal steps	> 20 Million changes	of control signal steps		
Mounting position:	Indiffer	ent (recommended positio	n: upright; electronic part	on top)		
Resistance to vibrations:		30 g in all	directions			
Degree of protection:		IP	65			
Assembly:		Silicor	ne 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:		, 408014" and appendix the product.		" and appendix supplied product.		

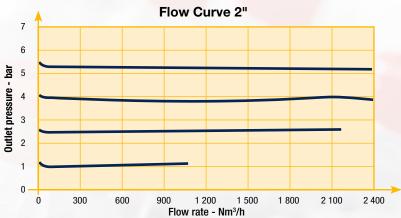
 $\textbf{Note:} \ \mathsf{Parker} \ \mathsf{reserves} \ \mathsf{the} \ \mathsf{right} \ \mathsf{to} \ \mathsf{change} \ \mathsf{specifications} \ \mathsf{without} \ \mathsf{notification}.$

Flow Curves









Lucifer® EPP4 Basic 1/4", 1/2", 1" & 2"

References

Codes	Pipe		re Range par)	Control Signal	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	4 - 20 mA	2
P4BN2001A003	NPT 1/4"	0	10 bar	0 - 10 V	2
P4BN4001A002	NPT 1/2"	0	10 bar	4 - 20 mA	2
P4BN4001A003	NPT 1/2"	0	10 bar	0 - 10 V	2
P4BG6101A002	G 1"	0	10 bar	0 - 10 V	3
P4BG6101A003	G 1"	0	10 bar	4 - 20 mA	3
P4BG9101A002	G 2"	0	10 bar	0 - 10 V	4
P4BG9101A003	G 2"	0	10 bar	4 - 20 mA	4

^{*} Integrated pilot exhaust

^{***} External pressure supply





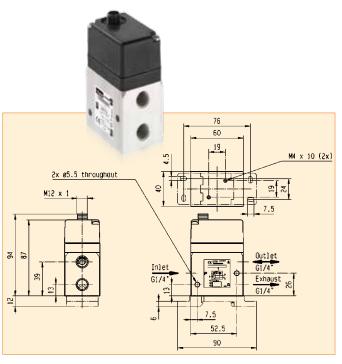


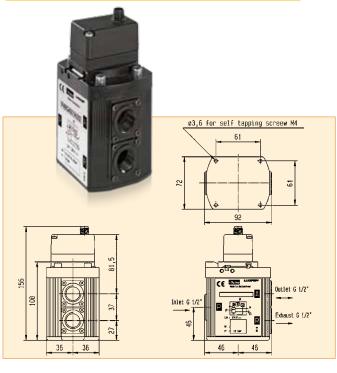


^{**} O2

Dimensions EPP4 1/4"

Dimensions EPP4 1/2"

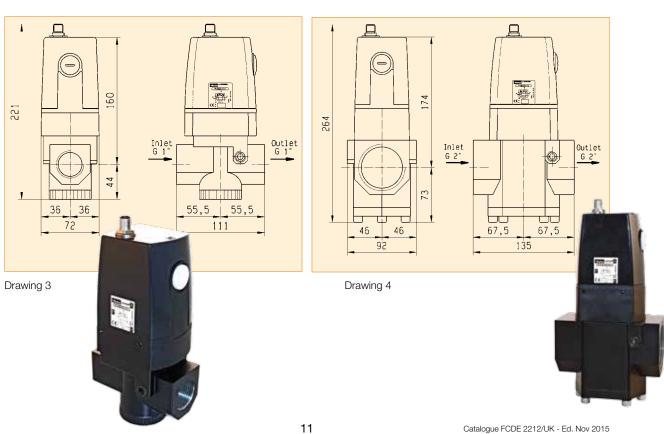




Drawing 1 Drawing 2

Dimensions EPP4 1"

Dimensions EPP4 2"



Lucifer® EPP4 Comfort 1/4" & 1/2"

Technical Data



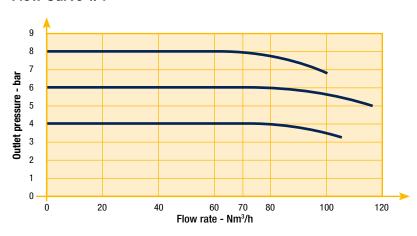
	Comfort 1/4"	Comfort 1/2"		
Fluids:	Lubricated or non lubricated air and neutral	gases - Recommended filtration: 50 µm		
Temperature range:	Ambient: 0°C Fluid: 0°C to			
Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure.	1 to 12 bar	1 to 12 bar		
Outlet pressure range:	0.05 to 1	0 bar		
Hysteresis:	± 50 mbar (fac	tory set up)		
Air consumption at constant control signal:	0			
Supply voltage:	24 V DC \pm 15 % (N	Max. ripple 1 V)		
Power consumption:	Max. 2.8 W wi and constant of the control sig without change of	changes gnal < 1.5 W		
Control signal:	Analog 0 Analog 4 -			
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: Filling 2 to 4 bar : Filling 2 to 8 bar: Emptying 4 to 2 bar: Emptying 8 to 2 bar:	With a volume of 330 cm ³ at 50 ms 100 ms 70 ms 130 ms	the outlet of the regulator 60 ms 120 ms 90 ms 190 ms		
Safety position:	In case of control signal failure the regulated pressure drop (atmospheric In case of voltage supply failure, the regu	s automatically to 0 bar pressure).		
Electrical connection:	M12 - 8 pin; male connector p M12 - 5 pin; male conne			
Life expectancy:	> 50 Million changes of	control signal steps		
Mounting position:	Indifferent (recommended position:	upright; electronic part on top)		
Resistance to vibrations:	30 g in all d	irections		
Degree of protection:	IP 65	5		
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 "Notice 408128, 408134" and	appendix supplied with the product.		

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

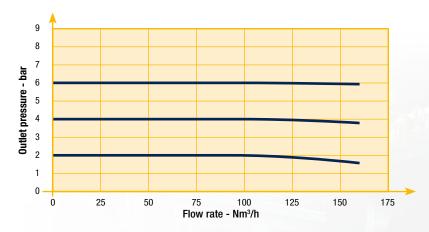


Flow Curves

Flow Curve 1/4"



Flow Curve 1/2"



Lucifer® EPP4 Comfort 1/4" & 1/2"

References

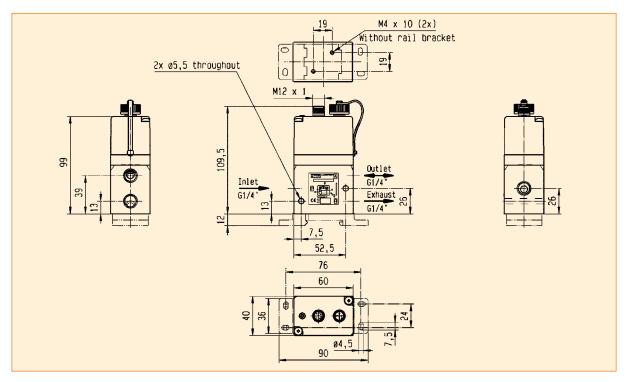
Codes	Pipe		e Range ar)	Control Signal	Display	Drawing Number
P4CG2001C001	G 1/4	0	10	0-10 V	-	5
P4CG2001C002	G 1/4	0	10	4-20 mA	-	5
P4CG2001C005	G 1/4	0	7	0-10 V	-	5
P4CG2001C006	G 1/4	0	7	4-20 mA	-	5
P4CG2002C001	G 1/4	0	10	0-10 V	included	5
P4CG2002C002	G 1/4	0	10	4-20 mA	included	5
P4CG2003C001 *	G 1/4	0	10	0-10 V	-	5
P4CG2003C002 *	G 1/4	0	10	4-20 mA	-	5
P4CG2002C007	G 1/4	0	7	0-10 V	included	5
P4CG2002C008	G 1/4	0	7	4-20 mA	included	5
P4CN2001C001	1/4 NPT	0	10	0-10 V	-	5
P4CN2001C002	1/4 NPT	0	10	4-20 mA	-	5
P4CN2002C001	1/4 NPT	0	10	0-10 V	included	5
P4CN2002C002	1/4 NPT	0	10	4-20 mA	included	5
P4CG4001C001	G 1/2	0	10	0-10 V	-	6
P4CG4001C002	G 1/2	0	10	4-20 mA	-	6
P4CG4001C005	G 1/2	0	7	0-10 V	-	6
P4CG4001C006	G 1/2	0	7	4-20 mA	=	6
P4CG4002C001	G 1/2	0	10	0-10 V	included	6
P4CG4002C002	G 1/2	0	10	4-20 mA	included	6
P4CG4002C005	G 1/2	0	7	0-10 V	included	6
P4CG4002C006	G 1/2	0	7	4-20 mA	included	6
P4CG4051C001 **	G 1/2	0	10	0-10 V	-	6
P4CG4051C002 **	G 1/2	0	10	4-20 mA	-	6
P4CN4001C001	1/2 NPT	0	10	0-10 V	-	6
P4CN4001C002	1/2 NPT	0	10	4-20 mA	-	6
P4CN4002C001	1/2 NPT	0	10	0-10 V	included	6
P4CN4002C002	1/2 NPT	0	10	4-20 mA	included	6

Integrated pilot exhaustO2



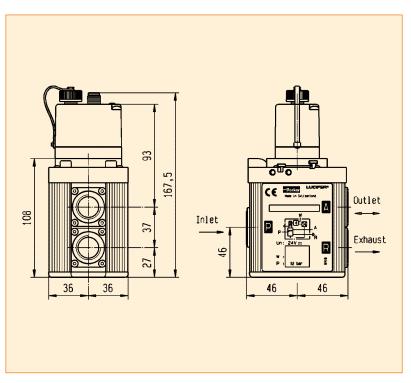


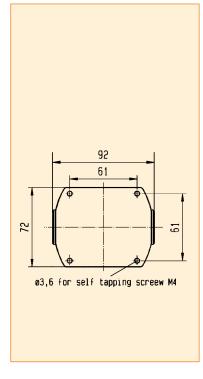
Dimensions Drawings EPP4 Comfort Range 1/4"



Drawing 5

Dimensions Drawings EPP4 Comfort Range 1/2"





Drawing 6

Lucifer® EPP4 Comfort 1/2"HP, 1" & 2"

Technical Data



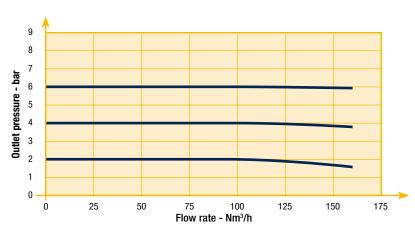
	Comfort 1/2" HP	Comfort 1"	Comfort 2"		
Fluids:	Lubricated or non lubricated air and neutral gases - Recommended filtration: 50 μm				
Temperature range:		Ambient: 0°C to +50°C Fluid: 0°C to +50°C			
Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure.	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 10 bar		
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:	١	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 Digital 0/24 V for alarm features Standard for 0 - 10 bar; Adjustable Adjustable pressure error (+/-) Adjustable delay ON Analog 4 - 20 mA Adjustable delay OFF Standard for 0 - 10 bar; Adjustable 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 volur 120 ms 190 ms	ne of 330 cm³ at the outlet of the 250 ms 400 ms	regulator 250 ms 400 ms		
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/con 5 pin; male connector communica			
Life expectancy:	> 20 N	Million changes of control signal s	teps		
Mounting position:	Indifferent (recom	mended position: upright; electro	nic part on top)		
Resistance to vibrations:		30 g in all directions			
Degree of protection:		IP 65			
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	193" and appendix supplied with	the product.		

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

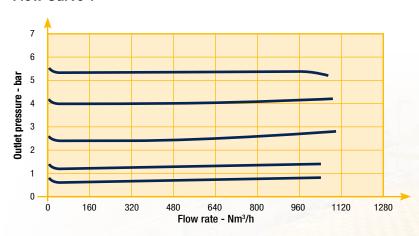


Flow Curves

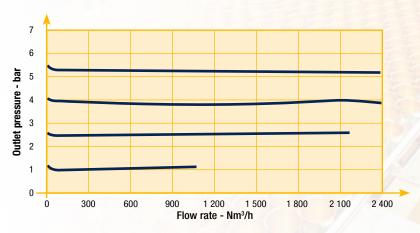
Flow Curve 1/2"HP



Flow Curve 1"



Flow Curve 2"



Lucifer® EPP4 Comfort 1/2"HP, 1" & 2"

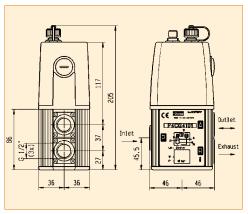
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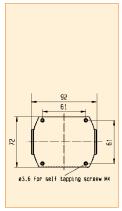
Codes	Pipe	Max inlet pressure (bar)		re range par)	Control signal	Dimensional Drawing
P4CG4101D001	G1/2	15	0	12	0-10 V	7
P4CG4201D005	G1/2	21	0	16	0-10 V	8
P4CG4201D003	G1/2	21	0	20	0-10 V	8
P4CG4201D004	G1/2	21	0	20	4-20 mA	8
P4CG6101C009	G1	12	0	3.5	4-20 mA	9
P4CG6101C011	G1	12	0	5.0	0-10 V	9
P4CG6101C010	G1	12	0	6.0	4-20 mA	9
P4CG6101C001	G1	12	0	10	0-10 V	9
P4CG6101C002	G1	12	0	10	4-20 mA	9
P4CG6201D001	G1	21	0	12	0-10 V	9
P4CG6201D003	G1	21	0	20	0-10 V	9
P4CG9101C012	G2	12	0	4.0	4-20 mA	10
P4CG9101C010	G2	12	0	6.0	4-20 mA	10
P4CG9101C001	G2	12	0	10	0-10 V	10
P4CG9101C002	G2	12	0	10	4-20 mA	10

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



Dimensions Drawings

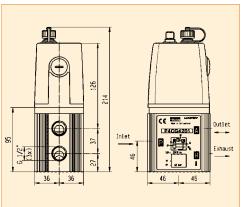


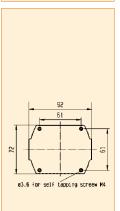


Drawing 7

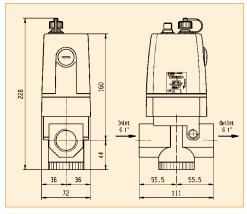
Drawing 9

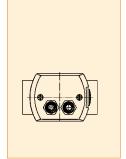




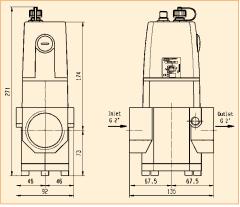


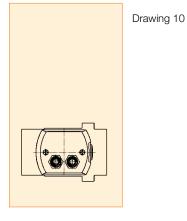














Lucifer® EPP4 Comfort 1/2", 1" & 2" ATEX



Technical Data



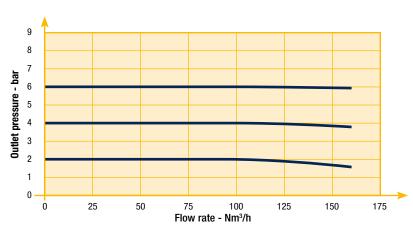
	Comfort 1/2" ATEX	Comfort 1" ATEX	Comfort 2" ATEX		
Fluids:	Lubricated or non lubricated air and neutral gases - Recommended filtration: 50 µm				
Temperature range:	Ambient: 0°C to +50°C Fluid: 0°C to +50°C				
Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure.	lı	nlet pressure range: 1 to 12 bar			
Outlet pressure range:	Out	let pressure range: 0.05 to 10 ba	r		
Hysteresis:		≤ 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 tant changes of thecontrol signal vithout change of control signal	< 2 W		
Control signal:	Analog 0 - 10 V Analog 4 - 20 mA				
Outlet sensor signal:	Analog 0 - 10 V Standard for 0 - 10 bar; Adjustable Adjustable pressure error (+/-) Adjustable delay ON 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:	With a volun	ne of 330 cm³ at the outlet of the	regulator		
Filling 2 to 8 bar: Emptying 8 to 2 bar:	120 ms 190 ms	250 ms 400 ms	250 ms 400 ms		
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/cor 5 pin; male connector communic			
Life expectancy:	> 20 N	fillion changes of control signal s	teps		
Mounting position:	Indifferent (recom	mended position: upright; electro	onic 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	283" and appendix supplied with	the product.		

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

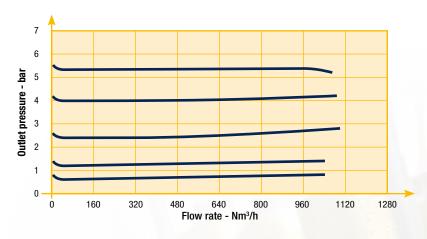


Flow Curves

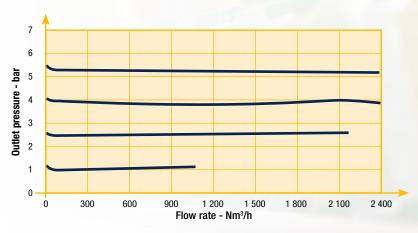
Flow Curve 1/2"



Flow Curve 1"



Flow Curve 2"



Lucifer® EPP4 Comfort 1/2", 1" & 2" ATEX



References

Codes	Pipe	Max inlet pressure (bar)		ire range par)	Control signal	Dimensional Drawing
P4CG4461C001	G1/2	12	0	10	0-10 V	11
P4CG4461C002	G1/2	12	0	10	4-20 mA	11
P4CG4465C001 **	G1/2	12	0	10	0-10 V	11
P4CG4465C002 **	G1/2	12	0	10	4-20 mA	11
P4CG6161C001	G1	12	0	10	0-10 V	12
P4CG6161C002	G1	12	0	10	4-20 mA	12
P4CG9161C001	G2	12	0	10	0-10 V	13
P4CG9161C002	G2	12	0	10	4-20 mA	13

^{**} O2

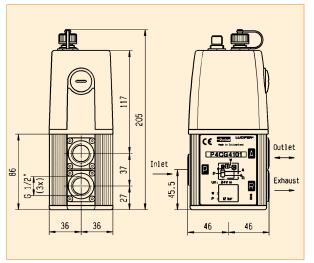
Other specific settings or specialties are available, please contact us.

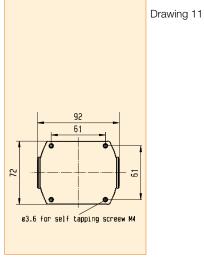




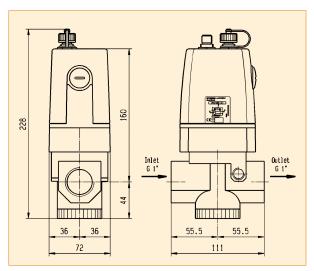


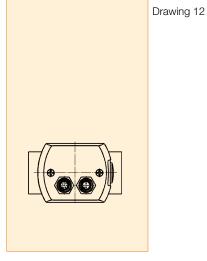
Dimensions Drawings



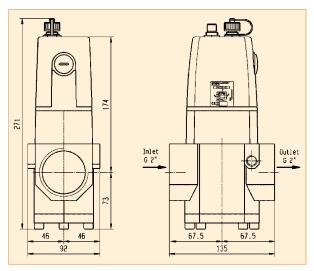


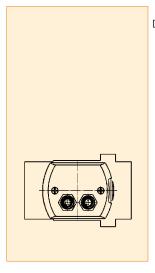














Lucifer® EPP4 Accessories

Mounting Brackets for EPP4 1/4" Basic / Comfort



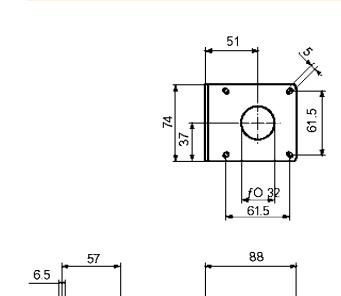


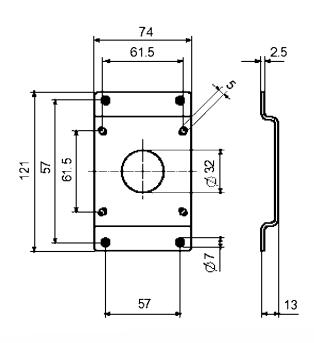


This mounting bracket is delivered as a standard with all EPP4 1/4".

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

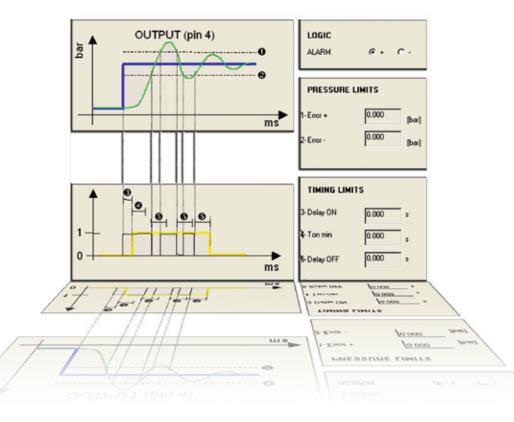
calys Software

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.

Compact and highly readable remote LED display:

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

Order the Remote Display under reference 496490

This option is for safe area only.





WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.
- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.
- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Air Preparation & Airline Accessories

Global Air Preparation System



- Space saving integral gauge (P31 size only)
- Manifold style regulators available
- OSHA compliant shut-off valves
- Soft-Start & Quick Dump valves
- Electronic Proportional Regulator

For more details refer to catalogue: 0750-UK

Global Proportional Technology



- · Very fast response times
- Accurate output pressure
- Micro parameter settings
- Selectable I/O parameters
- · Quick, full flow exhaust
- LED display indicates output pressure
- No air consumption in steady state
- . Multiple mounting options
- Protection to IP65

For more details refer to catalogue: PDE2600TCUK

P3X Lite Air Preparation System



- Integral 1/2 or 3/4 ports
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Secondary pressure ranges 8 and 16 bar
- Rolling diaphragm for extended life
- Membrane dryers

For more details refer to catalogue: PDE2620TCUK

Heavy Duty FRLs - P3Z Series



- Self relieving feature plus balanced poppet provides quick response and accurate pressure regulation.
- Port flanges G1¹/₂" & 2" to a 2" body.
- Proportional oil delivery over a wide range of air flows.

For more details refer to catalogue: PDE2641TCUK

P3L Lite Air Preparation System



- · Compact body ported units
- Port size G1/4
- Unique deflector plate ensuring maximum water and particulate removal
- Solid control piston with lip seal for extended life.
- Proportional oil delivery over a wide range of air flows.

For more details refer to catalogue: PDE2661TCUK

Stainless Steel FRLs



- Suitable for Marine & Offshore applications
- Chemical / Petroleum and process industries
- Coalescing filters are designed for removing oil and water aerosols down to 0.01µ
- Suitable for food industry applications

For more details refer to catalogue: PDE2504TCUK

Modular FRLs - P3Y Series



- Integral 3/4 or 1" ports (BSPP or NPT)
- High efficiency element as standard
- Excellent water removal efficiency
- Secondary pressure ranges 12 and 16 bar

For more details refer to catalogue: PDE2631TCUK

Prep-Air II[®] Miniature FRLs



- Compact body ported units.
- Port sizes G1/8 and G1/4.
- Unique deflector plate ensuring maximum water and particulate removal.
- Solid control piston with lip seal for extended life.
- Proportional oil delivery over a wide range of air flows.

For more details refer to catalogue: PDE2591TCUK

Air Preparation & Airline Accessories

P3T Compressed Air Filters



- Tested in accordance with ISO 8573.9
- High liquid removal efficiencies at all flow conditions
- Low pressure losses for low operational costs
- Multiple port sizes for a given flow rate provides increased flexibility during installation

For more details refer to catalogue: PDE2603TCUK

Precision Pressure Regulators



- High repeatability
- High relief capacity on R220 model
- High flow capacity on R230 model

For more details refer to catalogue: PDE2542TCUK

Modular Membrane Dryers - P3X



- Removes water vapour & lowers the PDP
- Compact design
- No electrical connections necessary
- Suitable for hazardous environments
- No moving parts
- Maintenance & wear free
- No change in air consumption
- Low pressure drop less than 0.1 bar

For more details refer to catalogue: PDE2640TCUK

P3TJ Dry Air System



- Designed in accordance with ASME VIII Div.1, approved to CSA/UL/CRN and fully CE Marked (PED, EMC, LVD) as standard.
- Flexible installation utilising the multiple in-line inlet & outlet connection ports.
- Can be Floor, Bench or Wall/ Canopy mounted.

For more details refer to catalogue: PDE2602TCUK

AirGuard Protection System



- Maintenance friendly, Repair possible while plant is still operating.
- Reliable and tamperproof, No adjustment necessary.
- Complies with EU current standard
- Complies with the 2009 ISO4414 (5.4.5.11.1)

For more details refer to catalogue: PDE2604TCUK

Cylinder Controls



- "Push-in" or threaded connection
- Multifunction options
- Fit directly to cylinder ports
- Swivelling pilot banjo
- Pneumatic, Electric or Electronic back pressure sensor

For more details refer to catalogue: 0093/UK

Shuttle Valve & Quick Exhaust Valves



- Increases piston speeds, super sensitive diaphragm.
- May be used as differential shuttle valve.
- Allows two separate signals to be applied to the air pilot.
- 0,6 bar differential, Viton seals as standard.
- Aluminium or polymer bodies

For more details refer to catalogue: 0093/UK

Exhaust Silencers



- All plastic ultra light weight versions
- Sintered metal
- All metal versions for heavy duty applications
- Versions with push-in connections
- · High noise level reduction
- · Low back pressure generation

For more details refer to catalogue: 0093/UK



At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further

Parker's Motion & Control Technologies



Aerospace Key Markets

Aftermarket services Commercial transports Engines General & business aviation Helicopters Launch vehicles Military aircraft Power generation

Key Products

Regional transports

Unmanned aerial vehicles

Control systems & actuation products Engine systems & components Fluid conveyance systems & components Fluid metering, delivery & atomization devices Fuel systems & components Fuel tank inerting systems Hydraulic systems & components Thermal management Wheels & brakes



Climate Control

Key Markets

Agriculture Air conditioning Construction Machinery Food & beverage Industrial machinery Life sciences Oil & gas Precision cooling Process Refrigeration Transportation



Accumulators Advanced actuators CO, controls Electronic controllers Filter driers Hand shut-off valves Heat exchangers Hose & fittings Pressure regulating valves Refrigerant distributors Safety relief valves Smart pumps Solenoid valves Thermostatic expansion valves



Electromechanical Key Markets

Aerospace Factory automation Life science & medical Machine tools Packaging machinery Paper machinery Plastics machinery & converting Semiconductor & electronics Textile Wire & cable



AC/DC drives & systems Electric actuators, gantry robots & slides Electrohydrostatic actuation systems Electromechanical actuation systems Human machine interface Linear motors Stepper motors, servo motors, drives & controls Structural extrusions



Filtration **Key Markets**

Aerospace Food & beverage Industrial plant & equipment Life sciences Marine Mobile equipment Oil & gas Power generation & renewable energy Process Transportation Water Purification

Key Products

Analytical gas generators Compressed air filters & dryers Engine air, coolant, fuel & oil filtration systems Fluid condition monitoring systems Hydraulic & lubrication filters Hydrogen, nitrogen & zero air generators Instrumentation filters Membrane & fiber filters Microfiltration Water desalination & purification filters & system



info call 00800 27 27 5374

Fluid & Gas Handling

Key Markets

Aerial lift Agriculture Bulk chemical handling Construction machinery Food & beverage Fuel & gas delivery Industrial machinery Life sciences Marine Mining Mobile Oil & gas Renewable energy Transportation

Key Products

Check valves Connectors for low pressure fluid conveyance Deep sea umbilicals Diagnostic equipment Hose couplings Industrial hose Mooring systems & power cables PTFF hose & tubing Quick couplings Rubber & thermoplastic hose Tube fittings & adapters Tubing & plastic fittings



Hydraulics

Key Markets Aerial lift

Agriculture Alternative energy Construction machinery Forestry Industrial machinery Machine tools Marine Material handling Mining Oil & gas Power generation Refuse vehicles Renewable energy Truck hydraulics Turf equipment

Key Products

Accumulators Cartridge valves Electrohydraulic actuators Human machine interfaces Hybrid drives Hydraulic cylinders Hydraulic motors & numps Hydraulic systems Hydraulic valves & controls Hydrostatic steering Integrated hydraulic circuits Power units Rotary actuators Sensors



Pneumatics

Key Markets

Aerospace Conveyor & material handling Factory automation Life science & medical Machine tools Packaging machinery Transportation & automotive

Key Products Air preparation Brass fittings & valves

Manifolds Pneumatic accessories Pneumatic actuators & grippers Pneumatic valves & controls Quick disconnects Rotary actuators Rubber & thermoplastic hose & couplings Structural extrusions Thermoplastic tubing & fittings Vacuum generators, cups & sensors



Process Control

Key Markets

Alternative fuels Biopharmaceuticals Chemical & refining Food & beverage Marine & shipbuilding Medical & dental Microelectronics Nuclear Power Offshore oil exploration Oil & gas Pharmaceuticals Power generation Pulp & paper Water/wastewater

Key Products Analytical Instruments Analytical sample conditioning products & systems Chemical injection fittings & valves Fluoropolymer chemical delivery fittings, valves & pumps High purity gas delivery fittings, valves, regulators & digital flow controllers Industrial mass flow meters/ controllers Permanent no-weld tube fittings Precision industrial regulators & flow controllers Process control double block & bleeds Process control fittings, valves,

regulators & manifold valves



Sealing & Shielding

Key Markets

Aerospace Chemical processing Consumer Fluid power General industrial Information technology Life sciences Microelectronics Military Oil & gas Power generation Renewable energy Telecommunications Transportation

Key Products

Dynamic seals Elastomeric o-rings Electro-medical instrument design & assembly EMI shielding Extruded & precision-cut, fabricated elastomeric seals High temperature metal seals Homogeneous & inserted elastomeric shapes Medical device fabrication Metal & plastic retained composite seals Shielded optical windows Silicone tubing & extrusions Thermal management Vibration dampening

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