



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



Logic processing

Catalogue PDE2619TCUK May 2009



ENGINEERING YOUR SUCCESS.

**Important !**

Before carrying out any service work, ensure that the valve and manifold have been vented. Remove the primary supply air hose to ensure total disconnection of the air supply before dismantling valves or blank connection blocks.

**NB !**

All technical data in this catalogue is typical only. The air quality is decisive for the valve life: see ISO 8573.

**WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS 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 and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met. The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

SALE CONDITIONS

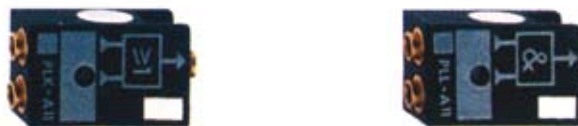
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Line mounted logic elements

These can either be mounted along the length of the line or located in an enclosure.

Two logic functions are available with this model : AND and OR.



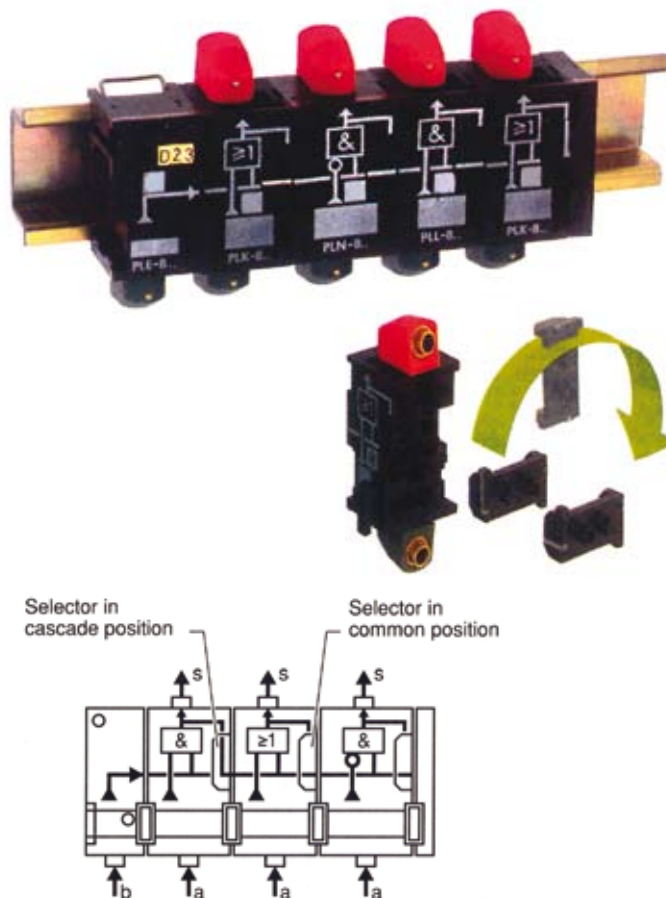
Combinable logic elements

These elements can be combined with each other enabling the assembly of compact logic blocks. Three logic functions are provided : AND - OR and inhibition NOT.

In addition to the combination assembly by integral key, each logic element includes a mode selector which enables, simply by pivoting the selector, a choice between cascade mode or common, input mode :

- cascade mode means that the element output corresponds to the input of the following element ;
- common input mode sends one of the element's inputs to an input of the following element.

The logic block obtained in this way for each applications are mounted in an enclosure on standard Omega rail, are connected by instant connections and carry, on the front, their internal diagram to facilitate any intervention.



Sub-base mounting logic elements

As an alternative, it is possible to use logic element suitable for mounting on 3-port sub-bases, the interconnections being made by the sub-bases.

The following can be used :

- 3-port sub-bases with common pressure, with common used as "input common" ;
- 3-port "cascade" sub-bases.



The specialized relays mounted on stacking sub-bases are complementary to the sequencers and logic elements.

According to the relay, it can be used a 3-port or a 4-port sub-base.



3-port sub-bases

These are designed for the mounting of :

- timers,
- relays for bleed sensors,
- pressure operated electrical contacts.

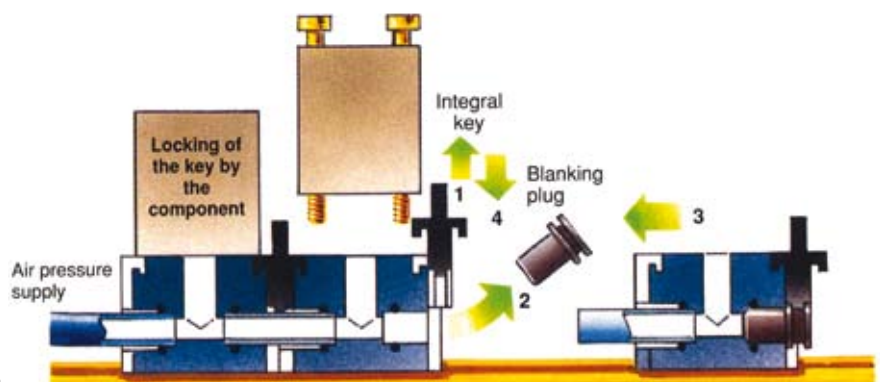


4-ports sub-bases

These are designed for the mounting of :

- memory relays,
- amplifier relays for fluidic proximity sensors.

The standard configuration enables the use of a single pressure supply to all the relays by the centre ports ; this is why the stacking "common pressure" sub-bases, with either 3 or 4 ports, are all designed to be used singly or combined in a bank traversed by a pressure common.



Production machines fitted with pneumatic cylinders generally repeat a defined sequential cycle.

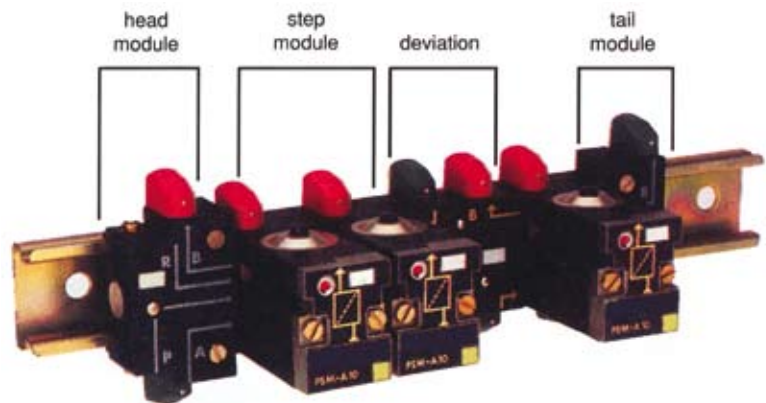
The pneumatic sequencer commands and controls the correct operation of the required cycle.

Composition

The pneumatic sequencer comprises :

- the stage modules corresponding to the cycle to be run : a module is used for each stage of the GRAFCET function chart ;
- the two modules, head and tail, interlock the association of the module onto Omega rail and enable the connection of the pressure common, of the reset to zero and the connection loops between the last and the first module.

A deviation module is fitted between the step modules to intercept the inter-module signals when the cycle includes parallel elements, restarts or the skipping of a step.



Dialogue

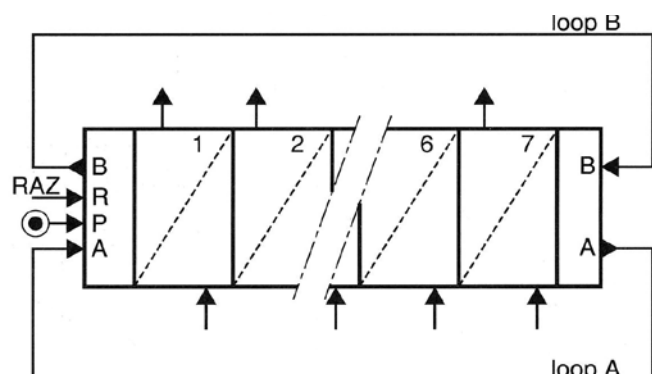
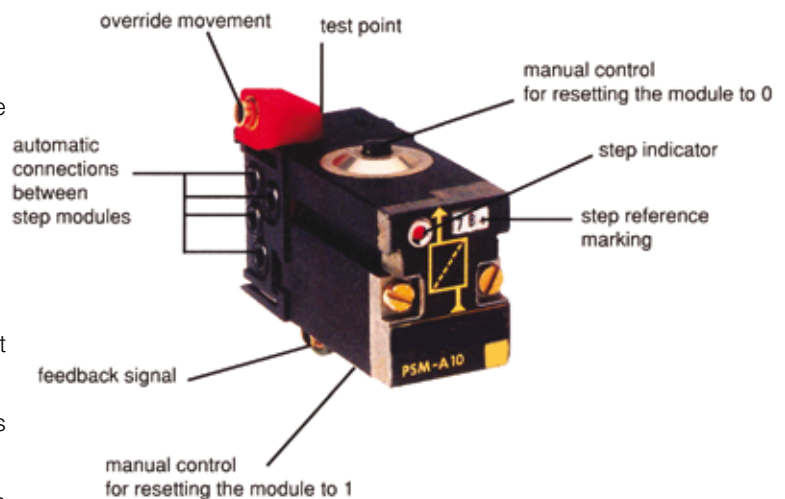
The pneumatic sequencer facilitates the machine adjustment dialogue and the optional dialogue.

At the step module level, dialogue items include :

- a step indicator which signals the step activated ;
- step reference marking ;
- manual overrides for resetting the module to 0 or to 1;
- test point, enabling knowledge of the input and output state of each module.

At the closure module level, the reference markings enable :

- connection of loops A and B necessary for cycle repetition ;
- switching on of the sequencer ;
- fitting of a reset (RESET) if the application requires this.

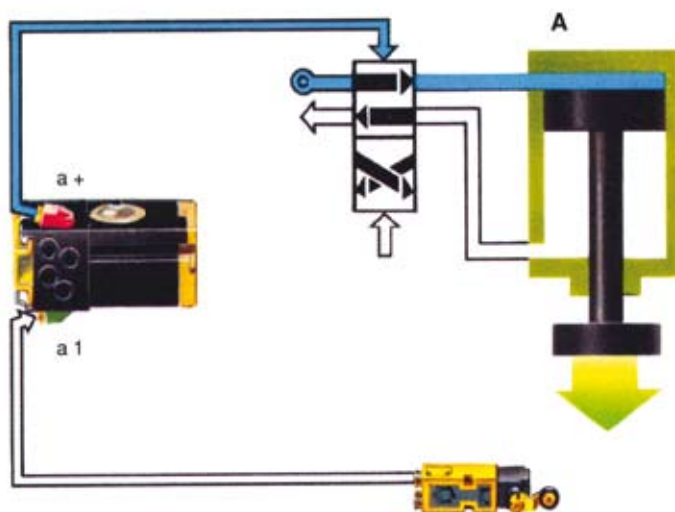


Setting up

The sequencer reproduces the GRAFCET function diagram configuration which defines the operating cycle : a sequencer stage module corresponds to each stage in the cycle.

The activated stage module sends the control signal to the pressure valve controlling the action intended for the stage, then waits for the feedback signal at the end of this action before activating the next stage module in the sequencer.

The all pneumatic loop shown in the diagram revolves in this way around the stage module, the sequencer activating stage by stage each of the actions to be carried out in the cycle order.



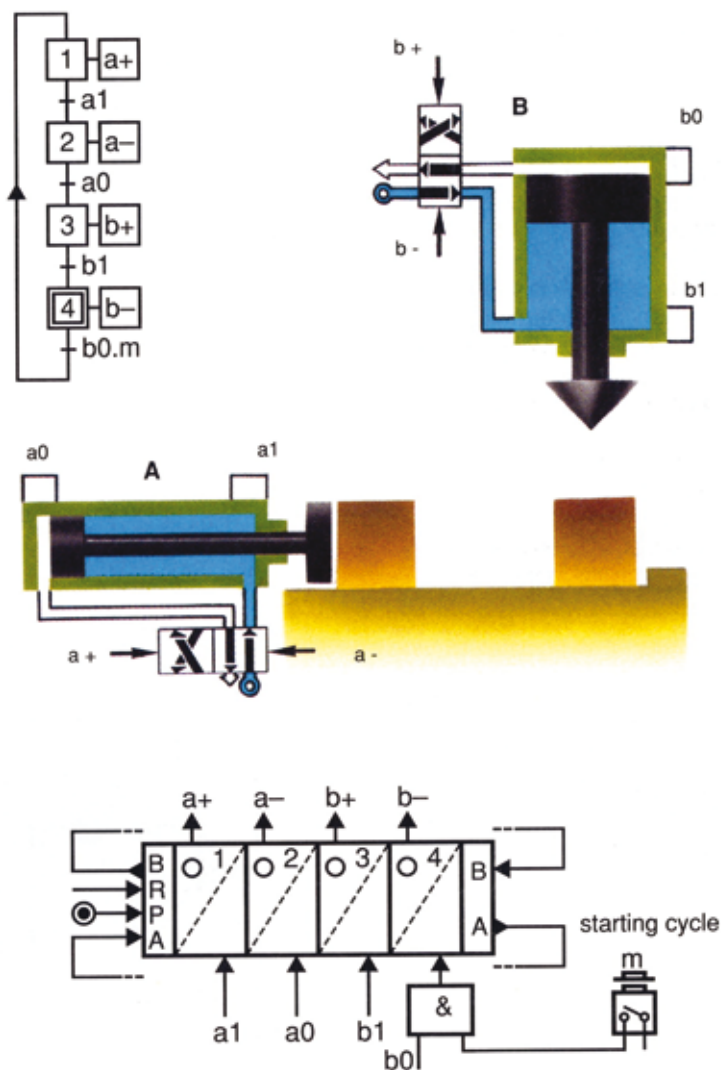
Example

This very simple example shows a pneumatic press fitted with a part supply cylinder.

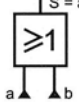
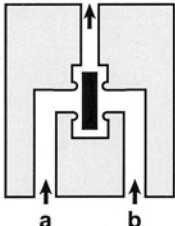
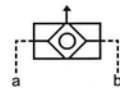
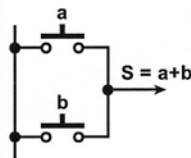
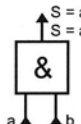
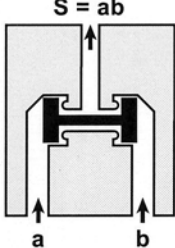
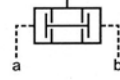
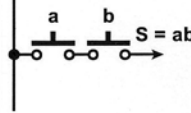
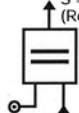
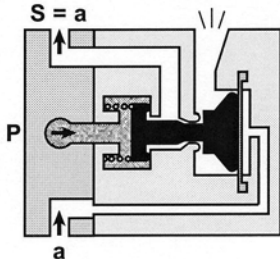
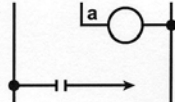
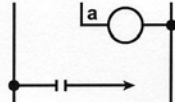
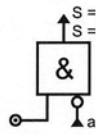
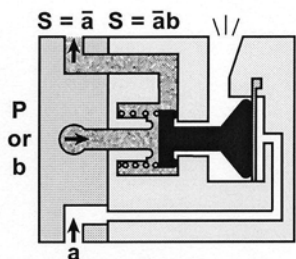
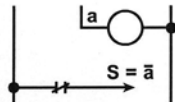
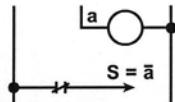
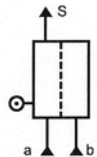
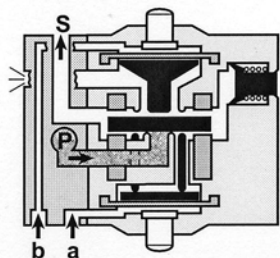
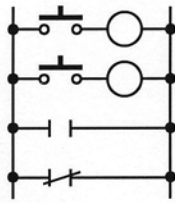
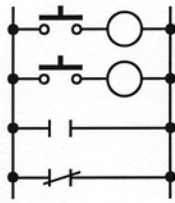
A bistable power valve and end of travel sensors are associated with each cylinder.

The GRAFCET diagram defines the required cycle. The initial stage is placed at the end to facilitate obtaining the cycle via the sequencer.

In the diagram, the sequencer reproduces the GRAFCET diagram, sending step by step control signals (a+, a-, b+, b-) according to the feedback signals (a1, a0, b1, b0).



Basic features

	Logic Function	Logic Symbol	Pneumatic Component	Function Symbol	Electrical Equivalent
PASSIVE FUNCTIONS	OR	$S = a \text{ OR } b \text{ (or both)}$ $S = a + b$  Output S is ON if at least one of the inputs "a" OR "b" is ON	$S = a + b$ 		
	AND	$S = a \text{ and } b$ $S = ab$  Output S is ON only if inputs "a" AND "b" are ON	$S = ab$ 		
ACTIVE FUNCTIONS	YES (Regenerate)	$S = a$ (Regenerated)  Output S is ON and regenerated if input "a" is ON	$S = a$ 		
	NOT (Inhibit)	$S = \text{NOT } a$ $S = \bar{a}$  Output S is ON if input "a" is OFF (and if supply P is present)	$S = \bar{a}$ $S = \bar{a}b$ 		
	MEMORY	 Input "a" generates Output S (SET). Output S remains ON until removed by input "b" (RESET)			





ATEX - Ex products compliance

Some products (**PLL-, PLK-, PLN-, PLJ-, PLM-, PRD-, PRF-, PRT-, PSM-, PSV-A1**) are available certified ATEX Labels II 2 GD c 85 °C zones 1, 2, 21, 22 certification n° LCIE 04 ATEX 6164X.

All these products are marked with * in this technical leaflet.

To obtain the ATEX version of the product, add -EX at the end of the order code Eg : **PSM-A12-EX**

For more information please refer to ATEX Components technical leaflet : PDE2584TCUK-ev

Instruction Leaflet		Logic elements		CE  Parker	
1 – SPECIFICATIONS					
• Operating temperature (Ta)	-15°C to +60°C (5°F to +140°F)				
• Fluid temperature	-15°C to +60°C (5°F to +140°F)				
• Operating pressure	3 to 8 bar (45 to 116 psi)				
• Air condition	ISO 8573-1: - Filtered air or inert gas class 5 - Dry air or inert gas class 4				
• Max Operating Frequency	5 Hz				
• Operating position	Any position				
2 – MODELS AND FUNCTIONS					
PLL-... / PLK-... / PLN-... / PLJ-C10 / PLM-... / ...	Functions AND, OR, NOT, YES and Latch memory,				
PRD-... / PRF-... / PRT-... / ...	Amplifier, Sensor, Timer,				
PSM-... / PSV-A12	Modular Sequencer.				
3 – INSTALLATION					
• Mounting according to the PARKER catalogue, in conjunction with subbases and input modules:					
PLE-B1. / PZU-...	for functions and latch memory				
PZU-...	for Amplifier, Sensor, Timer,				
PSE-A1. / PSD-... / PSB-A1.	for Modular Sequencer				
WARNING					
• Conditions for installing the components must comply with specifications mentioned in chapters 1 and 3					
• Before maintenance operations, stop the air and ensure that pipes are exhausted. Then proceed.					
• The replacement of a component must be done with a component of the same ATEX category.					
• Cleaning operations should be done in compliance with the specifications of the ATEX zone, preferably by aspiration and/or utilization of antistatic products. The deposit of dust should not exceed 5mm.					
• The installation and maintenance operations must be done by qualified personnel.					
4 – ATEX CLASSIFICATION					
 II 2 GD c 85 °C					
	Specific logo for safety in hazardous atmospheres				
II	Destination : Group II : Atmospheres other than in mines				
2	For use in zones 1 and 21				
GD	Gas or Dust atmospheres				
c	Protection mode : "c", constructional safety				
85°C	Temperature class (T6)				
The maximum ambient temperature (Ta) of the equipment or of the subassembly incorporating logic elements will be defined as:					
• (Ta) of the element having the lowest limit if this one is < 60°C,					
• 60°C if elements other than the logic have a (Ta) > 60°C.					
EC DECLARATION of CONFORMITY 					
We, Parker Hannifin France S.A.S. Etablissement d'Evreux Rue H. Becquerel – BP 3124 27031 EVREUX CEDEX – France					
hereby declare that the following components from the Telepneumatic pneumatic logic range :					
- PLL-... / PLK-... / PLN-... / PLJ-C10 / Functions AND, OR, NOT, YES,					
- PLM-... / PRD-... / PRF-... / PRT-... / Latch memory, Amplifier, Sensor, Timer,					
- PSM-... / PSV-A1. Modular Sequencer,					
are compatible for use in explosive atmosphere II 2 GD (zones 1,2 and 21,22).					
These components are designed and manufactured in compliance with the European Directive:					
- 94/9/EC, March 1994, "ATEX"					
The present declaration is based on the compliance with the following standards:					
- Standard EN 13463-1, 2001 and AC:2002, Non-electrical equipment for potentially explosive atmospheres. Part 1: Basic methods and requirements					
- Standard EN 13463-5, 2003, Non-electrical equipment intended for use in potentially explosive atmospheres. Part 5: Protection by constructional safety "c".					
Type certificate: LCIE 04 ATEX 6164X					
Delivered by: LCIE					
Additional information:					
These products are designed for utilization in applications falling under the scope of the ATEX Directive 94/9/EC. This coverage could only be referred to as long as operations for the installation and the maintenance of these products are complying with related standards.					
The user will have to comply with procedures for getting an approval of the final assembled system according to related regulations.					
Issued at Evreux					
Date: January 24 th , 2007					
CE marked: 2004					

Introduction to the European ATEX directive Explosive atmospheres

Directive 94/9/EC defines an explosive atmosphere as a mixture of :

- a) **flammable substances** – gases, vapours, mists or dusts
 - b) with **air**
 - c) under specific **atmospheric conditions**
 - d) in which, after ignition has occurred, combustion spreads to the entire flammable mixture
- (NB: with regard to dust, it may be that not all dust is combusted after ignition has occurred)

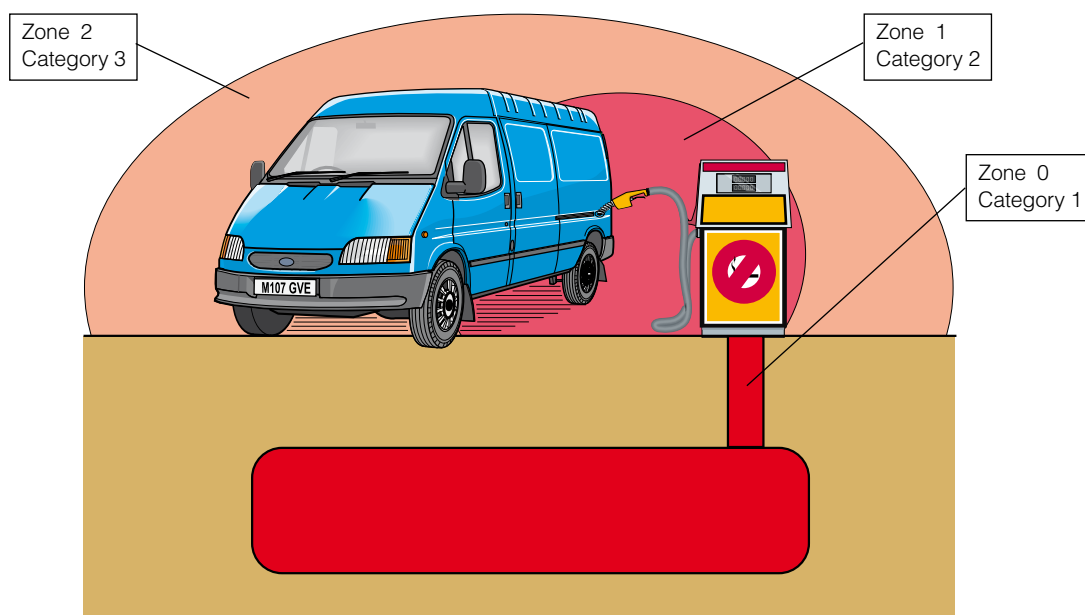
An atmosphere with the potential to become an explosive atmosphere during operating conditions and/or under the influence of the surroundings is defined as a **potentially explosive atmosphere**. Products covered by directive 94/9/EC are defined as intended for use in potentially explosive atmospheres.

Harmonised European ATEX standard

The European Union has adopted two harmonised directives in the field of health and safety. The directives are known as ATEX 100a and ATEX 137.

Directive ATEX 100a (94/9/EC) lays down minimum safety requirements for products intended for use in potentially explosive atmospheres in European Union member states. Directive ATEX 137 (99/92/EC) defines minimum requirements for health and safety at the workplace, for working conditions and for the handling of products and materials in potentially explosive atmospheres. This directive also divides the workplace into **zones** and defines criteria by which products are **categorised** within these zones.

The table below describes the **zones** in an installation where there is a potential for explosive atmospheres. The **owner** of the installation must analyse and assess the area in which the explosive gas/dust mixture may occur, and if necessary must divide it into **zones**. This process of zoning then allows the correct plant and equipment to be selected for use in the area.



Zones		Presence of potentially explosive atmosphere	Type of risk
Gas G	Dust D		
0	20	Present continuously or for long periods.	Permanent.
1	21	Likely to occur in normal operation occasionally.	Potential.
2	22	Not likely to occur in normal operation but, if it does occur, will persist for a short period only.	Minimal.

The ATEX directive has been in force throughout the European Union since 1 July 2003, replacing the existing divergent national and European legislation relating to explosive atmospheres. Please note that for the first time, the directive covers mechanical, hydraulic and pneumatic equipment and not just electrical equipment as before.

With regard to the **Machinery directive** 98/37/EC, note that a number of external requirements in 94/9/EC refer to hazards arising from potentially explosive atmospheres, where the Machinery directive only contains general requirements relating to explosion safety (Annex I 1.5.7).

As a result, directive 94/9/EC (ATEX 100a) takes precedence over the Machinery directive with regard to explosion protection in potentially explosive atmospheres. The requirements in the Machinery directive are applicable to all other risks relating to machinery.

In most cases full certification is not required, a much more simple “Risk Assessment” as detailed in the Directive, for the products to be supplied will suffice. At the moment we are conducting “Risk Assessments” in accordance with the Directive, on a broad range of core products which will be published on the web site. A more limited range of products will have the full ATEX certification where this is deemed necessary.

Levels of protection for the various equipment categories

The various equipment categories must be capable of operating in accordance with the manufacturer's operating specifications at defined levels of protection.

Level of protection	Category Group I	Group II	Type of protection	Operating specifications
Very high	M1		Two independent means of protection or safety, ensuring that the equipment remains functional even in the event of two faults occurring independently of each other.	The equipment remains energised and functional even with an explosive atmosphere present.
Very high		1	Two independent means of protection or safety, ensuring that the equipment remains functional even in the event of two faults occurring independently of each other.	The equipment remains energised and functional in zones 0, 1, 2 (G) and/or zones 20, 21, 22 (D).
High	M2		Protection suitable for normal operation and severe operating conditions.	The equipment is de-energised in the event of an explosive atmosphere.
High		2	Protection suitable for normal operation and frequent faults, or equipment in which faults normally have to be taken into account.	The equipment remains energised and functional in zones 1, 2 (G) and/or zones 21, 22 (D).
Normal		3	Protection suitable for normal operation.	The equipment remains energised and functional in zones 2 (G) and/or zones 22 (D).

Definition of groups (EN 1127-1)

Group I Equipment intended for use in underground parts of mines as well as those parts of surface installations of such mines likely to be endangered by flammable vapours and/or flammable dusts.

Group II Equipment intended for use in other places exposed to explosive atmospheres.

Group	I mines, combustible vapours		II other potentially explosive atmospheres (gases, dust)					
Category	M1	M2	1		2		3	
Atmosphere*			G	D	G	D	G	D
Zone			0	20	1	21	2	22

* G = gas and D = dust

Temperature classes

Classification of flammable gases and vapours on the basis of ignition temperature.

Temperature class	Maxi. allowed temperature on the surface of the material (°C)
T1	450
T2	300
T3	200
T4	135
T5	100
T6	85

Parker components out of scope of the ATEX Directive :

Essential elements with the reliable use of the products and protection systems, but not having an autonomous function nor an own ignition source.

Declaration of conformity

The product catalogues contain copies of the declaration of conformity demonstrating that the product meets the requirements of directive 94/9/EC.

The declaration is only valid in conjunction with the instructions contained in the installation manual relating to the safe use of the product throughout its service life.

The instructions relating to the conditions in the surrounding area are particularly important, as the certificate is invalidated if the instructions are found not to have been adhered to during operation of the product. If there is any doubt as to the validity of the certificate of conformity, contact Parker Hannifin customer service.

Operation, installation and maintenance

The product installation manual contains instructions relating to the safe storage, handling, operation and servicing of the product.

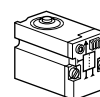
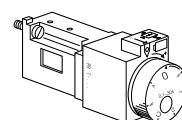
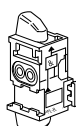
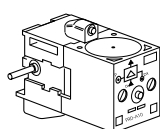
The manual is available in different languages, and can be downloaded from www.parker.com/euro_pneumatic.

This document must be made accessible in a suitable place near where the product is installed. It is used as a reference for all personnel authorised to work with the product throughout its service life.

We, the manufacturer, reserve the right to modify, extend or improve the installation manual in the interests of the users.

For more information about ATEX see EUs homepage: <http://europa.eu.int/comm/enterprise/atex/>

Pneumatic automation; Control module

Time delay
RelayRelay
function

Series	PSM, PLM	PLL, PLK	PLL, PLK	PLN-D, PLJ	PRT	PLM
Function	Modular sequencer	Stand alone logic cell	Stackable logic cell	Subbase mtd logic cell	Time relay Pneum. Relay	Memory Relay
Operating Pressure	3 to 8 bar	3 to 8 bar	3 to 8 bar	3 to 8 bar	3 to 8 bar	3 to 8 bar
Storage temperature	-15 °C to +70 °C	-15 °C to +70 °C	-15 °C to +70 °C	-15 °C to +70 °C	-15 °C to +70 °C	-15 °C to +70 °C
Working temperature	-40 °C to +60 °C	-40 °C to +60 °C	-40 °C to +60 °C	-40 °C to +60 °C	-40 °C to +60 °C	-40 °C to +60 °C
Flow, NI/min at 6 bar	180	180	180	90/180	180	180
Flow, Kv	1,8	1,8	1,8	1/1,8	1,8	1,8
Response time	Commuting time of the primary acting cell: 2 to 3 ms					
Mechanical life at 6 bar, 20 °C 1 Hz	10 million cycles	100 million cycles	100 million cycles	10 million cycles	10 million cycles	10 million cycles
Shocks and Vibrations	According to IEC 68-2-6 and IEC 68-2-27					
Connection	Push-in connection Ø4 mm					
Mounting	All positions	All positions	All positions	All positions	All positions	All positions
Refer to page	15	16	17	17	18	19

Material

Valve member - seat :	Self lubricating acetal - ceramic
Body :	Polyamide reinforced fibreglass
Casing - End plates :	Anodised aluminium
Valve plate :	Zamak
Seals :	Nitrile
Springs :	Stainless steel
Screws :	Stainless steel
Poppets :	Polyuréthane

General Characteristics

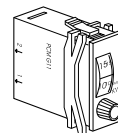
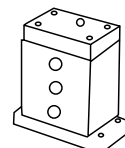
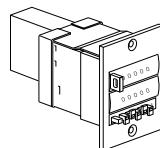
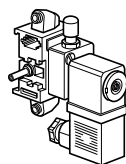
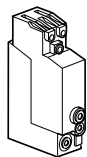
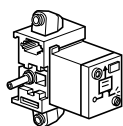
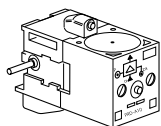
Fluid :	Air or inert gas filtered 40 µ class 5 according to ISO 8573-1 dry class according to service temperature non-lubricated, or lubricated
Storage temperature :	-40 °C to + 70 °C
Low temperature climatic :	According to EN 60068-2-1, test Ad
High temperature climatic :	According to EN 60068-2-2, test Bd
Shock and Vibrations :	According to IEC 68-2-6 and IEC 68-2-27
Salt spray test :	According to ISO 9227, 168 h
Solenoid orifice :	1.2/1.3mm
Power (DC) :	6 to 6.8W
Voltage tolerance :	+/- 30%
Duty cycle :	100%
Electrical connection :	Din A

Relay functions

Pressure Switch

Solenoid Actuator

Counters and Timers



PRD	PRF	PRE, PS1	PRS	PCT, PCP	2147	PCM
Amplifier relay	Sensor relay	Pressure switch	Solenoid actuator	Counter	Binary Counter	Timers
3 to 8 bar	3 to 8 bar	3 to 8 bar	3 to 8 bar	2 to 8 bar	0 to 10 bar	2 to 6 bar
-15 °C to +70 °C	-15 °C to +70 °C	-15 °C to +70 °C	-15 °C to +70 °C	0 °C to +60 °C	0 °C to +70 °C	0 °C to +60 °C
-40 °C to +60 °C	-40 °C to +60 °C	-40 °C to +60 °C	-40 °C to +40 °C	-0 °C to +50 °C		-0 °C to +60 °C
90	180	-	60	-	460	100
1	1,8		0,65	-	-	
Commuting time of the primary acting cell: 2 to 3 ms		2 to 3 ms	8 to 12 ms	Reset time 150 ms	Reset time 200 ms	
10 million cycles	10 million cycles	10 million cycles	10 million cycles	10 million cycles	50 million cycles	5 million cycles
According to IEC 68-2-6 and IEC 68-2-27						
Push-in connection Ø4 mm						
All positions	All positions	All positions	All positions	All positions	All positions	All positions
19	19	20	20	21	21	21

Specific characteristics**PRD**

Signal pressure (a) :	0,5 to 2 mbar (maximum permissible overpressure = 200 mbar)
Auxiliary supply pressure (p) :	100 to 200 mbar
Consumption :	at 100 mbar with a = 0 : 3l/min ANR
Operating frequency :	10 Hz (with manual control)

PRF

Operating pressure :	3 to 8 bar
Nozzle Ø :	0,3 mm
Nozzle consumption :	2 NI/min per bar

PRS

Consumption :	Direct current : sealed = 5 W	Alternating current : sealed= 6 VA ; inrush = 20 VA
Voltage range :	0,9 to 1,05 Un	
Standard voltages :	24 VDC ; 48 VDC ; 24 VAC ; 115 VAC ; 230 VAC	
Rating :	100 %	
Connection :	Plug -in connector, Ø 9 mm cable entry, terminal capacity 1,5 mm ²	
Nominal insulation voltage :	660 V AC or V DC (with manual control)	
Protection degree :	IP 65	

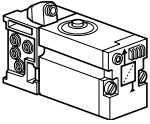

PRE

Trip pressure :	2,2 to 3 bar
Depilot pressure :	2 to 2,6 bar
Max. operating frequency :	10 Hz
Nominal insulation voltage :	660 V AC or V DC
Nominal thermal rating :	10 A
Protection degree :	IP 65
Connection :	Plug -in connector, Ø 9 mm cable entry, terminal capacity 1,5 mm ²
Function :	NO contact

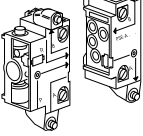
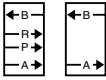
PS1-P

Fixed trip pressure :	≤1,3 bar
Adjustable trip pressure :	2 to 5 bar
Nominal thermal rating :	10 A
Max. operating frequency :	10 Hz
Nominal insulation voltage :	660 V AC or V DC
Protection degree :	IP 40
Function :	Open/Closed contact

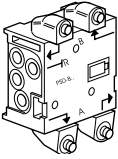
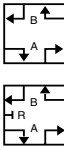
Step modules

Type	Symbol	Logic function	Description	Connection	Weight kg	Order code
		Visual indication of pneumatic output and manual override	With PSB-A12 sub-base	Ø4 mm Swivel push-in	0,175	PSM-A12 *
		Without manual override	With PSB-A12 sub-base	Ø4 mm Swivel push-in	0,170	PSM-B12 *

Set of head and tail modules

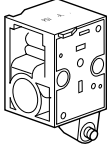

Type	Symbol	Logic function	Connection	Weight kg	Order code
		Ø6 mm Swivel push-in connection	Ø4 mm Swivel push-in	0,080	PSE-A12

Deviation modules

Type	Symbol	Logic function	Connection	Weight kg	Order code
		Used for parallel, optional, repeat sequenses and skip step	Ø4 mm Swivel push-in	0,050	PSD-A12
		for the remote reset of the last step module		0,050	PSD-B12

* ATEX version available Order code example : **PSM-A12-EX**

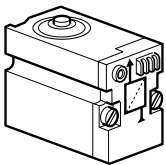

Additional step module interlock

Type	Symbol	Logic function	Connection ⁽¹⁾ connection	Weight kg	Order code
		May be mounted between the sub-base and the step module to interrupt the sequence if a sensor is found to be faulty	Ø4 mm Swivel push-in	0,045	PSV-A12 *

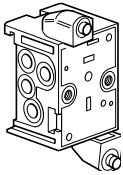
(1) For other type of connections contact Technical Sales Department

Step module without sub-base

To be used with PSB-A12 sub-bases

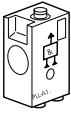

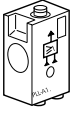


Type	Symbol	Logic function	Description	Weight kg	Order code
		Visual indication of pneumatic output	With manual override	0,135	PSM-A10 *
			Without manual override	0,130	PSM-B10

Step module sub-base

Type	Description	Connection ⁽¹⁾	Weight kg	Order code
	Sub-base	Ø4 mm Swivel push-in	0,040	PSB-A12

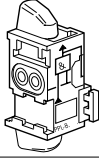

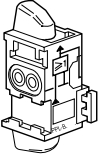

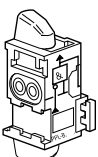

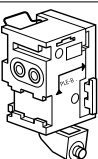

(1) For other type of connections contact technical sales Technical Sales Department

Main data for Line mounted elements

Type	Symbol	Logic function	Description	Connection	Weight kg	Order code
		AND	Single module	Ø4 mm Straight push-in	0,07	PLL-A11 *
		OR	Single module	Ø4 mm Straight push-in	0,07	PLK-A11 *
		Screw and clip assembly	Enables line mounted logic elements to be attached to DIN rail (Sold per pack of 10)		0,02	PZM-L199

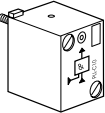

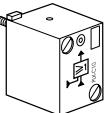

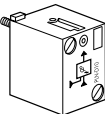

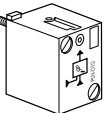

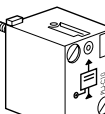

* ATEX version available Order code example : **PSV-A12-EX**

Main data for Combinable elements

Type	Symbol	Logic function	Description	Connection ⁽¹⁾	Weight kg	Order code
		AND	With built-in key for combination and operating mode selection	Ø4mm Swivel push-in	0,08	PLL-B12 *
		OR	With built-in key for combination and operating mode selection	Ø4mm Swivel push-in	0,08	PLK-B12 *
		NOT	With built-in key for combination and operating mode selection	Ø4mm Swivel push-in	0,08	PLN-B12 *
		INPUT	With built-in key for combination, clip for mounting on DIN rail and blanking plate for closing a bank of combined elements	Ø4mm swivel push-in	0,08	PLE-B12

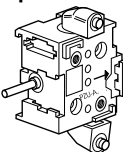


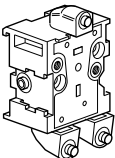

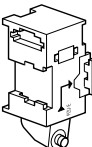
(1) For other type of connections contact Technical Sales Department

Main data for Sub-base mounted element

Type	Symbol	Logic function	Description	Weight kg	Order code
		AND	With visual indication of pneumatic output signal	0,03	PLL-C10 *
		OR	With visual indication of pneumatic output signal	0,03	PLK-C10 *
		NOT inhibit standard	With visual indication of pneumatic input/output signal	0,03	PLN-C10 *
		NOT inhibit on	With visual indication of pneumatic input/output signal threshold	0,03	PLN-D10 *
		YES regenerate	With visual indication of pneumatic input/output signal	0,03	PLJ-C10 *

* ATEX version available Order code example : **PLL-B12-EX**

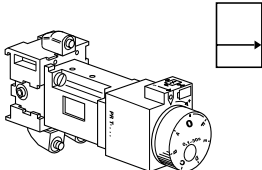
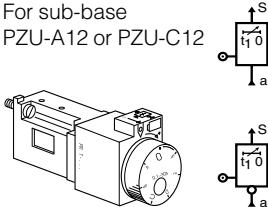
Sub base mounted elements

Type	Symbol	Logic function	Description	Connection ⁽¹⁾	Weight kg	Order code
3-port sub-bases (2) 	 		With common input	Ø4 mm Swivel push-in	0,04	PZU-A12
			Cascade	Ø4 mm Swivel push-in	0,05	PZU-C12
4-port sub-bases (2) 			For combination with memory relay (see next page) and amplifier relay (see next page)	Ø4 mm Swivel push-in	0,05	PZU-B12
Input module 				Ø4 mm Swivel push-in	0,05	PZU-E12

(1) For other type of connections contact Technical Sales Department (Ex : M5 connection = PZU-E15)

(2) Can be used singly or in combination. Mounting methods: On DIN rail with built in clip, on surface mounting using screws M4x25

Main data for time delay relays

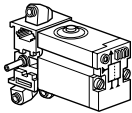



Type	Function	Timing range	Connection ⁽¹⁾	Weight kg	Order code
Complete with sub-base PZU-A12 	Output after timed period	0,1 to 30 s	Ø4 mm Swivel push-in	0,17	PRT-A12 *
Without sub-base For sub-base PZU-A12 or PZU-C12 	Output after timed period	0,1 to 3 s 0,1 to 30 s 10 to 180 s		0,13 0,13 0,13	PRT-E10 * PRT-A10 * PRT-B10 *
	Output during timed period (3)	0,1 to 3 s 0,1 to 30 s 10 to 180 s		0,13 0,13 0,13	PRT-F10 * PRT-C10 * PRT-D10 *
Tamper proof cap				0,01	LA9-D901

* ATEX version available Order code example : **PZU-A12-EX**

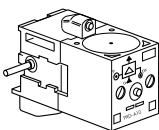

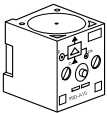

(1) For other type of connections contact Technical Sales Department

(3) Can be used to provide an impulse generator

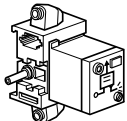



Main data for Memory relays

Type	Symbol	Description	Connection ⁽¹⁾	Weight kg	Order code
Complete with sub-base PZU-B12					
		With priority reset signal and visula indication With manual override	Ø4 mm Swivel push-in	0,19	PLM-A12 *
Without sub-base For sub-base PZU-B12					
		With priority reset signal and visula indication With manual override		0,14	PLM-A10 *
		Without manual override		0,13	PLM-B10

Main data for Amplifier relays

Type	Symbol	Description	Connection ⁽¹⁾	Weight kg	Order code
Complete with sub-base PZU-B12					
		This relay is used to amplify the low pressure signal provided by a fluidic proximity sensor to a useable level With manual override	Ø4 mm Swivel push-in	0,18	PRD-A12 *
Without sub-base For sub-base PZU-B12					
		This relay is used to amplify the low pressure signal provided by a fluidic proximity sensor to a useable level With manual override		0,13	PRD-A10 *

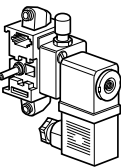

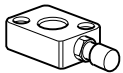
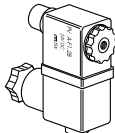
Main data for Sensor relays

Type	Symbol	Description	Connection ⁽¹⁾	Weight kg	Order code
Complete with sub-base PZU-A12					
		This relay is used to provide a supply to a bleed sensor and to generate a pneumatic signal equal to its supply pressure	Ø4 mm Swivel push-in	0,07	PRF-A12 *
Without sub-base For sub-base PZU-A12 or PZU-C12					
		This relay is used to provide a supply to a bleed sensor and to generate a pneumatic signal equal to its supply pressure		0,03	PRF-A10 *

* ATEX version available Order code example : **PLM-A12-EX**

(1) For other type of connections contact your Technical Sales Department

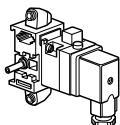

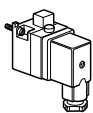

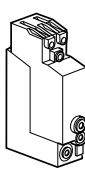

Main data for Solenoid actuators

Type	Symbol	Voltage	Load		Connection	Weight kg	Order code
Complete units, solenoid and cable plug							
		24 V ~ 50/60 Hz	8,5 VA	Manual override	22 mm Plug-in	0,17	PRS-A121B
		24 V	6 W	Manual override	22 mm Plug-in	0,17	PRS-A122B
		115 V ~ 50 Hz 120 V ~ 60 Hz	8,5 VA	Manual override	22 mm Plug-in	0,17	PRS-A121F
		230 V ~ 50 Hz 240 V ~ 60 Hz	8,5 VA	Manual override	22 mm Plug-in	0,17	PRS-A121M
Solenoid mounting base							
		For mounting the solenoid coil and plunger on 3-port modular sub-bases type PZU-A●●, see page 18		Manual override		0,09	PRS-D10
Solenoid coil							
with plunger and 22 mm plug-in connector (4)		24 V*	6 W			0,135	PVA-F102B
		48 V*	6 W			0,135	PVA-F102E
		24 VAC 50/60 Hz	8,5 VA			0,135	PVA-F101B
		48 VAC 50/60 Hz	8,5 VA			0,135	PVA-F101E
		115 VAC 50 Hz/ 120 VAC 60 Hz	8,5 VA			0,135	PVA-F101F
		230 VAC 50 Hz	8,5 VA			0,135	PVA-F101M
		240 VAC 60 Hz					
		255 VAC 50 Hz	8,5 VA			0,135	PVA-F101U

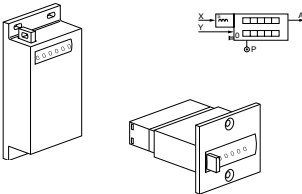
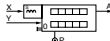
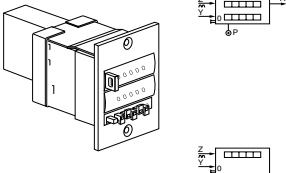


* Versions available for operation in explosive atmospheres.
- Conforming to certificate LCIE 866115X
- Electrical equipment conforming to harmonised European standards

EN 50014 dated March 1977 (NFC 23514 dated May 1982)
EN 50019 dated March 1977 (NFC 23519 dated May 1982)
- Referencing code EExe II T4 (consult Technical Sales Department)
(4) Can be fitted with LED indicator and suppression, PVA●ZF●●

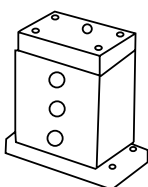
Main data for Pressure switches

Type	Symbol	Electrical characteristics	Pneumatic characteristics	Connection	Weight	Order code	
Electric/Pneumatic							
kg							
Complete unit with sub-base, solenoid and cable plug							
		N/O contact	Manual Plug-in	22 mm	0,13	PRE-A12	
		override		Ø4 mm Swivel push-in			
Without sub-base							
		N/O contact	Manual override	22 mm Plug-in Ø4 mm Swivel push-in	0,04	PRE-A10	
Line mounted							
		1 CO contact 5 A/250 V	Fixed operating threshold	Manual override	Ø4 mm Push-in	0,05	PS1-P1081
		1 CO contact 5 A/250 V	Adjustable operating threshold	Manual override	Ø4 mm Push-in	0,05	PS1-P1091

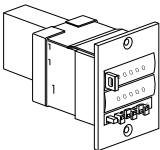
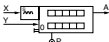
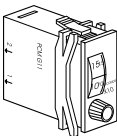
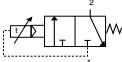
Main data for Impulse counters

Type	Symbol	Type Counting range	Mounting	Weight kg	Order code	
Totalising counters						
		Pneumatic or manual reset	0 - 999 999	Surface mounting Flush mounting	0,08 0,06	PCT-A11 PCT-B11
Pre-selection counters						
		Additional with pneumatic or manual reset	0 - 99 999	Flush mounting	0,12	PCP-A11
		Auto reset	0 - 99 999	Flush mounting		PCP-A111
		Subtraction with pneumatic or manual reset	0 - 99 999	Flush mounting	0,11	PCP-S11
						

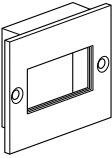
Binary counters

Type	Description	Weight kg	Order code
	Pneumatic actuated	0,650	2147900
	Electrical actuated	0,775	2147950

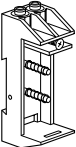
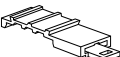
Main data for Timers

Type	Symbol	Type	Time base	Time range	Weight kg	Order code
Digital display						
		With pneumatic or manual reset	1 second	1 second to 27 hours	0,20	PCM-A11
			1 minute	1 minute to 69 days	0,20	PCM-B11
			2 minutes	3 to 100 minutes	0,20	PCM-E11
Calibrated dial						
			1 second	2 to 30 seconds	0,05	PCM-F11
			1 second	20 to 300 seconds	0,05	PCM-G11

Mounting bezels

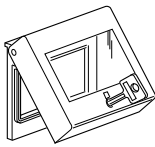
Type	Description	Weight kg	Order code
	For PCM-F11 and PCM-G11 mounting in 60 x 75 mm cut-out	0,015	PXC-ZM6075
	For PCM-F11 and PCM-G11 mounting in 72 x 72 mm cut-out	0,015	PXC-ZM7272

Bezels for DIN rail mounting

Type	Description	Weight kg	Order code
	For (non-reversible) clip-on mounting of PCM-F11 and PCM-G11 on push-in connection sub-base	0,020	PXC-ZA35
	35 mm DIN rail latching device for PXC-ZA35 sub-bases	0,010	PXC-ZE35

Lockable cover

Degree of protection IP 55

Type	Description	Weight kg	Order code
	Transparent cover key lockable for 60x75 bezel for PCP-A11, PCP-S11, PCP-MA11, PCP-MB11	0,025	PXC-B1
	For PCT-B11	0,018	PXC-A1

Seals for step modules and additional interlock modules

Type	Base component	Weight kg	Order code
1 set of 10 flat seals	PSM-A12	0,038	PPR-L01
	PSM-B12		
	PSV-A12		
	PSB-A12		

For logic elements and relays for mounting on modular sub-bases

Type	Base component	Weight kg	Order code
1 lot of 100 O-ring seals comprising : - 10 seals for ports with inputs filters - 90 seals for ports without input filter	PLJ-C10	0,015	PPR-L04
	PLK-C10		
	PLL-C10		
	PLN-C10		
	PLN-D10		
	PRT- . .		
	PRF-A10		

For amplifier relays

Type	Base component	Weight kg	Order code
1 lot of 10 Mylar diaphragms	PRD-A10	0,004	PPR-L08
	PRD-A12		

Base usage - Shows which components can be mounted with which base types

Element	Order code	Type	2-Port	3-Port	4-Port	6-Port
		Stacking		PZU-A12	PZU-B12	PSA-B12
		Stacking		PZU-C12		
		Inline	BNC3P20	BNC3P10		
		Inline	BPB3P20	BPB3P10		
Step Module						
Step Module with Overrides	PSM-A10					X
Step Module without Override	PSM-B10					X
Logic						
AND	PLL-C10			X		
OR	PLK-C10			X		
YES	PLJ-C10			X		
NO	PLN-C10			X		
Threshold NOT	PLN-D10			X		
Relays						
Sensor	PRF-A10			X		
Solenoid	PRS-A10		X	X		
Electric Pressure Switch	PRE-A10			X	X	
E/P Pressure Switch	LNOTPS10			X		
Electric Pressure switch	LPS10		X	X		
Vacuum / Electric	LPSV10		X	X		
Timers						
Timer (NNP) Relay	PRT-A10		X*	X		
Timer (NNP) Relay	PRT-B10		X*	X		
Timer (NNP) Relay	PRT-E10		X*	X		
Timer (NNP) Relay	PRT-C10		X*	X		
Timer (NNP) Relay	PRT-D10		X*	X		
Timer (NNP) Relay	PRT-F10		X*	X		
Other Relays						
Memory Relay	PLM-A10			X	X	
Amplifier Relay	PRD-A10			X	X	

* Functionality must be checked.

Fitting color code

Port	Label		Color
Supply	P	2	Black / None
Signal	a	1	Green
Output	S	3	Red

Sequencer input power modules

	Entry Module	Head / Tail
Used with Base	PZU-E12	PSE-A12 *
	PZU-A12	PSB-A12 **
	PZU-C12	
	PZU-B12	

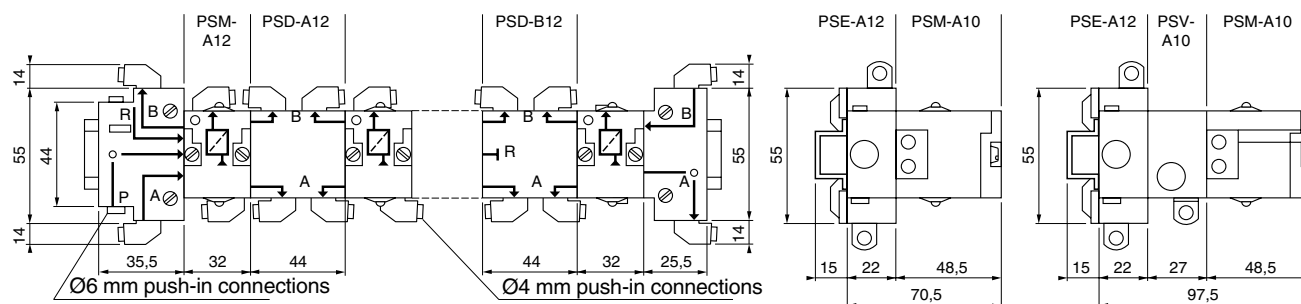
* PSE-A12-**EX** (ATEX version)

* PSE-A12**7** (U.S. version)

** PSB-A12-**EX** (ATEX version)

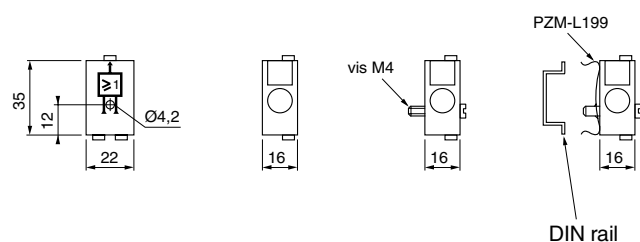
Dimensions, Logic processing

Modular sequencer



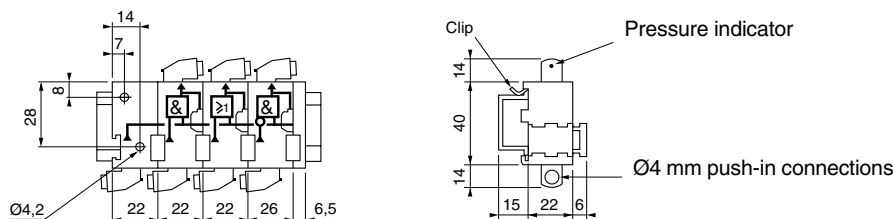
Line mounted logic elements

PLL-A11 and PLK-A11



Combinable logic elements

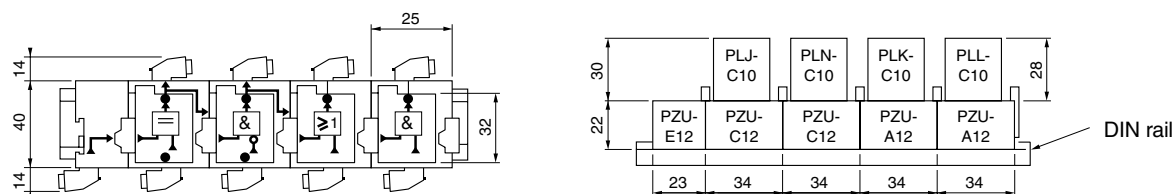
PLE-B12 — PLL-B12 — PLK-B12 and PLN-B12



Logic elements mounted on 3-port modular sub-bases

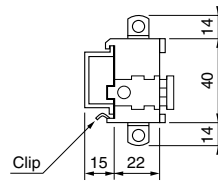
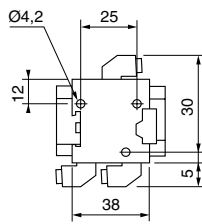
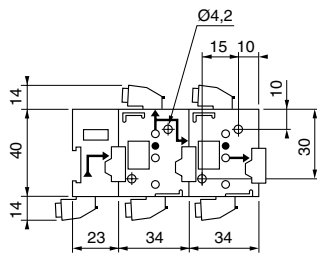
PZU-E12

PLJ-C10 — PLN-C10 — PLK-C10 and PLL-C10 mounted on PZU-C12 and PZU-A12

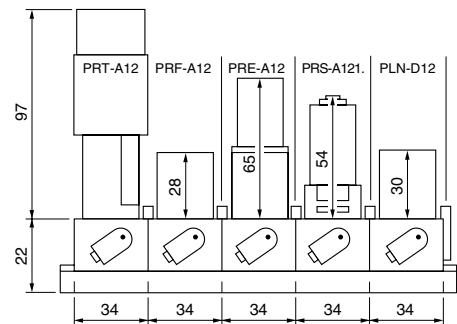
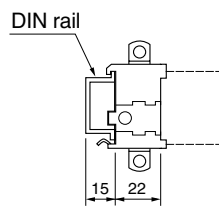
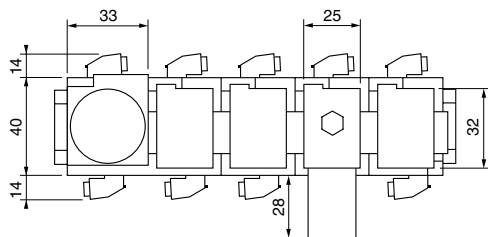


3 and 4-port modular sub-bases PZU-E12 — PZU-C12 — PZU-A12

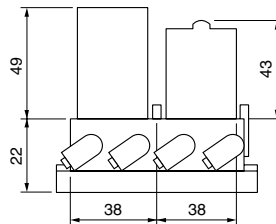
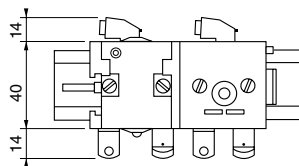
PZU-B12



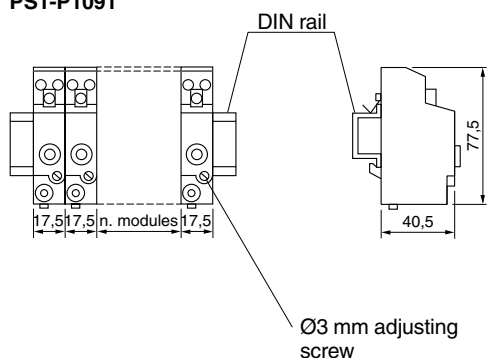
Relays mounted on 3-port modular sub-bases PRT-A12 — PRF-A12 — PRE-A12 — PRS-A121 and PLN-D12



Relays mounted on 4-port modular sub-bases PLM-A12 and PRD-A12

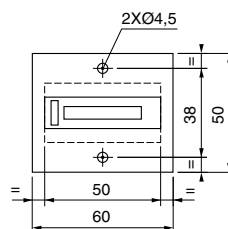
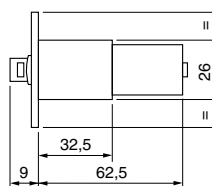
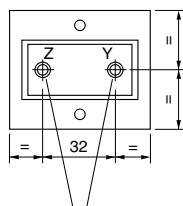
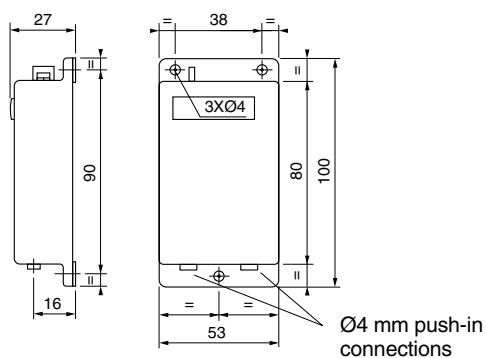


Pressure switch PS1-P1091



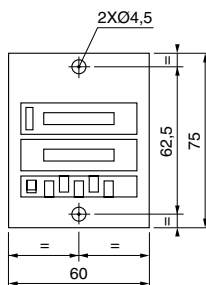
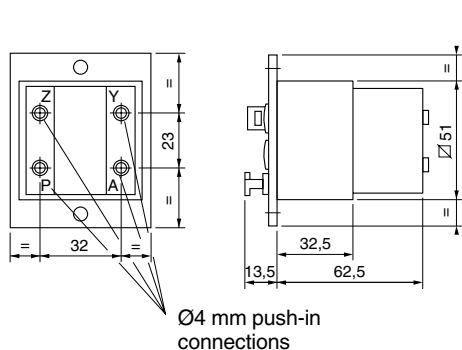
Totalising counters

PCT-A11 PCT-B11



Preselection counters

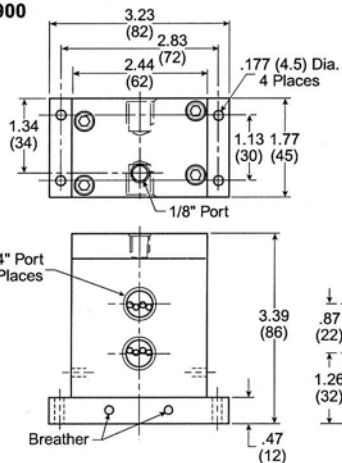
PCP-A11 and PCP-S11



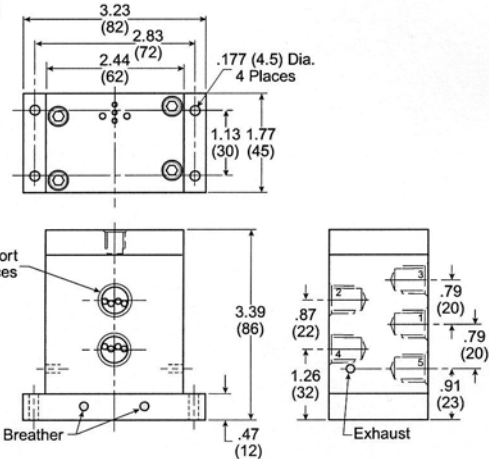
Binary counters

PCM-A11 and PCM-B11

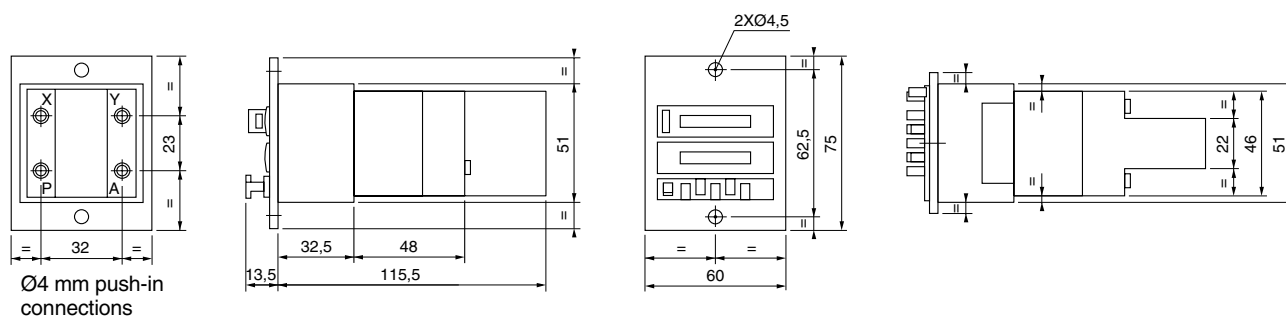
2147900



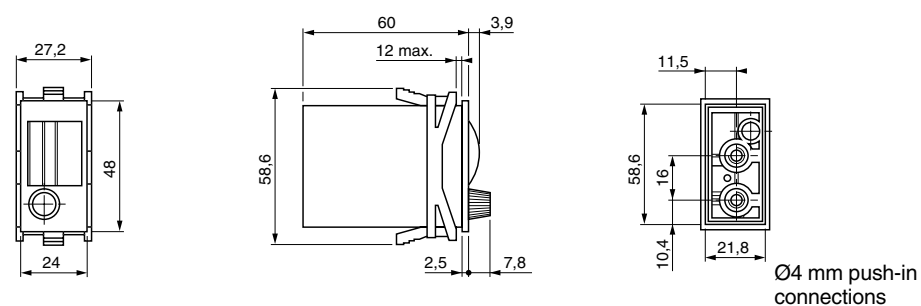
2147950



Digital display timers PCM-A11 and PCM-B11



Timers with calibrated dial PCM-F11 and PCM-G11



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PDE Information Bulletin

Product Group:	Actuators	Valves	Air Treatment	Factory Automation	Other Products
Title:	PNEUMATIC LOGIC RATIONALISATION -				
Catalogue:	-				
Date of Issue:	8 September 2006				
Bulletin No:	09-06				

Obsolescence Notice for Climax/Maxam Pneumatic Logic Products

Parker Pneumatics Europe currently manufactures the Parker Global (formerly Telepneumatic) and Climax/Maxam pneumatic logic ranges. Both product series have been supported in parallel for the previous five years albeit with reducing volumes on the Climax/Maxam product line. The Telepneumatic range will continue to form the basis of the Parker Global range since it offers many enhanced technical features and was developed as a second generation to the Climax/Maxam range.

As a result the majority of the Climax/Maxam logic range will be made obsolete during 2007, exceptions to this will be products which offer a unique addition to the Parker Global range.

The attached tables list the Climax/Maxam products with their Parker equivalent. Many of the popular logic elements from both ranges are interchangeable and will fit on the same pneumatic base, this is denoted within the data tables for ease of understanding. Catalogue information on these products can be viewed by clicking on the hyperlink:

http://www.parker.com/EAD/Digital_asset_display.asp?digital_asset_id=6812

Parker Pneumatic will continue to supply Climax/Maxam logic products while component stocks last, however, the anticipated production end will be 31st March 2007. Please be pro-active in the promotion of the preferred global products to ensure a smooth transition. Status reports throughout the oncoming months will be provided as component stocks are depleted.

We remain at your disposal for any further information.

Sincerely,



Claude Barrabès
Pneumatic Division Europe - Control Devices
Logic, Push Button, Limit switches & ATEX valves Product Manager
Tél : 33 (0) 2 32 23 34 25
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	CLIMAX/MAXAM			Parker (Telepneumatic) Recommended Alternative		
Description	Part Number	Future Status	Expected Date of Obsolescence	Part number	Mounting Interchangeability	Specification Details
OR	LOR10	To be obsoleted	31/03/2007	PLK-C10	Yes	
AND	LAND10	To be obsoleted	31/03/2007	PLL-C10	Yes	
NOT	LNOT10	To be obsoleted	31/03/2007	PLN-C10 or -D10	Yes	
YES	LYES10	To be obsoleted	31/03/2007	PLJ-C10	Yes	
Normally open timer 0,14 to 14s	LTN10/0	To be obsoleted	31/03/2007	PRT-F10	Yes	0,1 to 3s
Normally open timer 0,25 to 2s	LTN10/1	To be obsoleted	31/03/2007	PRT-F10	Yes	0,1 to 3s
Normally open timer 0,5 to 6s	LTN10/2	To be obsoleted	31/03/2007	PRT-C10 or -D10	Yes	0,1 to 30s or 10 to 180s
Normally open timer 2,5 to 25s	LTN10/3	To be obsoleted	31/03/2007	PRT-C10 or -D10	Yes	0,1 to 30s or 10 to 180s
Normally closed timer 0,1 to 1,8s	LTY10/0	To be obsoleted	31/03/2007	PRT-E10	Yes	0,1 to 3s
Normally closed timer 0,4 to 3s	LTY10/1	To be obsoleted	31/03/2007	PRT-E10	Yes	0,1 to 3s
Normally closed timer 1 to 10s	LTY10/2	To be obsoleted	31/03/2007	PRT-A10 or -B10	Yes	0,1 to 30s or to180s
Normally closed timer 5 to 40s	LTY10/3	To be obsoleted	31/03/2007	PRT-B10	Yes	10 to 180s
Panel mounting kit	LT10/PAN	To be obsoleted	31/03/2007	No equivalent		
counting dial	LT10/A	To be obsoleted	31/03/2007	No equivalent		
Temper proof cover	LT10/C	To be obsoleted	31/03/2007	No equivalent		
3/2 NC solenoid valve12V AC	LSV10B	To be obsoleted	31/03/2007	No equivalent		
3/2 NC solenoid valve 24VAC	LSV10C	To be obsoleted	31/03/2007	PVA-F101B + PRS-D10	Yes	
3/2 NC solenoid valve 48VAC	LSV10D	To be obsoleted	31/03/2007	PVA-F101E + PRS-D10	Yes	
3/2 NC solenoid valve 110VAC	LSV10E	To be obsoleted	31/03/2007	PRS-A121F + PRS-D10	Yes	
3/2 NC solenoid valve 230VAC	LSV10F	To be obsoleted	31/03/2007	No equivalent		
3/2 NC solenoid valve 230VAC	LSV10X	To be obsoleted	31/03/2007	PVA-F101M + PRS-D10	Yes	
3/2 NC solenoid valve 12VDC	LSV10L	To be obsoleted	31/03/2007	No equivalent		
3/2 NC solenoid valve 24VDC	LSV10M	To be obsoleted	31/03/2007	PVA-F102B+PRS-D10	Yes	
3/2 NC solenoid valve 48VDC	LSV10N	To be obsoleted	31/03/2007	PVA-F102E + PRS-D10	Yes	
3/2 NC solenoid valve 110VDC	LSV10P	To be obsoleted	31/03/2007	No equivalent		
3/2 NC solenoid valve 220VAC	LSV15A1-21	To be obsoleted	31/03/2007	PVA-F101M + PRS-D10	Yes	
3/2 NC solenoid valve 220VAC	LSV15A3-21	To be obsoleted	31/03/2007	PVA-F101M + PRS-D10	Yes	
3/2 NC solenoid valve 110/120VAC	LSV15J3-21	To be obsoleted	31/03/2007	PVA-F101F + PRS-D10	Yes	
3/2 NC solenoid valve 12VDC	LSV15L3-21	To be obsoleted	31/03/2007	No equivalent		
3/2 NC solenoid valve 24VDC	LSV15M3-21	To be obsoleted	31/03/2007	PVA-F102B + PRS-D10	Yes	
Solenoid without coil	LSV10	To be obsoleted	31/03/2007	No equivalent		
Polylog memory (without sub-base)	LPMEM10	To be obsoleted	31/03/2007	PLM-A10	Not interchangeable	
INPUT/OUTPUT BASE	BAESP10	To be obsoleted	31/03/2007	PSE-A12,B12	Not interchangeable	
INPUT PLATE	BAEP10	To be obsoleted	31/03/2007	No equivalent		
OUTPUT PLATE	BASP10	To be obsoleted	31/03/2007	No equivalent		

	CLIMAX/MAXAM			Parker (Telepneumatic) Recommended Alternative		
Description	Part Number	Future Status	Expected Date of Obsolescence	Part number	Mounting Interchangeability	Specification Details
Interconnecting base	BAC3P10	To be obsoleted	31/03/2007	PZU-A12	Not interchangeable	
Integral base	BAC7P10	To be obsoleted	31/03/2007	No equivalent		
Independent base	BIC3P10	To be obsoleted	31/03/2007	No equivalent		
Independent base	BIC3P20	To be obsoleted	31/03/2007	No equivalent		
Memory independent base	BIC7P10	To be obsoleted	31/03/2007	PZU-B12	Not interchangeable	
Free standing base	BIC7P20	To be obsoleted	31/03/2007	PZU-B12	Not interchangeable	
Logic port adaptor 1 and 2	PI123P10	To be obsoleted	31/03/2007	No equivalent		
Logic port adaptor 2 and 3	PI233P10	To be obsoleted	31/03/2007	No equivalent		
Sub base	PA3CS2-20/21	To be obsoleted	31/03/2007	No equivalent		
Base	PA3CL2-20	To be obsoleted	31/03/2007	No equivalent		
Sub base	PR2CL2.20	To be obsoleted	31/03/2007	No equivalent		
Sub base	PR2CS2.20	To be obsoleted	31/03/2007	No equivalent		
Sub base	PR2N233	To be obsoleted	31/03/2007	J5PK6-4 or K8-4		
Sub base G 1/8	LBSPUB10	To be retained				
Sub base 1/8NPT	LNPTUB10	To be retained				
Sub base G 1/8	LBSPSB10	To be retained				
Sub-base1/8NPT	LNPTSB10	To be retained				
Adjustable YES 0,1 to 1 bar	LAAY10/0	To be obsoleted	31/03/2007	No equivalent		
Adjustable YES 0,5 to 8 bar	LAAY10/1	To be obsoleted	31/03/2007	No equivalent		
Adjustable NOT 0,5 to 8 bar	LAAN10/1	To be obsoleted	31/03/2007	No equivalent		
Sensitive amplifier	LFAY10/0	To be obsoleted	31/03/2007	No equivalent		
Pressure amplifier	LFAY10/1	To be obsoleted	31/03/2007	No equivalent		
Flip-Flop	LMEM10	To be obsoleted	31/03/2007	PLM-A10 or -B10 or -A12		
Flow restrictor	LFR10	To be obsoleted	31/03/2007	No equivalent		
Precision flow restrictor	LTIM10	To be obsoleted	31/03/2007	No equivalent		
Frequency generator	LPG10/1	To be obsoleted	31/03/2007	No equivalent		
Pressure switch	LPS10/2	To be retained				
Pressure switch	LPS10/3	To be retained				
Plug and lead	LLEAD10	To be retained				
vacuum switch	LPSV10	To be retained				
NOT pressure switch	LNOTPS10	To be obsoleted	31/03/2007	No equivalent		
Pressure regulator	LPREG10	To be obsoleted	31/03/2007	No equivalent		
Logic manifold	LMAN10	To be obsoleted	31/03/2007	J5PK6-4		
Rail DIN	LDIN10	To be obsoleted	31/03/2007	AM1-D200		
Pneumatic totalizing counter	0 495 465	To be obsoleted	31/03/2007	PCT-B11		
Preselection counter	0 497 487	To be obsoleted	31/03/2007	PCP-A11		

	CLIMAX/MAXAM			Parker (Telepneumatic) Recommended Alternative		
Description	Part Number	Future Status	Expected Date of Obsolescence	Part number	Mounting Interchangeability	Specification Details
Timer with digital display	0 497 653	To be obsoleted	31/03/2007	PCM-A11		
Timer with calibrated dial 3 to 100s	AC54022	To be obsoleted	31/03/2007	PCM-A12		
Two- hand control module	B3793	To be obsoleted	31/03/2007	PXP-A11		
Two- hand control module	B1218	To be obsoleted	31/03/2007	PXP-A11		
Two- hand control unit	BCB-3A-100	To be obsoleted	31/03/2007	PXP-C111		
Two- hand control unit	BCB-3B-100	To be obsoleted	31/03/2007	PXP-D121		
Two- hand control unit	BCB-3B-1S1	To be obsoleted	31/03/2007	No equivalent		
Two- hand control unit	BCB-3A-1S1	To be obsoleted	31/03/2007	No equivalent		
Two- hand control unit	BCB-3A-1S2	To be obsoleted	31/03/2007	No equivalent		
Low force push button valve	VLF3P4-302	To be obsoleted	31/03/2007	PXB-B3111BA3	Higher force required	

PDE Information Bulletin

Product Group:	Actuators	Valves	Air Treatment	Factory Automation	Other Products
Title:	Logic processing: ATEX Certified Components Up date				
Catalogue:					
Date of Issue:	March 14 2006				
Bulletin No:	03-06				



ATEX Certified : Logic Components Up date

Please note some Logic components as sub-bases, created on September 2005, have been changed back to standard part numbers (for example PRS-D10-EX coil mounting will be obsolete and replaced by **PRS-D10**). Considering Notified Body argument, these accessories do not represent an intrinsic ignition risk, consequently they are not subdued to ATEX approval.

Hereafter the list of replaced components

Obsolete Part Numbers	Standard Part Numbers	Description
PLE-B12-EX	PLE-B12	Input module & blanking plate set
PRS-D10-EX	PRS-D10	Coil mounting
PSB-A12-EX	PSB-A12	Step module sub base
PSD-A12-EX	PSD-A12	Deviation module
PSD-B12-EX	PSD-B12	Derivation module reinitialization last step
PSE-A12-EX	PSE-A12	Head & tail module
PZU-A12-EX	PZU-A12	Common input 3 port sub-base
PZU-B12-EX	PZU-B12	Common input 4 port sub-base
PZU-C12-EX	PZU-C12	Cascade 3 ports sub-base
PZU-E12-EX	PZU-E12	Input module

This is immediately applicable

We remain at your disposal for any further information.

Sincerely,

Claude Barrabès

Pneumatic Division Europe

ATEX-Logic Product Manager

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PDE Information Bulletin

Product Group:	Actuators	Valves	Air Treatment	Factory Automation	Other Products
Title:	Logic processing: ATEX Certified Components				
Catalogue:					
Date of Issue:	September 14 2005				
Bulletin No:	01-05				



ATEX Certified : Logic Components



We are pleased to announce ATEX Logic components availability.

Starting on September 15TH all products on the list below will include the an ATEX label, Instruction Sheet, and Declaration of Conformity.

Instruction sheet and Declaration of Conformity are shipped with each unit.

They will be in the following languages: English, French, German, Italian, Spanish and Swedish.

Note: It is the responsibility of the seller (Trading Sub or Distributor) to insure that the customer receives and understand this documentation. If another language is necessary for comprehension, please make the necessary translations.

This is immediately applicable

We remain at your disposal for any further information.

Sincerely,

Claude Barrabès

Pneumatic Division Europe

ATEX-Logic Product Manager

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PDE Information Bulletin

Product Group:	Actuators	Valves	Air Treatment	Factory Automation	Other Products
Title:	Logic processing: ATEX Certified Components				
Catalogue:					
Date of Issue:	September 14 2005				
Bulletin No:	01-05				

Instruction Leaflet	Logic elements	Instruction de service	Cellules logiques																		
<p>1 - SPECIFICATIONS</p> <ul style="list-style-type: none"> Operating temperature (Ta) : -15°C to +60°C (5°F to +140°F) Fault temperature : -15°C to +60°C (5°F to +140°F) Operating pressure : 2 to 8 bar (15 to 58 psi) Air condition : ISO 8573-1 : Filtered air or inert gas class 5 Max Operating Frequency : 5 Hz Operating position : Any position <p>2 - MODELS AND FUNCTIONS</p> <p>PLC... / PLK... / PLN... / PLJ-C10 / PLM... / ... PRD... / PRF... / PRT... / ... PSM... / PSV-A12</p> <p>Functions AND, OR, NOT, YES and Latch memory, Amplifier, Sensor, Timer, Modular Sequencer</p> <p>3 - INSTALLATION</p> <ul style="list-style-type: none"> Mounting according to the PARKER catalogue, in conjunction with subbases and input modules <p>PLK-B1 / PLK... for functions and latch memory PLJ... for Amplifier, Sensor, Timer PSM-A1 / PSD... / PSV-A1 for Modular Sequencer</p> <p>WARNING</p> <ul style="list-style-type: none"> Conditions for installing the components must comply with specifications mentioned in chapters 1 and 3. Before maintenance operations, stop the air and ensure that parts are exhausted. Then proceed. The replacement of a component must be done with a component of the same ATEX category. Cleaning operations should be done in compliance with the specifications of the ATEX zone, preferably by operation and/or utilization of antistatic products. The installation and maintenance operations must be done by qualified personnel. <p>4 - ATEX CLASSIFICATION</p> <p>II 2 GD c 85 °C</p> <p>Specific logo for safety in hazardous atmospheres</p> <table border="1"> <tr> <td>1</td> <td>Destination - Group II - Atmospheres other than in mines</td> </tr> <tr> <td>2</td> <td>For use in zones 1 and 21</td> </tr> <tr> <td>GD</td> <td>Gas or dust atmospheres</td> </tr> <tr> <td>C</td> <td>Protection mode "c" - constructional safety</td> </tr> <tr> <td>85°C</td> <td>Temperature class T85</td> </tr> </table> <p>The maximum ambient temperature (Ta) of the equipment or of the subassembly incorporating logic elements will be defined as:</p> <ul style="list-style-type: none"> (Ta) of the element having the lowest limit if this one is < 60°C. 60°C if elements other than the logic have a (Ta) > 60°C. 	1	Destination - Group II - Atmospheres other than in mines	2	For use in zones 1 and 21	GD	Gas or dust atmospheres	C	Protection mode "c" - constructional safety	85°C	Temperature class T85	<p>1 - SPECIFICATIONS</p> <ul style="list-style-type: none"> Temperature de service (Ta) : -15°C à +60°C Température de fuite : -15°C à +60°C Pression de service : 2 à 8 bar Fluide admissible et qualité : ISO 8573-1 : Air ou gaz neutre filtré classe 5 Fréquence de service max : 5 Hz Position de fonctionnement : Indifférente <p>2 - TYPES ET FONCTIONS</p> <p>PLC... / PLK... / PLN... / PLJ-C10 / PLM... / ... PRD... / PRF... / PRT... / ... PSM... / PSV-A12</p> <p>Fonctions ET, OU, NON, OUI et mémoire, amplificateur, capteur à fuite, température, séquenceur modulaire.</p> <p>3 - INSTALLATION</p> <ul style="list-style-type: none"> Montage selon description du catalogue PARKER, en association avec les embase et modules d'entrée : <p>PLK-B1 / PLK... fonctions et mémoire PLJ... amplificateur, capteur à fuite, température PSM-A1 / PSD... / PSV-A1 séquenceur modulaire</p> <p>ATTENTION</p> <ul style="list-style-type: none"> Les composants doivent être installés dans un environnement conforme aux sélections des chapitres 1 et 3. Avant toute opération de maintenance, stopper l'air comprimé. S'assurer que le circuit est purgé sans problème à l'atmosphère. Le remplacement d'un composant doit être effectué avec un composant de même catégorie ATEX. Les opérations de nettoyage doivent être réalisées conformément aux spécifications ATEX de l'installation, de préférence par aspiration et/ou par utilisation de produits antistatiques. L'installation et les opérations de maintenance doivent être effectuées par du personnel qualifié. <p>4 - CLASSIFICATION ATEX</p> <p>II 2 GD c 85 °C</p> <p>Logo de référence pour la sécurité en atmosphères explosives</p> <table border="1"> <tr> <td>1</td> <td>Destination - Groupes II - Atmosphères de surface</td> </tr> <tr> <td>2</td> <td>Utilisation en zones 1 et 21</td> </tr> <tr> <td>GD</td> <td>Atmosphères de type gaz ou poussières</td> </tr> <tr> <td>C</td> <td>Méthode de protection "c" - sécurité de construction</td> </tr> <tr> <td>85°C</td> <td>Classe de températures T85</td> </tr> </table> <p>La limite de température ambiante (Ta) de l'équipement ou de l'ensemble incorporant les éléments de logique sera définie comme suit :</p> <ul style="list-style-type: none"> (Ta) du composant ayant la limite la plus basse si celle-ci est < 60°C. 60°C si les constituants autres que la logique ont une (Ta) > 60°C. 	1	Destination - Groupes II - Atmosphères de surface	2	Utilisation en zones 1 et 21	GD	Atmosphères de type gaz ou poussières	C	Méthode de protection "c" - sécurité de construction	85°C	Classe de températures T85
1	Destination - Group II - Atmospheres other than in mines																				
2	For use in zones 1 and 21																				
GD	Gas or dust atmospheres																				
C	Protection mode "c" - constructional safety																				
85°C	Temperature class T85																				
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GD	Atmosphères de type gaz ou poussières																				
C	Méthode de protection "c" - sécurité de construction																				
85°C	Classe de températures T85																				
<p>EC DECLARATION of CONFORMITY</p> <p>We, Parker Hannifin France S.A.S. Clabissement d'Evreux Rue H. Becquerel - BP 3124 27031 EVREUX CEDEX - France</p> <p>herby declare that the following components from the Telepneumatic pneumatic logic range :</p> <ul style="list-style-type: none"> PLK... / PLK... / PLN... / PLJ-C10 / ... Functions AND, OR, NOT, YES, PLM... / PRD... / PRF... / PRT... / ... Latch memory, Amplifier, Sensor, Timer, PSM... / PSV-A1, Modular Sequencer, <p>are compatible for use in explosive atmosphere II 2 GD (zones 1,2 and 21,22).</p> <p>These components are designed and manufactured in compliance with the European Directive :</p> <ul style="list-style-type: none"> 94/9/EC, March 1994, "ATEX" <p>The present declaration is based on the compliance with the following standards:</p> <ul style="list-style-type: none"> Standard EN 13463-1, 2001 and AC:2002, Non-electrical equipment for potentially explosive atmospheres. Basic methods and requirements Standard EN 13463-5, 2003, Non-electrical equipment intended for use in potentially explosive atmospheres. Part 5: Protection by constructional safety "c". <p>Type certificate : LCIE 04 ATEX 6164X Delivered by : LCIE</p> <p>Additional information: These products are designed for utilization in applications falling under the scope of the ATEX Directive 94/9/EC. This coverage could only be referred to as long as operators for the installation and the maintenance of these products are complying with related standards. The user will have to comply with procedures for getting an approval of the final assembled system according to related regulations.</p> <p>Issued at Evreux Date : June 13th, 2005</p> <p>CE marked: 2004</p>	<p>DECLARATION CE de CONFORMITE</p> <p>Nous, Parker Hannifin France S.A.S. Clabissement d'Evreux Rue H. Becquerel - BP 3124 27031 EVREUX CEDEX - France</p> <p>declorons que les composants de la gamme de logique pneumatique Telepneumatic référencés :</p> <ul style="list-style-type: none"> PLK... / PLK... / PLN... / PLJ-C10 / ... Fonctions ET, OU, NON, OUI, PLM... / PRD... / PRF... / PRT... / ... mémoire, amplificateur, capteur à fuite, température, PSM... / PSV-A1, séquenceur modulaire, <p>sont utilisables en atmosphère explosive II 2 GD (zones 1,2 et 21,22).</p> <p>Ces composants sont construits conformément aux dispositions de la directive européenne :</p> <ul style="list-style-type: none"> 94/9/CE, mars 1994, "ATEX" <p>La présente déclaration est établie sur la base de la conformité aux normes suivantes :</p> <ul style="list-style-type: none"> norme EN 13463-1, 2001 et AC:2002, Matériel non électrique pour utilisation en atmosphères explosives. Prescriptions et méthodes de base norme EN 13463-5, 2003, Appareils non électriques destinés à être utilisés en atmosphères explosives. Partie 5: Protection par sécurité de construction "c". <p>Attestation d'examen de type : LCIE 04 ATEX 6164X Délivrée par : LCIE</p> <p>Information complémentaire: La conception de ces produits permet leur utilisation dans un environnement soumis à l'application de la Directive ATEX 94/9/CE sous réserve que les opérations nécessaires à leur installation et à leur maintenance soient effectuées en conformité avec les dispositions des normes en vigueur. L'utilisateur prendra en charge la mise en conformité de l'installation finale conformément à la réglementation en vigueur.</p> <p>Fait à Evreux Date : 13 juin 2005</p> <p>Date d'application marquage CE : 2004</p> <p>Jean-Michel Fournier Responsable ATEX</p>																				

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PDE Information Bulletin

Product Group:	Actuators	Valves	Air Treatment	Factory Automation	Other Products
Title:	Logic processing: ATEX Certified Components				
Catalogue:					
Date of Issue:	September 14 2005				
Bulletin No:	01-05				

You will find, hereafter the new ATEX logic components Part Numbers, Interco & European List Price.

Part Number	Description				
PLE-B12-EX	Input module & blanking plate set				
PLJ-C10-EX	"YES" element subbase mounting				
PLK-A11-EX	"OR" element line mounted				
PLK-B12-EX	"OR" combinable element				
PLK-C10-EX	"OR" element subbase mounting				
PLL-A11-EX	"AND" element line mounted				
PLL-B12-EX	"AND" combinable element				
PLL-C10-EX	"AND" element subbase mounting				
PLM-A10-EX	Memory relay without sub base				
PLN-B12-EX	"NOT" combinable element				
PLN-C10-EX	"NOT" element subbase mounting std				
PLN-D10-EX	"NOT" element subbase mounting threshold				
PRD-A10-EX	Amplifier relay without sub base				
PRF-A10-EX	Sensor relay without sub base				
PRS-D10-EX	Coil mounting				
PRT-A10-EX	"YES" timer relay 0,1 to 30s				
PRT-B10-EX	"YES" timer relay 10 to 180s				
PRT-C10-EX	"Negative" timer relay 0,1 to 30s				
PRT-D10-EX	"Negative" timer relay 10 to 180s				
PRT-E10-EX	"YES" timer relay 0,1 to 3s				
PRT-F10-EX	"Negative" timer relay 0,1 to 3s				
PSB-A12-EX	Step module sub base				
PSD-A12-EX	Deviation module				
PSD-B12-EX	Derivation module reinitialization last step				
PSE-A12-EX	Head & tail module				
PSM-A10-EX	Step module				
PSV-A12-EX	Step module interlock				
PZU-A12-EX	Common input 3 port subbase				
PZU-B12-EX	Common input 4 port subbase				
PZU-C12-EX	Cascade 3 ports subbase				
PZU-E12-EX	Input module				

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