erstellt am

28.5.2002 ER

### Description of function:

The pneumatic window locking device is a locking device, which unlock the locking bolt after applying the min. release pressure to the input P.

When exhaust the input P, the window locking device close and the locking bolt can snap into the locking device.

### Technical data:

maximum operating pressure	60bar		
static holding force	2x 1250N		
connection thread remote control P	G1/8"		
ambient temperature range	-25°C - 110°C		

### Connections:

P ... remote control

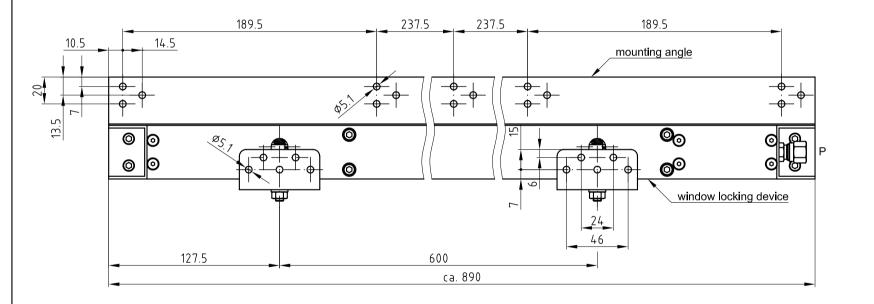
#### Release pressure:

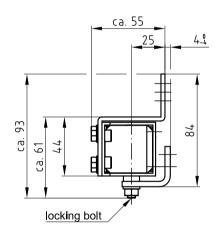
Depending on the locking force - see table

locking force	min. release pressure				
1250N	9,45bar				
1000N	7,50bar				
750N	5,15bar				
500N	5,10bar				

#### Scope of supply:

Screw connection and locking bolt are <u>NOT</u> included in the scope of supply and must be ordered separately!





Diese Zeichnung ist Eigentum der Fa. Grasl GmbH A-3454 Reidling,Europastraß 1 Die Weiterverwendung oder Vervielfältigung ohne unser schriftliches Einverständnis ist verboten!

> formell geprüft am 29.5.2002 KW

GRASL Pneumatic-Mechanik GmbH A-3454 Reidling Europastraße 1				Freimaßtoleranz nach DIN 7168:			Maßstab: 1:1   Werkstoff:			
					Datum	Name	Bezeichnung:  Data sheet Pneumatic window locking device PFR 2.1			
				Bear.	13.11.2008	GöschlS				
				Gepr.	20.09.2021	HA				
				Norm						
				Туре:			Zeichnung Nr.: Bl			Blatt
02	min. Auslösedruck	20.09.2021	SA	PFR			03.014.DAT.03.02-E			
01	Diverse Änderungen	21.01.2010	SA							BL.
Zus.	Änderung	Datum	Name	(Urspr.)			(Ers.f.:)	03.014.DAT.03.01	(Ers.d.:)	
	fachlich geprüft am									

29.5.2002 KW



# **Technical Instructions**

# Pneumatic window locking device PFR

Please read these "Technical Instructions" carefully and completely. Only technically qualified personnel may work on this device.

## Meaning of symbols



Safety instructions, must be observed!

Failure to observe these notes may result in personal injury and property damage.



**Advice**, the non-compliance with these instructions or the technical data shall lead to the loss of rights under guarantee.



Correct,

this is how it should be done.



Incorrect.

this is not how it should be done.

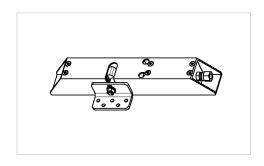


Figure 1: Pneumatic window locking device (symbolically)

# Correct and proper use

The pneumatic window locking device is a locking device, which unlocks the locking bolt after applying the min. release pressure to the input P. When exhausting the input P, the window locking device close and the locking bolt can snap into the locking device.

### General notes



The PFR is not suited for use in highly corrosive environments (e.g.: thermal spas, waste management industry, etc.).



Always close the connections and protect against dirt and humidity.



We recommend the use of cutting ring fittings (DIN 3861). Our connection threads are designed for screw-in stud threads R1/8" according to EN 10226. A suitable sealant is recommended.



The PFR must not be used to fasten decoration, cables, or other construction products.



When handling this product, always use suitable PPE – personal protective equipment (e.g. protective gloves, safety boots) as protection against sharp and pointed edges and falling objects.



When working on the PFR, the work area under the locking device must be secured against hazards from falling parts. A suitable PPE must be provided for unavoidable activities below the work area.

## Installation/Commissioning

Observe the following before the installation:

- Check the transport box for damage and unauthorized opening.
- The completeness of the delivery.
- Check the window locking device for transport damages.

The PFR may not be exposed to extreme temperatures and weather, and it is not suited for outdoor storage and assembly. When installing the PFR, observe the national standards.

It is important to ensure that the PFR is selected appropriately for the window (wind load, snow load, and dead weight must be considered!)

The PFR must be mounted to all provided mounting holes, with suitable fastening material, mounted on a firm and stable surface. The mounting base (window frame) affects the stability of the mounting.

Connect the respective connections, according to the connection diagram, with suitable screw connections and pipes.

Attach pipelines tension-free.

### Maintenance

Maintenance may only be carried out by authorized personnel and must be

- · at least yearly
- · and according to the national, legal regulations,
- · or in case of malfunction,

carried out and the following must be checked:

- · secure fastening screws
- no corrosion or damage to the PFR, screw connections, and piping
- check that there are no foreign objects on the PFR or its piping (decorations, cables, etc.)



If the PFR is no longer functional, it must be replaced completely. It is not permitted to modify or remove any components of the PFR. This would impair the safe operation of the PFR in which case it may no longer be used. Possible consequences may include failure to function.



If incomplete or defective, a complaint must be lodged immediately. The transport box must not be exposed to the elements (e.g.: rain).



The PFR is not equipped with devices that provide protection against crushing at the SHEV system.

### Malfunction

In the event of a malfunction, arrange for a service by a qualified company immediately.

# **Disposal**

This product is made of steel, aluminum, and plastic.



Dispose of this product in observance of the national regulations.



External controls (e.g., automatic control devices located outside of the line of sight) may result in unpredictable control commands, which may cause the locking device to move. Before handling the locking device, it must be disconnected from all external control devices.

The locking device must be disconnected from

- automatic controls (alarm boxes, etc.)
- control points that cannot be seen or controlled

### as long as

- work in the area of operation is not completed
- the work area is not cleared of obstacles
- there are people in the danger zone