

EMBLEM EASY Airpress Standard pneumatic eyepress

Operating Manual



pneumatic machine to set eyelets and washers

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1. Introduction

1.1 Introduction

This machine has been designed to set eyelets (grommets) and washers, in one step. EMBLEM EASY AIRPRESS Standard can set eyelets on materials such as PVC coated material and in general terms on plasticized fabrics with a strength of 0,3 - 1,2mm.

1.2 Machine Identification And "CE" Marking

Each machine has a label on the side, with the following specifications:

- Manufacturer's name and data.
- "CE" Mark
- Model and serial number.
- Weight
- Maximum air pressure (in bars).

 DATAPLOT SINCE 1979 Gutenbergstr. 15 D-24558 Henstedt-Ulzburg		
Modell <i>item</i>	EMBLEM Easy-Airpress Standard	
Seriennummer <i>serialnumber</i>		
Gewicht <i>weight</i>	9kg	
Max. Pressdruck <i>max press</i>	8 Bar	

2 Installation

2.1 Installation Position Requirements

The minimum space recommended must be sufficient to keep that safety space in all directions for the operator to work properly.

2.2 Pneumatic Installation

The machine has an air inlet valve, type quick acting coupler (ISO 6150-B standard) 8 mm, located on the back of the machine.

For an optimal operation, the supply of compressed air should be 6 kg/cm², adjusted with a pressure gauge that customer's will have installed on its compressor.

2.3 Transport

If it is necessary to transport the machine again after its installation and the customer does not have the original packaging, we advice to use a reinforced package (wood or cardboard).

2.4 And Holding The Box Firmly

Before any operation with the equipment, the machine must be properly fixed to the bench (from the customer) with 4xM8 screws (8.8 quality), washers and self-locking nuts.

2.5 Learning Instructions

The following set of instructions and warnings about EMBLEM Easy AIRPRESS Standard should always be taken in account:

Before connecting the machine to the compressor or to customer's pneumatic installation, it should be place on its permanent location.

- The cleaning, handling or replacement of parts should always be made with the air inlet valve shut.
- Do not remove from the machine the safety devices, stickers or warning signs that point out dangerous areas.
- The machine has an air inlet valve to manually open and close the air supply to the pneumatic cylinder "F" (Fig. 1); When the machine is not in use, it should be shut (see Fig. 5), to avoid accidents when use by a third party. We also suggest disconnecting the hosepipe from the compressor for safety reasons.

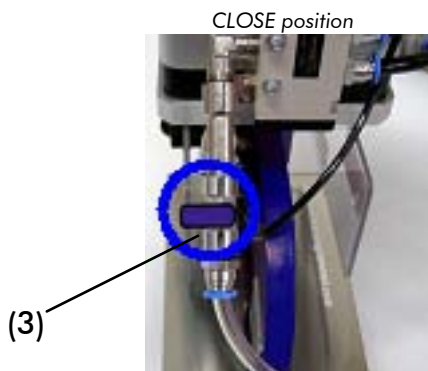


Fig. 5



Fig. 6

3 Technical Data

3.1 Machine Specifications And Operation

The EMBLEM AIRPRESS Standard has been designed to bolt it to the customer's work bench or the optional Table.

Once the machine has been placed on its permanent location, without fitting the air hosepipe into the connection, verify that it has not suffered any blow or breakage while being transported and it has not any loose parts.

The operation of the machine is very simple:

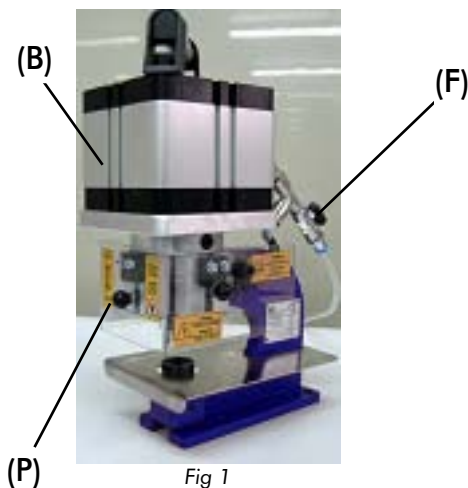


Fig. 1

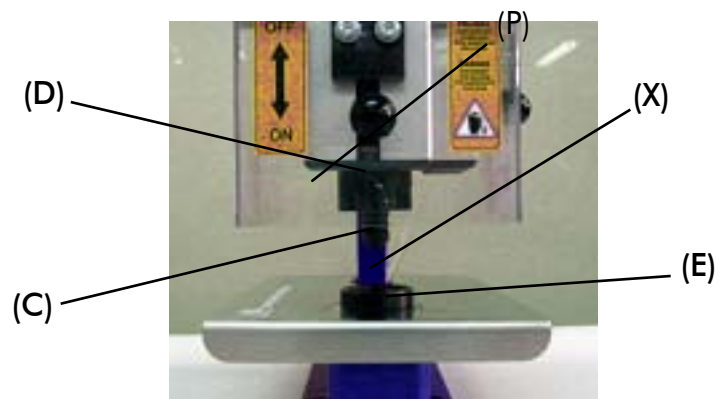


Fig. 2

1^{st.}). When pressing down manually the safety protection "P", with the black plastic knob placed on the front and side of the machine, until it reaches completely its stroke (position "ON", see Fig. 4), preventing the access of operator's hands to the setting area "X", the screw "Y" placed on the side makes contact and activates the micro end of race which sets the pneumatic cylinder in motion).

Position "off"

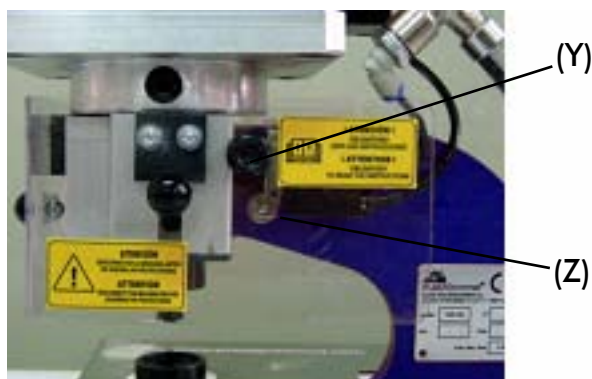


Fig. 3

Position "on"



Fig. 4

2^{nd.}). The pneumatic cylinder "B" causes its vertical axle to descend. Attached to its lower part there is one puncher "C" and a setting die "D". The aim of the downward movement of the axle is to cut a hole with the puncher and as an effect of the pressure that the top die "D" puts on the bottom one "E", to set the eyelet (grommet) on the setting area "X".

3rd). After the eyelet is set and once the pressure on the black plastic knob of the safety protection "P" has been released, it will automatically come up by a return spring located in the guide that holds the safety protection to the machine, the pneumatic cylinder will return and the machine will be again on its starting position ready for a new cycle.

3.2 Main Technical Data

The main technical data of this machine are:

WxDxH	300 x 130 x 220 mm
Weight	9 Kg
Air pressure	6 Kg/cm ²

4. Machine Operation

4.1 Machine Description

This machine has been designed to set eyelets (grommets) with washers, feeding the machine by hand, on PVC coated material and in general terms on plasticized fabrics with a strength of 0,3 - 1,2mm. The maximum cutting diameter is 11 mm.

The machine cuts the material and sets the eyelet in just one operation.

Dataplot GmbH disclaims any responsibility when using the machine for different uses than the ones covered on this operating manual.

4.2 Checking The Machine Before Starting

Before starting the machine for the first time, or when the location of the machine is changed, or adjustments or part replacements are made, we advice customers to check that the machine has not suffered a blow or breakage.

4.3 Eyelet (Grommet) Setting

- a) Check that the air inlet valve "F" is on OPEN position (Fig. 14).
- b) Place the eyelet (grommet) "O" gently through the puncher "C" of the top die "D" checking that it stays firmly on the junction area puncher/top die.



Fig. 7

- c) Place the washer "A" on the bottom die "E" with the teethed surface upwards.

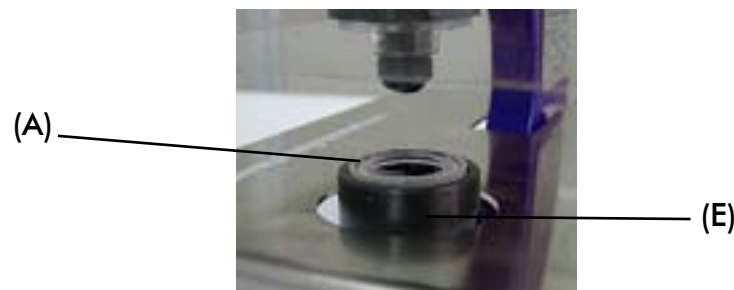


Fig. 8

- d) Place the banner on the stainless steel plate.
- e) Press down manually the safety protection "P", with the black plastic knob placed on the front and side of the machine until it reaches completely its stroke to set the eyelet.

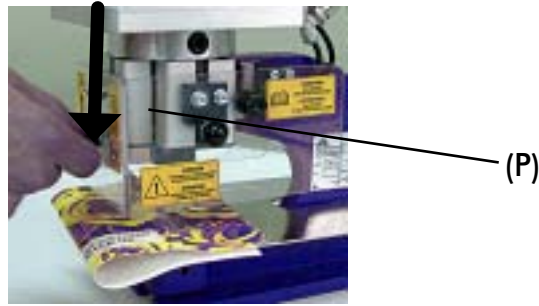


Fig. 9

f) Release the safety protection “P” so it comes up by the return spring located on the guide that holds the protection with the machine. At the moment the machine will be ready to set an other eyelet.

4.4 Other Machine Applications

To cut holes on the material, without setting eyelets, it will not be necessary to install specific tooling; it will be possible to make it with the same ones use to set the eyelets.

See chapter 5 Adjustments, section 5.4. Only Cutting.

WARNING: This machine should not be used for a different purpose than the one originally manufactured for and specified on this operating manual: To set eyelets (grommets) with washers, to cut holes on PVC coated material and in general terms on plasticized fabrics of the printing industry.

5. Adjustments

5.1 Warnings About The Adjustments

Parts that should be replaced on a regular basis due to normal wear are the cutting or bottom die "E" and setting or top die "D". We will see that the parts need to be replaced when either the cutting or the setting is not accurate. We always recommend having a spare set of these parts on your stock.

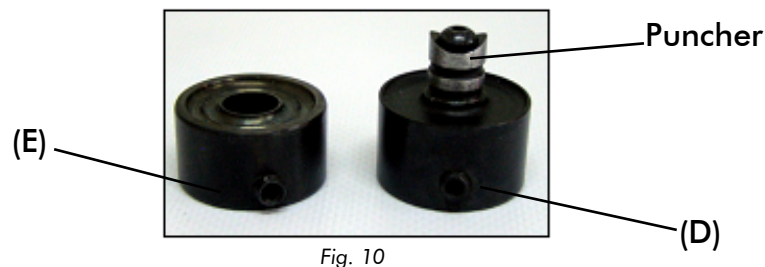


Fig. 10

When making adjustments if by any reason it is necessary to remove parts meant for operator safety (cover, stainless steel plate ...) remember to put them back where they belong and fasten them firmly.

WARNING: Shut the general air inlet valve "F" (see Fig. 1) to change dies, make adjustments, install optional equipment or any other handling.

5.2 Dies Changing For Same Dimension Eyelet – Washer

The machine EMBLEM EASY AIRPRESS Standard sets eyelets sets on different materials and thicknesses in a range of ,03 - 1,2mm.

However, although it works with different types of materials, it will not require any adjustments (neither cutting or setting); just follow the guidelines on this section to install properly the dies avoiding breakage of the cutting area.

WARNING: To change the setting dies it will be necessary at some point to connect the air hosepipe to the compressor and open the air inlet valve "F" (see Fig. 1).

5.3 Guidelines to install the cutting and setting dies:

This machine is mainly composed of two vertical shafts on the front; on top is the shaft that holds the setting or top die "D" and the bottom the shaft holding the cutting or bottom die "E".

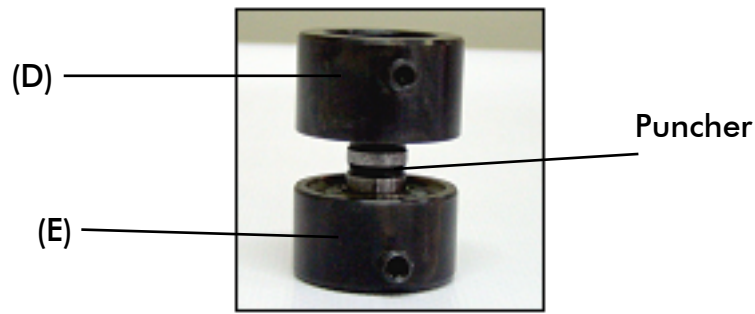


Fig. 11

To have an even cutting, the puncher (located on the setting die "D", must be able to enter softly on the bottom die (see Fig. 11).

We need to follow these steps:

1st) Machine should be as in Fig. 12.



Fig. 12

2nd) Manually lower the safety protection "P" with the black plastic knob without releasing it when it has reached the end of the stroke.

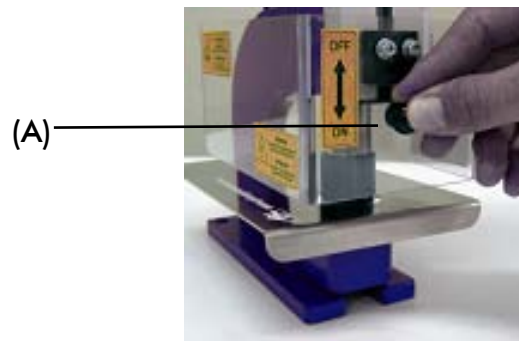


Fig. 13

3rd) Holding down the knob, shut the air inlet valve "F".



Fig. 14

4th) Loosen the set screw "a" (see Fig. 13) of the bottom die "E" from the right hand side of the machine until the die can turn freely.

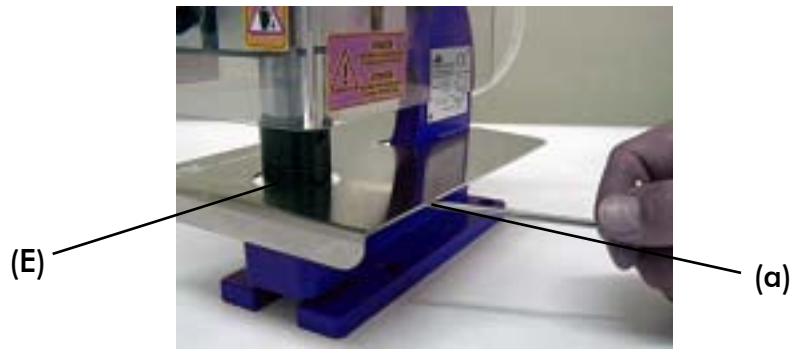


Fig. 15

5th) Loosen the set screw "b" of the top die "D".



Fig. 16

6th) Open the air inlet valve "F", so the compressed air enters the cylinder and the main shaft comes up releasing the dies (Fig. 17 and 18). Take the dies out and shut the air inlet valve "F" for safety reasons.

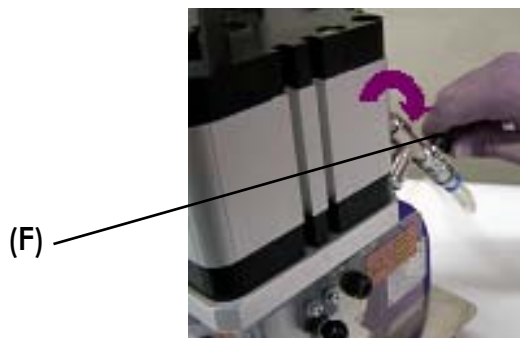


Fig. 17



Fig. 18

7th) Out of the machine, take the new set of dies and gently enter the puncher of the top die "D" into the center hole of the cutting or bottom die "E" (see Fig. 16).

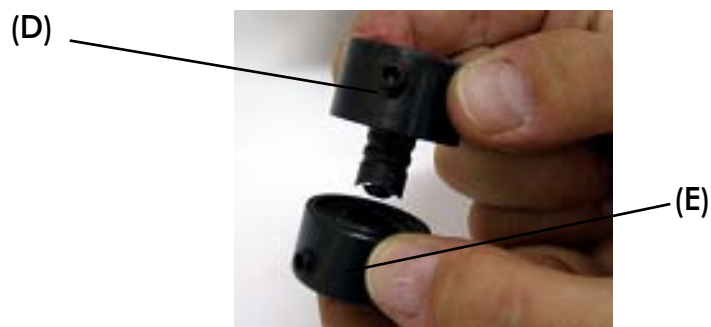


Fig. 19

8th) Place the new set of dies on the bottom shaft at the setting area with the set screws looking to the right hand side of the machine.

9th) Under the stainless steel plate tighten the set screw "a" (see Fig.

20) of the bottom die "E" from the right side of the machine.

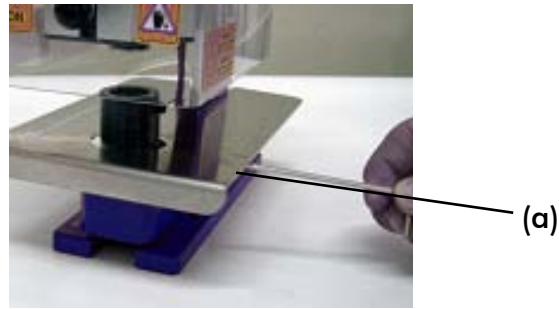


Fig. 20

10th) Open the air inlet valve "F" and manually lower the safety protection "P" (Fig. 21) so the main shaft of the pneumatic cylinder comes down entering in the hole that the top die "D" has on its upper part. Please make sure that the set screw "b" does not point out on the inner part of the hole as it could damage the shaft.



Fig. 21

11th) Holding down the black plastic knob, close the air inlet valve "F". Once the machine has been depressurized, release it checking that the main shaft does not move up.



Fig. 22

12th) Tighten the set screw "b" (see Fig. 23) of the top the die "D".

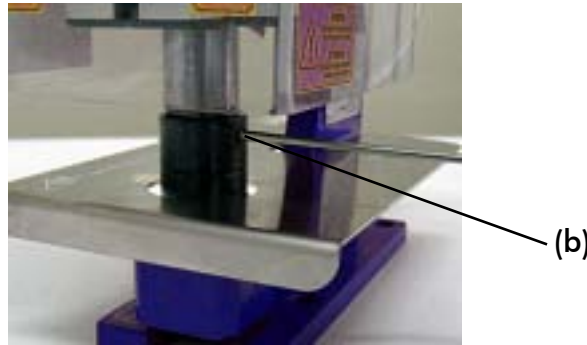


Fig. 23

13th) Open again the air inlet valve "F" (see Fig. 17).

Once these steps have been accomplished, the machine is properly adjusted, both for cutting of the material and setting of the eyelet while having a constant air pressure of 6 kg/cm².

5.3 Cutting And Setting Adjustments

It is not necessary to make any adjustments, just follow the steps on chapter 5.1.

5.4 "Only Cutting" Operation

If you just need to cut the material, you can use the same dies without placing the eyelet/washer.

6. Maintenance

6.1 Mechanical Parts Of The Machine

For an optimum operation of the machine we recommend to keep clean certain parts of the machine. The cleaning should be done with the machine disconnected from the air supply and with a rag that will leave no threads.

It is very important for the correct holding of the eyelet on the top die that the area where the puncher touches the top die (see Fig. 23) is completely free of threads or dust, as otherwise the eyelet will come off easily.

This area
must be
keep clean
of threads



Fig. 24

How often you will need to clean this area will depend of the number of eyelets set and the type of material being cut.

When the machine is going to be a long period with no use we recommend to disconnect it from the compressor, clean it and cover it to avoid humidity and dust.

6.2 Pneumatic Parts Of The Machine

The pneumatic parts of the machine do not need a specific maintenance.

The machine must be connected to an air compressor or pneumatic circuit with air filter and pressure gauge to have a constant pressure of 6 kg/cm².

7. Failures

7.1 Troubleshooting

PROBLEM	CAUSE	SOLUTION
The machine does not work.	1. Check that the air hosepipe is connected to the compressor.	Connect the air hosepipe.
	2. Check that the air inlet valve is on position "ON"	Open the inlet valve.
	3. Check that the air pressure on the circuit is 6 Kg/cm ²	Adjust the pressure gauge until the manometer has the correct pressure
	4. Check that the safety protection is on its lower position	Lower the protection all the way until it reaches the end of its stroke.
The machine does not cut.	1. The edge of the bottom die is either worn out or damaged.	Change the dies.
The eyelet crushed when setting.	1. Check that the pressure of the circuit is no more than 6 Kg/cm ² .	Adjust the pressure with the manometer to 6 Kg/cm ² .
The eyelet does not hold on the puncher of the top die.	1. Check that there are no threads or dust on the top area of the puncher.	Clean the threads with a rag that leaves no threads / or with compressed air.

8. Safety

8.1 Safety Devices

The machine has a range of protection devices to prevent operator (except on maintenance or repairs) from accessing dangerous areas where he can be injured.

The dangerous part of the machine is the setting area "X", where operator has the risk of crushing his fingers or hands.

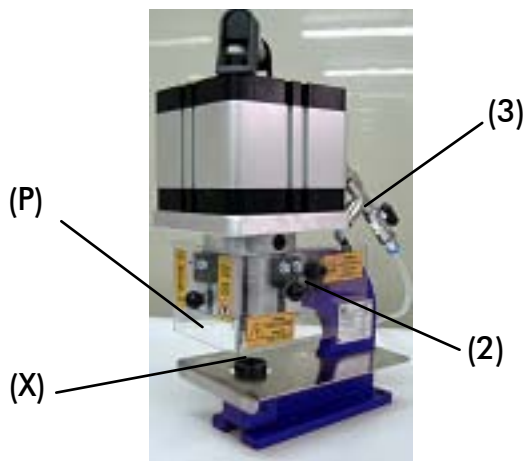


Fig. 25

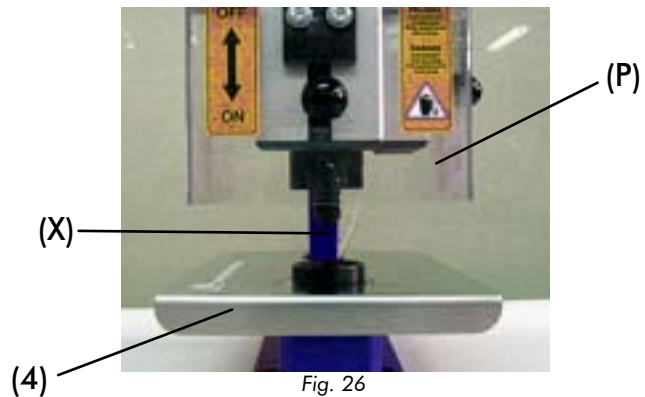


Fig. 26

The dangerous area "X" is protected with the following devices:

Safety protection "P": Before a cutting and setting cycle is made, this protect must come down manually all its stroke and hold it on position "ON", preventing the access of operator's hands or fingers to the risk area "X".



Fig. 27

Pneumatic valve or security end of race "2": This valve prevents the action of the pneumatic cylinder if the safety protection "P" is not on its lower position.

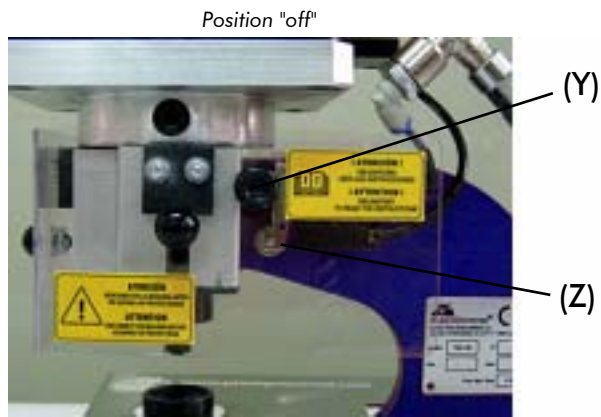


Fig. 28



Fig. 29

General air inlet valve "3": This valve allows manually opening or shutting the pneumatic air supply from the compressor or general air installation. As safety device, it has a decompression system, when the valve changes its position from open to close; the compressed air on the internal circuit of the machine is expelled, preventing any unexpected action from the pneumatic cylinder when making assembling or adjustments on the machine.

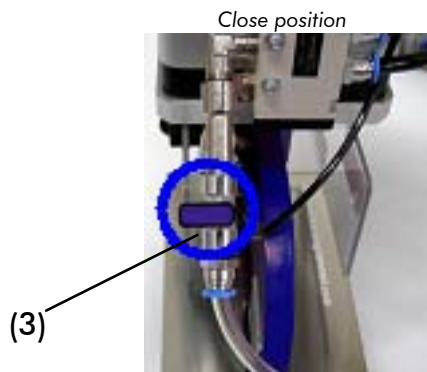


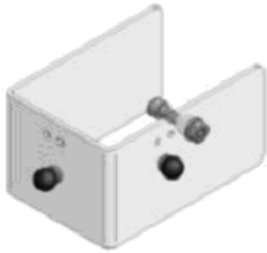
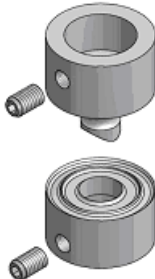
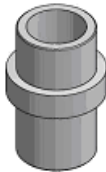
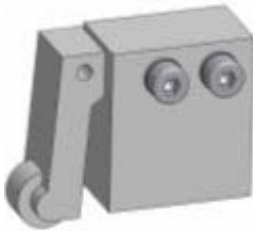
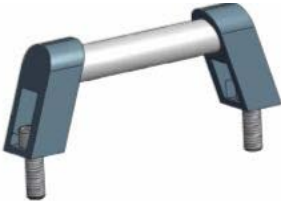
Fig. 30

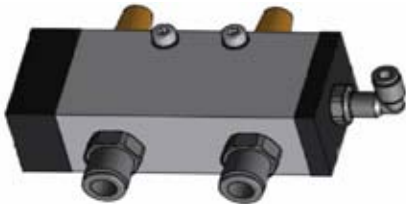
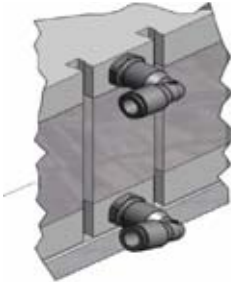
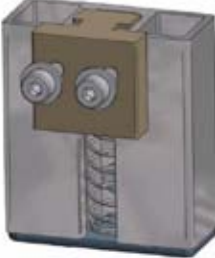


Fig. 31

9. Annex

9.1 Spare Parts Listing

Protection Damper		Article nr. PMS060-006
Screw		Article nr. PMS060-008
Cutting Tool		Article nr. PMS060-009
Base		Article nr. PMS060-010
Switcher		Article nr. PMS060-007
Handle		Article nr. PMS060-011

Pneumatic		Article nr. PMS060-001
Valve		Article nr. PMS060-002
Alignment		Article nr. PMS060-003
Steel plate		Article nr. PMS060-004
Track		Article nr. PMS060-005

Dataplot Gmbh

**Gutenbergstrasse 15
D- 24558 Henstedt-Ulzburg**

**Tel: +49 (0)4193-995-0
Fax: +49 (0)4193-995-220**

**www.dataplot.de
email: info@dataplot.de**

