

USE AND MAINTENANCE MANUAL

MEMBRANE DOSING VALVE DA-250



Summary

1	GENERAL INFORMATION	1
1.1	SYMBOLGY	2
1.2	REFERENCE STANDARDS	3
1.3	DECLARATION OF INCORPORATION (ANNEX II B DIR. 2006/42/EC)	4
1.4	GLOSSARY	5
1.5	SERVICE AND MANUFACTURER CONTACT DETAILS	6
2	PRESENTATION AND OPERATION	7
2.1	EXPLODED VIEW	11
2.2	TECHNICAL DATA	12
3	SAFETY	14
3.1	COMPONENT SAFETY DEVICES	15
3.2	FREE USEFUL SPACES	15
3.3	RISK AREAS AND RESIDUAL RISK	15
4	TRANSPORT AND HANDLING	15
5	INSTALLATION	16
5.1	POSITIONING	16
5.2	CONNECTIONS	16
5.2.1	Electric	16
5.2.2	Pneumatic	17
5.3	COMMISSIONING	17
6	SOFTWARE	17
7	PROCEDURE	18
7.1	MICROMETRIC ADJUSTMENT	18
8	MAINTENANCE	19
8.1	VALVE DISASSEMBLY AND REASSEMBLY	21
9	TROUBLESHOOTING	24
10	END OF LIFE	24

1 GENERAL INFORMATION

This manual contains information regarding the installation, use, maintenance and end of life of the component and provides indications for the most appropriate behavior for correct operation. This manual has been designed to be simple and as immediate as possible, with a subdivision between chapters and sub-chapters that allows any desired information to be found quickly. Furthermore, the manual begins by giving a general description of the content, then an overview of the component, to arrive at aspects of safety, transport, installation and use and finally the end of life. In case of doubts about the interpretation or reading of this document, please contact the manufacturer.



DAV Tech disclaims all responsibility relating to improper use of the component. Comply with what is specified in this manual.



Read this manual before handling the component or performing any action on it



The manual constitutes an essential safety requirement and must accompany the component throughout its entire life cycle.

It is the responsibility of the end user to optimize the functionality of the component, always keeping in consideration the purpose for which it was built.



This manual must be kept, together with the attached documentation, in good condition, readable and complete. Furthermore, it must be stored near the component or, in any case, in a place accessible and known to all personnel who use the component itself or who must carry out maintenance or inspection interventions. In the event that the manual deteriorates or is no longer complete, a copy must be requested from the manufacturer, indicating the manual code and revision.



The manual is intended for personnel who use the component (operators), who perform maintenance on it (maintenance technicians), and personnel who must carry out checks or inspections. The manufacturer is not liable for damage to the component caused by personnel who have not followed the indications contained within the manual itself.

In case of doubts about the correct interpretation of the information contained in this manual, please contact the manufacturer.

GUARANTEE

During the design phase, materials and components were carefully selected for implementation in the project and subjected to routine inspection prior to delivery. All elements, from fastening assemblies to control mechanisms, have been engineered and manufactured with an appropriate safety factor to withstand loads exceeding those encountered during normal operating conditions.

For additional notes regarding equipment warranty provisions, please refer to Section 7 of the "GENERAL CONDITIONS OF SALE AND WARRANTY" form issued during either the quotation or order confirmation phase.

1.1 Symbology

The following symbols are used to give greater impact to the importance of the concept to be conveyed.



ATTENTION!

Refers to a warning that could lead to minor damage (minor injuries, damage to the component requiring maintenance technician intervention).



DANGER!

Refers to a major event that could cause significant damage (death, permanent injury, irreversible component failure).



NOTE. Indicates relevant information or elaboration.



OBLIGATION. Indicates an activity that must be performed, related to both the component and the manual.



REFERENCE. Refers to an external document that is important to view.

Furthermore, the symbol list is integrated with that of personnel authorized to use the component and their function, together with other symbols used within the manual.



Operator

Qualified person capable of operating on the component, performing adjustment, cleaning, start-up or restart operations. The operator is not authorized to perform maintenance.



Mechanical maintenance technician

Qualified technician capable of performing mechanical interventions, adjustment, maintenance and ordinary repair described in this manual. Not qualified to perform interventions on electrical systems in the presence of voltage.



Electrical maintenance technician

Qualified technician capable of performing electrical interventions, adjustment, maintenance and ordinary repair described in this manual. Capable of working in the presence of voltage on electrical cabinets and junction boxes. Not qualified to perform interventions on the mechanical side.



Manufacturer's technician

Qualified technician made available by the manufacturer to perform complex operations in particular situations, or in any case according to what has been agreed with the customer.

1.2 Reference standards

The normative and directive references for this manual are as follows:

Directives

- 2006/42/EC – Machinery Directive;

1.3 Declaration of incorporation (Annex II B DIR. 2006/42/EC)

Manufacturer's name: DAV Tech Srl
Address: Via G. Ravizza, 30, .36075, Montecchio Maggiore (VI)

DECLARES THAT THE PARTLY COMPLETED MACHINERY

Component: DA 250 Valve
Model: Diaphragm dosing valve
Year: 2024
Intended use: Pressure-time dosing of low viscosity aggressive fluids

COMPLIES WITH THE INCORPORATION PROVISIONS DICTATED BY DIRECTIVE 2006/42/EC

The technical documentation has been drawn up in compliance with Annex VII B, as required by the following:

- Machinery Directive 2006/42/EC of the European Parliament and Council of 17 May 2006

FURTHER DECLARES THAT:

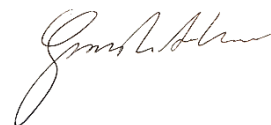
- We undertake to transmit, in response to an adequately motivated request from national authorities, relevant information on this partly completed machinery;
- The technical file has been constituted by Andrea Grazioli, via Ravizza, 30, Montecchio Maggiore (VI), IT.

This partly completed machinery cannot be used until the machinery on which it will be used is declared compliant with standard 2006/42/EC.

Montecchio Maggiore, 19 January 2024

The legal representative

Andrea Grazioli



1.4 Glossary

The following are the most used terms within this manual with their meanings.

TERM	DEFINITION
Enable	Term that defines the act of preparing (enabling) an action. The action will be activated as soon as criteria are satisfied which, as a consequence, lead to the activation of the enabled action.
Activate	The action that is performed instantaneously upon command actuation.
Hold-to-run Commands	Commands that, used for manual operations, must be kept activated for the action to be completed. When the command is released, the action stops.
Two-hand Commands	Hold-to-run commands that require simultaneous actuation of two manual commands to perform an action.
PPE	Personal Protective Equipment. Includes all objects necessary to ensure personnel protection from possible accidental damage (safety shoes, gloves, helmet, and others).
Display	Used to display information. Can be in any form and size, including touch screen.
Manufacturer	Natural or legal person who designed and manufactured the component subject to this manual.
HP	High Pressure. Abbreviation indicating high pressure.
Icon	Small image that symbolically represents a command, function or even a document or operating program, which appears on a computer screen. When selected by the user, it starts the function or program it symbolizes.
Joystick	Lever controller used in command panels.
N/A	Not Applicable, indicating a field that does not apply to this particular manual and cannot be integrated into the component.
Operator Panel	Command station where machine control instruments are located.
P.I.	Possible Implementation, currently absent from the component described in this manual, but possible to add and implement.
Screen	Interface system between man and component. Screen images displayed on the operator panel that allow the user to receive and provide information to the management software.
Control Panel	Composition of buttons and selectors that allow direct action on component behavior.
Keyboard	Keyboard only (standalone element) or in addition to a display (keys only, no selectors or other).
Touch Screen	Touch screen that allows the user to interact with a graphical interface using fingers or special objects.

1.5 Service and manufacturer contact details

For any reason relating to use, maintenance or request for spare parts, the customer must contact the manufacturer directly (or the service center if present), specifying the component identification data.

The customer can avail themselves of commercial technical support from area agents or importers, who are in direct contact with DAV Tech Srl.

Company name	DAV Tech Srl
Postal address	Via Ravizza, 30, 37065, Montecchio Maggiore (VI) – (IT)
Telephone	+39 0444 574510
Fax	+39 0444 574324
email	davtech@davtech.it
Website	www.davtech.it

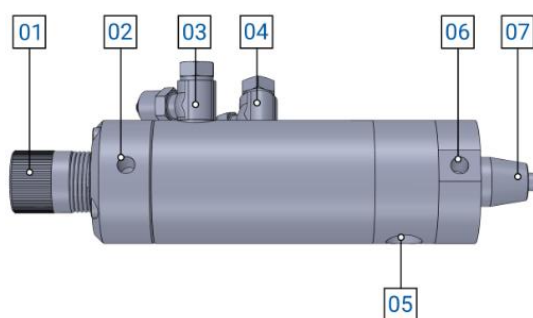
2 PRESENTATION AND OPERATION

This dosing valve is a pneumatically actuated component designed for dosing low viscosity fluids. Its rest state is normally closed; therefore, without pneumatic supply, the valve does not dispense fluid due to the presence of a spring that keeps the pin in position. When a supply of at least 5 bar arrives from its lower inlet, the valve begins to release fluid and therefore to dose. This outflow can be modulated both by adjusting the inlet pressure and by adjusting the opening of the pin, present on its upper part.

In other words, the function of this component is:

PRESSURE-TIME DOSING OF LOW VISCOSITY AGGRESSIVE FLUIDS

The intended use is considered to be that described in the chapter below, while improper use is considered any other use that is not described within this manual, with products of matter and format different from those for which it was built.



No. DESCRIPTION

01	Adjustment knob
02	Adjustment block
03	Closing air inlet
04	Opening air inlet
05	Product inlet
06	Fixing hole
07	Nozzle port

Figure 01 – Detail DA 250

Before using a specific type of fluid, it must be verified that:

- The fluid viscosity is compatible with the valve characteristics;
- The fluid characteristics satisfy the desired requirements;
- The fluid technical data sheet provided by the manufacturer contains all information regarding the product such as viscosity, applications, drying and storage times;
- The fluid storage time has not been exceeded;
- The fluid packages are hermetically sealed.

In case it is necessary to use multiple fluids with the same valve, it must be thoroughly cleaned to prevent residues from the previous processing from affecting the processing to be performed.

OPERATION

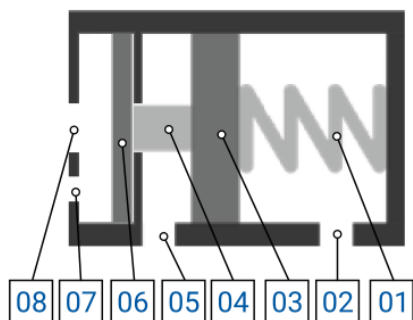


Figure 02 – Explanatory example of the DA 250 internal section

No.	DESCRIPTION
01	Spring
02	Closing air inlet
03	Piston
04	Pin
05	Opening air inlet
06	Membrane
07	Fluid inlet
08	Nozzle coupling / fluid outlet

It can be used in two working modes:

- As a single-acting valve, with spring closure;
- As a double-acting valve, with opening and closing via air and spring.

Based on the function to be used, one of the following solenoid valves must be connected:

- To a 3/2 solenoid valve for single acting;
- To a 5/2 solenoid valve for double acting.

Figure 02 represents the most complete case. For minimum working pressures, refer to [chapter 2.2](#).

The valve cannot operate autonomously. For it to dispense product, it must be connected to a supply source, which can be a tank, pump or other, based on the system and customer needs.

ATTENTION!



It is recommended to connect the valve to the sources indicated in this manual in [chapter 2.2](#). Connecting it to other sources or to products with characteristics not indicated in this manual could damage the valve.

The following explains the operation through the section of the DA 250 valve. Note that blue indicates the incoming/outgoing fluid, yellow indicates air, when present.

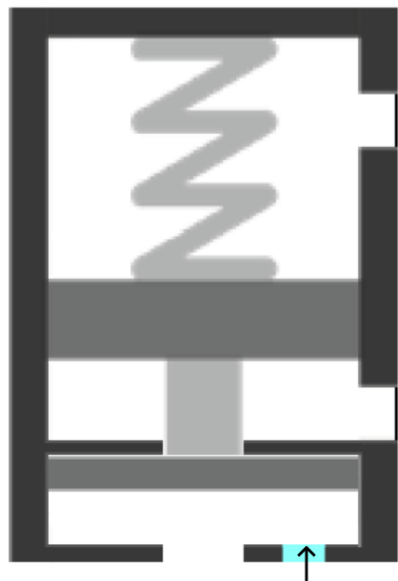


Figure 03 – Single acting rest phase

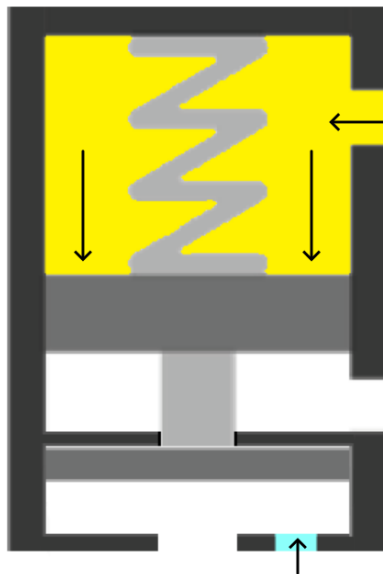


Figure 04 – Double acting rest phase

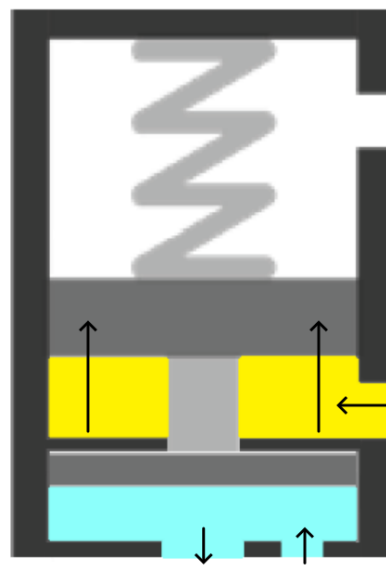


Figure 05 – Single and double acting dosing phase

The valve can operate in two modes: single and double acting.

In the case of single acting, what keeps the valve closed is the spring, so the fluid pressure must be below the pressure generated by the spring to keep the valve closed (Figure 03). The fluid is at the fluid inlet, whose inlet is blocked by the membrane, held in position by the pin that is pushed by the spring. When pneumatic pressure is applied to the opening inlet, the piston rises and, consequently, also the pin and membrane, allowing the fluid to pass to the nozzle (Figure 05).

In the case of double acting, the working mode is similar to single acting, except that, in addition to the spring keeping the valve closed, there is pneumatic pressure from the valve closing inlet (Figure 04). This is used when working with fluid pressures higher than that exerted by the spring.

Therefore, in general, the activation/deactivation sequence is as follows:

- The fluid is pressurized at the fluid inlet and resting against the membrane; in the case of single acting, with only the spring pushing to close the fluid outlet (Figure 03), in the case of double acting, also with pneumatic pressure (Figure 04);
- The PLC commands the solenoid valve (3/2 in the case of single acting, 5/2 in the case of double acting) to perform dosing;
- In the case of double acting, the solenoid valve changes inlet, emptying the closing inlet and opening the opening one; while, in the case of single acting, only opening the appropriate pneumatic inlet;
- The pin lifts, lifting the membrane and allowing the fluid to exit (Figure 05);
- When the PLC commands completed dosing, it returns to the starting condition, with the membrane closing the fluid inlet inside the valve chamber.

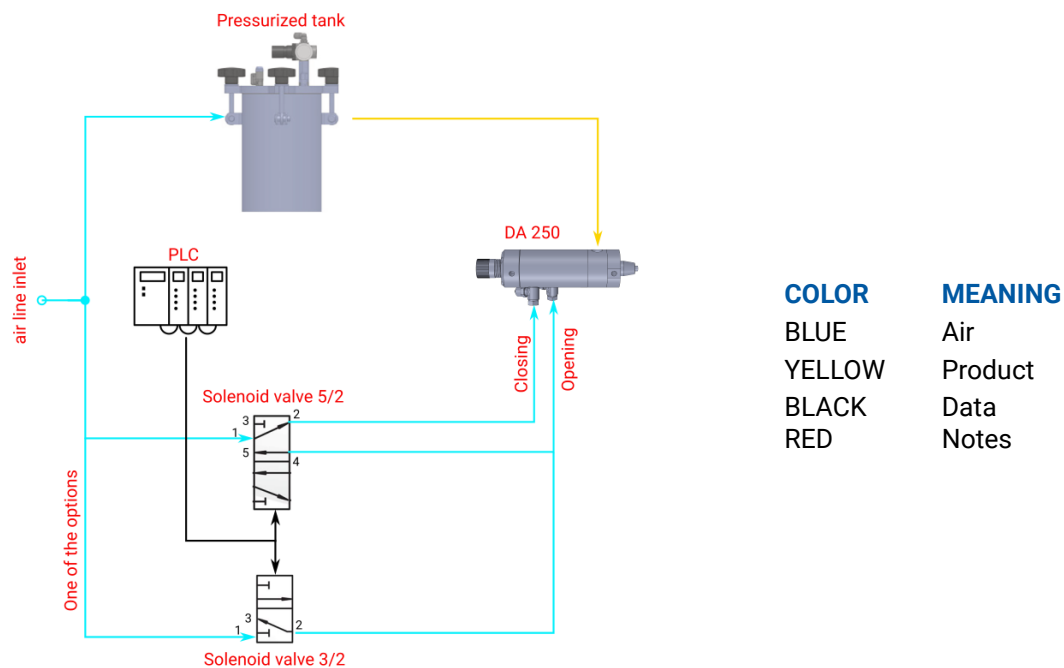


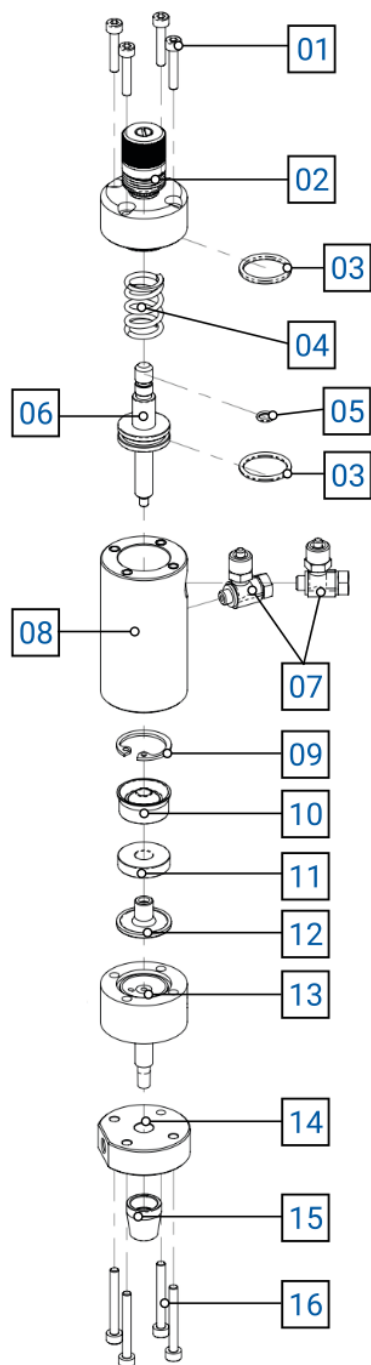
Figure 06 – Connection diagram



It is recommended to position a silencer at inlets 3 and 5 of the solenoid valve.

2.1 Exploded view

The following is a list of the main valve components with spare part codes.



No.	Description	Var.	Code
01	SCREW	-	0003.00030161
02	MICROMETRIC ADJUSTMENT ASSEMBLY	-	0003.MCD000450
03	O-RING	-	0003.000015E
04	SPRING	-	0003.CCS000450
05	O-RING	-	0003.040X10E
06	PISTON	-	0003.PST000450
07	90° AIR FITTING	-	0003.RRB0252
08	VALVE BODY	-	0003.BG000450
09	CIRCLIP	-	0003.501801
10	LIP SEAL	-	0003.25004
11	SPACER	-	0003.WSH000450
12	MEMBRANE	-	0003.DPH000450
13	TEFLON BODY	-	0003.25010
14	FRONT BODY	-	0003.000451
15	LUER LOCK RING NUT	-	0003.25008
16	SCREW	-	0003.00030251
\	GASKET KIT	-	GASKETKIT-DA250

2.2 Technical data

The following indicates all technical characteristics regarding the component of this manual.

TECHNICAL SPECIFICATIONS		
Description	UdM	Values
Model	/	DA 250
Actuation	/	Single or Double acting
Maximum fluid pressure	bar	10
Air pressure for actuation	bar	5
Fluid inlet thread	/	1/8" GAS
Fluid outlet thread	/	Luer lock needle port
Maximum fluid outlet speed	points/sec	2
Flow adjustment	/	Micrometric
Materials used	/	Anodized aluminum
		PTFE

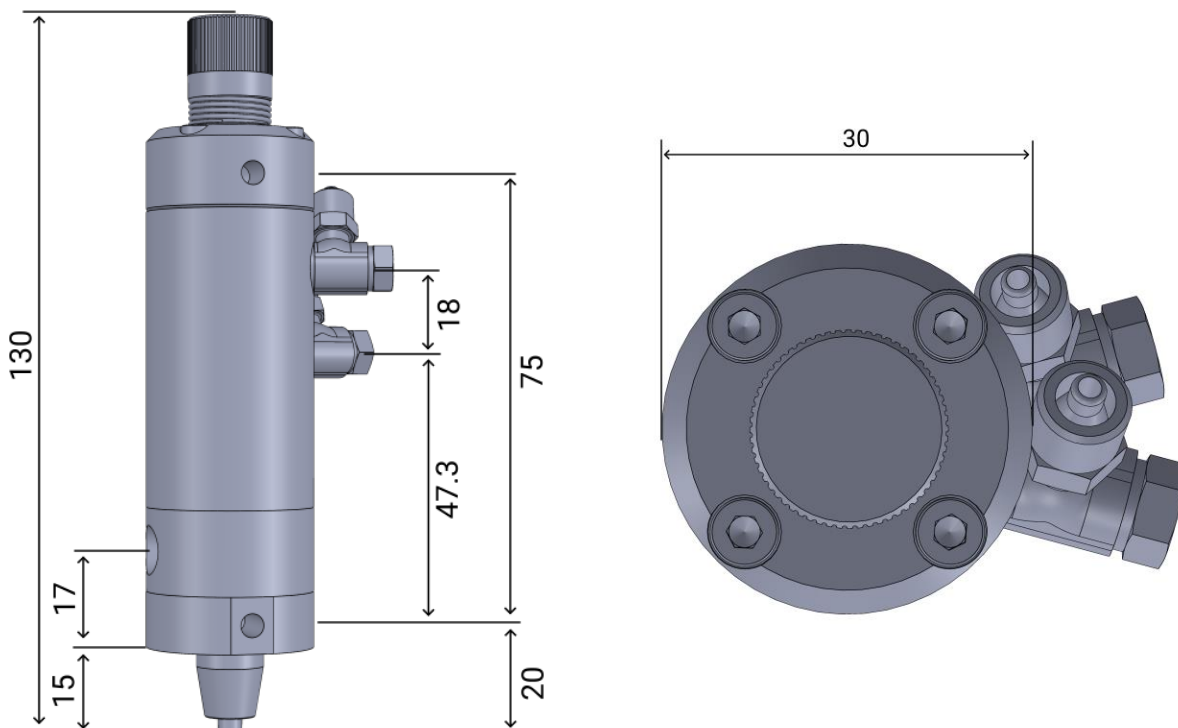
ENVIRONMENTAL CHARACTERISTICS		
Description	UdM	Values
Working ambient temperature	°C	5 ÷ 45
Storage ambient temperature	°C	-20 ÷ 55
Permitted non-condensing humidity	%	5 ÷ 90

USABLE FLUIDS		
Low viscosity aggressive fluids		

DIMENSIONAL AND WEIGHT CHARACTERISTICS

Description	UdM	Value
Component length (min ÷ max)	mm	130
Component diameter (min ÷ max)	mm	30
Component weight	kg	0.25

Component



It is possible to request the 3D model of the component in the desired version from the manufacturer without any commitment.

3 SAFETY

The following presents the list of warnings regarding the component subject to this manual. Please read carefully before proceeding with the next chapters.



DANGER!

Before putting the component into operation or performing any action on it, carefully read this manual.



DANGER!

Do not use the component under the influence of drugs or other substances that may alter attention and reaction capacity.



DANGER!

Operators must perform only operations or interventions that are within the competence of their assigned role and qualification.



FIRE/EXPLOSION HAZARD!

This component is not designed to work in ATEX environments.



DANGER!

Pay close attention during the component maintenance phase, especially when disassembling components that contain pressurized springs.



ATTENTION!

No modifications must be made to the component in order to obtain performance different from that for which it was designed and built, unless authorized by the manufacturer.



ATTENTION!

Avoid introducing foreign bodies into the pneumatic system, even small ones, which could cause system malfunction and compromise machine safety.



The component can only be used by trained and authorized operators and only for the purpose for which it was designed and built.



The component is built in compliance with the technical safety standards in force at the time of its construction.

3.1 Component safety devices

N.A.

3.2 Free useful spaces

N.A.

3.3 Risk areas and residual risk

N.A.

4 TRANSPORT AND HANDLING

Once the goods are received, it must be verified that the packaging is intact and that there is an exact correspondence with the ordered material.



ATTENTION!

The original configuration of the component must not be modified. The manufacturer is not liable for damage caused by inappropriate use of the component.



ATTENTION!

If the packaging is not intact, immediately contact the manufacturer, also sending photos of the packaging condition. Do not open it before notifying the manufacturer.

5 INSTALLATION



The component installation is performed by the customer. If necessary, they can contact the manufacturer to have a specialized technician assist them.

The valve has been designed to be used in the following cases:

- Autonomous work as a fluid dispenser on a pressure/time basis;
- Work in conjunction with a volumetric pump to dose fluid volumetrically.

It is also equipped with a hole (number 06, figure 01, [chapter 2](#)) that allows the valve to be locked in position during work. It is also recommended to fix it well to the support, as vibrations caused by the operating machinery could move the valve off-center, resulting in non-optimal dosing.



It is recommended to perform a component check before starting installation. If it shows obvious damage, please contact the manufacturer.



ATTENTION!

Please remove packaging with maximum care. In the event that damage is caused to the component, the manufacturer is not liable.



Dispose of packaging correctly, taking into account the different nature of the components and following the regulations in force in the country.

5.1 Positioning

N.A.

5.2 Connections







This chapter explains the connection method to be used for the component. The following types of connections are provided:

- Pneumatic connection

5.2.1 Electric

N.A.

5.2.2 Pneumatic

Authorized personnel	 PPE to wear					
Component status	Component installed					
Supply values	See chapter 2.2					
Necessary Preparations	Functioning pneumatic air system					
Required Material	Fixing screws (for centering holes)					
Required Equipment	Wrench or screwdriver					



The pneumatic connection is the customer's responsibility.

Before performing valve assembly, it is recommended to perform valve calibration, so as to perform it precisely and, once performed, you can proceed with assembly and possible fixing with screws through the relevant hole. For connections, it is recommended to connect the pneumatic tube first (or both in case of double-acting operation) and then proceed with connecting the product tube (using the data shown in [chapter 2.2](#)).

5.3 Commissioning

Component commissioning is performed once positioning and connection operations are completed. Before performing component commissioning, the following checks must be performed:

- Verify that connections have been made correctly;
- Verify that the component is free from dirt or residues of various types.



ATTENTION!

If even just one of the points listed above is not compliant, commissioning must not proceed. Commissioning must only proceed when all points have been successfully completed.

6 SOFTWARE

N.A.

7 PROCEDURE

This chapter explains the main configurations that can be used on the component subject to this manual. In particular, it explains in detail:

- How to perform pin adjustment through micrometric adjustment.

Note that the output fluid depends not only on pin adjustment, but also on other factors:

- **Nozzle diameter:** the larger the nozzle diameter, the greater the output fluid flow rate;
- **Fluid pressure:** the higher the fluid pressure, the greater its output flow rate;
- **Pin stroke adjustment:** the greater the pin stroke, the greater the output flow rate.

7.1 Micrometric adjustment

The pin stroke can be adjusted by acting on the micrometric screw located on the rear of the valve body. Each click of the screw corresponds to a movement equal to 0.008mm of the pin stop block. To adjust the screw:

- Turn clockwise to decrease the amount of dispensed fluid;
- Turn counterclockwise to increase the amount of dispensed fluid.



ATTENTION!

The passage must not be excessively reduced by forcing the stop block, otherwise there is a risk of damaging the pin and membrane.

8 MAINTENANCE

Maintenance interventions are all those activities to be performed on the component which, if performed correctly, allow it to have a longer life. In general, maintenance is divided into two groups:

- **Ordinary maintenance**, which are interventions at regular intervals or that can be performed by the customer's personnel, are the most important activities as they allow the component to be maintained in good working conditions;



ATTENTION!

Ordinary maintenance interventions must be performed with the methods and timing indicated in the following chapters.

- **Extraordinary maintenance**, i.e., all those interventions that are not at regular intervals or that have not been foreseen, or interventions that cannot be performed by the customer. They can also arise from the lack of ordinary maintenance interventions.



ATTENTION!

Extraordinary maintenance interventions must be performed together with the manufacturer's specialized technicians.



Regarding frequency, it must be considered that:

- **When necessary**: Operation to be performed when the need to perform it is seen;
- **Every machine start or end of work**: Indicates a daily time period, in general. This can imply every 24 hours (therefore at the beginning of shift every day, or end of shift every day), or even more frequently, based on applications;
- **Long pause**: Indicates a time period greater than approximately one hour;
- **Every drum change**: Indicates every time the supply system is changed (tank, drum, cartridge or other);
- **Every mixer disassembly**: Indicates that every time the mixer is replaced, a specific operation must be performed;
- **Weekly**: Indicates a time span equal to seven calendar days;
- **Monthly**: Indicates a time span equal to one calendar month;
- **Semi-annual**: Indicates a time span equal to six calendar months;
- **Annual**: Indicates a time span equal to one calendar year.



ATTENTION!

The times indicated below are indicative as they depend on how the component is used. Follow the variations suggested by technicians.

Assigned	Description	Frequency	Chapter
	Perform a valve function test	Every machine start or end of work	\
	Perform superficial cleaning of the valve	Every machine start or end of work	\
	Apply a drop of grease to the outlet nozzle	Every end of work	\
	Nozzle cleaning and/or replacement	Semi-annual	8.1
	Valve disassembly and reassembly	Annual	8.1



ATTENTION!


Apply a drop of petroleum jelly grease at every end of work and every prolonged system pause, so as to preserve the fluid inside the system and the functionality of the valve itself.



ATTENTION!

For valve cleaning, use only soft brushes or cotton cloths.

8.1 Valve disassembly and reassembly

Assigned	Periodicity	Materials and equipment
	Annual	<ul style="list-style-type: none"> • 2.5mm and 3mm Allen keys • 8mm wrench • Narrow-nose pliers • Flathead screwdriver

PPE to wear



ATTENTION!

Before performing this procedure, it is necessary to discharge pressure from the system and disconnect the air connection.

01



Unscrew the micrometric adjustment to minimum by turning it counterclockwise

02



Unscrew the air inlet fittings using a 3mm Allen key (if they are air inlets) or with an 8mm wrench (if it is a silenced vent)

03



Unscrew the screws that hold the micrometric regulator attached to the body with a 2.5mm Allen key



ATTENTION!

There is a spring inside the body. Keep the micrometric regulator steady while unscrewing the screws to avoid damage to the threads or to the person.

04



Remove the spring from its seat

05



Remove the nozzle body by removing the appropriate screws using a 2.5mm Allen key

06

N.A.

If necessary, remove the nozzle holder by unscrewing it by hand. If it cannot be done by hand, use pliers, being careful not to damage the nozzle holder.

07



Remove the PTFE body

08

N.A.

Push the pin downward and unscrew the membrane manually. Then push the pin upward to remove it from its seat

09

N.A.

Remove the circlip using internal circlip pliers. Once removed, position the nozzle part upward and let the lip seal and bronze ring come out.



If the lip seal and bronze ring do not come out of the seat, help from the nozzle side with a drift pin.

To reassemble the valve, follow the same steps just seen but in reverse.



ATTENTION!

The lip seal has an assembly direction: the part with the lip must face toward the micrometric adjustment and not toward the nozzle.



ATTENTION!

Assemble the nozzle part first and then the spring and micrometric regulator part, so as to have the spring force when mounting the regulator and not the nozzle.



ATTENTION!

When mounting the nozzle block, the screws must not be tightened too much, otherwise the PTFE block deforms and is no longer usable. As soon as some resistance is felt, stop tightening.

9 TROUBLESHOOTING

This chapter addresses the most common problems that could arise when using the component in this manual.



ATTENTION!

Once the operator has found a problem or suspects there is a problem, they must call the technician responsible for maintenance. Maintenance must always be performed by a specialized and qualified technician.

DEFECT	CAUSE	SOLUTION
No or little fluid	The valve does not receive the command	Verify the valve command (solenoid valve). Perform a manual test
	Fluid pressure is too low or absent	Check the fluid supply group pressure and increase it if necessary
	The nozzle is clogged	Replace the nozzle
	The filter is dirty (if present)	Wash or replace the filter
	A tube is bent	Check the condition of the fluid supply tubes
	Insufficient actuation pressure	Check the actuation pressure (ch. 2.2)
	Fluid residues present in the system	Disassemble and clean any solid particles
	Membrane deformation	Replace the membrane
The nozzle drips even when the valve is not actuated	Presence of dirt in the nozzle	Clean or replace the nozzle
	Presence of foreign components between teflon body and membrane	Service the valve
The valve opens with delay	Insufficient actuation pressure	Check the actuation pressure (ch. 2.2)
	Damaged O-Ring on pneumatic piston	Replace O-Ring on pneumatic piston

10 END OF LIFE

End of life refers to all those activities that put the component out of service. End of life activities can be:

- **Storage**, when the component is temporarily placed in the warehouse for future use;
- **Stocking**, when the component is placed in the warehouse for an unspecified period waiting for a third party to purchase the component;
- **Dismantling**, when the component has reached the end of working period, whether due to age, obsolescence or failures that cannot be repaired, or that can be repaired but it is more convenient to buy a new component.

If installation is not planned in the short term, the component can remain packaged and must be stored in a sheltered and preferably closed place. The ambient temperatures to be respected are shown in [chapter 2.2](#).

Instead, for dismantling and consequent scrapping of the component or its parts, the different nature of the various components must be taken into account and differentiated scrapping must be performed. It is recommended to entrust specialized companies for this purpose and the laws in force regarding waste disposal must always be observed.