

Installation and maintenance guide

DAVtech

360° SPRAY VALVE FOR INTERNAL DAS 50N



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1 INTRODUCTION

1.1 The manual

The user guide is the document that accompanies the valve from the time of its construction and throughout the period of use, it is therefore an integral part of the valve. It requires reading the manual before taking any action involving the valve. The manual must be readily available for use by staff and maintenance of the valve. The user and the attendant use are required to know the contents of this manual.

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1.2 Warranty

The warranty is valid for a period of 12 months from the date of commissioning and no later than 15 months from the date delivery. The interventions carried out during the warranty period does not extend in any way the validity period of the guarantee. The seller is not liable for defects caused by normal wear of parts which by their nature are subject to wear.

1.3 Goods receiving

The original configuration of the valve must never be changed.

Upon receipt of the goods, check that:

- The packaging is intact
- The exact correspondence of the material ordered.

2 TECHNICAL DESCRIPTION

2.1 Valve Operation

DAS 50N spray valve have been designed and manufactured to be used in a variety of applications.

Their design and versatility make them suitable for any application requiring the use of spraying valves.

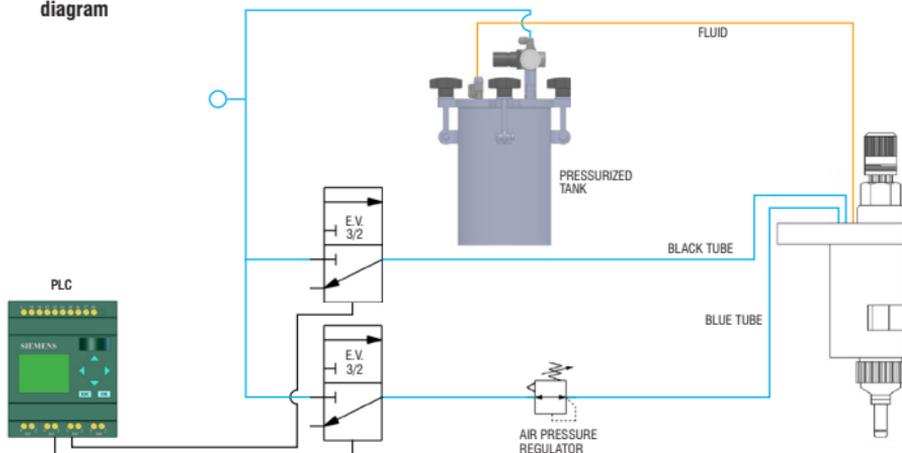
DAS 50N valves is low and medium viscosity fluid dispensers.

The valves are pneumatically controlled by means of external solenoid valves.

2.2 Technical Specification

Model	DAS 50N
Drive	Single acting
Weight	440 g
Max fluid pressure	Max 10 bar
Actuating air pressure	5 - 7 bar
Atomizing air pressure	0,1 - 2 bar
Input type air	Tube 6x4mm
Inlet type fluid	Tube 6x4mm
Extension length	15, 20, 30, 50, 100, 200 mm
Speed	Up to 200 cycles / min
Adjusting the passage	Micrometric
Used materials	Stainless steel, nickel-plated brass
Fluids to be dispensed	Oils, lubricants, greases up to NLGI 2, primers

2.3 Connection diagram



3 INSTALLATION

3.1 Mounting in the machine

The DAS 50 / DAS 50N valve must be mounted using the fixing plate on the valve.

A good valve fixing on the machine must be guaranteed, stable without vibration and with good accessibility for adjustment, cleaning and maintenance.



3.2 Drive the valve

The DAS 50 / DAS 50N spray valve must be operated by two separate solenoid valves; a 3/2 way for the pilot (black tube) and a 3/2 way for the nebulization (blue tube).

The operating pressure must be between 4 ... 6 bar.

Additional air pressure between 0.1 ... 3 bar.

3.3 Fluid connections

The valve must be connected to a fluid supply unit (pressure drum or diaphragm pump).

The material pipe is the transparent 6x4 diameter.

3.4 Setting of the dispensed shot

Pin stroke adjustment determines the amount of fluid delivered.

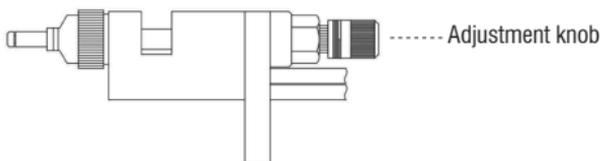
> **Version with micrometric adjustment:**

To adjust the travel, act on the adjustment knob at the top of the valve.

Rotate clockwise to decrease the stroke and consequently the amount of adhesive.

Turning clockwise, reaching the end of the stroke the valve will be fully closed, so it will not flow fluid.

Rotate counterclockwise to increase the stroke and then the amount of fluid.



Do not tighten the needle setting too firmly to avoid damaging the needle and nozzle.

3.5 Amount of the shot

Adjusting the amount of material (fluid) is determined by:

- > **Fluid pressure**
- > **Needle stroke adjustment**
- > **Valve opening time**

Acting on these factors, you can adjust the amount of material you want.

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5 TROUBLESHOOTING

5.1 Problems and solutions

The search for defects in the operation should be performed only by personnel qualified respecting the safety rules in force.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Nothing or little fluid	Valve does not receive the command	Check valve (solenoid valve) control. Perform a manual test.
	The pressure of the fluid is too low or absent.	Check the fluid supply pressure and, if necessary, increase it.
	The nozzle is clogged	Unscrew and clean the nozzle.
	The filter is dirty (if present)	Wash or replace the filter.
	A tube is bent	Check the status of the fluid supply pipes
	Insufficient drive pressure	Check drive pressure (5-7 bar)
Fluid out of the compass	Fluid residues present in the system	Clean the system with water
	O-ring or shaped gasket on the damaged valve body	Replace O-ring or shaped gasket
Fluid flow between valve body and fixing plate	O-ring on the damaged dam reservoir	Replace the O-ring of the hub
The nozzle dries even if the valve is not piloted	Presence of dirt in the nozzle	Clean or replace the nozzle.
The valve opens late	Insufficient drive pressure	Check drive pressure 5-7 bar
	O-ring on the damaged spike	Replace the O-ring on the pin
Splashed irregularly	Insufficient spraying pressure	Check spraying pressure (0,1...2,5 bar)
	Dirt in the air cap	Clean the air cap

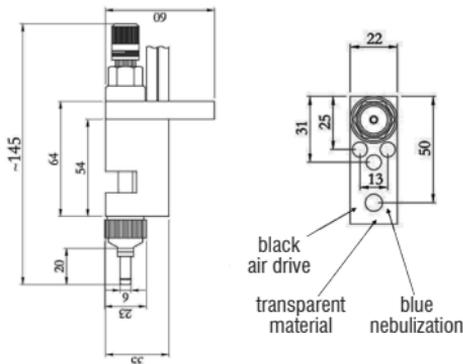
6 SPARE PARTS AND DIMENSIONS

6.1 Overall dimensions DAS 50 / DAS 50N

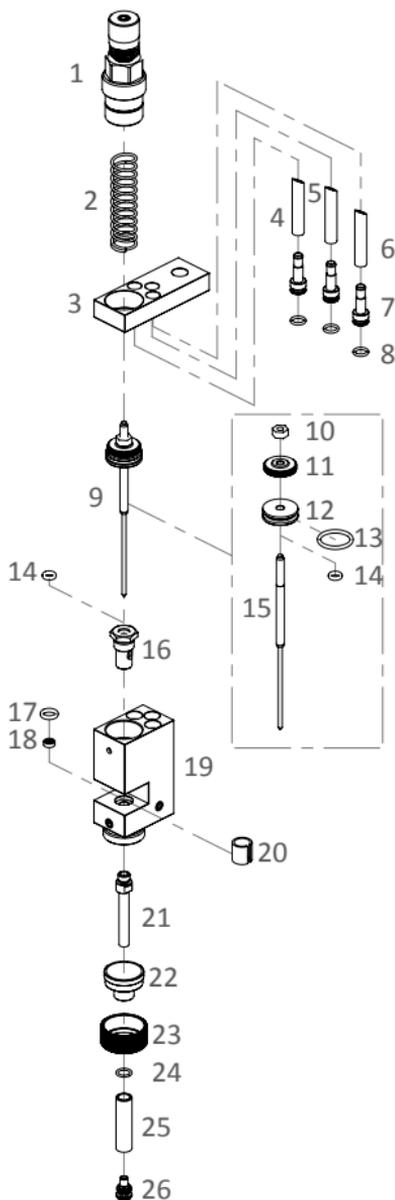
The size of the enclosure depends on the type of extender used and its length.

Download 3D models from our web-site.

Dimensions refer to the 15mm extension.



5.2 Esploso ricambi DAS 50 N



5.3 Lista ricambi DAS 50 N

POS	CODE	DESCRIPTION
1	0003.36000009	MICROMETRIC REGULATION COMPLETE
2	0003.000200	PRESSURE SPRING
3	0003.36000006	FIXING PLATE
4	0003.010407	BLUE HOSE (ATOMIZING AIR)
5	0003.050407	CLEAR HOSE (FLUID)
6	0003.140407	BLACK HOSE (COMMAND AIR)
7	0003.36000011	HOSE HOLDER
8	0003.000901N	O-RING
9		NEEDLE COMPLETE
	0003.84150206	9.1 NEEDLE COMPLETE 20 mm
	0003.84150306	9.2 NEEDLE COMPLETE 30 mm
	0003.84150506	9.3 NEEDLE COMPLETE 50 mm
	0003.84151006	9.4 NEEDLE COMPLETE 100 mm
	0003.84152006	9.5 NEEDLE COMPLETE 200 mm
10	0003.0004010	NEEDLE NUT
11	0003.36000028	NEEDLE COLLAR
12	0003.36000005	PISTON
13	0003.000015E	O-RING
14	0003.000007E	O-RING
15		NEEDLE BASIC
	0003.84050206	15.1 NEEDLE BASIC 20 mm
	0003.84050306	15.2 NEEDLE BASIC 30 mm
	0003.84050506	15.3 NEEDLE BASIC 50 mm
	0003.84051006	15.4 NEEDLE BASIC 100 mm
	0003.84052006	15.5 NEEDLE BASIC 200 mm
16	0003.36000003	BUSH
17	0003.000010E	O-RING
18	0003.30570T	VARISEAL
19	0003.36000001	BODY VALVE
20	0003.36000029	PLASTIC COLLAR
21		FLUID OUTLET EXTENDER
	0003.85811020	21.1 FLUID OUTLET EXTENDER 20 mm
		21.2 FLUID OUTLET EXTENDER 30 mm
		21.3 FLUID OUTLET EXTENDER 50 mm
		21.4 FLUID OUTLET EXTENDER 100 mm
		21.5 FLUID OUTLET EXTENDER 200 mm
22	0003.85791003	AIR CAP
23	0003.85792001	COLLAR
24	0003.060X10E	O-RING
25		AIR EXTENDER
		25.1 AIR EXTENDER 20 mm
		25.2 AIR EXTENDER 30 mm
		25.3 AIR EXTENDER 50 mm
		25.4 AIR EXTENDER 100 mm
		25.5 AIR EXTENDER 200 mm
26	0003.85801000	EXTENDER NOZZLE
	GASKETKIT-DAS50N-EV	GASKET KIT COMPLETE

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The illustrations are not binding.