

Installation and maintenance guide



DISPENSING VALVE WITH HAND-GRIP DAV 100 MAN - DAV 200 MAN



DAV TECH SRL

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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.

Reproduction of any part of this manual, in any form, without the express written permission of DAV Tech. The text and illustrations in this manual are not binding, the DAV tech reserves the right, at any time and without notice, the right to make any changes to improve the product or for reasons of character manufacturing or commercial.

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

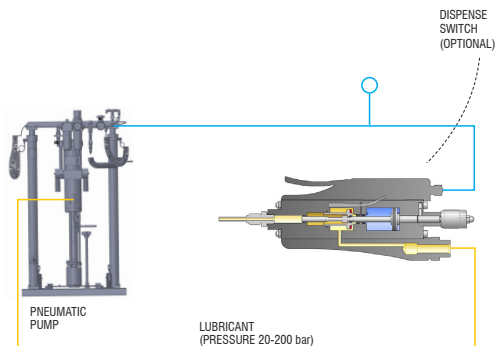
The dispensing valves with hand grip DAV 100 MAN - DAV 200 MAN are pneumatically driven components, designed for accurate dispensing of lubricants at low, medium or high viscosity.

The exchange of the compressed air, at a pressure equal to or greater than 6 bar, will result in the emptying of the volumetric chamber and the relative dispensing of a quantity of fluid constant and adjustable.

2.2 Technical specification

Model	DAV 100 MAN - DAV 200 MAN
Operation mode	Double Acting
Weight	230 g
Fluid pressure inlet	Min 20 bar - Max 200 bar (low pressure version available)
Quantity dispensable	DAV 100 MAN: 1 - 20 mm ³ (0,001 - 0,020 cc) - DAV 200 MAN: 10 - 200 mm ³ (0,01 - 0,2 cc)
Actuating air pressure	5 - 7 bar
Inlet air	ø 4mm hose
Inlet fluid thread	1/8 BSP
Outlet fluid	M5 threaded with luer lock holder or fitting 1/8 BSP female
Speed	Up to 60 cycles / min
Adjusting the amount dosed	Micrometric with block screw
Used materials	Stainless steel, anodized aluminum
Fluids to be dispensed	Greases and lubricants up to NLGI 3-1000000 mPa s

2.3 Connection diagram



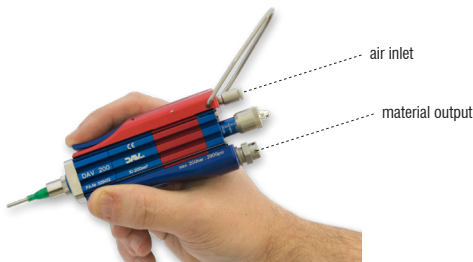
3 INSTALLATION

3.1 Drive the valve

The DAV 100 MAN and DAV 200 MAN valves operate pneumatically with a double effect, by pressing the trigger on the handle.

3.2 Connection of the fluid

The valve must be connected to a power supply unit, which guarantees a pressure between 20 and 200 bar. A flexible hose, resistant to high pressures, must be connected to the fitting placed in the smallest part of the valve.



3.3 Adjusting the amount of material

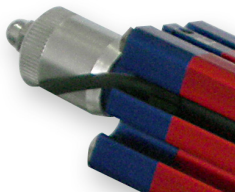
The amount of product is dispensable functional to fill volume of the room, set by turning the adjustment, mounted on valve head displacement.

A grain then allows you to lock the adjustment and prevent tampering.

3.4 Quantity dispensable

Being valves volumetric quantity is dispensable only functional to the volume of the chamber set.

In any case it is necessary consider the minimum time required for charging and discharging of the valve, the times that vary with the pressure of the incoming fluid, its viscosity, and depending on the type of applicator connected to the nozzle valve.



4 MAINTENANCE

4.1 General rules

Le valve DAV 100 MAN e DAV 200 MAN, thanks to construction methods and materials used are easy to maintain.

Minimal maintenance , simple, accurate and allow a steady long-term operation and regular time of the valve, maintaining unchanged performance.

4.2 Valve disassembly

Before disassembling the valve:

- 1) Clean the outside
- 2) Release the pressure from the system
- 3) Disconnect the power supply of lubricant to the valve
- 4) Key 4mm remove the 4 tie rods present in the valve and foot valve
- 5) Remove various aluminum bodies
- 6) Remove the needle and the volumetric chamber
- 7) If necessary, unscrew the air piston needle from the spool.

4.3 Valve reassembly

After it has been cleaned thoroughly and have replaced all the damaged parts (especially the seals, scrapers etc.), reassemble in reverse order of disassembly little lubrication parts and seals with grease fittings.

Be careful not to overdo the tightening of the 4 tie rods, to avoid damage.

Installation and maintenance guide

5 TROUBLESHOOTING

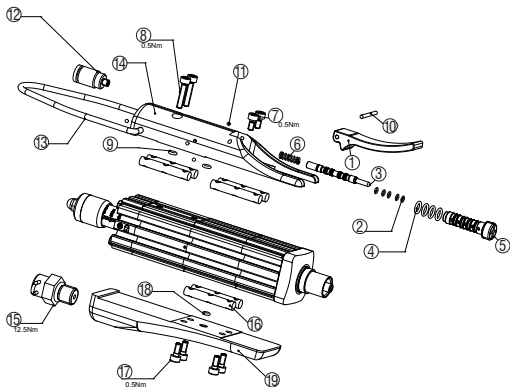
5.1 Problems and solutions

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

PROBLEM	POSSIBLE CAUSE	SOLUTION
The lubricant does not come out	The valve does not receive the command	Check the control (solenoid) of valve. Perform a manual test.
	The pressure of the grease is too low or absent.	Check the pressure of the power supply fluid and possibly increase in range 20/200 bar
	The nozzle is clogged	Remove and clean the nozzle.
	The filter is dirty (if any)	Clean or replace the filter.
	A tube is bent	Check the fluid supply pipe
	Actuating pressure tire	Ensure sufficient pressure to drive (5-7 bar)
	The lubricant has a viscosity too high	The valves can DAV 100 and DAV 200 dispense lubricant viscosity max. 1,000,000 mPa s and NLGI 3
Lubricant leakage retired	Molded seals or gaskets	Replace the damaged needle or needle shaped

6 BREAKDOWN AND DIMENSIONS

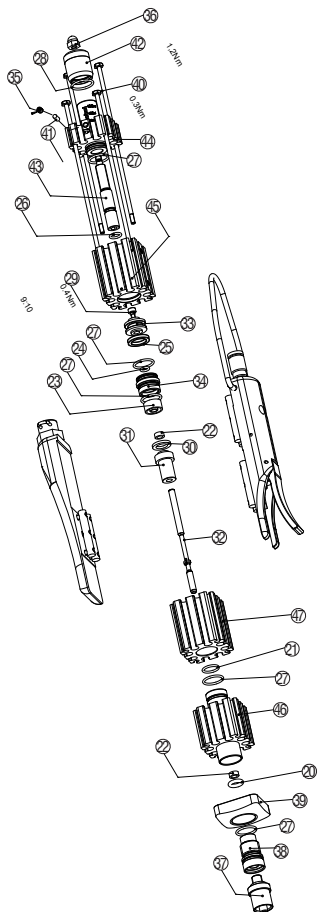
6.1 Hand grip valve breakdown



6.2 Componenti

NR.	CODE	DESCRIPTION
1	0002122	LEVER
2	0001779	O-RING
3	0002086	VALVE PISTON
4	8220900	O-RING
5	0002087	BODY VALVE
6	0002102	SPRING
7	8423901	SCREW
8	8423906	SCREW
9	8220100	O-RING
10	0002101	PIN
11	8210700	BALL
12	0002099	AIR FITTING
13	4240400	FASTENING
14	0002084	PNEUMATIC HAND GRIP BODY
15	0002004	INLET NIPLLEX
16	0002213	NUT
17	8423900	SCREW
18	0001224	O-RING
19	0002088	FLUID GRIP BODY
	0003632	COMPLETE HAND GRIP

6.3 Valve breakdown



6.4 Components

NR.	CODE	DESCRIPTION
20	8221400	O-RING
21	8227800	O-RING DAV-100
21 bis	0001628	O-RING DAV-200
22	8221401	VARISEAL
23	8353502	LIP SEAL
24	8220400	O-RING
25	0001106	X-RING
26	8221600	O-RING
27	8223401	O-RING
28	8225600	O-RING
29	0001226	NEEDLE SCREW
30	0001044	MAGNETING RING
31	0001038	VOLUMETRIC CHAMBER DAV-100
31bis	0001629	VOLUMETRIC CHAMBER DAV-200
32	0001039	NEEDLE
33	0001043	PNEUMATIC PISTON
34	0001041	BUSH
35	8510101	GRUB SCREW
36	8411400	NUT
37	0001019	LUER LOCK ADAPTER
38	0001037	LUER-LOCK BUSH
39	0004971	FRONTAL PLATE DAV-100/200
40	0001228	SCREW
41	0001227	PIN
42	0001042	MICROMETRIC REGULATION
43	0001045	STOPPER
44	0004890	REGULATION BODY
45	0004891	PNEUMATIC BODY
46	0004894	FRONTAL BODY DAV-100
46 bis	0004893	FRONTAL BODY DAV-200
47	0004892	MID BODY DAV-100/200
GASKETKIT-DAV100200		GASKET KIT COMPLETE (handle grip gaskets not included)

Declaration of Incorporation

according to the EU Machinery Directive 2006/42/EG, Annex II, 1.B for partly completed machinery

Manufacturer:

DAV Tech Srl

Via Ravizza, 30 - 36075 Montebelluna Maggiore

VICENZA - ITALY

Person residing within the Community authorised to compile the relevant technical documentation:

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VICENZA - ITALY

Description and identification of the partly completed machinery:

Type: Volumetric valves

Model: DAV 100, DAV 200, DAV 300, DAV 400, DAV 100 MAN, DAV 200 MAN, DAV 300 MAN, DAV 400 MAN.

It is also declared that the relevant technical documentation has been compiled in accordance with part B of Annex VII.

It is expressly declared that the partly completed machinery the machinery fulfils all relevant provisions of the following EU Directives:

- 2006/42/CE
- 2006/42/EG
- 95/16/EG

The manufacturer or his authorised representative undertakes to transmit, in response to a reasoned request by the national authorities, relevant information on the partly completed machinery. This transmission takes place:

This does not affect the intellectual property rights!

Important note! The partly completed machinery may be put into service only if it was determined, where appropriate, that the machinery into which the partly completed machinery is to be installed meets the provisions of this Directive.

Andrea Grazioli
