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Approved by Guillaume Delmot & Gilles Raets	REV B (2025-08-18) MR240030	<i>Intentionally left blank</i>	DPPC EDA9
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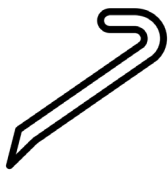
1 PRECAUTIONS AND TIPS



Before installing or removing the valve, please ensure a safe work environment. This includes shut off and lock-out.

Do NOT attempt to service valve in place. Remove from service and conduct repairs on workbench.

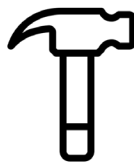
Removal tools



CROWBAR



PLIERS



HAMMER



SCREWDRIVER



HEX KEY



Please never clean MAC Valves with



CORROSIVE LIQUIDS / SOLVENTS



OILS / LUBRICANTS



HYDROCARBONS



SOLVENT BASED CLEANERS



TIPS

1. Review complete instructions before beginning.
2. Maintenance operations should be carried out with valves removed from base and without any compressed air supply.



2 DESCRIPTION

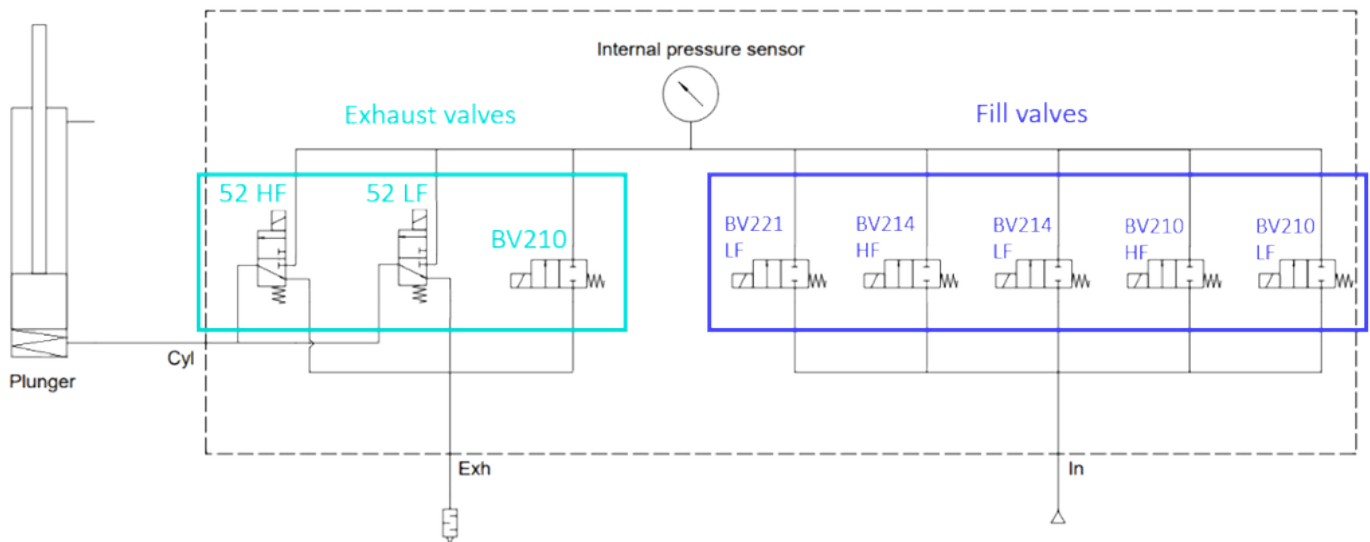
This valve is a 3/3 proportional valve, called DPPC for “Digital Proportional Pressure Control”. It uses an array of monostable valves of different flow that are operated with electronic control so that the output pressure matches the command signal at best, reaching quickly, precisely and steadily the targeted pressure. In addition, the electronic program of DPPC / EDA9 has been tailored for the specific case of plunger-up control, with or without using the Emhart Plunger Press Control closed loop system.

The DPPC / EDA9 has been designed to be robust, using MAC’s decades of expertise in the glass industry. It uses 8 valves direct & pilot operated to control the pressure and flow across the unit. The valves are modified for glass environment.

The unit uses a brand-new electronic board with an extremely precise pressure sensor, enabling an outstanding precision of the output pressure that is required for the glass NNPB process. In addition, this new board embed components for diagnostic functions and future options such as BUS communication (IO link).

The electronic board and direct valves are encapsulated in a sealed area to prevent damage from humidity and condensation. It has been designed to withstand high temperatures that can be seen in the glass environment.

DPPC Schematic



3 DATASHEET

Valve Description & Mod Specifics

- Washdown protection (valves and electronic control protected against liquid infiltration)
- Viton® spool (main valve) & poppet (pilot valve)
- High temperature lubrication in main & pilot valves
- All static & dynamic seals made of Viton®
- Program fine-tuned for specific operation of Plunger Up Control for hollow-glass manufacturing
- Field repairable (no calibration required after repair)
- Mechanically and electrically drop-in with OEM proportional valve



DPPC EDA9

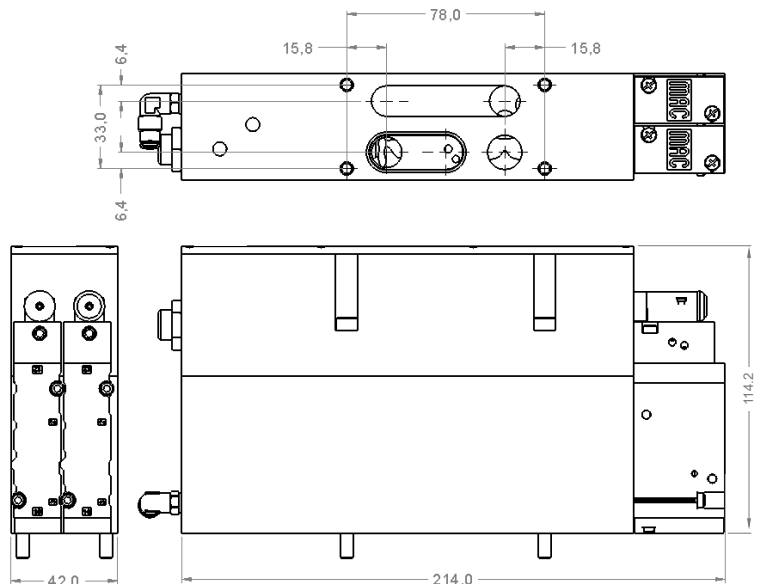
Technical Data

Fluid	Air
Function	3/3 proportional
Precision	+/- 0.020 bar *
Max. Input Pressure	6 bar
Mounting	Manifold mount
Ports Size	NA (manifold mount)
Type of Actuation	Proportional
Pilot Air Supply	Internal
Minimum Filtration	40 µm
Operating Pressure	0 to 4.0 bar
Ambient Temperature	0°C to 75°C
Flow Maximum (at 6 bar, ΔP = 1 bar)	Up to 1.2 Cv
Electrical Voltage Power Connector	24 VDC (-10% / +15%) max. 1.6 A M12
Command	4 - 20 mA

* in a static closed volume of 1.5 L

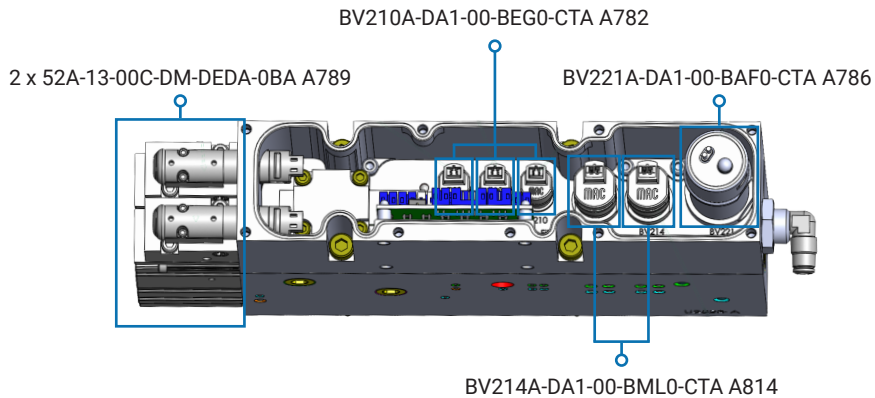
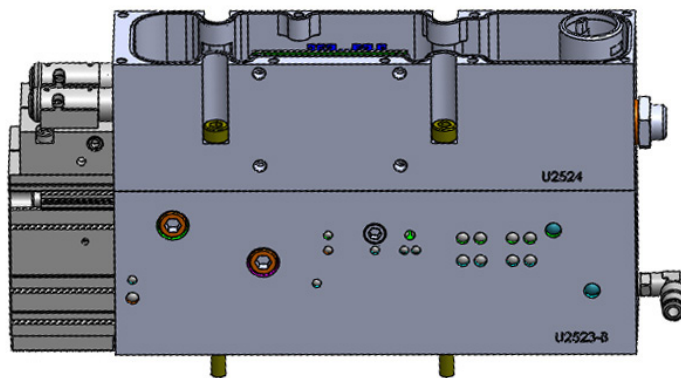
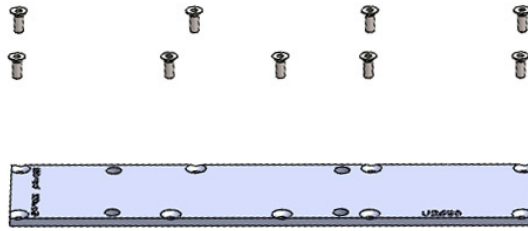
Dimensions

All dimensions are metric (in mm).





4 MAINTENANCE



5 SPARE PARTS LIST AND REPAIR KITS

DPPC EAG6 Components

Quantity	Valve Codification	Mod
2	52A-13-00C-DM-DEDA-0BA	A789
3	BV210A-DA1-00-BEG0-CTA	A782
2	BV214A-DA1-00-BML0-CTA	A814
1	BV221A-DA1-00-BAF0-CTA	A786

Repair Kits

Number	Repair Kit Content
KE-DPPC-002	Circuit boards kit
KE-DPPC-003	Seals kit



6 WARRANTY

The MAC Valves organisation has established a reputation over many years for fulfilling the needs and requirements of the users of its products. All MAC Valves are quality products specifically designed and built for long and rugged service. For this reason, MAC Valves is able to provide the Buyer a limited warranty.

Warranty

MAC Valves, Inc. hereby warrants to Buyer that, for a period of 18 months from the original date of shipment of each valve from our factory (« Warranty period »), such valve will be free from significant defects in material and workmanship and will conform to all specifications agreed to by MAC Valves, Inc. In addition, MAC Valves, Inc. warrants that the electrical coils on such valves will be free from significant defects in material and workmanship for their normal useful life. Except for these limited warranties, MAC Valves, Inc. expressly disclaims all representations and warranties of any kind (whether express, implied or arising by operation of law) with respect to the valves, including, without limitation, any warranties or representations as to merchantability, fitness for a particular purpose or any other matter. This section survives the expiration, termination or cancellation of any agreements between the parties relating to the purchase of the valves.

Warranty Limitations

This warranty does not apply where the valves have been (i) subjected to abuse, misuse, damage, neglect, negligence, accident, improper testing, improper installation, improper storage, improper handling, abnormal physical stress, abnormal environmental condition, or use contrary to any instructions issued by MAC Valves, Inc. ; (ii) modified, reconstructed, repaired, or altered by persons other than MAC Valves, Inc. or its authorised representative ; or (iii) used with any third-party product, hardware, software or other product that has not been previously approved in writing by MAC Valves, Inc. Additionally, this warranty does not cover claims for labor, material, time or transportation, and does not apply to loss or damage caused by fire, theft, riot, explosion, labor dispute, act of God, or other causes beyond the control of MAC Valves, Inc.

Exclusive Remedy

The Buyer's sole remedy under this warranty is limited to the replacement or rebuilding of any valve which does not conform to the warranties provided herein or, in MAC Valves, Inc.'s sole discretion, refund of the purchase price for the non-conforming valve. Buyer's remedy is conditioned on Buyer's compliance with its obligations under this warranty. Valves that Buyer believes do not conform to this warranty must be returned (with or without bases) transportation prepaid and received at our factory within the warranty period. If MAC Valves, Inc. determines that the valve is non-conforming and is otherwise covered by this warranty, the rebuilt or replaced valve will be returned to the customer at the expense of MAC Valves, Inc., and will carry the same warranties as provided under the Flat Rate Rebuild Program described below. MAC Valves, Inc. will not be responsible for any incidental, special, exemplary or consequential damages, including without limitation direct and indirect lost profits, regardless of whether those damages were foreseeable.