Compact Modular Valves

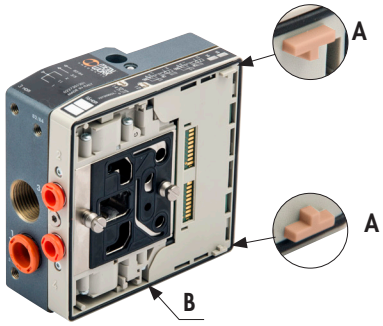
INSTALLATION AND MAINTENANCE INSTRUCTIONS, KEEP FOR FUTURE REFERENCE.

For Technical Assistance Call 770-844-4200

Assembly And Pneumatic Testing:

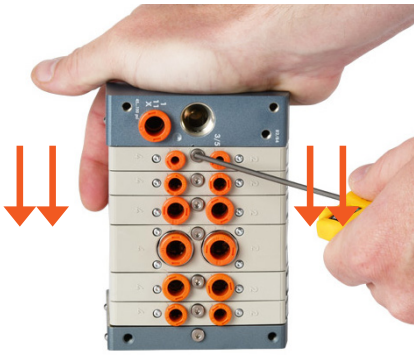
1.

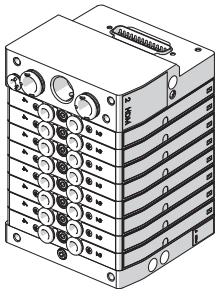
Position the valves in the desired sequence, making sure the small teeth "A" of each case engage with the next one and in the seat of the blind end-plate. Also check that gasket "B" rests in its seat.



2.

Place the blind end-plate on a flat surface. Apply a force of several pounds on the input end-plate to compact the valves properly one against the other and mantain it for all the subsequent steps.

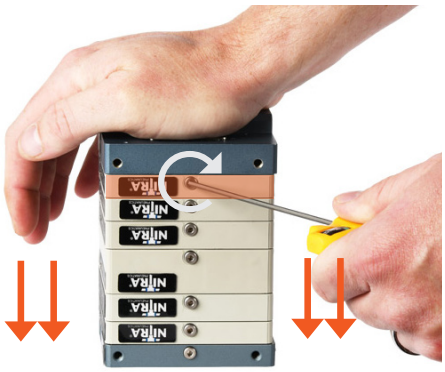


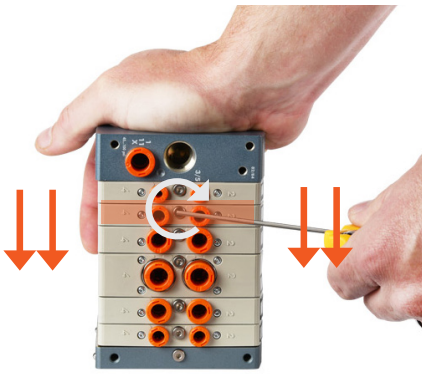


3.

Tighten the rear locking grub screw of the first valve with hex key 2.5 mm to a torque of 2 Nm (18 lb-in).

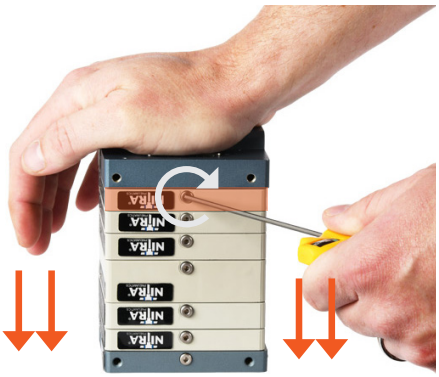
Tighten the front locking grub screw with hex key 2.5 mm to a torque of 2 Nm (18 lb-in).

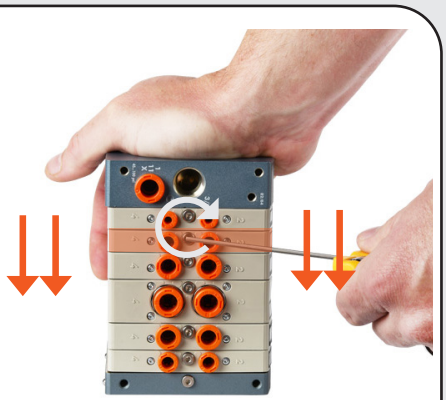




4.

Follow the same procedure to tighten all the valves.





After assembly, it is necessary to perform the pneumatic test on the island to check overall-sealing performance.

Plug all valve output ports (ports 2 and 4)

Connect the 1-11 input end-plate ports marked with identification numbers 1, 11, X (fig.1) or the 1 input end-plate ports marked with identification numbers 1-11-X (fig.2) to the supply.

The pressure used for the test must always be 85 psi (6 bar).

Fig.1

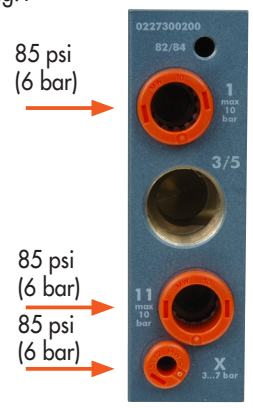
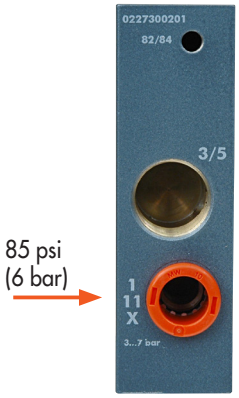
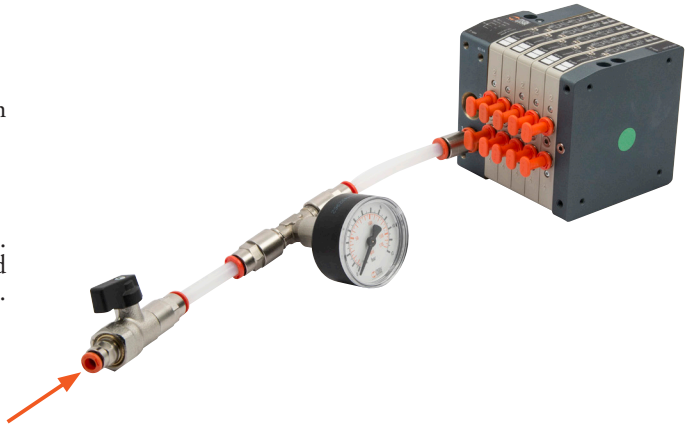


Fig.2

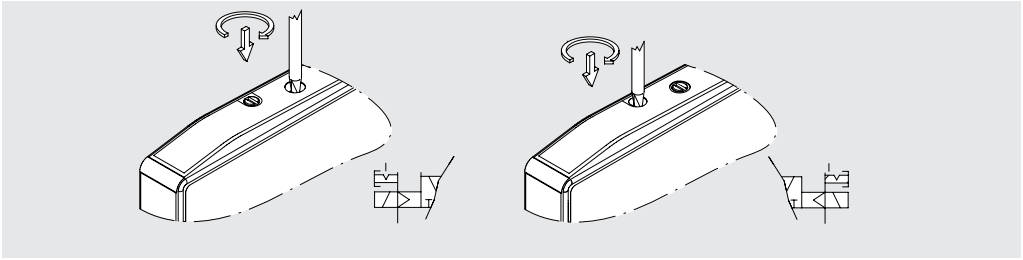


Execution of the test

- Connect air source as shown;
- Close the shutoff valve;
- Wait about 15 seconds to stabilize the air in the island;
- Read the value of the pressure gauge;
- Wait about 60 seconds;
- Read the value of the pressure gauge again. The correct assembly of the island is verified if the pressure loss is less than 15 psi (1 bar).



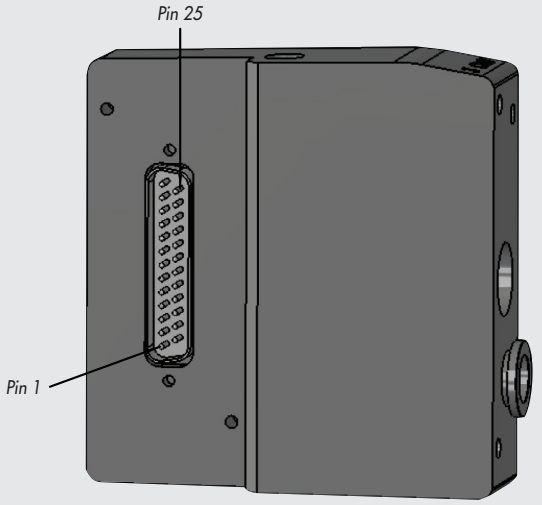
Manual Controls:



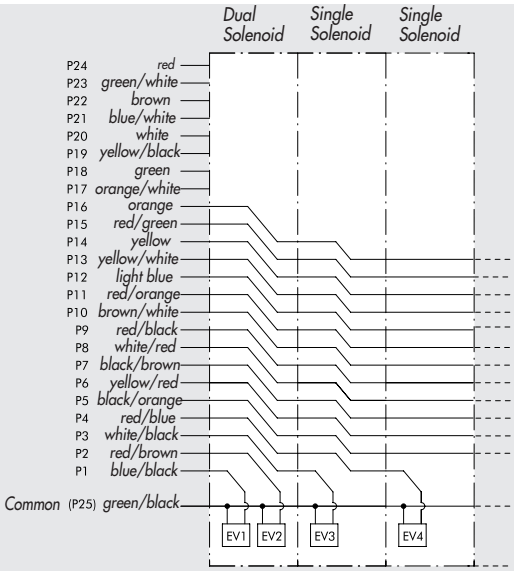
Locking Manual Override Port 2 or 4 pilot-assisted

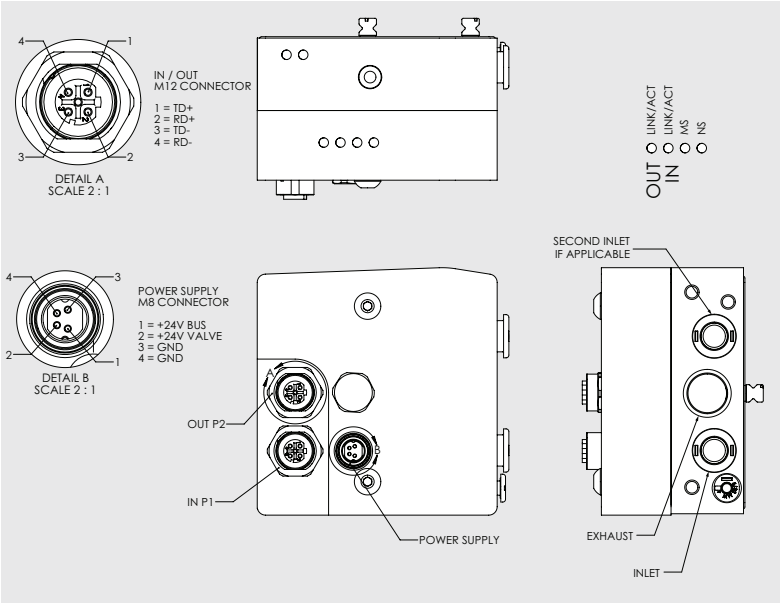
- Press the manual control in to operate valve then turn it clockwise 90 degrees to lock.
- To unlock rotate the manual control 90 degrees counter clockwise and then release it.
- The valve returns to the home position with the exception of CMV-B2L-XX which remains switched.

General Wiring:



Unit can be wired PNP or NPN

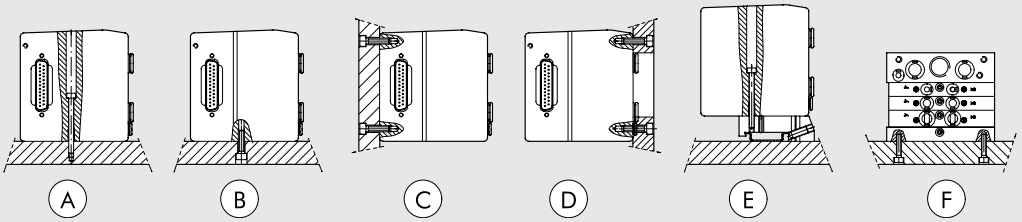




EtherNet/IP enabled inlet plates:

- Use 4-pole M12 cables for both In and Out Ethernet connections and a 4-pole M8 cable for power.
- Each valve manifold assembly can have a maximum of 16 solenoids.
- Solenoids from left to right (1 through 16) equal bits 0 through 15. i.e. Solenoid 1 will be bit 0.
- Any number of valve manifold assemblies can be "daisy chained" together on the same network.

Mounting the Base:



A. Top mount using (2) M4-0.7x45mm socket head cap screws (5.8 Nm [51 lb-in]).

B. / C. Bottom or rear mounting using (2) M5-0.8 (length as needed), (12 Nm [106 lb-in]).

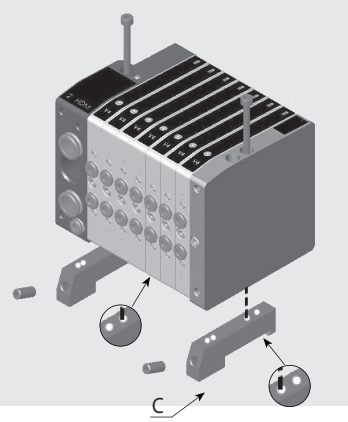
D. Face mounting using (2) M5-0.8 (length as needed), (12 Nm [106 lb-in]). An opening for the pipes is needed in the plate.

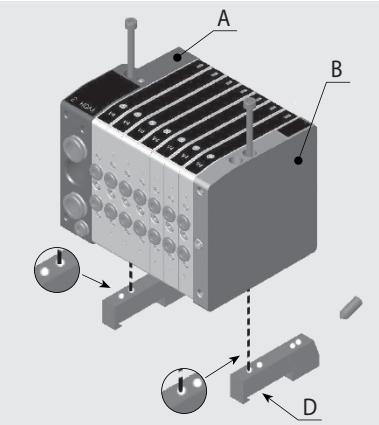
E. DIN rail mounting using 35 mm DIN bracket (CMV-ACC04 (2 required) - hardware included).

F. Side mounting using the blind end plate, and (4) M4-0.7 (length as needed), (5.8 Nm [51 lb-in]) threads on the side.

Note: Other mounting positions not recommended.

General Assembly Instructions:





Fitting the DIN brackets

(CMV-ACC04 - 2 required):

Fix the brackets onto both end plates (A and B) using the screws supplied with the brackets (12Nm [106 lb-in]). Brackets can be positioned facing either direction as shown on C or D.

Notes: