

## 2. INSTRUCTIONS FOR THE SET UP OF THE POTENTIOMETER IN THE LIMIT SWITCH VERSION "EVO" 2018

For the wiring instructions, verify the related paragraph and electrical wiring diagram

Tools necessary for the wiring of the limit switch:

- Flathead screwdriver 0.5x3 x L = any
- Hexagonal Key or Allen Key 2.5
- Wrench mm.8
- Wrench mm.13

### Legend of the elements:

A/A -1st group micro-set (the lower one is the one working, the one on top is installed for safety reasons, against the inversion of phases).

B/B -2nd group micro-set (lower one working, upper one for safety – against inversion of phases).

A/1 and B/1- the working Micro. It is the one on the bottom (both in the group A/A and in the group B/B).

A/2 and B/2- The safety Micro against the inversion of phase. It's the one on top (both in the group A/A and in the group B/B).

A – Central bushing for the movement of the square plastic actuator (B)

B – Central square limit switch actuator for the micro sets (A/A e B/B)

C – Screw 5x10 for blocking the central square actuator (B) on the central bushing (A).

D – Toothed knob for moving and setting the micro set (A/A).

E – Toothed knob for moving and setting the micro set (B/B).

F – Nut 5 for blocking the toothed know for moving the micro set A/A.

G – Nut 5 for blocking the toothed know for moving the micro set B/B

H – Potentiometer

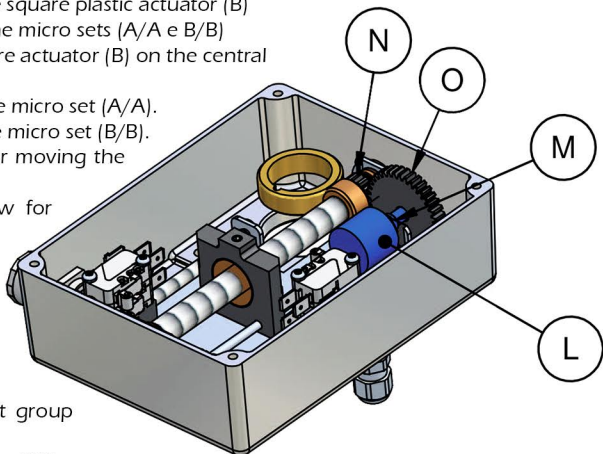
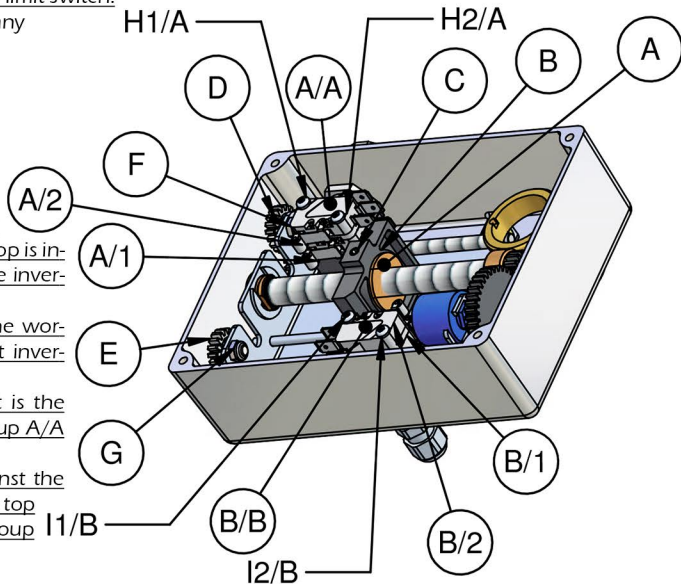
I – Nut for blocking the potentiometer on the support bracket.

L – Gear mounted on the potentiometer.

M – Gear mounted on the central screw for coupling with the potentiometer's gear.

H1/A - H2/A - Screw for blocking micro-set group A/A

I1/B - I2/B - Screw for blocking micro-set group B/B



Data of the POTENTIOMETER	
Reduction	2.53
Max. revolutions of the potentiometer	10
Max. revolutions allowed for the central screw	22,77
Max. revolutions allowed for the reductor shaft	11,5
Max. distance with pulley ø 55 (mm)	1990
Max. distance with racks VIALE (mm)	1650

## HOW TO SET THE LIMIT SWITCH WITH POTENTIOMETER:

1. In order to set the limit switch, first verify that the potentiometer is “free” and its gear **(L)** is not connected to the central screw’s gear **(M)**.
2. According to the sense of rotation of the gearmotor shaft, decide which micro-set use for the opening or the closing **(A/A or B/B)**.
3. Move the central bushing **(A)** close to the micro-set of your choice for the closure, insert the central square actuator **(B)** verifying that it does not go beyond the micro’s levers and it does not touch the lever at the bottom. The best solution would be to leave a little space between the central actuator **(B)** and the **BOTTOM LEVER** of the micro.
4. Block the square actuator on the bushing, by twisting in the screw 5x10 **(C)** with a hexagonal or Allen key 2.5.
5. Manually turn the toothed displacement knob corresponding to the micro-set you want to set on closed **(D or E)** until the central actuator touches the **LOWER** lever so that it will result “armed” (you will hear a click from the micro of the limit switch).
6. Open the vent as much as desired by **MANUALLY** operating the gearmotor. When this is done, manually turn the knob opposite to the one regulated in the previous phase 4: the lower micro in the related set will be “armed” and you will hear that click again.
7. Using the toothed knob, move the micro-set chosen for the closure to about 5/10 mm in the direction of the set chosen for the opening.
8. Still with the gearmotor in **MANUAL** mode, perform the closing operation until the central group **(A+B+C)** “arms” the lower micro (you will again hear a click); at this point the vent will be still slightly open (not completely shut). **SLOWLY** turn the toothed knob in order to move away the micro from the central group **(A+B+C)**. The gearmotor will restart in the closure-phase until the actuator will touch again the lower micro’s lever. Control the vent’s position and if necessary, repeat the operation with the toothed knob until the vent will be able to shut completely without any effort.
9. Repeat a couple of times the opening/closing actions in order to verify the set position, and, if necessary, regulate again using the toothed knobs to make variations of positions or regulations of precision.
10. Once you have reached the desired position, **lock the screws H1/A-H2/A and I1/B-I2/B with the screwdriver or hexagonal key to block micro-set groups in the desired position**, (optional) use a hexagonal key 8 on the nuts M5 **(F and G)** to block them. If during this blocking action the screws that support the toothed knobs move, use a flat-headed screwdriver to restrain the rotation.

## POTENTIOMETER:

11. Verify the sense of rotation of the gear **(N)** according to the opening or closure.
12. Manually twist the gear **(O)** mounted on the potentiometer till the end of its run **(L)** in the sense opposite to the one verified at the point 11, for safety reasons, we recommend a half-turn backwards.
13. Insert the potentiometer into its own support bracket and make the gears’ teeth mesh **(N and O)**. Verify the correct conveyance of the movement between those.
14. Fasten the potentiometer to the support bracket by tightening the nut **(M)** using a wrench 13.
15. Verify the revolutions and run of the potentiometer; if necessary, repeat the previous actions and increase the final backwards half-turn.