

POSSIBLE COMBINATIONS AND CONNECTIONS

All actuators can be connected to any controller, providing that the relevant output signal complies with the requirements at "Technical Characteristics" paragraph. In particular they can be connected to the CONTROLLI 500-line controllers, DIGITROLL 2000, 3000, and 200, 300 and 400-line controllers.

The following accessories are available:

MODEL	DESCRIPTION
DMVL	2 auxiliary microswitches (SPDT 10 (3)A-250 V~) adjustable on the whole stroke. Microdisconnection type 1B according to IEC 730-1(93)/6.4.3.2
MVLP A2	for MVL2.
MVLP A4	for MVL4.
MVLP A4M	for MVL4.A/C
MVLP A6	for MVL6.
MVLHT	Valve body-actuator spacer reducing the actuator direct exposure in case of installation with high-temperature fluids. Dimensions: Ø 120 mm; h = actuator height + 102 mm
245	Stem heater 24 V~, 50 W (for applications with fluid temperature <-10 °C)
AG31	Kit for VMB and VSB valve assembly

INSTALLATION AND MOUNTING

The actuator can be mounted in the positions shown in Fig. 2. It is advisable to equip the motorized valve with MVLHT spacer, in order to reduce the actuator working temperature in case of fluids at high temperatures (approximately > 120° C) in the valve body. For fluids over 160°C avoid mounting the actuator in vertical position on the valve so as to avoid the direct exposure to heat sources.

Carry out the electrical connections by removing the cover, in compliance to existing standards. For valve mounting, follow the assembly instruction inside the package.

Models with electronic card for proportional signal

• Voltage and current (MVL5.)

These actuators are factory-supplied with 6..9 V- control signal. To select different ranges, move the SW1 jumper from the preset position 6..9 V- to the desired one (see Fig. 1). For 4..20 mA range it is necessary to position on SW2 both the SW1 jumper and the jumper set in DIP position.

To reverse the rotation direction, move the SW3 jumper from A to C position.

• Potentiometric (MVL3.)

To reverse the rotation direction, exchange the connections at M and V+ terminals.

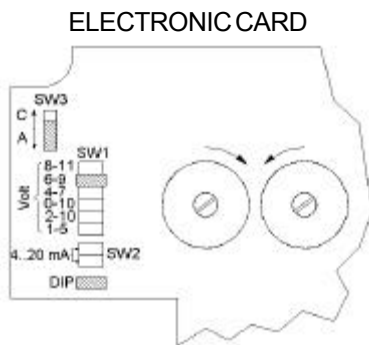


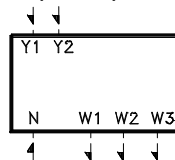
FIG.1

N3012

TERMINAL BOARDS

MVL 2. (230 V~)

MVL 4. (24 V~)



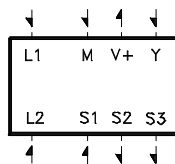
Power supply control | N-Y1 (**)
| N-Y2 (***)

(**) Joint moves upwards
(***) Joint moves downwards

W1 Auxiliary potentiometer
W2 Central | MVL 2./4./6./4.A/C
W3

MVL 5. and MVL5A/C

MVL 3. and MVL3A/C



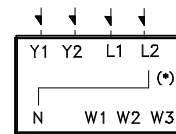
L1 Phase | 24V~ ±10%
L2 Neutral | power supply

M Common | (1)
V+ +15 V Output
Y Control signal (2)

S1 Analogue common | (3)
S2 0..10V or 0..200µA
S3 10..0V or 200..0µA

- (1) For the model MVL3. Connect the central of the controller potentiometer (165 ohm) to terminal Y, one side to terminal M and the other one to terminal V+.
- (2) With jumper SW3 in A position and increasing control signal the joint moves upwards.
- (3) Connect the eventual indicator to the current input at terminals S3 (or S2) and S1 (max 2mA). Connect the indicator with voltage input to terminals S3 (or S2) and M (max 2mA). With joint up between M (S1) and S2 min. (between M (S1) and S3 max) voltage (current) value.

MVL 4. A/C



(*) Internally connected

CONTROL

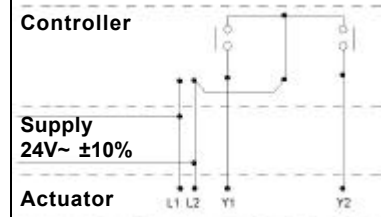
5-wire

L1 | 24 V~ ± 10%
L2 | Power supply

N-Y1 | Joint moves upwards
N-Y2 | Joint moves downwards

• 4-wire (typical for controller with power supply common to the actuator)

Controller



Supply
24V~ ±10%

Actuator

MOUNTING POSITIONS

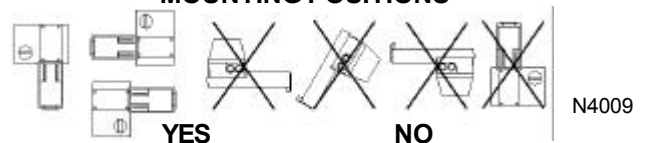
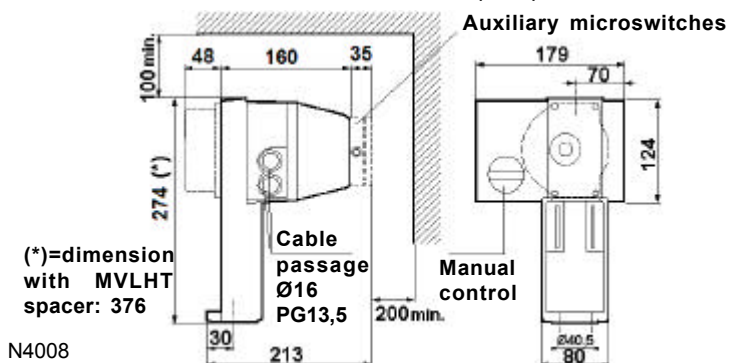


FIG. 2

OVERALL DIMENSIONS (mm)



N4008

The performances stated on this sheet can be modified without any prior notice due to design improvement.

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DBL011E

CONTROLLI

Automatic control systems for:
air conditioning/heating/industrial thermal process.