

The actuator MOTORHEAD can be installed on series valves Compact Motor in an extremely simple, practical and safe way.

The connection of the servomotor to the valve is guaranteed by means of a split pin steel.

The actuators MOTORHEAD have:

- Phase voltage gray wire, valve completely open, to be used as a remote control. Its use is optional (for example: indicating opening, operating pump relay, etc.).

- An auxiliary micro-switch in opening (white and pink wires, clean contact) which is electrically closed when the valve is open.

Its use is optional (for example: indicating opening, operating pump relay, boiler control, signal to PLC, etc.).

ACTUATORS AND VALVES

ELECTRICAL CONNECTIONS:

The electrical connections must be carried out by qualified personnel and when the power supply is off, following the instructions displayed on the actuator.

The cap must never be removed, so to connect, simply plug the wire for the power supply, already prepared, with appropriate cabling systems; this must be done inside the junction box which ensures protection IP54 or higher.

On the electrical system must be installed magnetic switches, fuses and differential switches, before the actuators so as to ensure compliance with the safety conditions required by current standards.

The actuator, in the absence of electrical power supply, maintains its position.



SERVO:

The actuator MOTORHEAD is available with the following characteristics:

- Uni-Bi-230V 50 / 60Hz (on-off)

- Bidirectional 230V 50 / 60Hz (modulating)

NOTES:

- Command to 2 points with relay: a single control (thermostat) can operate multiple actuators.

- Command to 3 points: a single control (thermostat) can operate only one actuator.

- Upon request version with faster operating times

- Upon request 110V version (minimum order 20 pcs.)

Uni-Bidirezionale (on-off)

Valvole	Power supply	Torque	Time	Angle
2 - 3 vie - 3 vie by-pass	230V 50/60Hz	8Nm	45sec.	90°
2 - 3 vie - 3 vie by-pass	24V 50/60Hz	8Nm	45 sec.	90°

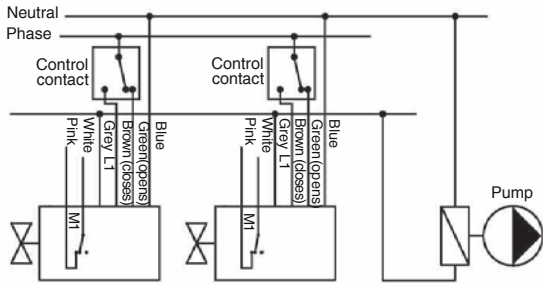
Bidirectional (modulating)

Valvole	Power supply	Torque	Time	Angle
2 - 3 vie - 3 vie by-pass	230V 50/60Hz	8Nm	35 sec.	90°
2 - 3 vie - 3 vie by-pass	24V 50/60Hz	8Nm	35 sec.	90°

Tecnical data

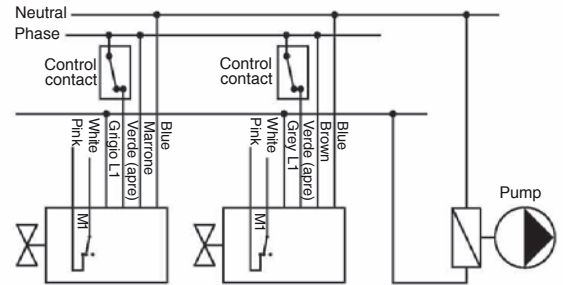
Electric motor	Uni / Bidirectional (on-off) – 2 point control with relay - 1 additional micro switch available on opening side Bidirectional (modulating) - command to 3 points - 1 additional micro switch available on opening side
Power supply	230 v; 50/60 Hz - 24 v; 50/60 Hz
Uni-Bi (on-off)	45 sec. torque : 8 Nm
Operating time (90 ° rotation)	
Bidirectional (modulating)	35 sec. torque : 8 Nm
Operating time (90 ° rotation)	
Absorbed power	3.9 VA
Degree of protection	IP 54
PElectrical capacity of the auxiliary micro	1 A resistive
Ambient temperature	-10°C + 50C°
Plastic box made of fireproof Polyamide	Polyamide PA 6, 30% glass fiber
Electrical protection	Double insulation
Maintenance required	No maintenance required
Length of the wire	80 cm

EXAMPLE OF ELECTRICAL CONNECTIONS



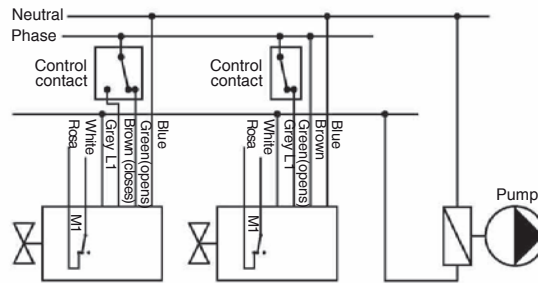
M1 EXTRA MICRO SWITCH DURING THE OPENING

Fixed impeller connection with two 3 point controls



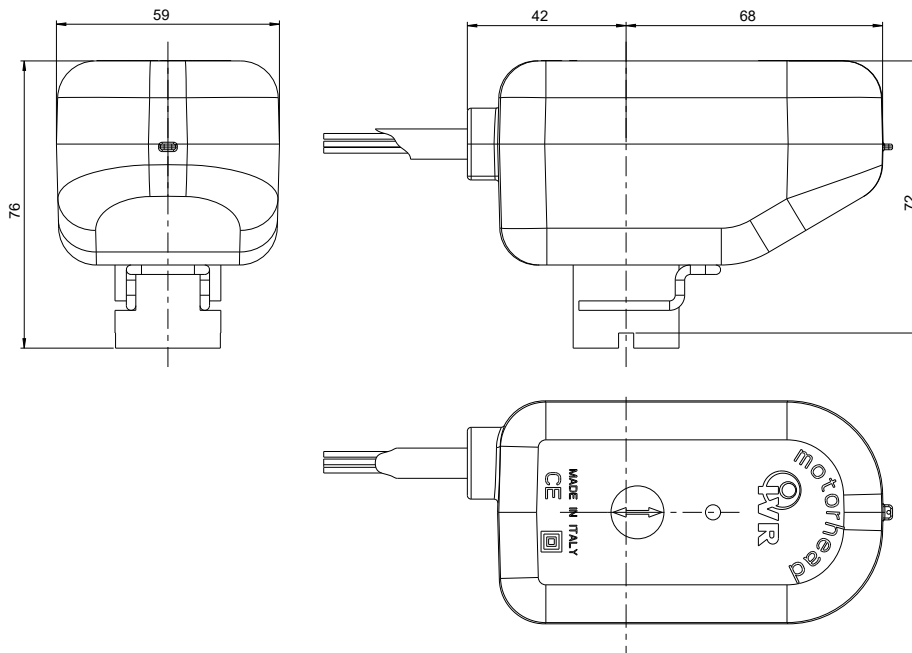
M1 EXTRA MICRO SWITCH DURING THE OPENING

Fixed impeller connection with two 2 point controls



M1 EXTRA MICRO SWITCH DURING THE OPENING

Fixed impeller connection with a 3 point control and a 2 point control

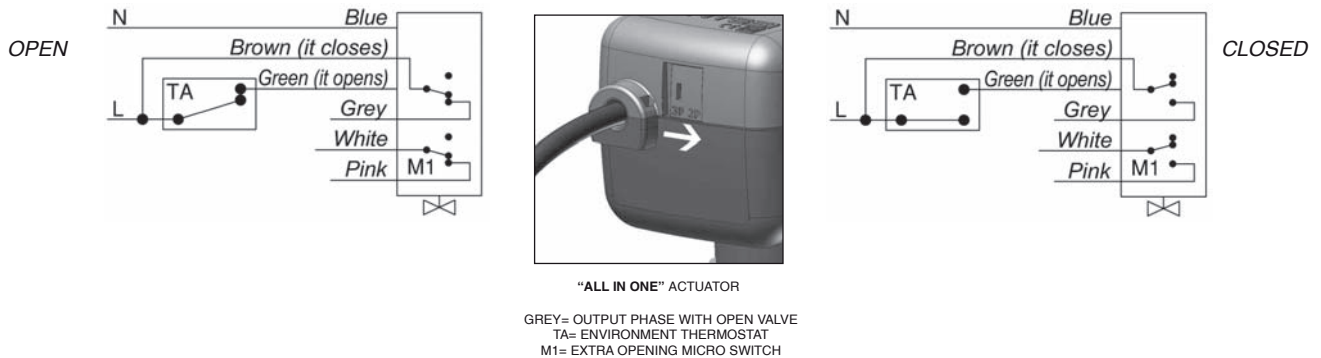


ELECTRICAL CONNECTIONS: 2-POINT CONTROL - ON / OFF (Switch)

SERVOCONTROLS Uni-Bidirectional (IVR 215 UB) and Bidirectional

- BLUE wire: neutral
- BROWN wire: closure
- GREEN wire: opening.

The power to the green wire can be supplied through a switch.
Actuators can be actuated by a single command.



The figures show the electrical diagram of the actuator 2 POINTS. The actuator is shown in the conditions of opening and closing respectively. The supply phase to the brown wire determines the closure of the valve (electric self-closing), while powering also the green wire the valve will open. The LED lights on the cover of the actuator Uni / Bi-directional signals the conditions for current opening and finish opening.

3-POINT CONTROL - the ON / OFF (switch) SERVOCONTROL Bidirectional (IVR 215 B)

- BLUE wire: neutral
- BROWN wire: closing
- GREEN wire: opening.

The power must be diverted to the brown or green wire. Each actuator must be operated by a single command.



The figures show the electrical diagram of servo-controlled 3-POINTS ON / OFF. The actuator is shown in the conditions of opening and closing respectively. The power on green wire determines the opening of the valve, instead the power on brown wire it determines the closure of the valve.