

APPLICATION

The Honeywell M7410A actuators provide floating control of specified VSOx series small linear valves.

They are suitable for use in room applications including radiators, fan-coil units, and induction units, but also for zone applications and small re-heaters. They are employed in electronic temperature control systems with hot and/or cold water as the controlled medium.

They are suitable for Honeywell Excel Series controllers as well as for Honeywell individual room temperature controllers. These controllers track the precise valve position by counting the number of individual control pulses which move the valve from one position to another. For this reason, the actuators do not need end switches or a feedback potentiometer. The absence of these mechanical components ensures long-term reliability.

The M7410A actuators are also compatible with any controller providing intelligent position control and having a built-in shut-off function.

The M7410A actuators are well-suited for applications in which space is limited and minimum power consumption is required. They feature an attractive and rugged design.

FEATURES

- Suitable for three-position floating control without proportional feedback
- Small size allows installation where space is limited
- Low power consumption
- Reliable long-term operation because mechanical feedback potentiometers and mechanical end switches are not required
- Magnetic coupling for stem force limitation and self-adjustment of the close-off point
- Supplied with pre-wired connection cable
- Simple, standardized M30 x 1,5 valve/actuator coupling – no tools required for mounting

SPECIFICATIONS

Control type	floating (three-point)
Input voltage	24 Vac +10%/-20%; 50/60 Hz
Power consumption	0.7 VA
Stroke	4 mm
Running time	53 sec at 50 Hz
Stem force	90 N
Protection standard	IP43 in accordance with EN 60529
Insulation class	III (according to EN 60730)
Connection cables	0.9 or 3.0 meters
Ambient operating temp.	0...60 °C
Housing type	A
Weight	0.4 kg
Suitable valves	VSOx
Manual operation	by valve protection cap, only

OPERATION

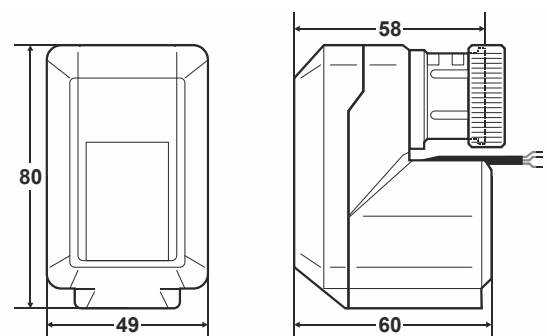


Fig. 1. Dimensions

ORDERING INFORMATION

OS no.	control type	stem force	cable length
M7410A1001	floating	90 N	0.9 m
M7410A1001-3M	floating	90 N	3.0 m

FUNCTION

The movement of the electric actuators is produced by a screw spindle which is driven in both directions by a synchronous motor through a set of gears. A magnetic clutch limits the torque of the gear assembly and the driving force of the actuators. The actuators are fixed to the valve body by means of a coupling ring requiring no tools for mounting. The actuators are maintenance-free and supplied completely with a ready-to-wire connecting cable

MOUNTING POSITION

The actuator may be mounted only beside or above the valve. Adjust the valve in the correct position before mounting the actuator.

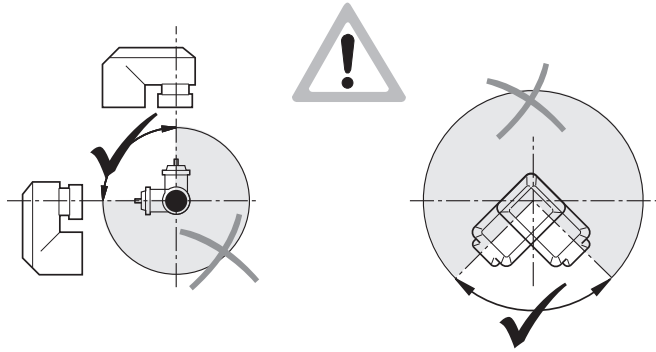


Fig. 2. Mounting positions

MOUNTING

Before the actuator is fixed to the valve, the adjustment cap must be removed (see Fig. 3). Make sure that the actuator is in the open position (factory-supplied position) before fixing the actuator to the valve body.

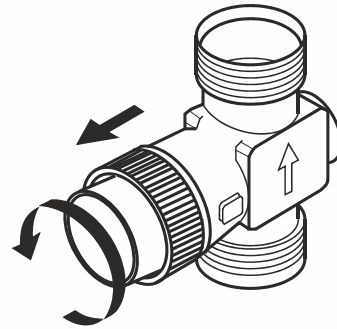


Fig. 3. Removing the protection cap

The actuator must be mounted by hand. Do not use tools or additional force insofar as this may damage the actuator and valve.

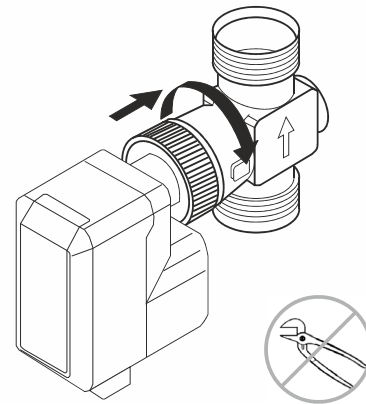


Fig. 4. Mounting the actuator

ELECTRICAL WIRING

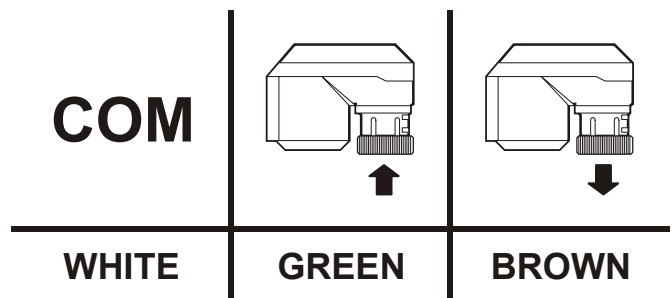


Fig. 5. Cable colors

Honeywell

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