



Gear actuators

AMI 140

Description

AMI 140 is 2 point 3 wires actuator used with AB-QM (DN 10-32) and VZ, VZL valves. The actuator can be used with fan coil units, induction units, small re-heaters, re-coolers and zone applications in which hot/cold water is the controlled medium. The actuator provides with factory default setting (actuators spindle fully stem down): normally closed function for AB-QM and normally open function for VZ and VZL.

Note: it is possible to change setting from normally closed to normally open function

Features & benefits

- 2-point 3 wires versions
- Force switch-off at stem down position prevents overload of actuator and valve
- No tools required for mounting
- Maintenance free during lifetime
- Low noise operation
- Supplied with 1.5 m cable

Ordering

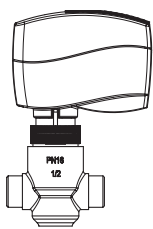
Spare parts code numbers

Type	Code No.
Cable (5m) - 24 V	082H8052
Cable (5m) - 230 V	082H8053

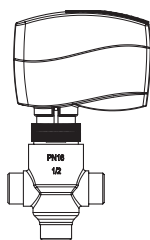
Overview

Product portfolio

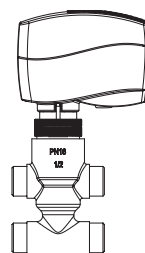
Actuator - valves combinations



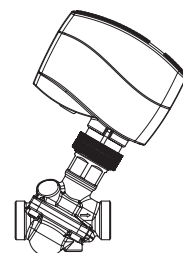
AMI 140 + VZ 2, VZL 2



AMI 140 + VZ 3, VZL 3



AMI 140 + VZ 4, VZL 4



AMI 140 + AB-QM

Functions

Operation

Commissioning

The factory setting of the spindle is the fully stem up position because of easier mechanical connection of the actuator on the valve.

Manual override (for service purposes only)

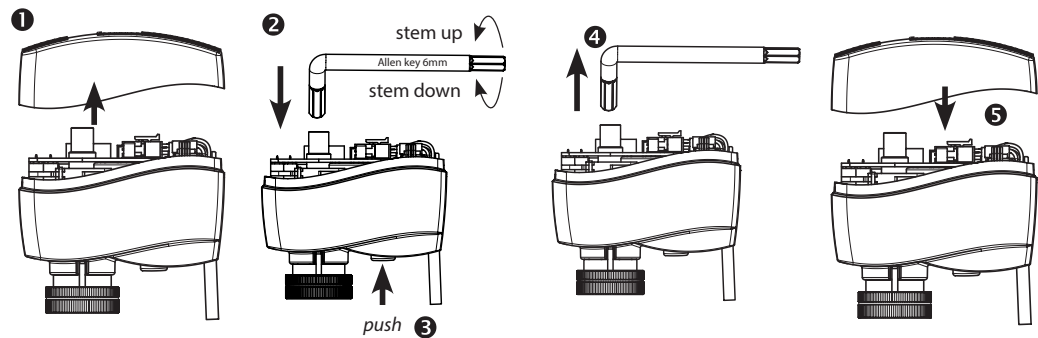


Caution: Do not manually operate the drive under power!

1. Remove the cover.
2. Insert the Allen key 6 into the spindle.
3. Press and hold the button (on the bottom side of the actuator) during manual override.
4. Pull out the tool.
5. Place cover back on the actuator.

Remark:

A "click" sound after energizing the actuator means that the gear wheel has jumped into normal position.



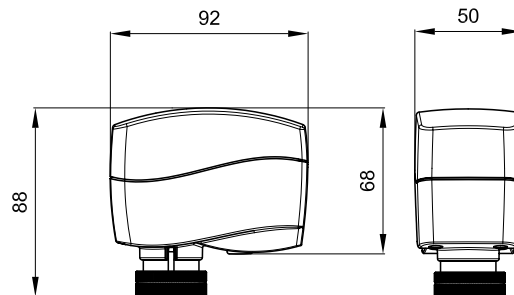
Product details

General data

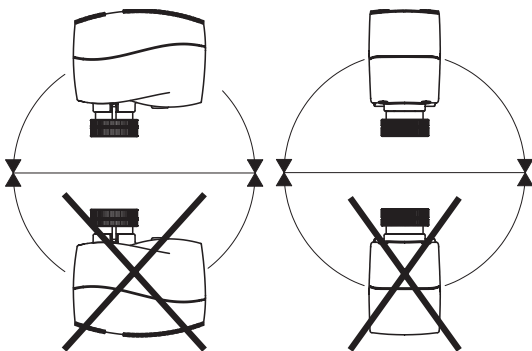
Technical data

Power supply		24 Vac, 230 Vac; +10 to -15%
Power consumption		1 VA - 24 Vac; 8 VA - 230 Vac
Frequency	Hz	50
Close of force	N	200
Stroke	mm	5,5
Speed	s/mm	12
Max. medium temperature inside the pipe	°C	130
Ambient temperature		0 ... 55
Storage and transport temperature		-40 ... +70
Protection class		II
Ambient humidity		95% r.h., non-condensing
Grade of enclosure		IP 42
Weight	kg	0,3

Dimensions



Installation



Mechanical

The actuator should be mounted with the valve stem in either horizontal position or pointing upwards.

The actuator is fixed to the valve body by means of a mounting ring which requires no tools for mounting. The ring should be tightened by hand.

Electrical

Important: It is strongly recommended that the mechanical installation is completed before the electrical installation.

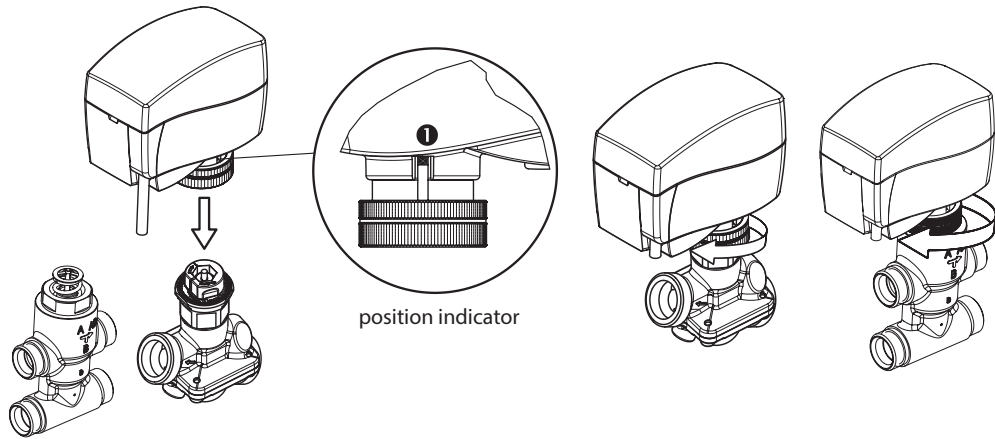
Each actuator is supplied with the connecting cable for the controller.

Installation and commissioning procedure (if required)



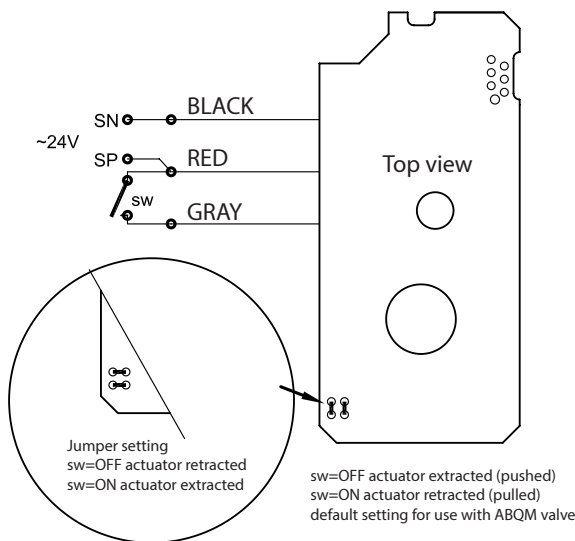
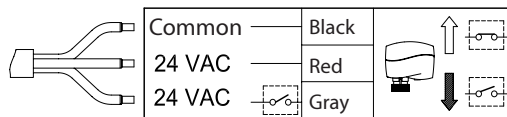
Do not touch anything on the PCB! Before removing the cover in need of hand operation with Allen key power supply must be disconnected. Lethal voltage!

- Check the valve's neck. The actuator should be in steam up position (factory setting) ①. Ensure that the actuator is mounted securely on the valve body.
- Energise the actuator according to the wiring diagram.
- The direction of stem movement can be observed on the position indicator ①.

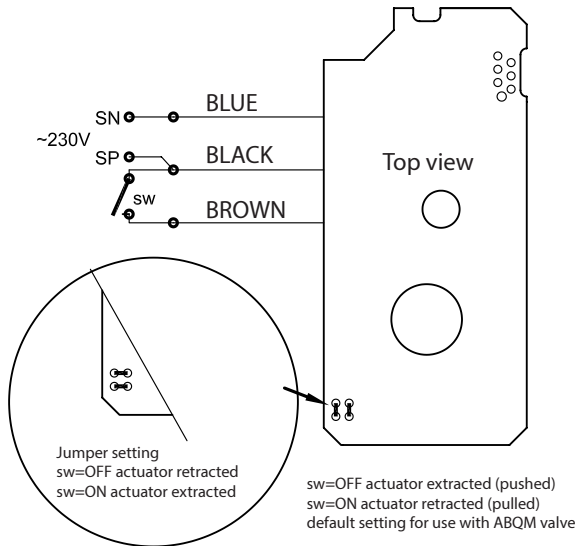
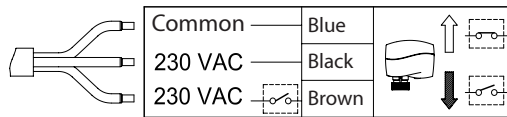


Wiring

AMI 140 - 24V



AMI 140 - 230V



Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
UA Declaration	UA Actuators 2024-06-27	Danfoss	LVD, EMC
Export Control Declaration	Gear and Thermal actuators	Danfoss	

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