

Data sheet

Actuator for three point control

AMV 10, AMV 13 (special versions for YADOS)

Description



Actuators with safety function (AMV 13) and actuators without safety function (AMV 10) are mainly used with VS, VM, VB, or AVQM valves.

Safety version is activated automatically in case of power failure or if the power supply is switched off by the safety thermostat. Actuators automatically adapt stroke to valve end positions which reduces commissioning time.

Actuators have some special features:

- The advanced design incorporates load related 'switch-off' to ensure that actuators and valves are not exposed to overload.
- Digital feedback end position indication signal for valve end position is available by terminal 4 or 5.
- Low weight and robust.
- EN 14597 certified safety function

Main data:

- Nominal voltage: 230 VAC, 50 Hz/60 Hz
- Force: 300 N
- Speed: 14 s/mm
- Max. medium temperature: 130 °C
- EN 14597 certified safety function

Ordering


Actuator

Type	Supply voltage	Speed	Code No.
AMV 10	230 VAC	14 s/mm	082H0070

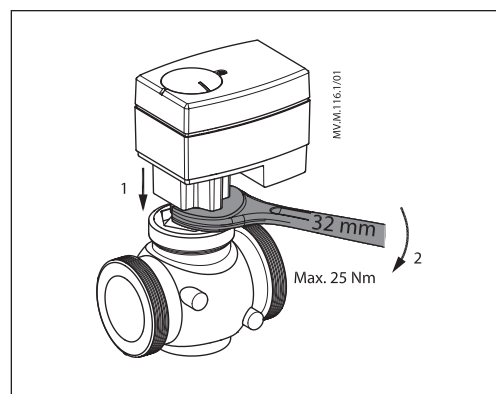
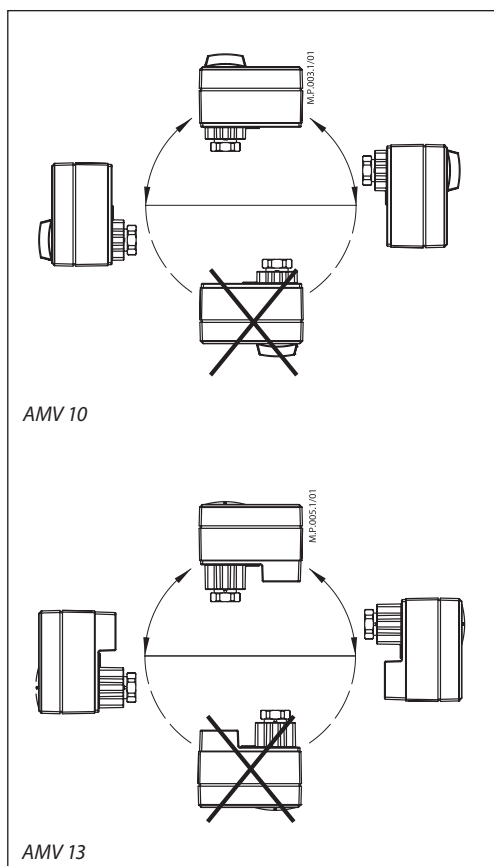
Actuator with safety function - EN 14597

Type	Supply voltage	Speed	Code No.
AMV 13	230 VAC	14 s/mm	082H0071

Technical data

Type		AMV 10	AMV 13
Power supply	VAC	230; +10 to -15%	
Power consumption	VA	2	7
Frequency	Hz	50/60	
Control input		3-point	
Spring return function		-	x
Close of force	N	300	
Speed	s/mm	14	
Stroke	mm	7	
Safety function runtime	7 mm stroke	s	8.5
Max. medium temperature		130	
Ambient temperature	°C	0 ... 55	
Ambient humidity	RH	5-95 % no condensing	
Storage and transport temp.	°C	-40 ... 70	
Protection Class		II	
Grade of enclosure		IP 54	
Weight	kg	0.6	0.8
 - marking in accordance with standard		Low Voltage Directive (LVD) 2014/35/EU: EN 60730-1, EN 60730-2-14 Electromagnetic Compatibility Directive (EMC) 2014/30/EU: EN 61000-6-2, EN 61000-6-3	

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 nut which requires 32 mm screw key. The nut should be tightened with a torque of max. 25 Nm.

Electrical

Electrical connections can be accessed by removing the cover.

Two M16x1.5 cable entries are provided. However, in order to maintain the enclosure IP rating an appropriate cable gland must be used.

Disposal

The actuator must be dismantled and the elements sorted into various material groups before disposal.

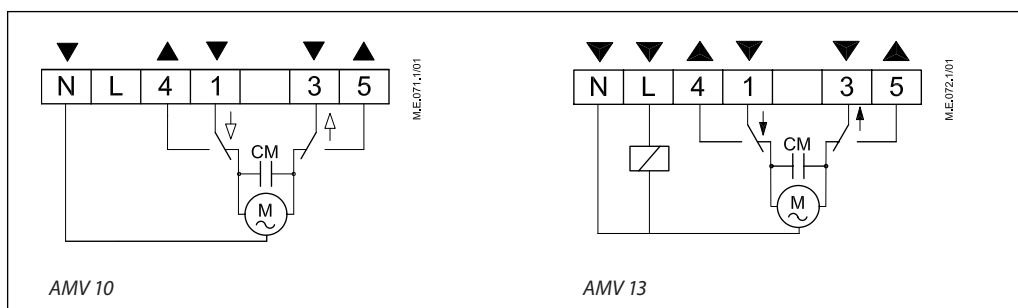
Wiring



230 VAC version:

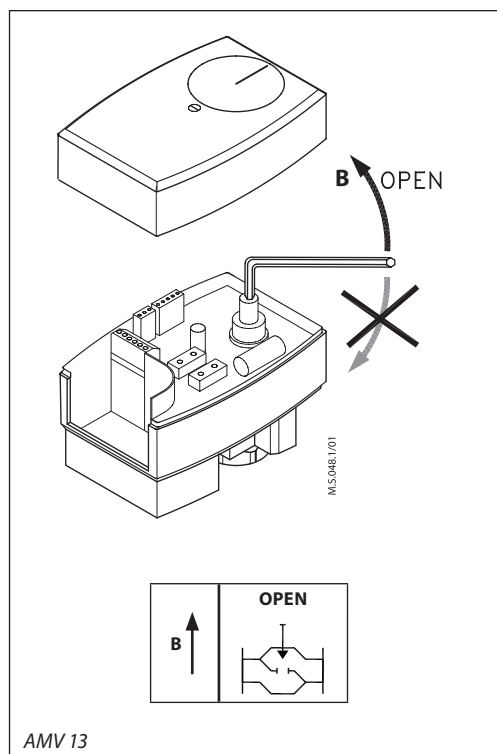
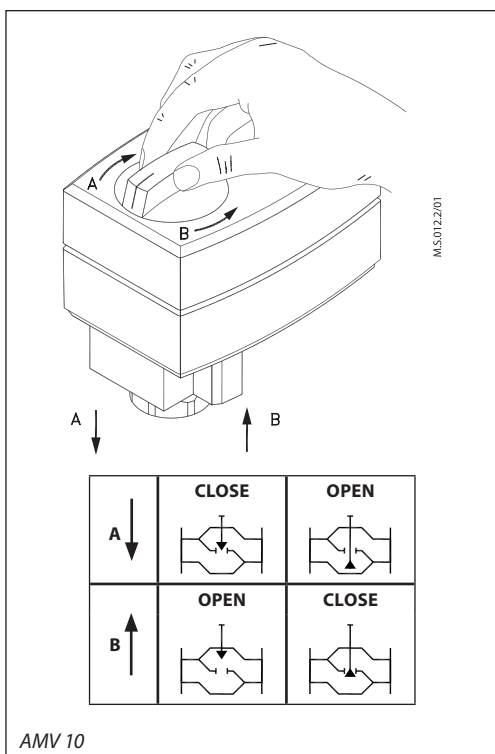
Do not touch anything on the PCB!

Do not remove the cover before the power supply is fully switched off.



N	0 V	Neutral
L	230 VAC	Power supply
1	230 VAC	Input
3		
4, 5		Output

Manual override



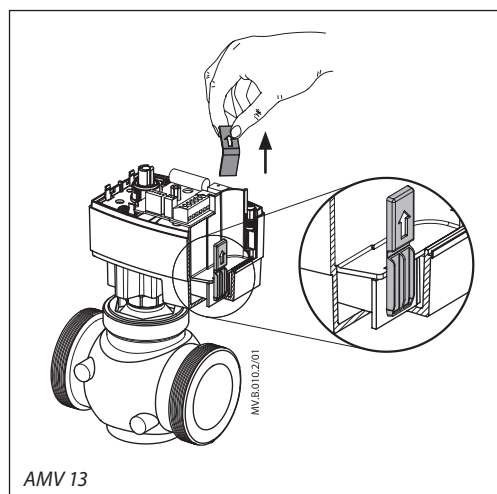
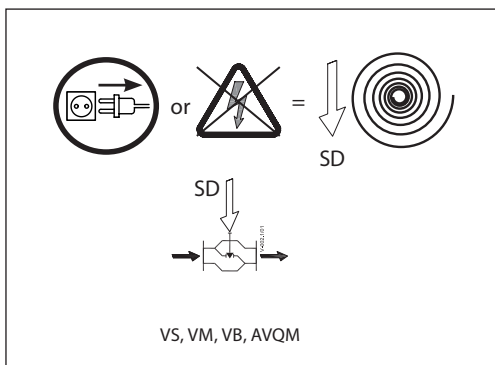
On spring versions manual override is achieved by disconnecting the power supply, removing the cover and inserting a 6 mm Allen key for AMV 13 (not supplied) into the top of the positioning spindle and turning the key against the spring. Observe the direction of rotation symbol. To hold a manual override position, the key must be wedged.

Safety function

The safety function in compliance with DIN EN 14597 will fully close by power failure:

- VS2 (DN 15-25);
- VM2 (DN 15-32);
- VB2 (DN 15-25);
- AVQM PN16 (DN 15-32)
PN25 (DN 15-25)

The safety function unit is factory fitted to the rear of the actuator.



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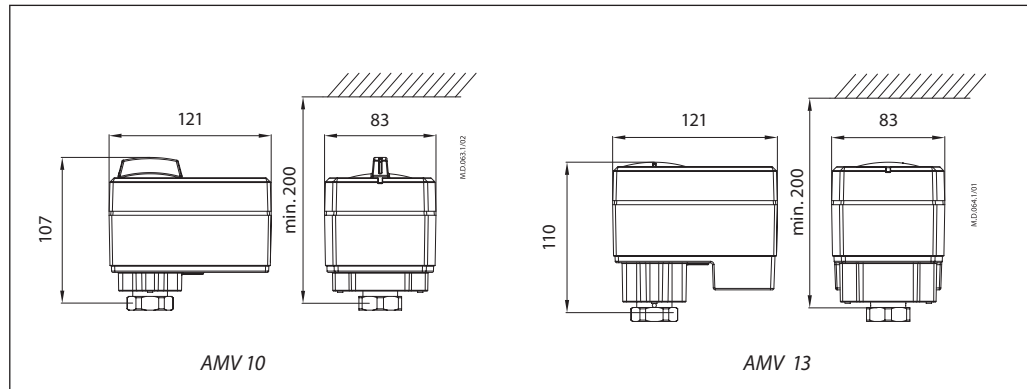
Commissioning

Complete the mechanical and electrical installation and perform the necessary checks and tests:

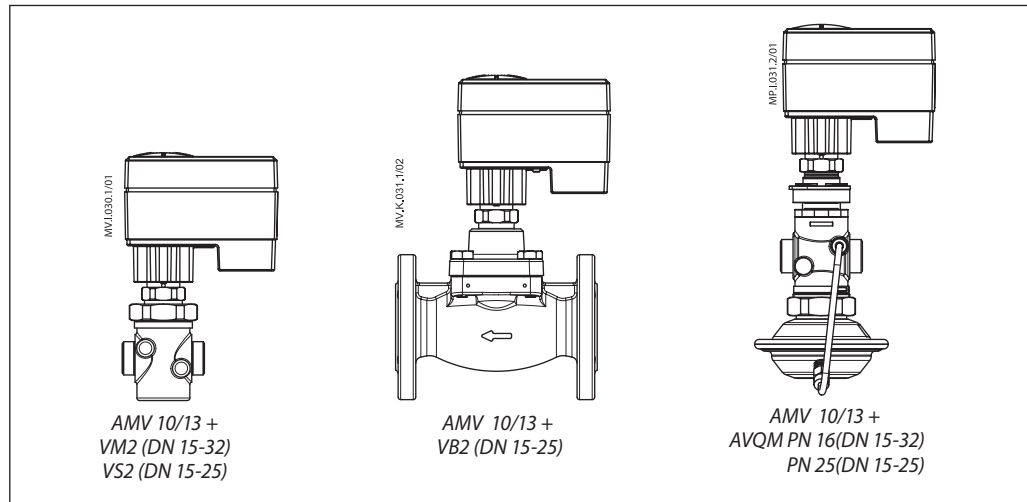
- Turn on the power.
- Set the appropriate control signal and check that the valve stem direction is correct for the application.

The unit is now fully commissioned.

Dimensions



Actuators - valves combinations



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