



Gear actuators

AMV 25 SD / AMV 25 SU

Description

AMV 25 SD or SU electric actuators are used with valves gen.2009 type VRB, VRG, VF, VL with additional adapter (Code No. 065Z0311, not supplied) and VFS 2 valves up to DN 50 diameter.

The actuator automatically adapts its stroke to valve end positions which reduces commissioning time. Optional auxiliary switches, feedback potentiometer and valve stem heater are available.

Features & benefits

- The advanced design incorporates load related 'switch-off' to ensure that actuators and valves are not exposed to overload
- Digitale feedback end position indication signal for valve end position is available by terminal 4 or 5
- Low weight and robust
- Safety function versions: SD (spring down), SU (spring up)

Ordering

Product code numbers

Product Type	Supply voltage [V]	Code number
AMV 25 SD	24 V AC	082H3036
AMV 25 SD	230 V AC	082H3037
AMV 25 SU	24 V AC	082H3039
AMV 25 SU	230 V AC	082H3040

Accessories code numbers



065Z7548

ADAPTER

ADAPTER

Related products

082H3036

082H3037

082H3039

082H3040



003G6396

SP Stem Clutch AMV(E) 25, AMV(E) 35

SP Stem Clutch AMV(E) 25, AMV(E)
35

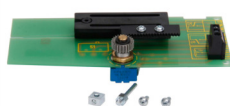
Related products

082H3036

082H3037

082H3039

082H3040



082H7016

ADD.S. 2S+POTENTIOMETER (10K)AMV25,35

ADD.S. 2S+POTENTIOMETER
(10K)AMV25,35

Related products

082H3036

082H3037

082H3039

082H3040



082H7015

Additional switch 2S AMV 25 35

Additional switch 2S AMV 25 35

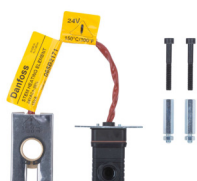
Related products

082H3036

082H3037

082H3039

082H3040



065B2171

STEM HEATER

STEM HEATER

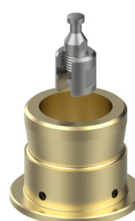
Related products

082H3036

082H3037

082H3039

082H3040



065Z0311

AdapAMx15/16/25/35- VRB/G,VF/L2009dn15-50

AdapAMx15/16/25/35-
VRB/G,VF/L2009dn15-50

Related products

082H3036

082H3037

082H3039

082H3040



082H7017

ADD.SWITCH 2S+POTENTIOMETER(1K)AMV25,35

ADD.SWITCH
2S+POTENTIOMETER(1K)AMV25,35

Related products

082H3036

082H3037

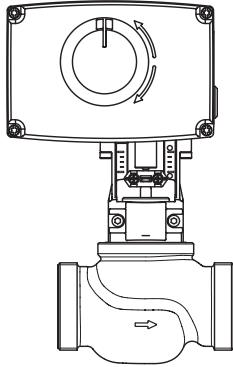
082H3039

082H3040

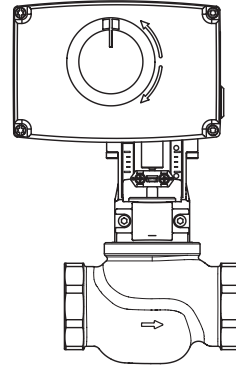
Overview

Product portfolio

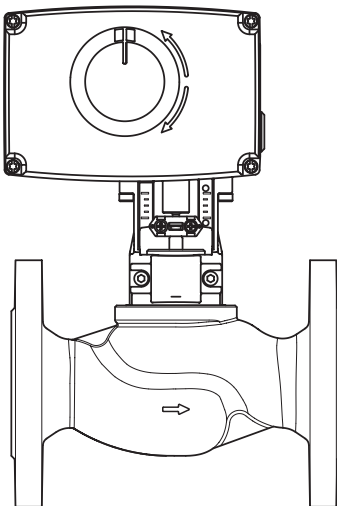
Actuator - valve combinations



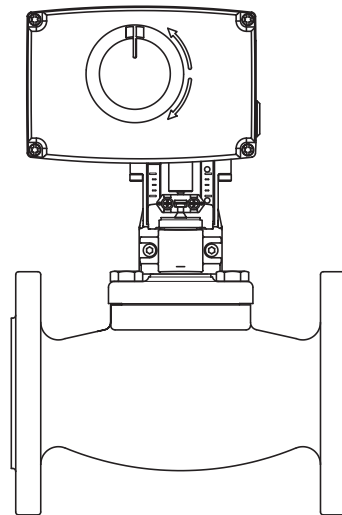
AMV 25 SD/SU +
Adapter (**065Z0311**)
VRB 2, VRB 3 ext. thread (DN 15-50)
VRG 2, VRG 3 ext. thread (DN 15-50)



AMV 25 SD/SU +
Adapter (**065Z0311**)
VRB 2, VRB 3 Int. thread
(DN 15-50)



AMV 25 SD/SU +
Adapter (**065Z0311**)
VF 2, VF 3 (DN 15-50)
VL 2, VL 3 (DN 15-50)



AMV 25 SD/SU +
VFS 2 (DN 15-50)

Functions

Operation

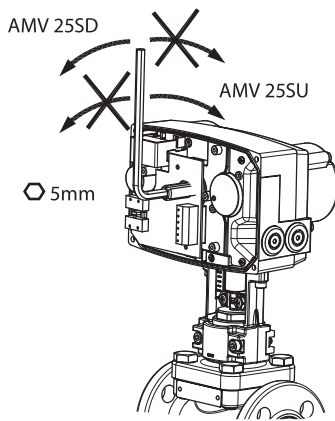
Commissioning

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.

Manual Override



Manual override is done by means of positioning spindle inside the actuator:

- Disconnect power signal
- Remove the actuator cover
- Insert 5 mm Allan key (not part of actuator delivery) into the top of the positioning spindle
- Turn the key against the spring (observe the rotation direction)

To hold a manual override position, the key must be wedged.

After manual override is not needed:

- Restore power signal.

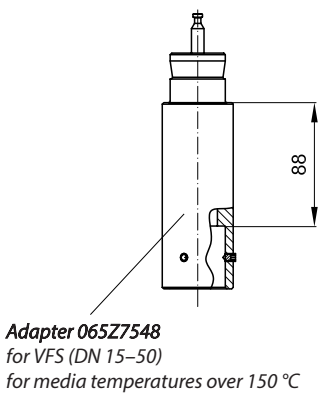
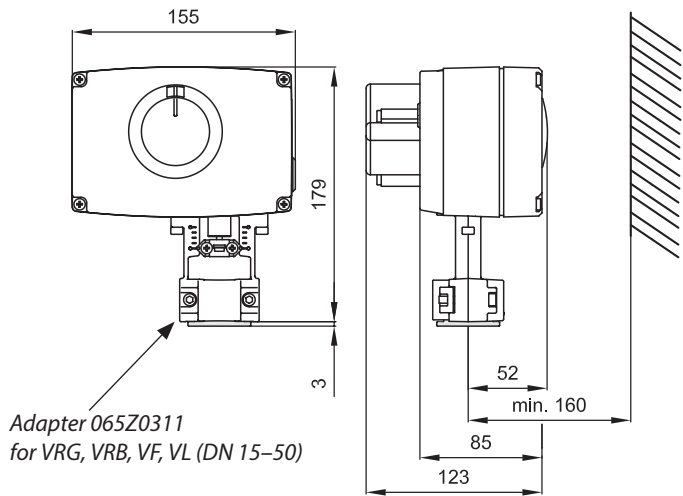


Product details

General data
Technical Data

Power supply	V	24, 230 AC
Power consumption	VA	12
Frequency	Hz	50/60
Control input		3-point
Close of force	N	450
Max. stroke	mm	15
Speed	s/mm	15
Max. medium temperature	°C	150 (200 - for VFS valve with adapter)
Ambient temperature		0...55
Storage and transport temp.		-40...70
Protection code		IP 54
Weight	kg	2,3

Dimensions



Warnings

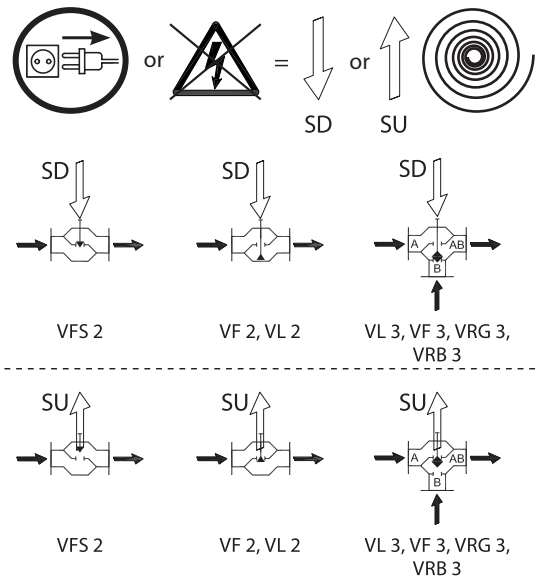
Safety function

The safety function will fully open or close the valve by power failure, depending upon the chosen safety action (SD/SU). Valve selection will also affect the safety action. The safety function unit is factory fitted to the rear of the actuator.

• *not in accordance to DIN EN 14597*

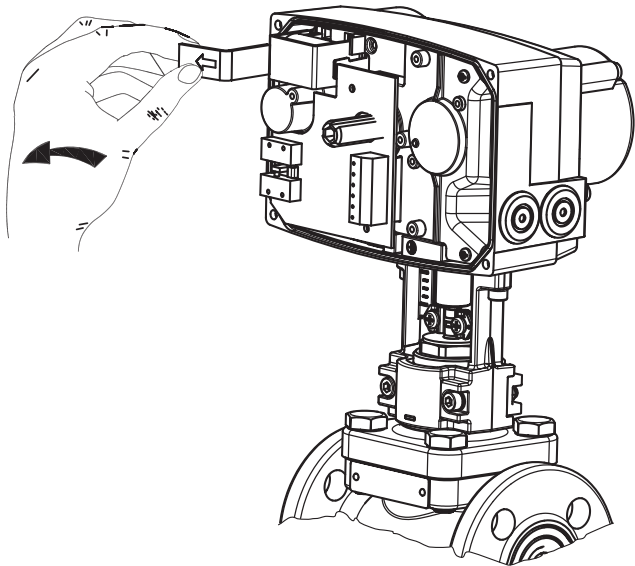
Valve type	Spring action selection will	
	Close port A-AB	Open port A-AB
VRG, VRB	SU	SD
VL (DN 15-50)	SU	SD
VF (DN 15-50)	SU	SD
VFS 2 (DN 15-50)	SD	SU

Note: Do not use safety activations for ON/OFF regulation.



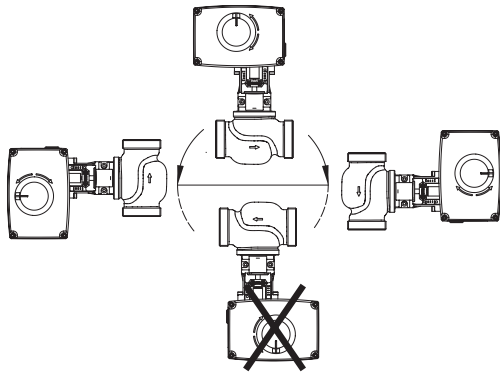
Safety function activation

(AMV 25 SD only)

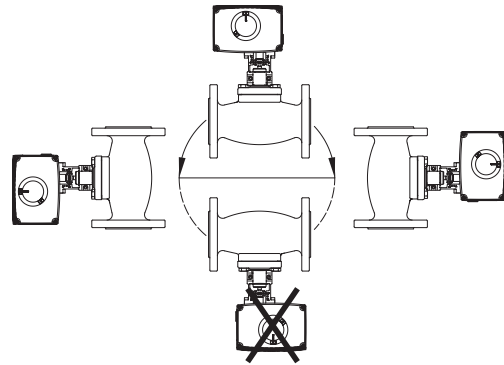


Installation

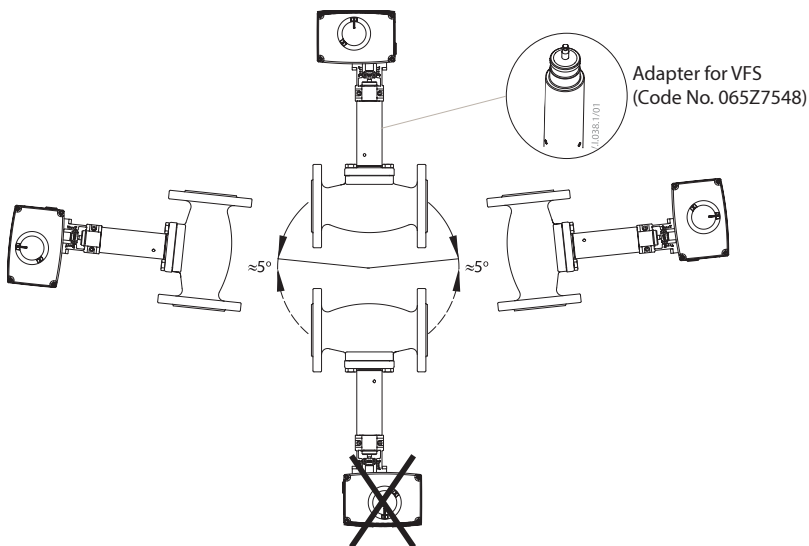
$T_{\max} \leq 150^{\circ}\text{C}$ for AMV 25 SD / SU and VRB, VRG, VF and VL



$T_{\max} \leq 150^{\circ}\text{C}$ for AMV 25 SD / SU and VFS



$T_{\max} = 200^{\circ}\text{C}$ for AMV 25 SD / SU and VFS



Mechanical

Use 4 mm Allan key (not part of actuator delivery) to mount actuator on the valve. Installation of the valve with the actuator is allowed in horizontal position or upwards. Installation downwards is not allowed.

The actuator must not be installed in an explosive atmosphere, at ambient temperature lower than 0°C or at ambient temperature higher than 55°C . It must not be subject to steam jets, water jets or dripping liquid as well.

Note: the actuator may be rotated up to 360° with respect to the valve stem by loosening the retaining fixture. Once the actuator is placed, retighten the fixture.

Electrical

Electrical connections can be accessed by removing the actuator cover. Two cable gland entries with thread (M20 x 1.5 and M16 x 1.5) are prepared for cable glands.

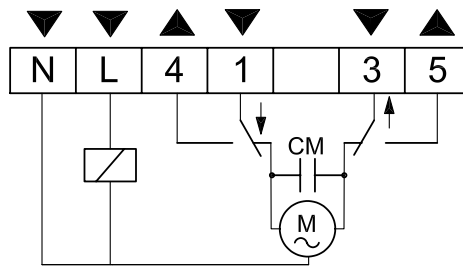
Note: Cable and cable gland used must not compromise the actuator's IP rating, and must ensure the connectors are fully strain relieved. Please observe local rules and regulations as well.

Wiring



230 VAC version:

Do not touch anything on the PCB!
Do not remove the cover before the power supply is fully switched off.



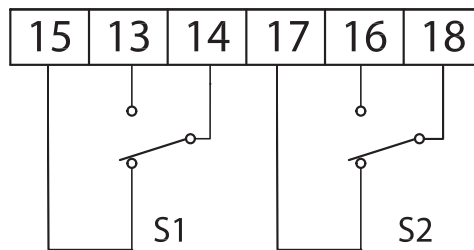
Terminals 1, 3: Control voltage input from the controller.

Terminals 4, 5: Output used for position indication or monitoring.

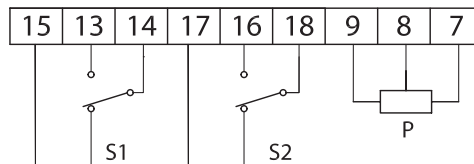
L - Power supply 24 or 230 V~

N - Common (0 V)

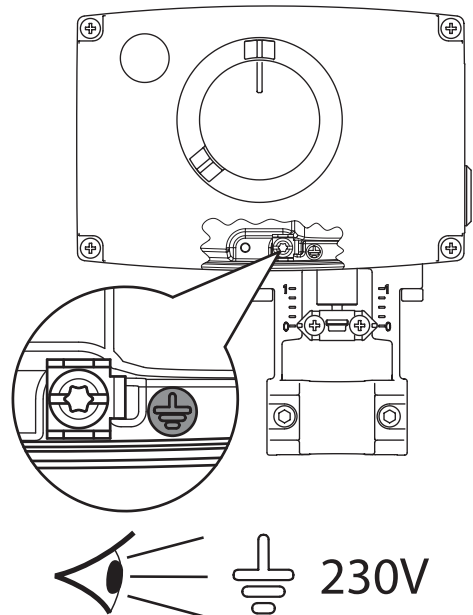
Accessories



Additional switches (2x)



Additional switches (2x) and potentiometer



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
Export Control Declaration	Gear and Thermal actuators	Danfoss	

Contact details

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