

Globe valve actuator for 2-way and 3-way globe valves

- Actuating force 1500 N
- Nominal voltage AC 100...240 V
- Control Open/close, 3-point
- Stroke 50 mm



and CAN/CSA E60730-1 The UL marking on the actuator depends on			
Nominal voltage frequency Nominal voltage range AC 85265 V Power consumption in operation 3.5 W Power consumption in rest position Power consumption for wire sizing 6.5 VA Connection supply / control Terminals 4 mm² (cable ø410 mm) Parallel operation Yes (note the performance data) Functional data Actuating force motor Manual override with push-button, can be locked Stroke So mm Running time motor Sound power level, motor Sound power l	Technical data		
Nominal voltage range AC 85265 V Power consumption in operation 3.5 W Power consumption for wire stoposition 1 W Power consumption for wire sizing 6.5 VA Connection supply / control Terminals 4 mm² (cable ø410 mm) Parallel operation Yes (note the performance data) Functional data Actuating force motor 1500 N Manual override with push-button, can be locked Stroke 50 mm Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position indication Mechanical, 550 mm stroke Safety data Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 AU Approval CLU according to UL60730-2-14 UL Approval CLU according to UL60730-2-14 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient humidity Max. 95% RH, non-condensing Ambient themperature - 4080°C [-40176°F]	Electrical data	Nominal voltage	AC 100240 V
Power consumption in operation 3.5 W Power consumption in rest position 1 W Power consumption for wire sizing 6.5 VA Connection supply / control Terminals 4 mm² (cable e410 mm) Parallel operation Yes (note the performance data) Functional data Actuating force motor 1500 N Manual override with push-button, can be locked Stroke 50 mm Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position indication Mechanical, 550 mm stroke Safety data Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval Clus according to UL60730-2-14 UL Approval Clus according to UL60730-1-1, UL60730-2-14 and CANYCSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient humidity Amax. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature 4080°C [-40176°F]		Nominal voltage frequency	50/60 Hz
Power consumption in rest position 1 W Power consumption for wire sizing 6.5 VA Connection supply / control Terminals 4 mm² (cable ø410 mm) Parallel operation Yes (note the performance data) Functional data Actuating force motor 1500 N Manual override with push-button, can be locked Stroke 50 mm Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position inclined Mechanical, 550 mm stroke Safety data Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Cow voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL60730-14, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient temperature 050°C (32122°F] Storage temperature -4080°C [40176°F]		Nominal voltage range	AC 85265 V
Power consumption for wire sizing Connection supply / control Parallel operation Functional data Actuating force motor Manual override Stroke Somm Running time motor Sound power level, motor Sound power level, motor Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Degree of protection NEMA/UL NEMA 2 Enclosure EMC Enclosure EMC Cet according to 2014/30/EU Certification IEC/EN UL Approval Type of action Rated impulse voltage supply / control Rated impulse voltage supply / control Ambient temperature Ambient temperature Ves (note the performance (able parallel paral		Power consumption in operation	3.5 W
Connection supply / control Terminals 4 mm² (cable ø410 mm) Parallel operation Yes (note the performance data) Functional data Actuating force motor 1500 N Manual override with push-button, can be locked Stroke 50 mm Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position indication Mechanical, 550 mm stroke Safety data Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL60730-14, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Power consumption in rest position	1 W
Parallel operation Yes (note the performance data) Functional data Actuating force motor 1500 N Manual override with push-button, can be locked Stroke 50 mm Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position indication Mechanical, 550 mm stroke Safety data Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/30/EU Low voltage directive CE according to 2014/30/EU LOW voltage directive CE according to 10.60730-2-14 UL Approval CLUsa according to 10.60730-14, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Power consumption for wire sizing	6.5 VA
Functional data Actuating force motor Manual override Stroke Stroke So mm Running time motor Sound power level, motor Position indication Frotection class IEC/EN Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure UL Enclosure UL Enclosure UL Low voltage directive Certification IEC/EN UL Approval Type of action UL Approval Type of action Type 1 Rated impulse voltage supply / control Ambient humidity Ambient temperature Actuating force motor With push-button, can be locked swith		Connection supply / control	Terminals 4 mm² (cable ø410 mm)
Manual override with push-button, can be locked Stroke 50 mm Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position indication Mechanical, 550 mm stroke Safety data Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure TUL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/30/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL 60730-1A, UL 60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [3212°F] Storage temperature -4080°C [-40176°F]		Parallel operation	Yes (note the performance data)
Stroke 50 mm Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position indication Mechanical, 550 mm stroke Safety data Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval cUlus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]	Functional data	Actuating force motor	1500 N
Running time motor 150 s / 50 mm Sound power level, motor 55 dB(A) Position indication Mechanical, 550 mm stroke Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 0730-1 and IEC/EN 60730-2-14 UL Approval CLUs according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Manual override	with push-button, can be locked
Sound power level, motor Position indication Mechanical, 550 mm stroke Frotection class IEC/EN Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure UL Enclosure Type 2 EMC Low voltage directive Cet according to 2014/30/EU Certification IEC/EN UL Approval UL Approval UL Approval CULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control Ambient humidity Ambient temperature Storage temperature 55 dB(A) Mechanical, 550 mm stroke II, reinforced insulation Mechanical, 550 mm stroke III, reinforced insulation Nemas 2 supply Leas 2 Supply Class 2 Supply Leas 2 Supply Leas 2 Supply Degree of protection IEC/EN III, reinforced insulation NEMA 2 Endos 2 Supply Leas 2		Stroke	50 mm
Position indication Mechanical, 550 mm stroke Protection class IEC/EN II, reinforced insulation Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval cULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Running time motor	150 s / 50 mm
Protection class IEC/EN Power source UL Class 2 Supply Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure EMC Low voltage directive Certification IEC/EN UL Approval UL Approval Type of action Rated impulse voltage supply / control Rated impulse voltage supply / control Pollution degree Ambient humidity Ambient temperature Storage temperature IEC/EN Class 2 Supply Class 2 Supply IED, Approval IP54 Degree of protection IEC/EN IED, Approva IED, Bora, Approva IED, Bora, Approva IEC/EN 60730-1 and IEC/EN 60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type 1 Rated impulse voltage supply / control AkV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient condensing Ambient temperature -4080°C [-40176°F]		Sound power level, motor	55 dB(A)
Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Position indication	Mechanical, 550 mm stroke
Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]	Safety data	Protection class IEC/EN	II, reinforced insulation
Degree of protection NEMA/UL Enclosure UL Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 CULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Power source UL	Class 2 Supply
Enclosure Enclosure Type 2 EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Degree of protection IEC/EN	IP54
EMC CE according to 2014/30/EU Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Degree of protection NEMA/UL	NEMA 2
Low voltage directive CE according to 2014/35/EU Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 UL Approval CULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control Pollution degree 3 Ambient humidity Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Enclosure	UL Enclosure Type 2
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and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case Type of action Type 1 Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
Rated impulse voltage supply / control 4 kV Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		UL Approval	The UL marking on the actuator depends on the production site, the device is UL-compliant
Pollution degree 3 Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Type of action	Type 1
Ambient humidity Max. 95% RH, non-condensing Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Rated impulse voltage supply / control	4 kV
Ambient temperature 050°C [32122°F] Storage temperature -4080°C [-40176°F]		Pollution degree	3
Storage temperature -4080°C [-40176°F]		Ambient humidity	Max. 95% RH, non-condensing
		Ambient temperature	050°C [32122°F]
Servicing maintenance-free		Storage temperature	-4080°C [-40176°F]
		Servicing	maintenance-free

5.5 kg

Weight Weight



Safety notes



- This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation or aggressive gases interfere directly with the device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The switch for changing the direction of motion and so the closing point may be adjusted
 only by authorised specialists. The direction of motion is critical, particularly in connection
 with frost protection circuits.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Mounting on third-party valves

The RetroFIT+ actuators for installation on a wide range of valves from various manufacturers are comprised of an actuator, universal valve neck adapter and universal valve stem adapter. Adapt the valve neck and valve stem to begin with, then attach the RetroFIT+ actuator to the valve neck adapter, connect to the valve and start up. The valve neck adapter/actuator can be rotated by 360° on the valve neck, provided the size of the installed valve permits.

Mounting on Belimo valves

Use standard actuators from Belimo for mounting on Belimo globe valves.

Manual override

Manual override with push-button possible (the gear train is disengaged for as long as the button is pressed or remains locked).

The stroke can be adjusted by using a hexagon socket screw key (5 mm), which is inserted into the top of the actuator. The stem extends when the key is rotated clockwise.

High functional reliability

The actuator is overload protected, requires no limit switches and automatically stops when

the end stop is reached.

Home position

Factory setting: Actuator stem is retracted.

Setting direction of motion

When actuated, the stroke direction switch changes the running direction in normal

operation.

Restriction 3-point controller

It must be ensured that the pulsating 3-point controller stops when the end position is reached. If this is not possible on the system side, the multifunctional 24 V version of the

actuator (..V24A-MP-..) must be used.

Accessories

Electrical accessories	Description	Туре	
	Auxiliary switch 2x SPDT add-on	S2A-H	
Mechanical accessories Description		Type	
	Spacer ring for Sauter, stroke 50 mm	ZRV-301	
	Spacer ring for Siebe, stroke 50 mm	ZRV-302	
	Spacer ring for Johnson Control, stroke 50 mm	ZRV-303	
	Washer Sauter for Sauter, stroke 50 mm	ZRV-304	



Electrical installation

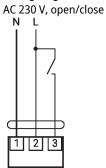


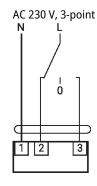
Caution: Power supply voltage!

Parallel connection of other actuators possible. Observe the performance data.

Direction of stroke switch factory setting: Actuator stem retracted (\blacktriangle).

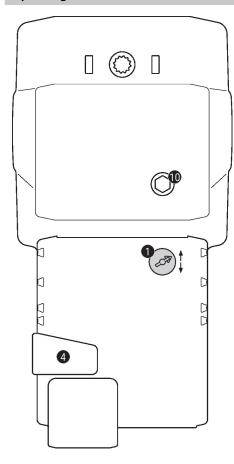
Wiring diagrams





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Operating controls and indicators



Direction of stroke switch

Switch over: Direction of stroke changes

4 Manual override button

Press button: Gear train disengages, motor stops, manual override possible

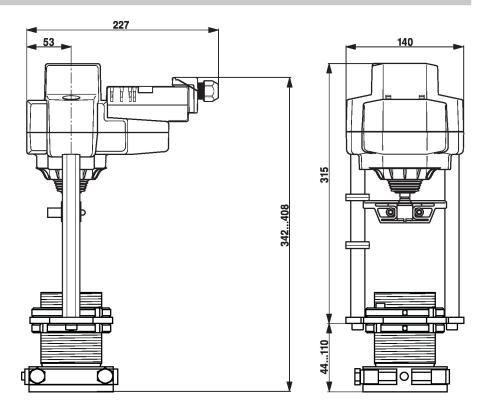
Release button: Gear train engages, standard mode

10 Manual override

Clockwise: Actuator stem extends
Counterclockwise: Actuator stem retracts



Dimensions



Further documentation

• Installation instructions for actuators