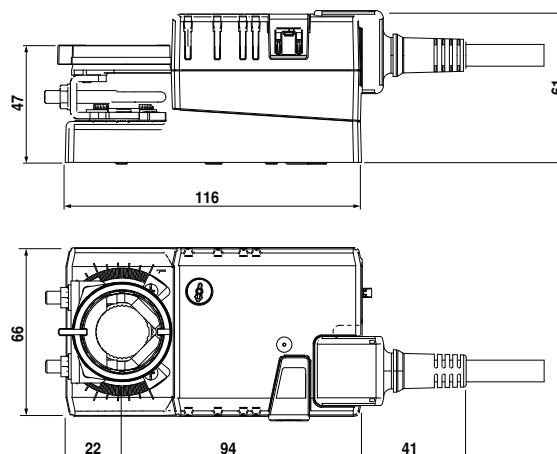


Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point


Technical data

Electrical data	Nominal voltage	AC 24V, 50/60Hz DC 24V
	Nominal voltage range	AC/DC 19.2...28.8V
	Power consumption	In operation 1W @ nominal torque At rest 0.2W For wire sizing 1.5VA
	Connection	Cable 1m, 3 x 0.75mm ²
Functional data	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ or 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	Max. 95°↔, limited on both sides by means of adjustable, mechanical end stops
	Running time	150s
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable
Safety	Protection class	III Safety extra-low voltage
	Degree of protection	IP54 in any mounting position
	EMC	CE according to 2004/108/EC
	Mode of operation	Type 1 (to EN 60730-1)
	Ambient temperature range	-30...+50°C
	Non-operating temperature	-40...+80°C
	Ambient humidity range	95% r.H., non-condensating (EN 60730-1)
	Maintenance	Maintenance-free
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 0.48kg

Dimensions [mm]
Dimensional drawings


Damper spindle	Length	
	min. 37	6...20

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point
- Damper rotation: Form-fit 8mm

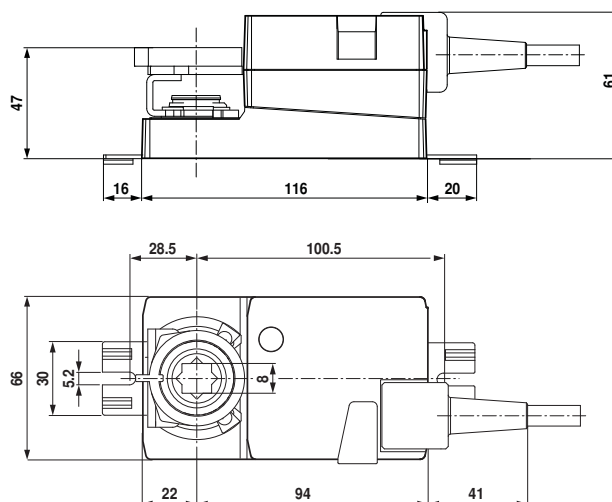


Technical data

Electrical data	Nominal voltage	AC 24V, 50/60Hz / DC 24V
	Nominal voltage range	AC 19.2...28.8V / DC 21.6...28.8V
	Power consumption	In operation 1W @ nominal torque At rest 0.2W For wire sizing 1.5VA
	Connection	Cable 1m, 3 x 0.75mm ²
Functional data	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ resp. 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, can be locked
	Angle of rotation	Max. 95°↔, can be limited at both ends with adjustable mechanical end stops
	Running time	150s / 90°↔
	Sound power level	Max. 35dB(A)
	Damper rotation	Form-fit 8mm
	Position indication	Mechanical, pluggable
Safety	Protection class	III Safety extra-low voltage / UL Class 2 Supply
	Degree of protection	IP54 in any mounting position NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/EC
	Certification	cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Rated impulse voltage	0.8kV
	Control pollution degree	3 (to EN 60730-1)
	Ambient temperature range	-30...+50°C
	Non-operating temperature	-40...+80°C
	Ambient humidity range	95% r.H., non-condensating
	Maintenance	Maintenance-free
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 0.47kg

Dimensions [mm]

Dimensional drawings



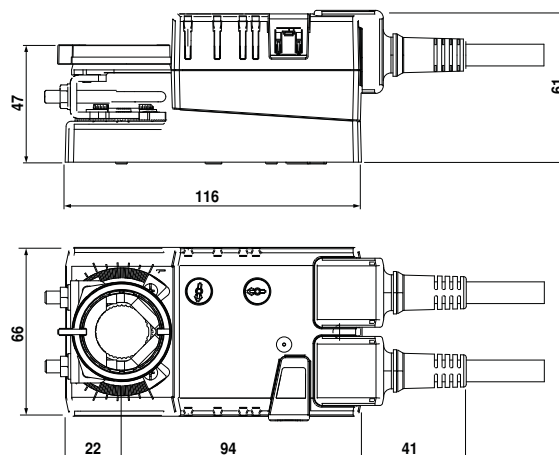
Damper spindle	Length	□ I
	≥20	8

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point
- Integrated auxiliary switch


Technical data

Electrical data	Nominal voltage	AC 24V, 50/60Hz DC 24V
	Nominal voltage range	AC/DC 19.2...28.8V
	Power consumption	In operation 1W @ nominal torque At rest 0.2W For wire sizing 1.5VA
	Auxiliary switch	1 x SPDT, 1mA...3 (0.5) A, AC 250V <input type="checkbox"/> (0...100% adjustable)
	Connection	Motor Cable 1m, 3 x 0.75mm ² Auxiliary switch Cable 1m, 3 x 0.75mm ²
	Functional data	Torque (nominal torque)
Direction of rotation		Reversible with switch 0 ↺ or 1 ↻
Manual override		Gearing latch disengaged with pushbutton, self-resetting
Angle of rotation		Max. 95°↔, limited on both sides by means of adjustable, mechanical end stops
Running time		150s
Sound power level		Max. 35dB(A)
Safety	Position indication	Mechanical, pluggable
	Protection class	III Safety extra-low voltage
	Degree of protection	IP54 in any mounting position
	EMC	CE according to 2004/108/EC
	Mode of operation	Type 1 (to EN 60730-1)
	Ambient temperature range	-30...+50°C
	Non-operating temperature	-40...+80°C
	Ambient humidity range	95% r.H., non-condensating (EN 60730-1)
	Maintenance	Maintenance-free
	Dimensions / Weight	Dimensions
Weight		Approx. 0.58kg

Dimensions [mm]
Dimensional drawings


Damper spindle	Length	
	min. 37	6...20

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: modulating DC (0)2...10V, position feedback DC 2...10V

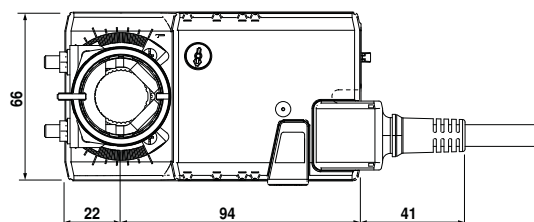
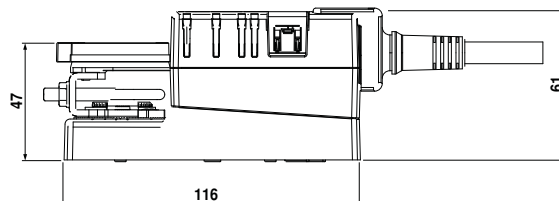


Technical data

Electrical data	Nominal voltage	AC 24V, 50/60Hz DC 24V
	Nominal voltage range	AC/DC 19.2...28.8V
	Power consumption	In operation 1W @ nominal torque At rest 0.4W For wire sizing 2VA
	Connection	Cable 1m, 4 x 0.75mm ²
	Functional data	Torque (nominal torque)
	Control	Control signal Y DC (0)2...10V, typical input impedance 100kΩ Working range DC 2...10V
	Position feedback (Measuring voltage)	DC 2...10V, max. 1mA
	Position accuracy	±5%
	Direction of rotation	Reversible with switch 0 / 1
	Direction of rotation at Y = 0V	at switch position 0 ↻ resp. 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	Max. 95°↔, limited on both sides by means of adjustable, mechanical end stops
	Running time	150s
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable
Safety	Protection class	III Safety extra-low voltage
	Degree of protection	IP54 in any mounting position
	EMC	CE according to 2004/108/EC
	Mode of operation	Type 1 (to EN 60730-1)
	Ambient temperature range	-30...+50°C
	Non-operating temperature	-40...+80°C
	Ambient humidity range	95% r.H., non-condensating (EN 60730-1)
	Maintenance	Maintenance-free
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 0.51kg

Dimensions [mm]

Dimensional drawings



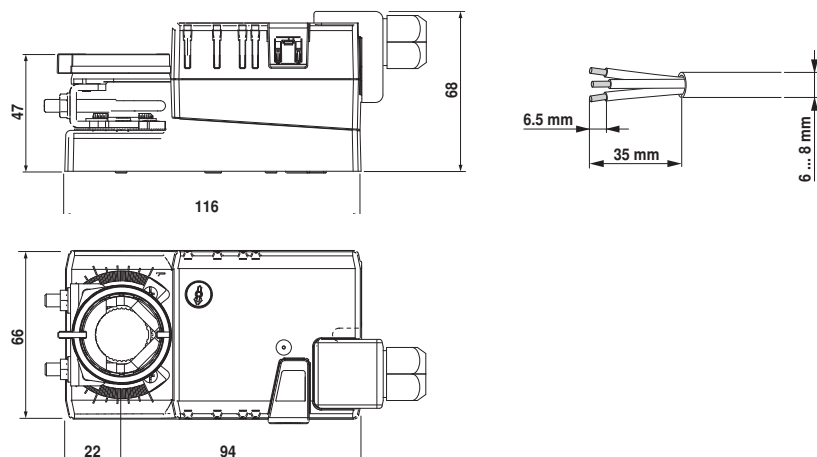
Damper spindle	Length	
	min. 37	6...20

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point


Technical data

Electrical data	Nominal voltage	AC 24V, 50/60Hz DC 24V
	Nominal voltage range	AC/DC 19.2...28.8V
	Power consumption	In operation 1W @ nominal torque At rest 0.2W For wire sizing 1.5VA
	Connection	Terminals 4mm ² (Cable Ø 6...8mm, three-core)
Functional data	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ or 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, detentable
	Angle of rotation	Max. 95°↔, limited on both sides by means of adjustable, mechanical end stops
	Running time	150s / 90°↔
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable
	Safety	Protection class
Degree of protection		IP54 in any mounting position
EMC		CE according to 2004/108/EC
Mode of operation		Type 1 (to EN 60730-1)
Rated impulse voltage		0.8kV (to EN 60730-1)
Control Pollution Degree		3 (to EN 60730-1)
Ambient temperature range		-30...+50°C
Non-operating temperature		-40...+80°C
Ambient humidity range		95% r.H., non-condensating (to EN 60730-1)
Maintenance		Maintenance-free
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 0.46kg

Dimensions [mm]
Dimensional drawings


Damper spindle	Length	● I	■ I	◆ I
	>37	6...20	>6	<20

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point

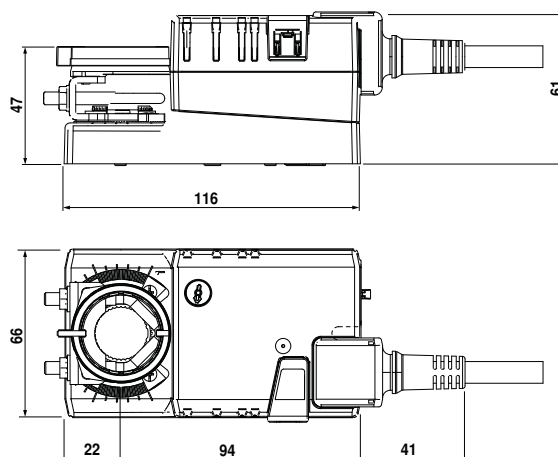


Technical data

Electrical data	Nominal voltage	AC 100...240V, 50/60Hz
	Nominal voltage range	AC 85...265V
	Power consumption	In operation 1.5W @ nominal torque At rest 0.4W For wire sizing 3.5VA
	Connection	Cable 1m, 3 x 0.75mm ²
Functional data	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ or 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	Max. 95°↔, limited on both sides by means of adjustable, mechanical end stops
	Running time	150s
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable
	Safety	Protection class
Degree of protection		IP54 in any mounting position
EMC		CE according to 2004/108/EC
Low voltage directive		CE according to 2006/95/EC
Mode of operation		Type 1 (to EN 60730-1)
Ambient temperature range		-30...+50°C
Non-operating temperature		-40...+80°C
Ambient humidity range		95% r.H., non-condensating (EN 60730-1)
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 0.5kg

Dimensions [mm]

Dimensional drawings



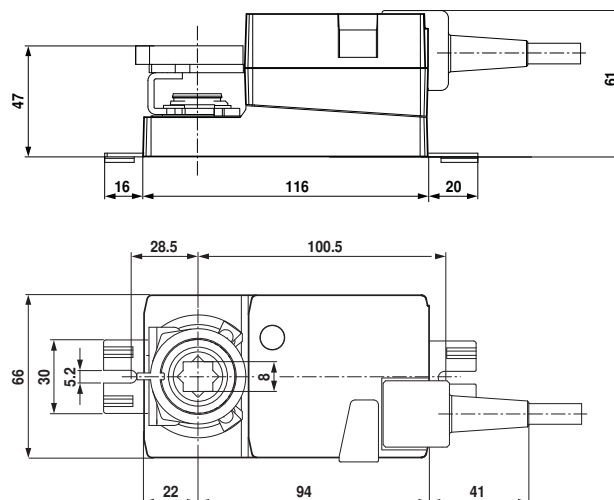
Damper spindle	Length	
	min. 37	6...20

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point
- Damper rotation: Form-fit 8mm


Technical data

Electrical data	Nominal voltage	AC 100...240V, 50/60Hz
	Nominal voltage range	AC 85...265V
	Power consumption	In operation 1.5W @ nominal torque At rest 0.4W For wire sizing 3.5VA
	Connection	Cable 1m, 3 x 0.75mm ²
Functional data	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ resp. 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, can be locked
	Angle of rotation	Max. 95°↔, can be limited at both ends with adjustable mechanical end stops
	Running time	150s / 90°↔
	Sound power level	Max. 35dB(A)
	Damper rotation	Form-fit 8mm
	Position indication	Mechanical, pluggable
Safety	Protection class	II Totally insulated <input type="checkbox"/>
	Degree of protection	IP54 in any mounting position NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108 EC
	Low voltage directive	CE according to 2006/95/EC
	Certification	cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Rated impulse voltage	2.5kV
	Control pollution degree	3 (to EN 60730-1)
	Ambient temperature range	-30...+50°C
	Non-operating temperature	-40...+80°C
Ambient humidity range	95% r.H., non-condensating	
Maintenance	Maintenance-free	
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 0.48kg

Dimensions [mm]
Dimensional drawings


Damper spindle	Length	<input type="checkbox"/> I
	≥20	8

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point
- Integrated auxiliary switch

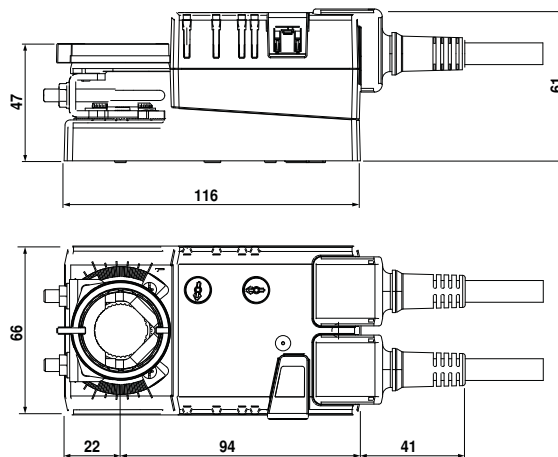


Technical data

Electrical data	Nominal voltage	AC 100...240V, 50/60Hz
	Nominal voltage range	AC 85...265V
	Power consumption	In operation 1.5W @ nominal torque At rest 0.4W For wire sizing 3.5VA
	Auxiliary switch	1 x SPDT, 1mA...3 (0.5) A, AC 250V <input type="checkbox"/> (0...100% adjustable)
Functional data	Connection Motor	Cable 1m, 3 x 0.75mm ²
	Auxiliary switch	Cable 1m, 3 x 0.75mm ²
	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ or 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	Max. 95°\sphericalangle, limited on both sides by means of adjustable, mechanical end stops
	Running time	150s
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable
	Safety	Protection class
Degree of protection		IP54 in any mounting position
EMC		CE according to 2004/108/EC
Low voltage directive		CE according to 2006/95/EC
Mode of operation		Type 1 (to EN 60730-1)
Ambient temperature range		-30...+50°C
Non-operating temperature		-40...+80°C
Ambient humidity range		95% r.H., non-condensating (EN 60730-1)
Dimensions / Weight	Maintenance	Maintenance-free
	Dimensions	See «Dimensions»
	Weight	Approx. 0.58kg

Dimensions [mm]

Dimensional drawings



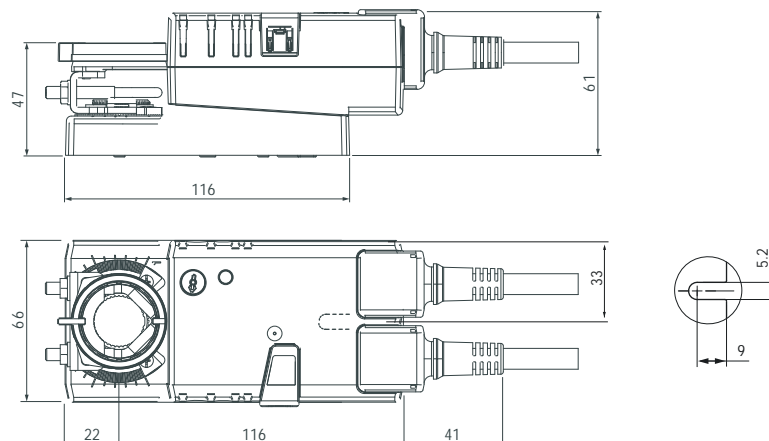
Damper spindle	Length	
	min. 37	6...20

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: modulating DC 0...10V, position feedback DC 2...10V


Technical data

Electrical data	Nominal voltage	AC 100...240V, 50/60Hz	
	Nominal voltage range	AC 85...265V	
	Power consumption	In operation	2W @ nominal torque
		At rest	1W
Connection	Power supply	Cable 1m, 2 x 0.75mm ²	
	Signals	Cable 1m, 4 x 0.75mm ²	
Functional data	Torque (nominal torque)	Min. 5Nm @ nominal voltage	
	Control	Control signal Y	DC 0...10V, typical input impedance 100kΩ
		Working range	DC 2...10V
	Position feedback (Measuring voltage)	DC 2...10V, max. 1mA	
	Position accuracy	±5%	
	Direction of rotation	Reversible with switch 0 / 1	
	Direction of rotation at Y = 0V	at switch position 0 ↶ resp. 1 ↷	
	Manual override	Gearing latch disengaged with pushbutton, self-resetting	
	Angle of rotation	Max. 95°↶, limited on both sides by means of adjustable, mechanical end stops	
	Running time	150s	
	Sound power level	Max. 35dB(A)	
	Position indication	Mechanical, pluggable	
Safety	Protection class	II Totally insulated <input type="checkbox"/>	
	Degree of protection	IP54 in any mounting position	
	EMC	CE according to 2004/108/EC	
	Low voltage directive	CE according to 2006/95/EC	
	Mode of operation	Type 1 (to EN 60730-1)	
	Ambient temperature range	-30...+50°C	
	Non-operating temperature	-40...+80°C	
	Ambient humidity range	95% r.H., non-condensating (EN 60730-1)	
Maintenance	Maintenance-free		
Dimensions / Weight	Dimensions	See «Dimensions»	
	Weight	Approx. 0.62kg	

Dimensions [mm]
Dimensional drawings


Damper spindle	Length	
	min. 37	6...20

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point

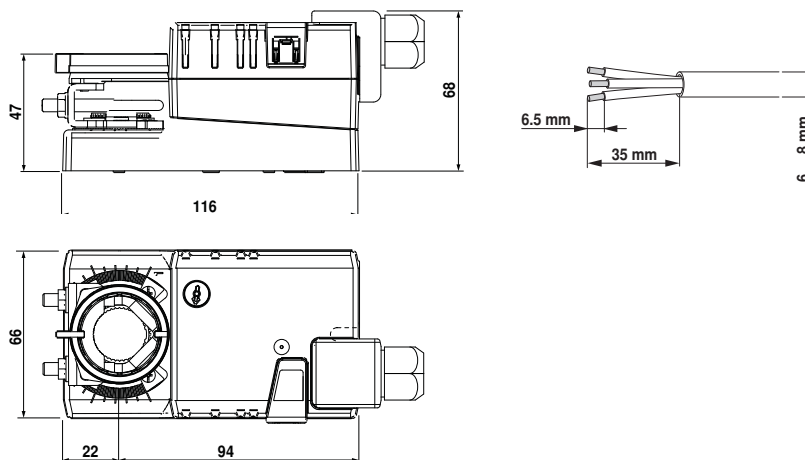


Technical data

Electrical data	Nominal voltage	AC 100...240V, 50/60Hz
	Nominal voltage range	AC 85...265V
	Power consumption	In operation 1.5W @ nominal torque At rest 0.4W For wire sizing 3.5VA
	Connection	Terminals 4mm ² (Cable Ø 6...8mm, three-core)
Functional data	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ or 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, detentable
	Angle of rotation	Max. 95°↔, limited on both sides by means of adjustable, mechanical end stops
	Running time	150s / 90°↔
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable
	Safety	Protection class
Degree of protection		IP54 in any mounting position
EMC		CE according to 2004/108/EC
Low voltage directive		CE according to 2006/95/EC
Mode of operation		Type 1 (to EN 60730-1)
Rated impulse voltage		4kV (to EN 60730-1)
Control Pollution Degree		3 (to EN 60730-1)
Ambient temperature range		-30...+50°C
Non-operating temperature		-40...+80°C
Ambient humidity range		95% r.H., non-condensating (to EN 60730-1)
Maintenance	Maintenance-free	
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 0.47kg

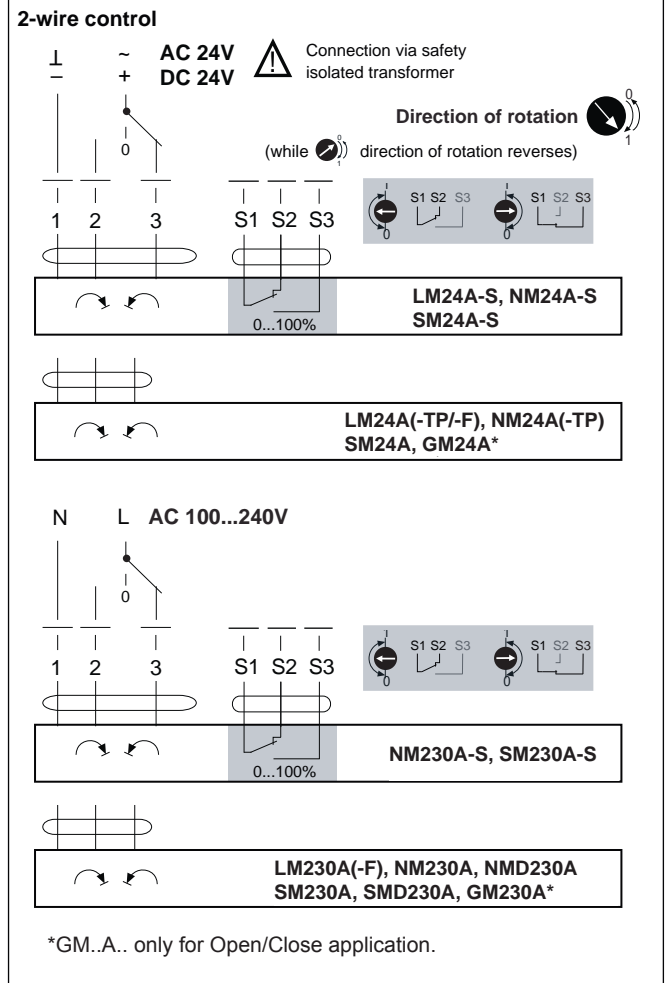
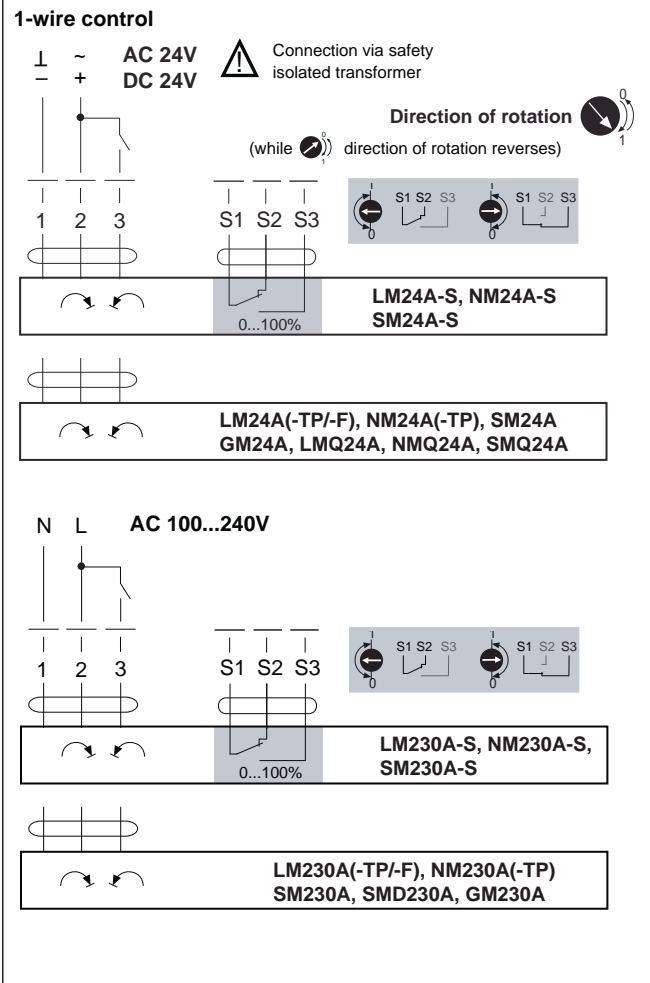
Dimensions [mm]

Dimensional drawings

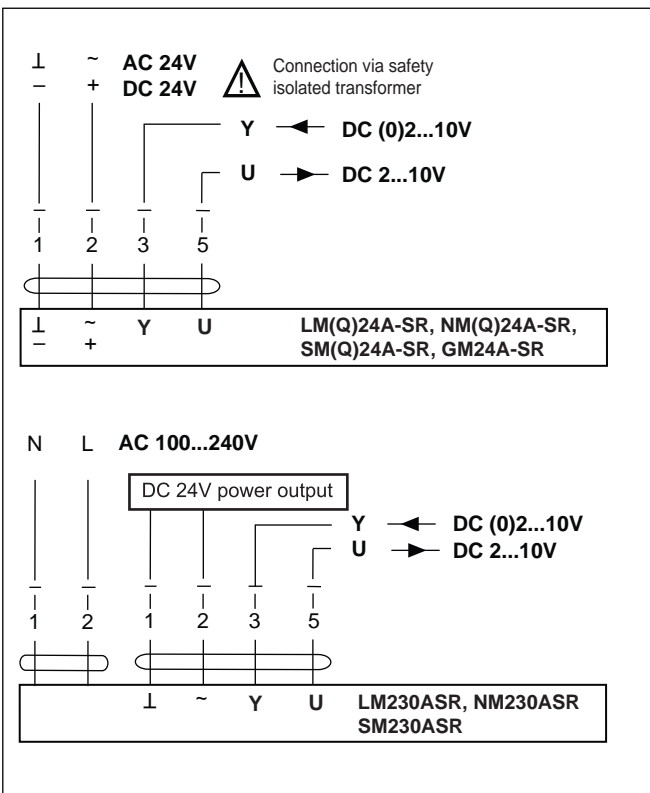


Damper spindle	Length			
	>37	6...20	>6	<20

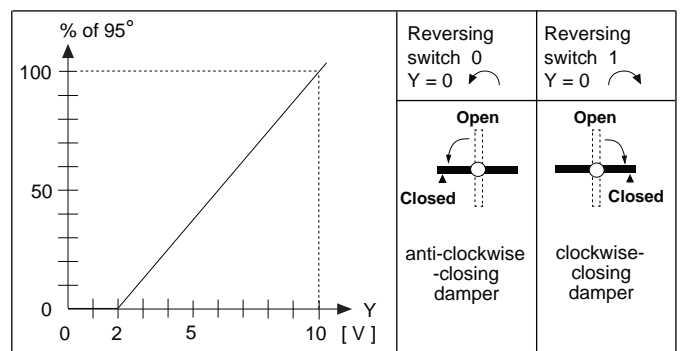
Wiring diagrams: Open/Close actuators – parallel connection possible, please note the performance data



Wiring diagrams: Modulating actuators – parallel connection possible, please note the performance data



Position - signal voltage



Direction of rotation