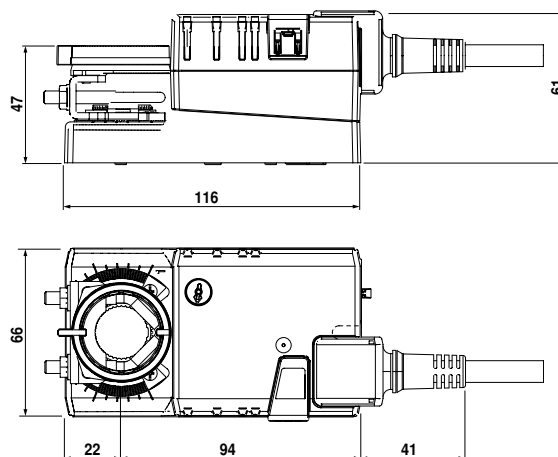


Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

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


**Technical data**

<b>Electrical data</b>	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 <sup>2</sup>
<b>Functional data</b>	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
<b>Safety</b>	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
<b>Dimensions / Weight</b>	Dimensions	See «Dimensions»
	Weight	Approx. 0.48kg

**Dimensions [mm]**
**Dimensional drawings**


Damper spindle	Length	⊙ I ◇
	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

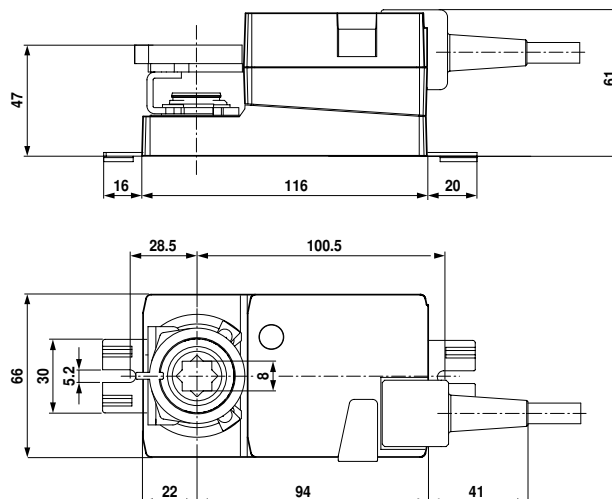


**Technical data**

<b>Electrical data</b>	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 <sup>2</sup>
<b>Functional data</b>	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
<b>Safety</b>	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
<b>Dimensions / Weight</b>	Dimensions	See «Dimensions»
	Weight	Approx. 0.47kg

**Dimensions [mm]**

**Dimensional drawings**



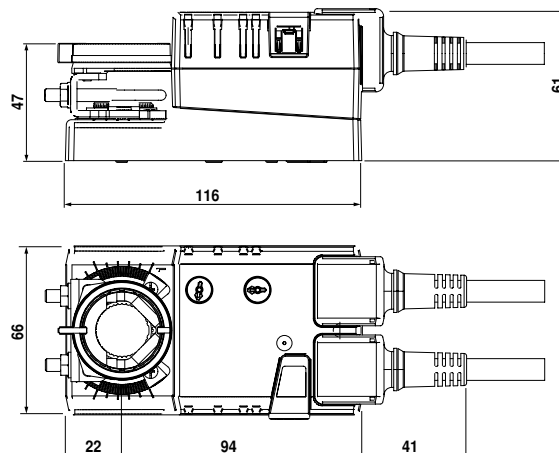
Damper spindle	Length	□ i
	≥20	8

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**

<b>Electrical data</b>	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 <sup>2</sup> Auxiliary switch Cable 1m, 3 x 0.75mm <sup>2</sup>
	<b>Functional data</b>	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)
Position indication		Mechanical, pluggable
<b>Safety</b>	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	
<b>Dimensions / Weight</b>	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/DC 24V
- Control: modulating DC (0)2...10V, position feedback DC 2...10V

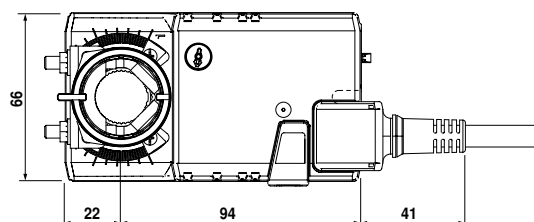
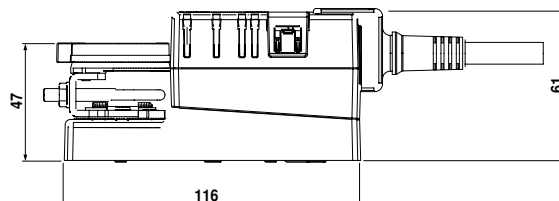


**Technical data**

<b>Electrical data</b>	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 <sup>2</sup>
<b>Functional data</b>	Torque (nominal torque)	Min. 5Nm @ nominal voltage
	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
<b>Safety</b>	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	
<b>Dimensions / Weight</b>	Dimensions	See «Dimensions»
	Weight	Approx. 0.51kg

**Dimensions [mm]**

**Dimensional drawings**



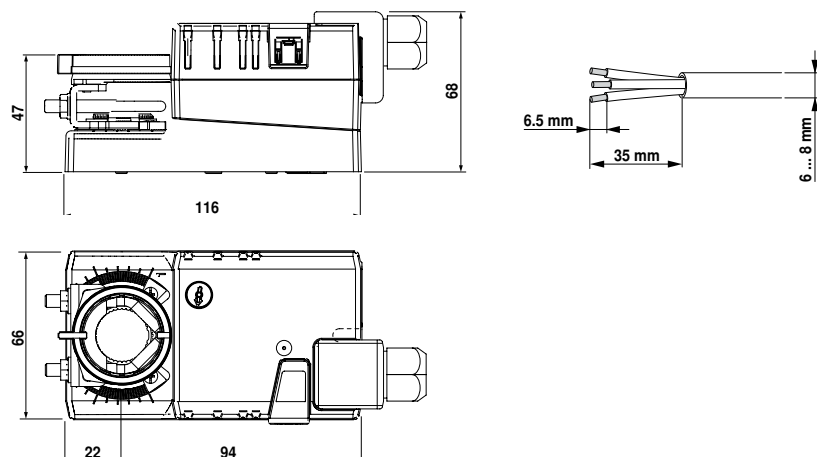
<b>Damper spindle</b>	<b>Length</b>	
	min. 37	6...20

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**

<b>Electrical data</b>	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 <sup>2</sup> (Cable Ø 6...8mm, three-core)
<b>Functional data</b>	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
	<b>Safety</b>	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
<b>Dimensions / Weight</b>	Dimensions	See «Dimensions»
	Weight	Approx. 0.46kg

**Dimensions [mm]**
**Dimensional drawings**


Damper spindle	Length			
	>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

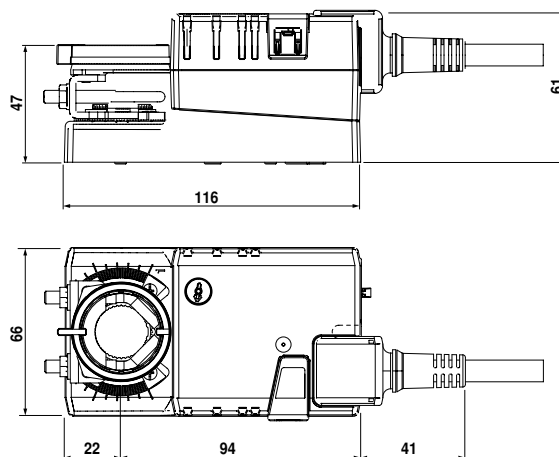


**Technical data**

<b>Electrical data</b>	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 <sup>2</sup>
<b>Functional data</b>	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
	<b>Safety</b>	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)
<b>Dimensions / Weight</b>	Maintenance	Maintenance-free
	Dimensions	See «Dimensions»
	Weight	Approx. 0.5kg

**Dimensions [mm]**

Dimensional drawings



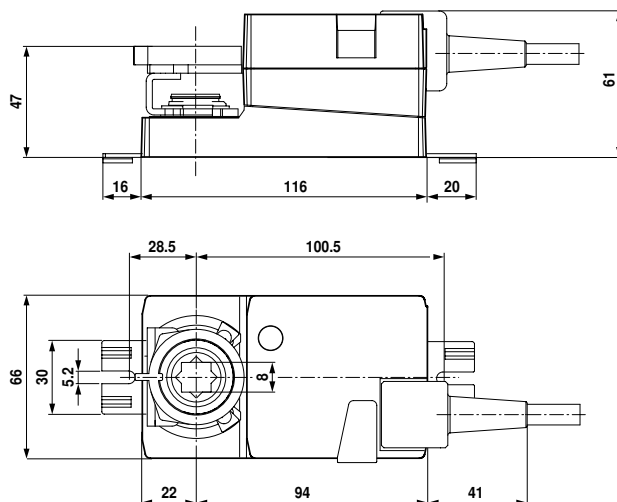
<b>Damper spindle</b>	<b>Length</b>	
	min. 37	6...20

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**

<b>Electrical data</b>	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 <sup>2</sup>
<b>Functional data</b>	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
<b>Safety</b>	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	
<b>Dimensions / Weight</b>	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

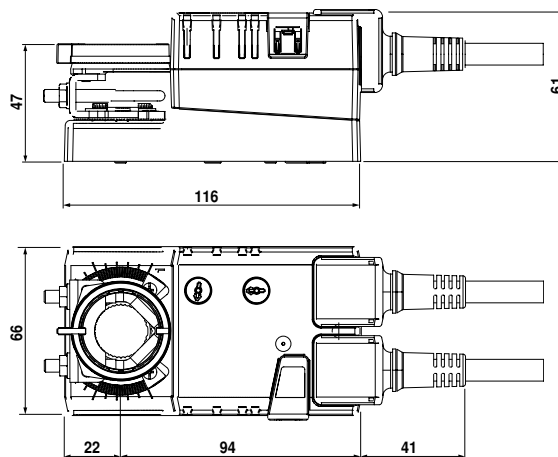


**Technical data**

<b>Electrical data</b>	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)
<b>Functional data</b>	Connection Motor	Cable 1m, 3 x 0.75mm <sup>2</sup>
	Auxiliary switch	Cable 1m, 3 x 0.75mm <sup>2</sup>
	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
	<b>Safety</b>	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)
<b>Dimensions / Weight</b>	Maintenance	Maintenance-free
	Dimensions	See «Dimensions»
	Weight	Approx. 0.58kg

**Dimensions [mm]**

Dimensional drawings



<b>Damper spindle</b>	<b>Length</b>	
	min. 37	6...20

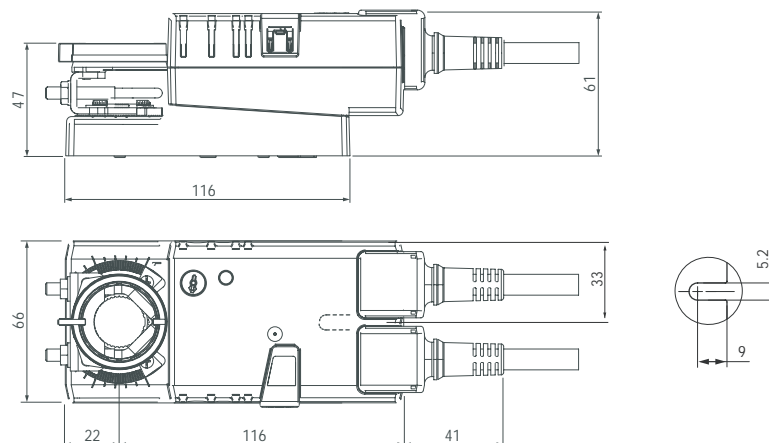


Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

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


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 100...240V, 50/60Hz	
	Nominal voltage range	AC 85...265V	
	Power consumption	In operation	2W @ nominal torque
		At rest	1W
Connection	For wire sizing	4VA	
	Power supply	Cable 1m, 2 x 0.75mm <sup>2</sup>	
	Signals	Cable 1m, 4 x 0.75mm <sup>2</sup>	
<b>Functional data</b>	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	
	<b>Safety</b>	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	
<b>Dimensions / Weight</b>	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

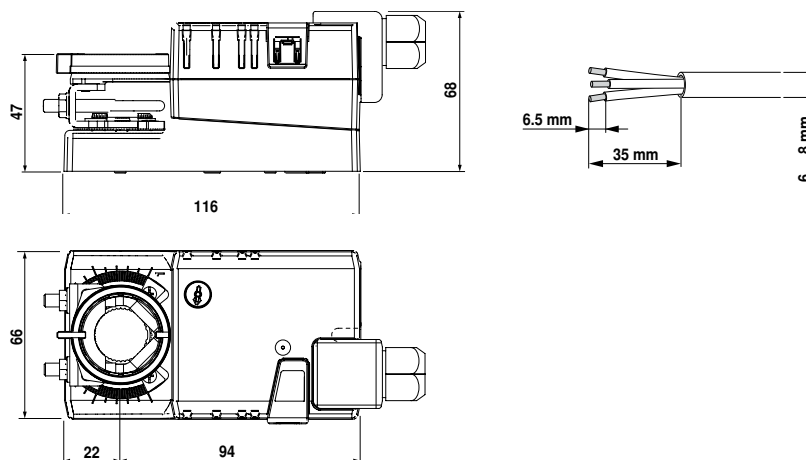


**Technical data**

<b>Electrical data</b>	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 <sup>2</sup> (Cable Ø 6...8mm, three-core)
<b>Functional data</b>	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
<b>Safety</b>	Protection class	II Totally insulated □
	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	
<b>Dimensions / Weight</b>	Dimensions	See «Dimensions»
	Weight	Approx. 0.47kg

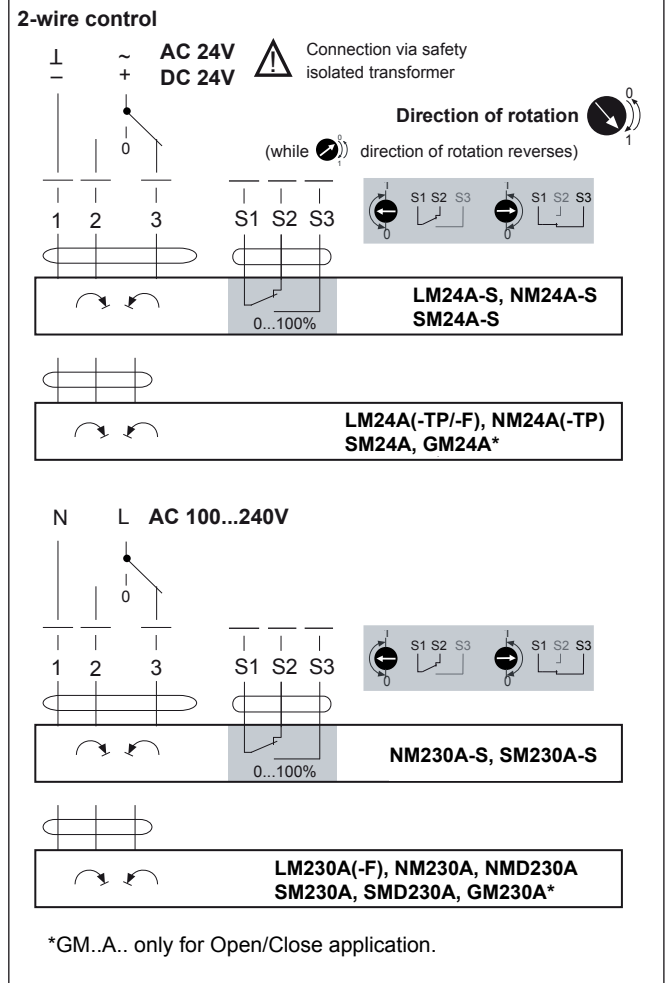
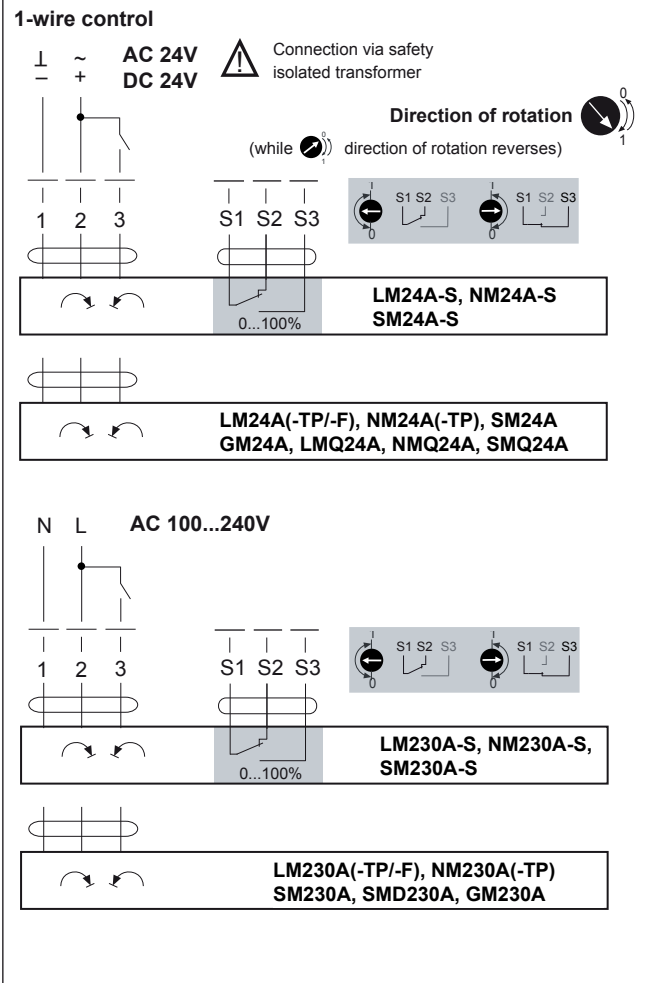
**Dimensions [mm]**

Dimensional drawings

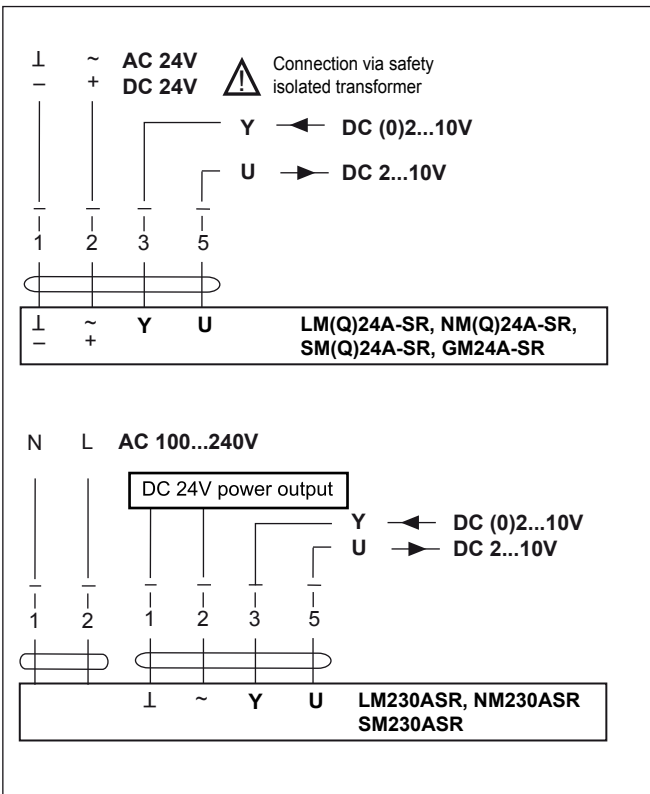


Damper spindle	Length	● I	■ I	◆ I
	>37	6...20	>6	<20

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

