





















**Withstands  
any weather.**

## **Actuators for harsh environmental conditions in ventilation applications**

Edition 2022

# Special actuators



Actuator type	Fail-safe	Nominal torque <sup>1)</sup>	Shaft diameter	Damper size up to approx. <sup>1)</sup>	Page
RobustLine rotary actuators for extreme conditions, non fail-safe/fail-safe					6
NM..P. 		10 Nm	10...20 mm	 2 m <sup>2</sup>	
SM..P. 		20 Nm	14...20 mm	 4 m <sup>2</sup>	
NKQ..P. 	■	6 Nm	10...20 mm	 1.2 m <sup>2</sup>	
IP66/67 NEMA 4X rotary actuators for outdoor applications, non fail-safe/fail-safe					7-8
SMQ..G. 		16 Nm	12...26.7 mm	 3.2 m <sup>2</sup>	
GM..G. 		40 Nm	14...26.7 mm	 8 m <sup>2</sup>	
NF..G. 	■	10 Nm	12...26.7 mm	 2 m <sup>2</sup>	
SF..G. 	■	20 Nm	12...26.7 mm	 4 m <sup>2</sup>	
GK..G. 	■	40 Nm	14...26.7 mm	 8 m <sup>2</sup>	
Rotary actuators with high torque					9
PMCA. 		160 Nm	17x17 mm	Special	
PKCA. 	■	160 Nm	17x17 mm	Special	
Configuration options					10-11

Use of damper actuators from BELIMO: the actuators listed in this documentation are designed for adjusting dampers in technical building installations.

<sup>1)</sup> When calculating the torque or actuating force required to operate air dampers, it is essential to take into account all the data supplied by the damper manufacturer concerning cross sectional area, design, place of installation and air flow conditions. The recommended damper sizes are guidelines.

## Bus solutions from Belimo, save costs and energy!



Bus systems can be used to exchange any volume of data from various bus participants over the same physical lines. The user has unrestricted access to control, feedback and parameters on the individual devices. Cabling expenditures are reduced by up to 90% compared with actuators with conventional wiring.

Thanks to time and material savings (cables, connecting terminals, connectors, etc.), installation work is simpler and cheaper. Further positive selling points for bus solutions include their lower fire load and the fact that they take up less space in cable trays and switch cabinets. Depending on the application and requirements, different bus systems are used.

One or two sensors can also be connected to most communicative actuators. This may be a passive resistance sensor (Pt1000, Ni1000, NTC etc.), an active sensor (e.g. with a 0...10 V output) or a switching contact. Its signals are digitised in the Belimo actuator and transferred to the higher-level bus system.



The Belimo MP-Bus was specially developed as a master-slave system for HVAC actuators and sensors. It allows up to eight different HVAC performance devices to be grouped together and connected to any higher-level system. It is very resistant to external interferences and does not need bus terminals.



Modbus is a communication protocol, which has become the de-facto standard. It is used commonly all around the globe and in a huge range of applications. Its simple implementation makes Modbus very popular with many manufacturers.



BACnet is a proven, widely used communication protocol for building automation. The standard is open, requires no licence and is used by a large number of international providers, universities and associations. Implementing the BACnet Standard Device Profiles and the associated BACnet Interoperability Building Blocks guarantees genuine compatibility between various BACnet devices.























KNX is a well-engineered building automation system used around the world to control systems spanning several maintenance groups, for example heaters, blinds and security technology in buildings. The KNX-certified actuators enable direct connection to the KNX network. Communication takes place via the integrated KNX interface (TP, S-Mode).



IoT actuators with Ethernet interface can exchange operating and setting data with Belimo Cloud. It is controlled locally via an analogue signal or BACnet/Modbus. Thanks to the open client API of the Belimo Cloud, a connection to a specific cloud solution can be implemented.

# Special actuators

## non fail-safe / fail-safe

	RobustLine rotary actuators for extreme conditions			IP66/67 NEMA 4X rotary actuators for outdoor applications					Actuators with high torque	
	Non fail-safe		Fail-safe	Non fail-safe		Fail-safe			Non fail-safe/fail-safe	
	NM..P..	SM..P..	NKQ..P..	SMQ..G..	GM..G..	NF..G..	SF..G..	GK..G..	PMCA.. PKCA..	
										
Mechanical accessories										
Lever for actuator drive shafts				AH-GMA	AH-GMA	AH-GMA	AH-GMA	AH-GMA		
Lever for damper shafts				KH10	KH10	KH10	KH10	KH10		
Ball joints				KG10A	KG10A	KG10A	KG10A	KG10A		
Mounting kit for linkage operation				ZG-GMA	ZG-GMA	ZG-GMA	ZG-GMA	ZG-GMA		
Adapter kit									ZPR..	
Electrical accessories										
Heating with humidistat AC 230 V (only avail- able fitted ex factory)		HH230	HH230	HH230-MG	HH230-MG	HH230-FG	HH230-FG	HH230-MG		
Heating with humidistat AC/DC 24 V (only available fitted ex factory)				HH24-MG	HH24-MG	HH24-FG	HH24-FG	HH24-MG		
Heating with thermostat AC 230 V (only avail- able fitted ex factory)		HT230	HT230	HT230-MG	HT230-MG	HT230-FG	HT230-FG	HT230-MG		
Heating with thermostat AC/DC 24 V (only available fitted ex factory)				HT24-MG	HT24-MG	HT24-FG	HT24-FG	HT24-MG		

# Special actuators non fail-safe / fail-safe



## RobustLine rotary actuators for extreme conditions

## IP66/67 NEMA 4X rotary actuators for outdoor applications

## Actuators with high torque

### Non fail-safe

### Fail-safe

### Non fail-safe

### Fail-safe

### Non fail-safe/fail-safe

NM..P..

SM..P..

NKQ..P..

SMQ..G..

GM..G..

NF..G..

SF..G..

GK..G..

PMCA..  
PKCA..



## Electrical accessories

Auxiliary switches



S2A GR

S2A GR

S2A

S2A

(S2A-F GR) <sup>1)</sup> (S2A-F GR) <sup>1)</sup>

(S2A) <sup>1)</sup>

Room temperature  
controller for  
modulating actuators



CR24..

CR24..

CR24..

CR24..

CR24..

CR24..

CR24..

CR24..

CR24..

Feedback  
potentiometers



P..A GR <sup>2)</sup>

P..A GR <sup>2)</sup>

P..A GR <sup>2)</sup>

P..A GR <sup>2)</sup>

P..A GR <sup>1) 2)</sup>

P..A GR <sup>1) 2)</sup>

P..A GR <sup>1) 2)</sup>

Signal converter  
Voltage/current  
For modulating  
actuators



Z-UIC

Z-UIC

Z-UIC

Z-UIC

Z-UIC

Z-UIC

Z-UIC

Z-UIC

Z-UIC

Positioner/  
Range controller  
For modulating  
actuators



CRP24-B1

CRP24-B1

CRP24-B1

CRP24-B1

CRP24-B1

CRP24-B1

CRP24-B1

CRP24-B1

CRP24-B1

SBG24

SBG24

SBG24

SBG24

SBG24

SBG24

SBG24

SBG24

SBG24

SGA24

SGA24

SGA24

SGA24

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SGA24

SGA24

SGA24

SGE24

SGE24

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SGE24

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SGE24

SGE24

SGE24

SGF24

SGF24

SGF24

SGF24

SGF24

SGF24

SGF24

SGF24

SGF24

## Tools

Service Tool



ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

ZTH EU <sup>3)</sup>

Belimo Assistant App



■

<sup>1)</sup> Combination only on request. Please get in touch with your local Belimo contact person.

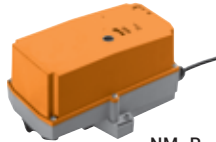
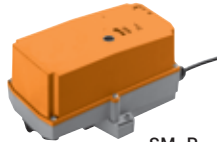
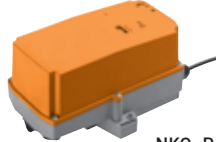
<sup>2)</sup> Resistance values 140 Ω, 200 Ω, 500 Ω, 1 kΩ, 2.8 kΩ, 5 kΩ, 10 kΩ available.

<sup>3)</sup> For all ..24A-MP(..); ..24P-MP(..) and ..24G-MP(..) actuators in the contracting and retrofit business.

For form fit inserts, please get in touch with your local Belimo contact person.



# RobustLine rotary actuators for extreme conditions, non fail-safe / fail-safe

Nominal torque		10 Nm	20 Nm	6 Nm		
Damper size up to approx.		2 m²	4 m²	1.2 m²		
Open/close	3-point	Modulating (2...10 V)	Parametrisable	Nominal voltage		
						
		NM..P		SM..P		
				NKQ..P		
		Without auxiliary switch	With 1 SPDT auxiliary switch	Without auxiliary switch	With 1 SPDT auxiliary switch	Without auxiliary switch
Open/close, 3-point						
■	■	AC/DC 24 V	NM24P	NM24P-S	SM24P	SM24P-S
■		AC/DC 24 V				NKQ24P-1
■	■	AC 230 V	NM230P <sup>4)</sup>	NM230P-S <sup>4)</sup>	SM230P <sup>4)</sup>	SM230P-S <sup>4)</sup>
Modulating (2...10 V) <sup>1)</sup>						
	■	AC/DC 24 V	NM24P-SR		SM24P-SR	NKQ24P-SR
	■	AC 230 V	NM230PSR		SM230PSR	
Communicative <sup>2)</sup> , parametrisable <sup>3)</sup>						
	■	AC/DC 24 V	NM24P-MP		SM24P-MP	
Technical data						
Fail-safe			–			■
Shaft diameter		10...20 mm		14...20 mm		10...20 mm
Running time motor 90°		150 s		150 s		4 s
Running time fail-safe 90°		–		–		4 s
Manual override		Gear disengagement with push button, can be locked		Gear disengagement with push button, can be locked		Gear disengagement with push button
Motor sound power level		≤35 dB(A) @ 150 s		≤45 dB(A) @ 150 s		≤60 dB(A) @ 4 s
Sound power level fail-safe position		–		–		≤60 dB(A) @ 4 s
Ambient temperature		–30...50°C (with heating to –40°C) <sup>4)</sup>		–30...50°C (with heating to –40°C) <sup>4)</sup>		–30...50°C
Connection		Connecting cable 1 m, FRNC				
Direction of rotation		Selectable with switch				
Angle of rotation		Max. 95°, can be limited on both sides by adjustable mechanical end stops				
Position indication		Mechanical, add-on				
Degree of protection		IP66/67 / NEMA 4X				
Storage temperature		–40...80°C				
Ambient humidity		100% RH				
EMC		CE according to 2014/30/EU				

<sup>1)</sup> Modulating actuators: Positioning signal Y = 0...10 V, 100 kΩ; operating range 2...10 V/position feedback U = 2...10 V, max. 1 mA for NM..P und SM..P, max. 0.5 mA for NKQ..P.

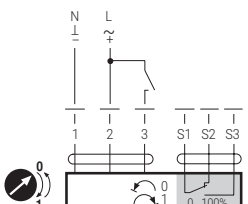
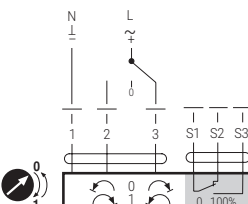
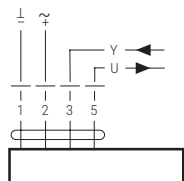
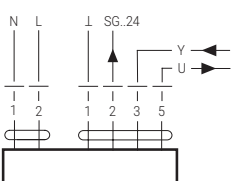
<sup>2)</sup> You can find suitable system diagrams at [www.belimo.com](http://www.belimo.com).

<sup>3)</sup> Control, operating range, feedback, running time and other functions with MP types adjustable with PC-Tool or Service Tool ZTH EU.

<sup>4)</sup> Available with heating and thermostat AC 230 V or with heating and humidistat AC 230 V for ambient temperatures down to –40°C (see overview of accessories **Page 4–5**). Other versions on request.

## Electrical installation

Electrical and mechanical accessories **Page 4–5**

Open/close	3-point	Modulating	Parametrisable	Modulating
..M24P, ..M24P-S, ..M230P, ..M230P-S, NKQ24P-1	..M24P, ..M24P-S, ..M230P, ..M230P-S	..24P-SR	..24P-MP	..M230PSR
		Y = 0...10 V U = 2...10 V	Y = positioning signal U = position feedback	Y = 0...10 V U = 2...10 V
				

# IP66/67 / NEMA 4X rotary actuators for outdoor applications, non fail-safe

Nominal torque **16 Nm**

Damper size up to approx. 3.2 m<sup>2</sup>

**40 Nm**

8 m<sup>2</sup>

Nominal voltage	Running time motor 90°	SMQ..G	GM..G..
-----------------	------------------------	--------	---------

		Without auxiliary switch	Without auxiliary switch
<b>Open/close</b>			
AC/DC 24 V	7 s	<b>SMQ24G</b>	
	150 s		<b>GM24G-T</b>
AC 230 V	150 s		<b>GM230G-T</b>
<b>Modulating (2...10 V) <sup>1)</sup></b>			
AC/DC 24 V	7 s	<b>SMQ24G-SR</b>	
	150 s		<b>GM24G-SR-T</b>
<b>Communicative <sup>2)</sup>, parametrisable <sup>3)</sup></b>			
AC/DC 24 V	150 s		<b>GM24G-MP-T</b>
<b>Technical data</b>			
Shaft diameter	12...26.7 mm		14...26.7 mm
Manual override	Gear disengagement with push button, can be locked		Gear disengagement with push button, can be locked
Motor sound power level	≤63 dB(A) @ 7 s		≤45 dB(A) @ 150 s
Ambient temperature	-30...40°C <sup>4)</sup> (40...50°C limited) <sup>5)</sup>		-30...50°C (with heating to -40°C) <sup>4)</sup>
Connection	Connecting cable 1 m, FRNC		Connecting terminals
Direction of rotation	Selectable with switch		
Angle of rotation	Max. 95°, can be limited on both sides by adjustable mechanical end stops		
Position indication	Mechanical, add-on		
Degree of protection	IP66/67 / NEMA 4X		
Storage temperature	-40...80°C		
Ambient humidity	100% RH		
EMC	CE according to 2014/30/EU		

<sup>1)</sup> Modulating actuators: Positioning signal Y = 0...10 V, 100 kΩ; operating range 2...10 V/position feedback U = 2...10 V, max. 1 mA for GM..G, NF..G and SF..G, max. 0.5 mA for SMQ..G and GK..G.

<sup>2)</sup> You can find suitable system diagrams at [www.belimo.com](http://www.belimo.com).

<sup>3)</sup> Control, operating range, feedback, running time and other functions with MP types adjustable with PC-Tool or Service Tool ZTH EU.

<sup>4)</sup> Available with heating and thermostat/humidistat for ambient temperatures down to -40°C (see overview of accessories **Page 4-5**).

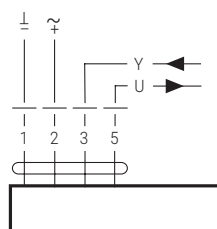
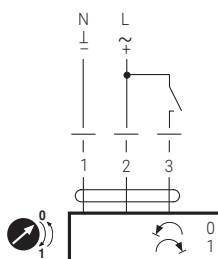
<sup>5)</sup> Please contact your local Belimo representative.

Other versions on request.

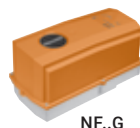
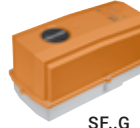
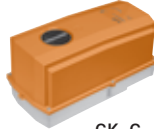
## Electrical installation

Electrical and mechanical accessories **Page 4-5**

Open/close	Modulating	Parametrisable
<b>GM..G, SMQ24G</b>	<b>..24G-SR..</b>	<b>..24G-MP..</b>
	Y = 0...10 V U = 2...10 V	Y = positioning signal U = position feedback



# IP66/67 / NEMA 4X rotary actuators for outdoor applications, fail-safe

Nominal torque		10 Nm		20 Nm		40 Nm				
Damper size up to approx.		2 m <sup>2</sup>		4 m <sup>2</sup>		8 m <sup>2</sup>				
Nominal voltage	Running time motor 90°									
		NF..G		SF..G		GK..G				
Without auxiliary switch		With 2 SPDT auxiliary switches		Without auxiliary switch		With 2 SPDT auxiliary switches		Without auxiliary switch		
Open/close										
AC/DC 24 V	150 s							GK24G-1		
AC 24...240 V	<75 s	NFG-L	NFG-S2-L	SFG-L	SFG-S2-L					
DC 24...125 V										
Modulating (2...10 V) <sup>1)</sup>										
AC/DC 24 V	150 s	NF24G-SR-L	NF24G-SR-S2-L	SF24G-SR-L	SF24G-SR-S2-L	GK24G-SR				
Communicative <sup>2)</sup> , parametrisable <sup>3)</sup>										
AC/DC 24 V	<75 s	NF24G-MP-L		SF24G-MP-L						
	150 s					GK24G-MP				
Technical data										
Fail-safe		■		■		■				
Shaft diameter		12...26.7 mm		12...26.7 mm		14...26.7 mm				
Running time fail-safe 90°		<20 s		<20 s		35 s				
Manual override		Hand crank		Hand crank		Gear disengagement with push button				
Sound power level		≤45 dB(A) @ 150 s		≤45 dB(A) @ 150 s		≤52 dB(A) @ 150 s				
Sound power level		≤62 dB(A) @ 20 s		≤62 dB(A) @ 20 s		≤61 dB(A) @ 35 s				
Fail-safe position										
Ambient temperature		-30...50°C (with heating to -40°C) <sup>4)</sup>		-30...50°C (with heating to -40°C) <sup>4)</sup>		-30...50°C				
Connection		Connecting cable 1 m, FRNC		Connecting cable 1 m, FRNC		Connecting cable 1 m, FRNC				
Direction of rotation		↺ counterclockwise rotation		↺ counterclockwise rotation		Selectable with switch				
Angle of rotation		Max. 95°, can be limited on one side by adjustable mechanical end stops								
Position indication		Mechanical, add-on								
Degree of protection		IP66/67 / NEMA 4X								
Storage temperature		-40...80°C								
Ambient humidity		100% RH								
EMC		CE according to 2014/30/EU								

<sup>1)</sup> Modulating actuators: Positioning signal Y = 0...10 V, 100 kΩ; operating range 2...10 V/position feedback U = 2...10 V, max. 1 mA for GM..G, NF..G and SF..G, max. 0.5 mA for SMQ..G and GK..G.

<sup>2)</sup> You can find suitable system diagrams at [www.belimo.com](http://www.belimo.com).

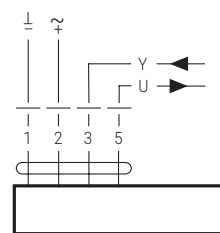
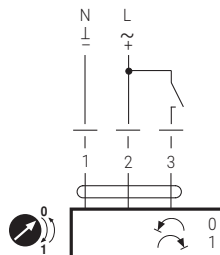
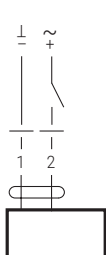
<sup>3)</sup> Control, operating range, feedback, running time and other functions with MP types adjustable with PC-Tool or Service Tool ZTH EU.

<sup>4)</sup> Available with heating and thermostat/humidistat for ambient temperatures down to -40°C (see overview of accessories **Page 4-5**). Other versions on request.

## Electrical installation

Electrical and mechanical accessories **Page 4-5**

Open/close	Modulating	Parametrisable
<b>..FG..-L</b>	<b>..24G-SR..</b>	<b>..24G-MP..</b>
	Y = 0...10 V U = 2...10 V	Y = positioning signal U = position feedback





# Actuators with high torque

Nominal torque

160 Nm

Damper size up to approx.

Special

Nominal voltage



PMCA..



PKCA..

## Communicative, parametrisable

AC 24...240 V

DC 24...125 V

### Control

PMCA-S2-T

PMCA-BAC-S2-T

PKCA-BAC-S2-T

Open/close

Modulating (2...10 V)

Modulating (2...10 V)

3-point

Modulating (4...20 mA)

Modulating (4...20 mA)

BACnet MS/TP

BACnet MS/TP

Modbus RTU

Modbus RTU

MP-Bus

MP-Bus

Open/close

Open/close

3-point

3-point

### Technical data

Fail-safe

—

—

■

Form fit

17x17 mm

17x17 mm

17x17 mm

Running time motor 90°

35 s (30...120 s variable)

35 s (30...120 s variable)

35 s (30...120 s variable)

Running time fail-safe 90°

—

—

30 s

Motor sound power level

68 dB(A)

68 dB(A)

68 dB(A)

Sound power level fail-safe position

—

—

68 dB(A)

Parametrisation, commissioning, maintenance

Belimo Assistant App, ZTH EU

Manual override

Hand crank

Auxiliary switches

2 x SPDT

Connection

Connecting terminals

Direction of rotation

Selectable with Tool

Position indication

Mechanical (integrated)

Degree of protection

IP66/67 / NEMA 4X

EMC

CE according to 2014/30/EU

Ambient temperature

-30...40°C

Storage temperature

-40...80°C

Ambient humidity

100% RH

EMC

CE according to 2014/30/EU

## Electrical installation

Electrical and mechanical accessories **Page 4–5**

### Open/close

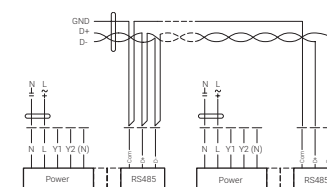
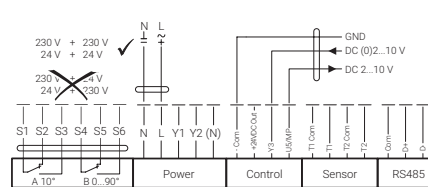
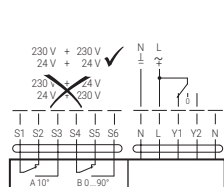
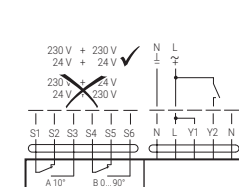
### 3-point

### Modulating

### Communicative (BACnet, Modbus)

PMCA-S2-T/PMCA-BAC-S2-T/PKCA-BAC-S2-T

PMCA-BAC-S2-T/PKCA-BAC-S2-T



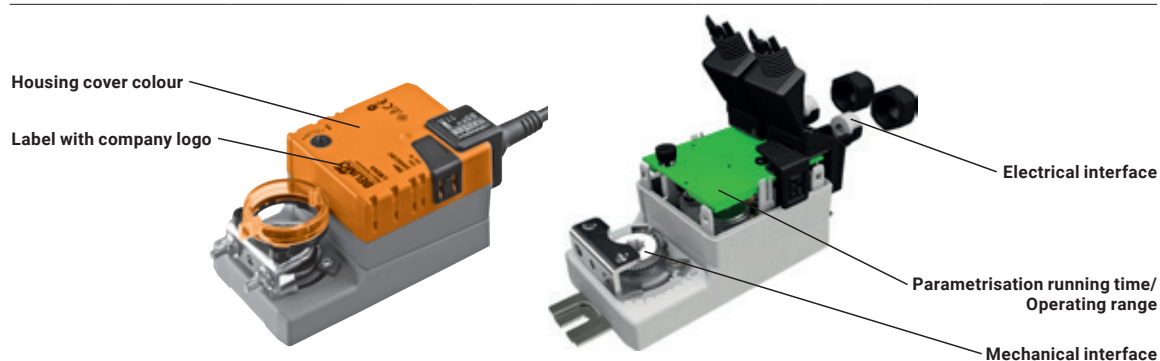
Subject to technical modifications

# Configuration options

Some actuator product ranges permit adaptation to special customer preferences. These allow - on the basis of existing components - a selection of different cable lengths, mechanical interfaces, running times and operating ranges. Please get in touch with your local Belimo contact person.






## Example

### LM..A..



Numeration is not exhaustive.

## Rotary actuators

	CM..	LM..A..	NM..A..	SM..A..	GM..A..
<b>Configuration</b>					
<b>Housing cover colour</b>	orange grey	orange grey	orange grey	orange grey	orange grey
<b>Label with company logo, colour</b>	Label: transparent    Font: black	Label: transparent    Font: black white	Label: transparent    Font: black white	Label: transparent    Font: black white	Label: transparent    Font: black white
<b>Mechanical interface</b>	Shaft clamp, one-sided 6...12.7 mm Form fit 6x6 mm Form fit 8x8 mm Form fit 10x10 mm	Shaft clamp, one-sided 6...20 mm Form fit 8x8 mm Form fit 10x10 mm Form fit 12x12 mm	Shaft clamp, one-sided 8...26.7 mm Shaft clamp, reversible 8...20 mm Form fit 8x8 mm Form fit 10x10 mm Form fit 12x12 mm Form fit 16x16 mm	Shaft clamp, one-sided 8...26.7 mm Shaft clamp, reversible 10...20 mm Form fit 10x10 mm Form fit 12x12 mm Form fit 16x16 mm	Shaft clamp, reversible 12...26.7 mm
<b>Electrical interface</b>	Terminal connection IP20 Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC	Terminal connection IP20 Terminal connection IP54 Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC	Terminal connection IP20 Terminal connection IP54 Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC	Terminal connection IP20 Terminal connection IP54 Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC	Terminal connection IP20 Terminal connection IP54 Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC
<b>Parametrisation running time</b>	35 s 45 s 75 s	35 s 45 s 90 s 150 s	45 s 90 s 150 s	90 s 150 s	90 s 150 s
<b>Parametrisation operating range</b>	2...10 V 0.5...10 V Adaption option	2...10 V 0.5...10 V Adaption option	2...10 V 0.5...10 V Adaption option	2...10 V 0.5...10 V Adaption option	2...10 V 0.5...10 V Adaption option
<b>Packaging</b>	Single pack Multipack 20 pieces	Single pack Multipack 20 pieces	Single pack Multipack 20 pieces	Single pack Multipack 20 pieces	Single pack Multipack 20 pieces
<b>General</b>	Feasibility of the combinations on request Minimum order quantity with coloured label or customer logo: 20 pieces.				

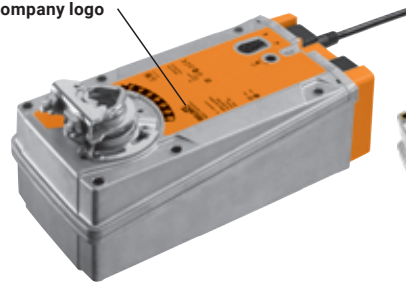
# Configuration options

Some actuator product ranges permit adaptation to special customer preferences. These allow - on the basis of existing components - a selection of different cable lengths, mechanical interfaces, running times and operating ranges. Please get in touch with your local Belimo contact person.

## Example

### EF..A

Label with company logo







Parametrisation running time/  
Operating range

Electrical interface

Heating

Mechanical interface

Numeration is not exhaustive.

	Rotary actuators, fail-safe		Very fast running rotary actuators		Linear actuators	
	NF..A../SF..A..	EF..A..	LMQ..A..	LH..A..		
Configuration						
Housing cover colour	orange grey		orange grey	orange grey		
Label with company logo, colour	Label: orange blue grey Font: black white black	Label: orange grey Font: black	Label: transparent blue black Font: black white white	Label: transparent blue black Font: black white white		
Mechanical interface	Shaft clamp, reversible 10...25.4 mm Form fit 10x10 mm Form fit 12x12 mm Form fit 16x16 mm	Shaft clamp, reversible 12...26.7 mm	Shaft clamp, one-sided 8...26.7 mm Shaft clamp, reversible Form fit 8x8 mm Form fit 10x10 mm Form fit 12x12 mm Form fit 16x16 mm	Without stroke limitation With stroke limitation		
Electrical interface	Terminal connection IP20 Terminal connection IP54 Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC	Terminal connection IP66 Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC	Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC	Terminal connection IP20 Terminal connection IP54 Cable 1 m, PVC Cable 1 m, FRNC Cable 3 m, FRNC Cable 5 m, FRNC		
Parametrisation running time	45 s 75 s 90 s 150 s	75 s 90 s 150 s	2.5 s 4 s 5 s 7 s 10 s	75 s/100 mm 90 s/100 mm 120 s/100 mm 150 s/100 mm		
Parametrisation operating range	2...10 V 0.5...10 V Adaption option	2...10 V 0.5...10 V Adaption option	2...10 V 0.5...10 V Adaption option	2...10 V 0.5...10 V Adaption option		
Packaging	Single pack Multipack 20 pieces	Single pack Multipack 20 pieces	Single pack Multipack 20 pieces	Single pack Multipack 20 pieces		
Special		Heating				
General	Feasibility of the combinations on request Minimum order quantity with coloured label or customer logo: 20 pieces.					

# All inclusive.

Belimo as a global market leader develops innovative solutions for the controlling of heating, ventilation and air-conditioning systems. Actuators, valves and sensors represent our core business.

Always focusing on customer added value, we deliver more than only products. We offer you the complete product range for the regulation and control of HVAC systems from a single source. At the same time, we rely on tested Swiss quality with a five-year warranty. Our world-wide representatives in over 80 countries guarantee short delivery times and comprehensive support through the entire product life. Belimo does indeed include everything.

The "small" Belimo devices have a big impact on comfort, energy efficiency, safety, installation and maintenance.

In short: Small devices, big impact.



5-year warranty



On site around the globe



Complete product range



Tested quality



Short delivery times



Comprehensive support



## **BELIMO Automation AG**

Brunnenbachstrasse 1, 8340 Hinwil, Switzerland  
+41 43 843 61 11, [info@belimo.ch](mailto:info@belimo.ch), [www.belimo.com](http://www.belimo.com)

