

## BADL Electric throttle valves without seal

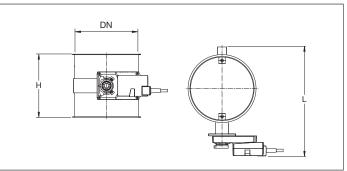


#### BADL Electric throttle valves without seal

Full welded electric throttle valves to regulate, open, or close a ducting line in an installation (possibility to regulate).

The throttle valve blade is secured in a desired position by means of the electric plug-in motor 24 V DC. (3D illustration including S2A position indicator)

Throttle valves  $\emptyset$ 100 up to  $\emptyset$ 175 have a SM model and the  $\emptyset$ 200 up to  $\emptyset$ 300 have a GM model Belimo motorozation.The switching time is 150 seconds.



#### Material

2.00 mm black steel 1.0330 powder coated in RAL 7032. Electrostatically conductive and food-safe powder coating thickness of 30 to 60  $\mu$ m. Temperature resistance up to +80°C.

Type

Rolled sheets with 6 mm edges for lock rings.

#### Options

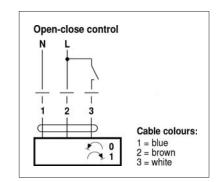
- FDA and EU compliant food-grade quality
- other voltage : 220 V AC
- S2A position sensor
- Electro-galvanized or stainless steel execution
- wear resistant lining as of Ø150 (83° Shore)
- equipotential equalization or ATEX
- other colors
- other diameters
- other types of edges or connections



Visual indicator mounted on axle to indicate thottle valve position



Optional S2-A position detector



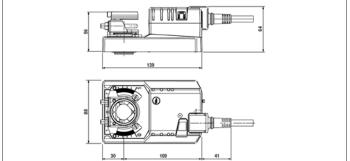
Wiring diagram of electric actuator

Ød	Code	L	Н	S	Weight
mm		mm	mm	mm	kg
100	BADL000002	285	100	2.00	1.23
120	BADL000003	305	120	2.00	1.50
140	BADL000004	320	140	2.00	1.83
150	BADL000005	335	150	2.00	2.01
160	BADL000006	340	160	2.00	2.21
175	BADL000007	360	175	2.00	2.52
200	BADL000008	385	200	2.00	3.11
224	BADL000009	405	200	2.00	3.48
250	BADL000010	435	200	2.00	3.90
280	BADL000011	460	200	2.00	4.40
300	BADL000012	490	200	2.00	4.75



## PCG Electric actuator SM for BADL electric throttle valves





PCG Electric actuator SM for BADL electric throttle valves Actuator for operating throttle valves and such in ventilation, dust extraction and air-conditioning systems for building services and industrial installations.

Simple direct mounting on the damper spindleby form-fit. The actuator, with its hollow shaft, is placed over the 8 mm square spindle of the throttle valve and secured by two screws.

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

Mounted on throttle valves Ø80 up to Ø175 without seal, they have an adjustable angle of rotation with mechanical end stops. The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

#### Material

Prewired plastic body on metal base with metal mechanism.

#### Type

Nominal voltage : 24V AC/DC or 220V AC - 50/60 Hz. Power consumption : 2W / 4VA or 2.5W / 6VA. Cable type : 1m, 3 x 0.75 mm<sup>2</sup>. Torque : 20 Nm. Angle rotation : max. 95° adjustable. Speed : 150 sec. / 90°. Sound level : 45 dB(A). Protection class : NEMA 2, UL enclosure type 2. EMC: 2004/108/EC Directive. Certification : cULus according to UL 60730-59A and UL 60730-2-594 and CAN/CSA E60730-59:02, IEC/EN 60730-59 and IEC/EN 60730-2-594. Protection level : IP 54. Temperature range : -30°C up to +50°C. Ambient humidity : 95% non-condensating.

Maintenance : maintenance free.

Axle requirements :  $L = \ge 20.8$  mm square axle.

#### Options

- S2-A position detector

Open-close control T Cable colours: 1 = black

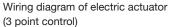
2 = red

3 = white

Please state the voltage when ordering:

24 V AC-DC, 220 V AC.

3-point control T Cable colours: 1 = black2 = red3 = white





Wiring diagram c	t electric	actuator
(open/close)		

Model	Coc	Weight	
	24V	220V	kg
ADTER-A-S	AADL000056	AADL000071	1.00



### PCG Electric actuator GM for BADL electric throttle valves

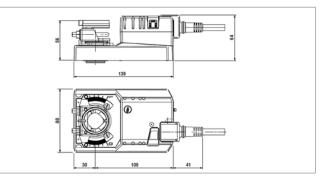


**PCG Electric actuator GM for BADL electric throttle valves** Actuator for operating throttle valves and such in ventilation, dust extraction and air-conditioning systems for building services and industrial installations.

Simple direct mounting on the damper spindleby form-fit. The actuator, with its hollow shaft, is placed over the 8 mm square spindle of the throttle valve and secured by two screws.

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

Mounted on throttle valves Ø80 up to Ø200 with seal and Ø200 up to Ø300 without seal, they have an adjustable angle of rotation with mechanical end stops. The actuator is overloadproof, requires no limit switches and automatically stops when the end stop is reached.



#### Material

Prewired plastic body on metal base with metal mechanism.

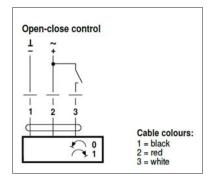
#### Туре

Nominal voltage : 24V AC/DC or 220V AC - 50/60 Hz. Power consumption : 4W / 6VA. Cable type : 1m, 3 x 0.75 mm<sup>2</sup>. Torque : 40 Nm. Angle rotation : max. 95° adjustable. Speed : 150 sec. / 90°. Sound level : 45 dB(A). Protection class : NEMA 2, UL enclosure type 2. EMC: 2004/108/EC Directive. Certification : cULus according to UL 60730-60A and UL 60730-2-604 and CAN/CSA E60730-60:02, IEC/EN 60730-60 and IEC/EN 60730-2-604. Protection level : IP 54. Temperature range : -30°C up to +50°C. Ambient humidity : 95% non-condensating. Maintenance : maintenance free. Axle requirements :  $L = \ge 25.2 \text{ mm}$  square axle.

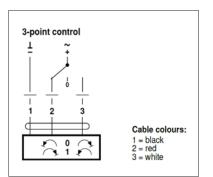
#### Options

- S2-A position detector

Please state the voltage when ordering: 24 V AC-DC, 220 V AC.



Wiring diagram of electric actuator (open/close)



Wiring diagram of electric actuator (3 point control)



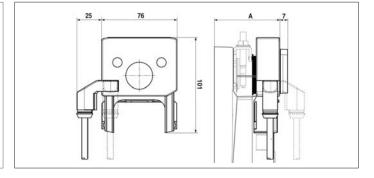
Optional S2-A position detector

de	Weight	
220V	kg	
	1.70	



# PCG Position detector S2-A for BADL electric throttle valves





## **PCG Position detector S2-A for BADL electric throttle valves** These electric position indicator fit over the Belimo electric actuator range mounted on the electric throttle valves and are used to signal positions or execute switching functions in any angular position.

A form-fit engagement is created between a driver disc and the spindle clamp causing the position to be directly transfered to the trip cams of the indicator. The guiding grooves between the housing ad detector ensure a tight fit.

This model has two adjustable switches, an integrated cable and is maintenance free.

#### Options

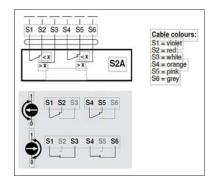
- S1-A single switch model
- FNRC models
- different cable length models

## Material

Plastic housing, PVC coated copper cable.

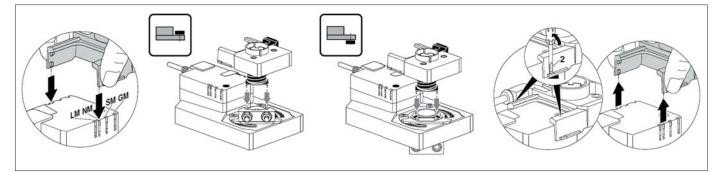
#### Туре

Voltage : 220V AC Power : 10 W Rated current : 1 mA - 3 A Protection class : completelly insulated Protection level : IP54 (NEMA2, UL Enclosure type 2) EU directive : 2006/95/EC, low voltage equipment Certification : IEC/EN 60730-1 and IEC/EN 60730-2-14 according to UL 60730-1A and UL 30730-2-14, and CAN/CSA E60730-1:02 Working temperature : -30°C up to +50°C Ambiante humidity : 95%, non-condesating



Wiring diagram of detector

# Standard voltage : 220 V AC.



Mounting overview of detector

Code	A (mm) according to actuator model						Weight	
	TMA/LMA	NMA	SMA/SMDA	LMQA	NMQA	SMQA	NKQA	kg
PCG000030	66	69	71	80	83	89	87	0.20