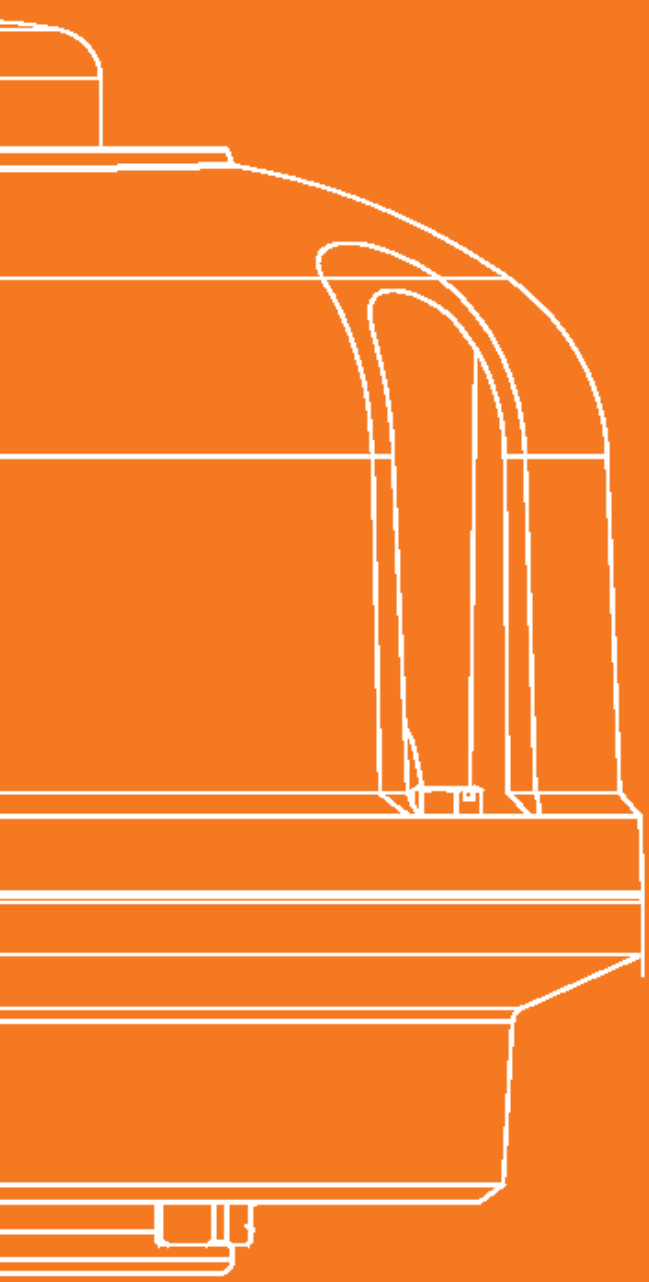




Be it for common flow control in a thermal power plant, in a water treatment plant, for ventilation systems or for any other kind of industrial applications, you need a compact, simple and reliable electric actuation solution.

In case of **moderate environmental and operational constraints**, BERNARD CONTROLS has created the FIRST BC label to identify products and solutions which offer to users **the Essentials**: the key functions to operate your valve safely and efficiently in case of **standard applications**.

In 2017, the FIRST BC label turns over a new leaf with the launch of product ranges with a brand new design - compact and optimized for their use. The quarter-turn applications can now be addressed with the **AQL range**. These electric actuators are even more closer to standard actuation needs of the power, water or various industry applications than the previous FIRST BC generation. Learn more in this brochure.



## BERNARD CONTROLS GROUP

### CORPORATE HEADQUARTERS

4 rue d'Arsonval - CS 70091 / 95505 Gonesse CEDEX France / Tel. : +33 (0)1 34 07 71 00 / Fax : +33 (0)1 34 07 71 01 / mail@bernardcontrols.com

### CONTACT BY OPERATING AREAS

#### > AMERICAS

**NORTH AMERICA**  
BERNARD CONTROLS UNITED STATES  
HOUSTON  
inquiry.usa@bernardcontrols.com  
Tel. +1 281 578 66 66

**SOUTH AMERICA**  
BERNARD CONTROLS LATIN AMERICA  
inquiry.southamerica@bernardcontrols.com  
Tel. +1 281 578 66 66

#### > ASIA

**CHINA**  
BERNARD CONTROLS CHINA &  
BERNARD CONTROLS CHINA NUCLEAR  
BEIJING  
inquiry.china@bernardcontrols.com  
Tel. +86 (0) 10 6789 2861

**KOREA**  
BERNARD CONTROLS KOREA  
SEOUL  
inquiry.korea@bernardcontrols.com  
Tel. +82 (0)2 2183 6226

**SINGAPORE**  
BERNARD CONTROLS SINGAPORE  
SINGAPORE  
inquiry.singapore@bernardcontrols.com  
Tel. +65 65 654 227

#### > EUROPE

**BELGIUM**  
BERNARD CONTROLS BENELUX  
NIVELLES (BRUSSELS)  
inquiry.belgium@bernardcontrols.com  
inquiry.holland@bernardcontrols.com  
Tel. +32 (0)2 343 41 22

**FRANCE**  
BERNARD CONTROLS FRANCE &  
BERNARD CONTROLS NUCLEAR FRANCE  
GONESSE (PARIS)  
inquiry.france@bernardcontrols.com  
Tel. +33 (0)1 34 07 71 00

**GERMANY**  
BERNARD CONTROLS DEUFRA  
TROIUSDORF (KÖLN)  
inquiry.germany@bernardcontrols.com  
Tel. +49 2241 9834 0

**ITALY**  
BERNARD CONTROLS ITALIA  
RHO (MILANO)  
inquiry.italy@bernardcontrols.com  
Tel. +39 02 931 85 233

**RUSSIA**  
BERNARD CONTROLS RUSSIA  
inquiry.russia@bernardcontrols.com  
Tel. +33 (0)1 34 07 71 00

**SPAIN**  
BERNARD CONTROLS SPAIN  
MADRID  
inquiry.spain@bernardcontrols.com  
Tel. +34 91 30 41 139

**UNITED KINGDOM**  
BERNARD CONTROLS UNITED KINGDOM  
inquiry.uk@bernardcontrols.com  
Tel. +44 (0)7435 266310

#### > INDIA, MIDDLE EAST & AFRICA

**AFRICA**  
BERNARD CONTROLS AFRICA  
ABIDJAN - IVORY COAST  
inquiry.africa@bernardcontrols.com  
Tel. + 225 21 34 07 82

**INDIA**  
BERNARD CONTROLS INDIA  
inquiry.india@bernardcontrols.com  
Tel. +971 4 880 0660

**MIDDLE-EAST**  
BERNARD CONTROLS MIDDLE-EAST  
DUBAI - U.A.E.

More than 50 agents and distributors worldwide. Contact details on [www.bernardcontrols.com](http://www.bernardcontrols.com)

Invest in Confidence



New

Weatherproof  
Quarter-turn Actuators  
**AQL RANGE**





# > AQL range

## The essentials

for quarter-turn electric actuation



AQ1L - AQ3L



AQ7L

### Product overview

#### Easy commissioning

Wiring diagram directly available inside the cover



#### Mechanical position indicator as standard

Check the position of your valve at a glance

#### New mobile application BC App



> Get access to documentation and Bernard Controls Assistance

#### Heavy duty design

Full aluminium enclosure protected by durable powder coating

#### Cable entries

#### Manual operation

Emergency intervention via manual hexagonal output 10mm

#### Flange according to ISO 5211

models delivered with standard adaptors

#### Adjustable mechanical stop

#### New camblock system

Easy set up of the travel limitation system with a standard screwdriver.

#### Product specifications

- **Adaptation to all quarter-turn valves:**
  - > torque range from 15 to 70 Nm (direct quarter-turn)
- **Type of Controls**
  - > Electromechanical, SWITCH
  - > Positioner, 4-20mA
- **BC Duty & Modulating Classification**
  - > On-Off: Class A
  - > Inching/Positioning: Class B
- **IP68**
- **Corrosive environment: C4**
- **Operating temp.: -20...+60°C**

### Product benefits

#### • Compact & optimized design

- > Super compact design
- > Product architecture & torque range adapted to customers' requirements: 3 models from 15 to 70 Nm
- > Multi-voltage (AC/DC) & multi-frequency products : suitable whatever your location on the globe
- > 24VDC or 12VDC, both 2 or 3 wires available as an option
- > Short delivery time, even for voluminous project, thanks to large production capacity

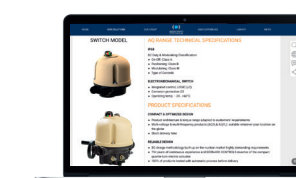
- > Self-locking at all speeds without any additional component
- > S4 Motor Service Duty. Up to 120 starts per hour at peak of operation
- > Electronic torque limiter for reinforced valve security
- > 100% of delivered products are tested with automatic process before delivery
- > Semi automated assembly line: enables complete electronics traceability

#### • Easy to use

- > Easy commissioning for quick installation on site: pre-wired version, wiring diagram inside the cover, Quick connector (IP68) option
- > User-friendly set up of travel limitation system with a standard screwdriver. Camblock directly accessible at the front
- > Positioner option (4-20mA)
- > Manual operation via manual hexagonal output: essential for emergency intervention
- > BC APP: Bernard Controls new mobile application to get access to full documentation and Assistance

#### • Reliable design

- > BERNARD CONTROLS design methodology built-up on the nuclear market highly demanding requirements
- > 80+ years of continuous experience and BC inventor of the compact quarter-turn electric actuator
- > Extended lifetime: more than 200000 cycles attained during endurance tests in laboratory
- > Heavy duty design: full aluminum enclosure protected by durable powder coating, C4, IP68, large temperature scale



Full range description, product specifications and technical data on BERNARD CONTROLS' website.