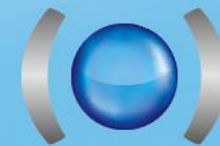




# AT Range



**BERNARD  
CONTROLS**

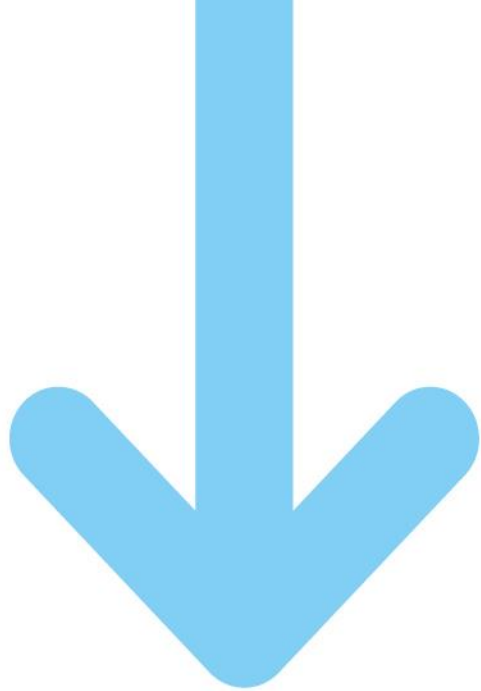
Invest in Confidence

07-12-2017

## Specially designed for the POWER - WATER - INDUSTRY applications

- Fully new design
- A new modular concept
- High quality & reliability
- Easy-to-use
- Competitive offer





1. **Range Overview**
2. Mechanical design
3. Control type
4. New BC APP



# The essentials

For moderate environment  
moderate operational constraints  
standard applications

# AT RANGE

NEW

Multi-turn actuators



The essentials



AT3 - AT6L



AT6 - AT14



AT25 - AT50

*A new range of 6 multi-turn references under the FIRST BC label !*

# ////// The Essentials...

## For Multi-turn electric actuation



The essentials

- Adaptation to all multi-turn valves
  - > 30 to 500 Nm (direct)
  - up to 8,000 Nm on request
- 10 to 127 rpm (direct)
- Type of Controls:
  - > Electromechanical - SWITCH
  - > Integrated control - new LOGIC (v2)
- Wiring : Screw Type Terminal
- BC Duty & Modulating Classification:
  - > On-Off : Class A
  - > Inching/Positioning : Class B
  - > Modulating : Class III
- Environment:
  - > IP 68
  - > C3
  - > T: -20° C ...+60° C (-40° C as an option)



- 6 references, 5 rated torques
- Max torque adjustable between 40 & 100%

1	> AT3	(12 to 30 Nm)
	> AT6L	(24 to 60 Nm)
2	> AT6	(24 to 60 Nm)
	> AT14	(56 to 140 Nm)
3	> AT25	(100 to 250 Nm)
	> AT50	(200 to 500 Nm)



Up to 8.000 Nm with gearboxes ...

## INNOVATIVE, RELIABLE & UNIQUE DESIGN



- Product architecture & torque range adapted to customers' requirements: 6 models from 30 to 500 Nm
- Selection of the essential features to ensure a competitive but performing solution: actuator duty from On-Off to Modulating, heavy duty enclosure protection, IP68, integrated control, wide range of output speeds...
- New reliable camblock system unaffected by vibrations. Fully new & unique design with internal modularity for compact solution, e.g. modular position sensor enables up to 1700 turns with the same product



## PERFORMANCE FOR MULTI-TURN ACTUATION



- From 30Nm (adjustable to 12Nm) to 500Nm (direct) and more with gearboxes
- Wide range of speeds to address all types of applications
- Wide stem acceptance
- Self-locking at all speeds without any additional component\*
- S4 Motor Service Duty on all models
- Suitable for modulating applications (BC Class III complying with EN15714-2 Class C)

\*except AT25 and AT50 at 127rpm



## EASY TO INSTALL



- Easy commissioning: set up of travel limitation system (new camblock) with a standard screwdriver (similar to FIRST BC AQ range), only two standard tools required to install and set up the actuator on valve, wiring reduced to the minimum for fast assembly
- Large LCD display on LOGIC version for user-friendly commissioning and local command. Easily orientable (4-way direction) in few clicks
- Product suitable for rising stem thanks to adjustable torque sensor from 40 to 100%



## EASY TO MAINTAIN



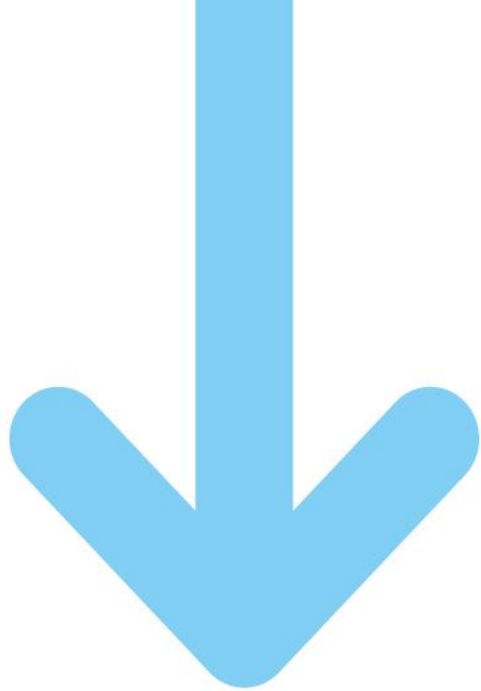
- Declutch-free manual override for quick intervention on site
- Mechanical position indicator on SWITCH versions: check the position of your valve at a glance
- BC APP: Bernard Controls new mobile application for setting, operating, troubleshooting and easy access to documentation

## THE MAIN FUNCTIONS OF INTEGRATED CONTROL WITH THE NEW LOGIC (v2)



- Turn-key, time & cost-saving solution
- User-friendly & intuitive
- Non-intrusive setting for enhanced safety and reliability
- Compatible with common fieldbus protocols: Modbus RTU, Profibus DPV1
- Bluetooth communication (as standard) to communicate with Bernard Controls' BC App





1. Range Overview
2. **Mechanical design**
3. Control type
4. New BC APP

# AT RANGE - SWITCH version



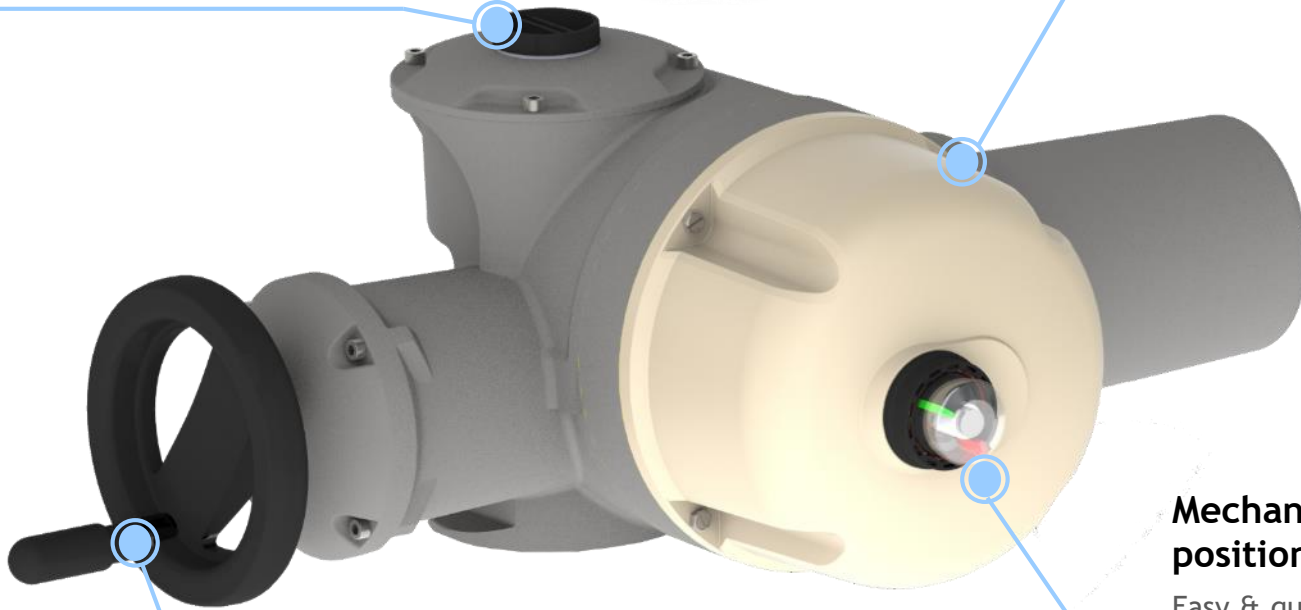
## Large Stem Acceptance

Suitable for rising stem thanks to a removable & watertight screw cap  
Easy & watertight fixation of the stem cover



## Heavy Duty Design

Full aluminium enclosure protected by durable powder coating Grey Aluminium & Champagne !



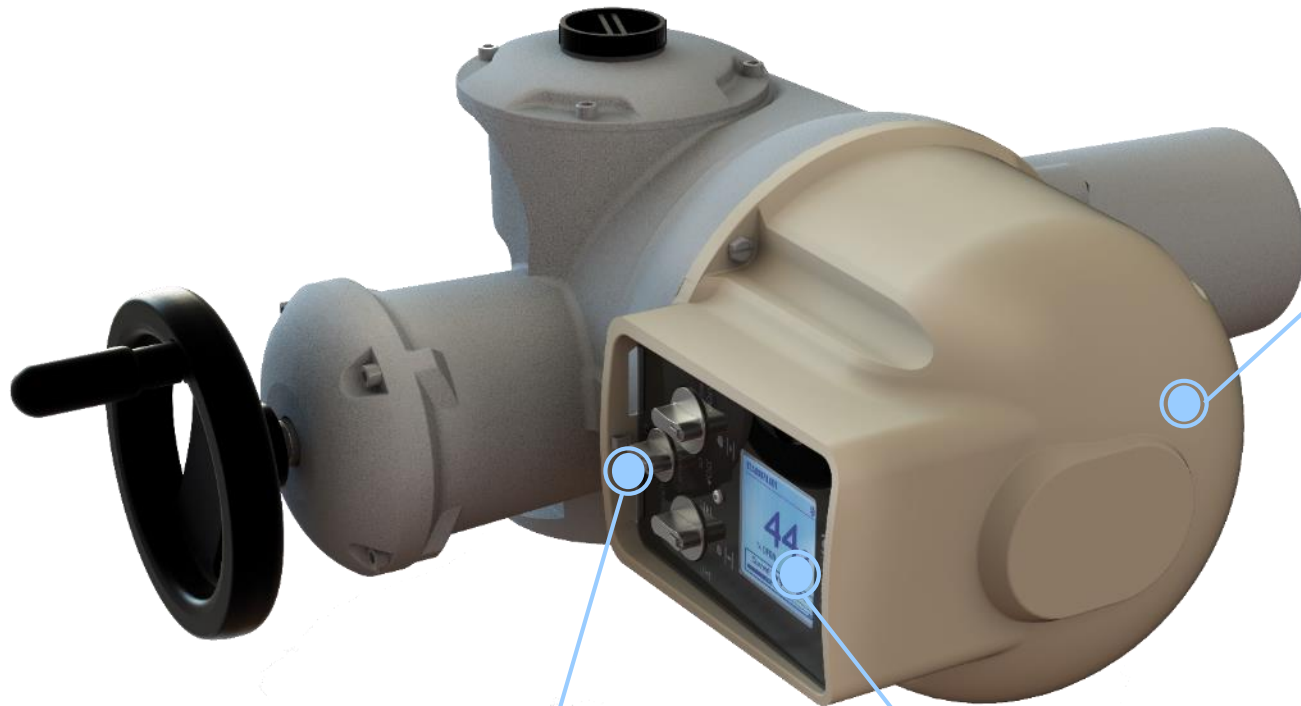
## Declutch-free handwheel with motor priority

With foldable handle for quick intervention on site

## Mechanical position indicator

Easy & quick customization of color indication & orientation from the outside





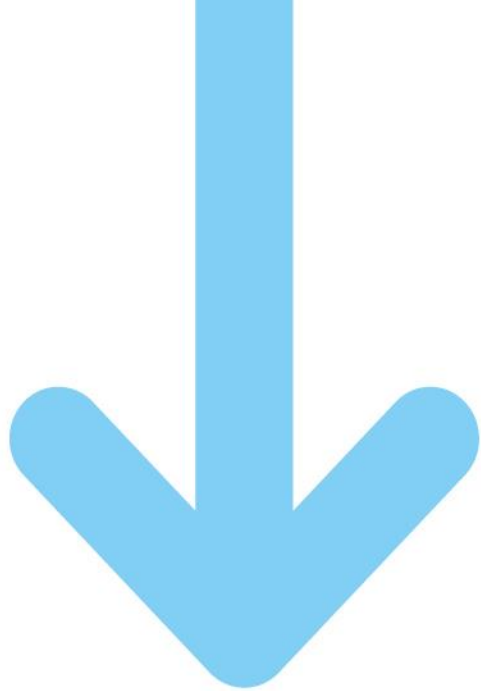
**2 possible positions for the cover**  
For user-friendly experience



**User-friendly local commands**  
through 2 buttons + 1 padlockable selector



**Large LDC Display**  
Easily orientable in few clicks on the BC APP or through local commands



1. Range Overview
2. Mechanical design
3. **Control type**
4. New BC APP

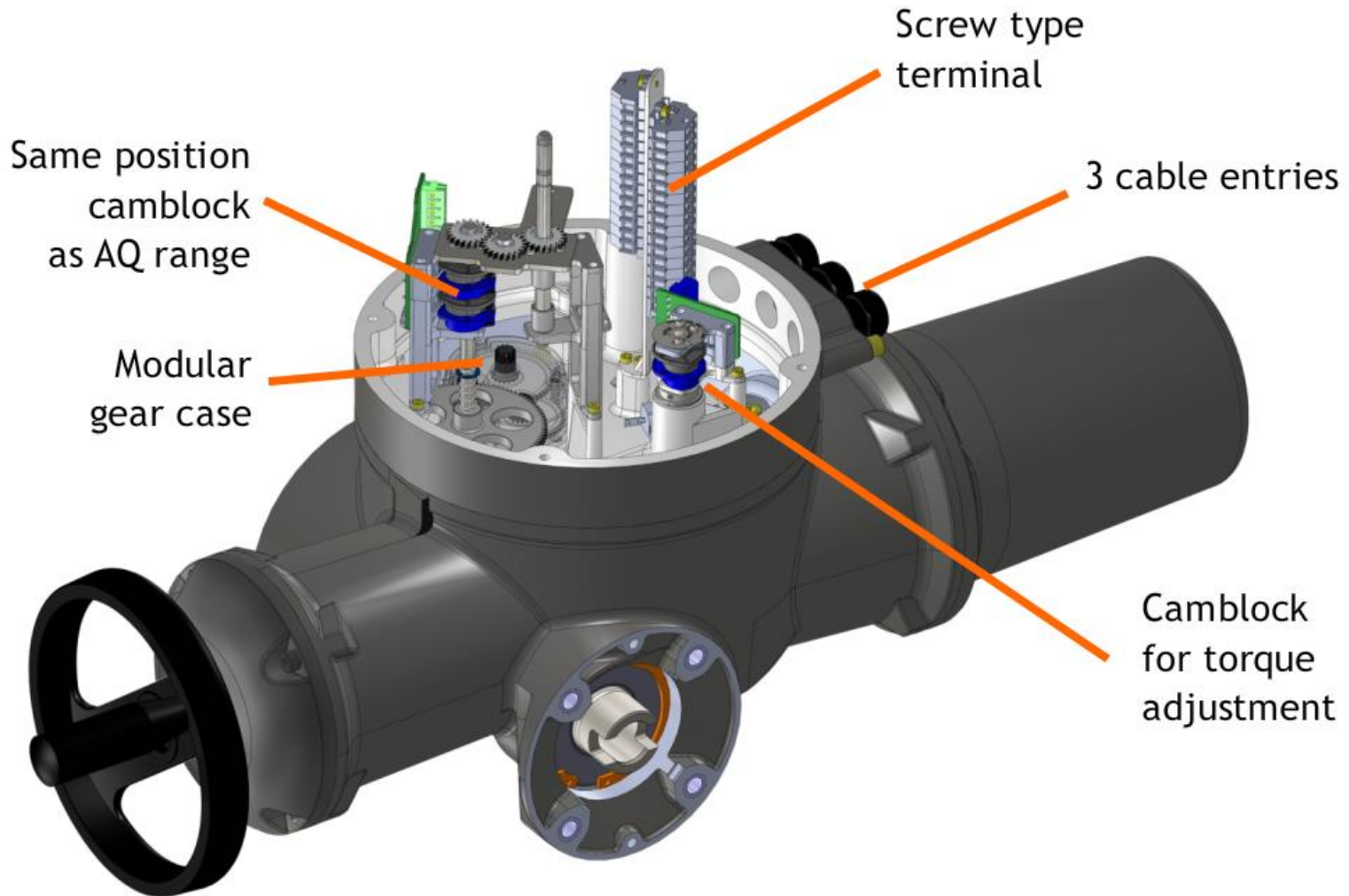
# Choose your control type

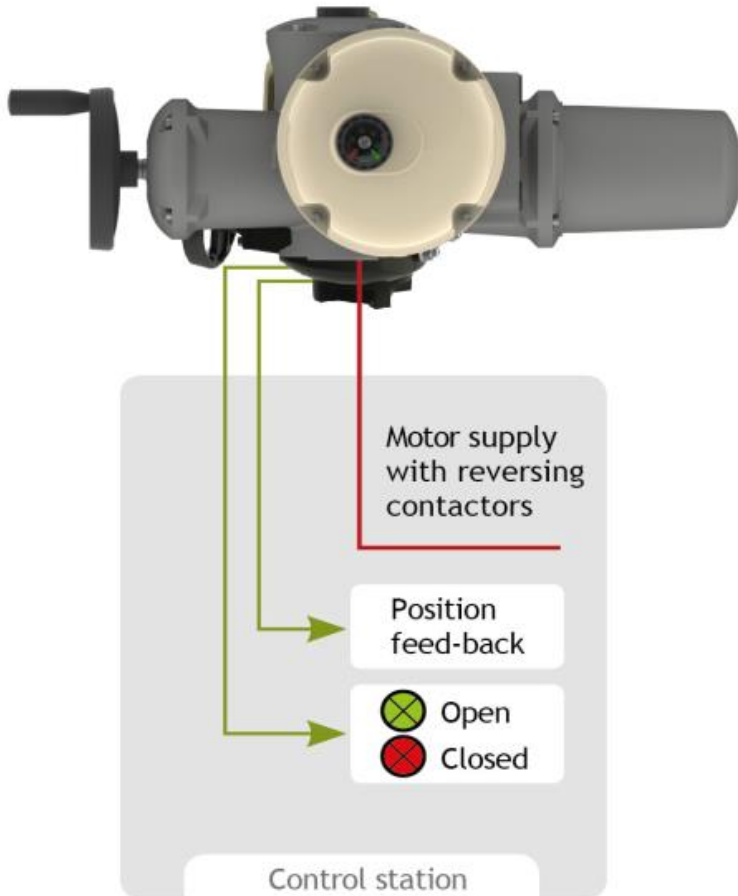


- The AT Range is available with
  - › **SWITCH:** Electromechanical non-integrated
  - › **LOGIC:** The main functions you expect from modern integrated controls

NEW

## The essentials

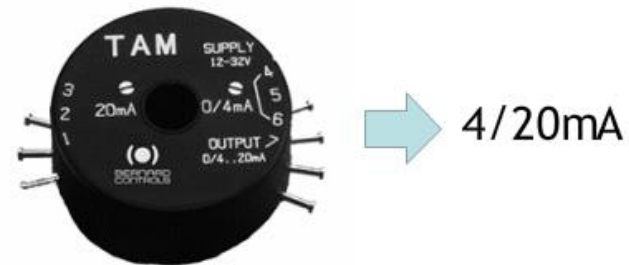




## Position feedback given by optional:

- ✓ 1K $\Omega$  potentiometer or
- ✓ Analog transmitter

TAM will be used as position transmitter on AQ models



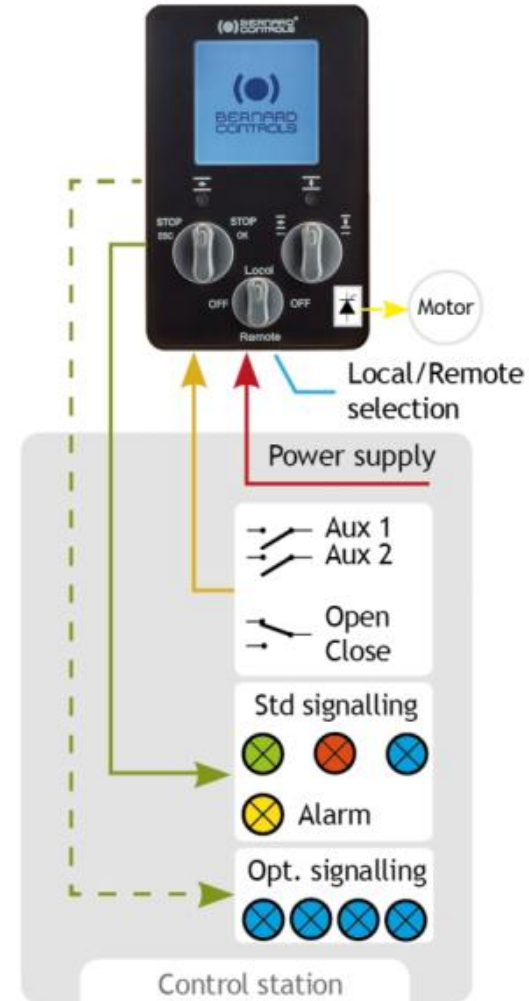
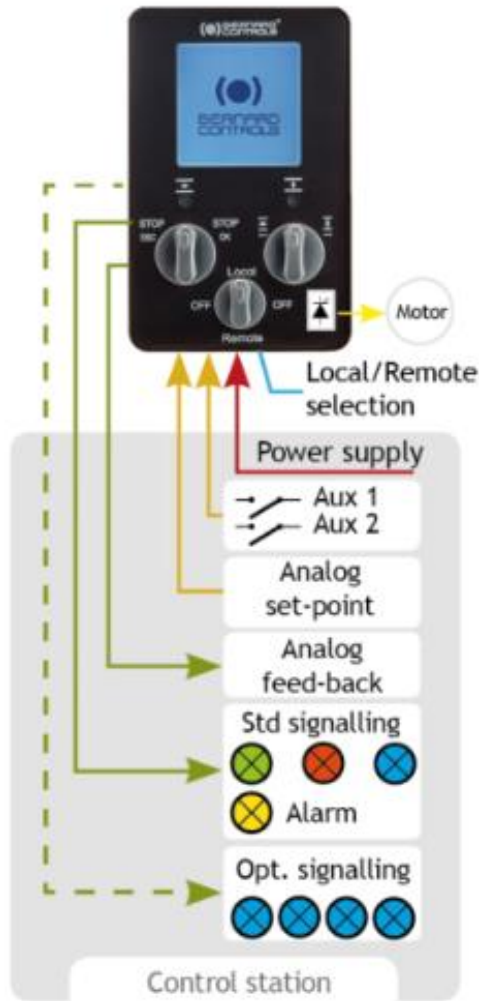
# ////// New LOGIC - fully redesigned! //////////////



- **ON/OFF**
  - › For Class A applications
- **POSITIONER** managing proportional command
  - › For Class B Positioning
  - › But also for Class III Modulating (with S4-50% motors)
- **3 signaling relays**
  - › Valve open
  - › Valve closed
  - › +1 Programmable relay
- **1 fault relay**
- **4 optional relays**



# ////// New LOGIC - fully redesigned!



# 14 available languages



- English
- French
- Chinese (*simplified*)
- Spanish
- German
- Italian
- Portuguese
- Russian
- Polish

- Korean
- Arabic
- Turkish
- Dutch
- Chinese (*traditional*)



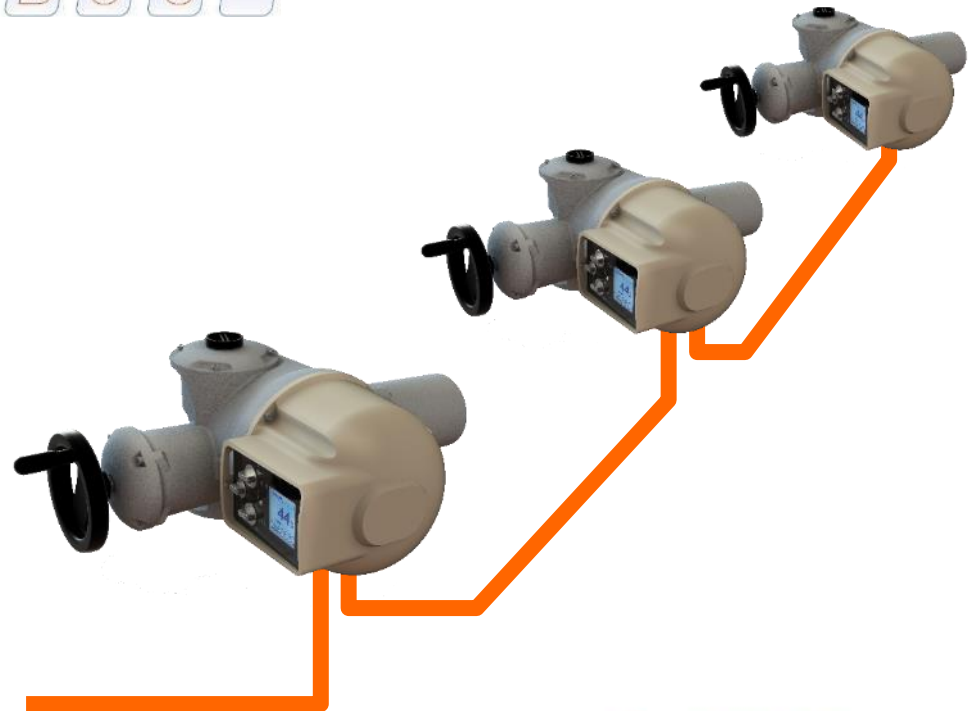
+ 1 programmable language

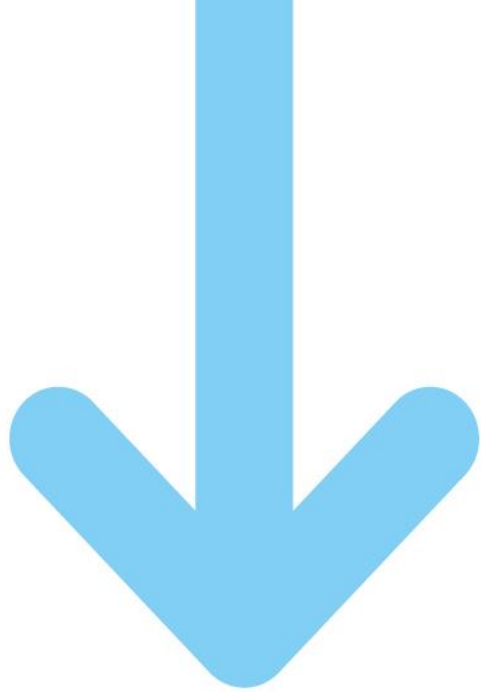




- **Most common protocols**

- > Profibus DPV1
- > Modbus RTU





1. Range Overview
2. Mechanical design
3. Control type
4. **New BC APP**

# BERNARD CONTROLS

## New Mobile Application BC App



*“The only application that allows not only to set up your actuator in a few clicks, but also to improve the reliability of your process thanks to key features and data for preventive maintenance,,*

- > support: documentation, troubleshooting
- > feedbacks: position, alarms, ...
- > commands

# Bernard Controls new mobile application

- > For **ANDROID**
- > For **iOS** (Q1 2018)



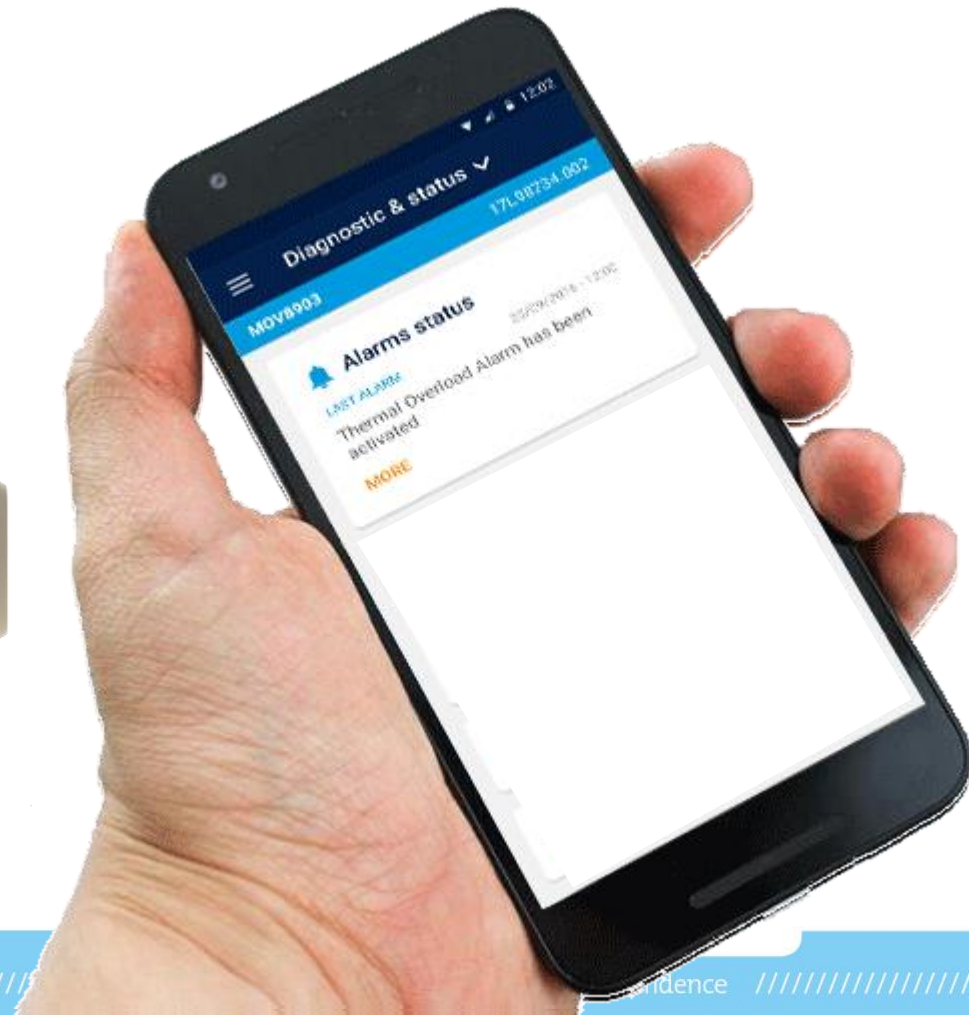
- **SAFE COMMUNICATION**

- › Identified 'user' with individual account
- › Actuator setting protected by code



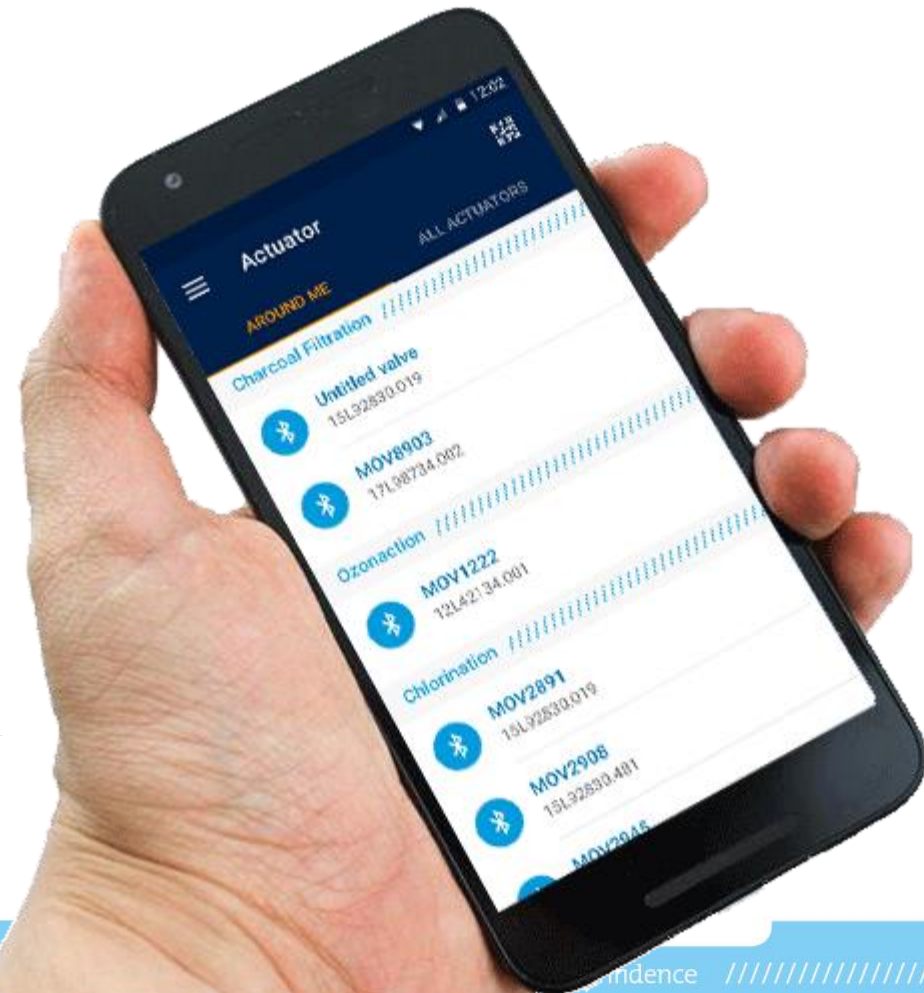
- **COMMISSIONING & DIAGNOSTIC**

- > Valve set-up
- > Operation
- > Alarms status



# Bernard Controls new mobile application

- Management of the valves
  - › By Tag number
  - › By serial number
  - › By operating unit

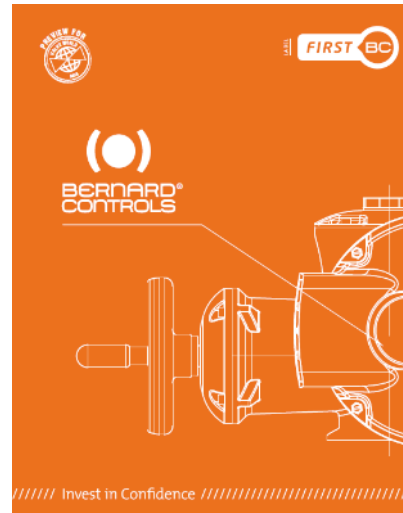


- Direct access to the **documentation by QR code or serial number**

- › User's manual (IOM)
- › Wiring diagram
- › Dimensional drawing
- › Certificates , Spare-part list



- Download the brochures on BC website [www.bernardcontrols.com](http://www.bernardcontrols.com)



Weatherproof  
Multi-turn Actuators  
AT RANGE

- Contact us for additional information  
[inquiry.world@bernardcontrols.com](mailto:inquiry.world@bernardcontrols.com)