

PROFOX

ACTUATORS



auma[®]

60 years experience in development, production and distribution of electric actuators. This is an excellent background for redesigning automation of valves to tomorrow's standards. Considering current developments and the future in digitalisation.

AUMA has broken new ground.

The result:

Compact, flexible and cunning,
the FOX is the perfect namesake.

PROFOX

for smart valve
automation of
today and tomorrow



smart means sustainability

- > Low standby consumption
- > Premium efficiency
- > Long lifetime
- > High availability thanks to predictive maintenance



clarity through ingenuity

- > Simple installation
- > Intuitive commissioning
- > Clearly visible status indication
- > Commissioning also via App



flexibility through versatility

- > Optimising the positioning speed for each phase of the travel (operation profiles)
- > Precise positioning
- > Gentle approaching of end positions



PROFOX BENEFITS



universal use through modularity

- > Automation of all valve types
- > Certified for potentially explosive atmospheres
- > Homogeneous operation scheme
- > Wide performance range with just a few sizes



reliability through resistance

- > Engineered & made in Germany
- > Robust metal housing
- > High enclosure protection
- > Wide temperature range
- > Premium corrosion protection



ONE SOLUTION FOR BUTTERFLY, BALL/PLUG AND GLOBE VALVES

Compact actuators – intelligent functions – a platform concept

for tailored automation solutions at numerous levels:

> **Valve:**

PROFOX is available as multi-turn, part-turn or linear actuator Wide performance range with just a few sizes

> **DCS:**

PROFOX masters a large variety of communication technologies and supports easy integration

> **Applications:**

In all types of process plants as indoor or outdoor application, also under severe climatic conditions. Any mounting position Certification according to IECEx qualifies PROFOX for use in potentially explosive atmospheres

> **Future and digitalisation:**

PROFOX can be adapted to new requirements via firmware upgrade

> **Compact**

Ideally suited for space constraints e.g. in skids



PROFOX-L

Linear actuators

Operating forces between
0.8 kN and 15 kN
(as of Q3/2024)



PROFOX-M
Multi-turn actuators
Torques between
10 Nm and 100 Nm

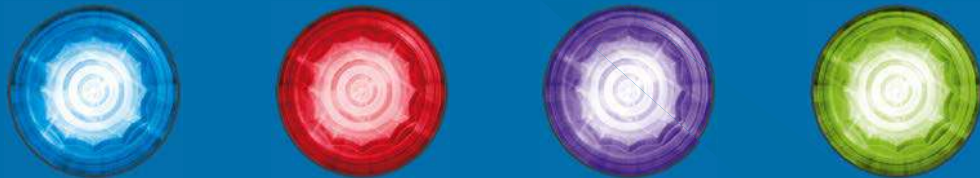
PROFOX-Q
Part-turn actuators
Torques between
32 Nm and 600 Nm

PROFOX – A PARTNER FOR LIFE

Harmonised:

- > Automation
 - > Installation
 - > Device integration
 - > Commissioning
 - > Operation
 - > Documentation
 - > Service schemes
 - > Spare parts management
- for all valves at one site.**

FOX-EYE



Each PROFOX is equipped with a centrally located LED: The FOX-EYE.

Providing clearly visible information about both actuator and valve status.

Blinking or continuously illuminated, the FOX-EYE provides unambiguous signals thanks to different colours. Example:

- > White permanent light: PROFOX in standard operation
- > Blue permanent light: Bluetooth connection active

The FOX-EYE indication scheme can be configured by the user via App as required

The optional position indication allows clear display of the current valve position.

PROFOX-Q
Part-turn actuator



PROFOX-M
Multi-turn actuator



PROFOX – CLEAR COMMUNICATION



FOX-EYE and status indication

- > Clearly visible
- > Unambiguous symbols
- > Clear display scheme

AUTOMATION MADE EASY THANKS TO PROFOX

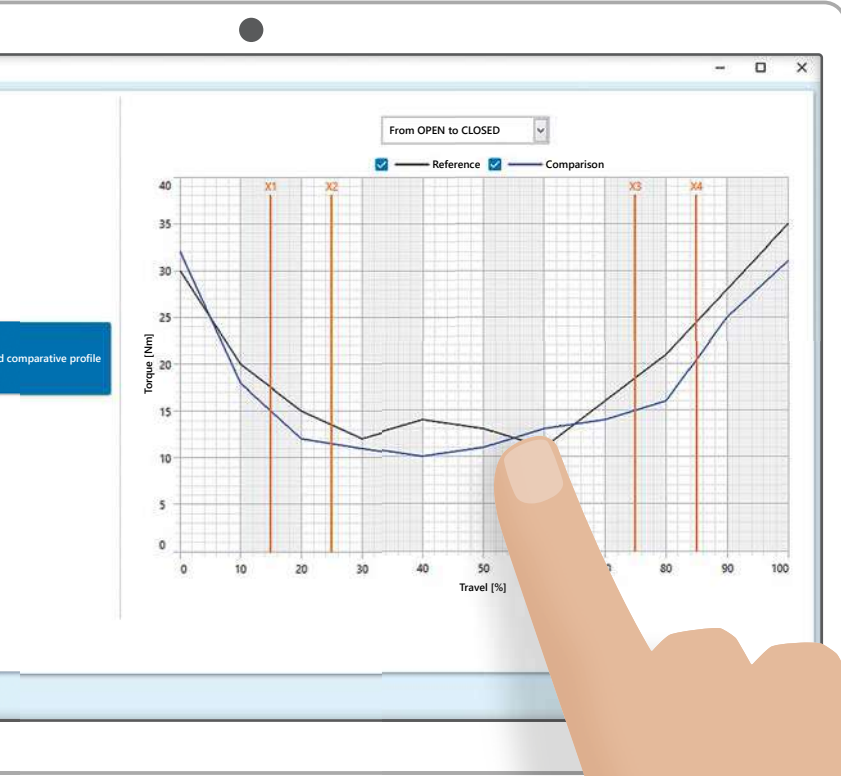
Installation – Commissioning – Lifetime operation: Basic design and well-engineered functions ensure long, safe and economic PROFOX operation without incidents.

The PROFOX diagnostic functions provide solutions for fast fault analysis and remedy.

Increase availability thanks to PROFOX: Regular control of operating parameters shows deviating and taxing operating conditions which could be avoided. The timely fault remedy avoids failures and additionally extends the PROFOX lifetime.



PROFOX – A SOLUTION FOR LIFE



comparative profile

Torque requirement control

You may record a torque profile at any time. This is compared with a reference profile recorded in PROFOX.

A warning signal clearly indicates increased loads. The profile allows drawing conclusions on the valve status.



**Flexible integration:
From binary signals right through to Industrial Ethernet**

Both are possible with PROFOX – and any other schemes

Commissioning:

- > via push buttons or
- > via App by means of Bluetooth interface.

Transmission of operation commands and feedback signals:

- > via 24 V or 4 – 20 mA signal or
- > as digital data via fieldbus or Industrial Ethernet



CORALINK

Expert care for your actuators



Fit for the digital future

The intelligent PROFOX allows the use of the full potential of CORALINK, the digital ecosystem by AUMA.

CORALINK provides support in all phases of the product lifecycle.

Modules like the AUMA Assistant App, AUMA CDT and AUMA Cloud help to save resources and to optimise availability and lifetime



Commissioning, analysis,
service support, remote
controls of PROFOX via AUMA
Assistant App.



The Commissioning and
Diagnostic Tool (CDT) is the
variant to be used on
laptops.

Connection to PROFOX via
password-protected
Bluetooth connection

PROFOX – DIGITAL SCALING

Modular enhancement

e.g. for including interface boards
for transmitting additional signals or
for
redundant communication structures.



FLEXIBLE AND RESISTANT

Foxes are adaptable animals.

PROFOX is an adaptable actuator.

This applies in particular to the application conditions.

Supply voltage virtually as desired

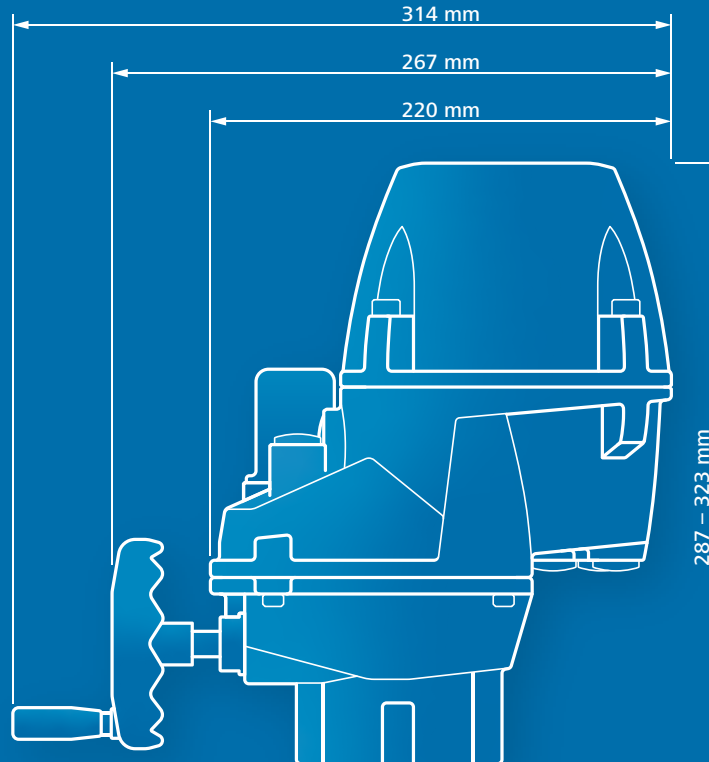
PROFOX actuators are equipped with a wide range power supply unit,

which automatically adapts to the supply voltage. For 1-phase AC voltages between 100 V and 240 V, irrespective if 50 Hz or 60 Hz, for DC voltages between 180 V and 300 V. In these ranges, the actuator has a good tolerance against voltage peaks and maintains speed and torque at a constant level.

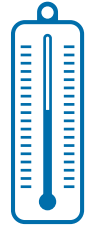
In addition, PROFOX is available for 24 V DC voltage supply.

Compact

Premium performance with compact design, allowing any desired mounting position. Allows wide tolerances for planning and installation.



Wide temperature range



+70
-30



ange

°C

°C

Highest enclosure protection

IP67

IP68

Premium corrosion protection

C5-M/C5-I

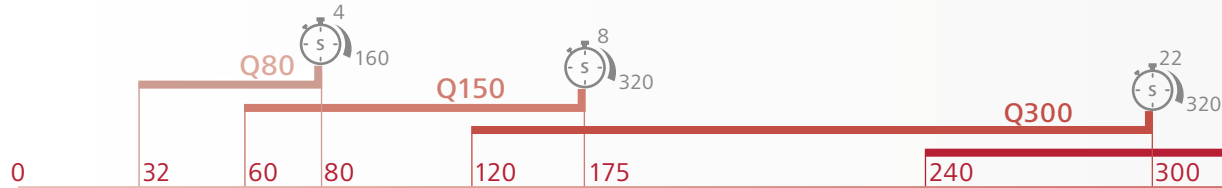
According to EN ISO 12944-2

PROFOX –
PERFECTLY
ADAPTABLE



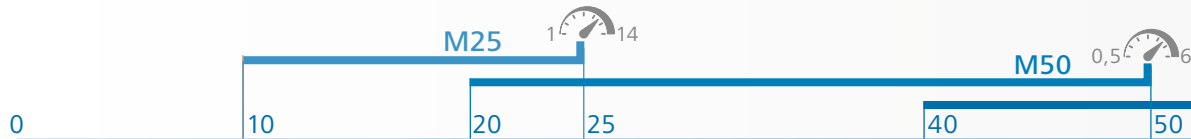
Made in Germany

PROFOX-Q PART-TURN ACTUATOR – torques and operating times



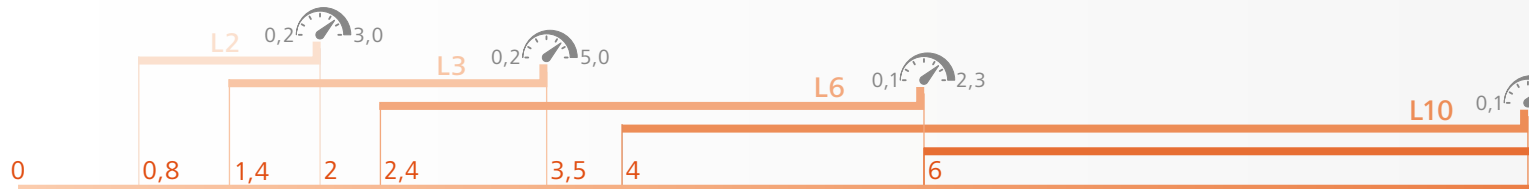
Setting range for tripping torque in Nm

PROFOX-M MULTI-TURN ACTUATOR – torques and positioning speeds



Setting range for tripping torque in Nm

PROFOX-L LINEAR ACTUATOR – positioning forces and positioning speeds (as of Q3/2024)



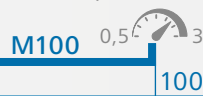
Setting range for tripping force in kN

PROFOX – BASIC DATA

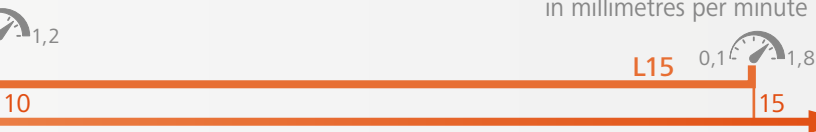
Positioning range
in seconds



Operating speed range
in turns per minute



Operating speed range
in millimetres per minute



Open-close and
modulating duty

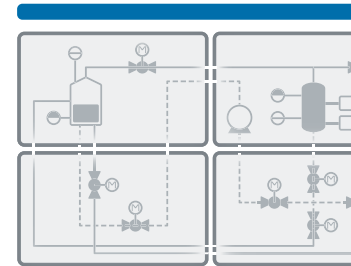
Limit and torque seating
can be configured

Operating time/operating speed
fine-tuning possible

Standardised valve attachments

PROFOX FACTS

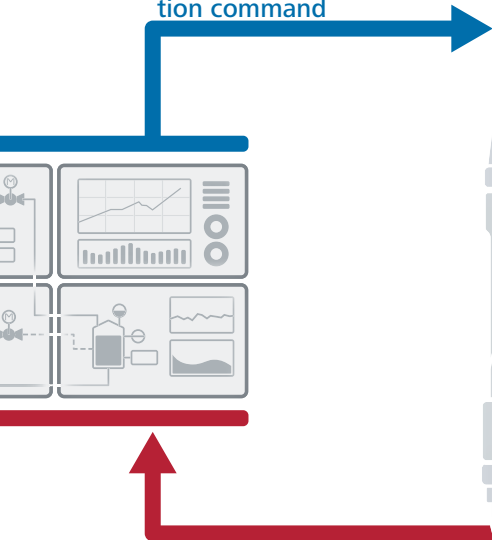
- Positioning of valves depending on DCS operating commands and setting specifications.
- Signals the valve position to the DCS.
- Receives and sends commands or signals via selection communication technology either parallel or serial (fieldbus/Ethernet).
- Equipped with two independent automatic seating facilities:
 - > Limit seating: Tripping once the end position is reached.
 - > Torque seating: Tripping once the torque limit value within the valve is reached – permanent overload protection. Can also be used for conventional end position tripping.
- Ready for both duties: OPEN - CLOSE duty and modulating duty.
 - > OPEN - CLOSE valves: Approaching the end positions.
 - > Modulating valves: Flow control for valve position.
- Comprises of functions based on flexible speed, ensuring premium positioning accuracy and soft valve management.
- Safety functions ensure predictable valve behaviour in case of functional deviations, e.g. for signal loss.
- Handwheel in particular for emergency operation in case of power failure. Easier device setting during commissioning.



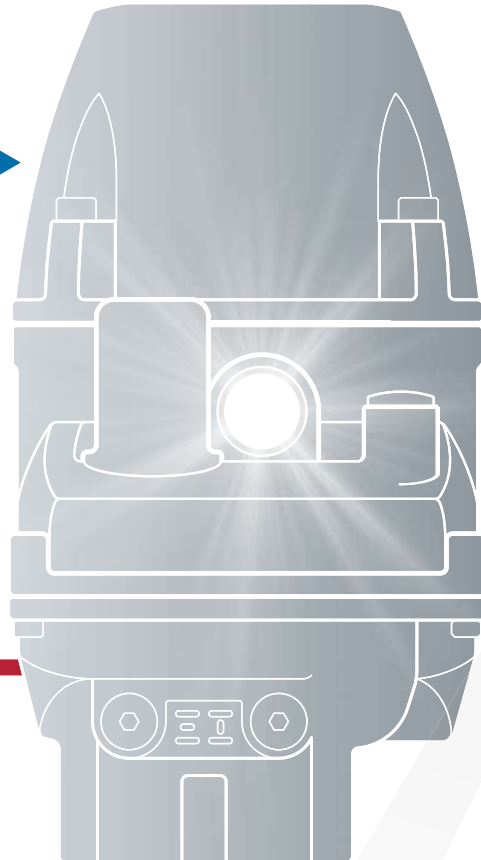
DCS

PROFOX – BASICS

Running OPEN
Running CLOSE
STOP
Position setpoint for
emergency opera-
tion command



End position OPEN
End position CLOSED
Valve position
Fault
Diagnostic data



Standardised

AUMA devices are designed to satisfy international standards.

This includes the interfaces to the valve as well as the integration into any DCS. AUMA exclusively uses open data protocols. AUMA actuators, and this includes PROFOX, are compatible in terms of communication to all other field devices.

KNOWING WHAT IS NEEDED!

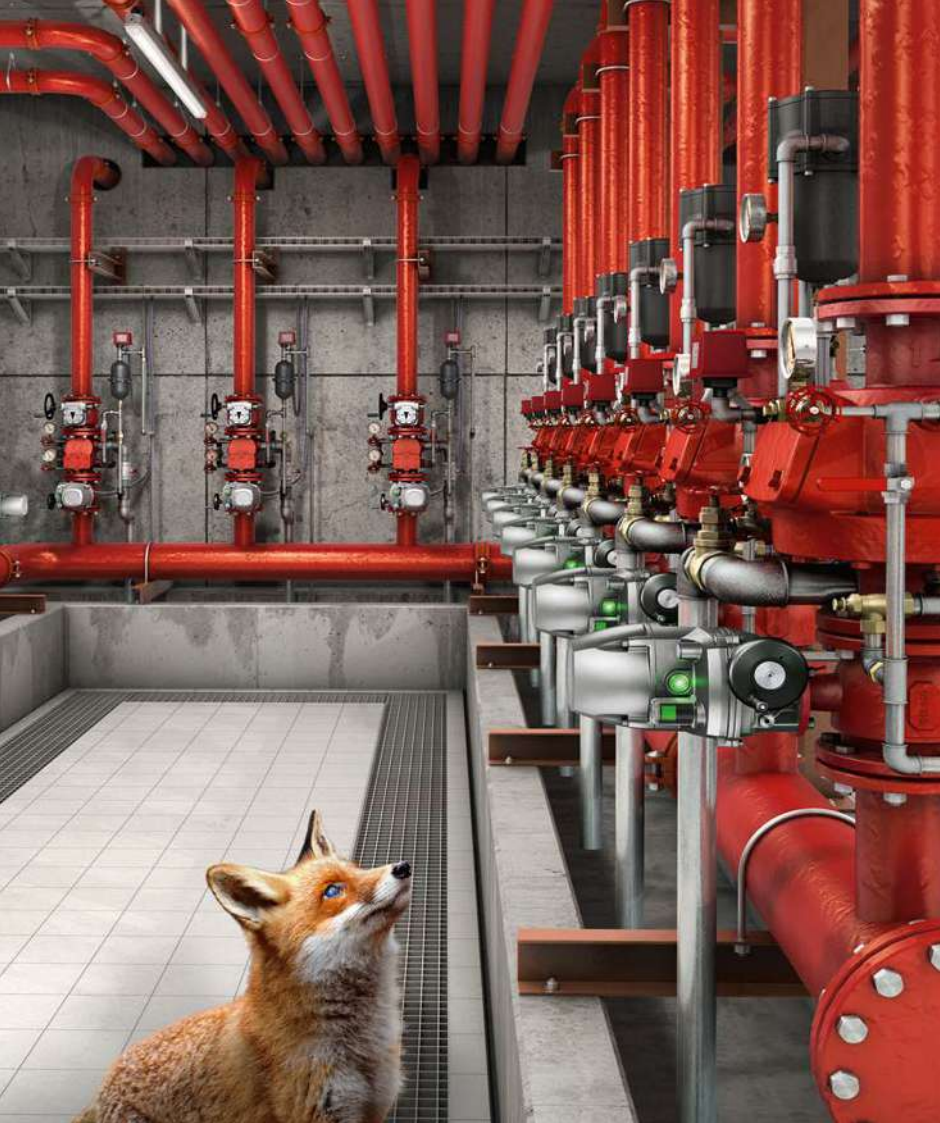
The key element of our long-standing experience:

We have identified your exact requirements!

PROFOX actuators are optimised for the deployments like:

- > In water industry installations, in particular small units for water supply.
- > In energy sector installations like CHP or for district heating.
- > In ventilation systems in the traffic sector like tunnels.
- > In generation and distribution of heating or cooling energy in industrial processes.
- > On vessels for bilge systems, fire protection, ballast or fuel.
- > For pump adjustment
or,
- > as shown, in sprinkler systems.





PROFOX – ON MISSION



All documents
for detailed
product selection are
available on our
website:

www.auma.com

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