

# PROFOX

## ACTUATORS



**auma**<sup>®</sup>

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**

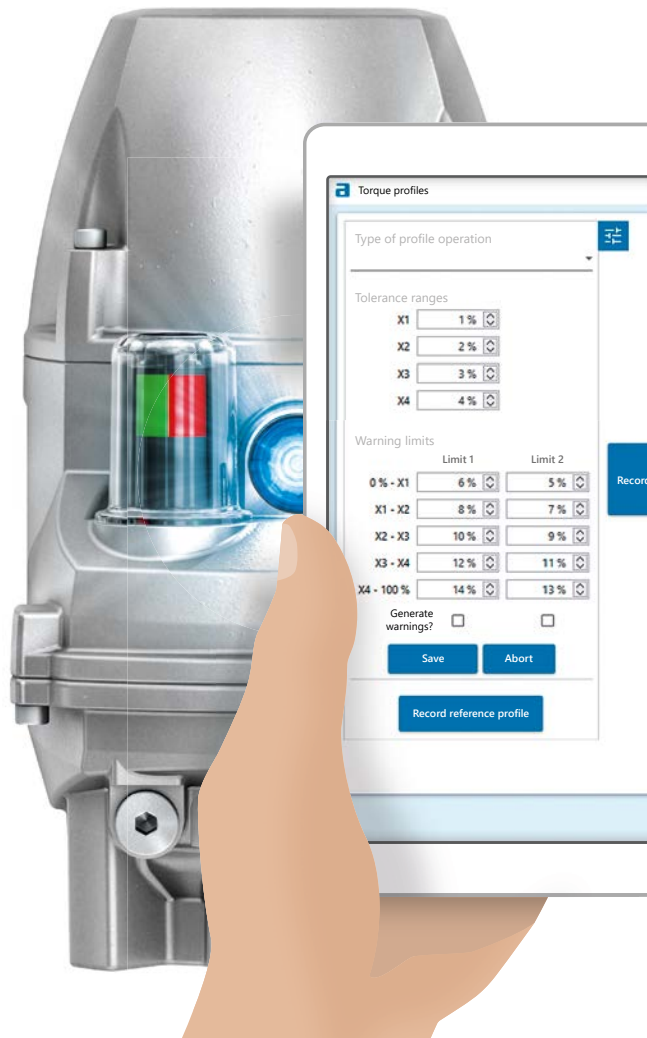
- > Clearly visible
- > Unambiguous symbols
- > Clear display scheme

# 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.

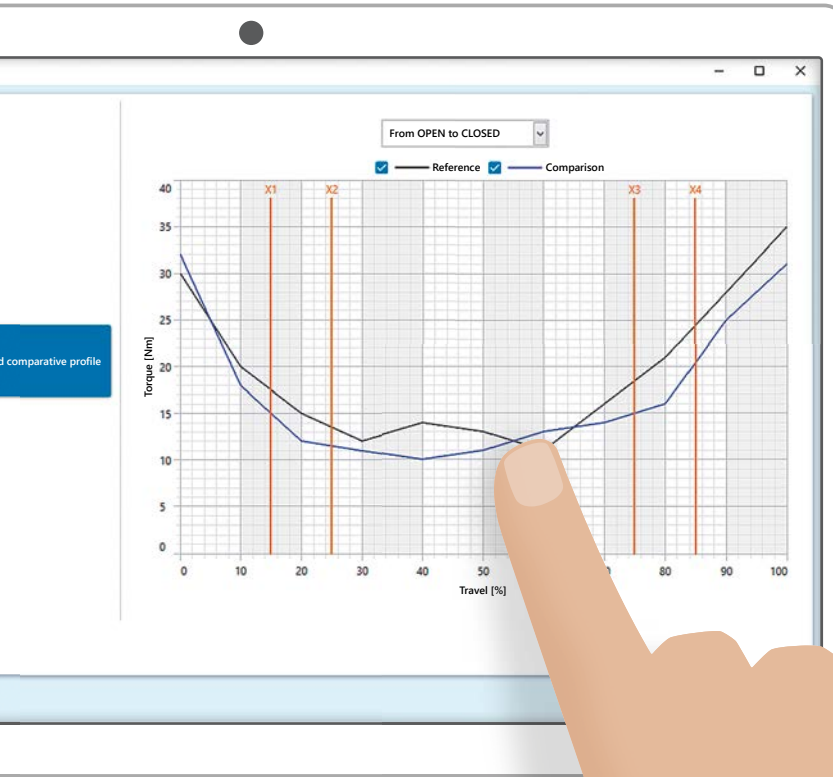
The PROFOX diagnostic functions provide solutions for fast fault analysis and remedy.

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



## 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**

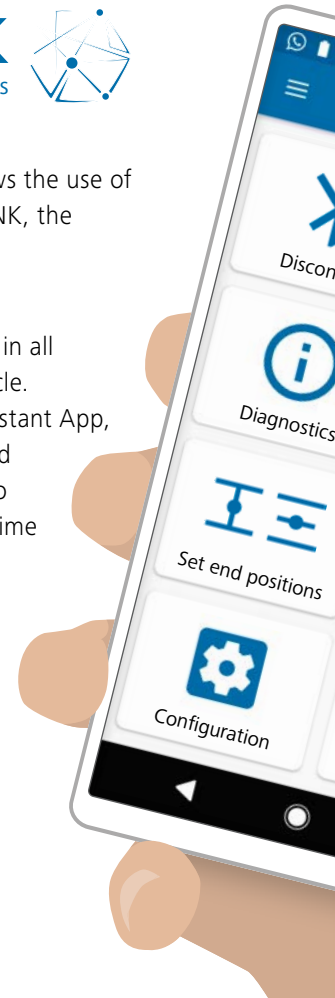
Expert care for your actuators



### **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

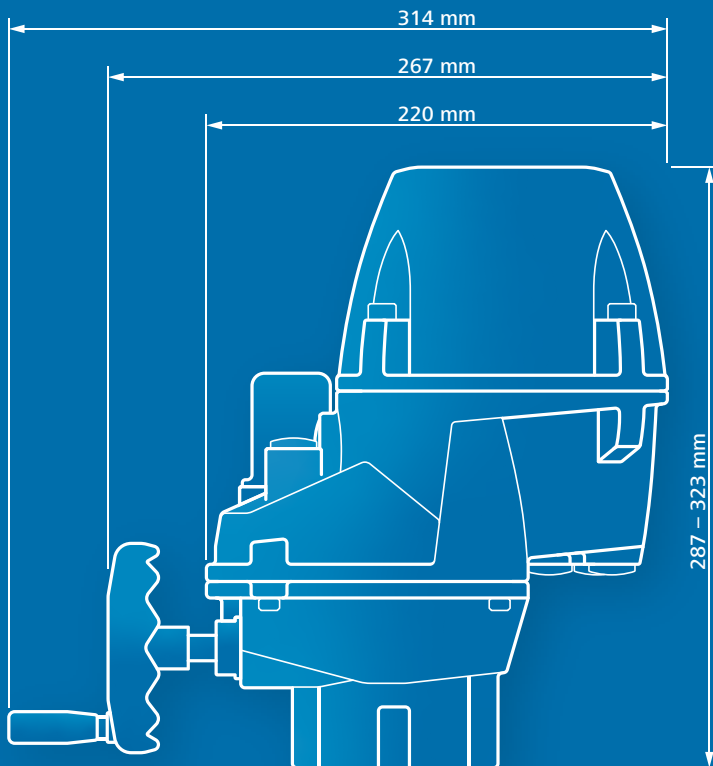
PROFOX actuators are equipped with a wide range power supply unit,

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

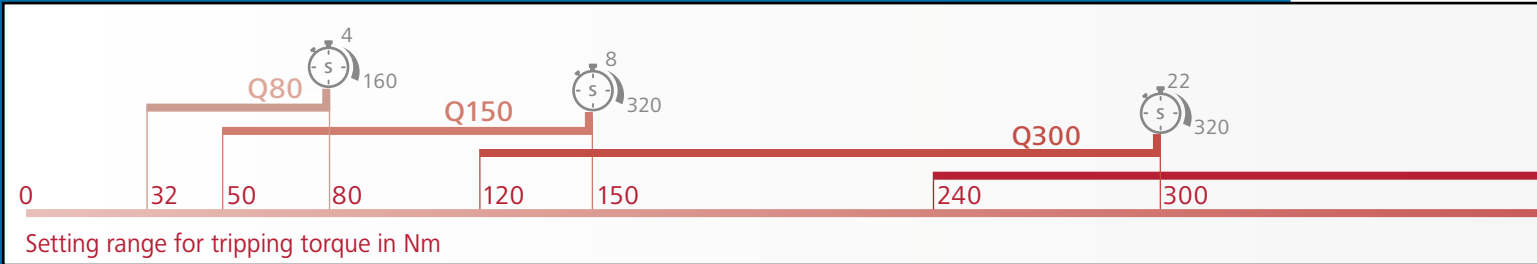
According to EN ISO 12944-2

PROFOX –  
PERFECTLY  
ADAPTABLE

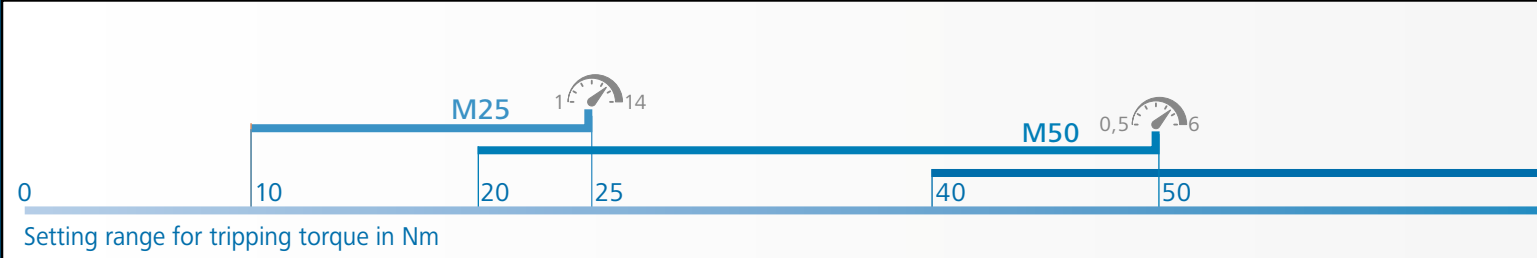


Made in Germany

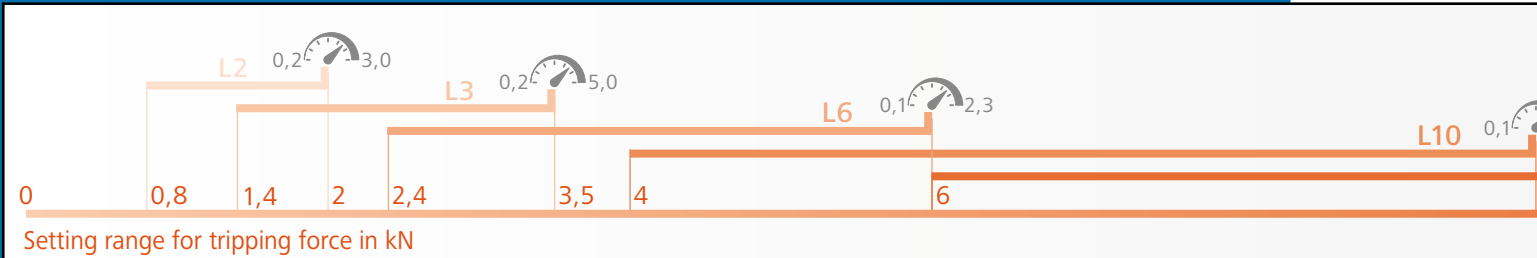
PROFOX-Q PART-TURN ACTUATOR – torques and operating times



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



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



# PROFOX – BASIC DATA

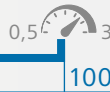
Positioning range  
in seconds

Q600



Operating speed range  
in turns per minute

M100



Operating speed range  
in millimetres per second

L15



Open-close and  
modulating duty

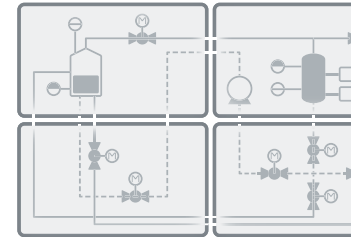
Limit and torque seating  
can be configured

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.

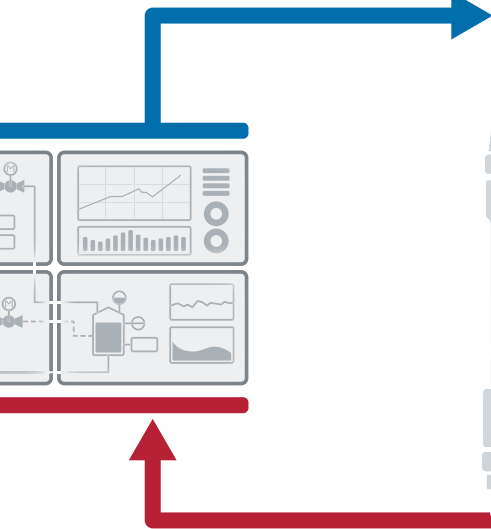


DCS

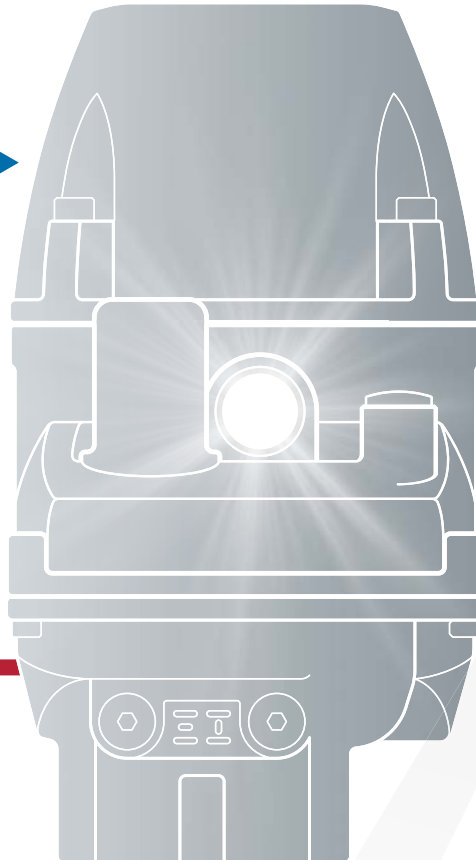


# PROFOX – BASICS

Running OPEN  
Running CLOSE  
STOP  
Position setpoint for  
emergency operation  
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!

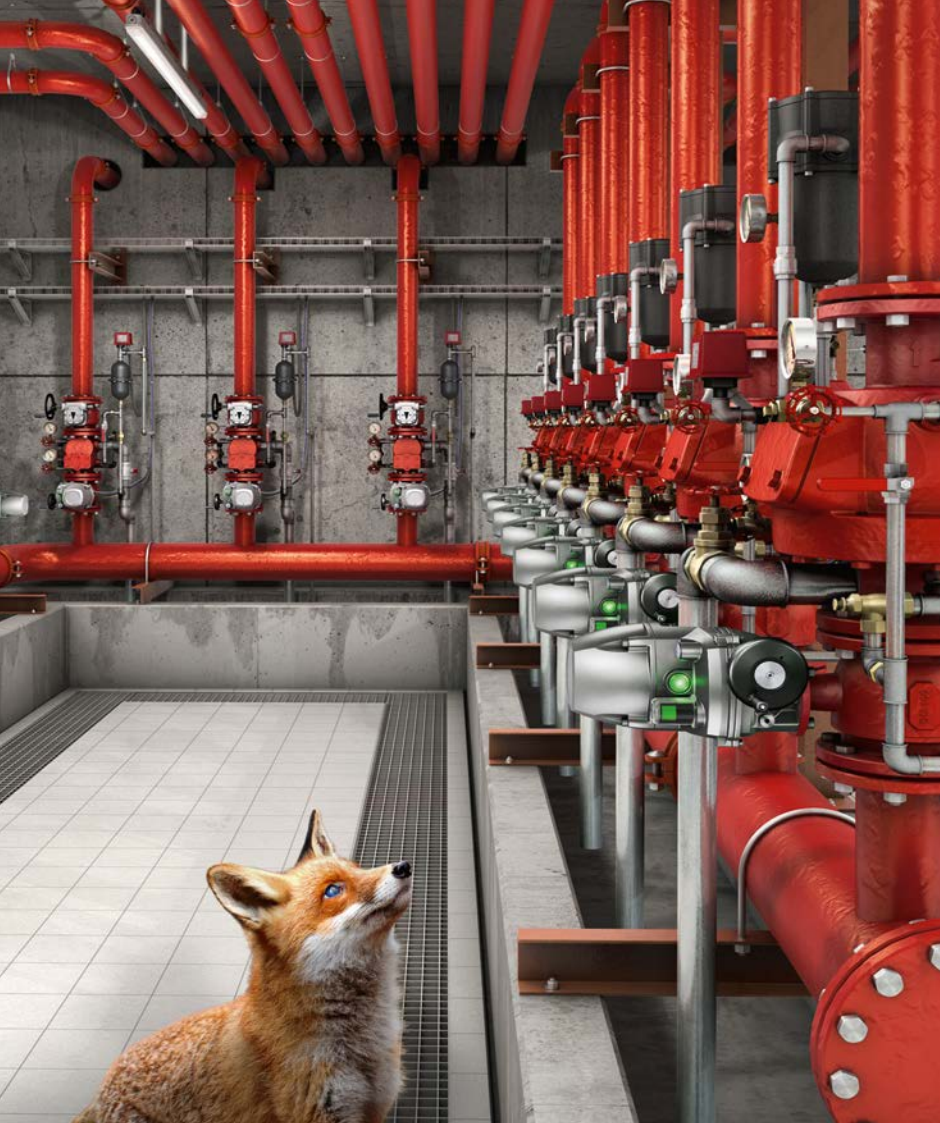
The key element of our long-standing experience:

**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](http://www.auma.com)





**AUMA Riester GmbH & Co. KG**

Aumastr. 1

79379 Muellheim, Germany

Tel +49 7631-809-0

Fax +49 7631-809-1250

[info@auma.com](mailto:info@auma.com)

Available for you in more than  
70 countries.

[www.auma.com](http://www.auma.com)



[profox.auma.com](http://profox.auma.com)



Subject to changes without notice. The product features and technical data provided do not express or imply any warranty.  
Y008.939/003/en/1.24