

PROFOX X

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.

THE **PROFOX X**

for smart automation of valves in potentially explosive atmospheres

2025.07.18



safety thanks to certification

- > Certification according to ATEX & IECEx
- > Approved for atmospheres with high specific ignition capability (IIC)
- > Approved for atmospheres with low ignition temperatures (T4)



reliability through durability

- > Made in Germany
- > Durable flameproof metal housing
- > Wide temperature range
- > Premium corrosion protection
- > High availability



sustainability through efficiency

- > Low standby consumption
- > Premium efficiency
- > Long lifetime
- > Low carbon footprint



flexibility through compact design

- > Perfectly suited for space constraints
- > Any mounting position
- > Intuitive commissioning also via App





PROFOX X COMPETITIVE EDGE



universal use through **modularity**

- > Automation of all valve types
- > Homogeneous operation scheme
- > Wide performance range with just a few sizes
- > Interchangeability of components ensures ease of servicing



precision through **versatility**

- > The positioning speed can be optimised for each phase of the travel (operation profiles)
- > Precise positioning
- > Gentle approaching of end positions



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

> **DCS:**

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

> **Future and digitalisation:**

PROFOX X can be adapted to new requirements via firmware upgrade

> **Compact**

Ideally suited for space constraints e.g. in skids

> **Global certifications**

PROFOX X globally approved for use in potentially explosive atmospheres



PROFOX LX

Linear actuators

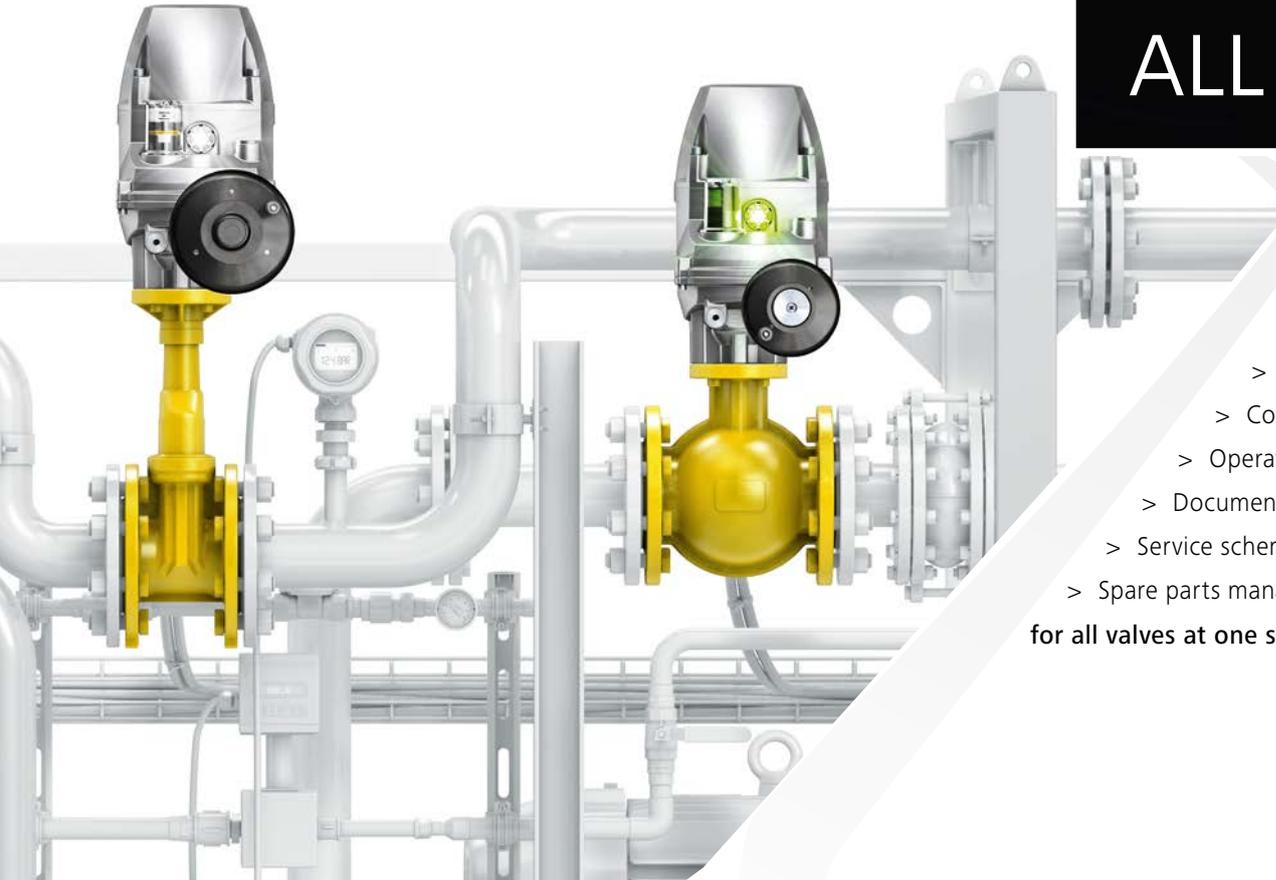
Operating forces between
0.8 kN and 15 kN
(as of Q4/2024)



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

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

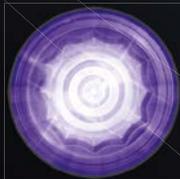
PROFOX X ONE FITS ALL



Harmonised:

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

FOX-EYE



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

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

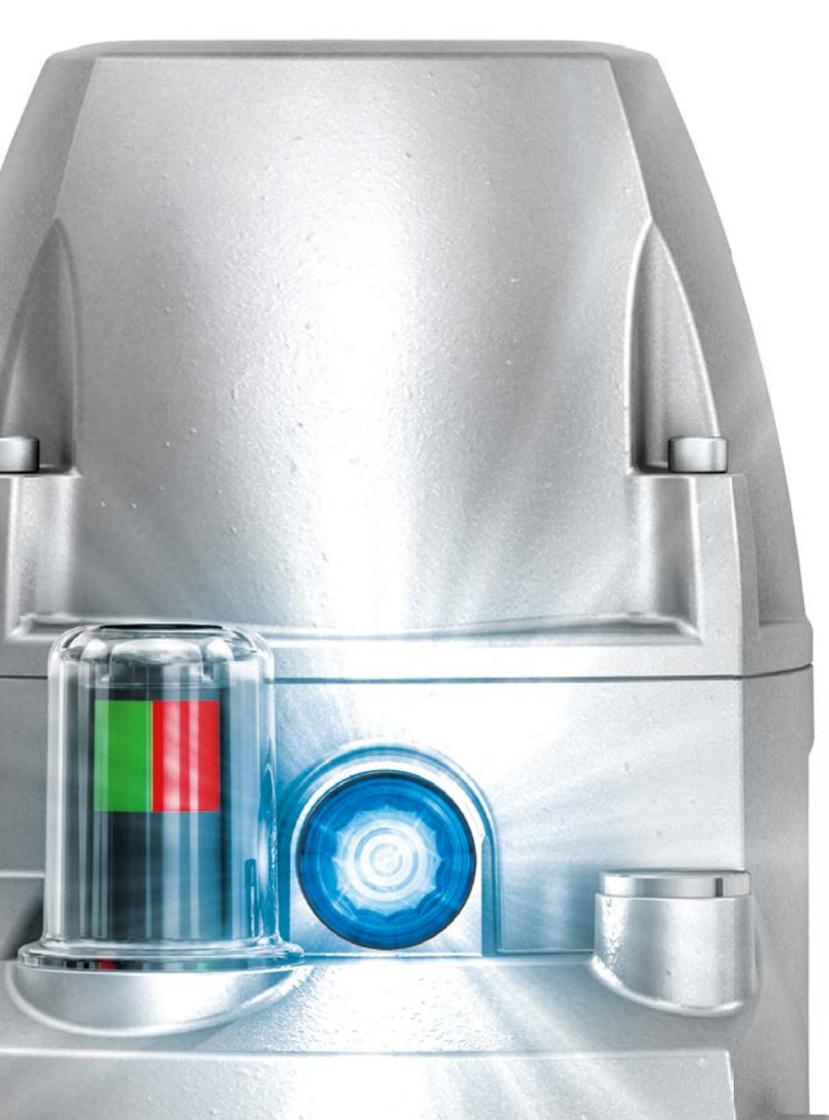
The optional position indication allows clear display of the current valve position.

PROFOX QX
Part-turn actuator



PROFOX MX
Multi-turn actuator





PROFOX X CLEAR COM- MUNICATION

FOX-EYE and status indication

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

AUTOMATION MADE EASY THANKS TO PROFOX X

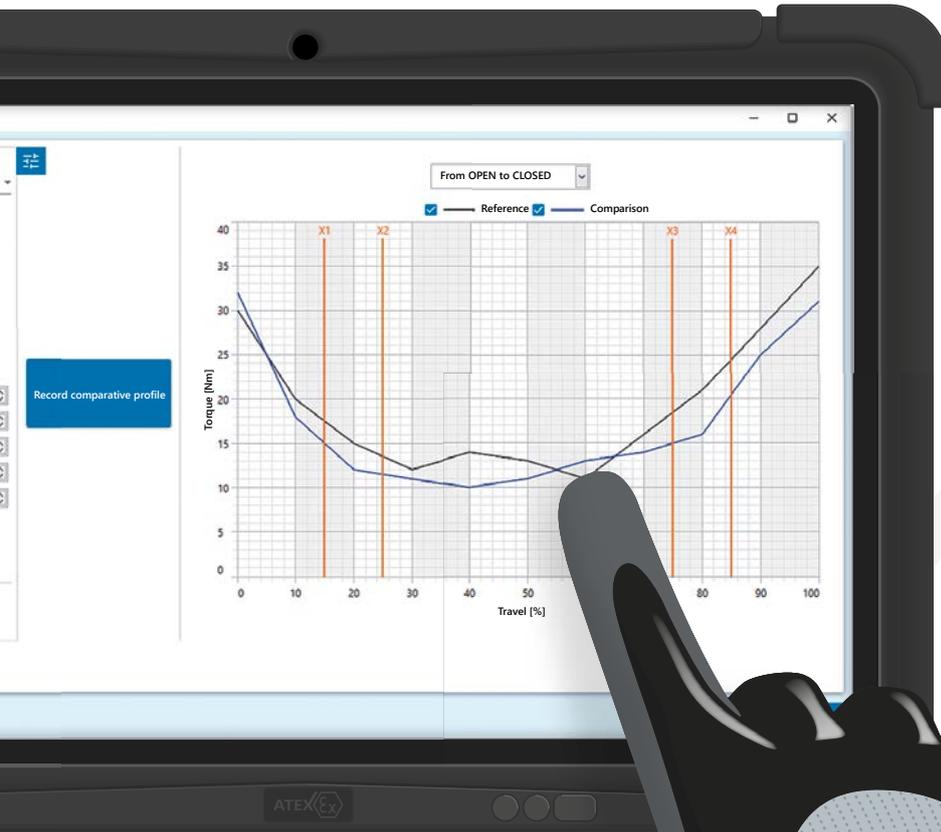
Installation – Commissioning – Lifetime operation: Basic design and well-engineered functions ensure long, safe and economic PROFOX X operation without incidents.

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

Increase availability thanks to PROFOX X: 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 X lifetime.



PROFOX X 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 X.

Increased loads are easy to detect. The profile allows drawing conclusions on the valve status.



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

Both are possible with PROFOX X, 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 actuator

Fit for the digital future

The intelligent PROFOX X allows 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
control of PROFOX X via AUMA
Assistant App.

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

Connection to PROFOX X via pass-
word-protected
Bluetooth connection



PROFOX X DIGITAL SCALING

Modular enhancement

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



FLEXIBLE AND DURABLE

Foxes are adaptable animals.

PROFOX X is an adaptable actuator.

This applies in particular to the application conditions.

Supply voltage virtually as desired

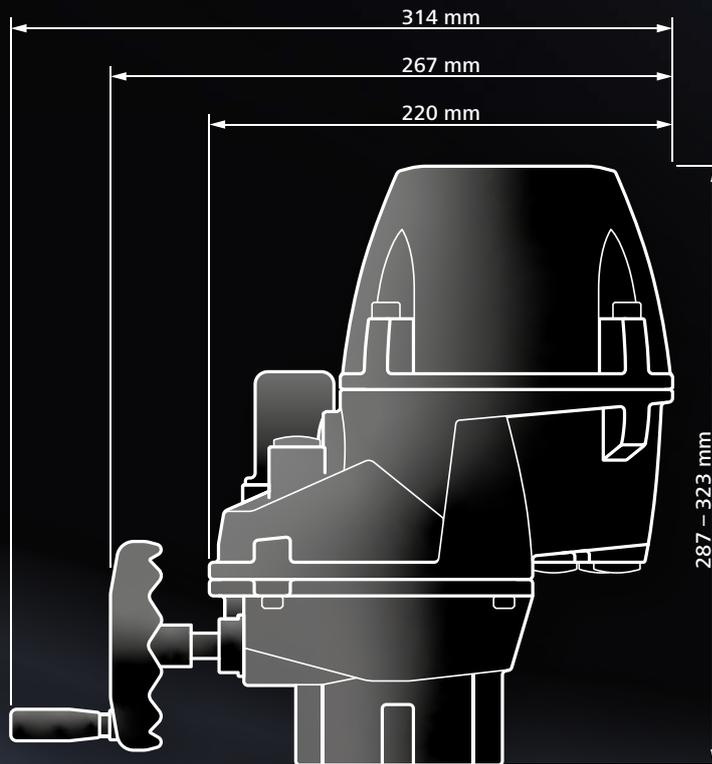
PROFOX X actuators are equipped with a wide range power supply unit,

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.



Explosion protection

Ex db h IIC T4

Ex h tb IIIC T13

DEKRA 21
&

IECEX DEK



ction

Gb
30°C Db

ATEX0092 X

21.0058X

Highest enclosure
protection

IP67

IP68

Wide
temperature range



+65 °C

-30 °C

PROFOX X
PERFECTLY
ADAPTABLE



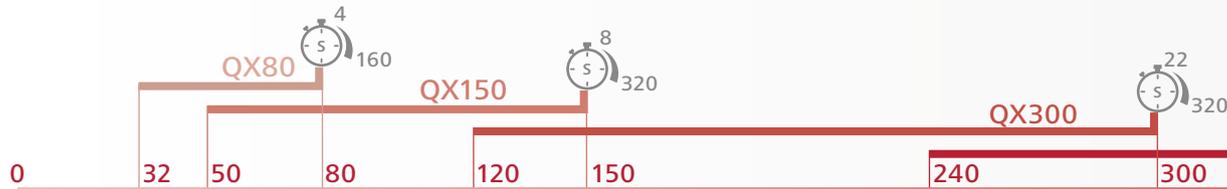
Premium
corrosion protection

C5-M/C5-I

According to EN ISO 12944-2

Made in Germany

PROFOX QX PART-TURN ACTUATOR – torques and operating times



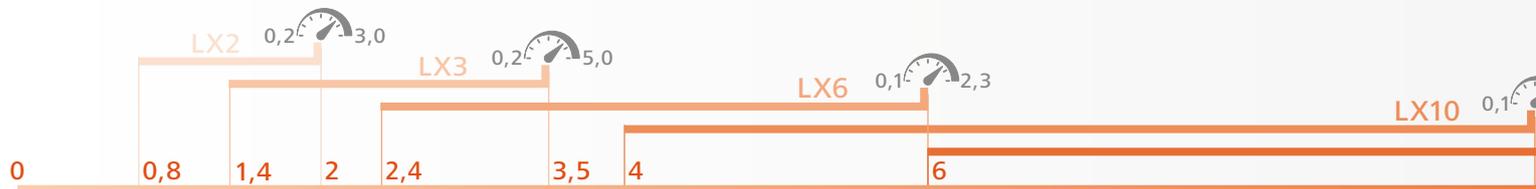
Setting range for tripping torque in Nm

PROFOX MX MULTI-TURN ACTUATOR – torques and positioning speeds



Setting range for tripping torque in Nm

PROFOX LX LINEAR ACTUATOR – positioning forces and speeds (as of Q4/2024)



Setting range for tripping force in kN

PROFOX X BASIC DATA

Positioning range
in seconds



Operating speed range
in turns per minute



Operating speed range
in millimetres per second



Open-close and modulating
duty

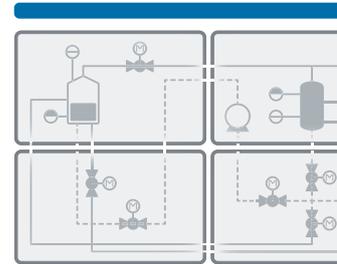
Limit seating, torque seating or
force seating can be configured

Operating time/operating speed
fine-tuning possible

Standardised valve attachments

PROFOX X INFORMATION

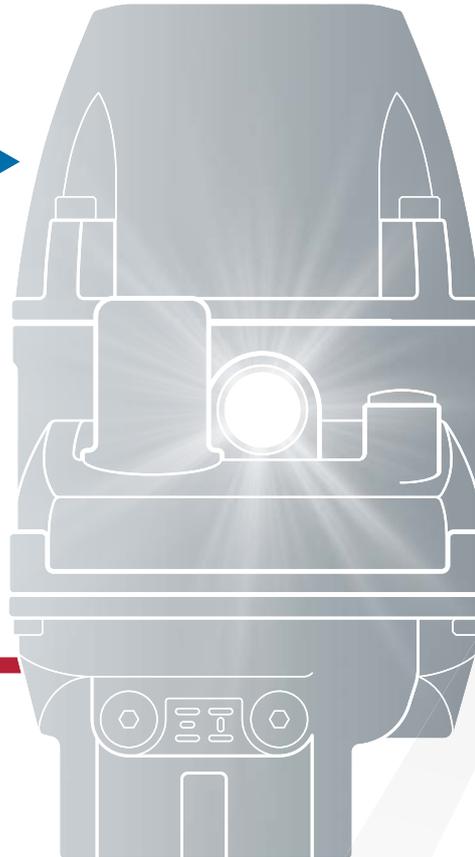
- ↙ ↘ Positioning of valves depending on DCS operating commands and setting specifications.
- ↙ ↘ Signals the valve position to the DCS.
- ↙ ↘ Receives and sends commands or signals via selection communication technology either parallel or serial (Fieldbus/Ethernet).
- ↙ ↘ Equipped with two independent 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 X 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 X, 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 X actuators are optimised for below deployments: In compact skids used for processing explosive media and/or for potentially explosive atmospheres.

- > In installations for storage of explosive gases
- > In installations for hydrogen generation
- > On board of vessels e.g. in the area of fuel supply
- > For pump adjustment in potentially explosive atmospheres
or
- > as shown, for pressure control when using choke valves in oil extraction.





PROFOX X ON MISSION



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

www.auma.com

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