



PNEUMATIC ACTUATORS
High Performance Execution



**We are specialized
in the manufacture
of high quality
actuators**



ACTREG, established in 1992, is a multinational company specializing in the manufacture and sales of high quality actuators for industrial valves for either On/Off or modulating duty.

The expertise and know-how have made **ACTREG** a leader in actuation technology.

ACTREG provides world coverage thanks to the strategic locations of its factories and offices.

The international distribution network ensures quick availability, and more importantly, personalized service for valve manufacturers, valve stocking distributors and contractors.



Power in automation

ESTABLISHED IN
1992

INTERNATIONAL
Distribution

DESIGN &
Quality

LEADERS IN
Technology

PERSONALIZED
Service

At ACTREG, we are dedicated to providing cutting-edge actuator solutions that meet the highest standards of performance and reliability. Our range of high-performance actuators is designed to stand up in the most aggressive environment, with the most efficiency and performance.

Advantages:

Innovative Technology

Our actuators integrate the most advanced engineering to deliver unmatched precision, speed and efficiency.

Robust Design

Built to withstand the most demanding environments, our actuators provide exceptional durability and longevity.

Versatile Applications

Whether you need actuators for heavy-duty tasks or intricate precision work, our products are versatile enough to meet your specific needs.

FULLY TRACEABILITY ACTUATORS WITH ONLINE CERTIFICATION SYSTEM

ACTREG pneumatic actuators uniquely offer full traceability for all critical components. The body, end caps, stems and pinions are individually marked with heat numbers. This allows the end user to identify when the component was manufactured, its raw material composition, and

to avoid any potential systematic error as a result of a mass production process. Every single actuator is laser-engraved with a unique and individual serial number and with this serial number you can download the specific certificates for each actuator.



Every single actuator is laser graved with individual serial number.

SERIAL NUMBER

www.actreg.com/en/certificates/

Download the individual certificates

Information of
the actuator



ACTREG has designed a unique actuator solution specially dedicated to the most critical applications

ADVANCED CORROSION PROTECTION COATING C5 ACCORDING TO ISO 12944

ISO 12944 is a globally recognised standard that lays out the rules and guidelines for the protection of assets from corrosion by use of coating systems and paint. This standard outlines the key criteria required to select the appropriate level of protection based customer's application. The first consideration is the classification of the atmospheric environment. The second consideration is the level of durability of the coating system required. While the first consideration is primarily used to select the appropriate coating system, the second indicates the estimated time before the first coating maintenance is required. According to ISO 12944, atmospheric environments are classified into five corrosive categories (from C1 to C5).

Certified for the highest classification

C5

All **ACTREG** high performance execution actuators are certified to the highest classification of C5, which withstands the most critical and corrosive environments. **ACTREG's** advanced coating system includes the following as standard:

A hard anodized primer coating with an 80µ dry layer as a final coat

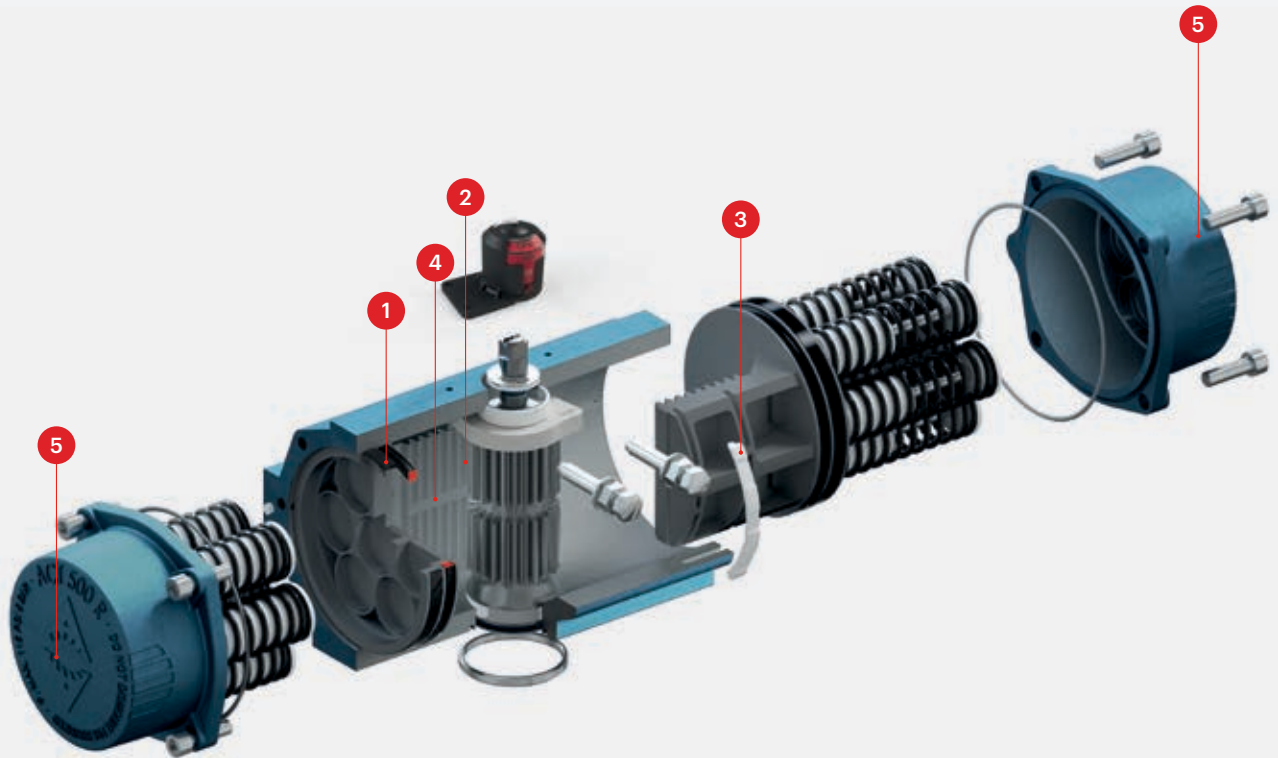
A highly corrosion resistant layer which withstands over 2000 hours in a salt spray chamber without any signs of corrosion or pitting

All exposed metal parts such as caps and fasteners in A4/316 stainless steel

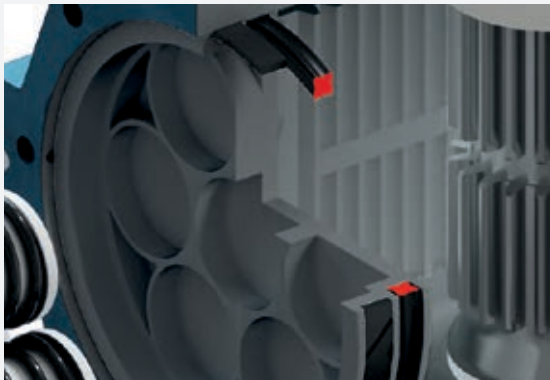
A "self-cleaning" monolayer with low porosity and lacquered finish, which prevents dirt and grime from adhering to the surface

Improved durability over standard actuators on the market

INNER DESIGN



1 ACTUATORS FITTED WITH QUAD RINGS



Special Quad Rings have a high stability for dynamic applications, have deeper standard grooves, more sealing capacity, and are more resistant.

Actuators from size 500 onwards, are fitted with special **ACTREG** Quad rings.

The quad ring provides increased reliability for dynamic applications, which is advantageous at higher torque requirements on larger actuated assemblies

Compared to the O-ring, the **ACTREG** quad rings have deeper standard grooves, where the diametrical squeeze is lower, friction is reduced and lubrication is enhanced, resulting in superior dynamic sealing

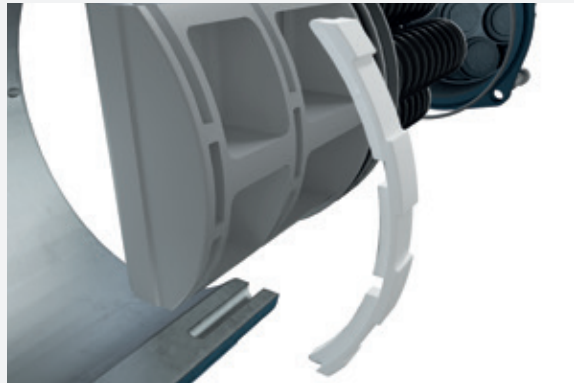
The quad ring has more sealing capacity due to its four-lobed design and has been proven to have longer lifespan and is more resistant to spiral failure compared to standard O-rings at higher torque loads

2 RACK AND PINION TRANSMISSION DESIGN



To prevent backlash, the **ACTREG** transmission gear has been optimized to have a zero backlash and zero pitch error. The actuator's internal rack and pinion has a unique design that ensures 3-tooth engagement at all times during operation.

3 SLIDE GUIDE DESIGN



To avoid metal-to-metal internal friction between the piston and the actuator body, **ACTREG** uses a special slide guide with just 4 friction points thus reducing wearing and increasing the torque output.

4 GUIDED PISTONS



ACTREG pistons have an integral guide to avoid axial movements and prevent stem blow out, whilst also increasing the lifetime of the actuators.

5 DIFFERENT END CAPS FOR SPRING OR DOUBLE ACTING



ACTREG differentiates the end caps for spring return or double acting actuators. This feature makes visual identification easier and the flat cap design results in reduced air consumption for the double acting iteration.

MULTIFUNCTION POSITION INDICATOR ACTREG & P+F PARTNERSHIP

The **ACTREG** position indicators are suitable for mechanical or inductive switches Pepperl+Fuchs. Those dual sensors are the best suited for position feedback of the open/closed of the valves. The main benefits of these sensors are:



Direct mounting on pneumatic actuated ball and butterfly valves

Easy installation and maintenance of the valve package - no extra mounting accessories required

Small sensing face ensures no pinch-point hazard between sensor and puck

Suitable for outdoor use

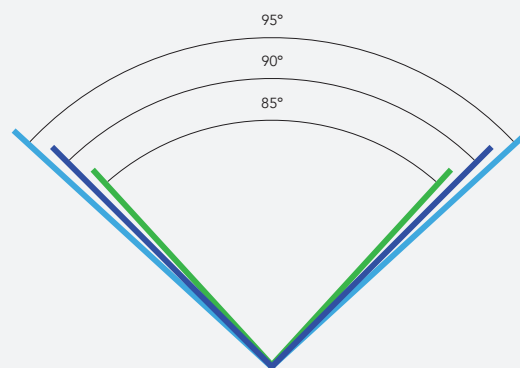
Versions available for all hazardous areas



BI-DIRECTIONAL TRAVEL STOPS

ACTREG actuators are provided with side located travel stops that allow $\pm 5^\circ$ travel adjustment between 85° and 95° .

These travel stops are designed to absorb the maximum rated torque of the actuator and the maximum impact loads associated with recommended travel speed.



NEW ACTREG POSITION INDICATOR

We have developed a new position indicator which is standard on High Performance actuators, suitable for dual sensors. Includes 3D visual degrees and open/close indications.



CERTIFICATES

ACTREG S.A.U. has a Quality Management System certified in accordance with the requirements of ISO 9001:2015 for the design, development, manufacturing and distribution of pneumatic actuators and accessories for valves.

ADA/ASR 10 up to size 300 are classified as category SEP in accordance with Pressure Equipment Directive 2014/68/EU. ADA/ASR 500 up to size 4000 are classified as Category I, Procedure module A.

All **ACTREG** actuators are classified for use in potentially explosive atmospheres as Group II Category 2, suitable for zones 1, 2, 21 and 22 in accordance with directive 2014/34/EU "ATEX".

All **ACTREG** actuators are tested and certified according to IEC61508:2010 and have a SIL3 capability. In addition, we can supply the final elements loops for SIF, with a full SIL calculations including valves and ancillaries, so we can provide a SIL certificate for the complete final element units.

TR-CU (Technical Regulations of Customs Union) certificates for Eurasian countries (EAC).

TYPE approval for Pipping systems offshore standard, marine and machinery systems and equipment.



WARRANTY

For this special customer solution, we upgrade as well the warranty terms. All our actuators are tested and certified according to European standard EN15714-3.

This standard specifies a minimum number of cycles, tested with an endurance test that includes a load and standard 5.5 Bar air pressure.

Minimum testing of cycles according to ACTREG test as per EN 15714

Nominal torque Nm	Piston or vane actuator Minimum number of cycles
≤ 125	1 000 000
≤ 1 000	1 000 000
≤ 2 000	500 000
≤ 8 000	200 000
≤ 32 000	50 000
≤ 63 000	20 000
≤ 125 000	10 000

Tested and certified according European standard **EN 15714-3**

Specifies minimum number of cycles

Tested with an endurance test that includes a load and standard 5.5 Bar air pressure

2x

ACTREG

guarantee their actuators
for double of state on
EN15714-3 standard

OTHER PRODUCTS

Check out the rest of our range of specialized products to complement your needs.



SY SERIES

Heavy duty applications

Hydraulic or pneumatic actuators

Scotch yoke design

Up to 258616 Nm in double acting and 111245 Nm in Spring return

Modular design

ATEX / CE / VDI/VDE 3845 / ISO 5211



SK SERIES

Compact pneumatic actuators

Scotch yoke design

Steel construction

Namur connection for solenoid valves

VDI/VDE 3845

ATEX, SIL3, PED



LINEAR PISTON ACTUATORS

Steel actuators for heavy duty applications

Hydraulic or pneumatic

Up to 400.000 N

Spring return or double acting



SWITCH BOXES

Micromechanical switches or inductive switches

Inductive switches for direct mounting

ATEX execution



DECLUTCHABLE GEAR BOXES

Aluminium Housing

Sealed to IP-65

ACTREG's Actuators direct mounting

Compact design-low weight

Double adjustment stroke



BRACKETS AND COUPLINGS

Stainless steel, carbon steel or other materials upon request

Machined for every kind of valve



PNEUMATIC CONTROL DESIGNS

Solenoid valves, filters, quick exhaust valves, tubing, regulators...

Line Break systems

Emergency shut down systems

Design and manufacturing control cabinets



SPECIAL ACTUATORS

Fire-proof

Fast acting actuators

100% adjustment stroke actuators

Special coatings

Locking device



AIR RESERVOIRS

Up to 3000 Liters

PED or "U" stamp

Carbon steel, stainless steel, special alloys



**Always
looking for
maximum
reliability**



For further information visit our website
www.actreg.com



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