

MAIN FEATURES & CHARACTERISTICS

1 BODY

The body is hard anodized aluminum with low surface roughness making it extremely abrasion resistant. Every single actuator is tested and provided with a unique serial number for traceability. This heat number is stamped on the body.

2 PINION

The carbon steel shaft is electroless nickel plated that protects against external and internal corrosion and is an anti-blowout design.

3 ADJUSTMENT STROKE

External stroke adjustment for 5 degree is placed on opposite side of Namur connection for better manipulation when the solenoid valve is assembled.

4 PISTONS

Pistons are coated with a special treatment for corrosion resistance. Backlash is avoided by a special tooth machining. The pistons have a 3-way guide for low friction between body and pistons. The pistons are also provided with an integral guide machined between pistons and pinion.

5 POSITION INDICATOR

Multi-function indicator suitable for mechanical or inductive switches is a standard feature. There are many different combinations so no need for external indicators.

6 SPRINGS

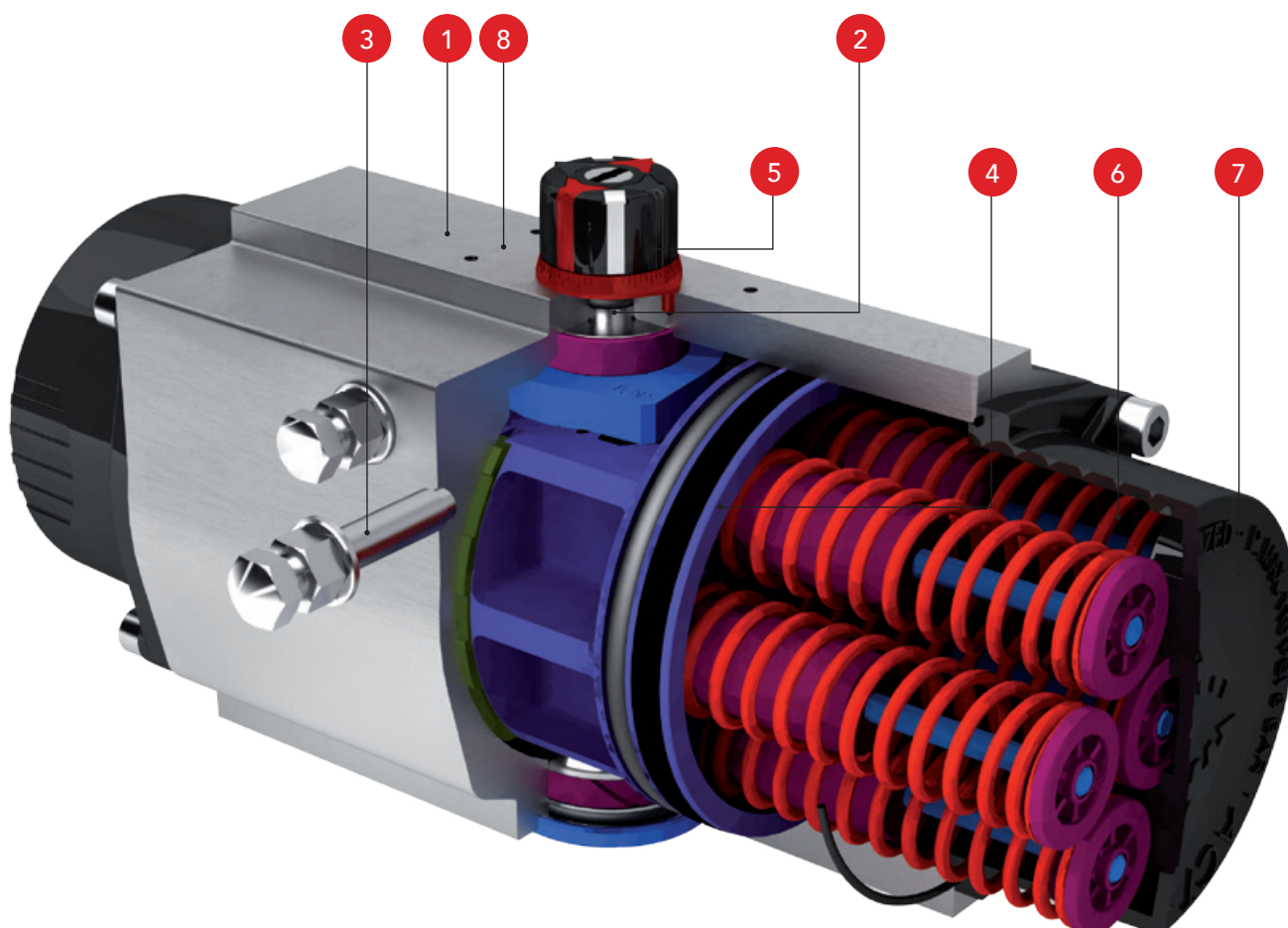
This system allows an easy fit for the necessary torque to open or close the valve which offers safe replacement and manipulation.

7 END CAPS

There are different end caps for double acting and spring return for quick and safe identification without need to read label. End caps are epoxy coated as a standard protecting them against environmental corrosion.

8 CONNECTION VDI/VDE 3845

The assembly of switch boxes, proximity switches or positioners take place by means of the Namur connection VDI/VDE 3845, which is a standard feature in all of our models. The height of the axis for all our products is 30mm, which means with a single model box or positioner all manufacturing ranges can be covered.



Types of Actuators

Double Acting & Spring Return



ADA
DOUBLE
ACTING
ACTUATOR



ASR
SPRING
RETURN
ACTUATOR

Rack and pinion design | Linear torque | Rotation angle $90^\circ \pm 5^\circ$ | Antifriction sliding bearings | Long life without maintenance | Total safety for springs replacement | Mounting of solenoid valves acc. NAMUR Std. | Mounting of devices acc. NAMUR VDI/VDE 3845 Std. | Coupling according to ISO 5211 and DIN 3337 (Octagonal drive) | Multi-function position indicator suitable for mechanical and inductive direct switches.

Working temperature:

-30 °C to 100 °C in Standard Construction.

-15 °C to 150 °C with FKM O-rings (high temperature execution).

-40 °C to 80 °C with Silicone O-rings (low temperature execution).

-60° C to 80° C with Silicone O-rings and 316 pinion (extreme low temperature).

Maximum working pressure:

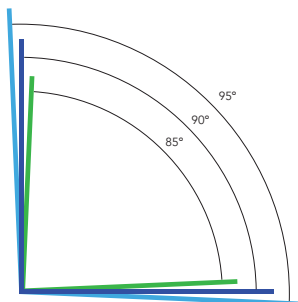
8 bar (116 psig). (Except ADA10 at 10 barg)

Bi-Directional Travel Stops

ACTREG pneumatic actuators are provided with bi-directional pinion travel stops.

Side located stops allow a full $\pm 5^\circ$ 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.

Adjustment of the travel limits are accomplished by unscrewing the locking nuts, turning the respective left and right stop studs to reduce or increase the travel angle and screwing the locking nuts.



Options On Request

- Locking device with padlock.
- Fast acting actuators.
- 100% travel adjustment stroke.
- Fire proof systems (K-mass, blanket).

Coatings for special applications

Actreg Pneumatic actuators are protected against external corrosion by proper material selection or surface treatment.

Standard execution

Anticorrosive C3 according to EN-ISO 12944-2

PARTS	DESCRIPTION	COATING
BODY	Hard anodized	25-30 μm
END CAPS	Epoxy painted	80-90 μm
STEM	Carbon Steel + ENP	25-30 μm
SCREWS	A2	

Execution A

Anticorrosive C5-I/C5-M according to EN-ISO 12944-2

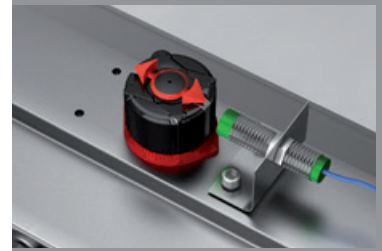
PARTS	DESCRIPTION	COATING
BODY	Epoxy painted	200-300 μm
END CAPS	Epoxy painted	140-180 μm
STEM	SS 316	
SCREWS	A4	

Execution B

Anticorrosive C4 according EN-ISO 12944-2

PARTS	DESCRIPTION	COATING
BODY	Epoxy painted	80-90 μm
END CAPS	Epoxy painted	80-90 μm
STEMS	Carbon Steel + ENP	
SCREWS	A2	

Multi-function position indicator



Inductive switch indicating open or closed position



Mechanical switches indicating open and close



Inductive switches indicating open and closed position



Namur connection for direct mounting switch box



Inductive switches indicating open and closed position (45° detecting switches...)

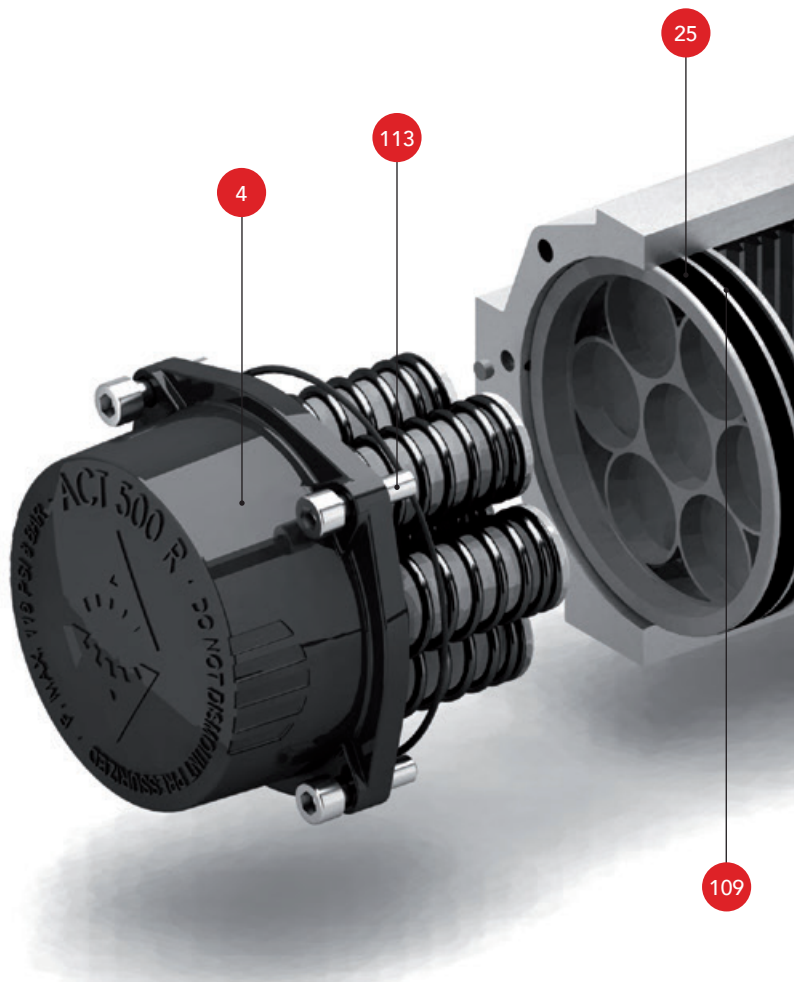


Inductive switches indicating open and closed position (up/down detecting switches...)

PARTS & MATERIALS

- 1 Body
Aluminium Hard Anodized
- 2 Piston
Aluminium
- 3 Pinion
Nickel Plated Carbon Steel
- 4 End Caps
Aluminium Epoxy Coated
- 5 Soft Pinion Washer *
Polyamide PA 6,6
- 6 Slide Piston *
Polyamide PA 6,6 + 30% G.F.
- 7 Lug **
Nickel Plated Carbon Steel
- 8 Pinion Washer
Stainless Steel
- 10 Upper Pinion Bearing
Polyamide PA 6,6 (bronze for sizes 500 and 2100)
- 12 Stop
ASTM A 105
- 14 Spring's Long Support
Polyamide PA 6,6
- 15 Spring's Short Support
Polyamide PA 6,6
- 16 Leveling Screw
Stainless Steel
- 18 Bolt
Stainless Steel
- 19 Spring
DIN 2076 · D-5.6
- 20 Position Indicator
Polypropylene
- 21 Cam
Polypropylene
- 23 Centering Ring
Nickel Plated Carbon Steel
- 25 Slide Guide *
Polyamide PA 6,6 + 30% G.F.
- 26 Lower Pinion Bearing *
Polyamide PA 6,6
- 109 O-Ring *
NBR
- 110 O-Ring *
NBR
- 111 O-Ring *
NBR

SPRING RETURN ACTUATOR (ASR)



POSITION INDICATOR

FROM SIZE 20 TO 850



Inserts
Stainless Steel

Position indicator & Cams
Polypropylene

FROM SIZE 1200 TO 4000



