

rotork® Fluid Systems

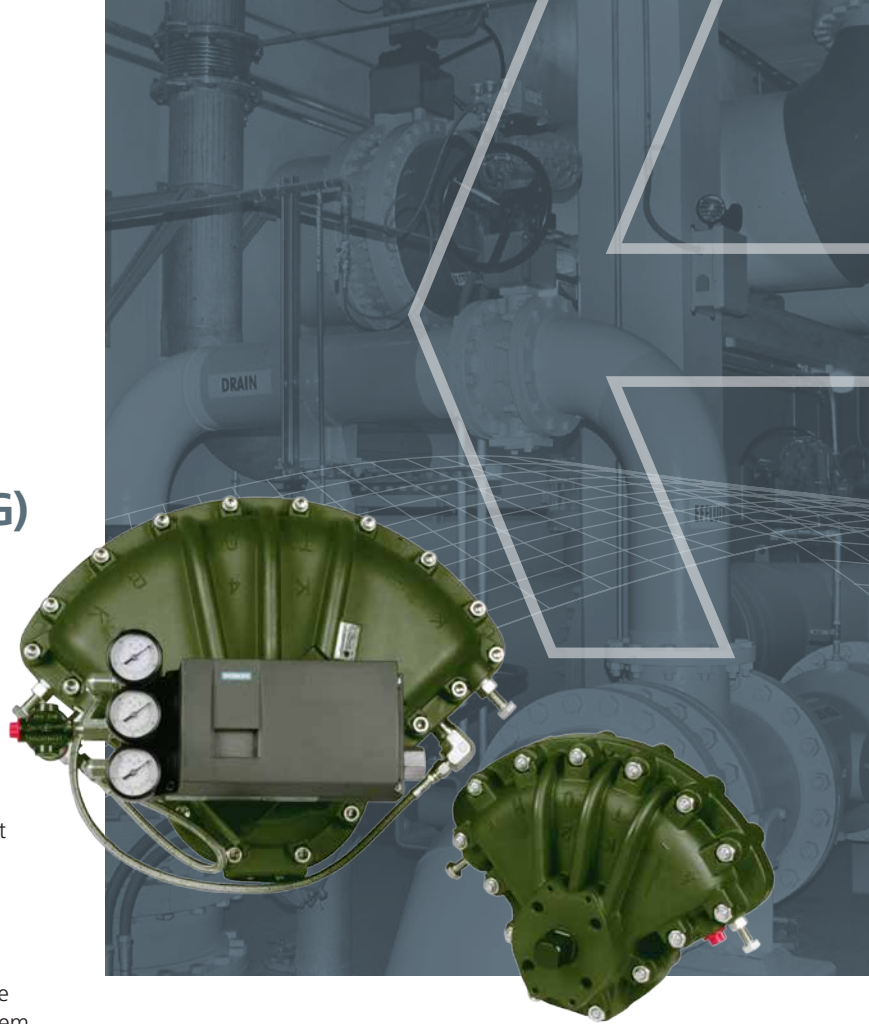
Maximise Protection with Ranger Corrosion Guard (CG)

Ranger Corrosion Guard is an optional coating process that provides maximum environmental protection to our K-TORK range of valve actuators. When used in highly-corrosive environments, service life is vastly extended.

The K-TORK actuator is a true rotary actuator that does not require the conversion of linear motion to rotary motion. It provides a simple, highly accurate and reliable quarter-turn valve operation for on/off or modulating service.

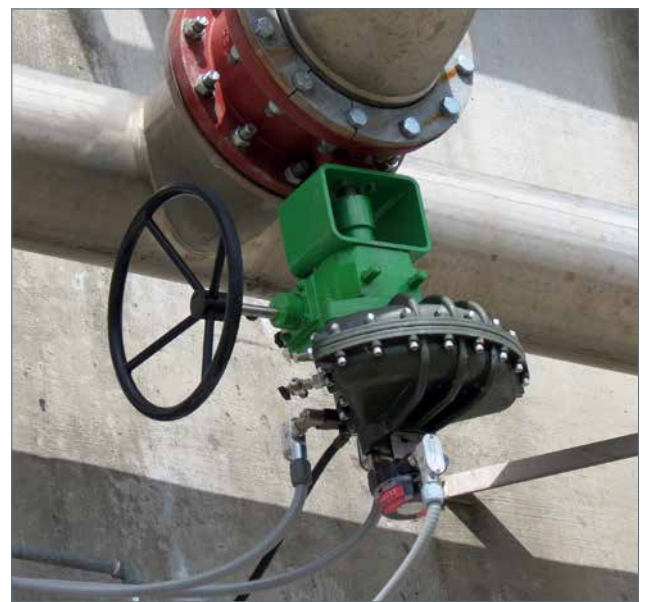
The actuator's cast aluminium body and alloy steel vane are treated with a thermosetting tri-polymer resin coating system formulated for mechanical components requiring corrosion resistance and surface lubrication. Once applied, the system provides an armored layer of protection against a wide range of acids, caustics, alkalis, solvents and salt-laden environments.

The Ranger CG system can be provided on all K-TORK double-acting and spring-return models. Note that the K-TORK spring-return is totally sealed. The internals of the non-vented spring housing are never subject to compressed air, moisture or atmospheric contaminants.



K-TORK Ranger CG

Corrosion resistant treatment



Keeping the World Flowing

K-TORK Ranger CG Coating Technical Data

The following estimates are guidelines only and are not intended for use in specifications.

Temperature range¹	-253 to +260 °C (-425 to +500 °F) (intermittently to +370 °C (+700 °F))
Flexibility	Unaffected by bend over 1/4" mandrel over complete temperature range
Taber abrasion	1,500 cycles for CS-17 wheel, 1,000 hours
Impact resistance	Greater than 54 kg (120 lbf)
Pencil hardness (direct and reverse)	3 H (on coated grit-blasted surfaces)
Boiling water	Unaffected in 6 months
Weathering (accelerated)	Unaffected in 1,000 hours
Saturated salt spray	Unaffected in 6 months
Dielectric strength	Greater than 1,000 volts/mil
Electric conductance	Non-conductive
Exterior durability	12 months
Adhesion (cross hatch tape test ASTM D3359 method B)	Excellent

1. This temperature range is applicable to the Ranger coating only. K-TORK actuators are available with the following operating temperature ranges:

Standard: -30 to +80 °C (-20 to +175 °F)
High: -20 to +149 °C (0 to +300 °F)
Low: -40 to +70 °C (-40 to +160 °F)

Steel and aluminum samples coated with the Ranger CG coating have remained immersed in the following chemicals for a period of 6 months with no deterioration:

- Ethyl alcohol
- Sec-butyl alcohol
- Methyl isobutyl alcohol
- Carbon chloride
- Sodium hydroxide
- Ammonium hydroxide (10%)
- Hydrochloric acid (10%)
- Phosphoric acid (85%)
- Solid detergent (1%)
- Calcium hypochloride (5%)
- Sodium methoxide (40% methanol)
- Isopropyl alcohol
- N-butyl alcohol
- Hexylene glycol
- Diethyl ether
- Formaldehyde (30%)
- Xylene
- Linseed fatty acids
- Hydrofluoric acid
- Sodium chloride (25%)
- Sodium hypochloride (5%)
- Toluene
- Diacetone alcohol
- Glycerine
- Methyl isobutyl ketone
- Sulfuric acid (75%)
- Nitric acid (10%)
- Allyl chloride
- Liquid detergent (100%)
- Ferric chloride (5%)
- Water

A full listing of our worldwide sales and service network is available on our website.

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