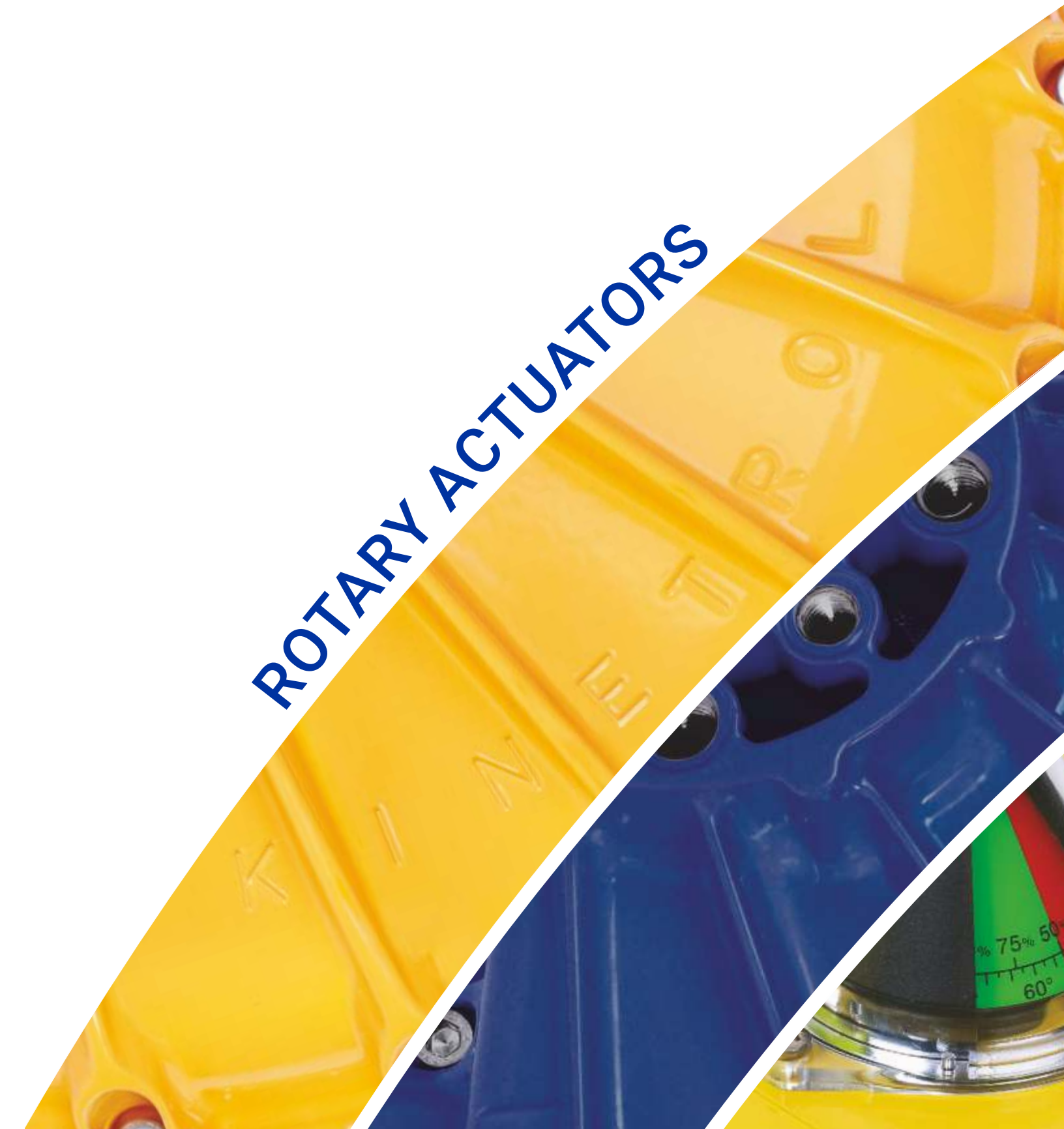


KINETROL®

ROTARY ACTUATORS



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Certificate No. FM22163

Kinetrol's rigorous quality program is approved to ISO 9001:2015 ensuring that each unit is manufactured to the highest standards.

APPLICATIONS

Operation or positioning of ball, butterfly, plug and control valves, ventilation dampers and automatic doors. Uses also include movement and positioning of components during manufacture - in fact anything that needs to be turned through 90° or less, automatically or by remote control.

LONG MAINTENANCE-FREE LIFE
Up to 4 million operations guaranteed

PROVEN IN SERVICE
Millions of units operating trouble-free worldwide

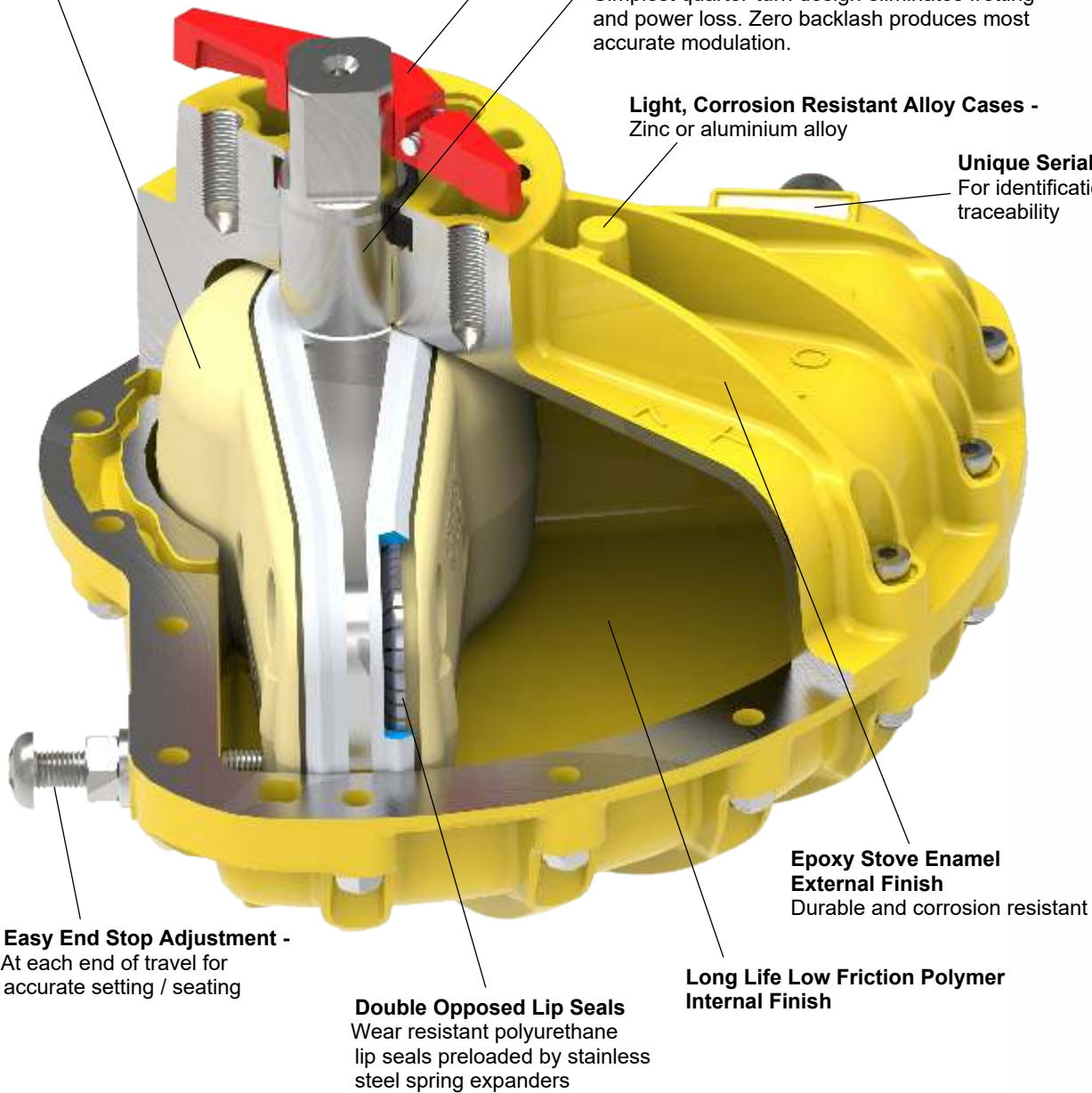
Patented Energy Absorbent, Space Filling Sideplates
Minimise dimensions and air consumption thereby maximising efficiency and operating speeds

Visual Position Indication

Internal Shaft / Vane Casting
Single moving part with no cranks or gearing. Simplest quarter-turn design eliminates fretting and power loss. Zero backlash produces most accurate modulation.

Light, Corrosion Resistant Alloy Cases -
Zinc or aluminium alloy

Unique Serial Number -
For identification and traceability



Easy End Stop Adjustment -
At each end of travel for accurate setting / seating

Double Opposed Lip Seals
Wear resistant polyurethane lip seals preloaded by stainless steel spring expanders

Epoxy Stove Enamel External Finish
Durable and corrosion resistant

Long Life Low Friction Polymer Internal Finish

CHOICE OF MALE OR FEMALE OUTPUT DRIVE SQUARES
Easy and versatile interface to applications

CLOSE COUPLED CONTROL MODULES
Fail-safe spring returns, limit switch boxes, solenoid valves and positioners all close coupled to actuators (see page 4)

The policy of KINETROL is one of continuous improvement. We reserve the right to alter the product as described and illustrated without notice.

Kinetrol modular concept easily provides the control assembly needed

1. Visual Indicator

Gives visual indication of valve position as standard except models 0M0, 01, 16, 18, 20, 30 and 60.

2. Clear Cone Monitor

Gives 360° and overhead position indication. Available on actuator models 03, 05, 07, 08, 09, 10, 12, 14, 15, limit switch boxes, AP positioners, EL positioners, P3 positioners and EHD models (details page 38).

3. I/P Controller

4-20mA electrical signal controls main air supply to pneumatic positioner as alternative to air signal control (details page 46).

4. AP Positioner

3-15psi (0.2-1 bar) air signal controls main air supply to turn, stop or hold the actuator vane in proportional response to that air signal. Limit switch and angle retransmit options available (details pages 41/42).

5. EL Electropneumatic Positioner

A single unit gives smooth accurate control in response to a 4-20mA signal. Limit switch and angle retransmit options in same housing (details pages 39/40).

6. P3 On/Off Positioner

Modulation and/or two endstop positions and a mid-range setpoint anywhere within the 90° span. Easy setpoint adjustment and integral position feedback options (details page 43/44).

7. Explosion Proof P3 On/Off Positioner

Provides the same basic options as the P3 Positioner but in a flame proof enclosure with ATEX approval (details page 45).

8. VLS/ULS Limit Switch Box

Weathertight unit with up to 4 switches for remote position indication or control use. Optional switches for flame proof/explosion proof needs and high visibility Clear Cone monitor (details pages 31/32).

9. Explosion Proof Limit Switch Box

Provides the same basic options as the VLS/ULS Switch Box but in a flame proof enclosure with ATEX, FM and IEC approvals (details page 33/34).

10. Solenoid

Optional integral pneumatic solenoid valve for actuators. Various electrical, environmental and explosion proof requirements covered (details page 38).

11. Actuator

17 sizes covering torque range 0.1 Nm (1 lbf in) to 40765 Nm (356,977 lbf in). Operating air pressure range 1.4 bar (20 psi) to 7 bar (100 psi). Adjustable stops as standard. Restricted travel stops and ISO/DIN versions available (details pages 9 to 25).

12. 180° Converter

Compact units give constant torque output through to 200° travel (details pages 51/52).

13. Fail-Safe Spring Return Units

Clock type spring return gives reliable fail-safe operation with high torque output throughout spring stroke, yet has easy adjustment to suit application (details pages 27 to 29).

14. Spring To Centre

Patented spring unit to provide accurate adjustable port travel position on loss of air/signal (details page 50).

15. ISO Adaptor

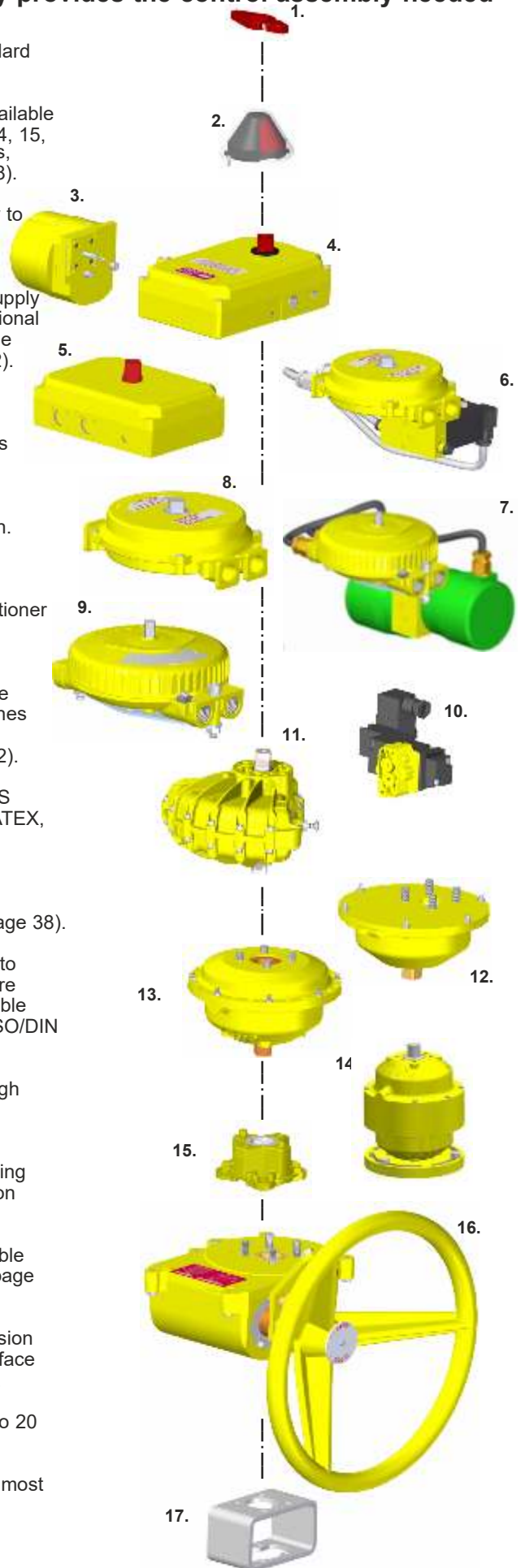
The patented ISO adaptor provides easy conversion from a Kinetrol male drive to an ISO flange interface for ultimate mounting flexibility (details page 26).

16. Gearbox

Geared manual override on all models from 05 to 20 excluding model 15 (details page 55).

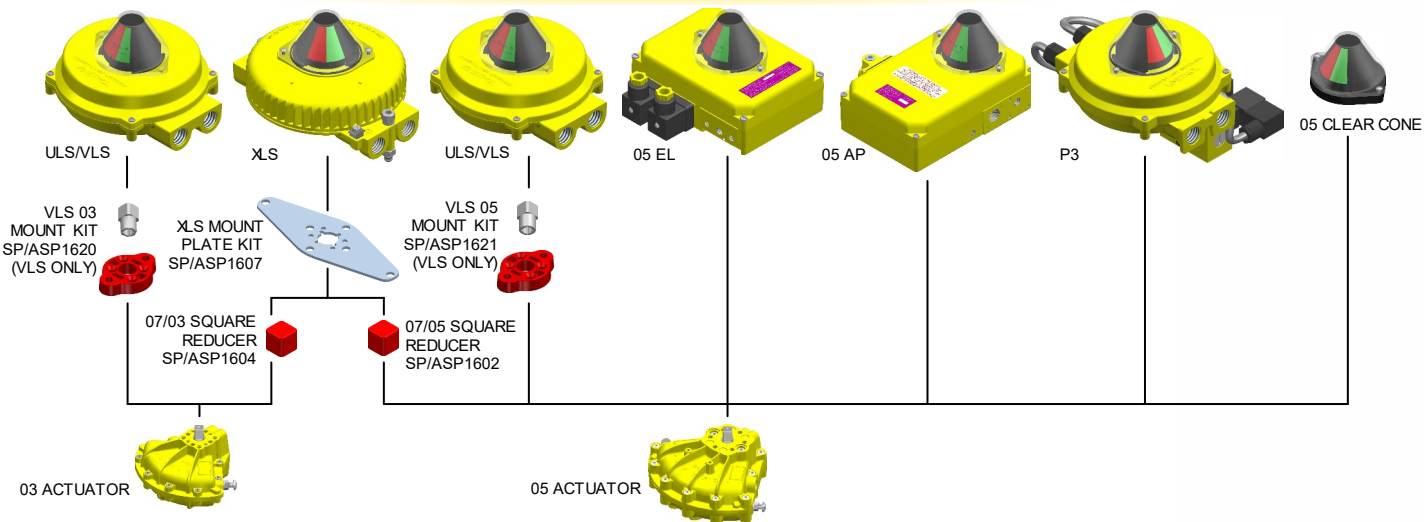
17. Mounting Bracket

A comprehensive range of brackets provides for most ball, plug and butterfly valves (details page 56).

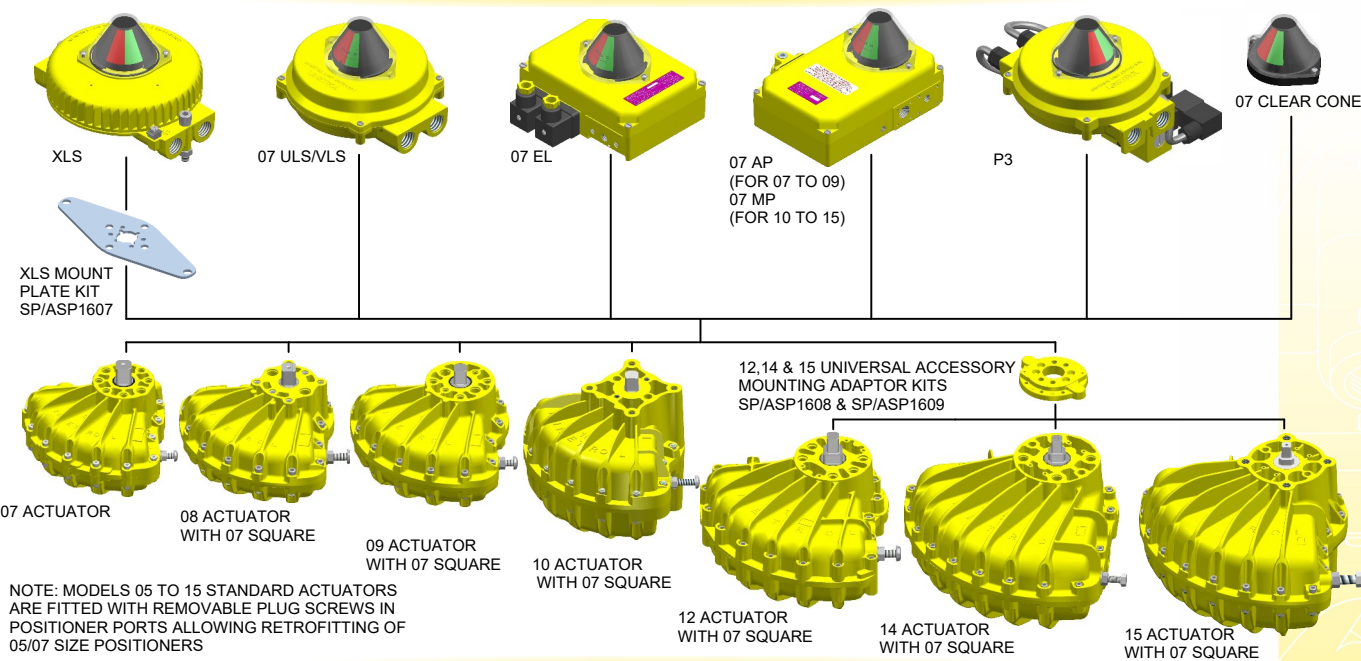


Kinetrol Actuators, Springs and Accessories are approved up to ATEX Category 1.

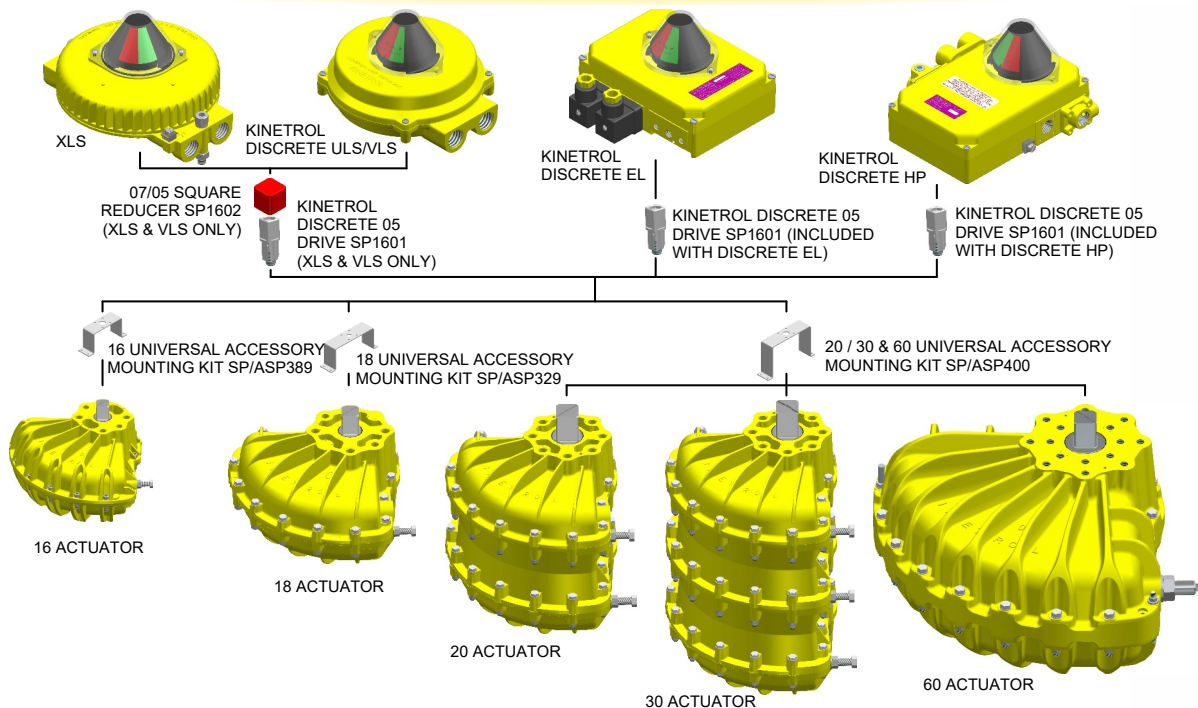
Models 03 & 05



Models 07 to 15



Models 16 to 60



Actuator General Specification

Materials of Construction:

Casing:

Models 0M0, 01, 02, 03 & 05 - Pressure die cast ZL16 zinc alloy.

Models 07, 08, 09, 10, 12, 14, 15, 16, 18, 20, 30 & 60 - Die cast or sand cast aluminium alloy.

Vane & Output Shaft:

Models 0M0, 01, 02, 03 and 05 - Stainless steel.

Models 07 to 60 - SG iron, zinc plated.

Shaft bushes: PTFE coated bronze.

Seals: Moulded polyurethane.

High and low temperature seals also available - contact Kinetrol.

Seal expanders: Stainless spring steel.

Couplings: Weldable mild steel, zinc plated.

Working temperature range:

Standard: -40°C (-40°F) to +80°C (176°F).

High temperature option: -20°C (-4°F) to +100°C (212°F) using temperature seals for higher temperatures with special equipment - contact Kinetrol.

If consulted Kinetrol may, under certain circumstances/conditions, be prepared to extend its high temperature limits

Low temperature option: -54°C (-65°F) to +60°C (140°F) using temperature seals include option "W" at end of actuator coding.

Maximum recommended working pressure: 100 psi (7 bar)

Maximum overload pressure: 150 psi (10 bar)

Certification

