

# Kinetrol Model 07 Modular Spring Unit



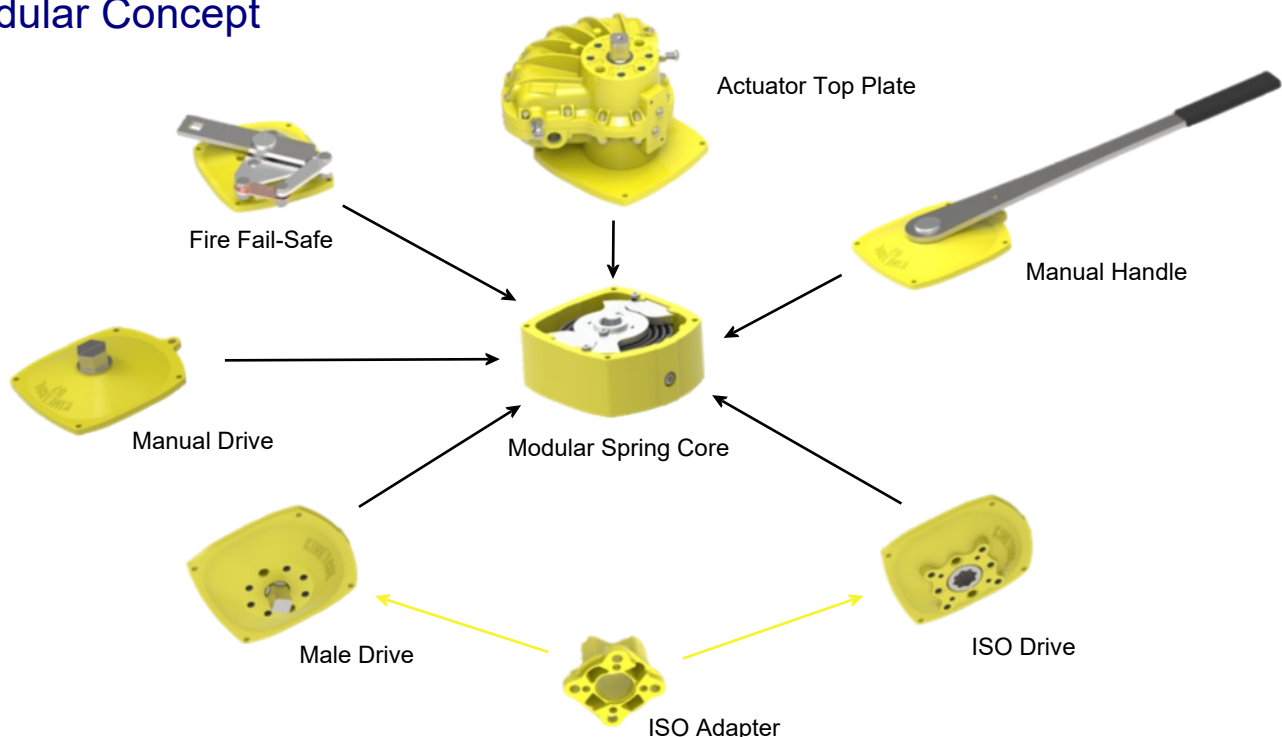
- A variety of different configurations possible from one core unit
- Fully reversible direction of spring from clockwise to counter clockwise or counter clockwise to clockwise
- No air or special tools required and direction reverse can be completed in minutes
- International patents
- Keeper plates no longer required for removal of the spring from the actuator
- The only spring which allows the actuator to be removed whilst the valve remains in its safe position
- Sealed, non breathing housing
- End stop redundancy gives higher SIL data
- Can be converted from male to female drive and vice versa
- Spring can be converted to manual fail-safe or fire fail-safe spring units
- Special output drives available

The modular spring units' patented design takes the Kinetrol expertise and low stress range clock type spring to a new level. The direction of the spring can be reversed from clockwise to counter clockwise or vice versa with only simple tools and can be completed within minutes.

The units' fully sealed, non breathing housing protects the spring from corrosive environments the enhanced durability which Kinetrol is known for.

Factory assembled actuator and springs have the spring tension set for a balanced torque output when the actuator is operated at 80 psi (5.5 Bar). If required, the spring can be set for different air pressures on request.

## Modular Concept



# Kinetrol Model 07 Modular Spring Unit

## Direction of Spring Action

The reversible spring unit is available either clockwise or counter clockwise and is determined by looking at the unit from the end which interfaces with the actuator.

### Suffix

- 0A0 = counter clockwise (male drive)
- 0C0 = clockwise (male drive)
- 0R0 = reversible spring core only
- 0R0-90 = reversible spring core only for manual handle

## ISO / DIN "Star" Drive

Female bi-square (star) drive option is also available.

### Suffix

- F0A0 = counter clockwise F05/F07
- F0C0 = clockwise F05/F07

## Specification

### Spring Torque

Start 50.8 Nm / 450 lbf ins  
Finish 42.1 Nm / 375 lbf ins

### Angle of Travel

0 - 97° (alternative angles available)

### Materials of Construction

Casing: Extruded & pressure die cast aluminium alloy  
Output Shaft: Stainless steel  
Shaft bushes: PTFE coated bronze (lead free)  
Clock Type Spring: Carbon spring steel  
Stop Elements: Mild steel

### Finish

Epoxy thermoset powder

### Weight

5.07 kg / 11.18 lb (including coupling)

### Operating Temperature

-40°C to +80°C (-40°F to +176°F)



Photo shows non-directional option suffix 074-0R0 without actuator interface and output flange



ATEX Category 2

## Options

- Male or Female drive options may be fitted to both ends
- High temperature / Low temperature options
- Available in Blueline paint finish
- Available as a manual fail-safe spring unit - see datasheet WEBDS121
- Available as a fire fail-safe spring unit - see datasheet WEBDS 122

## Non Kinetrol Actuator Application Notes

Kinetrol spring units can be used in non Kinetrol actuator applications however the following must be considered.

A static gasket is provided to seal the base plate mounting face but the user's shaft must also be sealed to prevent water ingress into the spring housing.

See Kinetrol installation, operation and maintenance instructions for application example.

# Kinetrol Model 07 Modular Spring Unit - Male Drive

## Product Code

## Air Ports

## Mount Holes

074-0C0 Metric Spring Return Clockwise	G $\frac{1}{4}$	4 x M8 x 16 deep on 50.9 PCD 2 x M8 x 16 deep on 50.8 PCD
074-0A0 Metric Spring Return Counter Clockwise	G $\frac{1}{4}$	4 x M8 x 16 deep on 50.9 PCD 2 x M8 x 16 deep on 50.8 PCD
077-0C0 English Spring Return Clockwise	$\frac{1}{4}$ NPT	4 x $\frac{5}{16}$ -18 UNC x 0.63" deep on 2.00" PCD 2 x $\frac{5}{16}$ -18 UNC x 0.63" deep on 2.00" PCD
077-0A0 English Spring Return Counter Clockwise	$\frac{1}{4}$ NPT	4 x $\frac{5}{16}$ -18 UNC x 0.63" deep on 2.00" PCD 2 x $\frac{5}{16}$ -18 UNC x 0.63" deep on 2.00" PCD

For female drive part codes contact Kinetrol

## Dimensions

