Kinetrol Modular Spring Units for Non-Kinetrol Actuator Applications (Electric Actuators)

The Kinetrol modular spring can be used in non-Kinetrol actuator applications such as electric actuators, other actuators with ISO5211 style interface and machines anywhere a mechanical failsafe device is needed.
The units consist of a central core and two output drives which can offer male and female shafts either end, or a mix of both plus the possibility of non-standard interfaces / drives to suit the application

ATEX Category 2

Features

- Available for Model sizes 03, 05, 07, 08, 14 & 15
- 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
- Sealed, non breathing housing
- Keeper plates no longer required for removal of the spring from the actuator
- International patents
- End stop redundancy gives higher SIL data
- Can be converted from male to female drive and vice versa
- Easy attachment to ISO5211 compliant devices.

Torques

Modular Spring Model	Maximum Allowable Input Torque Nm	lbf-in
03	25	221
05	50	442
07	124	1097
08	199	1761
09*	261	2310
10*	416	3682
12*	575	5089
14	1375	12170
15	2337	20684

Modular Spring Model		Spring Output Torque Nm	lbf-in
03	Start	10.3	91.2
	Finish	8.7	77.0
05	Start	20.9	185.0
	Finish	17.5	154.9
07	Start	50.8	449.6
	Finish	42.4	375.3
08	Start	81.3	719.6
	Finish	65.5	579.7
09*	Start	104.0	920.5
	Finish	93.8	830.2
10*	Start	164.0	1451.5
	Finish	143.0	1265.7
12*	Start	238.0	2106.5
	Finish	204.0	1805.6
14	Start	588.0	5204.2
	Finish	478.0	4230.7
15	Start	962.0	8514.4
	Finish	790.0	6992.1

* Due to launch 2026 - contact Kinetrol

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Spring interface with through holes

The standard Kinetrol modular springs come with thread holes as standard for externally securing bolts on the spring housing, Kinetrol can also offer an option with through holes which allows the mounting hardware to be secured from the inside out. This allows the spring to be attached to any device having ISO5211 mounting details. O-rings are used to seal the mounting screw holes and is ISO5211 interface compliant.

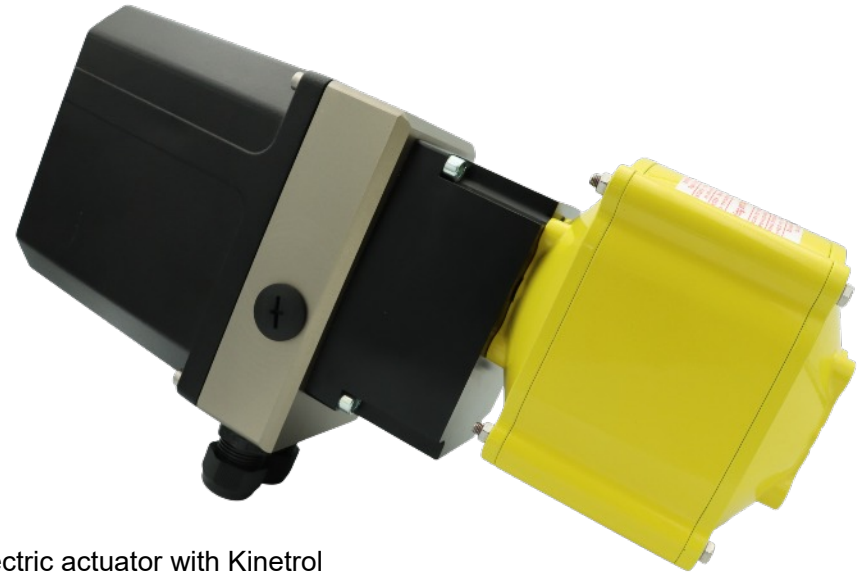
Specification

Angle of Travel
0 - 97° (alternative angles available)

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

Finish
Epoxy thermoset powder

Operating Temperature
-40°C to +80°C (-40°F to +176°F)



ARIS Tensor HS L electric actuator with Kinetrol model 08 modular spring F07, 22mm square interface and an F07 17mm female square output use 083C07L22F0717

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Ordering Codes

CODES WHEN THROUGH HOLE SR MODULE IS USED WITH OTHER ACTUATOR

INPUT MALE SQUARE

SIZE A/F	AVAILABLE ON
09 = 9mm	03
11 = 11mm	03 05
14 = 14mm	03 05
17 = 17mm	07 08
19 = 19mm	08 09
22 = 22mm	08 09 10 12
27 = 27mm	10 12 14
36 = 36mm	12 14 15
46 = 46mm	12 14 15

OUTPUT FEMALE BiSQUARE

SIZE A/F	AVAILABLE ON
09 = 9mm	03 05
11 = 11mm	03 05 07
14 = 14mm	03 05 07 08
17 = 17mm	07 08 09 10
19 = 19mm	09 10 12
22 = 22mm	09 10 12 14
27 = 27mm	12 14 15
36= 36mm	12 14 15

INPUT MALE SQUARE

L = ISO 5211 PARALLEL
D = ISO 5211 DIAGONAL

0	7	3	A	0	7	D	1	4	F	0	7	1	7

SPRING SIZE

3 = METRIC THREADS
7 = UNC THREADS

A = SPRING DIRECTION ACW
C = SPRING DIRECTION CW

INPUT MOUNT THROUGH HOLES

F PATTERN	AVAILABLE ON
05 = F05	03 05 07 08
07 = F07	03 05 07 08 09 10
10 = F10	09 10 12 14 15
12 = F12	12 14 15
14 = F14	12 14 15

OUTPUT MOUNT HOLES

F = THREADED HOLES

F PATTERN	AVAILABLE ON
03 = F03	03 05
04 = F04	03 05 07
05 = F05	03 05 07 08
07 = F07	03 05 07 08 09 10
10 = F10	09 10 12 14 15
12 = F12	12 14 15
14 = F14	12 14 15

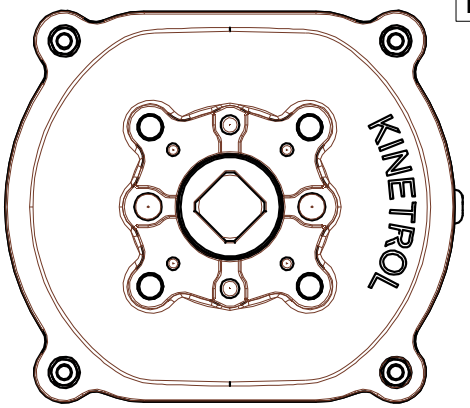
T = THROUGH HOLES

F PATTERN	AVAILABLE ON
05 = F05	03 05 07 08
07 = F07	03 05 07 08 09 10
10 = F10	09 10 12 14 15
12 = F12	12 14 15
14 = F14	12 14 15

OUTPUT MOUNT HOLES

F = THREADED HOLES
T = THROUGH HOLES

SPRING DIRECTION ACW
WHEN VIEWED
FROM INPUT END



SPRING DIRECTION CW
WHEN VIEWED
FROM INPUT END

INPUT END
(ATTACHED TO
NON-KINETROL ACTUATOR)

CORE

OUTPUT END
(ATTACHED TO LOAD)