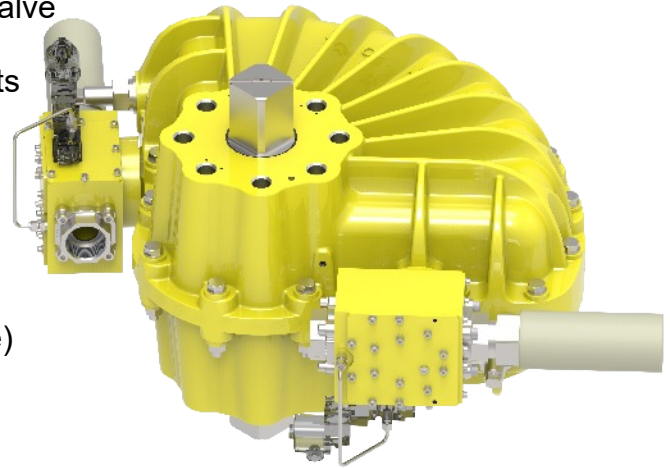


# Kinetrol Fast Acting Actuator Booster Blocks

Specially developed fast acting actuator booster valve blocks which deliver super fast operating times for larger actuators

- Available for Kinetrol Models 16 to 60 (1.7K to 40K Nm)
- Each block assembly acts as high CV 3/2 solenoid valve
- No external piping - direct mounts to actuator air ports
- Three block sizes with CVs from 30 to 180
- 90° travel time in 2 seconds at 80% load
- Standard 5/2 Namur solenoid valve, single or dual coil pilot each valve (ATEX and FM options available)
- Tested to over 1 million actuator cycles
- Both double acting actuators (two blocks) or single acting, spring return actuators (one block)
- Block A - SIL 2 capable. Blocks B & C, redundancy built in - SIL3



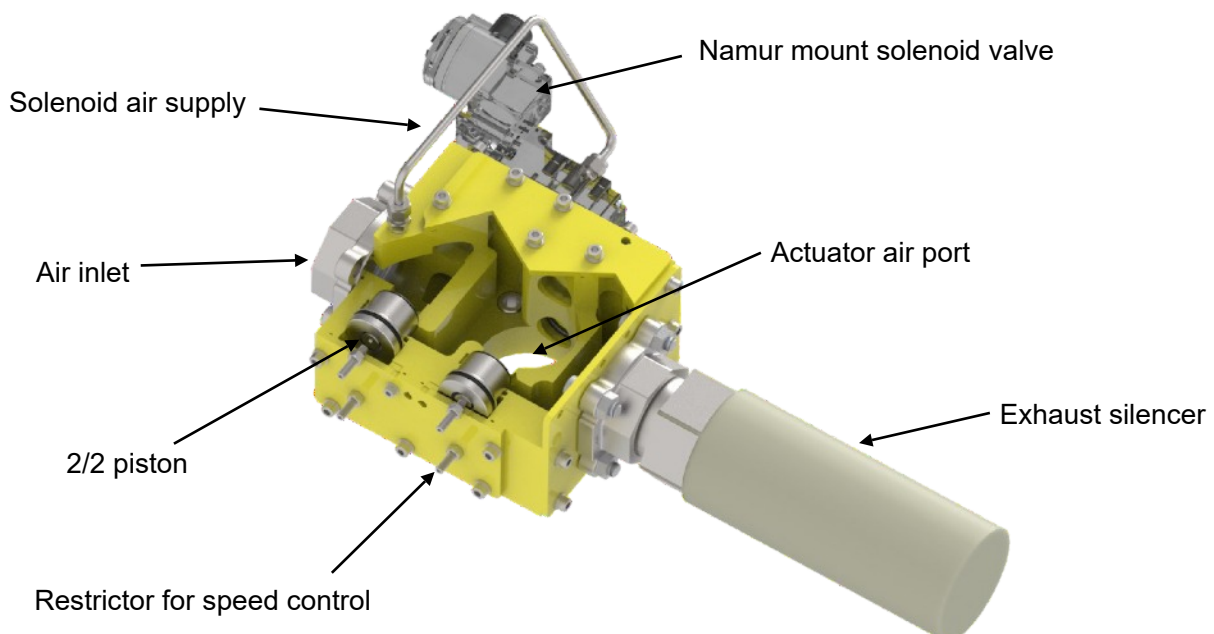
Model 21 fitted with two block 'B' variants



## Application

Fast moving large actuators need high air flow. Current flow solutions available - booster valves or standard ball valves - are often unreliable in harsh environments and require expensive external piping. Kinetrol's specially designed fast acting actuator booster blocks allow for super fast operation times combined with exceptional reliability (over 1 million actuator cycles) and durability.

The small-scale design of the blocks, coupled with the overall compact size of Kinetrol's actuators, means the units can fit into limited access spaces, and costs associated with instrument panel mounting hard-ware & pipe work or added protection, such as fire proofing, are reduced. The low SIL failure rate numbers make this a unique option to consider when putting together Emergency Shutdown Valve packages.



# Kinetrol Fast Acting Actuator Booster Blocks

## Specification

### Materials of Construction

**Fast acting block:** Aluminium (Finish: Epoxy stove enamel)

**Air Inlet:** Models 16 - 18: Aluminium

Models 21 - 60: Stainless steel

**Exhaust outlet:** Models 16 - 18: Aluminium

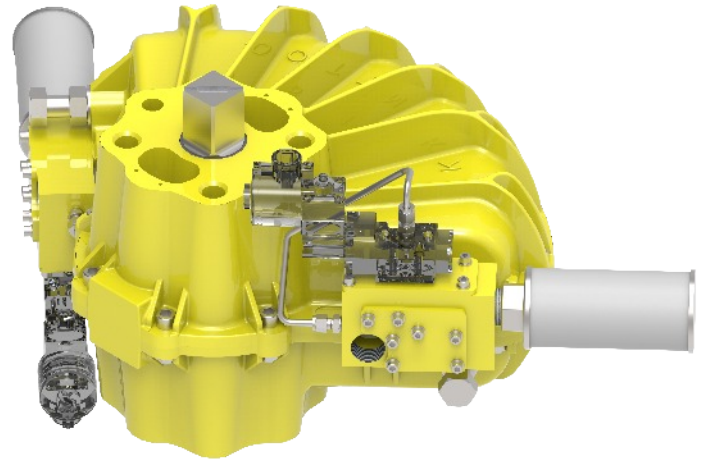
Models 21 - 60: Stainless steel

**Pistons:** Aluminium

**Piston seals:** NBR

**Solenoid:** Dependant upon chosen unit

**Solenoid air supply piping:** Stainless steel



Model 16 fitted with two block 'A' variants

### Operating Temperature

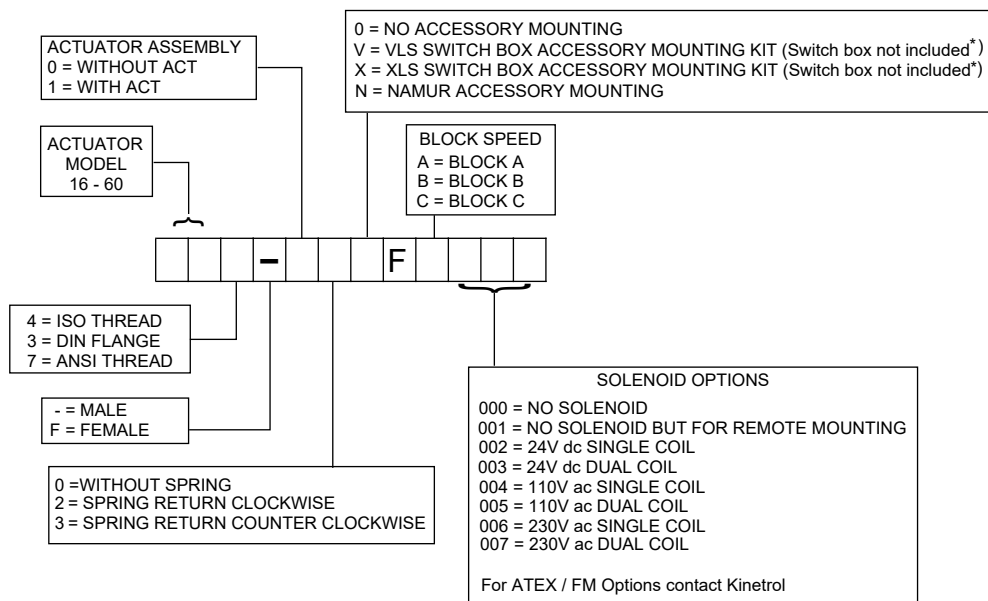
-40°C to 80°C (-40°F to 176°F)

### Fast Acting Block Choice

| Actuator                             | Model 16 |     |     | Model 18 |      |     | Model 21 |      |     | Model 30 |      |     | Model 60 |     |     |
|--------------------------------------|----------|-----|-----|----------|------|-----|----------|------|-----|----------|------|-----|----------|-----|-----|
|                                      | A        | B   | C   | A        | B    | C   | A        | B    | C   | A        | B    | C   | A        | B   | C   |
| <b>Travel Time @ 80% load (secs)</b> | 1.2      | N/A | N/A | 1.8      | 1.2  | N/A | 3.5      | 2.4  | N/A | 5.3      | 3.7  | N/A | 11.7     | 2.7 | 1.9 |
| <b>Actuator + Block CV</b>           | 18       | N/A | N/A | 30       | 43.1 | N/A | 30       | 43.1 | N/A | 30       | 43.1 | N/A | 30       | 130 | 180 |

To determine which block is required for your application, please use TD77 to calculate the CV necessary to achieve the required travel time.

## Ordering Codes



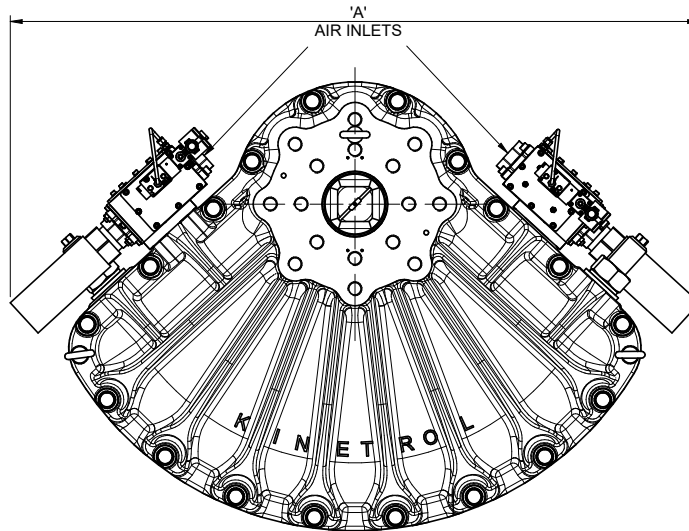
\* VLS and XLS switch boxes MUST be ordered as a separate item with comment assemble items 1 and 2 together

# Kinetrol Fast Acting Actuator Booster Blocks

## Dimensions

### Double Acting

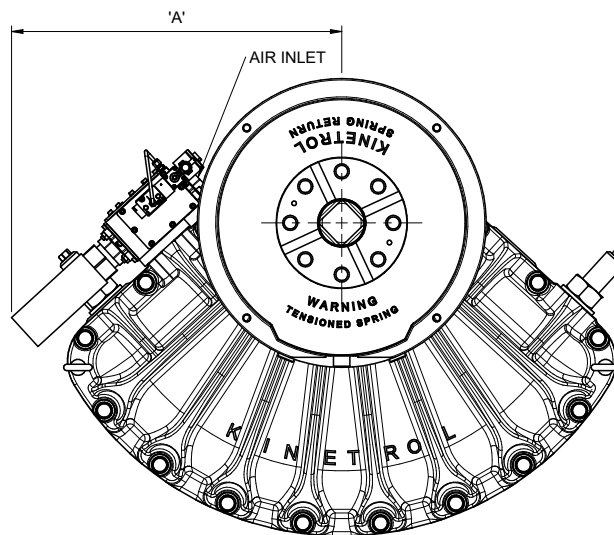
2 fast acting booster blocks



| Actuator   | Block A |            | Block B |            | Block C |            |
|------------|---------|------------|---------|------------|---------|------------|
|            | Dim 'A' | Air Inlets | Dim 'A' | Air Inlets | Dim 'A' | Air Inlets |
| 164 (mm)   | 852     | 1" BSP     | N/A     | N/A        | N/A     | N/A        |
| 167 (inch) | 33.6    | 1" NPT     | N/A     | N/A        | N/A     | N/A        |
| 184 (mm)   | 679     | 1" BSP     | N/A     | N/A        | N/A     | N/A        |
| 187 (inch) | 26.8    | 1" NPT     | N/A     | N/A        | N/A     | N/A        |
| 214 (mm)   | 928     | 1" BSP     | 1274    | 2" BSP     | N/A     | N/A        |
| 217 (inch) | 36.6    | 1" NPT     | 50.2    | 2" NPT     | N/A     | N/A        |
| 304 (mm)   | 994     | 1" BSP     | 972     | 2" BSP     | N/A     | N/A        |
| 307 (inch) | 39.1    | 1" NPT     | 38.3    | 2" NPT     | N/A     | N/A        |
| 604 (mm)   | 1202    | 1" BSP     | 1450    | 2" BSP     | 1450    | 2" BSP     |
| 607 (inch) | 47.3    | 1" NPT     | 57.0    | 2" NPT     | 57.0    | 2" NPT     |

### Spring return

1 fast acting booster block



| Actuator   | Block A |            | Block B |            | Block C |            |
|------------|---------|------------|---------|------------|---------|------------|
|            | Dim 'A' | Air Inlets | Dim 'A' | Air Inlets | Dim 'A' | Air Inlets |
| 164 (mm)   | 426     | 1" BSP     | N/A     | N/A        | N/A     | N/A        |
| 167 (inch) | 16.8    | 1" NPT     | N/A     | N/A        | N/A     | N/A        |
| 184 (mm)   | 339     | 1" BSP     | N/A     | N/A        | N/A     | N/A        |
| 187 (inch) | 13.3    | 1" NPT     | N/A     | N/A        | N/A     | N/A        |
| 214 (mm)   | 464     | 1" BSP     | 623     | 2" BSP     | N/A     | N/A        |
| 217 (inch) | 18.3    | 1" NPT     | 24.5    | 2" NPT     | N/A     | N/A        |
| 304 (mm)   | 496     | 1" BSP     | 486     | 2" BSP     | N/A     | N/A        |
| 307 (inch) | 19.5    | 1" NPT     | 19.1    | 2" NPT     | N/A     | N/A        |
| 604 (mm)   | 601     | 1" BSP     | 725     | 2" BSP     | 725     | 2" BSP     |
| 607 (inch) | 23.7    | 1" NPT     | 28.5    | 2" NPT     | 28.5    | 2" NPT     |