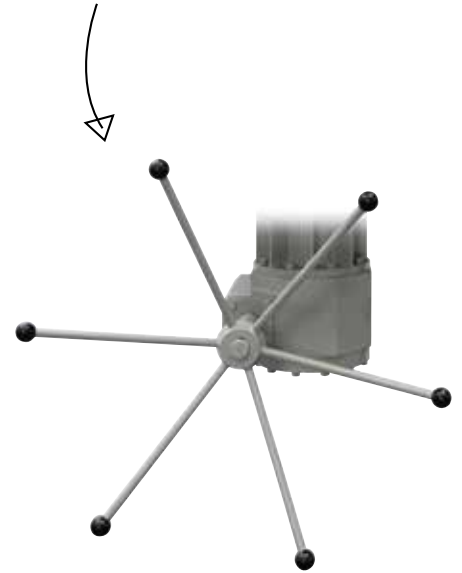


# GR: Manual Override

The Manual Override (model GR) is designed to manually move the actuator stem using a handwheel. The internal gear is mounted on ball bearings for high efficiency and for long operating life. All STI actuators may be equipped with a manual override to allow operation of the control element when instrument air is not available and the actuator has to be operated manually. Several sizes are available according to the actuator required. For STI actuators series SCV the gear box is mounted between the actuator and the yoke, for the SC series it is mounted on the actuator stem cap side. The manual override can be used as an adjustable retraction stroke limiter. A specific version can be direct mounted to operate a valve where no actuator is installed.

*Minimal operator effort*



## Key features

- > Suitable for standard, offshore, sandstorm and copper-free ambient conditions
- > Low and high ambient temperature
- > Single and double acting actuators

## Benefits

- > Internal gear mounted on ball bearings to minimize operator effort and long operation life
- > Available with sandstorm design with stem and main screw bellows
- > Available to lock movement in any position to keep valve in any required position
- > Available with adjustable thrust limiter
- > Available with mechanical chain transmission of the manual override for remote operator access

## Technical specifications

### Housing materials

GR 1 = Painted aluminium  
 GR 2 = Painted aluminium  
 GR 2.5 = Painted cast iron  
 GR 3 = Painted carbon steel

### Operating temperature\*

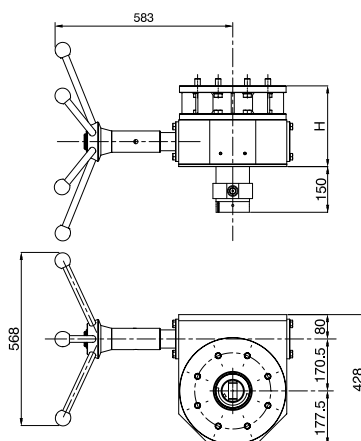
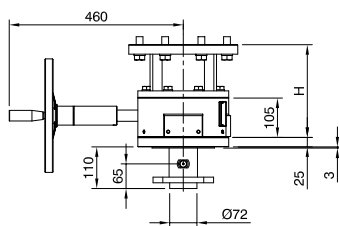
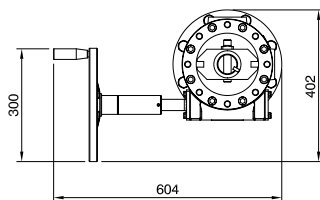
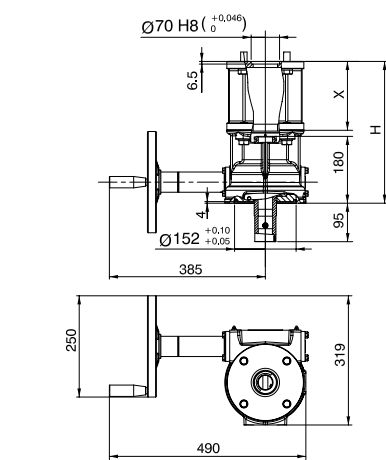
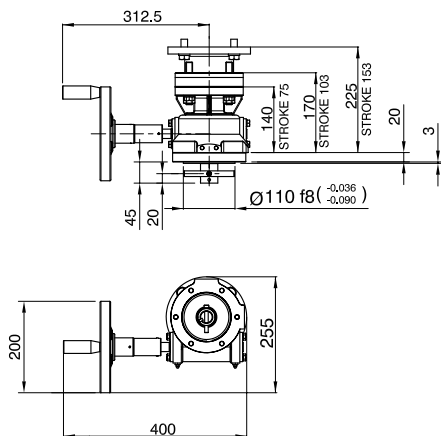
-20°C to 70°C (-4°F to 158°F)  
 -40°C to 70°C (-40°F to 158°F)  
 -20°C to 85°C (-4°F to 185°F)

\* Lower or higher temperature available on request



*Optional adjustable thrust limiter*

## Dimensional drawing



| GR 1   | Stroke | Weight (kg) | H (mm) | X (mm) |
|--------|--------|-------------|--------|--------|
| GR_153 | 153.0  | 22          | 225    | -      |
| GR_103 | 103.0  | 17          | 170    | -      |
| GR_75  | 75.0   | 14          | 140    | -      |

| GR 2   | Stroke | Weight (kg) | H (mm) | X (mm) |
|--------|--------|-------------|--------|--------|
| GR_605 | 605    | 57          | 690    | 520    |
| GR_555 | 555    | 55          | 640    | 470    |
| GR_505 | 505    | 53          | 590    | 420    |
| GR_455 | 455    | 51          | 540    | 370    |
| GR_405 | 405    | 49          | 490    | 320    |
| GR_355 | 355    | 47          | 440    | 270    |
| GR_305 | 305    | 45          | 390    | 220    |
| GR_255 | 255    | 43          | 340    | 170    |
| GR_205 | 205    | 40          | 300    | -      |
| GR_153 | 153    | 38          | 247    | -      |
| GR_103 | 103    | 32          | 180    | -      |

| GR 2.5 | Stroke | Weight (kg) | H (mm) | X (mm) |
|--------|--------|-------------|--------|--------|
| GR_103 | 103    | 71          | 245    | -      |
| GR_153 | 153    | 75          | 295    | -      |
| GR_205 | 205    | 78          | 347    | -      |
| GR_255 | 255    | 82          | 397    | -      |
| GR_305 | 305    | 85          | 447    | -      |
| GR_355 | 355    | 88          | 497    | -      |
| GR_405 | 405    | 91          | 547    | -      |
| GR_455 | 455    | 94          | 597    | -      |
| GR_505 | 505    | 97          | 647    | -      |
| GR_555 | 555    | 100         | 697    | -      |
| GR_605 | 605    | 103         | 747    | -      |
| GR_655 | 655    | 106         | 797    | -      |

| GR 3   | Stroke | Weight (kg) | H (mm) | X (mm) |
|--------|--------|-------------|--------|--------|
| GR_505 | 505    | 240         | 667    | -      |
| GR_455 | 455    | 226         | 617    | -      |
| GR_405 | 405    | 230         | 567    | -      |
| GR_355 | 355    | 225         | 517    | -      |
| GR_305 | 305    | 220         | 467    | -      |
| GR_255 | 255    | 215         | 417    | -      |
| GR_205 | 205    | 209         | 367    | -      |
| GR_153 | 153    | 204         | 315    | -      |
| GR_103 | 103    | 199         | 265    | -      |