

ROTARY ACTUATOR SERIES R3

Actuator with double rack and play take-up. Angle of rotation adjustable from 0 to 180°. The R3 rotary actuator can come with a mechanical stop or hydraulic end-of-stroke cushioning.

There is a version with flange and one with shaft (for $\varnothing 16-20-25-30$).

There are slots in the body for retracting magnetic proximity sensors, two on each side. There is hole in the flange for air pipes or wires.

N.B.: We always suggest to use flow microregulators.

During the setup of the actuator, start with CLOSE flow microregulators, and open gradually till the achievement of the required speed.



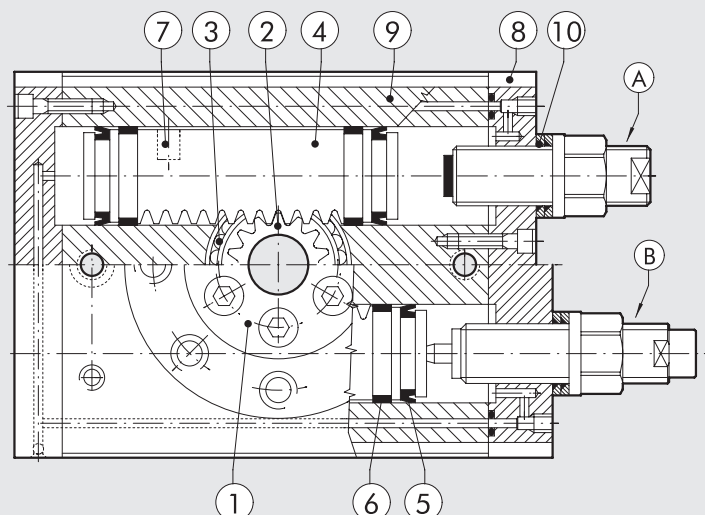
| TECHNICAL DATA | | R3-16 | R3-20 | R3-22 | R3-25 | R3-30 | R3-40 | |
|--|---------|---|--------|--------|--------|--------|-------------|--|
| Operating pressure | bar | | | | | | 3 to 7 | |
| | MPa | | | | | | 0.3 to 0.7 | |
| | psi | | | | | | 43.5 to 101 | |
| | degrees | | | | | | 0° to 180° | |
| Temperature range | °C | | | | | | -10 to +80 | |
| Angle adjustment | degrees | | | | | | 0° to 180° | |
| Fluid | | 20 μ m filtered, lubricated or unlubricated air; lubrication if used, it must be continuous | | | | | | |
| Versions | | With mechanical stop / hydraulic decelerator | | | | | | |
| Sizes | | 16 | 20 | 22 | 25 | 30 | 40 | |
| Bores | mm | 2 x 16 | 2 x 20 | 2 x 22 | 2 x 25 | 2 x 30 | 2 x 40 | |
| Theoretical torque at 6 bar | Nm | 0.9 | 1.8 | 2.7 | 4.6 | 9.3 | 22 | |
| Max. axial load | N | 74 | 135 | 195 | 300 | 340 | 360 | |
| Max. radial load | N | 78 | 137 | 360 | 450 | 490 | 560 | |
| Weight | kg | 0.53 | 0.99 | 1.29 | 2.08 | 3.9 | 6.7 | |
| Rotation time without load | s | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | |
| Admissible kinetic energy | Joule | | | | | | | |
| WITH MECHANICAL STOP | | 0.007 | 0.025 | 0.049 | 0.082 | 0.090 | 0.150 | |
| (with flange W1630__2180 and with shaft W1630__5180) | | | | | | | | |
| WITH HYDRAULIC DECELERATOR | | - | - | - | 0.29 | 1.10 | 1.60 | |
| (with flange W1630__2180 and with shaft W1630__5180) | | | | | | | | |

COMPONENTS

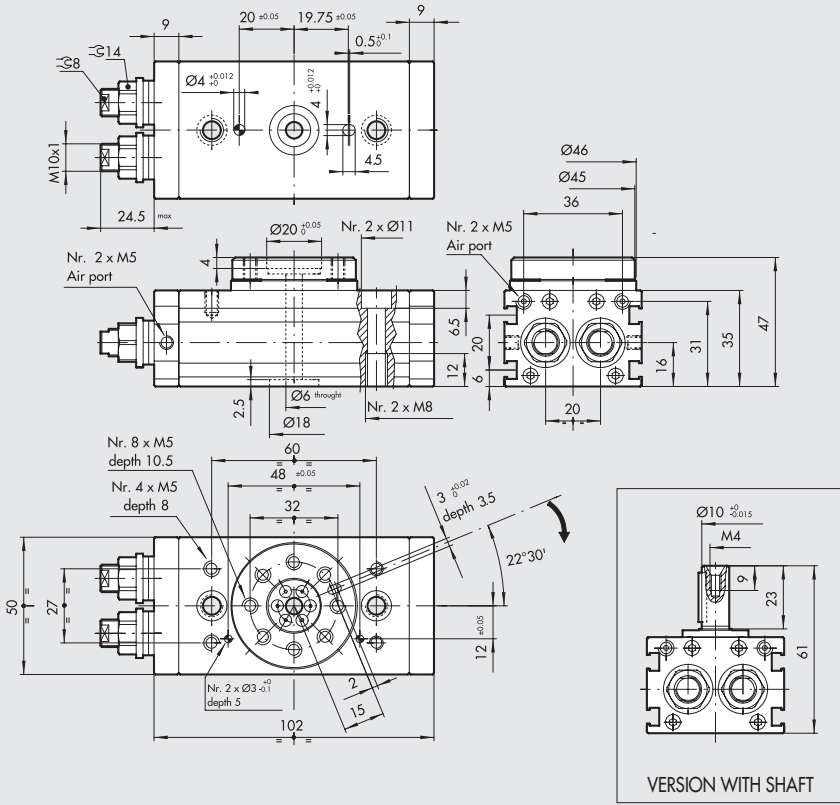
- ① ROTARY FLANGE: anodized aluminium
- ② PINION: hardened and tempered steel
- ③ BALL BEARING
- ④ PISTON / RACK: hardened and tempered steel
- ⑤ CUSHIONING GASKET: NBR
- ⑥ GUIDE PAD: PTFE
- ⑦ MAGNET: neodymium
- ⑧ HEAD: anodized aluminium
- ⑨ BARREL: anodized aluminium
- ⑩ SEAL: NBR

VERSIONS:

- A Stroke adjustment
- B Stroke adjustment with inside hydraulic shock absorbers (available from $\varnothing 25$)

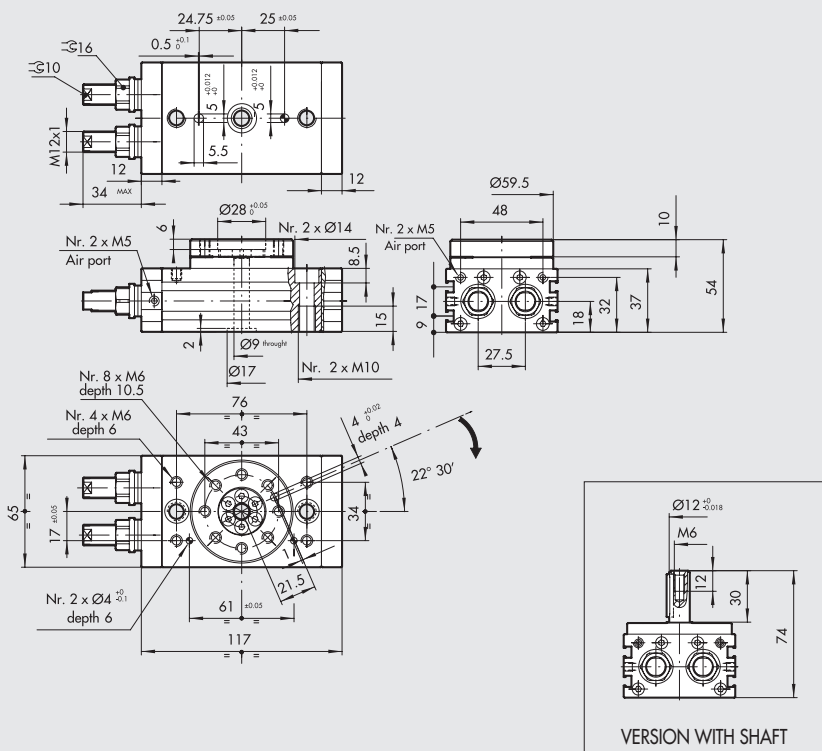


ROTARY ACTUATOR R3-16



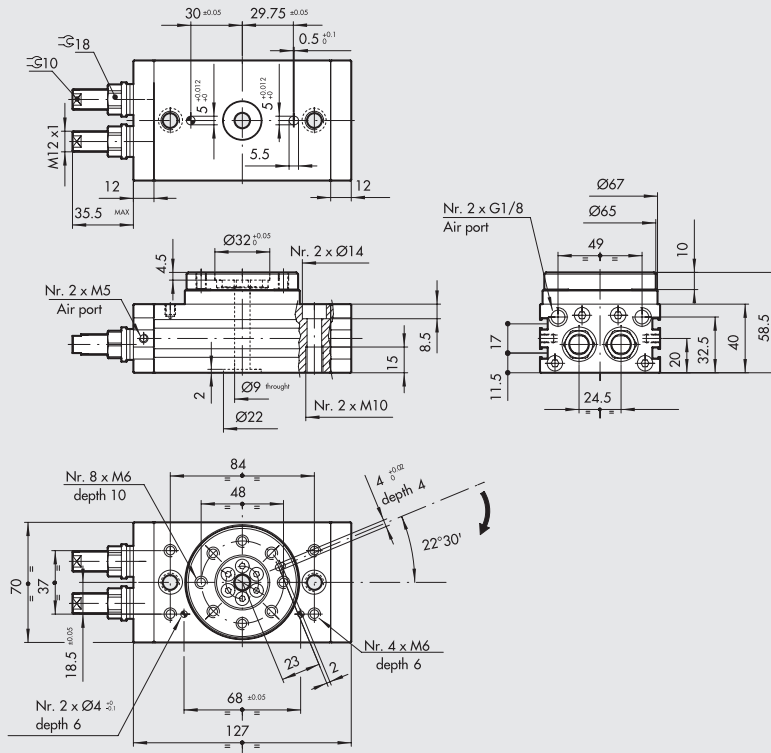
| Code | Description |
|-------------|-----------------------------------|
| W1630162180 | Rotary actuator with flange R3-16 |
| W1630165180 | Rotary actuator with shaft R3-16 |

ROTARY ACTUATOR R3-20



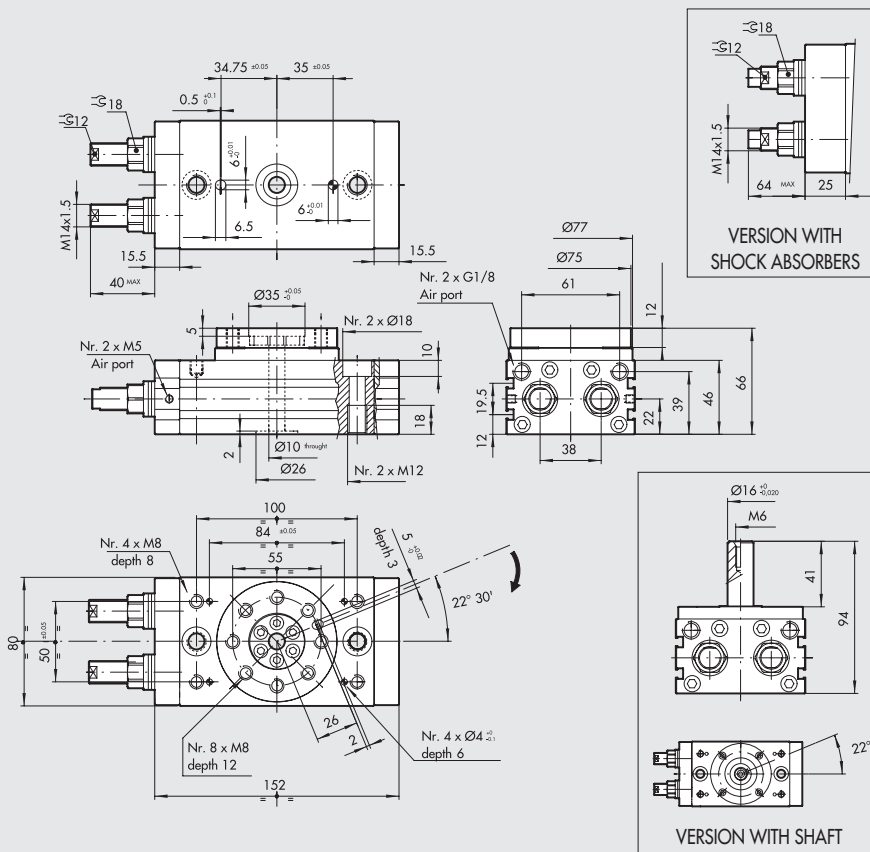
| Code | Description |
|-------------|-----------------------------------|
| W1630202180 | Rotary actuator with flange R3-20 |
| W1630205180 | Rotary actuator with shaft R3-20 |

ROTARY ACTUATOR R3-22



| Code | Description |
|-------------|-----------------------------------|
| W1630222180 | Rotary actuator with flange R3-22 |

ROTARY ACTUATOR R3-25

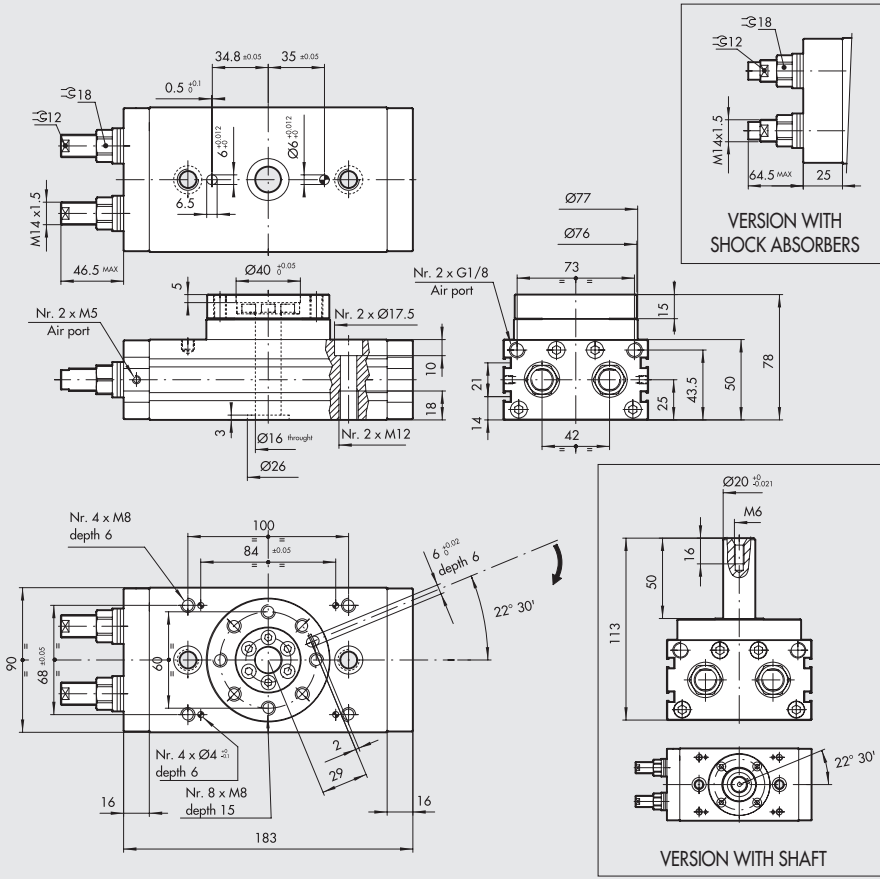


| Code | Description |
|-------------|---|
| W1630252180 | Rotary actuator with flange R3-25 |
| W1630253180 | Rotary actuator with flange + shock absorbers R3-25 |
| W1630255180 | Rotary actuator with shaft R3-25 |
| W1630256180 | Rotary actuator with shaft + shock absorbers R3-25 |

VERSION WITH SHOCK ABSORBERS

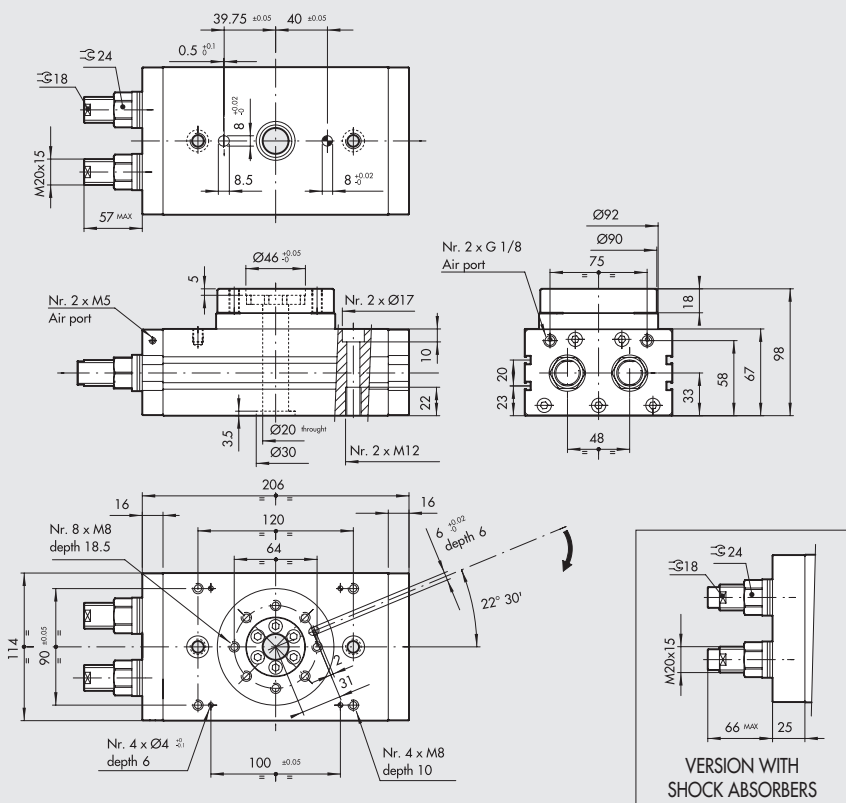
VERSION WITH SHAFT

ROTARY ACTUATOR SERIES R3-30



| Code | Description |
|-------------|---|
| W1630302180 | Rotary actuator with flange R3-30 |
| W1630303180 | Rotary actuator with flange + shock absorbers R3-30 |
| W1630305180 | Rotary actuator with shaft R3-30 |
| W1630306180 | Rotary actuator with shaft + shock absorbers R3-30 |

ROTARY ACTUATOR SERIES R3-40



| Code | Description |
|-------------|---|
| W1630402180 | Rotary actuator with flange R3-40 |
| W1630403180 | Rotary actuator with flange + shock absorbers R3-40 |