

The UNIVER rotary actuator incorporates several technology features which provide a higher degree of accuracy and reliability. The robust mechanical design expands application possibilities within modern day automation.

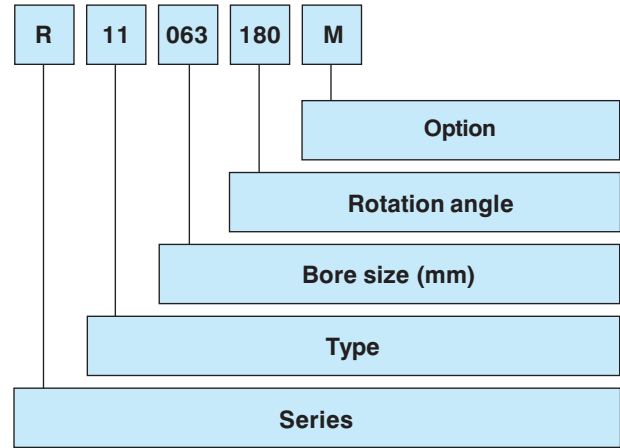
TECHNICAL CHARACTERISTICS

Working pressure: 1,5 ÷ 10 bar
Ambient temperature: -20° ÷ +80°C
Fluid: filtered air with or without lubrication
Cylinder barrel: aluminium extrusion, internally and externally anodized
15 - 18 microns
Rack backlash recovery
Rotating pinion supported by ball bearings



HOUSEN 昊盛

Codification Key



Theoretical torque at 1 bar

Multiply the value in the table by the operating pressure

Cyl. Ø	32	40	50	63	80	100	125
M: (Nm)	1,2	2,25	3,9	7,3	15,7	26,5	51

Maximum kinetic energy absorbable by cushioning

The adjustment of the rotation angle reduces the effect of cushioning (R12 - R14)

Cyl. Ø	32	40	50	63	80	100	125
E _c (Nm)	1,8	2,5	4,5	8	12	21	36

Magnetic sensor DH- Series (Section accessories see page 2).

TYPES

- 11 Male pinion without adjustment (positional accuracy ± 3°)
- 12 Male pinion with adjustment ± 5°
- 13 Female pinion without adjustment (positional accuracy ± 3°)
- 14 Female pinion with adjustment ± 5°

BORE

032 - 040 - 050 - 063 - 080 - 100 - 125 mm

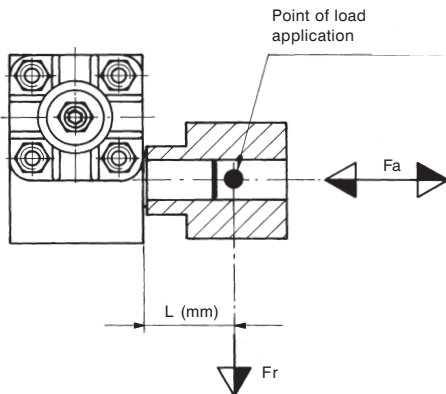
ROTATION ANGLE

90° - 180° - 270° - 360°

OPTION

M = Magnetic version

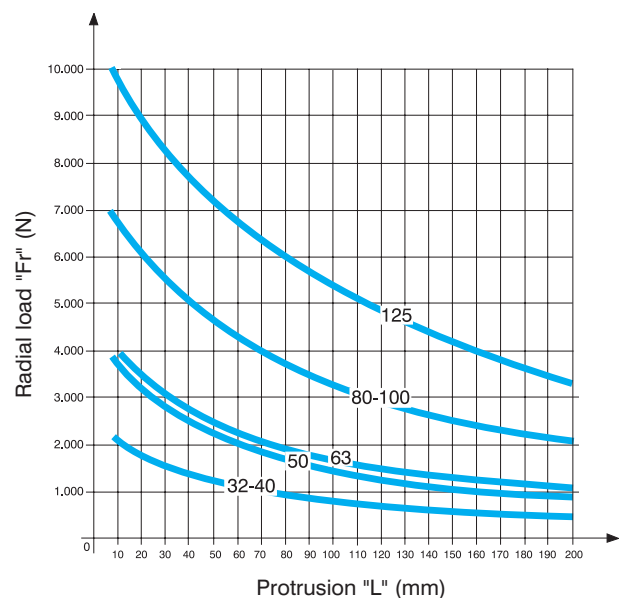
Static loads acceptable for the pinion

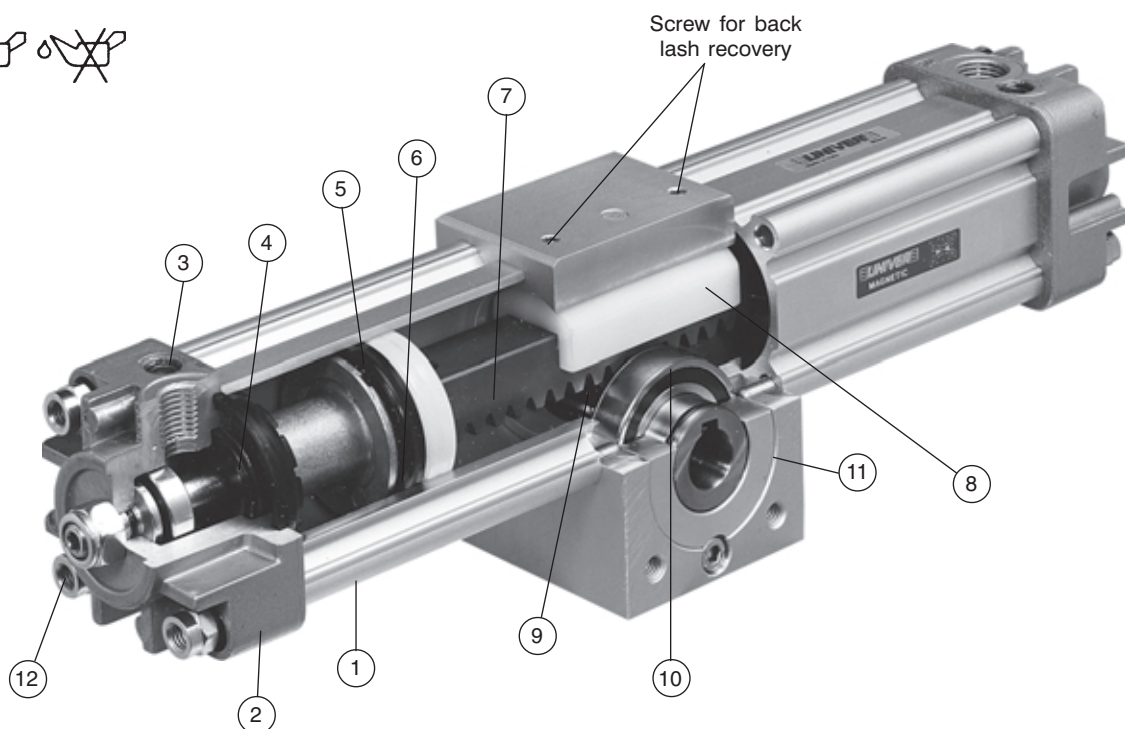


Fa = Axial loads max (N) with Fr = 0

Cyl. Ø	32	40	50	63	80	100	125
Fa	100	100	120	120	200	250	300

Fr = Radial loads max (N) with Fa=0 based on L protrusion





Construction details

- ① Cylinder barrel in extruded aluminium alloy with ribbed design for rigidity and without stagnation points. Internally and externally anodized up to 18 micron.
- ② Light aluminium alloy die-cast end-caps are fixed to the body by means of tie rods and bushings.
- ③ Pneumatic adjustable cushioning provides an efficient piston deceleration.
- ④ Mechanical barrel/end-cap seal.
- ⑤ Aluminium alloy articulated piston and acetalic-resin slide with permanent plastoferrite magnetic ring (upon request).
- ⑥ Piston seals and cushions are made of a wear resistant nitrilic rubber compound, suitable for applications with or without lubrication, the double lip shape allows the constant wear recovery.
- ⑦ Square rack made of stainless steel reduces backlash in the mechanism.
- ⑧ Rack guiding slide with self adjusting backlash.
- ⑨ Pinion of nitrided steel.
- ⑩ Pinion supported by ball-race bearings (bronze/teflon bearing fitted to Ø 32 version).
- ⑪ Anodized aluminium body.
- ⑫ Rotation angle adjustment screw, with a rotation angle $\pm 5^\circ$ Series R12 - 14. (It is advisable not to make adjustments while the cylinder is under pressure)

Rotating cylinders with:

male pinion



female pinion

