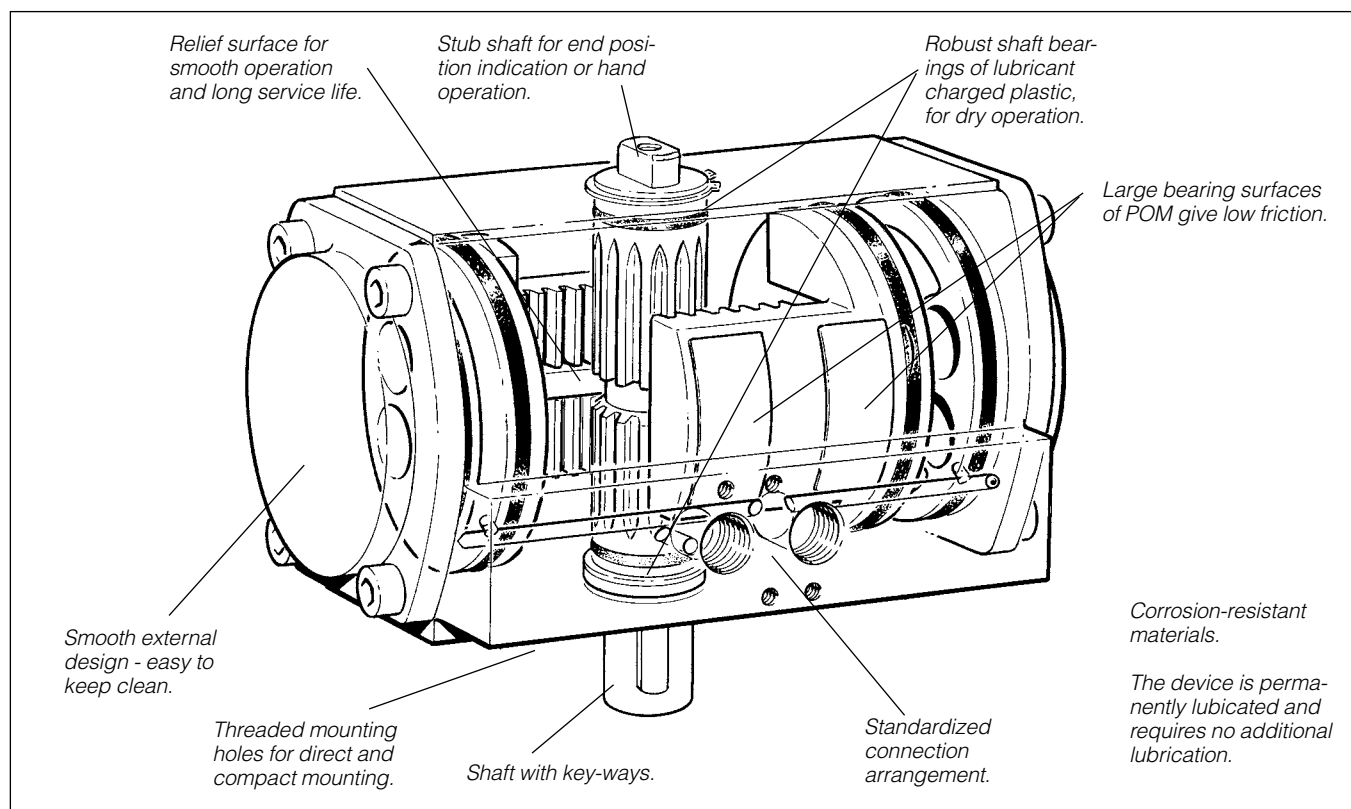


Rotary Actuators - Series RA



Pneumatic rotary actuator RA

The RA is a double-acting rotary actuator of very compact design. It has a high torque and small installation dimensions. The actuator has double pistons, which transmit the turning moment to the output shaft. The toothed piston rods act on the output shaft in a rack-and-pinion type arrangement. Each piston and toothed rod is of integral construction. The rack-and-pinion type arrangement gives an even turning moment throughout the rotation movement.

The drive shaft is robustly supported in bushings of self-lubricating plastic. There are key-ways on the output end of the shaft, while the opposite end of the shaft has a stub that can be used to accommodate end-position indication, or to facilitate hand operation of the actuator. The turning limits of the rotary actuator should be determined by external stop lugs, in order to protect the unit from the effects of excessive load inertia.

Compressed air is fed into the piston chambers via a connection plate and drilled galleries in the central part and end covers. The connection plate is fitted to a standardized connection arrangement on one of the long sides of the unit. This means that the end covers are completely smooth, without any protruding parts.

The RA rotary actuator has a cylinder block of natural anodized aluminium, with end covers of black anodized aluminium. The unit is available in 5 different sizes, covering a turning-moment range of 20 to 200 Nm. As standard, all sizes are available with a turning angle of either 90° or 180°.

Technical data

Working medium	dry, filtered compressed air
Working pressure	max. 10 bar
Working temperature	-20 °C to +80 °C

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it has to be continued.

Ordering information for RA

Angle	Order code
90°	RA2-90
180°	RA2-180
90°	RA4-90
180°	RA4-180
90°	RA8-90
180°	RA8-180
90°	RA12-90
180°	RA12-180
90°	RA20-90
180°	RA20-180

Material specification

Cylinder block/end covers	Anodized aluminium, natural/black
Pistons	Aluminium
Relief surface bars	Stainless steel
Shaft	Zinc-plated steel
End cover screws	Zinc-plated steel
Seals	Nitrile rubber, NRB
Piston bearings	POM
Shaft bearings	Polyethylene MOS2



Important

Before attempting any external or internal work on the rotary actuator or any connected components, make sure the rotary actuator is vented and disconnect the air supply in order to ensure isolation of the air supply.

Note

Air quality is essential for maximum cylinder service life (see ISO 8573).

Note

All technical data in this catalogue is typical data only.