



# Actuator technology for ball valves, plug valves and butterfly valves



# Pneumatic Quarter-turn Actuator S

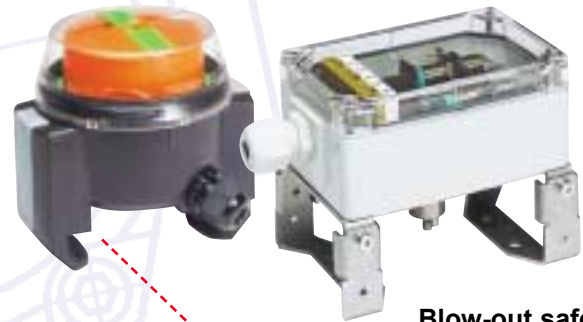
Pneumatic quarter-turn actuators series R are used for the actuation of valves with 90° travel, such as ball valves, tap locks as well as butterfly valves. Further areas of application include functions with rotary movements of 90° or 180°. The transmission of force is accomplished by rack and pinion.

All quarter-turn actuators can be used for open/close applications or as control drives. On the double-acting version the valve is opened or closed by application of compressed air to the actuator.

On single-acting actuators compressed air is applied only to one direction, movement to the opposite direction is accomplished by spring force.

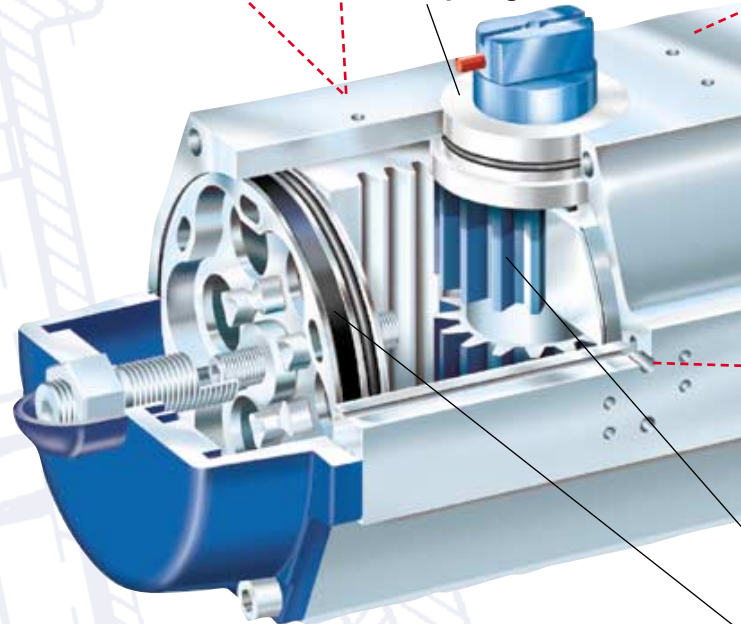
In case of a compressed air failure these drives therefore automatically return to a safe position. Depending on the process or the requirements the springs are used to accommodate the opening or closing function.

Today the quarter-turn actuators already comply with the EN-standards, which will supersede a large proportion of the DIN-standards, as well as a variety of ISO-standard drafts and various factory standards used in large scale industry.



Standard co  
enable prob  
installation,  
valve, limit s  
positioner. H  
essential de  
can be recog

Blow-out safe bushing, no  
corrosion susceptible circl  
snap rings.



- Quality assurance acc. to DIN ISO 9001/EN 29001
- Connecting flange of actuator acc. to ISO 5211, draft February 91
- Actuator connection with square acc. to DIN 3337, alternatively with "Double-D" acc. to EN draft "butterfly valves" preferred series of measurements
- Connection for solenoid valve acc. to VDI/VDE 3845 (NAMUR)
- Connection for positioner control and limit switch acc. to VDI/VDE 3845 (NAMUR)
- Visual indicator acc. to NAMUR
- On request available with NAMUR mounting kit for valve connection

## Main applications:

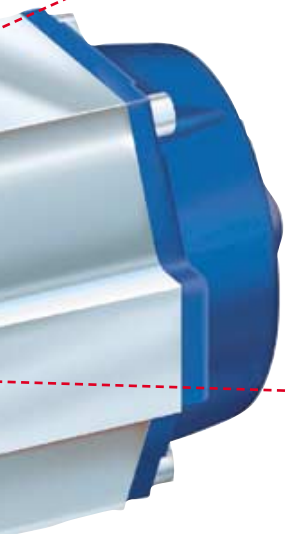
- Power plants
- Sugar industry
- Petrochemical industry
- Waste incineration
- Food and beverage industry
- Steel industry
- pulp and Paper
- Chemical industry



# Series R

connections  
 stem-free  
 e.g. of solenoid  
 switch and  
 here the  
 design features  
 optimized.

external  
 lips or



pressure balanced, blow-out safe spindle

Sliding bands on piston arranged  
 with wide distance in between, no tilting,  
 low-wear operation

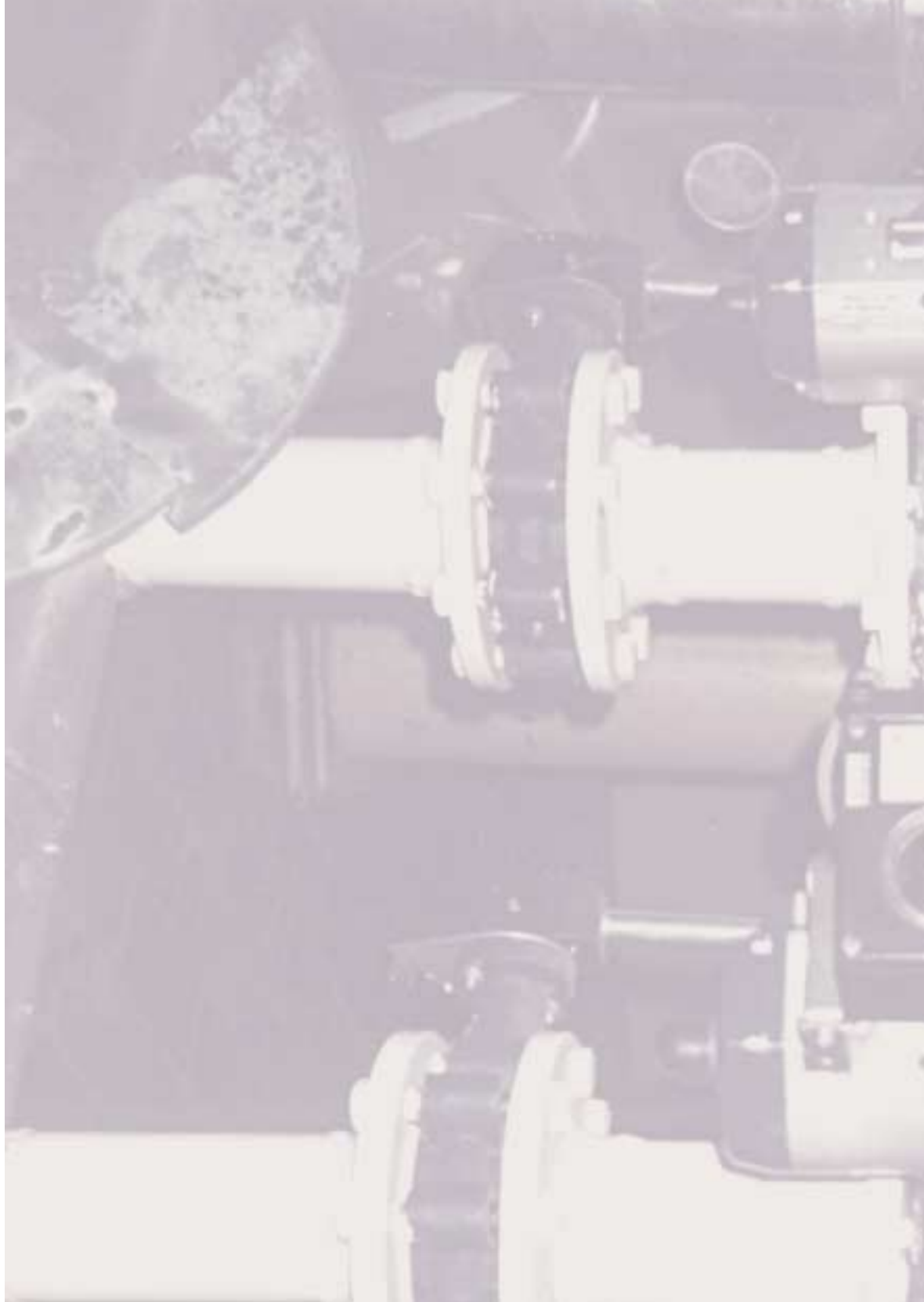
## Unique design features enable continuous and trouble-free operation

- The patented, pressure balanced spindle prevents any axial forces acting on the bearings. This results in high reliability, long lifetime and low wear.
- Spindle and the bearing bushings mounted from inside are of blow-out safe design, therefore no external circlips or snap rings required, high functional safety.
- Robust aluminium housings with anodized surface ensure even expansion of the housing under thermal influences, no jamming of the piston, high level of corrosion protection.
- Optimally positioned, self-lubricating sliding bands on the piston made of graphite filled Teflon arranged with a wide gap in between – low friction, no risk of tilting of the piston, therefore resulting in low wear.
- Risk-free and cost saving conversion/retrofitting of the actuators with left and right wound springs – guided spring pockets in cover and piston, star-shaped arranged, the spring pressure is already relieved when slackening the cover mounting screws.
- Interfaces designed acc. to NAMUR and ISO-standards. Problem-free retrofitting of accessories, such as solenoid valve, limit switch and positioners.
- Optimal adaptation of the actuator types over the torque range. Economical lay-out of actuators for direct installation.



### Specification / tender text

Part-turn valve actuators series R	
Housing material:	Aluminium, anodized
Operating pressure:	max. 10 bar
Temperature:	-20 to +80 °C (standard)
Shaft:	pressure relieved, blow-out safe
Rotation:	clockwise (standard)
Lubrication:	Permanent lubrication



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