



180° Aluminum Rack and Pinion Actuator

- NAMUR VDI/VDE 3845 and ISO 5211 dimensions on all sizes. No special blocks are required to mount solenoid valves, limit switches or positioners.
- The standard angle of rotation is 180°. Additional travel rotations of 120°, 135°, 150° are available. MA016 and larger sizes feature a travel stop with $\pm 10^\circ$ adjustment in both open and close directions (International Patent).
- The 'patent pending' bottom plate design, unique to Dixon Sanitary secures a captive pinion (anti-blowout system) and permits flexibility in mounting by retaining AISI 304 nuts (standard) or AISI 304 bolts (optional) In either dual ISO patterns, or to customer dimensions
- All pinions are supplied with anti-blowout retention in both directions
- The female pinion drive is standard with a double square output drive and optional with a double-D drive, keyed drive and designs to meet your specific requirements
- Shaft bearings isolate the pinion gear from the housing and support the shaft for high cycle applications
- The pinion teeth are engaged for the full length and stroke of the piston. The pinion height allows manual override without disturbing the position indication
- Extruded aluminum body is internally machined and lapped to exact specifications. All internal and external surfaces are anodized for corrosion resistance
- External open/closed indicator is standard, available for all rotations
- Pistons incorporate double wear pads to separate the rack from the actuator wall and serve as both guide and wear bearings
- Epoxy coated special steel springs are pre-loaded with non-metallic materials. The stainless steel end cap fasteners are extra long to allow for spring relaxation, all parts are corrosion resistant
- Air pressure operation from 40 to 150 PSI. Water, nitrogen and compatible hydraulic fluids may as be used to power the actuator



Double Acting



Spring Return

- All external fasteners are corrosion resistant stainless steel
- All units are permanently lubricated at the factory with non-silicone grease
- All units are externally stamped with a progressive traceable serial number
- 100% of all units are factory pressure and leak tested

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Specifications

Operating pressure range	40 to 120 PSIG
Maximum allowable working pressure	150 PSIG
Operating media	Dry or lubricated non-corrosive gas
Operating temperature standard	-40°F to 176°F
Piston and pinion lubrication	Non-silicone grease
Range of rotation adjustment	Between 170° and 190°
Valve and accessory mounting	Standard ISO 5211 bolt patterns
Output shaft	Female – Double square
Design	Twin rack and pinion
Factory testing cycles	1 million