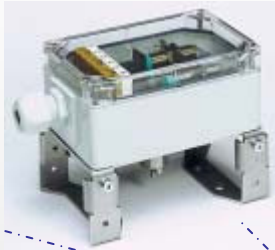


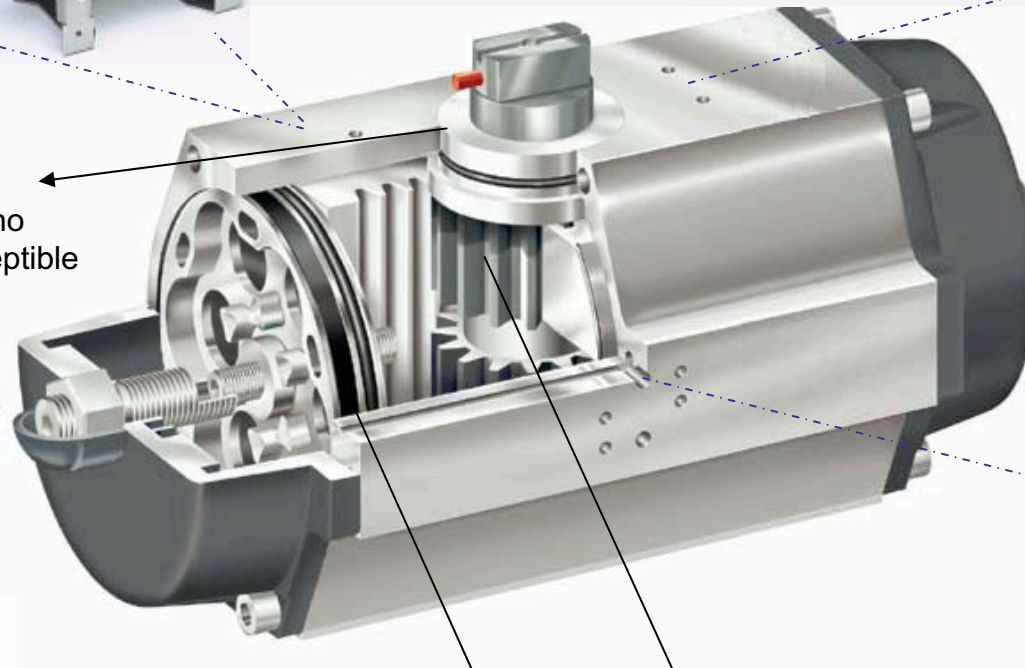
Rack and Pinion actuators with an output from 10 Nm to 12.000 Nm



Standard connections enable problem-free installation, e.g. of solenoid valve, limit switch and positioner. Here the essential design features can be recognized.

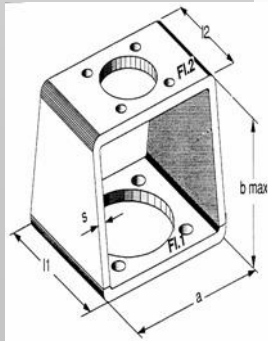


Blow-out safe bushing, no external corrosion susceptible circlips or snap rings



Pressure balances, blow-out safe spindle

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



Rack and Pinion actuators with an output from 10 Nm to 12.000 Nm

Datasheets

size 001

1. General Data Body

Body Material: Aluminium anodized acc. DIN 17611 (E6), calibrated
End Caps: plastic end caps RAL 7046 (other colours upon request)
End Cap Version: air end caps
End Cap Screws: material and strength acc. A2 70, DIN 912
Weight: 0,3 kg
Air Connection: G 1/8"
Shaft: one piece
Rotation: clockwise => double acting and spring to close
 anti- clockwise => double acting and spring to open
Lubrication: permanent greasing
Piston Support: PTFE guiding tapes
Interfaces:
 actuator/valve: F03; flange acc. DIN 5211 without centring key, with female square

2. General Technical Data

Actuations principle: rack and pinion
Allowable pressures:
 working pressure: 2,5 to 10 bar
 tightness test: 1,1 x max. nominal pressure
Cycle Time:
 $t_{open} < 1,0 \text{ sec.}$, with solenoid valve $K_v=1,2 \text{ [m}^3/\text{h]}$, at 6 bar air supply pressure
 $t_{close} < 1,0 \text{ sec.}$, with solenoid valve $K_v=1,2 \text{ [m}^3/\text{h]}$, at 6 bar air supply pressure
Travel: 90° standard, other options upon request
Travel tolerance: +/- 1,5° each end position
Air Consumption: theoretical 0,06 N l/h at 1 bar per cycle 0° - 90°
Leakage: new => max 2 N l/h at 6 bar working pressure
 after 500.000 cycles => max 10 N l/h at 6 bar working pressure
Life span: 1 Mio. cycles at 6 bar working pressure, 20°C ambient temperature acc. VDINDE 3844
Ambient Temperature: -20 to + 80° C (standard)
Installation Position: random
Medium: air and all non-aggressive gases

Torques:	Air Supply Pressure [bar]						
	2	3	4	5	6	7	8
Theoretical value	2,48 Nm	3,72 Nm	4,96 Nm	6,2 Nm	7,44 Nm	8,68 Nm	9,92 Nm
Min. efficiency at 6 bar	70%	70%	70%	70%	70%	70%	70%

Spring torques and corresponding air torques please find on separate pages.

size 002

1. General Data Body

Body Material: Aluminium anodized acc. DIN 17611 (E6), calibrated
End Caps: plastic end caps RAL 7046 (other colours upon request)
End Cap Version: air end caps
End Cap Screws: material and strength acc. A2 70, DIN 912
Weight: 0,6 kg
Air Connection: G 1/8"
Shaft: one piece
Rotation: clockwise => double acting and spring to close
 anti- clockwise => double acting and spring to open
Lubrication: permanent greasing
Piston Support: PTFE guiding tapes
Interfaces:
 actuator/valve: FO4/F05; flange acc. DIN 5211 without centring key, with female square

2. General Technical Data

Actuations principle: rack and pinion
Allowable pressures:
 working pressure: 2,5 to 10 bar
 tightness test: 1,1 x max. nominal pressure
Cycle Time:
 $t_{open} < 1,0 \text{ sec.}$, with solenoid valve $K_v=1,2 \text{ [m}^3/\text{h]}$, at 6 bar air supply pressure
 $t_{close} < 1,0 \text{ sec.}$, with solenoid valve $K_v=1,2 \text{ [m}^3/\text{h]}$, at 6 bar air supply pressure
Travel: 90° standard, other options upon request
Travel tolerance: +/- 1,5° each end position
Air Consumption: theoretical 0,09 N l/h at 1 bar per cycle 0° - 90°
Leakage: new => max 2 N l/h at 6 bar working pressure
 after 500.000 cycles => max 10 N l/h at 6 bar working pressure
Life span: 1 Mio. cycles at 6 bar working pressure, 20°C ambient temperature acc. VDINDE 3844
Ambient Temperature: -20 to + 80° C (standard)
Installation Position: random
Medium: air and all non-aggressive gases

Torques:	Air Supply Pressure [bar]						
	2	3	4	5	6	7	8
Theoretical value	12,4 Nm	18,6 Nm	24,8 Nm	31 Nm	37,2 Nm	43,4 Nm	49,6 Nm
Min. efficiency at 6 bar	80%	80%	80%	80%	80%	80%	80%

Spring torques and corresponding air torques please find on separate pages.