

Rack & Pinion Pneumatic Actuator / Features

General Features

- High performance
- Long lasting
- High torque (rotation movement) output
- Position indicator
- Body: Extruded aluminium, (on request; anodized)
Optionally; epoxy painted body or PTFE coated body
- Piston and caps: Die cast aluminium
- Double acting actuators can turn into single acting easily
- Single acting actuator's springs, preloaded and durable
- Sensitive and high quality working of bearing system and o-ring
- Stroke adjustment in both ways $\pm 5^\circ$
- Nickel covered steel or stainless steel shaft
- ISO 5211, DIN 3337 and namur standard
- Limit switchbox, positioner connection is namur standard
- Direction valve montage is namur standard
- Actuator valve montage is ISO 5211 standard

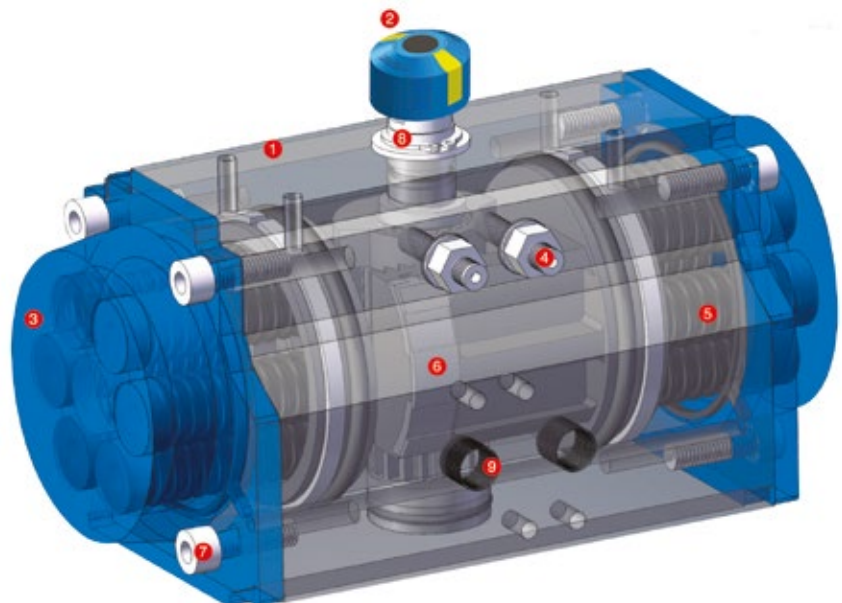


Design Features of TORK RA Series Actuator (Rack & Pinion Actuator)

- 1) **Actuator Body:** Corrosion protected aluminium extruded body.
- 2) **Indicator:** It is standard on all actuators.
- 3) **Caps:** Aluminium extruded caps provide maximum resistance against corrosion, caps are suitable for single and double acting actuators
- 4) **Stroke Adjustment:** Permit adjustment of $\pm 5\%$ in both directions.
- 5) **Springs:** Cartridge design and corrosion resistant springs.
- 6) **Piston Bearing O-rings:** Long lasting
- 7) **Nuts and Bolts:** Stainless steel and high resistance for corrosion.
- 8) **Actuator Pistons:** Aluminium injections. High quality o-rings and against corrosion.
- 9) **Connections:**
 - Solenoid Valve, Limit Switch Box, Positioner: Namur VDINDE3845
 - Ball, Butterfly and Plug Valve Montage: ISO5211, DIN3337standard

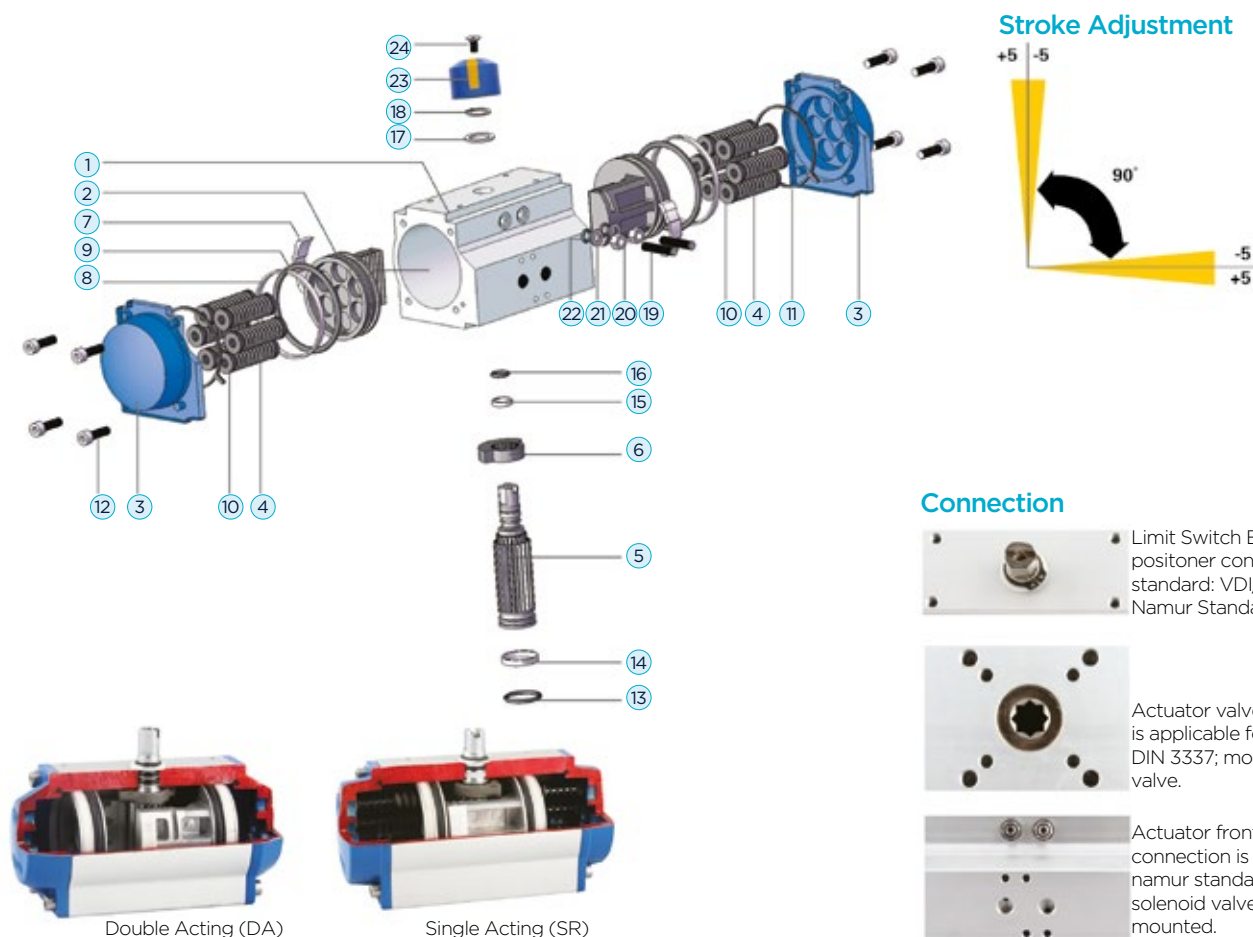
Air Quality:

ISO 8573-1: 7-4-4 (Particle - Water - Oil)

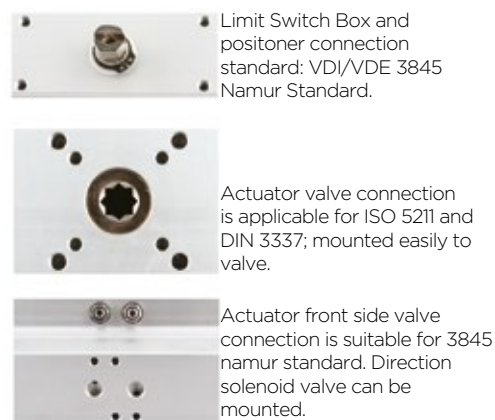


Rack & Pinion Pneumatic Actuator / Spare Parts

RA Series (DA/ SR): Spare Part List



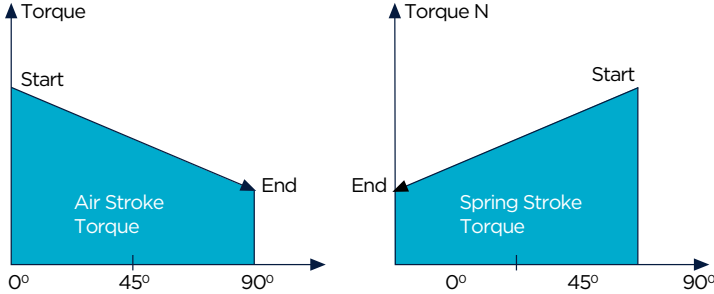
Connection



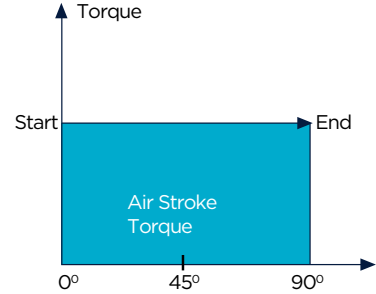
PART NO	UNIT QUANTITY	PART DESCRIPTION	STANDARD MATERIAL
1	1	Body	Extruded Aluminium Alloy
2	2	Piston	Die Cast Aluminium
3	2	Cap	Die Cast Aluminium
4	min.5/max.12	Spring	High Alloy Spring Steel
5	1	Pinion	Steel Alloy
6	1	Cam (Stop Arrangement)	Stainless Steel
7	2	Bearing (Piston Back)	Polyptlamide
8	2	Bearing (Piston Sliding)	Polyptlamide
9	2	Piston "O" Ring	Nitrile (NBR70)
10	min.5/max.12	Spring Holder	Polypropylene + Gf
11	2	Cap "O" Ring	Nitrile (NBR70)
12	8	Cap Bolt	Stainless Steel
13	1	Pinion Bottom "O" Ring	Nitrile (NBR70)
14	1	Bearing (Pinion Bottom)	Polyptlamide
15	1	Bearing (Pinion Top)	Polyptlamide
16	1	Pinion Top "O" Ring	Nitrile (NBR70)
17	1	Thrust Bearing	Polyptlamide
18	1	Spring Clip	Steel Alloy
19	2	Stop Set Screw	Stainless Steel
20	2	Stop Nut	Stainless Steel
21	2	Stop Set Screw Washer	Stainless Steel
22	2	Stop Set Screw "O" Ring	Nitrile (NBR70)
23	1	Indicator	Polypropylene + Gf
24	1	Indicator Screw	Stainless Steel

Rack & Pinion Pneumatic Actuator/ Operation

TORK Actuator, Tork Output Diagrams Rack & Pinion Actuator

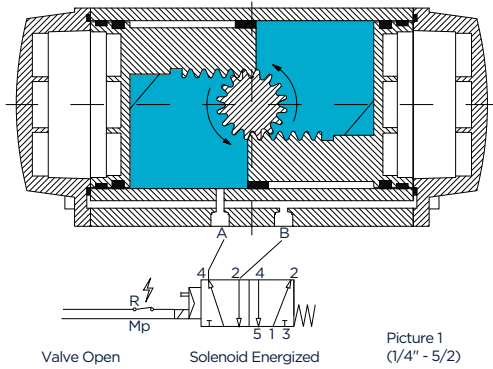


TORK RA ... SR Series (Single Acting) Actuator Output Diagram

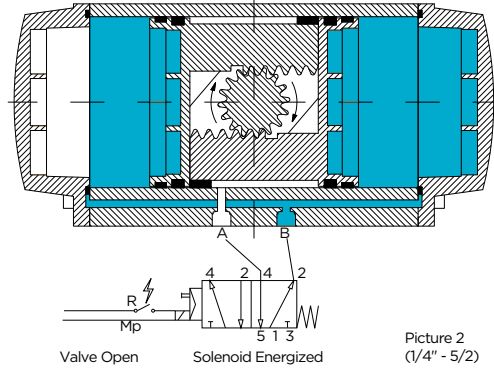


TORK RA ... DA Series (Double Acting) Actuator Output Diagram

TORK RA ... DA Series Actuator Operation (Double Acting) Rack & Pinion Actuator

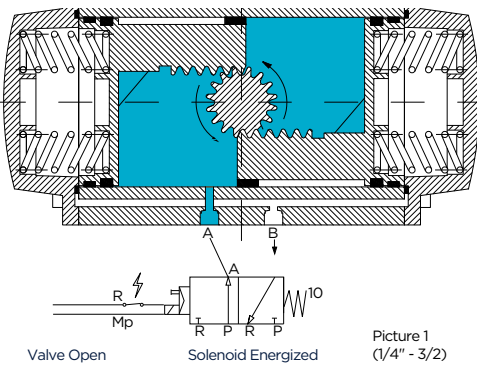


Picture 1
(1/4" - 5/2)

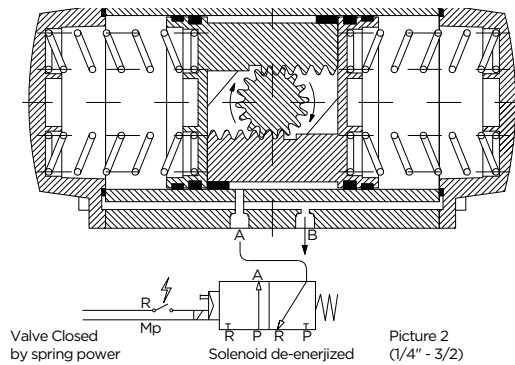


Picture 2
(1/4" - 5/2)

TORK RA ... DA Series Actuator Operation (Single Acting) Rack & Pinion Actuator



Picture 1
(1/4" - 3/2)



Picture 2
(1/4" - 3/2)

TORK RA ... SR Series (Single Acting) Actuator Spring Arrangement

