

ZEETORK

— the Automation & Controls Expert —



Contents

- About Zeetork
- Mission, vision & core values
- Zeetork product ranges
- Actuator accessories



About us

- Incorporated in the year 2021 by a team of professional engineers with more than 20 years in Flow Control & Automation Industry who has an in depth understanding on valve automation.
- Zeetork, a one stop solution for automation and control of flow control products.
- At most attention is provided to deliver the best quality product inline with customer's requirement.
- We cater to the needs of diversified group of industries like
 - Water & Wastewater
 - Sugar, Pulp & paper
 - Mining & cement
 - Marine & Offshore



MISSION

We want to be a one stop solution provider for all automation needs.

VISION

We want to be one of the top 5 automation solution providers in our region of operation.

CORE VALUES

Professionalism

Trust

Quality

Reliability

Total Customer Satisfaction



Range of products



Pneumatic Actuators

- ✓ ZRA series
- ✓ ZRB Series
- ✓ ZRC series
- ✓ ZRD series

Electric actuator

- ✓ ZREQT Series
- ✓ ZREQM Series
- ✓ ZREQR Series

Heavy duty actuator

- ✓ ZRF Series

Accessories

- ✓ ZRG series- Gear box, Manual overrides
- ✓ ZPT Positioner
- ✓ ZLS series Limit Switch box (Valve monitor)
- ✓ ZLV series Solenoid valve
- ✓ Speed controller ZSCSR-N
- ✓ Air filter regulator ZLOFR
- ✓ Quick exhaust valve

PNEUMATIC ACTUATORS

- Converts energy from a pressurized gas into motion.
- Consists of a piston which develops the motive power.
- Keeps the air in the upper portion of the cylinder, allowing air pressure to force the piston to move the valve stem or rotate the valve control element.
- In Zeetork, based on the mechanism we offer two types,
 - I. Rack & Pinion
 - II. Scotch Yoke



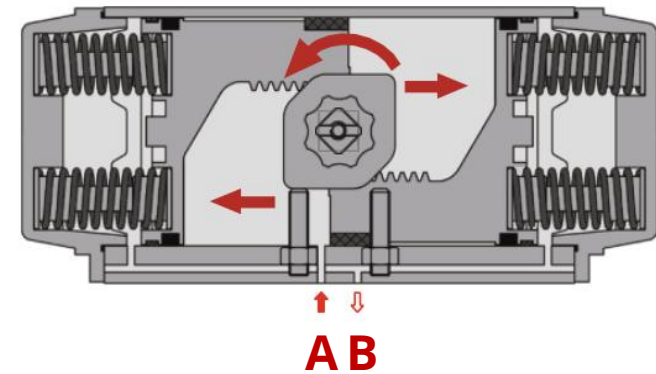
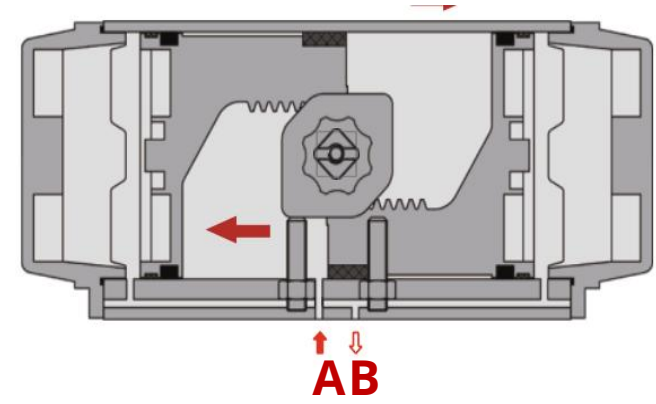
Actuator Mechanism

Double acting :

Air to port A forces the pistons outwards, causing the pinion to turn counterclockwise while the air is being exhausted from port B. Air to port B forces the pistons inwards, causing the pinion to turn clockwise while the air is being exhausted from port A.

Single acting :

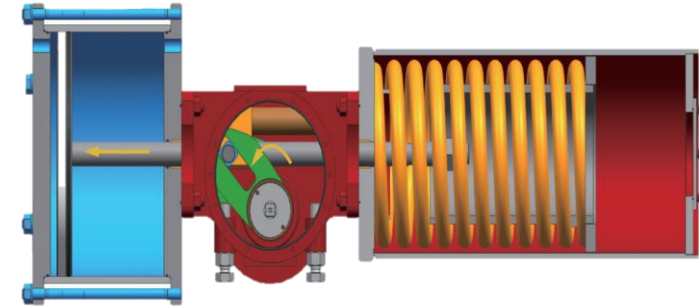
Air to port A forces the pistons outwards, causing the springs to compress, the pinion turns counterclockwise while air is being exhausted from port B. Loss of air pressure on port A, the stored energy in the springs forces the pistons inwards. The pinion turns clockwise while air is being exhausted from port A.



SCOTCH YOKE ACTUATOR

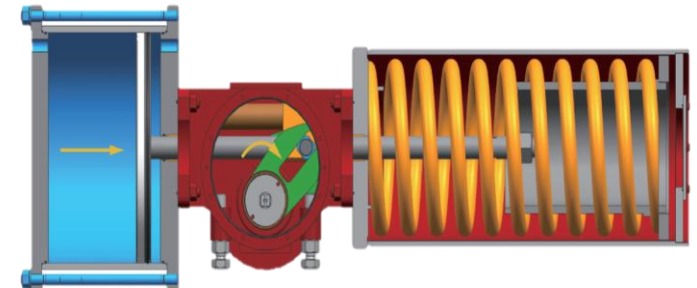
Operating principle

The actuator is operated by pressure air in one position (open or closed) and by spring energy in another position (closed or open).



Double acting actuator :

One or two pneumatic cylinders are fitted to one or each sides and the actuator is operated by pressure air totally.

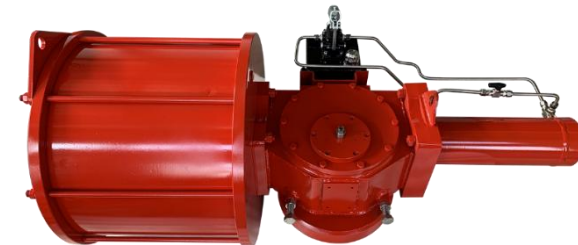


Spring return actuator :

One side is fitted with pneumatic cylinder and another side is fitted with a spring cartridge.

Actuators Range

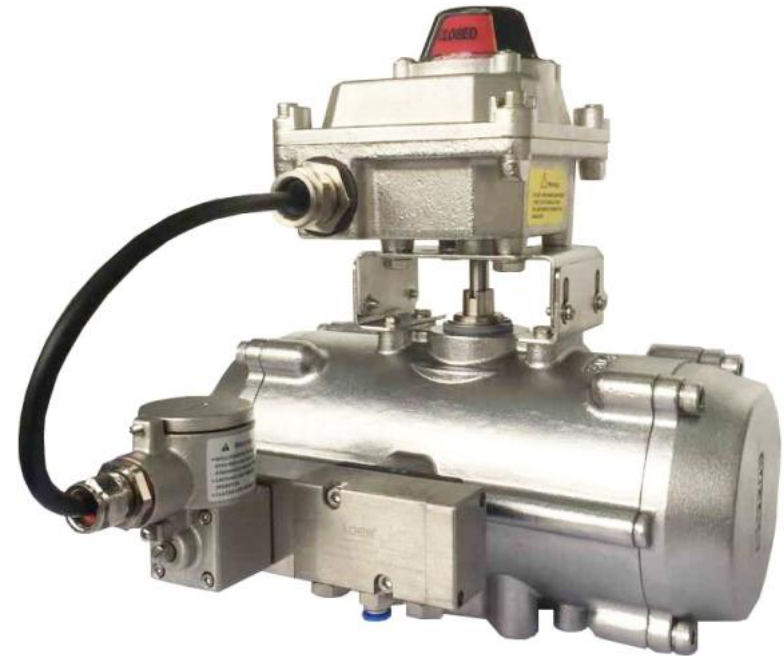
Rotary actuators	Series ZR	Material	Double acting Torque (Nm)	Single acting Torque (Nm)
Rack and Pinion	A	100% Stainless steel	15 to 2000	4.3 to 1200
	B	Extruded aluminium alloy	7.8 to 1,600	4.3 to 700
	C	Extruded aluminum alloy	3.1 to 2000	4.3 to 1100
	D	Extruded aluminum alloy	4.8 to 8140	4.3 to 4,200
Electric actuators	E	Cast Aluminium	50 to 6000	
Scotch Yoke actuators	F	Carbon Steel	509 to 2,51,900	191 -2,26,1200
Gear box	G	Ductile iron	250 to 1,00,000	



ZRA Series

Stainless Steel (SS) rack and pinion actuator offers several advantages depending on the application

Models	ZRA2-28DA
Pressure range bar	2-8
DA Torque Range Nm	15 to 2000
SA Torque range Nm	4.3 to 1,200
Spring Size	4-12
Body material	SS304
Adjust Stroke	$\pm 5^\circ$
Tested No .of Cycles	1 millions



ZRB Series

IT is a special actuator type. The adjustment screw of the ZRB series will be mounted on the end cap

Model	ZRB 4DA-26DA
Pressure range bar	2-8
DA Torque Range Nm	7.8 to 6,200
SA Torque range Nm	4.3 to 1,600
Spring Size	10-12
Body material	Extruded Al
Adjust Stroke	$\pm 5^\circ$
Tested No .of Cycles	1 millions



ZRC Series

The actuator features a top mount multifunction indicator and open-close stops adjustment as a standard.

Models	ZRC1DA-36DA
Pressure range bar	2-8
DA Torque Range Nm	7.8 to 2000
SA Torque range Nm	4.3 to 1,330
Spring Size	4-12
Body material	Extruded Al
Adjust Stroke	$\pm 5^\circ$
Tested No .of Cycles	1 millions



ZRD Series

This series actuator are **high performance** actuator. It **more than one million actuators** of various specifications were worked and operated safely on all kinds of quarter-turn valves worldwide.

No. of Models	ZRD 2DA-36DA
Pressure range bar	2-8
DA Torque Range Nm	15 to 13,024
SA Torque range Nm	4.3 to 4,100
Spring Size	4-12
Body material	Extruded Aluminium
Adjust range	±5°
Tested No .of Cycles	2 millions



ZREQT Series

Actuator output clearance is small, stroke repetition deviation within $\pm 1^\circ$, high control accuracy.

Model	ZRQT 50- 6000
Torque range Nm	50-6000
Stem connection mm	□ 9-55
Output Connect	ISO 5211
Power Supply	24V Dc, 110,230V AC, 380V AC
Ingress Protection	IP67, Optional:IP68
Working Duty	On/off type : S2-15min Modulating type : S4-50%
Motor Specifications	Class F, with thermal protection
Position Indicator	Flat Pointer Indicator



ZREQM Series Actuator

Actuator output clearance is small, stroke repetition deviation within $\pm 1^\circ$, high control accuracy.

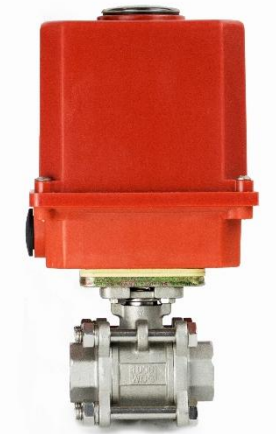
Model	ZREQM10-20000
Torque range Nm	10-20000
Stem connection mm	□ 9-55
Output Connect	ISO 5211
Power Supply	24V Dc, 110,230V AC, 380V AC
Ingress Protection	IP67, Optional:IP68
Working Duty	On/off type : S2-15min Modulating type : S4-50%
Motor Specifications	Class F, with thermal protection
Cable entries	2 x PG16



ZREQR Series Actuator

Actuator output clearance is small, stroke repetition deviation within $\pm 1^\circ$, high control accuracy.

Model	ZREQR10-20000
Torque range Nm	10-50
Stem connection mm	□ 9-22
Output Connect	ISO 5211
Power Supply	24V Dc, 110,230V AC, 380V AC
Ingress Protection	IP67, Optional:IP68
Working Duty	On/off type : S2-15min Modulating type : S4-50%
Motor Specifications	Class F, with thermal protection



Scotch Yoke Actuators ZRF

- Scotch yoke actuators are known for providing **higher torque** at the start and end of their stroke compared to rack and pinion actuators.
- If you need high torque for **opening and closing**, combined with durability and efficiency, Scotch yoke actuators are often the preferred choice.

ZRF Series	
Pressure range - bar	3-6
DA Torque Range - Nm	100 to 2,50,000
SA Torque range - Nm	200 to 4,80,000
Spring Size	3-6
Body material	Carbon steel
Adjust. range	±6°

Gear box ZRG series

A gearbox solves this by reducing speed while increasing torque, or by allowing more precise control over the actuator's movement.

No. of model	ZRG 10-1000
Torque range Nm	250- 1,00,000
Input Output Connect/	ISO 5211
Max Drive bore mm	20- 100
Hand wheel Dia	Φ200- 750
Std. Closure	IP-54 Optional 65
Lubrication	High performance Grease Filled NLGI-2



Accessories

Solenoid Valve- ZLV Series

- Mode of operation - direct acting and pilot operating mechanism.
- Pilot operated with single/dual coils. Single coil for open and close operation and Dual coil is for three position.

Models	ZLV310P1C0D, F2C0D, ZLV310F3C0,F3C5
Body material/Seal	Extruded Aluminium/SS304 Anodized Coated/ Buna
Function	5/2 or 3/2NC, Monostable, Pilot Operation
Airports	1/4" BSPP or NPT
Operating Voltage	24VDC-2.5W110/220VAC-2.8VA (50/60HZ)
Working Life	More Than 1000,000 Cycle
IP rating / Protection	IP66/Weatherproof/ flame proof
Flow rate	CV =1.4(25.00mm ²)
Insulation Protection	F Class



Limit Switch box - ZLS Series

- Provides feedback to (Distributed Control System) DCS through mechanical switches, inductive sensors & magnet sensors.

Models	ZLS 200,300,500,600
Body material/Seal	Die-cast aluminium (Anodized Coated)/Burna
Function/Seal	5/2 convertible 3/2
Double cable entry	2-1/2" NPT
Operating Voltage	250V AC/3A,125V AC/5A 250VDC/0.2A, 125VDC/0.4A, 30VDC/4A
Switches	SwitchesSS5GL (Omron micro switches)/P & F switch NJ2V3N
IP rating/Protection	IP67/Weatherproof/ Flame proof
Dome indicator	Yellow open red closed



Manual OverRide

The manual override ensures that the system or device can continue operating even when the automated function isn't working as intended.

No. of model	ZOR 0.5 - 5
Torque range Nm	250- 5,000
Input /Output Connect	ISO 5211
Max Drive bore mm	25- 80
Hand wheel Dia	Φ175- 600
Std. Closure	IP-54 Optional 65
Housing material	DI/SS/CS
Lubrication	High performance Grease Filled NLGI-2



Air Filter Regulator (ZLOFR)



- Used to remove liquid water and particulate matter from compressed air sources.
- Mechanical filters.
- Material – Aluminum, SS304, SS316
- Rating – IP67
- Port size:1/4"

Speed controller

- Mounted directly to pneumatic actuators
- Used with Namur solenoid valves and/or positioner.
- Controls the opening and closing speeds of pneumatic actuators.
- Can control the rotary speed of the actuator at any rate accurately, consistently & safely



ZRP Positioner

- A positioner is a device used in **control systems**, typically with **actuators and valves**, to ensure **precise positioning** of a control **valve's stem** or the **actuator's position** based on a control signal.
- Its primary function is to adjust and maintain the **valve's position** according to the desired **setpoint** provided by the controller.



ZRP Positioner

Model	ZP600-700-800
Type	Pneumatic, Electro pneumatic, Smart
Input Signal	4-20 mA DC
Limit Switch	Mechanical, Proximity type
Supplied Pressure bar	1.5 -7
Air connection	1/4" NPT
Material	Aluminum Die casting
Supply voltage	10- 30 V DC
Stroke length	10-150mm Linear 0-90° Rotary



Quick Exhaust valve

- A quick exhaust valve (also known as a QEV) is a type of pneumatic valve used in compressed air systems.
- Its primary function is to rapidly exhaust compressed air from a pneumatic cylinder or actuator, allowing for quick retraction or return of the piston or rod.



Solenoid Manifold

- It consists of multiple solenoid valves integrated into a single unit or assembly.



ZEETORK

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A Quality Product From

Zeetork Automation and Control Pte. Ltd.

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