



Worcester Controls

WRG Series Heavy Duty Actuator

Double Acting or Spring Return Scotch Yoke Actuator

WRG Series Scotch Yoke

- *IP67M Approved*
- *SIL 3 Capable*



WRG Series

Heavy-Duty Scotch Yoke Actuator

The Worcester WRG Series provides up to 2.2 million in-lbs of heavy-duty Scotch yoke torque. Enhanced performance is achieved by using a superior yoke support system that significantly reduces transverse loads.



Features

- True Modular Design
- On-Off, Multi-Position and Throttling
- Pneumatic, Gas and Hydraulic Models
- Spring Return “Fail Safe” and Double Acting
- Torque Outputs:
 - DA – 2.2M in-lbs (248K Nm)
 - SR – 1.2M in-lbs (124K Nm)
- Operating Pressures:
 - Pneumatic: 40-150psi
 - Hydraulic: 500-3000psi

IP67M Ingress Protection

O-Rings or dynamic quad seals are utilized to conform to IP67M specifications, ensuring optimal ingress protection.

Modular Construction

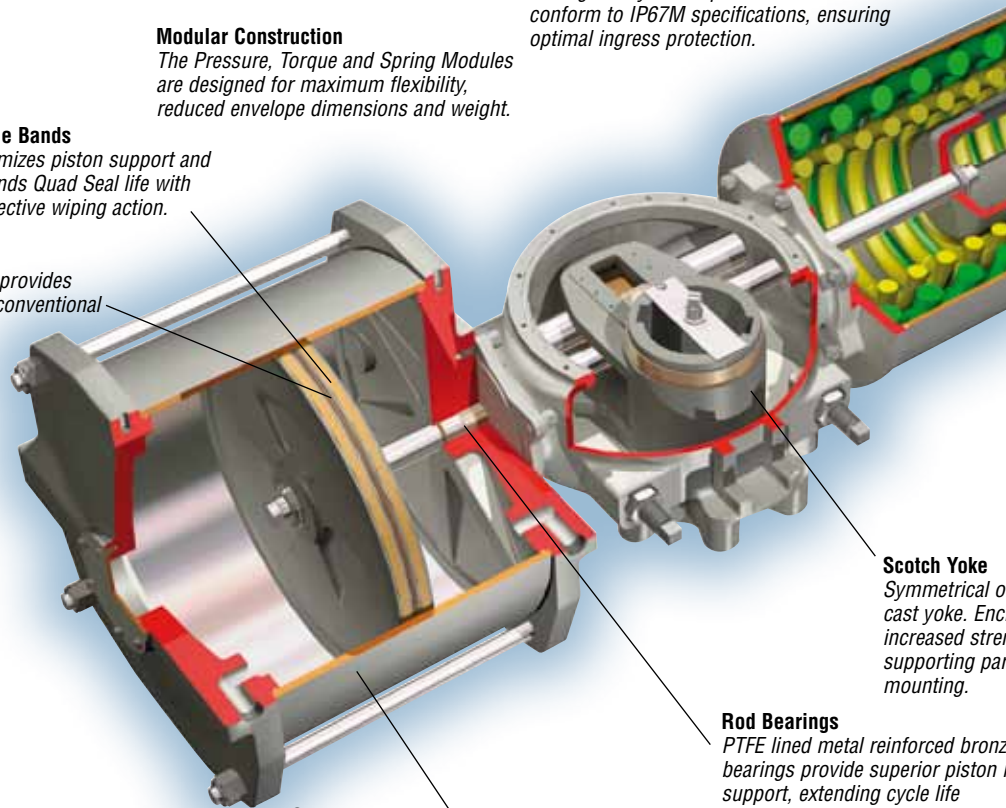
The Pressure, Torque and Spring Modules are designed for maximum flexibility, reduced envelope dimensions and weight.

Guide Bands

Optimizes piston support and extends Quad Seal life with protective wiping action.

Piston Seals

Dynamic Quad Seal design provides enhanced cycle life versus conventional O-Rings.



Scotch Yoke

Symmetrical or canted ductile iron cast yoke. Enclosed yoke slot for increased strength with 2 keyways supporting parallel or perpendicular mounting.

Rod Bearings

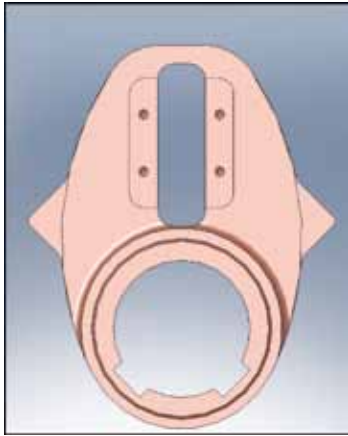
PTFE lined metal reinforced bronze bearings provide superior piston rod support, extending cycle life

Cylinder

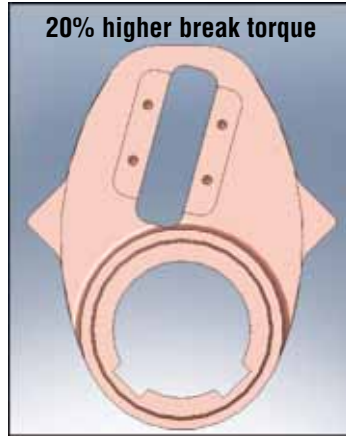
Heavy wall cylinders provide increased “job site” durability. Interior surface is honed and hard chrome plated to provide superior corrosion and wear resistance.

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Heavy-Duty Scotch Yoke Actuator



Symmetrical Yoke



Canted Yoke

Features

- Hard Chrome Plated Cylinder Walls
- Symmetrical and Canted Yoke
- Guide Bar Yoke Support
- Dual DD Cylinder Option
- Field Reversible Action
- Overrides, Line Break and Special Controls
- ESD Performance

Override Options

Spring Module design facilitates field retrofitting of jackscrew or hydraulic overrides

Interchangeable Yoke System

- Ductile iron casting
- Totally enclosed yoke slot for increased strength and cycle life
- Canted yoke results in approx. 20% higher break torque
- 2 keyway provision for flexibility of parallel or perpendicular mounting

