

ACTUS™

MANUFACTURING



PRODUCTGUIDE



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HISTORY

John A. Nicholson formed Nicholson Company (a.k.a. Actus Manufacturing) in 1953. Nicholson Company became the first air-cooled Deutz diesel engine distributor in the United States.

In the 60's, Nicholson Company began supplying control products to the construction industry. Our first linear and rotary electro-mechanical actuators were manufactured.

In the '70s, Nicholson Company began designing and building various heavy duty mechanical hand levers, controls, and cables, giving birth to Nicholson Company's industrial product lines.

The '80s found Nicholson Company looking for new applications for the Deutz engine. This search led to using the Deutz engine to power the DOT-SIGN®, the first flip disk, portable, changeable message sign. This sign prompted entry into the traffic control industry. A new company name, ADDCO, was born.

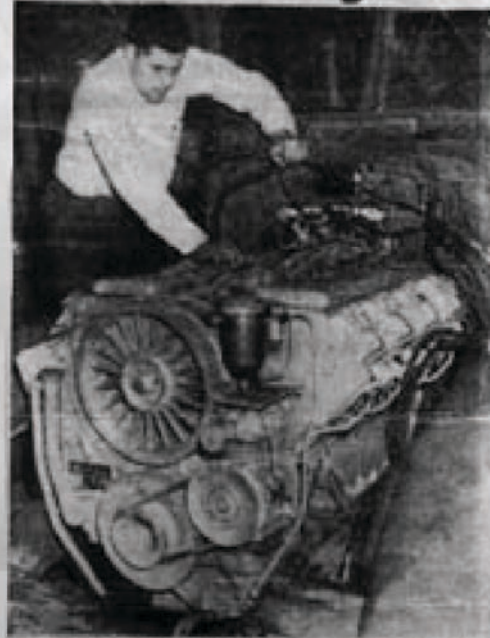
In the '90s, ADDCO developed innovations such as the Energy Manager software for control of diesel engines and The BRICK® modular message sign system. ADDCO also developed the first radio-linked portable traffic signal and introduced the ERC (Electric Remote Control) system.

In 2007, the traffic portion of ADDCO was sold and the industrial products group broke off and became Actus Manufacturing.

The name has changed but the innovation continues.

Wednesday, June 23, 1964

Ex-GI Here Gets Rommel Engine



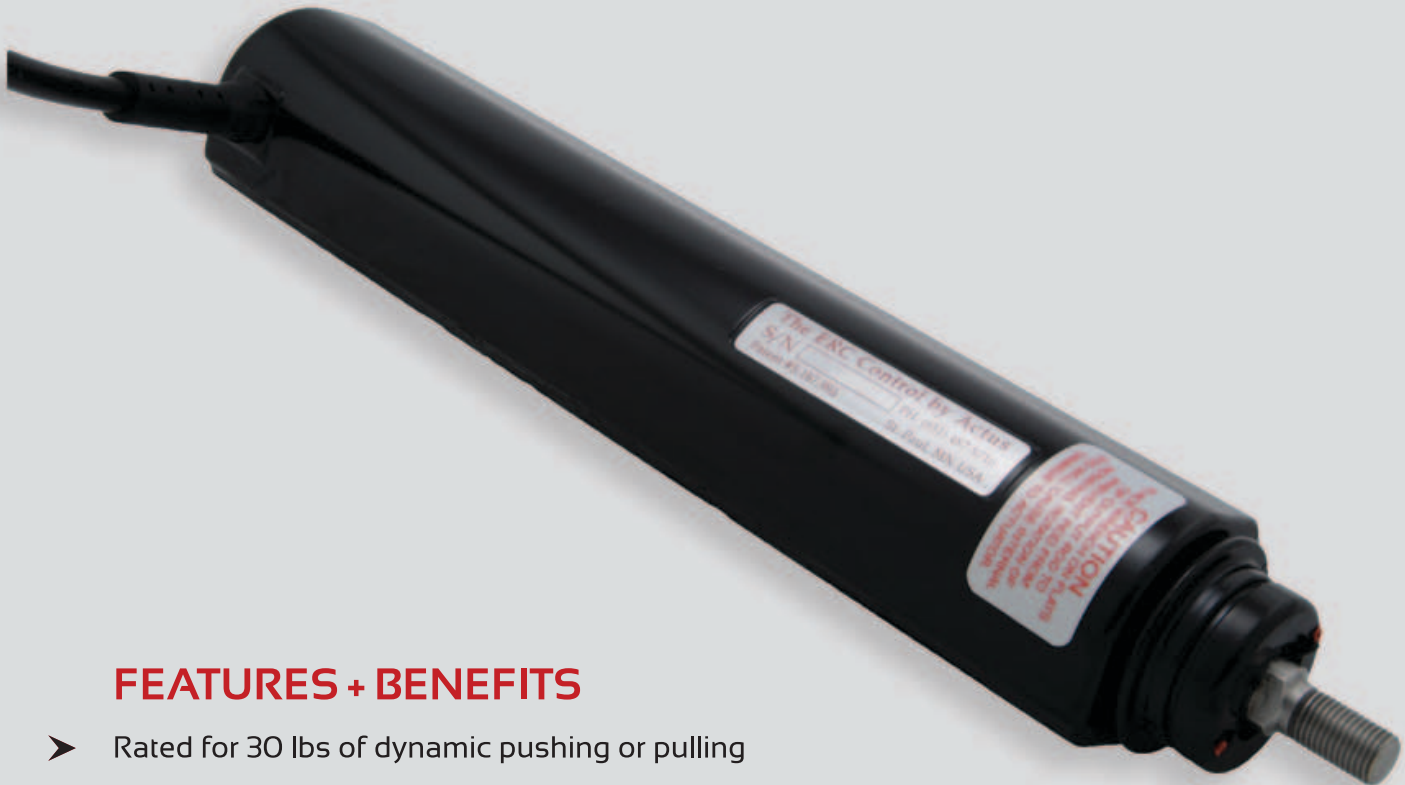
John Nicholson today has fulfilled a 10-year-old wish—to own a diesel engine of the type used in the tanks of Nazi Gen. Rommel. The wish dates back to the day Nicholson, 35 Norbert place, tested a tank captured from the "Desert Fox."—Staff Photo.



722 Series

The 722 series Electric Remote Control (ERC) Actuators are built to replace mechanical linkages with a more reliable electrical system.

Applications
Engine Throttle, Manual Valves, Hydrostatic Pumps



FEATURES + BENEFITS

- Rated for 30 lbs of dynamic pushing or pulling
- Patented internal clutch system that releases when power or signal is lost, allowing actuator to safely "float" to a pre-set position
- Rugged cast aluminum body, four point screw, all gear driven dustproof and water resistant ; all designed to meet the demands of an off-road environment
- Infinitely adjustable stroke length ; position repeatable operation to within 0.10" allowing for precise control of a load
- Factory lubricated requiring no scheduled field maintenance

OPTIONS

- Various rod or push-pull cable outputs <
- Mounting kit <
- Variety of wire harness cable connectors <
- Clutchless direct drive <

723 Series

The 722 series Electric Remote Control (ERC) Actuators are built to replace mechanical linkages with a more reliable electrical system.

Applications

Throttle Controls, Pump Stokers, Spool Valve Operation, Automatic Transmission Shifting, Process Valve Actuation, Damper Controls.



FEATURES + BENEFITS

- Rated for 60lbs of dynamic pushing or pulling <
- Patented internal clutch system that releases when power or signal is lost, allowing actuator to safely "float" to a pre-set position <
- Rugged cast aluminum body, four point screw, all gear driven, dustproof and water resistant; all designed to meet the demands of an off-road environment <
- Infinitely adjustable stroke length; position repeatable operation to within 0.10" allowing for precise control of a load <
- Factory lubricated requiring no scheduled field maintenance <

OPTIONS

- > Various rod or push-pull cable output
- > Mounting kit
- > Variety of wire harness cable connectors
- > Clutchless direct drive

Controls

The Electronic Control Module (ECM) is designed to maximize the performance and productivity of ERC actuators. Actus ECM modules control not only the position of the actuator, they control Actus' patented built-in clutch. This unique feature allows for immediate disengagement of the clutch, allowing the output shaft to safely float freely or return to a pre-set position in case of emergency, power failure or system design. The ECM's compact yet rugged cast aluminum body requires no field maintenance thanks to its weather resistant construction.



FEATURES + BENEFITS

- Rugged cast aluminum bod
- Dustproof and water resistant
- Closed loop circuit design
- Limited or infinite position settings are possible providing operator with maximum control capability
- No field maintenance required

INPUTS

Positional: Variable voltage, 4-20mA <

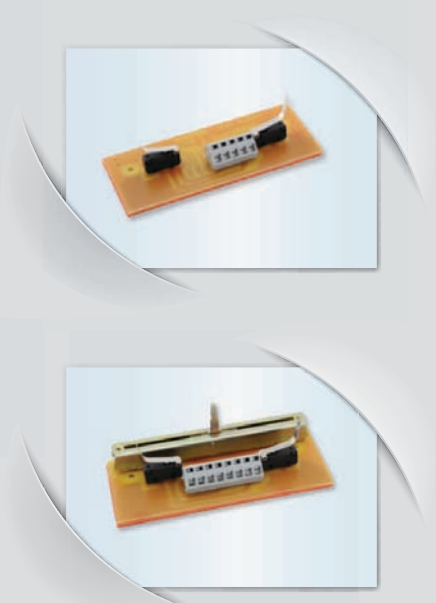
OPTIONS

Variety of wire harness cable connectors <

720 Series

The 720 Series Actuators are designed and built to replace mechanical linkages with simple, reliable electronic control.

Applications
Throttle Controls, Valve Actuation, Stroking
Hydrostatic Pumps.



FEATURES + BENEFITS

- Infinite position settings are possible, providing maximum control capability
- Easily adjustable limit switches to set stroke length
- Rugged, dustproof and water aluminum case designed for the demanding off-road market
- No field maintenance required

OPTIONS

- 12 or 24 VDC <
- Various stroke speeds <
- Various outputs - cable, rod, dual cable, dual rod, custom <
- Pivot, shock, tapped hole and custom mounts <
- Custom control wire harness / connector <
- Closed loop position control via low or high precision feedback potentiometer <
- 3 position <
- Dual output signal <

Flex Tite

FlexTite rubber latches are highly versatile and are used in many demanding applications with long-lasting dependability. They are made of high grade EPDM rubber and have superior UV resistance. FlexTite latches stretch-and-latch design make for easy and secure fastening in most environments or applications. Three, four and five inch length versions are available, and talk to us about custom mounts!

Applications

Hoods, Access Panels, Body Panels, Storage Compartments, Hold-Downs.



FEATURES + BENEFITS

- Wear, ozone, and UV resistant, flexible at temperature extremes, Weatherproof; all leading to long-lasting latching
- Specially formulated EPDM rubber allows for sound/vibration dampening
- Simple design also for easy to installation and misalignment flexibility

OPTIONS

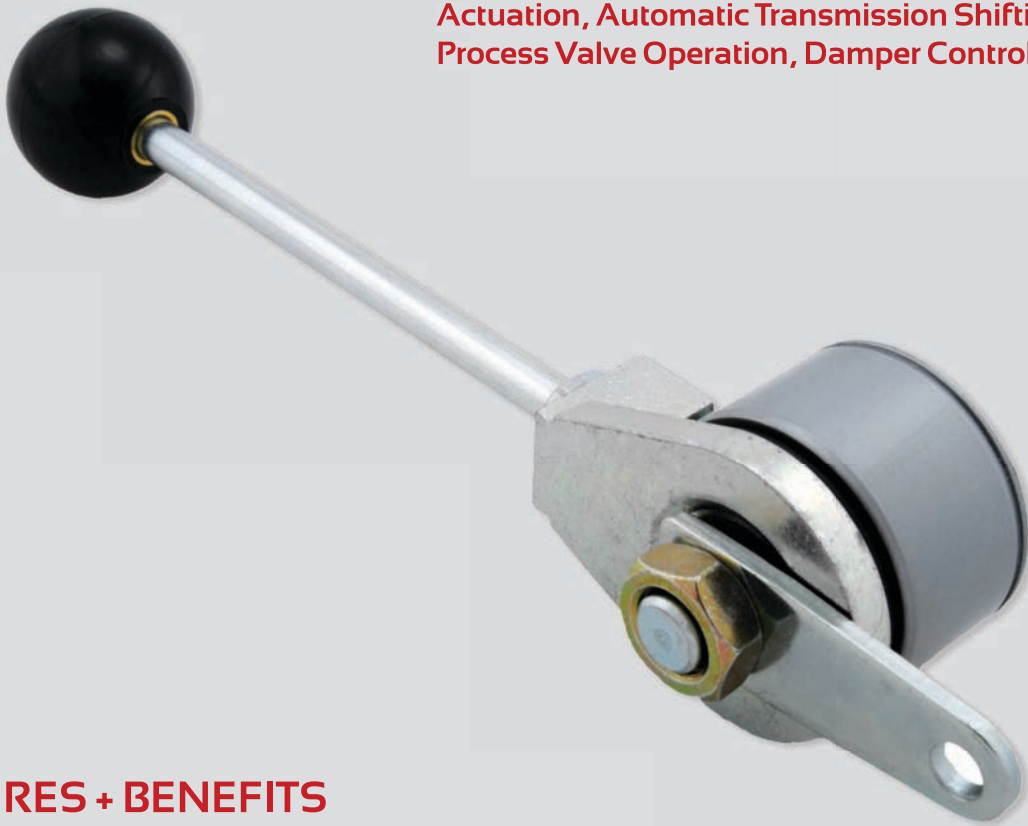
- Rubber durometer <
- Strap size - 3, 4, and 5" <
- Hardware - forward/reverse keeper, base and keeper mounting holes, etc <
- Finish - plain, clear zinc, black zinc, Everlube, Dorritech <
- Material - steel, stainless steel <

150 Series

The 150 Series Hand Control puts control in the palm of your hand. The 150 series is an extremely durable push-pull control providing smooth movement and very low friction. With minimal push-pull force required, you have infinite positioning in a complete 360 arc at your finger tips. When the control is in its "locked" positions it won't slip like other "friction" style controls.

Applications

Throttle Controls, Pump Strokers, Spool Valve Actuation, Automatic Transmission Shifting, Process Valve Operation, Damper Control.



FEATURES + BENEFITS

- Input lever travels smooth, with very low friction and light force required, providing 360 degree travel and infinite positioning
- Hardened steel locking mechanism, plated external components, factory lubricated, and weather sealed requiring no scheduled field maintenance.

OPTIONS

Custom input handles and output levers, including size and orientation <

Spring lock; detent <

Knob Color <

300 Series

The 300 series friction control was designed for wherever smooth multi-cycle operation is required. Friction of the unit is adjustable to compensate for light and heavy loads. All external parts are plated for rust protection, while long life nylon washers maintain the desired amount of friction.

Applications
Engine Throttle, Hydraulic Pump Stroking, Valve Actuation.



FEATURES + BENEFITS

- Compact, rugged design for mobile equipment
- 360 degree travel
- Detents available
- Available in various configurations, including input handle, output lever, and mounting

Non-Linear

The Non-Linear Hand Control was designed to fit directly on variable displacement hydraulic pumps. The control gives the operator smooth control throughout the speed range. The design of the control provides a wider neutral deadband, thus avoiding the sudden "lurch" often associated with the hydraulic pumps. After the control is advanced past the neutral position, it accelerates at a faster rate until it reaches the end stop.

Applications
Hydraulic Pump Stroking.



FEATURES + BENEFITS

- Compact, rugged design for mobile equipment
- Smooth control with wide, neutral dead band
- Detents available
- Available in various configurations, including input handle, output lever, and mounting



Automotive | Construction Equipment | Off Highway | Agriculture |
Aviation/aerospace | Military | Industrial machinery | Recreational | Mining | Marine

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INNOVATING, EFFECTIVE MOTION CONTROL SOLUTIONS

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