



Helping you build a better machine, faster.

# **Industrial Linear Actuators - Electrak Pro Series**



# Electrak Pro Series - when you need a pro for the job!

Thomson has for decades been the number one choice for actuators in mobile and industrial applications. With over 10,000 successful applications Thomson has set the standard for industrial linear actuators. Now Thomson presents the next generation of linear actuators with the introduction of the new Electrak Pro Series.

# Simply the best

The Electrak Pro Series is not an actuator designed for the ordinary tasks. Instead the Pro Series stands alone when it comes to the toughest and most demanding applications. When space is scarce, where dust, dirt and water is abdundant and when solid, reliable and maintenance free operation is a must - Electrak Pro is the answer.

# What is special for most is standard for a pro

The Electrak Pro Series is packed with standard features developed for applications where performance is essential. Electronic load monitoring, electronic limit switches, dynamic braking, manual override and IP66 protection are all standard features.

# **Electronic load monitoring (ELM)**

A built-in micro processor continuously monitors the performance of the actuator. The processor will stop the movement at the end of stroke and also in case of mid stroke stall, at overload conditions or if the duty cycle is too high. It also eliminates the need of a clutch and provides dynamic braking.

# **Broad range of unique options**

The Electrak Pro Series offer a broad range of options. Some or them are unique and have never before been seen on a linear actuator. Options include programmable limit switches, low voltage power switching, PWM speed control monitoring, signal follower input, analog or digital position feedback, end of stroke indication outputs, ELM indication outputs and longer stroke lengths, most being available without adding size to the standard optimized envelope.

# Low voltage power switching

and more cost effective installation.

This option provides a host of benefits and cost savings. You can directly interface the actuator with programmable controllers, without risk of overloading sensitive low voltage components. It also allows you to use low cost switches to control the actuator instead of using heavy relays and permits smaller wire cross section for the control circuits. It all means easier, faster

# **Programmable limit switches**

Programmable limit switches is an option that allows you to easily teach and repeat unique end of stroke positions. The positions can be programmed over and over, using a hand held pendant which can be removed during operation to prevent unauthorized changes.

# **Signal follower input**

This option provides the possibility to make the extension tube position follow the setting of a customer provided trim or adjustment potentiometer.

# PWM speed control monitoring

The PWM speed control option allows a customer provided PWM input to interface with our electronic load monitoring system in applications requiring variable speed control of the actuator.

# Customization

Even the most versatile actuator may not always suit all applications. But whatever your need is, our engineers are ready to help you to customize the actuators according to your requirements. We build more exclusive actuators than anyone else and have many years of experience of producing actuators to meet special needs.

# More information

Please visit www.danahermotion.com or call our customer support if you need more technical information, CAD files or want to find out more about Thomson.



# Electronic load monitoring The built-in micro processor continuously monitors all critical parameters and shuts down the actuator if necessary. Manual override This standard feature allows

manual operation in both

failure using a customer provided standard 5 mm or

3/16" hexagon key.

directions in case of a power

# Integral sealed connector

A robust, gasketed and weather protected Delphi Metrapak 280 connector is integrated in the housing providing a fast and secure connection.

**Electrak Pro** 

# Suitable for the harshest environments

The corrosion resistant enclosure in combination with IP66 protection as standard means that the actuator is maintenance free and can be used virtually anywhere.

# Rear clevis

The rear clevis is designed for installation in 90 degree steps right out of the box, no adjustment or special part number required.

# **Clam shell housing**

**Acme Screw** 

Fully gasketed aluminium clam shell housing means low weight, high strength and superior sealing.

**Ball Screw** 

### **General performance** [Vdc] 12, 24 12, 24 Input voltages Maximum static load [N/lbs] 6750 / 1500 18000 / 4000 Maximum dynamic load [N/lbs] 3375 / 750 9000 / 2000 Maximum speed [mm/s / inch/s] 43 / 1.7 38 / 1.5 Maximum stroke\* [mm / inch] 300 / 12 300 / 12 25 Full load duty cycle [%] 25 Operating temperature [°C] -40 - +85-40 - +85Protection class - standard / optional IP66 / IP67 IP66 / IP67 Lead screw type acme ball Standard features Load holding brake Motor overload protection Electronic limit switches Electronic load monitoring Dynamic braking Manual override **Optional features** Position feedback - analog / digital Programmable limit switches End of stroke indication outputs **ELM** indication outputs Low voltage power switching Signal follower input

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PWM speed control monitoring

Integral nut support guide

This standard feature increases the allowed static column loading by 20 % compared to traditional nut/screw designs.

# **Optimized size and extend / retract ratio**The physical size of the unit is smaller

The physical size of the unit is smaller and the retracted length shorter to allow the actuator to be used in more cramped quarters.



<sup>\*</sup> contact applications engineering for longer stroke lengths.



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