



FOR IMMEDIATE RELEASE:

NEW ELZex EXPLOSION-PROOF MODULAR LINEAR ACTUATORS UNIQUELY DESIGNED FOR DYNAMICALLY HARSH ENVIRONMENTS.

Cleveland, OH-September 2008

Leading linear motion control systems and components manufacturer Nook Industries (Cleveland, OH) has recently introduced its ELZex Modular Linear Actuator series that meets ATEX 95 explosion area testing certification for caustic environments. Developed by Nook's Precision Actuator Group, the heavy duty rodless design is belt-driven and features the industry's only anti-static HTD (High Torque Drive) belt on the market.

As more stringent requirements are being mandated for market applications with potentially explosive atmospheres (i.e.-automotive paint booths) that utilize a mixture of flammable substances such as cleaning agents, vapors, fluids, dust, gases (paint, thinners, solvents), etc. – the ELZex represents a unique solution for extreme manufacturing environments. Notably, the design features stainless steel guide rods (modified from standard) that work in conjunction with adjustable track rollers to maintain consistent contact with the stainless steel guide rods; thus, preventing potentially explosive electric arcing discharge.

SPECIFICATIONS / CAPACITIES:

Nook Industries' Modular Linear Actuators are available in a wide-range of sizes (ELZex: 40 / 60 / 80 / 805 / 100 / 125). The explosion-proof series provides an exceptional performance solution for precision and commercial applications; offering flexibility with long travel, high speed and the availability of high acceleration systems.

Nook's Modular Linear Actuators can be easily modified in several ways to meet the client's design requirements. Stroke-lengths up to several hundred feet are available. (maximum length=6,000 mm single / extrusion).

Additionally, the anti-static HTD belt is steel reinforced and minimizes backlash on reversal; the minimized backlash offers repeatability of $\pm 0,1$ mm.



These Modular Linear Actuators can also be delivered with the top and bottom carriages rigidly joined (also referred to as "wrap-around" carriages) enabling higher moment loads to be applied. The "wrap around carriages" offer a dynamic capacity up to 1,654 newtons (N) (thrust version) or 372 lbs. of force. Greater load carrying capacity can be achieved in non-standard longer carriage lengths that can be modified to meet the customer's specifications.

According to Nook Industries Vice President of the Actuator Group Jim Mangan, "We offer diverse modifications to our standard series linear actuators which gives Design Engineers a lot of flexibility in application of our products. In fact, we recently modified one of our standard linear actuators to increase its capacity in an auto plant that would allow a 300lb. person to stand on it."

ATEX 95 CERTIFICATION:

ELZex series is certified for ATEX 95 (2G & 3D) testing which provides the technical requirements for equipment and protective systems intended for use in potentially Explosive Atmospheres. The European ATEX 95 testing standards equate to U.S. standards for Class 1, Division 1 Groups C-D:

- Group C: Atmospheres containing ethyl-ether vapors, ethylene, or cyclo-propane
- Group D: Atmospheres containing gasoline, hexane, naphtha, benzene, butane, propane, alcohol, acetone, benzol, lacquer solvent vapors, or natural gas.

The testing considers potentially explosive concentrations of gas, vapor or mist in the air, as well as concentrations of dust. Additionally, it accounts for both electrical and mechanical sources of ignition. The ELZex meets testing approval for all of the above applications except underground mining.

CONCLUSION:

The ELZex series Modular Linear Actuators are an optimal solution for improving safety and health protection of workers at risk from explosive atmospheres; including single axis automotive paint booths and dual axis pick-and-place gantry environments. The versatile series can be matched with motion controls and drives to fit a wide range of coordinated motion application requirements. Additionally, they can be driven by any explosion proof motor (Nook motors available in servo or a/c).

The ability to create a unique turn-key explosion-proof system is available by pairing the explosion-proof Modular Linear Actuators with other explosion-proof Nook hardware including motor mounts & couplings to customer spec. Nook is now also offering explosion-proof mechanical limit switches to complete the turnkey system.



The ELZex series Explosion-Proof Modular Linear Actuators have been in use by many major automotive clients for over a year.

For more comprehensive ELZex series Specification Data visit Nook's online Modular Linear Actuator Catalog (page 28): www.precisionactuator.com



CORPORATE PROFILE:

Since 1969, Nook Industries, Inc. has been a leading manufacturer of linear motion components and linear control systems used in a multitude of market applications requiring straight-line, controlled movement. Manufacturing one of the most comprehensive selections of integrated linear motion components in the world, Nook's progressive growth has been achieved through its commitment to quality; emphasizing continuous improvement, defect prevention, and the use of statistical methods and consistent training to ensure the quality of its products.

Headquartered in Cleveland, Ohio, Nook Industries is an ISO 9001-2000 Registered Company that provides controlled motion solutions in a wide range of industries including; transportation, medical/diagnostics, paper, chemical, food/beverage, solar/aerospace, entertainment and communications markets, amongst others. Clients in these markets rely on the company's products for tooling, product design and engineering flexibility in providing modified standards to meet their respective application requirements.

Whether the application requires an off-the-shelf linear motion component or an engineered solution tailored to fit your application—Nook provides comprehensive engineering, design and analysis in providing the highest quality linear motion manufacturing solutions on the market today.

For more detailed information, visit the Nook web site at:

www.nookindustries.com or call: 1-800-321-7800

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