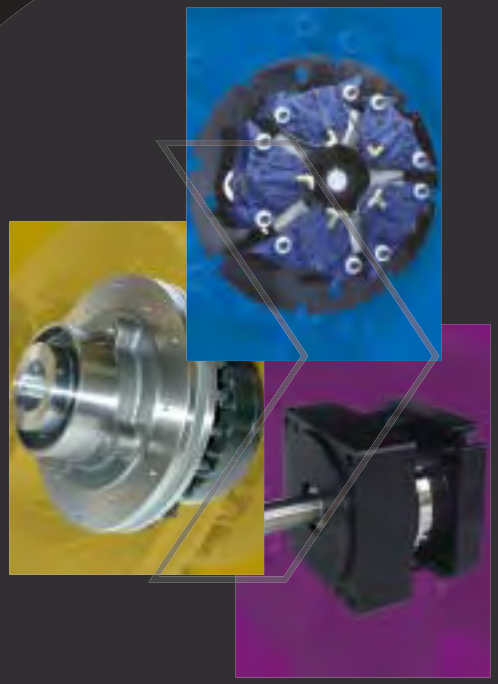

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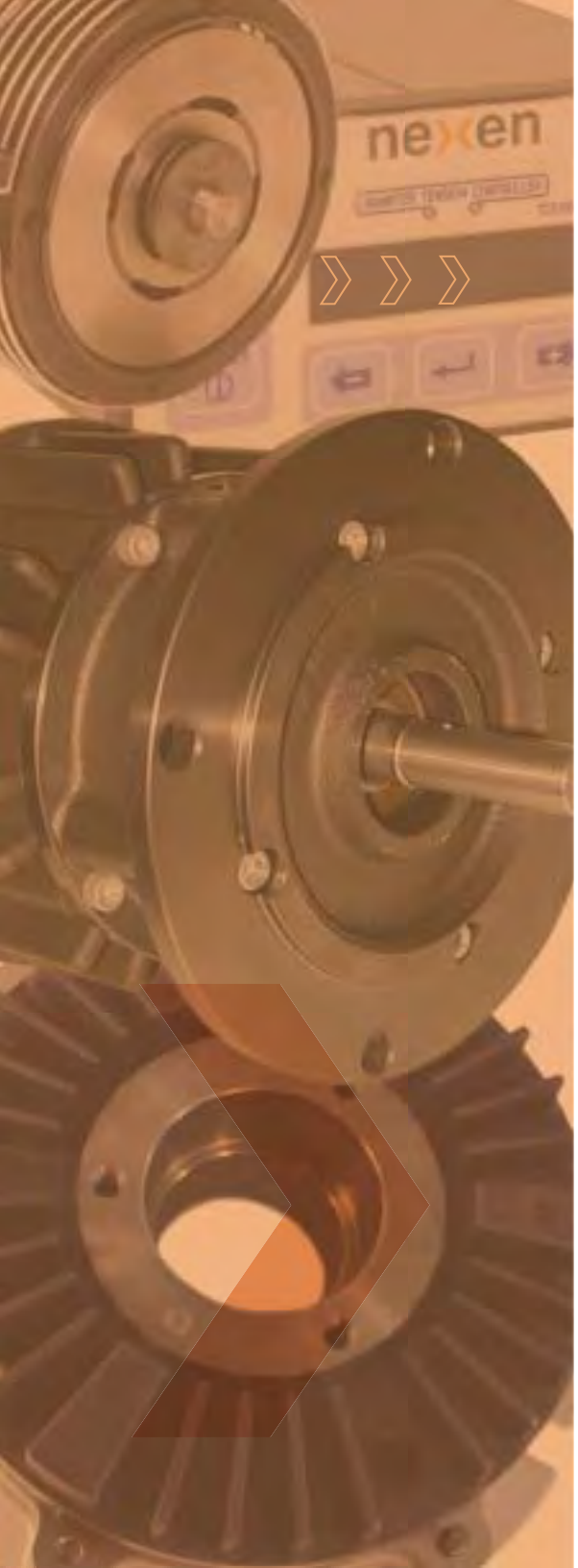


INDUSTRIAL MOTION CONTROL

Nexen Group, Inc. has been producing industrial clutches, brakes and web tension control products for nearly 50 years, and remains the leader in pneumatic power transmission components worldwide. Each day, millions of people see, touch, or use items produced with equipment that requires one or more Nexen products.

Customers span every industry – from multi-national corporations to small businesses – and range from design engineers to plant maintenance personnel. Regardless of industry or profession, the reason for using Nexen products remains the same: they are simple, durable, high-quality products our customers can trust.

Nexen has its headquarters in Vadnais Heights, Minnesota, with the manufacturing facility in Webster, Wisconsin. The company also has more than 40 worldwide sales offices and over 1,500 distributor sales outlets.

SIMPLE.
DEPENDABLE.

nexen

INDUSTRIES SERVED

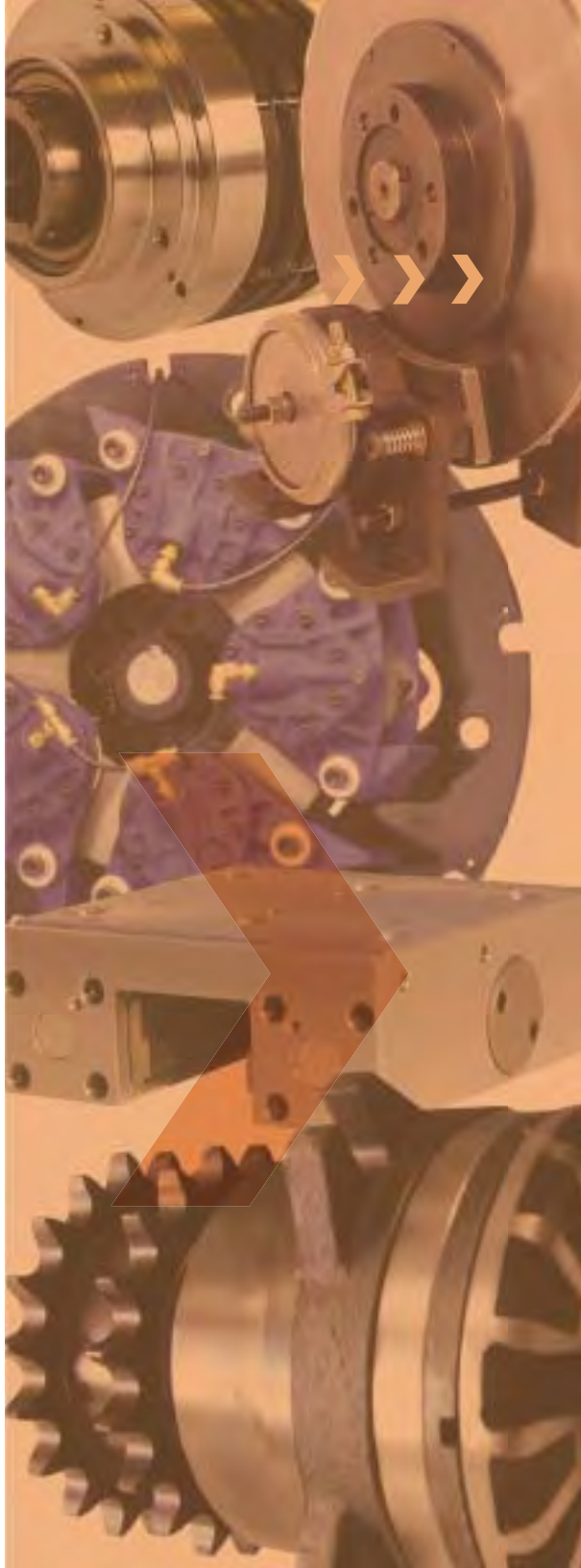
CLUTCHES

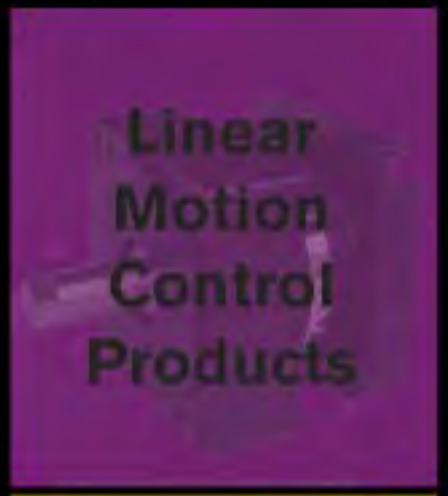
BRAKES

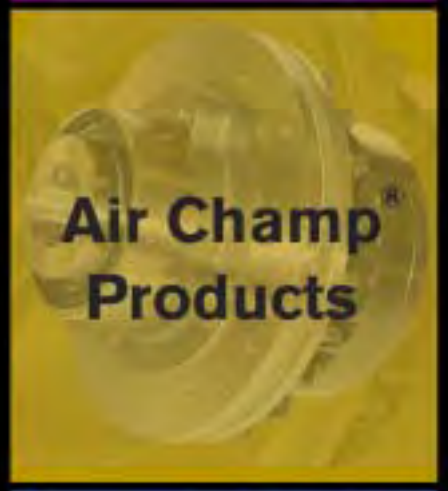
OVERLOAD PROTECTION

TENSION CONTROL

PRINTING
AUTOMOTIVE
ROBOTICS
WOOD PROCESSING
CONVEYING
FOOD PROCESSING
CONVERTING
PACKAGING
MATERIAL HANDLING
MACHINE TOOL
PHARMACEUTICAL
AMUSEMENT RIDES
COMMERCIAL LAUNDRY EQUIPMENT
TIRE MANUFACTURING
BOTTLING







THE NEXEN ADVANTAGE

At Nexen, our heritage is built on producing technically superior products while providing the highest level of customer support. This is also our commitment to tomorrow as Nexen continues to set new standards and build award-winning products. For more information on all Nexen products, visit our web-site at www.nexengroup.com.

- Long product life
- Minimal downtime
- Inexpensive to operate
- Easy to understand, install, and maintain
- High efficiency and productivity
- Operational versatility
- Mounting flexibility
- Custom design services available

FEATURES

SIMPLE DESIGN

AIR-ACTUATED

SPRING-ACTUATED

HIGH THERMALS

SELF-ADJUSTING

LOW MAINTENANCE

WIDE SELECTION

READY TO SHIP

LINEAR MOTION PRODUCTS

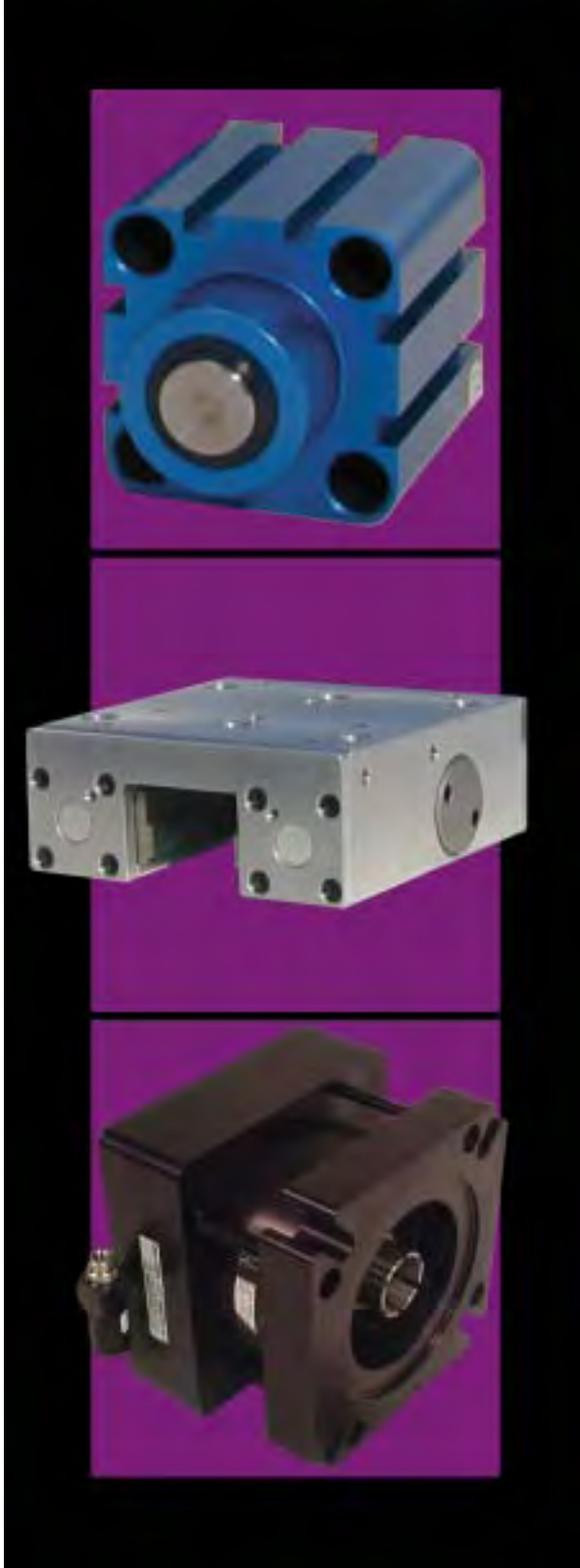
STOPPING

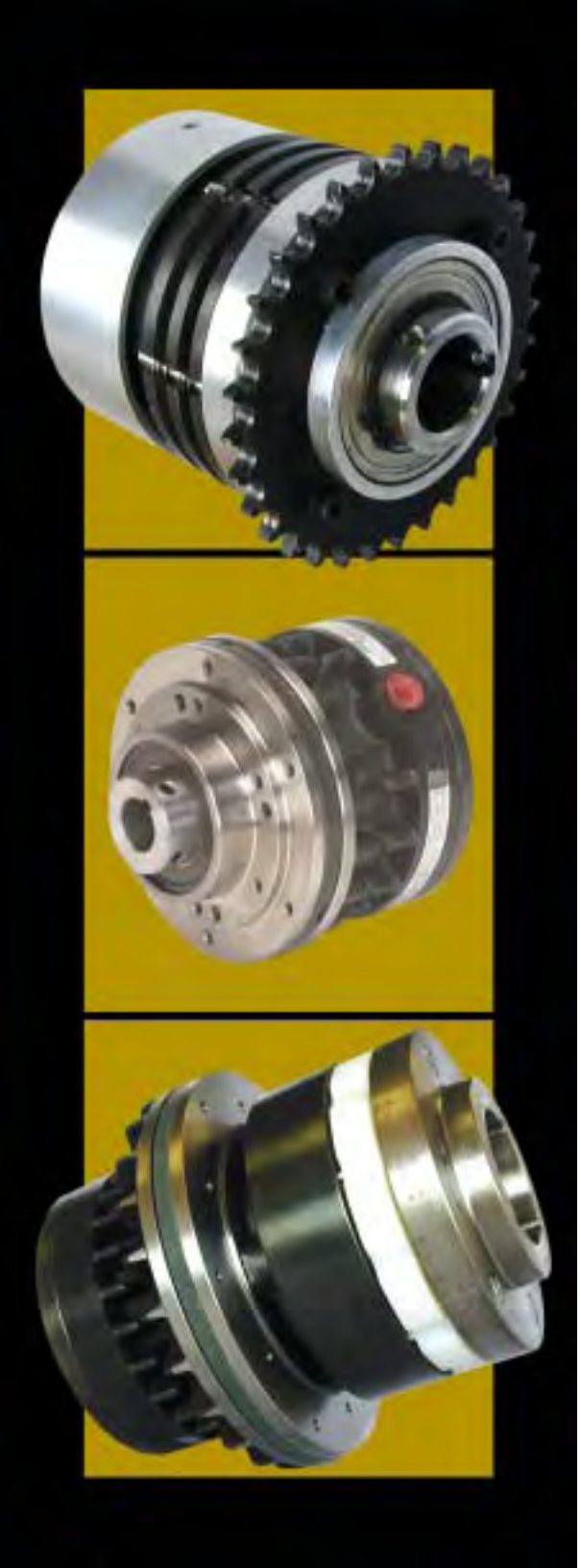
HOLDING

E-STOP

APPLICATIONS

- **Rod Locks**: used on pneumatic cylinders and precision guide rods
  - Backlash less than 0.076 mm [0.003 in]
  - Holding Force: 450–20,000 N [100–4500 lb]
- **Guide Rail Brakes**: for profile guide rails
  - Fit most profile guide rail systems
  - Braking Force: 445–2670 N [100–600 lb]
- **Servomotor / Stage Brakes**: for linear stages
  - Torque: 2.25–124 Nm [20–1100 in-lb]
  - Mounting flange to match servomotors up to 14.9 Kw [20 HP]





FRICTION CLUTCHES

- Torque: 0.6–34,128 Nm [5–302,000 in-lb]
- Bore: 10–165 mm [0.375–6.5 in]
- Air-engaged / spring-released models
- High heat dissipation
- High dynamic torque
- Long friction facing life
- Self-adjusting for friction facing wear
- Single or multi-plate clutch models
- Accurately adjustable torque
- Variable mounting options on either the motor or driven shaft with a pulley, sprocket, or flexible coupling on the pilot

APPLICATIONS

INCHING/JOGGING

SOFT STARTS

POSITIONING

CONTROLLED ACCELERATION

CYCLING/INDEXING

TENSION CONTROL

CONNECT/ DISCONNECT

OVERLOAD PROTECTION

TOOTH CLUTCHES

ACCURATE POSITIONING

REVERSING / MULTI-SPEED

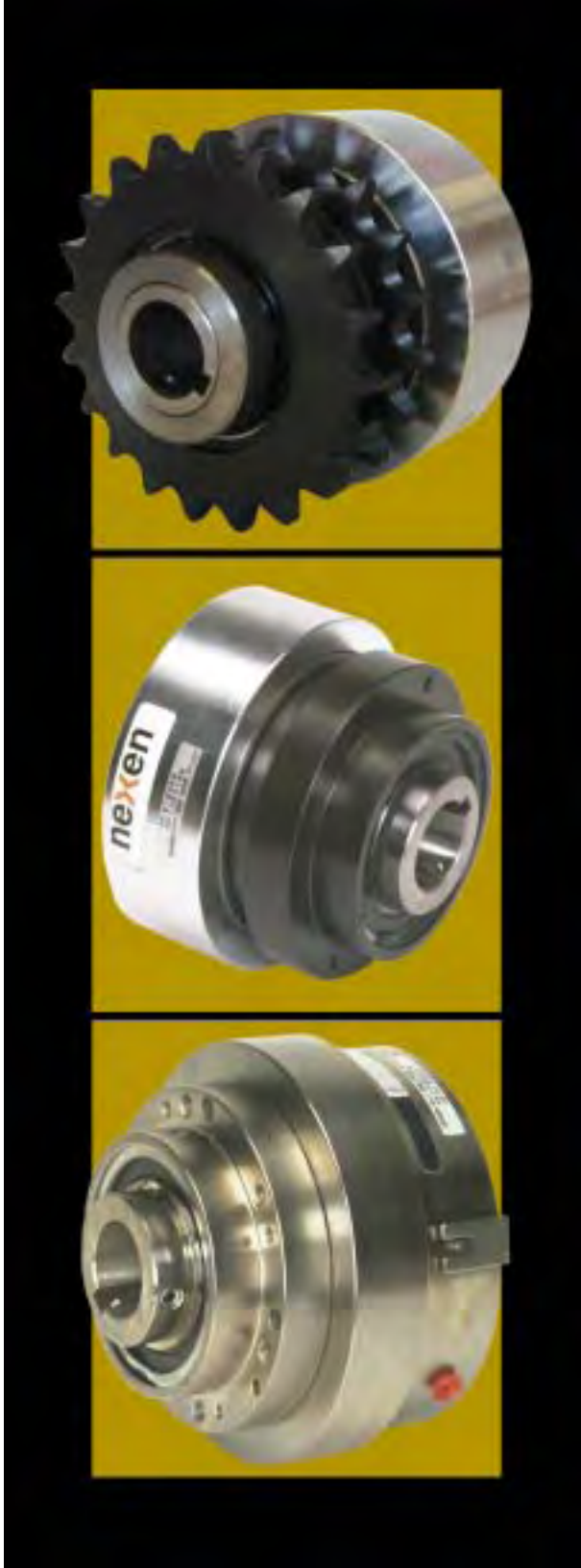
POSITIVE DRIVE

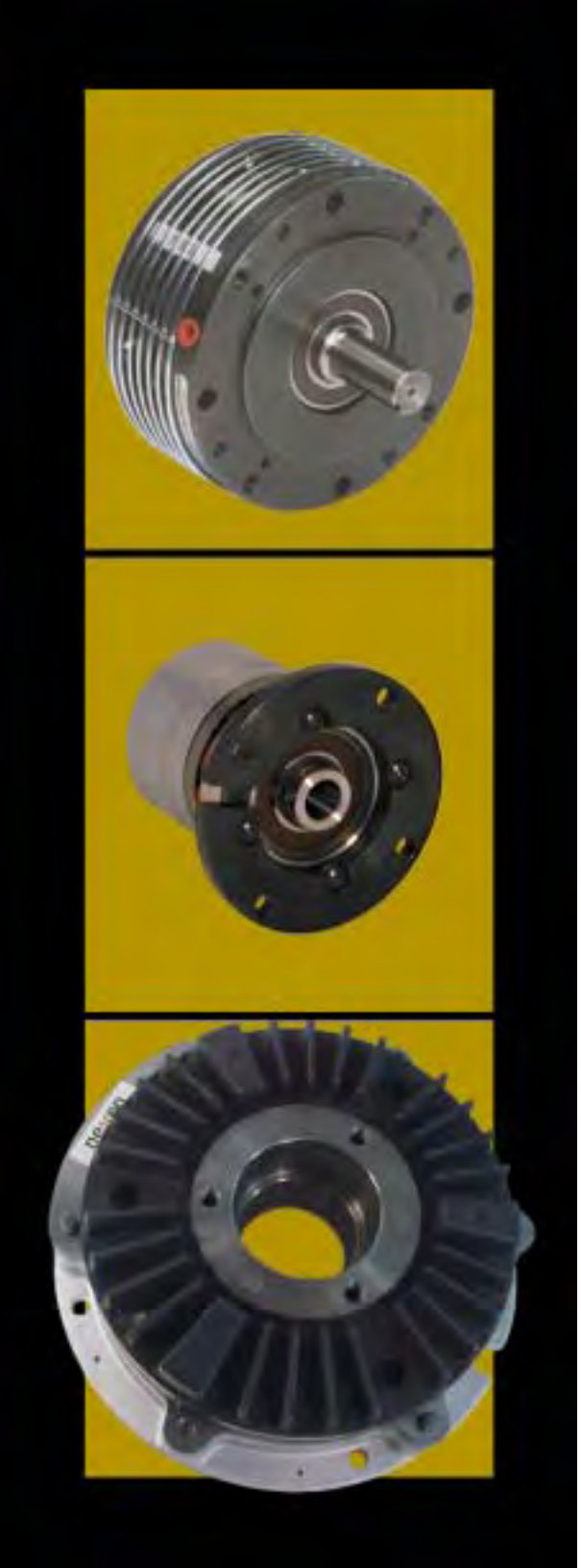
STOPPING / HOLDING

DISCONNECT

APPLICATIONS

- Torque: 3–6779 Nm [20–60,000 in-lb]
- Bore: 13–100 mm [0.625–3.938 in]
- Air-engaged / spring-released models
- Spring-engaged / air-released models
- Single or multi-position models
- Inch and metric sizes available
- Totally enclosed (IP65) models available
- Positive engagement: no slipping
- Fast response time
- Variable mounting options on either the motor or driven shaft with a pulley, sprocket, or flexible coupling on the pilot





AIR-ENGAGED FRICTION BRAKES

- Torque: 2–33,900 Nm [18–300,000 in-lb]
- Bore: 10–165 mm [0.375–6.500 in]
- Air-engaged / spring-released models
- High heat dissipation
- Straight or tapered (QD bushing) bore
- Inch and metric models available
- Self-adjusting for friction facing wear
- Four types of friction material available
- High friction work capacity
- Split friction facings for fast replacement
- Variable mounting options: horizontal and vertical mounting in a range of shaft sizes

APPLICATIONS

STOPPING / HOLDING

ACCURATE POSITIONING

CONTROLLED DECELERATION

CYCLING / INDEXING

UNWIND TENSION CONTROL

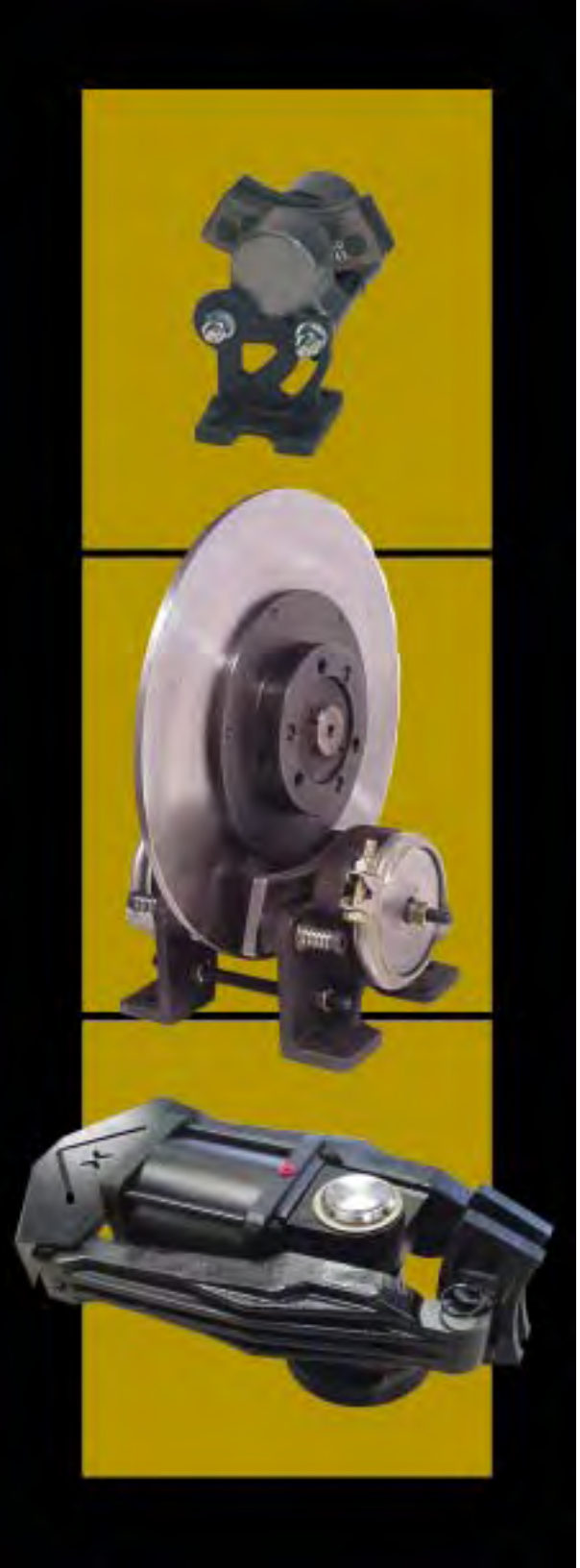
SPRING-ENGAGED BRAKES

STOPPING

HOLDING

APPLICATIONS

- Torque: 6–18,642 Nm [50–165,000 in-lb]
- Spring-engaged / air-released models
- Inch and metric models available
- Shaft mounting, straight or tapered bores
- NEMA C-faced or IEC B5 flange mounting
- Totally enclosed (IC65) models available
- Split friction facing for easy replacement
- Self-cooling design for high thermal rating
- High dynamic torque for fast load response
- Manual release for power-off situations



CALIPER BRAKES

- Torque: 2.3–5649 Nm [20–50,000 in-lb]
- Disc diameters: 152–610 mm [6–24 in]
- Air-engaged / spring-released models
- Spring-engaged / air-released models
- Spring-engaged / hydraulically released
- Adjustable caliper spacing
- Fast/easy friction facing replacement
- Simple design: easy to use and maintain
- Ten standard models
- Custom designs available

APPLICATIONS

CYCLING / INDEXING

POSITIONING

CONTROLLED DECELERATION

TENSION CONTROL

STOPPING / HOLDING

TORQUE LIMITERS

DISCONNECTING

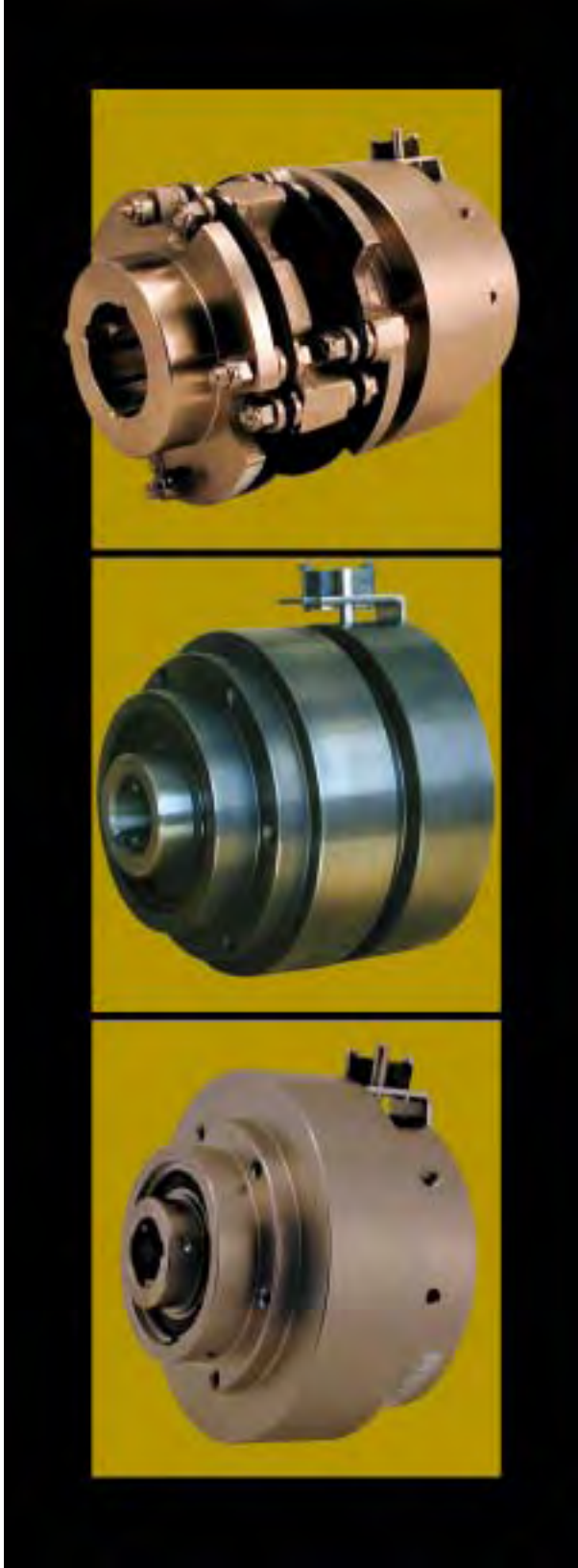
POSITIVE DRIVE

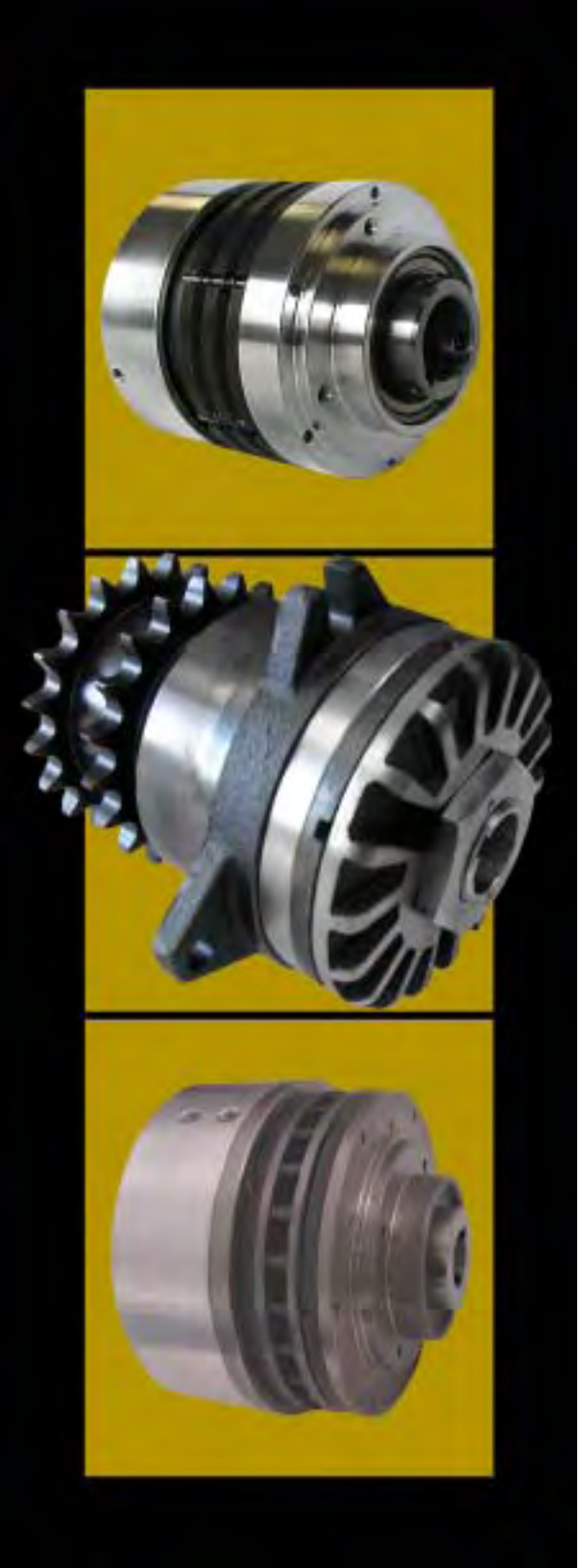
POSITIONING

OVERLOAD PROTECTION

APPLICATIONS

- Torque: 6–3390 Nm [53–30,000 in-lb]
- Bore: 13–75mm [0.625–2.938 in]
- Air-engaged / spring-released models
- Torque adjustable during process
- Inch and metric models available
- Enclosed, nickel-plated (IP65) models
- Crisp and complete disconnect
- Ball-detent interface for synchronized re-engagement at customer specified intervals
- Solid-state proximity sensor detects overload conditions quickly
- Variable mounting options on either the motor or driven shaft with a pulley, sprocket, or flexible coupling on the pilot





SHAFT-MOUNTED CLUTCH-BRAKES

- Torque: 1–316 Nm [10–2800 in-lb]
- Shaft diameters: 12–46 mm [$^{1}/_{2}$–1 $^{7}/_{8}$ in]
- Air-engaged / spring-released models
- Through-shaft mounting on driven shaft
- Pilot mounting: sprocket, pulley or coupling
- Single piston design eliminates over-lap
- Maintains torque without manual adjustment
- High cycling rates and long life
- Inexpensive to operate and maintain
- Friction brake and clutch combined into one low cost, compact unit

APPLICATIONS

STOPPING / HOLDING

CYCLING / POSITIONING

INCHING / JOGGING

TENSION CONTROL

DISCONNECT

CONTROLLED ACCELERATION

CONTROLLED DECELERATION

FLANGE-MOUNTED CLUTCH-BRAKES

STOPPING/HOLDING

INCHING/JOGGING

CONNECT/DISCONNECT

ACCURATE POSITIONING

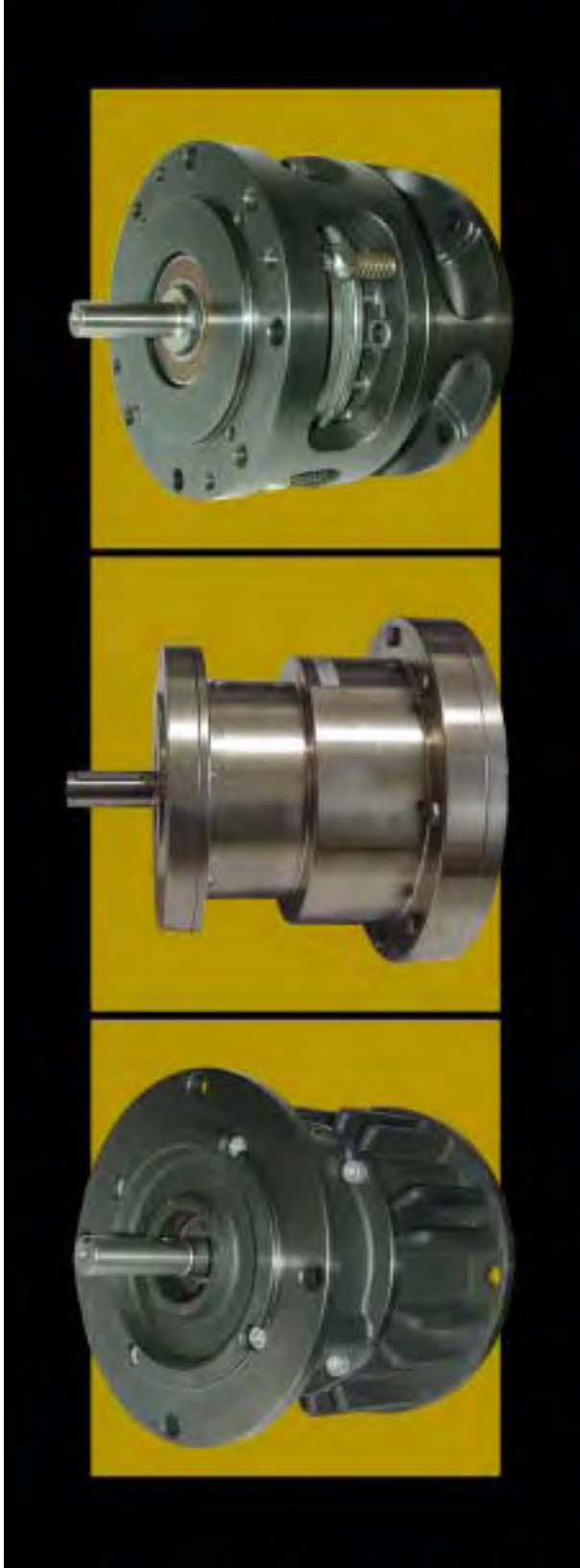
CONTROLLED ACCELERATION

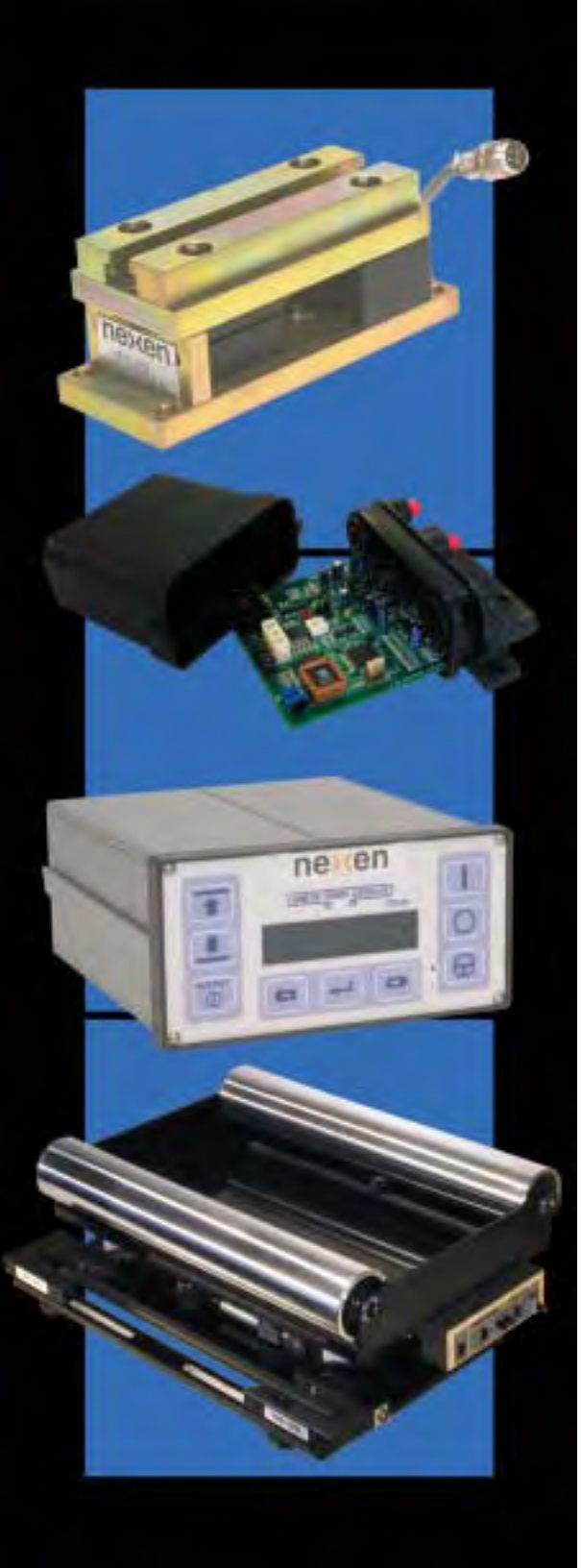
CONTROLLED DECELERATION

HIGH INERTIA START/STOP

APPLICATIONS

- Torque: 9.6–226.0 Nm [85–2000 in-lb]
- Air-engaged / spring-released models
- Spring-engaged brake models available
- Fits NEMA frame sizes 48Y to 256TC
- Fits IEC frame sizes from D71C–160M
- Use with 0.09–14.6 Kw [1/8–20 HP] motors
- Self-adjusting for friction material wear
- Flange or foot mount capability
- Single piston design eliminates over-lap
- Enclosed, nickel-plated (IP65) models
- Optional locking key eliminates key roll-over





TENSION CONTROL SYSTEMS

- Complete systems for easy integration
- Open-loop or closed-loop controls
- Accurate, fast response time
- Simple connections
- PC based set-up available
- Adaptive dancer control systems
- Web guiding systems
- Variety of sensors for: splice/break detection, web guiding, tension control and monitoring, edge/center control, and positioning

APPLICATIONS

PRINTING

CONVERTING

WINDING

UNWINDING

TENSION BRAKES & CLUTCHES

- Torque: 9–4049 Nm [80–35,840 in-lb]
- Air-engaged
- Multiple actuators for wide torque range
- Self-cooling for high thermal capacity
- Integrated fan available on some models
- Low rotational inertia
- Use for wind, unwind and intermediate stages
- Long operating life
- Simple connections
- Quick change friction facings

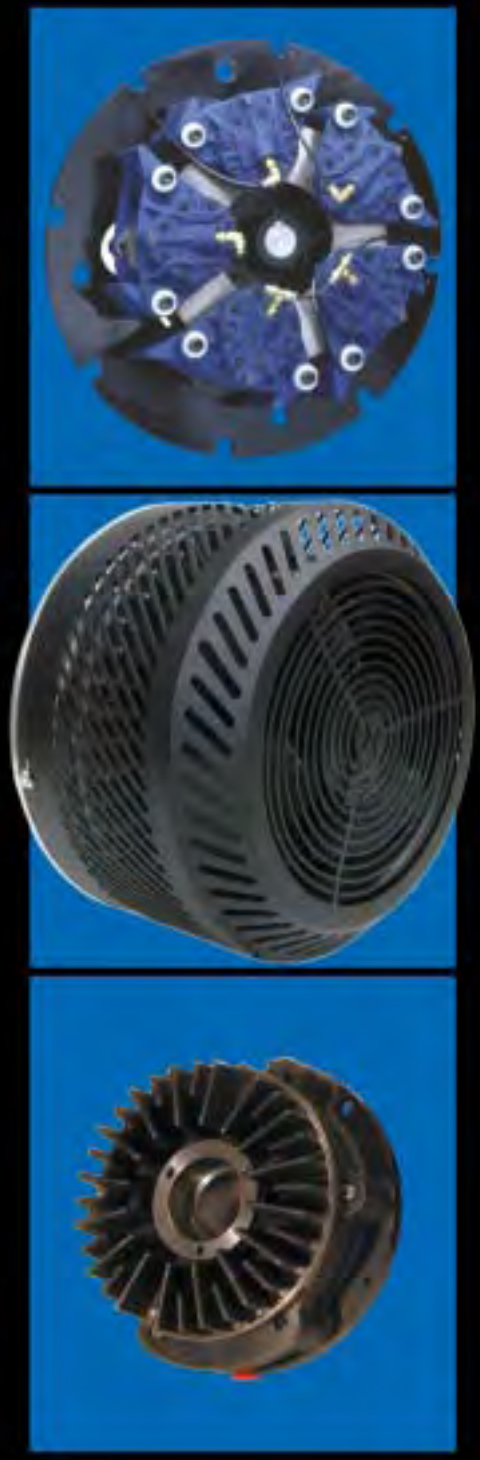
APPLICATIONS

PRINTING

CONVERTING

WINDING

UNWINDING



www.nexengroup.com

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