



To: All Distributor Personnel

Monthly bulletin: Number 2

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National Sales Director-Valves

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Subject: Lexair, Inc. Product Application Information

The following information is being provided to assist your sales force in the application and sale of our products. In most cases, we have provided specific applications for specific types of products. In addition to providing specific applications, we have also provided applications by Industry SIC Codes at the end of the bulletin.

Lexair, Inc. Product Application Information

Poppet Valve Application Info

- Economical replacements for expensive ¼ turn ball valves/actuators
- Car wash equipment – low or high pressure water and chemical control
- Commercial laundry equipment
- Air compressors and controls
- Industrial air dryers and controls
- Industrial liquid or air controls – excellent for applications with aggressive fluids and gasses
- Water/waste water treatment – filtration flow, pollution control equipment, etc.
- Utility facilities – for controlling the flow of liquids, gasses, etc.
- Induction heating equipment – controlling quench or cooling water flow
- Resistance welding equipment – controlling cooling water flow
- Mining and construction equipment – dust suppression, product separation, etc.
- Machine tool coolant flow
- Coolant flow on buses, ships, construction equipment and other on/off highway vehicles and machinery
- Paper and pulp processing
- Injection molding machine coolant water controls
- High pressure/flow of air for blow molding machines
- Cooling or refrigeration heat exchanger controls
- Textile industry – flow on bleaching, dyeing and drying equipment
- Foundry equipment for high flow air, water or other liquids for cooling and processing
- Any application that requires a high flow filling or quick exhaust function with liquids or gases
- Test equipment requiring a fast acting or high pressure, bubble tight valve – includes air, vacuum, liquids, etc.
- Nitrogen, oxygen or other types of gas generation equipment

Stainless Steel Version

- Dairy processing or other applications where Clean-In-Place (CIP) ability is needed
- Food and beverage filling, packaging and dispensing
- Corrosive chemical dispensing and processing
- Breweries and distilleries – water, pasteurization, glycol solutions for cooling, de-aeration processes, blending, carbonation, etc.
- Fertilizer production
- Pharmaceutical and cosmetic mixing, blending and dispensing
- Bottling and bottle washing equipment

Bronze Star[®] Direct Solenoid Version

- Low pressure, high pressure (gasses or liquids) or vacuum applications where pilot operated valves will not or can not function due to an inadequate pilot source (too low or too high) or media aggressiveness (would clog pilot passages)
- Excellent for fast filling/exhaust applications due to extremely fast response time of about 10ms to open the poppet

Direct Cam Operated

- Any application that requires a direct mechanically actuated valve to control the flow of air, oil, water, vacuum, etc.

3-Way Normally Closed Poppet

- Processes that require “rinsing cycles” – fresh liquid pumped in then emptied and refilled with fresh liquid cycles
- Air or liquid pressurization/dumping applications

TUBE-O-MATIC[®] Valve Application Info

- Economical replacements for expensive ¼ turn ball valves/actuators
- Chemical processing and mixing
- Pharmaceutical and cosmetic mixing, blending and dispensing
- Dairy processing or other applications where Clean-In-Place (CIP) ability is needed
- Oilfield equipment
- Water/waste water treatment – filtration flow, pollution control, etc.
- Food and beverage filling, packaging and dispensing
- Machine tool coolants
- Coolant flow on buses, ships, construction equipment and other on/off highway vehicles and machinery
- Utility facilities – coolant flow, coal slurry removal, etc.
- Industrial liquid or air controls
- Sandblasting equipment
- Air conveyed materials – plastic pellets, sand, other aggressive materials
- Asphalt batching plants
- Paper and pulp processing

- Fertilizer production
- Breweries and Distilleries – water, pasteurization, glycol solutions for cooling, de-aeration processes, blending, carbonation, etc.
- Any circuit that requires a fast-acting, high flow, bubble tight valve

Check Valve Application Info

- Car wash equipment
- Commercial laundry equipment
- Air compressors and controls
- Industrial air dryers and controls
- Water/waste water treatment
- Utility facilities
- Virtually any application listed for our Poppet or Tube-O-Matic® series products involving circuits that require the flow of air, liquids, etc in only one direction

Shuttle Valve Application Info

- Multiple station control of pilot signals
- Two pressure selector when using different inlet pressures
- Selection of media viscosity, type, color, etc.
- Air compressors and controls
- Industrial air dryers and controls

Hi-Cyclic® Valve Application Info

- Hydraulically or pneumatically controlled machine tool applications
- Operation of pneumatic or hydraulic double acting or single acting cylinders, rotary actuators, etc.
- Oilfield equipment
- Control valves for agricultural, construction or other types of on/off highway equipment
- Any pneumatic or hydraulic circuit that needs the ability for “human interface” capability – Manually operated models
- Any pneumatic or hydraulic circuit where positive, fast acting electrical control is needed – Solenoid operated models
- Control or sequencing in pneumatic or hydraulic circuits that require pilot signals to achieve action – Pilot operated models
- Used in hazardous locations where solenoids or other types of operators cannot be used – Pilot operated models
- Control and sequencing in pneumatic and hydraulic circuits that require mechanical “signals” or “triggers” from the process – Mechanically operated models

Hi-Cyclic[®] Magna-Cycle[®] Valve Application Info

- Continuous reciprocation of a cylinder for operation of a diaphragm pump, shaking of a hopper for compacting or discharging of material, shaking large containers for mixing, etc.
- Sequential operation or sequencing of two or more cylinders
- Adjustable or fixed time delays of a cylinder
- Force or pressure sensing in cylinders
- Above functions are achieved with no mechanical or electrical connections making them ideal for use in hostile or hazardous locations where electrical control is impractical or dangerous to use

Mini 1Valve Application Info

Solenoid Models

- Electrically controlled actuation of small pneumatic devices, i.e. single and double acting cylinders, rotary actuators, slides, grippers, etc.
- Optional explosion-proof solenoid safely allows operation in hazardous locations
- Any pneumatic circuit where electrical control of valves is required

Pilot Operated Models

- Actuation of small pneumatic devices, i.e. single or double acting cylinders, rotary actuators, slides, grippers, etc.
- Can be plumbed as pressure selector, diverter, used in vacuum applications, etc.
- Can be safely operated in hazardous locations

Mechanically Operated Models

- Actuation of small pneumatic devices, i.e. single or double acting cylinders, rotary actuators, slides, grippers, etc.
- End of stroke/cycle sensing to reset circuit
- Useful in sequencing of pneumatically operated equipment requiring mechanical interface
- Pilot signals for other products, i.e. Lexair Poppet or TUBE-O-MATIC[®] valves
- Can be used as pressure selector, diverter, used in vacuum applications, etc.

Manually Operated Valves

- Actuation of small pneumatic devices, i.e. single or double acting cylinders, rotary actuators, slides, grippers, etc.
- Allows human interface to pneumatic control systems
- Pilot signals for other products, i.e. Lexair Poppet or TUBE-O-MATIC[®] valves
- Can be plumbed as pressure selector, diverter, used in vacuum applications, etc.

Solenoid Operators

- Solenoid operator for Lexair 2-way and 3-way Poppet valves and TUBE-O-MATIC[®] valves
- Valve for use to operate small bore single acting cylinders, rotary actuators, etc.



- Standard valve is both multifunction and multipurpose - can be plumbed normally open or normally closed and used with air, oil or liquids (compatible with Buna seals)
- Explosion-Proof version has a normally closed function only, but is still multipurpose for use with air, oil or liquids in hazardous locations

Collet Closer Application Info

- Part holding for assembly applications
- Part holding for machining or grinding applications
- High force units can be used for crimping operations
- Models available are excellent for tool room and production environments
- Part holding for inspection and test procedures
- Modular designs are easily combined into fixtures – We can design and manufacture custom turnkey solutions to meet the demands of all your workholding requirements
- Industries served include:

Electronics	Automotive	Medical
Dental	Aerospace	Machine Tool
Heavy Equipment	Power and Hand Tool	General Industrial

Lexair, Inc Application Info by SIC Code

- Car Wash Equipment - SIC 3589
- Commercial Laundry Equipment - SIC 3582
- Air Compressors and Controls - SIC 3563
- Water/Waste Water Treatment - SIC 3589
- Utility Facilities - SIC 3589, 4911, 4941, 4952
- Induction Heating Equipment - SIC 3567
- Resistance Welding Equipment - SIC 3548
- Mining and Construction Equipment - SIC 3532
- Machine Tools (coolant flow) - SIC 3541, 3542
- Coolant flow on buses, ships, construction equipment or other on/off highway vehicles and equipment - SIC 3537, 3532, 3531, 3711, 3716, 3731
- Dairy Processing Equipment - SIC 3556
- Food and Beverage filling, packaging and dispensing - SIC 3565
- Chemical Dispensing - SIC falls under almost all in Major Group 28
- Totalizing Fluid Meters and Counting Devices - SIC 3824
- General Contractors - SIC 1541, 1542 (process control valves needed in commercial building projects)
- Heavy Construction - SIC 1629 (related to heavy construction projects and need for process control valves for them)



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- Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products - SIC 3823
- Oilfield Equipment - SIC 3533
- Air Conveyed Materials - SIC 3535
- Control valves for agricultural, construction or other types of on/off highway equipment - SIC 3523
- Control valves for various types of semi-truck trailers (car hauling, aggregate belly dump, etc) - SIC 3523