

# PNEUMATIC CYLINDERS

## HEAVY DUTY PNEUMATIC CYLINDERS



STANDARD BRASS AND  
STEEL CONSTRUCTION

ALL-STAINLESS STEEL  
CONSTRUCTION

NFPA TIE-ROD DESIGN

CUSTOM DESIGNS

ALSO:

VALVE ACTUATORS

SPRING EXTEND AND RETRACT

POSITION SENSING CYLINDERS

BOOSTERS

LINEAR AIR MOTORS

FEATURING THE EXCLUSIVE  
**MIRACALUBE®**  
SELF-LUBRICATING SYSTEM



**LEHIGH**  
FLUID POWER, INC.



## **FLUID POWER . . .**

### ***Pneumatic and Hydraulic Power!***

You are sure to note some special features on our industrial pneumatic and hydraulic cylinders. Like our exclusive Miracalube® lubricant on our air cylinders. And our unique ability to mount tie-rod limit switches on hydraulic cylinders. And then there's our line of stainless steel cylinders.

#### **Industrial Pneumatic and Hydraulic Cylinders**

We have been manufacturing cylinders since the 1940's. Our standard materials include brass tubing for our air and medium duty hydraulics, steel for high pressure, and stainless steel for any application. With our capabilities your engineering application gets focused and expert attention, and your purchasing gets competitive pricing.

We welcome the one-of-a-kind special as well as the OEM quantity. So whether your requirements are frequent or few, standard or custom, we are here to help.

#### **Better By Design**

Among our innovations: The Miracalube® self-lubricated air cylinder. Its lubricant is made of FDA approved materials and does not mist into the atmosphere. Over 50 million linear feet of piston travel have been reported in case histories!

Among our features: Limit switches can be tie-rod mounted on our medium duty hydraulic cylinders! This is unique in the industry, allowing sensing to be set anywhere along the stroke without external mechanisms.

And... These cylinders are offered from the catalog in bore sizes from 3/4" to 20" in pressures up to 250 PSI in air and up to 3,000 PSI hydraulic, with custom design for specials!

The information in this catalog should be used as a guide for your consideration, investigation and verification. This information does not constitute a warranty or representation and we assume no legal responsibility or obligation with respect thereto, and the use to which such information may be put.

As product improvement is a continuous process, specifications are subject to change without notice.

## SOME OF OUR CUSTOM DESIGNS

*Specials are welcome!*

We have a long history of producing custom design cylinders that are specific to a customer's application. This includes such special features as:

- |   |                           |
|---|---------------------------|
| Unique mounting requirements                  | Non-rotating rods         |
| Composite materials                           | Tandem force cylinders    |
| High-temperature cylinders                    | Underwater operation      |
| Alternate media cylinders                     | Higher pressure cylinders |
| Larger bore cylinders                         | Locking cylinders         |
| Position sensing cylinders                    |                           |
| Engineered spring extend or retract cylinders |                           |

12" Bore x 2" Stroke  
9" Dia. Piston w/8" Bore Thru  
with (4) 1" Dia. Ejector Rods



20" Bore Pneumatic Cylinder  
Tandem Force Multiplier



14" Bore Air Cylinder  
Double Rod End  
with Manual Override, Extend & Retract

1" x 6" Electro-Hydraulic  
Transducer Cylinder



2" Bore Air Cylinder  
Extended Double Rods, Special Nose Mount



6" Bore Stainless Steel  
2,500 PSI Hydraulic Cylinder  
with Linear Transducer & Cover



10" Bore Air Cylinder  
Stand-Off Mount  
Indicator Rod  
with Valve

10" Bore Air Cylinder  
with Air Valve, Manual Rod  
Lock, and Limit Switches



Air & Hydraulic Cylinder  
Rod-within-Rod

***The Lehigh Miracalube® Air Cylinder  
The Only Real Self-Lube Air Cylinder in the World***

***BENEFITS!***

The true test of a cylinder is how well it performs in your application. This has been our philosophy since 1948 when we first designed and manufactured the exclusive Miracalube® self-lubricated air cylinder system. This combination of innovative design features plus the finest available materials and workmanship has earned us an industry-wide reputation of excellence.



The unique Miracalube® internal reservoir system meters a specially formulated non-toxic, ingestible, low-vapor pressure lubricant - totally solvent-free for millions of trouble free cycles. Unlike contaminating airline lubricants, Miracalube® will not mist or atomize and, being solvent-free, will not dissolve seals or fuse lipseals to the tube ID if the piston remains in one position for any extended time. This means that you can run our cylinder without the usual inline lubricator, and that means no spray from the exhaust!

Other standard Lehigh high-performance features include a tough, no-rust/non-pitting hard-tempered brass cylinder tube for extended piston seal life and a long self-lubed, readily removable sintered bronze rod bearing with grooved design for doubled oil capacity.

Our Series JHD air cylinders offers bore sizes from 3/4" to 20", maximum pressures up to 250 PSI, and strokes to over 10 feet. We design to match our customers' cylinder and seal requirements, whatever they may be.

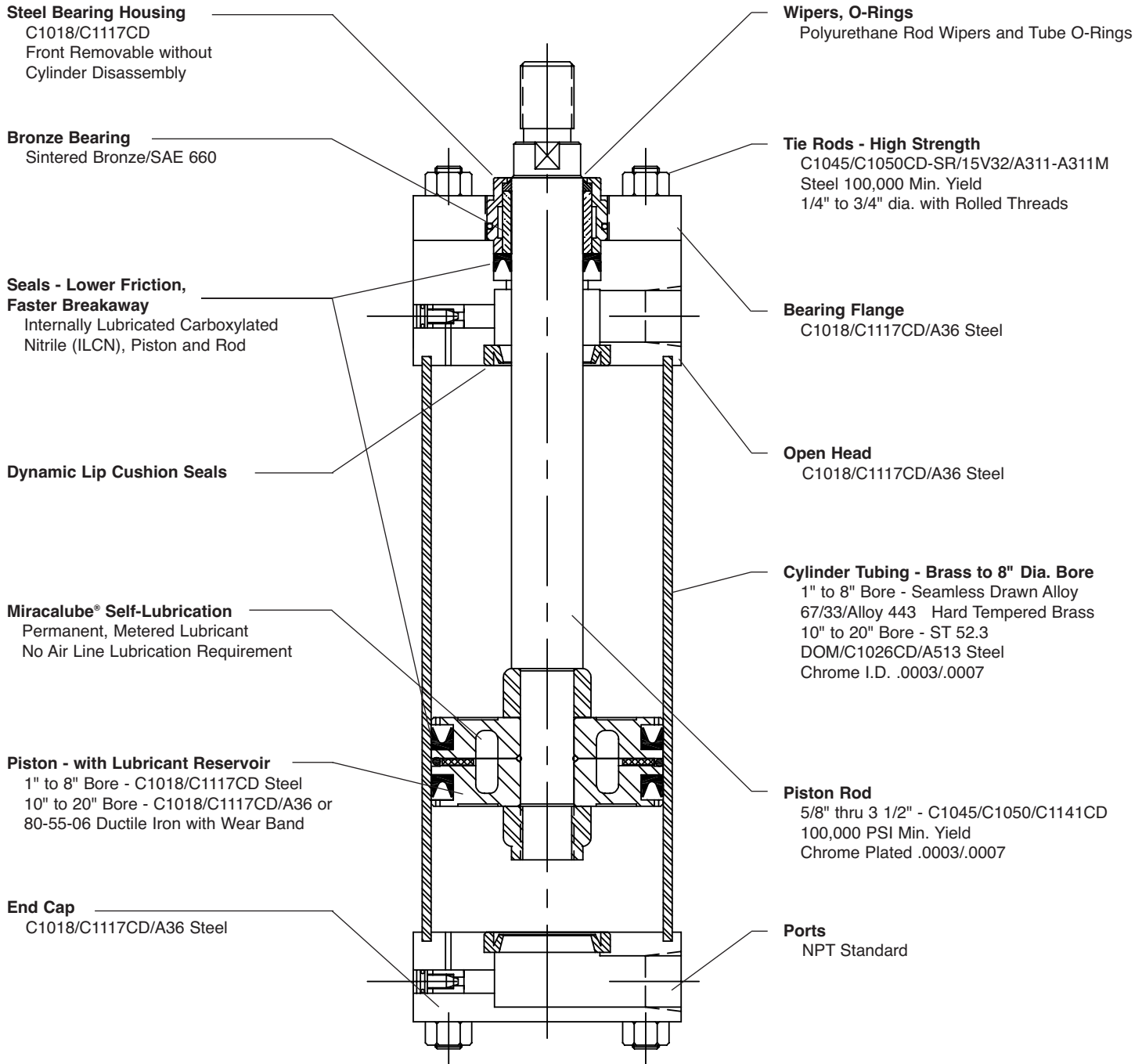
You'll benefit with the Miracalube® air cylinder's longer life, less downtime, no air line lubrication, and smooth, low breakaway startups for increased productivity. Let Lehigh's sales and engineering departments help you select the best product for your application needs.

The Series JHD Heavy Duty Air Cylinder  
The Miracalube® Series . . . Real Self-Lubrication



**FEATURES!**

The Series JHD Heavy Duty Air Cylinder Comes Standard with the Following Design Features:



Other ... Pneumatic Service to 250 PSI ... Operating Temp. from 0° to 165° F (Standard), to 400°F (Optional Seals)

**Custom Pneumatic Cylinders**

An important part of our business is the custom cylinder design. The Series JHD pneumatic cylinder is available in virtually any configuration required by your special application. When you contact us with your design challenges, chances are that our engineering will meet the requirements of your special mounting, material, seal, temperature, sensing or other needs.

## SERIES LSSL STAINLESS STEEL AIR CYLINDER

*The Lehigh Stainless Steel Air Cylinder  
Real Self-Lube with Miracalube®*

### **BENEFITS!**

Look inside our new Series LSSL pneumatic stainless steel cylinder and you will see that we build more quality and features in ... to get more productivity out.



The benefits of improved corrosion resistance coupled with the integrity of stainless steel, plus the exclusive Lehigh Miracalube® mist-free oil self-lubrication system, make the Lehigh Series LSSL a truly unique cylinder for standard or special applications.

Lehigh stainless cylinders use broached stainless steel blocks and precision bored and honed stainless tubing. Chrome plated stainless steel rods are used to improve resistance to scratches and dents. The Miracalube® self-lubrication system eliminates the need for in-line lubrication and does not mist in the atmosphere.

Our Series LSSL air cylinders are available in bore sizes from 3/4" to 20", maximum pressures up to 250 PSI, and strokes to over 10 feet. We design to match our customers' cylinder and seal requirements, whatever they may be.

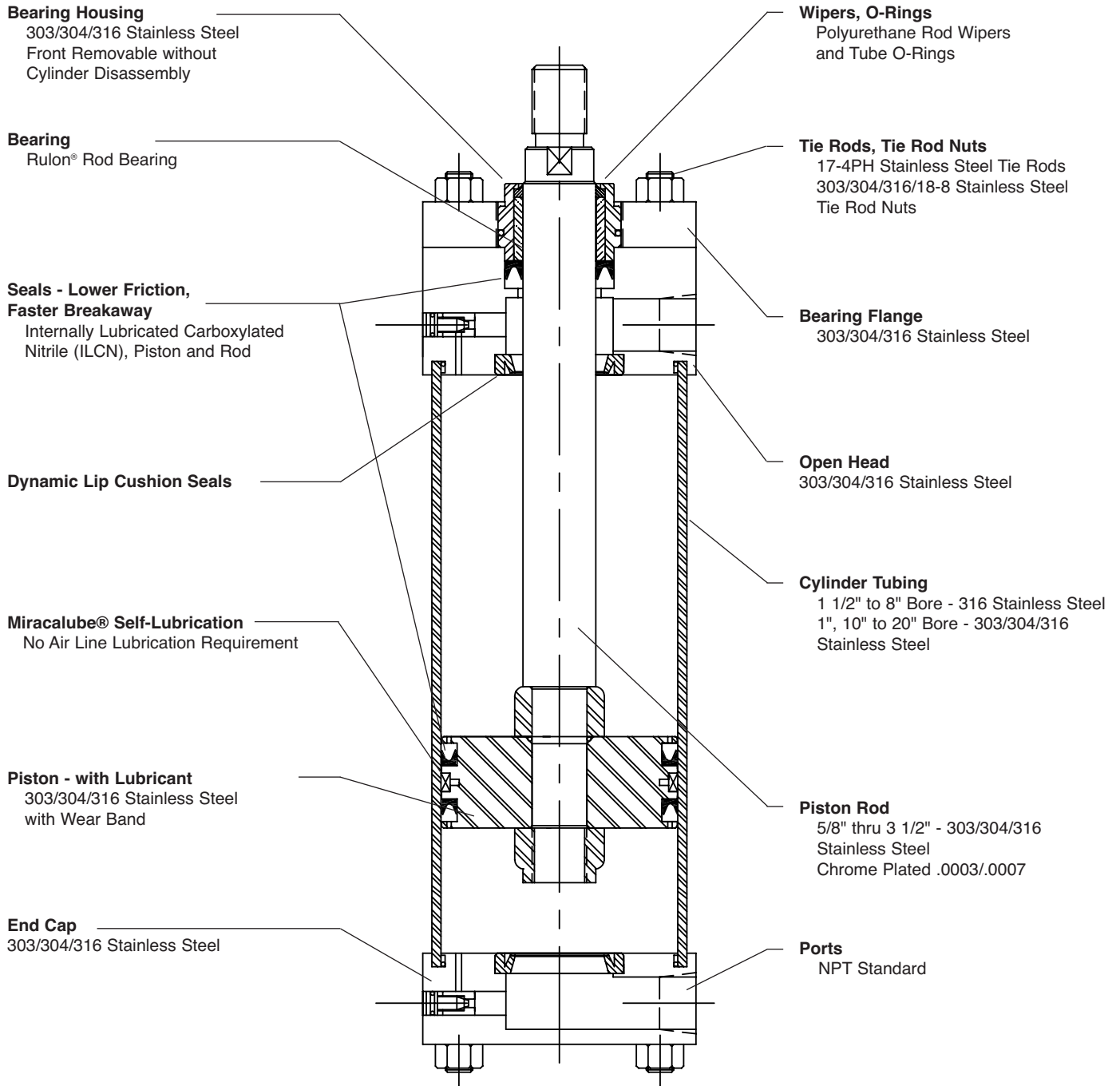
Applications include, among others: pharmaceutical and medical clean room equipment; food industry products that require USDA approvals; chemical industry equipment; wet applications (marine, dock, underwater, sewage, water treatment); and gate or other type valves.

The best feature of a Lehigh stainless steel cylinder is the long term savings in both reduced downtime and maintenance. Let Lehigh's sales and engineering departments help you select the best product for your application needs.

# The Series LSSL Stainless Steel Air Cylinder Built to Survive Where Other Cylinders Fail

## FEATURES!

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Other ... Pneumatic Service to 250 PSI ... Operating Temp. from 0° to 165° F (Standard), to 400°F (Optional Seals)

### Custom Stainless Steel Pneumatic Cylinders

An important part of our business is the custom cylinder design. The Series LSSL stainless steel pneumatic cylinder is available in virtually any configuration required by your special application. When you contact us with your design challenges, chances are that our engineering will meet the requirements of your special mounting, material, seal, temperature, sensing or other needs.