

Introduction

Origa Corporation, the US operation of Hoerbiger International's Origa Division, is the principle manufacturer of rodless pneumatic cylinders for the United States, South American and Canadian markets.

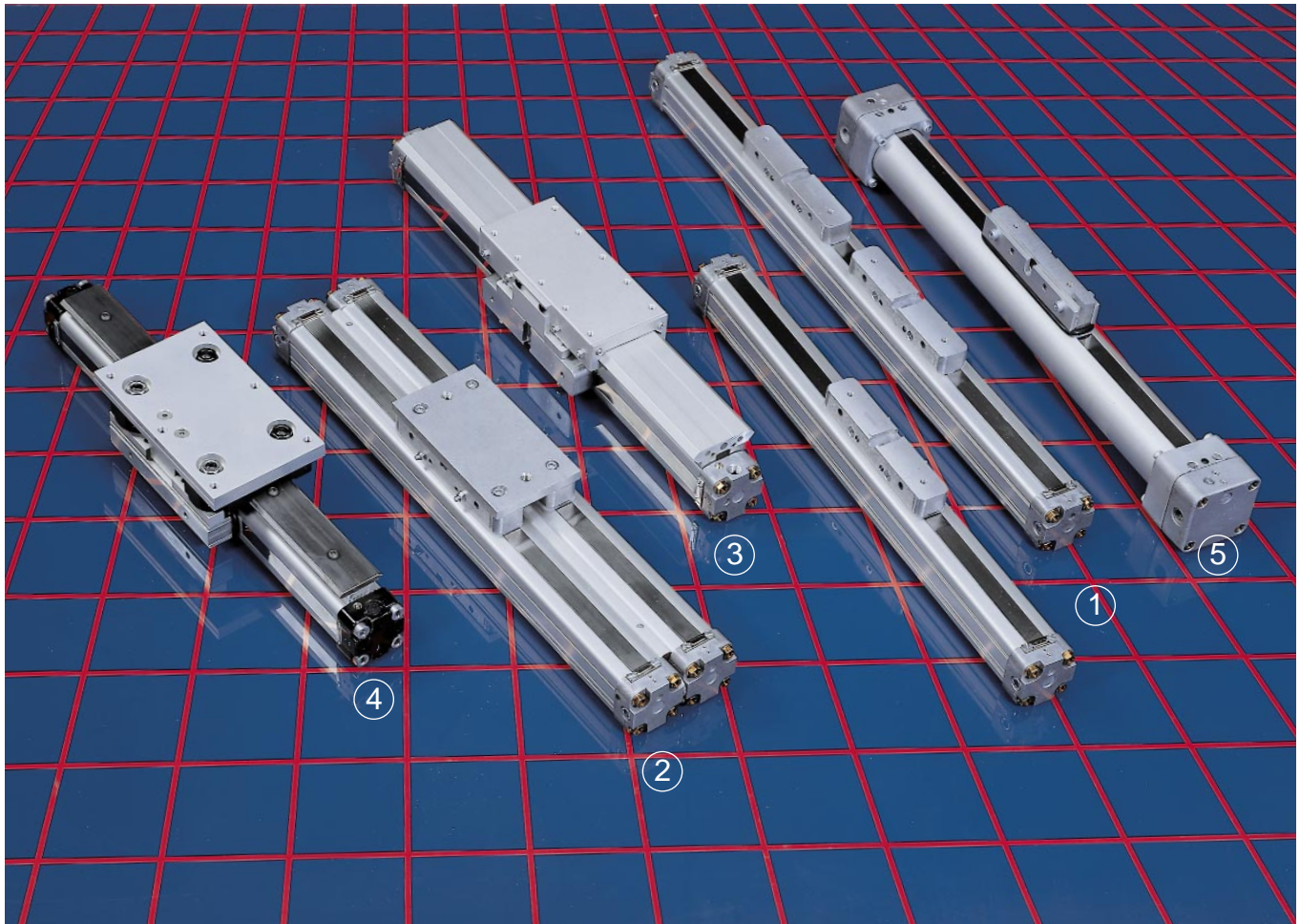
As part of a global organization, Origa's world wide sales and service network is supported by manufacturing and assembly locations in Europe, Australia and Asia. The parent company, Hoerbiger International, is a world-wide manufacturer and developer of industrial products, including pneumatic and hydraulic automation components.

Origa is committed to developing the rodless cylinder technology with innovations that can facilitate greater penetration into the linear motion market. In particular, new developments have reduced or eliminated the need for additional support and secondary engineering associated with alternative systems.

Through market specialization Origa dominates the international market for rodless cylinders and has cultivated unparalleled expertise in their application. The company operates with an extensive distributor network, a worldwide sales force, and a complete application engineering staff dedicated to customer and technical services.

Origa strives to provide customers with products tailored to their needs, with consistent high quality and reliability. If you require further information or assistance, please complete the attached business reply card or contact us directly at any of the locations listed in section 1 page 1.1/7

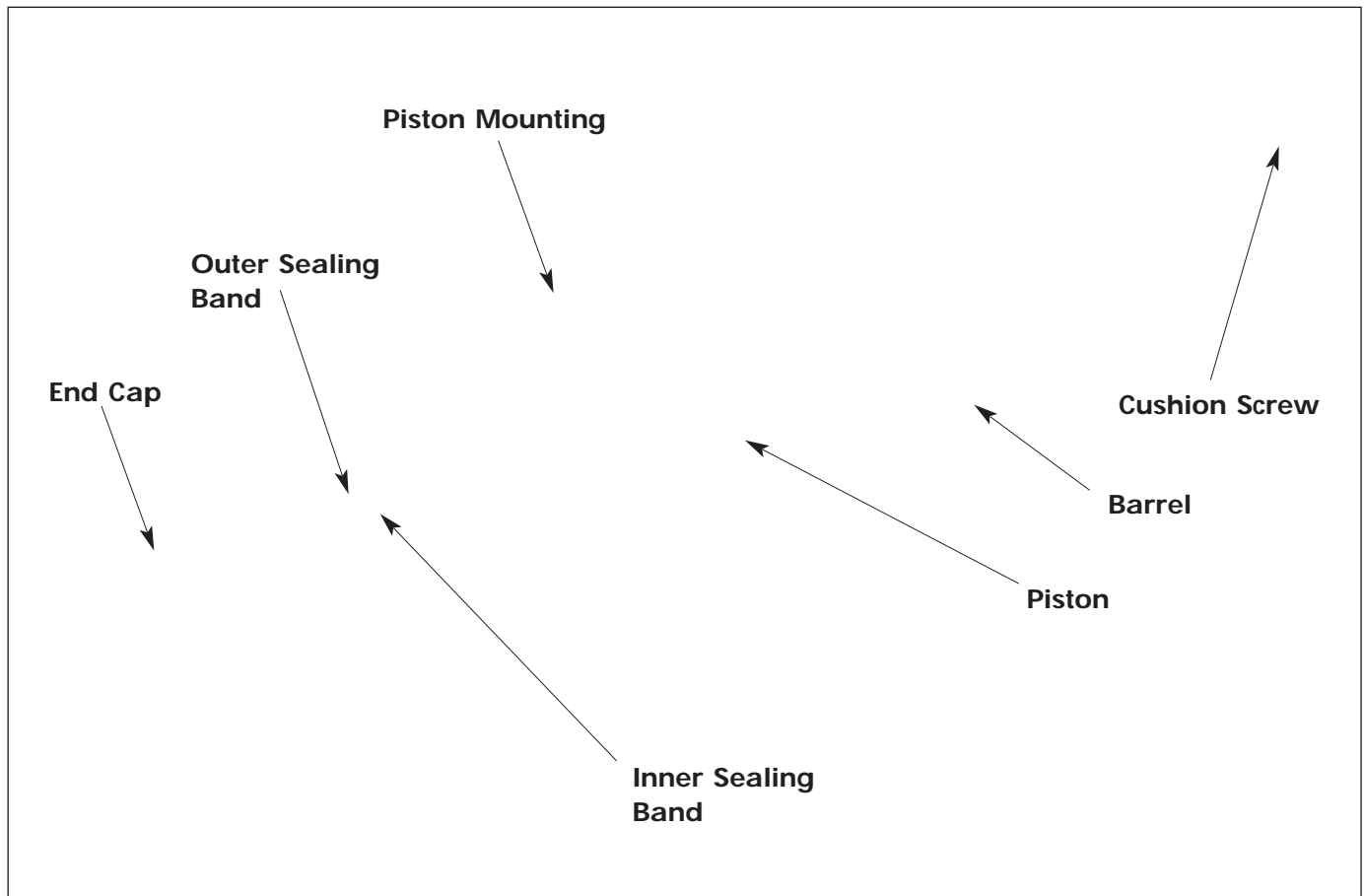
The Pneumatic Rodless Cylinder



The following cylinder types are available:

1. **Series 2000 - Basic Cylinder**
Available in the following bore sizes: 10mm, 16mm, 25mm, 32mm, 40mm, 50mm
Single Piston and Double Piston configurations
2. **Series 2000 - Joint Clamp**
Available in the following bore sizes: 25mm, 32mm, 40mm, 50mm
Single Piston and Double Piston configurations
3. **Series 2000 - NR50**
Available in the following bore sizes: 16mm, 25mm, 32mm, 40mm, 50mm
Single Piston and Double Piston configurations
4. **Series 2000 - Powerguide™**
Available in the following bore sizes: 25mm, 32mm, 50mm
5. **Series P120 - Basic Cylinder**
Available in the following bore sizes: 40mm, 63mm, 80mm
Short and Long Piston configurations

The ORIGA Principle



Features

1. The cylinder barrel of extruded anodized aluminum has a slot along its entire length. To provide rigidity the bore is eccentric to the outside diameter.
 2. A flexible hardened stainless steel inner band running the entire length of the bore and passing through the piston provides a near-zero-leakage metal to metal seal. An outer band of the same material acts as a cover over the slot preventing foreign particles from entering into the cylinders interior.
 3. The aluminum piston is fitted with synthetic bearing rings. The power transmission outward takes place through a positive, physical connection through the slot to the external piston mounting. This solid guide permits the acceptance of external forces and moments and minimizes frictional losses.
 4. The extensive experience in the development and production of rodless cylinders, as well as the use of high quality components and materials, ensure a very serviceable design lending itself to high operating safety and optimum performance.
 5. This unique design, using only 4 main components, makes ORIGA cylinders reliable in operation and simple to maintain, providing long trouble free service.
 6. ORIGA is the specialist in the rodless cylinder field. ORIGA has the largest range of bore diameters and can offer the longest stroke lengths with application oriented accessories for cost effective designs. ORIGA has experience in all conceivable areas of industry, attributable to the thousands of applications in which ORIGA rodless cylinders are used.
- The ORIGA system is protected by worldwide patents.

Technical Benefits

Design Options

ORIGA cylinders can be supplied as a basic model, or as a basic model with external guides depending on the application requirements.

Cylinder Mountings

Various types of piston mounting are available including one which allows the cylinder to be inverted under adverse operating conditions thus protecting the sealing bands. End mounting brackets and mid-section supports are also available.

Operating Pressure

Max. 120 P.S.I.

End Of Stroke Cushioning

Adjustable cushioning is provided as standard and ensures the piston stops smoothly - even at high speeds. (10 mm not adjustable.)

Oil Free Operation

The ORIGA permanent lubricating grease eliminates the need for regular oil mist lubrication and provides long service life.

Cylinders can be used in applications where maximum cleanliness is required. (e.g. electronics pharmaceutical and food processing industries).

Slow Speed Applications

The construction of the ORIGA rodless cylinder allows for a low friction characteristic permitting extremely slow traversing speeds. For speeds below 4 inches/second we recommend that ORIGA "slow speed" lubrication is specified.

Temperature Range/Piston Speed

Standard Buna-N seals are suitable for temperatures from 15° F to +175° F. Viton seals are required for higher temperatures as well as for use when piston speeds exceed 5 ft./sec. Please contact the ORIGA Technical Department if the required operating temperature is above 175° F.

Magnetic Pistons

All Series 2000 cylinders are supplied as standard with magnetic pistons for proximity switch actuation.

Proximity Switches

Magnetically operated Hall Effect switches (IS) or Reed switches (RS) are available to sense piston position at any point over the entire stroke length.

Corrosive Environments

All screws are plated. In extreme applications stainless steel can be supplied. Special aluminum coatings are available for added protection against chemical or caustic wash down of equipment or in environments where corrosive gases are present.

Cylinder Loading

Values are based on shock-free duty and should not be exceeded during piston acceleration.

Note:

Seal life can be significantly influenced by extremes of speed, load and temperature which exceed the approved limits. Contact the ORIGA Technical Department for assistance with special applications.

All specifications are subject to change without notice.

Ordering Procedure

Series 2000

32-2020/20X50-B-M

Cylinder Bore Size: _____
 10, 16, 25, 32, 40 or 50

Configuration: _____
 - = Single Cylinder
 J = Joint Clamp Unit
 C=Clean Room Cylinder

Piston Quantity: _____
 20 = Single Piston
 22 = Double Piston

End Cap Cushion Placement: _____
 20 = Standard Cushion Location (21 for Ø25 & 50mm)
 30 = Cushion at Rear of Cap (31 for Ø25 & 50mm)
 Note: Rear cushions are available on Ø25mm - Ø50mm only.

*Note: When entering total stroke length for 2220/2230 (double piston) cylinders be sure to first add the "CL" distance to the actual, effective stroke length. Enter this total in the cylinder part number. Follow the same procedure for pricing.

Prelube Specification (optional):
 M = Standard
 C = Cleanroom
 F = Food Grade
 S = Slow Speed

Seal Type:
 B = Buna-N
 V = Viton

***Stroke Length:**
 Enter metric strokes followed by "mm" (i.e. 200MM)

Piston Mounting Type:
 20 = Standard Mount 35 = Inverted Floating Mount
 25 = Floating Mount 50 = External Guided Mount
 30 = Inverted Mount(Not available for 10mm)
 PG = Powerguide

For Joint Clamp Cylinders:
 24 = Platform Mount 34 = Inverted Platform Mount

Series P120

P124-S/20X50-B-M

Cylinder Series P120 _____

Cylinder Bore Size: _____
 4 = 40mm
 6 = 63mm
 8 = 80mm

Piston/Mount Configuration: _____

<u>Short Piston</u>	<u>Long Piston</u>
S/20 = Standard Mount	L/26 = Standard Mount
S/22 = Platform Mount	L/28 = Platform Mount
S/25 = Floating Mount	L/36 = Inverted Mount
S/30 = Inverted Mount	L/38 = Inverted Platform Mount
S/32 = Inverted Platform Mount	
S/35 = Inverted Floating Mount	

Prelube Specification (optional):
 M = Standard
 C = Cleanroom
 F = Food Grade
 S = Slow Speed

Seal Type:
 B = Buna-N
 V = Viton

Stroke Length:
 Enter metric strokes followed by "mm" (i.e. 200MM)

Service Packs

Series 2000
SP32-B-1 X S-M

Service Pack _____
 Bore Size=10, 16, 25, 32, 40, 51
 (Use "50" for 2020 versions)
 B= Buna-N, V= Viton _____
 1 = Single Piston _____
 2 = Double Piston _____
 Enter Stroke Length _____
 Grease Requirements
 M= Standard _____
 S= Slow Speed _____

Series P120
SP124-B-S X S-M

Service Pack _____
 Bore Size: 124=40mm, 126=63mm, 128=80mm _____
 B= Buna-N, V= Viton _____
 S = Short Piston _____
 L = Long Piston _____
 Enter Stroke Length _____
 Grease Requirements
 M= Standard _____
 S= Slow Speed _____

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NOTE: All listings include country codes and city codes.