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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.
Technical Benefits

Design Options
Parker 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 midsection 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.

Oil Free Operation
The Parker 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 Parker ORIGA rodless cylinder allows for a low friction characteristic permitting extremely slow traversing speeds. For speeds below 4 inches / second we recommend that Parker 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 Parker ORIGA Technical Department if the required operating temperature is above 175°F.

Magnetic Pistons
All Series 2002 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 Parker ORIGA Technical Department for assistance with special applications.

All specifications are subject to change without notice.
Ordering Procedure

**Series 2002**

**Cylinder Bore Size:**
- 16, 25, 32, 40 or 50

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

**Piston Quantity:**
- 20 = Single Piston
- 22 = Double Piston

**End Cap Cushion Placement:**
- 20 = Standard Cushion Location (21 for 50mm)
- 30 = Cushion at Rear of Cap (31 for 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.

**Series P120**

**Cylinder Series P120**
- 4 = 40mm
- 6 = 63mm
- 8 = 80mm

**Piston/Mount Configuration:**
- Long Piston
- Short Piston
- Standard Mount = S/20
- Platform Mount = S/22
- Floating Mount = S/25
- Inverted Mount = S/30
- Inverted Platform Mount = S/32
- Inverted Floating Mount = S/35

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

**Seal Type:**
- B = Buna
- V = Viton

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

**Piston Mounting Type:**
- 20 = Standard Mount
- 25 = Floating Mount
- 30 = Inverted Mount
- 35 = Inverted Floating Mount

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

**Service Packs**

**SP32R-B-1 X S**
- Service Pack
- Bore Size = 25, 32, 40, 50
- B = Buna-N, V = Viton
- 1 = Single Piston
- 2 = Double Piston
- Enter Stroke Length

**SP124-B-S X S**
- Service Pack
- Bore Size: 124 = 40mm, 126 = 63mm, 128 = 80mm
- B = Buna-N, V = Viton
- S = Short Piston
- L = Long Piston
- Enter Stroke Length