

TABLE OF CONTENTS

Account Number: _____ Discount %: _____

INTRODUCTION

Introduction.....	ii
Catalog Offerings, Online Ordering and Social Media	iii
Freight Information	iv - v
Ordering information and Terms and Conditions.....	vi - vii
Credit Application	viii
Typical Sealing Components and Regional Territory Map	ix - x
Web Features / Seal Kit ID Code Conversion Chart.....	xi - xii

CUSTOM SEALS

Index.....	1
Seals On Demand Information	2 - 10

INDUSTRIAL KITS

Index.....	11
Material Used / Glossary of Terms.....	12
Industrial Kits.....	13 - 167

FORKLIFT KITS

Index.....	169
Forklift Kits.....	170 - 195

REPAIR ACCESSORIES

Index.....	197
Repair Accessories	198 - 218

ASSORTMENT KITS AND TOOLS

Index.....	219
Assortment Kits	220 - 241
Tools	242 - 252
Technical Information.....	253 - 264

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All trademarks mentioned belong to their respective owners. Prices in this catalog supersede those found in the Hercules Sealing Products 2017 Seal, Kit, and 14th Edition Cylinder Catalogs. Prices are subject to change at any time. Go to www.Herculesus.com to view current pricing.



US - Introduction

The Corporate Office of Hercules® Sealing Products is located in Clearwater, Florida. Hercules® is an ISO 9001 registered distributor of hydraulic and pneumatic seals, seal kits, repair parts, engine and transmission gaskets, and replacement cylinders for mobile and industrial applications. Hercules® provides seal products used in hydraulic cylinders to a variety of industries for equipment such as: constuction, mining, aerial lift and craine, dump and refuse trucks, material handling, industrial plant applications, paving, agriculture, and logging equipment. Industry-leading technical catalogs provide application, dimensional, material specifications and product pricing.

A technical sales force with 8:00 a.m. to 7:00 p.m. ET hours of operation and an engineering department will provide you with unparalleled technical service. Additional value added services include reduced freight rates, special packaging, wide selection of aftermarket seal kits, largest in-stock inventory in the industry, and same day shipping on orders before 6:30 p.m. ET. Cylinder repair parts such as cylinders, power units, and cylinder rebuilding accessories are also available.

Hercules® Sealing Products offers products from the leading suppliers in the fluid power industry. These suppliers are continually rated and monitored based on the quality of their products. This process enables Hercules® to exceed our goal to deliver the highest quality products and services in the industry.

1016 North Belcher Road
Clearwater, FL 33765
www.HerculesUS.com

Phone:
1-800-777-5617
727-796-1300

Fax: 1-800-759-6391
Intl Fax: 727-797-8849
Email: Sales@HerculesUS.com

Online Ordering - www.HerculesUs.com

Placing orders on the Hercules® website is a fast and easy alternative to calling or faxing in your orders. Simply place items in the shopping cart and register during the checkout process, or click the “register” button on the upper right-hand corner of the homepage to start the process prior to shopping. First-Time visitors need to fill out a short profile to view company specific discounts and inventory. To shop quickly, click the “Quick Order Entry” button on the left side menu and add items by part number directly into your shopping cart. For website assistance, e-mail our Help Desk at HelpDesk@HerculesUS.com, click the **Live Chat**, or call **727-796-1300**.

Sign-up for the Hercules e-newsletter, found at the bottom of the homepage, to receive notice of web-only specials, new product announcements and industry specific articles.



Catalog Offerings

Seal Catalog - The Hercules® Seal Catalog contains over 800 pages of seals in the most popular styles and sizes. The easy-to-use format quickly locates u-seals, piston seals, scrapers, o-rings, piston rings, buffer seals, and much more. Each listing includes seal material, temperature and pressure specifications, and cross-sectional drawings to simplify selection.

Industrial Kit Catalog - The Hercules® Industrial Catalog contains priced listings of the wide range of hydraulic / pneumatic sealing and related products for in-plant industrial applications. This catalog includes OEM quality industrial cylinder repair kits for many popular brands of in-plant cylinders such as; Parker, Miller, Hydro-Line, and many more. Additional product offerings include cylinder repair kits for many popular makes of forklifts; including Toyota, Raymond, Caterpillar®-Towmotor and many more.

Mobile Kit Catalog - The Hercules® Kit Catalog contains hydraulic and pneumatic seal kit information for both in-plant and mobile applications. Complete cylinder repair kits are listed from over 140 different brands of equipment for construction, mining, aerial lift and crane, logging, refuse, agriculture, paving, material handling and industrial plant applications. In addition, a cylinder application reference guide is available to simplify your selection.

Cylinder and Repair Parts Catalog - The Hercules® Cylinder Catalog is packed with valuable for information cylinder replacement and repair parts. It also features our very own HTR, HSTR, HMW, HCW, HTC, and Snow Plow cylinders as well as telescopic cylinders, power units, and cylinder repair parts.

Hercules Social Media

Get connected to Hercules® Sealing Products - Go to the Hercules website at www.HerculesUs.com to link directly to our Facebook, Twitter, Linked In and Hercules YouTube Channel.



Freight Information

Low cost air and ground shipments available world wide. Guaranteed service available (restrictions apply to select zip codes.) One Call to Hercules® Sealing Products gets you top quality seal and repair products, cost saving freight rates, and a wide variety of delivery services to save you time and money! Hercules® pays the dimensional weight charges for air US shipments on boxes up to 13" cubed (additional accessorial charges may apply).



**MOST ARRIVE
WITHIN 2 DAYS!**

United States Postal Service Priority Flat-Rate Options

If It Fits, It Ships for One Low Rate - Anywhere in the Continental United States!

The United States Postal Services is available as a delivery option for all domestic locations. Your flat-rate options are as follows: Small padded envelope, medium and large boxes. When placing your order online at www.HerculesUS.com the envelope or box that would best fit your shipment size will appear on the Shipping and Payment screen. Orders placed via phone or fax will be determined by your regional sales representative. **Shipments placed by 1pm EST will ship the same day.**

\$8.50*

Priority Flat-Rate Envelope
12-1/2 x 9-1/2 or
8-5/8 x 5-3/8 x 1-5/8



\$14.50*

Priority Flat-Rate
Medium Box
11" x 8 1/2" x 5 1/2"



\$18.50*

Priority Flat-Rate
Large Box
12" x 12" x 5 1/2"



* Includes a \$1.50 shipping and handling charge.

UPS and FedEx Special Discounted Rates

These discounted rates offer significant savings on shipments for zones 103 and up (additional accessorial charges may apply).



NEXT DAY AIR

(1-7 lbs.)

Package

Weight

Rate

1 LB.	\$ 32.00
2 LBS.	34.00
3 LBS.	35.00
4 LBS.	38.00
5 LBS.	42.00
6 LBS.	46.00
7 LBS.	52.00

8LBS. AND UP - PUBLISHED UPS RATES.



NEXT DAY AIR

(1-7 lbs.)

Package

Weight

Rate

1 LB.	\$ 32.00
2 LBS.	34.00
3 LBS.	35.00
4 LBS.	38.00
5 LBS.	42.00
6 LBS.	46.00
7 LBS.	52.00

8LBS. AND UP - PUBLISHED FEDEX RATES

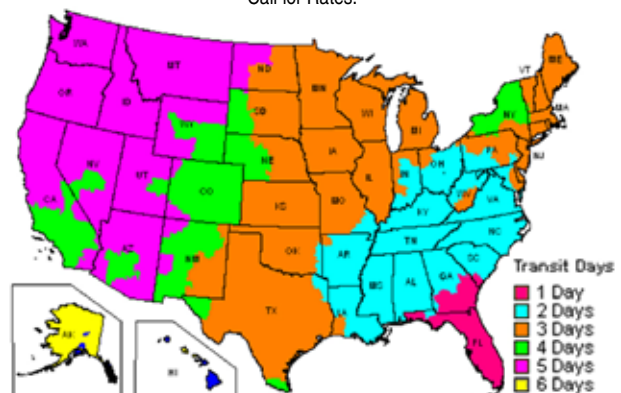
UPS GROUND TRANSIT MAP

Call for Rates.



FEDEX GROUND TRANSIT MAP

Call for Rates.



Order Cut-Off Times

At Hercules, we understand the importance of getting your equipment fixed fast! Therefore, it is imperative that you receive your shipments on-time. Orders placed by the following cut-off times will ship the same day. All cut-off times are based on Eastern Time Zone.

Order Cut-Off Times	Freight Carriers
1:00 pm	United States Postal Service
3:30 pm	Ground (UPS and FedEx - excluding FL)
3:30 pm	LTL Truck Carriers
3:30 pm	3-Day Select (UPS and FedEx)
3:30 pm	International (FedEx Intl. and DHL)
5:00 pm	FedEx Next Day Air
3:30 pm	Florida Ground (UPS and FedEx)
5:00 pm	2nd Day Air FedEx
6:30 pm	UPS Next Day Air
6:30 pm	2nd Day Air UPS

HERCULES® ORDERING INFORMATION

DOMESTIC CUSTOMER SERVICE

SATISFACTION

Total customer satisfaction is our goal. Please call with any questions or problems. Your input helps us to improve our service. We want to be your most reliable supplier.

HOW TO OPEN AN ACCOUNT WITH US - SAME DAY CREDIT APPROVAL

1. Copy and fill out the credit application found on page X of this catalog.
2. Fax completed and signed Credit Application and your sales tax exempt certificate (if applicable) for processing to 1-800-759-6391.
3. We will fax or email an open account letter. — If you need additional information call our Accounting Department at 1-800-244-5617.

HOW TO ORDER FROM US

Hercules® offers Toll Free phone and fax lines to make ordering as easy as possible. We encourage faxing your order to us Toll Free at 1-800-759-6391 to eliminate any possible error. Our technical sales staff is also available TOLL FREE from 8 a.m. to 7 p.m. E.S.T. to take your order, assist you in finding the correct part, or answer any questions you may have. You may also mail your order or use Hercules® Toll Free Fax.

SHIPMENT / DELIVERY

Every order we receive is classified as a RUSH. You tell us how fast you need it. Shipping agreements with UPS and FedEx allow us to offer substantial freight discounts.

PRICE QUOTATIONS/NON-CATALOG ITEMS

Hercules® is constantly adding parts to inventory. If you need a part that is not listed in our catalog, call, fax, or send us a sample of the part you need, roughly how many pieces are required, and we will source, quote, order, and stock the parts for you. Call or fax us anytime for price and delivery on hard-to-find or non-catalog items. Formal quotations for product and freight costs are gladly furnished upon request.

CREDIT CARDS

Hercules® now accepts the following credit cards: Mastercard, Visa, American Express, American Express Corporate Procurement.

INTERNATIONAL CUSTOMER SERVICE

MAILING ADDRESS

HERCULES® SEALING PRODUCTS
1016 North Belcher Road
Clearwater, FL 33765 USA

PHONE / FAX NUMBERS

PHONE: (727) 796-1300
FAX: (727) 797-8849

E-MAIL/WEBSITE

hercules@herculesus.com
<http://www.herculesus.com>

PAYMENT

Payment for all products must be in U.S. dollars.

PLACING ORDERS FOR SHIPMENT

1. Fax, mail, email or telephone order to HB Sealing Products, specifying method of shipment.
2. HB Sealing Products will fax or email order value to you. All prices are in U.S. dollars.
3. Wire transfer funds to: HB Sealing Products, Inc.
Fifth Third Bank
Cincinnati, OH USA
All orders must be paid for in U.S. dollars.
Call For Account, Routing and Swift Numbers
4. Payment will be accepted in the form of a wire transfer (in advance), on a letter of credit, or a U.S.A. credit card (Mastercard, Visa, American Express)



SHIPMENT / DELIVERY

Hercules® will gladly ship by the carrier of your choice. Please specify any special shipping requirements you may have. All shipments are Ex-Works Clearwater, FL, USA, unless otherwise specified or prearranged. Additional charges may be incurred for inbound freight and/or special packaging.

PRICE QUOTATIONS/NON-CATALOG ITEMS

Call, fax, or email us anytime for price and delivery. Formal quotations are gladly furnished upon request.

QUALITY

Hercules® has achieved a worldwide reputation as an organization committed to providing products and services that continually meet or exceed the needs and expectations of our customers. Hercules® is an ISO 9001 registered company.

ANTI-DEFAMATION POLICY

All equipment manufacturer's names, part numbers, and descriptions are used for reference purposes only. We do not imply that any part shown is the product of these manufacturers. We also do not imply that the list price shown is exactly that of the manufacturer.

TERMS AND CONDITIONS

BACKORDERS

Backorders will ship as ordered and additional freight charges will apply. Cancellation of backorders must be requested at the time of order to prevent additional freight charges. All backorders less than \$5.00 will be automatically canceled unless specified otherwise by the customer at the time of order.

CREDITS

Our payment terms for all open accounts are NET 30 days. Accounts outstanding over 30 days are reviewed daily. At 45 days past due (75 days from invoice date) all orders and backorders will automatically be put on credit hold until full payment is received.

RETURNS

Before you return any item, please call our customer service desk to obtain a Return Material Authorization (RMA) Number. Returned shipments without a Returned Material Authorization (RMA) number will be rejected. Our Receiving Department cannot accept a return without an RMA Number. Parts must be returned within 30 days of receipt of goods. Returned items are subject to a 20% restocking charge. All returns are subject to inspection by our Quality Control Department and may be rejected if not in resalable condition. Special order items are non-returnable.

CLAIMS

It is the policy of HB Sealing Products that inquiries for pricing discrepancies, order discrepancies, freight claims and customer returns must be reported to Hercules Sealing Products Customer Service within 30 days of invoice. Claims/discrepancies reported after 30 days of invoice will not be honored.

ORDER CANCELLATIONS

Orders for Standard Cataloged Products will not be canceled once processed. All custom supplied, non-cataloged products cannot be canceled. Additional cancellation charges may apply.

EXCLUSION OF WARRANTIES; LIMITATIONS OF DAMAGES

EXCEPT AS PROVIDED IN THE NEXT SECTION (TITLED HERCULES BRAND PRODUCTS CYLINDER WARRANTY") ANY WARRANTIES ON THE PRODUCTS SOLD BY H B SEALING PRODUCTS ARE THOSE MADE BY THE MANUFACTURER. EXCEPT AS PROVIDED IN THE "HERCULES BRAND PRODUCTS CYLINDER WARRANTY", HB SEALING PRODUCTS HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HB SEALING PRODUCTS NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS.

IN NO EVENT SHALL HB SEALING PRODUCTS BE LIABLE TO BUYER FOR ANY INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES, INCLUDING (WITHOUT LIMITATION) LOST PROFITS, COSTS OF DELAY, PERSONAL INJURY, PROPERTY DAMAGE OR LIABILITIES TO BUYER OR THIRD PARTIES ARISING FROM ANY SOURCE. THIS LIMITATION ON DAMAGES SHALL APPLY TO ALL PRODUCTS SOLD BY HB SEALING PRODUCTS, INCLUDING HERCULES BRAND PRODUCTS CYLINDERS. IN THE EVENT, THAT, NOTWITHSTANDING THE TERMS OF THIS SECTION, HB SEALING PRODUCTS IS FOUND LIABLE FOR DAMAGES BASED ON ANY DEFECT OR NONCONFORMITY IN PRODUCTS SOLD BY IT, INCLUDING HERCULES BRAND PRODUCTS CYLINDERS, ITS TOTAL LIABILITY FOR EACH DEFECTIVE OR NONCONFORMING PRODUCT SHALL NOT EXCEED THE PRICE PAID BY BUYER FOR SUCH DEFECTIVE PRODUCT.

HERCULES® BRAND PRODUCTS CYLINDER WARRANTY

HB Sealing Products herein supplies a limited express warranty to its buyers who purchase standard or custom Hercules Brand Products Cylinders ("Cylinders"). HB Sealing Products warrants that such Cylinders are free from defects in material and workmanship for a period of 12 months from the date the Cylinders are shipped from HB Sealing Products' facility. HB Sealing Products will repair or replace, at its sole option, Cylinders that are found to be defective in material or workmanship upon inspection by HB Sealing Products personnel when the Cylinders have been used under conditions for which the Cylinders were designed to operate. No warranty will be in effect for any of the following reasons:

- Chemical attack, corrosion or erosion;
- Non-compatible or dirty hydraulic fluid;
- Seal degradation due to contamination (including hydraulic fluids), excessive heat or misapplication;
- Excessive side loading;
- Maintenance or disassembly of the cylinder if performed by anyone other than HB Sealing Products personnel without HB Sealing Products' permission, prior to the date of warranty expiration;
- Removal of the HB Sealing Products ID tag indicating bore, stroke, and other information concerning traceability; or Instances of improper installation or misapplication of the Cylinders.

Due to the variety of operating conditions and applications for the Cylinders and HB Sealing Products' related products, HB Sealing Products recommends that Buyer analyze all aspects of the application and carefully select the correct cylinder product to fit the buyer's application. Buyer is solely responsible for the cylinder product selection in assessing that all performance, safety and warning requirements of the application are met. **IMPROPER CYLINDER PRODUCT SELECTION, MISAPPLIED ENGINEERING OR IMPROPER USE OF THE CYLINDERS AND RELATED PRODUCTS DESCRIBED HEREIN MAY CAUSE DEATH, PERSONAL INJURY AND/OR PROPERTY DAMAGE.** HB Sealing Products does not imply or represent that the Cylinders will work properly in any customer application. No sales agent of HB Sealing Products shall have the right to determine warranty periods, terms or conditions for Cylinders if such statements by the sales agents are different from those included herein. Buyer understands that HB Sealing Products will not be held liable for any other costs or damages including any charges for removal, installation, assembly or any other charges in connection with the replacement or repair of the Cylinders. All returned products must have, before being returned to HB Sealing Products, an "RMA" (return material authorization) number assigned to it by HB Sealing Products' customer service department.

THE WARRANTY STATED IN THIS SECTION IS HB SEALING PRODUCTS' SOLE AND EXCLUSIVE WARRANTY PERTAINING TO THE CYLINDERS, AND HB SEALING PRODUCTS HEREBY DISCLAIMS ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE FOR THE CYLINDERS.

CREDIT APPLICATION



Hercules Sealing Products
1016 North Belcher Road
Clearwater, FL 33765 USA

CREDIT APPLICATION

Toll Free: 1-800-777-5617
International: (727) 796-1300
Fax: (800) 759-6391
Intl Fax: (727) 797-8849
E-Mail: sales@herculesus.com

Please Indicate Type
of Request:
☐ Catalog
☐ COD
☐ Credit Card
☐ Net 30

COMPANY INFORMATION

Company Name: _____
Billing Address: _____ City: _____ State: _____ Zip: _____
Shipping Address: _____ City: _____ State: _____ Zip: _____
Branch Office: _____ DBA: _____
Phone: _____ Fax: _____
Business Structure (Sole Ownership, Partnership, Corporation): _____
Type of Business: _____ Year Business Established: At current Address Since: _____
Federal ID#: _____ President/Owner SSN: _____
Owner/President: _____
Primary Contact Person: _____ Title: _____
Controller: _____ Annual Purchases: _____
Website: _____ E-Mail: _____
Primary Industry: ☐ Construction ☐ Mining ☐ Refuse/Waste ☐ Material Handling ☐ Aerial Lift/Crane ☐ Agriculture ☐ Oil and Gas
(Check One) ☐ Concrete/Paving ☐ Logging/Forestry ☐ Industrial Plant ☐ Automotive/Marine ☐ Rental Equipment

BANK REFERENCES

Bank Name and Address: _____
Account #: _____ Contact Name & Phone: _____

TRADE REFERENCES

Firm Name: _____ City, State: _____ Phone/Fax: _____
1: _____
2: _____
3: _____

CREDIT AGREEMENT

I understand the following and will abide by your company regulations:

1. Notify Hercules Sealing Products of any changes in ownership of your company.
2. If granted credit, our company agrees to pay all invoices within 30 days of invoice date.
3. It is agreed that our company will pay 1.5% per month which is 18% yearly for all past due balances.
4. It is agreed that our account will become COD if we fail to pay invoices within the above stated terms.
5. Our company financial condition is satisfactory and we can meet all financial obligations.
6. There are no lawsuits or judgements against me at this present time. If our company defaults on payment of any outstanding valid invoices we agree to pay attorney and/or collection expenses.

Credit Amount Requested

AGREE TO PAY MY ACCOUNT WITHIN THE TERMS AND AUTHORIZE YOU TO OBTAIN SUCH INFORMATION YOU MAY REQUIRE CONCERNING THIS APPLICATION.

Date _____ Signed _____
X _____ Title _____

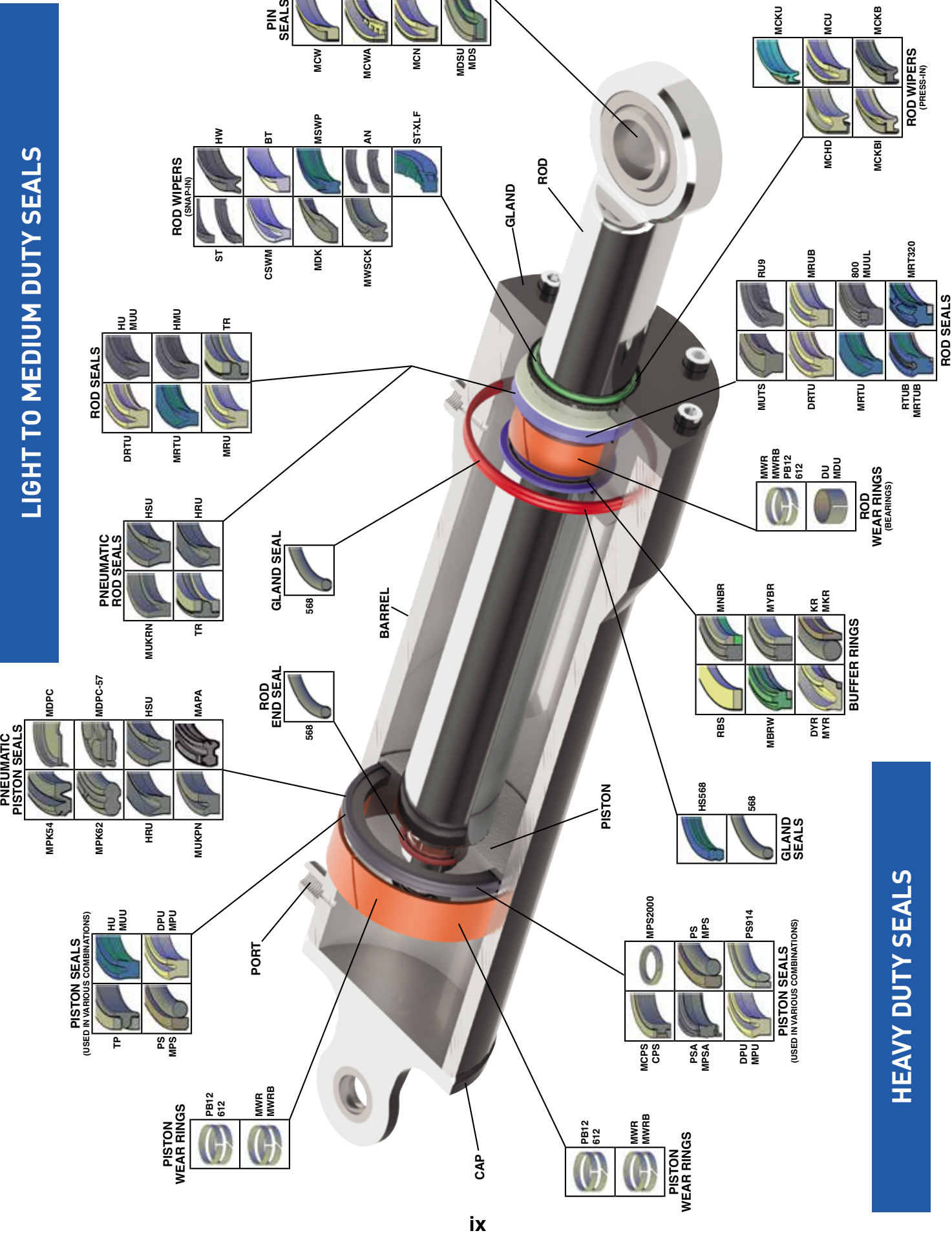
PERSONAL GUARANTEE

REFERRAL INFORMATION

How did you learn about Hercules Sealing Products? Please choose one and provide detailed information:

Trade Show: _____ Magazine: _____ Previous Employer: _____
Hercules Customer: _____ Website or Search Engine: _____ Other: _____

TYPICAL SEALING COMPONENTS

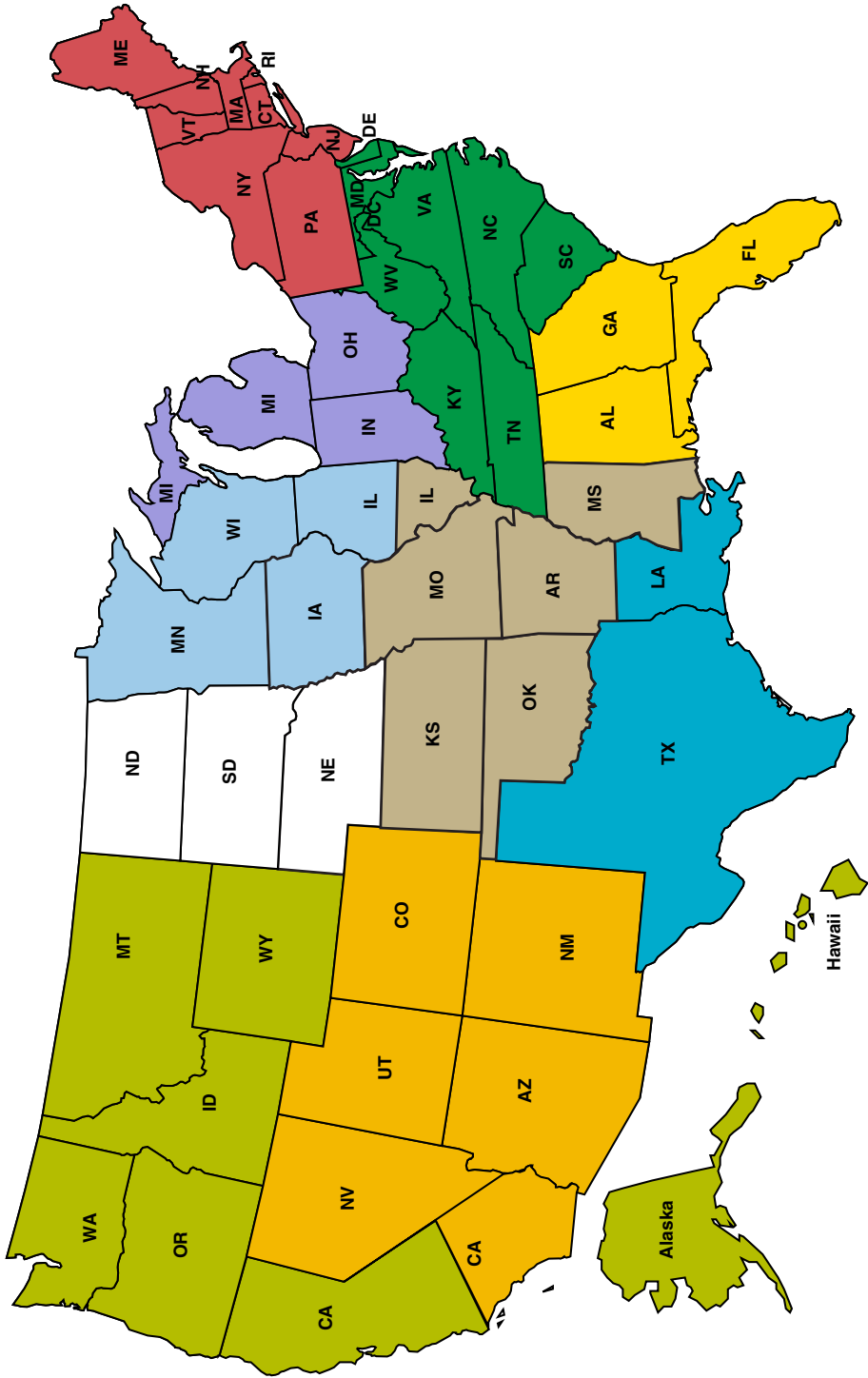


LIGHT TO MEDIUM DUTY SEALS

HEAVY DUTY SEALS

REGIONAL TERRITORY MAP

- Brian Iblings**
Email: biblings@herculesus.com
Phone: 727.212.1381
 - Jeff Roman**
Email: jroman@herculesus.com
Phone: 727.219.7558
 - Robert Bires**
Email: rbires@herculesus.com
Phone: 727.463.4440
 - Erick Harris**
Email: eharris@herculesus.com
Phone: 727.330.0530
 - Jason Looker**
Email: jlooker@herculesus.com
Phone: 727.330.0666
 - Michelle Cromer**
Email: mcromer@herculesus.com
Phone: 727.509.0268
 - Harry Conn**
Email: hconn@herculesus.com
Phone: 804.317.1715
 - Wayne Staab**
Email: wstaab@herculesus.com
Phone: 904.304.2383
 - Dan Stewart**
Email: dstewart@herculesus.com
Phone: 623.910.1227
- For National Account Sales Inquiries
Darrin Mann
Email: dmann@herculesus.com
Phone: 813.766.7567
- Clint Dombroski**
Account Relations Manager
Email: cdombroski@herculesus.com
Phone: 727.385.6080



EXCITING NEW WEB FEATURES

Introducing the Hercules Phone App*!

Inventory Management & Ordering Made Easy!



Increase Productivity

**CMI: Custom Manage Inventory
Manage Your Hercules Inventory Your Way**



**Print your
parts on
Avery labels.**

**Streamline Your
Order Entry Process**

Reduce Stock Outs

Decrease Human Error

**Scan labels
to quickly add
parts to your list.**



**You must be a registered Hercules website user in order to use the app.*

Get Yours Today!

Contact your Hercules Rep | Call 1-800-777-5617 or go to www.HerculesUS.com and click the phone icon on the right.



CUSTOM SEAL CONFIGURATOR

Fast, Easy to Use • Real Time Pricing & Availability

• Dozens of Profiles to Choose From

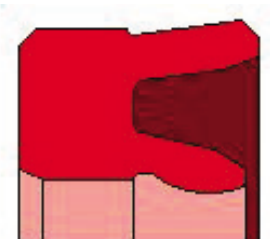
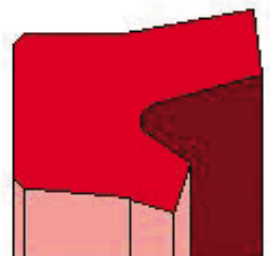
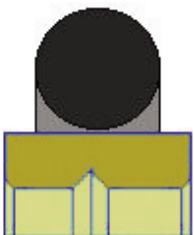
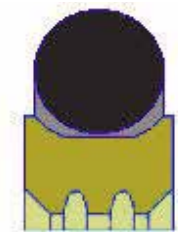
Added Features Include:

Save it to Your List

Add to Cart

Email Quote Directly to Your Customers

Order History



HERCULES®
SEALING PRODUCTS

Go To www.HerculesUS.com,
Click on Custom Seals Tab
and Create Your Custom Seal!

SEAL KIT IDENTIFICATION CODE CONVERSION CHART

<u>WIPERS</u>	<u>ROD SEALS</u>	<u>PISTON SEALS</u>	<u>ROD X BORE SIZE</u>
I = Insert	O = O-Ring	1 = None	
P = Press In	OB = O-Ring & B/U	2 = O-Ring	
N = No Wiper	U = U-Seal	3 = O-Ring & B/U	
	UB = U-Seal & Buffer	4 = 1 U-Seal	
	BB = Tandem Buffers	5 = 2 U-Seals	
	V = Vee Set	6 = 1 Piston Cup	
	N = None	7 = 2 Piston Cups	
	TR = T Seal	8 = "SA" Vee Set	
	SP = Special	9 = "DA" Vee Set	
	UV = U-Seals &	10 = Piston Seal	
	Vee Sets	11 = T Seal	
		12 = Cast Iron Piston Ring	
		13 = Special	
		14 = 4 Piece Capped T-Seal	
		15 = 5 Piece Piston Seal	

EXAMPLE

<u>P</u>	<u>–</u>	<u>U</u>	<u>–</u>	<u>5</u>		<u>2</u>	<u>X</u>	<u>4</u>
Wiper		Rod		Piston		Rod		Bore
		Seal		Seal				

NOTE:

These codes were developed as an aid for kit identification. Verification can be made by calling our sales department and comparing the parts to be replaced with those offered in our kit.

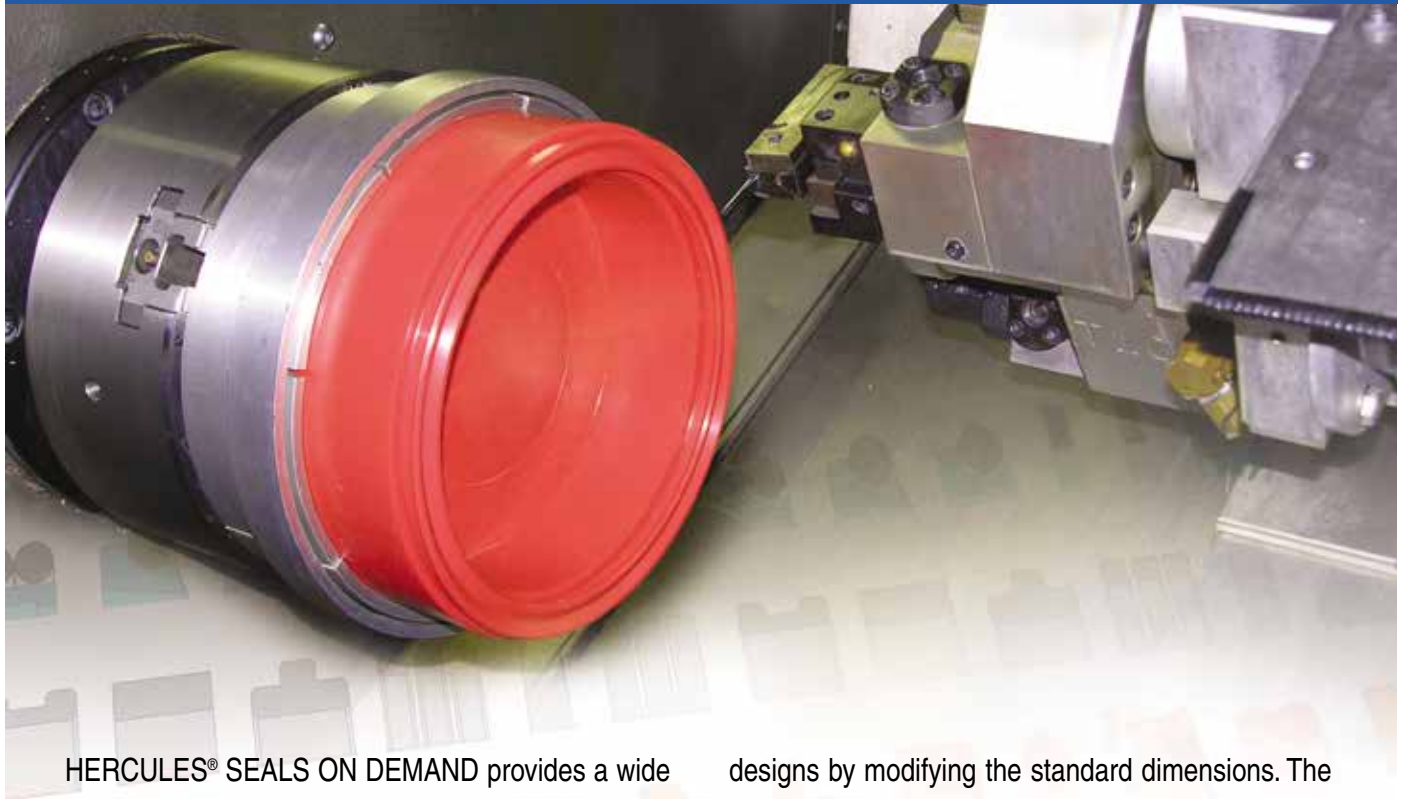
Custom Seals

Contents Page

Piston Seals	3 - 4
Rod Seals	4 - 5
Wiper Rings	5 - 6
Rotary Seals	6 - 7
Gaskets / Back-Up Rings	8
Guide-Rings	8
Ordering Information	8
Material Index	9 - 10

SEALS ON DEMAND

CUSTOM SEALS



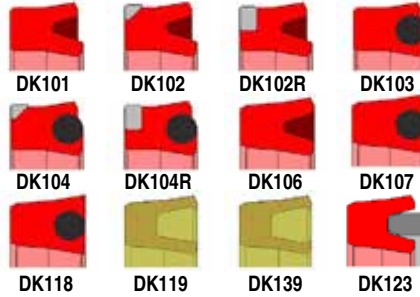
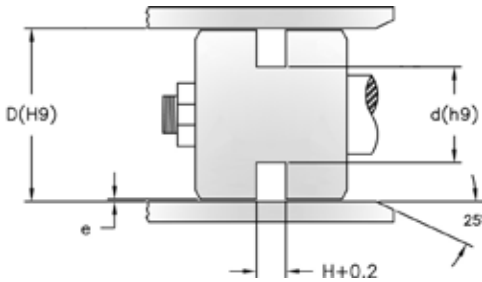
HERCULES® SEALS ON DEMAND provides a wide selection of custom, cost effective sealing solutions using advanced rapid-prototype technology. The programmable CNC production cell can manufacture both hydraulic and pneumatic styles of o-rings, rod seals, piston seals, wipers, backup rings, rotary seals, swivel seals and static seals in both imperial and metric sizes for almost any fluid power application including agriculture, automotive, heavy construction, material handling, manufacturing, mining, logging, fluid handling and refuse. Hercules® Seals On Demand technology gives you the ability to source custom manufactured products with a short turn-around time and with no mold costs. Hercules® Seals On Demand design software offers over 100 standard profiles and can produce countless custom

designs by modifying the standard dimensions. The advanced lathe technology results in exceptional sealing products with smooth corners and fillets, fine surface finishes and sharp lips. Hercules® Seals On Demand has a large inventory of high quality materials in numerous sizes including materials from elastomers of rubber and urethane to plastics of fluoro-polymers (PTFE) and Acetal (POM) available for your sealing application.

The following technical information illustrates common housings for each seal profile. Included in each seal application is a chart detailing the recommended dimensions for typical housing sizes. Hercules Sealing Products offers design assistance for non-standard and custom application needs, which may exceed the size ranges in these recommended charts. To reach our technical department, please call 1.800.777.5617 and press 8.

PISTON SEALS

U-Seal



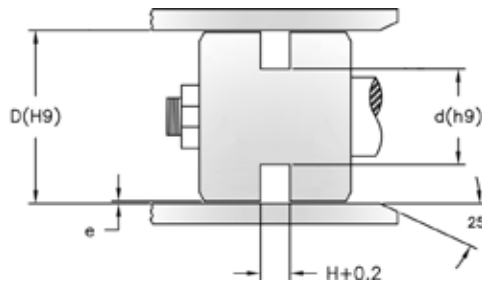
Application: Hydraulic single-acting piston seals
Material: Urethane, NBR, PTFE, Fluorocarbon

Standard Recommended Dimensions

D (Range)	d	H
15 - 25	D - 8	6
25.1 - 50	D - 10	7
50.1 - 75	D - 12	8
75.1 - 150	D - 15	10
150.1 - 300	D - 20	12
300.1 - 450	D - 25	18
450.1 - 575	D - 30	20

All Dimensions Are Millimeters

Two Piece Seal



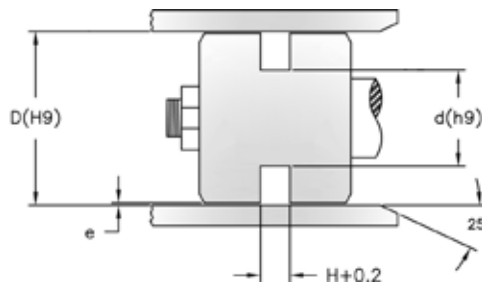
Application: Hydraulic double-acting piston seals
Material: Urethane, NBR, PTFE, Fluorocarbon

Standard Recommended Dimensions

D (Range)	d	H
10 - 15	D - 4.9	2.2
15.1 - 40	D - 7.5	3.2
40.1 - 80	D - 11	4.2
80.1 - 135	D - 15.5	6.3
135.1 - 300	D - 21	8.1
300.1 - 575	D - 24.5	8.1

All Dimensions Are Millimeters

Two Piece Seal Step-Cut



DK138
STEP CUT

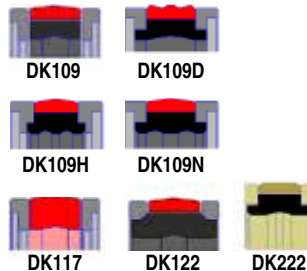
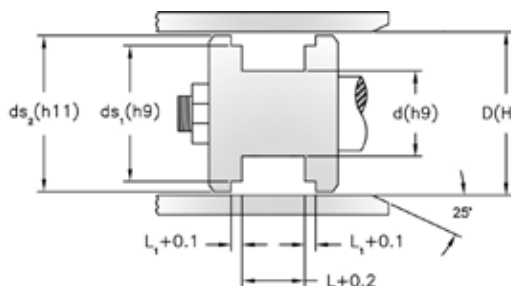
Application: Hydraulic double-acting piston seals
Material: POM, PA6

Standard Recommended Dimensions

D (Range)	d	H
38 - 40	D - 7.5	3.2
40.1 - 80	D - 11	4.2
80.1 - 135	D - 15.5	6.3
135.1 - 300	D - 21	8.1
300.1 - 394	D - 24.5	8.1

All Dimensions Are Millimeters

Compact Seal



Application: Hydraulic double-acting piston seals
Material: Urethane, NBR, PTFE, Fluorocarbon

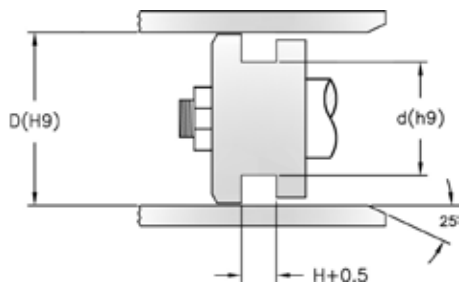
Standard Recommended Dimensions

D (Range)	d	ds ₁	L	L ₁
20 - 50	D - 10	D - 3	12.5	4
50.1 - 80	D - 15	D - 4	20	4
80.1 - 150	D - 20	D - 5	25	5.5
150.1 - 300	D - 25	D - 6	32	7
300.1 - 600	D - 30	D - 8	36	7

All Dimensions Are Millimeters

PISTON SEALS

Pneumatic U-Seal



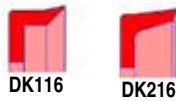
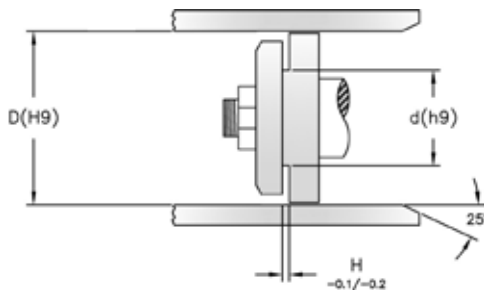
Pressure: 350 psi max
Application: Hydraulic and Pneumatic single-acting piston seals
Material: Urethane, NBR, PTFE, Fluorocarbon

Standard Recommended Dimensions

D (Range)	d	H
15 - 25	d - 8	6
25.1 - 50	d - 10	7
50.1 - 75	d - 12	8
75.1 - 150	d - 15	10
150.1 - 300	d - 20	12
300.1 - 450	d - 25	18
450.1 - 575	d - 30	20

All Dimensions Are Millimeters

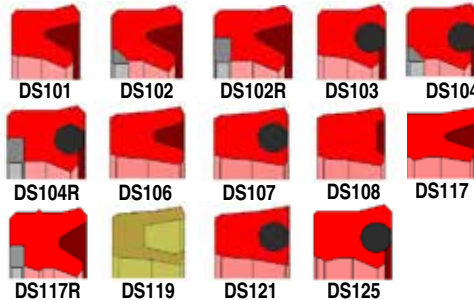
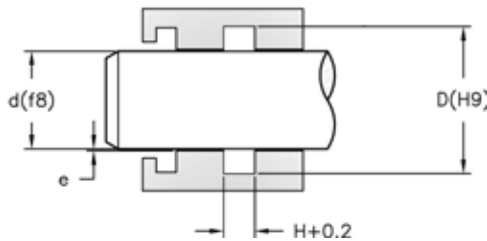
Piston Cup



Application: Hydraulic single acting piston seals
Material: Urethane, NBR, PTFE, Fluorocarbon

ROD SEALS

U-Seals



Application: Hydraulic single acting rod seals
Material: Urethane, NBR, PTFE, Fluorocarbon

Standard Recommended Dimensions

d (Range)	D	H
8 - 25	d + 8	6
25.1 - 50	d + 10	8
50.1 - 150	d + 15	10
150.1 - 300	d + 20	14
300.1 - 450	d + 25	17
450.1 - 575	d + 30	20

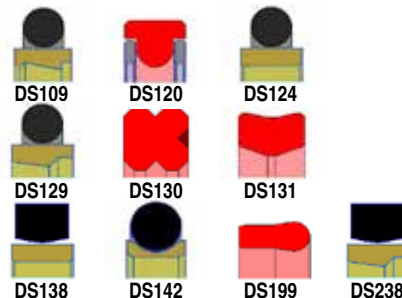
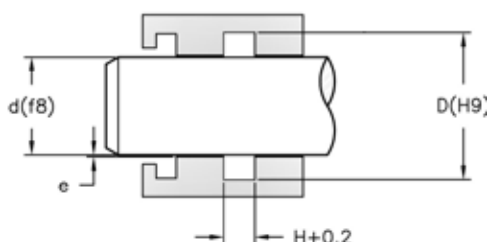
All Dimensions Are Millimeters

Pneumatic U-Seals



Pressure: 350 psi max
Application: Hydraulic and pneumatic single acting rod seals
Material: Urethane, NBR, PTFE, Fluorocarbon

One and Two Piece Seals



Application: Hydraulic double acting rod seals
Material: Urethane, NBR, PTFE, Fluorocarbon

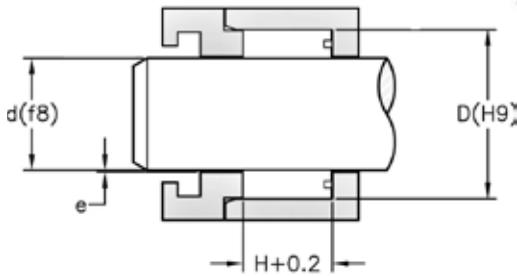
Standard Recommended Dimensions

d (Range)	D	H
8 - 10	d + 4.9	2.2
10.1 - 39	d + 10.7	4.2
39.1 - 199	d + 15.1	6.3
199.1 - 259	d + 20.5	8.1
259.1 - 575	d + 24	8.1

All Dimensions Are Millimeters

ROD SEALS

Vee Packing



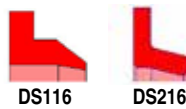
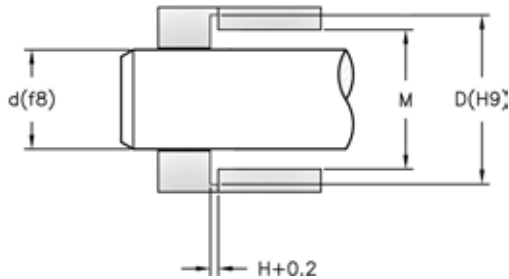
Application: Hydraulic single acting seals
Material: Urethane, NBR, PTFE, Fluorocarbon

Standard Recommended Dimensions

d (Range)	D	H
10 - 40	d + 10	16
40.1 - 75	d + 15	25
75.1 - 150	d + 20	32
150.1 - 200	d + 25	40
200.1 - 300	d + 30	50
300.1 - 575	d + 40	63

All Dimensions Are Millimeters

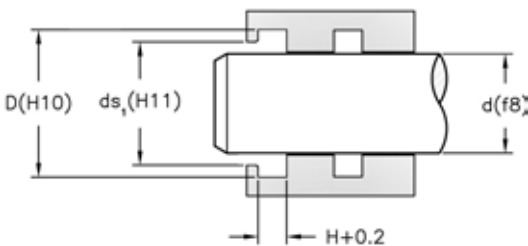
Rod Cup - Seal



Application: Hydraulic single acting rod seals
Material: Urethane, NBR, PTFE, Fluorocarbon

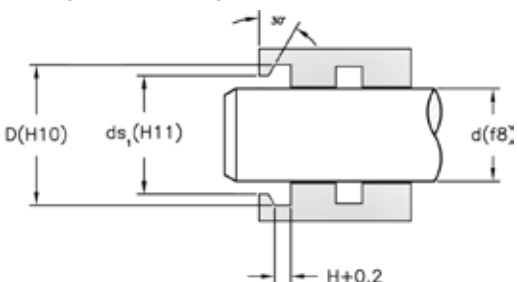
WIPERS

Single Acting Wipers



Application: Single acting wiper
Material: Urethane, NBR, PTFE, Fluorocarbon

Single Acting Wipers



Application: Single acting wiper
Material: Urethane, NBR, PTFE, Fluorocarbon

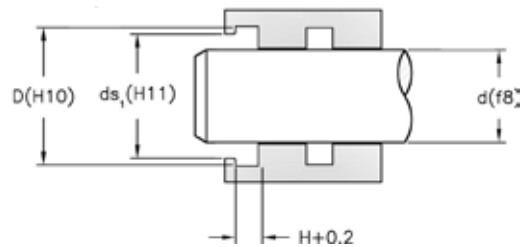
Standard Recommended Dimensions

d (Range)	D	H
8 - 50	d + 4	5
50.1 - 100	d + 5	5
100.1 - 575	d - 7.5	7

All Dimensions Are Millimeters

WIPERS

Single & Double Acting Wipers



DA102



DA105



DA109



DA211



DA115



DA116



DA117



DA118



DA119

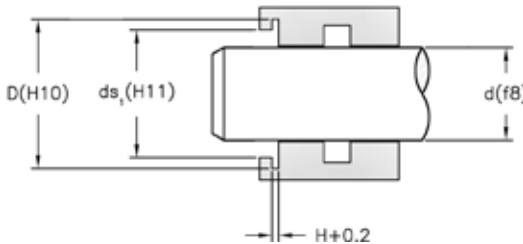
Standard Recommended Dimensions

d (Range)	D	H
8 - 50	d + 4	5
50.1 - 100	d + 5	5
100.1 - 575	d - 7.5	7

All Dimensions Are Millimeters

Application: W102, W105, W115 - Single acting wiper
 W111, W211, W116, W117 - Single and double acting wiper
Material: Urethane, NBR, PTFE, Fluorocarbon

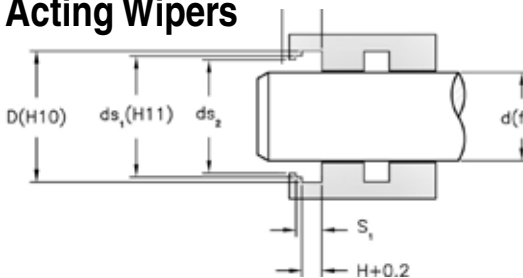
Single Acting Wipers



DA108

Application: Single acting wiper
Material: Urethane, NBR, PTFE, Fluorocarbon

Single and Double Acting Wipers



DA101



DA104



DA212

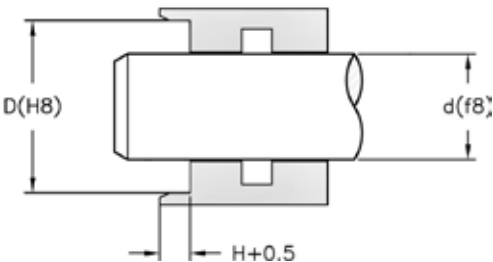
Standard Recommended Dimensions

d (Range)	D	S ₁
8 - 100	d + 8	4
100.1 - 150	d + 9	5.5
150 - 575	d + 11	6.5

All Dimensions Are Millimeters

Application: Single acting wiper
Material: Urethane, NBR, PTFE, Fluorocarbon

Single Acting Wipers



DA103



DA106

Standard Recommended Dimensions

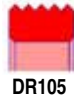
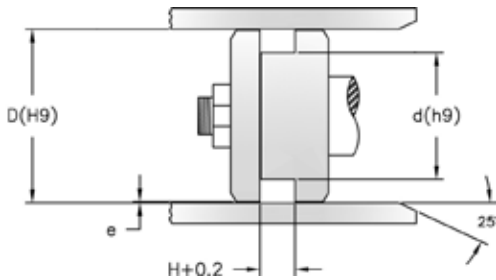
d (Range)	D	S ₁
8 - 10	d + 8	5
10.1 - 100	d + 9	7
100.1 - 200	d + 15	9
200.1 - 575	d + 20	12

All Dimensions Are Millimeters

Application: Single acting wiper
Material: Urethane, NBR, PTFE, Fluorocarbon

ROTARY PISTON SEALS

Piston Rotary Seal



Application: Hydraulic double acting piston seals
Material: Urethane, NBR, PTFE, Fluorocarbon

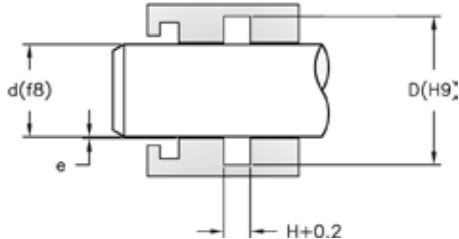
Standard Recommended Dimensions

D (Range)	d	H
10 - 20	D - 4.9	2.2
20.1 - 50	D - 7.5	3.2
50.1 - 150	D - 11	4.2
150.1 - 300	D - 15.5	6.3
300 - 600	D - 21	8.1

All Dimensions Are Millimeters

ROTARY SHAFT SEALS

Rod Rotary Seals



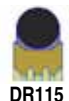
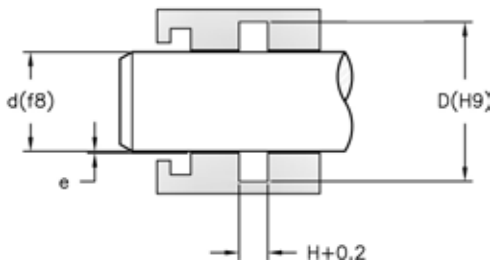
Application: Hydraulic double acting rod seals
Material: Urethane, NBR, PTFE, Fluorocarbon

Standard Recommended Dimensions

D (Range)	D	H
8 - 10	d + 4.9	2.2
10.1 - 39	d + 10.7	4.2
39.1 - 199	d + 15.1	6.3
199.1 - 259	d + 20.5	8.1
259 - 575	d + 25	8.1

All Dimensions Are Millimeters

Rod Rotary Seals



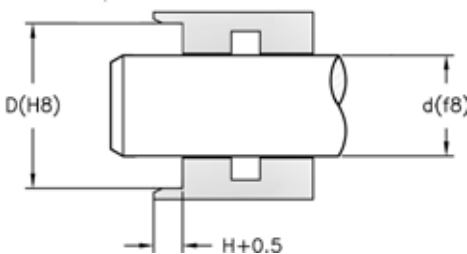
Application: Hydraulic double acting rod seals
Material: Urethane, NBR, PTFE, Fluorocarbon

Standard Recommended Dimensions

d (Range)	D	H
8 - 20	d + 4.9	2.2
20.1 - 50	d + 7.5	3.2
50.1 - 150	d + 11	4.2
150.1 - 300	d + 15.5	6.3
300.1 - 575	d + 21	8.1

All Dimensions Are Millimeters

Shaft Seals



Application: Hydraulic single acting shaft seals
Material: NBR, Fluorocarbon, PTFE

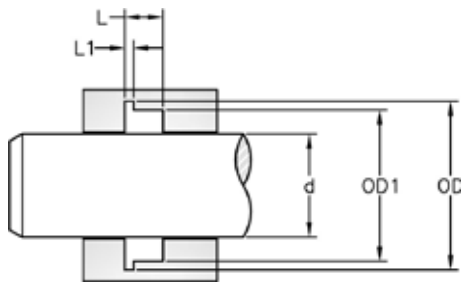
Standard Recommended Dimensions

d (Range)	D	H
10 - 60	d + 12	7
60.1 - 140	d + 15	8
14.1 - 300	d + 20	10
300.1 - 450	d + 30	12
450.1 - 575	d + 40	20

All Dimensions Are Millimeters

ROTARY SHAFT SEALS

Spring Activated Shaft Seal



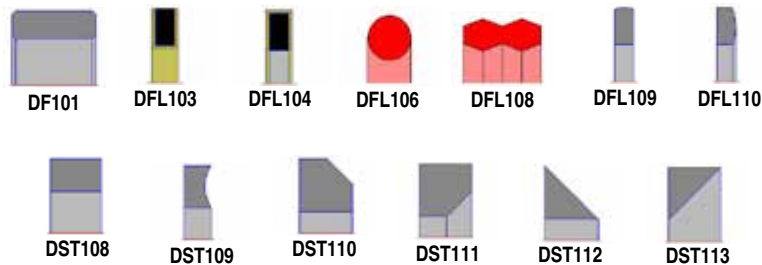
Standard Recommended Dimensions

d (Range)	OD	OD ₁	L	L ₁
8 - 20	d + 9	d + 5	36	0.85
50.1 - 80	d + 12.5	d + 7	4.8	1.35
80.1 - 150	d + 17.5	d + 10.5	7.1	1.8
150.1 - 300	d + 22	d + 14	9.5	2.8

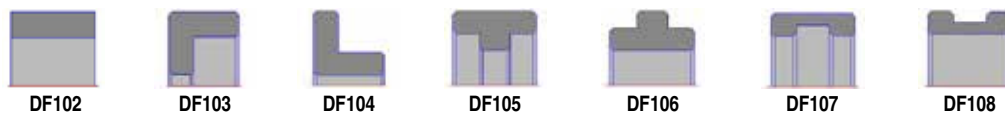
All Dimensions Are Millimeters

Application: Hydraulic single acting shaft seals
 Material: PTFE

GASKET / BACK-UP RINGS



GUIDE-RINGS



To place an order Call 1.800.777.5617 and press 8

Please provide the following information:

- Groove dimensions
- Seal profile
- Seal material

OR go to our website at www.HerculesUS.com and click on the CUSTOM SEALS tab at the top of the page.

*The Hercules® Seals On Demand inventory includes sizes from 1/4" to 24", 15 material choices;
 Hundreds of combinations, all in-stock and ready for next day delivery!*

MATERIAL INDEX

Material Specifications:

- 85A NBR (Black)
- 85A Fluorocarbon / Viton (Brown)
- 85A HNBR (Green)
- 85A EPDM (Black)
- 55D Virgin PTFE (White)
- 40% Bronze/PTFE (Bronze)
- 15% Glass/5% Moly PTFE (Black)
- 85D Polyacetal (POM) (White)
- 86D Virgin PEEK (Cream)
- 96A Hydrolysis Resistant Polyurethane (Red)
- 94A Cast Hydrolysis Resistant Polyurethane (Red)
- 55D Hytrel (Orange)
- 61D UHMW (White)
- 77D Polyamide (PA) (Black)
- 86D Synthetic Fabric Thermoset Resin (SFTR) (Turquoise)

MATERIAL			HPU	C-HPU Cast	Hytrel	NBR	HNBR	FPM	EPDM
Property	Specification	Unit							
Color			Red	Red	Orange	Black	Green	Brown	Black
Min Service Temp		°F	-5	-35	-65	-35	-30	-30	-50
Max Service Temp		°F	240	230	275	230	300	425	300
Max Temp - Water/Steam		°F	195	195			245	300	300
Max Temp - Hot Air (short)		°F					355	570	355
Hardness	ASTM D 2240	Shore A	96±2	94±1		85±5	85±5	85±5	85±5
Hardness	ASTM D 2240	Shore D	47±3	44±3	55				
Modulus 100%	ASTM D 412	psi	2900	2175	2250	1740	1450	1160	
Modulus 300%	ASTM D 412	psi	5800	4160					
Tensile Strength	ASTM D 412	psi	6200	7250	6100▲	2300	2900	1450	1740
Elongation at break	ASTM D 412	%	300	350	520▲	150	200	200	80
Tear Strength	ASTM D 624 die C	lbf/inch	570	560		140	170	34	50
Abrasion	ASTM D 1630	mm ³	17	20		130	130	200	140
Specific Gravity	ASTM D 792	g/cm ³	1.19	1.19	1.19	1.32	1.32	2.51	1.23
Rebound Elasticity	DIN 53512	%				20		7	37
Modulus of Elasticity	DIN 53457	N/mm ²							
Compressive Strength	ASTM D 695	psi							
Compressive Modulus	ASTM D 695	psi							
Compression Set									
70°C/24hr @ 20% def	ASTM D 395 Meth B	%	25	27	40%	6	14	8	7
100°C/24hr @ 20% def	ASTM D 395 Meth B	%	30	33		5	22	10	

* Lead time required ▼Spec - DIN 53505
 ▲Spec - ASTM D 638 ◀Spec - DIN 53504
 ►Spec - DIN 53455 ●Spec - DIN 53479

MATERIAL INDEX

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- 77D Polyamide (PA) (Black)
- 86D Synthetic Fabric Thermoset Resin (SFTR) (Turquoise)

MATERIAL			PTFE Virgin	PTFE 15% Glass	PTFE 40% Bronze	POM	PA Nylon	UHMW-PE*	PEEK*	SFTR
Property	Specification	Unit								
Color			White	Grey	Brown	White	Black	Natural	Cream	Turquoise
Min Service Temp		°F	-325	-325	-325	-50	-40	-325		-40
Max Service Temp		°F	500	500	500	210	210	175	500	309
Max Temp - Water/Steam		°F								
Max Temp - Hot Air (short)		°F								
Hardness	ASTM D 2240	Shore A								
Hardness	ASTM D 2240	Shore D	50-65	58-63	61-67	85±3	77	61	86	86
Modulus 100%	ASTM D 412	psi								
Modulus 300%	ASTM D 412	psi								
Tensile Strength	ASTM D 412	psi	6000▲	3000▲	3300▲	10100	9400◄	5800▲	14000◄	
Elongation at break	ASTM D 412	%	300▲	280▲	250▲	40	120◄	350▲	50◄	
Tear Strength	ASTM D 624 die C	lbf/inch								
Abrasion	ASTM D 1630	mm3								
Specific Gravity	ASTM D 792	g/cm3	2.2	2.2	3.13	1.41	1.15●	0.93●	1.32●	1.3
Rebound Elasticity	DIN 53512	%								
Modulus of Elasticity	DIN 53457	N/mm2				3000	1800	98000	3600	
Compressive Strength	ASTM D 695	psi	3500	1055	1470	12800				54375
Compressive Modulus	ASTM D 695	psi	70000	63000	66000					406105
Compression Set										
70°C/24hr @ 20% def	ASTM D 395 Meth B	%								
100°C/24hr @ 20% def	ASTM D 395 Meth B	%								

* Lead time required ▼Spec - DIN 53505
 ▲Spec - ASTM D 638 ◄Spec - DIN 53504
 ►Spec - DIN 53455 ●Spec - DIN 53479

Industrial Kits

CONTENTS	PAGE
Materials Used / Glossary of Terms	12
Atlas Cylinder Repair Kits	14 - 30
Hydro-line Cylinder Repair Kits	32 - 60
Miller Cylinder Repair Kits	62 - 97
Milwaukee Cylinder Repair Kits	98
Ortman Cylinder Repair Kits	99
Parker Cylinder Repair Kits	102 - 144
Rexroth Cylinder Repair Kits	146 - 147
Royal Cylinder Repair Kits	148 - 151
Sheffer Cylinder Repair Kits	154 - 162
Tompkins-Johnson / TJ Cylinder Repair Kits	163
Vickers Cylinder Repair Kits	164 - 167

All manufacturer's names, part numbers and descriptions are used for reference purposes only. We do not imply that any part shown is the product of these manufacturers. We also do not imply that the list price shown is exactly that of the manufacturer.

Materials Used

Urethane (URE)

Formulated of copolymers of ether or ester based urethanes, this material is used in a wide application of seals, wipers, back-up rings, cushions, bumpers, and a myriad of other uses. Highly resistant to oil swell, ozone, oxidation and abrasion, it also has excellent cut resistance. Highly resilient, urethanes also have high tensile strength and elongation properties. Urethanes remain an excellent choice in hydraulic systems using petroleum based fluids. Most urethane seals remain flexible and efficient in temperatures ranging from -65° F to +200° F with some able to withstand intermittent temperatures up to +300° F.

Nitrile (NBR) (XNBR)

Two common nitrile copolymer blends are Buna-N (NBR) and Carboxylated Nitrile (XNBR). Possessing very good resistance to petroleum based hydraulic oils, Buna-N also works well with fuels such as diesel or gasoline. XNBR compounds feature improved abrasion resistance and tensile strength. Nitrile seals have a good resistance to compression set, but their flexibility suffers somewhat in the lower temperature range. Seals made from this material have a low resistance to ozone and must be stored carefully in most environments. Working temperatures are -40° to +240°F.

Polytetrafluoroethylene (PTFE)

Most PTFE seals, in order to retain their toughness and flexibility, are fortified with short glass fiber, bronze flashes, carbon, graphite, or a combination of these fillers. Because of a lack of resilience (memory) in PTFE, an energizer is most often employed to obtain the desired fit. Benefits are chemical inertness, high heat resistance, low temperature flexibility, low running friction, and non-adhesive characteristics. Temperatures to +500° F are obtainable but are often reduced by the filler or energizer employed.

Fluorocarbon (FC)

Fluorocarbon combines high temperature resistance with excellent chemical resistance. Excellent for use with alcohol and aromatic fuels and is highly resistant to ultraviolet light and ozone. This material is not recommended for use in low temperatures or in aircraft hydraulic fluids. Temperature range is -20° to +400° F.

Glossary of Terms

Bearing/Wear Rings

Soft metal or plastic rings placed in grooves on the piston or in the head to prevent contact between hard metal surfaces.

Durometer

A generic term referring to the instrument and the scale used to measure the relative hardness of various elastomers. The lower the durometer rating, the softer the material.

Dynamic Seal

A sealing device used between mating surfaces that have relative motion.

Elastomer

A rubber-like material having the capacity for large deformation and rapid, complete recovery from the deforming force.

Gland

A rod bushing containing sealing devices fitted into the rod end cap. A groove or open area machined into the head or piston that houses the sealing device.

Static Seal

A sealing device used between mating surfaces that have no relative motion.

Wiper/Scraper

A device placed in the head of a cylinder for the purpose of excluding foreign matter from the inside of the cylinder.

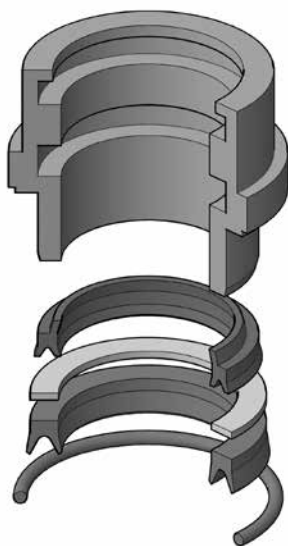
ATLAS

Kit Type		Page
Series A, L & 2LA	Rod Gland Kits	14 - 15
	Rod Seal Kits	16
	Rod Kits	17
	Piston Kits	18 - 19
	Head Seal Kits	20
Series H	Rod Seal Kits	21
	Piston Seal Kits	22 - 24
	Head Seal Kits	25
Bronze Rod Gland	Air Cylinders	26
Rod Kits	Hydraulic Cylinders	27
Piston Kits	Hydraulic & Pneumatic Cylinders	27
Repair Kits	By Part Number	28 - 30

ATLAS

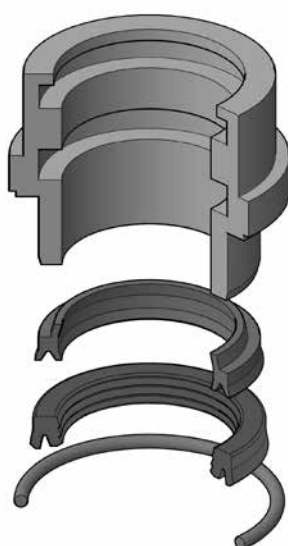
Series A & L Rod Gland Kits

Series A & L Cylinders Nitrile


Kit Includes:

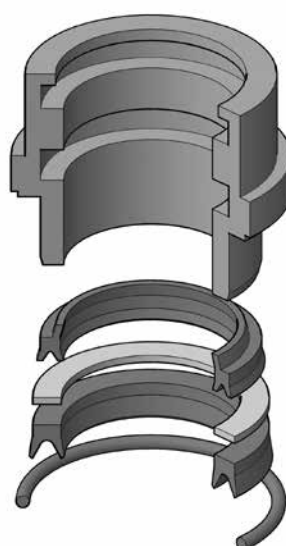
1 Bronze Gland
 1 XNBR Wiper
 1 PTFE Back-Up Ring
 1 NBR U-Seal
 1 NBR O-Ring

Series L Cylinders Urethane


Kit Includes:

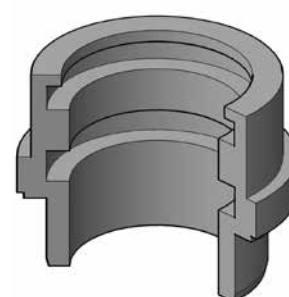
1 Bronze Gland
 1 XNBR Wiper
 1 Multi-lip Urethane U-Seal
 1 NBR O-Ring

Series A & L Cylinders Fluorocarbon


Kit Includes:

1 Bronze Gland
 1 FC Wiper
 1 PTFE Back-Up Ring
 1 FC U-Seal
 1 FC O-Ring

Series A & L Cylinders Bronze


Kit Includes:

1 Bronze Gland

Rod Dia.	(NBR) Kit #	List Price	(URE) Kit #	List Price	(FC) Kit #	List Price	(BZ) Kit #	List Price
5/8"	ATL-4A06R000S	\$90.92	ATL-EA06R000S	\$94.70	ATL-4A06R000V	\$120.72	ATL-RGAL-06	\$81.26
1"	ATL-4A10R000S	106.99	ATL-EA10R000S	105.91	ATL-4A10R000V	141.87	ATL-RGAL-10	91.27
1-3/8"	ATL-4A13R000S	128.16	ATL-EA13R000S	121.74	ATL-4A13R000V	146.42	ATL-RGAL-13	106.99
1-3/4"	ATL-4A17R000S	151.09	ATL-EA17R000S	143.75	ATL-4A17R000V	174.15	ATL-RGAL-17	124.93
2"	ATL-4A20R000S	177.25	ATL-EA20R000S	176.38	ATL-4A20R000V	203.81	ATL-RGAL-20	151.55
2-1/2"	ATL-4A25R000S	201.62	ATL-EA25R000S	198.21	ATL-4A25R000V	242.54	ATL-RGAL-25	171.11
3"	ATL-4A30R000S	249.02	ATL-EA30R000S	263.97	ATL-4A30R000V	293.65	ATL-RGAL-30	212.94

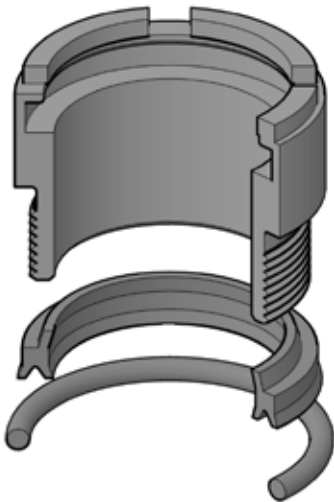
ATLAS

Series 2LA Rod Gland Kits

Nitrile

Series 2LA Air Cylinders

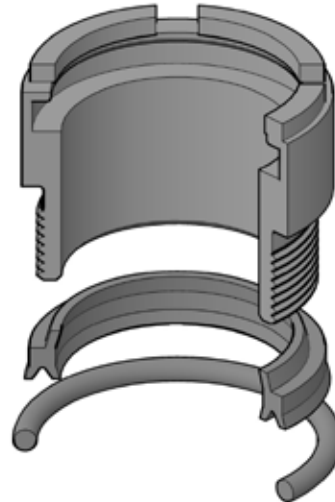
Fluorocarbon



1/2" - 1-3/4"

Kit Includes:

- 1 Bronze gland
- 1 XNBR Wiper/Seal
- 1 NBR O-Ring
- 1 Tube Seal Lubricant



1/2" - 1-3/4"

Kit Includes:

- 1 Bronze gland
- 1 FC Wiper/Seal
- 1 FC O-Ring
- 1 Tube Seal Lubricant

Rod Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1/2"	ATL-RG02MA0051	\$41.74	ATL-RG02MA0055	\$44.47
5/8"	ATL-RG02MA0061	27.57	ATL-RG02MA0065	44.03
1"	ATL-RG02MA0101	31.59	ATL-RG02MA0105	48.79
1-3/8"	ATL-RG02MA0131	47.18	ATL-RG02MA0135	70.53
1-3/4"	ATL-RG02MA0171	96.01	ATL-RG02MA0175	107.70

ATLAS

Series A & L Rod Seal Kits

Series A Cylinders Nitrile



Kit Includes:

- 1 XNBR Wiper
- 1 PTFE Back-up Ring
- 1 NBR U-Seal
- 1 NBR O-Ring

Series L Cylinders Urethane



Kit Includes:

- 1 XNBR Wiper
- 1 Multi-lip Urethane U-Seal
- 1 NBR O-Ring

Series A & L Cylinders Fluorocarbon



Kit Includes:

- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC U-Seal
- 1 FC O-Ring

Rod Dia.	(NBR) Kit #	List Price	(URE) Kit #	List Price	(FC) Kit #	List Price
5/8"	ATL-4A06S000S	\$10.36	ATL-EA06S000S	\$8.73	ATL-4A06S000V	\$28.78
3/4"	ATL-4A07S000S	13.96	—		ATL-4A07S000V	41.30
1"	ATL-4A10S000S	10.37	ATL-EA10S000S	9.40	ATL-4A10S000V	29.67
1-3/8"	ATL-4A13S000S	10.64	ATL-EA13S000S	10.02	ATL-4A13S000V	31.21
1-3/4"	ATL-4A17S000S	13.40	ATL-EA17S000S	11.73	ATL-4A17S000V	34.98
2"	ATL-4A20S000S	14.97	ATL-EA20S000S	15.12	ATL-4A20S000V	36.43
2-1/2"	ATL-4A25S000S	20.38	ATL-EA25S000S	17.28	ATL-4A25S000V	46.06
3"	ATL-4A30S000S	29.10	ATL-EA30S000S	35.03	ATL-4A30S000V	54.09
3-1/2"	ATL-4A35S000S	31.84	ATL-EA35S000S	50.72	ATL-4A35S000V	67.26
4"	ATL-4A40S000S	34.17	ATL-EA40S000S	56.52	ATL-4A40S000V	102.94
4-1/2"	ATL-4A45S000S	41.74	ATL-EA45S000S	62.85	ATL-4A45S000V	116.08
5"	ATL-4A50S000S	48.66	ATL-EA50S000S	68.18	ATL-4A50S000V	156.13

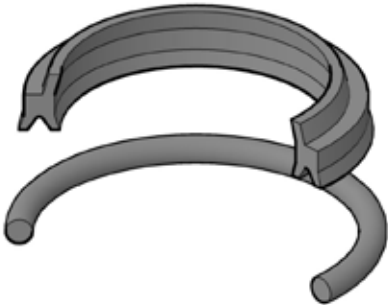
ATLAS

Series 2LA Rod Kits

Nitrile

Series 2LA Air Cylinders

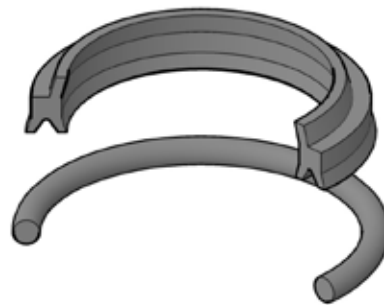
Fluorocarbon



1/2" - 1-3/4"

Kit Includes:

- 1 XNBR Wiper/Seal
- 1 NBR O-Ring
- 1 Tube Seal Lubricant



1/2" - 1-3/4"

Kit Includes:

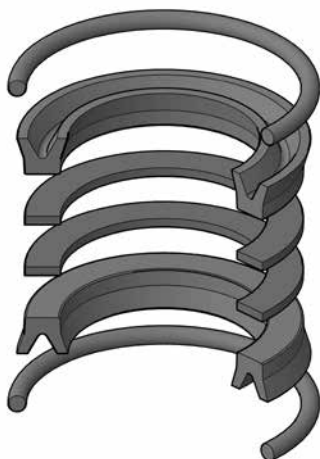
- 1 FC Wiper/Seal
- 1 FC O-Ring
- 1 Tube Seal Lubricant

Rod Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1/2"	ATL-RK02MA0051	\$13.47	ATL-RK02MA0055	\$20.13
5/8"	ATL-RK02MA0061	13.89	ATL-RK02MA0065	20.68
1"	ATL-RK02MA0101	14.24	ATL-RK02MA0105	21.36
1-3/8"	ATL-RK02MA0131	15.23	ATL-RK02MA0135	26.75
1-3/4"	ATL-RK02MA0171	16.28	ATL-RK02MA0175	33.64

ATLAS

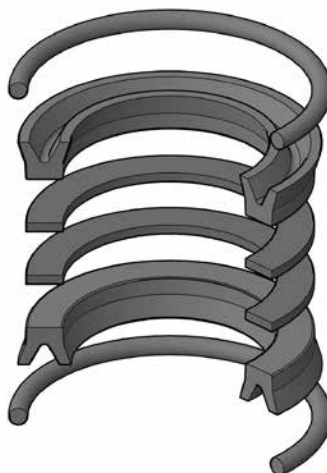
Series A & L Piston Kits

Series A Cylinders Nitrile


Kit Includes:

2 NBR U-Seals
2 HP URE Back-Up Rings
2 NBR O-Ring Head Seals

Series L Cylinders Nitrile


Kit Includes:

2 NBR U-Seals
2 HP URE Back-Up Rings
2 NBR O-Ring Head Seals

Series A & L Cylinders Fluorocarbon


Kit Includes:

2 FC U-Seals
2 HP URE Back-Up Rings
2 FC O-Ring head Seals

Bore Dia.	(NBR) Kit #	List Price	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	ATL-4B00S015S	\$8.35	ATL-EB00S015S	\$8.35	ATL-4B00S015V	\$38.36
2"	ATL-4B00S020S	9.95	ATL-EB00S020S	9.95	ATL-4B00S020V	43.85
2-1/2"	ATL-4B00S025S	11.40	ATL-EB00S025S	11.40	ATL-4B00S025V	60.75
3-1/4"	ATL-4B00S032S	13.84	ATL-EB00S032S	13.84	ATL-4B00S032V	65.23
4"	ATL-4B00S040S	17.63	ATL-EB00S040S	17.63	ATL-4B00S040V	77.36
5"	ATL-4B00S050S	21.34	ATL-EB00S050S	21.34	ATL-4B00S050V	95.95
6"	ATL-4B00S060S	27.73	ATL-EB00S060S	27.73	ATL-4B00S060V	131.95
7"	ATL-4B00S070S	77.32	ATL-4B00S070S	77.32	ATL-4B00S070V	238.58
8"	ATL-4B00S080S	87.71	ATL-EB00S080S	87.71	ATL-4B00S080V	287.64
10"	ATL-4B00S100S	124.86	ATL-4B00S100S	124.86	ATL-4B00S100V	398.61
12"	ATL-4B00S120S	168.97	ATL-4B00S120S	168.97	ATL-4B00S120V	618.70
14"	ATL-4B00S140S	261.62	ATL-4B00S140S	261.62	ATL-4B00S140V	912.07

HP URE - High Performance Urethane

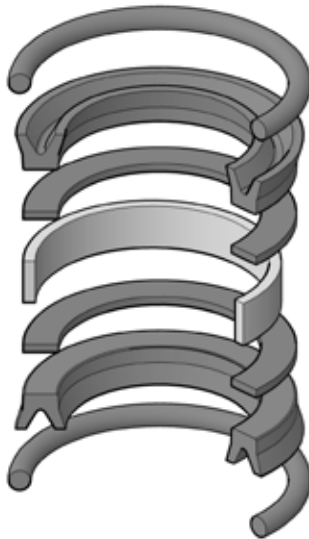
ATLAS

Series 2LA Piston Kits

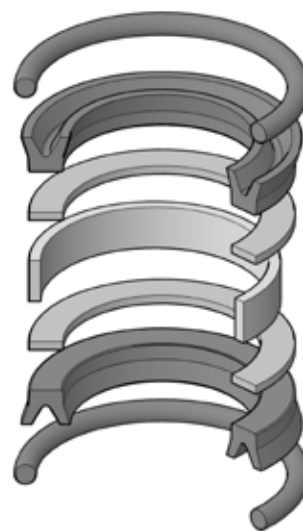
Nitrile

Series 2LA Air Cylinders

Fluorocarbon


Kit Includes:

2 NBR O-ring Head Seals
 2 NBR U-Seals
 2 URE Back-up Rings
 1 Nylon Wear Ring
 1 Tube Seal Lubricant


Kit Includes:

2 FC O-ring Head Seals
 2 FC U-Seals
 2 PTFE Back-up Rings
 1 Nylon Wear Ring
 1 Tube Seal Lubricant

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	ATL-PK1502MA01	\$25.11	ATL-PK1502MA05	\$48.92
2"	ATL-PK2002MA01	25.45	ATL-PK2002MA05	52.39
2-1/2"	ATL-PK2502MA01	27.29	ATL-PK2502MA05	69.54
3-1/4"	ATL-PK3202MA01	32.80	ATL-PK3202MA05	85.96
4"	ATL-PK4002MA01	40.22	ATL-PK4002MA05	97.38
5"	ATL-PK5002MA01	52.05	ATL-PK5002MA05	147.36
6"	ATL-PK6002MA01	69.59	ATL-PK6002MA05	208.72
8"	ATL-PK8002MA01	122.85	ATL-PK8002MA05	349.01

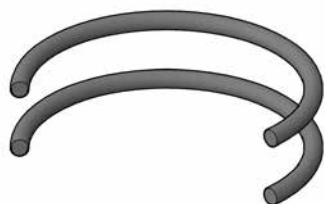
ATLAS

Series A & L Head Seal Kits

Nitrile

Series A & L Head Seal Kits

Fluorocarbon



Kit Includes:
2 NBR O-Ring Head Seals



Kit Includes:
2 FC O-Ring Head Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	ATL-4E00S015S	\$4.84	ATL-4E00S015V	\$6.96
2"	ATL-4E00S020S	5.14	ATL-4E00S020V	11.83
2-1/2"	ATL-4E00S025S	5.74	ATL-4E00S025V	15.50
3-1/4"	ATL-4E00S032S	5.81	ATL-4E00S032V	18.10
4"	ATL-4E00S040S	6.10	ATL-4E00S040V	23.31
5"	ATL-4E00S050S	7.13	ATL-4E00S050V	32.80
6"	ATL-4E00S060S	8.83	ATL-4E00S060V	34.60
7"	ATL-4E00S070S	8.95	ATL-4E00S070V	48.90
8"	ATL-4E00S080S	10.90	ATL-4E00S080V	49.06
10"	ATL-4E00S100S	12.64	ATL-4E00S100V	54.63
12"	ATL-4E00S120S	14.58	ATL-4E00S120V	65.88
14"	ATL-4E00S140S	73.75	ATL-4E00S140V	132.26

ATLAS

Series H Rod Seal Kits

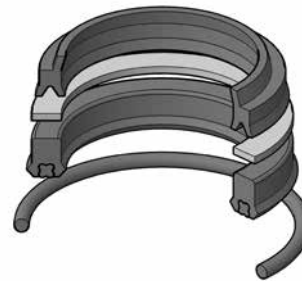
Nitrile

Series H Rod Seal Kits

Fluorocarbon


Kit Includes:

- 1 URE Wiper (For cyl. mfg. before April 2005)
- 1 XNBR Wiper (For cyl. mfg. April 2005 and after)
- 1 Multi-lip URE U-Seal
- 1 NBR O-Ring


Kit Includes:

- 1 FC Wiper (For cyl. mfg. April 2005 and after*)
- 1 PTFE Back-Up Rings
- 1 FC Loaded FC U-Seals
- 1 FC O-Ring

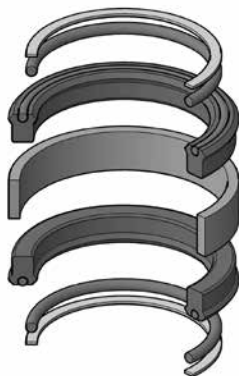
Rod Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
5/8"	ATL-PH06SH000	\$9.38	ATL-VH06SH000	\$28.65
1"	ATL-PH10SH000	10.13	ATL-VH10SH000	40.43
1-3/8"	ATL-PH13SH000	13.61	ATL-VH13SH000	42.17
1-3/4"	ATL-PH17SH000	13.74	ATL-VH17SH000	50.00
2"	ATL-PH20SH000	18.79	ATL-VH20SH000	57.26
2-1/2"	ATL-PH25SH000	23.43	ATL-VH25SH000	92.55
3"	ATL-PH30SH000	24.87	ATL-VH30SH000	106.64
3-1/2"	ATL-PH35SH000	48.11	ATL-VH35SH000	148.25

* Fluorocarbon Rod Seal Kits for cylinders manufactured before April 2005 use a bronze AN style wiper ring.

ATLAS

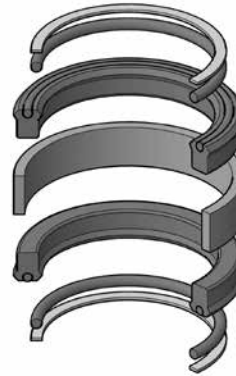
Series H (for cylinders manufactured before April 2005) Piston Seal Kits

Nitrile


Kit Includes:

- * See notes below
- 2 NBR Loaded URE U-Seals
- 1 Nylon Wear Ring
- 2 NBR O-Ring Head Seals
- 2 PTFE Back-up Rings

Fluorocarbon


Kit Includes:

- * See notes below
- 2 FC Loaded FC U-Seals
- 1 Nylon Wear Ring
- 2 FC O-Ring Head Seals
- 2 PTFE Back-Up Rings

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	ATL-1B00S015S	\$17.37	ATL-1B00S015V	\$52.64
2"	ATL-1B00S020S	20.24	ATL-1B00S020V	58.59
2-1/2"	ATL-1B00S025S	21.61	ATL-1B00S025V	62.19
3-1/4"	ATL-1B00S032S	33.28	ATL-1B00S032V	88.84
4"	ATL-1B00S040S	42.69	ATL-1B00S040V	128.02
5"	ATL-1B00S050S	89.71	ATL-1B00S050V	192.76
6"	ATL-1B00S060S	153.71	ATL-1B00S060V	261.64
7"	ATL-1B00S070S	200.84	ATL-1B00S070V	401.82
8"	ATL-1B00S080S	213.17	ATL-1B00S080V	421.90
10"	ATL-1B00S100S	278.67	ATL-1B00S100V	559.13
12"	ATL-1B00S120S	354.11	ATL-1B00S120V	686.61

* Kit contents are size dependant:
 1-1/2" thru 4" - U-Seals and O-Rings
 5" - U-Seals, O-Rings and Wear Rings
 6" - Same as 5, also includes 2 PTFE U-Seal Back-Up Rings
 7" thru 12" - contain all parts listed

ATLAS

(for cylinders manufactured April 2005 and after) **Series H**
Piston Seal Kits
(1-1/2" to 6" Bores)

Series H Piston Seal Kits

Nitrile



Kit Includes:

2 NBR O-Ring Head Seals
2 HP URE Back-up Rings
2 NBR U-Seals

Fluorocarbon



Kit Includes:

2 FC O-Ring Head Seals
2 PTFE Back-Up Rings
2 FC U-Seals

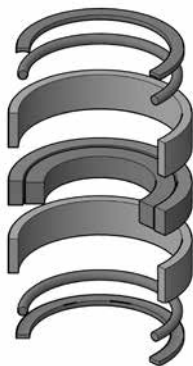
Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	ATL-PH00LH015	\$13.41	ATL-VH00LH015	\$47.17
2"	ATL-PH00LH020	14.18	ATL-VH00LH020	67.96
2-1/2"	ATL-PH00LH025	16.85	ATL-VH00LH025	78.26
3-1/4"	ATL-PH00LH032	30.82	ATL-VH00LH032	90.39
4"	ATL-PH00LH040	36.66	ATL-VH00LH040	206.71
5"	ATL-PH00LH050	53.87	ATL-VH00LH050	310.55
6"	ATL-PH00LH060	80.62	ATL-VH00LH060	365.14

HP URE - High Performance Urethane

ATLAS

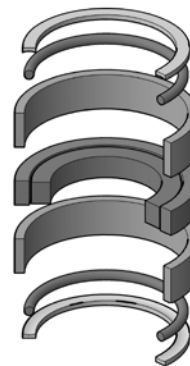
Series H (for cylinders manufactured April 2005 and after) Piston Seal Kits (7" & 8" Bores)

Nitrile


Kit Includes:

2 NBR Back-Up Rings
 2 NBR O-Ring Head Seals
 2 Nylon Wear Rings
 1 Bronze filled PTFE Piston Ring
 w/ 1 NBR Expander

Fluorocarbon


Kit Includes:

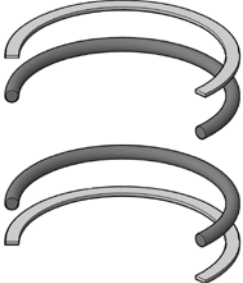
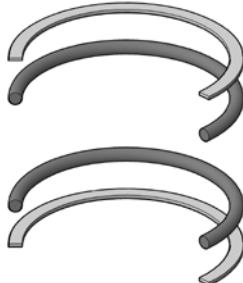
2 PTFE Back-Up Rings
 2 FC O-Ring Head Seals
 2 Nylon Wear Rings
 1 Bronze filled PTFE Piston Ring
 w/1 FC Expander

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
7"	ATL-PH00KH070	\$324.70	ATL-VH00KH070	\$328.45
8"	ATL-PH00KH080	394.66	ATL-VH00KH080	405.25

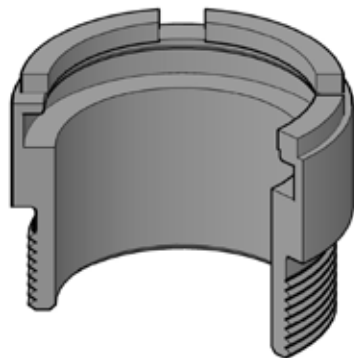
High load Piston Seal Kits are standard for 7" & 8" Bores

ATLAS

(for cylinders manufactured before April 2005) **Series H**
Head Seal Kits

Series H Head Seal Kits				
Nitrile		Fluorocarbon		
 Kit Includes: 2 NBR O-Ring Head Seals 2 PTFE Back-up Rings*		 Kit Includes: 2 FC O-Ring Head Seals 2 PTFE Back-up Rings*		
Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	ATL-1E00S015S	\$4.23	ATL-1E00S015V	\$6.29
2"	ATL-1E00S020S	5.43	ATL-1E00S020V	7.49
2-1/2"	ATL-1E00S025S	7.27	ATL-1E00S025V	8.99
3-1/4"	ATL-1E00S032S	13.58	ATL-1E00S032V	17.76
4"	ATL-1E00S040S	16.42	ATL-1E00S040V	19.21
5"	ATL-1E00S050S	19.69	ATL-1E00S050V	29.89
6"	ATL-1E00S060S	30.90	ATL-1E00S060V	32.27
7"	ATL-1E00S070S	65.46	ATL-1E00S070V	76.10
8"	ATL-1E00S080S	69.62	ATL-1E00S080V	88.81
10"	ATL-1E00S100S	126.59	ATL-1E00S100V	142.57
12"	ATL-1E00S120S	143.87	ATL-1E00S120V	164.12

* Back-up Rings in 7", 8", 10" and 12" kits only

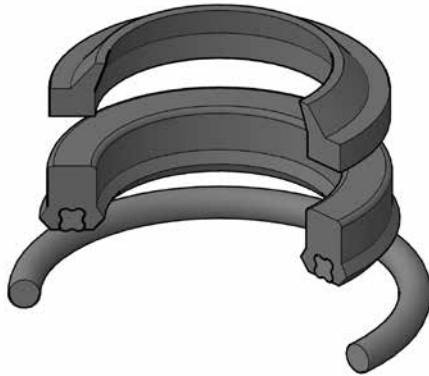
ATLAS**Bronze Rod Glands****Series 2LA Air Cylinders**

Rod Dia.	Kit #	List Price
1/2"	ATL-RG02MA-05	\$37.59
5/8"	ATL-RG02MA-06	27.70
1"	ATL-RG02MA-10	34.67
1-3/8"	ATL-RG02MA-13	50.12
1-3/4"	ATL-RG02MA-17	78.94

ATLAS

Rod Kits

Hydraulic Cylinders

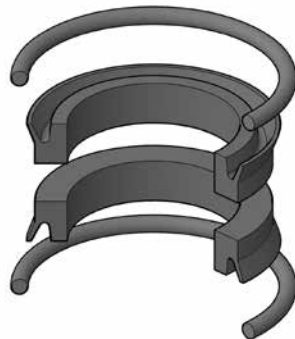

Kit Includes:

1 URE Wiper
1 URE Loaded U-seal
1 NBR O-ring

Rod Dia.	Kit #	List Price
5/8"	ATL-HRK62	\$8.99
1"	ATL-HRK100	10.77
1-3/8"	ATL-HRK137	12.49
1-3/8"	ATL-90030340-79	14.58
1-3/8"	ATL-90030370-79	11.95
1-3/4"	ATL-HRK175	13.81
1-3/4"	ATL-90030340-69	13.04
1-3/4"	ATL-90030370-69	12.93
2"	ATL-HRK200	14.80

Piston Kits

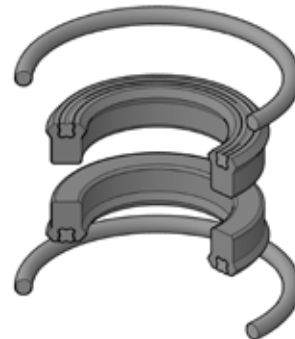
Pneumatic Cylinders


Kit Includes:

2 URE U-seals
2 NBR O-rings

Bore Dia.	Kit #	List Price
1-1/2"	—	
2"	ATL-APK20-000	\$13.60
2-1/2"	ATL-APK25-000	14.37
3-1/4"	—	
4"	ATL-APK40-000	39.54
5"	ATL-APK50-000	39.87
6"	ATL-APK60-000	47.00
8"	ATL-APK80-000	80.69
10"	ATL-APK100-000	157.10

Hydraulic Cylinders


Kit Includes:

2 URE Loaded U-seals
2 NBR O-rings

Kit #	List Price
ATL-HPK15-000	\$15.94
ATL-HPK20-000	17.87
ATL-HPK25-000	19.39
ATL-HPK35-000	29.06
ATL-HPK40-000	35.04
ATL-HPK50-000	43.54
ATL-HPK60-000	52.05
ATL-HPK80-000	105.90
—	

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ATLAS

Kit Number	Code	Rod Size	Bore Size	List Price	Kit Number	Code	Rod Size	Bore Size	List Price
ATL-1B00S015S	N-N-5		1-1/2	\$17.37	ATL-4A10R000S	I-U-1	1		\$106.99
ATL-1B00S015V	N-N-5		1-1/2	52.64	ATL-4A10R000V	I-U-1	1		141.87
ATL-1B00S020S	N-N-5		2	20.24	ATL-4A10S000S	I-U-1	1		10.37
ATL-1B00S020V	N-N-5		2	58.59	ATL-4A10S000V	I-U-1	1		29.67
ATL-1B00S025S	N-N-5		2-1/2	21.61	ATL-4A13R000S	I-U-1	1-3/8		128.16
ATL-1B00S025V	N-N-5		2-1/2	62.19	ATL-4A13R000V	I-U-1	1-3/8		146.42
ATL-1B00S032S	N-N-5		3-1/4	33.28	ATL-4A13S000S	I-U-1	1-3/8		10.64
ATL-1B00S032V	N-N-5		3-1/4	88.84	ATL-4A13S000V	I-U-1	1-3/8		31.21
ATL-1B00S040S	N-N-5		4	42.69	ATL-4A17R000S	I-U-1	1-3/4		151.09
ATL-1B00S040V	N-N-5		4	128.02	ATL-4A17R000V	I-U-1	1-3/4		174.15
ATL-1B00S050S	N-N-5		5	89.71	ATL-4A17S000S	I-U-1	1-3/4		13.40
ATL-1B00S050V	N-N-5		5	192.76	ATL-4A17S000V	I-U-1	1-3/4		34.98
ATL-1B00S060S	N-N-5		6	153.71	ATL-4A20R000S	I-U-1	2		177.25
ATL-1B00S060V	N-N-5		6	261.64	ATL-4A20R000V	I-U-1	2		203.81
ATL-1B00S070S	N-N-5		7	200.84	ATL-4A20S000S	I-U-1	2		14.97
ATL-1B00S070V	N-N-5		7	401.82	ATL-4A20S000V	I-U-1	2		36.43
ATL-1B00S080S	N-N-5		8	213.17	ATL-4A25R000S	I-U-1	2-1/2		201.62
ATL-1B00S080V	N-N-5		8	421.90	ATL-4A25R000V	I-U-1	2-1/2		242.54
ATL-1B00S100S	N-N-5		10	278.67	ATL-4A25S000S	I-U-1	2-1/2		20.38
ATL-1B00S100V	N-N-5		10	559.13	ATL-4A25S000V	I-U-1	2-1/2		46.06
ATL-1B00S120S	N-N-5		12	354.11	ATL-4A30R000S	I-U-1	3		249.02
ATL-1B00S120V	N-N-5		12	686.61	ATL-4A30R000V	I-U-1	3		293.65
ATL-1E00S015S	Head Seal Kit		1-1/2	4.23	ATL-4A30S000S	I-U-1	3		29.10
ATL-1E00S015V	Head Seal Kit		1-1/2	6.29	ATL-4A30S000V	I-U-1	3		54.09
ATL-1E00S020S	Head Seal Kit		2	5.43	ATL-4A35S000S	I-U-1	3-1/2		31.84
ATL-1E00S020V	Head Seal Kit		2	7.49	ATL-4A35S000V	I-U-1	3-1/2		67.26
ATL-1E00S025S	Head Seal Kit		2-1/2	7.27	ATL-4A40S000S	I-U-1	4		34.17
ATL-1E00S025V	Head Seal Kit		2-1/2	8.99	ATL-4A40S000V	I-U-1	4		102.94
ATL-1E00S032S	Head Seal Kit		3-1/4	13.58	ATL-4A45S000S	I-U-1	4-1/2		41.74
ATL-1E00S032V	Head Seal Kit		3-1/4	17.76	ATL-4A45S000V	I-U-1	4-1/2		116.08
ATL-1E00S040S	Head Seal Kit		4	16.42	ATL-4A50S000S	I-U-1	5		48.66
ATL-1E00S040V	Head Seal Kit		4	19.21	ATL-4A50S000V	I-U-1	5		156.13
ATL-1E00S050S	Head Seal Kit		5	19.69	ATL-4B00S015S	N-N-5		1-1/2	8.35
ATL-1E00S050V	Head Seal Kit		5	29.89	ATL-4B00S015V	N-N-5		1-1/2	38.36
ATL-1E00S060S	Head Seal Kit		6	30.90	ATL-4B00S020S	N-N-5		2	9.95
ATL-1E00S060V	Head Seal Kit		6	32.27	ATL-4B00S020V	N-N-5		2	43.85
ATL-1E00S070S	Head Seal Kit		7	65.46	ATL-4B00S025S	N-N-5		2-1/2	11.40
ATL-1E00S070V	Head Seal Kit		7	76.10	ATL-4B00S025V	N-N-5		2-1/2	60.75
ATL-1E00S080S	Head Seal Kit		8	69.62	ATL-4B00S032S	N-N-5		3-1/4	13.84
ATL-1E00S080V	Head Seal Kit		8	88.81	ATL-4B00S032V	N-N-5		3-1/4	65.23
ATL-1E00S100S	Head Seal Kit		10	126.59	ATL-4B00S040S	N-N-5		4	17.63
ATL-1E00S100V	Head Seal Kit		10	142.57	ATL-4B00S040V	N-N-5		4	77.36
ATL-1E00S120S	Head Seal Kit		12	143.87	ATL-4B00S050S	N-N-5		5	21.34
ATL-1E00S120V	Head Seal Kit		12	164.12	ATL-4B00S050V	N-N-5		5	95.95
ATL-4A06R000S	I-U-1	5/8		90.92	ATL-4B00S060S	N-N-5		6	27.73
ATL-4A06R000V	I-U-1	5/8		120.72	ATL-4B00S060V	N-N-5		6	131.95
ATL-4A06S000S	I-U-1	5/8		10.36	ATL-4B00S070S	N-N-5		7	77.32
ATL-4A06S000V	I-U-1	5/8		28.78	ATL-4B00S070V	N-N-5		7	238.58
ATL-4A07S000S	I-U-1	3/4		13.96	ATL-4B00S080S	N-N-5		8	87.71
ATL-4A07S000V	I-U-1	3/4		41.30	ATL-4B00S080V	N-N-5		8	287.64

ATLAS

Kit Number	Code	Rod Size	Bore Size	List Price	Kit Number	Code	Rod Size	Bore Size	List Price
ATL-4B00S100S	N-N-5		10	\$124.86	ATL-EA20S000S	I-U-1	2		\$15.12
ATL-4B00S100V	N-N-5		10	398.61	ATL-EA25R000S	I-U-1	2-1/2		198.21
ATL-4B00S120S	N-N-5		12	168.97	ATL-EA25S000S	I-U-1	2-1/2		17.28
ATL-4B00S120V	N-N-5		12	618.70	ATL-EA30R000S	I-U-1	3		263.97
ATL-4B00S140S	N-N-5		14	261.62	ATL-EA30S000S	I-U-1	3		35.03
ATL-4B00S140V	N-N-5		14	912.07	ATL-EA35S000S	I-U-1	3-1/2		50.72
ATL-4E00S015S	Head Seal Kit		1-1/2	4.84	ATL-EA40S000S	I-U-1	4		56.52
ATL-4E00S015V	Head Seal Kit		1-1/2	6.96	ATL-EA45S000S	I-U-1	4-1/2		62.85
ATL-4E00S020S	Head Seal Kit		2	5.14	ATL-EA50S000S	I-U-1	5		68.18
ATL-4E00S020V	Head Seal Kit		2	11.83	ATL-EB00S015S	N-N-5		1-1/2	8.35
ATL-4E00S025S	Head Seal Kit		2-1/2	5.74	ATL-EB00S020S	N-N-5		2	9.95
ATL-4E00S025V	Head Seal Kit		2-1/2	15.50	ATL-EB00S025S	N-N-5		2-1/2	11.40
ATL-4E00S032S	Head Seal Kit		3-1/4	5.81	ATL-EB00S032S	N-N-5		3-1/4	13.84
ATL-4E00S032V	Head Seal Kit		3-1/4	18.10	ATL-EB00S040S	N-N-5		4	17.63
ATL-4E00S040S	Head Seal Kit		4	6.10	ATL-EB00S050S	N-N-5		5	21.34
ATL-4E00S040V	Head Seal Kit		4	23.31	ATL-EB00S060S	N-N-5		6	27.73
ATL-4E00S050S	Head Seal Kit		5	7.13	ATL-4B00S070S	N-N-5		7	77.32
ATL-4E00S050V	Head Seal Kit		5	32.80	ATL-EB00S080S	N-N-5		8	87.71
ATL-4E00S060S	Head Seal Kit		6	8.83	ATL-HPK15-000	N-N-5		1-1/2	15.94
ATL-4E00S060V	Head Seal Kit		6	34.60	ATL-HPK20-000	N-N-5		2	17.87
ATL-4E00S070S	Head Seal Kit		7	8.95	ATL-HPK25-000	N-N-5		2-1/2	19.39
ATL-4E00S070V	Head Seal Kit		7	48.90	ATL-HPK35-000	N-N-5		3-1/4	29.06
ATL-4E00S080S	Head Seal Kit		8	10.90	ATL-HPK40-000	N-N-5		4	35.04
ATL-4E00S080V	Head Seal Kit		8	49.06	ATL-HPK50-000	N-N-5		5	43.54
ATL-4E00S100S	Head Seal Kit		10	12.64	ATL-HPK60-000	N-N-5		6	52.05
ATL-4E00S100V	Head Seal Kit		10	54.63	ATL-HPK80-000	N-N-5		8	105.90
ATL-4E00S120S	Head Seal Kit		12	14.58	ATL-HRK100	I-U-1	1		10.77
ATL-4E00S120V	Head Seal Kit		12	65.88	ATL-HRK137	I-U-1	1-3/8		12.49
ATL-4E00S140S	Head Seal Kit		14	73.75	ATL-HRK175	I-U-1	1-3/4		13.81
ATL-4E00S140V	Head Seal Kit		14	132.26	ATL-HRK200	I-U-1	2		14.80
ATL-90030340-69	I-U-1	1-3/4		13.04	ATL-HRK62	I-U-1	5/8		8.99
ATL-90030340-79	I-U-1	1-3/8		14.58	ATL-PH00KH070	N-N-1		7	324.70
ATL-90030370-69	I-U-1	1-3/4		12.93	ATL-PH00KH080	N-N-1		8	394.66
ATL-90030370-79	I-U-1	1-3/8		11.95	ATL-PH00LH015	N-N-5		1-1/2	13.41
ATL-APK100-000	N-N-5		10	157.10	ATL-PH00LH020	N-N-5		2	14.18
ATL-APK20-000	N-N-5		2	13.60	ATL-PH00LH025	N-N-5		2-1/2	16.85
ATL-APK25-000	N-N-5		2-1/2	14.37	ATL-PH00LH032	N-N-5		3-1/4	30.82
ATL-APK40-000	N-N-5		4	39.54	ATL-PH00LH040	N-N-5		4	36.66
ATL-APK50-000	N-N-5		5	39.87	ATL-PH00LH050	N-N-5		5	53.87
ATL-APK60-000	N-N-5		6	47.00	ATL-PH00LH060	N-N-5		6	80.62
ATL-APK80-000	N-N-5		8	80.69	ATL-PH06SH000	I-U-1	5/8		9.38
ATL-EA06R000S	I-U-1	5/8		94.70	ATL-PH10SH000	I-U-1	1		10.13
ATL-EA06S000S	I-U-1	5/8		8.73	ATL-PH13SH000	I-U-1	1-3/8		13.61
ATL-EA10R000S	I-U-1	1		105.91	ATL-PH17SH000	I-U-1	1-3/4		13.74
ATL-EA10S000S	I-U-1	1		9.40	ATL-PH20SH000	I-U-1	2		18.79
ATL-EA13R000S	I-U-1	1-3/8		121.74	ATL-PH25SH000	I-U-1	2-1/2		23.43
ATL-EA13S000S	I-U-1	1-3/8		10.02	ATL-PH30SH000	I-U-1	3		24.87
ATL-EA17R000S	I-U-1	1-3/4		143.75	ATL-PH35SH000	I-U-1	3-1/2		48.11
ATL-EA17S000S	I-U-1	1-3/4		11.73	ATL-PK1502MA01	N-N-5		1-1/2	25.11
ATL-EA20R000S	I-U-1	2		176.38	ATL-PK1502MA05	N-N-5		1-1/2	48.92

ATLAS

ATLAS

ATLAS

Kit Number	Code	Rod Size	Bore Size	List Price	Kit Number	Code	Rod Size	Bore Size	List Price
ATL-PK2002MA01	N-N-5		2	\$25.45	ATL-RG02MA-06	Bronze Rod Gland	5/8		\$27.70
ATL-PK2002MA05	N-N-5		2	52.39	ATL-RG02MA-10	Bronze Rod Gland	1		34.67
ATL-PK2502MA01	N-N-5		2-1/2	27.29	ATL-RG02MA-13	Bronze Rod Gland	1-3/8		50.12
ATL-PK2502MA05	N-N-5		2-1/2	69.54	ATL-RG02MA-17	Bronze Rod Gland	1-3/4		78.94
ATL-PK3202MA01	N-N-5		3-1/4	32.80	ATL-RK02MA0051	I-SP-1	1/2		13.47
ATL-PK3202MA05	N-N-5		3-1/4	85.96	ATL-RK02MA0055	I-SP-1	1/2		20.13
ATL-PK4002MA01	N-N-5		4	40.22	ATL-RK02MA0061	I-SP-1	5/8		13.89
ATL-PK4002MA05	N-N-5		4	97.38	ATL-RK02MA0065	I-SP-1	5/8		20.68
ATL-PK5002MA01	N-N-5		5	52.05	ATL-RK02MA0101	I-SP-1	1		14.24
ATL-PK5002MA05	N-N-5		5	147.36	ATL-RK02MA0105	I-SP-1	1		21.36
ATL-PK6002MA01	N-N-5		6	69.59	ATL-RK02MA0131	I-SP-1	1-3/8		15.23
ATL-PK6002MA05	N-N-5		6	208.72	ATL-RK02MA0135	I-SP-1	1-3/8		26.75
ATL-PK8002MA01	N-N-5		8	122.85	ATL-RK02MA0171	I-SP-1	1-3/4		16.28
ATL-PK8002MA05	N-N-5		8	349.01	ATL-RK02MA0175	I-SP-1	1-3/4		33.64
ATL-RGAL-06	Bronze Rod Gland	5/8		81.26	ATL-VH00KH070	N-N-1		7	328.45
ATL-RGAL-10	Bronze Rod Gland	1		91.27	ATL-VH00KH080	N-N-1		8	405.25
ATL-RGAL-13	Bronze Rod Gland	1-3/8		106.99	ATL-VH00LH015	N-N-5		1-1/2	47.17
ATL-RGAL-17	Bronze Rod Gland	1-3/4		124.93	ATL-VH00LH020	N-N-5		2	67.96
ATL-RGAL-20	Bronze Rod Gland	2		151.55	ATL-VH00LH025	N-N-5		2-1/2	78.26
ATL-RGAL-25	Bronze Rod Gland	2-1/2		171.11	ATL-VH00LH032	N-N-5		3-1/4	90.39
ATL-RGAL-30	Bronze Rod Gland	3		212.94	ATL-VH00LH040	N-N-5		4	206.71
ATL-RG02MA0051	I-SP-1	1/2		41.74	ATL-VH00LH050	N-N-5		5	310.55
ATL-RG02MA0055	I-SP-1	1/2		44.47	ATL-VH00LH060	N-N-5		6	365.14
ATL-RG02MA0061	I-SP-1	5/8		27.57	ATL-VH06SH000	I-U-1	5/8		28.65
ATL-RG02MA0065	I-SP-1	5/8		44.03	ATL-VH10SH000	I-U-1	1		40.43
ATL-RG02MA0101	I-SP-1	1		31.59	ATL-VH13SH000	I-U-1	1-3/8		42.17
ATL-RG02MA0105	I-SP-1	1		48.79	ATL-VH17SH000	I-U-1	1-3/4		50.00
ATL-RG02MA0131	I-SP-1	1-3/8		47.18	ATL-VH20SH000	I-U-1	2		57.26
ATL-RG02MA0135	I-SP-1	1-3/8		70.53	ATL-VH25SH000	I-U-1	2-1/2		92.55
ATL-RG02MA0171	I-SP-1	1-3/4		96.01	ATL-VH30SH000	I-U-1	3		106.64
ATL-RG02MA0175	I-SP-1	1-3/4		107.70	ATL-VH35SH000	I-U-1	3-1/2		148.25
ATL-RG02MA-05	Bronze Rod Gland	1/2		37.59					

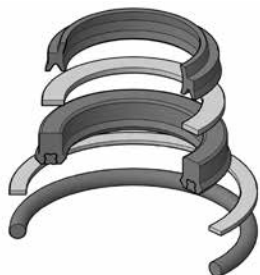
HYDRO-LINE

Kit Type		Page
A5 Series	Rod Kits	32
	Piston Kits	33
	Tube End Seals	33
E2 Series	Rod Kits	34
	Piston Kits	34
	Tube End Seals	34
N2 Series	Rod Kits	35
	Piston Kits	36
	Tube End Seals	37
N5 Series	Rod Kits	38 - 39
	Piston Kits	40
	Tube End Seals	40
R2 Series	Rod Kits	41
	Piston Kits	42
	Tube End Seals	43
R5 Series	Rod Kits	44 - 45
	Piston Kits	46
	Tube End Seals	47
Universal Kits	Rod Kits	48
	Gland Kits	49 - 50
	Captive Cushion Adjustment Seal	51
	Piston Kits	52
Repair Kits	By Part Number	53 - 60

HYDRO-LINE

A5 Series Rod Kits

HYDRO-LINE®

A5 Cylinders				HA5 Cylinders				
Nitrile		Fluorocarbon		Urethane		Fluorocarbon		
								
Kit Includes: 1 XNBR Wiper 1 URE Back-up Ring 1 NBR U-seal 1 PTFE Back-up Ring 1 NBR O-ring		Kit Includes: 1 FC Wiper 1 PTFE Back-up Ring 1 FC U-seal 1 PTFE Back-up Ring 1 FC O-ring		Kit Includes: 1 XNBR Wiper 1 URE U-seal 1 PTFE Back-up Ring 1 NBR O-ring		Kit Includes: 1 FC Wiper 1 PTFE Back-up Ring 1 FC Loaded U-seal 1 PTFE Back-up Ring 1 FC O-ring		
Rod Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price	(URE) Kit #	List Price	(FC) Kit #	List Price
5/8"	HSKN5-660-05	\$10.24	HSKN5-660-05V	\$36.75	HSKN5-681-05	\$17.24	HSKN5-660-P-05V	\$61.82
1"	HSKN5-660-08	10.40	HSKN5-660-08V	38.61	HSKN5-681-08	18.91	HSKN5-660-P-08V	70.18
1-3/8"	HSKN5-660-11	13.05	HSKN5-660-11V	50.46	HSKN5-681-11	21.08	HSKN5-660-P-11V	85.99

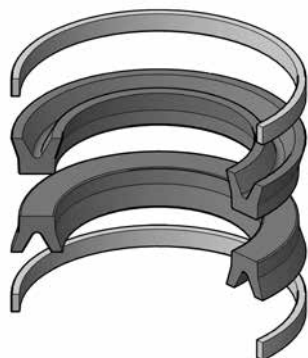
HYDRO-LINE

A5 Series Piston Kits

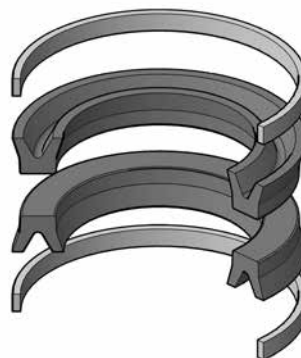
Nitrile

A5 Cylinders

Fluorocarbon



Kit Includes:
 2 NBR U-seals
 2 PTFE Tube End Seals



Kit Includes:
 2 FC U-seals
 2 PTFE Tube End Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	HSKA5-512-03	\$26.94	HSKA5-512-03V	\$54.49
2"	HSKA5-512-04	28.70	HSKA5-512-04V	56.46
2-1/2"	HSKA5-512-05	30.91	HSKA5-512-05V	66.58
3-1/4"	HSKA5-512-065	33.34	HSKA5-512-065V	75.08
4"	HSKA5-512-08	38.82	HSKA5-512-08V	81.61
5"	HSKA5-512-10	48.50	HSKA5-512-10V	95.71
6"	HSKA5-512-12	57.11	HSKA5-512-12V	156.62

Tube End Seals

A5 Cylinders PTFE

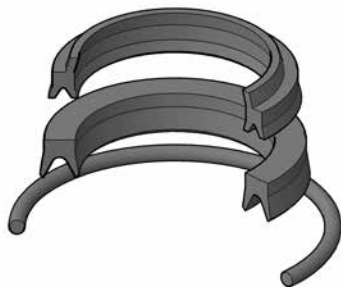
Bore Dia.	Part #	List Price
1-1/2"	HS-C221-03	\$8.89
2"	HS-C221-04	9.68
2-1/2"	HS-C221-05	10.68
3-1/4"	HS-C221-065	11.52
4"	HS-C221-08	13.01
5"	HS-C221-10	17.60
6"	HS-C221-12	22.65



HYDRO-LINE

E2 Series Rod Kits

E2 Cylinders Nitrile



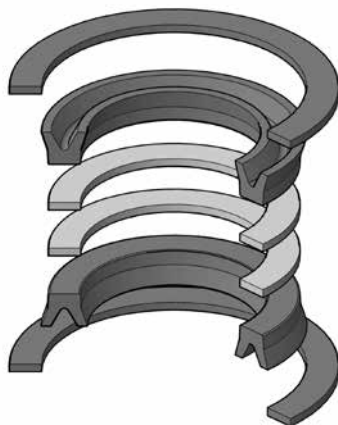
Rod Dia.	(NBR) Kit #	List Price
5/8"	HSKE2-660-05	\$4.54
1"	HSKE2-660-08	5.05
1-3/8"	HSKE2-660-11	5.62

Kit Includes:

- 1 XNBR Wiper
- 1 NBR U-seal
- 1 NBR O-ring

Piston Kits

E2 Cylinders Nitrile



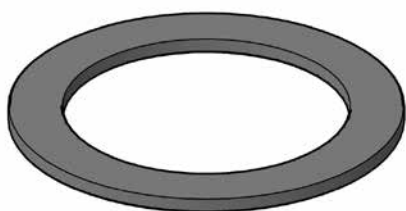
Bore Dia.	(NBR) Kit #	List Price
2"	HSKE2-512-04	\$27.33
3-1/4"	HSKE2-512-065	26.27
4"	HSKE2-512-08	45.83

Kit Includes:

- 2 NBR U-seals
- 2 PTFE Back-up Rings (found in 2" & 4" Bore Kits Only)
- 2 Fiber Gaskets

Tube End Seals

E2 Cylinders Fiber



Bore Dia.	Part #	List Price
1-1/2"	HS-E304-03	\$2.58
2"	HS-E304-04	2.70
3-1/4"	HS-E304-065	3.01
4"	HS-E304-08	3.40

HYDRO-LINE

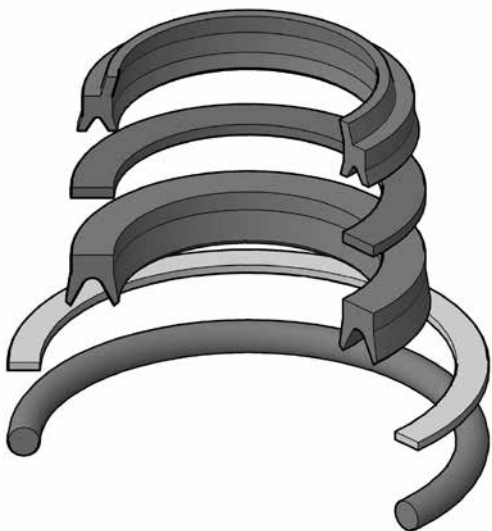
N2 Series Rod Kits

 HYDRO-LINE[®]

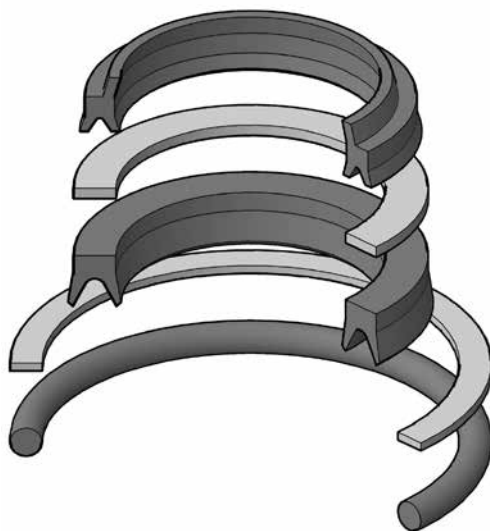
Nitrile

N2 Cylinders

Fluorocarbon


Kit Includes:

- 1 XNBR Wiper
- 1 URE Back-up Ring
- 1 NBR U-seal
- 1 PTFE Back-up Ring
- 1 NBR O-ring


Kit Includes:

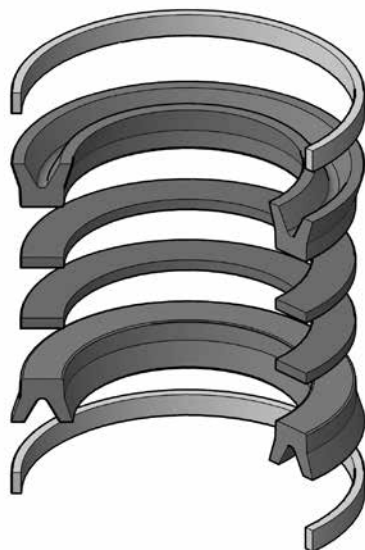
- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC U-seal
- 1 PTFE Back-up Ring
- 1 FC O-ring

Rod Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
5/8"	HSKN2-661-05	\$10.27	HSKN2-661-05V	\$38.03
1"	HSKN2-661-08	10.20	HSKN2-661-08V	40.37
1-3/8"	HSKN2-661-11	12.44	HSKN2-661-11V	44.98
1-3/4"	HSKN2-661-14	14.62	HSKN2-661-14V	52.74
2"	HSKN2-661-16	16.18	HSKN2-661-16V	55.69
2-1/2"	HSKN2-661-20	24.28	HSKN2-661-20V	62.15
3"	HSKN5-660-24	21.08	HSKN5-660-24V	82.05
3-1/2"	HSKN5-660-28	23.12	HSKN5-660-28V	95.86
4"	HSKN5-660-32	29.02	HSKN5-660-32V	100.18
4-1/2"	HSKN5-660-36	31.25	HSKN5-660-36V	105.75
5"	HSKN5-660-40	46.27	HSKN5-660-40V	127.12
5-1/2"	HSKN5-660-44	63.08	HSKN5-660-44V	143.56

HYDRO-LINE

N2 Series Piston Kits

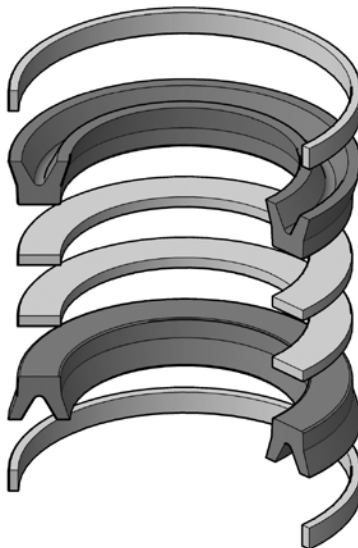
Nitrile



Kit Includes:

2 NBR U-seals
2 URE Back-up Rings
2 PTFE Tube End Seals

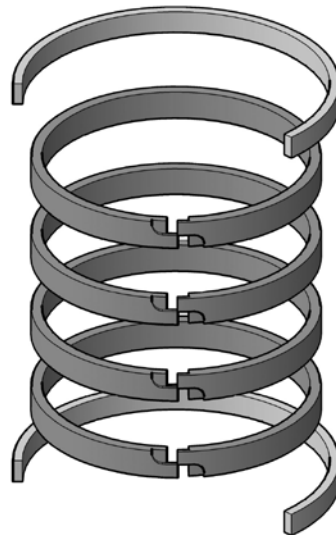
N2 Cylinders Fluorocarbon



Kit Includes:

2 FC U-seals
2 PTFE Back-up Rings
2 PTFE Tube End Seals

Piston Ring



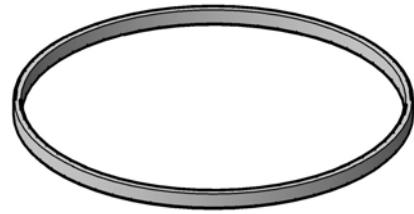
Kit Includes:

4 Cast-Iron Piston Rings
2 PTFE Tube End Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price	(PR) Kit #	List Price
1-1/2"	HSKN2-512-03	\$34.38	HSKN2-512-03V	\$66.92	HSKN2-511-03	\$85.36
2"	HSKN2-512-04	41.67	HSKN2-512-04V	87.86	HSKN2-511-04	97.32
2-1/2"	HSKN2-512-05	44.98	HSKN2-512-05V	93.40	HSKN2-511-05	98.89
3-1/4"	HSKN2-512-065	43.23	HSKN2-512-065V	106.16	HSKN2-511-065	104.39
4"	HSKN2-512-08	51.94	HSKN2-512-08V	125.57	HSKN2-511-08	117.52
5"	HSKN2-512-10	66.73	HSKN2-512-10V	139.06	HSKN2-511-10	143.01
6"	HSKN2-512-12	74.99	HSKN2-512-12V	184.74	HSKN2-511-12	151.03
7"	HSKN2-512-14	114.50	HSKN2-512-14V	272.13	HSKN2-511-14	169.17
8"	HSKN2-512-16	145.01	HSKN2-512-16V	300.61	HSKN2-511-16	207.99
10"	HSKN2-512-20	163.07	HSKN2-512-20V	559.23	HSKN2-511-20	434.37
12"	HSKN2-512-24	256.32	HSKN2-512-24V	829.16	HSKN2-511-24	587.58

HYDRO-LINE**N2 Series
Tube End Seals****N2 Cylinders
PTFE**

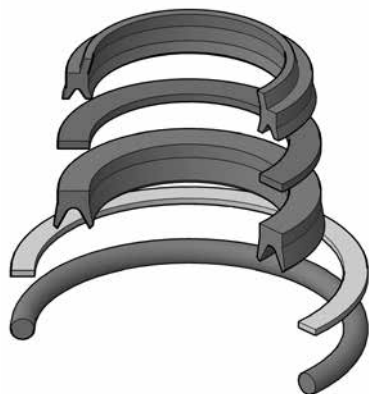
Bore Dia.	Part #	List Price
1-1/2"	HS-C124-03	\$10.93
2"	HS-C124-04	13.28
2-1/2"	HS-C124-05	15.38
3-1/4"	HS-C124-065	19.45
4"	HS-C124-08	20.91
5"	HS-C124-10	23.01
6"	HS-C124-12	23.76
7" & UP	HS-C124-STRIP (sold by the foot)	15.99

**HYDRO-LINE[®]**

HYDRO-LINE

N5 Series Rod Kits

N5 & AN5 Cylinders Nitrile



Kit Includes:

- 1 XNBR Wiper
- 1 URE Back-up Ring
- 1 NBR U-seal
- 1 PTFE Back-up Ring
- 1 NBR O-ring

Rod Dia.	(NBR) Kit #	List Price
5/8"	HSKN5-660-05	\$10.24
1"	HSKN5-660-08	10.40
1-3/8"	HSKN5-660-11	13.05
1-3/4"	HSKN5-660-14	16.45
2"	HSKN5-660-16	18.43
2-1/2"	HSKN5-660-20	20.27
3"	HSKN5-660-24	21.08
3-1/2"	HSKN5-660-28	23.12
4"	HSKN5-660-32	29.02
4-1/2"	HSKN5-660-36	31.25
5"	HSKN5-660-40	46.27
5-1/2"	HSKN5-660-44	63.08

Rod Kits

N5 Cylinders Fluorocarbon



Kit Includes:

- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC U-seal
- 1 PTFE Back-up Ring
- 1 FC O-ring

Rod Dia.	(FC) Kit #	List Price
5/8"	HSKN5-660-05V	\$36.75
1"	HSKN5-660-08V	38.61
1-3/8"	HSKN5-660-11V	50.46
1-3/4"	HSKN5-660-14V	52.33
2"	HSKN5-660-16V	55.76
2-1/2"	HSKN5-660-20V	62.92
3"	HSKN5-660-24V	82.05
3-1/2"	HSKN5-660-28V	95.86
4"	HSKN5-660-32V	100.18
4-1/2"	HSKN5-660-36V	105.75
5"	HSKN5-660-40V	127.12
5-1/2"	HSKN5-660-44V	143.56

HYDRO-LINE

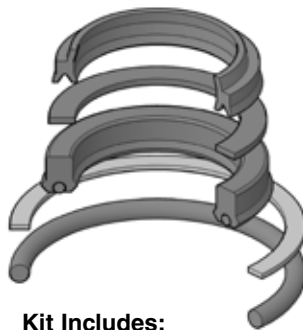
N5 Series Rod Kits

Urethane


Kit Includes:

- 1 XNBR Wiper
- 1 URE U-seal
- 1 PTFE Back-up Ring
- 1 NBR O-ring

N5 Cylinders Urethane


Kit Includes:

- 1 XNBR Wiper
- 1 Urethane Back-up Ring
- 1 Urethane Loaded U-seal
- 1 PTFE Back-up Ring
- 1 NBR O-ring

Fluorocarbon


Kit Includes:

- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC Loaded U-seal
- 1 PTFE Back-up Ring
- 1 FC O-ring

Rod Dia.	(URE) Kit #	List Price	(URE) Kit #	List Price	(FC) Kit #	List Price
1/2"	—		HSKN5-660-P-04	\$14.50	—	
5/8"	HSKN5-681-05	\$17.24	—		HSKN5-660-P-05V	\$61.82
1"	HSKN5-681-08	18.91	HSKN5-660-P-08	16.11	HSKN5-660-P-08V	70.18
1-3/8"	HSKN5-681-11	21.08	—		HSKN5-660-P-11V	85.99
1-3/4"	HSKN5-681-14	22.55	HSKN5-660-P-14	20.00	HSKN5-660-P-14V	94.75
2"	HSKN5-681-16	29.36	—		HSKN5-660-P-16V	98.68
2-1/2"	HSKN5-681-20	41.34	HSKN5-660-P-20	30.09	HSKN5-660-P-20V	143.89
3"	HSKN5-681-24	45.07	—		HSKN5-660-P-24V	165.72
3-1/2"	HSKN5-681-28	49.36	HSKN5-660-P-28	37.01	HSKN5-660-P-28V	185.03
4"	HSKN5-681-32	57.88	—		HSKN5-660-P-32V	223.47
4-1/2"	HSKN5-681-36	76.04	—		HSKN5-660-P-36V	239.68
5"	HSKN5-681-40	79.65	—		HSKN5-660-P-40V	245.70
5-1/2"	HSKN5-681-44	94.78	—		HSKN5-660-P-44V	251.20

HYDRO-LINE

N5 Series Piston Kits

HYDRO-LINE®

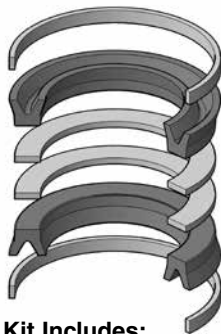
N5 Cylinders

Nitrile



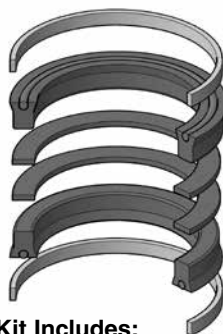
Kit Includes:
 2 NBR U-seals
 2 URE Back-up Rings
 2 PTFE Tube End Seals

Fluorocarbon



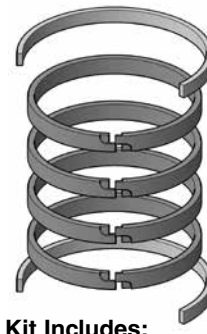
Kit Includes:
 2 FC U-seals
 2 PTFE Back-up Rings
 2 PTFE Tube End Seals

Urethane



Kit Includes:
 2 Urethane U-seals
 2 URE Back-up Rings
 2 PTFE Tube End Seals

Piston Ring

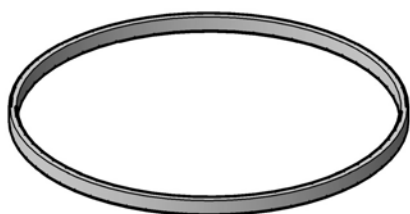


Kit Includes:
 4 Cast-Iron Piston Rings
 2 PTFE Tube End Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price	(URE) Kit #	List Price	(PR) Kit #	List Price
1-1/2"	HSKN5-512-03	\$26.72	HSKN5-512-03V	\$66.36	—		HSKN5-511-03	\$84.80
2"	HSKN5-512-04	36.75	HSKN5-512-04V	91.84	—		HSKN5-511-04	92.43
2-1/2"	HSKN5-512-05	39.32	HSKN5-512-05V	93.40	HSKN5-512-P-05	\$44.77	HSKN5-511-05	93.18
3-1/4"	HSKN5-512-065	43.23	HSKN5-512-065V	97.55	—		HSKN5-511-065	96.04
4"	HSKN5-512-08	51.82	HSKN5-512-08V	126.26	—		HSKN5-511-08	110.05
5"	HSKN5-512-10	63.19	HSKN5-512-10V	148.26	—		HSKN5-511-10	133.97
6"	HSKN5-512-12	65.75	HSKN5-512-12V	175.53	—		HSKN5-511-12	151.03
7"	HSKN5-512-14	124.36	HSKN5-512-14V	250.51	—		HSKN5-511-14	178.48
8"	HSKN5-512-16	174.46	HSKN5-512-16V	282.07	HSKN5-512-P-16	224.16	HSKN5-511-16	226.49
10"	HSKN2-512-20	163.07	HSKN2-512-20V	559.23	—		HSKN2-511-20	434.37
12"	HSKN2-512-24	256.32	HSKN2-512-24V	829.16	—		HSKN2-511-24	587.58

Tube End Seals

N5 Cylinders PTFE

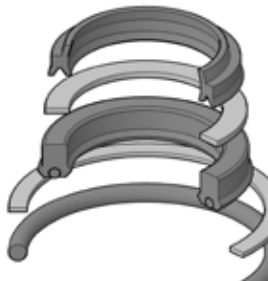


Bore Dia.	Part #	List Price
1-1/2"	HS-C255-03	\$11.73
2"	HS-C255-04	13.56
2-1/2"	HS-C255-05	14.31
3-1/4"	HS-C255-065	14.74
4"	HS-C255-08	16.73
5"	HS-C255-10	17.81
6"	HS-C255-12	18.58
7"	HS-C255-14	19.45
8"	HS-C255-16	22.64
10" & UP	HS-C124-STRIP (sold by the foot)	15.99

HYDRO-LINE

R2 Series Rod Kits

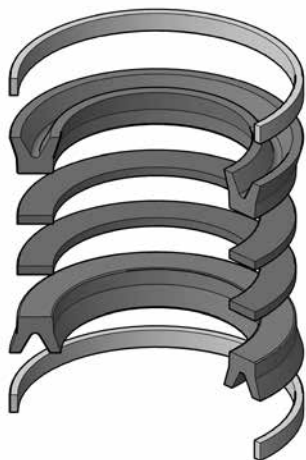
HYDRO-LINE®

R2 & LR2 Cylinders									
		Nitrile	Fluorocarbon	Urethane	Fluorocarbon				
									
		Kit Includes: 1 XNBR Wiper 1 URE Back-up Ring 1 NBR U-seal 1 PTFE Back-up Ring 1 NBR O-ring	Kit Includes: 1 FC Wiper 1 PTFE Back-up Ring 1 FC U-seal 1 PTFE Back-up Ring 1 FC O-ring	Kit Includes: 1 XNBR Wiper 1 URE U-seal 1 PTFE Back-up Ring 1 NBR O-ring	Kit Includes: 1 FC Wiper 1 PTFE Back-up Ring 1 FC Loaded U-seal 1 PTFE Back-up Ring 1 FC O-ring				
Rod Dia.	Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price	(URE) Kit #	List Price	(FC) Kit #	List Price
5/8"	1"	HSKR2-662-05A	\$9.00	HSKR2-662-05AV	\$37.95	HSKR2-681-05A	\$15.06	HSKR2-662-P-05AV	\$58.54
5/8"	1.5" & UP	HSKN2-661-05	10.27	HSKN2-661-05V	38.03	—	—	—	—
1"	1.5", 2, 2.5"	HSKR2-662-08	9.81	HSKR2-662-08V	38.72	HSKR2-681-08	18.69	HSKR2-662-P-08V	70.76
1"	3.25" & UP	HSKN2-661-08	10.20	HSKN2-661-08V	40.37	—	—	—	—
1-3/8"	2", 2.5"	HSKR2-662-11	11.95	HSKR2-662-11V	49.90	HSKR2-681-11	18.91	HSKR2-662-P-11V	84.93
1-3/8"	3.25" & UP	HSKN2-661-11	12.44	HSKN2-661-11V	44.98	—	—	—	—
1-3/4"	2.5"	HSKR2-662-14	14.69	HSKR2-662-14V	51.27	HSKR2-681-14	19.75	HSKR2-662-P-14V	95.11
1-3/4"	3.25" & UP	HSKN2-661-14	14.62	HSKN2-661-14V	52.74	—	—	—	—
2"	ALL	HSKN2-661-16	16.18	HSKN2-661-16V	55.69	—	—	—	—
2-1/2"	ALL	HSKN2-661-20	24.28	HSKN2-661-20V	62.15	—	—	—	—
3"	ALL	HSKN5-660-24	21.08	HSKN5-660-24V	82.05	—	—	—	—
3-1/2"	ALL	HSKN5-660-28	23.12	HSKN5-660-28V	95.86	—	—	—	—
4"	ALL	HSKN5-660-32	29.02	HSKN5-660-32V	100.18	—	—	—	—
4-1/2"	ALL	HSKN5-660-36	31.25	HSKN5-660-36V	105.75	—	—	—	—
5"	ALL	HSKN5-660-40	46.27	HSKN5-660-40V	127.12	—	—	—	—
5-1/2"	ALL	HSKN5-660-44	63.08	HSKN5-660-44V	143.56	—	—	—	—

HYDRO-LINE

R2 Series Piston Kits

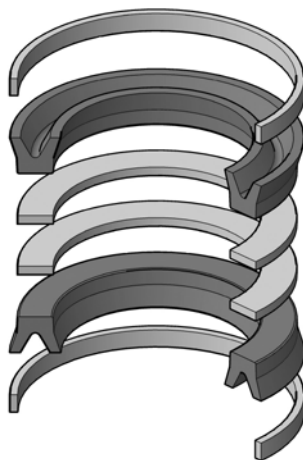
Nitrile



Kit Includes:

2 NBR U-seals
 2 URE Back-up Rings
 2 PTFE Tube End Seals

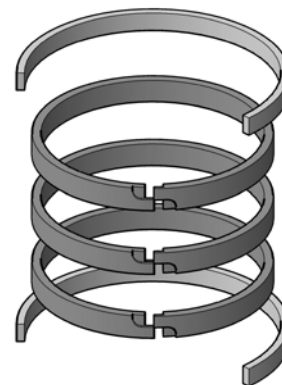
R2 & LR2 Cylinders Fluorocarbon



Kit Includes:

2 FC U-seals
 2 PTFE Back-up Rings
 2 PTFE Tube End Seals

Piston Ring



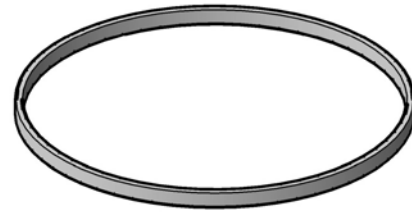
Kit Includes:

3 Cast-Iron Piston Rings
 2 PTFE Tube End Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price	(PR) Kit #	List Price
1"	HSKR5-512-02	\$27.57	HSKR5-512-02V	\$58.87	HSKR5-511-02	\$91.87
1-1/2"	HSKR5-512-03	29.12	HSKR5-512-03V	61.63	HSKR5-511-03	61.63
2"	HSKR5-512-04	31.87	HSKR5-512-04V	86.95	HSKR5-511-04	63.47
2-1/2"	HSKR5-512-05	34.81	HSKR5-512-05V	88.88	HSKR5-511-05	64.51
3-1/4"	HSKR5-512-065	38.61	HSKR5-512-065V	93.01	HSKR5-511-065	74.68
4"	HSKR5-512-08	45.28	HSKR5-512-08V	119.57	HSKR5-511-08	84.18
5"	HSKR5-512-10	57.35	HSKR5-512-10V	133.18	HSKR5-511-10	108.87
6"	HSKR5-512-12	64.00	HSKR5-512-12V	173.79	HSKR5-511-12	120.65
8"	HSKR5-512-16	166.49	HSKR5-512-16V	329.90	HSKR5-511-16	142.03
10"	HSKR5-512-20	163.07	HSKR5-512-20V	559.23	HSKR5-511-20	404.57
12"	HSKR5-512-24	256.32	HSKR5-512-24V	801.12	HSKR5-511-24	562.87
14"	HSKR5-512-28	368.71	HSKR5-512-28V	874.06	—	

HYDRO-LINE**R2 Series
Tube End Seals****R2 & LR2 Cylinders
PTFE**

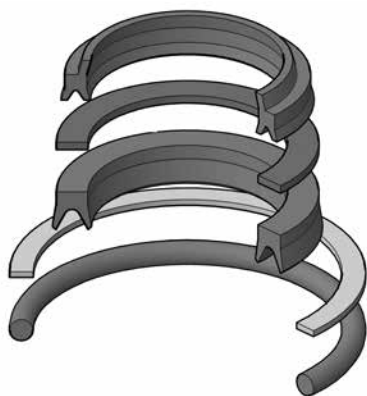
Bore Dia.	Part #	List Price
1"	HS-C221-02	\$8.29
1-1/2"	HS-C221-03	8.89
2"	HS-C221-04	9.68
2-1/2"	HS-C221-05	10.68
3-1/4"	HS-C221-065	11.52
4"	HS-C221-08	13.01
5"	HS-C221-10	17.60
6"	HS-C221-12	22.65
8" & UP	HS-C221-STRIP (sold by the foot)	10.29

**HYDRO-LINE[®]**

HYDRO-LINE

R5 Series Rod Kits

R5 & HR5 Cylinders Nitrile



Kit Includes:

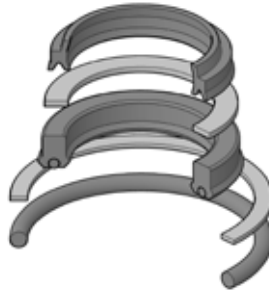
- 1 XNBR Wiper
- 1 URE Back-up Ring
- 1 NBR U-seal
- 1 PTFE Back-up Ring
- 1 NBR O-ring

Rod Dia.	Bore Dia.	(NBR) Kit #	List Price
1/2"	1"	HSKN5-660-04	\$8.36
5/8"	1"	HSKR2-662-05A	9.00
5/8"	1.5" & UP	HSKN5-660-05	10.24
1"	2" & UP	HSKN5-660-08	10.40
1-3/8"	2.5" & UP	HSKN5-660-11	13.05
1-3/4"	ALL	HSKN5-660-14	16.45
2"	ALL	HSKN5-660-16	18.43
2-1/2"	ALL	HSKN5-660-20	20.27
3"	ALL	HSKN5-660-24	21.08
3-1/2"	ALL	HSKN5-660-28	23.12
4"	ALL	HSKN5-660-32	29.02
4-1/2"	ALL	HSKN5-660-36	31.25
5"	ALL	HSKN5-660-40	46.27
5-1/2"	ALL	HSKN5-660-44	63.08

HYDRO-LINE

R5 Series Rod Kits

HYDRO-LINE[®]

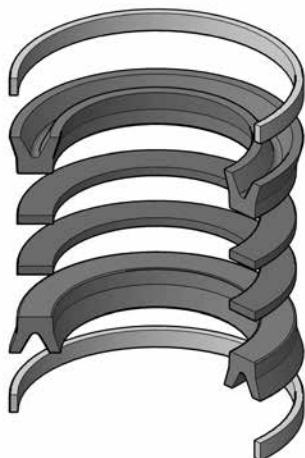
HR5 Cylinders									
Fluorocarbon		Urethane		Urethane		Fluorocarbon			
									
Kit Includes: 1 FC Wiper 1 PTFE Back-up Ring 1 FC U-seal 1 PTFE Back-up Ring 1 FC O-ring		Kit Includes: 1 XNBR Wiper 1 URE U-seal 1 PTFE Back-up Ring 1 NBR O-ring		Kit Includes: 1 XNBR Wiper 1 Urethane Back-up Ring 1 Urethane Loaded U-seal 1 PTFE Back-up Ring 1 NBR O-ring		Kit Includes: 1 FC Wiper 1 PTFE Back-up Ring 1 FC Loaded U-seal 1 PTFE Back-up Ring 1 FC O-ring			
Rod Dia.	Bore Dia.	(FC) Kit #	List Price	(URE) Kit #	List Price	(URE) Kit #	List Price	(FC) Kit #	List Price
1/2"	1"	HSKN5-660-04V	\$30.79	—		HSKN5-660-P-04	14.50	HSKN5-660-P-04V	\$58.17
5/8"	1"	HSKR2-662-05AV	37.95	HSKN5-681-05A	\$15.06	—		HSKN5-660-P-05AV	58.55
5/8"	1.5" & UP	HSKN5-660-05V	36.75	HSKN5-681-05	17.24	—		HSKN5-660-P-05V	61.82
1"	2" & UP	HSKN5-660-08V	38.61	HSKN5-681-08	18.91	HSKN5-660-P-08	16.11	HSKN5-660-P-08V	70.18
1-3/8"	2.5" & UP	HSKN5-660-11V	50.46	HSKN5-681-11	21.08	—		HSKN5-660-P-11V	85.99
1-3/4"	ALL	HSKN5-660-14V	52.33	HSKN5-681-14	22.55	HSKN5-660-P-14	20.00	HSKN5-660-P-14V	94.75
2"	ALL	HSKN5-660-16V	55.76	HSKN5-681-16	29.36	—		HSKN5-660-P-16V	98.68
2-1/2"	ALL	HSKN5-660-20V	62.92	HSKN5-681-20	41.34	—		HSKN5-660-P-20V	143.89
3"	ALL	HSKN5-660-24V	82.05	HSKN5-681-24	45.07	—		HSKN5-660-P-24V	165.72
3-1/2"	ALL	HSKN5-660-28V	95.86	HSKN5-681-28	49.36	HSKN5-660-P-28	37.01	HSKN5-660-P-28V	185.03
4"	ALL	HSKN5-660-32V	100.18	HSKN5-681-32	57.88	—		HSKN5-660-P-32V	223.47
4-1/2"	ALL	HSKN5-660-36V	105.75	HSKN5-681-36	76.04	—		HSKN5-660-P-36V	239.68
5"	ALL	HSKN5-660-40V	127.12	HSKN5-681-40	79.65	—		HSKN5-660-P-40V	245.70
5-1/2"	ALL	HSKN5-660-44V	143.56	HSKN5-681-44	94.78	—		HSKN5-660-P-44V	251.20

HYDRO-LINE

R5 Series Piston Kits

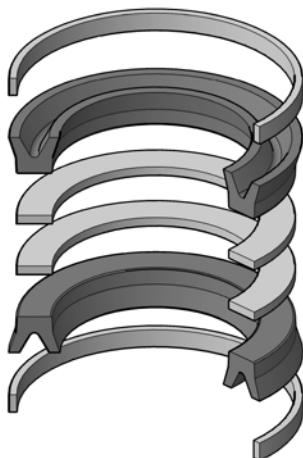
HYDRO-LINE®

Nitrile


Kit Includes:

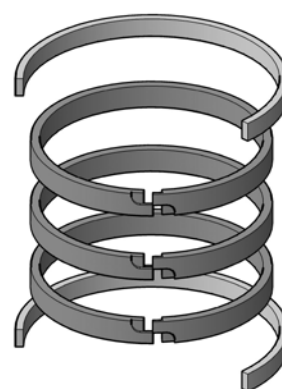
 2 NBR U-seals
 2 URE Back-up Rings
 2 PTFE Tube End Seals

R5 Cylinders Fluorocarbon


Kit Includes:

 2 FC U-seals
 2 PTFE Back-up Rings
 2 PTFE Tube End Seals

Piston Ring

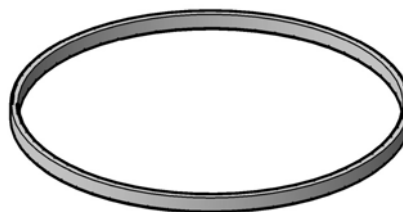

Kit Includes:

 3 Cast-Iron Piston Rings
 2 PTFE Tube End Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price	(PR) Kit #	List Price
1"	HSKR5-512-02	\$27.57	HSKR5-512-02V	\$58.87	HSKR5-511-02	\$91.87
1-1/2"	HSKR5-512-03	29.12	HSKR5-512-03V	61.63	HSKR5-511-03	61.63
2"	HSKR5-512-04	31.87	HSKR5-512-04V	86.95	HSKR5-511-04	63.47
2-1/2"	HSKR5-512-05	34.81	HSKR5-512-05V	88.88	HSKR5-511-05	64.51
3-1/4"	HSKR5-512-065	38.61	HSKR5-512-065V	93.01	HSKR5-511-065	74.68
4"	HSKR5-512-08	45.28	HSKR5-512-08V	119.57	HSKR5-511-08	84.18
5"	HSKR5-512-10	57.35	HSKR5-512-10V	133.18	HSKR5-511-10	108.87
6"	HSKR5-512-12	64.00	HSKR5-512-12V	173.79	HSKR5-511-12	120.65
8"	HSKR5-512-16	166.49	HSKR5-512-16V	329.90	HSKR5-511-16	142.03
10"	HSKR5-512-20	163.07	HSKR5-512-20V	559.23	HSKR5-511-20	404.57
12"	HSKR5-512-24	256.32	HSKR5-512-24V	801.12	HSKR5-511-24	562.87
14"	HSKR5-512-28	368.71	HSKR5-512-28V	874.06	—	

HYDRO-LINE**R5 Series
Tube End Seals****R5 Cylinders
PTFE**

Bore Dia.	Part #	List Price
1"	HS-C221-02	\$8.29
1-1/2"	HS-C221-03	8.89
2"	HS-C221-04	9.68
2-1/2"	HS-C221-05	10.68
3-1/4"	HS-C221-065	11.52
4"	HS-C221-08	13.01
5"	HS-C221-10	17.60
6"	HS-C221-12	22.65
8" & UP	HS-C221-STRIP (sold by the foot)	10.29

**HYDRO-LINE®**

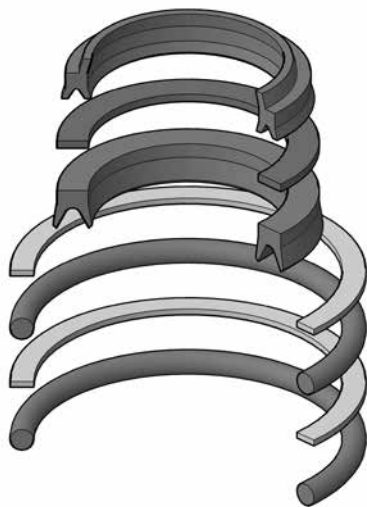
HYDRO-LINE

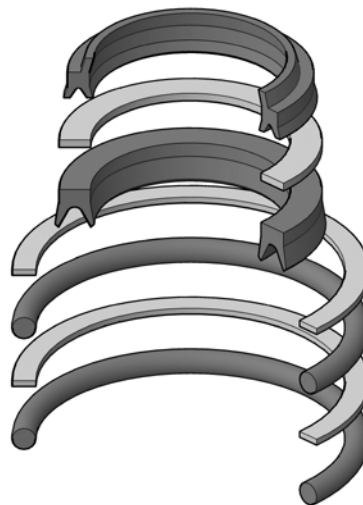
UNIVERSAL Rod Kits

A5, N2, N5, R2, & R5 Cylinders (see note)

Nitrile

Fluorocarbon


Kit Includes:

 1 XNBR Wiper
 1 URE Back-up Ring
 1 NBR U-seal
 2 NBR O-rings
 2 PTFE BU Rings

Kit Includes:

 1 FC Wiper
 1 PTFE BU Ring
 1 FC U-seal
 2 FC O-rings
 2 PTFE BU Rings

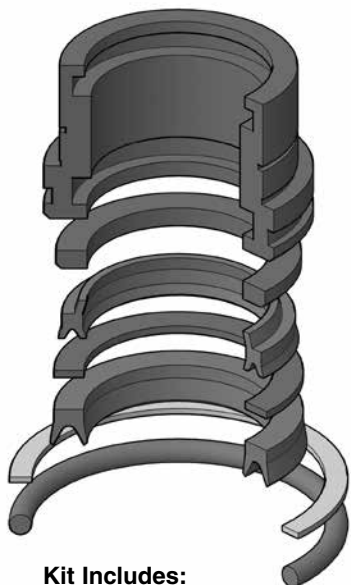
Rod Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
5/8"	HSKN25-665-05	\$11.87	HSKN25-665-05V	\$41.16
1"	HSKN25-665-08	12.35	HSKN25-665-08V	42.82
1-3/8"	HSKN25-665-11	15.76	HSKN25-665-11V	54.38
1-3/4"	HSKN25-665-14	19.91	HSKN25-665-14V	61.05
2"	HSKN25-665-16	22.24	HSKN25-665-16V	64.69
2-1/2"	HSKN25-665-20	26.61	HSKN25-665-20V	73.61

Note: Rod Seal Kits are good for all cylinders except R2/R5 1" Bore X All Rods, 1-1/2" Bore X 1" Rod, and 2" Bore X 1-3/8" Rod.

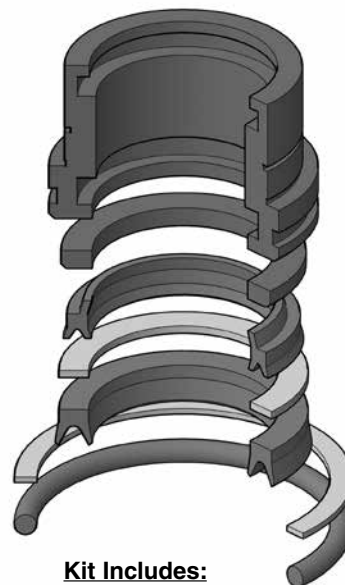
HYDRO-LINE

UNIVERSAL Gland Kits

A5, N2, N5, R2, & R5 Cylinders (see note)

Nitrile
Fluorocarbon

Kit Includes:

- 1 Iron Bushing
- 1 Spacer
- 1 XNBR Wiper
- 1 URE Back-up Ring
- 1 NBR U-seal
- 1 PTFE Back-up ring
- 1 NBR O-ring


Kit Includes:

- 1 Iron Bushing
- 1 Spacer
- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC U-seal
- 1 PTFE Back-up ring
- 1 FC O-ring

Rod Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
5/8"	HN5-665-05	\$137.61	HN5-665-05V	\$156.85
1"	HN5-665-08	170.82	HN5-665-08V	191.68
1-3/8"	HN5-665-11	182.73	HN5-665-11V	209.54
1-3/4"	HN5-665-14	212.45	HN5-665-14V	238.37
2"	HN5-665-16	221.21	HN5-665-16V	249.36
2-1/2"	HN5-665-20	240.07	HN5-665-20V	268.19
3"	HN5-665-24	361.65	HN5-665-24V	407.56
3-1/2"	HN5-665-28	423.41	HN5-665-28V	461.23
4"	HN5-665-32	469.28	HN5-665-32V	524.56
4-1/2"	HN5-665-36 (2.57" HGT)	664.22	HN5-665-36V (2.57" HGT)	717.10
4-1/2"	HN5-665-36A (1.88" HGT)	664.22	HN5-665-36AV (1.88" HGT)	717.10
5"	HN5-665-40	799.25	HN5-665-40V	867.94
5-1/2"	HN5-665-44	867.30	HN5-665-44V	962.50

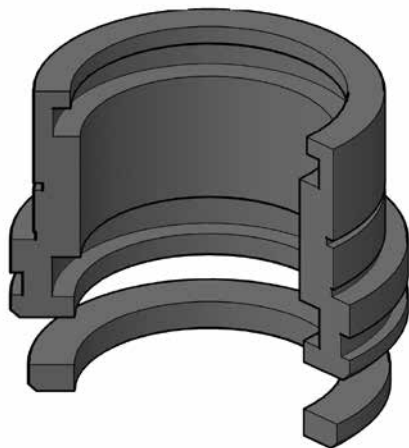
**Note: Gland Seal Kits are good for all cylinders with some exceptions.
Call with series, rod & bore size for more information.**

HYDRO-LINE

UNIVERSAL Gland Kits

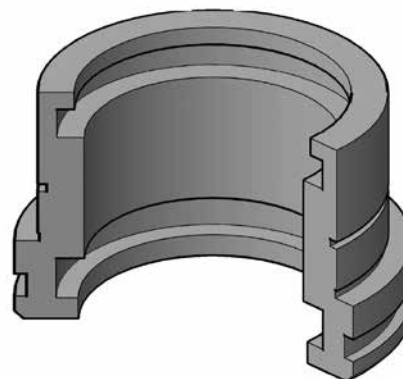
A5, N2, N5, R2, & R5 Cylinders (see note)

Iron Bushing


Kit Includes:

- 1 Iron Bushing
- 1 Spacer

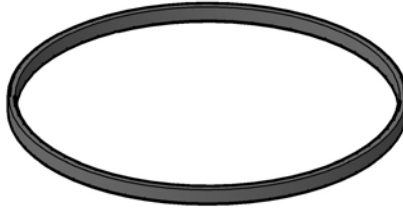
Bronze Bushing


Kit Includes:

- 1 Bronze Bushing

Rod Dia.	Part #	List Price	Part #	List Price
5/8"	HN5-655-05	\$121.73	HN5-B-650-05	\$119.03
1"	HN5-655-08	155.47	HN5-B-650-08	127.54
1-3/8"	HN5-655-11	163.24	HN5-B-650-11	150.14
1-3/4"	HN5-655-14	188.26	HN5-B-650-14	173.25
2"	HN5-655-16	196.79	HN5-B-650-16	179.14
2-1/2"	HN5-655-20	211.86	HN5-B-650-20	225.68
3"	HN5-655-24	315.47	HN5-B-650-24	240.42
3-1/2"	HN5-655-28	369.55	HN5-B-650-28	426.65
4"	HN5-655-32	405.59	HN5-B-650-32	458.59
4-1/2"	HN5-655-36 (2.57" HGT)	576.86	HN5-B-650-36 (2.57" HGT)	631.84
4-1/2"	HN5-655-36A (1.88" HGT)	576.86	HN5-B-650-36A (1.88" HGT)	497.10
5"	HN5-655-40	703.03	HN5-B-650-40	694.20
5-1/2"	HN5-655-44	757.13	HN5-B-650-44	724.72

Note: Gland Seal Kits are good for all cylinders with some exceptions.
 Call with series, rod & bore size for more information.

HYDRO-LINE**UNIVERSAL**
Captive Cushion Adjustment Seal**A, N & R Cylinders**

Part #	I.D. X C.S.	List Price
HS-C408-1	.204 X .072	\$5.93
HS-C408-1V	.204 X .072	7.14
HS-C408-2	.298 X .072	5.93
HS-C408-2V	.298 X .072	7.14
HS-C408-3	.420 X .072	5.93
HS-C408-3V	.420 X .072	7.14
HS-C408-4	.542 X .072	5.93
HS-C408-4V	.542 X .072	7.14

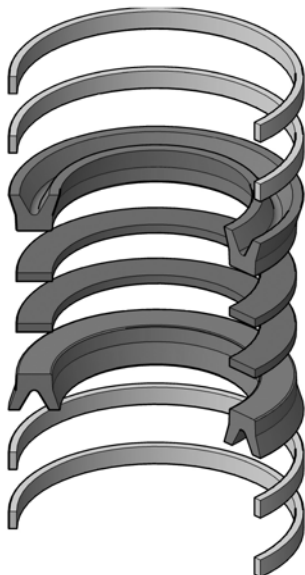
Used on Captive Cushion Adjustment Valves for precise adjustment under pressure over a broad range of operating conditions. Available in both 90A material - Nitrile and Fluorocarbon.

HYDRO-LINE

UNIVERSAL Piston Kits

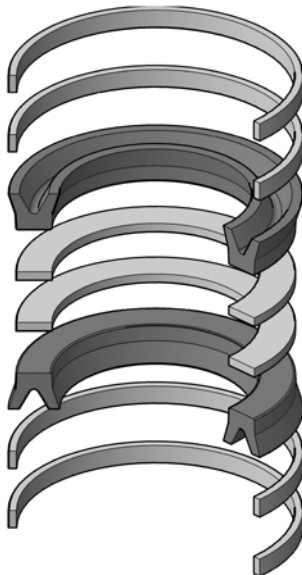
HYDRO-LINE®

Nitrile


Kit Includes:

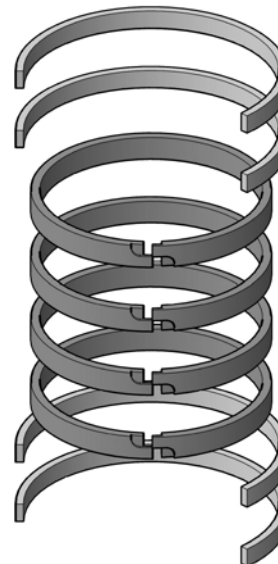
2 NBR U-seals
2 URE Back-up Rings
4 PTFE Tube End Seals

N2 & N5 Cylinders Fluorocarbon


Kit Includes:

2 FC U-seals
2 PTFE Back-up Rings
4 PTFE Tube End Seals

Piston Ring


Kit Includes:

4 Cast Iron Piston Rings
4 PTFE Tube End Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price	(PR) Kit #	List Price
1-1/2"	HSKN25-512-03	\$40.41	HSKN25-512-03V	\$79.55	HSKN25-511-03	\$109.07
2"	HSKN25-512-04	45.34	HSKN25-512-04V	115.56	HSKN25-511-04	122.05
2-1/2"	HSKN25-512-05	47.28	HSKN25-512-05V	124.57	HSKN25-511-05	124.36
3-1/4"	HSKN25-512-065	61.75	HSKN25-512-065V	132.43	HSKN25-511-065	130.67
4"	HSKN25-512-08	72.68	HSKN25-512-08V	163.50	HSKN25-511-08	147.30
5"	HSKN25-512-10	95.21	HSKN25-512-10V	180.03	HSKN25-511-10	174.97
6"	HSKN25-512-12	108.12	HSKN25-512-12V	266.90	HSKN25-511-12	193.37
7"	HSKN25-512-14	128.11	HSKN25-512-14V	320.49	HSKN25-511-14	193.18
8"	HSKN25-512-16	181.00	HSKN25-512-16V	265.58	HSKN25-511-16	235.23

HYDRO-LINE

HYDRO-LINE®

Sales Part Number	Description	Rod Size	Bore Size	List Price
HN5-650-08	Bushing	1		\$37.30
HN5-650-11	Bushing	1-3/8		42.09
HN5-650-14	Bushing	1-3/4		54.66
HN5-650-24	Bushing	3		159.45
HN5-650-S-20	Bushing	2-1/2		137.86
HN5-655-05	Bushing w/ spacer	5/8		121.73
HN5-655-08	Bushing w/ spacer	1		155.47
HN5-655-11	Bushing w/ spacer	1-3/8		163.24
HN5-655-14	Bushing w/ spacer	1-3/4		188.26
HN5-655-16	Bushing w/ spacer	2		196.79
HN5-655-20	Bushing w/ spacer	2-1/2		211.86
HN5-655-24	Bushing w/ spacer	3		315.47
HN5-655-28	Bushing w/ spacer	3-1/2		369.55
HN5-655-32	Bushing w/ spacer	4		405.59
HN5-655-36	Bushing w/ spacer	4-1/2 x 2.57ht		576.86
HN5-655-36A	Bushing w/ spacer	4-1/2 x 1.88ht		576.86
HN5-655-40	Bushing w/ spacer	5		703.03
HN5-655-44	Bushing w/ spacer	5-1/2		757.13
HN5-665-05	Rod Gland Kit	5/8		137.61
HN5-665-05V	Rod Gland Kit	5/8		156.85
HN5-665-08	Rod Gland Kit	1		170.82
HN5-665-08V	Rod Gland Kit	1		191.68
HN5-665-11	Rod Gland Kit	1-3/8		182.73
HN5-665-11V	Rod Gland Kit	1-3/8		209.54
HN5-665-14	Rod Gland Kit	1-3/4		212.45
HN5-665-14V	Rod Gland Kit	1-3/4		238.37
HN5-665-16	Rod Gland Kit	2		221.21
HN5-665-16V	Rod Gland Kit	2		249.36
HN5-665-20	Rod Gland Kit	2-1/2		240.07
HN5-665-20V	Rod Gland Kit	2-1/2		268.19
HN5-665-24	Rod Gland Kit	3		361.65
HN5-665-24V	Rod Gland Kit	3		407.56
HN5-665-28	Rod Gland Kit	3-1/2		423.41
HN5-665-28V	Rod Gland Kit	3-1/2		461.23
HN5-665-32	Rod Gland Kit	4		469.28
HN5-665-32V	Rod Gland Kit	4		524.56
HN5-665-36	Rod Gland Kit	4-1/2		664.22
HN5-665-36A	Rod Gland Kit	4-1/2		664.22
HN5-665-36AV	Rod Gland Kit	4-1/2		717.10
HN5-665-36V	Rod Gland Kit	4-1/2		717.10
HN5-665-40	Rod Gland Kit	5		799.25
HN5-665-40V	Rod Gland Kit	5		867.94
HN5-665-44	Rod Gland Kit	5-1/2		867.30
HN5-665-44V	Rod Gland Kit	5-1/2		962.50
HN5-681-08	Rod Gland Kit	1		50.77
HN5-681-11	Rod Gland Kit	1-3/8		58.68
HN5-681-14	Rod Gland Kit	1-3/4		73.49
HN5-681-24	Rod Gland Kit	3		206.19
HN5-B-650-05	Gland Kit	5/8		119.03

FORMERLY LISTED REPAIR PARTS ARE AVAILABLE ONLINE AT WWW.HERCULESUS.COM
 OR BY CONTACTING YOUR REGIONAL HERCULES SALES TEAM.

HYDRO-LINE

HYDRO-LINE®

Sales Part Number	Description	Rod Size	Bore Size	List Price
HN5-B-650-08	Gland Kit	1		\$127.54
HN5-B-650-11	Gland Kit	1-3/8		150.14
HN5-B-650-14	Gland Kit	1-3/4		173.25
HN5-B-650-16	Gland Kit	2		179.14
HN5-B-650-20	Gland Kit	2-1/2		225.68
HN5-B-650-20-NH	Bushing	2-1/2		112.24
HN5-B-650-24	Gland Kit	3		240.42
HN5-B-650-28	Gland Kit	3-1/2		426.65
HN5-B-650-32	Gland Kit	4		458.59
HN5-B-650-36	Gland Kit	4-1/2		631.84
HN5-B-650-36A	Gland Kit	4-1/2		497.10
HN5-B-650-40	Gland Kit	5		694.20
HN5-B-650-44	Gland Kit	5-1/2		724.72
HN5-B-650-S24	Bushing	3		188.43
HN5-B-681-20	Gland Kit	2-1/2		142.38
HN5-B-681-28	Gland Kit	3-1/2		431.06
HS-C124-03	Tube End Seals		1-1/2	10.93
HS-C124-04	Tube End Seals		2	13.28
HS-C124-05	Tube End Seals		2-1/2	15.38
HS-C124-065	Tube End Seals		3-1/4	19.45
HS-C124-08	Tube End Seals		4	20.91
HS-C124-10	Tube End Seals		5	23.01
HS-C124-12	Tube End Seals		6	23.76
HS-C124-STRIP	Tube End Seals		0.068cs x 0.140w PTFE strip (sold by the foot)	15.99
HS-C221-02	Tube End Seals		1	8.29
HS-C221-03	Tube End Seals		1-1/2	8.89
HS-C221-04	Tube End Seals		2	9.68
HS-C221-05	Tube End Seals		2-1/2	10.68
HS-C221-065	Tube End Seals		3-1/4	11.52
HS-C221-08	Tube End Seals		4	13.01
HS-C221-10	Tube End Seals		5	17.60
HS-C221-12	Tube End Seals		6	22.65
HS-C221-STRIP	Tube End Seals		0.063cs x 0.093w PTFE strip (sold by the foot)	10.29
HS-C255-03	Tube End Seals		1-1/2	11.73
HS-C255-04	Tube End Seals		2	13.56
HS-C255-05	Tube End Seals		2-1/2	14.31
HS-C255-065	Tube End Seals		3-1/4	14.74
HS-C255-08	Tube End Seals		4	16.73
HS-C255-10	Tube End Seals		5	17.81
HS-C255-12	Tube End Seals		6	18.58
HS-C255-14	Tube End Seals		7	19.45
HS-C255-16	Tube End Seals		8	22.64
HS-C408-1	Captive Cushion Adjustment Seal	0.204 ID x 0.072 CS		5.93
HS-C408-1V	Captive Cushion Adjustment Seal	0.204 ID x 0.072 CS		7.14
HS-C408-2	Captive Cushion Adjustment Seal	0.298 ID x 0.072 CS		5.93
HS-C408-2V	Captive Cushion Adjustment Seal	0.298 ID x 0.072 CS		7.14

HYDRO-LINE

Sales Part Number	Description	Rod Size	Bore Size	List Price
HS-C408-3	Captive Cushion Adjustment Seal	0.420 ID x 0.072 CS		\$5.93
HS-C408-3V	Captive Cushion Adjustment Seal	0.420 ID x 0.072 CS		7.14
HS-C408-4	Captive Cushion Adjustment Seal	0.542 ID x 0.072 CS		5.93
HS-C408-4V	Captive Cushion Adjustment Seal	0.542 ID x 0.072 CS		7.14
HS-E304-03	Tube End Seals		1-1/2	2.58
HS-E304-04	Tube End Seals		2	2.70
HS-E304-065	Tube End Seals		3-1/4	3.01
HS-E304-08	Tube End Seals		4	3.40
HSKA5-512-03	Piston Kit		1-1/2	26.94
HSKA5-512-03V	Piston Kit		1-1/2	54.49
HSKA5-512-04	Piston Kit		2	28.70
HSKA5-512-04V	Piston Kit		2	56.46
HSKA5-512-05	Piston Kit		2-1/2	30.91
HSKA5-512-05V	Piston Kit		2-1/2	66.58
HSKA5-512-065	Piston Kit		3-1/4	33.34
HSKA5-512-065V	Piston Kit		3-1/4	75.08
HSKA5-512-08	Piston Kit		4	38.82
HSKA5-512-08V	Piston Kit		4	81.61
HSKA5-512-10	Piston Kit		5	48.50
HSKA5-512-10V	Piston Kit		5	95.71
HSKA5-512-12	Piston Kit		6	57.11
HSKA5-512-12V	Piston Kit		6	156.62
HSKE2-512-04	Piston Kit		2	27.33
HSKE2-512-065	Piston Kit		3-1/4	26.27
HSKE2-512-08	Piston Kit		4	45.83
HSKE2-660-05	Rod Kit	5/8		4.54
HSKE2-660-08	Rod Kit	1		5.05
HSKE2-660-11	Rod Kit	1-3/8		5.62
HSKN2-511-03	Piston Ring Kit		1-1/2	85.36
HSKN2-511-04	Piston Ring Kit		2	97.32
HSKN2-511-05	Piston Ring Kit		2-1/2	98.89
HSKN2-511-065	Piston Ring Kit		3-1/4	104.39
HSKN2-511-08	Piston Ring Kit		4	117.52
HSKN2-511-10	Piston Ring Kit		5	143.01
HSKN2-511-12	Piston Ring Kit		6	151.03
HSKN2-511-14	Piston Ring Kit		7	169.17
HSKN2-511-16	Piston Ring Kit		8	207.99
HSKN2-511-20	Piston Ring Kit		10	434.37
HSKN2-511-24	Piston Ring Kit		12	587.58
HSKN2-512-03	Piston Kit		1-1/2	34.38
HSKN2-512-03V	Piston Kit		1-1/2	66.92
HSKN2-512-04	Piston Kit		2	41.67
HSKN2-512-04V	Piston Kit		2	87.86
HSKN2-512-05	Piston Kit		2-1/2	44.98
HSKN2-512-05V	Piston Kit		2-1/2	93.40
HSKN2-512-065	Piston Kit		3-1/4	43.23
HSKN2-512-065V	Piston Kit		3-1/4	106.16

HYDRO-LINE®

HYDRO-LINE

HYDRO-LINE®

Sales Part Number	Description	Rod Size	Bore Size	List Price
HSKN2-512-08	Piston Kit		4	\$51.94
HSKN2-512-08V	Piston Kit		4	125.57
HSKN2-512-10	Piston Kit		5	66.73
HSKN2-512-10V	Piston Kit		5	139.06
HSKN2-512-12	Piston Kit		6	74.99
HSKN2-512-12V	Piston Kit		6	184.74
HSKN2-512-14	Piston Kit		7	114.50
HSKN2-512-14V	Piston Kit		7	272.13
HSKN2-512-16	Piston Kit		8	145.01
HSKN2-512-16V	Piston Kit		8	300.61
HSKN2-512-20	Piston Kit		10	163.07
HSKN2-512-20V	Piston Kit		10	559.23
HSKN2-512-24	Piston Kit		12	256.32
HSKN2-512-24V	Piston Kit		12	829.16
HSKN25-511-03	Piston Kit		1-1/2	109.07
HSKN25-511-04	Piston Kit		2	122.05
HSKN25-511-05	Piston Kit		2-1/2	124.36
HSKN25-511-065	Piston Kit		3-1/4	130.67
HSKN25-511-08	Piston Kit		4	147.30
HSKN25-511-10	Piston Kit		5	174.97
HSKN25-511-12	Piston Kit		6	193.37
HSKN25-511-14	Piston Kit		7	193.18
HSKN25-511-16	Piston Kit		8	235.23
HSKN25-512-03	Piston Kit		1-1/2	40.41
HSKN25-512-03V	Piston Kit		1-1/2	79.55
HSKN25-512-04	Piston Kit		2	45.34
HSKN25-512-04V	Piston Kit		2	115.56
HSKN25-512-05	Piston Kit		2-1/2	47.28
HSKN25-512-05V	Piston Kit		2-1/2	124.57
HSKN25-512-065	Piston Kit		3-1/4	61.75
HSKN25-512-065V	Piston Kit		3-1/4	132.43
HSKN25-512-08	Piston Kit		4	72.68
HSKN25-512-08V	Piston Kit		4	163.50
HSKN25-512-10	Piston Kit		5	95.21
HSKN25-512-10V	Piston Kit		5	180.03
HSKN25-512-12	Piston Kit		6	108.12
HSKN25-512-12V	Piston Kit		6	266.90
HSKN25-512-14	Piston Kit		7	128.11
HSKN25-512-14V	Piston Kit		7	320.49
HSKN25-512-16	Piston Kit		8	181.00
HSKN25-512-16V	Piston Kit		8	265.58
HSKN25-665-05	Rod Kit	5/8		11.87
HSKN25-665-05V	Rod Kit	5/8		41.16
HSKN25-665-08	Rod Kit	1		12.35
HSKN25-665-08V	Rod Kit	1		42.82
HSKN25-665-11	Rod Kit	1-3/8		15.76
HSKN25-665-11V	Rod Kit	1-3/8		54.38
HSKN25-665-14	Rod Kit	1-3/4		19.91
HSKN25-665-14V	Rod Kit	1-3/4		61.05
HSKN25-665-16	Rod Kit	2		22.24

HYDRO-LINE

Sales Part Number	Description	Rod Size	Bore Size	List Price
HSKN25-665-16V	Rod Kit	2		\$64.69
HSKN25-665-20	Rod Kit	2-1/2		26.61
HSKN25-665-20V	Rod Kit	2-1/2		73.61
HSKN2-661-05	Rod Kit	5/8		10.27
HSKN2-661-05V	Rod Kit	5/8		38.03
HSKN2-661-08	Rod Kit	1		10.20
HSKN2-661-08V	Rod Kit	1		40.37
HSKN2-661-11	Rod Kit	1-3/8		12.44
HSKN2-661-11V	Rod Kit	1-3/8		44.98
HSKN2-661-14	Rod Kit	1-3/4		14.62
HSKN2-661-14V	Rod Kit	1-3/4		52.74
HSKN2-661-16	Rod Kit	2		16.18
HSKN2-661-16V	Rod Kit	2		55.69
HSKN2-661-20	Rod Kit	2-1/2		24.28
HSKN2-661-20V	Rod Kit	2-1/2		62.15
HSKN5-511-03	Piston Ring Kit		1-1/2	84.80
HSKN5-511-04	Piston Ring Kit		2	92.43
HSKN5-511-05	Piston Ring Kit		2-1/2	93.18
HSKN5-511-065	Piston Ring Kit		3-1/4	96.04
HSKN5-511-08	Piston Ring Kit		4	110.05
HSKN5-511-10	Piston Ring Kit		5	133.97
HSKN5-511-12	Piston Ring Kit		6	151.03
HSKN5-511-14	Piston Ring Kit		7	178.48
HSKN5-511-16	Piston Ring Kit		8	226.49
HSKN5-512-03	Piston Kit		1-1/2	26.72
HSKN5-512-03V	Piston Kit		1-1/2	66.36
HSKN5-512-04	Piston Kit		2	36.75
HSKN5-512-04V	Piston Kit		2	91.84
HSKN5-512-05	Piston Kit		2-1/2	39.32
HSKN5-512-05V	Piston Kit		2-1/2	93.40
HSKN5-512-065	Piston Kit		3-1/4	43.23
HSKN5-512-065V	Piston Kit		3-1/4	97.55
HSKN5-512-08	Piston Kit		4	51.82
HSKN5-512-08V	Piston Kit		4	126.26
HSKN5-512-10	Piston Kit		5	63.19
HSKN5-512-10V	Piston Kit		5	148.26
HSKN5-512-12	Piston Kit		6	65.75
HSKN5-512-12V	Piston Kit		6	175.53
HSKN5-512-14	Piston Kit		7	124.36
HSKN5-512-14V	Piston Kit		7	250.51
HSKN5-512-16	Piston Kit		8	174.46
HSKN5-512-16V	Piston Kit		8	282.07
HSKN5-512-G-08	Piston Kit		4	58.22
HSKN5-512-P-05	Piston Kit		2-1/2	44.77
HSKN5-512-P-16	Piston Kit		8	224.16
HSKN5-517-065	Piston Kit		3-1/4	48.10
HSKN5-660-04	Rod Kit	1/2		8.36
HSKN5-660-04V	Rod Kit	1/2		30.79
HSKN5-660-05	Rod Kit	5/8		10.24
HSKN5-660-05V	Rod Kit	5/8		36.75

HYDRO-LINE®

HYDRO-LINE

HYDRO-LINE®

Sales Part Number	Description	Rod Size	Bore Size	List Price
HSKN5-660-08	Rod Kit	1		\$10.40
HSKN5-660-08V	Rod Kit	1		38.61
HSKN5-660-11	Rod Kit	1-3/8		13.05
HSKN5-660-11V	Rod Kit	1-3/8		50.46
HSKN5-660-14	Rod Kit	1-3/4		16.45
HSKN5-660-14V	Rod Kit	1-3/4		52.33
HSKN5-660-16	Rod Kit	2		18.43
HSKN5-660-16V	Rod Kit	2		55.76
HSKN5-660-20	Rod Kit	2-1/2		20.27
HSKN5-660-20V	Rod Kit	2-1/2		62.92
HSKN5-660-24	Rod Kit	3		21.08
HSKN5-660-24V	Rod Kit	3		82.05
HSKN5-660-28	Rod Kit	3-1/2		23.12
HSKN5-660-28V	Rod Kit	3-1/2		95.86
HSKN5-660-32	Rod Kit	4		29.02
HSKN5-660-32V	Rod Kit	4		100.18
HSKN5-660-36	Rod Kit	4-1/2		31.25
HSKN5-660-36V	Rod Kit	4-1/2		105.75
HSKN5-660-40	Rod Kit	5		46.27
HSKN5-660-40V	Rod Kit	5		127.12
HSKN5-660-44	Rod Kit	5-1/2		63.08
HSKN5-660-44V	Rod Kit	5-1/2		143.56
HSKN5-660-P-04	Rod Kit	1/2	1	14.50
HSKN5-660-P-04V	Rod Kit	1/2	1	58.17
HSKN5-660-P-05AV	Rod Kit	5/8	1	58.55
HSKN5-660-P-05V	Rod Kit	5/8	1.5 & UP	61.82
HSKN5-660-P-08	Rod Kit	1	2 & UP	16.11
HSKN5-660-P-08V	Rod Kit	1	2 & UP	70.18
HSKN5-660-P-11	Rod Kit	1-3/8		9.36
HSKN5-660-P-11V	Rod Kit	1-3/8	2.5 & UP	85.99
HSKN5-660-P-14	Rod Kit	1-3/4		20.00
HSKN5-660-P-14V	Rod Kit	1-3/4		94.75
HSKN5-660-P-16V	Rod Kit	2		98.68
HSKN5-660-P-20	Rod Kit	2-1/2		30.09
HSKN5-660-P-20V	Rod Kit	2-1/2		143.89
HSKN5-660-P-24	Rod Kit	3		16.68
HSKN5-660-P-24V	Rod Kit	3		165.72
HSKN5-660-P-28	Rod Kit	3-1/2		37.01
HSKN5-660-P-28V	Rod Kit	3-1/2		185.03
HSKN5-660-P-32V	Rod Kit	4		223.47
HSKN5-660-P-36V	Rod Kit	4-1/2		239.68
HSKN5-660-P-40V	Rod Kit	5		245.70
HSKN5-660-P-44V	Rod Kit	5-1/2		251.20
HSKN5-681-05	Rod Kit	5/8		17.24
HSKN5-681-05A	Rod Kit	5/8	1	15.06
HSKN5-681-08	Rod Kit	1		18.91
HSKN5-681-11	Rod Kit	1-3/8		21.08
HSKN5-681-14	Rod Kit	1-3/4		22.55
HSKN5-681-16	Rod Kit	2		29.36
HSKN5-681-20	Rod Kit	2-1/2		41.34

HYDRO-LINE

Sales Part Number	Description	Rod Size	Bore Size	List Price
HSKN5-681-24	Rod Kit	3		\$45.07
HSKN5-681-28	Rod Kit	3-1/2		49.36
HSKN5-681-32	Rod Kit	4		57.88
HSKN5-681-36	Rod Kit	4-1/2		76.04
HSKN5-681-40	Rod Kit	5		79.65
HSKN5-681-44	Rod Kit	5-1/2		94.78
HSKN5-681-S-16	Rod Kit	2		36.09
HSKN5-681-S-20	Rod Kit	2-1/2		38.30
HSKN5-681-S-28	Rod Kit	3-1/2		74.94
HSKN5-681-S-36	Rod Kit	4-1/2		49.22
HSKN5-B-681-28	Rod Kit	3-1/2		30.67
HSKR2-662-05A	Rod Kit	5/8	1	9.00
HSKR2-662-05AV	Rod Kit	5/8	1	37.95
HSKR2-662-08	Rod Kit	1	1.5,2,2.5	9.81
HSKR2-662-08V	Rod Kit	1	1.5,2,2.5	38.72
HSKR2-662-11	Rod Kit	1-3/8	2, 2.5	11.95
HSKR2-662-11V	Rod Kit	1-3/8	2, 2.5	49.90
HSKR2-662-14	Rod Kit	1-3/4	2.5	14.69
HSKR2-662-14V	Rod Kit	1-3/4	2.5	51.27
HSKR2-662-P-05AV	Rod Kit	5/8	1	58.54
HSKR2-662-P-08V	Rod Kit	1	1.5,2,2.5	70.76
HSKR2-662-P-11V	Rod Kit	1-3/8	2, 2.5	84.93
HSKR2-662-P-14V	Rod Kit	1-3/4	2.5	95.11
HSKR2-681-05A	Rod Kit	5/8	1	15.06
HSKR2-681-08	Rod Kit	1	1.5,2,2.5	18.69
HSKR2-681-11	Rod Kit	1-3/8	2, 2.5	18.91
HSKR2-681-14	Rod Kit	1-3/4	2.5	19.75
HSKR5-511-02	Piston Ring Kit		1	91.87
HSKR5-511-03	Piston Ring Kit		1-1/2	61.63
HSKR5-511-04	Piston Ring Kit		2	63.47
HSKR5-511-05	Piston Ring Kit		2-1/2	64.51
HSKR5-511-065	Piston Ring Kit		3-1/4	74.68
HSKR5-511-08	Piston Ring Kit		4	84.18
HSKR5-511-10	Piston Ring Kit		5	108.87
HSKR5-511-12	Piston Ring Kit		6	120.65
HSKR5-511-16	Piston Ring Kit		8	142.03
HSKR5-511-20	Piston Ring Kit		10	404.57
HSKR5-511-24	Piston Ring Kit		12	562.87
HSKR5-512-02	Piston Kit		1	27.57
HSKR5-512-02V	Piston Kit		1	58.87
HSKR5-512-03	Piston Kit		1-1/2	29.12
HSKR5-512-03V	Piston Kit		1-1/2	61.63
HSKR5-512-04	Piston Kit		2	31.87
HSKR5-512-04V	Piston Kit		2	86.95
HSKR5-512-05	Piston Kit		2-1/2	34.81
HSKR5-512-05V	Piston Kit		2-1/2	88.88
HSKR5-512-065	Piston Kit		3-1/4	38.61
HSKR5-512-065V	Piston Kit		3-1/4	93.01
HSKR5-512-08	Piston Kit		4	45.28
HSKR5-512-08V	Piston Kit		4	119.57

HYDRO-LINE®

HYDRO-LINE

HYDRO-LINE®

Sales Part Number	Description	Rod Size	Bore Size	List Price
HSKR5-512-10	Piston Kit		5	\$57.35
HSKR5-512-10V	Piston Kit		5	133.18
HSKR5-512-12	Piston Kit		6	64.00
HSKR5-512-12V	Piston Kit		6	173.79
HSKR5-512-16	Piston Kit		8	166.49
HSKR5-512-16V	Piston Kit		8	329.90
HSKR5-512-20	Piston Kit		10	163.07
HSKR5-512-20V	Piston Kit		10	559.23
HSKR5-512-24	Piston Kit		12	256.32
HSKR5-512-24V	Piston Kit		12	801.12
HSKR5-512-28	Piston Kit		14	368.71
HSKR5-512-28V	Piston Kit		14	874.06
HSKX-B-29427-20	Rod Kit	2-1/2		17.66
HSKX-B-31300	Piston Kit		12.030	303.48
HSKX-B-54030	Piston Kit		3	21.92
HSKX-C-53238-36	Rod Kit	4-1/2		128.15
HSKX-C-53238-56	Rod Kit	7		230.53
HSKX-E-49904	Rod Kit	7		267.20

MILLER

Kit Type		Page
Rod Kit, Iron Gland	Star Bushing - A, J, & H Cylinders	62
	Pneumatic - A & C Cylinders	63
	Hydraulic - AJ, J, M & H Cylinders	64
	HV Cylinders - Retainer Held - With Retainer & Without Retainer	65
	HV Cylinders-Bolted	66
Star Rod Kits	A, J, & H Cylinders	67
Rod Seal Cage Assembly	Hydraulic	68
Rod Kits	HV2 Cylinders	69 - 70
Hat Packing	PTFE & Nitrile	71
PTFE Wiper	"U" Style - A, C, J, M, & H Cylinders	72
Iron Gland	Star Bushing Style A, J, & H Cylinders - Retainer Held & Bolted	73
	A, C, J, M, & H Cylinders	74
	HV Cylinders	75
Retainer	A, C, J, M, H & HV Cylinders	76
Caged Assembly Components	Rod Seal Cage, Wave Spring, & Bronze Pressure Ring	76
Piston Kits	A, J, & H Series Cylinders	77
Piston Kits	HV Series Cylinders	78
PTFE Tube Seal Cord	A, C, J, M, & H Cylinders	78
Piston Kits	HV2 Cylinders	79 - 82
Piston U-seals	All Current Style Cylinders	83
Wear Rings	Air & Hydraulic Service	84
PTFE Tube End Seals	Continuous	85
	Various Kits	85
	Strip PTFE	86
Follower Seals	PTFE	86
Piston Cups	A, AJ, J, JW, H, & HW Cylinders	87
Repair Kits	By Part Number	88 - 97

MILWAUKEE

Kit Type		Page
Milwaukee Kits	H Cylinders	98

ORTMAN

Kit Type		Page
Ortman Kits	Various Kits	99

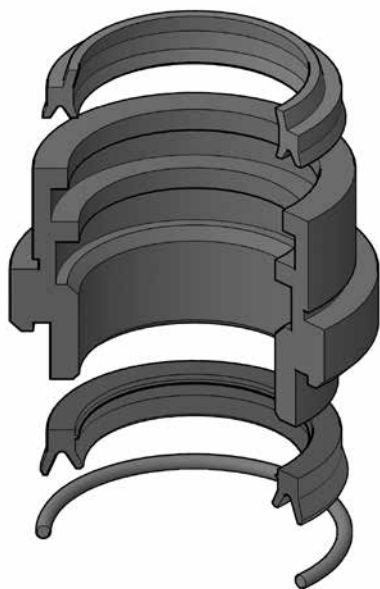
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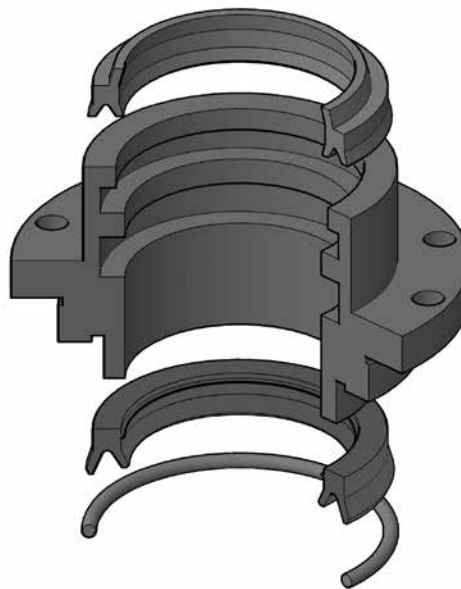
Star Bushing Rod Kit, Iron Gland

A, J, & H Cylinders

1998 Style Retainer Held

1998 Style Bolted


Kit Includes:

 1 XNBR Wiper
 1 Retainer Held Star Bushing
 1 URE Rod Seal
 1 NBR O-ring

Kit Includes:

 1 XNBR Wiper
 1 Bolted Star Bushing
 1 URE Rod Seal
 1 NBR O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	MLR-051-KR074-063	\$173.59	MLR-051-KR075-063	\$233.17
1"	MLR-051-KR074-100	215.99	MLR-051-KR075-100	281.24
1-3/8"	MLR-051-KR074-138	254.64	MLR-051-KR075-138	329.64
1-3/4"	—		MLR-051-KR075-175	357.23
2"	—		MLR-051-KR075-200	420.78
2-1/2"	—		MLR-051-KR075-250	577.73
3"	—		MLR-051-KR075-300	740.05
3-1/2"	—		MLR-051-KR075-350	992.57
4"	—		MLR-051-KR075-400	1,067.16
4-1/2"	—		MLR-051-KR075-450	1,148.54
5"	—		MLR-051-KR075-500	1,528.69
5-1/2"	—		MLR-051-KR075-550	2,138.85

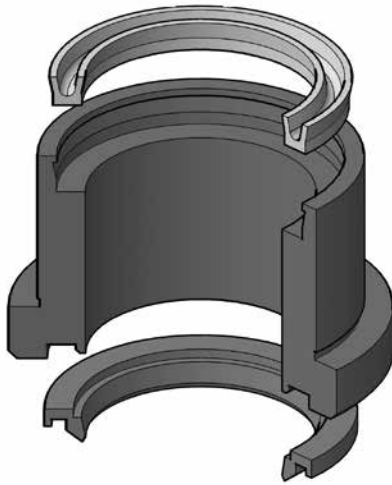
Bolted bushings from: 5/8" to 1-3/4" have 4 bolt holes
 2" to 4-1/2" have 8 bolt holes
 5" to 5-1/2" have 12 bolt holes

MILLER

Pneumatic Rod Kit, Iron Gland

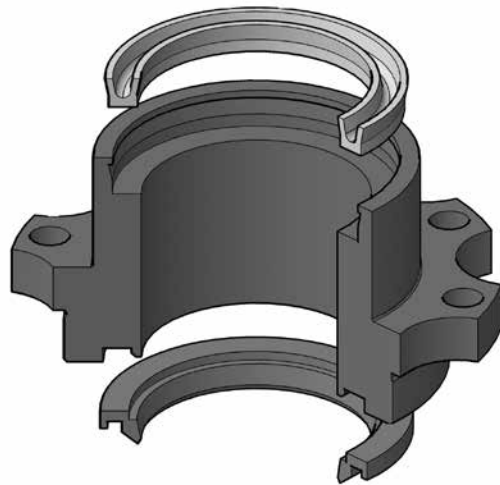
A & C Cylinders

Retainer Held


Kit Includes:

- 1 PTFE Wiper
- 1 Retainer Held Iron Gland
- 1 NBR Hat Packing

Bolted


Kit Includes:

- 1 PTFE Wiper
- 1 Bolted Iron Gland
- 1 NBR Hat Packing

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	MLR-051-KR010-063	\$76.28	MLR-051-KR011-063	\$129.56
1"	MLR-051-KR010-100	102.66	MLR-051-KR011-100	149.88
1-3/8"	MLR-051-KR010-138	116.63	MLR-051-KR011-138	162.24
1-3/4"	MLR-051-KR010-175	171.30	MLR-051-KR011-175	255.16
2"	MLR-051-KR010-200	200.37	MLR-051-KR011-200	289.02
2-1/2"	MLR-051-KR010-250	288.32	MLR-051-KR011-250	371.66
3"	MLR-051-KR010-300	376.29	MLR-051-KR011-300	446.04

Bolted bushings from: 5/8" to 1-3/4" have 4 bolt holes
 2" to 4-1/2" have 8 bolt holes
 5" to 5-1/2" have 12 bolt holes

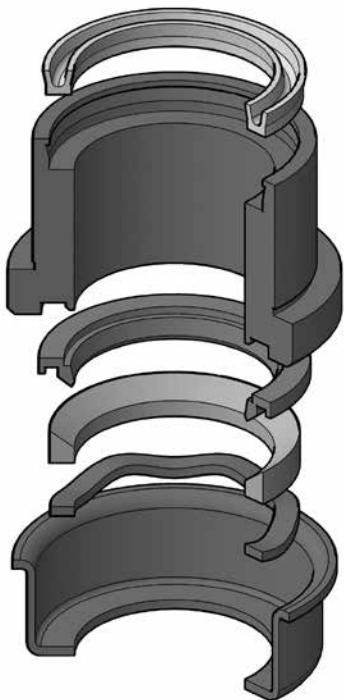
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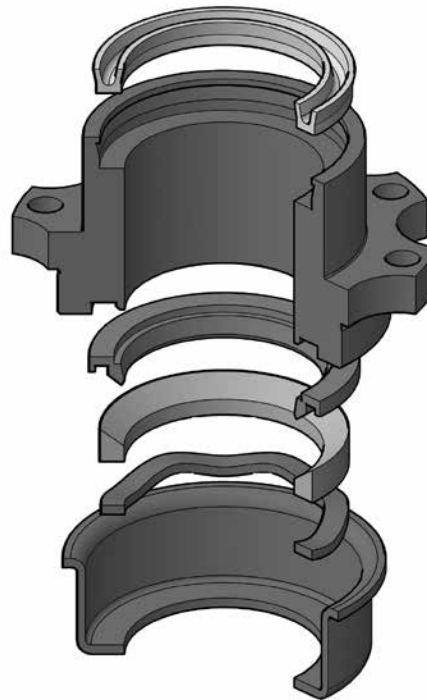
Hydraulic Rod Kit, Iron Gland

AJ, J, M, & H Cylinders

Retainer Held

Bolted


Kit Includes:

 1 PTFE Wiper
 1 Retainer Held Iron Gland
 1 PTFE Hat Packing
 1 Bronze Pressure Ring
 1 Wave Spring
 1 Cage

Kit Includes:

 1 PTFE Wiper
 1 Bolted Iron Gland
 1 PTFE Hat Packing
 1 Bronze Pressure Ring
 1 Wave Spring
 1 Cage

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	MLR-051-KR014-063	\$136.67	MLR-051-KR015-063	\$168.91
1"	MLR-051-KR014-100	168.44	MLR-051-KR015-100	203.33
1-3/8"	MLR-051-KR014-138	207.06	MLR-051-KR015-138	251.78
1-3/4"	MLR-051-KR014-175	280.52	MLR-051-KR015-175	320.45
2"	MLR-051-KR014-200	338.49	MLR-051-KR015-200	376.71
2-1/2"	MLR-051-KR014-250	417.12	MLR-051-KR015-250	487.10
3"	MLR-051-KR014-300	550.99	MLR-051-KR015-300	608.28

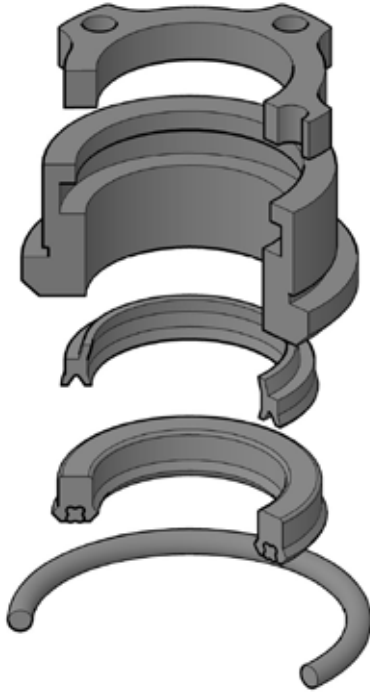
Bolted bushings from: 5/8" to 1-3/4" have 4 bolt holes
 2" to 4-1/2" have 8 bolt holes
 5" to 5-1/2" have 12 bolt holes

MILLER

Rod Kit, Iron Gland

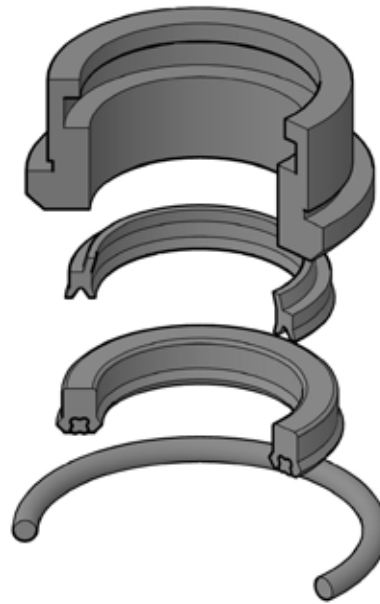
HV Cylinders - Retainer Held

With Retainer


Kit Includes:

- 1 NBR Wiper
- 1 Retainer Held Gland
- 1 Retainer Ring
- 1 URE Rod Seal
- 1 NBR O-ring

Without Retainer


Kit Includes:

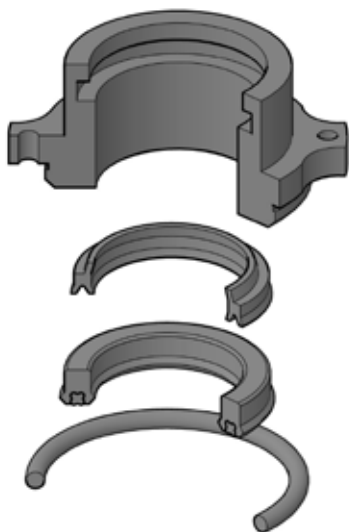
- 1 NBR Wiper
- 1 Retainer Held Gland
- 1 URE Rod Seal
- 1 NBR O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	MLR-051-KR065-063	\$102.61	MLR-051-KR064-063	\$43.80
1"	MLR-051-KR065-100	100.76	MLR-051-KR064-100	51.38
1-3/8"	MLR-051-KR065-138	133.74	MLR-051-KR064-138	64.00

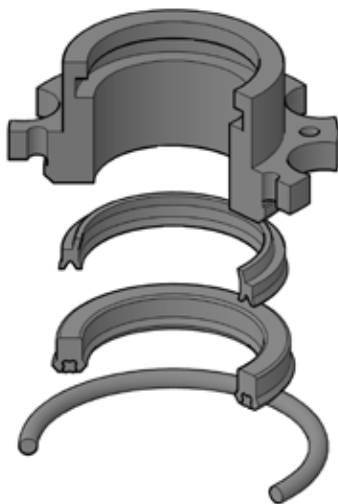
MILLER

Rod Kit, Iron Gland

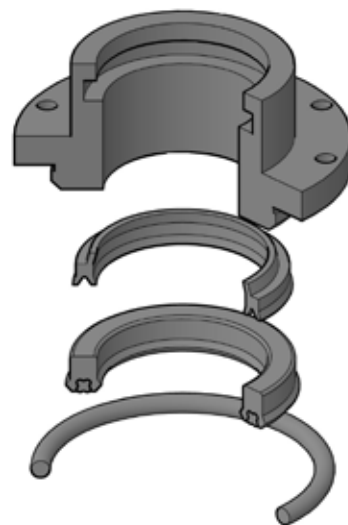
HV Cylinders-Bolted


Kit Includes:

1 NBR Wiper
 1 Bolted Gland
 1 URE Rod Seal
 1 NBR O-ring


Kit Includes:

1 NBR Wiper
 1 Bolted Gland
 1 URE Rod Seal
 1 NBR O-ring


Kit Includes:

1 NBR Wiper
 1 Bolted Gland
 1 URE Rod Seal
 1 NBR O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price	Kit #	List Price
1-3/4"	MLR-051-KR065-175	\$152.92	—	—	—	—
2"	—	—	MLR-051-KR065-200	\$164.12	—	—
2-1/2"	—	—	—	—	MLR-051-KR065-250	\$191.81
3	—	—	—	—	MLR-051-KR065-300	219.95
3-1/2"	—	—	—	—	MLR-051-KR065-350	251.73

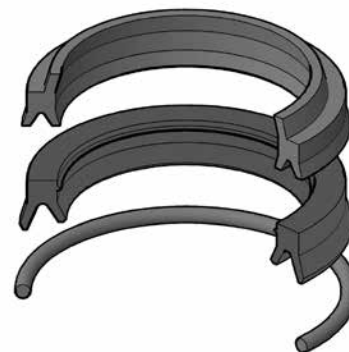
MILLER

Star Rod Kits

A, J, & H Cylinders
Star Kits

Rod Dia.	Kit #	List Price
5/8"	MLR-051-KR080-063	\$20.63
1"	MLR-051-KR080-100	36.45
1-3/8"	MLR-051-KR080-138	48.42
1-3/4"	MLR-051-KR080-175	60.02
2"	MLR-051-KR080-200	67.37
2-1/2"	MLR-051-KR080-250	80.44
3"	MLR-051-KR080-300	144.88
3-1/2"	MLR-051-KR080-350	155.23
4"	MLR-051-KR080-400	174.39
4-1/2"	MLR-051-KR080-450	197.12
5"	MLR-051-KR080-500	210.71
5-1/2"	MLR-051-KR080-550	329.30

Kit Includes:
1 XNBR Wiper
1 URE Rod Seal
1 NBR O-ring

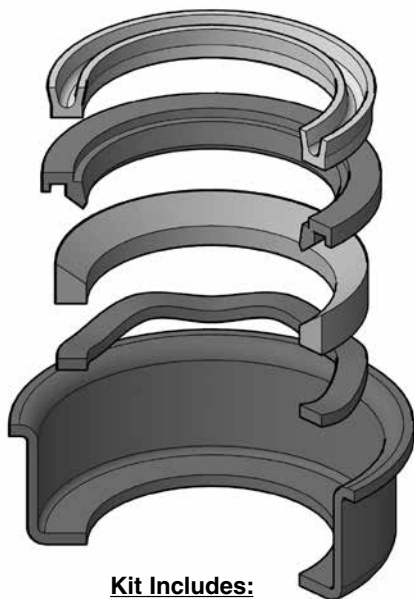


MILLER

MILLER

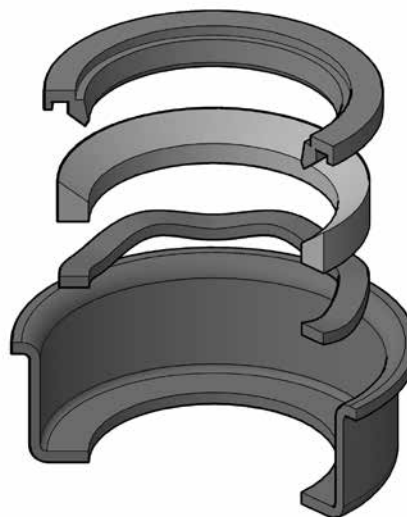
Hydraulic Rod Seal Cage Assembly

AJ, J, M, & H Cylinders


Kit Includes:

1 PTFE Wiper
 1 PTFE Hat Packing
 1 Bronze Pressure Ring
 1 Wave Spring
 1 Cage

Boosters & Tandems


Kit Includes:

1 PTFE Hat Packing
 1 Bronze Pressure Ring
 1 Wave Spring
 1 Cage
 No Wiper

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	MLR-051-KR012-063	\$76.92	MLR-051-KR024-063	\$69.75
1"	MLR-051-KR012-100	92.08	MLR-051-KR024-100	83.57
1-3/8"	MLR-051-KR012-138	114.03	MLR-051-KR024-138	103.29
1-3/4"	MLR-051-KR012-175	138.50	MLR-051-KR024-175	125.43
2"	MLR-051-KR012-200	161.71	MLR-051-KR024-200	146.77
2-1/2"	MLR-051-KR012-250	201.32	MLR-051-KR024-250	175.33
3"	MLR-051-KR012-300	269.54	MLR-051-KR024-300	240.52

MILLER

Rod Kits

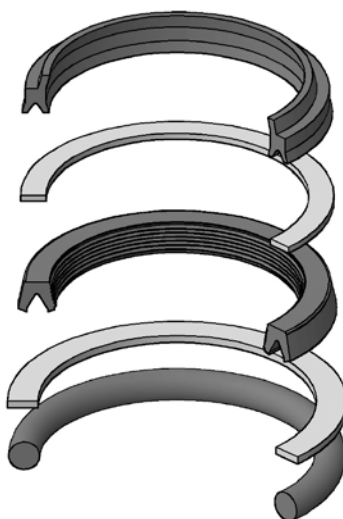
Miller Rod Kits For 2002 HV2 Cylinders

Nitrile / Urethane


Kit Includes:

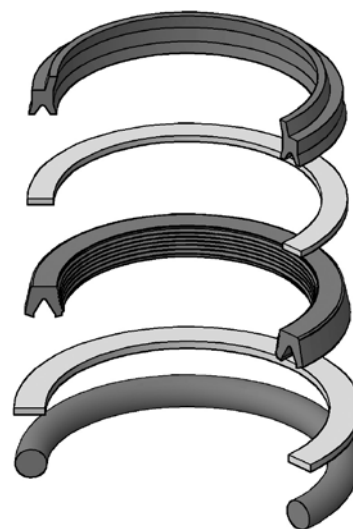
- 1 URE Multi-Lip U-Seal
- 1 XNBR Wiper
- 1 NBR O-Ring
- 1 NBR Back-Up

Fluorocarbon


Kit Includes:

- 1 FC Multi-Lip U-Seal
- 1 FC Wiper
- 1 FC O-Ring
- 1 FC Back-Up
- 1 PTFE Back-Up

Buna


Kit Includes:

- 1 NBR Multi-Lip U-Seal
- 1 XNBR Wiper
- 1 NBR O-Ring
- 1 NBR Back-Up
- 1 PTFE Back-Up

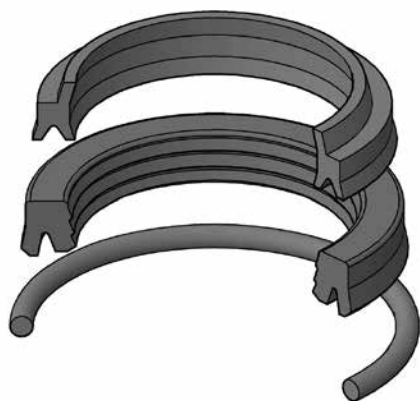
Rod Dia.	Kit #	List Price	Kit #	List Price	Kit #	List Price
5/8"	MLR-HV2-KR300-63	\$28.08	MLR-HV2-KR400-63	\$20.78	MLR-HV2-KR600-63	\$20.04
1"	MLR-HV2-KR300-100	19.01	MLR-HV2-KR400-100	20.22	MLR-HV2-KR600-100	20.94
1-3/8"	MLR-HV2-KR300-138	21.53	MLR-HV2-KR400-138	36.03	MLR-HV2-KR600-138	24.18
1-3/4"	MLR-HV2-KR300-175	23.12	MLR-HV2-KR400-175	39.07	MLR-HV2-KR600-175	27.69
2"	MLR-HV2-KR300-200	24.66	MLR-HV2-KR400-200	45.46	MLR-HV2-KR600-200	30.48
2-1/2"	MLR-HV2-KR300-250	30.31	MLR-HV2-KR400-250	52.39	MLR-HV2-KR600-250	33.55
3"	MLR-HV2-KR300-300	34.94	MLR-HV2-KR400-300	57.03	MLR-HV2-KR600-300	37.29
3-1/2"	MLR-HV2-KR300-350	53.31	MLR-HV2-KR400-350	61.80	MLR-HV2-KR600-350	41.82
4"	MLR-HV2-KR300-400	60.37	MLR-HV2-KR400-400	67.15	MLR-HV2-KR600-400	46.99

MILLER

Rod Kits

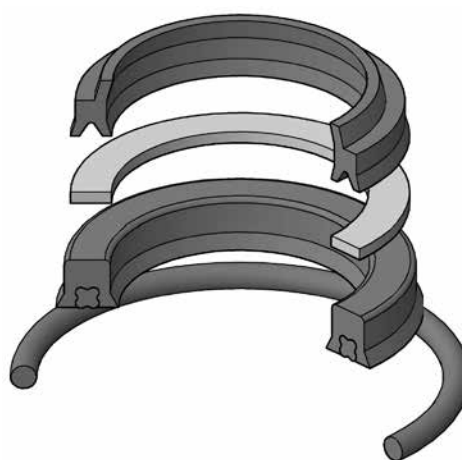
Miller Rod Kits For 2004 HV2 Cylinders

Urethane / Buna


Kit Includes:

- 1 URE Multi-Lip U-Seal
- 1 XNBR Wiper
- 1 NBR O-Ring

Fluorocarbon


Kit Includes:

- 1 FC Multi-Lip U-Seal
- 1 FC Wiper
- 1 FC O-Ring
- 1 Teflon Back-Up

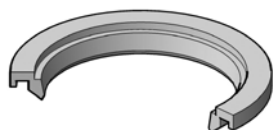
Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	MLR-HV2-KR310-63	\$15.19	MLR-HV2-KR410-63	\$19.03
1"	MLR-HV2-KR310-100	19.01	MLR-HV2-KR410-100	24.79
1-3/8"	MLR-HV2-KR310-138	21.53	MLR-HV2-KR410-138	36.54
1-3/4"	MLR-HV2-KR310-175	23.12	MLR-HV2-KR410-175	39.30
2"	MLR-HV2-KR310-200	24.66	MLR-HV2-KR410-200	94.13
2-1/2"	MLR-HV2-KR310-250	30.31	MLR-HV2-KR410-250	67.80
3"	MLR-HV2-KR310-300	34.94	MLR-HV2-KR410-300	80.46
3-1/2"	MLR-HV2-KR310-350	48.37	MLR-HV2-KR410-350	85.86
4"	MLR-HV2-KR310-400	57.52	MLR-HV2-KR410-400	98.77
5"	—		MLR-HV2-KR410-500	141.08
5-1/2"	—		MLR-HV2-KR410-550	169.58

MILLER

Hat Packing

**For Hydraulic Service
PTFE**

**For Air & Water Service
Nitrile**



Rod Dia.	Part #	List Price	Part #	List Price
5/8"	MLR-051-RS007-063	\$10.56	MLR-051-RS014-063	\$11.67
1"	MLR-051-RS007-100	13.57	MLR-051-RS014-100	19.10
1-3/8"	MLR-051-RS007-138	15.98	MLR-051-RS014-138	11.91
1-3/4"	MLR-051-RS007-175	16.83	MLR-051-RS014-175	15.04
2"	MLR-051-RS007-200	17.41	MLR-051-RS014-200	20.91
2-1/2"	MLR-051-RS007-250	22.31	MLR-051-RS014-250	24.43
3"	MLR-051-RS007-300	31.07	MLR-051-RS014-300	26.92
3-1/2"	MLR-051-RS007-350	39.61	MLR-051-RS014-350	38.62
4"	MLR-051-RS007-400	42.62	MLR-051-RS014-400	45.93
4-1/2"	MLR-051-RS007-450	49.62	MLR-051-RS014-450	53.01
5"	MLR-051-RS007-500	53.37	MLR-051-RS014-500	60.21
5-1/2"	MLR-051-RS007-550	62.68	MLR-051-RS014-550	67.30
7"	MLR-051-RS007-700	56.49	—	—
8"	MLR-051-RS007-800	59.14	—	—
9"	MLR-051-RS007-900	59.18	—	—
10"	MLR-051-RS007-1000	115.81	—	—

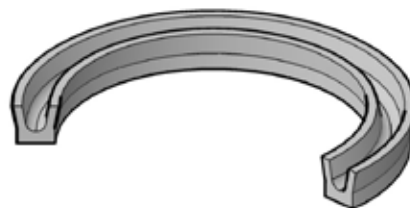
MILLER

MILLER

PTFE Wiper “U” Style

A, C, J, M, & H Cylinders

Rod Dia.	Part #	List Price
5/8"	MLR-051-WP001-063	\$7.62
1"	MLR-051-WP001-100	9.03
1-3/8"	MLR-051-WP001-138	11.40
1-3/4"	MLR-051-WP001-175	13.87
2"	MLR-051-WP001-200	15.81
2-1/2"	MLR-051-WP001-250	27.51
3"	MLR-051-WP001-300	30.71
3-1/2"	MLR-051-WP001-350	34.70
4"	MLR-051-WP001-400	39.41
4-1/2"	MLR-051-WP001-450	51.59
5"	MLR-051-WP001-500	55.58
5-1/2"	MLR-051-WP001-550	56.53
7"	MLR-051-WP001-700	55.25
8"	MLR-051-WP001-800	49.04
9"	MLR-051-WP001-900	62.25
10"	MLR-051-WP001-1000	91.86



MILLER

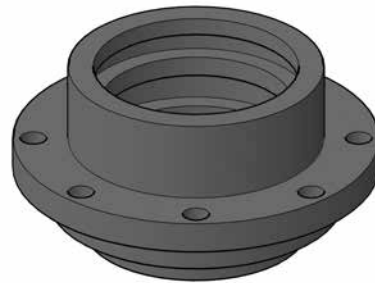
MILLER

Iron Gland

Star Bushing Style A, J, & H Cylinders

Retainer Held

Bolted



Rod Dia.	Part #	List Price	Part #	List Price
5/8"	MLR-050-BU100-063	\$118.63	MLR-050-BU101-063	\$145.27
1"	MLR-050-BU100-100	145.19	MLR-050-BU101-100	178.06
1-3/8"	MLR-050-BU100-138	148.94	MLR-050-BU101-138	218.75
1-3/4"	—		MLR-050-BU101-175	220.14
2"	—		MLR-050-BU101-200	271.90
2-1/2"	—		MLR-050-BU101-250	380.84
3"	—		MLR-050-BU101-300	422.85
3-1/2"	—		MLR-050-BU101-350	499.43
4"	—		MLR-050-BU101-400	732.00
4-1/2"	—		MLR-050-BU101-450	792.06
5"	—		MLR-050-BU101-500	900.01
5-1/2"	—		MLR-050-BU101-550	986.30

Bolted bushings from: 5/8" to 1-3/4" have 4 bolt holes
2" to 4-1/2" have 8 bolt holes
5" to 5-1/2" have 12 bolt holes

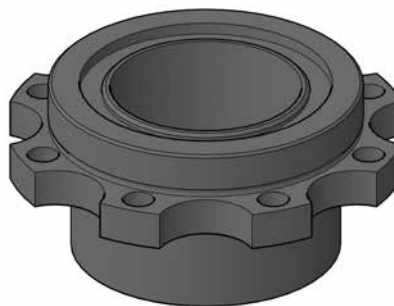
MILLER

Iron Gland

A, C, J, M, & H Cylinders

Retainer Held

Bolted



Rod Dia.	Part #	List Price	Part #	List Price
5/8"	MLR-050-BU022-063	\$62.64	MLR-050-BU024-063	\$137.52
1"	MLR-050-BU022-100	78.54	MLR-050-BU024-100	165.66
1-3/8"	MLR-050-BU022-138	95.29	MLR-050-BU024-138	213.15
1-3/4"	MLR-050-BU022-175	136.47	MLR-050-BU024-175	215.57
2"	MLR-050-BU022-200	169.91	MLR-050-BU024-200	241.96
2-1/2"	MLR-050-BU022-250	274.04	MLR-050-BU024-250	279.25
3"	MLR-050-BU022-300	275.69	MLR-050-BU024-300	331.29

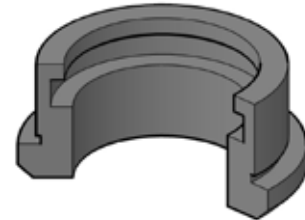
Bolted bushings from: 5/8" to 1-3/4" have 4 bolt holes
 2" to 4-1/2" have 8 bolt holes
 5" to 5-1/2" have 12 bolt holes

MILLER

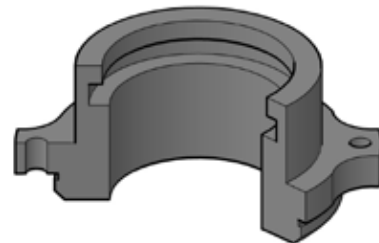
Iron Gland

HV Cylinders

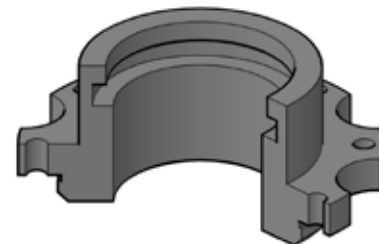
Rod Dia.	Kit #	List Price
5/8"	MLR-RG065-063	\$38.66
1"	MLR-RG065-100	45.03
1-3/8"	MLR-RG065-138	56.29



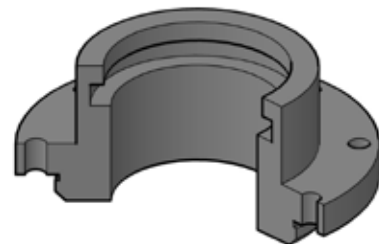
Rod Dia.	Kit #	List Price
1-3/4"	MLR-RG065-175	\$144.87



Rod Dia.	Kit #	List Price
2"	MLR-RG065-200	\$156.68



Rod Dia.	Kit #	List Price
2-1/2"	MLR-RG065-250	\$182.53
3"	MLR-RG065-300	209.40
3-1/2"	MLR-RG065-350	233.72



MILLER

Retainer

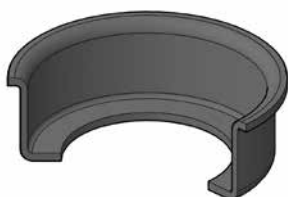
A, C, J, M, H & HV Cylinders

Rod Dia.	Part #	List Price
5/8"	MLR-050-RT005-063	\$39.52
1"	MLR-050-RT005-100	44.09
1-3/8"	MLR-050-RT005-138	56.33



Caged Assembly Components

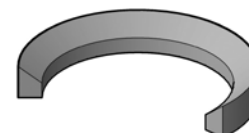
Rod Seal Cage



Wave Spring



Bronze Pressure Ring



Rod Dia.	Part #	List Price	Part #	List Price	Part #	List Price
5/8"	MLR-051-CG001-063	\$25.93	MLR-051-WS004-063	\$17.86	MLR-051-PG001-063	\$24.42
1"	MLR-051-CG001-100	31.68	MLR-051-WS004-100	17.86	MLR-051-PG001-100	30.49
1-3/8"	MLR-051-CG001-138	33.33	MLR-051-WS004-138	17.86	MLR-051-PG001-138	45.29
1-3/4"	MLR-051-CG001-175	35.20	MLR-051-WS004-175	17.86	MLR-051-PG001-175	61.51
2"	MLR-051-CG001-200	38.60	MLR-051-WS003-200	21.72	MLR-051-PG001-200	71.92
2-1/2"	MLR-051-CG001-250	43.67	MLR-051-WS003-250	22.85	MLR-051-PG001-250	89.65
3"	MLR-051-CG001-300	60.92	MLR-051-WS003-300	27.39	MLR-051-PG001-300	125.54

MILLER

Piston Kits

A Series Cylinders

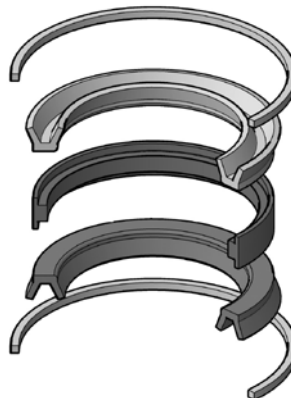
January '82 to Current


Kit Includes:

2 NBR U-seals
1 Wear Ring
2 PTFE Tube End Seals
(wear ring material and profile varies with size)

J Series Cylinders

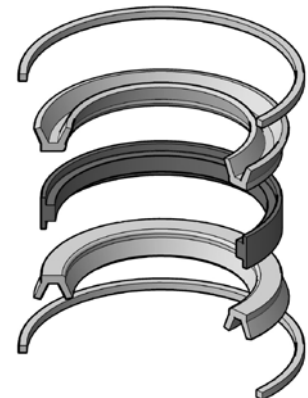
January '81 to Current


Kit Includes:

2 U-seals (PTFE up to 5",
NBR from 6" to 12")
1 Wear Ring
2 PTFE Tube End Seals
(wear ring and u-seal material and profile varies with size)

H Series Cylinders

January '82 to Current


Kit Includes:

2 PTFE U-seals
1 T-Shape Wear Ring
2 PTFE Tube End Seals
(wear ring material varies with size)

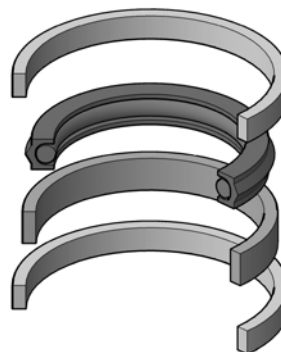
Bore Dia.	Kit #	List Price	Kit #	List Price	Kit #	List Price
1-1/2"	MLR-090-KB001-150	\$81.42	MLR-091-KB001-150	\$93.73	MLR-171-KB001-150	\$128.45
2"	MLR-090-KB001-200	104.33	MLR-091-KB001-200	94.26	MLR-171-KB001-200	148.79
2-1/2"	MLR-090-KB001-250	113.17	MLR-091-KB001-250	109.77	MLR-171-KB001-250	178.86
3-1/4"	MLR-090-KB001-325	128.28	MLR-091-KB001-325	143.98	MLR-171-KB001-325	212.67
4"	MLR-090-KB001-400	148.37	MLR-091-KB001-400	158.41	MLR-171-KB001-400	293.64
5"	MLR-090-KB001-500	157.66	MLR-091-KB001-500	222.91	MLR-171-KB001-500	341.10
6"	MLR-090-KB001-600	189.89	MLR-091-KB001-600	238.18	MLR-171-KB001-600	379.61
7"	MLR-090-KB001-700	201.06	MLR-091-KB001-700	245.43	MLR-171-KB001-700	534.99
8"	MLR-090-KB001-800	206.72	MLR-091-KB001-800	264.37	MLR-171-KB001-800	667.91
10"	MLR-090-KB001-1000	231.91	MLR-091-KB001-1000	305.21	MLR-171-KB001-1000	782.63
12"	MLR-090-KB001-1200	265.74	MLR-091-KB001-1200	376.45	MLR-171-KB001-1200	885.87

MILLER

Piston Kits

HV Series Cylinders Urethane

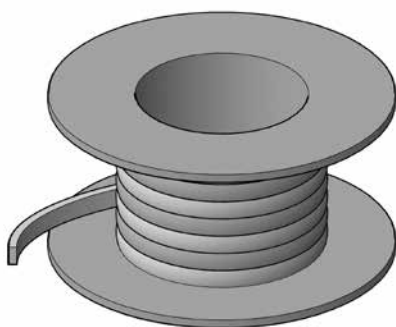
Bore Dia.	(URE) Kit #	List Price
1-1/2"	MLR-181-KB001-150	\$56.74
2"	MLR-181-KB001-200	59.15
2-1/2"	MLR-181-KB001-250	61.82
3-1/4"	MLR-181-KB001-325	68.48
4"	MLR-181-KB001-400	73.67
5"	MLR-181-KB001-500	87.22
6"	MLR-181-KB001-600	100.95
7"	MLR-181-KB001-700	102.24
8"	MLR-181-KB001-800	145.82


Kit Includes:

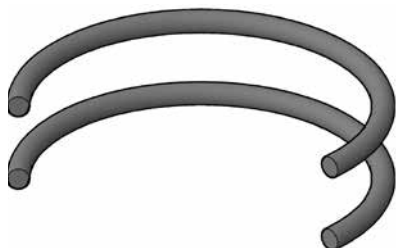
- 1 URE Piston Seal
- 1 Wear Ring
- 2 PTFE Tube End Seals

PTFE Tube Seal Cord

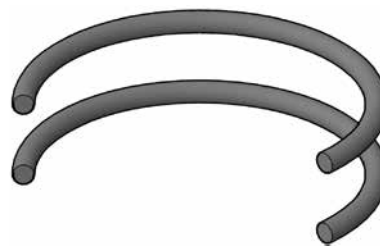
A, C, J, M, & H Cylinders



Part #	Radial Wall	Width	List Price
MLR-008-SH001-30	.030	.070	\$123.31
Includes: 30' spool of PTFE Head Seal			
MLR-SH1-STRIP	.030	.070	8.15

MILLER
Piston Kits
Tube End Seal Kits For HV2 Cylinders
Nitrile


Kit Includes:
2 NBR O-ring Head Seals

Fluorocarbon


Kit Includes:
2 FC O-ring Head Seals

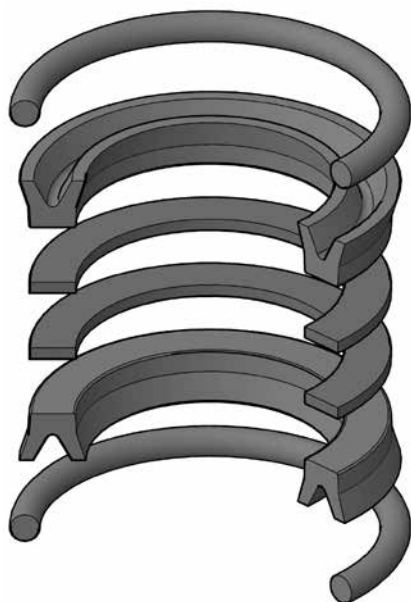
Bore Dia.	Part #	List Price	Part #	List Price
1-1/2"	MLR-HV2-ES100-150	\$7.00	MLR-HV2-ES200-150	\$9.59
2"	MLR-HV2-ES100-200	7.36	MLR-HV2-ES200-200	16.39
2-1/2"	MLR-HV2-ES100-250	7.67	MLR-HV2-ES200-250	20.46
3-1/4"	MLR-HV2-ES100-325	8.11	MLR-HV2-ES200-325	24.87
4"	MLR-HV2-ES100-400	8.47	MLR-HV2-ES200-400	31.11
5"	MLR-HV2-ES100-500	9.75	MLR-HV2-ES200-500	44.91
6"	MLR-HV2-ES100-600	9.75	MLR-HV2-ES200-600	46.97

MILLER

Piston Kits

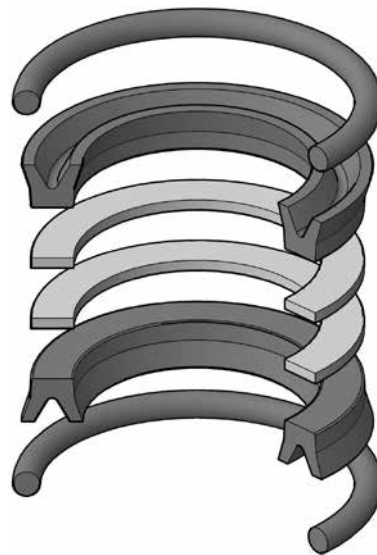
Lip Seal Kits For HV2 Cylinders

Nitrile


Kit Includes:

2 NBR O-ring Head Seals
 2 NBR U-seals
 2 URE Back-up Rings

Fluorocarbon


Kit Includes:

2 FC O-ring Head Seals
 2 FC U-seals
 2 PTFE Back-up Rings

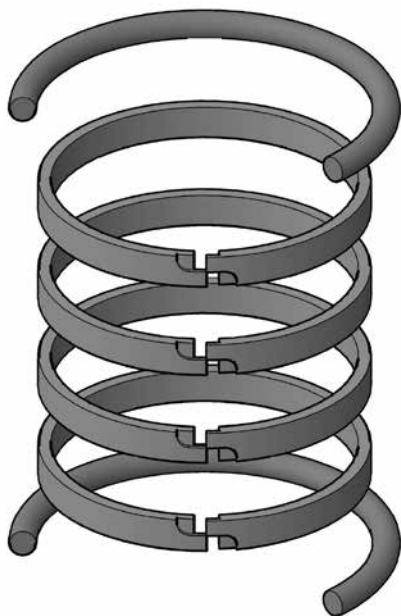
Bore Dia.	Part #	List Price	Part #	List Price
1-1/2"	MLR-HV2-KB100-150	\$11.27	MLR-HV2-KB200-150	\$51.29
2"	MLR-HV2-KB100-200	13.27	MLR-HV2-KB200-200	58.54
2-1/2"	MLR-HV2-KB100-250	15.39	MLR-HV2-KB200-250	82.15
3-1/4"	MLR-HV2-KB100-325	19.08	MLR-HV2-KB200-325	95.88
4"	MLR-HV2-KB100-400	25.08	MLR-HV2-KB200-400	103.34
5"	MLR-HV2-KB100-500	29.25	MLR-HV2-KB200-500	131.15
6"	MLR-HV2-KB100-600	29.25	MLR-HV2-KB200-600	174.32

MILLER

Piston Kits

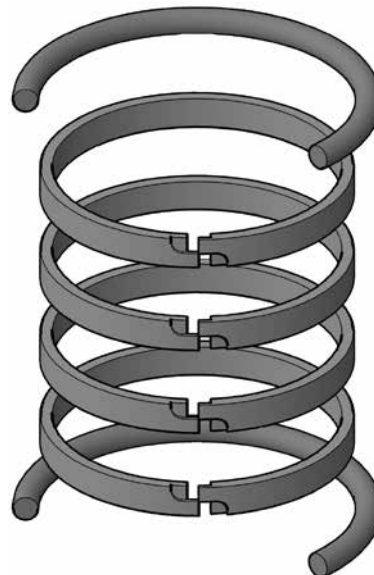
Piston Rings Kits For HV2 Cylinders

Nitrile


Kit Includes:

2 NBR O-ring Head Seals
4 Cast Iron Piston Rings

Fluorocarbon


Kit Includes:

2 FC O-ring Head Seals
4 Cast Iron Piston Rings

MILLER

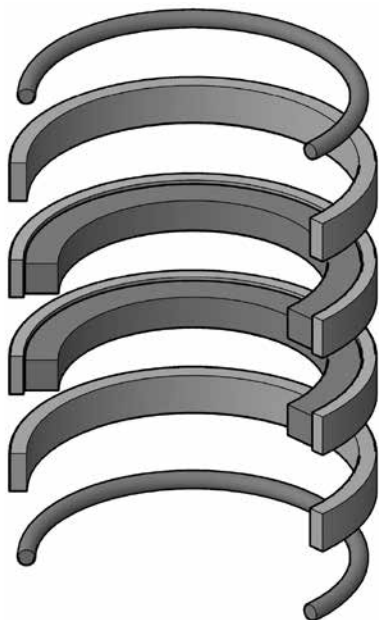
Bore Dia.	Part #	List Price	Part #	List Price
1-1/2"	MLR-HV2-KB300-150	\$46.74	MLR-HV2-KB400-150	\$54.14
2"	MLR-HV2-KB300-200	49.87	MLR-HV2-KB400-200	56.11
2-1/2"	MLR-HV2-KB300-250	50.43	MLR-HV2-KB400-250	56.90
3-1/4"	MLR-HV2-KB300-325	54.53	MLR-HV2-KB400-325	67.79
4"	MLR-HV2-KB300-400	56.13	MLR-HV2-KB400-400	69.08
5"	MLR-HV2-KB300-500	73.94	MLR-HV2-KB400-500	97.95
6"	MLR-HV2-KB300-600	111.15	MLR-HV2-KB400-600	118.54

MILLER

Piston Kits

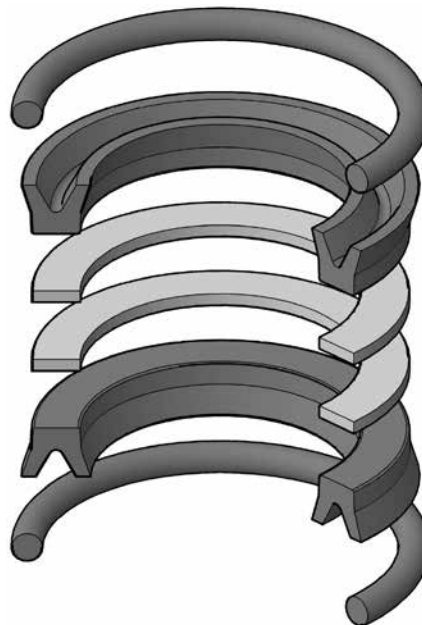
High Load Kits For HV2 Cylinders

Nitrile


Kit Includes:

2 NBR O-ring Head Seals
 2 Nylon Wear Rings
 2 Bronze filled PTFE Piston Rings
 w/ 2 NBR Expanders

Fluorocarbon


Kit Includes:

2 FC O-ring Head Seals
 2 Nylon Wear Rings
 2 Bronze filled PTFE Piston Rings
 w/ 2 FC Expanders

Rod Dia.	Kit #	List Price	Kit #	List Price
1-1/2"	MLR-HV2-KB500-150	\$25.50	MLR-HV2-KB600-150	\$44.22
2"	MLR-HV2-KB500-200	33.10	MLR-HV2-KB600-200	50.07
2-1/2"	MLR-HV2-KB500-250	31.91	MLR-HV2-KB600-250	53.82
3-1/4"	MLR-HV2-KB500-325	42.14	MLR-HV2-KB600-325	118.54
4"	MLR-HV2-KB500-400	36.70	MLR-HV2-KB600-400	131.17
5"	MLR-HV2-KB500-500	41.18	MLR-HV2-KB600-500	145.15
6"	MLR-HV2-KB500-600	75.55	MLR-HV2-KB600-600	226.33

MILLER
Piston U-seals
All Current Style Cylinders
Buna-N
PTFE


Bore Dia.	Part #	List Price	Part #	List Price
1-1/2"	MLR-052-PS025-150	\$18.64	MLR-052-PS017-150	\$17.36
2"	MLR-052-PS025-200	19.33	MLR-052-PS017-200	17.48
2-1/2"	MLR-052-PS025-250	20.49	MLR-052-PS017-250	20.62
3-1/4"	MLR-052-PS025-325	22.24	MLR-052-PS017-325	26.93
4"	MLR-052-PS025-400	22.06	MLR-052-PS017-400	35.71
5"	MLR-052-PS025-500	26.27	MLR-052-PS017-500	53.56
6"	MLR-052-PS025-600	33.65	MLR-052-PS017-600	61.23
7"	MLR-052-PS025-700	21.02	MLR-052-PS017-700	74.39
8"	MLR-052-PS016-800	26.04	MLR-052-PS017-800	86.66
10"	MLR-052-PS025-1000	77.76	MLR-052-PS017-1000	136.86
12"	MLR-052-PS016-1200	61.73	MLR-052-PS017-1200	183.53
14"	MLR-052-PS025-1400	150.99	MLR-052-PS017-1400	188.72
16"	MLR-052-PS025-1600	307.51	MLR-052-PS017-1600	199.73

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Wear Rings

Air Service PTFE



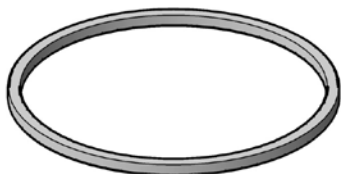
Hydraulic Service Acetal



Hydraulic Service Bronze



Bore Dia.	Part #	List Price	Part #	List Price	Part #	List Price
1-1/2"	MLR-052-WR005-150-25	\$30.52	MLR-052-WR009-150-25	\$24.06	—	—
2"	MLR-052-WR005-200-25	32.13	MLR-052-WR009-200-25	27.71	—	—
2"	—	—	MLR-052-WR009-200-31	28.14	—	—
2-1/2"	MLR-052-WR005-250-25	33.91	MLR-052-WR009-250-25	34.09	—	—
2-1/2"	—	—	MLR-052-WR009-250-38	36.19	—	—
3-1/4"	MLR-052-WR005-325-25	44.95	MLR-052-WR009-325-25	46.66	—	—
3-1/4"	—	—	MLR-052-WR009-325-50	51.77	—	—
4"	MLR-052-WR005-400-25	56.08	MLR-052-WR009-400-25	54.15	—	—
4"	—	—	MLR-052-WR009-400-63	73.19	—	—
5"	MLR-052-WR005-500-25	70.40	—	—	—	—
5"	—	—	MLR-052-WR009-500-75	145.53	—	—
6"	MLR-052-WR005-600-25	84.17	—	—	—	—
6"	—	—	MLR-052-WR009-600-75	188.50	—	—
7"	MLR-052-WR005-700-38	57.49	—	—	—	—
7"	—	—	—	—	MLR-052-WR008-700-75	\$196.79
8"	MLR-052-WR005-800-38	81.45	—	—	—	—
8"	—	—	—	—	MLR-052-WR008-800-125	263.48
10"	MLR-052-WR005-1000-38	86.25	—	—	—	—
10"	—	—	—	—	MLR-052-WR008-1000-125	307.40
12"	MLR-052-WR005-1200-38	108.61	—	—	—	—
12"	—	—	—	—	MLR-052-WR008-1200-125	336.52
16"	MLR-052-WR005-1600-50	169.15	—	—	—	—
18"	MLR-052-WR005-1800-50	174.98	—	—	—	—
20"	MLR-052-WR005-2000-50	202.98	—	—	—	—

MILLER
Tube End Seals
Continuous PTFE
A, C, J, M, ER500, & ER3000
H & ER6000


Bore Dia.	Part #	List Price	Part #	List Price
1-1/2"	MLR-090-ES009-150	\$9.25	MLR-170-ES010-150	\$14.21
2"	MLR-090-ES009-200	16.87	MLR-170-ES010-200	20.11
2-1/2"	MLR-090-ES009-250	16.93	MLR-170-ES010-250	26.10
3-1/4"	MLR-090-ES009-325	17.08	MLR-170-ES010-325	27.20
4"	MLR-090-ES009-400	25.28	MLR-170-ES010-400	32.54
5"	MLR-090-ES009-500	31.83	MLR-170-ES010-500	39.00
6"	MLR-090-ES009-600	39.65	MLR-170-ES010-600	45.13
7"	MLR-090-ES009-700	49.78	MLR-170-ES010-700	51.23
8"	MLR-090-ES009-800	61.96	MLR-170-ES010-800	64.15
10"	MLR-090-ES009-1000	73.90	MLR-170-ES010-1000	74.48
12"	MLR-090-ES009-1200	82.26	MLR-170-ES010-1200	82.99
14"	MLR-090-ES009-1400	81.65	—	—

Various Kits

Kit #	Bore	List Price
MLR-150-KB001-325	3-1/4"	\$233.31
MLR-150-KB001-500	5"	392.44

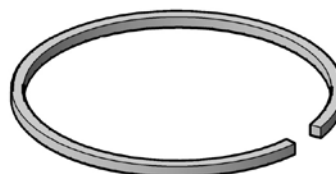
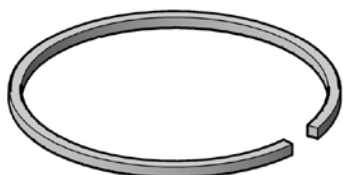
Kit Includes:

2 Leather Piston Cups
2 PTFE Tube End Seals
1 PTFE Follower Seal

MILLER

Tube End Seals

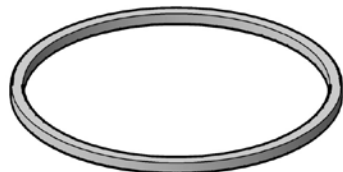
Strip PTFE

A, C, J, M, ER500, & ER3000
H & ER6000


Bore Dia.	Part #	List Price	Part #	List Price
1-1/2"	MLR-090-ES006-150	\$8.05	MLR-170-ES006-150	\$7.90
2"	MLR-090-ES006-200	14.03	MLR-170-ES006-200	14.41
2-1/2"	MLR-090-ES006-250	14.75	MLR-170-ES006-250	14.59
3-1/4"	MLR-090-ES006-325	17.07	MLR-170-ES006-325	15.06
4"	MLR-090-ES006-400	21.14	MLR-170-ES006-400	21.46
5"	MLR-090-ES006-500	22.66	MLR-170-ES006-500	22.59
6"	MLR-090-ES006-600	27.98	MLR-170-ES006-600	26.74
7"	MLR-090-ES006-700	27.60	MLR-170-ES006-700	27.60
8"	MLR-090-ES006-800	34.50	MLR-170-ES006-800	34.50
10"	MLR-090-ES006-1000	41.41	MLR-170-ES006-1000	41.41
12"	MLR-090-ES006-1200	48.31	MLR-170-ES006-1200	48.31
14"	MLR-090-ES006-1400	55.22	MLR-170-ES006-1400	55.22
18"	—		MLR-170-ES006-1800	69.03

PTFE Follower Seals

J & H Cylinders

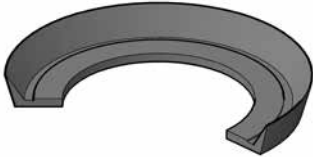
For 3 Piece Pistons From 1956-1977


Part #	Bore		I.D.	Radial Wall	Width	List Price
	H	J				
MLR-052-FS001-44	1-1/2	1-1/2, 2, 2-1/2	7/16	0.070	0.070	\$10.06
MLR-052-FS001-75	2, 2-1/2	3-1/4, 4, 5	3/4	0.070	0.070	9.60
MLR-052-FS001-100	3-1/4	6, 7, 8	1	0.142	0.142	14.89
MLR-052-FS001-125	4	10	1-1/4	0.142	0.142	16.53
MLR-052-FS001-150	5	12	1-1/2	0.142	0.142	20.91
MLR-052-FS001-188	6	14	1-7/8	0.142	0.142	23.34
MLR-052-FS001-250	8	-	2-1/2	0.142	0.142	24.14

MILLER

Piston Cups

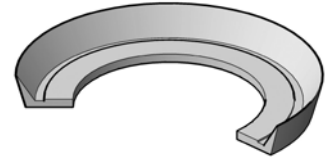
**A, JW, & HW Cylinders
From 1956-1977
Nitrile**



**J & H Cylinders
From 1956-1977
Leather**



**AJ, J, & H Cylinders
From 1956-1977
PTFE**



Bore Dia.	Part #	List Price	Part #	List Price	Part #	List Price
1-1/2"	MLR-052-PS001-150	\$12.53	MLR-052-PS003-150	\$20.08	MLR-052-PS006-150	\$28.07
2"	MLR-052-PS001-200	13.40	MLR-052-PS003-200	24.62	MLR-052-PS006-200	48.89
2-1/2"	MLR-052-PS001-250	18.31	MLR-052-PS003-250	32.99	MLR-052-PS006-250	51.52
3-1/4"	MLR-052-PS001-325	28.58	MLR-052-PS003-325	51.81	MLR-052-PS006-325	46.43
4"	MLR-052-PS001-400	33.34	MLR-052-PS003-400	63.80	MLR-052-PS006-400	57.34
5"	MLR-052-PS001-500	43.20	MLR-052-PS003-500	88.74	MLR-052-PS006-500	85.86
6"	MLR-052-PS001-600	49.12	MLR-052-PS003-600	120.29	MLR-052-PS006-600	103.77
7"	—	—	—	—	MLR-052-PS006-700	249.47
8"	MLR-052-PS001-800	56.13	—	—	MLR-052-PS006-800	140.41
10"	MLR-052-PS001-1000	67.06	—	—	MLR-052-PS006-1000	181.15
12"	MLR-052-PS001-1200	204.37	—	—	MLR-052-PS006-1200	241.61

MILLER

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Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-HV2-KR400-100	Rod Kit		1				\$20.22
MLR-HV2-KR600-138	Rod Kit		1-3/8				24.18
MLR-HV2-KR600-175	Rod Kit		1-3/4				27.69
MLR-HV2-KR600-200	Rod Kit		2				30.48
MLR-HV2-KR600-250	Rod Kit		2-1/2				33.55
MLR-HV2-KR600-300	Rod Kit		3				37.29
MLR-HV2-KR600-350	Rod Kit		3-1/2				41.82
MLR-HV2-KR600-400	Rod Kit		4				46.99
MLR-050-BU022-063	Iron Gland	5/8					62.64
MLR-050-BU022-100	Iron Gland	1					78.54
MLR-050-BU022-138	Iron Gland	1-3/8					95.29
MLR-050-BU022-175	Iron Gland	1-3/4					136.47
MLR-050-BU022-200	Iron Gland	2					169.91
MLR-050-BU022-250	Iron Gland	2-1/2					274.04
MLR-050-BU022-300	Iron Gland	3					275.69
MLR-050-BU024-063	Iron Gland	5/8					137.52
MLR-050-BU024-100	Iron Gland	1					165.66
MLR-050-BU024-138	Iron Gland	1-3/8					213.15
MLR-050-BU024-175	Iron Gland	1-3/4					215.57
MLR-050-BU024-200	Iron Gland	2					241.96
MLR-050-BU024-250	Iron Gland	2-1/2					279.25
MLR-050-BU024-300	Iron Gland	3					331.29
MLR-050-BU100-063	Iron Gland	5/8					118.63
MLR-050-BU100-100	Iron Gland	1					145.19
MLR-050-BU100-138	Iron Gland	1-3/8					148.94
MLR-050-BU101-063	Iron Gland	5/8					145.27
MLR-050-BU101-100	Iron Gland	1					178.06
MLR-050-BU101-138	Iron Gland	1-3/8					218.75
MLR-050-BU101-175	Iron Gland	1-3/4					220.14
MLR-050-BU101-200	Iron Gland	2					271.90
MLR-050-BU101-250	Iron Gland	2-1/2					380.84
MLR-050-BU101-300	Iron Gland	3					422.85
MLR-050-BU101-350	Iron Gland	3-1/2					499.43
MLR-050-BU101-400	Iron Gland	4					732.00
MLR-050-BU101-450	Iron Gland	4-1/2					792.06
MLR-050-BU101-500	Iron Gland	5					900.01
MLR-050-BU101-550	Iron Gland	5-1/2					986.30
MLR-050-RT005-063	Retainer	5/8					39.52
MLR-050-RT005-100	Retainer	1					44.09
MLR-050-RT005-138	Retainer	1-3/8					56.33
MLR-051-CG001-063	Rod Seal Cage	5/8					25.93
MLR-051-CG001-100	Rod Seal Cage	1					31.68
MLR-051-CG001-138	Rod Seal Cage	1-3/8					33.33
MLR-051-CG001-175	Rod Seal Cage	1-3/4					35.20
MLR-051-CG001-200	Rod Seal Cage	2					38.60
MLR-051-CG001-250	Rod Seal Cage	2-1/2					43.67
MLR-051-CG001-300	Rod Seal Cage	3					60.92
MLR-051-KR010-063	Rod Kit - Gland	5/8					76.28
MLR-051-KR010-100	Rod Kit - Gland	1					102.66
MLR-051-KR010-138	Rod Kit - Gland	1-3/8					116.63

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Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-051-KR010-175	Rod Kit - Gland	1-3/4					\$171.30
MLR-051-KR010-200	Rod Kit - Gland	2					200.37
MLR-051-KR010-250	Rod Kit - Gland	2-1/2					288.32
MLR-051-KR010-300	Rod Kit - Gland	3					376.29
MLR-051-KR011-063	Rod Kit - Gland	5/8					129.56
MLR-051-KR011-100	Rod Kit - Gland	1					149.88
MLR-051-KR011-138	Rod Kit - Gland	1-3/8					162.24
MLR-051-KR011-175	Rod Kit - Gland	1-3/4					255.16
MLR-051-KR011-200	Rod Kit - Gland	2					289.02
MLR-051-KR011-250	Rod Kit - Gland	2-1/2					371.66
MLR-051-KR011-300	Rod Kit - Gland	3					446.04
MLR-051-KR012-063	Rod Kit - Cage Assembly	5/8					76.92
MLR-051-KR012-100	Rod Kit - Cage Assembly	1					92.08
MLR-051-KR012-138	Rod Kit - Cage Assembly	1-3/8					114.03
MLR-051-KR012-175	Rod Kit - Cage Assembly	1-3/4					138.50
MLR-051-KR012-200	Rod Kit - Cage Assembly	2					161.71
MLR-051-KR012-250	Rod Kit - Cage Assembly	2-1/2					201.32
MLR-051-KR012-300	Rod Kit - Cage Assembly	3					269.54
MLR-051-KR014-063	Rod Kit - Gland	5/8					136.67
MLR-051-KR014-100	Rod Kit - Gland	1					168.44
MLR-051-KR014-138	Rod Kit - Gland	1-3/8					207.06
MLR-051-KR014-175	Rod Kit - Gland	1-3/4					280.52
MLR-051-KR014-200	Rod Kit - Gland	2					338.49
MLR-051-KR014-250	Rod Kit - Gland	2-1/2					417.12
MLR-051-KR014-300	Rod Kit - Gland	3					550.99
MLR-051-KR015-063	Rod Kit - Gland	5/8					168.91
MLR-051-KR015-100	Rod Kit - Gland	1					203.33
MLR-051-KR015-138	Rod Kit - Gland	1-3/8					251.78
MLR-051-KR015-175	Rod Kit - Gland	1-3/4					320.45
MLR-051-KR015-200	Rod Kit - Gland	2					376.71
MLR-051-KR015-250	Rod Kit - Gland	2-1/2					487.10
MLR-051-KR015-300	Rod Kit - Gland	3					608.28
MLR-051-KR024-063	Rod Kit - Cage Assembly	5/8					69.75
MLR-051-KR024-100	Rod Kit - Cage Assembly	1					83.57
MLR-051-KR024-138	Rod Kit - Cage Assembly	1-3/8					103.29
MLR-051-KR024-175	Rod Kit - Cage Assembly	1-3/4					125.43
MLR-051-KR024-200	Rod Kit - Cage Assembly	2					146.77
MLR-051-KR024-250	Rod Kit - Cage Assembly	2-1/2					175.33
MLR-051-KR024-300	Rod Kit - Cage Assembly	3					240.52
MLR-051-KR064-063	Rod Kit - Gland	5/8					43.80
MLR-051-KR064-100	Rod Kit - Gland	1					51.38
MLR-051-KR064-138	Rod Kit - Gland	1-3/8					64.00
MLR-051-KR065-063	Rod Kit - Gland	5/8					102.61
MLR-051-KR065-100	Rod Kit - Gland	1					100.76
MLR-051-KR065-138	Rod Kit - Gland	1-3/8					133.74
MLR-051-KR065-175	Rod Kit - Gland	1-3/4					152.92
MLR-051-KR065-200	Rod Kit - Gland	2					164.12
MLR-051-KR065-250	Rod Kit - Gland	2-1/2					191.81
MLR-051-KR065-300	Rod Kit - Gland	3					219.95
MLR-051-KR065-350	Rod Kit - Gland	3-1/2					251.73

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Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-051-KR074-063	Rod Kit - Gland	5/8					\$173.59
MLR-051-KR074-100	Rod Kit - Gland	1					215.99
MLR-051-KR074-138	Rod Kit - Gland	1-3/8					254.64
MLR-051-KR075-063	Rod Kit - Gland	5/8					233.17
MLR-051-KR075-100	Rod Kit - Gland	1					281.24
MLR-051-KR075-138	Rod Kit - Gland	1-3/8					329.64
MLR-051-KR075-175	Rod Kit - Gland	1-3/4					357.23
MLR-051-KR075-200	Rod Kit - Gland	2					420.78
MLR-051-KR075-250	Rod Kit - Gland	2-1/2					577.73
MLR-051-KR075-300	Rod Kit - Gland	3					740.05
MLR-051-KR075-350	Rod Kit - Gland	3-1/2					992.57
MLR-051-KR075-400	Rod Kit - Gland	4					1,067.16
MLR-051-KR075-450	Rod Kit - Gland	4-1/2					1,148.54
MLR-051-KR075-500	Rod Kit - Gland	5					1,528.69
MLR-051-KR075-550	Rod Kit - Gland	5-1/2					2,138.85
MLR-051-KR080-063	Rod Kit - Seal	5/8					20.63
MLR-051-KR080-100	Rod Kit - Seal	1					36.45
MLR-051-KR080-138	Rod Kit - Seal	1-3/8					48.42
MLR-051-KR080-175	Rod Kit - Seal	1-3/4					60.02
MLR-051-KR080-200	Rod Kit - Seal	2					67.37
MLR-051-KR080-250	Rod Kit - Seal	2-1/2					80.44
MLR-051-KR080-300	Rod Kit - Seal	3					144.88
MLR-051-KR080-350	Rod Kit - Seal	3-1/2					155.23
MLR-051-KR080-400	Rod Kit - Seal	4					174.39
MLR-051-KR080-450	Rod Kit - Seal	4-1/2					197.12
MLR-051-KR080-500	Rod Kit - Seal	5					210.71
MLR-051-KR080-550	Rod Kit - Seal	5-1/2					329.30
MLR-051-PG001-063	Bronze Pressure Ring	5/8					24.42
MLR-051-PG001-100	Bronze Pressure Ring	1					30.49
MLR-051-PG001-138	Bronze Pressure Ring	1-3/8					45.29
MLR-051-PG001-175	Bronze Pressure Ring	1-3/4					61.51
MLR-051-PG001-200	Bronze Pressure Ring	2					71.92
MLR-051-PG001-250	Bronze Pressure Ring	2-1/2					89.65
MLR-051-PG001-300	Bronze Pressure Ring	3					125.54
MLR-051-RS007-063	Hat Packing - PTFE	5/8					10.56
MLR-051-RS007-100	Hat Packing - PTFE	1					13.57
MLR-051-RS007-1000	Hat Packing - PTFE	10					115.81
MLR-051-RS007-138	Hat Packing - PTFE	1-3/8					15.98
MLR-051-RS007-175	Hat Packing - PTFE	1-3/4					16.83
MLR-051-RS007-200	Hat Packing - PTFE	2					17.41
MLR-051-RS007-250	Hat Packing - PTFE	2-1/2					22.31
MLR-051-RS007-300	Hat Packing - PTFE	3					31.07
MLR-051-RS007-350	Hat Packing - PTFE	3-1/2					39.61
MLR-051-RS007-400	Hat Packing - PTFE	4					42.62
MLR-051-RS007-450	Hat Packing - PTFE	4-1/2					49.62
MLR-051-RS007-500	Hat Packing - PTFE	5					53.37
MLR-051-RS007-550	Hat Packing - PTFE	5-1/2					62.68
MLR-051-RS007-700	Hat Packing - PTFE	7					56.49
MLR-051-RS007-800	Hat Packing - PTFE	8					59.14
MLR-051-RS007-900	Hat Packing - PTFE	9					59.18

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MILLER

Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-051-RS014-063	Hat Packing - Nitrile	5/8					\$11.67
MLR-051-RS014-100	Hat Packing - Nitrile	1					19.10
MLR-051-RS014-138	Hat Packing - Nitrile	1-3/8					11.91
MLR-051-RS014-175	Hat Packing - Nitrile	1-3/4					15.04
MLR-051-RS014-200	Hat Packing - Nitrile	2					20.91
MLR-051-RS014-250	Hat Packing - Nitrile	2-1/2					24.43
MLR-051-RS014-300	Hat Packing - Nitrile	3					26.92
MLR-051-RS014-350	Hat Packing - Nitrile	3-1/2					38.62
MLR-051-RS014-400	Hat Packing - Nitrile	4					45.93
MLR-051-RS014-450	Hat Packing - Nitrile	4-1/2					53.01
MLR-051-RS014-500	Hat Packing - Nitrile	5					60.21
MLR-051-RS014-550	Hat Packing - Nitrile	5-1/2					67.30
MLR-051-WP001-063	U' Style Wiper - PTFE	5/8					7.62
MLR-051-WP001-100	U' Style Wiper - PTFE	1					9.03
MLR-051-WP001-1000	U' Style Wiper - PTFE	10					91.86
MLR-051-WP001-138	U' Style Wiper - PTFE	1-3/8					11.40
MLR-051-WP001-175	U' Style Wiper - PTFE	1-3/4					13.87
MLR-051-WP001-200	U' Style Wiper - PTFE	2					15.81
MLR-051-WP001-250	U' Style Wiper - PTFE	2-1/2					27.51
MLR-051-WP001-300	U' Style Wiper - PTFE	3					30.71
MLR-051-WP001-350	U' Style Wiper - PTFE	3-1/2					34.70
MLR-051-WP001-400	U' Style Wiper - PTFE	4					39.41
MLR-051-WP001-450	U' Style Wiper - PTFE	4-1/2					51.59
MLR-051-WP001-500	U' Style Wiper - PTFE	5					55.58
MLR-051-WP001-550	U' Style Wiper - PTFE	5-1/2					56.53
MLR-051-WP001-700	U' Style Wiper - PTFE	7					55.25
MLR-051-WP001-800	U' Style Wiper - PTFE	8					49.04
MLR-051-WP001-900	U' Style Wiper - PTFE	9					62.25
MLR-051-WS003-200	Wave Spring	2					21.72
MLR-051-WS003-250	Wave Spring	2-1/2					22.85
MLR-051-WS003-300	Wave Spring	3					27.39
MLR-051-WS004-063	Wave Spring	5/8					17.86
MLR-051-WS004-100	Wave Spring	1					17.86
MLR-051-WS004-138	Wave Spring	1-3/8					17.86
MLR-051-WS004-175	Wave Spring	1-3/4					17.86
MLR-052-FS001-100	Follower Seal			1	0.142	0.142	14.89
MLR-052-FS001-125	Follower Seal			1-1/4	0.142	0.142	16.53
MLR-052-FS001-150	Follower Seal			1-1/2	0.142	0.142	20.91
MLR-052-FS001-188	Follower Seal			1-7/8	0.142	0.142	23.34
MLR-052-FS001-250	Follower Seal			2-1/2	0.142	0.142	24.14
MLR-052-FS001-44	Follower Seal			7/16	0.070	0.070	10.06
MLR-052-FS001-75	Follower Seal			3/4	0.070	0.070	9.60
MLR-052-PS001-1000	Piston Cup - Nitrile		10				67.06
MLR-052-PS001-1200	Piston Cup - Nitrile		12				204.37
MLR-052-PS001-150	Piston Cup - Nitrile		1-1/2				12.53
MLR-052-PS001-200	Piston Cup - Nitrile		2				13.40
MLR-052-PS001-250	Piston Cup - Nitrile		2-1/2				18.31
MLR-052-PS001-325	Piston Cup - Nitrile		3-1/4				28.58
MLR-052-PS001-400	Piston Cup - Nitrile		4				33.34
MLR-052-PS001-500	Piston Cup - Nitrile		5				43.20

MILLER

Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-052-PS001-600	Piston Cup - Nitrile		6				\$49.12
MLR-052-PS001-800	Piston Cup - Nitrile		8				56.13
MLR-052-PS003-150	Piston Cup - Leather		1-1/2				20.08
MLR-052-PS003-200	Piston Cup - Leather		2				24.62
MLR-052-PS003-250	Piston Cup - Leather		2-1/2				32.99
MLR-052-PS003-325	Piston Cup - Leather		3-1/4				51.81
MLR-052-PS003-400	Piston Cup - Leather		4				63.80
MLR-052-PS003-500	Piston Cup - Leather		5				88.74
MLR-052-PS003-600	Piston Cup - Leather		6				120.29
MLR-052-PS006-1000	Piston Cup - PTFE		10				181.15
MLR-052-PS006-1200	Piston Cup - PTFE		12				241.61
MLR-052-PS006-150	Piston Cup - PTFE		1-1/2				28.07
MLR-052-PS006-200	Piston Cup - PTFE		2				48.89
MLR-052-PS006-250	Piston Cup - PTFE		2-1/2				51.52
MLR-052-PS006-325	Piston Cup - PTFE		3-1/4				46.43
MLR-052-PS006-400	Piston Cup - PTFE		4				57.34
MLR-052-PS006-500	Piston Cup - PTFE		5				85.86
MLR-052-PS006-600	Piston Cup - PTFE		6				103.77
MLR-052-PS006-700	Piston Cup - PTFE		7				249.47
MLR-052-PS006-800	Piston Cup - PTFE		8				140.41
MLR-052-PS016-1200	Piston U-seal - Nitrile		12				61.73
MLR-052-PS016-800	Piston U-seal - Nitrile		8				26.04
MLR-052-PS017-1000	Piston U-seal - PTFE		10				136.86
MLR-052-PS017-1200	Piston U-seal - PTFE		12				183.53
MLR-052-PS017-1400	Piston U-seal - PTFE		14				188.72
MLR-052-PS017-150	Piston U-seal - PTFE		1-1/2				17.36
MLR-052-PS017-1600	Piston U-seal - PTFE		16				199.73
MLR-052-PS017-1800	Piston U-seal - PTFE		18				241.11
MLR-052-PS017-200	Piston U-seal - PTFE		2				17.48
MLR-052-PS017-250	Piston U-seal - PTFE		2-1/2				20.62
MLR-052-PS017-325	Piston U-seal - PTFE		3-1/4				26.93
MLR-052-PS017-400	Piston U-seal - PTFE		4				35.71
MLR-052-PS017-500	Piston U-seal - PTFE		5				53.56
MLR-052-PS017-600	Piston U-seal - PTFE		6				61.23
MLR-052-PS017-700	Piston U-seal - PTFE		7				74.39
MLR-052-PS017-800	Piston U-seal - PTFE		8				86.66
MLR-052-PS025-1000	Piston U-seal - Nitrile		10				77.76
MLR-052-PS025-1400	Piston U-seal - Nitrile		14				150.99
MLR-052-PS025-150	Piston U-seal - Nitrile		1-1/2				18.64
MLR-052-PS025-1600	Piston U-seal - Nitrile		16				307.51
MLR-052-PS025-200	Piston U-seal - Nitrile		2				19.33
MLR-052-PS025-250	Piston U-seal - Nitrile		2-1/2				20.49
MLR-052-PS025-325	Piston U-seal - Nitrile		3-1/4				22.24
MLR-052-PS025-400	Piston U-seal - Nitrile		4				22.06
MLR-052-PS025-500	Piston U-seal - Nitrile		5				26.27
MLR-052-PS025-600	Piston U-seal - Nitrile		6				33.65
MLR-052-PS025-700	Piston U-seal - Nitrile		7				21.02
MLR-052-WR005-1000-38	Wear Ring - PTFE		10				86.25
MLR-052-WR005-1200-38	Wear Ring - PTFE		12				108.61
MLR-052-WR005-150-25	Wear Ring - PTFE		1-1/2				30.52

MILLER

Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-052-WR005-1600-50	Wear Ring - PTFE		16				\$169.15
MLR-052-WR005-1800-50	Wear Ring - PTFE		18				174.98
MLR-052-WR005-2000-50	Wear Ring - PTFE		20				202.98
MLR-052-WR005-200-25	Wear Ring - PTFE		2				32.13
MLR-052-WR005-250-25	Wear Ring - PTFE		2-1/2				33.91
MLR-052-WR005-325-25	Wear Ring - PTFE		3-1/4				44.95
MLR-052-WR005-400-25	Wear Ring - PTFE		4				56.08
MLR-052-WR005-500-25	Wear Ring - PTFE		5				70.40
MLR-052-WR005-600-25	Wear Ring - PTFE		6				84.17
MLR-052-WR005-700-38	Wear Ring - PTFE		7				57.49
MLR-052-WR005-800-38	Wear Ring - PTFE		8				81.45
MLR-052-WR008-1000-125	Wear Ring - Bronze		10				307.40
MLR-052-WR008-1200-125	Wear Ring - Bronze		12				336.52
MLR-052-WR008-700-75	Wear Ring - Bronze		7				196.79
MLR-052-WR008-800-125	Wear Ring - Bronze		8				263.48
MLR-052-WR009-150-25	Wear Ring - Acetal		1-1/2				24.06
MLR-052-WR009-200-25	Wear Ring - Acetal		2				27.71
MLR-052-WR009-200-31	Wear Ring - Acetal		2				28.14
MLR-052-WR009-250-25	Wear Ring - Acetal		2-1/2				34.09
MLR-052-WR009-250-38	Wear Ring - Acetal		2-1/2				36.19
MLR-052-WR009-325-25	Wear Ring - Acetal		3-1/4				46.66
MLR-052-WR009-325-50	Wear Ring - Acetal		3-1/4				51.77
MLR-052-WR009-400-25	Wear Ring - Acetal		4				54.15
MLR-052-WR009-400-63	Wear Ring - Acetal		4				73.19
MLR-052-WR009-500-75	Wear Ring - Acetal		5				145.53
MLR-052-WR009-600-75	Wear Ring - Acetal		6				188.50
MLR-090-ES006-1000	Tube End Seal		10				41.41
MLR-090-ES006-1200	Tube End Seal		12				48.31
MLR-090-ES006-1400	Tube End Seal		14				55.22
MLR-090-ES006-150	Tube End Seal		1-1/2				8.05
MLR-090-ES006-200	Tube End Seal		2				14.03
MLR-090-ES006-250	Tube End Seal		2-1/2				14.75
MLR-090-ES006-325	Tube End Seal		3-1/4				17.07
MLR-090-ES006-400	Tube End Seal		4				21.14
MLR-090-ES006-500	Tube End Seal		5				22.66
MLR-090-ES006-600	Tube End Seal		6				27.98
MLR-090-ES006-700	Tube End Seal		7				27.60
MLR-090-ES006-800	Tube End Seal		8				34.50
MLR-090-ES009-1000	Tube End Seal		10				73.90
MLR-090-ES009-1200	Tube End Seal		12				82.26
MLR-090-ES009-1400	Tube End Seal		14				81.65
MLR-090-ES009-150	Tube End Seal		1-1/2				9.25
MLR-090-ES009-200	Tube End Seal		2				16.87
MLR-090-ES009-250	Tube End Seal		2-1/2				16.93
MLR-090-ES009-325	Tube End Seal		3-1/4				17.08
MLR-090-ES009-400	Tube End Seal		4				25.28
MLR-090-ES009-500	Tube End Seal		5				31.83
MLR-090-ES009-600	Tube End Seal		6				39.65
MLR-090-ES009-700	Tube End Seal		7				49.78
MLR-090-ES009-800	Tube End Seal		8				61.96

MILLER

Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-090-KB001-1000	Piston Kit		10				\$231.91
MLR-090-KB001-1200	Piston Kit		12				265.74
MLR-090-KB001-150	Piston Kit		1-1/2				81.42
MLR-090-KB001-200	Piston Kit		2				104.33
MLR-090-KB001-250	Piston Kit		2-1/2				113.17
MLR-090-KB001-325	Piston Kit		3-1/4				128.28
MLR-090-KB001-400	Piston Kit		4				148.37
MLR-090-KB001-500	Piston Kit		5				157.66
MLR-090-KB001-600	Piston Kit		6				189.89
MLR-090-KB001-700	Piston Kit		7				201.06
MLR-090-KB001-800	Piston Kit		8				206.72
MLR-091-KB001-1000	Piston Kit		10				305.21
MLR-091-KB001-1200	Piston Kit		12				376.45
MLR-091-KB001-150	Piston Kit		1-1/2				93.73
MLR-091-KB001-200	Piston Kit		2				94.26
MLR-091-KB001-250	Piston Kit		2-1/2				109.77
MLR-091-KB001-325	Piston Kit		3-1/4				143.98
MLR-091-KB001-400	Piston Kit		4				158.41
MLR-091-KB001-500	Piston Kit		5				222.91
MLR-091-KB001-600	Piston Kit		6				238.18
MLR-091-KB001-700	Piston Kit		7				245.43
MLR-091-KB001-800	Piston Kit		8				264.37
MLR-150-KB001-325	Piston Kit		3-1/4				233.31
MLR-150-KB001-500	Piston Kit		5				392.44
MLR-170-ES006-1000	Tube End Seal		10				41.41
MLR-170-ES006-1200	Tube End Seal		12				48.31
MLR-170-ES006-1400	Tube End Seal		14				55.22
MLR-170-ES006-150	Tube End Seal		1-1/2				7.90
MLR-170-ES006-1800	Tube End Seal		18				69.03
MLR-170-ES006-200	Tube End Seal		2				14.41
MLR-170-ES006-250	Tube End Seal		2-1/2				14.59
MLR-170-ES006-325	Tube End Seal		3-1/4				15.06
MLR-170-ES006-400	Tube End Seal		4				21.46
MLR-170-ES006-500	Tube End Seal		5				22.59
MLR-170-ES006-600	Tube End Seal		6				26.74
MLR-170-ES006-700	Tube End Seal		7				27.60
MLR-170-ES006-800	Tube End Seal		8				34.50
MLR-170-ES010-1000	Tube End Seal		10				74.48
MLR-170-ES010-1200	Tube End Seal		12				82.99
MLR-170-ES010-150	Tube End Seal		1-1/2				14.21
MLR-170-ES010-200	Tube End Seal		2				20.11
MLR-170-ES010-250	Tube End Seal		2-1/2				26.10
MLR-170-ES010-325	Tube End Seal		3-1/4				27.20
MLR-170-ES010-400	Tube End Seal		4				32.54
MLR-170-ES010-500	Tube End Seal		5				39.00
MLR-170-ES010-600	Tube End Seal		6				45.13
MLR-170-ES010-700	Tube End Seal		7				51.23
MLR-170-ES010-800	Tube End Seal		8				64.15
MLR-171-KB001-1000	Piston Kit		10				782.63
MLR-171-KB001-1200	Piston Kit		12				885.87

MILLER

MILLER

Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-171-KB001-150	Piston Kit		1-1/2				\$128.45
MLR-171-KB001-200	Piston Kit		2				148.79
MLR-171-KB001-250	Piston Kit		2-1/2				178.86
MLR-171-KB001-325	Piston Kit		3-1/4				212.67
MLR-171-KB001-400	Piston Kit		4				293.64
MLR-171-KB001-500	Piston Kit		5				341.10
MLR-171-KB001-600	Piston Kit		6				379.61
MLR-171-KB001-700	Piston Kit		7				534.99
MLR-171-KB001-800	Piston Kit		8				667.91
MLR-181-KB001-150	Piston Kit		1-1/2				56.74
MLR-181-KB001-200	Piston Kit		2				59.15
MLR-181-KB001-250	Piston Kit		2-1/2				61.82
MLR-181-KB001-325	Piston Kit		3-1/4				68.48
MLR-181-KB001-400	Piston Kit		4				73.67
MLR-181-KB001-500	Piston Kit		5				87.22
MLR-181-KB001-600	Piston Kit		6				100.95
MLR-181-KB001-700	Piston Kit		7				102.24
MLR-181-KB001-800	Piston Kit		8				145.82
MLR-HV2-ES100-150	Piston Kit		1-1/2				7.00
MLR-HV2-ES100-200	Piston Kit		2				7.36
MLR-HV2-ES100-250	Piston Kit		2-1/2				7.67
MLR-HV2-ES100-325	Piston Kit		3-1/4				8.11
MLR-HV2-ES100-400	Piston Kit		4				8.47
MLR-HV2-ES100-500	Piston Kit		5				9.75
MLR-HV2-ES100-600	Piston Kit		6				9.75
MLR-HV2-ES200-150	Piston Kit		1-1/2				9.59
MLR-HV2-ES200-200	Piston Kit		2				16.39
MLR-HV2-ES200-250	Piston Kit		2-1/2				20.46
MLR-HV2-ES200-325	Piston Kit		3-1/4				24.87
MLR-HV2-ES200-400	Piston Kit		4				31.11
MLR-HV2-ES200-500	Piston Kit		5				44.91
MLR-HV2-ES200-600	Piston Kit		6				46.97
MLR-HV2-KB100-150	Piston Kit		1-1/2				11.27
MLR-HV2-KB100-200	Piston Kit		2				13.27
MLR-HV2-KB100-250	Piston Kit		2-1/2				15.39
MLR-HV2-KB100-325	Piston Kit		3-1/4				19.08
MLR-HV2-KB100-400	Piston Kit		4				25.08
MLR-HV2-KB100-500	Piston Kit		5				29.25
MLR-HV2-KB100-600	Piston Kit		6				29.25
MLR-HV2-KB300-150	Piston Kit		1-1/2				46.74
MLR-HV2-KB300-200	Piston Kit		2				49.87
MLR-HV2-KB300-250	Piston Kit		2-1/2				50.43
MLR-HV2-KB300-325	Piston Kit		3-1/4				54.53
MLR-HV2-KB300-400	Piston Kit		4				56.13
MLR-HV2-KB300-500	Piston Kit		5				73.94
MLR-HV2-KB300-600	Piston Kit		6				111.15
MLR-HV2-KB400-150	Piston Kit		1-1/2				54.14
MLR-HV2-KB400-200	Piston Kit		2				56.11
MLR-HV2-KB400-250	Piston Kit		2-1/2				56.90
MLR-HV2-KB400-325	Piston Kit		3-1/4				67.79

MILLER

Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-HV2-KB400-400	Piston Kit		4				\$69.08
MLR-HV2-KB400-500	Piston Kit		5				97.95
MLR-HV2-KB400-600	Piston Kit		6				118.54
MLR-HV2-KB500-150	Piston Kit		1-1/2				25.50
MLR-HV2-KB500-200	Piston Kit		2				33.10
MLR-HV2-KB500-250	Piston Kit		2-1/2				31.91
MLR-HV2-KB500-325	Piston Kit		3-1/4				42.14
MLR-HV2-KB500-400	Piston Kit		4				36.70
MLR-HV2-KB500-500	Piston Kit		5				41.18
MLR-HV2-KB500-600	Piston Kit		6				75.55
MLR-HV2-KB600-150	Piston Kit		1-1/2				44.22
MLR-HV2-KB600-200	Piston Kit		2				50.07
MLR-HV2-KB600-250	Piston Kit		2-1/2				53.82
MLR-HV2-KB600-325	Piston Kit		3-1/4				118.54
MLR-HV2-KB600-400	Piston Kit		4				131.17
MLR-HV2-KB600-500	Piston Kit		5				145.15
MLR-HV2-KB600-600	Piston Kit		6				226.33
MLR-HV2-KR300-100	Rod Kit		1				19.01
MLR-HV2-KR300-138	Rod Kit		1-3/8				21.53
MLR-HV2-KR300-175	Rod Kit		1-3/4				23.12
MLR-HV2-KR300-200	Rod Kit		2				24.66
MLR-HV2-KR300-250	Rod Kit		2-1/2				30.31
MLR-HV2-KR300-300	Rod Kit		3				34.94
MLR-HV2-KR300-350	Rod Kit		3-1/2				53.31
MLR-HV2-KR300-400	Rod Kit		4				60.37
MLR-HV2-KR300-63	Rod Kit		5/8				28.08
MLR-HV2-KR310-100	Rod Kit		1				19.01
MLR-HV2-KR310-138	Rod Kit		1-3/8				21.53
MLR-HV2-KR310-175	Rod Kit		1-3/4				23.12
MLR-HV2-KR310-200	Rod Kit		2				24.66
MLR-HV2-KR310-250	Rod Kit		2-1/2				30.31
MLR-HV2-KR310-300	Rod Kit		3				34.94
MLR-HV2-KR310-350	Rod Kit		3-1/2				48.37
MLR-HV2-KR310-400	Rod Kit		4				57.52
MLR-HV2-KR310-63	Rod Kit		5/8				15.19
MLR-HV2-KR400-138	Rod Kit		1-3/8				36.03
MLR-HV2-KR400-175	Rod Kit		1-3/4				39.07
MLR-HV2-KR400-200	Rod Kit		2				45.46
MLR-HV2-KR400-250	Rod Kit		2-1/2				52.39
MLR-HV2-KR400-300	Rod Kit		3				57.03
MLR-HV2-KR400-350	Rod Kit		3-1/2				61.80
MLR-HV2-KR400-400	Rod Kit		4				67.15
MLR-HV2-KR400-63	Rod Kit		5/8				20.78
MLR-HV2-KR410-100	Rod Kit		1				24.79
MLR-HV2-KR410-138	Rod Kit		1-3/8				36.54
MLR-HV2-KR410-175	Rod Kit		1-3/4				39.30
MLR-HV2-KR410-200	Rod Kit		2				94.13
MLR-HV2-KR410-250	Rod Kit		2-1/2				67.80
MLR-HV2-KR410-300	Rod Kit		3				80.46
MLR-HV2-KR410-350	Rod Kit		3-1/2				85.86

MILLER

Sales Part Number	Description	Rod Size	Bore Size	ID	Radial Wall	Width	List Price
MLR-HV2-KR410-400	Rod Kit		4				\$98.77
MLR-HV2-KR410-500	Rod Kit		5				141.08
MLR-HV2-KR410-550	Rod Kit		5-1/2				169.58
MLR-HV2-KR410-63	Rod Kit		5/8				19.03
MLR-HV2-KR600-100	Rod Kit		1				20.94
MLR-HV2-KR600-63	Rod Kit		5/8				20.04
MLR-RG065-063	Iron Gland		5/8				38.66
MLR-RG065-100	Iron Gland		1				45.03
MLR-RG065-138	Iron Gland		1-3/8				56.29
MLR-RG065-175	Iron Gland		1-3/4				144.87
MLR-RG065-200	Iron Gland		2				156.68
MLR-RG065-250	Iron Gland		2-1/2				182.53
MLR-RG065-300	Iron Gland		3				209.40
MLR-RG065-350	Iron Gland		3-1/2				233.72
MLR-008-SH001-30	0.03cs x 0.07w PTFE strip (30' Spool)						123.31
MLR-SH1-STRIP	0.03cs x 0.07w PTFE strip (sold by the foot)						8.15

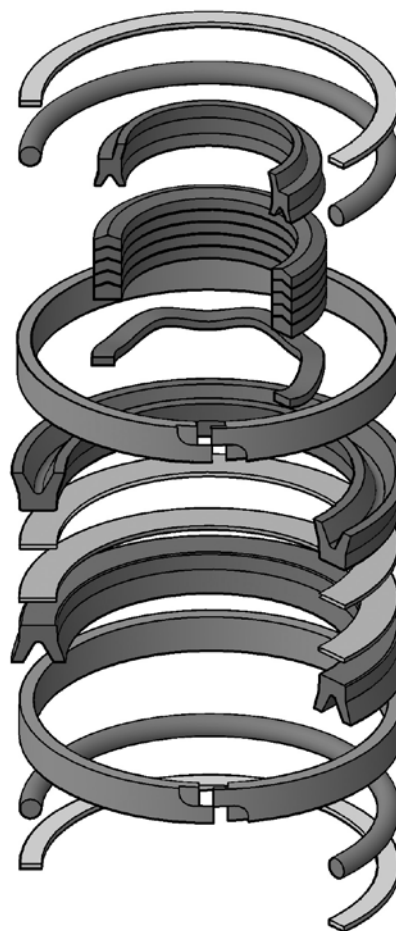
MILLER

MILWAUKEE

Kits

H Cylinders Nitrile

Bore	Rod	(NBR) Kit #	List Price
1-1/2"	5/8"	MIL-00151-7-40	\$41.84
1-1/2"	1"	MIL-00152-7-40	44.46
2"	1"	MIL-01510-7-40	43.91
2"	1-3/8"	MIL-01511-7-40	46.49
2-1/2"	1"	MIL-01520-7-40	47.29
2-1/2"	1-3/8"	MIL-01521-7-40	49.69
2-1/2"	1-3/4"	MIL-01522-7-40	51.78
3-1/4"	1-3/8"	MIL-01530-7-40	60.27
3-1/4"	1-3/4"	MIL-01531-7-40	65.37
3-1/4"	2"	MIL-01532-7-40	68.02
4"	1-3/4"	MIL-01540-7-40	69.39
4"	2"	MIL-01541-7-40	71.29
4"	2-1/2"	MIL-01542-7-40	86.90
5"	2"	MIL-01550-7-40	100.74
5"	2-1/2"	MIL-01551-7-40	73.73
5"	3"	MIL-01552-7-40	96.25
5"	3-1/2"	MIL-01553-7-40	102.50
6"	2-1/2"	MIL-01560-7-40	151.72
6"	3"	MIL-01561-7-40	152.77
6"	3-1/2"	MIL-01562-7-40	158.55
6"	4"	MIL-01563-7-40	170.36



ORTMAN**Various Kits**

Kit #	Code	Rod x Bore	List Price
ORT-RS003540010	I-U-1	5/8 Rod Kit	\$16.35
ORT-RS003540020	I-U-1	1 Rod Kit	16.34
ORT-RS003540040	I-U-1	1-3/4 Rod Kit	30.98
ORT-RS003540060	I-U-1	2-1/2 Rod Kit	33.58
ORT-RS003540090	I-U-1	4" Rod Kit	53.26
ORT-TS563511000	N-N-5	3-1/4 Piston Kit	48.16
ORT-TS583511000	N-N-5	4 Piston Kit	36.54
ORT-TS603511000	N-N-5	6 Piston Kit	95.86
ORT-TS777512000	N-N-5	1-1/2 Piston Kit	10.91

Kit Composition Varies

Consult your
Hercules® Sealing Products representative.**ORTMAN**

NOTES**NOTES**

PARKER

Kit Type		Page
Rod Gland Kits	A, 2A, 2AN, H, 2H, HD, 3H, VH, L, 2L, 3L, HMI, MA & 2MA Air Cylinders	102 - 109
Rod Kits	A, 2A, 2AN, H, 2H, HD, 3H, VH, L, 2L, 3L, HMI, 2MA Air & 2ML Cylinders	110 - 117
Bronze Rod Glands	A, 2A, 2AN, H, 2H, HD, VH, L, 2L, 3L, MA, HMI, 2MA Air & Hydraulic Cylinders	118 - 119
Gland Wrenches	For Parker Glands	120
Rod & Piston Seal Kits	MA Air Cylinders	121
Piston Kits	HD, HL, 2HL, L, LL, 2LL, & 3LL Hydraulic Cylinders, 1A & 2A Air Cylinders, 2AN, 2MA & 2ML Cylinders, L, 2L, 3L, H, 2H, HD, VH & HMI Cylinders	122 - 129
Piston Ring Kits	H, HD, 2H, L, 2L, & 3L Hydraulic Cylinders	130
Piston Head Seal Kits	2A, 2H, 3L, HD, VH, 2MA, ML & HMI Cylinders	131 - 132
Various Kits		133
Repair Kits	By Part Number	134 - 144

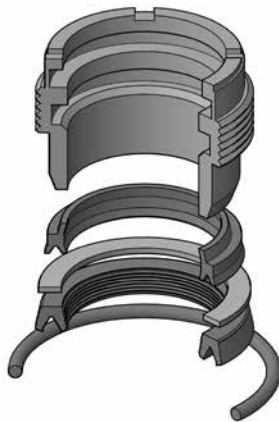
PARKER

Rod Gland Kits

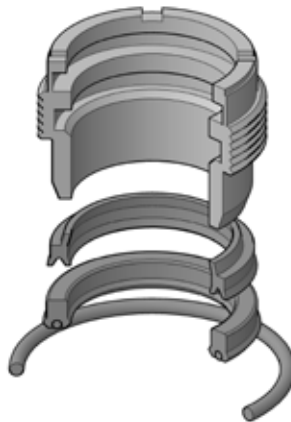
A, 2A, H, 2H, VH, L, 2L, & 3L Cylinders

Nitrile

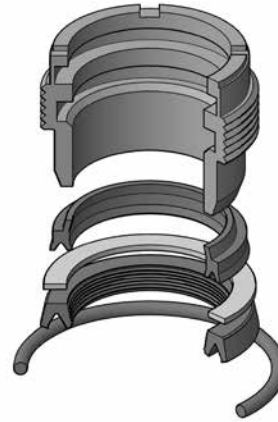
Fluorocarbon


1/2" - 3"
Kit Includes:

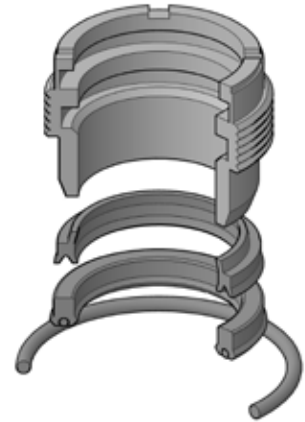
- 1 Bronze Gland
- 1 XNBR Wiper
- 1 URE Back-up Ring
- 1 NBR U-seal
- 1 NBR O-ring


3-1/2" - 5-1/2"
Kit Includes:

- 1 Bronze Gland
- 1 XNBR Wiper
- 1 NBR Loaded U-seal
- 1 NBR O-ring


1/2" - 3"
Kit Includes:

- 1 Bronze Gland
- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC U-seal
- 1 FC O-ring


3-1/2" - 5-1/2"
Kit Includes:

- 1 Bronze Gland
- 1 FC Wiper
- 1 FC Loaded U-seal
- 1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
1/2"	PKH-RG2AHL0051	\$66.61	PKH-RG2AHL0055	\$85.62
5/8"	PKH-RG2AHL0061	40.22	PKH-RG2AHL0065	65.63
1"	PKH-RG2AHL0101	49.32	PKH-RG2AHL0105	74.27
1-3/8"	PKH-RG2AHL0131	60.13	PKH-RG2AHL0135	93.31
1-3/4"	PKH-RG2AHL0171	69.64	PKH-RG2AHL0175	101.90
2"	PKH-RG2AHL0201	86.88	PKH-RG2AHL0205	121.28
2-1/2"	PKH-RG2AHL0251	118.53	PKH-RG2AHL0255	157.50
3"	PKH-RG2AHL0301	152.13	PKH-RG2AHL0305	179.05
3-1/2"	PKH-RG2AHL0351	333.50	PKH-RG2AHL0355	361.40
4"	PKH-RG2AHL0401	405.59	PKH-RG2AHL0405	425.85
4-1/2"	PKH-RG2AHL0451	504.64	PKH-RG2AHL0455	508.80
5"	PKH-RG2AHL0501	561.45	PKH-RG2AHL0505	635.55
5-1/2"	PKH-RG2AHL0551	579.05	PKH-RG2AHL0555	693.63

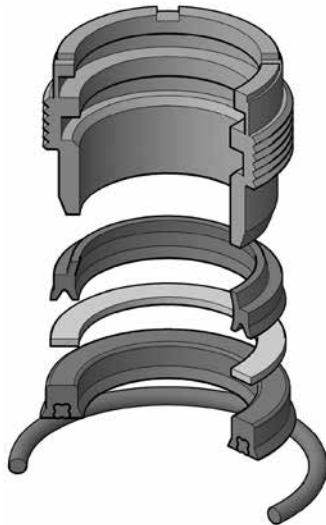
PARKER

Rod Gland Kits

A, 2A, H, 2H, VH, L, 2L, & 3L Cylinders

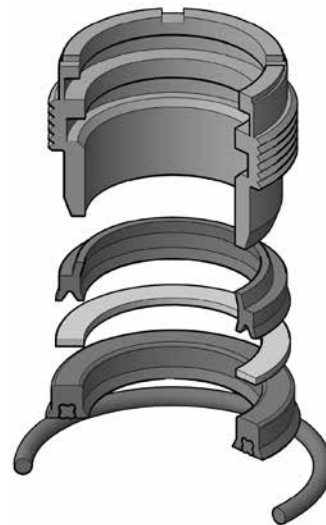
Nitrile

Fluorocarbon



Kit Includes:

- 1 Bronze Gland
- 1 XNBR Wiper
- 1 PTFE Back-up Ring
- 1 XNBR U-seal
- 1 NBR O-ring



Kit Includes:

- 1 Bronze Gland
- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC U-seal
- 1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
1/2"	PKH-RG2AHL0051PS	\$35.66	PKH-RG2AHL0055PS	\$43.42
5/8"	PKH-RG2AHL0061PS	38.67	PKH-RG2AHL0065PS	47.68
1"	PKH-RG2AHL0101PS	47.98	PKH-RG2AHL0105PS	57.69
1-3/8"	PKH-RG2AHL0131PS	59.00	PKH-RG2AHL0135PS	72.02
1-3/4"	PKH-RG2AHL0171PS	66.55	PKH-RG2AHL0175PS	83.54
2"	PKH-RG2AHL0201PS	83.81	PKH-RG2AHL0205PS	97.42
2-1/2"	PKH-RG2AHL0251PS	128.61	PKH-RG2AHL0255PS	157.73
3"	PKH-RG2AHL0301PS	152.17	PKH-RG2AHL0305PS	173.69
3-1/2"	PKH-RG2AHL0351PS	317.30	PKH-RG2AHL0355PS	319.83

PARKER

Rod Gland Kits

Urethane


Kit Includes:

- 1 Bronze Gland
- 1 XNBR Wiper
- 1 URE Multi-lip U-seal
- 1 NBR Back-up Ring
- 1 NBR O-ring

HD Cylinders

Fluorocarbon


Kit Includes:

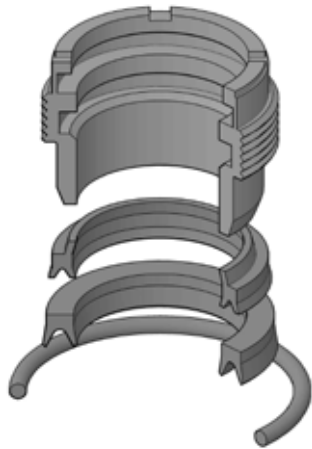
- 1 Bronze Gland
- 1 FC Wiper
- 1 Multi-lip FC U-seal
- 2 PTFE Back-up Rings
- 1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	PKH-RG1HDL0061	\$56.61	PKH-RG1HDL0065	\$68.61
1"	PKH-RG1HDL0101	72.89	PKH-RG1HDL0105	84.50
1-3/8"	PKH-RG1HDL0131	94.65	PKH-RG1HDL0135	114.56
1-3/4"	PKH-RG1HDL0171	111.86	PKH-RG1HDL0175	139.75
2"	PKH-RG1HDL0201	160.94	PKH-RG1HDL0205	189.56
2-1/2"	PKH-RG1HDL0251	215.49	PKH-RG1HDL0255	247.21
3-1/2"	PKH-RG1HDL0351	267.12	PKH-RG1HDL0355	303.64

PARKER

Rod Gland Kits

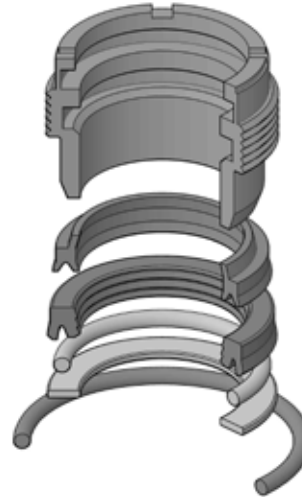
2AN Air Cylinders Nitrile



1/2" - 2-1/2"

Kit Includes:

- 1 Bronze Gland
- 1 XNBR Wiper
- 1 NBR U-seal
- 1 NBR O-ring



3" - 5-1/2"

Kit Includes:

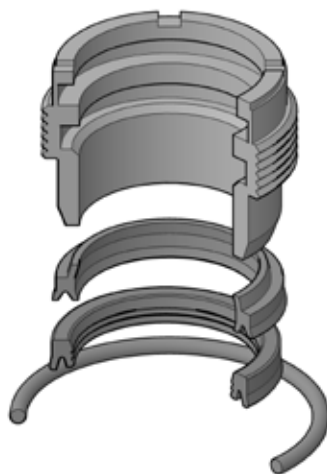
- 1 Bronze Gland
- 1 XNBR Wiper
- 1 NBR Multi-lip U-seal
- 1 Felt Wick
- 1 Felt Washer
- 1 NBR O-ring

Rod Dia.	Kit #	List Price
1/2"	PKH-RG2AN00051	\$43.31
5/8"	PKH-RG2AN00061	45.08
1"	PKH-RG2AN00101	50.66
1-3/8"	PKH-RG2AN00131	53.90
1-3/4"	PKH-RG2AN00171	67.73
2"	PKH-RG2AN00201	82.46
2-1/2"	PKH-RG2AN00251	134.88
3"	PKH-RG2AN00301	204.98
3-1/2"	PKH-RG2AN00351	291.56
4"	PKH-RG2AN00401	390.53
4-1/2"	PKH-RG2AN00451	484.18
5"	PKH-RG2AN00501	577.24
5-1/2"	PKH-RG2AN00551	646.74

PARKER

Rod Gland Kits

H*, 2H*, 3H (7" & 8" Bore), VH, L, 2L, and 3L Cylinders
Urethane



1/2" - 5-1/2"

Kit Includes:

- 1 Bronze Gland
- 1 XNBR Wiper
- 1 Multi-lip Urethane U-seal
- 1 NBR O-ring

Rod Dia.	Kit #	List Price
1/2"	PKH-RG2HLTS051	\$97.65
5/8"	PKH-RG2HLTS061	74.89
1"	PKH-RG2HLTS101	84.96
1-3/8"	PKH-RG2HLTS131	99.40
1-3/4"	PKH-RG2HLTS171	106.67
2"	PKH-RG2HLTS201	138.72
2-1/2"	PKH-RG2HLTS251	180.02
3"	PKH-RG2HLTS301	223.15
3-1/2"	PKH-RG2HLTS351	315.75
4"	PKH-RG2HLTS401	412.72
4-1/2"	PKH-RG2HLTS451	448.91
5"	PKH-RG2HLTS501	592.66
5-1/2"	PKH-RG2HLTS551	611.62

* Excludes 10" and 12" Bore for Series H and 2H.

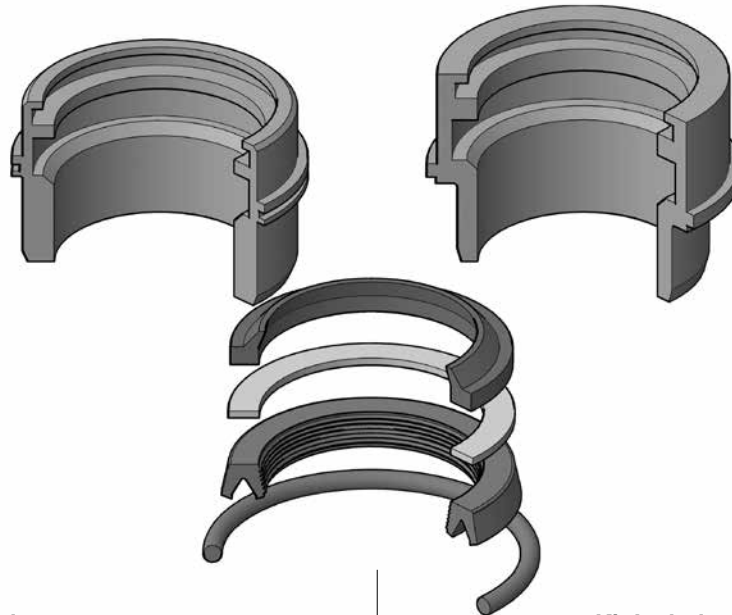
PARKER

Rod Gland Kits

Nitrile **MA Air Cylinders** **Fluorocarbon**

5/8" Rod Gland profile

1" & 1-3/8" Rod Gland profile



Kit Includes:

1 Bronze Gland
1 URE Wiper
1 PTFE Back-up Ring
1 NBR Multi-lip U-seal
1 NBR O-ring

Kit Includes:

1 Bronze Gland
1 FC Wiper
1 PTFE Back-up Ring
1 FC Multi-lip U-seal
1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	PKH-RGL6948MA1	\$50.17	PKH-RGL6948MA5	\$56.90
1"	PKH-RGL6949MA1	42.09	PKH-RGL6949MA5	54.25
1-3/8"	PKH-RGL6950MA1	50.09	PKH-RGL6950MA5	67.01

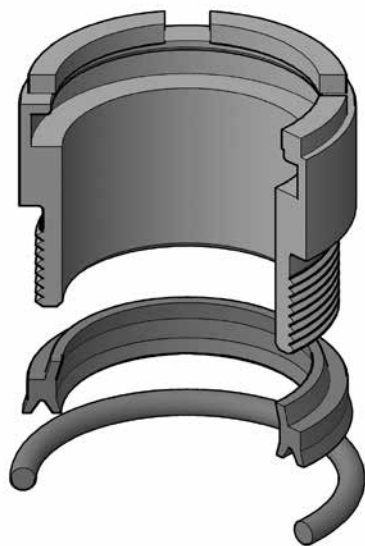
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Rod Gland Kits

PARKER

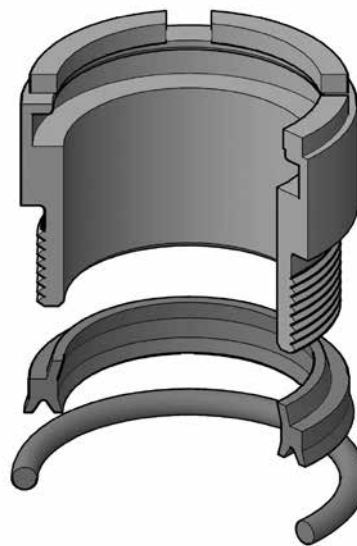
2MA Air Cylinders

Nitrile


1/2" - 1-3/4"
Kit Includes:

- 1 Bronze Gland
- 1 XNBR Wiper/Seal
- 1 NBR O-ring
- 1 Tube Seal Lubricant

Fluorocarbon


1/2" - 1-3/4"
Kit Includes:

- 1 Bronze Gland
- 1 FC Wiper/Seal
- 1 FC O-ring
- 1 Tube Seal Lubricant

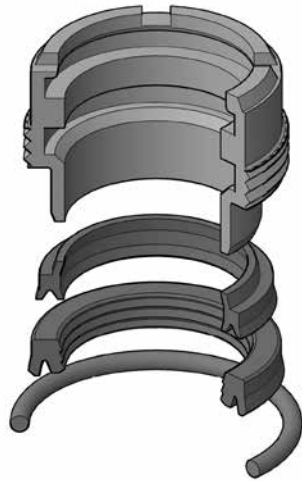
Rod Dia.	Kit #	List Price	Kit #	List Price
1/2"	PKH-RG02MA0051	\$41.74	PKH-RG02MA0055	\$44.47
5/8"	PKH-RG02MA0061	27.57	PKH-RG02MA0065	44.03
1"	PKH-RG02MA0101	31.59	PKH-RG02MA0105	48.79
1-3/8"	PKH-RG02MA0131	47.18	PKH-RG02MA0135	70.53
1-3/4"	PKH-RG02MA0171	96.01	PKH-RG02MA0175	107.70

PARKER

Rod Gland Kits

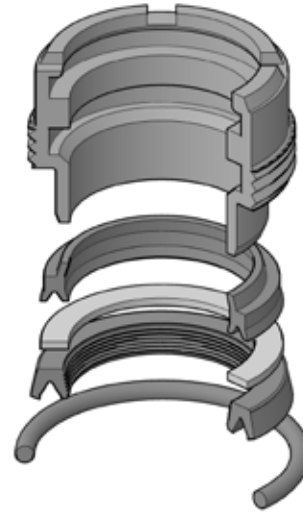
HMI Cylinders

Urethane


Kit Includes:

- 1 Bronze Gland
- 1 URE Wiper
- 1 URE Multi-lip U-seal
- 1 NBR O-ring

Fluorocarbon


Kit Includes:

- 1 Bronze Gland
- 1 FC Wiper
- 1 PTFE Back-up Ring
- 1 FC Multi-lip U-seal
- 1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
12 mm	PKH-RG2HM0121	\$62.98	PKH-RG2HM0125	\$70.52
14 mm	PKH-RG2HM0141	89.57	PKH-RG2HM0145	96.98
18 mm	PKH-RG2HM0181	87.36	PKH-RG2HM0185	103.59
22 mm	PKH-RG2HM0221	90.18	PKH-RG2HM0225	108.57
28 mm	PKH-RG2HM0281	92.28	PKH-RG2HM0285	120.23
36 mm	PKH-RG2HM0361	88.39	PKH-RG2HM0365	116.73
45 mm	PKH-RG2HM0451	97.92	PKH-RG2HM0455	120.30
56 mm	PKH-RG2HM0561	180.96	PKH-RG2HM0565	224.26
70 mm	PKH-RG2HM0701	266.03	PKH-RG2HM0705	326.06

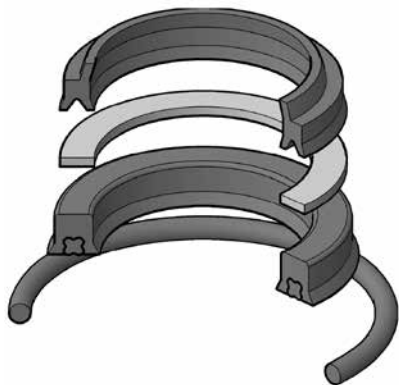
PARKER

Rod Kits

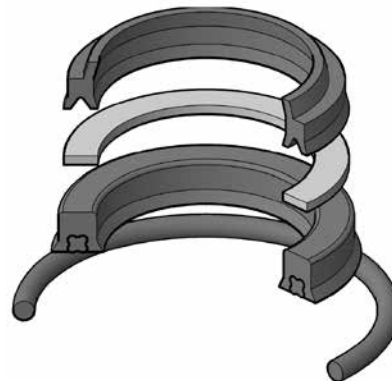
A, 2A, H, 2H, VH, L, 2L, & 3L Cylinders

Nitrile

Fluorocarbon



Kit Includes:
 1 XNBR Wiper
 1 PTFE Back-up Ring
 1 XNBR U-seal
 1 NBR O-ring



Kit Includes:
 1 FC Wiper
 1 PTFE Back-up Ring
 1 FC U-seal
 1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
1/2"	PKH-RK2AHL0051PS	\$10.65	PKH-RK2AHL0055PS	\$18.41
5/8"	PKH-RK2AHL0061PS	11.22	PKH-RK2AHL0065PS	20.23
1"	PKH-RK2AHL0101PS	15.99	PKH-RK2AHL0105PS	25.70
1-3/8"	PKH-RK2AHL0131PS	18.80	PKH-RK2AHL0135PS	31.83
1-3/4"	PKH-RK2AHL0171PS	16.17	PKH-RK2AHL0175PS	33.16
2"	PKH-RK2AHL0201PS	19.84	PKH-RK2AHL0205PS	33.45
2-1/2"	PKH-RK2AHL0251PS	30.31	PKH-RK2AHL0255PS	59.43
3"	PKH-RK2AHL0301PS	36.57	PKH-RK2AHL0305PS	58.09
3-1/2"	PKH-RK2AHL0351PS	72.37	PKH-RK2AHL0355PS	74.90

PARKER

Rod Kits

A, 2A, H, 2H, VH, L, 2L, & 3L Cylinders

Nitrile

Fluorocarbon



1/2" - 3"

Kit Includes:

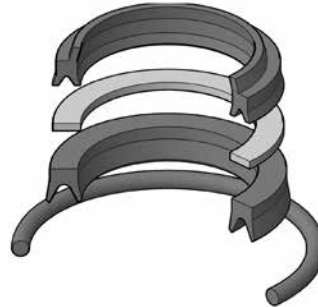
1 XNBR Wiper
1 URE Back-up Ring
1 NBR U-seal
1 NBR O-ring



3-1/2" - 5-1/2"

Kit Includes:

1 XNBR Wiper
1 NBR Loaded U-seal
1 NBR O-ring



1/2" - 3"

Kit Includes:

1 FC Wiper
1 PTFE Back-up Ring
1 FC U-seal
1 FC O-ring



3-1/2" - 5-1/2"

Kit Includes:

1 FC Wiper
1 FC Loaded U-seal
1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
1/2"	PKH-RK2AHL0051	\$7.72	PKH-RK2AHL0055	\$32.07
5/8"	PKH-RK2AHL0061	13.38	PKH-RK2AHL0065	35.25
1"	PKH-RK2AHL0101	9.67	PKH-RK2AHL0105	39.61
1-3/8"	PKH-RK2AHL0131	10.62	PKH-RK2AHL0135	51.29
1-3/4"	PKH-RK2AHL0171	12.29	PKH-RK2AHL0175	53.42
2"	PKH-RK2AHL0201	13.57	PKH-RK2AHL0205	55.68
2-1/2"	PKH-RK2AHL0251	15.23	PKH-RK2AHL0255	60.93
3"	PKH-RK2AHL0301	19.75	PKH-RK2AHL0305	73.53
3-1/2"	PKH-RK2AHL0351	92.43	PKH-RK2AHL0355	152.53
4"	PKH-RK2AHL0401	114.82	PKH-RK2AHL0405	176.74
4-1/2"	PKH-RK2AHL0451	134.63	PKH-RK2AHL0455	221.21
5"	PKH-RK2AHL0501	167.63	PKH-RK2AHL0505	258.46
5-1/2"	PKH-RK2AHL0551	187.18	PKH-RK2AHL0555	370.81

PARKER

Rod Kits

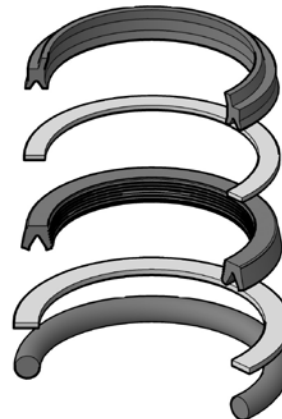
Urethane


Kit Includes:

- 1 XNBR Wiper
- 1 Multi-lip Urethane U-seal
- 1 NBR O-ring
- 1 NBR Back-up Ring

HD Cylinders

Fluorocarbon


Kit Includes:

- 1 FC Wiper
- 1 Multi-lip FC U-seal
- 2 PTFE Back-up Rings
- 1 FC O-ring

Rod Dia.	Kit #	List Price	Kit #	List Price
5/8"	PKH-RK1HDL0061	\$10.75	PKH-RK1HDL0065	\$22.76
1"	PKH-RK1HDL0101	12.71	PKH-RK1HDL0105	24.32
1-3/8"	PKH-RK1HDL0131	15.55	PKH-RK1HDL0135	35.47
1-3/4"	PKH-RK1HDL0171	19.15	PKH-RK1HDL0175	39.62
2"	PKH-RK1HDL0201	24.08	PKH-RK1HDL0205	42.10
2-1/2"	PKH-RK1HDL0251	34.01	PKH-RK1HDL0255	65.74
3-1/2"	PKH-RK1HDL0351	44.27	PKH-RK1HDL0355	80.79

PARKER

Rod Kits

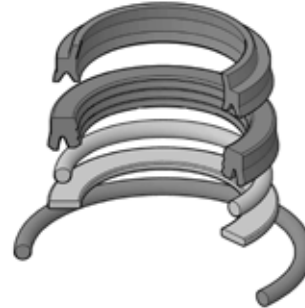
2AN Air Cylinders Nitrile



1/2" - 2-1/2"

Kit Includes:

- 1 XNBR Wiper
- 1 NBR U-seal
- 1 NBR O-ring



3" - 5-1/2"

Kit Includes:

- 1 XNBR Wiper
- 1 NBR Multi-lip U-seal
- 1 Felt Wick
- 1 Felt Washer
- 1 NBR O-ring

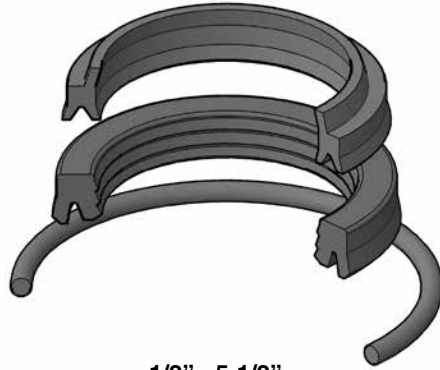
Rod Dia.	Kit #	List Price
1/2"	PKH-RK2AN00051	\$18.85
5/8"	PKH-RK2AN00061	19.75
1"	PKH-RK2AN00101	22.69
1-3/8"	PKH-RK2AN00131	25.05
1-3/4"	PKH-RK2AN00171	29.45
2"	PKH-RK2AN00201	34.76
2-1/2"	PKH-RK2AN00251	50.38
3"	PKH-RK2AN00301	83.06
3-1/2"	PKH-RK2AN00351	131.35
4"	PKH-RK2AN00401	159.04
4-1/2"	PKH-RK2AN00451	174.35
5"	PKH-RK2AN00501	190.83
5-1/2"	PKH-RK2AN00551	227.95

PARKER

Rod Kits

H*, 2H*, 3H (7" & 8" Bore), VH, L, 2L, and 3L Cylinders Urethane

Standard seals for Series 2H*, VH, 3L, and 3H (7" and 8" Bore) manufactured after September 30, 1990.
Interchangeable seals for Series H*, 2H*, VH, L, 2L, and 3L manufactured before September 30, 1990.



1/2" - 5-1/2"

Kit Includes:

- 1 XNBR Wiper
- 1 Multi-lip Urethane U-seal
- 1 NBR O-ring

Rod Dia.	Kit #	List Price
1/2"	PKH-RK2HLTS051	\$23.02
5/8"	PKH-RK2HLTS061	23.59
1"	PKH-RK2HLTS101	27.88
1-3/8"	PKH-RK2HLTS131	32.93
1-3/4"	PKH-RK2HLTS171	38.26
2"	PKH-RK2HLTS201	43.85
2-1/2"	PKH-RK2HLTS251	46.91
3"	PKH-RK2HLTS301	50.99
3-1/2"	PKH-RK2HLTS351	61.10
4"	PKH-RK2HLTS401	68.25
4-1/2"	PKH-RK2HLTS451	74.53
5"	PKH-RK2HLTS501	80.86
5-1/2"	PKH-RK2HLTS551	88.78

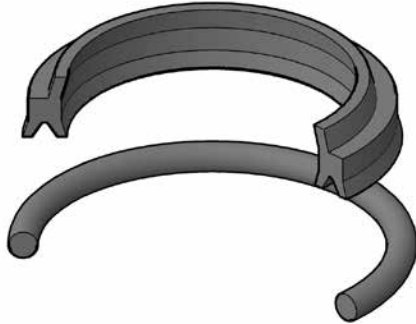
*Excludes 10" and 12" Bore for Series H and 2H.

PARKER

Rod Kits

2MA Air Cylinders

Nitrile

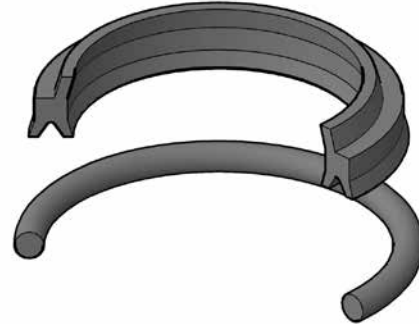


1/2" - 1-3/4"

Kit Includes:

- 1 XNBR Wiper/Seal
- 1 NBR O-ring
- 1 Tube Seal Lubricant

Fluorocarbon



1/2" - 1-3/4"

Kit Includes:

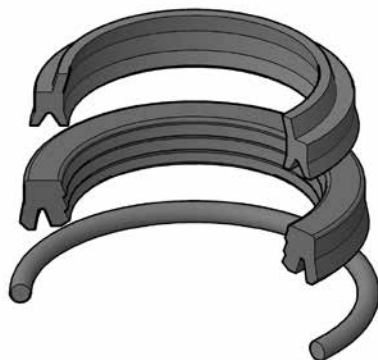
- 1 FC Wiper/Seal
- 1 FC O-ring
- 1 Tube Seal Lubricant

Rod Dia.	Kit #	List Price	Kit #	List Price
1/2"	PKH-RK02MA0051	\$13.47	PKH-RK02MA0055	\$20.13
5/8"	PKH-RK02MA0061	13.89	PKH-RK02MA0065	20.68
1"	PKH-RK02MA0101	14.24	PKH-RK02MA0105	21.36
1-3/8"	PKH-RK02MA0131	15.23	PKH-RK02MA0135	26.75
1-3/4"	PKH-RK02MA0171	16.28	PKH-RK02MA0175	33.64

PARKER

Rod Kits

2ML Hydraulic Cylinders Urethane



1/2" - 5-1/2"

Kit Includes:

- 1 XNBR Wiper / Seal
- 1 Multi-lip Urethane U-seal
- 1 NBR O-ring

Rod Dia.	Kit #	List Price
5/8"	PKH-RK02ML0061	\$17.82
1"	PKH-RK02ML0101	18.42
1-3/8"	PKH-RK02ML0131	20.90
1-3/4"	PKH-RK02ML0171	23.88

PARKER

Rod Kits

Urethane

HMI Cylinders

Fluorocarbon

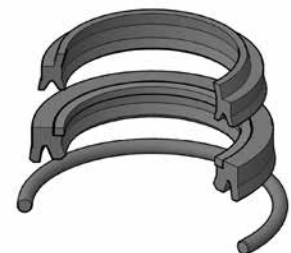

Kit Includes:

- 1 URE Wiper
- 1 URE Multi-lip U-seal
- 1 NBR O-ring

12 - 70mm



90 - 140mm


Kit Includes:

- 1 FC Wiper
- 1 PTFE Back-up Ring*
- 1 FC Multi-lip U-seal*
- 1 FC O-ring

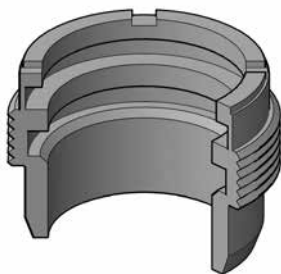
Rod Dia.	Kit #	List Price	Kit #	List Price
12 mm	PKH-RK2HM0121	\$28.60	PKH-RK2HM0125	\$36.19
14 mm	PKH-RK2HM0141	29.46	PKH-RK2HM0145	36.90
18 mm	PKH-RK2HM0181	22.81	PKH-RK2HM0185	39.02
22 mm	PKH-RK2HM0221	31.73	PKH-RK2HM0225	40.73
28 mm	PKH-RK2HM0281	14.33	PKH-RK2HM0285	48.94
36 mm	PKH-RK2HM0361	21.79	PKH-RK2HM0365	50.14
45 mm	PKH-RK2HM0451	34.80	PKH-RK2HM0455	57.11
56 mm	PKH-RK2HM0561	37.15	PKH-RK2HM0565	80.46
70 mm	PKH-RK2HM0701	28.52	PKH-RK2HM0705	88.54
90 mm	PKH-RK2HM0901	53.59	PKH-RK2HM0905	288.16
110 mm	PKH-RK2HM1101	69.19	PKH-RK2HM1105	385.14
140 mm	PKH-RK2HM1401	89.80	PKH-RK2HM1405	461.17

*90, 110, & 140mm Fluorocarbon kits use (1) FC Single Lip Rod U-seal w/ a Bronze/PTFE ID back-up ring

PARKER

Bronze Rod Glands

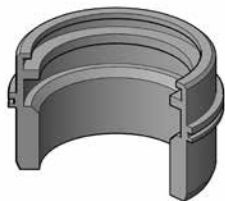
A, 2A, 2AN, H, 2H, VH, L, 2L, & 3L Air and Hydraulic Cylinders



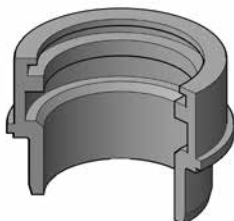
Rod Dia.	Part #	List Price
1/2"	PKH-RG-05	\$39.02
5/8"	PKH-RG-06	23.51
1"	PKH-RG-10	27.30
1-3/8"	PKH-RG-13	37.87
1-3/4"	PKH-RG-17	46.06
2"	PKH-RG-20	56.30
2-1/2"	PKH-RG-25	79.44
3"	PKH-RG-30	109.81
3-1/2"	PKH-RG-35	257.60
4"	PKH-RG-40	262.43
4-1/2"	PKH-RG-45	377.39
5"	PKH-RG-50	437.22
5-1/2"	PKH-RG-55	461.11

MA Air Cylinders

5/8" Rod Gland profile

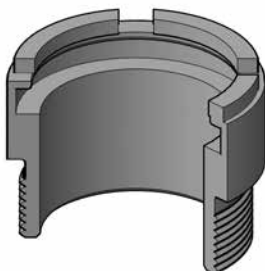


1" & 1-3/8" Rod Gland profile



Rod Dia.	Part #	List Price
5/8"	PKH-RGMA-06	\$42.29
1"	PKH-RGMA-10	33.46
1-3/8"	PKH-RGMA-13	40.73

2MA Air Cylinders

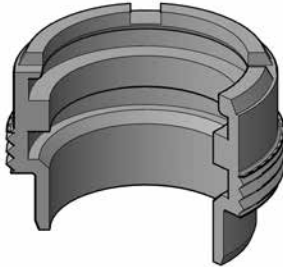


Rod Dia.	Part #	List Price
1/2"	PKH-RG02MA-05	\$37.59
5/8"	PKH-RG02MA-06	27.70
1"	PKH-RG02MA-10	34.67
1-3/8"	PKH-RG02MA-13	50.12
1-3/4"	PKH-RG02MA-17	78.94

PARKER

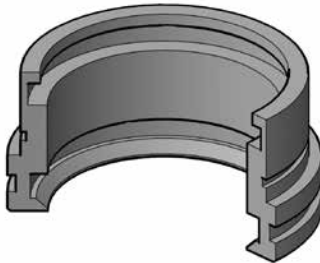
Bronze Rod Glands

HMI Hydraulic Cylinders



Rod Dia.	Part #	List Price
12 mm	PKH-RGHM-012	\$29.74
14 mm	PKH-RGHM-014	51.96
18 mm	PKH-RGHM-018	55.82
22 mm	PKH-RGHM-022	54.57
28 mm	PKH-RGHM-028	59.21
36 mm	PKH-RGHM-036	57.58
45 mm	PKH-RGHM-045	54.60
56 mm	PKH-RGHM-056	124.37
70 mm	PKH-RGHM-070	205.39

HD Hydraulic Cylinders

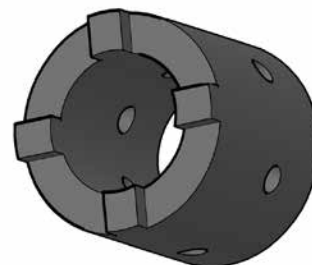
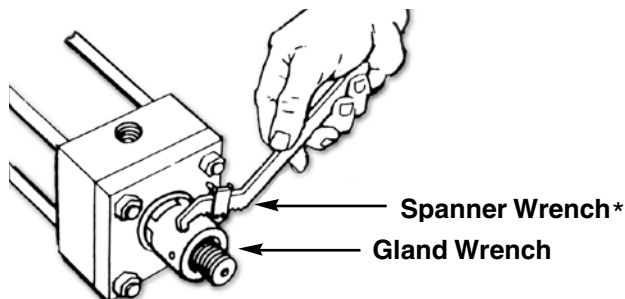


Rod Dia.	Part #	List Price
5/8"	PKH-RGHD-06	\$45.85
1"	PKH-RGHD-10	60.18
1-3/8"	PKH-RGHD-13	79.10
1-3/4"	PKH-RGHD-17	100.13
2"	PKH-RGHD-20	147.47
2-1/2"	PKH-RGHD-25	181.47
3-1/2"	PKH-RGHD-35	222.85

PARKER

Gland Wrenches

Parker Gland Wrenches



Rod Dia.	Kit #	ID X OD X HT	NET Price
1/2", 5/8", 12mm & 14mm	PKH-069590	11/16" X 1-1/8" X 1-3/8"	\$34.62
18mm	PKH-084765	13/16" X 1-1/4" X 1-7/16"	32.46
1" & 22mm	PKH-069591	1-1/16" X 1-5/8" X 1-1/2"	20.91
28mm	PKH-084766	1-1/4" X 1-11/16" X 1-9/16"	31.05
1-3/8" & 36mm	PKH-069592	1-7/16" X 1-7/8" X 1-5/8"	40.50
1-3/4" & 45mm	PKH-069593	1-13/16" X 2-1/4" X 1-5/8"	38.50
2"	PKH-069594	2-1/16" X 2-1/2" X 2"	47.81
2-1/2" & 56mm	PKH-069595	2-9/16" X 3" X 2-1/8"	75.51
70mm	PKH-069596	2-15/16" X 3-1/2" X 2-3/8"	92.64

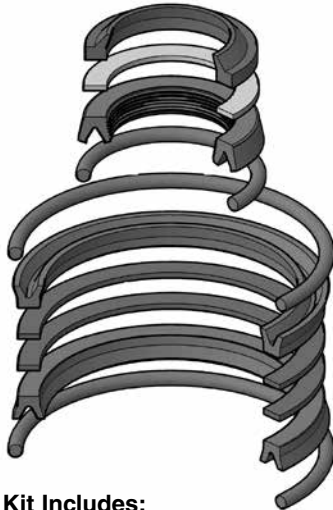
*See Assortment Kits and Tools Section

PARKER

Rod & Piston Seal Kits

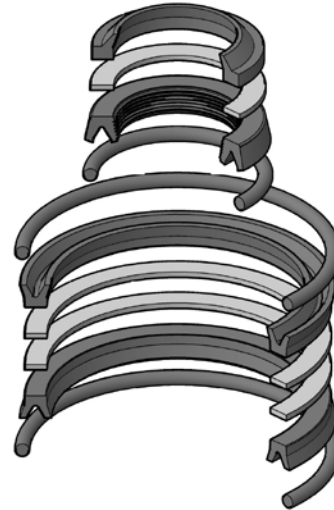
MA Air Cylinders

Nitrile


Kit Includes:

- 1 URE Wiper
- 1 PTFE Back-up Ring
- 1 NBR Multi-lip U-seal
- 2 NBR U-seals
- 2 URE Back-up Rings
- 3 NBR O-rings

Fluorocarbon


Kit Includes:

- 1 FC Wiper
- 1 FC Multi-lip U-seal
- 2 FC U-seals
- 3 PTFE Back-up Ring
- 3 FC O-rings

Rod Dia.	Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
5/8"	1-1/2"	PKH-SKL7000MA1	\$21.91	PKH-SKL7000MA5	\$61.66
5/8"	2"	PKH-SKL7001MA1	22.11	PKH-SKL7001MA5	64.50
1"	2"	PKH-SKL7002MA1	22.48	PKH-SKL7002MA5	67.35
5/8"	2-1/2"	PKH-SKL7003MA1	29.15	PKH-SKL7003MA5	78.86
1"	2-1/2"	PKH-SKL7004MA1	24.28	PKH-SKL7004MA5	81.71
1"	3-1/4"	PKH-SKL7005MA1	25.23	PKH-SKL7005MA5	86.44
1-3/8"	3-1/4"	PKH-SKL7006MA1	28.58	PKH-SKL7006MA5	98.62
1"	4"	PKH-SKL7007MA1	29.15	PKH-SKL7007MA5	102.52
1-3/8"	4"	PKH-SKL7008MA1	31.45	PKH-SKL7008MA5	114.78
1"	5"	PKH-SKL7009MA1	36.01	PKH-SKL7009MA5	124.97
1-3/8"	5"	PKH-SKL7010MA1	39.38	PKH-SKL7010MA5	137.25
1-3/8"	6"	PKH-SKL7098MA1	42.41	PKH-SKL7098MA5	169.35

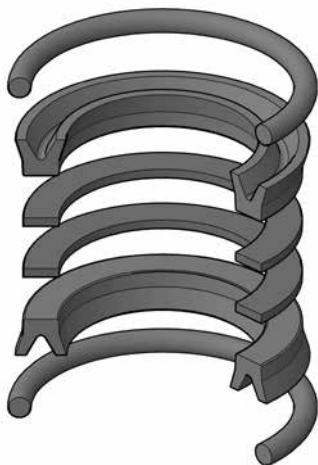
PARKER

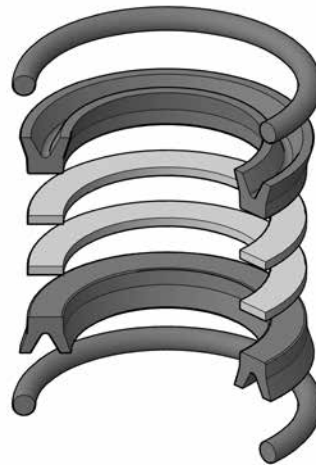
Piston Kits

HD, HL, 2HL, L, LL, 2LL, & 3LL Hydraulic Cylinders

Nitrile

Fluorocarbon


Kit Includes:

 2 NBR U-seals
 2 NBR O-ring Head Seals
 2 URE Back-up Rings

Kit Includes:

 2 FC U-seals
 2 FC O-ring Head Seals
 2 PTFE Back-up Rings

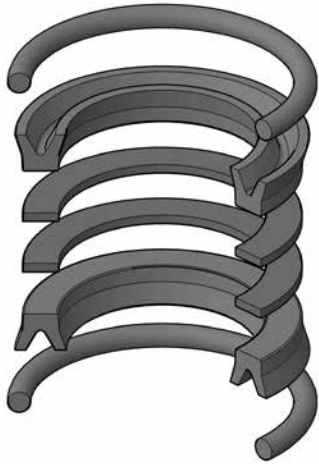
Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1"	PKH-PK102HLL01	\$14.11	PKH-PK102HLL05	\$49.27
1-1/2"	PKH-PK152HLL01	10.38	PKH-PK152HLL05	51.17
2"	PKH-PK202HLL01	13.23	PKH-PK202HLL05	79.77
2-1/2"	PKH-PK252HLL01	15.35	PKH-PK252HLL05	80.82
3-1/4"	PKH-PK322HLL01	19.03	PKH-PK322HLL05	87.10
4"	PKH-PK402HLL01	25.02	PKH-PK402HLL05	108.77
5"	PKH-PK502HLL01	29.11	PKH-PK502HLL05	129.97
6"	PKH-PK602HLL01	37.84	PKH-PK602HLL05	173.77
7"	PKH-PK702HLL01	100.54	PKH-PK702HLL05	275.49
8"	PKH-PK802HLL01	110.12	PKH-PK802HLL05	376.90
10"	PKH-PK902HLL01	196.34	PKH-PK902HLL05	589.01
12"	PKH-PK922HLL01	266.41	PKH-PK922HLL05	734.87

PARKER

Piston Kits

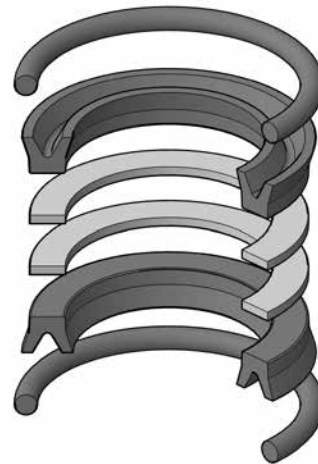
1A & 2A Air Cylinders

Nitrile


Kit Includes:

2 NBR O-ring Head Seals
2 NBR U-seals
2 URE Back-up Rings

Fluorocarbon


Kit Includes:

2 FC O-ring Head Seals
2 FC U-seals
2 PTFE Back-up Rings

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1"	PKH-PK1002A001	\$9.57	PKH-PK1002A005	\$36.32
1-1/2"	PKH-PK1502A001	11.24	PKH-PK1502A005	51.17
2"	PKH-PK2002A001	13.23	PKH-PK2002A005	58.39
2-1/2"	PKH-PK2502A001	15.35	PKH-PK2502A005	81.95
3-1/4"	PKH-PK3202A001	19.03	PKH-PK3202A005	95.64
4"	PKH-PK4002A001	25.02	PKH-PK4002A005	103.08
5"	PKH-PK5002A001	29.18	PKH-PK5002A005	130.83
6"	PKH-PK6002A001	37.91	PKH-PK6002A005	173.89
7"	PKH-PK7002A001	94.58	PKH-PK7002A005	275.62
8"	PKH-PK8002A001	110.12	PKH-PK8002A005	376.90
10"	PKH-PK9002A001	163.08	PKH-PK9002A005	478.38
12"	PKH-PK9202A001	221.55	PKH-PK9202A005	734.87
14"	PKH-PK9402A001	342.69	PKH-PK9402A005	1,200.64

PARKER

Piston Kits

2AN Cylinders Nitrile


Kit Includes:

2 NBR O-ring Head Seals
2 NBR U-seals

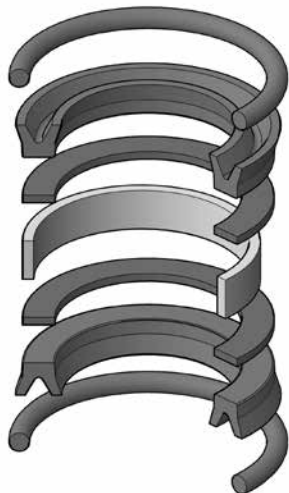
Bore Dia.	Kit #	List Price
1"	PKH-PK1002AN01	\$19.65
1-1/2"	PKH-PK1502AN01	21.83
2"	PKH-PK2002AN01	24.40
2-1/2"	PKH-PK2502AN01	29.79
3-1/4"	PKH-PK3202AN01	38.91
4"	PKH-PK4002AN01	48.16
5"	PKH-PK5002AN01	57.80
6"	PKH-PK6002AN01	92.09
7"	PKH-PK7002AN01	100.06
8"	PKH-PK8002AN01	142.94
10"	PKH-PK9002AN01	213.49
12"	PKH-PK9202AN01	391.04

PARKER

Piston Kits

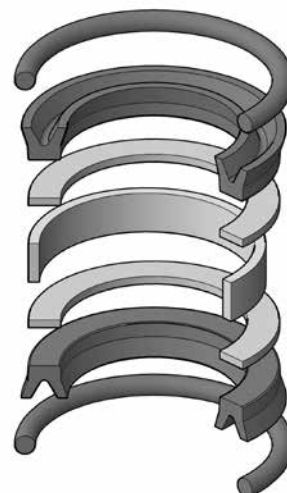
2MA Cylinders

Nitrile


Kit Includes:

2 NBR O-ring Head Seals
2 NBR U-seals
2 URE Back-up Rings
1 Nylon Wear Ring
1 Tube Seal Lubricant

Fluorocarbon


Kit Includes:

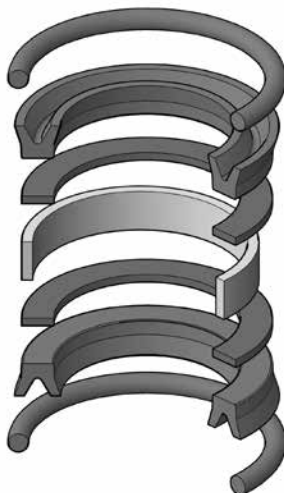
2 FC O-ring Head Seals
2 FC U-seals
2 PTFE Back-up Rings
1 Nylon Wear Ring
1 Tube Seal Lubricant

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	PKH-PK1502MA01	\$25.11	PKH-PK1502MA05	\$48.92
2"	PKH-PK2002MA01	25.45	PKH-PK2002MA05	52.39
2-1/2"	PKH-PK2502MA01	27.29	PKH-PK2502MA05	69.54
3-1/4"	PKH-PK3202MA01	32.80	PKH-PK3202MA05	85.96
4"	PKH-PK4002MA01	40.22	PKH-PK4002MA05	97.38
5"	PKH-PK5002MA01	52.05	PKH-PK5002MA05	147.36
6"	PKH-PK6002MA01	69.59	PKH-PK6002MA05	208.72
8"	PKH-PK8002MA01	122.85	PKH-PK8002MA05	349.01

PARKER

Piston Kits

2ML Cylinders
Nitrile



Kit Includes:

2 NBR O-ring Head Seals
2 NBR U-seals
2 URE Back-up Rings
1 Nylon Wear Ring

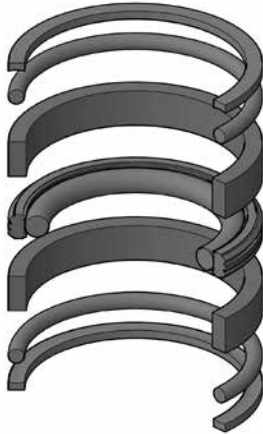
Rod Dia.	Kit #	List Price
1-1/2"	PKH-PK1502ML01	\$30.40
2"	PKH-PK2002ML01	23.01
2-1/2"	PKH-PK2502ML01	24.09
3-1/4"	PKH-PK3202ML01	28.70
4"	PKH-PK4002ML01	41.15
5"	PKH-PK5002ML01	68.23
6"	PKH-PK6002ML01	87.29
8"	PKH-PK8002ML01	148.73

PARKER

Piston Kits

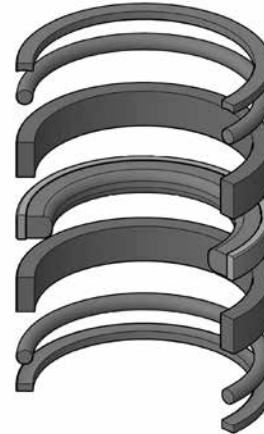
HMI Cylinders

Nitrile


Kit Includes:

2 NBR Back-up Rings*
2 NBR O-ring Head Seals
2 Polyacetal Wear Rings
1 URE Piston Ring
w/ 1 NBR Expander

Fluorocarbon


Kit Includes:

2 FC Back-up Rings*
2 FC O-ring Head Seals
2 Phenolic Wear Rings
1 Step-cut Nylon Piston Ring
w/ 1 FC Expander

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
25 mm	PKH-PN025HM001	\$17.97	—	
32 mm	PKH-PN032HM001	21.10	PKH-PN032HM005	\$103.82
40 mm	PKH-PN040HM001	30.99	PKH-PN040HM005	128.28
50 mm	PKH-PN050HM001	33.71	PKH-PN050HM005	134.48
63 mm	PKH-PN063HM001	40.39	PKH-PN063HM005	173.80
80 mm	PKH-PN080HM001	44.42	PKH-PN080HM005	205.22
100 mm	PKH-PN100HM001	59.20	PKH-PN100HM005	210.90
125 mm	PKH-PN125HM001	102.38	PKH-PN125HM005	234.88
160 mm	PKH-PN160HM001	171.51	PKH-PN160HM005	373.86
200 mm	PKH-PN200HM001	180.66	PKH-PN200HM005	432.50

*Back-up Rings used only in 63mm and larger Piston Kits.

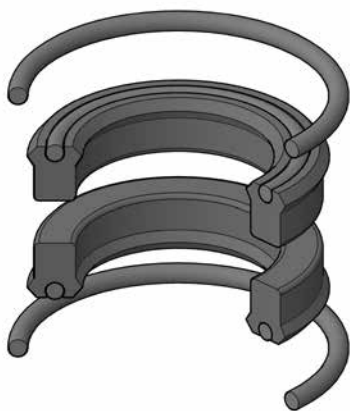
PARKER

Piston Kits

Poly Pack kits for L, 2L, 3L, H, 2H, HD, & VH Cylinders

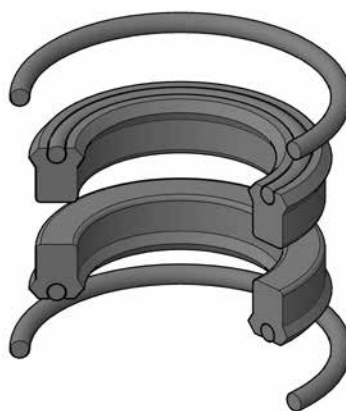
Urethane

Fluorocarbon



Kit Includes:

2 NBR O-ring Head Seals
 2 NBR Loaded Urethane U-seals
 2 PTFE Head Seals (1" Bore Only)



Kit Includes:

2 FC O-ring Head Seals
 2 FC Loaded U-seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1"	PKH-PK102HLLP1	\$28.81	—	
1-1/2"	PKH-PK152HLLP1	19.89	PKH-PK152HLLP5	\$74.27
2"	PKH-PK202HLLP1	22.49	PKH-PK202HLLP5	84.22
2-1/2"	PKH-PK252HLLP1	23.61	PKH-PK252HLLP5	89.07
3-1/4"	PKH-PK322HLLP1	31.64	PKH-PK322HLLP5	164.32
4"	PKH-PK402HLLP1	36.75	PKH-PK402HLLP5	192.69
5"	PKH-PK502HLLP1	60.11	PKH-PK502HLLP5	229.11
6" *	PKH-PK602HLLP1	90.43	PKH-PK602HLLP5	461.81
6" **	PKH-PK602HLLP1-OLD	83.86	PKH-PK602HLLP5-OLD	327.97
8"	PKH-PK802HLLP1	110.33	PKH-PK802HLLP5	431.00

Note: These kits are used in the lipseal type piston for the models shown above.

* These 6" kits are for the current standard piston, Jan. 1992-current. U-seal cross section of .28".

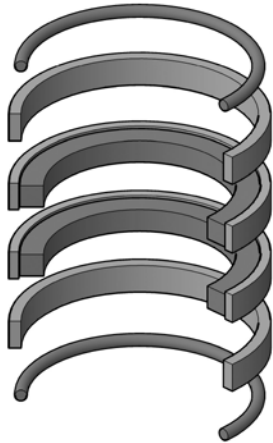
** These 6" kits are for the pre-1992 reworked piston. U-seal cross section of 5/16".

PARKER

Piston Kits

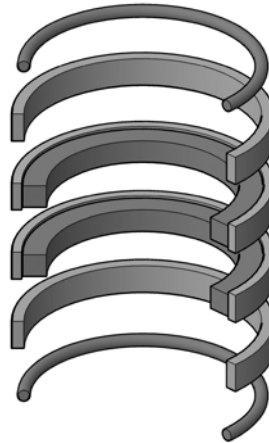
High Load Kits for 2H, VH & HD

Nitrile


Kit Includes:

2 NBR O-ring Head Seals
2 Nylon Wear Rings
2 Bronze filled PTFE Piston Rings
w/ 2 NBR Expanders

Fluorocarbon


Kit Includes:

2 FC O-ring Head Seals
2 Nylon Wear Rings
2 Bronze filled PTFE Piston Rings
w/ 2 FC Expanders

Bore Dia.	Kit #	List Price	Kit #	List Price
1-1/2"	PKH-PK152HK001	\$25.44	PKH-PK152HK005	\$44.12
2"	PKH-PK202HK001	33.02	PKH-PK202HK005	49.95
2-1/2"	PKH-PK252HK001	31.84	PKH-PK252HK005	53.69
3-1/4"	PKH-PK322HK001	42.04	PKH-PK322HK005	118.25
4"	PKH-PK402HK001	36.61	PKH-PK402HK005	130.85
5"	PKH-PK502HK001	41.08	PKH-PK502HK005	144.80
6"	PKH-PK602HK001	75.37	PKH-PK602HK005	225.78
7"	PKH-PK702HK001	166.08	PKH-PK702HK005	334.87
8"	PKH-PK802HK001	177.88	PKH-PK802HK005	477.36
10"	PKH-PK902HK001	333.24	PKH-PK902HK005	683.78
12"	PKH-PK922HK001	682.00	PKH-PK922HK005	1,171.63

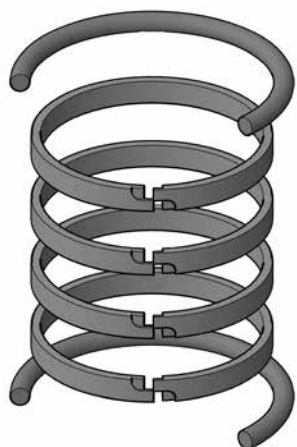
PARKER

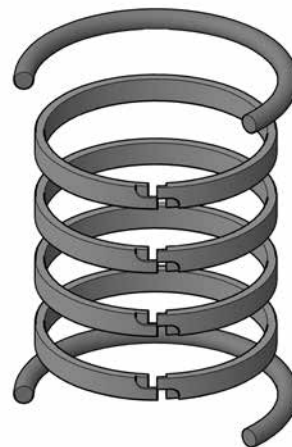
Piston Ring Kits

H, HD, 2H, L, 2L, & 3L Hydraulic Cylinders

Nitrile

Fluorocarbon


Kit Includes:

 2 NBR O-ring Head Seals
 4 Cast Iron Piston Rings
 2 PTFE Head Seals (1" Bore Only)

Kit Includes:

 2 FC O-ring Head Seals
 4 Cast Iron Piston Rings
 2 PTFE Head Seals (1" Bore Only)

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1"	PKH-PR102H0001	\$83.36	PKH-PR102H0005	\$83.88
1-1/2"	PKH-PR152H0001	46.63	PKH-PR152H0005	54.01
2"	PKH-PR202H0001	49.75	PKH-PR202H0005	55.98
2-1/2"	PKH-PR252H0001	50.31	PKH-PR252H0005	56.76
3-1/4"	PKH-PR322H0001	54.40	PKH-PR322H0005	67.63
4"	PKH-PR402H0001	56.00	PKH-PR402H0005	68.91
5"	PKH-PR502H0001	73.76	PKH-PR502H0005	97.71
6"	PKH-PR602H0001	110.88	PKH-PR602H0005	118.25
7"	PKH-PR702H0001	123.91	PKH-PR702H0005	145.59
8"	PKH-PR802H0001	189.37	PKH-PR802H0005	202.00
10"	PKH-PR902H0001	517.37	PKH-PR902H0005	578.61
12"	PKH-PR922H0001	828.58	PKH-PR922H0005	967.09

PARKER

Piston Head Seal Kits

Nitrile



Kit Includes:
2 NBR O-ring Head Seals

Fluorocarbon



Kit Includes:
2 FC O-ring Head Seals

2A, 2H, 3L, HD, & VH Cylinders

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1"	PKH-CB102HL001	\$6.81	PKH-CB102HL005	\$9.56
1-1/2"	PKH-CB152HL001	6.98	PKH-CB152HL005	9.56
2"	PKH-CB202HL001	7.34	PKH-CB202HL005	16.35
2-1/2"	PKH-CB252HL001	7.65	PKH-CB252HL005	20.41
3-1/4"	PKH-CB322HL001	8.09	PKH-CB322HL005	24.81
4"	PKH-CB402HL001	8.45	PKH-CB402HL005	31.04
5"	PKH-CB502HL001	9.73	PKH-CB502HL005	44.80
6"	PKH-CB602HL001	11.58	PKH-CB602HL005	46.85
7"	PKH-CB702HL001	12.48	PKH-CB702HL005	67.22
8"	PKH-CB802HL001	14.17	PKH-CB802HL005	68.41
10"	PKH-CB902HL001	17.26	PKH-CB902HL005	75.74

2MA & ML Cylinders

2MA Cylinders Only

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
1-1/2"	PKH-CB1502MA01	\$6.64	PKH-CB1502MA05	\$6.88
2"	PKH-CB2002MA01	6.64	PKH-CB2002MA05	11.45
2-1/2"	PKH-CB2502MA01	6.83	PKH-CB2502MA05	11.45
3-1/4"	PKH-CB3202MA01	9.36	PKH-CB3202MA05	15.19
4"	PKH-CB4002MA01	14.68	PKH-CB4002MA05	16.69
5"	PKH-CB5002MA01	19.23	PKH-CB5002MA05	30.80
6"	PKH-CB6002MA01	25.58	PKH-CB6002MA05	50.05
8"	PKH-CB8002MA01	31.26	PKH-CB8002MA05	51.55

PARKER

Piston Head Seal Kits

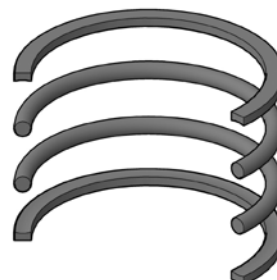
HMI Hydraulic Cylinders

Nitrile


Kit Includes:

2 NBR Back-up Rings*
2 NBR O-ring Head Seals

Fluorocarbon


Kit Includes:

2 FC Back-up Rings*
2 FC O-ring Head Seals

Bore Dia.	(NBR) Kit #	List Price	(FC) Kit #	List Price
25 mm	PKH-CB025HM001	\$8.46	PKH-CB025HM005	\$15.97
32 mm	PKH-CB032HM001	8.72	PKH-CB032HM005	16.41
40 mm	PKH-CB040HM001	9.01	PKH-CB040HM005	17.18
50 mm	PKH-CB050HM001	9.33	PKH-CB050HM005	21.47
63 mm	PKH-CB063HM001	11.17	PKH-CB063HM005	21.74
80 mm	PKH-CB080HM001	11.76	PKH-CB080HM005	22.21
100 mm	PKH-CB100HM001	13.28	PKH-CB100HM005	33.25
125 mm	PKH-CB125HM001	17.28	PKH-CB125HM005	43.56
160 mm	PKH-CB160HM001	22.60	PKH-CB160HM005	75.71
200 mm	PKH-CB200HM001	29.13	PKH-CB200HM005	117.31

*Back-up rings used only in 63mm and larger piston kits.

PARKER

Various Kits

Various Kits

Kit #	Series	Code	Rod x Bore	List Price
PKH-KT060VP101	VP	I-N-2	1" X 6"	\$25.30
PKH-KT070VP101	VP	I-N-2	1" X 7"	28.10
PKH-KT080VP101	VP	I-N-2	1" X 8"	42.77
PKH-KT100VP101	VP	I-N-2	1" X 10"	53.14

Kit Includes:

1 XNBR H Style Wiper
2 NBR O-rings
1 NBR Quad Ring

PARKER

PARKER - NET PRICE

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	Net Price
PKH-069590	Gland Wrench	1/2, 5/8, 12mm, 14mm		11/16 x 1-1/8 x 1-3/8	\$34.62
PKH-069591	Gland Wrench	1, 22mm		1-1/16 x 1-5/8 x 1-1/2	20.91
PKH-069592	Gland Wrench	1-3/8, 36mm		1-7/16 x 1-7/8 x 1-5/8	40.50
PKH-069593	Gland Wrench	1-3/4, 45mm		1-13/16 x 2-1/4 x 1-5/8	38.50
PKH-069594	Gland Wrench	2		2-1/16 x 2-1/2 x 2	47.81
PKH-069595	Gland Wrench	2-1/2, 56mm		2-9/16 x 3 x 2-1/8	75.51
PKH-069596	Gland Wrench	70mm		2-15/16 x 3-1/2 x 2-3/8	92.64
PKH-084765	Gland Wrench	18mm		13/16 x 1-1/4 x 1-7/16	32.46
PKH-084766	Gland Wrench	28mm		1-1/4 x 1-11/16 x 1-9/16	31.05

PARKER - LIST PRICE

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-CB025HM001	Piston Head Seal Kit		25 mm		\$8.46
PKH-CB025HM005	Piston Head Seal Kit		25 mm		15.97
PKH-CB032HM001	Piston Head Seal Kit		32 mm		8.72
PKH-CB032HM005	Piston Head Seal Kit		32 mm		16.41
PKH-CB040HM001	Piston Head Seal Kit		40 mm		9.01
PKH-CB040HM005	Piston Head Seal Kit		40 mm		17.18
PKH-CB050HM001	Piston Head Seal Kit		50 mm		9.33
PKH-CB050HM005	Piston Head Seal Kit		50 mm		21.47
PKH-CB063HM001	Piston Head Seal Kit		63 mm		11.17
PKH-CB063HM005	Piston Head Seal Kit		63 mm		21.74
PKH-CB080HM001	Piston Head Seal Kit		80 mm		11.76
PKH-CB080HM005	Piston Head Seal Kit		80 mm		22.21
PKH-CB100HM001	Piston Head Seal Kit		100 mm		13.28
PKH-CB100HM005	Piston Head Seal Kit		100 mm		33.25
PKH-CB102HL001	Piston Head Seal Kit		1		6.81
PKH-CB102HL005	Piston Head Seal Kit		1		9.56
PKH-CB125HM001	Piston Head Seal Kit		125 mm		17.28
PKH-CB125HM005	Piston Head Seal Kit		125 mm		43.56
PKH-CB1502MA01	Piston Head Seal Kit		1-1/2		6.64
PKH-CB1502MA05	Piston Head Seal Kit		1-1/2		6.88
PKH-CB152HL001	Piston Head Seal Kit		1-1/2		6.98
PKH-CB152HL005	Piston Head Seal Kit		1-1/2		9.56
PKH-CB160HM001	Piston Head Seal Kit		160 mm		22.60
PKH-CB160HM005	Piston Head Seal Kit		160 mm		75.71
PKH-CB2002MA01	Piston Head Seal Kit		2		6.64
PKH-CB2002MA05	Piston Head Seal Kit		2		11.45
PKH-CB200HM001	Piston Head Seal Kit		200 mm		29.13
PKH-CB200HM005	Piston Head Seal Kit		200 mm		117.31
PKH-CB202HL001	Piston Head Seal Kit		2		7.34
PKH-CB202HL005	Piston Head Seal Kit		2		16.35
PKH-CB2502MA01	Piston Head Seal Kit		2-1/2		6.83
PKH-CB2502MA05	Piston Head Seal Kit		2-1/2		11.45
PKH-CB252HL001	Piston Head Seal Kit		2-1/2		7.65
PKH-CB252HL005	Piston Head Seal Kit		2-1/2		20.41
PKH-CB3202MA01	Piston Head Seal Kit		3-1/4		9.36

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Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-CB3202MA05	Piston Head Seal Kit		3-1/4		\$15.19
PKH-CB322HL001	Piston Head Seal Kit		3-1/4		8.09
PKH-CB322HL005	Piston Head Seal Kit		3-1/4		24.81
PKH-CB4002MA01	Piston Head Seal Kit		4		14.68
PKH-CB4002MA05	Piston Head Seal Kit		4		16.69
PKH-CB402HL001	Piston Head Seal Kit		4		8.45
PKH-CB402HL005	Piston Head Seal Kit		4		31.04
PKH-CB5002MA01	Piston Head Seal Kit		5		19.23
PKH-CB5002MA05	Piston Head Seal Kit		5		30.80
PKH-CB502HL001	Piston Head Seal Kit		5		9.73
PKH-CB502HL005	Piston Head Seal Kit		5		44.80
PKH-CB6002MA01	Piston Head Seal Kit		6		25.58
PKH-CB6002MA05	Piston Head Seal Kit		6		50.05
PKH-CB602HL001	Piston Head Seal Kit		6		11.58
PKH-CB602HL005	Piston Head Seal Kit		6		46.85
PKH-CB702HL001	Piston Head Seal Kit		7		12.48
PKH-CB702HL005	Piston Head Seal Kit		7		67.22
PKH-CB8002MA01	Piston Head Seal Kit		8		31.26
PKH-CB8002MA05	Piston Head Seal Kit		8		51.55
PKH-CB802HL001	Piston Head Seal Kit		8		14.17
PKH-CB802HL005	Piston Head Seal Kit		8		68.41
PKH-CB902HL001	Piston Head Seal Kit		9		17.26
PKH-CB902HL005	Piston Head Seal Kit		9		75.74
PKH-KT060VP101	Rod & Piston Seal Kit	1	6		25.30
PKH-KT070VP101	Rod & Piston Seal Kit	1	7		28.10
PKH-KT080VP101	Rod & Piston Seal Kit	1	8		42.77
PKH-KT100VP101	Rod & Piston Seal Kit	1	10		53.14
PKH-PK1002A001	Piston Kit		1		9.57
PKH-PK1002A005	Piston Kit		1		36.32
PKH-PK1002AN01	Piston Kit		1		19.65
PKH-PK102HLL01	Piston Kit		1		14.11
PKH-PK102HLL05	Piston Kit		1		49.27
PKH-PK102HLLP1	Piston Kit		1		28.81
PKH-PK1502A001	Piston Kit		1-1/2		11.24
PKH-PK1502A005	Piston Kit		1-1/2		51.17
PKH-PK1502AN01	Piston Kit		1-1/2		21.83
PKH-PK1502MA01	Piston Kit		1-1/2		25.11
PKH-PK1502MA05	Piston Kit		1-1/2		48.92
PKH-PK1502ML01	Piston Kit		1-1/2		30.40
PKH-PK152HK001	Piston Kit		1-1/2		25.44
PKH-PK152HK005	Piston Kit		1-1/2		44.12
PKH-PK152HLL01	Piston Kit		1-1/2		10.38
PKH-PK152HLL05	Piston Kit		1-1/2		51.17
PKH-PK152HLLP1	Piston Kit		1-1/2		19.89
PKH-PK152HLLP5	Piston Kit		1-1/2		74.27
PKH-PK2002A001	Piston Kit		2		13.23
PKH-PK2002A005	Piston Kit		2		58.39
PKH-PK2002AN01	Piston Kit		2		24.40
PKH-PK2002MA01	Piston Kit		2		25.45
PKH-PK2002MA05	Piston Kit		2		52.39

PARKER

PARKER

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-PK2002ML01	Piston Kit		2		\$23.01
PKH-PK202HK001	Piston Kit		2		33.02
PKH-PK202HK005	Piston Kit		2		49.95
PKH-PK202HLL01	Piston Kit		2		13.23
PKH-PK202HLL05	Piston Kit		2		79.77
PKH-PK202HLLP1	Piston Kit		2		22.49
PKH-PK202HLLP5	Piston Kit		2		84.22
PKH-PK2502A001	Piston Kit		2-1/2		15.35
PKH-PK2502A005	Piston Kit		2-1/2		81.95
PKH-PK2502AN01	Piston Kit		2-1/2		29.79
PKH-PK2502MA01	Piston Kit		2-1/2		27.29
PKH-PK2502MA05	Piston Kit		2-1/2		69.54
PKH-PK2502ML01	Piston Kit		2-1/2		24.09
PKH-PK252HK001	Piston Kit		2-1/2		31.84
PKH-PK252HK005	Piston Kit		2-1/2		53.69
PKH-PK252HLL01	Piston Kit		2-1/2		15.35
PKH-PK252HLL05	Piston Kit		2-1/2		80.82
PKH-PK252HLLP1	Piston Kit		2-1/2		23.61
PKH-PK252HLLP5	Piston Kit		2-1/2		89.07
PKH-PK3202A001	Piston Kit		3-1/4		19.03
PKH-PK3202A005	Piston Kit		3-1/4		95.64
PKH-PK3202AN01	Piston Kit		3-1/4		38.91
PKH-PK3202MA01	Piston Kit		3-1/4		32.80
PKH-PK3202MA05	Piston Kit		3-1/4		85.96
PKH-PK3202ML01	Piston Kit		3-1/4		28.70
PKH-PK322HK001	Piston Kit		3-1/4		42.04
PKH-PK322HK005	Piston Kit		3-1/4		118.25
PKH-PK322HLL01	Piston Kit		3-1/4		19.03
PKH-PK322HLL05	Piston Kit		3-1/4		87.10
PKH-PK322HLLP1	Piston Kit		3-1/4		31.64
PKH-PK322HLLP5	Piston Kit		3-1/4		164.32
PKH-PK4002A001	Piston Kit		4		25.02
PKH-PK4002A005	Piston Kit		4		103.08
PKH-PK4002AN01	Piston Kit		4		48.16
PKH-PK4002MA01	Piston Kit		4		40.22
PKH-PK4002MA05	Piston Kit		4		97.38
PKH-PK4002ML01	Piston Kit		4		41.15
PKH-PK402HK001	Piston Kit		4		36.61
PKH-PK402HK005	Piston Kit		4		130.85
PKH-PK402HLL01	Piston Kit		4		25.02
PKH-PK402HLL05	Piston Kit		4		108.77
PKH-PK402HLLP1	Piston Kit		4		36.75
PKH-PK402HLLP5	Piston Kit		4		192.69
PKH-PK5002A001	Piston Kit		5		29.18
PKH-PK5002A005	Piston Kit		5		130.83
PKH-PK5002AN01	Piston Kit		5		57.80
PKH-PK5002MA01	Piston Kit		5		52.05
PKH-PK5002MA05	Piston Kit		5		147.36
PKH-PK5002ML01	Piston Kit		5		68.23
PKH-PK502HK001	Piston Kit		5		41.08

PARKER

PARKER

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-PK502HK005	Piston Kit		5		\$144.80
PKH-PK502HLL01	Piston Kit		5		29.11
PKH-PK502HLL05	Piston Kit		5		129.97
PKH-PK502HLLP1	Piston Kit		5		60.11
PKH-PK502HLLP5	Piston Kit		5		229.11
PKH-PK6002A001	Piston Kit		6		37.91
PKH-PK6002A005	Piston Kit		6		173.89
PKH-PK6002AN01	Piston Kit		6		92.09
PKH-PK6002MA01	Piston Kit		6		69.59
PKH-PK6002MA05	Piston Kit		6		208.72
PKH-PK6002ML01	Piston Kit		6		87.29
PKH-PK602HK001	Piston Kit		6		75.37
PKH-PK602HK005	Piston Kit		6		225.78
PKH-PK602HLL01	Piston Kit		6		37.84
PKH-PK602HLL05	Piston Kit		6		173.77
PKH-PK602HLLP1	Piston Kit		6		90.43
PKH-PK602HLLP1-OLD	Piston Kit		6		83.86
PKH-PK602HLLP5	Piston Kit		6		461.81
PKH-PK602HLLP5-OLD	Piston Kit		6		327.97
PKH-PK7002A001	Piston Kit		7		94.58
PKH-PK7002A005	Piston Kit		7		275.62
PKH-PK7002AN01	Piston Kit		7		100.06
PKH-PK702HK001	Piston Kit		7		166.08
PKH-PK702HK005	Piston Kit		7		334.87
PKH-PK702HLL01	Piston Kit		7		100.54
PKH-PK702HLL05	Piston Kit		7		275.49
PKH-PK8002A001	Piston Kit		8		110.12
PKH-PK8002A005	Piston Kit		8		376.90
PKH-PK8002AN01	Piston Kit		8		142.94
PKH-PK8002MA01	Piston Kit		8		122.85
PKH-PK8002MA05	Piston Kit		8		349.01
PKH-PK8002ML01	Piston Kit		8		148.73
PKH-PK802HK001	Piston Kit		8		177.88
PKH-PK802HK005	Piston Kit		8		477.36
PKH-PK802HLL01	Piston Kit		8		110.12
PKH-PK802HLL05	Piston Kit		8		376.90
PKH-PK802HLLP1	Piston Kit		8		110.33
PKH-PK802HLLP5	Piston Kit		8		431.00
PKH-PK9002A001	Piston Kit		10		163.08
PKH-PK9002A005	Piston Kit		10		478.38
PKH-PK9002AN01	Piston Kit		10		213.49
PKH-PK902HK001	Piston Kit		10		333.24
PKH-PK902HK005	Piston Kit		10		683.78
PKH-PK902HLL01	Piston Kit		10		196.34
PKH-PK902HLL05	Piston Kit		10		589.01
PKH-PK9202A001	Piston Kit		12		221.55
PKH-PK9202A005	Piston Kit		12		734.87
PKH-PK9202AN01	Piston Kit		12		391.04
PKH-PK922HK001	Piston Kit		12		682.00
PKH-PK922HK005	Piston Kit		12		1,171.63

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PARKER

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-PK922HLL01	Piston Kit		12		\$266.41
PKH-PK922HLL05	Piston Kit		12		734.87
PKH-PK9402A001	Piston Kit		14		342.69
PKH-PK9402A005	Piston Kit		14		1,200.64
PKH-PN025HM001	Piston Kit		25 mm		17.97
PKH-PN025HM005	Piston Kit		25 mm		80.38
PKH-PN032HM001	Piston Kit		32 mm		21.10
PKH-PN032HM005	Piston Kit		32 mm		103.82
PKH-PN040HM001	Piston Kit		40 mm		30.99
PKH-PN040HM005	Piston Kit		40 mm		128.28
PKH-PN050HM001	Piston Kit		50 mm		33.71
PKH-PN050HM005	Piston Kit		50 mm		134.48
PKH-PN063HM001	Piston Kit		63 mm		40.39
PKH-PN063HM005	Piston Kit		63 mm		173.80
PKH-PN080HM001	Piston Kit		80 mm		44.42
PKH-PN080HM005	Piston Kit		80 mm		205.22
PKH-PN100HM001	Piston Kit		100 mm		59.20
PKH-PN100HM005	Piston Kit		100 mm		210.90
PKH-PN125HM001	Piston Kit		125 mm		102.38
PKH-PN125HM005	Piston Kit		125 mm		234.88
PKH-PN160HM001	Piston Kit		160 mm		171.51
PKH-PN160HM005	Piston Kit		160 mm		373.86
PKH-PN200HM001	Piston Kit		200 mm		180.66
PKH-PN200HM005	Piston Kit		200 mm		432.50
PKH-PR102H0001	Piston Ring Kit		1		83.36
PKH-PR102H0005	Piston Ring Kit		1		83.88
PKH-PR152H0001	Piston Ring Kit		1-1/2		46.63
PKH-PR152H0005	Piston Ring Kit		1-1/2		54.01
PKH-PR202H0001	Piston Ring Kit		2		49.75
PKH-PR202H0005	Piston Ring Kit		2		55.98
PKH-PR252H0001	Piston Ring Kit		2-1/2		50.31
PKH-PR252H0005	Piston Ring Kit		2-1/2		56.76
PKH-PR322H0001	Piston Ring Kit		3-1/4		54.40
PKH-PR322H0005	Piston Ring Kit		3-1/4		67.63
PKH-PR402H0001	Piston Ring Kit		4		56.00
PKH-PR402H0005	Piston Ring Kit		4		68.91
PKH-PR502H0001	Piston Ring Kit		5		73.76
PKH-PR502H0005	Piston Ring Kit		5		97.71
PKH-PR602H0001	Piston Ring Kit		6		110.88
PKH-PR602H0005	Piston Ring Kit		6		118.25
PKH-PR702H0001	Piston Ring Kit		7		123.91
PKH-PR702H0005	Piston Ring Kit		7		145.59
PKH-PR802H0001	Piston Ring Kit		8		189.37
PKH-PR802H0005	Piston Ring Kit		8		202.00
PKH-PR902H0001	Piston Ring Kit		10		517.37
PKH-PR902H0005	Piston Ring Kit		10		578.61
PKH-PR922H0001	Piston Ring Kit		12		828.58
PKH-PR922H0005	Piston Ring Kit		12		967.09
PKH-RG02MA0051	Rod Gland Kit	1/2			41.74
PKH-RG02MA0055	Rod Gland Kit	1/2			44.47

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Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-RG02MA0061	Rod Gland Kit	5/8			\$27.57
PKH-RG02MA0065	Rod Gland Kit	5/8			44.03
PKH-RG02MA0101	Rod Gland Kit	1			31.59
PKH-RG02MA0105	Rod Gland Kit	1			48.79
PKH-RG02MA0131	Rod Gland Kit	1-3/8			47.18
PKH-RG02MA0135	Rod Gland Kit	1-3/8			70.53
PKH-RG02MA0171	Rod Gland Kit	1-3/4			96.01
PKH-RG02MA0175	Rod Gland Kit	1-3/4			107.70
PKH-RG02MA-05	Rod Gland	1/2			37.59
PKH-RG02MA-06	Rod Gland	5/8			27.70
PKH-RG02MA-10	Rod Gland	1			34.67
PKH-RG02MA-13	Rod Gland	1-3/8			50.12
PKH-RG02MA-17	Rod Gland	1-3/4			78.94
PKH-RG-05	Rod Gland	1/2			39.02
PKH-RG-06	Rod Gland	5/8			23.51
PKH-RG-10	Rod Gland	1			27.30
PKH-RG-13	Rod Gland	1-3/8			37.87
PKH-RG-17	Rod Gland	1-3/4			46.06
PKH-RG1HDL0061	Rod Gland Kit	5/8			56.61
PKH-RG1HDL0065	Rod Gland Kit	5/8			68.61
PKH-RG1HDL0101	Rod Gland Kit	1			72.89
PKH-RG1HDL0105	Rod Gland Kit	1			84.50
PKH-RG1HDL0131	Rod Gland Kit	1-3/8			94.65
PKH-RG1HDL0135	Rod Gland Kit	1-3/8			114.56
PKH-RG1HDL0171	Rod Gland Kit	1-3/4			111.86
PKH-RG1HDL0175	Rod Gland Kit	1-3/4			139.75
PKH-RG1HDL0201	Rod Gland Kit	2			160.94
PKH-RG1HDL0205	Rod Gland Kit	2			189.56
PKH-RG1HDL0251	Rod Gland Kit	2-1/2			215.49
PKH-RG1HDL0255	Rod Gland Kit	2-1/2			247.21
PKH-RG1HDL0351	Rod Gland Kit	3-1/2			267.12
PKH-RG1HDL0355	Rod Gland Kit	3-1/2			303.64
PKH-RG-20	Rod Gland	2			56.30
PKH-RG-25	Rod Gland	2-1/2			79.44
PKH-RG2AHL0051	Rod Gland Kit	1/2			66.61
PKH-RG2AHL0051PS	Rod Gland Kit	1/2			35.66
PKH-RG2AHL0055	Rod Gland Kit	1/2			85.62
PKH-RG2AHL0055PS	Rod Gland Kit	1/2			43.42
PKH-RG2AHL0061	Rod Gland Kit	5/8			40.22
PKH-RG2AHL0061PS	Rod Gland Kit	5/8			38.67
PKH-RG2AHL0065	Rod Gland Kit	5/8			65.63
PKH-RG2AHL0065PS	Rod Gland Kit	5/8			47.68
PKH-RG2AHL0101	Rod Gland Kit	1			49.32
PKH-RG2AHL0101PS	Rod Gland Kit	1			47.98
PKH-RG2AHL0105	Rod Gland Kit	1			74.27
PKH-RG2AHL0105PS	Rod Gland Kit	1			57.69
PKH-RG2AHL0131	Rod Gland Kit	1-3/8			60.13
PKH-RG2AHL0131PS	Rod Gland Kit	1-3/8			59.00
PKH-RG2AHL0135	Rod Gland Kit	1-3/8			93.31
PKH-RG2AHL0135PS	Rod Gland Kit	1-3/8			72.02

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Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-RG2AHL0171	Rod Gland Kit	1-3/4			\$69.64
PKH-RG2AHL0171PS	Rod Gland Kit	1-3/4			66.55
PKH-RG2AHL0175	Rod Gland Kit	1-3/4			101.90
PKH-RG2AHL0175PS	Rod Gland Kit	1-3/4			83.54
PKH-RG2AHL0201	Rod Gland Kit	2			86.88
PKH-RG2AHL0201PS	Rod Gland Kit	2			83.81
PKH-RG2AHL0205	Rod Gland Kit	2			121.28
PKH-RG2AHL0205PS	Rod Gland Kit	2			97.42
PKH-RG2AHL0251	Rod Gland Kit	2-1/2			118.53
PKH-RG2AHL0251PS	Rod Gland Kit	2-1/2			128.61
PKH-RG2AHL0255	Rod Gland Kit	2-1/2			157.50
PKH-RG2AHL0255PS	Rod Gland Kit	2-1/2			157.73
PKH-RG2AHL0301	Rod Gland Kit	3			152.13
PKH-RG2AHL0301PS	Rod Gland Kit	3			152.17
PKH-RG2AHL0305	Rod Gland Kit	3			179.05
PKH-RG2AHL0305PS	Rod Gland Kit	3			173.69
PKH-RG2AHL0351	Rod Gland Kit	3-1/2			333.50
PKH-RG2AHL0351PS	Rod Gland Kit	3-1/2			317.30
PKH-RG2AHL0355	Rod Gland Kit	3-1/2			361.40
PKH-RG2AHL0355PS	Rod Gland Kit	3-1/2			319.83
PKH-RG2AHL0401	Rod Gland Kit	4			405.59
PKH-RG2AHL0405	Rod Gland Kit	4			425.85
PKH-RG2AHL0451	Rod Gland Kit	4-1/2			504.64
PKH-RG2AHL0455	Rod Gland Kit	4-1/2			508.80
PKH-RG2AHL0501	Rod Gland Kit	5			561.45
PKH-RG2AHL0505	Rod Gland Kit	5			635.55
PKH-RG2AHL0551	Rod Gland Kit	5-1/2			579.05
PKH-RG2AHL0555	Rod Gland Kit	5-1/2			693.63
PKH-RG2AN00051	Rod Gland Kit	1/2			43.31
PKH-RG2AN00061	Rod Gland Kit	5/8			45.08
PKH-RG2AN00101	Rod Gland Kit	1			50.66
PKH-RG2AN00131	Rod Gland Kit	1-3/8			53.90
PKH-RG2AN00171	Rod Gland Kit	1-3/4			67.73
PKH-RG2AN00201	Rod Gland Kit	2			82.46
PKH-RG2AN00251	Rod Gland Kit	2-1/2			134.88
PKH-RG2AN00301	Rod Gland Kit	3			204.98
PKH-RG2AN00351	Rod Gland Kit	3-1/2			291.56
PKH-RG2AN00401	Rod Gland Kit	4			390.53
PKH-RG2AN00451	Rod Gland Kit	4-1/2			484.18
PKH-RG2AN00501	Rod Gland Kit	5			577.24
PKH-RG2AN00551	Rod Gland Kit	5-1/2			646.74
PKH-RG2HLTS051	Rod Gland Kit	1/2			97.65
PKH-RG2HLTS061	Rod Gland Kit	5/8			74.89
PKH-RG2HLTS101	Rod Gland Kit	1			84.96
PKH-RG2HLTS131	Rod Gland Kit	1-3/8			99.40
PKH-RG2HLTS171	Rod Gland Kit	1-3/4			106.67
PKH-RG2HLTS201	Rod Gland Kit	2			138.72
PKH-RG2HLTS251	Rod Gland Kit	2-1/2			180.02
PKH-RG2HLTS301	Rod Gland Kit	3			223.15
PKH-RG2HLTS351	Rod Gland Kit	3-1/2			315.75

PARKER

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-RG2HLTS401	Rod Gland Kit	4			\$412.72
PKH-RG2HLTS451	Rod Gland Kit	4-1/2			448.91
PKH-RG2HLTS501	Rod Gland Kit	5			592.66
PKH-RG2HLTS551	Rod Gland Kit	5-1/2			611.62
PKH-RG2HM0121	Rod Gland Kit	12 mm			62.98
PKH-RG2HM0125	Rod Gland Kit	12 mm			70.52
PKH-RG2HM0141	Rod Gland Kit	14 mm			89.57
PKH-RG2HM0145	Rod Gland Kit	14 mm			96.98
PKH-RG2HM0181	Rod Gland Kit	18 mm			87.36
PKH-RG2HM0185	Rod Gland Kit	18 mm			103.59
PKH-RG2HM0221	Rod Gland Kit	22 mm			90.18
PKH-RG2HM0225	Rod Gland Kit	22 mm			108.57
PKH-RG2HM0281	Rod Gland Kit	28 mm			92.28
PKH-RG2HM0285	Rod Gland Kit	28 mm			120.23
PKH-RG2HM0361	Rod Gland Kit	36 mm			88.39
PKH-RG2HM0365	Rod Gland Kit	36 mm			116.73
PKH-RG2HM0451	Rod Gland Kit	45 mm			97.92
PKH-RG2HM0455	Rod Gland Kit	45 mm			120.30
PKH-RG2HM0561	Rod Gland Kit	56 mm			180.96
PKH-RG2HM0565	Rod Gland Kit	56 mm			224.26
PKH-RG2HM0701	Rod Gland Kit	70 mm			266.03
PKH-RG2HM0705	Rod Gland Kit	70 mm			326.06
PKH-RG-30	Rod Gland	3			109.81
PKH-RG-35	Rod Gland	3-1/2			257.60
PKH-RG-40	Rod Gland	4			262.43
PKH-RG-45	Rod Gland	4-1/2			377.39
PKH-RG-50	Rod Gland	5			437.22
PKH-RG-55	Rod Gland	5-1/2			461.11
PKH-RGHD-06	Bronze Rod Gland	5/8			45.85
PKH-RGHD-10	Bronze Rod Gland	1			60.18
PKH-RGHD-13	Bronze Rod Gland	1-3/8			79.10
PKH-RGHD-17	Bronze Rod Gland	1-3/4			100.13
PKH-RGHD-20	Bronze Rod Gland	2			147.47
PKH-RGHD-25	Bronze Rod Gland	2-1/2			181.47
PKH-RGHD-35	Bronze Rod Gland	3-1/2			222.85
PKH-RGHM-012	Rod Gland	12 mm			29.74
PKH-RGHM-014	Rod Gland	14 mm			51.96
PKH-RGHM-018	Rod Gland	18 mm			55.82
PKH-RGHM-022	Rod Gland	22 mm			54.57
PKH-RGHM-028	Rod Gland	28 mm			59.21
PKH-RGHM-036	Rod Gland	36 mm			57.58
PKH-RGHM-045	Rod Gland	45 mm			54.60
PKH-RGHM-056	Rod Gland	56 mm			124.37
PKH-RGHM-070	Rod Gland	70 mm			205.39
PKH-RGL6948MA1	Rod Gland Kit	5/8			50.17
PKH-RGL6948MA5	Rod Gland Kit	5/8			56.90
PKH-RGL6949MA1	Rod Gland Kit	1			42.09
PKH-RGL6949MA5	Rod Gland Kit	1			54.25
PKH-RGL6950MA1	Rod Gland Kit	1-3/8			50.09
PKH-RGL6950MA5	Rod Gland Kit	1-3/8			67.01

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Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-RGMA-06	Rod Gland	5/8			\$42.29
PKH-RGMA-10	Rod Gland	1			33.46
PKH-RGMA-13	Rod Gland	1-3/8			40.73
PKH-RK02MA0051	Rod Kit	1/2			13.47
PKH-RK02MA0055	Rod Kit	1/2			20.13
PKH-RK02MA0061	Rod Kit	5/8			13.89
PKH-RK02MA0065	Rod Kit	5/8			20.68
PKH-RK02MA0101	Rod Kit	1			14.24
PKH-RK02MA0105	Rod Kit	1			21.36
PKH-RK02MA0131	Rod Kit	1-3/8			15.23
PKH-RK02MA0135	Rod Kit	1-3/8			26.75
PKH-RK02MA0171	Rod Kit	1-3/4			16.28
PKH-RK02MA0175	Rod Kit	1-3/4			33.64
PKH-RK02ML0061	Rod Kit	5/8			17.82
PKH-RK02ML0101	Rod Kit	1			18.42
PKH-RK02ML0131	Rod Kit	1-3/8			20.90
PKH-RK02ML0171	Rod Kit	1-3/4			23.88
PKH-RK1HDL0061	Rod Kit	5/8			10.75
PKH-RK1HDL0065	Rod Kit	5/8			22.76
PKH-RK1HDL0101	Rod Kit	1			12.71
PKH-RK1HDL0105	Rod Kit	1			24.32
PKH-RK1HDL0131	Rod Kit	1-3/8			15.55
PKH-RK1HDL0135	Rod Kit	1-3/8			35.47
PKH-RK1HDL0171	Rod Kit	1-3/4			19.15
PKH-RK1HDL0175	Rod Kit	1-3/4			39.62
PKH-RK1HDL0201	Rod Kit	2			24.08
PKH-RK1HDL0205	Rod Kit	2			42.10
PKH-RK1HDL0251	Rod Kit	2-1/2			34.01
PKH-RK1HDL0255	Rod Kit	2-1/2			65.74
PKH-RK1HDL0351	Rod Kit	3-1/2			44.27
PKH-RK1HDL0355	Rod Kit	3-1/2			80.79
PKH-RK2AHL0051	Rod Kit	1/2			7.72
PKH-RK2AHL0051PS	Rod Kit	1/2			10.65
PKH-RK2AHL0055	Rod Kit	1/2			32.07
PKH-RK2AHL0055PS	Rod Kit	1/2			18.41
PKH-RK2AHL0061	Rod Kit	5/8			13.38
PKH-RK2AHL0061PS	Rod Kit	5/8			11.22
PKH-RK2AHL0065	Rod Kit	5/8			35.25
PKH-RK2AHL0065PS	Rod Kit	5/8			20.23
PKH-RK2AHL0101	Rod Kit	1			9.67
PKH-RK2AHL0101PS	Rod Kit	1			15.99
PKH-RK2AHL0105	Rod Kit	1			39.61
PKH-RK2AHL0105PS	Rod Kit	1			25.70
PKH-RK2AHL0131	Rod Kit	1-3/8			10.62
PKH-RK2AHL0131PS	Rod Kit	1-3/8			18.80
PKH-RK2AHL0135	Rod Kit	1-3/8			51.29
PKH-RK2AHL0135PS	Rod Kit	1-3/8			31.83
PKH-RK2AHL0171	Rod Kit	1-3/4			12.29
PKH-RK2AHL0171PS	Rod Kit	1-3/4			16.17
PKH-RK2AHL0175	Rod Kit	1-3/4			53.42

PARKER

PARKER

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-RK2AHL0175PS	Rod Kit	1-3/4			\$33.16
PKH-RK2AHL0201	Rod Kit	2			13.57
PKH-RK2AHL0201PS	Rod Kit	2			19.84
PKH-RK2AHL0205	Rod Kit	2			55.68
PKH-RK2AHL0205PS	Rod Kit	2			33.45
PKH-RK2AHL0251	Rod Kit	2-1/2			15.23
PKH-RK2AHL0251PS	Rod Kit	2-1/2			30.31
PKH-RK2AHL0255	Rod Kit	2-1/2			60.93
PKH-RK2AHL0255PS	Rod Kit	2-1/2			59.43
PKH-RK2AHL0301	Rod Kit	3			19.75
PKH-RK2AHL0301PS	Rod Kit	3			36.57
PKH-RK2AHL0305	Rod Kit	3			73.53
PKH-RK2AHL0305PS	Rod Kit	3			58.09
PKH-RK2AHL0351	Rod Kit	3-1/2			92.43
PKH-RK2AHL0351PS	Rod Kit	3-1/2			72.37
PKH-RK2AHL0355	Rod Kit	3-1/2			152.53
PKH-RK2AHL0355PS	Rod Kit	3-1/2			74.90
PKH-RK2AHL0401	Rod Kit	4			114.82
PKH-RK2AHL0405	Rod Kit	4			176.74
PKH-RK2AHL0451	Rod Kit	4-1/2			134.63
PKH-RK2AHL0455	Rod Kit	4-1/2			221.21
PKH-RK2AHL0501	Rod Kit	5			167.63
PKH-RK2AHL0505	Rod Kit	5			258.46
PKH-RK2AHL0551	Rod Kit	5-1/2			187.18
PKH-RK2AHL0555	Rod Kit	5-1/2			370.81
PKH-RK2AN00051	Rod Kit	1/2			18.85
PKH-RK2AN00061	Rod Kit	5/8			19.75
PKH-RK2AN00101	Rod Kit	1			22.69
PKH-RK2AN00131	Rod Kit	1-3/8			25.05
PKH-RK2AN00171	Rod Kit	1-3/4			29.45
PKH-RK2AN00201	Rod Kit	2			34.76
PKH-RK2AN00251	Rod Kit	2-1/2			50.38
PKH-RK2AN00301	Rod Kit	3			83.06
PKH-RK2AN00351	Rod Kit	3-1/2			131.35
PKH-RK2AN00401	Rod Kit	4			159.04
PKH-RK2AN00451	Rod Kit	4-1/2			174.35
PKH-RK2AN00501	Rod Kit	5			190.83
PKH-RK2AN00551	Rod Kit	5-1/2			227.95
PKH-RK2HLTS051	Rod Kit	1/2			23.02
PKH-RK2HLTS061	Rod Kit	5/8			23.59
PKH-RK2HLTS101	Rod Kit	1			27.88
PKH-RK2HLTS131	Rod Kit	1-3/8			32.93
PKH-RK2HLTS171	Rod Kit	1-3/4			38.26
PKH-RK2HLTS201	Rod Kit	2			43.85
PKH-RK2HLTS251	Rod Kit	2-1/2			46.91
PKH-RK2HLTS301	Rod Kit	3			50.99
PKH-RK2HLTS351	Rod Kit	3-1/2			61.10
PKH-RK2HLTS401	Rod Kit	4			68.25
PKH-RK2HLTS451	Rod Kit	4-1/2			74.53
PKH-RK2HLTS501	Rod Kit	5			80.86

PARKER

PARKER

Sales Part Number	Description	Rod Size	Bore Size	ID x OD x W	List Price
PKH-RK2HLTS551	Rod Kit	5-1/2			\$88.78
PKH-RK2HM0121	Rod Kit	12 mm			28.60
PKH-RK2HM0125	Rod Kit	12 mm			36.19
PKH-RK2HM0141	Rod Kit	14 mm			29.46
PKH-RK2HM0145	Rod Kit	14 mm			36.90
PKH-RK2HM0181	Rod Kit	18 mm			22.81
PKH-RK2HM0185	Rod Kit	18 mm			39.02
PKH-RK2HM0221	Rod Kit	22 mm			31.73
PKH-RK2HM0225	Rod Kit	22 mm			40.73
PKH-RK2HM0281	Rod Kit	28 mm			14.33
PKH-RK2HM0285	Rod Kit	28 mm			48.94
PKH-RK2HM0361	Rod Kit	36 mm			21.79
PKH-RK2HM0365	Rod Kit	36 mm			50.14
PKH-RK2HM0451	Rod Kit	45 mm			34.80
PKH-RK2HM0455	Rod Kit	45 mm			57.11
PKH-RK2HM0561	Rod Kit	56 mm			37.15
PKH-RK2HM0565	Rod Kit	56 mm			80.46
PKH-RK2HM0701	Rod Kit	70 mm			28.52
PKH-RK2HM0705	Rod Kit	70 mm			88.54
PKH-RK2HM0901	Rod Kit	90 mm			53.59
PKH-RK2HM0905	Rod Kit	90 mm			288.16
PKH-RK2HM1101	Rod Kit	110 mm			69.19
PKH-RK2HM1105	Rod Kit	110 mm			385.14
PKH-RK2HM1401	Rod Kit	140 mm			89.80
PKH-RK2HM1405	Rod Kit	140 mm			461.17
PKH-SKL7000MA1	Rod & Piston Seal Kit	5/8	1-1/2		21.91
PKH-SKL7000MA5	Rod & Piston Seal Kit	5/8	1-1/2		61.66
PKH-SKL7001MA1	Rod & Piston Seal Kit	5/8	2		22.11
PKH-SKL7001MA5	Rod & Piston Seal Kit	5/8	2		64.50
PKH-SKL7002MA1	Rod & Piston Seal Kit	1	2		22.48
PKH-SKL7002MA5	Rod & Piston Seal Kit	1	2		67.35
PKH-SKL7003MA1	Rod & Piston Seal Kit	5/8	2-1/2		29.15
PKH-SKL7003MA5	Rod & Piston Seal Kit	5/8	2-1/2		78.86
PKH-SKL7004MA1	Rod & Piston Seal Kit	1	2-1/2		24.28
PKH-SKL7004MA5	Rod & Piston Seal Kit	1	2-1/2		81.71
PKH-SKL7005MA1	Rod & Piston Seal Kit	1	3-1/4		25.23
PKH-SKL7005MA5	Rod & Piston Seal Kit	1	3-1/4		86.44
PKH-SKL7006MA1	Rod & Piston Seal Kit	1-3/8	3-1/4		28.58
PKH-SKL7006MA5	Rod & Piston Seal Kit	1-3/8	3-1/4		98.62
PKH-SKL7007MA1	Rod & Piston Seal Kit	1	4		29.15
PKH-SKL7007MA5	Rod & Piston Seal Kit	1	4		102.52
PKH-SKL7008MA1	Rod & Piston Seal Kit	1-3/8	4		31.45
PKH-SKL7008MA5	Rod & Piston Seal Kit	1-3/8	4		114.78
PKH-SKL7009MA1	Rod & Piston Seal Kit	1	5		36.01
PKH-SKL7009MA5	Rod & Piston Seal Kit	1	5		124.97
PKH-SKL7010MA1	Rod & Piston Seal Kit	1-3/8	5		39.38
PKH-SKL7010MA5	Rod & Piston Seal Kit	1-3/8	5		137.25
PKH-SKL7098MA1	Rod & Piston Seal Kit	1-3/8	6		42.41
PKH-SKL7098MA5	Rod & Piston Seal Kit	1-3/8	6		169.35

REXROTH

Kit Type		Page
Gland Kits	CDT1, CGT1, CDT4, CGT4	146
Piston Kits	CDT1, CGT1, CDT4, CGT4	146
Seal Kits	CDT3, CGT3	147
Various Kits		147

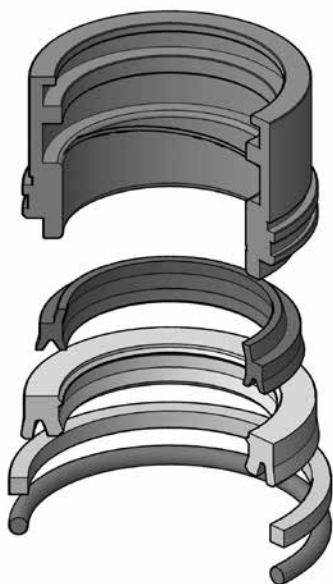
ROYAL

Kit Type		Page
Pneumatic Kits	A Series	148
Pneumatic Kits	M Series	149
Hydraulic Kits	H & S2 Series	150
Repair Kits	By Part Number	151

REXROTH

Gland Kits

CDT1, CGT1, CDT4, CGT4* Hydraulic Cylinders Urethane



Kit #	Rod Dia.	Bore Dia.	List Price
RRTH-R978006773	5/8"		\$105.37
RRTH-R978006774	1"	1-1/2"	113.32
RRTH-R978006775	1"	2" - 2-1/2"	113.22
RRTH-R978006776	1-3/8"	2"	128.66
RRTH-R978006777	1-3/8"	2-1/2" - 3-1/4"	128.65
RRTH-R978006778	1-3/4"		147.30
RRTH-R978006779	2"		173.40
RRTH-R978006780	2-1/2"		197.62

*CGT4 Series Double Rod cylinder may require 2 kits.

Kit Includes:

- 1 Iron Gland
- 1 URE Wiper
- 1 URE U-seal
- 1 PTFE Back-up Ring
- 1 NBR O-ring

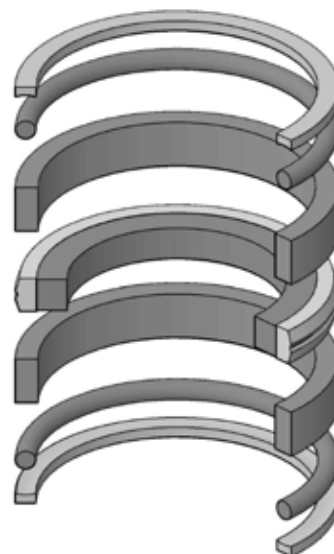
Piston Kits

CDT1, CGT1, CDT4, CGT4 Hydraulic Cylinders Urethane

Kit #	Bore Dia.	List Price
RRTH-R978006830	1-1/2"	\$27.32
RRTH-R978006831	2"	33.08
RRTH-R978006832	2-1/2"	38.79
RRTH-R978006833	3-1/4"	50.10
RRTH-R978006834	4"	65.28
RRTH-R978006835	5"	84.09

Kit Includes:

- 1 Urethane Piston Seal
- 2 Wear Rings
- 2 Tube End Seals
- 2 Back-up Rings



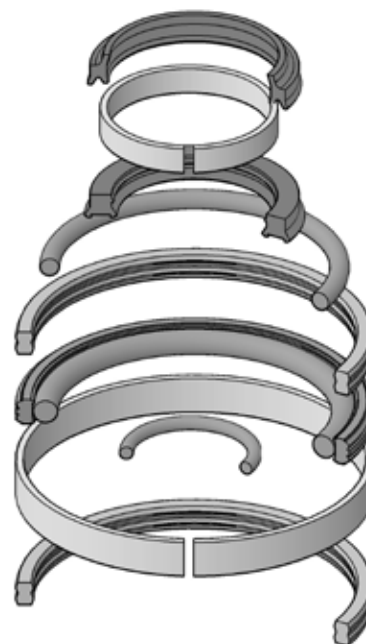
REXROTH

Seal Kits

CDT3, CGT3* Hydraulic Cylinders Urethane

Kit #	Bore Dia.	Rod Dia.	List Price
RRTH-R961008000	25	12	\$65.50
RRTH-R961008001	25	18	48.48
RRTH-R961008002	32	14	56.19
RRTH-R961008003	32	22	49.00
RRTH-R961008004	40	18	58.98
RRTH-R961008005	40	22	56.68
RRTH-R961008006	40	28	59.10
RRTH-R961008007	50	22	85.96
RRTH-R961008008	50	28	59.66
RRTH-R961008009	50	36	85.60
RRTH-R961008010	63	28	73.84
RRTH-R961008011	63	36	93.28
RRTH-R961008012	63	45	94.30
RRTH-R961008013	80	36	115.38
RRTH-R961008014	80	45	127.22
RRTH-R961008015	80	56	124.44
RRTH-R961008016	100	45	127.98
RRTH-R961008017	100	56	150.79
RRTH-R961008018	100	70	139.27
RRTH-R961008019	125	56	157.96
RRTH-R961008020	125	70	180.63
RRTH-R961008021	125	90	172.20

*CGT3 series double rod cylinder may require 2 kits.



Kit Includes:

- 1 Urethane Wiper
- 2 Rod Wear Bands
(40x22, 40x28, and 50 thru 100mm Bore**)
- 1 Urethane Rod Seal
- 1 NBR Gland Seal
- 1 Urethane Piston Seal
- 1 Piston Wear Band (25 thru 63mm Bore)
- 2 Piston Wear Bands (80 thru 125mm Bore)
- 1 Stub O-ring
- 2 Head Seals
- 2 Port O-rings

**Not Included With 70mm Rod

Various Kits

Various Kits

Kit #	Model	Code	Bore	List Price
RRTH-1817005842	RRTH-KIT	N-N-10	63 mm	\$90.96

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A Series Pneumatic Kits

A Cylinders

Kit Composition Varies
 Consult your Hercules® representative.

Kit #	Code	Rod x Bore	List Price
RYL-KA207	N-U-5	3/4" X 2"	\$45.79
RYL-KA210	N-U-5	1" X 2"	45.86
RYL-KA310	I-U-5	1" X 3"	54.94
RYL-KA312	I-U-5	1-1/4" X 3"	55.52
RYL-KA412	I-U-5	1-1/4" X 4"	77.12
RYL-KA415	I-U-5	1-1/2" X 4"	77.82
RYL-KA512	I-U-5	1-1/4" X 5"	93.59
RYL-KA515	I-U-5	1-1/2" X 5"	94.30
RYL-KA615	I-U-5	1-1/2" X 6"	118.65
RYL-KA617	I-U-5	1-3/4" X 6"	119.15
RYL-KA1030	I-U-5	3" X 10"	144.32
RYL-KA1230	I-U-5	3" X 12"	151.13
RYL-KA1235	I-U-5	3-1/2" X 12"	154.66
RYL-KA1506	N-U-5	5/8" X 1-1/2"	8.50

ROYAL

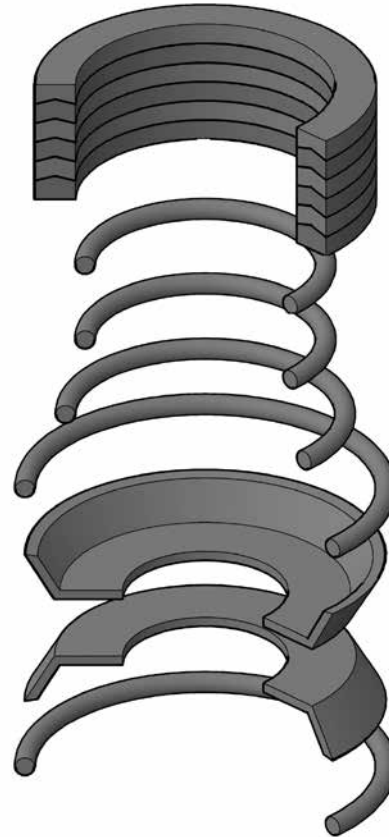
M Series
Pneumatic Kits

M Cylinders

Kit #	Code	Rod x Bore	List Price
RYL-KM415	N-V-7	1-1/2" X 4"	\$42.12
RYL-KM620	N-V-7	2" X 6"	64.42
RYL-KM820	N-V-7	2" X 8"	96.18
RYL-KM825	N-V-7	2-1/2" X 8"	98.27
RYL-KM1025	N-V-7	2-1/2" X 10"	127.92
RYL-KM1030	N-V-7	3" X 10"	135.71
RYL-KM1235	N-V-7	3-1/2" X 12"	196.48

Kit Includes:

1 Vee-Set
5 NBR O-rings
2 NBR Piston Cups

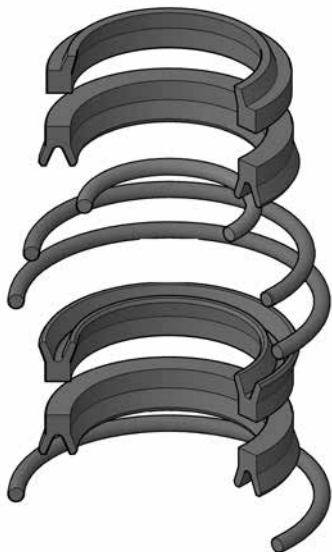


ROYAL

ROYAL

H Series Hydraulic Kits

H Cylinders



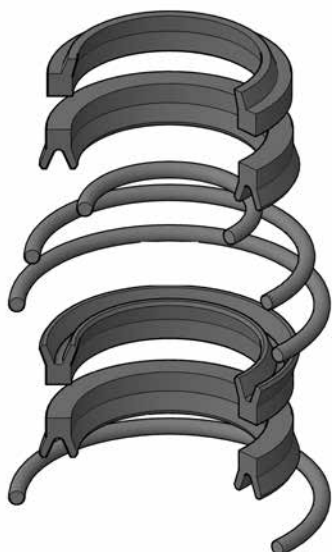
Kit #	Code	Rod x Bore	List Price
RYL-KH1510	I-U-5	1" X 1-1/2"	\$50.50
RYL-KH2510	I-U-5	1" X 2-1/2"	66.47
RYL-KH2517	I-U-5	1-3/4" X 2-1/2"	73.09
RYL-KH3217	I-U-5	1-3/4" X 3-1/4"	97.46
RYL-KH3220	I-U-5	2" X 3-1/4"	98.92
RYL-KH4017	I-U-5	1-3/4" X 4"	103.18
RYL-KH4025	I-U-5	2-1/2" X 4"	116.48
RYL-KH5020	I-U-5	2" X 5"	134.42
RYL-KH6025	I-U-5	2-1/2" X 6"	136.61

Kit Includes:

1 URE Wiper
 3 URE U-seals
 1 NBR O-ring
 3 URE O-rings

S2 Series Hydraulic Kits

S2 Cylinders



Kit #	Code	Rod x Bore	List Price
RYL-K2K212	I-U-5	1-1/4" X 2"	\$40.93
RYL-K2K2510	I-U-5	1" X 2-1/2"	49.92
RYL-K2K2512	I-U-5	1-1/4" X 2-1/2"	48.31
RYL-K2K312	I-U-5	1-1/4" X 3"	57.99

Kit Includes:

1 URE Wiper
 3 URE U-seals
 4 NBR O-rings

ROYAL

Kit Number	Code	Rod x Bore	List Price
RYL-K2K212	I-U-5	1-1/4 X 2	\$40.93
RYL-K2K2510	I-U-5	1 X 2-1/2	49.92
RYL-K2K2512	I-U-5	1-1/4 X 2-1/2	48.31
RYL-K2K312	I-U-5	1-1/4 X 3	57.99
RYL-KA1030	I-U-5	3 X 10	144.32
RYL-KA1230	I-U-5	3 X 12	151.13
RYL-KA1235	I-U-5	3-1/2 X 12	154.66
RYL-KA1506	N-U-5	5/8 X 1-1/2	8.50
RYL-KA207	N-U-5	3/4 X 2	45.79
RYL-KA210	N-U-5	1 X 2	45.86
RYL-KA310	I-U-5	1 X 3	54.94
RYL-KA312	I-U-5	1-1/4 X 3	55.52
RYL-KA412	I-U-5	1-1/4 X 4	77.12
RYL-KA415	I-U-5	1-1/2 X 4	77.82
RYL-KA512	I-U-5	1-1/4 X 5	93.59
RYL-KA515	I-U-5	1-1/2 X 5	94.30
RYL-KA615	I-U-5	1-1/2 X 6	118.65
RYL-KA617	I-U-5	1-3/4 X 6	119.15
RYL-KH1510	I-U-5	1 X 1-1/2	50.50
RYL-KH2510	I-U-5	1 X 2-1/2	66.47
RYL-KH2517	I-U-5	1-3/4 X 2-1/2	73.09
RYL-KH3217	I-U-5	1-3/4 X 3-1/4	97.46
RYL-KH3220	I-U-5	2 X 3-1/4	98.92
RYL-KH4017	I-U-5	1-3/4 X 4	103.18
RYL-KH4025	I-U-5	2-1/2 X 4	116.48
RYL-KH5020	I-U-5	2 X 5	134.42
RYL-KH6025	I-U-5	2-1/2 X 6	136.61
RYL-KM1025	N-V-7	2-1/2 X 10	127.92
RYL-KM1030	N-V-7	3 X 10	135.71
RYL-KM1235	N-V-7	3-1/2 X 12	196.48
RYL-KM415	N-V-7	1-1/2 X 4	42.12
RYL-KM620	N-V-7	2 X 6	64.42
RYL-KM820	N-V-7	2 X 8	96.18
RYL-KM825	N-V-7	2-1/2 X 8	98.27

ROYAL

NOTES**NOTES**

SHEFFER

Kit Type		Page
Hydraulic Kits	HH Series	154 - 155
	MH Series	156 - 157
Pneumatic Kits	C20 Series	158
	A Series	159
Various Kits		158 - 159
Repair Kits	By Part Number	160 - 162

TOMPKINS-JOHNSON / TJ

Kit Type	Page
Tompkins-Johnson / TJ	163

VICKERS / EATON

Kit Type	Page
Repair Kits	NZ Series 164 - 165
	TZ Series 166

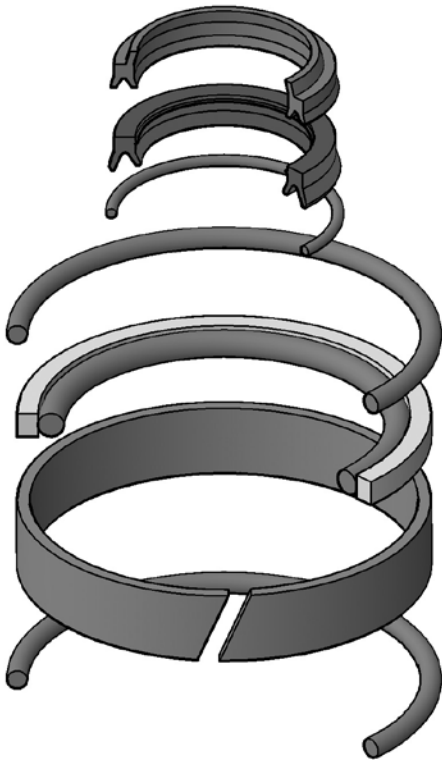
VICKERS / TOMPKINS-JOHNSON

Kit Type	Page
Repair Kits	TE / TF Series 167

SHEFFER

HH Series

HH Hydraulic Cylinders Standard


Kit Includes:

- 1 NBR Rod Wiper
- 1 Urethane Rod Seal
- 1 NBR Gland O-ring
- 1 PTFE Piston seal
- *Piston Wear Strips
- **1 NBR Piston/ Rod O-ring
- 2 NBR Tube End O-rings

Note:

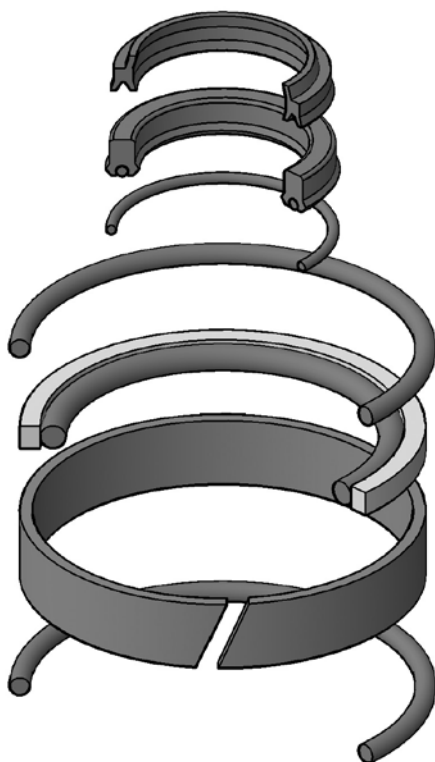
- * Piston Wear Strips:
 - 1 Wear Strip thru 4" bore
 - 2 Wear Strips 5" to 8" bore
 - 3 Wear Strips 10" and 12" bore
 - 4 Wear Strips 14" bore
- ** Where Applicable

Rod x Bore	(NBR) Kit #	List Price
5/8" X 1-1/8"	SHF-761-01-0112-0062	\$25.69
5/8" X 1-1/2"	SHF-761-01-0150-0062	29.80
1" X 1-1/2"	SHF-761-01-0150-0100	31.34
1" X 1-1/2"	SHF-761-01-0200-0100	33.16
1-3/8" X 2"	SHF-761-01-0200-0137	38.01
1-3/8" X 2-1/2"	SHF-761-01-0250-0137	38.68
1-3/4" X 2-1/2"	SHF-761-01-0250-0175	40.08
1-3/8" X 3-1/4"	SHF-761-01-0325-0137	42.88
1-3/4" X 3-1/4"	SHF-761-01-0325-0175	44.46
2" X 3-1/4"	SHF-761-01-0325-0200	44.95
2" X 4"	SHF-761-01-0400-0200	46.07
2-1/2" X 4"	SHF-761-01-0400-0250	48.62
2-1/2" X 5"	SHF-761-01-0500-0250	55.15
3-1/2" X 5"	SHF-761-01-0500-0350	58.89
3" X 6"	SHF-761-01-0600-0300	70.38
4" X 6"	SHF-761-01-0600-0400	75.17
4" X 7"	SHF-761-01-0700-0400	79.97
5" X 7"	SHF-761-01-0700-0500	102.31
3-1/2" X 8"	SHF-761-01-0800-0350	138.96
4" X 8"	SHF-761-01-0800-0400	141.01
5-1/2" X 8"	SHF-761-01-0800-0550	151.41
4-1/2" X 10"	SHF-761-01-1000-0450	177.18
7" X 10"	SHF-761-01-1000-0700	314.28
5-1/2" X 12"	SHF-761-01-1200-0550	382.23
7" X 14"	SHF-761-01-1400-0700	390.67

SHEFFER

HH Series

HH Hydraulic Cylinders Fluorocarbon


Kit Includes:

- 1 FKM Rod Wiper
- 1 FKM Rod Seal
- 1 FKM Gland O-ring
- 1 PTFE Piston seal
- *Piston Wear Strips
- **1 FKM Piston/ Rod O-ring
- 2 FKM Tube End O-rings

Note:

- * Piston Wear Strips:
 - 1 Wear Strip thru 4" bore
 - 2 Wear Strips 5" to 8" bore
 - 3 Wear Strips 10" and 12" bore
 - 4 Wear Strips 14" bore
- ** Where Applicable

Rod x Bore	(FKM) Kit #	List Price
5/8" X 1-1/8"	SHF-761-21-0112-0062	\$39.13
5/8" X 1-1/2"	SHF-761-21-0150-0062	42.64
1" X 1-1/2"	SHF-761-21-0150-0100	47.60
1" X 1-1/2"	SHF-761-21-0200-0100	49.92
1-3/8" X 2"	SHF-761-21-0200-0137	57.97
1-3/8" X 2-1/2"	SHF-761-21-0250-0137	58.71
1-3/4" X 2-1/2"	SHF-761-21-0250-0175	63.87
1-3/8" X 3-1/4"	SHF-761-21-0325-0137	67.56
1-3/4" X 3-1/4"	SHF-761-21-0325-0175	72.52
2" X 3-1/4"	SHF-761-21-0325-0200	75.52
2" X 4"	SHF-761-21-0400-0200	96.33
2-1/2" X 4"	SHF-761-21-0400-0250	107.20
2-1/2" X 5"	SHF-761-21-0500-0250	109.51
3-1/2" X 5"	SHF-761-21-0500-0350	115.82
3" X 6"	SHF-761-21-0600-0300	148.56
4" X 6"	SHF-761-21-0600-0400	181.52
4" X 7"	SHF-761-21-0700-0400	184.69
5" X 7"	SHF-761-21-0700-0500	247.37
3-1/2" X 8"	SHF-761-21-0800-0350	270.65
4" X 8"	SHF-761-21-0800-0400	282.88
5-1/2" X 8"	SHF-761-21-0800-0550	298.43
4-1/2" X 10"	SHF-761-21-1000-0450	367.67
7" X 10"	SHF-761-21-1000-0700	627.23
5-1/2" X 12"	SHF-761-21-1200-0550	524.43
7" X 14"	SHF-761-21-1400-0700	784.66

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MH Series

MH Hydraulic Cylinders Standard


Kit Includes:

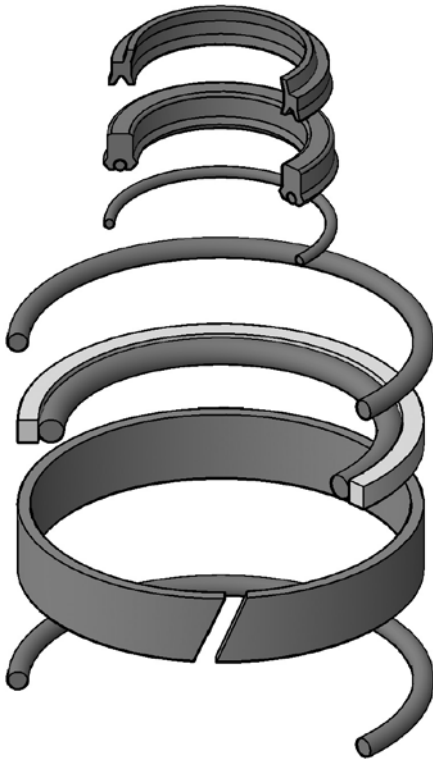
- 1 Urethane Rod Wiper
- 1 Urethane Rod Seal
- 1 NBR Gland O-ring
- 1 PTFE Piston seal
- Piston Wear Strip
- 1 NBR Piston/ Rod O-ring
- 2 NBR Tube End O-rings

Rod x Bore	(NBR) Kit #	List Price
5/8" X 1-1/8"	SHF-757-01-0112-0062	\$16.78
5/8" X 1-1/2"	SHF-757-01-0150-0062	28.11
5/8" X 2"	SHF-757-01-0200-0062	30.46
5/8" X 2-1/2"	SHF-757-01-0250-0062	33.34
1" X 1-1/2"	SHF-757-01-0150-0100	29.55
1" X 2"	SHF-757-01-0200-0100	30.88
1" X 2-1/2"	SHF-757-01-0250-0100	34.18
1" X 3-1/4"	SHF-757-01-0325-0100	39.30
1" X 4"	SHF-757-01-0400-0100	43.16
1" X 5"	SHF-757-01-0500-0100	47.81
1-3/8" X 2"	SHF-757-01-0200-0137	32.71
1-3/8" X 2-1/2"	SHF-757-01-0250-0137	35.83
1-3/8" X 3-1/4"	SHF-757-01-0325-0137	41.98
1-3/8" X 4"	SHF-757-01-0400-0137	44.26
1-3/8" X 5"	SHF-757-01-0500-0137	49.09
1-3/4" X 2-1/2"	SHF-757-01-0250-0175	36.74
1-3/4" X 3-1/4"	SHF-757-01-0325-0175	42.11
1-3/4" X 4"	SHF-757-01-0400-0175	44.97
1-3/4" X 5"	SHF-757-01-0500-0175	49.83
2" X 3-1/4"	SHF-757-01-0325-0200	43.02
2" X 4"	SHF-757-01-0400-0200	45.47
2-1/2" X 4"	SHF-757-01-0400-0250	47.10

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MH Series

MH Hydraulic Cylinders Fluorocarbon


Kit Includes:

- 1 Urethane Rod Wiper
- 1 Urethane Rod Seal
- 1 NBR Gland O-ring
- 1 PTFE Piston seal
- Piston Wear Strip
- 1 NBR Piston/ Rod O-ring
- 2 NBR Tube End O-rings

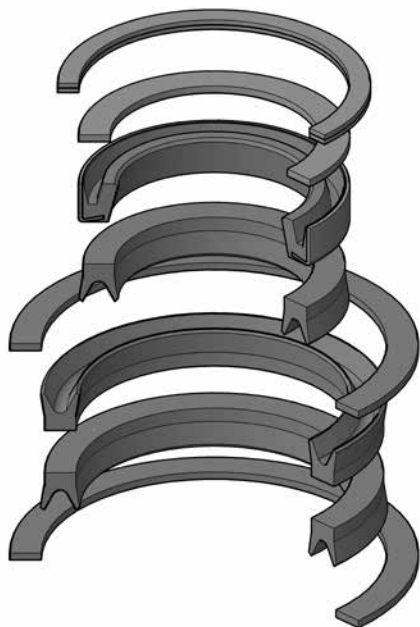
Rod x Bore	(FKM) Kit #	List Price
5/8" X 1-1/8"	SHF-757-21-0112-0062	\$37.06
5/8" X 1-1/2"	SHF-757-21-0150-0062	38.03
5/8" X 2"	SHF-757-21-0200-0062	39.50
5/8" X 2-1/2"	SHF-757-21-0250-0062	46.32
1" X 1-1/2"	SHF-757-21-0150-0100	38.91
1" X 2"	SHF-757-21-0200-0100	41.27
1" X 2-1/2"	SHF-757-21-0250-0100	47.41
1" X 3-1/4"	SHF-757-21-0325-0100	56.26
1" X 4"	SHF-757-21-0400-0100	63.06
1" X 5"	SHF-757-21-0500-0100	69.76
1-3/8" X 2"	SHF-757-21-0200-0137	45.85
1-3/8" X 2-1/2"	SHF-757-21-0250-0137	53.27
1-3/8" X 3-1/4"	SHF-757-21-0325-0137	57.82
1-3/8" X 4"	SHF-757-21-0400-0137	63.83
1-3/8" X 5"	SHF-757-21-0500-0137	71.04
1-3/4" X 2-1/2"	SHF-757-21-0250-0175	55.15
1-3/4" X 3-1/4"	SHF-757-21-0325-0175	59.70
1-3/4" X 4"	SHF-757-21-0400-0175	65.72
1-3/4" X 5"	SHF-757-21-0500-0175	73.85
2" X 3-1/4"	SHF-757-21-0325-0200	62.18
2" X 4"	SHF-757-21-0400-0200	67.38
2" X 5"	SHF-757-21-0500-0200	75.94
2-1/2" X 4"	SHF-757-21-0400-0250	68.79
3" X 5"	SHF-757-21-0500-0300	87.89
3-1/2" X 5"	SHF-757-21-0500-0350	96.41

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C20 Series

Pneumatic Kits



Kit #	Code	Rod x Bore	List Price
SHF-720-00150	P-U-5	1/2" X 1-1/2"	\$16.69
SHF-720-00200	P-U-5	1/2" X 2"	17.73
SHF-720-00250	P-U-5	5/8" X 2-1/2"	18.42
SHF-720-00300	P-U-5	3/4" X 3"	18.82
SHF-720-00350	P-U-5	3/4" X 3-1/2"	20.17
SHF-720-00400	P-U-5	1" X 4"	20.95
SHF-720-00500	P-U-5	1" X 5"	23.69
SHF-720-00600	P-U-5	1" X 6"	29.14
SHF-720-00700	P-U-5	1-3/8" X 7"	40.05
SHF-720-00800	P-U-5	1-3/8" X 8"	61.03

Kit Includes:

- 1 Metal-Clad Wiper
- 3 NBR U-seals
- 1 Steel Washer
- 2 Gaskets
- 1 Spiral Retainer Ring

(8" Bore also Includes:

- 4 NBR O-rings
- 2 NBR Cushion Seals)

Various Kits

Kit #	Code	Rod x Bore	List Price
SHF-720-01-0300	P-U-5	3/4" X 3"	\$24.26
SHF-720-01-0400	P-U-5	1" X 4"	32.57
SHF-720-01-0500	P-U-5	1" X 5"	37.13
SHF-720-01-0800	P-U-5	1-3/8" X 8"	78.02
SHF-726-0267-1000-0175	I-U-5	1-3/4" X 10"	116.82
SHF-760-01-0200-0137	I-U-10	1-3/8" X 2"	94.01
SHF-760-01-0250-0175	I-U-10	1-3/4" X 2-1/2"	34.26
SHF-761-01-0200-0137	I-U-10	1-3/8" x 2"	38.01
SHF-761-01-0250-0175	I-U-10	1-3/4" X 2-1/2"	40.08

Kit Composition Varies

Consult your
Hercules® Sealing Products representative.

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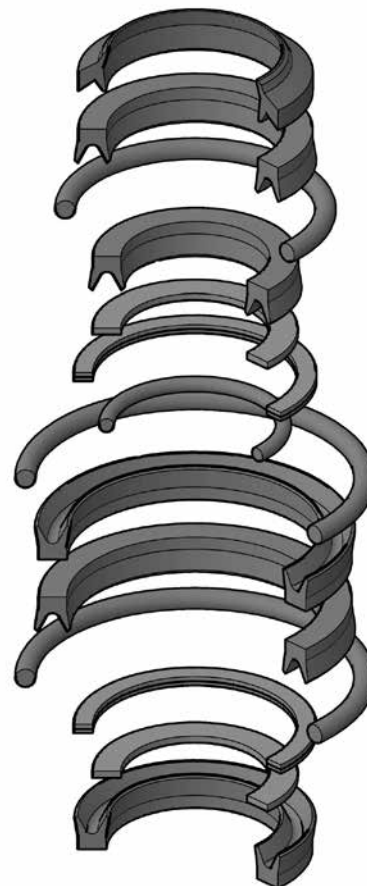
A Series

Pneumatic Kits

Kit #	Code	Rod x Bore	List Price
SHF-726-0167-0200-0062	I-U-5	5/8" X 2"	\$14.47
SHF-726-0167-0250-0062	I-U-5	5/8" X 2-1/2"	15.42
SHF-726-0167-0250-0100	I-U-5	1" X 2-1/2"	21.81
SHF-726-0167-0250-0137	I-U-5	1-3/8" X 2-1/2"	23.98
SHF-726-0167-0325-0100	I-U-5	1" X 3-1/4"	21.74
SHF-726-0167-0325-0137	I-U-5	1-3/8" X 3-1/4"	26.2
SHF-726-0167-0325-0175	I-U-5	1-3/4" X 3-1/4"	25.75
SHF-726-0167-0400-0100	I-U-5	1 X 4"	27.19
SHF-726-0167-0400-0137	I-U-5	1-3/8" X 4"	23.84
SHF-726-0167-0400-0175	I-U-5	1-3/4" X 4"	25.66
SHF-726-0167-0500-0100	I-U-5	1 X 5"	38.4
SHF-726-0167-0500-0137	I-U-5	1-3/8" X 5"	27.18
SHF-726-0167-0500-0175	I-U-5	1-3/4" X 5"	28.05
SHF-726-0167-0600-0137	I-U-5	1-3/8" X 6"	42.11
SHF-726-0167-0600-0175	I-U-5	1-3/4" X 6"	44.75
SHF-726-0167-0700-0137	I-U-5	1-3/8" X 7"	45.61
SHF-726-0167-0800-0137	I-U-5	1-3/8" X 8"	52.15
SHF-726-0167-0800-0175	I-U-5	1-3/4" X 8"	60.71
SHF-726-0167-1000-0175	I-U-5	1-3/4" X 10"	91.12

Kit Includes:

1 URE Wiper
 5 NBR U-seals
 4 NBR O-rings
 2 Steel Washers
 2 Spiral Retainer Rings



Various Kits

Kit #	Code	Rod x Bore	List Price
SHF-720-01-0600	P-U-4	1" X 6"	\$32.35
SHF-726-0107-0200-0100	I-U-5	1" X 2"	14.03
SHF-729-0200-K019	P-U-5	1-1/4" X 2"	31.33
SHF-729-0500-K003	P-U-5	2" X 5" Double Rod	52.94
SHF-757-01-0325-0137	I-U-10	1-3/8" X 3-1/4"	41.98
SHF-759-0100-0325-0137	I-U-5	1-3/8" X 3-1/4"	42.67
SHF-760-0100-0400-0175	I-U-10	1-3/4" X 4"	48.13
SHF-760-22-0600-0250	I-U-1	2-1/2" x 6"	104.15
SHF-761-01-0800-0350	I-U-10	3-1/2" X 8	138.96
SHF-795-S003	I-U-10	1-1/4 X 2-3/4	50.01

Kit Composition Varies

Consult your
 Hercules® Sealing Products representative.

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Kit Number	Code	Rod x Bore	List Price
SHF-100-032	O-Ring	Min Pack 20	\$0.30
SHF-100-041	O-Ring	Min Pack 20	0.58
SHF-100-149	O-Ring	Min Pack 20	0.49
SHF-157-0175-0137-031	U-Seal		11.10
SHF-185-301-0325	Piston Seal		6.31
SHF-720-00150	P-U-5	1/2 X 1-1/2	16.69
SHF-720-00200	P-U-5	1/2 X 2	17.73
SHF-720-00250	P-U-5	5/8 X 2-1/2	18.42
SHF-720-00300	P-U-5	3/4 X 3	18.82
SHF-720-00350	P-U-5	3/4 X 3-1/2	20.17
SHF-720-00400	P-U-5	1 X 4	20.95
SHF-720-00500	P-U-5	1 X 5	23.69
SHF-720-00600	P-U-5	1 X 6	29.14
SHF-720-00700	P-U-5	1-3/8 X 7	40.05
SHF-720-00800	P-U-5	1-3/8 X 8	61.03
SHF-720-01-0300	P-U-5	3/4 X 3	24.26
SHF-720-01-0350	P-U-5	3/4 X 3-1/2	25.31
SHF-720-01-0400	P-U-5	1 X 4	32.57
SHF-720-01-0500	P-U-5	1 X 5	37.13
SHF-720-01-0600	P-U-4	1 X 6	32.35
SHF-720-01-0800	P-U-5	1-3/8 X 8	78.02
SHF-726-0107-0200-0100	I-U-5	1 X 2	14.03
SHF-726-0167-0200-0062	I-U-5	5/8 X 2	14.47
SHF-726-0167-0250-0062	I-U-5	5/8 X 2-1/2	15.42
SHF-726-0167-0250-0100	I-U-5	1 X 2-1/2	21.81
SHF-726-0167-0250-0137	I-U-5	1-3/8 X 2-1/2	23.98
SHF-726-0167-0325-0100	I-U-5	1 X 3-1/4	21.74
SHF-726-0167-0325-0137	I-U-5	1-3/8 X 3-1/4	26.20
SHF-726-0167-0325-0175	I-U-5	1-3/4 X 3-1/4	25.75
SHF-726-0167-0400-0100	I-U-5	1 X 4	27.19
SHF-726-0167-0400-0137	I-U-5	1-3/8 X 4	23.84
SHF-726-0167-0400-0175	I-U-5	1-3/4 X 4	25.66
SHF-726-0167-0500-0100	I-U-5	1 X 5	38.40
SHF-726-0167-0500-0137	I-U-5	1-3/8 X 5	27.18
SHF-726-0167-0500-0175	I-U-5	1-3/4 X 5	28.05
SHF-726-0167-0600-0137	I-U-5	1-3/8 X 6	42.11
SHF-726-0167-0600-0175	I-U-5	1-3/4 X 6	44.75
SHF-726-0167-0700-0137	I-U-5	1-3/8 X 7	45.61
SHF-726-0167-0800-0137	I-U-5	1-3/8 X 8	52.15
SHF-726-0167-0800-0175	I-U-5	1-3/4 X 8	60.71
SHF-726-0167-1000-0175	I-U-5	1-3/4 X 10	91.12
SHF-726-0267-1000-0175	I-U-5	1-3/4 X 10	116.82
SHF-729-0200-K019	P-U-5	1-1/4 X 2	31.33
SHF-729-0500-K003	P-U-5	2 X 5 Double Rod	52.94
SHF-757-01-0112-0062	I-U-10	5/8 X 1-1/8	16.78
SHF-757-01-0150-0062	I-U-10	5/8 X 1-1/2	28.11
SHF-757-01-0150-0100	I-U-10	1 X 1-1/2	29.55
SHF-757-01-0200-0062	I-U-10	5/8 X 2	30.46
SHF-757-01-0200-0100	I-U-10	1 X 2	30.88
SHF-757-01-0200-0137	I-U-10	1-3/8 X 2	32.71
SHF-757-01-0250-0062	I-U-10	5/8 X 2-1/2	33.34
SHF-757-01-0250-0100	I-U-10	1 X 2-1/2	34.18
SHF-757-01-0250-0137	I-U-10	1-3/8 X 2-1/2	35.83
SHF-757-01-0250-0175	I-U-10	1-3/4 X 2-1/2	36.74
SHF-757-01-0325-0100	I-U-10	1 X 3-1/4	39.30

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Kit Number	Code	Rod x Bore	List Price
SHF-757-01-0325-0137	I-U-10	1-3/8 X 3-1/4	\$41.98
SHF-757-01-0325-0175	I-U-10	1-3/4 X 3-1/4	42.11
SHF-757-01-0325-0200	I-U-10	2 X 3-1/4	43.02
SHF-757-01-0400-0100	I-U-10	1 X 4	43.16
SHF-757-01-0400-0137	I-U-10	1-3/8 X 4	44.26
SHF-757-01-0400-0175	I-U-10	1-3/4 X 4	44.97
SHF-757-01-0400-0200	I-U-10	2 X 4	45.47
SHF-757-01-0400-0250	I-U-10	2-1/2 X 4	47.10
SHF-757-01-0500-0100	I-U-10	1 X 5	47.81
SHF-757-01-0500-0137	I-U-10	1.370 X 5	49.09
SHF-757-01-0500-0175	I-U-10	1-3/4 X 5	49.83
SHF-757-01-0500-0200	I-U-10	2 X 5	50.68
SHF-757-01-0500-0300	I-U-10	3 X 5	52.70
SHF-757-01-0500-0350	I-U-10	3-1/2 X 5	54.73
SHF-757-01-0600-0138	I-U-10	1.370 X 6	58.04
SHF-757-01-0600-0175	I-U-10	1-3/4 X 6	59.26
SHF-757-01-0600-0200	I-U-10	2 X 6	60.04
SHF-757-01-0600-0300	I-U-10	3 X 6	61.26
SHF-757-01-0600-0350	I-U-10	3-1/2 X 6	62.54
SHF-757-01-0600-0400	I-U-10	4 X 6	63.85
SHF-757-21-0112-0062	I-U-10	5/8 X 1-1/8	37.06
SHF-757-21-0150-0062	I-U-10	5/8 X 1-1/2	38.03
SHF-757-21-0150-0100	I-U-10	1 X 1-1/2	38.91
SHF-757-21-0200-0062	I-U-10	5/8 X 2	39.50
SHF-757-21-0200-0100	I-U-10	1 X 2	41.27
SHF-757-21-0200-0137	I-U-10	1.370 X 2	45.85
SHF-757-21-0250-0062	I-U-10	5/8 X 2-1/2	46.32
SHF-757-21-0250-0100	I-U-10	1 X 2-1/2	47.41
SHF-757-21-0250-0137	I-U-10	1-3/8 X 2-1/2	53.27
SHF-757-21-0250-0175	I-U-10	1-3/4 X 2-1/2	55.15
SHF-757-21-0325-0100	I-U-10	1 X 3-1/4	56.26
SHF-757-21-0325-0137	I-U-10	1-3/8 X 3-1/4	57.82
SHF-757-21-0325-0175	I-U-10	1-3/4 X 3-1/4	59.70
SHF-757-21-0325-0200	I-U-10	2 X 3-1/4	62.18
SHF-757-21-0400-0100	I-U-10	1 X 4	63.06
SHF-757-21-0400-0137	I-U-10	1.370 X 4	63.83
SHF-757-21-0400-0175	I-U-10	1-3/4 X 4	65.72
SHF-757-21-0400-0200	I-U-10	2 X 4	67.38
SHF-757-21-0400-0250	I-U-10	2-1/2 X 4	68.79
SHF-757-21-0500-0100	I-U-10	1 X 5	69.76
SHF-757-21-0500-0137	I-U-10	1.370 X 5	71.04
SHF-757-21-0500-0175	I-U-10	1.370 X 5	73.85
SHF-757-21-0500-0200	I-U-10	2 X 5	75.94
SHF-757-21-0500-0300	I-U-10	3 X 5	87.89
SHF-757-21-0500-0350	I-U-10	3-1/2 X 5	96.41
SHF-757-21-0600-0138	I-U-10	1-3/8 X 6	106.60
SHF-757-21-0600-0175	I-U-10	1-3/4 X 6	109.76
SHF-757-21-0600-0200	I-U-10	2 X 6	112.57
SHF-757-21-0600-0300	I-U-10	3 X 6	129.47
SHF-757-21-0600-0350	I-U-10	3-1/2 X 6	143.47
SHF-757-21-0600-0400	I-U-10	4 X 6	154.40
SHF-759-0100-0325-0137	I-U-5	1-3/8 X 3-1/4	42.67
SHF-760-0100-0400-0175	I-U-10	1-3/4 X 4	48.13
SHF-760-01-0200-0137	I-U-10	1-3/8 X 2	94.01
SHF-760-01-0250-0175	I-U-10	1-3/4 X 2-1/2	34.26

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Kit Number	Code	Rod x Bore	List Price
SHF-760-22-0600-0250	I-U-1	2-1/2 x 6	\$104.15
SHF-761-01-0200-0137	I-U-10	1-3/8 X 2	38.01
SHF-761-01-0250-0175	I-U-10	1-3/4 X 2-1/2	40.08
SHF-761-01-0700-0400	I-U-10	4 X 7	79.97
SHF-761-01-0800-0350	I-U-10	3-1/2 X 8	138.96
SHF-795-S003	I-U-10	1-1/4 X 2-3/4	50.01

SHEFFER

TOMPKINS-JOHNSON / TJ

Various Kits

Kit #	Code	Rod x Bore	List Price
TJ-28136862	N-TR-11	1 X 5	\$38.52
TJ-6331U-027	N-U-10	1-1/4 X 4	61.32
TJ-6332U-014	N-U-5	1 X 2-1/2	19.44
TJ-6332U-026	N-U-5	1 X 4	24.83
TJ-6332U-028	N-V-5	1-3/8 X 4	23.22
TJ-6332U-030	N-U-5	1-3/4 X 4	27.68
TJ-6332U-035	N-U-5	1 X 5	26.13
TJ-6332U-048	N-V-5	1-3/4 X 6	37.44
TJ-6332U-069	N-V-5	1-3/8 X 8	38.29
TJ-6332U-070	N-V-5	1-3/4 X 8	42.11

Kit Composition Varies

Consult your
Hercules® Sealing Products representative.

TOMPKINS-JOHNSON / TJ

VICKERS / EATON

NZ Series

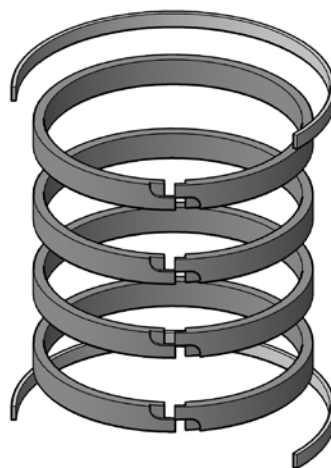
Kits For NZ Cylinders

Rod Kits


Kit Includes:

- 1 NBR Wiper
- 1 Urethane Rod Seal
- 1 Wear Strip
- 1 Gland Seal
- 1 Backup Ring

Iron Ring Piston Kits


Kit Includes:

- 4 Iron Piston Rings
- 2 Tube End Seals

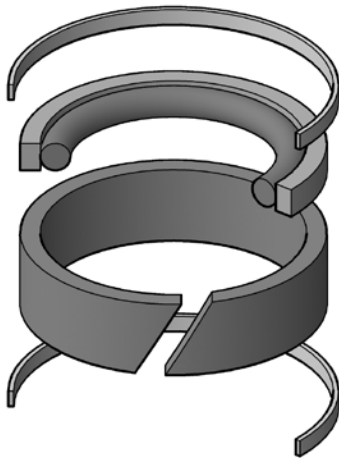
Rod Dia.	Kit #	List Price	Bore Dia.	Kit #	List Price
5/8"	VI-6533N-NZC	\$28.24	1-1/2"	VI-6633C-NZC	\$55.00
1"	VI-6533N-NZE	25.45	2"	VI-6633C-NZD	52.33
1-3/8"	VI-6533N-NZH	14.33	2-1/2"	VI-6633C-NZE	50.67
1-3/4"	VI-6533N-NZL	21.31	3-1/4"	VI-6633C-NZG	71.50
2"	VI-6533N-NZM	20.35	4"	VI-6633C-NZH	57.33
2-1/2"	VI-6533N-NZP	26.65	5"	VI-6633C-NZK	72.33
3"	VI-6533N-NZU	30.30	6"	VI-6633C-NZL	91.33
3-1/2"	VI-6533N-NZV	44.82			
4"	VI-6533N-NZW	72.85			

VICKERS / EATON

NZ Series

Kits For NZ Cylinders

Piston Kits


Kit Includes:

- 1 PTFE Piston Seal
- 1 Wear Strip
- 2 Tube End Seals

Low Friction Piston Kits


Kit Includes:

- 1 PTFE Piston Seal
- 1 Wear Strip
- 2 Tube End Seals

Bore Dia.	Kit #	List Price	Bore Dia.	Kit #	List Price
1-1/2"	VI-6633N-NZC	\$36.81	1-1/2"	VI-6633L-NZC	\$36.81
2"	VI-6633N-NZD	24.22	2"	VI-6633L-NZD	24.22
2-1/2"	VI-6633N-NZE	33.52	2-1/2"	VI-6633L-NZE	33.52
3-1/4"	VI-6633N-NZG	34.99	3-1/4"	VI-6633L-NZG	34.99
4"	VI-6633N-NZH	35.13	4"	VI-6633L-NZH	35.13
5"	VI-6633N-NZK	75.84	5"	VI-6633L-NZK	75.84
6"	VI-6633N-NZL	79.88	6"	VI-6633L-NZL	79.88

VICKERS / EATON

TZ Series

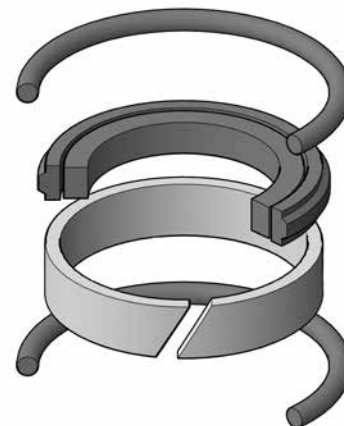
Urethane Kits For TZ Cylinders

Rod Kits


Kit Includes:

- 1 NBR Wiper
- 1 Urethane Rod Seal
- 1 Wear Strip
- 2 Gland Seals

Piston Kits


Kit Includes:

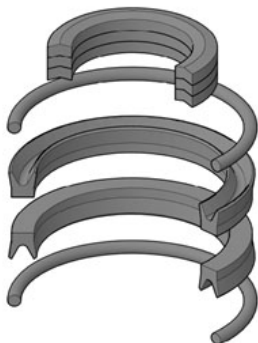
- 1 Urethane Piston Seal
- 1 Wear Strip
- 2 Tube End Seals

Rod Dia.	Kit #	List Price	Bore Dia.	Kit #	List Price
5/8"	VI-6533N-TZCC	\$23.29	1-1/2"	VI-6633N-TVCE	\$19.29
1"	VI-6533N-TZDE	39.70	2"	VI-6633N-TVDG	21.13
1-3/8"	VI-6533N-TZGH	29.45	2-1/2"	VI-6633N-TVEJ	23.09
1-3/4"	VI-6533N-TZHL	31.31	3-1/4"	VI-6633N-TVGL	28.80
2"	VI-6533N-TZKM	35.13	4"	VI-6633N-TVHN	36.94
2-1/2"	VI-6533N-TZLP	40.49	5"	VI-6633N-TVKQ	48.39
3"	VI-6533N-TZMU	49.69	6"	VI-6633N-TZLP	51.20
3-1/2"	VI-6533N-TZNV	51.38	7"	VI-6633N-TZMU	64.00
4"	VI-6533N-TZNW	91.55	8"	VI-6633N-TVNU	57.74
4-1/2"	VI-6533N-TZNY	72.22			
5-1/2"	VI-6533N-TZN1	100.46			
5"	VI-6533N-TZNZ	89.94			

VICKERS / TOMPKINS-JOHNSON

TE / TF Series

Universal / No Wiper


Kit Includes:

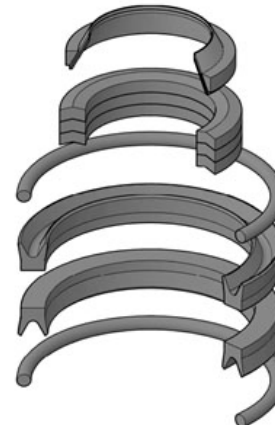
3 NBR Vee Rings
2 NBR Piston Seals
2 Tube End Seals

Pneumatic / Urethane Wiper


Kit Includes:

1 Urethane Insert Wiper
3 NBR Vee Rings
2 NBR Piston Seals
2 Tube End Seals

Hydraulic / Bronze Wiper


Kit Includes:

1 Bronze Insert Wiper
3 NBR Vee Rings
2 NBR Piston Seals
2 Tube End Seals

Rod x Bore	Kit #	List Price	Kit #	List Price	Kit #	List Price
5/8" X 1-1/2"	VI-6332U-004	\$13.34	VI-6332U-004-P	\$17.59	VI-6332U-004-H	\$26.66
5/8" X 2"	VI-6332U-007	13.62	VI-6332U-007-P	17.86	VI-6332U-007-H	26.78
1" X 2"	VI-6332U-009	14.45	VI-6332U-009-P	18.80	VI-6332U-009-H	25.38
1" X 2-1/2"	VI-6332U-014	19.44	VI-6332U-014-P	13.33	VI-6332U-014-H	22.65
1" X 3-1/4"	VI-6332U-020	17.88	VI-6332U-020-P	22.65	VI-6332U-020-H	27.32
1" X 4"	VI-6332U-026	24.83	VI-6332U-026-P	20.52	VI-6332U-026-H	26.24
1" X 1-1/2"	VI-6332U-006	14.13	VI-6332U-006-P	18.39	VI-6332U-006-H	25.18
1" X 5"	VI-6332U-035	26.13	VI-6332U-035-P	25.71	VI-6332U-035-H	39.51
1-3/8" X 2-1/2"	VI-6332U-016	36.95	VI-6332U-016-P	44.90	VI-6332U-016-H	44.51
1-3/8" X 3-1/4"	VI-6332U-022	17.89	VI-6332U-022-P	23.45	VI-6332U-022-H	33.77
1-3/8" X 4"	VI-6332U-028	24.39	VI-6332U-028-P	30.77	VI-6332U-028-H	37.44
1-3/8" X 5"	VI-6332U-037	27.01	VI-6332U-037-P	25.85	VI-6332U-037-H	42.13
1-3/8" X 8"	VI-6332U-069	38.29	VI-6332U-069-P	39.84	VI-6332U-069-H	45.17
1-3/4" X 3-1/4"	VI-6332U-023	21.76	VI-6332U-023-P	27.95	VI-6332U-023-H	42.44
1-3/4" X 4"	VI-6332U-030	26.29	VI-6332U-030-P	33.03	VI-6332U-030-H	44.97
1-3/4" X 5"	VI-6332U-039	28.94	VI-6332U-039-P	35.98	VI-6332U-039-H	47.78
1-3/4" X 6"	VI-6332U-048	37.44	VI-6332U-048-P	39.57	VI-6332U-048-H	44.90
1-3/4" X 8"	VI-6332U-070	42.11	VI-6332U-070-P	45.31	VI-6332U-070-H	50.59
2" X 4"	VI-6332U-031	27.12	VI-6332U-031-P	36.17	VI-6332U-031-H	50.29
2-1/2" X 4"	VI-6332U-033	30.20	VI-6332U-033-P	41.05	VI-6332U-033-H	58.28
2-1/2" X 5"	VI-6332U-042	33.87	VI-6332U-042-P	43.45	VI-6332U-042-H	67.08
3" X 5"	VI-6332U-044	36.00	VI-6332U-044-P	47.24	VI-6332U-044-H	79.06

NOTES**NOTES**

Forklift / Manlift Kits

CONTENTS	PAGE
Allis-Chalmers	170
Baker	171 - 172
Cascade	173 - 176
Caterpillar®-Towmotor	177
Clark	178 - 179
Crown	180
Gehl	181 - 182
Genie	182
Hyster	183
Kalmar	183 - 185
Komatsu	186
LULL	186
Mitsubishi	186 - 187
Moffett	187
Nissan	188 - 189
Raymond	190
TCM	191
Toyota	192 - 194
White	194
Yale	195

ALLIS-CHALMERS

LIFT TRUCKS

ALLIS-CHALMERS

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
AC-4751907	N-V-1	1-1/4 Rod Kit	\$90.53
AC-4787570	2 STAGE	1-7/8, 2-1/2	232.76
AC-4787619	9/16" SPOOL	9/16" Spool	10.93
AC-4885085	1 HALF RING	2-1/4 Rod Bearing	3.67
AC-4905170		3/4 Shaft Kit	62.29
AC-4906087	I-U-4	3 X 3-1/2	64.18
AC-4906099	I-U-1	2-1/4 X 2-3/4	100.52
AC-4906100	I-U-1	2-1/4 X 2-3/4	39.02
AC-4906322	I-U-11	1-1/4 X 3	28.98
AC-4906332	I-U-11	1-1/4 X 3	31.99
AC-4906336	I-U-11	1-1/2 X 3-3/4	44.00
AC-4906380	I-U-1	1-3/4 X 2-1/4	24.29
AC-4906390	I-U-1	2-5/8 X 3-1/4	26.64
AC-4906391	I-U-4	3-3/4 X 4-1/4 w/ feed tube	170.16
AC-4906392	I,P-U-1	3-3/4 X 4-1/4	74.64
AC-4906396	I-U-11	1-3/4 X 4-7/8	69.80
AC-4907400		Pump Kit	13.29
AC-4907419	I-U-11	1-1/8 X 2-1/4	29.46
AC-4907474	P-U-1	4 X 4-1/2 w/ feed tube	88.25
AC-4907475	P-U-1	3-1/2 X 4-1/4	62.05
AC-4908297	I-O-3	1 X 2-1/2	16.71
AC-4908540	P-U-1	5 X 5-1/2	102.31
AC-4908541	P-U-1	5 X 5-1/2 w/ feed tube	131.00
AC-4908555	I-O-3	3/4 X 1-1/2	8.65
AC-4908917	I-U-1	3-1/4 X 3-3/4	40.84
AC-4908980	7/8" SPOOL	7/8" Spool	12.46
AC-4909028	I-O-3	1-1/4 X 3-1/2	13.86

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
AC-4909035	I-O-11	1-1/2 X 2-1/2	\$53.60
AC-4910116	I-O-11	7/8 X 2	15.81
AC-4910977	9/16" SPOOL	9/16" Spool	9.03
AC-4911398	I-U-4	2 X 3 2 Cylinders	42.34
AC-4912036	I,P-U-1	1, 2-1/4, 3 Stages	110.09
AC-4912039	I-U-11	1-1/8 X 2-1/4	35.12
AC-4912322	I,P-U-1	1, 1-3/4, 2-3/8 Stages	109.85
AC-4912359	P-U-1	3 X 3-1/2	47.57
AC-4913028	P-U-11	7/8 X 2	40.79
AC-4913075	P-U-1	3-3/4 X 4-1/4 w/ feed tube	168.27
AC-4913486	P-U-1	2-1/2 X 3	54.60
AC-4914879	I-U-1	2-3/4 X 3-1/2	36.38
AC-4914917	I-U-4	1-7/8, 2-5/8 2 Stages	100.59
AC-4917136	I-U-10	2-1/4 X 3	64.64
AC-4917655	I-U-4	1-3/4 X 2-1/4	36.15
AC-4918325	I-U-4	1 X 2	36.24
AC-4918585	I-U-1	1-1/2 X 2-1/4	27.96
AC-4932484	I-SP-1	35 mm Rod Kit	14.36
AC-4942582	I-U-1	30 x 55 mm	30.76
AC-4991278	I-OB-3	1-1/8 X 2-1/4	17.40
AC-4992550	N-TR-1	7/8 Rod Only	7.98
AC-4992855	I-V-6	1-1/2 X 3-3/4	89.36
AC-4993273	I-V-6	1-1/4 X 3	78.49
AC-4993661	I-V-6	1-3/4 X 4-7/8	92.84
AC-4998712	I-N-V	3-5/8 X 4-1/4	87.02
AC-78762688	I-U-1	4-1/8 Rod Kit	89.13

BAKER LIFT TRUCKS

Kit Number	Code (Pg. x)	Rod X Bore Size	List Price
BAK-104840	Multi-Stage	3-1/2, 3-3/8, 4-7/16	\$226.71
BAK-105147	I-V-1	4.438 Rod	181.99
BAK-105235	I-V-1	2.950 Rod	69.60
BAK-105652	I-V-5	1-1/4 X 4	89.12
BAK-106390	I-U-5	1-3/4 X 4-1/2	97.10
BAK-106391	I-V-11	1-3/4 X 4	46.76
BAK-106393	I-V-11	1-1/4 X 4	85.40
BAK-106399	I-V-11	1-1/4 X 3	34.10
BAK-106657	I-V-1	3.950 Rod	92.72
BAK-106663	Multi-Stage	2-1/4, 2-3/8, 3-1/4	80.47
BAK-109009	I-U-4	2-1/2 X 3	60.57
BAK-109010	I-V-1	2-1/2 Rod	108.37
BAK-138727	P-U-10	22 X 60 mm	110.93
BAK-3001Y10	I-V-11	1-3/4 X 4	46.48
BAK-3001Y14	Multi-Stage	2-3/8, 3-3/16, 4-15/16	335.62
BAK-3001Y16	I-V-11	1-1/4 X 3	77.77
BAK-3001Y17	I-V-1	3.450 Rod	100.94
BAK-3001Y20	I-V-1	3.950 Rod	94.36
BAK-3001Y22	P-OB-10	3/4 X 2	28.34
BAK-3001Y28	I-V-5	1-1/4 X 3	124.45

BAKER LIFT TRUCKS KIT APPLICATIONS - TILT CYLINDERS

Cylinder Assembly	Repair Kit	Cylinder Assembly	Repair Kit
233HR7774ZC	3001Y10	9025JT	105652
270HR7774ZC	106399	9025JV	105652
9025AT	106399	9025JW	105652
9025AX	106399	9025JX	3001Y28
9025BE	3001Y10	9025JY	3001Y28
9025BF	3001Y10	9025KA	105652
9025BL	3001Y10	A9025KA	105652
9025BM	106391	9025KB	105652
9025BN	106391	9025KC	105652
9025CH	106399	100072-75	3001Y28
9025EG	3001Y16	100472-477	105652
9025EP	3001Y16	100503-508	105652
9025EW	3001Y10	100516-519	105652
9025FB	3001Y16	100742-743	105652
9025FF	106391	100960-963	105652
9025FH	3001Y10	102793-94	3001Y28
9025FN	3001Y16	102961-62	3001Y28
9025FP	106391	103904-05	105652
9025FT	3001Y10	104183-86	3001Y28
A9025GK	106393	104639-40	105652
A9025GN	106393	105840-41	105652
9025GN	106393	106058-59	105652
9025HC	106393	108259-60	105652
9025JA	106393	109351-52	105652
9025JJ	106393	110872-73	106390
9025JM	106393	113352-53	106390
9025JS	105652		

BAKER

BAKER LIFT TRUCKS

KIT APPLICATIONS - HOIST CYLINDERS

BAKER

Cylinder Assembly	Repair Kit	Cylinder Assembly	Repair Kit	Cylinder Assembly	Repair Kit	Cylinder Assembly	Repair Kit
122R7774Z	3001Y14	103598	3001Y20	105845	104840	112006	104840
160R7774XC	3001Y14	103635	3001Y20	105855	3001Y20	112037	3001Y20
230HR7774ZC	3001Y14	103662	105147	105933	106663	112061	109009
270HR7774XC	106399	103775	106663	105962	3001Y20	112111	104840
294U7774XC	106657	103855	106663	105970	3001Y20	112213	104840
295HR7774XC	3001Y17	103894-95	106663	106138	3001Y20	112419	105235
298U7774XC	3001Y14	104100	104840	106228	3001Y20	112562-63	109009
9025AD	3001Y14	104131	3001Y14	106474-76	109009	112600	105147
9025AF	3001Y14	104178	105147	106477	109009	112658	109009
9025CN	106657	104244	3001Y14	106647	104840	112832	105235
9025D	106657	104278	106663	106672	106663	112904	104840
9025EH	3001Y17	104349	3001Y20	106733	104840	112962	109009
C9025GB	104840	104377	105147	107695-96	105147	113111	105147
A9025GC	3001Y20	104431	104840	107794-96	109009	113194	109009
9025GW	105235	104438	104840	108051	104840	113228	3001Y20
9025HH	3001Y20	104441	106663	108625	109009	113251	105235
9025HX	3001Y20	104516	105147	108656	109009	113388	109009
9025JK	106393	104529	104840	108971-974	105235	113434	109009
100227-230	105235	104548	3001Y20	109631-641	109009	113638	105147
102019-20	105235	104604	105147	109788	3001Y20	114040	109009
102064-67	105235	104617	105147	109823	105147	114141	109009
102068-72 & 79	3001Y17	104705-07	3001Y20	109879	109010	114283	109009
102506-08	105235	104745	104840	110095	109009	114392	105147
102556-559	3001Y17	104794-96	3001Y20	110506	109010	114889	109009
102569-79	106663	104878	3001Y20	110648-657	105235	114954	109009
102671-79	3001Y14	104998	104840	110756	3001Y20	115237	105147
102695-102708	104840	105104	3001Y20	110899	105235	115247	3001Y20
102813-16	3001Y20	105163	105147	110947-949	109009	115656	105147
102898-900	3001Y20	105387-89	109010	111059-61	109009	115956	109009
103102	105147	105727	106663	111124	109010	116318	109009
103583	3001Y20	105730	3001Y14	111549-562	109010	116740	3001Y20
103589	3001Y20	105842	104840	111843	105235	G7328-3	104840

CASCADE

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price	Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
CAS-11.11.73	I-U-15	7/8 X 1-1/2	\$26.34	CAS-640371	I-U-4	4 X 4-1/2	\$83.07
CAS-210090	I-U-4	20 X 36 mm	161.16	CAS-641956	MULTI STAGE	4, 5	136.42
CAS-210288	I-U-4	20 X 36 mm	161.16	CAS-643280	I-U-4	3 X 3-1/2	52.22
CAS-562339	I-U-4,10	1-1/8 X 2-1/4	25.49	CAS-644690	I-U-5	1-3/4 X 4	97.09
CAS-684827	I-U-4	3/4 X 1-1/2	15.40	CAS-646305	I-U-3	3-1/2 X 4	64.05
CAS-552715	I-U-1	2-1/4 X 2-3/4	46.74	CAS-646339	SWIVEL KIT		6.28
CAS-554289	MULTI STAGE	4, 5	159.95	CAS-647626	I-U-4	1 X 2-1/4	25.53
CAS-560349	I-U-4	2" X 75 mm	100.96	CAS-647892	I-V-8	1-3/4 X 4.520	86.70
CAS-562591	I-U-4	2" X 60 mm	80.70	CAS-650018	I-U-5	3-1/2 X 7	112.73
CAS-564409	I-U-13	25 X 63 mm	60.38	CAS-651847	I-N-4	2 X 2-1/2	39.21
CAS-615939	O-RING KIT		6.97	CAS-654519	P-V-1	2 X 4-3/4	59.09
CAS-615940	O-RING KIT		9.18	CAS-656167	MULTI STAGE	4-1/4, 5-7/16	187.36
CAS-628080	I-V-8	1-1/4 X 3	61.48	CAS-658717	MULTI STAGE	2-3/4, 3-3/4	94.26
CAS-630033	I-U-3	1-1/2 X 4-3/4	31.39	CAS-660954	I-U-4	1-5/8 X 3-1/2	55.78
CAS-630038	I-U-3	1-1/2 X 4-3/4	29.07	CAS-660955	I-U-4	3 X 4	65.75
CAS-630445	I-V-8	1-1/4 X 2-1/2	53.96	CAS-664814	N-U-4	3/4 X 1-3/4	26.59
CAS-631277	P-V-9	2 X 4-3/4	195.09	CAS-667622	MULTI STAGE	2-1/2, 3-1/4, 4-1/2	179.29
CAS-638884	MULTI STAGE	2-3/4, 3-3/4	100.03	45C VIEWMAST II			
CAS-639695	I-U-4	3/4 X 1-3/4	49.57	CAS-T555286	P-U-10	2-1/8 X 3	\$78.28

REPLACEMENT PARTS FOR CASCADE EQUIPMENT

NOTE: Cascade part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

BACK-UP RINGS

Part Number	Min. Pkgs.	List Price
CAS-559870	1	\$11.42
CAS-563388	10	1.07
CAS-563907	1	2.96
CAS-563977	5	1.91
CAS-564404	1	9.89
CAS-615009	25	0.39
CAS-615012	25	0.40
CAS-615126	10	0.59
CAS-615128	10	0.69
CAS-615130	10	0.83
CAS-615132	10	0.93
CAS-615135	10	1.08
CAS-615140	10	1.48
CAS-615146	5	2.27
CAS-615147	5	1.98

BACK-UP RINGS

Part Number	Min. Pkgs.	List Price
CAS-615150	5	\$2.29
CAS-615152	5	2.54
CAS-615217	1	4.35
CAS-637565	1	5.76
CAS-638223	1	7.77
CAS-638224	1	7.77
CAS-638225	1	8.10
CAS-638244	10	0.68
CAS-638245	1	5.69
CAS-638247	1	5.97
CAS-638249	1	6.24
CAS-638250	1	5.54
CAS-638252	1	6.87
CAS-638253	1	7.12
CAS-638256	1	7.97

BACK-UP RINGS

Part Number	Min. Pkgs.	List Price
CAS-638257	1	\$8.10
CAS-638293	1	6.66
CAS-638295	1	7.12
CAS-638298	1	8.10
CAS-648569	4	3.14
CAS-660952	1	7.12
CAS-669247	5	2.24
CAS-671754	10	0.92

FACE SEALS

Part Number	List Price
CAS-601468	\$2.27
CAS-607287	3.84

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REPLACEMENT PARTS FOR CASCADE

NOTE: Cascade part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

CASCADE

O-RINGS

Part Number	Min. Pkgs.	List Price
CAS-1596	50	\$0.09
CAS-1912210	20	0.30
CAS-207300	50	0.06
CAS-208761	50	0.09
CAS-208762	50	0.23
CAS-208763	50	0.27
CAS-209063	15	0.82
CAS-209064	15	0.82
CAS-209065	15	0.84
CAS-209066	15	0.90
CAS-212359	50	0.11
CAS-2696	50	0.03
CAS-2697	50	0.03
CAS-2698	50	0.03
CAS-2699	50	0.03
CAS-2700	50	0.06
CAS-2701	50	0.07
CAS-2702	50	0.06
CAS-2703	50	0.07
CAS-2704	50	0.07
CAS-2705	50	0.07
CAS-2706	50	0.07
CAS-2707	50	0.09
CAS-2709	50	0.09
CAS-2712	50	0.12
CAS-2722	20	0.27
CAS-2753	5	2.15
CAS-2785	20	0.55
CAS-2787	20	0.40
CAS-2789	20	0.43
CAS-2792	20	0.54
CAS-2793	20	0.54
CAS-2797	20	0.67
CAS-2799	20	0.71
CAS-2801	20	0.73
CAS-2803	10	0.81
CAS-2804	10	0.87
CAS-2807	10	1.15
CAS-2808	10	1.18
CAS-2809	10	1.21

O-RINGS

Part Number	Min. Pkgs.	List Price
CAS-2811	10	\$1.28
CAS-2840	50	0.23
CAS-524737	50	0.07
CAS-543372	10	1.48
CAS-557226	50	0.14
CAS-562127	20	0.66
CAS-564363	20	0.42
CAS-581565	50	0.30
CAS-613376	50	0.10
CAS-617724	50	0.12
CAS-622406	20	0.27
CAS-624737	50	0.07
CAS-624738	50	0.10
CAS-626186	50	0.10
CAS-626189	20	0.23
CAS-628033	20	0.19
CAS-630386	20	0.24
CAS-643330	50	0.06
CAS-643331	50	0.06
CAS-643332	50	0.06
CAS-643333	50	0.06
CAS-643334	50	0.06
CAS-643335	50	0.06
CAS-643336	50	0.06
CAS-643337	50	0.07
CAS-643338	50	0.07
CAS-643339	50	0.09
CAS-643340	50	0.09
CAS-643341	50	0.10
CAS-643342	50	0.10
CAS-643343	50	0.10
CAS-643344	50	0.10
CAS-643345	50	0.12
CAS-643346	50	0.12
CAS-643347	50	0.17
CAS-643348	50	0.19
CAS-643349	50	0.19
CAS-643350	20	0.19
CAS-643351	20	0.21
CAS-643352	20	0.24

O-RINGS

Part Number	Min. Pkgs.	List Price
CAS-643353	20	\$0.27
CAS-643354	20	0.30
CAS-643355	20	0.37
CAS-643356	20	0.40
CAS-643357	20	0.40
CAS-643358	20	0.43
CAS-643359	20	0.43
CAS-643360	20	0.48
CAS-643361	20	0.49
CAS-643362	20	0.51
CAS-643363	20	0.58
CAS-643364	20	0.64
CAS-643365	20	0.67
CAS-643366	10	0.79
CAS-643367	10	0.81
CAS-643368	10	0.87
CAS-643369	10	0.96
CAS-643370	10	1.15
CAS-643371	10	1.48
CAS-643373	50	0.09
CAS-643374	50	0.10
CAS-643375	50	0.10
CAS-643376	50	0.10
CAS-643377	50	0.12
CAS-643378	50	0.12
CAS-643379	50	0.12
CAS-643380	50	0.19
CAS-643381	50	0.19
CAS-643382	20	0.21
CAS-643383	20	0.23
CAS-643384	20	0.24
CAS-643385	20	0.24
CAS-643386	20	0.27
CAS-643387	20	0.28
CAS-643388	20	0.28
CAS-643389	20	0.30
CAS-643390	20	0.30
CAS-643391	20	0.30
CAS-643392	20	0.31
CAS-643393	20	0.31

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REPLACEMENT PARTS FOR CASCADE EQUIPMENT

NOTE: Cascade part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

O-RINGS

Part Number	Min. Pkgs.	List Price
CAS-643394	20	\$0.37
CAS-643395	20	0.37
CAS-643396	20	0.37
CAS-643397	20	0.43
CAS-643398	20	0.43
CAS-643399	20	0.43
CAS-643400	20	0.48
CAS-643401	20	0.48
CAS-645592	20	0.55
CAS-654926	50	0.19
CAS-655799	50	0.12
CAS-666015	50	0.23
CAS-666183	50	0.23
CAS-666184	50	0.14
CAS-666891	15	0.82
CAS-666892	10	0.90
CAS-666893	15	0.82
CAS-676959	15	0.80
CAS-682862	50	0.07
CAS-684587	50	0.11
CAS-684615	50	0.11
CAS-689937	50	0.11
CAS-689938	50	0.14
CAS-797089	20	0.56

PISTON SEALS

Part Number	Bore Diameter	List Price
CAS-564407	63 mm	\$38.83

RETAINER RINGS

Part Number	List Price
CAS-7197	\$2.64

U-SEALS

Part Number	Rod Dia.	List Price
CAS-646540	3/4	\$5.09
CAS-641835	7/8	5.28
CAS-560502	1	5.49
CAS-662447	1	5.85
CAS-662450	1-3/8	6.67
CAS-662452	1-5/8	7.21
CAS-662454	1-7/8	8.08
CAS-553521	2-1/2	20.33
CAS-662462	3-1/2	15.69
CAS-553954	4-1/2	36.72
CAS-662457	2-1/4	10.47
CAS-553523	3	23.99
CAS-553524	3-1/4	25.13
CAS-662465	4-1/4	20.57
CAS-662467	4-3/4	23.50

CASCADE

REPLACEMENT PARTS FOR CASCADE

NOTE: Cascade part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

VEE SETS

Part Number	Bore	List Price
CAS-1469	3-1/2	\$44.26
CAS-1471	4-1/2	47.93
CAS-1809	1-3/4	19.22
CAS-1861	2-3/4	40.74
CAS-7501	1-3/8	22.13
CAS-7502	2	21.36
CAS-7514	3-3/4	40.19
CAS-7538	4	27.13
CAS-7542	3	23.01
CAS-7554	4-3/4	69.29
CAS-7561	4-1/4	75.39
CAS-7606	2-1/4	17.38
CAS-7608	3-1/2	22.88
CAS-7609	2-1/2	20.65
CAS-7636	4-1/4	42.77
CAS-827	4-1/2	54.65

WEAR RINGS

Part Number	O.D. X Width	List Price
CAS-660761	2-1/4 X 1/2	\$4.27
CAS-660769	4 X 1/2	4.79
CAS-660784	4-3/4 X 3/4	5.61
CAS-660786	5-1/4 X 3/4	5.73
CAS-636959	5-3/4 X 3/4	7.36

WIPERS

Part Number	Rod Dia.	List Price
CAS-559961	3/4	\$3.33
CAS-636851	7/8	1.23
CAS-636852	1	1.23
CAS-626468	1-1/4	1.33
CAS-636854	1-5/8	2.07
CAS-1916335	2-1/2	5.99
CAS-629608	2-1/2	2.53
CAS-636859	3	3.12
CAS-636860	3-1/4	3.67
CAS-563682	3-1/4	8.67
CAS-636862	4	4.19
CAS-563683	4-1/2	11.17
CAS-626456	4-1/2	4.54
CAS-636864	4-3/4	4.72
CAS-561256	42 mm	20.81

CASCADE

REPLACEMENT KITS FOR CATERPILLAR TOWMOTOR LIFT TRUCKS

NOTE: If you can locate the cylinder group number, it can aid in identifying the proper kit.

Kit Number	Code (Pg. xiv)	Rode X Bore Size	List Price	Kit Number	Code (Pg. xiv)	Rode X Bore Size	List Price
TM-1033947	I-U-10	40 X 90 mm	\$73.33	TM-396848	P-UB-11	1-1/4 X 3	\$42.62
TM-1040763	P-U-1	70 mm	57.63	TM-396849	I-V-8	2 X 5.025	67.49
TM-1040900	I-U-10	37 X 71 mm	39.51	TM-659060	O-RINGS		7.19
TM-1040948	P-U-1	35 mm	29.32	TM-690003	I-U-5	2 X 5	103.56
TM-1041095	P-U-1	40 x 50 mm	97.42	TM-691389	I-OB-3	1-1/2 X 2-1/2	22.32
TM-1042519	P-U-1	85 X 100 mm	68.24	TM-693683	O-RINGS		8.58
TM-1042609	P-U-4	45 X 55 mm	73.00	TM-694526	I-UB-5	2 X 5	99.23
TM-1146727	P-U-14	50 X 110 mm	106.43	TM-694527	I-UB-5	2-1/2 X 6	109.73
TM-206398	RETAINER RING		0.90	TM-694528	I-U-4,10	2 X 4-1/2	67.35
TM-324908	I-V-8	2 X 4.525	64.05	TM-695522	I-UB-5	1-1/4 X 3-1/2	71.26
TM-375427	I-U-11	1 X 2-1/2	17.39	TM-695523	I-UB-5	1-1/2 X 4	85.06
TM-376968	I-U-1	2-1/2 Rod	34.04	TM-901523	I-U-1	2-1/2, 3-1/4, 4 Stages	155.71
TM-388594-6	P-UB-10	1-1/2 X 3-1/2	41.50	TM-905761	P-U-1	3-1/8, 4-3/8 Stages	202.75
TM-396743	I-P-N-8	3 X 4.025	91.90	TM-905771	P-U-1	2-3/8, 4-3/8 Stages	164.21
TM-396744	I,P-U-8	2-1/2 X 3.525	41.23	TM-905961	VALVE KIT		11.56
TM-396746	I,P-U-1	2-1/4, 3-1/4, 4-1/8 Stages	141.52	TM-905962	VALVE KIT		5.42
TM-396747	P-U-8	3 X 3.525	56.64	TM-906496	I-U-10	3 X 4	55.34
TM-396748	I-U-8	3 X 4.025	52.32	TM-911700	I-U-1	75 mm Rod Kit	46.22
TM-396749	P-U-1	3-1/8, 4-3/8, 5 Stages	240.55	TM-911701	I-U-1	50 mm Rod Kit	49.15
TM-396750	P-U-1	2-3/16 X 2-1/2	48.45	TM-911725	I-N-10	25 X 50 mm	47.75
TM-396751	P-U-8	3-3/4 X 5.025	87.10	TM-911726	I-U-10	35 X 80 mm	59.28
TM-396752	I-U-8	2-5/8 X 3.025	62.49	TM-911956	P-U-1	1-5/8 Rod Kit	23.63
TM-396754	I-U-8	2-1/2 X 3.025	41.04	TM-912067	P-UB-10	1-1/4 X 3	31.84
TM-396755	I-U-8	3 X 3.525	49.79	TM-912711	P-U-1	2-3/8 Rod Kit	36.72
TM-396756	I-P-1-8	3 X 4.025	75.79	TM-912748	P-U-1	2-3/8 Rod Kit	36.82
TM-396757	P-U-1	2-3/8, 4-3/8, 5-3/4 Stages	224.46	TM-914206	P-UB-10	2 X 4-1/2	67.05
TM-396758	I-P-U-1	1-7/8, 2-3/4, 3-5/8 Stages	122.69	TM-914634	I-U-1	3-3/4" Rod	40.49
TM-396759	I-V-1	2.700, 3.450, 5.700 Stgs.	153.83	TM-914635	I-U-10	2 X 2-1/2	70.13
TM-396760	I-V-1	2.200, 2.950, 4.700 Stgs.	119.64	TM-914636	N-U-10	4 X 4-1/2	105.21
TM-396761	I,P-N-8	3 X 5.025	104.63	TM-917170	U-SEAL	4-3/8	33.88
TM-396801	P-U-1	3-3/8, 4-3/8, 5 Stages	266.64	TM-917174	U-SEAL	2-1/4	9.14
TM-396842	P-UB-10	1-1/2 X 3-1/2	40.15	TM-917175	U-SEAL	3-1/4	12.66
TM-396843	P-U-11	1-1/2 X 3-1/2	30.59	TM-917177	U-SEAL	2-3/4	10.92
TM-396844	P-UB-11	1-1/2 X 3-1/2	32.06	TM-918024	P-U-4	150 X 180 mm	378.01
TM-396845	I-U-11	1-1/4 X 3	23.88	TM-919851	P-U-15	120 X 180 mm	669.54
TM-396846	P-UB-10	2 X 4-1/2	90.29	TM-920666	I-U-1	50 mm Rod Kit	40.21
TM-396847	I-V-8	2 X 4.525	58.76	TM-923282	I-U-10	2 X 2-1/2	111.12

REPLACEMENT PARTS FOR CATERPILLAR[®] TOWMOTOR LIFT TRUCKS

Part Number	Type	I.D.	O.D.	Hgt.	List Price	Part Number	Type	I.D.	O.D.	Hgt.	List Price
TM-5461	Vee Set	1-1/4	1-3/4		\$11.18	TM-67843	Vee Set	5.700	6.450		\$51.71
TM-41248	Vee Set	2.200	2.700	1	20.12	TM-303231	Wiper	1	1-3/8	3/16	3.12
TM-41250	Vee Set	2.950	3.450	1	22.93	TM-303233	Wiper	2			3.61
TM-41252	Vee Set	4.700	5.290	1	37.31	TM-303260	Vee Set	2.275	3.025	1.2	20.53
TM-41340	Vee Set	4.025	5.025	1.3	45.08	TM-371212	Modular Back-up Ring	5	5-3/4	.226	34.59
TM-67841	Vee Set	2.700	3.450		26.20	TM-903016	Wiper	5	5-3/4	3/8	47.59
TM-67842	Vee Set	3.450	4.250	1.5	47.38						

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CATERPILLAR[®]

CLARK LIFT TRUCKS

NOTE: A CLARK deck number can positively identify the kit needed for lift cylinders. Looking at the upright (lift mechanism) from the driver's seat, the deck number is stamped on the right outer channel.

SAMPLE: MO141, HO351, FO168, etc.

ALSO NOTE: Kits with an "E" suffix contain original equipment u-seals. Kits without "E" suffix contain Hercules Sealing Products designed seals.

Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price	Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price
CLK-1795529	I-U-5	1-1/2 X 4	\$64.18	CLK-1811179	I-V-5	1-1/2 X 4	\$86.99
CLK-1810820	O-RINGS		11.22	CLK-1811180	I-V-5	1-1/4 X 4	79.74
CLK-1811046	I-U-10	1-1/4 X 3	26.88	CLK-1811184	I-V-5	1-1/4 X 3	86.79
CLK-1811107	I-N-4	2 X 2-1/4	27.86	CLK-1811200	I-V-4	2 X 6	157.40
CLK-1811108	I-N-4	2-1/4 X 2-1/2	21.55	CLK-1811200-E	I-V-4	2 X 6	295.35
CLK-1811120		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	155.89	CLK-1811204	I-V-1	1-1/4 ROD	86.30
CLK-1811120-E		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	252.99	CLK-1811206	I-V-5	3/4 X 1-5/8	39.74
CLK-1811122		2-1/8 VID, 3-7/8, 4-3/4, 6-1/2 UID	209.30	CLK-1811207	I-V-5	1 X 2	57.67
CLK-1811122-E		2-1/8 VID, 3-7/8, 4-3/4, 6-1/2 UID	291.35	CLK-1811209	I-V-5	1 X 2-1/4	65.03
CLK-1811123-E		3-1/4, 4-1/4 VID'S, 6-1/2 UID'S	307.18	CLK-1811210	I-V-5	1-1/4 X 2-3/4	80.54
CLK-1811124		2-1/8, 3-1/8 VID'S	90.54	CLK-1811212	I-V-5	1-1/4 X 3-1/4	83.86
CLK-1811125		2-1/8, 3-1/8, 4-1/2 VID'S	206.03	CLK-1811217	I-V-5	1-3/4 X 4-1/2	63.69
CLK-1811126		2-3/4, 3-3/4, 5-3/4 VID'S	218.21	CLK-1811218	I-V-5	2 X 6	344.35
CLK-1811127		2-3/4, 3-3/4, 5-3/4 VID'S	223.26	CLK-1811231	N-N-5	2.26" Piston Kit	43.28
CLK-1811129	I-N-4	2-1/2 X 4	45.18	CLK-1811244	I-U-10	1-1/8 X 2-1/4	28.02
CLK-1811130		1-3/4, 2-5/8, 3-3/4 VID'S	130.35	CLK-1811275	I-V-5	1-1/2 X 4	65.80
CLK-1811131		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	167.02	CLK-1811309	I-U-10	1 X 3	14.99
CLK-1811131-E		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	227.91	CLK-1811314		1-3/4 VID, 3-1/8, 3-7/8, 5-1/4 UID	138.21
CLK-1811132		1-3/4, 2-5/8 VID, 3-3/8, 4-1/2 UID	118.83	CLK-1811314-E		1-3/4 VID, 3-1/8, 3-7/8, 5-1/4 UID	197.57
CLK-1811132-E		1-3/4, 2-5/8 VID, 3-3/8, 4-1/2 UID	185.42	CLK-1811315		1-3/4 VID, 3-1/8, 3-7/8, 5-1/4 UID	157.47
CLK-1811133		1-3/4, 2-5/8 VID'S	61.77	CLK-1811315-E		1-3/4 VID, 3-1/8, 3-7/8, 5-1/4 UID	200.45
CLK-1811142		1-3/4, 2-5/8, 3-3/4 VID'S	212.66	CLK-1811327		2-1/8 VID, 3-7/8, 4-3/4, 6-1/2 UID	184.64
CLK-1811148		2-1/8 VID, 3-7/8, 4-3/4, 6-1/2 UID	219.52	CLK-1811327-E		2-1/8 VID, 3-7/8, 4-3/4, 6-1/2 UID	291.02
CLK-1811148-E		2-1/8 VID, 3-7/8, 4-3/4, 6-1/2 UID	292.33	CLK-1811369	P-U-4	60 mm X 73 mm	69.54
CLK-1811149	I-U-4	3-1/2 X 4-3/4	100.68	CLK-1811376	I-U-10	40 mm X 4"	52.06
CLK-1811154	I-U-1	2-1/2 X 3-1/4	29.17	CLK-1811392	P-U-10	1-3/4 X 3	67.74
CLK-1811155	I-N-4	2-1/2 X 3	27.54	CLK-1811393	I-U-10	40 mm X 4"	57.61
CLK-1811157	I-U-5	5 X 7	185.73	CLK-1811415	P-U-4	60 X 78 mm	74.10
CLK-1811158	I-U-5	4-1/2 X 6	143.31	CLK-1811537	P-U-1	60 mm	72.49
CLK-1811158-E	I-U-5	4-1/2 X 6	174.02	CLK-1811538	I-U-4	40 X 56 mm	61.55
CLK-1811159		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	157.68	CLK-1811542	I-U-10	1-3/8 X 3	33.68
CLK-1811159-E		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	228.83	CLK-1811544	I-U-10	1 X 2	58.43
CLK-1811160		1-3/4, 2-5/8 VID, 3-3/8, 4-1/2 UID	117.98	CLK-1811569	P-U-10	2 X 3-3/8	51.08
CLK-1811160-E		1-3/4, 2-5/8 VID, 3-3/8, 4-1/2 UID	185.42	CLK-1811582	I-U-10	1-1/4 X 3-1/2	31.08
CLK-1811161		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	158.89	CLK-1811691	P-U-1	2 X 2.450	35.48
CLK-1811161-E		1-3/4, 3-1/8 VID, 3-7/8, 5-1/4 UID	221.50	CLK-1811697	I-U-10	1-1/4 X 3-1/2	32.70
CLK-1811162		2-1/8, 3-1/8, 4-1/2 UID'S	169.01	CLK-1811719	I-U-10	40 mm X 3-1/2	37.14
CLK-1811163		2-1/8, 3-1/8, 4-1/2 VID'S	208.49	CLK-1811759	I-U-10	1-1/4 X 3	32.13
CLK-1811164		1-3/4, 2-5/8, 3-3/8, 4-5/8 UID'S	105.37	CLK-1811785	I-U-10	40 mm x 3-1/2	43.45
CLK-1811164-E		1-3/4, 2-5/8, 3-3/8, 4-5/8 UID'S	206.09	CLK-1811799	I-U-10	2 X 3-3/8	82.27

CLARK LIFT TRUCKS

Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price	Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price
CLK-1811820	I-U-10	2 X 3	\$32.65	CLK-1831074	I-U-10	1-3/4 X 4-1/2	\$44.30
CLK-1811828	I-U-10	2 X 3	28.86	CLK-1831075	I-V-1	3-1/4 Rod Kit	44.17
CLK-1811852	I-U-1	3 X 3-1/2	64.12	CLK-1831076	I-U-10	1-1/8 X 2-1/2	27.86
CLK-1811855	P-U-1	60 mm X 72 mm	44.70	CLK-1991085	P-TR-10	2 X 4	41.88
CLK-1811972	I-U-10	1-1/4 X 3	40.84	CLK-2367420	I-U-1	2-1/4 X 3-1/4	106.17
CLK-1813014	P-U-1	2 X 2-1/2	32.72	CLK-3009626	P-U-10	25 mm X 50 mm	70.51
CLK-1813015	I-U-1	2-5/8 Rod Kit	71.71	CLK-3986876	MOTOR KIT		29.67
CLK-1813016	I-U-1	3 X 3-1/2	56.82	CLK-841270	P-U-10	2 X 3-3/4	36.19
CLK-1813017	P-U-1	60mm X 72 mm	44.70	CLK-886547	P-TR-12	1 X 2	49.76
CLK-1813023	I-U-1	40 mm X 2-3/16"	43.00	CLK-896505	MOTOR KIT		7.40
CLK-1813024	I-U-1	40 mm Rod Kit	21.46	CLK-905074	MOTOR KIT		16.36
CLK-1813032	I-U-10	50 mm X 3-3/8"	68.62	CLK-907984	VALVE KIT		18.51
CLK-1813055	I-U-10	50 mm X 3-1/8"	74.38	CLK-908985	VALVE KIT		17.67
CLK-1813075	I-U-10	40 mm X 3-1/2"	42.50	CLK-912339	P-U-1	2-1/2 X 3	39.68
CLK-1813076	I-U-10	40 mm X 4"	45.41	CLK-914698	I-U-4	1 X 2-1/2	28.07
CLK-1813082	I-U-10	50 X 86 mm	62.81	CLK-914703	I-O-4	1-1/4 X 3	18.76
CLK-1813084	I-U-1	50 mm Rod Kit	24.66	CLK-917282	O-RING KIT		8.12
CLK-1813176	I-U-4	60 X 73 mm	77.22	CLK-917713	N-N-10	2" Piston Kit	22.72
CLK-1818816	P-U-10	3/4 X 1-3/4	27.54	CLK-918886	I-U-10	2 X 3-3/8	40.07
CLK-1818864	P-U-10	3/4 X 2	20.44	CLK-921115A	VALVE KIT		10.76
CLK-1821328	I-U-10	7/8 X 2	14.34	CLK-990076	VALVE KIT		4.53
CLK-1830350	I-N-4	2 X 2-1/4	30.11	CLK-990208	SWIVEL KIT		7.24
CLK-1830352	I-N-4	3-1/4 X 4	45.55	CLK-990209	SWIVEL KIT		10.83
CLK-1830358	I-N-4	2-1/2 X 3-1/4	53.78	CLK-992511	O-RING KIT		7.42
CLK-1830360	I-N-4	2-1/2 X 3	30.66	CLK-994287	VALVE KIT		12.80
CLK-1830361	I-N-4	2-1/4 X 2-1/2	34.64	CLK-995815	SWIVEL KIT		10.83
CLK-1830649	I-U-10	3/4 X 2-3/4	33.37	CLK-999820	P-U-10	3/4 X 1-3/4	35.66
CLK-1831042	N-V-1	1-1/4" Rod Kit	9.95				

CLARK

CROWN LIFT TRUCKS

CROWN

Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price
CRN-087484		O-RING	\$4.46
CRN-088719		O-RING	3.99
CRN-089178	I-U-13	1-3/4 X 3-1/2	54.19
CRN-093217		O-RING	4.27
CRN-101296	I-U-1	2-1/2" Rod Kit	23.02
CRN-101301	I-U-1	2 ROD KIT	27.24
CRN-101302	I-U-1	1-7/8 X 2-1/2	71.86
CRN-101305	I-U-1	1-5/8 X Rod Kit	105.47
CRN-101309	I-U-1	1-7/8" ROD KIT	75.40
CRN-101310	I-U-1	2-1/2" ROD KIT	30.65
CRN-101313	I-U-1	1-3/8" Rod Kit	27.68
CRN-101314	I-U-1	2-1/8" ROD KIT	21.38
CRN-101316	I-U-1	2-3/8" ROD KIT	49.92
CRN-101323	I-V-1	1-7/8" Rod Kit	92.10
CRN-101326	I-U-1	2-3/8" Rod Kit	33.90
CRN-101329	I-U-1	1-7/8, 2-5/8 Stages	82.28
CRN-101331	I-U-1	1-3/4, 2-3/8 Stages	67.64
CRN-101332	I-U-1	1-3/4 X 2-1/2	22.56
CRN-101334	I-U-1	1-7/8, 2-5/8 Rod kit	85.08
CRN-101335	I-U-1	1-5/8, 2-1/4 Stages	73.32
CRN-101336	I-U-1	1-5/8, 2-1/4 Stages	75.87
CRN-101339	I-U-1	2" Rod Kit	83.88
CRN-101340	I-U-1	1-7/8 ROD KIT	23.03
CRN-101341	I-U-5	1-1/4 X 2-3/8	56.33
CRN-101342	I-U-3	1-1/2 X 3	74.38
CRN-101343	I-U-5	3/4 X 2	65.69
CRN-101346	I-U-5	3/4 X 1-3/4	46.96
CRN-101347	I-U-5	3/4 X 2-1/8	64.73
CRN-101376	I-U-5	1-1/4 X 3	89.72

Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price
CRN-101377	I-U-5	1 x 1-3/4	\$48.41
CRN-102659		VALVE KIT	5.24
CRN-105476004		O-RING	7.85
CRN-105476-6		O-RING	2.62
CRN-107366	I-O-1	1/2" Valve Kit	19.10
CRN-111573	I-U-1	3" ROD KIT	37.91
CRN-111574	I-U-1	2" ROD KIT	24.31
CRN-111790-001		O-RING	2.62
CRN-111790-12		O-RING	2.62
CRN-111790-2		O-RING	5.24
CRN-111790-3		O-RING	3.30
CRN-111790-4		O-RING	3.30
CRN-111790-9		O-RING	3.11
CRN-112022	I-U-4	7/8 X 2	23.51
CRN-112704		8, 9/16" Spools Rod Kit	20.33
CRN-113744	I-U-13	2-1/2 X 3-1/4	60.92
CRN-113745	I-U-13	3/4 x 1-3/4	30.22
CRN-115604	I-U-4	7/8 X 2	37.48
CRN-116360	N-O-1	O-RING	5.80
CRN-116820	I-U-1	2" rod kit	16.39
CRN-42249	I-U-1	56 X 80 mm	40.80
CRN-43023-1		VALVE KIT	33.54
CRN-78685		VALVE KIT	15.59
CRN-79017		VALVE KIT	4.81
CRN-87317	N-O-1	O-RING	4.27
CRN-89704	I-U-13	1-3/4 x 2-3/4	75.88
CRN-90880	I-U-5	3/4 X 1-3/4	48.78
CRN-94580	I-O-1	5/8" Rod kit	5.70

GEHL

Replacement Kits For

Forklifts							
APPLICATION	CYL #	SERIAL #	CODE	ROD	BORE	KIT #	List \$
MODEL 552, 553							
ATTACHMENT ROTATE	L63594		I-U-10	1	2-1/2	GEHL-L99170	38.07
ATTACHMENT SLAVE	L63014		I-U-11	1-3/4	3-1/2	GEHL-L98527	39.39
ATTACHMENT TILT	L63013		I-U-11	2	4	GEHL-L98548	61.69
BOOM EXTEND	L63012		I-U-11	2-1/2	3-1/2	GEHL-L98558	75.91
BOOM LIFT	L63199		I-U-11	2-1/2	4-1/2	GEHL-L98521	69.74
FORK SHIFT	L66920		I-U-10	1-1/4	2	GEHL-L99958	79.79
FRAME LEVEL	L63015		I-U-11	1-3/4	4	GEHL-L98506	46.25
STEER	L98444		I-U-10	45 mm	90 mm	GEHL-L98565	117.61
MODEL 663							
BOOM EXTEND	L64333		I-U-10	3	4	GEHL-L99386	83.04
BOOM LIFT	L64014		I-U-10	3	4	GEHL-L99331	118.87
CARRIER SLAVE	L61869		I-U-10	1-3/4	3-1/2	GEHL-L99332	62.44
CARRIER TILT	L61868		I-U-10	2	4	GEHL-L99385	92.37
FRAME SWAY	L64054	Prior-4319	I-U-10	3	4	GEHL-L97674	69.61
	L64085	4320-4356	P-U-5	1-3/4	4	GEHL-L97903	66.60
	L64818	4357-UP	I-U-10	1-3/4	4	GEHL-L99382	77.70
ROTATE CARRIAGE	L61317		I-U-10	1-3/8	3	GEHL-L97769	46.31
STEER	L97649-L97976		I-U-10	1-1/8	2-1/4	GEHL-L97978	36.99
MODEL 883							
ATTACHMENT TILT	L49988A	7001-7004	I-U-10	2-1/2	5	GEHL-L97716	99.74
	L64086	7005-7444	P-U-10	2-1/2	5	GEHL-L97922	80.57
BOOM EXTEND	L64385	7001-7004	I-U-10	3-1/2	4-1/2	GEHL-L97713	80.32
	L66770	7446-UP	I-U-10	3-1/2	4-1/2	GEHL-L99376	96.39
BOOM LIFT	L64083	7005-7445	I-U-10	3-1/2	4-1/2	GEHL-L97908	53.78
	L64401	7001-7004	I-U-10	3-1/2	4-1/2	GEHL-L97711	66.96
BOOM SLAVE	L64087	7001-7004	I-U-10	2-1/4	4-1/2	GEHL-L97917	56.03
	L64087	7005-7171	I-U-10	2-1/4	4-1/2	GEHL-L97715	62.62
	L66032	7172-7444	I-U-10	2-1/4	4-1/2	GEHL-L97917	56.03
	L66666	7445-UP	I-U-11	2-1/4	5	GEHL-L99330	92.77
FORK SHIFT	L66920		I-U-10	1-1/4	2	GEHL-L99958	79.79
FRAME LEVEL	L64085	7005-7445	P-U-5	1-3/4	4	GEHL-L97903	66.60
	L64818	7001-7004, 7446-UP	I-U-10	1-3/4	4	GEHL-L99382	77.70
MAST LIFT	L66537		I-U-10	2	3	GEHL-L98848	38.19
OUTRIGGER	L64968	Prior-7386	I-U-10	2-1/2	4	GEHL-L97938	44.03
	L66642	7387-UP	I-U-11	2-1/2	4	GEHL-L99059	59.45
ROTATE CARRIAGE	L61317		I-U-10	1-3/8	3	GEHL-L97769	46.31
STEER	L97649		I-U-10	1-1/8	2-1/4	GEHL-L97978	36.99
	L99428		I-U-10	1-1/8	3	GEHL-L99430	46.82
SWING CARRIAGE	L63970	2781-UP	I-U-10	1-1/4	2-1/2	GEHL-L99944	37.37
	L65659	Prior-2780	I-U-10	1-3/8	3	GEHL-L97955	59.23

GEHL

GEHL

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
GEHL-L97617	I-U-10	2 X 4	\$45.28
GEHL-L97674	I-U-10	3 X 4	69.61
GEHL-L97711	I-U-10	3-1/2 X 4-1/2	66.96
GEHL-L97713	I-U-10	3-1/2 X 4-1/2	80.32
GEHL-L97715	I-U-10	2-1/4 X 4-1/2	62.62
GEHL-L97716	I-U-10	2-1/2 X 5	99.74
GEHL-L97769	I-U-10	1-3/8 X 3	46.31
GEHL-L97903	P-U-5	1-3/4 X 4	66.60
GEHL-L97908	I-U-10	3-1/2 X 4-1/2	53.78
GEHL-L97917	I-U-10	2-1/4 X 4-1/2	56.03
GEHL-L97922	P-U-10	2-1/2 X 5	80.57
GEHL-L97938	I-U-10	2-1/2 X 4	44.03
GEHL-L97955	I-U-10	1-3/8 X 3	59.23
GEHL-L97978	I-U-10	1-1/8 X 2-1/4	36.99
GEHL-L98506	I-U-11	1-3/4 X 4	46.25
GEHL-L98521	I-U-11	2-1/2 X 4-1/2	69.74
GEHL-L98527	I-U-11	1-3/4 X 3-1/2	39.39
GEHL-L98548	I-U-11	2 X 4	61.69
GEHL-L98558	I-U-11	2-1/2 X 3-1/2	75.91
GEHL-L98565	I-U-10	45 X 90 mm	117.61
GEHL-L98848	I-U-10	2 X 3	38.19
GEHL-L99059	I-U-11	2-1/2 X 4	59.45
GEHL-L99170	I-U-10	1 X 2-1/2	38.07
GEHL-L99330	I-U-11	2-1/4 X 5	92.77
GEHL-L99331	I-U-10	3 X 4	118.87
GEHL-L99332	I-U-10	1-3/4 X 3-1/2	62.44
GEHL-L99376	I-U-10	3-1/2 X 4-1/2	96.39
GEHL-L99382	I-U-10	1-3/4 X 4	77.70
GEHL-L99385	I-U-10	2 X 4	92.37
GEHL-L99386	I-U-10	3 X 4	83.04
GEHL-L99430	I-U-10	1-1/8 X 3	46.82
GEHL-L99944	I-U-10	1-1/4 X 2-1/2	37.37
GEHL-L99958	I-U-10	1-1/4 X 2	79.79

GENIE

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
GENIE-101252	P-U-15	100 X 140	\$166.12
GENIE-101254	I,P-U-15	40 X 75	62.45
GENIE-102126	MISC		120.51
GENIE-106119	MISC		81.71

GENIE

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
GENIE-106125	MISC		\$42.39
GENIE-106508	MISC		62.87
GENIE-107813	WASHER		7.03
GENIE-110202	34542 VALVE KIT		11.62
GENIE-139972	MISC		250.87
GENIE-18471	I-SP-10	1.5 X 2.5	40.76
GENIE-226542	MISC		173.52
GENIE-230483	I-U-10	1.750 X 4	55.43
GENIE-33487	I-U-10	1.5 X 3	20.63
GENIE-43018	O-rings + Back-ups		37.05
GENIE-44233	CHECK VALVE KIT		27.32
GENIE-44250	I-U-10	.750 X 20	62.62
GENIE-45898	I-SP-10	2 X 4	34.34
GENIE-52620	I-U-10	1.500 X 30	57.69
GENIE-59050	I-U-14	1.5 X 2.5	158.28
GENIE-59169	I-U-10	10 X 20	68.88
GENIE-59444	I-U-10	1.750 X 2.5	80.26
GENIE-62417	N-TR-5,11	2.125 X 3.5	55.45
GENIE-63350	P-U-15	40 X 75	56.14
GENIE-63353	P-U-15	40 X 63	68.83
GENIE-63354	P-U-15	40 X 63	15.16
GENIE-640096	I-U-15	70 X 110	60.96
GENIE-65789	P-U-15	32 X 50	45.41
GENIE-72047	O-rings		35.81
GENIE-7-234-31	CARTRIDGE SEAL KIT		49.50
GENIE-77189	P-U-15	45 X 90	43.13
GENIE-77364	P-U-15	40 X 75	43.13
GENIE-77521	P-U-15	45 X 63	53.38
GENIE-7-900-180	I-U-10	1.5 X 3.5	49.45
GENIE-88338	P-U-10	25 X 50	15.07
GENIE-88338	P-U-10	25 X 50	48.85
GENIE-89066	P-U-10	25 X 50	22.21
GENIE-89294	P-U-10	40 X 63	309.04
GENIE-89310	O-rings + Back-ups		14.7
GENIE-94255	P-U-15	32 X 50	106.66
GENIE-94256	P-U-15	32 X 50	106.66
GENIE-94620	MISC		47.66
GENIE-94625	O-Rings + Back-Ups		21.67
GENIE-94937	MISC		301.5

HYSTER

Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price
HYS-1332565	I-U-1	1-7/8 X 2-1/4	\$50.12
HYS-1334570	I-U-4	3-1/2 X 4	72.60
HYS-1334571	I-N-5	4 X 4-1/2	91.46
HYS-133462	I-V-1	1-3/4" ROD	21.31
HYS-1355337		GEAR KIT	26.06
HYS-144267		O-RING KIT	12.88
HYS-148292	N-N-8	3-1/4" PISTON KIT	56.44
HYS-148414	I-V-1	1-3/4" ROD	23.23
HYS-149193	N-N-P	2-1/2" BORE	20.81
HYS-149194	P-V-1	1-3/4 X 2-1/2	28.54
HYS-149254	I-V-1	1-3/4" ROD	19.50
HYS-149258	P-V-1	2" ROD	43.78
HYS-149259	N-V-1	2-1/4" ROD	25.36
HYS-149260	I-V-1	1-1/4" ROD	23.97
HYS-149292		O-RING KIT	7.22
HYS-1494726	P-U-10	1-3/4 X 4	34.41
HYS-168801	N-U-12	1 X 3	62.57
HYS-170881	P-V-8	1-1/4 X 3	41.97
HYS-2026822	P-U-10	35 X 65 mm	85.46
HYS-2085015	P-U-13	35 X 70 mm	67.35
HYS-226074	I-U-8	1-1/2 X 3-1/2	53.53
HYS-2302714	I-U-11	28 mm X 2-1/2	20.83
HYS-2303974	I-U-1	3 X 3-3/4	50.70
HYS-250050	P-U-10	1-1/2 X 3-1/2	41.16
HYS-250051	P-U-10	1-1/4 X 3	43.68
HYS-250550	I-U-4	4-1/4 X 6	131.46
HYS-250559	I-U-4	5-1/4 X 7-1/2	180.61
HYS-250603	I-U-8	1 X 2-1/2	50.54
HYS-250937	I-U-8	1-1/2 X 3.525	120.64
HYS-250943	I-U-1	3.70, 5.45 Stages	221.98

Kit Number	Code (Pg. xviii)	Rod X Bore Size	List Price
HYS-280182	I-O-10	1 X 2-1/4	\$16.02
HYS-280537	I-U-4	2-1/8 X 2-1/2	55.12
HYS-281474	P-U-10	1-1/2 X 3-1/2	43.21
HYS-281815	I-U-10	1-3/4 X 3-1/2	22.13
HYS-281822	I-U-10	1-1/4 X 3	20.26
HYS-281855	I-U-10, 12	1-3/4 X 3-1/2	45.76
HYS-281859	I-U-10, 12	2-1/4 X 3-1/2	48.73
HYS-281864	I-U-10	1-3/4 X 3-1/2	22.29
HYS-314993		O-RING KIT	6.37
HYS-318005	I-U-1	2-3/4, 3-3/4 Stages	72.68
HYS-321758	I-U-10	2-1/4 X 4-1/2	32.82
HYS-321909	I-U-5	3 X 4-3/4	120.58
HYS-323645	I-U-8	1-3/4 X 4	60.05
HYS-327393	I-U-4	2-1/8 X 2-1/2	40.31
HYS-328074	I-U-10	1-1/4 X 2-3/4	24.27
HYS-328121	P-U-10	1-1/4 X 3	47.32
HYS-328226	P-U-10	1-3/4 X 4-1/4	49.20
HYS-333742	P-U-10	2-1/8 X 3	70.66
HYS-334997	I-U-10	1-1/4 X 2-3/4	28.16
HYS-337281	I-U-4	1-3/8 X 2	39.58
HYS-339347	I-U-4	4, 5 Stages	167.25
HYS-340079	N-U-4	1-3/4 X 2-3/4	51.21
HYS-355695	P-U-10	1-3/8 X 3	42.12
HYS-355909	I-U-5	1-1/2 X 4	60.24
HYS-381762	I-U-10	2-7/8 X 4-1/2	66.44
HYS-383991	P-U-10	1-1/4 X 3	40.31
HYS-48628	I-U-4	3/4 X 1-5/8	20.24
HYS-629326		HOSE REEL KIT	7.92
HYS-639456	I-U-4	3 X 3-1/2	64.17
HYS-643280	I-U-4	3 X 3-1/2	65.87

HYSTER - KALMAR

KALMAR

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
KAL-920670.0003	P-U-13	32 X 63 mm	\$113.96
KAL-920673.0005	P-U-15	80 X 125 mm	151.20
KAL-920744.0001	P-U-13	32 X 63 mm	108.30
KAL-920744.0002	I-U-13	40 X 80 mm	150.27
KAL-920744.0003	P-U-10	60 X 80 mm	158.34

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
KAL-920744.0005	P-U-10	70 X 125 mm	\$181.71
KAL-920744.0006	P-U-15	70 X 160 mm	112.13
KAL-920744.0013	P-U-15	90 X 180 mm	130.24
KAL-921307.0001	P-U-10	50 X 100 mm	177.20

REPLACEMENT PARTS FOR KALMAR

NOTE: Kalmar part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

BACK-UP RINGS

Part Number	Min. Pkg Qty	List Price
KAL-0926644	10	\$1.32
KAL-0930280	5	1.98
KAL-4741128	10	1.12
KAL-8653585	10	1.32
KAL-8653594	1	2.96
KAL-931868-4	10	1.19

O-RINGS

Part Number	Min. Pkg Qty	List Price
KAL-0922571	50	\$0.07
KAL-0923376	50	0.07
KAL-0923379	50	0.09
KAL-0923558	50	0.06
KAL-0923560	50	0.06
KAL-0923561	50	0.07
KAL-0923562	50	0.10
KAL-0923563	50	0.12
KAL-0923564	50	0.19
KAL-0923565	50	0.07
KAL-0923566	50	0.10
KAL-0923567	50	0.10
KAL-0923568	50	0.12
KAL-0923569	20	0.21
KAL-0923570	20	0.24
KAL-0923571	20	0.28
KAL-0923572	20	0.30
KAL-0923573	20	0.30
KAL-0923574	50	0.10
KAL-0923575	50	0.17
KAL-0923576	20	0.30
KAL-0923577	20	0.55
KAL-0923578	20	0.33
KAL-0923579	20	0.40
KAL-0923580	20	0.40
KAL-0923582	20	0.54
KAL-0923584	20	0.60
KAL-0923585	20	0.64
KAL-0923586	20	0.71

O-RINGS

Part Number	Min. Pkg Qty	List Price
KAL-0923587	20	\$0.74
KAL-0923591	10	0.81
KAL-0923598	10	0.90
KAL-0923599	10	1.09
KAL-0923644	50	0.17
KAL-0923645	50	0.09
KAL-0923646	20	0.27
KAL-0923648	50	0.19
KAL-0923649	50	0.21
KAL-0923650	20	0.33
KAL-0923651	20	0.57
KAL-0923663	50	0.07
KAL-0923664	20	0.27
KAL-0923702	20	0.48
KAL-0923718	50	0.21
KAL-0923719	50	0.09
KAL-0923810	50	0.12
KAL-0923811	50	0.19
KAL-0923812	50	0.21
KAL-0923813	20	0.23
KAL-0923814	20	0.43
KAL-0923815	20	0.51
KAL-0923816	20	0.67
KAL-0923817	20	0.73
KAL-0923826	20	0.33
KAL-0923827	20	0.67
KAL-0923828	20	0.73
KAL-0923829	20	0.74
KAL-0923831	10	1.18
KAL-0923832	10	1.21
KAL-0923833	10	1.21
KAL-0923843	50	0.03
KAL-0923845	50	0.06
KAL-0923847	50	0.09
KAL-0923848	50	0.10
KAL-0923849	50	0.09
KAL-0923850	20	0.24
KAL-0923851	50	0.12
KAL-0923852	20	0.48
KAL-0923855	10	1.00
KAL-0923856	20	0.51

O-RINGS

Part Number	Min. Pkg Qty	List Price
KAL-0923865	20	\$0.28
KAL-0923896	20	0.24
KAL-0923922	20	0.60
KAL-0923934	50	0.12
KAL-0923935	20	0.67
KAL-0923936	10	0.87
KAL-0923944	50	0.03
KAL-0923945	50	0.09
KAL-0923947	50	0.12
KAL-0923948	50	0.19
KAL-0923949	20	0.43
KAL-0923988	50	0.10
KAL-0923989	50	0.12
KAL-0924003	50	0.07
KAL-0924038	20	0.30
KAL-0924137	20	0.19
KAL-0924158	20	0.82
KAL-0924187	20	0.67
KAL-0924416	50	0.12
KAL-0924686	10	1.05
KAL-0924859	20	0.21
KAL-0927902	50	0.03
KAL-0930897	50	0.10
KAL-231416	50	0.10
KAL-4255395	50	0.14
KAL-4910140	50	0.07
KAL-4910366	20	0.27
KAL-4910375	50	0.23
KAL-4910378	10	1.45
KAL-4910379	20	0.51
KAL-70923812	50	0.21
KAL-70923829	20	0.74
KAL-70924003	50	0.07
KAL-70926560	5	1.32
KAL-8653584	20	0.60

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REPLACEMENT PARTS FOR KALMAR

NOTE: Kalmar part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

NYLON PLUGS

Part Number	Rod Dia.	List Price
KAL-74816749	1/8 x 5/32	\$0.70

PISTON SEALS

Part Number	Bore Dia.	List Price
KAL-4909279	2-1/2	\$8.71

PISTON U-SEALS

Part Number	Bore Dia.	List Price
KAL-4910347	4	\$21.64

RETAINER RINGS

Part Number	List Price
KAL-231423	\$5.09
KAL-4255082	5.13
KAL-4910370	3.16
KAL-4910376	10.84
KAL-4910377	4.46
KAL-927822	11.52

U-SEALS

Part Number	Rod Dia.	List Price
KAL-78630662	1-1/2	\$13.81
KAL-4850624-0	2-1/2	11.50
KAL-74820556	2-5/8	12.01
KAL-8653586	2-3/4	12.58
KAL-8653592	4-1/2	28.80
KAL-8653595	4-1/2	21.39
KAL-74843499	5	28.23

WEAR RINGS

Part Number	OD X W	List Price
KAL-4910372	2-1/2 X 3/8	\$4.41
KAL-4850622-4	2-3/4 X 1	5.79
KAL-4910373	4 X 1/2	4.79
KAL-74844040	5-1/2 X 1	7.66

WIPERS

Part Number	Rod Dia.	List Price
KAL-4908498	1	\$1.23
KAL-74857829	1-1/4	5.57
KAL-4911395	2	2.11
KAL-4910380	2-1/2	2.53
KAL-74820557	2-5/8	9.17
KAL-8653582	2-3/4	2.68
KAL-74845370	3	21.17
KAL-8653591	4-1/2	4.54

KALMAR

KOMATSU LIFT TRUCKS

NOTE: Komatsu part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
KOM-34A-63-05010	I-U-4,12	50 X 70 mm	\$134.91
KOM-34A-64-05010	I-U-1	30mm Rod Kit	25.19
KOM-34B-63-05011	I-U-4,10	55 X 80 mm	169.68
KOM-34B-63-05021	I-U-4,10	60 X 80 mm	162.12
KOM-34B-64-05010	I-U-1	35 X 50 mm	36.33
KOM-3EA-64-05020	I-U-1	25 X 60 mm	40.13
KOM-3EA-64-05030	I-U-1	35mm Rod Kit	43.59
KOM-3EA-64-05190	I-U-10	1 X 2-1/2	43.65
KOM-3EB-34-05010	O-Ring Kit		21.61
KOM-3EB-63-05010	P-U-4	40 X 50 mm	96.21
KOM-3EB-63-05020	P-U-4	45 X 55 mm	43.16
KOM-3EB-64-05010	I-U-1	25 X 50 mm	34.16
KOM-3EB-64-05020	I-U-1	25 X 50 mm	52.32
KOM-3EB-64-05020L	P-U-10	25 X 50mm	30.19
KOM-3EB-64-05050	I-U-1	30 X 70 mm	40.15
KOM-3EB-64-05050L	I-U-3	30 X 70 mm	36.35
KOM-3EB-64-05060	I-U-1	35 X 65 mm	35.49
KOM-3EB-64-05091	I-U-3	30 X 70 mm	29.53
KOM-3EB-64-05190	I-U-10	1-1/4 X 2-3/4	52.53
KOM-3EB-64-A2000	I-U-10	1-5/8 X 2-1/2	67.34
KOM-3EB-64-A5191	I-U-10	1-1/4 X 2-3/4	87.70
KOM-3EC-63-05020	P-U-4	50 X 70 mm	66.48
KOM-3EC-64-05010L	I-U-3	45 X 90 mm	41.70
KOM-3EC-64-05190	I-U-10	1-3/4 X 3-1/2	49.34
KOM-3EC-64-A2390	I-U-10	1 X 2	37.01
KOM-ON43001-07567	I-U-10	50 X 75 mm	109.67

LULL

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
LULL-3586-34	I-U-10	1-1/8 X 3	\$31.48
LULL-P19382	I-U-10	1-1/8 X 2-1/2	18.40

MITSUBISHI LIFT TRUCKS

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
MIT-91254-10330	P-U-10	22 X 45mm	\$47.49
MIT-91254-30330	P-U-10	22 X 45mm	41.85
MIT-91255-11120	I-U-10	22.4 X 45 mm	42.25
MIT-91273-30150	Valve Kit		6.01
MIT-91273-30220	Valve Kit		5.86
MIT-91854-15310	I-U-10	25 X 55 mm	38.07
MIT-91854-40230	P-U-10	25 X 55 mm	49.19
MIT-91872-22120	Valve Kit		8.73
MIT-93051-00028	I-U-4	2 in X 75 mm	121.89
MIT-93051-10068	I-U-4	40 X 50 mm	51.63
MIT-94004-00120	P-UB-1	30 mm Rod Kit	38.88
MIT-94004-00130	N-N-15	63 mm Piston Kit	58.04
MIT-94104-00110	N-N-13	70 mm Piston Kit	72.70
MIT-94104-00120	P-UB-1	35 mm Rod Kit for 70 mm Bore	40.80
MIT-94104-00170	I-U-10	30 X 63 mm	52.69
MIT-94114-00110	I-U-4	50 X 70 mm	84.58
MIT-94114-00210	I-U-4	60 X 70 mm	47.47
MIT-94119-00018	I-U-1	70 mm Rod Kit	46.55
MIT-94119-00048	I-U-1	50 mm Rod Kit	22.01
MIT-94119-00068	P-U-1	32 mm Rod Kit	40.25
MIT-94119-00088	P-U-1	32 mm	42.79
MIT-94133-00018	I-N-4	40 X 50 mm	66.78
MIT-94151-00018	P-U-1	70 mm Rod Kit	49.43
MIT-94151-00028	P-U-1	70 mm Rod Kit	53.21
MIT-94162-00018	P-U-4	35 X 45 mm	45.64
MIT-94204-10120	I-U-10	35 X 70 mm	25.65
MIT-94219-00018	P-U-1	35 mm Rod Kit	16.74
MIT-94219-00028	P-U-1	35 mm Rod Kit	27.08
MIT-94251-00018	I-U-1	75 mm Rod Kit	46.86
MIT-94251-00038	P-U-1	75 mm Rod Kit	64.51
MIT-94251-00058	P-U-1	75 mm Rod Kit	50.28
MIT-94262-00028	P-U-4	40 X 50 mm	86.92
MIT-94304-00110	N-N-13	80 mm Piston Kit	80.72
MIT-94304-00120	P-UB-1	35 mm Rod Kit for 80 mm Bore	45.99
MIT-94304-10140	I-U-10	35 X 80 mm	38.62
MIT-94314-00110	I-U-1	65 X 80 mm	47.55
MIT-94319-00018	I-U-1	60 mm Rod Kit	25.45
MIT-94319-00038	I-U-1	85 mm Rod Kit	44.43
MIT-94319-00068	P-U-1	40 mm Rod Kit	17.89
MIT-94319-00088	I-U-1	40 mm Rod Kit	57.03

MITSUBISHI LIFT TRUCKS

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
MIT-94351-00018	I-U-1	80 mm Rod Kit	\$33.89
MIT-94351-00028	P-U-1	45 X 55 mm	101.06
MIT-94351-00038	P-U-1	85 mm Rod Kit	68.12
MIT-94351-00068	P-U-1	85 mm Rod Kit	64.38
MIT-94362-00018	P-U-1	45 X 55 mm	101.06
MIT-94404-00120	P-UB-3	45 X 90 mm	60.97
MIT-94404-10140	I-U-10	40 X 80 mm	91.18
MIT-94404-10160	I-U-10	40 X 90 mm	75.86
MIT-94504-02090	P-U-1	40 X 100 mm	50.56

MOFFETT

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
MOFT-270021	I-V-15	40 X 75 mm	\$59.71
MOFT-270078	I-V-15	1-3/4 X 90 mm	58.21
MOFT-270711	I-U-15	1 X 2	23.77
MOFT-519-023-0000	I-U-15	25 X 50 mm	43.97

REPLACEMENT KITS FOR NISSAN LIFT TRUCKS

NOTE: A cylinder number will help in determining the proper kit part number. If no cylinder number is available, furnish rod and bore sizes and description of parts.

NISSAN

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
NN-49440-00H00	MOTOR KIT		\$9.07
NN-49510-L6025	P-U-10	25 X 55 mm	70.69
NN-49599-11H00	P-U-10	40 X 60 Double Rod	96.90
NN-49599-51K00	P-U-10	40 X 65 mm	96.83
NN-49599-FC000	I-U-10	40 mm X 2-3/8	79.57
NN-58099-00H00	P-U-4	35 X 45 mm	66.73
NN-58099-00H60	P-U-4	35 X 45 mm	47.36
NN-58099-0G211	I-U-4	2 in X 75 mm	33.95
NN-58099-0G511	I-U-4	2 in X 80 mm	113.57
NN-58099-10H00	P-U-5	40 X 50 mm	115.49
NN-58099-10H60	P-U-4	40 X 50 mm	44.08
NN-58099-20H12	P-U-4	45 X 60 mm	78.74
NN-58099-20H62	P-U-4	45 X 60 mm	40.86
NN-58099-23H00	P-U-1	45 X 55 mm	57.21
NN-58099-23H60	P-U-4	45 X 55 mm	50.20
NN-58099-31K11	I-U-4	2" X 2-3/4"	44.47
NN-58099-51H10	P-U-14	50 X 70 mm	90.19
NN-58099-51H60	P-U-4	50 X 65 mm	41.54
NN-58099-51H70	P-U-4	50 X 70 mm	68.08
NN-58099-L2600	P-U-4	40 X 50 mm	108.33
NN-58099-L4900	P-U-1	55 mm Rod Kit	58.82
NN-58099-L6000	P-U-4	50 X 70 mm	133.08
NN-58099-L6001	P-U-4	60 X 70 mm	142.03
NN-58099-L900	P-U-1	55 mm Rod Kit	58.82
NN-58099-L9010	P-U-4	60 X 80 mm	76.35
NN-58099-L9016	P-U-15	65 X 80 mm	78.83
NN-58199-L1100	I-U-4	50 X 70 mm	121.21
NN-58199-L1300	I-U-4	60 X 80 mm	132.58
NN-58199-L1400	I-U-4	45 X 65 mm	115.55
NN-58199-L1700	I-U-4	50 X 70 mm	121.21
NN-58199-L6000	I-U-4	65 X 90 mm	137.26
NN-58199-L6100	I-U-4	70 X 100 mm	142.16
NN-58299-01H00	P-U-1	32 mm Rod Kit	47.50
NN-58299-11H00	P-U-1	35 X 55 mm	52.69
NN-58299-L1100	I-U-1	60, 80, 112mm Stages	104.19

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
NN-58399-L1100	I-U-4	60 X 90 mm	\$135.82
NN-58499-02H10	P-U-1	70 mm Rod Kit	69.62
NN-58499-12H11	P-U-1	75 X 85 mm	90.29
NN-58499-22H10	P-U-1	90 mm Rod Kit	80.33
NN-58499-25H10	P-U-1	80 mm Rod Kit	90.83
NN-58499-6G500	I-U-4	2 in X 60 mm	122.71
NN-58499-L1100	I-U-1	80 mm Rod Kit	63.83
NN-58499-L1101	I-U-1	50 mm Rod Kit	40.65
NN-58499-L1102	I-U-1	50 mm Rod Kit	42.78
NN-58499-L1400	I-U-1	70 mm Rod Kit	54.49
NN-58499-L1401	I-U-1	45 mm Rod Kit	37.88
NN-58499-L1402	I-U-1	45 mm Rod Kit	39.90
NN-58499-L6000	I-U-4	70 X 100 mm	118.23
NN-58499-L6001	P-U-1	65mm Rod Kit	66.81
NN-58499-L7401	P-U-1	45 mm Rod Kit	32.64
NN-58699-00H00	P-U-1	25 X 65 mm	67.42
NN-58699-05H00	P-U-1	30 X 65 mm	62.39
NN-58699-10H00	P-U-3	30 X 70 mm	67.84
NN-58699-14H00	P-U-3	35 X 70 mm	70.12
NN-58699-20H00	P-U-1	35 X 80 mm	52.32
NN-58699-21H00	P-U-1	40 X 80 mm	63.23
NN-58699-51K00	P-U-3	30 X 60 mm	39.98
NN-58699-L1125	I-U-1	35 mm Rod Kit	44.54
NN-58699-L1126	I-U-1	35 mm Rod Kit	47.29
NN-58699-L1425	I-U-1	30 mm Rod Kit	47.29
NN-58699-L1426	I-U-1	30 mm Rod Kit	41.85
NN-58699-L6000	I-U-1	40 mm Rod Kit	47.86
NN-58699-L6011	I-U-1	40 mm Rod Kit	51.77
NN-58699-L6800	I-U-1	45 mm Rod Kit	53.73
NN-58699-L6811	I-U-1	45 mm Rod Kit	57.85
NN-58699-L8100	I-U-1	35 X 80 mm	33.17
NN-58699-L9000	I-U-1	50mm Rod Kit	55.18
NN-58699-L9010	I-U-1	50 X 100 mm	66.67
NN-69399-90H00		9/16" Valve Kit	7.48
NN-69399-L1202		9/16" Valve Kit	22.30

REPLACEMENT PARTS FOR NISSAN EQUIPMENT

NOTE: Nissan part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

O-RINGS

Part Number	Min Pkg Qty	List Price
NN-49516-L6004	10	\$0.92
NN-49526-L6004	10	3.36
NN-58117-L6000	20	0.76
NN-58122-L0700	2	4.54
NN-58123-L1100	5	1.91
NN-58123-L1300	5	1.85
NN-58123-L1400	10	1.21
NN-58124-L1300	5	6.64
NN-58124-L1400	10	1.54
NN-58124-L6100	5	2.19
NN-58142-L0800	5	2.61
NN-58185-48570	5	6.64
NN-58225-47600	2	3.56
NN-58245-47701	25	0.36
NN-58248-47230	2	5.83
NN-58251-48570	2	4.96
NN-58417-L1100	10	1.48
NN-58423-L1100	2	5.44
NN-58423-L1400	2	5.13
NN-58424-L1100	5	2.16
NN-58424-L1400	5	2.50
NN-58624-L3100	5	1.87
NN-58624-L6800	5	1.92
NN-58634-L3100	25	0.36
NN-69386-L1106	20	0.60
NN-69399-L2500	10	2.50
NN-85225-47600	2	3.56
NN-E8122-F8101	10	1.39
NN-G9386-L1106	20	0.60

PISTON U-SEALS

Part Number	Bore Dia.	List Price
NN-58140-L1401	65 mm	\$38.27
NN-58140-L1100	70 mm	38.27
NN-58140-L6000	90 mm	45.21
NN-58140-L6100	100 mm	45.21

U-SEALS

Part Number	Rod Dia.	List Price
NN-49522-L6004	25 mm	\$3.13
NN-58621-L1400	30 mm	7.34
NN-58621-L1100	35 mm	11.11
NN-58221-24H00	38 mm	13.13
NN-58621-L3100	40 mm	12.17
NN-58121-L1400	45 mm	14.35
NN-58242-L1400	65 mm	15.28
NN-30961-08012	80 mm	28.44

BUSHINGS

Part Number	Rod Dia.	List Price
NN-49521-FC000	60 mm	\$3.62

WIPERS

Part Number	Rod Dia.	List Price
NN-49524-L6004	25 mm	\$16.72
NN-58622-L1400	30 mm	7.79
NN-58222-01H01	32 mm	20.79
NN-58222-24H01	38 mm	28.39
NN-58622-L3100	40 mm	4.74
NN-58122-L1400	45 mm	5.80
NN-58017-L1300	50 mm	23.63
NN-58122-L1100	50 mm	6.58
NN-58017-L4900	55 mm	27.00
NN-58017-L6007	60 mm	29.26
NN-58122-L1300	60 mm	8.54
NN-58243-L1400	65 mm	9.10
NN-58453-L6000	65 mm	31.03
NN-58422-L1400	70 mm	9.49
NN-58243-L1100	80 mm	10.51

NISSAN

RAYMOND LIFT TRUCKS

RAYMOND

Kit Number	Code (Pg. x)	Rod X Bore Size	List Price	Kit Number	Code (Pg. x)	Rod X Bore Size	List Price
RAY-400-148-01	O-RING KIT		\$6.20	RAY-53072702	P-U-1	1-3/4	\$124.60
RAY-500-412-02	O-RING KIT		10.87	RAY-53073101	I-U-11	1-1/4 X 2-1/2	25.81
RAY-520-037-15	O-RING KIT		0.62	RAY-53073102	I-U-11	1-1/4 X 3	36.65
RAY-520-038-12	O-RING KIT		6.20	RAY-54004105	P-OB-10	3/4 X 1-3/4	48.04
RAY-520-041-01	O-RING KIT		5.81	RAY-540041105	P-OB-10	3/4 X 1-3/4	33.45
RAY-520-044-01	O-RING KIT		6.20	RAY-540-043-07	P-OB-10	3/4 X 1-3/4	43.11
RAY-520047004	P-U-10	3/4 X 1-3/4	39.46	RAY-540-046-05	P-OB-10	3/4 X 1-3/4	61.81
RAY-520-053-01	O-RING KIT		6.20	RAY-540-052-01	SEAL KIT		3.76
RAY-520-066-01	O-RING KIT		7.23	RAY-540-056-06	SEAL KIT		6.92
RAY-520-077-01	VALVE KIT		30.68	RAY-540067214	I-U-13	1-3/4 X 3-1/2	56.32
RAY-520-817-08	O-RING KIT		6.20	RAY-540113269	I-U-13	1-3/4 X 3-1/2	42.32
RAY-520-899-113	O-RING KIT		3.30	RAY-870-460-217	VALVE KIT		19.74
RAY-53072101	I-U-11	3/4 X 2-1/2	25.40	RAY-870-607-26	VALVE KIT		10.74
RAY-530-722-02	I-U-11	1 X 2-1/2	25.92				

REPLACEMENT KITS FOR TCM LIFT TRUCKS

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
TCM-20804-59801	P-U-10	25 X 60 mm	\$59.42
TCM-210F0-89804	P-U-4	35 X 45 mm	108.99
TCM-210F8-49804	P-U-4	35 X 46 mm	75.70
TCM-214A0-59801	P-U-10	75 X 90 mm	126.77
TCM-214A0-59821	P-U-1	35 X 45 mm	66.73
TCM-214A0-89804	P-U-4	40 X 50 mm	76.27
TCM-214A4-59801	P-U-10	25 X 50 mm	56.18
TCM-214A8-49804	P-U-4	40 X 50 mm	88.37
TCM-214A8-49812	P-U-4	40 X 50 mm	92.54
TCM-214A8-59801	P-U-5	32 X 71 mm	157.51
TCM-214J0-59812	P-U-1	40 X 50 mm	89.38
TCM-214J8-49804	P-U-4	45 X 55 mm	89.20
TCM-214T0-89811	P-U-4	50 X 60 mm	116.17
TCM-214T8-49801	P-U-4	50 X 60 mm	111.30
TCM-22438-49811	P-N-4	60 X 90 mm	106.13
TCM-22438-49812	P-N-4	60 X 90 mm	51.25
TCM-22438-59804	P-U-5	40 X 90 mm	172.16
TCM-224T8-49803	P-U-1	50 X 65 mm	95.18
TCM-22578-49801	P-N-4	45 X 63 mm	107.66
TCM-22580-89801	P-N-4	45 X 70 mm	76.27
TCM-22678-59801	P-U-5	32 X 80 mm	90.54
TCM-228C0-59801	P-U-1	112 X 130 mm	367.19
TCM-23460-89801	P-N-4	50 X 90 mm	85.57
TCM-234A8-49803	P-U-4	40 X 50 mm	64.05
TCM-234A8-59805	P-U-5	30 X 71 mm	114.60
TCM-234F8-49801	P-U-4	45 X 55 mm	68.76
TCM-23650-59801	P-U-1	35 X 45 mm	79.10
TCM-23650-59802	P-U-1	35 X 45 mm	61.59
TCM-23650-89802	P-U-1	40 X 50 mm	76.56
TCM-23650-89803	P-N-4	40 X 50 mm	65.74
TCM-23650-89822	P-U-1	75 X 90 mm	119.25
TCM-23650-89841	P-U-1	40 mm	52.29

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
TCM-23654-52201	I-U-10	25 X 60 mm	\$47.58
TCM-23658-59811	P-U-5	32 X 70 mm	117.30
TCM-23658-59813	P-U-5	32 X 70 mm	117.30
TCM-23678-59801	P-U-5	32 X 71 mm	106.65
TCM-24239-49801	P-N-4	38 X 45 mm	83.06
TCM-24239-49804	P-U-1	35 X 45 mm	81.68
TCM-24240-89801	P-U-1	70 X 80 mm	68.95
TCM-24248-59802	P-U-5	30 X 63 mm	151.42
TCM-24248-59807	P-U-5	30 X 63 mm	104.33
TCM-24328-59804	P-U-5	50 X 100 mm	172.71
TCM-24450-89803	P-U-1	85 mm	77.65
TCM-24450-89823	P-N-4	45 X 55 mm	78.00
TCM-24458-59812	P-U-10	32 X 71 mm	166.51
TCM-24469-49803	P-U-4	45 X 55 mm	53.88
TCM-24600-89902	P-U-1	50 X 60 mm	153.10
TCM-24608-59803	P-U-10	50 X 90 mm	152.60
TCM-25594-59802	P-U-10	22 X 50 mm	65.60
TCM-25954-59802	P-U-10	25 X 60 mm	47.34
TCM-26094-17161	VALVE KIT		10.05
TCM-27248-49801	P-N-4	50 X 80 mm	95.73
TCM-27390-59801	P-U-10	70 X 80 mm	137.54
TCM-27390-59902	P-U-1	32 mm Rod Kit	110.56
TCM-27410-89811	P-U-1	75 mm	63.86
TCM-277H8-59802	P-U-5	30 X 63 mm	104.52
TCM-27830-89802	P-U-10	85 X 100 mm	168.57
TCM-510F0-59801	P-U-1	32 X 45 mm	94.65
TCM-510F2-40601	P-U-10	40 X 70 mm	245.69
TCM-514A2-40552	P-U-10	50 X 80 mm	257.29
TCM-514A2-40554	P-U-10	50 X 80 mm	202.26
TCM-514A2-42631	VALVE KIT		10.25
TCM-52486-09811	VALVE KIT		23.99

TCM

PISTON SEALS FOR TCM EQUIPMENT

Part Number	Bore Diam.	List Price
TCM-24458-50311	71 mm	\$27.45

TOYOTA LIFT TRUCKS

TOYOTA

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
TOY-04431-30091-71	P-U-5	60 X 90 mm	\$240.49
TOY-04433-10010-71	P-U-10	40 X 60 mm	99.85
TOY-04433-10020-71	P-U-10	40 X 60 mm	62.55
TOY-04433-10101-71	I-U-10	40 X 60 mm	65.67
TOY-04433-20011-71	I-U-10	50 X 75 mm	193.80
TOY-04433-20030-71	I-U-10	50 X 80 mm	166.15
TOY-04433-U1010-71	I-U-10	40 mm X 2-3/8 in	49.72
TOY-04433-U2040-71	I-U-10	50 mm X 3	47.22
TOY-04433-U2050-71	I-U-10	50 mm X 3-1/8 in	185.14
TOY-04433-U3010-71	I-U-10	50 mm X 3-1/8 in	185.14
TOY-04451-10070-71	P-V-12	22 X 40 mm	69.60
TOY-04451-10090-71	P-V-12	22 X 40 mm	77.01
TOY-04451-10120-71	P-U-12	22 X 45 mm	71.81
TOY-04451-20100-71	P-V-12	22 X 50 mm	77.30
TOY-04451-20101-71	P-U-12	22 X 50 mm	82.42
TOY-04451-20170-71	P-V-12	22 X 50 mm	78.18
TOY-04451-20171-71	P-U-12	22 X 50 mm	78.49
TOY-04455-U2010-71	OVERHAUL STEER KIT		74.16
TOY-04456-10020-71	P-U-10	22 X 50 mm	50.97
TOY-04456-10031-71	P-U-5	30 X 55 mm	152.22
TOY-04456-10050-71	P-U-12	22 X 45 mm	64.92
TOY-04456-20010-71	P-U-12	22 X 40 mm	74.28
TOY-04456-20020-71	P-U-12	22 X 40 mm	69.74
TOY-04456-20030-71	N-U-12	22 X 50 mm	58.99
TOY-04456-20060-71	I-U-12	22 X 50 mm	33.87
TOY-04456-30010-71	P-U-1	25 X 55 mm	54.59
TOY-04456-30011-71	P-U-12	25 X 55 mm	73.36
TOY-04651-10060-71	P-N-4	50 X 80 mm	67.13
TOY-04651-10132-71	P-U-5	30 X 80 mm	89.77
TOY-04651-10330-71	P-U-5	30 X 70 mm	70.74
TOY-04651-10333-71	P-U-5	30 X 70 mm	104.40
TOY-04651-10334-71	P-U-5	30 X 70 mm	104.40
TOY-04651-10652-71	P-U-4	50 X 65 mm	107.16
TOY-04651-10662-71	P-U-4	50 X 65 mm	107.16
TOY-04651-10671-71	P-U-1	70 mm Rod Kit	90.73
TOY-04651-10870-71	P-U-1	70 X 80 mm	103.44
TOY-04651-10871-71	P-U-1	70 mm Rod Kit	90.73
TOY-04651-10882-71	P-U-5	30 X 70 mm	104.40
TOY-04651-10892-71	P-U-5	30 X 70 mm	104.40
TOY-04651-11032-71	P-U-1	35 X 50 mm	63.54
TOY-04651-11061-71	P-U-4	40 X 50 mm	74.56
TOY-04651-11250-71	P-U-1	75 X 90 mm	153.39
TOY-04651-11261-71	P-U-1	35 X 50 mm	63.18
TOY-04651-11270-71	P-U-1	75 X 90 mm	154.90
TOY-04651-11271-71	P-U-1	75 mm Rod Kit	97.32
TOY-04651-11290-71	P-U-4	40 X 50 mm	74.15
TOY-04651-11291-71	P-U-4	40 X 50 mm	73.69
TOY-04651-11300-71	N-U-4	50 X 65 mm	79.59
TOY-04651-11390-71	P-U-4	40 X 50 mm	79.80
TOY-04651-20132-71	P-U-1	60 X 70 mm	112.17
TOY-04651-20133-71	P-U-4	60 X 70 mm	124.52
TOY-04651-20141-71	P-U-4	50 X 70 mm	91.60
TOY-04651-20142-71	P-U-4	50 X 70 mm	104.29
TOY-04651-20151-71	P-V-5	30 X 70 mm	164.53
TOY-04651-20182-71	P-U-4	60 X 75 mm	108.24
TOY-04651-20184-71	P-U-1	75 X 90 mm	111.42
TOY-04651-20185-71	P-U-1	75 X 90 mm	111.42

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
TOY-04651-20186-71	P-U-1	75 X 90 mm	\$154.90
TOY-04651-20260-71	P-U-1	50 X 70 mm	73.38
TOY-04651-20262-71	P-U-1	50 X 70 mm	92.71
TOY-04651-20262-71	P-U-1	50 X 70 mm	92.71
TOY-04651-20390-71	P-U-4	50 X 70 mm	110.31
TOY-04651-20400-71	P-U-4	60 X 70 mm	121.01
TOY-04651-20421-71	P-U-4	50 X 70 mm	105.50
TOY-04651-20441-71	P-U-5	30 X 70 mm	65.71
TOY-04651-20442-71	P-U-5	30 X 70 mm	104.40
TOY-04651-20841-71	P-U-1	75 X 90 mm	155.14
TOY-04651-20970-71	P-U-1	75 X 90 mm	154.90
TOY-04651-20971-71	P-U-1	75 mm Rod Kit	97.54
TOY-04651-20980-71	P-U-4	40 X 50 mm	60.67
TOY-04651-20992-71	P-U-1	35 X 50 mm	63.18
TOY-04651-21150-71	P-U-4	40 X 50 mm	61.13
TOY-04651-21151-71	P-U-4	40 X 50 mm	74.15
TOY-04651-21290-71	P-U-4	40 X 50 mm	61.13
TOY-04651-21310-71	P-U-1	35 X 50 mm	62.75
TOY-04651-21340-71	P-U-1	35 X 50 mm	63.18
TOY-04651-21350-71	P-U-4	40 X 50 mm	78.73
TOY-04651-30111-71	P-N-4	60 X 100 mm	85.17
TOY-04651-30170-71	P-U-5	40 X 100 mm	101.13
TOY-04651-30181-71	I-U-1	30 X 90 mm	96.22
TOY-04651-30211-71	P-N-4	60 X 80 mm	100.02
TOY-04651-30212-71	P-U-4	60 X 80 mm	104.40
TOY-04651-30561-71	P-U-4	60 X 80 mm	113.72
TOY-04651-30841-71	P-U-1	90 X 105 mm	139.82
TOY-04651-30842-71	P-U-1	90 X 105 mm	189.03
TOY-04651-30911-71	P-U-1	60 X 80 mm	99.80
TOY-04651-30920-71	P-U-4	60 X 80 mm	115.67
TOY-04651-30980-71	P-U-4	60 X 80 mm	80.25
TOY-04651-30991-71	P-U-5	40 X 100 mm	73.76
TOY-04651-31170-71	P-U-1	55 X 65 mm	88.43
TOY-04651-31180-71	P-U-4	50 X 65 mm	102.34
TOY-04651-31181-71	P-U-4	50 X 65 mm	93.37
TOY-04651-31210-71	P-U-1	90 X 105 mm	190.56
TOY-04651-31211-71	P-U-1	85 X 105 mm	229.19
TOY-04651-31220-71	P-U-1	40 X 60 mm	60.79
TOY-04651-31230-71	P-U-1	40 X 60 mm	61.22
TOY-04651-31240-71	P-U-1	55 X 65 mm	89.86
TOY-04651-31250-71	P-U-1	55 X 65 mm	90.29
TOY-04651-31280-71	P-U-4	50 X 65 mm	100.77
TOY-04651-31281-71	P-U-4	50 X 65 mm	91.83
TOY-04651-31282-71	P-U-4	50 X 65 mm	77.40
TOY-04651-31290-71	P-U-4	60 X 90 mm	113.49
TOY-04651-31302-71	P-U-1	95 mm Rod Kit	116.45
TOY-04651-31311-71	P-U-1	105 mm Rod Kit	117.74
TOY-04651-31410-71	P-U-1	45 X 65 mm	76.64
TOY-04651-31420-71	P-U-1	45 X 65 mm	78.18
TOY-04651-31430-71	P-U-1	55 X 65 mm	90.73
TOY-04651-31440-71	P-U-1	55 X 65 mm	87.34
TOY-04651-31450-71	P-U-4	70 X 90 mm	142.66
TOY-04651-31500-71	P-U-4	45 X 55 mm	78.83
TOY-04651-31510-71	P-U-4	45 X 55 mm	78.38
TOY-04651-31520-71	P-U-4	45 X 55 mm	79.92
TOY-04651-31530-71	P-U-4	45 X 55 mm	77.09
TOY-04651-31800-71	P-U-4	55 X 80 mm	92.33

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TOYOTA LIFT TRUCKS

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
TOY-04651-31810-71	P-U-4	55 X 80 mm	\$86.17
TOY-04651-31820-71	P-U-5	70 X 120 mm	227.45
TOY-04651-31830-71	P-U-5	70 X 110 mm	69.38
TOY-04652-10020-71	P-U-1	70 X 80 mm	145.61
TOY-04652-10030-71	P-U-1	70 X 80 mm	145.61
TOY-04652-10170-71	P-U-1	70 mm Rod Kit	75.66
TOY-04652-10191-71	P-U-1	70 X 85 mm	53.01
TOY-04652-10300-71	P-U-10	50 X 70 mm	97.13
TOY-04652-20031-71	P-U-1	75 X 90 mm	118.41
TOY-04652-20040-71	P-U-1	75 X 90 mm	110.56
TOY-04652-30010-71	P-U-1	90 X 105 mm	141.47
TOY-04652-30011-71	P-U-1	85 X 105 mm	138.61
TOY-04652-30020-71	P-U-1	40 X 60 mm	61.22
TOY-04652-30030-71	P-U-1	40 X 60 mm	60.79
TOY-04652-30040-71	P-U-1	50 X 70 mm	81.10
TOY-04652-30050-71	P-U-1	50 X 70 mm	82.68
TOY-04652-30131-71	P-U-1	85 X 105 mm	138.31
TOY-04652-30132-71	P-U-1	85 X 105 mm	80.21
TOY-04652-30150-71	P-U-1	85 X 105 mm	130.31
TOY-04652-U1020-71	I-U-4	2 X 2-3/4	131.60
TOY-04652-U2010-71	I-U-4	50 X 75 mm	116.27
TOY-04652-U2020-71	I-U-4	2" X 75 mm	101.92
TOY-04653-10020-71	P-U-4	35 X 45 mm	71.27
TOY-04653-10030-71	P-U-4	35 X 45 mm	70.50
TOY-04653-10040-71	P-U-4	35 X 45 mm	71.27
TOY-04653-10050-71	P-U-4	35 X 45 mm	70.84
TOY-04653-10060-71	P-U-1	35 X 50 mm	64.51
TOY-04653-10170-71	P-U-1	35 mm	37.34
TOY-04653-10500-71	P-U-1	35 X 45 mm	30.59
TOY-04653-10530-71	P-U-4	35 X 45 mm	27.31
TOY-04653-20071-71	P-U-4	40 X 50 mm	79.80
TOY-04653-20081-71	P-U-4	40 X 50 mm	80.34
TOY-04653-20090-71	P-U-1	35 X 50 mm	68.78
TOY-04653-20100-71	P-U-1	35 mm Rod Kit	59.79
TOY-04653-20110-71	P-U-1	35 X 50 mm	45.77
TOY-04653-20130-71	P-U-1	40 X 50 mm	61.51
TOY-04653-20230-71	P-U-4	50 X 63 mm	45.34
TOY-04653-30010-71	P-U-1	55 X 65 mm	88.88
TOY-04653-30020-71	P-U-1	55 X 65 mm	88.88
TOY-04653-30030-71	P-U-1	115 mm Rod Kit	175.32
TOY-04653-30050-71	P-U-5	45 X 55 mm	77.40
TOY-04653-30060-71	P-U-4	45 X 55 mm	79.47
TOY-04653-30111-71	P-U-1	90 mm	42.99
TOY-04653-30211-71	P-U-4	45 X 55 mm	76.75
TOY-04653-30221-71	P-U-4	45 X 55 mm	83.75
TOY-04653-30230-71	P-U-1	40 X 55 mm	77.09
TOY-04653-30231-71	P-U-1	40 X 55 mm	48.53
TOY-04653-30240-71	P-U-1	40 X 55 mm	69.74
TOY-04653-30310-71	P-U-3	50 X 70 mm	40.86
TOY-04653-U1010-71	I-U-1	32 mm X 1-3/4	32.76
TOY-04653-U1011-71	I-U-1	32 mm X 1-3/4	77.82
TOY-04653-U2010-71	I-U-4	1-3/8 X 2	55.02
TOY-04653-U3010-71	I-U-1	40 mm X 2-1/8	32.76
TOY-04654-10020-71	P-U-4	35 X 45 mm	71.39
TOY-04654-10030-71	P-U-4	35 X 45 mm	70.84
TOY-04654-20020-71	P-U-1	40 X 50 mm	61.51
TOY-04654-30020-71	P-U-4	45 X 55 mm	111.15

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
TOY-04654-30030-71	P-U-4	45 X 55 mm	\$108.88
TOY-04654-U1010-70	I-U-4	1-3/8 X 1-3/4	34.70
TOY-04654-U1010-71	I-U-1	1-3/8 X 1-3/4	34.70
TOY-04654-U3010-71	I-U-4	45 X 55 mm	58.07
TOY-04655-20030-71	P-U-5	30 X 70 mm	93.70
TOY-04655-20080-71	P-U-5	30 X 70 mm	63.12
TOY-04655-20090-71	I-U-13	30 X 70 mm	199.44
TOY-04655-30040-71	P-U-5	40 X 90 mm	110.40
TOY-04655-30041-71	P-U-5	40 X 90 mm	119.48
TOY-04655-30300-71	P-U-5	45 X100 mm	83.41
TOY-04655-U1010-71	I-U-10	30 X 70 mm	161.03
TOY-04655-U2010-71	I-U-10	1-1/4 X 2-3/4	85.86
TOY-04655-U3010-71	I-U-10	1-1/4 X 3	96.52
TOY-04671-20380-71	VALVE KIT		21.36
TOY-04671-20390-71	VALVE KIT		49.70
TOY-04676-20370-71	VALVE KIT		19.35
TOY-04676-20380-71	VALVE KIT		23.25
TOY-04676-20421-71	VALVE KIT		14.44
TOY-04676-20431-71	VALVE KIT		16.42
TOY-04676-20441-71	VALVE KIT		15.96
TOY-04676-20491-71	VALVE KIT		13.72
TOY-04676-20501-71	VALVE KIT		14.44
TOY-04676-20511-71	VALVE KIT		15.28
TOY-04676-20521-71	VALVE KIT		16.61
TOY-04676-20560-71	VALVE KIT		15.74
TOY-04676-20570-71	VALVE KIT		30.75
TOY-04676-20580-71	VALVE KIT		15.28
TOY-04676-20590-71	VALVE KIT		13.42
TOY-04676-20600-71	VALVE KIT		18.33
TOY-04676-20680-71	VALVE KIT		11.36
TOY-04676-20690-71	VALVE KIT		18.37
TOY-04676-20700-71	VALVE KIT		16.41
TOY-04676-20722-71	VALVE KIT		13.59
TOY-04676-20742-71	O-RING KIT		16.96
TOY-04676-30311-71	VALVE KIT		12.55
TOY-04676-30312-71	VALVE KIT		13.42
TOY-04676-30313-71	VALVE KIT		11.26
TOY-04676-30331-71	VALVE KIT		16.61
TOY-04676-30332-71	VALVE KIT		13.61
TOY-04676-30341-71	VALVE KIT		44.77
TOY-04676-30342-71	VALVE KIT		20.35
TOY-04676-30620-71	VALVE KIT		15.73
TOY-04676-30920-71	VALVE KIT		15.45
TOY-04676-30930-71	VALVE KIT		14.30
TOY-04676-30940-71	VALVE KIT		19.36
TOY-04676-30950-71	VALVE KIT		19.44
TOY-04676-30970-71	VALVE KIT		12.56
TOY-04676-30980-71	VALVE KIT		10.36
TOY-04676-30990-71	VALVE KIT		24.85
TOY-04676-31000-71	VALVE KIT		14.15
TOY-04676-31010-71	VALVE KIT		16.45
TOY-04676-31020-71	VALVE KIT		22.17
TOY-04676-31161-71	VALVE KIT		10.01
TOY-04676-31171-71	O-RING KIT		13.59
TOY-04676-U2010-71	VALVE KIT		26.49

TOYOTA

REPLACEMENT PARTS FOR TOYOTA EQUIPMENT

NOTE: Toyota part numbers are used as a reference only. We do not imply that these kits are original REPLACEMENT PARTS.

O-RINGS

Part Number	Min Pkg Qty	List Price
TOY-65592-U2200-71	20	\$0.23

U-SEALS

Part Number	Rod Dia.	List Price
TOY-77167-20100-71	80 mm	\$32.09

WIPERS

Part Number	Rod Dia.	List Price
TOY-65575-31620-71	40 mm	\$21.56

PISTON BUSHINGS

Part Number	Bore Dia.	List Price
TOY-65254-14180-71	90 mm	\$101.91

WHITE LIFT TRUCK

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
WLT-20-7300283	I-U-4	1-3/4 X 4	\$60.66
WLT-20-7302715	I-U-10	1-1/2 X 3-1/2	33.81
WLT-30-3305457	P-U-10	1-1/2 X 3-1/2	33.76

TOYOTA - WHITE

YALE LIFT TRUCKS

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
YA-066414600	4-1/16 Rod Wiper		\$17.94
YA-5001689-04	4-1/16 ID Vee Set		47.52
YA-502566003	I-N-8	2-1/2 X 3-1/2	119.52
YA-502566004	I-N-8	2 X 3-1/2	114.20
YA-503130000	P-V-4	2 X 3-1/4	57.94
YA-504236229	P-U-10	2-1/8 X 2-3/4	69.19
YA-504236245	P-U-10	1-3/8 X 3	37.39
YA-504853000	I-U-5	1-1/4 X 3	85.11
YA-504857000	I-N-8	2-1/4 X 4	50.76
YA-5048620	I-N-8	1-3/4 X 2-1/2	24.22
YA-505136003	I-N-8	2-1/2 X 3-1/2	49.04
YA-505136004	I-N-8	2 X 3-1/2	40.99
YA-505136007	I-U-1	1-5/8 X 2-1/4	19.34
YA-505136008	I-U-1	1-5/16 X 2-1/4	18.93
YA-505136009	I-U-1	3-1/4" Rod	28.86
YA-505136010	I-U-1	1-7/8 X 2-1/2	18.20
YA-505136012	I-U-11	1-7/8 X 2-1/4	56.93
YA-505136013	I-U-1	2-5/8 Rod Kit	20.76
YA-505136014	I-U-1	3-3/4 Rod Kit	27.24
YA-505136015	I-U-10	2-5/8 X 3	86.67
YA-505136027	I-U-1	1-5/8 X 2	23.70
YA-505136028	i-u-4	1-3/8 x 2	77.75
YA-505136031	I-U-1	3 X 3-3/4	29.67
YA-505136035	I-U-4	1-3/8 X 2	48.52
YA-505136036	I-U-4	1-5/8 X 2	40.88
YA-505136037	I-U-12	1-3/8 X 2	50.36
YA-505136040	I-U-4	1-5/8 X 1-7/8	45.42
YA-505136059	I-U-1	1-1/4 X 1-3/4	23.66
YA-505142000	I-V-1	3-3/8, 4-1/16 Stages	96.33
YA-505143000	I-V-1	2-1/2, 3 Stages	68.83
YA-505163001	Rod Kit		15.17

Kit Number	Code (Pg. xiv)	Rod X Bore Size	List Price
YA-506785001	I-N-8	2-1/4 X 4	\$175.41
YA-506787001	I-N-8	2-3/4 X 4-1/2	186.75
YA-506788001	I-N-8	2-3/4 X 4-1/2	81.47
YA-507016002	I-V-5	1-1/2 x 4	67.80
YA-509753000	I-V-12	1 X 2	31.91
YA-510078000	I-U-5	1 X 2-1/2	42.22
YA-510398000	I-V-1	2-1/4, 3, 3-3/4 Stages	145.43
YA-510659001	I-V-2	1-1/4 X 3-1/2	38.20
YA-512944003	I-U-10	1 X 2	20.62
YA-513355800	O-ring Kit		4.04
YA-514527000	I-V-1	3, 3-3/4 Stages	90.06
YA-515229000	I-U-4	2-1/4 X 3-3/4	44.04
YA-516149002	I-U-11	1 X 2	27.79
YA-516149005	I-U-11	1 X 2	22.21
YA-516149006	I-U-11	1-1/8 X 2-1/2	27.43
YA-5178128-17	Shaft Kit		1.86
YA-518617001	I-V-10	1-1/4 X 2-1/2	68.74
YA-519132600	I-U-5	1-3/4 X 3-1/2	48.18
YA-519675801	O-RING KIT		7.32
YA-580026957	P-U-10	2-1/8 X 2-3/4	33.47
YA-580060036	P-U-10	2-1/8 X 2-3/4	51.27
YA-900299851	65 mm, 80 mm 2 Stage		50.64
YA-900847850	P-U-10	25 X 60 mm	45.65
YA-900879850	I-U-3	35 X 80 mm	18.94
YA-901115850	P-U-1	32 mm Rod Kit	43.02
YA-9012238-07	P-U-10	40 X 70 mm	70.24
YA-9017888-10	P-U-10	35 X 70 mm	55.26
YA-9019058-52	P-U-10	35 X 65 mm	84.84
YA-9022018-50	Shaft Kit		12.44

YALE

NOTES**NOTES**

Repair Accessories

Contents Page

Plastic Cap Plugs	198 -202
Bolted Split Flange Protectors	202
Face and Thread Seals	203 - 204
Connector Rings	205
Wave Springs and Carbon Steel Shims	206 - 207
Lock Nuts	208 - 209
Self Aligning Bearings	210 - 211
Set Screws and Wind-In Lock Wires	212
Nylon and Filter Vent Plugs, Manual Bleeder Valves	212
Steel Plugs and Vents	213
Port Plugs	214
Split Tension Bushings	215
Adhesives and Seal Lube	216
PTFE and Silicone Tape	217
Grease Fittings and Caps	217
Cotter Pins	217
Couplings	218

PLASTIC CAP PLUGS

CAP PLUG APPLICATION CHART

CAP-	NPT		INCH THREAD		METRIC THREAD	
	CAPS	PLUGS	CAPS	PLUGS	CAPS	PLUGS
00				10/32	M2,M2.5	M5
0				1/4	M3,M3.5	M6
1				5/16	M5	M8x1
1-X					M6	
2			15/64	3/8	M7	M10x1.25
2-X		1/8				
3				7/16	M8x1	M12
3-X			3/8			M12x1.25
4	1/8	1/4		1/2	M10x1.25	M14
4-X			7/16			M14x1.5
5			1/2	9/16		
5-X					M12x1.25	M16
6	1/4			5/8		
6-X		3/8	9/16			M18
7			5/8		M14x1.5	M18x1.5
7-X						
8				3/4		M20
8-X	3/8				M16x1.5	M20x1.5
9		1/2				M22
9-X			3/4			M22x1.5
10				7/8	M18x1.5	M24
11	1/2					M24x2
11-X			7/8		M20x1.5	
12		3/4				
12-X				1-1/16	M22x1.5	M27x2
13	3/4				M24x2	
13-X			1-1/16			M30x2
14		1			M27x2	M33
17		1-1/4			M36x3	
17-S				1-5/8		
18	1-1/4		1-5/8	1-3/4	M39x3	
19		1-1/2		1-7/8		
20	1-1/2		1-7/8			
20-S						
21						
220						
230			2-1/4			
24-S		2				
240	2					
250			2-1/2			

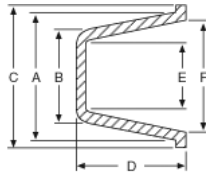


This style cap plug is equipped with a handy fold-down pull ring.

Tapered Caps & Plugs With Pull Ring

Part Number	NPT Port Size	OD Size Tapered	HT	Min Std Pkg	List Price
CAP-PR-9	1/8	.337/.375	1/4	50	\$0.12
CAP-PR-12	1/4	.436/.475	1/4	50	0.36
CAP-PR-17	3/8	.552/.615	3/8	50	0.21
CAP-PR-22	1/2	.668/.767	1/2	40	0.23
CAP-PR-27X	3/4	.878/.977	1/2	40	0.26
CAP-PR-32	1	1.113/1.212	1/2	25	0.29
CAP-PR-39	1-1/4	1.505/1.580	1/2	25	0.37
CAP-PR-43	1-1/2	1.780/1.860	1/2	20	0.41
CAP-PR-50	2	2.226/2.258	1/2	20	0.51

PLASTIC CAP PLUGS



Tapered Caps & Plugs For Misc. Applications

Part Number	A	B	C	D	E	F	List Price
CAP-00	.180	.115	5/16	13/32	.051	.118	\$0.26
CAP-0	.240	.175	3/8	3/8	.109	.175	0.39
CAP-0-X	0.275	0.209	7/16	3/8	0.150	0.209	0.08
CAP-1	.302	.240	15/32	3/8	.175	.240	0.28
CAP-1-X	.335	.265	15/32	3/8	.240	.275	0.28
CAP-2	.365	.300	17/32	3/8	.234	.301	0.28
CAP-3	.428	.360	19/32	3/8	.299	.365	0.24
CAP-3-X	.460	.390	5/8	3/8	.325	.396	0.28
CAP-4-X	.512	.447	5/8	3/8	.385	.448	0.05
CAP-5	.547	.490	23/32	1/2	.409	.485	0.05
CAP-5-X	.568	.500	3/4	7/16	.435	.503	0.06
CAP-6	.620	.531	3/4	1/2	.468	.555	0.05
CAP-6A-X	0.576	0.500	0.720	0.470	0.440	0.516	0.09
CAP-7	.675	.590	7/8	17/32	.520	.605	0.06
CAP-7-X	.695	.610	27/32	1/5	.549	.634	0.08
CAP-8	.728	.641	7/8	1/2	.575	.665	0.06
CAP-8-X	.754	.675	7/8	5/8	.615	.690	0.06
CAP-9-X	.925	.725	1	3/4	.662	.760	0.06
CAP-10	.848	.750	1-1/32	5/8	.686	.785	0.06
CAP-11	.910	.802	1-3/32	3/4	.740	.846	0.21
CAP-11-X	.931	.820	1-1/8	5/8	.754	.868	0.06
CAP-12A-X	0.973	0.856	1-1/8	3/4	0.768	0.906	0.16
CAP-13	1.091	.966	1-1/4	3/4	.902	1.025	0.21
CAP-13-X	1.145	1.002	1-5/16	3/4	.938	1.079	0.08
CAP-14-X	1.285	1.180	1-7/16	3/4	1.105	1.215	0.65
CAP-16A-X	1.312	1.276	1.380	0.560	1.155	1.190	0.23
CAP-17A-X	1.507	1.344	1-3/4	15/16	1.282	1.450	0.25
CAP-18	1.680	1.560	1-7/8	3/4	1.497	1.620	0.18
CAP-20	1.958	1.806	2.125	1	1.745	1.893	0.71
CAP-20-X	2.310	1.940	2.470	0.880	1.875	2.255	0.43
CAP-21	2.078	1.902	2-1/4	1	1.839	2.015	0.29
CAP-38	1.045	.980	1-1/4	1/2	.916	.984	0.28
CAP-220	2.132	1.980	2-1/4	1	1.915	2.068	0.29
CAP-230	2.330	2.156	2-5/8	1	2.094	2.264	0.80
CAP-240	2.465	2.300	2-5/8	1	2.235	2.400	0.37
CAP-250	2.605	2.395	2-5/8	1	2.331	2.541	0.39

Tapered Caps & Plugs For NPT Style Ports

Part Number	NPT Port Size	OD Size Tapered	HT	Min Std Pkg	List Price
CAP-2-X	1/8	.330/.396	3/8	50	\$0.08
CAP-4	1/4	.419/.485	3/8	50	0.08
CAP-6-X	3/8	.550/.631	7/16	50	0.12
CAP-9	1/2	.690/.788	9/16	50	0.12
CAP-12	3/4	.870/.975	5/8	120	0.06
CAP-12-X	3/4	.915/1.040	11/16	25	0.23
CAP-14	1	1.094/1.215	3/4	25	0.23
CAP-15	1	1.225/1.355	3/4	3	0.40
CAP-15-X	1	1.235/1.350	3/4	25	0.26
CAP-17	1-1/4	1.450/1.600	3/4	60	0.12
CAP-17-S	1-1/4	1.513/1.600	1/2	25	0.97
CAP-19	1-1/2	1.735/1.870	3/4	25	0.40
CAP-20-S	1-1/2	1.781/1.805	3/8	25	0.26
CAP-24-S	2	2.230/2.260	1/2	20	0.32

MCAP Tapered Caps & Plugs For Misc. Applications



Part Number	A mm	B mm	C mm	D mm	E mm	F mm	List Price
CAP-M10X1	13.00	11.35	15.88	10.32	9.78	11.38	\$0.05
CAP-M12X1	14.43	12.70	19.05	11.11	11.05	12.78	0.06
CAP-M12X1.5	14.63	12.70	18.29	11.94	11.18	13.11	0.09
CAP-M14X1.5	17.15	14.99	22.23	13.49	13.21	15.37	0.06
CAP-M16X1.5	19.15	17.15	22.23	15.88	15.62	17.53	0.06
CAP-M18X1.5	21.54	19.05	26.19	15.88	17.42	19.74	0.06
CAP-M20X1.5	24.71	21.74	28.58	19.05	19.51	23.01	0.16
CAP-M22X1.5	26.42	22.73	29.37	19.05	21.13	24.77	0.23
CAP-M25X1.5	29.08	25.45	33.34	19.05	23.83	27.41	0.08
CAP-M26X1.5	29.08	25.45	33.34	19.05	23.83	27.41	0.08
CAP-M27	31.12	29.19	38.50	19.05	26.37	29.97	0.23
CAP-M28X1.5	32.81	29.59	36.10	19.05	27.69	30.61	0.65
CAP-M30X2	33.32	32.41	35.05	14.22	29.34	30.23	0.23
CAP-M35	38.53	34.14	44.45	23.81	32.56	36.83	0.25
CAP-M39	42.49	39.62	47.63	19.05	38.02	41.15	0.18
CAP-M4	6.99	5.31	11.11	9.53	3.81	5.31	0.08
CAP-M42X2	44.45	40.79	49.21	19.05	39.83	42.80	0.59
CAP-M45	49.73	45.87	53.98	25.40	44.32	48.08	0.71
CAP-M48	58.67	49.28	62.74	22.35	47.63	57.28	0.43
CAP-M5	7.67	6.1	11.91	9.53	4.45	6.1	0.28
CAP-M6	8.51	6.73	11.91	9.53	5.18	6.99	0.28
CAP-M8X1	10.87	9.14	15.08	9.53	7.59	9.27	0.24

PLASTIC CAP PLUGS



**Female Threaded Cap Plugs
for J.I.C. Fittings**

Part Number	Std Thread Size	O.D. Size Tube	Dash Size	Min Std Pkg	List Price
CAP-G-2	7/16-20	1/4	#4	20	\$0.23
CAP-G-8	9/16-18	3/8	#6	20	0.23
CAP-G-14	3/4-16	1/2	#8	20	0.26
CAP-G-18	7/8-14	5/8	#10	20	0.26
CAP-G-20	7/8-18	5/8	#10	20	0.57
CAP-G-22	1-1/16-12	3/4	#12	20	0.32
CAP-G-25	1-3/16-12	7/8	#14	20	0.37
CAP-G-27	1-5/16-12	1	#16	20	0.37



Flat Face Fitting Caps

Part Number	Tube Size OD	Thread Size	Min Std Pkg	List Price
CAP-PDF-40	1/4	9/16-18	25	\$0.36
CAP-PDF-60	3/8	11/16-16	25	0.32
CAP-PDF-80	1/2	13/16-16	25	0.36
CAP-PDF-100	5/8	1-14	20	0.38
CAP-PDF-120	3/4	1-3/16-12	20	0.46
CAP-PDF-160	1	1-7/16-12	10	2.09



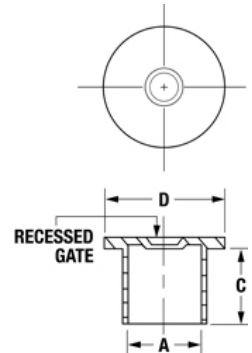
O-Ring Face Fitting Caps

These low density polyethylene caps are designed to fit female o-ring face seals.

Part Number	Thread Size	Min Std Pkg	List Price
CAP-OR-4	9/16-18	35	\$0.24
CAP-OR-6	11/16-16	25	0.27
CAP-OR-8	13/16-16	25	0.30
CAP-OR-10	1-14	25	0.37
CAP-OR-12	1-3/16-12	25	0.39
CAP-OR-16	1-7/16-12	15	0.89
CAP-OR-20	1-11/16-12	10	1.49



Unlike tear-tab closures that can only be used once, the CAP-PO series is designed to be reused. Specifically designed to protect straight threads with or without o-rings, this unique design is also ideal for use on a variety of thread forms and non-threaded fittings.



Straight Threaded Cap Plugs

Part Number	Min Std Pkg	To Cap Thread size	A	C	D	List Price
CAP-PO-20	25	7/16"	0.428	0.47	0.69	\$0.39
CAP-PO-30	25	1/2"	0.49	0.47	0.75	0.54
CAP-PO-40	25	9/16"	0.55	0.50	0.81	0.57
CAP-PO-50	25	11/16"	0.676	0.50	0.94	0.62
CAP-PO-55	25	-	0.721	0.67	1.00	0.65
CAP-PO-60	25	3/4"	0.738	0.67	1.00	0.65
CAP-PO-70	25	13/16"	0.802	0.56	1.06	0.68
CAP-PO-80	25	7/8"	0.864	0.66	1.12	0.70
CAP-PO-90	25	1.00"	0.99	0.66	1.25	0.73
CAP-PO-100	15	1-1/16"	1.051	0.75	1.31	0.78
CAP-PO-110	15	1-3/16"	1.175	0.75	1.44	0.95
CAP-PO-120	15	1-5/16"	1.298	0.75	1.56	1.07
CAP-PO-130	15	1-7/16"	1.426	0.75	1.69	1.32
CAP-PO-140	10	1-5/8"	1.12	0.85	1.88	1.46

**Cap Plug Assortment Kits
Also Available -
See the Kit & Tool Section**

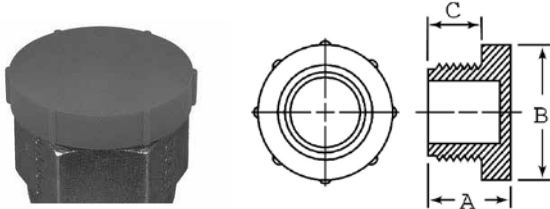
PLASTIC CAP PLUGS


Male Threaded Pipe Plugs (Sq. Top)

Part Number	NPT Port Size	Thread Size	Min Std Pkg	List Price
CAP-P-18	1/8	0.364	25	\$0.12
CAP-P-28	1/4	0.477	25	0.23
CAP-P-38	3/8	0.612	25	0.26
CAP-P-48	1/2	0.758	25	0.26
CAP-P-68-H	3/4	0.968	25	0.29
CAP-P-88-H	1	1.214	20	1.16
CAP-TP-13	1-1/4	1.557	5	2.02
CAP-TP-15	1-1/2	1.796	5	2.02


**Male Threaded Cap Plugs
for Flared J.I.C. Fittings**

Part Number	Std Thread Size	OD Size Tube	Dash Size	Min Std Pkg	List Price
CAP-PD-40	7/16-20	1/4	#4	25	\$0.38
CAP-PD-50	1/2-20	5/16	#5	25	0.38
CAP-PD-60	9/16-18	3/8	#6	25	0.23
CAP-PD-80	3/4-16	1/2	#8	25	0.23
CAP-PD-100	7/8-14	5/8	#10	25	0.26
CAP-PD-120	1-1/16-12	3/4	#12	25	0.26
CAP-PD-140	1-3/16-12	7/8	#14	20	0.39
CAP-PD-160	1-5/16-12	1	#16	20	0.39
CAP-PD-200	1-5/8-12	1-1/4	#20	15	0.48
CAP-PD-220	1-3/4-12	1-3/8	#22	10	1.23
CAP-PD-240	1-7/8-12	1-1/2	#24	10	1.11


Miscellaneous - MCAP- TP

Part Number	To Fit Metric Thread Size	A		B		C		Min Std Pkg	List Price
		in	mm	in	mm	in	mm		
MCAP-TP-M8X1	M8 x 1	0.562	14.27	0.484	12.29	0.374	9.50	10	\$0.67
MCAP-TP-M10X1	M10 x 1	0.574	14.58	0.602	15.29	0.409	10.39	10	0.93
MCAP-TP-M12X1	M12 x 1	0.657	16.69	0.728	18.49	0.421	10.69	10	0.99
MCAP-TP-M12X1.5	M12 x 1.5	0.641	16.28	0.657	16.69	0.342	8.69	10	1.15
MCAP-TP-M14X1.5	M14 x 1.5	0.677	17.20	0.728	18.49	0.374	9.50	10	1.22
MCAP-TP-M16X1.5	M16 x 1.5	0.677	17.20	0.866	22.00	0.492	12.50	10	1.19
MCAP-TP-M18X1.5	M18 x 1.5	0.720	18.29	0.960	24.38	0.539	13.69	10	1.25
MCAP-TP-M20X1.5	M20 x 1.5	0.716	18.19	1.035	26.29	0.551	14.00	10	1.19
MCAP-TP-M22X1.5	M22 x 1.5	0.720	18.29	1.110	28.19	0.539	13.69	10	1.19
MCAP-TP-M24X1.5	M24 x 1.5	0.728	18.49	1.232	31.29	0.543	13.79	10	1.37
MCAP-TP-M25X1.5	M25 x 1.5	0.728	18.49	1.232	31.30	0.551	14.00	5	1.51
MCAP-TP-M26X1.5	M26 x 1.5	0.736	18.69	1.287	32.69	0.543	13.79	5	1.53
MCAP-TP-M52X1.5	M52 x 1.5	0.846	21.50	2.508	63.70	0.610	15.50	5	5.01

PLASTIC CAP PLUGS



These low density polyethylene caps protect the faces of split flange connectors

Split Flange Coupling Caps - SAE CODE 61

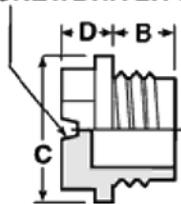
Part Number	Flange Size	Cap Size	Min Std Pkg	List Price
CAP-SF-8	1/2	1.19	50	\$0.12
CAP-SF-10	5/8	1.35	50	0.18
CAP-SF-12	3/4	1.50	50	0.21
CAP-SF-16	1	1.75	35	0.23
CAP-SF-20	1-1/4	2.00	35	0.24
CAP-SF-24	1-1/2	2.38	25	0.37
CAP-SF-32	2	2.81	15	0.49
CAP-SF-40	2-1/2	3.31	15	0.70

Split Flange Coupling Caps - SAE CODE 62

Part Number	Flange Size	Cap Size	Min Std Pkg	List Price
CAP-HPSF-8	1/2	1.25	10	\$1.24
CAP-HPSF-12	3/4	1.625	10	1.39
CAP-HPSF-16	1	1.87	10	1.43
CAP-HPSF-20	1-1/4	2.125	10	1.47
CAP-HPSF-24	1-1/2	2.5	10	1.67
CAP-HPSF-32	2	3.125	10	1.66



SCREWDRIVER SLOT



Threaded O-Ring Plugs

Part Number	Std Thread Size	B	C	D	Min Std Pkg	List Price
CAP-TF-9-OR	9/16-18	0.35	0.81	0.19	10	\$1.50
CAP-TF-12-OR	3/4-16	0.44	0.89	0.18	10	1.58

BOLTED SPLIT FLANGE PROTECTORS



3,000 PSI Flanges SAE Code 61

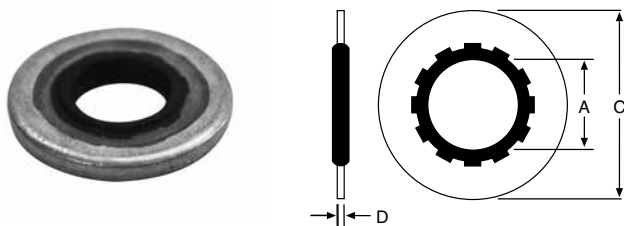
Part Number	Port Size	Min Std Pkg	List Price
CAP-8218	1/2	10	\$1.50
CAP-8219	3/4	10	1.53
CAP-8220	1	10	1.64
CAP-8221	1-1/4	10	1.74
CAP-8222	1-1/2	10	1.85
CAP-8223	2	10	2.04
CAP-8224	2-1/2	10	2.04

5,000 PSI Flanges SAE Code 62

Part Number	Port Size	Min Std Pkg	List Price
CAP-XP-075	3/4	10	\$1.53
CAP-XP-100	1	10	1.64
CAP-XP-125	1-1/4	10	1.74
CAP-XP-150	1-1/2	10	1.85
CAP-XP-200	2	10	2.04

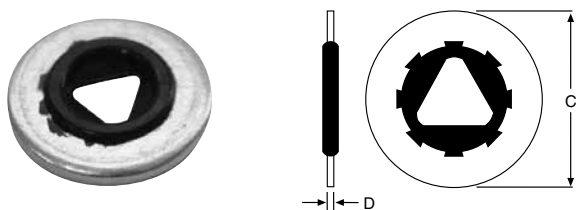
**Cap Plug Assortment Kits
Also Available -
See the Kit & Tool Section**

STYLE 110 FACE SEALS



Part Number	Max Screw Size	A Rubber I.D.	B Steel I.D.	C Steel O.D.	D Steel Thick.	List Price
DY-110X8	.164	.156	.255	.385	.041	\$1.41
DY-110X10	.177	.180	.317	.443	.050	1.96
DY-110X3/16	.190	.220	.281	.425	.054	3.84
DY-110X7/32	.216	.246	.307	.455	.054	13.56
DY-110X1/4	.250	.240	.381	.505	.054	2.27
DY-110X5/16	.312	.301	.488	.603	.054	2.27
DY-110X3/8	.375	.368	.546	.666	.054	2.27
DY-110X7/16	.437	.427	.618	.760	.054	5.80
DY-110X1/2	.500	.490	.696	.880	.054	6.44
DY-110X9/16	.562	.552	.759	1.067	.054	6.44
DY-110X5/8	.625	.615	.818	1.193	.054	7.88

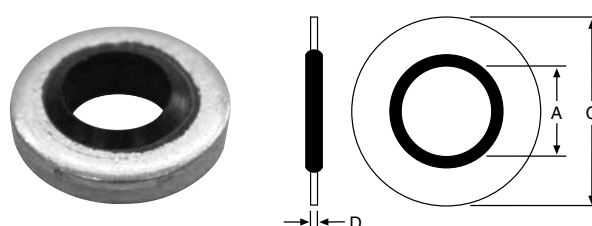
THREAD SEAL



Thread seals provide a positive seal directly against the threads of a bolt. Self-centering and easily installed.

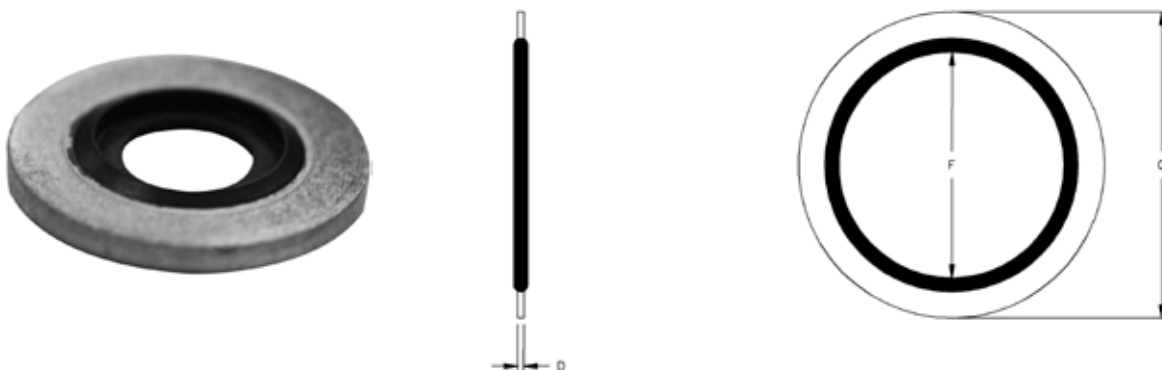
Part Number	C	D	Thread Size	List Price
TS7500X10	.469	.051	-10	\$2.96
TS7500X1/4	.562	.051	1/4	2.96
TS7500X5/16	.687	.064	5/16	3.69
TS7500X3/8	.750	.064	3/8	3.84
TS7500X7/16	.906	.078	7/16	5.39
TS7500X1/2	1.000	.078	1/2	11.88
TS7500X7/8	1.562	.109	7/8	19.45

STYLE SB FACE SEALS



Part Number	A	C	D	List Price
DY-SB-001	.115	.250	.048	\$1.98
DY-SB-002	.157	.286	.048	1.98
DY-SB-003	.205	.330	.051	1.54
DY-SB-004	.270	.520	.051	1.54
DY-SB-005	.270	.525	.048	2.18
DY-SB-006	.322	.525	.048	2.18
DY-SB-007	.340	.560	.051	1.58
DY-SB-020A	.408	.625	.083	1.68
DY-SB-008	.443	.723	.083	1.68
DY-SB-009	.460	.750	.083	1.70
DY-SB-225	.531	.866	.059	1.74
DY-SB-021B	.541	.810	.083	1.70
DY-SB-010	.585	.875	.083	1.86
DY-SB-022BB	.625	.875	.083	1.88
DY-SB-011	.650	1.000	.083	1.91
DY-SB-023C	.680	.937	.083	1.94
DY-SB-012	.715	1.000	.097	1.94
DY-SB-024CC	.775	1.060	.097	2.13
DY-SB-025D	.848	1.125	.097	2.40
DY-SB-026E	.925	1.250	.097	2.63
DY-SB-013	.955	1.310	.097	4.60
DY-SB-027F	1.065	1.375	.097	3.20
DY-SB-240	1.083	1.417	.07	3.27
DY-SB-028	1.095	1.520	.097	4.15
DY-SB-014	1.150	1.440	.092	4.54
DY-SB-029G	1.213	1.500	.097	4.83
DY-SB-015	1.280	1.630	.128	5.19
DY-SB-031	1.329	1.685	.092	5.70
DY-SB-030H	1.334	1.685	.133	4.87
DY-SB-016	1.410	1.750	.133	11.17
DY-SB-032J	1.690	2.062	.103	9.33
DY-SB-033K	1.907	2.307	.103	10.81
DY-SB-019	2.030	2.500	.128	16.95
DY-SB-034	2.161	2.750	.133	18.27
DY-SB-036	2.385	2.875	.133	15.27
DY-SB-038	2.625	3.130	.133	24.51
DY-SB-039	2.995	3.550	.133	27.47

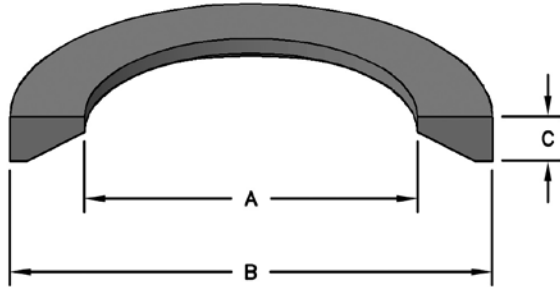
STYLE SB-SCR FACE SEALS



Part Number	F Self-Centralizing	C	D	List Price
DY-SB-004-SCR	0.185	0.520	0.048	\$1.54
DY-SB-005-SCR	0.185	0.525	0.048	2.18
DY-SB-006-SCR	0.240	0.525	0.048	2.18
DY-SB-007-SCR	0.240	0.560	0.048	1.58
DY-SB-020A-SCR	0.337	0.625	0.080	1.68
DY-SB-008-SCR	0.337	0.723	0.080	1.68
DY-SB-009-SCR	0.346	0.750	0.080	1.70
DY-SB-021B-SCR	0.451	0.810	0.080	1.70
DY-SB-010-SCR	0.456	0.875	0.080	1.86
DY-SB-022BB-SCR	0.476	0.875	0.080	1.88
DY-SB-023C-SCR	0.589	0.937	0.080	1.94
DY-SB-012-SCR	0.571	1.000	0.098	1.94
DY-SB-024CC-SCR	0.622	1.060	0.098	2.13
DY-SB-025D-SCR	0.734	1.125	0.098	2.40
DY-SB-026E-SCR	0.811	1.250	0.098	2.63
DY-SB-013-SCR	0.795	1.310	0.098	4.60
DY-SB-027F-SCR	0.950	1.375	0.098	3.20
DY-SB-028-SCR	0.902	1.520	0.098	4.15
DY-SB-014-SCR	0.941	1.440	0.098	4.54
DY-SB-031-SCR	1.193	1.685	0.098	5.70
DY-SB-029G-SCR	1.098	1.500	0.098	4.83
DY-SB-015-SCR	1.067	1.630	0.126	5.19
DY-SB-030H-SCR	1.193	1.685	0.126	4.87
DY-SB-016-SCR	1.161	1.750	0.126	11.17

DIN 3869 CONNECTOR RINGS

DIN 3869 profile rings are axially static soft seals in combination with threaded elements. They are molded from elastomers used for sealing threaded tube connections and fittings. Most common application, construction machinery, hydraulic presses, injection machines, etc. The DIN3869 is offered in two materials, an NBR 85 Shore A (black finish), and FKM 80 Shore A (green finish).



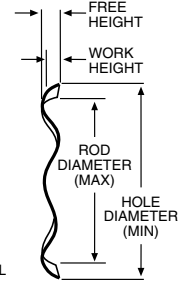
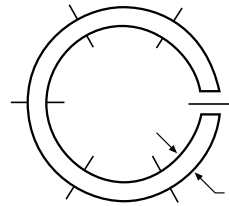
SEAL INFORMATION

MATERIAL	COLOR	TEMP RANGE
85A NBR	BLACK	-30° TO +100° C -22° TO +212° F
VITON (FKM)	GREEN	-20° TO +200° C -4° TO +392° F

Part Number	Nominal Size	Thread	A Inside Diameter	B Outside Diameter	C Height	Package Quantity	List Price
DIN3869-M8X1	8	M8 x 1	6.50	9.90	1.00	5	\$1.44
DIN3869-M10X1	10	M10 x 1	8.40	11.90	1.00	5	0.87
DIN3869-M12X1.5	12	M12 x 1.5	9.80	14.40	1.50	5	0.87
DIN3869-M14X1.5	14	M14 x 1.5	11.60	16.50	1.50	5	1.13
DIN3869-M16X1.5	16	M16 x 1.5	13.80	18.90	1.50	5	1.13
DIN3869-M17X1.5	17	M17 x 1.5	14.70	18.90	1.50	5	1.13
DIN3869-M18X1.5	18	M18 x 1.5	15.70	20.90	1.50	5	1.23
DIN3869-M20X1.5	20	M20 x 1.5	17.80	22.90	1.50	5	1.44
DIN3869-M21X1.5	21	M21 x 1.5	18.50	23.90	1.50	5	1.69
DIN3869-M22X1.5	22	M22 x 1.5	19.60	24.30	1.50	5	1.71
DIN3869-M27X2	27	M27 x 2	23.90	29.20	2.00	5	1.64
DIN3869-M30X2	30	M30 x 2	27.70	32.70	2.00	2	3.42
DIN3869-M33X2	33	M33 x 2	29.70	35.70	2.00	2	1.03
DIN3869-M42X2	42	M42 x 2	38.80	45.80	2.00	2	1.70
DIN3869-M48X2	48	M48 x 2	44.70	50.70	2.00	2	2.17
DIN3869-M8X1-V	8	M8 x 1	6.50	9.90	1.00	5	3.13
DIN3869-M10X1-V	10	M10 x 1	8.40	11.90	1.00	5	3.13
DIN3869-M12X1.5-V	12	M12 x 1.5	9.80	14.40	1.50	5	5.13
DIN3869-M14X1.5-V	14	M14 x 1.5	11.60	16.50	1.50	5	5.13
DIN3869-M16X1.5-V	16	M16 x 1.5	13.80	18.90	1.50	2	2.62
DIN3869-M18X1.5-V	18	M18 x 1.5	15.70	20.90	1.50	2	2.85
DIN3869-M20X1.5-V	20	M20 x 1.5	17.80	22.90	1.50	2	3.65
DIN3869-M21X1.5-V	21	M21 x 1.5	18.50	23.90	1.50	2	3.87
DIN3869-M22X1.5-V	22	M22 x 1.5	19.60	24.30	1.50	2	3.99
DIN3869-M27X2-V	27	M27 x 2	23.90	29.20	2.00	2	4.22
DIN3869-M30X2-V	30	M30 x 2	27.70	32.70	2.00	2	7.18

WAVE SPRINGS

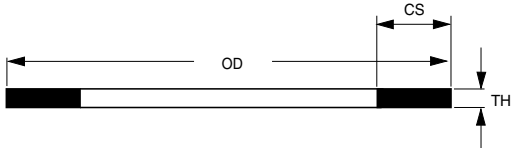
Wave Springs offer a convenient method of exerting a pre-load on vee packing where little or no adjustment is available. Because of a low fatigue factor, the spring should provide a proper pre-load throughout the life of the packing.



Part Number	WORK HEIGHT	FREE HEIGHT	E ROD DIAMETER	HOLE DIAMETER	RADIAL WALL	List Price
SSR-0112	.078	.130	.840	1.125	.133	\$12.27
SSR-0125	.078	.150	.960	1.250	.133	4.64
SSR-0150	.078	.170	1.170	1.500	.143	4.93
SSR-0175	.078	.140	1.440	1.750	.143	4.93
SSR-0187	.078	.150	1.560	1.875	.143	4.93
SSR-0200	.093	.140	1.680	2.000	.150	5.36
SSR-0225	.093	.170	1.930	2.250	.150	5.67
SSR-0237	.093	.160	1.990	2.375	.178	5.85
SSR-0250	.093	.170	2.120	2.500	.178	6.15
SSR-0262	.093	.190	2.240	2.625	.178	6.15
SSR-0275	.109	.170	2.340	2.750	.188	6.77
SSR-0300	.109	.190	2.590	3.000	.188	7.24
SSR-0312	.109	.210	2.710	3.120	.188	7.18
SSR-0325	.109	.200	2.750	3.250	.233	7.78
SSR-0350	.109	.230	3.000	3.500	.233	14.50
SSR-0362	.109	.240	3.120	3.625	.233	14.78
SSR-0375	.109	.260	3.250	3.750	.233	9.13
SSR-0400-N	.109	.200	3.570	4.000	.188	26.83
SSR-0425	.109	.210	3.740	4.250	.233	28.78
SSR-0462	.109	.230	4.125	4.625	.233	11.23
SSR-0475	.125	.310	4.240	4.750	.233	34.79
SSR-0512	.125	.340	4.610	5.125	.233	40.29

CARBON STEEL SHIMS

These carbon steel shims are commonly used with vee packing sets to fill the empty space in a gland.



Part Number	A Nom. ID	B Nom. OD	C Nom. Ht	RADIAL WALL	List Price
SSRS-0150	1.2	1-1/2	.024	.150	\$1.98
SSRS-0175	1.45	1-3/4	.024	.150	1.98
SSRS-0200	1.7	2	.024	.150	2.76
SSRS-0237	2.019	2-3/8	.024	.178	4.12
SSRS-0312	2.749	3-1/8	.03	.188	2.63
SSRS-0375	3.284	3-3/4	.03	.233	3.11

GRADE C LOCKNUTS

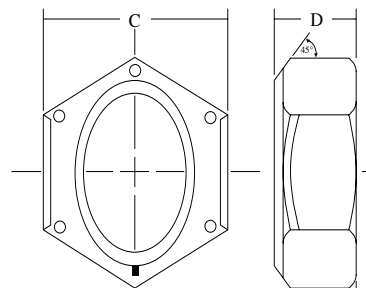
These fine-threaded Grade C locknuts are formed from medium carbon, heat-treated steel and are designed to be used with a Grade 8 bolt. Smaller size locknuts employ an automation style collar while the larger ones use a full collar design. Both locknut types are stocked with cadmium and wax plating.

Automation Style

Part Number	Size	Thread Pitch	C Width Across Flats		D Overall Thickness		List Price
			Max	Min	Max	Min	
LN-1/2-13	1/2	13	0.7500	0.736	0.510	0.490	\$0.97
LN-1/2-20	1/2	20	0.752	0.741	0.609	0.579	0.58
LN-1-14	1	14	1.5020	1.450	0.887	0.831	4.84
LN-3/4-16	3/4	16	1.1250	1.088	0.665	0.617	2.91
LN-5/8-18	5/8	18	0.9375	0.922	0.645	0.621	1.39
LN-7/8-14	7/8	14	1.3145	1.269	0.922	0.724	3.85
LN-7/16-20	7/16	20	0.627	0.616	0.468	0.438	2.50



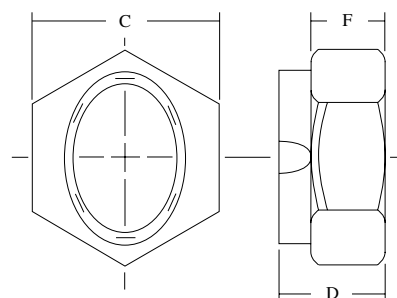
Automation Style



Full Collar Style

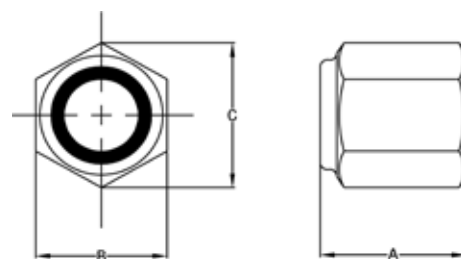
Part Number	Size	Thread Pitch	C Width Across Flats		D Overall Thickness		F Hex Height		List Price
			Max	Min	Max	Min	Max	Min	
LN-1-1/2-12	1-1/2	12	2.250	2.175	1.317	1.246	0.885	0.843	\$25.64
LN-1-1/4-12	1-1/4	12	1.876	1.812	1.094	1.030	0.719	0.698	15.47
LN-1-1/8-12	1-1/8	12	1.687	1.631	0.999	0.939	0.657	0.636	12.52
LN-1-3/4-12	1-3/4	12	2.625	2.538	1.540	1.460	1.012	0.989	47.00
LN-1-3/8-12	1-3/8	12	2.062	1.994	1.206	1.138	0.795	0.771	22.93
LN-2-12	2	12	3.000	2.900	1.763	1.675	1.158	1.134	104.15
LN-2-1/2-12	2-1/2	12	3.750	3.625	2.193	2.089	1.930	1.840	125.90

Full Collar Style



Part Number	Bar Size	A	B	C	List Price
CM-LN45050	1/2"-20	0.60	0.75	0.84	\$4.46
CM-LN45062	5/8"-18	0.75	0.94	1.06	9.64
CM-LN45075	3/4"-16	0.88	1.06	1.19	19.41
CM-LN45087	7/8"-14	1.00	1.25	1.40	10.69
CM-LN45100	1"-14	1.06	1.44	1.62	14.48
CM-LN45101	1"-14	0.88	1.62	1.83	17.25
CM-LN45112	1-1/8"-12	1.19	1.62	1.83	19.87
CM-LN45126	1-1/4"-12	1.38	1.81	2.06	23.11
CM-LN45151	1-1/2"-12	1.62	2.19	2.44	30.36
CM-LN45152	1-1/2"-12	0.81	2.19	2.44	23.84
CM-LN45175	1-3/4"-12	1.50	2.75	3.06	58.43
CM-LN45200	2"-12	1.62	3.12	3.50	62.37
CM-LN45225	2-1/4"-12	1.94	3.50	3.94	132.81
CM-LN45226	2-1/4"-12	2.81	3.50	3.94	181.85
CM-LN45250	2-1/2"-12	2.25	4.00	4.50	287.96

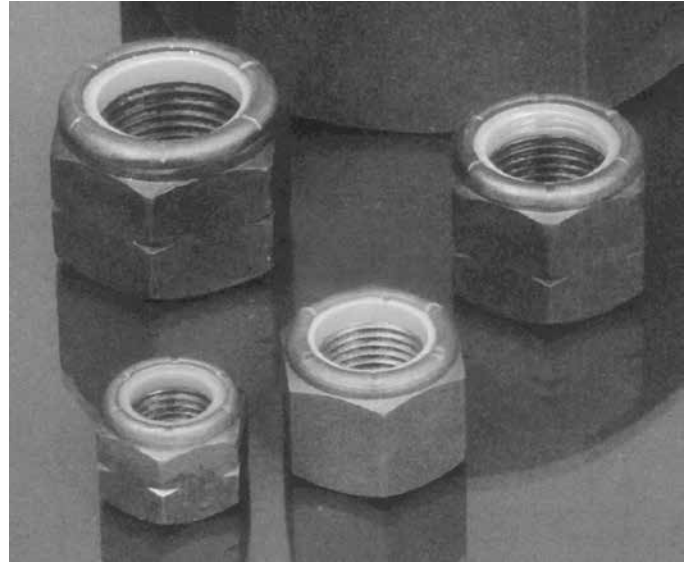
Nylon Insert Lock Nut



“NYLON INSERT” LOCKING NUTS

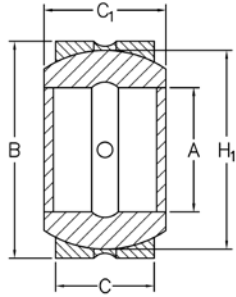
Manufactured from the finest quality steel to offer superior strength, Hercules® Sealing Products locking nuts with nylon inserts are specifically designed and manufactured to exact dimensions. The high temperature locking inserts are designed to withstand the high temperatures associated with close tolerance performance applications.

Part Number	Thread Size & Pitch	Height	Flats	List Price
CTC-2J0564	2 - 12	1-5/8	3-1/8	\$62.37
CTC-2J3247	1-3/4 - 12	1-7/16	2-3/4	58.43
CTC-2J3950	1-1/2 - 12	1-5/16	2-3/8	40.17
CTC-2J6384	1-1/4 - 12	1-1/8	2	35.79
CTC-2J7686	2-1/2 - 12	2-3/16	4	287.96
CTC-3J6899	2-1/4 - 12	2-13/16	3-1/2	181.85
CTC-3J9449	2-1/2 - 12	2-5/8	4	269.14
CTC-3J9545	2 - 12	2-7/16	3-1/8	167.37
CTC-4J6888	2-3/4 - 12	2-1/4	4	170.13
CTC-4J8734	2-3/4 - 12	3-1/8	4	325.28
CTC-5J3488	2-1/4 - 12	1-15/16	3-1/2	132.81
CTC-5J5731	1-3/4 - 12	1-7/16	2-1/2	37.46
CTC-7J9250	3-1/4 - 12	3-1/8	4-1/2	347.84
CTC-9X6018	4 - 12	3.73	5.62	730.11
CTC-1438149	M48 × 2	50 mm	75 mm	155.51
CTC-1438150	M56 × 2	56 mm	85 mm	163.43
CTC-1336686	M56 × 2	57 mm	80 mm	178.70
CTC-1475835	M64 × 2	63 mm	95 mm	219.68
CTC-7Y4622	M72 × 2	70 mm	105 mm	387.68
CTC-7Y4695	M80 × 2	76 mm	115 mm	388.82
CTC-1232060	M80 × 2	64 mm	115 mm	275.66
CTC-1232112	M90 × 2	76 mm	130 mm	487.92
CTC-7Y4956	M90 × 2	84 mm	130 mm	465.60
CTC-0875385	M95 × 2	88 mm	135 mm	579.86
CTC-1261971	M100 × 2	89 mm	146 mm	798.31
CTC-1163513	M105 × 2	97 mm	150 mm	921.39
CTC-1163516	M120 × 2	108 mm	170 mm	1,107.49



*Grade N8 (Grade C equivalent) or non-heat treated micro-alloy steel.

STYLE HH SELF ALIGNING BEARINGS (INCH)



SEAL INFORMATION

MATERIAL

CARBON
CHROMIUM STEEL
 SUFFIX:
 2RS = SEALED BEARINGS

REPAIR ACCESSORIES

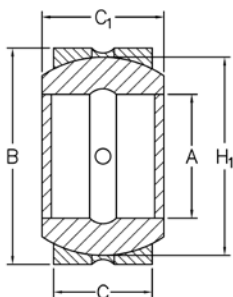
Part Number	A Nom. ID	B Nom. OD	C Nom. Ht	C ₁ OVERALL HEIGHT	G HOUSING DIAMETER	H ₁ BEARING GROOVE DIAMETER	Static Radial Load (lbs)	Dynamic Radial Load (lbs)	MATERIAL	List Price
HH008ES	1/2	7/8	3/8	.437	.875 ^{+0.000} _{-0.008}	.709	9337	3156	STEEL	\$22.86
HH010ES	5/8	1-1/16	15/32	.547	1.0625 ^{+0.000} _{-0.008}	.899	14732	4864	STEEL	25.14
HH012ES	3/4	1-1/4	9/16	.656	1.250 ^{+0.000} _{-0.001}	1.083	20927	7089	STEEL	23.64
HH100ES	1	1-5/8	3/4	.875	1.625 ^{+0.000} _{-0.001}	1.417	37359	12605	STEEL	20.58
HHW100ES	1	1-5/8	1-1/2	1.500	1.625 ^{+0.000} _{-0.001}	1.417	37351	12604	STEEL	25.82
HH104ES	1-1/4	2	15/16	1.093	2.000 ^{+0.000} _{-0.0012}	1.772	58507	19468	STEEL	29.70
HH106ES	1-3/8	2-3/16	1-1/32	1.187	2.1875 ^{+0.000} _{-0.0012}	1.929	69756	23404	STEEL	44.96
HH108ES	1-1/2	2-7/16	1-1/8	1.312	2.4375 ^{+0.000} _{-0.0012}	2.165	84379	28129	STEEL	38.87
HH108ES2RS	1-1/2	2-7/16	1-1/8	1.312	2.4375 ^{+0.000} _{-0.0012}	2.165	84379	28129	STEEL	51.80
HH112ES	1-3/4	2-13/16	1-5/16	1.531	2.8125 ^{+0.000} _{-0.0012}	2.520	114752	38255	STEEL	53.35
HH112ES2RS	1-3/4	2-13/16	1-5/16	1.531	2.8125 ^{+0.000} _{-0.0012}	2.520	114752	38255	STEEL	67.05
HH200ES	2	3-3/16	1-1/2	1.750	3.1875 ^{+0.000} _{-0.0014}	2.874	150754	50408	STEEL	72.40
HH200ES2RS	2	3-3/16	1-1/2	1.750	3.1875 ^{+0.000} _{-0.0014}	2.874	150754	50408	STEEL	86.88
HHW200ES	2	3-3/16	3	3.000	3.1875 ^{+0.000} _{-0.0014}	2.874	150757	50406	STEEL	82.00
HH204ES	2-1/4	3-9/16	1-11/16	1.969	3.5625 ^{+0.000} _{-0.0014}	3.228	191251	63002	STEEL	99.07
HH204ES2RS	2-1/4	3-9/16	1-11/16	1.969	3.5625 ^{+0.000} _{-0.0014}	3.228	191251	63002	STEEL	135.20
HH208ES	2-1/2	3-15/16	1-7/8	2.187	3.9375 ^{+0.000} _{-0.0014}	3.583	234007	77629	STEEL	134.14
HH212ES	2-3/4	4-3/8	2-1/16	2.406	4.375 ^{+0.000} _{-0.0014}	3.937	285752	95628	STEEL	157.50
HH300ES	3	4-3/4	2-1/4	2.625	4.750 ^{+0.000} _{-0.0016}	4.331	337506	112505	STEEL	236.24
HH300ES2RS	3	4-3/4	2-1/4	2.625	4.750 ^{+0.000} _{-0.0016}	4.331	337506	112505	STEEL	281.52
HH308ES	3-1/2	5-1/2	2-5/8	3.062	5.500 ^{+0.000} _{-0.0016}	5.039	459001	153003	STEEL	419.15
HH308ES2RS	3-1/2	5-1/2	2-5/8	3.062	5.500 ^{+0.000} _{-0.0016}	5.039	459001	153003	STEEL	464.89
HH312ES	3-3/4	5-7/8	2-13/16	3.281	5.875 ^{+0.000} _{-0.0016}	5.394	531004	175507	STEEL	452.68
HH400ES	4	6-1/4	3	3.500	6.250 ^{+0.000} _{-0.0016}	5.748	596256	202508	STEEL	611.19

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STYLE MHH SELF ALIGNING BEARINGS (METRIC)



SEAL INFORMATION

MATERIAL

CARBON
CHROMIUM STEEL

SUFFIX:
2RS = SEALED BEARINGS

Part Number	A Nom. ID	B Nom. OD	C Nom. Ht	C ₁ OVERALL HEIGHT	G HOUSING DIAMETER	H ₁ BEARING GROOVE DIAMETER	Static Radial Load (lbs)	Dynamic Radial Load (lbs)	List Price
MHH20ES	20	35	12	16	35 ^{+0.000} _{-0.025}	29	32857	6759	\$28.83
MHH25ES	25	42	16	20	42 ^{+0.000} _{-0.025}	36	54003	10804	35.90
MHH25ES2RS	25	42	16	20	42 ^{+0.000} _{-0.025}	36	54003	10804	33.51
MHH30ES	30	47	18	22	47 ^{+0.000} _{-0.025}	41	69751	13951	38.00
MHH30ES2RS	30	47	18	22	47 ^{+0.000} _{-0.025}	41	69751	13951	47.54
MHH35ES	35	55	20	25	55 ^{+0.00} _{-0.03}	47	90008	18009	49.23
MHH35ES2RS	35	55	20	25	55 ^{+0.00} _{-0.03}	47	90008	18009	47.54
MHH40ES	40	62	22	28	62 ^{+0.00} _{-0.03}	53	112507	22501	54.33
MHH40ES2RS	40	62	22	28	62 ^{+0.00} _{-0.03}	53	112507	22501	46.63
MHH45ES2RS	45	68	25	32	68 ^{+0.00} _{-0.03}	60	144009	28578	83.89
MHH50ES	50	75	28	35	75 ^{+0.00} _{-0.03}	66	175509	35109	79.35
MHH50ES2RS	50	75	28	35	75 ^{+0.00} _{-0.03}	66	175509	35109	154.63
MHH60ES	60	90	36	44	90 ^{+0.000} _{-0.035}	80	274509	55128	122.54
MHH70ES2RS	70	105	30	49	105 ^{+0.000} _{-0.035}	92	351007	70876	154.63
MHH70ES	70	105	40	49	105 ^{+0.000} _{-0.035}	92	351007	70876	183.71
MHH80ES	80	120	45	55	120 ^{+0.000} _{-0.035}	105	450005	90008	200.52

SET SCREWS



These set screws are used on many cylinder headnuts. Use nylon plugs to ensure no damage to the headnut threads. All set screws employ Allen wrench heads.

Part Number	Thread Size	Length	List Price
SS-1/4-20X1/2	1/4-20	1/2	\$1.04
SS-1/4-20X3/8	1/4-20	3/8	1.22
SS-1/4-28X1/4	1/4-28	1/4	0.98
SS-1/4-28X3/8	1/4-28	3/8	0.98
SS-5/16-18X1/4	5/16-18	1/4	0.98
SS-5/16-18X3/8	5/16-18	3/8	0.98
SS-5/16-18X3/4	5/16-18	3/4	1.32
SS-5/16-24X5/16	5/16-24	5/16	0.42
SS-5/16-24X3/8	5/16-24	3/8	1.32
SS-3/8-16X3/8	3/8-16	3/8	0.74
SS-3/8-16X1/2	3/8-16	1/2	1.04
SS-3/8-16X5/8	3/8-16	5/8	1.28
SS-3/8-16X7/8	3/8-16	7/8	1.48
SS-1/2-13X1/2	1/2-13	1/2	1.73
SS-1/2-13X5/8	1/2-13	5/8	2.01
SS-#8-32X1/4	#8-32	1/4	2.33
SS-#10-24X1/4	#10-24	1/4	0.98

NYLON PLUGS



These nylon plugs are used with headnut set screws to ensure that there is no damage to the headnut threads.

Part Number	Diameter	Length	List Price
NYPLUG-125-125	1/8	1/8	\$0.78
NYPLUG-125-156	1/8	5/32	0.70
NYPLUG-125-875	1/8	7/8	1.31
NYPLUG-187-109	3/16	7/64	0.68
NYPLUG-187-187	3/16	3/16	0.68
NYPLUG-187-250	3/16	1/4	0.69
NYPLUG-250-070	1/4	0.070	0.83
NYPLUG-250-125	1/4	1/8	0.68
NYPLUG-250-187	1/4	3/16	0.68
NYPLUG-250-250	1/4	1/4	1.20
NYPLUG-312-125	5/16	1/8	0.68
NYPLUG-312-250	5/16	1/4	2.07
NYPLUG-312-312	5/16	5/16	1.95
NYPLUG-375-250	3/8	1/4	0.68
NYPLUG-500-875-125H	1/2	7/8	5.08

WIND-IN LOCK WIRES



Part Number	Thickness	Length	List Price
LW-093-1262	3/32 sq.	12-5/8	\$28.11
MARION-35240	1/8 sq.	10-1/4	12.99
MARION-35250	1/8 sq.	13-3/8	12.24
MARION-35260	1/8 sq.	16-3/8	12.46
MARION-35270	1/8 sq.	19-1/4	14.32
MARION-1031	3/16 sq.	21.00	20.83
1/8 RD WIRE	1/8 round	11	3.26

FILTER VENT PLUGS



These plugs are used to allow air to pass in and out of the non-pressurized end of a single-acting cylinder.

Part Number	NPT Port Size	List Price
FV-.125	1/8	\$4.88
FV-.250	1/4	6.61
FV-.375	3/8	7.98
FV-.500	1/2	9.59
FV-.750	3/4	14.75
FV-1.000	1	17.67

MANUAL BLEEDER VALVES



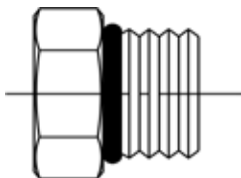
Part Number	Thread Size	Min Pkg Qty	List Price
WH705	1/8 NPT	3	\$5.49

STEEL PLUGS AND VENTS

Steel Plug (O-Ring Boss)



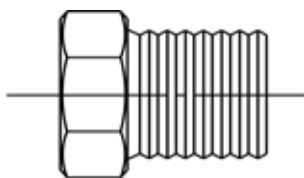
PART NUMBER	PORT SIZE	LIST PRICE
CM-74004	#4 SAE	\$2.74
CM-74005	#5 SAE	3.04
CM-74006	#6 SAE	3.26
CM-74008	#8 SAE	6.50
CM-74010	#10 SAE	5.48
CM-74012	#12 SAE	8.48
CM-74014	#14 SAE	19.96
CM-74016	#16 SAE	22.59
CM-74020	#20 SAE	27.74



NPT Steel Plug



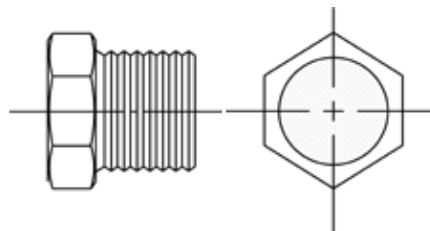
PART NUMBER	PORT SIZE	LIST PRICE
CM-74112	1/8" NPT	\$1.07
CM-74125	1/4" NPT	1.07
CM-74137	3/8" NPT	1.69
CM-74150	1/2" NPT	7.78
CM-74175	3/4" NPT	3.44
CM-74199	1" NPT	5.15
CM-74200	1-1/4" NPT	11.78



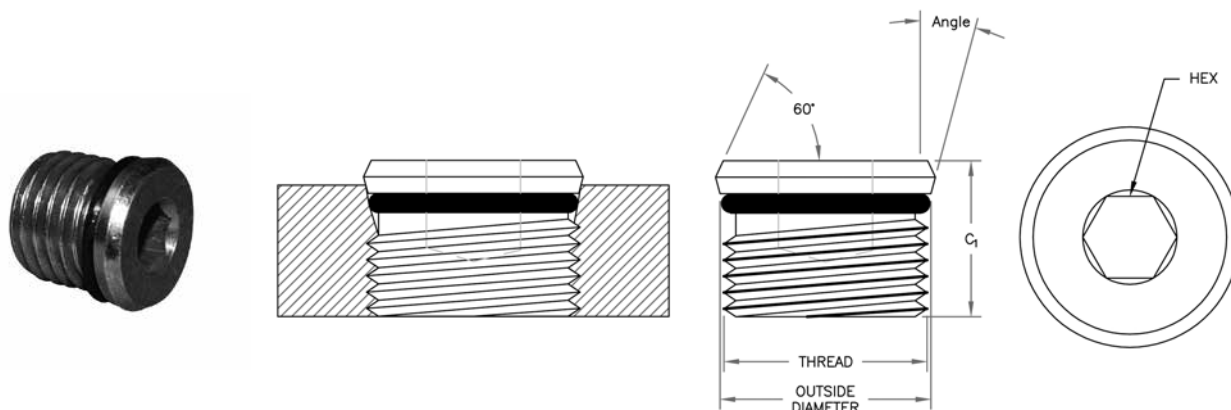
NPT Air Vent



PART NUMBER	PORT SIZE	LIST PRICE
CM-77002	1/8" NPT	\$4.88
CM-77004	1/4" NPT	6.61
CM-77006	3/8" NPT	7.98
CM-77008	1/2" NPT	9.59
CM-77010	3/4" NPT	14.75



ZERO-LEAK GOLD STANDARD THREAD PORT PLUGS

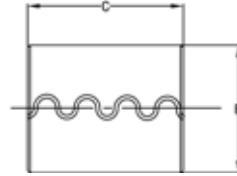


Part Number	SIZE NUMBER	C ₁ OVERALL HEIGHT	OUTSIDE DIAMETER	HEX	Angle	TESTED TORQUE (ft-lbs)	O-RING	THREAD	List Price
SHTPP-S04	4	.450 ±.020	.477 ±.003	.188 ^{+.005} / _{+.000}	12 ^{+0.0} / _{-0.5}	7	MOR-8X1.5	7/16-20 UNF	\$2.38
SHTPP-S06	6	.480 ±.020	.606 ±.003	.250 ^{+.005} / _{+.000}	12 ^{+0.0} / _{-0.5}	11	MOR-12.1X1.6	9/16-18 UNF	3.00
SHTPP-S08	8	.560 ±.020	.800 ±.003	.313 ^{+.005} / _{+.000}	15 ^{+0.0} / _{-0.5}	28	568-016	3/4-16 UNF	3.54
SHTPP-S10	10	.630 ±.020	.930 ±.003	.375 ^{+.005} / _{+.000}	15 ^{+0.0} / _{-0.5}	46	MOR-18X2	7/8-14 UNF	4.78
SHTPP-S12	12	.750 ±.020	1.130 ±.003	.563 ^{+.005} / _{+.000}	15 ^{+0.0} / _{-0.5}	51	MOR-22.3X2.4	1-1/16-12 UN	8.46
SHTPP-S16	16	.750 ±.020	1.385 ±.003	.625 ^{+.005} / _{+.000}	15 ^{+0.0} / _{-0.5}		MOR-27X2.5	1-5/16-12 UN	16.24

SPLIT TENSION BUSHINGS



Material: Hardened Spring Steel



PART NUMBER	A	B	C	HOUSING DIAMETER	LIST PRICE
CM-99507	0.75	1.00	2.00	1.002/1.006	\$13.40
CM-99508	0.88	1.00	2.00	1.002/1.006	12.89
CM-99510	1.00	1.25	0.75	1.252/1.256	8.43
CM-99514	1.00	1.25	0.88	1.252/1.256	10.75
CM-99511	1.00	1.25	1.00	1.252/1.256	9.43
CM-99513	1.00	1.25	1.25	1.252/1.256	12.48
CM-99512	1.00	1.25	1.50	1.252/1.256	11.16
CM-99519	1.25	1.50	1.25	1.502/1.506	9.93
CM-99522	1.25	1.50	1.50	1.502/1.506	14.12
CM-99521	1.25	1.50	2.00	1.502/1.506	15.62
CM-99531	1.50	1.75	1.50	1.752/1.756	12.43
CM-99533	1.50	1.75	2.00	1.752/1.756	16.85
CM-99535	1.50	1.75	3.00	1.752/1.756	25.38
CM-99534	1.50	1.88	2.00	1.877/1.881	28.61
CM-995335	1.50	1.75	2.50	1.752/1.756	23.82
CM-99537	1.50	2.00	1.25	2.002/2.006	23.24

PART NUMBER	A	B	C	HOUSING DIAMETER	LIST PRICE
CM-995371	1.50	2.00	2.00	2.002/2.006	\$30.84
CM-99540	1.75	2.00	1.25	2.002/2.006	16.08
CM-995375	1.75	2.00	1.50	2.002/2.006	19.68
CM-99538	1.75	2.00	2.00	2.002/2.006	18.13
CM-99539	1.75	2.00	2.25	2.002/2.006	27.60
CM-995410	1.75	2.00	3.00	2.002/2.006	33.71
CM-99541	1.75	2.25	2.00	2.252/2.256	37.81
CM-99546	2.00	2.38	3.00	2.377/2.381	51.21
CM-99549	2.00	2.25	1.50	2.252/2.256	17.35
CM-99550	2.00	2.25	2.50	2.252/2.256	22.32
CM-99547	2.00	2.50	2.00	2.502/2.506	38.22
CM-99545	2.00	2.50	2.50	2.502/2.506	49.93
CM-99556	2.50	3.00	2.00	3.002/3.006	54.76
CM-99557	2.50	3.00	3.00	3.002/3.006	92.02
CM-99565	3.00	3.50	2.50	3.502/3.506	91.34

LOCTITE



Threadlocker 242 locks fasteners 1/4" and larger yet allows easy disassembly with hand tools. Prevents rust and corrosion.

Part Number	Application	List Price
LOCTITE-24205	Removable Threadlocker 0.5 ml bottle	\$13.06
LOCTITE-24221	Removable Threadlocker 10 ml bottle	48.50
LOCTITE-24231	Removable Threadlocker 50 ml bottle	132.86
LOCTITE-27105	High Strength Threadlocker 0.5 ml bottle	8.93
LOCTITE-29021	Penetrating Threadlocker 10 ml bottle	68.37
LOCTITE-29031	Penetrating Threadlocker 50 ml bottle	150.63
LOCTITE-54531	Hyd/Pneum Thread Sealant 50 ml tube	159.21
LOCTITE-82325	Super Lube 3 oz tube	37.93

SEAL LUBE™

O-Ring Lubricant



Part Number: SEAL LUBE

List Price: \$23.34

Seal-Lube™ lubricant is a thick, clear, high viscosity silicone oil recommended for use with most seal compounds (except silicone) and a wide variety of hydraulic fluids. Insoluble in water, alcohol, petroleum oil and glycol, Seal-Lube™ can prolong seal life when applied prior to seal installation. Chemically inert and non-toxic, Seal-Lube™ retains its viscosity over a wide temperature range. The handy squeeze 2 ounce bottle dispenses just enough where you want it.

TURBO LOCK



Turbo Lock threadlocker adhesive series is an economical alternative to Loctite.

Part Number	Application	List Price
THREAD LOCKER-11-001	Removable Threadlocker 2 ml bottle	\$4.92
THREAD LOCKER-11-010	Removable Threadlocker 10 ml bottle	34.31
THREAD LOCKER-11-050	Removable Threadlocker 50 ml bottle	60.04
THREAD LOCKER-14-001	High Strength Threadlocker 2 ml bottle	4.92
THREAD LOCKER-14-250	High Strength Threadlocker 250 ml bottle	206.24
THREAD LOCKER-16-010	Penetrating Threadlocker 10 ml bottle	21.25
THREAD LOCKER-16-050	Penetrating Threadlocker 50 ml bottle	55.02

**Set Screw and Nylon Plug
Assortment Kits
Also Available -
See the Kits & Tools Section**

GREASE FITTINGS



Part Number	Description	List Price
GF-125NPTS	1/8" NPT STRAIGHT	\$1.08
GF-125NPT45	1/8" NPT 45°	2.17
GF-125NPT90	1/8" NPT 90°	2.17
GF-187DS	3/16" DRIVE STRAIGHT	0.93
GF-250-28S	1/4"-28 STRAIGHT	0.71
GF-250-28-45	1/4"-28 45°	1.92
GF-250-28-90	1/4"-28 90°	1.92
GF-312DS	5/16" DRIVE STRAIGHT	1.23

PTFE THREAD SEAL TAPE

Part Number: PTFE TAPE
List Price: \$3.03



1/2" Wide by 520" Roll

SILICONE TAPE



Used to create permanent seals for low pressure gas or liquid leaks in hydraulic hoses.
 Temperature Range: -62/+500° F

Part Number	Description	List Price
SILICONE TAPE	1" X 432" Roll	\$46.91

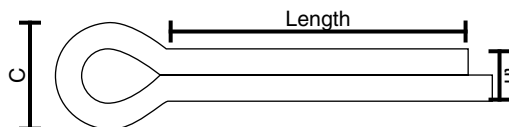
GREASE FITTING CAP



Low density polyethane cap plug for use with standard grease fittings.

Part Number	Description	List Price
CAP-GF-10	Cap Plug	\$0.21

COTTER PINS



Part Number	C	Length	th	List Price
CP-1X3/32	0.1875	1	0.082	\$0.43
CP-1-1/4X1/8	0.25	1.25	0.115	0.32
CP-1-1/2X5/32	0.3125	1.5	0.15	0.43
CP-1-3/4X3/16	0.39	1.75	0.1875	0.24
CP-2X3/16	0.375	2	0.176	0.53
CP-2X1/4	0.5	2	0.225	0.43
CP-2-1/2X1/8	0.25	2.5	0.115	0.32
CP-2-1/2X5/32	0.357	2.5	0.15625	0.52
CP-2-1/2X3/16	0.375	2.5	0.176	0.64
CP-2-1/2X1/4	0.5	2.5	0.225	0.59
CP-3X5/32	0.3125	3	0.15	0.55
CP-3X1/4	0.52	3	0.25	1.48
CP-3-1/2X1/4	0.5	3.5	0.225	0.82
CP-4X1/4	0.5	4	0.225	0.93
CP-5X1/4	0.5	5	0.225	2.94
CP-6X5/16	0.625	6	0.28	3.50

STYLE MCPL COUPLINGS

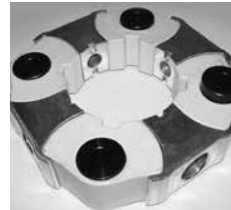
MCPL power transmission couplings are commonly found on mobile equipment to solve vibration problems in combustion engine driven equipment. The rubber or Hytrel elements effectively absorb shock loads, misalignment forces, and torsional vibrations generated by the connecting equipment at start-up for example. The coupling is axially connected to a PTO or flywheel on the engine side and radially connected to the driven equipment such as hydraulic pumps, generators, compressors, etc.



50H



110H



140H



50A

Part Number	ID X OD Dimensions	Material	Application	List Price
MCPL-110H-AL	100 X 222 mm	Plastic with Aluminum	Hitachi, Kato, etc.	\$516.31
MCPL-140H-AL	130 X 250 mm	Plastic with Aluminum	Komatsu, Kobelco, Kato, etc.	817.02
MCPL-50A-AL	107 X 200 mm	Rubber with Aluminum	Kobelco, Mitsubishi, etc.	383.98
MCPL-50H-AL	97 X 200 mm	Plastic with Aluminum	Komatsu, Hitachi, Kobelco, Mitsubishi, Kato, etc.	338.31

Cotter Pin and Grease Fitting Assortment Kits
Also Available -
See the Kits & Tools Section

Industrial Repair Parts

Contents

Page

Industrial Mounts	220 -223
Industrial Pins and Lock Nuts	224
Ports	225

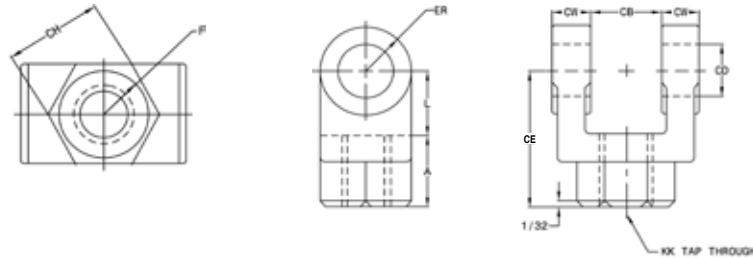
INDUSTRIAL MOUNTS



Rod Clevis

Material: 05, 07, 10
 Forging 13 & Up Ductile
 Iron Casting

PART NUMBER	CB	CD	CE	CH	CW	F	L	A	KK	ER	LIST PRICE
CM-RC0500	0.765	1/2	1-1/2	1	1/2	1	3/4	3/4	7/16"-20	1/2	\$18.99
CM-RC0750	1.265	3/4	2-3/8	1-1/4	5/8	1-1/4	1-1/4	1-1/8	3/4"-16	3/4	40.43
CM-RC1000	1.515	1	3-1/8	1-1/2	3/4	1-1/2	1-1/2	1-5/8	1"-14	1	65.70
CM-RC1375	2.032	1-3/8	4-1/8	2	1	2	2-1/8	2	1-1/4"-12	1-3/8	132.83
CM-RC1750	2.531	1-3/4	4-1/2	2-3/8	1-1/4	2-3/8	2-1/4	2-1/4	1-1/2"-12	1-3/4	162.89
CM-RC2000	2.531	2	5-1/2	2-15/16	1-1/4	2-15/16	2-1/2	3	1-7/8"-12	2	267.60
CM-RC2500	3.032	2-1/2	6-1/2	3-1/2	1-1/2	3-1/2	3	3-1/2	2-1/4"-12	2-1/2	360.73
CM-RC3000	3.032	3	6-3/4	3-7/8	1-1/2	3-7/8	3-1/4	3-1/2	2-1/2"-12	2-3/4	608.57
CM-RC3500	4.032	3-1/2	8-1/2	5	2	5	4	4-1/2	3-1/4"-12	3-1/2	836.03
CM-RC4000	4.532	4	10	6-1/8	2-1/4	6-1/8	4-1/2	5-1/2	4"-12	4	1,395.93



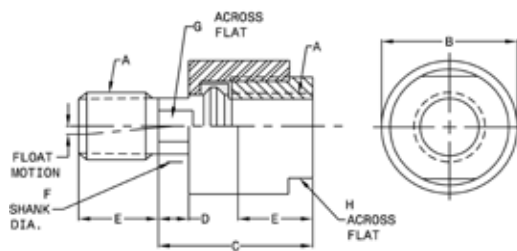
Alignment Coupler



1/16 Radial Float 2°
 Spherical Motion

ALIGNMENT COUPLER	A	B	C	D	E	F	G	H	MAX PULL YIELD	LIST PRICE
CM-BD-437	7/16"-20	1-1/4	2	1/2	3/4	5/8	1/2	1	10,000	\$82.16
CM-BD-500	1/2"-20	1-1/4	2	1/2	3/4	5/8	1/2	1	14,000	82.16
CM-BD-625	5/8"-18	1-1/4	2	1/2	3/4	5/8	1/2	1	19,000	97.42
CM-BD-750	3/4"-16	1-3/4	2-5/16	1/2	1-1/8	31/32	13/16	1-1/2	34,000	74.11
CM-BD-875	7/8"-14	1-3/4	2-5/16	1/2	1-1/8	31/32	13/16	1-1/2	39,000	112.72
CM-BD-1000	1"-14	2-1/2	2-15/16	1/2	1-5/8	1-3/8	1-5/32	2-1/4	64,000	169.63
CM-BD-1250	1-1/4"-12	2-1/2	2-15/16	1/2	1-5/8	1-3/8	1-5/32	2-1/4	78,000	227.32
CM-BD-1500	1-1/2"-12	3-1/4	4-3/8	13/16	2-1/4	1-3/4	1-1/2	3	134,000	396.78
CM-BD-1750	1-3/4"-12	3-1/4	4-3/8	13/16	2-1/4	1-3/4	1-1/2	3	134,000	396.50
CM-BD-1875	1-7/8"-12	3-3/4	5-7/16	7/8	3	2	1-7/8	3-1/2	240,000	538.41

NOTE: Metric Thread Sizes Also Available



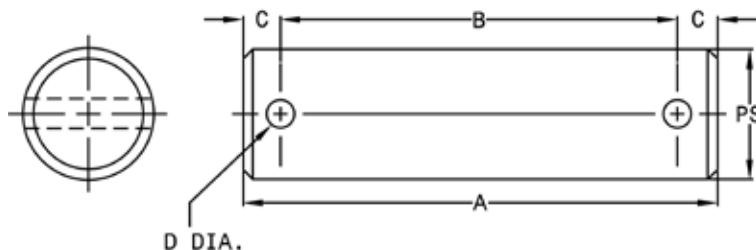
INDUSTRIAL MOUNTS

Pivot Pin



Material: 1144 Steel Nitrotec
Treated Surface

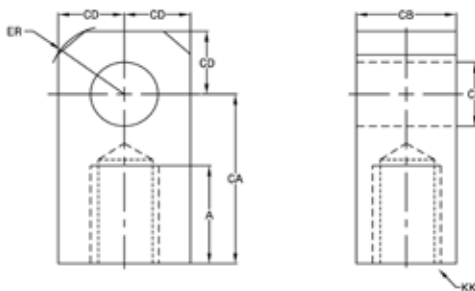
PART NUMBER	PIN SIZE	A	B	C	D	LIST PRICE
CM-PP0500	0.500	2.281	1.938	0.172	0.106	\$5.82
CM-PP0750	0.750	3.094	2.719	0.188	0.140	7.46
CM-PP1000	1.000	3.594	3.219	0.188	0.140	15.93
CM-PP1375	1.375	4.656	4.250	0.203	0.173	25.45
CM-PP1750	1.750	5.656	5.250	0.203	0.173	40.39
CM-PP2000	2.000	5.719	5.281	0.219	0.204	49.00
CM-PP2500	2.500	6.781	6.313	0.234	0.219	114.25



Material: 05 thru
13, C.F. Bar
Material: 17 thru
40, Steel Plate

Rod Eyes

PART NUMBER	A	CA	CB	CD	ER	KK	LIST PRICE
CM-RE0500	3/4	1-1/2	3/4	1/2	5/8	7/16"-20	\$16.94
CM-RE0750	1-1/8	2-1/16	1-1/4	3/4	7/8	3/4"-16	31.90
CM-RE1000	1-5/8	2-13/16	1-1/2	1	1-3/16	1"-14	52.23
CM-RE1375	2	3-7/16	2	1-3/8	1-9/16	1-1/4"-12	98.42
CM-RE1750	2-1/4	4	2-1/2	1-3/4	2	1-1/2"-12	137.91
CM-RE2000	3	5	2-1/2	2	2-1/2	1-7/8"-12	295.60
CM-RE2500	3-1/2	5-13/16	3	2-1/2	2-13/16	2-1/4"-12	432.03



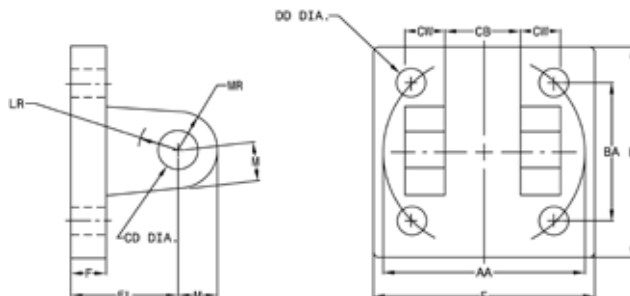
INDUSTRIAL MOUNTS



Clevis Bracket

PART NUMBER	AA	BA	CB	CD	CW	DD	E	F	FL	LR	M	MR	LIST PRICE
CM-BDCB-07	3.6	2-9/16	1.265	3/4	5/8	1/2"-20	3-1/2	5/8	1-7/8	1-1/16	3/4	1-1/16	\$113.86
CM-BDCB-10	4.6	3-1/4	1.515	1	3/4	5/8"-18	4-1/2	3/4	2-1/4	1-1/4	1	1-1/8	191.01
CM-BDCB-13	5.4	3-13/16	2.032	1-3/8	1	5/8"-18	5	7/8	3	7/8	1-3/8	1-3/4	322.55
CM-BDCB-20	8.2	5-3/4	2.531	2	1-1/4	1"-14	7-1/2	1	3-12	2-1/8	2	2-1/8	636.20

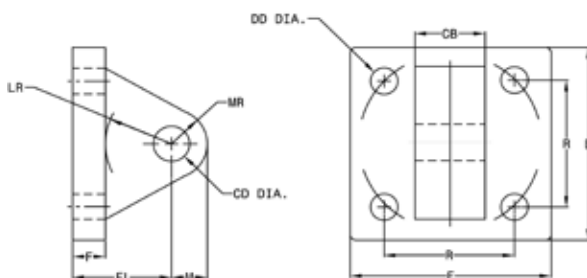
Material: Forging, Weldment, or Ductile Iron



Eye Bracket

PART NUMBER	CB	CD	DD	E	F	FL	LR	M	MR	R	LIST PRICE
CM-BDEB-05	3/4	1/2	13/32	2-1/2	3/8	1-1/8	3/4	1/2	9/16	1.63	\$28.89
CM-BDEB-07	1-1/4	3/4	17/32	3-1/2	5/8	1-7/8	1-1/4	3/4	7/8	2.56	53.40
CM-BDEB-10	1-1/2	1	21/32	4-1/2	3/4	2-1/4	1-1/2	1	1-1/4	3.25	87.17
CM-BDEB-13	2	1-3/8	21/32	5	7/8	3	2-1/8	1-3/8	1-5/8	3.81	149.82
CM-BDEB-17	2-1/2	1-3/4	29/32	6-1/2	7/8	3-1/8	2-1/4	1-3/4	2-1/8	4.95	295.42
CM-BDEB-20	2-1/2	2	1-1/16	7-1/2	1	3-1/2	2-1/2	2	2-7/16	5.75	516.52
CM-BDEB-25	3	2-1/2	1-3/16	8-1/2	1	4	3	2-1/2	3	6.59	666.54
CM-BDEB-30	3	3	1-5/16	9-1/2	1	4-1/4	3-1/4	3	3-1/4	7.50	809.83
CM-BDEB-40	4-1/2	4	2-1/16	14-7/8	1-15/16	6-7/16	4-1/2	4	5-1/4	11.50	3,532.05

Material: Forging, Weldment, or Ductile Iron



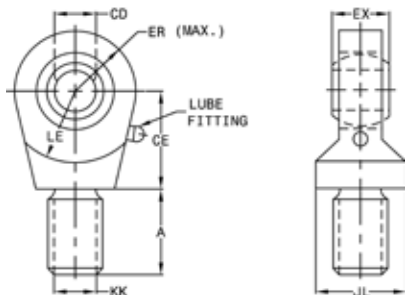
INDUSTRIAL MOUNTS



Material: Forging,
Weldment, or Ductile Iron

Spherical Rod Eye

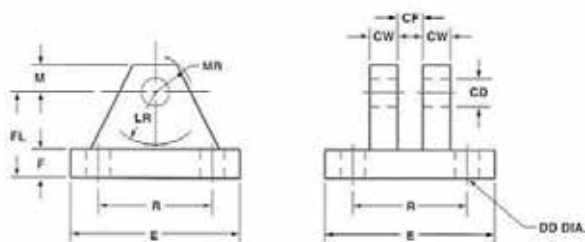
PART NUMBER	CD	A	CE	EX	ER	LE	KK	JL REF	LOAD CAP	SPACER WIDTH	LIST PRICE
CM-RES-05	0.500	11/16	7/8	7/16	7/8	3/4	7/16"-20	7/8	2,600	0.150	\$104.41
CM-RES-07	0.750	1	1-1/4	21/32	1-1/4	1-1/16	3/4"-16	1-5/16	9,400	0.250	130.71
CM-RES-10	1.000	1-1/2	1-7/8	7/8	1-3/8	1-7/16	1"-14	1-1/2	16,800	0.250	140.12
CM-RES-13	1.375	2	2-1/8	1-3/16	1-13/16	1-7/8	1-1/4"-12	2	28,600	0.375	198.43
CM-RES-17	1.750	2-1/8	2-1/2	1-17/32	2-3/16	2-1/8	1-1/2"-12	2-1/4	43,000	0.416	459.37
CM-RES-20	2.000	2-7/8	2-3/4	1-3/4	2-5/8	2-1/2	1-7/8"-12	2-3/4	70,000	0.375	613.50



Material: Steel Weldment

Spherical Clevis Brackets

PART NUMBER	E	F	M	R	CD	CF	CW	DD	FL	LR	MR	LIST PRICE
CM-CBS-0500	3.00	.50	.50	2.05	.500	.44	.50	.41	1.50	.94	.62	\$146.00
CM-CBS-0750	3.75	.62	.88	2.76	.750	.66	.62	.53	2.00	1.38	1.00	223.11
CM-CBS-1000	5.50	.75	1.00	4.10	1.000	.88	.75	.53	2.50	1.69	1.19	291.87
CM-CBS-1375	6.50	.88	1.38	4.95	1.375	1.19	1.00	.66	3.50	2.44	1.62	412.06
CM-CBS-1750	8.50	1.25	1.75	6.58	1.750	1.53	1.25	.91	4.50	2.88	2.06	609.04
CM-CBS-2000	10.62	1.50	2.00	7.92	2.000	1.75	1.50	.91	5.00	3.31	2.38	957.02



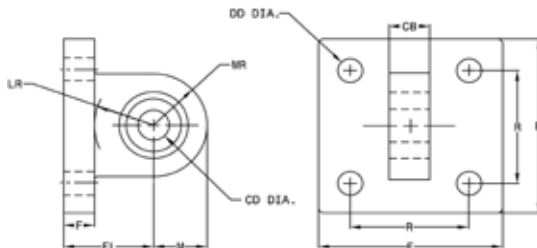
INDUSTRIAL MOUNTS, COUPLINGS AND NUTS



Spherical Eye Bracket

PART NUMBER	CB	CD	DD	E	F	FL	LR	M	MR	R	LIST PRICE
CM-BDS-07	3/4	3/4	17/32	3-1/2	5/8	1-7/8	1-1/4	1-3/16	1-3/16	2.56	\$409.51
CM-BDS-10	1	1	21/32	4-1/2	3/4	2-1/4	1-1/2	1-3/8	1-3/8	3.25	327.76
CM-BDS-13	1-3/8	1-3/8	21/32	5	7/8	3	2-1/8	2	2	3.81	532.10

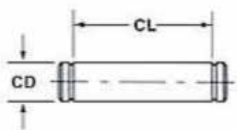
Material: Forging,
Weldment, or Ductile Iron



Pivot Pins for Spherical Clevis Brackets

Material: CD1144
- Close tolerance on pin diameter

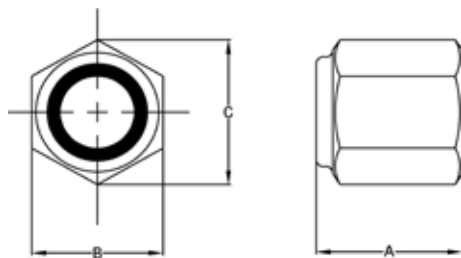
PART NUMBER	CD	CL	LIST PRICE
CM-PPS0500	.4997-.0004	1 9/16	\$10.71
CM-PPS0750	.7497-.0005	2 1/32	16.57
CM-PPS1000	.9997-.0005	2 1/2	19.63
CM-PPS1375	1.3746-.0006	3 5/16	33.72
CM-PPS1750	1.7496-.0006	4 7/32	66.47
CM-PPS2000	1.9996-.0007	4 15/16	128.32



Nylon Insert Lock Nut

PART NUMBER	BAR SIZE	A	B	C	LIST PRICE
CM-LN45050	1/2"-20	0.60	0.75	0.84	\$4.46
CM-LN45062	5/8"-18	0.75	0.94	1.06	9.64
CM-LN45075	3/4"-16	0.88	1.06	1.19	19.41
CM-LN45087	7/8"-14	1.00	1.25	1.40	10.69
CM-LN45100	1"-14	1.06	1.44	1.62	14.48
CM-LN45101	1"-14	0.88	1.62	1.83	17.25
CM-LN45112	1-1/8"-12	1.19	1.62	1.83	19.87
CM-LN45126	1-1/4"-12	1.38	1.81	2.06	23.11
CM-LN45151	1-1/2"-12	1.62	2.19	2.44	30.36
CM-LN45152	1-1/2"-12	0.81	2.19	2.44	23.84
CM-LN45175	1-3/4"-12	1.50	2.75	3.06	58.43
CM-LN45200	2"-12	1.62	3.12	3.50	62.37
CM-LN45225	2-1/4"-12	1.94	3.50	3.94	132.81
CM-LN45226	2-1/4"-12	2.81	3.50	3.94	181.85
CM-LN45250	2-1/2"-12	2.25	4.00	4.60	287.96

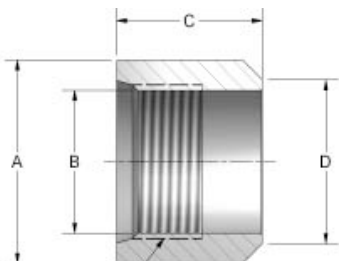
*Grade N8 (Grade C equivalent), except LN45101 is Grade N5 (Grade B equivalent)



PORTS



O-ring Boss Half Coupling Port

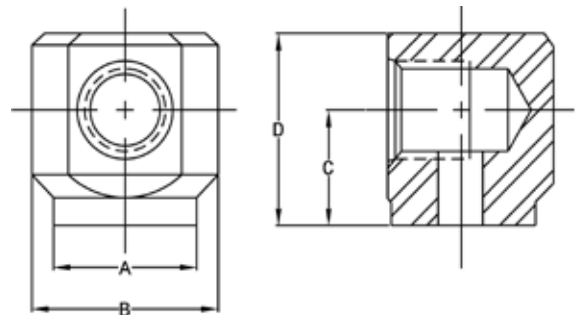


PART NUMBER	PORT SIZE	A	B	C	D	NET PRICE
CM-PO65304	#4 SAE	0.88	.389	1.00	.570	\$9.62
CM-PO65305	#5 SAE	0.88	.452	1.00	*	11.15
CM-PO65306	#6 SAE	1.00	.508	1.00	.690	9.98
CM-PO65308	#8 SAE	1.25	.689	1.06	.870	10.35
CM-PO65310	#10 SAE	1.38	.806	1.06	.990	10.22
CM-PO65312	#12 SAE	1.50	.981	1.28	1.160	14.41
CM-PO65314	#14 SAE	1.63	1.106	1.25	1.290	16.89
CM-PO65316	#16 SAE	1.75	1.231	1.28	1.410	20.77
CM-PO65320	#20 SAE	2.25	1.544	1.28	1.720	27.31
CM-PO65324	#24 SAE	2.50	1.794	1.28	1.980	42.76

- AISI1020 Carbon Steel

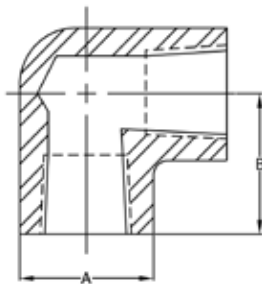
*No Bevel

90 Degree O-ring Boss Port



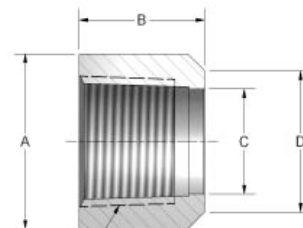
PART NUMBER	BAR SIZE	A	B	C	D	NET PRICE
CM-PO65604	#4 SAE	0.75	1.12	0.75	1.12	\$22.05
CM-PO65606	#6 SAE	0.87	1.25	0.81	1.25	23.90
CM-PO65608	#8 SAE	1.25	1.62	1.00	1.62	26.15
CM-PO65610	#10 SAE	1.25	1.75	1.12	1.88	30.21
CM-PO65612	#12 SAE	1.50	2.12	1.19	2.00	43.65
CM-PO65616	#16 SAE	1.50	2.25	1.25	2.38	58.08

90 Degree Pipe Thread Port



PART NUMBER	PORT SIZE	A	B	NET PRICE
CM-PO65225	1/4" NPT	0.75	1.00	\$13.57
CM-PO65237	3/8" NPT	0.88	1.00	20.22
CM-PO65250	1/2" NPT	1.12	1.25	30.20
CM-PO65275	3/4" NPT	1.38	1.38	34.44
CM-PO652751	1" NPT	1.75	1.62	37.65

Pipe Thread Half Coupling



PART NUMBER	PORT SIZE	A	B	C	D	NET PRICE
CM-PO65025	1/4" NPT	0.88	1.06	.391	.570	\$3.26
CM-PO65037	3/8" NPT	1.00	1.00	.520	.690	3.35
CM-PO65050	1/2" NPT	1.25	1.06	.650	.870	4.50
CM-PO65075	3/4" NPT	1.50	1.28	.850	1.160	4.98
CM-PO65100	1" NPT	1.75	1.28	1.050	1.410	9.98
CM-PO65125	1-1/4" NPT	2.25	1.28	1.420	1.720	17.82
CM-PO65150	1-1/2" NPT	2.75	1.28	1.560	1.980	21.39

- AISI1020 Carbon Steel

NOTES**NOTES**

Assortment Kits and Tools

Contents Page

O-Ring Kits	228 - 236
O-Ring Splice Kits	237
Back-Up Ring Kits	238
Retainer Ring Kits	239
Assortment Kits	240 - 242
Installation Tools	242 - 243
Splice Tools	243
Cutting and Chopping Tools	243 - 244
Removal Tools	245 - 246
Dismantling Tools	247
Lifting Slings	248
Remanufacturing Tools	249
Leak Detection Products	250
Measuring Tools	251 - 252
Technical Information	253 - 264

O-RING KITS

O-RING KIT

Part Number: 568 KIT-A
List Price: \$36.32

DASH NUMBER	QTY
006 THRU 012	20
110 THRU 116	13
210 THRU 222	10
325 THRU 327	7



This kit contains a total of 382 O-Rings in 30 different sizes, providing an extremely low cost per size value.

HNBR O-RING KIT

Part Number: 568 HNBR KIT
List Price: \$57.57

PART NUMBER	QTY
568-008H	20
568-010H	20
568-011H	20
568-012H	20
568-013H	20
568-014H	20
568-015H	15
568-017H	15
568-111H	15
568-116H	15
568-118H	10
568-211H	10



This kit contains a total of 200 70A Durometer HNBR o-rings in 12 different sizes, providing an extremely low cost per size value.

O-RING METRIC KIT

Part Number: METRIC O KIT-J-A
List Price: \$58.44

I.D X C.S. (mm)	QTY	I.D X C.S. (mm)	QTY	I.D X C.S. (mm)	QTY
3 X 2.0	16	14 X 2.5	13	28 X 3.0	12
4 X 2.0	16	16 X 2.5	13	30 X 3.0	12
5 X 2.0	16	17 X 2.5	13	32 X 3.0	12
6 X 2.0	16	19 X 2.5	13	33 X 3.0	12
7 X 2.0	16	19 X 3.0	11	35 X 3.0	12
8 X 2.0	16	20 X 3.0	12	36 X 3.0	12
10 X 2.0	16	22 X 3.0	12	38 X 3.0	12
10 X 2.5	13	24 X 3.0	12	38 X 4.0	9
11 X 2.5	13	25 X 3.0	12	41 X 4.0	9
12 X 2.5	13	27 X 3.0	12	44 X 4.0	9

The Metric O-Kit J-A contains a total of 385 O-Rings in 30 different sizes, another extremely low cost per size value.



MASTER O-RING FITTING KIT

Part Number: MASTER OR FITTING KIT
List Price: \$216.53

PORT DASH SIZE	PART NUMBER	QTY	PORT DASH SIZE	PART NUMBER	QTY
SAE BOSS #4	568-904	50	ORS #8	568-014-90D	50
SAE BOSS #5	568-905	50	ORS #10	568-016-90D	50
SAE BOSS #6	568-906	50	ORS #12	568-018-90D	50
SAE BOSS #8	568-908	50	ORS #16	568-021-90D	50
SAE BOSS #10	568-910	50	ORS #20	568-025-90D	50
SAE BOSS #12	568-912	50	ORS #24	568-029-90D	40
SAE BOSS #14	568-914	40	SAE #8	568-210-90D	50
SAE BOSS #16	568-916	40	SAE #12	568-214-90D	50
SAE BOSS #20	568-920	20	SAE #16	568-219-90D	20
SAE BOSS #24	568-924	10	SAE #20	568-222-90D	20
SAE BOSS #32	568-932	10	SAE #24	568-225-90D	20
ORS #4	568-011-90D	50	SAE #32	568-228-90D	20
ORS #6	568-012-90D	50	SAE #40	568-232-90D	10



This 1000 piece assortment contains 1/16" CS, 1/8" CS, and Boss 90A Durometer NBR O-rings in 26 of the most popular fitting sizes, including O-ring face seals and SAE straight thread boss fittings. Individually separated inside of a sturdy steel case.

O-RING KITS

SAE FLANGE SEALS

Part Number: SAE FLANGE SEALS

List Price: \$37.86

BOX PART NUMBER	PART NUMBER	QTY
-8	568-210-90D	8
-12	568-214-90D	8
-16	568-219-90D	8
-20	568-222-90D	8
-24	568-225-90D	8
-32	568-228-90D	8



Fits SAE J518 code 61/62 split flanges.

FLAT FACE SEALS

Part Number: FLAT FACE O-RINGS

List Price: \$40.10

BOX PART NUMBER	PART NUMBER	QTY
-4	568-011-90D	8
-6	568-012-90D	8
-8	568-014-90D	8
-10	568-016-90D	8
-12	568-018-90D	8
-16	568-021-90D	8
-20	568-025-90D	8
-24	568-029-90D	8



Fits SAE O-ring face seal fittings.

BOSS & TUBE SEALS

Part Number: BOSS-TUBE FITTINGS-1

List Price: \$27.66

Part Number: BOSS-TUBE FITTINGS-2

List Price: \$39.54

BOX PART NUMBER	PART NUMBER	QTY	KIT NUMBER
-2	568-902	8	FITTINGS-1
-3	568-903	8	FITTINGS-1
-4	568-904	8	FITTINGS-1
-5	568-905	8	FITTINGS-1
-6	568-906	8	FITTINGS-1
-8	568-908	8	FITTINGS-1
-10	568-910	8	FITTINGS-1
-12	568-912	8	FITTINGS-1
-14	568-914	8	FITTINGS-1
-16	568-916	8	FITTINGS-2
-20	568-920	8	FITTINGS-2
-24	568-924	8	FITTINGS-2
-32	568-932	8	FITTINGS-2

Fits SAE Boss straight thread tube fittings.



HOSE END & ADAPTER KIT

Part Number: O-R FITTING KIT

List Price: \$154.35

This handy kit contains 27 sizes and 216 pieces of 90A Durometer O-rings for boss, split flange, and flat face hose end fittings and adapters. Each box has a graphic label identifying the type of application and dash number for the seal. A chart on the back of the box lists popular OEM part number matches for each O-ring.



O-RING KITS

SAE 900 O-RING BOSS FLUOROCARBON KIT

Part Number: 900 BOSS FC
 List Price: \$200.63

PART NUMBER	QTY	SAE PORT SIZE
568-901V	10	-1
568-902V	10	-2
568-903V	10	-3
568-904V	10	-4
568-905V	12	-5
568-906V	12	-6
568-907V	12	-7
568-908V	12	-8
568-909V	12	-9
568-910V	12	-10
568-911V	10	-11
568-912V	10	-12
568-913V	10	-13
568-914V	10	-14
568-916V	10	-16
568-918V	10	-18
568-920V	10	-20
568-924V	10	-24
568-928V	10	-28
568-932V	10	-32



This 212 piece assortment contains the most popular size 90 Durometer FKM Boss O-rings in 20 different fitting sizes, individually separated, which will supply your shop, service truck, or parts counter with the sizes you need!

SAE J514 O-RING BOSS KIT

Part Number: 900 BOSS KIT
 List Price: \$38.07

PART NUMBER	QTY	SAE PORT SIZE
568-901	10	-1
568-902	10	-2
568-903	10	-3
568-904	10	-4
568-905	12	-5
568-906	12	-6
568-907	12	-7
568-908	12	-8
568-909	12	-9
568-910	12	-10
568-911	10	-11
568-912	10	-12
568-913	10	-13
568-914	10	-14
568-916	10	-16
568-918	10	-18
568-920	10	-20
568-924	10	-24
568-928	10	-28
568-932	10	-32



This 212 piece assortment contains the most popular size 90 Durometer Boss O-rings in 20 different fitting sizes, individually separated, which will supply your shop, service truck, or parts counter with the sizes you need!

O-RING FACE KIT

Part Number: 568 FACE KIT
 List Price: \$34.12

DASH NUMBER	FITTING	QTY
011-90D	#4	25
012-90D	#6	25
014-90D	#8	25
016-90D	#10	25
018-90D	#12	20
021-90D	#16	15
025-90D	#20	10
029-90D	#24	10



This kit contains a total of 155 90 Durometer O-Rings in 8 different sizes, providing an extremely low cost per size value.

SAE CODE 61 & 62 O-RING FLANGE KIT

Part Number: 568 FLANGE KIT
 List Price: \$40.14

DASH NUMBER	FITTING	QTY
210-90D	1/2"	10
214-90D	3/4"	10
219-90D	1"	10
222-90D	1-1/4"	10
225-90D	1-1/2"	10
228-90D	2"	10
232-90D	2-1/2"	10



This kit contains a total of 70, 90 Durometer O-Rings, in 7 different sizes, providing an extremely low cost per size value.

O-RING KITS

SPLIT FLANGE SEAL KIT

Part Number: SFS KIT

List Price: \$108.26

PART NUMBER	Flange Size	Replaces O-Ring No.	Outside Diam.	QTY
SFS-8	1/2"	-210	1.005	5
SFS-12	3/4"	-214	1.255	5
SFS-16	1"	-219	1.565	5
SFS-20	1-1/4"	-222	1.755	5
SFS-24	1-1/2"	-225	2.125	5
SFS-32	2"	-228	2.500	5
SFS-40	2-1/2"	-232	3.005	5



This kit contains 35 seals in 7 popular sizes for SAE J518 4-Bolt code 61 and code 62 split flanges.

U.S. INDUSTRIAL O-RING KIT

Part Number: 568 KIT

List Price: \$44.88

DASH NUMBER	QTY
005 THRU 011	25
012	15
013 THRU 018	10
110	15
111 THRU 116	10
117 THRU 121	7
210 THRU 211	10
212 THRU 219	7



This kit contains a total of 436 70 Durometer O-Rings in 36 different sizes, providing an extremely low cost per size value.

QUAD RING KIT

Part Number: QUAD-RING KIT

List Price: \$110.52

DASH NUMBER	QTY
4005 THRU 4012	10
4013 THRU 4016	6
4017 THRU 4018	5
4110 THRU 4116	6
4117 THRU 4121	4
4210 THRU 4219	5



QUAD WAREHOUSE KIT

Part Number: QUAD-RING WH KIT

List Price: \$581.84

DASH NUMBER	QTY
4004 THRU 4012	10
4013 THRU 4030	5
4031 THRU 4038	3
4039 THRU 4048	2
4108 THRU 4116	10
4117 THRU 4124	5
4125 THRU 4135	3
4136 THRU 4154	2
4204 THRU 4216	5
4217 THRU 4229	3
4230 THRU 4338	2



Similar to the O-Ring Warehouse kit, the Quad Seal Warehouse kit contains a total of 583 four-lobed seals in 145 different sizes. This kit is ideal for the small distributor who wishes to have a comprehensive on-hand inventory of Quad seals for counter sales.

O-RING KITS

90 DUROMETER O-RING KIT

Part Number: 568 90D KIT

List Price: \$63.92

DASH NUMBER	QTY
005 THRU 011-90D	25
012-90D	15
013 THRU 018-90D	10
110-90D	15
111 THRU 116-90D	10
117 THRU 121-90D	7
210 THRU 211-90D	10
212 THRU 219-90D	7



This kit contains a total of 436 90 Durometer O-Rings in 36 different sizes, providing an extremely low cost per size value.

PTFE O-RING KIT

Part Number: 568 PTFE KIT

List Price: \$622.41

DASH NUMBER	QTY
005 THRU 012T	15
013 THRU 018T	10
110 THRU 116T	10
117 THRU 121T	5
210 THRU 219T	5



This kit contains a total of 325 PTFE O-Rings (55 - 58 Shore D) in 36 different sizes. PTFE O-Rings can withstand temperatures up to 500° F and are impervious to a wide range of chemicals.

FLUOROCARBON O-RING KIT

Part Number: 568 FC KIT

List Price: \$285.33

DASH NUMBER	QTY
005 THRU 011V	25
012V	15
013 THRU 018V	10
110V	15
111 THRU 116V	10
117 THRU 121V	7
210 THRU 211V	10
212 THRU 219V	7



This kit contains a total of 436 75 Durometer Fluorocarbon O-Rings in 36 different sizes, providing an extremely low cost per size value.

FLUOROCARBON O-RING KIT

Part Number: 568 FC KIT-A

List Price: \$126.33

DASH NUMBER	QTY
006 THRU 012	10
110 THRU 114	10
115 THRU 116	5
210 THRU 214	5
216 THRU 222	2
325 THRU 327	2



This kit contains a total of 180 75 Shore A fluorocarbon o-rings in 30 different sizes.

VITON KIT

Part Number: METRIC O KIT-V

List Price: \$111.52

I.D.	C.S	QTY	I.D.	C.S	QTY	I.D.	C.S	QTY
5.00	1.50	20	9.00	2.00	15	19.00	2.00	10
2.20	1.60	20	10.00	2.00	15	20.00	2.00	10
3.10	1.60	20	12.00	2.00	15	10.00	2.50	10
4.10	1.60	20	4.30	2.40	15	13.00	2.50	10
7.10	1.60	20	5.30	2.40	15	14.00	2.50	10
4.00	2.00	20	5.60	2.40	15	15.00	2.50	10
6.00	2.00	20	7.60	2.40	15	17.00	2.50	10
13.00	1.50	15	8.30	2.40	15	18.00	2.50	10
9.10	1.60	15	8.60	2.40	15	19.00	2.50	10
10.10	1.60	15	16.00	1.50	10	9.00	3.00	10
13.10	1.60	15	14.00	2.00	10	10.00	3.00	10
8.00	2.00	15	16.00	2.00	10	11.00	3.00	10

This 500 piece kit contains 75 Shore A fluorocarbon o-rings in 36 metric sizes.



O-RING KITS

O-RING WAREHOUSE KIT

Part Number: 568 WH KIT

List Price: \$558.28

DASH NUMBER	QTY	DASH NUMBER	QTY	DASH NUMBER	QTY
001 THRU 016	20	125 THRU 142	5	325 THRU 328	5
017 THRU 024	10	143 THRU 146	3	329 THRU 330	4
025 THRU 031	7	147 THRU 151	2	331 THRU 338	2
032 THRU 043	5	210 THRU 216	10	901 THRU 914	5
044 THRU 046	2	217 THRU 229	5	916, 918	5
110 THRU 116	15	230 THRU 232	3	920, 924	5
117 THRU 124	10	233 THRU 237	2	928, 932	5

Our O-ring Warehouse kit is ideally suited for the repair shop that needs a large on-hand selection of O-rings to ensure quick repair of all machine types. 1,110 O-Rings in 150 different sizes are included in this kit. Each size is individually packaged in heavy duty ziploc bags to protect against environmental exposure and contamination. All packages are then stored in a sturdy styrene cabinet with pull-out drawers for easy access to parts. Included card shows size, dimensions, and drawer location for each ring.



FLUOROCARBON O-RING WAREHOUSE KIT

Part Number: 568 WH KIT-FC

List Price: \$753.38

DASH NUMBER	QTY	DASH NUMBER	QTY	DASH NUMBER	QTY
001 THRU 016V	20	125 THRU 142V	5	325 THRU 328V	5
017 THRU 024V	10	143 THRU 146V	3	329 THRU 330V	4
025 THRU 031V	7	147 THRU 151V	2	331 THRU 338V	2
032 THRU 043V	5	210 THRU 216V	10	901 THRU 914V	5
044 THRU 046V	2	217 THRU 229V	5	916V, 918V	5
110 THRU 116V	15	230 THRU 232V	3	920V, 924V	5
117 THRU 124V	10	233 THRU 237V	2	928V, 932V	5

Our 75 Durometer Fluorocarbon O-ring Warehouse kit is ideally suited for the repair shop that needs a large on-hand selection of O-rings to ensure quick repair of all machine types. 1,110 O-Rings in 150 different sizes are included in this kit. Each size is individually packaged in heavy duty ziploc bags to protect against environmental exposure and contamination. All packages are then stored in a sturdy styrene cabinet with pull-out drawers for easy access to parts. Included card shows size, dimensions, and drawer location for each ring.



90 DUROMETER O-RING WAREHOUSE KIT

Part Number: 568 WH KIT-90D

List Price: \$523.28

DASH NUMBER	QTY	DASH NUMBER	QTY
001 THRU 016-90D	20	217 THRU 229-90D	5
017 THRU 024-90D	10	230 THRU 232-90D	3
025 THRU 031-90D	7	233 THRU 237-90D	2
032 THRU 043-90D	5	325 THRU 328-90D	5
044 THRU 046-90D	2	329 THRU 330-90D	4
110 THRU 116-90D	15	331 THRU 338-90D	2
117 THRU 124-90D	10	901 THRU 914-90D	5
125 THRU 142-90D	5	916, 918-90D	5
143 THRU 146-90D	3	920, 924-90D	5
147 THRU 151-90D	2	928, 932-90D	5
210 THRU 216-90D	10		

Our 90 Durometer O-ring Warehouse kit is ideally suited for the repair shop that needs a large on-hand selection of O-Rings to ensure quick repair of all machine types. 1,110 O-Rings in 150 different sizes are included in this kit.



O-RING KITS

MAX O-RING KIT

Part Number: MAX 1381 KIT

List Price: \$382.12



Part Number: MAX 1381 KIT-90D

List Price: \$437.43



These sturdy kits, packaged in a heavy duty box, contain 1,415 O-Rings in the most popular sizes. Every service truck should have one of these. Five internal boxes contain 1/16" C/S, 3/32" C/S, 1/8" C/S, Boss, and Flange fitting o-rings. Contents and quantities are listed below.

Flange Seals

DASH NUMBER	QTY
8	10
12	10
16	10
20	5
24	5
32	5

Boss O-Rings

DASH NUMBER	QTY
903	15
904	25
905	15
906	25
908	25
910	25
912	15
916	10

1/16" C/S O-Rings

DASH NUMBER	QTY
006 THRU 018	25
019 THRU 021	20
022 THRU 026	15
028	15
029	10
030	10

1/8" C/S O-Rings

DASH NUMBER	QTY
210 THRU 214	20
215 THRU 222	15
223 THRU 224	10
226	10
228	10
232	10
236	10

3/32" C/S O-Rings

DASH NUMBER	QTY
109 THRU 118	25
119 THRU 120	20
121 THRU 127	15
128	10
129	10
131	10
133	10
135	5

O-RING KITS

COMMON JAPANESE SIZE O-RINGS IN 70 DUROMETER

Part Number: METRIC O KIT-J

List Price: \$70.39

I.D.	C.S.	QTY	I.D.	C.S.	QTY
2.8	1.9	25	20.8	2.4	8
3.8	1.9	20	21.8	2.4	8
4.8	1.9	20	24.4	3.1	6
5.8	1.9	20	29.4	3.1	7
6.8	1.9	15	21.7	3.5	5
7.8	1.9	15	22.1	3.5	5
8.8	1.9	15	23.7	3.5	7
9.8	1.9	15	24.7	3.5	7
9.8	2.4	15	25.2	3.5	7
10.8	2.4	15	25.7	3.5	7
11.0	2.4	15	27.7	3.5	7
11.8	2.4	12	28.7	3.5	6
12.8	2.4	12	29.2	3.5	6
13.8	2.4	12	29.7	3.5	6
14.8	2.4	12	30.7	3.5	6
15.8	2.4	12	31.2	3.5	6
17.8	2.4	8	14.5	4.0	4
19.8	2.4	8	23.5	4.0	6



This 380 piece kit contains the most popular Japanese Industrial metric O-ring sizes.

COMMON EUROPEAN SIZE O-RINGS IN 70 DUROMETER

Part Number: METRIC O KIT-E

List Price: \$53.78

I.D.	C.S.	QTY	I.D.	C.S.	QTY
5.0	1.5	20	19.0	2.0	10
13.0	1.5	15	20.0	2.0	10
16.0	1.5	10	4.3	2.4	15
2.2	1.6	20	5.3	2.4	15
3.1	1.6	20	5.6	2.4	15
4.1	1.6	20	7.6	2.4	15
7.1	1.6	20	8.3	2.4	15
9.1	1.6	15	8.6	2.4	15
10.1	1.6	15	10.0	2.5	10
13.1	1.6	15	13.0	2.5	10
4.0	2.0	20	14.0	2.5	10
6.0	2.0	20	15.0	2.5	10
8.0	2.0	15	17.0	2.5	10
9.0	2.0	15	18.0	2.5	10
10.0	2.0	15	19.0	2.5	10
12.0	2.0	15	9.0	3.0	10
14.0	2.0	10	10.0	3.0	10
16.0	2.0	10	11.0	3.0	10



This 500 piece kit contains the most popular European metric O-ring sizes.

O-RING KITS

COMMON JAPANESE SIZE O-RINGS IN 90 DUROMETER

Part Number: METRIC O KIT-J-90D

List Price: \$171.29

I.D.	C.S.	QTY	I.D.	C.S.	QTY
2.8	1.9	25	20.8	2.4	8
3.8	1.9	20	21.8	2.4	8
4.8	1.9	20	24.4	3.1	6
5.8	1.9	20	29.4	3.1	7
6.8	1.9	15	21.7	3.5	5
7.8	1.9	15	22.1	3.5	5
8.8	1.9	15	23.7	3.5	7
9.8	1.9	15	24.7	3.5	7
9.8	2.4	15	25.2	3.5	7
10.8	2.4	15	25.7	3.5	7
11.0	2.4	15	27.7	3.5	7
11.8	2.4	12	28.7	3.5	6
12.8	2.4	12	29.2	3.5	6
13.8	2.4	12	29.7	3.5	6
14.8	2.4	12	30.7	3.5	6
15.8	2.4	12	31.2	3.5	6
17.8	2.4	8	14.5	4.0	4
19.8	2.4	8	23.5	4.0	6



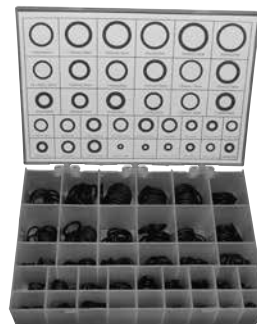
This 380 piece kit contains the most popular Japanese Industrial metric O-ring sizes in 90 durometer NBR.

COMMON EUROPEAN SIZE O-RINGS IN 90 DUROMETER

Part Number: METRIC O KIT-E-90D

List Price: \$183.05

I.D.	C.S.	QTY	I.D.	C.S.	QTY
5.0	1.5	20	19.0	2.0	10
13.0	1.5	15	20.0	2.0	10
16.0	1.5	10	4.3	2.4	15
2.2	1.6	20	5.3	2.4	15
3.1	1.6	20	5.6	2.4	15
4.1	1.6	20	7.6	2.4	15
7.1	1.6	20	8.3	2.4	15
9.1	1.6	15	8.6	2.4	15
10.1	1.6	15	10.0	2.5	10
13.1	1.6	15	13.0	2.5	10
4.0	2.0	20	14.0	2.5	10
6.0	2.0	20	15.0	2.5	10
8.0	2.0	15	17.0	2.5	10
9.0	2.0	15	18.0	2.5	10
10.0	2.0	15	19.0	2.5	10
12.0	2.0	15	9.0	3.0	10
14.0	2.0	10	10.0	3.0	10
16.0	2.0	10	11.0	3.0	10



This 500 piece kit contains the most popular European metric O-ring sizes in 90 durometer NBR.

O-RING SPLICE KITS

O-RING SPLICE KIT INCH SIZES

Part Number: 568 SPLICE KIT

List Price: \$52.71

Kit Contains:

1. Stock of 70 Durometer Buna O-ring Cord*
2. Razor Blade
3. Splicing tool
4. Tube of Adhesive

Replacement Parts

Parts:	List Price
568 SPLICE TOOL	\$11.01 ea
568 ADHESIVE	\$7.89 ea
70 Duro. Cord	



*Cross Sections: 1/16"(.070), 3/32"(.103), 1/8"(.139), 3/16"(.210), 1/4"(.275).
Length: 7 Feet Each

O-RING SPLICE KIT INCH & METRIC SIZES

Part Number: MET/INCH SPLICE KIT

List Price: \$93.39

This kit can produce O-Rings of any standard inch size cross-section plus a wide variety of metric sizes. Each kit contains quick drying adhesive, cutting and splicing jig, razor blade, and 14 lengths of 70 Durometer Buna-N cord stock as follows:

Inch cross-sections: (inch)

1/16" (.070), 3/32" (.103), 1/8" (.139),
3/16" (.210), 1/4" (.275)

Metric cross-sections: (mm)

1.6, 2.0, 2.5, 3.0, 3.5, 4.0, 5.0, 5.7, 8.4

Length: 1 Meter Each



These kits can produce O-Rings of any circumference. The 568 kit contains the most popular inch cross sectional sized O-ring cord. The Metric and Inch Kit has both standard inch size cross sectional cord plus a wide variety of metric sized cord. Both kits contain quick drying adhesive, a cutting and splicing jig, a razor blade and 70 Durometer Buna-N cord.

FLUOROCARBON O-RING SPLICE KIT INCH SIZES

Part Number: 568 FC SPLICE KIT

List Price: \$204.41

Kit Contains:

1. Stock of 75 Durometer Fluorocarbon Cord*
2. Razor Blade
3. Splicing tool
4. Tube of Adhesive

Replacement Parts

Parts:	List Price
568 SPLICE TOOL	\$11.01 ea
568 ADHESIVE	\$7.89 ea
75 Duro. Fluorocarbon Cord	



*Cross Sections: 1/16" (.070), 3/32"(.103), 1/8"(.139), 3/16"(.210),
1/4"(.275). Length: 7 Feet Each

BACK-UP RING KITS

574 BACK-UP RING KIT

Part Number: 574 KIT

List Price: \$84.04

PART NUMBER	QTY	PART NUMBER	QTY
574-005	10	574-114	10
574-006	10	574-115	10
574-007	10	574-116	10
574-008	10	574-117	5
574-009	10	574-118	5
574-010	10	574-119	5
574-011	10	574-120	5
574-012	10	574-121	5
574-013	10	574-210	7
574-014	10	574-211	7
574-015	10	574-212	7
574-016	10	574-213	7
574-017	10	574-214	5
574-018	10	574-215	5
574-110	10	574-216	5
574-111	10	574-217	5
574-112	10	574-218	5
574-113	10	574-219	5



This 293 piece kit contains 36 of the most popular size "Parback®" Style Dished Cross Section back-up rings. Molded of 90A Durometer Buna-N Rubber, they stretch for installation and return quickly to their original size. SIZES CORRESPOND TO O-RING NUMBERS. Your shop and service truck should not be without this handy kit.

575 BACK-UP RING KIT

Part Number: 575 KIT

List Price: \$184.58

PART NUMBER	QTY	PART NUMBER	QTY
575-111	25	575-216	25
575-112	25	575-217	15
575-113	25	575-218	15
575-114	25	575-219	15
575-115	25	575-220	15
575-116	25	575-221	15
575-210	25	575-222	15
575-211	25	575-223	15
575-212	25	575-224	15
575-213	25	575-325	10
575-214	25	575-326	10
575-215	25	575-327	10



This 475 piece kit contains 24 of the most popular size urethane back-up rings. This assortment is essential for parts counters, shop use, and service trucks.

PTFE BACK-UP RING KIT

Part Number: 575 PTFE KIT S

List Price: \$191.61

PART NUMBER	QTY	PART NUMBER	QTY
575-005ST	15	575-114ST	10
575-006ST	15	575-115ST	10
575-007ST	15	575-116ST	10
575-008ST	15	575-117ST	5
575-009ST	15	575-118ST	5
575-010ST	15	575-119ST	5
575-011ST	15	575-120ST	5
575-012ST	15	575-121ST	5
575-013ST	10	575-210ST	5
575-014ST	10	575-211ST	5
575-015ST	10	575-212ST	5
575-016ST	10	575-213ST	5
575-017ST	10	575-214ST	5
575-018ST	10	575-215ST	5
575-110ST	10	575-216ST	5
575-111ST	10	575-217ST	5
575-112ST	10	575-218ST	5
575-113ST	10	575-219ST	5

This 325 piece kit contains 36 of the most popular size PTFE Back-up Rings. These rings are compatible with all hydraulic fluids, since they are virtually chemically inert, and can be used in applications involving elevated operating temperatures. These rings are scarf cut to facilitate installation.



RETAINER RING KITS

SPIRAL WOUND

Part Number: SRR KIT
List Price: \$256.03

PART NUMBER	QTY.	PART NUMBER	QTY.
WHM-050	12	WSM-050	12
WHM-062	12	WSM-062	12
WHM-075	12	WSM-075	12
WHM-087	12	WSM-087	12
WHM-100	12	WSM-100	12
WHM-112	12	WSM-112	12
WHM-125	12	WSM-125	12
WHM-137	12	WSM-137	12
WHM-150	12	WSM-150	12



EATON

Part Number: ERR KIT
List Price: \$327.09

PART NUMBER	QTY.	PART NUMBER	QTY.
NAN-050	12	XAN-050	12
NAN-062	12	XAN-062	12
NAN-075	12	XAN-075	12
NAN-087	12	XAN-087	12
NAN-100	12	XAN-100	12
NAN-112	12	XAN-112	12
NAN-125	12	XAN-125	12
NAN-137	12	XAN-137	12
NAN-150	12	XAN-150	12


Each kit contains: 18 sizes - 9 internal, 9 external • 216 rings per box • 12 rings per size

Each kit has an assortment of retainer rings (Spiral and Eaton style) packed in a reusable plastic box. All rings are made in the USA from carbon spring steel.

EXTERNAL RETAINER RINGS

Part Number: 310 KIT
List Price: \$90.03

PART NUMBER	SHAFT SIZE	QTY.	PART NUMBER	SHAFT SIZE	QTY.
310-100	1.000	5	310-200	2.000	5
310-125	1.250	5	310-225	2.250	5
310-137	1.375	5	310-250	2.500	5
310-150	1.500	5	310-275	2.750	3
310-175	1.750	5	310-300	3.000	3



These assortments contain the most popular size retainer rings commonly used in many application such as pumps, motors, and forklift cylinders. Boxed in a handy storage and display case, which will supply your shop, service truck, or parts counter with the sizes you need!

INTERNAL RETAINER RINGS

Part Number: 300 KIT
List Price: \$170.21

PART NUMBER	BORE SIZE	QTY.	PART NUMBER	BORE SIZE	QTY.
300-075	0.750	10	300-200	2.000	10
300-087	0.875	10	300-225	2.250	5
300-100	1.000	10	300-250	2.500	5
300-112	1.125	10	300-275	2.750	5
300-125	1.250	10	300-300	3.000	5
300-137	1.375	10	300-350	3.500	5
300-150	1.500	10	300-400	4.000	5
300-162	1.625	10	300-450	4.500	2
300-175	1.750	10	300-500	5.000	2



ASSORTMENT KITS

THE ULTIMATE NITRILE O-RING ASSORTMENT

Part Number: 568 KIT-ULTIMATE

List Price: \$4,068.16



Includes: 12 drawers and 3 slide racks, plus base. Total weight 232 lbs.

214 Items, 1324 Pieces.

Sizes Include:

-001 THRU -010

-012 THRU -050

-106 THRU -163

-204 THRU -262

-314 THRU -355

-425 THRU -429

3 racks - each one is: 20" wide x 15-3/4" deep x 15" high
 1 base - 20-3/8" wide x 16" deep x 15-1/8" high
 Approximately 61" from top to bottom

THE ULTIMATE FLUOROCARBON O-RING ASSORTMENT

Part Number: 568 FC KIT-ULTIMATE

List Price: \$8,602.76



Includes: 12 drawers and 3 slide racks, plus base. Total weight 232 lbs.

214 Items, 1324 Pieces.

Sizes Include:

-001 THRU -010

-012 THRU -050

-106 THRU -163

-204 THRU -262

-314 THRU -355

-425 THRU -429

3 racks - each one is: 20" wide x 15-3/4" deep x 15" high
 1 base - 20-3/8" wide x 16" deep x 15-1/8" high
 Approximately 61" from top to bottom

ASSORTMENT KITS

COTTER PIN KIT

Part Number: COTTER PIN KIT

List Price: \$38.16

	1/8" X 1-1/4" 75 pcs.	3/32" X 1" 150 pcs.
	1/8" X 1-1/4" 75 pcs.	3/32" X 1-1/2" 100 pcs.
	1/8" X 2" 50 pcs.	5/32" X 2-1/2" 30 pcs.

555 Pieces



WOODRUFF KEY KIT

Part Number: WOODRUFF KEYS KIT

List Price: \$85.11

	1/8" X 1/2" No. 3 16 pcs.	1/8" X 5/8" No. 5 15 pcs.
	3/32" X 5/8" No. 6 15 pcs.	3/16" X 3/4" No. 9 10 pcs.
	1/4" X 7/8" No. A 5 pcs.	1/4" X 1" No. 15 4 pcs.

65 Pieces



GREASE FITTING KIT

Part Number: GREASE FITTING KIT

List Price: \$46.13

	1/8" NPT Straight 6 pcs.	1/4" - 28 Straight 6 pcs.
	3/16" Drive Straight 4 pcs.	1/8" NPT 45 1/8" NPT 90 3 pcs. ea.
	1/4" - 28 45 1/4" - 28 90 3 pc. ea.	5/16" Drive Straight 4 pcs.

32 Pieces



GREASE FITTING KIT-A

Part Number: GREASE FITTING KIT-A

List Price: \$41.00

	1/8" PT Straight 25 pcs.	1/8" PT 45° 1/8" PT 90° 1/8" PT 7.5° 5 pcs.
	1/4"-28 PT Straight 50 pcs.	1/4"-28 PT 45° 1/4"-28 PT 90° 5 pcs.

100 Pieces



NYLON PLUG KIT

Part Number: NYLON PLUG KIT

List Price: \$140.00

	Nyplug-125-125 1/8" x 1/8" 20 pcs.	Nyplug-187-109 3/16" x 7/64" 20 pcs.	Nyplug-250-125 1/4" x 1/8" 20 pcs.	
	Nyplug-125-156 1/8" x 5/32" 20 pcs.	Nyplug-187-187 3/16" x 3/16" 20 pcs.	Nyplug-250-187 1/4" x 3/16" 20 pcs.	Nyplug-312-125 5/16" x 1/8" 20 pcs.
	Nyplug-125-875 1/8" x 7/8" 20 pcs.	Nyplug-187-250 3/16" x 1/4" 20 pcs.	Nyplug-250-250 1/4" x 1/4" 20 pcs.	Nyplug-375-250 3/8" x 1/4" 20 pcs.

220 Pieces
11 Sizes



SET SCREW KIT

Part Number: SSK-INCH

List Price: \$63.60



Use these set screws in confined areas, where there is no room for a protruding head. Nine coarse sizes, three fine sizes.

Hex wrench shown not included. Coarse sizes: 1/8"-40 x 3/16", 5/32"-32 x 3/16", 3/16"-24 x 1/4", 1/4"-20 x 1/4", 1/4"-20 x 3/8", 5/16"-18 x 3/8", 5/16"-18 x 1/2", 3/8"-16 x 3/8", and 3/8"-16 x 1/2". Fine sizes: 1/4"-28 x 1/4", 5/16"-24 x 3/8", 3/8"-24 x 3/8"

ASSORTMENT KITS & INSTALLATION TOOLS

CAP PLUG KIT

Part Number: CAP PLUG KIT

List Price: \$222.97



Our new and improved cap plug kit contains 22% more cap plugs in an environmentally friendly corrugated box. Separated areas hold 625 cap plugs in 24 of the most popular sizes.

Cap Plug Number	QTY	Cap Plug Number	QTY	Cap Plug Number	QTY
CAP-2-X	50	CAP-PD-100	25	CAP-G-22	20
CAP-4	50	CAP-PD-120	25	CAP-G-25	20
CAP-6-X	50	CAP-PD-140	20	CAP-G-27	20
CAP-9	50	CAP-PD-160	20	CAP-P-28	25
CAP-12-X	25	CAP-G-2	20	CAP-P-38	25
CAP-14	20	CAP-G-8	20	CAP-P-48	25
CAP-PD-60	25	CAP-G-14	20	CAP-P-68-H	25
CAP-PD-80	25	CAP-G-18	20	CAP-P-88-H	20

CAP PLUG CASE

Part Number: CAP PLUG CASE

List Price: \$114.41

This rugged case has 24 empty compartments to hold a limited variety of cap plugs from the master kit (shown above).

Case only - cap plugs sold separately.



SEAL TOOL KIT

Part Number: SEAL TOOL KIT

Net Price: \$320.16

Kit contains:

- Piston seal compressor
- Pick set
- Pi Tape
- Seal installation tool set
- Wear strip cutter
- O-ring adhesive
- Precision cord cutter
- Seal install and remove tool
- O-ring detector



QUALITY ROD U-SEAL INSTALLATION TOOLS



Part Number	Seal ID Range		Max Heel Cross Section	Net Price
IT 100	3/4" to 1-1/4"	19 - 31 mm	0.300"	\$22.32
IT 150	1-3/8" to 1-7/8"	35 - 47 mm	0.360"	22.32
IT 200	2" to 3"	51 - 76 mm	0.600"	22.32
IT 100-NN	3/4" to 1-1/4"	19 - 31 mm	0.300"	22.32
IT 150-NN	1-3/8" to 1-7/8"	35 - 47 mm	0.360"	22.32
IT 200-NN	2" to 3"	51 - 76 mm	0.600"	22.32

These tools aid U-seal installation, eliminating the risk of damaging the seal lip. NN = Without Hercules® logo.

Usage Instructions online at www.HerculesUS.com / Technical / Usage and Installation Instructions / IT Tools Installation and Assembly.

VALUE ROD U-SEAL INSTALLATION TOOLS



Part Number	Seal ID Range		Net Price
SEAL TWISTOR M	1-3/16" to 2"	30 - 50 mm	\$12.30
SEAL TWISTOR L	2" to 2-3/4"	50 - 70 mm	13.84
SEAL TWISTOR XL	2-3/4" to 6-1/2"	70 - 165 mm	15.38

These tools aid Rod U-seal installation, eliminating the risk of damaging the seal lip.

Usage Instructions online at www.HerculesUS.com / Technical / Usage and Installation Instructions / IT Tools Installation and Assembly.

INSTALLATION / SPLICING / CUTTING TOOLS

INSTALLATION TOOL SET

Part Number: IT TOOL SET-A

Net Price: \$46.00

Sizes Included	Max Heel Cross Section
S (22 - 30 mm)	6.6 mm
M (30 - 50 mm)	10.7 mm
L (50 - 70 mm)	19.3 mm
XL (70 - 165 mm)	27.1 mm



This handy tool set has 4 different size installation tools, along with a holder.

SEAL CLASPER

Part Number: SEAL CLASPER

Net Price: \$99.00



The Seal clasper is designed to press a PTFE piston seal back into the groove. The clasper works on seals from 50mm to 360mm OD. It allows a piston seal to be installed into a cylinder safely and rapidly.

The stainless steel belt can be adjusted according to the dimension of seals. The HPU triangle protector prevents seal damage.

How to use:

1. Adjust the length of stainless steel belt to match the seal.
2. Pull the grid to clasp the PTFE piston seal back into groove.

SPLICE IRON

Part Number: SEAL HEATER

Net Price: \$43.05



100 to 400°C

O-RING SPLICE TOOL

Part Number: OR SPLICER

Net Price: \$30.75

- Splicing tool for o-rings
- For cross section diameter from 2.5 to 20 mm
- Clamping plates for locking
- Aluminium stands for use with glue or heat



O-RING SPLICE KIT

Part Number: OR SPLICE KIT

Net Price: \$169.23

Kit contains:

- Splice iron
- Pi tape
- Grinding tool
- O-ring adhesive
- Precision cord cutter
- Splice tool



WEAR STRIP CUTTER

Part Number: WS CUTTER

Net Price: \$22.80



Cut your own wear rings to exact dimensions.

CUTTING / CHOPPING / REMOVAL TOOLS

CUTTER BLADES

Part Number: WS CUTTER BLADE

Net Price: \$8.40



Quantity of 10 Wear Strip
Cutter Blades.

OIL SEAL REMOVAL & INSTALLATION TOOL

Part Number: SR TOOL

Net Price: \$64.80



O-RING CORD CHOPPER

Part Number: ORC CHOPPER

Net Price: \$35.20

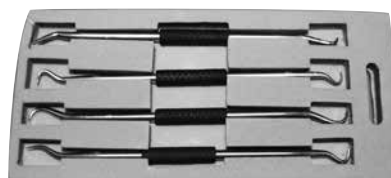


- Cuts o-ring cord to prepare it for splicing
- Suitable for cross section from 0.103 to 0.551 inches (2.62 to 14 mm)

O-RING PICK SET

Part Number: OR HOOK

List Price: \$7.27



This Value package of O-ring Picks in plastic carrying case, aid in the installation and extraction of O-rings.

CHOPPER BLADES

Part Number: ORC CHOPPER BLADE

Net Price: \$7.00



Quantity of 20 Chopper
Blades.

O-RING PICK SET 1

Part Number: O-RING PICK

Net Price: \$6.25

These Bronze O-ring Picks, w/ black vinyl case, aid in the installation and extraction of O-rings.



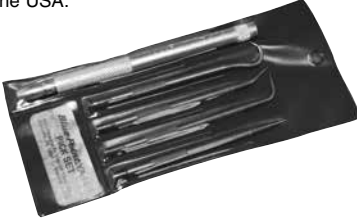
REMOVAL TOOLS

O-RING PICK SET 2

Part Number: O PICK SET

Net Price: \$34.90

Designed for heavy duty use and packaged in a clear vinyl pouch, this kit contains a knurled handle and four screw-in picks with different hook configurations. Set includes straight tip, o-ring 90° tip, hook tip, and angle tip. Made in the USA.

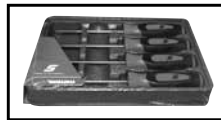


SNAP-ON O-RING PICK SET 4

Part Number: MAXI PICK SET

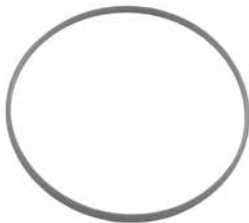
Net Price: \$55.74

Designed for heavy duty use and packaged in a plastic pouch, these highly visible picks feature screwdriver-type colored handles. Set includes awl, hook tip, 45° bent tip tool, and 90° bent tip tool. Made in the USA.



GLAND REMOVAL TOOLS

Part Number	Bore Diameter	List Price
JD-6.00X0.40-IT	6"	\$24.73
JD-70MM-IT	70 mm	8.55
JD-80MM-IT	80 mm	9.14
JD-90MM-IT	90 mm	10.06
JD-100MM-IT	100 mm	11.59



CHEVRON ASSEMBLY TOOL

Part Number: CM-376-9067-001

Net Price: \$53.61

Vee Packing assembly tool for Telescopic Cylinders.

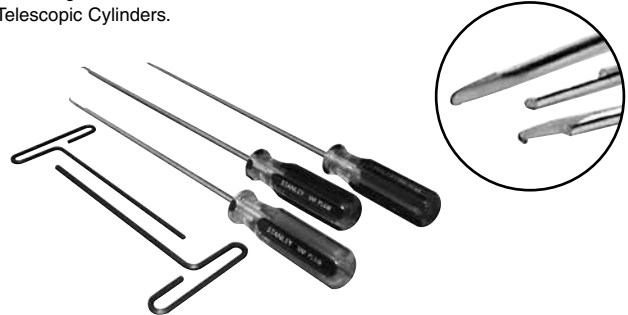


5 PIECE TOOL KIT SET

Part Number: CH-TK-1

Net Price: \$90.55

Vee Packing tool kit set for Telescopic Cylinders.



8 PIECE O-RING PICK SET

Part Number: O PICK SET-A

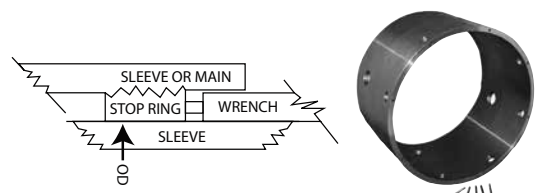
Net Price: \$20.00

This economical seal pick tool set lowers your chance of surface damage. It contains 8 different hard metal hooks with sturdy plastic handles.



STOP RING WRENCH

Part Number	Sleeve or Plunger O.D.	Pins	Net Price
CM-376-6067-047	2-3/4"	5 Pins	\$252.05
CM-376-6067-048	3-3/4"	5 Pins	285.98
CM-376-6067-049	4-3/4"	5 Pins	307.86
CM-376-6067-050	5-3/4"	5 Pins	330.13
CM-376-6067-051	6-3/4"	5 Pins	392.95
CM-376-6067-052	7-7/8"	5 Pins	425.05
CM-376-6067-053	9-3/8"	5 Pins	474.29
CM-391-2086-007	Replacement Stop Wrench Pin		2.95



REMOVAL TOOLS

11 PIECE PACKING TOOL KIT

Part Number: PACK TOOL SET-11
Net Price: \$138.33


Part Number	QTY	Part Number	QTY
FPH-312R	2	FPH-RTC312	3
FPH-437R	2	FPH-RTC437	3
SSP-125	1	WRENCH	1
SSP-187	1	BOX	1
SSP-312	1		

REPLACEABLE WOODSCREW TIPS

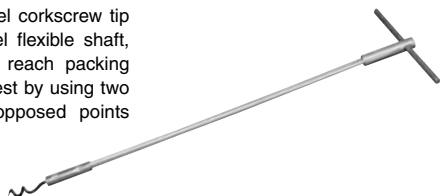
Part Number	Packing Space	Net Price
FPH-RTW312	5/16"-up	\$7.86
FPH-RTW437	7/16"-up	9.23
FPH-RTW500	1/2"-up	9.50



FLEXIBLE PACKING HOOKS

Part Number	Packing Space	Length	Net Price
FPH-187	3/16"-up	6-1/2"	\$15.20
FPH-312R	5/16"-up	7-1/2"	16.67
FPH-437R	7/16"-up	10-1/2"	18.33
FPH-500R	1/2"-up	14-1/2"	25.00

With a tempered tool steel corkscrew tip and a woven strand steel flexible shaft, this tool makes hard to reach packing easy to pull out. Works best by using two hooks at diametrically opposed points (180°).



17 PIECE PACKING TOOL KIT

Part Number: PACK TOOL SET-17
Net Price: \$228.33


Part Number	QTY	Part Number	QTY
FPH-312R	2	FPH-RTC437	3
FPH-437R	2	FPH-RTC500	3
FPH-500R	2	FPH-RTW312	1
SSP-125	1	FPH-RTW437	1
SSP-187	1	FPH-RTW500	1
SSP-312	1	WRENCH	1
FPH-RTC312	3	BOX	1

REPLACEABLE CORKSCREW TIPS

Part Number	Packing Space	Net Price
FPH-RTC312	5/16"-up	\$15.62
FPH-RTC437	7/16"-up	18.90
FPH-RTC500	1/2"-up	10.00



SOLID SHAFT PICKS

Part Number	Packing Space	Length	Net Price
SSP-125	1/8 -up	9-1/2"	\$21.75
SSP-187	3/16 -up	10"	26.75
SSP-312	5/16"-up	10"	42.96

Formed from hardened steel, this tool's length and sharp angled point gets at hard to reach o-rings, back-up rings and braided packing. You'll be amazed at all the uses you find for this tool.



DISMANTLING TOOLS

SPANNER WRENCHES

(1) ADJUSTABLE HEAD — PIN STYLE

PART NUMBER	PART OD RANGE	PIN DIA.	PIN LGTH.	NET PRICE
SPAP-2.00X0.13	3/4" to 2" (19mm to 50mm)	1/8"	1/8"	\$48.99
SPAP-2.00X0.19	3/4" to 2" (19mm to 50mm)	3/16"	5/32"	50.43
SPAP-3.00X0.19	1-1/4" to 3" (32mm to 76mm)	3/16"	3/16"	56.19
SPAP-3.00X0.25	1-1/4" to 3" (32mm to 76mm)	1/4"	7/32"	57.84
SPAP-4.75X0.25	2" to 4-3/4" (51mm to 120mm)	1/4"	1/4"	79.80
SPAP-6.25X0.38	4-1/2" to 6-1/4" (115mm to 159mm)	3/8"	1/4"	84.17



1

(2) ADJUSTABLE HEAD — HOOK STYLE

PART NUMBER	PART OD RANGE	HOOK WD.	HOOK DP.	NET PRICE
SPA-H-2.00	3/4" to 2" (19mm to 50mm)	11/32"	1/8"	\$44.60
SPA-H-3.00	1-1/4" to 3" (32mm to 76mm)	13/32"	5/32"	53.91
SPA-H-4.75	2" to 4-3/4" (51mm to 120mm)	15/32"	3/16"	68.88
SPA-H-6.25	4-1/2" to 6-1/4" (115mm to 159mm)	15/32"	1/4"	72.33
SPA-H-8.75	6-1/8" to 8-3/4" (155mm to 222mm)	15/32"	5/16"	84.61



2

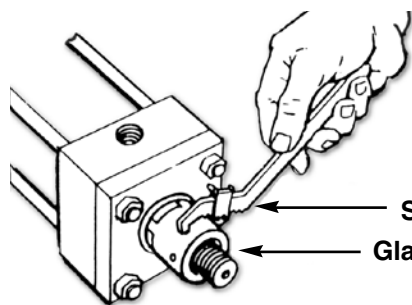
(3) ADJUSTABLE FACE — PIN STYLE

PART NUMBER	DIA. RANGE (CENTER TO CENTER)	PIN DIA.	PIN LGTH.	NET PRICE
SPAPF-2.00X0.19	5/8" to 2" (16mm to 50mm)	3/16"	1/8"	\$39.47
SPAPF-3.00X0.25	5/8" to 3" (16mm to 76mm)	1/4"	3/16"	57.71
SPAPF-4.00X0.31	5/8" to 4" (16mm to 101mm)	5/16"	1/4"	83.59



3

PARKER GLAND WRENCHES



Spanner Wrench (Sold Separately Above)

Gland Wrench



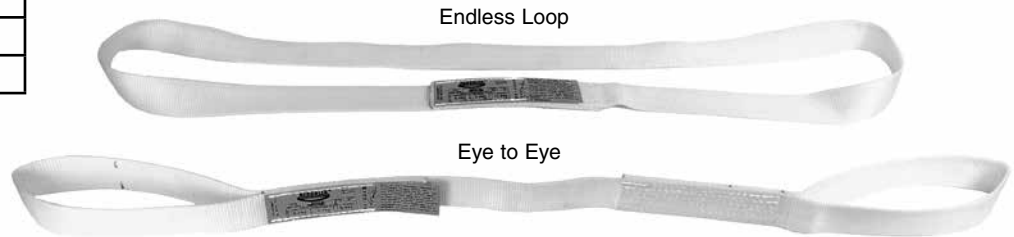
Rod Dia.	Kit #	ID X OD X HT	Net Price	Spanner (Sold Separately Above)
1/2", 5/8", 12mm & 14mm	PKH-069590	11/16" X 1-1/8" X 1-3/8"	\$34.62	SPAP-2.00X0.19
18mm	PKH-084765	13/16" X 1-1/4" X 1-7/16"	32.46	SPAP-2.00X0.19 or SPAP-3.00X0.19
1" & 22mm	PKH-069591	1-1/16" X 1-5/8" X 1-1/2"	20.91	SPAP-2.00X0.19 or SPAP-3.00X0.19
28mm	PKH-084766	1-1/4" X 1-11/16" X 1-9/16"	31.05	SPAP-2.00X0.19 or SPAP-3.00X0.19
1-3/8" & 36mm	PKH-069592	1-7/16" X 1-7/8" X 1-5/8"	40.50	SPAP-2.00X0.19 or SPAP-3.00X0.19
1-3/4" & 45mm	PKH-069593	1-13/16" X 2-1/4" X 1-5/8"	38.50	SPAP-3.00X0.25 or SPAP-4.75X0.25
2"	PKH-069594	2-1/16" X 2-1/2" X 2"	47.81	SPAP-3.00X0.25 or SPAP-4.75X0.25
2-1/2" & 56mm	PKH-069595	2-9/16" X 3" X 2-1/8"	75.51	SPAP-3.00X0.25 or SPAP-4.75X0.25
70mm	PKH-069596	2-15/16" X 3-1/2" X 2-3/8"	92.64	SPAP-4.75X0.25

LIFTING SLINGS

Hercules now carries new synthetic web lifting slings which are primarily composed of nylon. Our lifting slings are a soft and flexible solution to rigging and are offered in endless and eye to eye styles. All of the synthetic web slings are constructed with 9800 lbs. maximum load rated heavy duty webbing, and are in full compliance with current ASME B30.9 standards, with a 5:1 safety factor.

Nylon web slings with flat eye to eye loops are one of the most popular straps for lifting because of their versatility: they can be used in a choker, basket or vertical hitch. The design also makes it easy to remove from underneath a load.

Material	Nylon
Max Temperature	180°F
UV Degradation	High



Part Number	Width (in)	Length (ft)	Product	Vertical Load Limit (lbs.)	Choker Load Limit (lbs.)	Basket Load Limit (lbs.)	Net Price
SLEN1-4	1"	4'	Endless Loop	3200	2500	6400	\$7.92
SLEN1-6	1"	6'	Endless Loop	3200	2500	6400	10.08
SLEN2-4	2"	4'	Endless Loop	6400	5000	12800	11.94
SLEN2-6	2"	6'	Endless Loop	6400	5000	12800	15.88
SLEN2-8	2"	8'	Endless Loop	6400	5000	12800	19.82
SLEE1-4	1"	4'	Eye to Eye	1600	1200	3200	7.38
SLEE1-6	1"	6'	Eye to Eye	1600	1200	3200	8.46
SLEE2-4	2"	4'	Eye to Eye	3200	2400	6400	10.95
SLEE2-6	2"	6'	Eye to Eye	3200	2400	6400	12.92
SLEE2-8	2"	8'	Eye to Eye	3200	2400	6400	14.89

REMANUFACTURING TOOLS

PISTON SEAL REFORMING TOOL

Part Number: PS CONSTRICTOR

Net Price: \$13.75

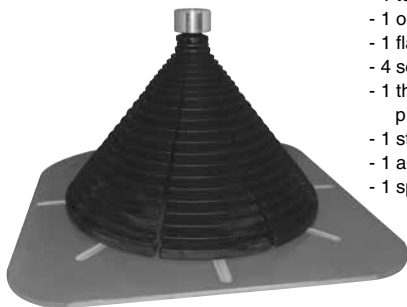


PTFE Piston seal resizing tool.

PISTON SEAL STRETCHER

Part Number: SEAL STRETCHER

Net Price: \$69.00



The Seal Stretcher
Includes the following:

- 8 stepped segments
- 1 top nut/handle
- 1 o-ring
- 1 flat base
- 4 screws
- 1 threaded rod with a piston pre-installed
- 1 stop nut
- 1 aluminum support base
- 1 spring

Usage Instructions online at www.HerculesUS.com / Technical / Usage and Installation Instructions / Seal Stretcher Instructions

MINI GRINDER

Part Number:

Net Price:

OR GRINDER

\$49.78



The Mini Grinder has a no load speed of 5000-18,000 rpm adjustable, and includes the following:

- Copper collet: 2.4 & 3.2 (mm)
- 2 Diamonds bits
- 2 Grinding Stones
- 1 Nylon Brush
- 1 Connective posts for sanding bands
- 2 sanding bands
- 1 engraving bit
- 1 collet (2.4 mm)

LEAK DETECTION

LEAK DETECTION KIT

Part Number: LDU-OPK-341
Net Price: \$373.69

HOW IT WORKS

A small amount of liquid fluorescent dye is added to a circulating fluid system that is being inspected for leaks. The system is then run for a short time to allow the dye to mix and circulate with the host fluid. The dye/fluid mixture escapes with the host fluid wherever there is a leak and glows a bright yellow/green when inspected with a high-intensity ultraviolet or UV/black light lamp. This method is extremely effective in locating even the smallest, most elusive leaks, as well as multiple leaks.



INDIVIDUAL LEAK DETECTION PRODUCTS

Part Number	Description	Net Price
LDU-CR-800	CLEANER, 8 OZ SPRAY	\$11.58
LDU-OIL-GLO-44-P	DYE, ALL-IN-ONE, 16 OZ	105.26
LDU-OPX-3000	LAMP, LED, 115V CHARGER	184.21
LDU-UVS-40	SPECTACLES, UV ENHANCING	18.95

MEASURING TOOLS

HIGH QUALITY DIGITAL CALIPER

Part Number: HH-CALIPER-6-FR

Net Price: \$40.33

This high quality instrument measures to 6" (150 mm). A push of a button changes from fractions, mm and inches. Functions also include: On/Off function, zero key, data input capabilities, test for low voltage, and "Auto Off" function when unit sits dormant for more than 4 minutes.



DIGITAL CALIPERS

Part Number	Net Price
HH-CALIPER-6	\$35.00
HH-CALIPER-6-P	35.00
HH-CALIPER-12	84.33
HH-CALIPER-12-P	84.33

Quality calipers able to measure up to 6" (150mm) or 12" (300mm). A push of a button changes from inches to metric. A clear LCD display shows a reading with a resolution of 0.0005" (0.01mm) that is accurate to ±0.001" (±0.03mm). These calipers come in a sturdy, padded plastic case with instructions and a spare battery.

P = No Hercules logo.



INNER GROOVE CALIPER

Part Number: INNER CALIPER

Net Price: \$108.75

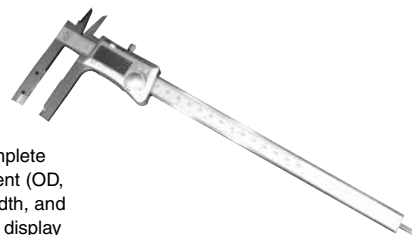


Inner Groove Caliper - 200 mm.

INNER DEPTH CALIPER

Part Number: INNER-DEPTH CALIPER

Net Price: \$135.00



This inner depth caliper is complete with five modes of measurement (OD, ID, General Depth, Groove Width, and Groove Depth). It has a digital display capable of displaying mm, inches, and fractions and can take measurements of up to 8" (205 mm). The four groove depth pins located on the back of the calipers measure 10mm, 20mm, 3/8", and 3/4".

INNER DEPTH CALIPER PINS

Part Number: INNER-DEPTH CALIPER DP

Net Price: \$12.50

This Inner-Depth Caliper replacement part includes four groove depth pins measuring 10mm, 20mm, 3/8", and 3/4".



INNER DEPTH CALIPER KNIVES

Part Number: INNER-DEPTH CALIPER WK

Net Price: \$12.50

This Inner-Depth Caliper replacement part includes one pair of width knives and four installation screws.



MEASURING TOOLS

O-RING COMPOUND IDENTIFIER

Part Number: OR RECOGNISER

Net Price: \$12.30

Identify a variety of o-ring compounds with this handy O-Ring Recognizer kit. Testing for EPDM70, NBR, FFKM (KALREZ®) and FKM o-rings. Three sample seals included.



BORE TAPE

Part Number: BORE TAPE 300

Net Price: \$95.07

Measures inside and outside diameters from 50 mm 300 mm (2"-12").

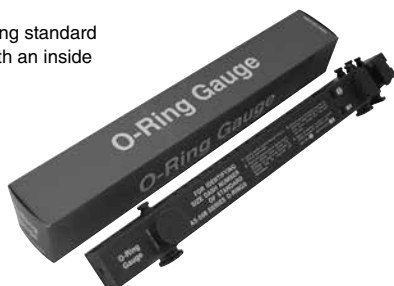


O-RING GAUGE

Part Number: OR-GAUGE

Net Price: \$21.53

Slide gauge for measuring standard cross-section o-rings with an inside diameter up to 13".



O-RING MEASURING CONE

Part Number: O RING CONE-INCH

Net Price: \$20.50

Handy cone provides o-ring dash numbers instantly. Measures 184 of the most widely used sizes in 5 standard widths, 1/4" ID to 5-5/8" ID. Made of high density polyurethane, the cone stands 17-1/2" high.



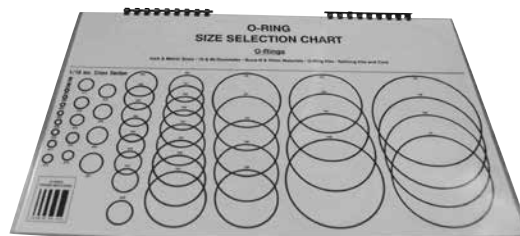
O-RING CHART

Part Number: O-RING CHART

Net Price: \$18.68

Part Number: O-RING CHART NN

Net Price: \$18.68



Durable, Accurate, and Fast, these charts allow for easy Standard O-ring size identification. No shop should be without one! NN = Without Hercules® logo.

Urethane

Formulated of copolymers of ether or ester based urethanes, this material is used in a wide application of seals, wipers, back-up rings, cushions, bumpers, and a myriad of other uses. Highly resistant to oil swell, ozone, oxidation and abrasion, it also has excellent cut resistance. Highly resilient, urethanes also have high tensile strength and elongation properties. Urethanes remain an excellent choice in hydraulic systems using petroleum based fluids. Most urethane seals remain flexible and efficient in temperatures ranging from -65° F to +200° F with some able to withstand intermittent temperatures up to +300° F.

Nitrile

The most common nitrile copolymer blend is the compound known as Buna-N. Possessing very good resistance to petroleum based hydraulic oils, Buna-N also works well with fuels such as diesel or gasoline. Nitrile seals have a good resistance to compression set, but their flexibility suffers somewhat in the lower temperature range. Seals made from this material have a low resistance to ozone and must be stored carefully in most environments. Working temperatures are -40° to +240° F.

PTFE

Most PTFE seals, in order to retain their toughness and flexibility, are fortified with short glass fiber, bronze flashes, carbon graphite, or a combination of these fillers. Because of a lack of resilience (memory) in PTFE, an energizer is most often employed to obtain the desired fit. Benefits are chemical inertness, high heat resistance, low temperature flexibility, low running friction, and non-adhesive characteristics. Temperatures to +500° F are obtainable but are often reduced by the filler or energizer employed.

Fluorocarbon

Fluorocarbon combines high temperature resistance with excellent chemical resistance. Excellent for use with alcohol and aromatic fuels and highly resistant to ultraviolet light and ozone. This material is not recommended for use in low temperatures or in aircraft hydraulic fluids. Temperature range is -20° to +400° F.

Ethylene-Propylene

Ethylene-Propylene can be used for sealing phosphate ester hydraulic fluids such as Skydrol. Not suitable for petroleum based fluids, Ethylene-Propylene is highly effective for use with steam, acetone, and dilute acids and bases. Specially compounded Ethylene-Propylene can be made suitable for automobile brake systems. Temperature range from -20° to +300° F.

Silicone

Silicone is an elastomer made from silicon, oxygen, hydrogen, and carbon. The key use of this material is in static seals employed in a wide (-75° F to +450° F) range of temperatures. Silicone has a high resistance to dry heat, ultraviolet light and ozone. This material is not recommended for dynamic situations due to poor abrasion resistance and high friction characteristics.

Glossary of Terms

Bearing/Wear Rings: Soft metal or plastic rings placed in grooves on the piston or in the head to prevent contact between hard metal surfaces.

Durometer: A generic term referring to the instrument and the scale used to measure the relative hardness of various elastomers. The lower the durometer reading, the softer the material.

Dynamic Seal: A sealing device used between mating surfaces that have relative motion.

Elastomer: A rubber-like material having the capacity for large deformation and rapid, complete recovery from the deforming force.

Gland: A groove or open area machined into the head or piston that houses the sealing device.

Static Seal: A sealing device used between mating surfaces that have no relative motion.

Wiper/Scraper: A device placed in the head of a cylinder for the purpose of excluding foreign matter from the inside of the cylinder.

These are general guidelines only, and users must conduct their own functional tests to determine the suitability of any compound for their particular application.

R = Recommended
M = Marginal
U = Unsatisfactory
X = Insufficient Data

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Acetaldehyde	U	U	R	U	U	U	R	U
Acetamide	R	U	R	R	U	U	M	U
Acetic Acid	M	M	R	R	U	U	R	U
Acetone	U	M	R	M	U	U	M	U
Acetophenone	U	U	R	U	U	U	U	U
Acetylene	R	R	R	R	X	X	R	R
Ammonia	R	R	R	R	U	X	R	U
Ammonium Hydroxide	R	R	R	R	U	U	R	R
Amyl Acetate	U	U	M	U	U	U	U	U
Anderol L-774	M	U	U	U	R	U	U	R
Aniline	U	U	R	U	U	U	U	M
Ansul Ether	M	U	M	U	U	R	U	U
Antifreeze	R	R	R	R	U	U	R	R
Aroclors	M	U	R	U	U	X	M	R
Askarel	R	U	U	U	U	U	U	R
ASTM #1	R	U	U	R	R	R	R	R
ASTM #3	R	U	U	U	R	R	U	R
ASTM Fuel A	R	U	U	R	R	R	U	R
ASTM Fuel B	R	U	U	U	U	R	U	R
ASTM Fuel C	R	U	U	U	U	R	U	R
ASTM Fuel D	M	U	U	U	U	R	U	R
Auto Transmission Fluid	R	U	U	M	R	R	M	R
Beer	R	R	R	R	U	U	R	R
Benzaldehyde	U	U	R	U	U	U	U	U
Benzene	U	U	U	U	U	U	U	R
Benzine	R	U	U	R	R	R	U	R
Benzoic Acid	U	U	U	U	U	U	U	R
Benzophenone	U	U	R	X	U	U	U	R
Benzyl Alcohol	U	U	U	R	U	U	X	R
Bleach	R	R	R	R	U	U	U	R
Borax	R	R	R	U	R	R	R	R
Boric Acid	R	R	R	R	U	R	R	R
* Brake Fluid (non-Petroleum)	U	R	R	R	U	U	R	U
Bromine	U	U	U	U	U	U	U	R
Bromobenzene	U	U	U	U	U	U	U	R
Bunker Oil	R	U	U	U	R	R	U	R
Butane	R	M	U	R	R	U	U	R
Butter	R	U	M	R	R	R	R	R
Butyl Acetate	U	U	U	U	U	U	U	U
Butyl Alcohol	R	R	R	R	U	U	R	R
Butyl Amine	M	U	U	U	U	U	R	U
Butyl Carbitol	U	U	R	M	U	X	U	M
Butyl Cellosolve	M	U	R	M	U	U	R	U
Butyraldehyde	U	U	R	U	U	U	U	U
Carbitol	R	R	R	R	U	U	R	R

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Carbitol Acetate	U	U	U	U	U	U	U	R
Carbon Disulfide	U	U	U	U	U	X	U	R
Carbon Tetrachloride	R	U	U	U	U	U	U	R
Carbonic Acid	R	R	R	R	R	R	R	R
Castor Oil	R	R	R	R	R	R	R	R
Cellosolve	U	R	U	U	U	U	U	U
Chassis Grease	R	U	U	M	R	X	U	R
Chloracetic Acid	U	U	R	U	U	U	X	U
Chloracetone	U	U	R	M	X	X	U	R
Chlordane	R	U	U	M	X	X	U	R
Chlorine	U	U	R	U	U	U	X	R
Chlorobenzol	U	U	U	U	U	U	U	R
Chloroform	U	U	U	U	U	U	U	R
Chlorsulfonic Acid	U	U	U	U	U	U	U	U
Chrome Plating Solution	U	U	R	U	U	U	R	R
Chromic Acid	U	U	X	U	X	X	M	R
Citric Acid	R	R	R	R	X	X	R	R
Cod Liver Oil	R	U	U	R	R	U	R	R
Coffee	R	R	R	R	U	U	R	R
Corn Oil	R	U	U	U	R	U	R	R
Creosote	R	U	U	R	R	M	U	R
Creoste Oil	R	U	U	M	X	X	M	R
Creosylic Acid	U	U	U	U	U	U	U	R
Crude Oil	R	U	U	U	R	X	U	R
Cyclohexane	R	U	U	M	R	R	U	R
Cyclohexanol	R	U	U	R	X	X	U	R
Decalin	U	U	U	U	U	U	U	R
Denatured Alcohol	R	R	R	R	U	U	R	R
Diacetone	U	U	R	U	U	U	U	U
Dibutyl Amine	U	U	U	M	U	U	U	U
Dibutyl Phthalate	U	U	R	U	U	X	X	M
Dichloro Aniline	U	U	U	U	U	U	U	M
Dichloro Butane	R	U	U	U	U	U	U	R
Diesel Oil	R	U	U	M	U	U	U	R
Diethyl Benzene	M	U	U	U	X	X	X	R
Diethylamine	R	R	R	R	U	M	R	U
Diethylene Glycol	R	R	R	R	U	U	R	R
Dimethyl Ether	U	U	U	M	M	R	U	U
Dimethyl Formamide	U	X	R	X	X	X	R	U
Dimethyl Phthalate	U	U	R	U	U	X	X	R
Dimethyl Terephthalate	U	U	U	U	U	U	U	R
Dioctyl Phthalate	U	U	R	U	U	U	M	R
Dioxane	U	U	R	U	U	U	U	U
Diphenyl	U	U	U	U	U	U	U	R
Dow Corning 550	R	R	R	R	R	R	R	R

*Requires special formulation of EPDM

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Dow Gard	R	R	R	R	M	M	R	R
Dowtherm A & E	U	U	U	U	U	U	U	R
Elco 28	R	U	U	M	R	R	R	R
Epoxy Resins	X	X	R	R	X	X	X	U
Ethane	R	U	U	R	R	M	U	R
Ethanol	R	R	R	R	U	R	R	R
Ethanolamine	R	R	R	R	U	M	R	U
Ethyl Acetate	U	U	R	U	U	U	R	U
Ethyl Benzene	U	U	U	U	U	U	U	R
Ethyl Cellulose	R	R	R	R	U	R	R	U
Ethyl Chloride	R	R	R	R	M	R	U	R
Ethyl Ether	M	U	M	U	U	R	U	U
Ethyl Formate	U	U	R	R	X	X	X	R
Ethyl Hexanol	M	R	R	R	X	X	X	R
Ethyl Merlaptan	U	U	X	M	X	X	M	R
Ethylene Chloride	U	U	U	U	U	U	U	R
Ethylene Glycol	R	R	R	R	U	X	R	R
Ethylene Oxide	U	U	R	U	U	U	U	U
Formaldehyde	M	M	R	M	U	U	R	U
Formic Acid	M	R	R	R	X	X	M	U
Freon 12	R	R	R	R	X	R	U	R
Fuel Oil	R	U	U	R	R	U	U	R
Furfuryl Alcohol	U	U	R	U	U	U	X	X
Furan	U	U	X	U	U	X	X	X
Furfural	U	U	R	U	U	X	U	U
Fyrquel	U	U	R	U	U	U	R	R
Gallic Acid	R	R	R	R	U	I	X	R
Gasoline	R	U	U	R	R	R	U	R
Gelatin	R	R	R	R	U	U	R	R
Glucose	R	R	R	R	X	U	R	R
Glycerine	R	R	R	R	U	U	R	R
Heptane	R	U	U	R	R	R	U	R
Hexaldehyde	U	U	R	R	X	X	R	U
Hexane	R	U	U	R	R	R	U	R
Hexanol	R	R	M	R	U	U	R	R
Home Heating Oil	R	U	U	M	R	R	R	R
Hydrazine	R	R	R	R	X	X	R	X
Hydrochloric Acid	R	M	R	R	M	U	U	R
Hydrocyanic Acid	R	R	R	R	U	X	M	R
Hydrogen Peroxide	R	R	R	R	U	X	R	R
Hydrogen Sulfide	U	U	R	R	U	X	M	U
Hydroquinone	M	U	U	U	U	X	X	R
Hypoid Gear Lube	R	U	U	M	R	R	M	R
Iodine	R	R	R	U	X	X	X	R
Iso Octane	R	U	U	R	R	R	U	R
Iso Phorone	U	U	R	U	U	U	U	U
Isocyanate	X	X	X	X	X	X	X	R
Isopar	R	X	U	R	R	R	U	R
Isopropanol	R	R	R	R	U	U	R	R
Isopropyl Acetate	U	U	R	U	U	U	U	U

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
JP-4(MIL-J-5624)	R	U	U	U	R	R	U	R
JP-4(MIL-J-5624)	R	U	U	U	R	R	U	R
Kerosene	R	U	U	R	R	R	U	R
Lacquers	U	U	U	U	U	U	U	U
Lactic Acid	R	R	R	R	U	X	X	R
Lard	R	U	R	R	R	R	R	R
Linoleic Acid	R	U	U	R	X	X	R	R
Linseed Oil	R	U	M	M	R	X	R	R
Lye Solutions	R	R	R	R	U	U	R	R
Malathion	R	U	U	X	X	X	U	R
Maleic Acid	U	U	U	U	X	X	X	R
Mercury	R	R	R	R	X	X	X	R
Meter-Cresol	U	U	U	R	U	U	U	R
Methacrylic Acid	U	U	R	R	U	U	U	M
Methane	R	U	U	R	R	M	U	R
Methanol	R	R	R	R	U	U	U	U
Methyl Acetate	U	U	R	R	U	U	U	U
Methyl Cellosolve	M	U	R	R	U	U	U	M
Methyl Ether Ketone	U	U	R	U	U	U	U	U
Methyl Mercaptan	X	X	R	X	X	X	X	X
Methylene Chloride	U	U	U	U	U	U	U	R
Milk	R	R	R	R	U	U	R	R
Mineral Oil	R	U	M	R	R	R	R	R
Mineral Spirits	R	U	U	U	R	R	U	R
Monovinyl Acetylene	R	R	R	R	X	X	R	R
Mustard	X	R	R	X	X	X	R	R
Naphtha	R	U	U	U	R	R	U	R
Naphthalene	U	U	U	U	X	X	U	R
Naphthenic Acid	R	U	U	U	X	X	U	R
Natural Gas	R	R	U	R	R	R	R	R
Neatsfoot Oil	R	U	R	U	R	R	R	R
Nitric Acid	U	M	R	U	U	U	U	M
Nitrobenzene	U	U	U	U	U	U	U	R
Nitropropane	U	U	R	U	U	U	U	U
Octane	R	U	U	U	U	U	U	R
Octanol	R	R	R	R	U	U	R	R
Oleic Acid	M	U	U	M	X	X	U	R
Oleum	R	U	U	M	X	X	U	R
Oronite 8200	R	U	U	R	X	R	U	R
Oxalic Acid	R	R	R	R	R	X	X	R
Peanut Oil	R	U	M	M	R	X	R	R
Pentane	R	M	U	R	R	U	U	R
Perchlorethylene	R	U	U	U	U	U	U	R
Petroleum Ether	U	U	U	U	U	U	U	R
Phenol	U	U	U	U	U	U	U	R
Phenylhydrazine	U	M	U	U	U	X	X	R
Phosphoric Acid	R	R	R	R	M	U	R	R
Pine Oil	R	U	U	U	U	X	X	R
Potassium Hydroxide	R	R	R	R	U	U	M	U
Propane	R	U	U	R	R	M	U	R

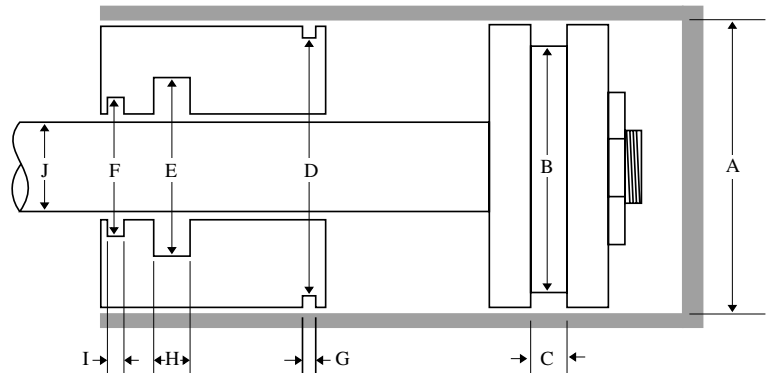
Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Propanol	R	R	R	R	U	U	R	R
Propyl Acetate	U	U	R	U	U	U	U	U
Propylene Glycol	R	R	R	M	U	M	R	R
Pydraul	U	U	R	U	U	U	U	R
Pyranol	R	U	U	R	R	R	U	R
Pyridine	U	R	U	U	U	X	U	U
Rapeseed Oil	R	U	R	R	R	R	U	R
Resurcinol	X	R	R	X	X	X	X	X
SAE 10W30	R	U	U	M	R	R	R	R
Seawater	R	R	R	R	U	U	R	X
Silicone Grease	R	R	R	R	R	R	R	R
Silver Nitrate	R	R	R	R	R	R	R	R
Skelly Solvent	R	U	U	U	X	X	X	R
Skydrol	U	U	R	U	U	U	U	R
Skydrol 500	U	U	R	U	U	U	U	R
Sodium Hydroxide	R	R	R	R	U	R	R	R
Sovasol	R	U	U	R	R	R	U	R
Soy Bean Oil	R	U	M	M	R	X	R	R
Stearic Acid	R	R	R	R	R	U	U	R
Stoddard Solvent	R	U	U	R	R	R	U	R
Sucrose	R	R	R	R	U	U	R	R

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Sulfuric Acid	R	R	R	R	R	U	U	R
Tall Oil	R	U	U	M	R	U	X	R
Tannic Acid	R	R	R	R	U	X	R	R
Tar	R	U	U	M	U	X	R	R
Tartaric Acid	R	R	R	R	X	X	R	R
Tetrachloro Ethane	U	U	U	U	U	U	U	R
Tetralin	U	U	U	U	U	U	U	R
Tidewater Oil	R	U	U	R	R	R	R	R
Toluene	U	U	U	U	U	U	U	R
Trichloro Ethylene	M	U	U	U	U	U	U	R
Triethanol Amine	M	R	R	R	U	U	X	U
Turbine Oil	R	U	U	U	R	R	U	R
Turpentine	R	U	U	U	R	U	U	R
UCDN 50HB280X	R	R	R	R	X	X	R	R
Univis J-43	R	U	U	R	R	R	U	R
Varnish	R	U	U	U	U	M	U	R
Vinegar	R	R	R	R	U	U	R	R
Water	R	R	R	R	U	U	R	R
Wheat Germ Oil	R	U	U	M	R	R	R	R
Whiskey & Wine	R	R	R	R	U	U	R	R
Wood Oil	R	U	U	R	X	M	U	R

HOW OFTEN HAVE YOU RECEIVED A CYLINDER FOR REPAIR AND THE SEALS WERE ...

- MISSING • COOKED • INCORRECT
- EXTRUDED • NIBBLED • TWISTED
- ROLLED • SPLIT • WORN OUT

The chart below can be used by your counter people, repair shops, or sales people to determine the seals you need. Note the dimensions, refer to your Hercules® Sealing Products Catalog, and call our sales staff with your information. If the part number(s) you need can't be located in the catalog, our Sales personnel will be glad to help you .



Call us TOLL FREE! 1-800-665-7325

FOR A PROFESSIONAL ANALYSIS OF SEAL FAILURE, SEND YOUR DAMAGED SEALS TO OUR ENGINEERING DEPARTMENT.

PISTON SEALS AND BEARINGS

DIAGRAM REFERENCE

DIMENSIONS

A = Bore = Nominal Seal O.D.
B = Groove Diameter = Nominal Seal I.D.
C = Groove Width = Nominal Seal Width

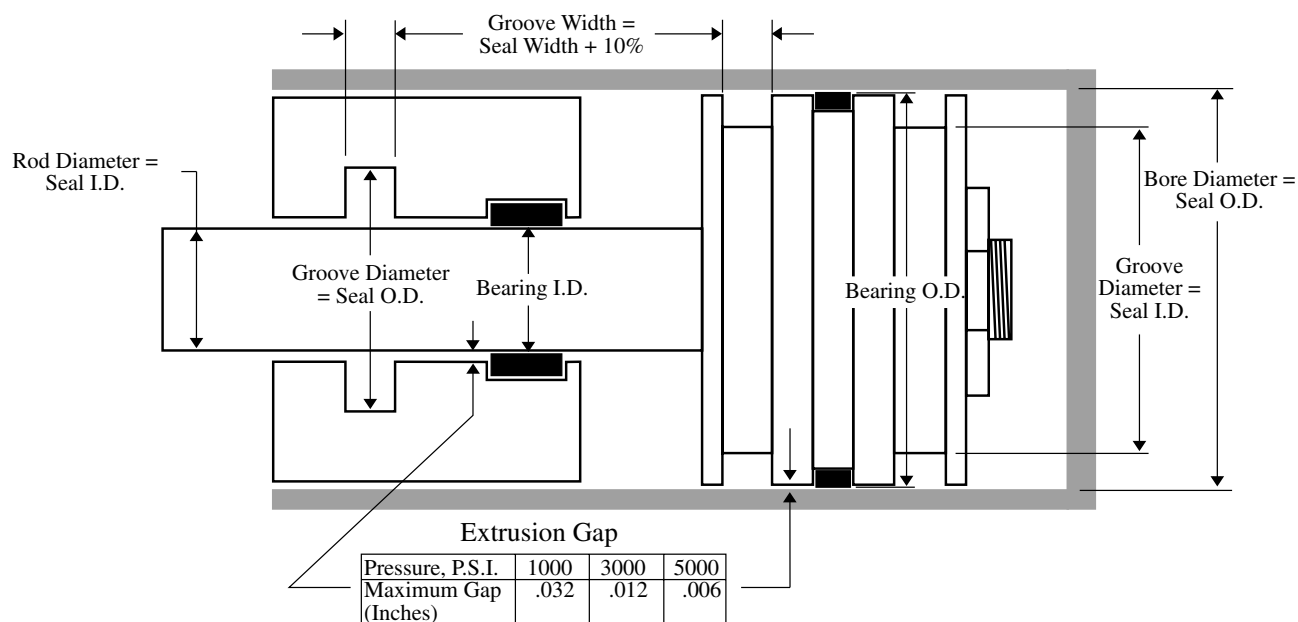
ROD SEALS AND BEARINGS

DIAGRAM REFERENCE

DIMENSIONS

D = Gland Groove Diameter = Nominal Seal I.D.
E = Rod Seal Groove Diameter = Nominal Seal O.D.
F = Wiper Groove Diameter = Nominal Wiper O.D.
G = Gland Groove Width = Nominal Seal Width
H = Rod Seal Groove Width = Nominal Seal Width
I = Wiper Groove Width = Base Width
J = Rod Diameter = Seal & Nominal Wiper I.D.

COPY FOR SHOP & COUNTER USE



ROD AND ROD GROOVE DIMETERS

ROD DIAM RANGE, IN.	ROD DIAM. TOLERANCE	GROOVE DIAM TOLERANCE	MAX DIAMETRICAL CLEARANCE		
			1000 PSI	3000 PSI	5000 PSI
.125 - .687	+ .0 / -.002	+ .004 / -.0	.008	.006	.004
.750 - 2.875	+ .0 / -.003	+ .008 / -.0	.012	.008	.004
3.000 - 7.000	+ .0 / -.004	+ .010 / -.0	.014	.010	-
7.000 - 7.750	+ .0 / -.005	+ .011 / -.0	.016	.010	-
8.000 - 9.500	+ .0 / -.005	+ .012 / -.0	.016	-	-
10.000 - 15.000	+ .0 / -.006	+ .015 / -.0	.016	-	-

BORE AND PISTON GROOVE DIMETERS

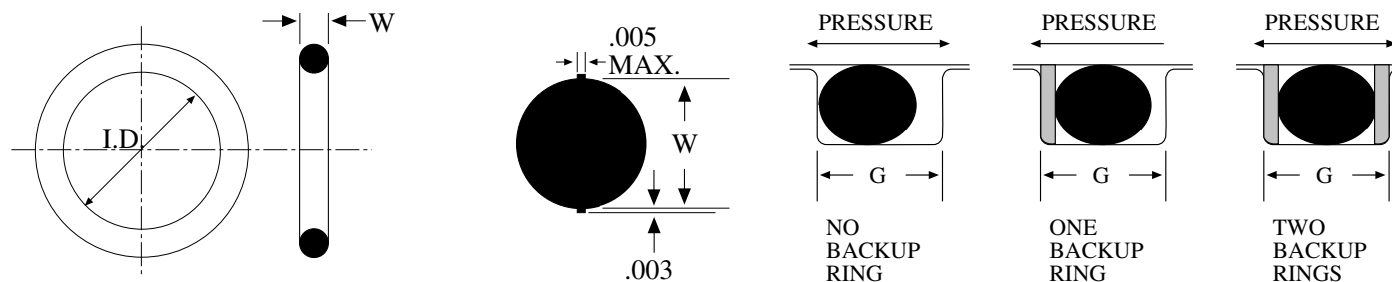
BORE DIAM RANGE, IN.	BORE DIAM. TOLERANCE	GROOVE DIAM TOLERANCE	MAX DIAMETRICAL CLEARANCE		
			1000 PSI	3000 PSI	5000 PSI
.750 - 1.062	+ .003 / -.0	+ .0 / -.004	.010	.008	.004
1.125 - 1.625	+ .003 / -.0	+ .0 / -.005	.010	.008	.004
1.750 - 2.500	+ .003 / -.0	+ .0 / -.007	.012	.008	.004
2.625 - 2.875	+ .003 / -.0	+ .0 / -.008	.012	.008	.005
3.000 - 3.500	+ .004 / -.0	+ .0 / -.008	.014	.010	-
3.625 - 5.625	+ .004 / -.0	+ .0 / -.009	.014	.010	-
5.750 - 6.750	+ .004 / -.0	+ .0 / -.010	.014	.010	-
7.000 - 8.500	+ .005 / -.0	+ .0 / -.011	.016	.010	-
9.000 - 11.000	+ .005 / -.0	+ .0 / -.011	.016	-	-
12.000 - 16.000	+ .006 / -.0	+ .0 / -.012	.018	-	-

METRIC / INCH CONVERSION TABLE

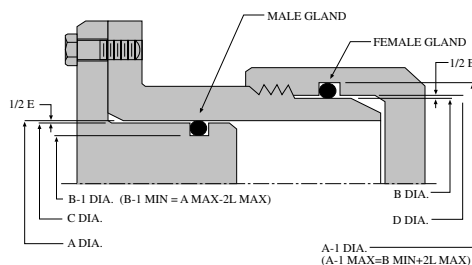
FRACTIONS, DECIMALS AND MILLIMETERS

Inches			Inches			Inches			Inches		
Fractions	Decimals	M M	Fractions	Decimals	M M	Fractions	Decimals	M M	Fractions	Decimals	M M
—	.0004	.01	25/32	.781	19.844	—	2.165	55.0	3-11/16	3.6875	93.663
—	.004	.10	—	.7874	20.0	2-3/16	2.1875	55.563	—	3.7008	94.0
—	.01	.25	51/64	.797	20.241	—	2.2047	56.0	3-23/32	3.719	94.456
1/64	.0156	.397	13/16	.8125	20.638	2-7/32	2.219	56.356	—	3.7401	95.0
—	.0197	.50	—	.8268	21.0	—	2.244	57.0	3-3/4	3.750	95.250
—	.0295	.75	53/64	.828	21.034	2-1/4	2.250	57.150	—	3.7795	96.0
1/32	.03125	.794	27/32	.844	21.431	2-9/32	2.281	57.944	3-25/32	3.781	96.044
—	.0394	1.0	55/64	.859	21.828	—	2.2835	58.0	3-13/16	3.8125	96.838
3/64	.0469	1.191	—	.8661	22.0	2-5/16	2.312	58.738	—	3.8189	97.0
—	.059	1.5	7/8	.875	22.225	—	2.3228	59.0	3-27/32	3.844	97.631
1/16	.062	1.588	57/64	.8906	22.622	2-11/32	2.344	59.531	—	3.8583	98.0
5/64	.0781	1.984	—	.9055	23.0	—	2.3622	60.0	3-7/8	3.875	98.425
—	.0787	2.0	29/32	.9062	23.019	2-3/8	2.375	60.325	—	3.8976	99.0
3/32	.094	2.381	59/64	.922	23.416	—	2.4016	61.0	3-29/32	3.9062	99.219
—	.0984	2.5	15/16	.9375	23.813	2-13/32	2.406	61.119	—	3.9370	100.0
7/64	.109	2.778	—	.9449	24.0	2-7/16	2.438	61.913	3-15/16	3.9375	100.013
—	.1181	3.0	61/64	.953	24.209	—	2.4409	62.0	3-13/32	3.969	100.806
1/8	.125	3.175	31/32	.969	24.606	2-15/32	2.469	62.706	—	3.9764	101.0
—	.1378	3.5	—	.9843	25.0	—	2.4803	63.0	4	4.000	101.600
9/64	.141	3.572	63/64	.9844	25.003	2-1/2	2.500	63.500	4-1/16	4.062	103.188
5/32	.156	3.969	1	1.000	25.400	—	2.5197	64.0	4-1/8	4.125	104.775
—	.1575	4.0	—	1.0236	26.0	2-17/32	2.531	64.294	—	4.1338	105.0
11/64	.172	4.366	1-1/32	1.0312	26.194	—	2.559	65.0	4-3/16	4.1875	106.363
—	.177	4.5	1-1/16	1.062	26.988	2-9/16	2.562	65.088	4-1/4	4.250	107.950
3/16	.1875	4.763	—	1.063	27.0	2-19/32	2.594	65.881	4-5/16	4.312	109.538
—	.1969	5.0	1-3/32	1.094	27.781	—	2.5984	66.0	—	4.3307	110.0
13/64	.203	5.159	—	1.1024	28.0	2-5/8	2.625	66.675	4-3/8	4.375	111.125
—	.2165	5.5	1-1/8	1.125	28.575	—	2.638	67.0	4-7/16	4.438	112.713
7/32	.219	5.556	—	1.1417	29.0	2-21/32	2.656	67.469	—	4.500	114.300
15/64	.234	5.953	1-5/32	1.156	29.369	—	2.6772	68.0	—	4.5275	115.0
—	.2362	6.0	—	1.1811	30.0	2-11/16	2.6875	68.263	4-9/16	4.562	115.888
1/4	.250	6.350	1-3/16	1.1875	30.163	—	2.7165	69.0	4-5/8	4.625	117.475
—	.2559	6.5	1-7/32	1.219	30.956	2-23/32	2.719	69.056	4-11/16	4.6875	119.063
17/64	.2656	6.747	—	1.2205	31.0	2-3/4	2.750	69.850	—	4.7244	120.0
—	.2756	7.0	1-1/4	1.250	31.750	—	2.7559	70.0	4-3/4	4.750	120.650
9/32	.281	7.144	—	1.2598	32.0	2-25/32	2.781	70.6439	4-13/16	4.8125	122.238
—	.2953	7.5	1-9/32	1.281	32.544	—	2.7953	71.0	4-7/8	4.875	123.825
19/64	.297	7.541	—	1.2992	33.0	2-13/16	2.8125	71.4376	—	4.9212	125.0
5/16	.312	7.938	1-5/16	1.312	33.338	—	2.8346	72.0	4-15/16	4.9375	125.413
—	.315	8.0	—	1.3386	34.0	2-27/32	2.844	72.2314	5	5.000	127.000
21/64	.328	8.334	1-11/32	1.344	34.131	—	2.8740	73.0	—	5.1181	130.0
—	.335	8.5	1-3/8	1.375	34.925	2-7/8	2.875	73.025	5-1/4	5.250	133.350
11/32	.344	8.731	—	1.3779	35.0	2-29/32	2.9062	73.819	5-1/2	5.500	139.700
—	.3543	9.0	1-13/32	1.406	35.719	—	2.9134	74.0	—	5.5118	140.0
23/64	.359	9.128	—	1.4173	36.0	2-15/16	2.9375	74.613	5-3/4	5.750	146.050
—	.374	9.5	1-7/16	1.438	36.513	—	2.9527	75.0	—	5.9055	150.0
3/8	.375	9.525	—	1.4567	37.0	2-31/32	2.969	75.406	6	6.000	152.400
25/64	.391	9.922	1-15/32	1.469	37.306	—	2.9921	76.0	6-1/4	6.250	158.750
—	.3937	10.0	—	1.4961	38.0	3	3.000	76.200	—	6.2992	160.0
13/32	.406	10.319	1-1/2	1.500	38.100	3-1/32	3.0312	76.994	6-1/2	6.500	165.100
—	.413	10.5	1-17/32	1.531	38.894	—	3.0315	77.0	—	6.6929	170.0
27/64	.422	10.716	—	1.5354	39.0	3-1/16	3.062	77.788	6-3/4	6.750	171.450
—	.4331	11.0	1-9/16	1.562	39.688	—	3.0709	78.0	7	7.000	177.800
7/16	.438	11.113	—	1.5748	40.0	3-3/32	3.094	78.581	—	7.0866	180.0
29/64	.453	11.509	1-19/32	1.594	40.481	—	3.1102	79.0	—	7.4803	190.0
15/32	.469	11.906	—	1.6142	41.0	3-1/8	3.125	79.581	7-1/2	7.500	190.500
—	.4724	12.0	1-5/8	1.625	41.275	—	3.1496	80.0	—	7.8740	200.0
31/64	.484	12.303	—	1.6535	42.0	3-5/32	3.156	80.169	8	8.000	203.200
—	.492	12.5	1-21/32	1.6562	42.069	3-3/16	3.1875	80.963	—	8.2677	210.0
1/2	.500	12.700	1-11/16	1.6875	42.863	—	3.1890	81.0	8-1/2	8.500	215.900
—	.5118	13.0	—	1.6929	43.0	3-7/32	3.219	81.756	—	8.6614	220.0
33/64	.5156	13.097	1-23/32	1.719	43.656	—	3.2283	82.0	9	9.000	228.600
17/32	.531	13.494	—	1.7323	44.0	3-1/4	3.250	82.550	—	9.0551	230.0
35/64	.547	13.891	1-3/4	1.750	44.450	—	3.2677	83.0	—	9.4488	240.0
—	.5512	14.0	—	1.7717	45.0	3-9/32	3.281	83.344	9-1/2	9.500	241.300
9/16	.563	14.288	1-25/32	1.781	45.244	—	3.3071	84.0	—	9.8425	250.0
—	.571	14.5	—	1.8110	46.0	3-5/16	3.312	84.1377	10	10.000	254.00
37/64	.578	14.684	1-13/16	1.8125	46.038	3-11/32	3.344	84.9314	—	10.2362	260.0
—	.5906	15.0	1-27/32	1.844	46.831	—	3.3464	85.0	—	10.6299	270.0
19/32	.594	15.081	—	1.8504	47.0	3-3/8	3.375	85.725	11	11.000	279.40
39/64	.609	15.478	1-7/8	1.875	47.625	—	3.3858	86.0	—	11.0236	280.0
5/8	.625	15.875	—	1.8898	48.0	3-13/32	3.406	86.519	—	11.4173	290.0
—	.6299	16.0	1-29/32	1.9062	48.419	—	3.4252	87.0	—	11.8110	300.0
41/64	.6406	16.272	—	1.9291	49.0	3-7/16	3.438	87.313	12	12.000	304.80
—	.6496	16.5	1-15/16	1.9375	49.213	—	3.4648	88.0	13	13.000	330.20
21/32	.658	16.669	—	1.9685	50.0	3-15/32	3.469	88.108	—	13.7795	350.0
—	.6693	17.0	1-31/32	1.969	50.006	3-1/2	3.500	88.900	14	14.000	355.60
43/64	.672	17.066	2	2.000	50.800	—	3.5039	89.0	15	15.000	381.00
11/16	.6875	17.463	—	2.0079	51.0	3-17/32	3.531	89.694	—	15.7480	400.0
45/64	.703	17.859	2-1/32	2.03125	51.594	—	3.5433	90.0	16	16.000	406.40
—	.7087	18.0	—	2.0472	52.0	3-9/16	3.562	90.4877	17	17.000	431.80
23/32	.719	18.256	2-1/6	2.062	52.388	—	3.5827	91.0	—	17.7165	450.0
—	.7283	18.5	—	2.0866	53.0	3-19/32	3.594	91.281	18	18.000	457.20
47/64	.734	18.653	2-3/32	2.094	53.181	—	3.622	92.0	19	19.000	482.60
—	.7480	19.0	2-1/8	2.125	53.975	3-5/8	3.625	92.075	—	19.6850	500.0
3/4	.750	19.050	—	2.126	54.0	3-21/32	3.656	92.869	20	20.000	508.00
49/64	.7656	19.447	2-5/32	2.156	54.769	—	3.6614	93.0	—	—	—

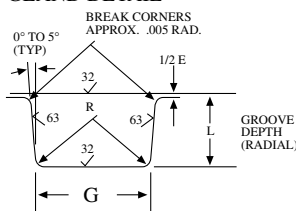
O-RING GLAND DIMENSIONS



O-Ring Gland Design For Static Seals



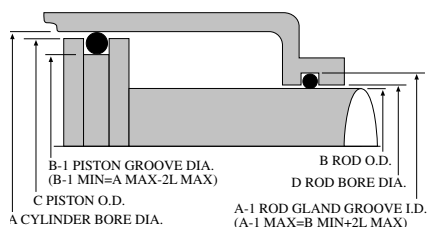
GLAND DETAIL



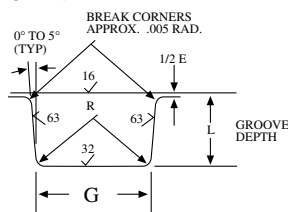
- A – Bore Dia. (male gland)
 A-1 – Groove Dia. (female gland)
 B – Tube OD (female gland)
 B-1 – Groove Dia. (male gland)
 C – Plug Dia. (male gland)
 D – Throat Dia. (female gland)
 E – Diametrical Clearance

W O-RING CROSS SECTION	L GROOVE DEPTH		SQUEEZE				E DIAMETRICAL CLEARANCE MAX.	G GROOVE WIDTH ± .005			R GROOVE RADIUS	ECCEN- TRICITY MAX.
			RADIAL		AXIAL			NO BACKUP RING	ONE BACKUP RING	TWO BACKUP RINGS		
	RADIAL	AXIAL	INCHES	%	INCHES	%						
.070	.050-.052	.050 -.054	.015-.023	22-23	.013-.023	19-32	.004	.095	.140	.207	.005-.015	.002
.103	.081-.083	.074-.080	.017-.025	17-24	.020-.032	20-30	.005	.142	.173	.240	.005-.015	.002
.139	.111-.113	.101-.107	.022-.032	16-23	.028-.042	20-30	.006	.189	.210	.277	.010-.025	.003
.210	.170-.173	.152-.162	.032-.045	15-21	.043-.063	21-30	.006	.283	.313	.413	.020-.035	.004
.275	.226-.229	.201-.211	.040-.055	15-20	.058-.080	21-29	.007	.377	.410	.540	.020-.035	.00

O-Ring Gland Design For Reciprocating Seals



GLAND DETAIL



- A – Bore Dia. of Cylinder
 B – OD of Rod
 C – OD of Piston
 D – Bore Dia. for Rod

W O-RING CROSS SECTION	L GROOVE DEPTH	SQUEEZE		E DIAMETRICAL CLEARANCE MAX.	G GROOVE WIDTH $\pm .005$			R GROOVE RADIUS	ECCEN- TRICITY MAX.
		INCHES	%		NO BACKUP RING	ONE BACKUP RING	TWO BACKUP RINGS		
.070	.055-.057	.010-.018	15-25	.004	.095	.140	.207	.005-.015	.002
.103	.088-.090	.010-.018	10-17	.005	.142	.173	.240	.005-.015	.002
.139	.121-.123	.012-.022	9-16	.006	.189	.210	.277	.010-.025	.003
.210	.185-.188	.017-.030	8-14	.006	.283	.313	.413	.020-.035	.004
.275	.237-.240	.029-.044	11-16	.007	.377	.410	.540	.020-.035	.005

O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-001	1/32	3/32	1/32	.029±.004	.040±.003
-001 1/2	1/16	1/8	1/32	.070±.004	.040±.003
-002	3/64	9/64	3/64	.042±.004	.050±.003
-003	1/16	3/16	1/16	.056±.004	.060±.003
-004	5/64	13/64	1/16	.070±.005	.070±.003
-005	3/32	7/32	1/16	.101±.005	.070±.003
-006	1/8	1/4	1/16	.114±.005	.070±.003
-007	5/32	9/32	1/16	.145±.005	.070±.003
-008	3/16	5/16	1/16	.176±.005	.070±.003
-009	7/32	11/32	1/16	.208±.005	.070±.003
-010	1/4	3/8	1/16	.239±.005	.070±.003
-011	5/16	7/16	1/16	.301±.005	.070±.003
-012	3/8	1/2	1/16	.364±.005	.070±.003
-013	7/16	9/16	1/16	.426±.005	.070±.003
-014	1/2	5/8	1/16	.489±.005	.070±.003
-015	9/16	11/16	1/16	.551±.007	.070±.003
-016	5/8	3/4	1/16	.614±.009	.070±.003
-017	11/16	13/16	1/16	.676±.009	.070±.003
-018	3/4	7/8	1/16	.739±.009	.070±.003
-019	13/16	15/16	1/16	.801±.009	.070±.003
-020	7/8	1	1/16	.864±.009	.070±.003
-021	15/16	1 1/16	1/16	.926±.009	.070±.003
-022	1	1 1/8	1/16	.989±.010	.070±.003
-023	1 1/16	1 3/16	1/16	1.051±.010	.070±.003
-024	1 1/8	1 1/4	1/16	1.114±.010	.070±.003
-025	1 3/16	1 5/16	1/16	1.176±.011	.070±.003
-026	1 1/4	1 3/8	1/16	1.239±.011	.070±.003
-027	1 5/16	1 7/16	1/16	1.301±.011	.070±.003
-028	1 3/8	1 1/2	1/16	1.364±.013	.070±.003
-029	1 1/2	1 5/8	1/16	1.489±.013	.070±.003
-030	1 5/8	1 3/4	1/16	1.614±.013	.070±.003
-031	1 3/4	1 7/8	1/16	1.739±.015	.070±.003
-032	1 7/8	2	1/16	1.864±.015	.070±.003
-033	2	2 1/8	1/16	1.989±.018	.070±.003
-034	2 1/8	2 1/4	1/16	2.114±.018	.070±.003
-035	2 1/4	2 3/8	1/16	2.239±.018	.070±.003
-036	2 3/8	2 1/2	1/16	2.364±.018	.070±.003
-037	2 1/2	2 5/8	1/16	2.489±.018	.070±.003
-038	2 5/8	2 3/4	1/16	2.614±.020	.070±.003
-039	2 3/4	2 7/8	1/16	2.739±.020	.070±.003
-040	2 7/8	3	1/16	2.864±.020	.070±.003
-041	3	3 1/8	1/16	2.989±.024	.070±.003
-042	3 1/4	3 3/8	1/16	3.239±.024	.070±.003
-043	3 1/2	3 5/8	1/16	3.489±.024	.070±.003
-044	3 3/4	3 7/8	1/16	3.739±.027	.070±.003
-045	4	4 1/8	1/16	3.989±.027	.070±.003
-046	4 1/4	4 3/8	1/16	4.239±.030	.070±.003

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-047	4 1/2	4 5/8	1/16	4.489±.030	.070±.003
-048	4 3/4	4 7/8	1/16	4.739±.030	.070±.003
-049	5	5 1/8	1/16	4.989±.037	.070±.003
-050	5 1/4	5 3/8	1/16	5.239±.037	.070±.003
-102	1/16	1/4	3/32	.049±.005	.103±.003
-103	3/32	9/32	3/32	.081±.005	.103±.003
-104	1/8	5/16	3/32	.112±.005	.103±.003
-105	5/32	11/32	3/32	.143±.005	.103±.003
-106	3/16	3/8	3/32	.174±.005	.103±.003
-107	7/32	13/32	3/32	.206±.005	.103±.003
-108	1/4	7/16	3/32	.237±.005	.103±.003
-109	5/16	1/2	3/32	.299±.005	.103±.003
-110	3/8	9/16	3/32	.362±.005	.103±.003
-111	7/16	5/8	3/32	.424±.005	.103±.003
-112	1/2	11/16	3/32	.487±.005	.103±.003
-113	9/16	3/4	3/32	.549±.005	.103±.003
-114	5/8	13/16	3/32	.612±.009	.103±.003
-115	11/16	7/8	3/32	.674±.009	.103±.003
-116	3/4	15/16	3/32	.737±.009	.103±.003
-117	13/16	1	3/32	.799±.010	.103±.003
-118	7/8	1 1/16	3/32	.862±.010	.103±.003
-119	15/16	1 1/8	3/32	.924±.010	.103±.003
-120	1	1 3/16	3/32	.987±.010	.103±.003
-121	1 1/16	1 1/4	3/32	1.049±.010	.103±.003
-122	1 1/8	1 5/16	3/32	1.112±.010	.103±.003
-123	1 3/16	1 3/8	3/32	1.174±.012	.103±.003
-124	1 1/4	1 7/16	3/32	1.237±.012	.103±.003
-125	1 5/16	1 1/2	3/32	1.299±.012	.103±.003
-126	1 3/8	1 9/16	3/32	1.362±.012	.103±.003
-127	1 7/16	1 5/8	3/32	1.424±.012	.103±.003
-128	1 1/2	1 11/16	3/32	1.487±.012	.103±.003
-129	1 9/16	1 3/4	3/32	1.549±.015	.103±.003
-130	1 5/8	1 13/16	3/32	1.612±.015	.103±.003
-131	1 11/16	1 7/8	3/32	1.674±.015	.103±.003
-132	1 3/4	1 15/16	3/32	1.737±.015	.103±.003
-133	1 13/16	2	3/32	1.799±.015	.103±.003
-134	1 7/8	2 1/16	3/32	1.862±.015	.103±.003
-135	1 15/16	2 1/8	3/32	1.925±.017	.103±.003
-136	2	2 3/16	3/32	1.987±.017	.103±.003
-137	2 1/16	2 1/4	3/32	2.050±.017	.103±.003
-138	2 1/8	2 5/16	3/32	2.112±.017	.103±.003
-139	2 3/16	2 3/8	3/32	2.175±.017	.103±.003
-140	2 1/4	2 7/16	3/32	2.237±.017	.103±.003
-141	2 5/16	2 1/2	3/32	2.300±.020	.103±.003
-142	2 3/8	2 9/16	3/32	2.362±.020	.103±.003
-143	2 7/16	2 5/8	3/32	2.425±.020	.103±.003
-144	2 1/2	2 11/16	3/32	2.487±.020	.103±.003

O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-145	2 9/16	2 3/4	3/32	2.550±.020	.103±.003
-146	2 5/8	2 13/16	3/32	2.612±.020	.103±.003
-147	2 11/16	2 7/8	3/32	2.675±.022	.103±.003
-148	2 3/4	2 15/16	3/32	2.737±.022	.103±.003
-149	2 13/16	3	3/32	2.800±.022	.103±.003
-150	2 7/8	3 1/16	3/32	2.862±.022	.103±.003
-151	3	3 3/16	3/32	2.987±.024	.103±.003
-152	3 1/4	3 7/16	3/32	3.237±.024	.103±.003
-153	3 1/2	3 11/16	3/32	3.487±.024	.103±.003
-154	3 3/4	3 15/16	3/32	3.737±.028	.103±.003
-155	4	4 3/16	3/32	3.987±.028	.103±.003
-156	4 1/4	4 7/16	3/32	4.237±.030	.103±.003
-157	4 1/2	4 11/16	3/32	4.487±.030	.103±.003
-158	4 3/4	4 15/16	3/32	4.737±.030	.103±.003
-159	5	5 3/16	3/32	4.987±.035	.103±.003
-160	5 1/4	5 7/16	3/32	5.237±.035	.103±.003
-161	5 1/2	5 11/16	3/32	5.487±.035	.103±.003
-162	5 3/4	5 15/16	3/32	5.737±.035	.103±.003
-163	6	6 3/16	3/32	5.987±.035	.103±.003
-164	6 1/4	6 7/16	3/32	6.237±.040	.103±.003
-165	6 1/2	6 11/16	3/32	6.487±.040	.103±.003
-166	6 3/4	6 15/16	3/32	6.737±.040	.103±.003
-167	7	7 3/16	3/32	6.987±.040	.103±.003
-168	7 1/4	7 7/16	3/32	7.237±.045	.103±.003
-169	7 1/2	7 11/16	3/32	7.487±.045	.103±.003
-170	7 3/4	7 15/16	3/32	7.737±.045	.103±.003
-171	8	8 3/16	3/32	7.987±.045	.103±.003
-172	8 1/4	8 7/16	3/32	8.237±.050	.103±.003
-173	8 1/2	8 11/16	3/32	8.487±.050	.103±.003
-174	8 3/4	8 15/16	3/32	8.737±.050	.103±.003
-175	9	9 3/16	3/32	8.987±.050	.103±.003
-176	9 1/4	9 7/16	3/32	9.237±.055	.103±.003
-177	9 1/2	9 11/16	3/32	9.487±.055	.103±.003
-178	9 3/4	9 15/16	3/32	9.737±.055	.103±.003
-201	3/16	7/16	1/8	.171±.005	.139±.004
-202	1/4	1/2	1/8	.234±.005	.139±.004
-203	5/16	9/16	1/8	.296±.005	.139±.004
-204	3/8	5/8	1/8	.359±.005	.139±.004
-205	7/16	11/16	1/8	.421±.005	.139±.004
-206	1/2	3/4	1/8	.484±.005	.139±.004
-207	9/16	13/16	1/8	.546±.007	.139±.004
-208	5/8	7/8	1/8	.609±.009	.139±.004
-209	11/16	15/16	1/8	.671±.009	.139±.004
-210	3/4	1	1/8	.734±.010	.139±.004
-211	13/16	1 1/16	1/8	.796±.010	.139±.004
-212	7/8	1 1/8	1/8	.859±.010	.139±.004
-213	15/16	1 3/16	1/8	.921±.010	.139±.004

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-214	1	1 1/4	1/8	.984±.010	.139±.004
-215	1 1/16	1 5/16	1/8	1.046±.010	.139±.004
-216	1 1/8	1 3/8	1/8	1.109±.012	.139±.004
-217	1 3/16	1 7/16	1/8	1.171±.012	.139±.004
-218	1 1/4	1 1/2	1/8	1.234±.012	.139±.004
-219	1 5/16	1 9/16	1/8	1.296±.012	.139±.004
-220	1 3/8	1 5/8	1/8	1.359±.012	.139±.004
-221	1 7/16	1 11/16	1/8	1.421±.012	.139±.004
-222	1 1/2	1 3/4	1/8	1.484±.015	.139±.004
-223	1 5/8	1 7/8	1/8	1.609±.015	.139±.004
-224	1 3/4	2	1/8	1.734±.015	.139±.004
-225	1 7/8	2 1/8	1/8	1.859±.018	.139±.004
-226	2	2 1/4	1/8	1.984±.018	.139±.004
-227	2 1/8	2 3/8	1/8	2.109±.018	.139±.004
-228	2 1/4	2 1/2	1/8	2.234±.020	.139±.004
-229	2 3/8	2 5/8	1/8	2.359±.020	.139±.004
-230	2 1/2	2 3/4	1/8	2.484±.020	.139±.004
-231	2 5/8	2 7/8	1/8	2.609±.020	.139±.004
-232	2 3/4	3	1/8	2.734±.024	.139±.004
-233	2 7/8	3 1/8	1/8	2.859±.024	.139±.004
-234	3	3 1/4	1/8	2.984±.024	.139±.004
-235	3 1/8	3 3/8	1/8	3.109±.024	.139±.004
-236	3 1/4	3 1/2	1/8	3.234±.024	.139±.004
-237	3 3/8	3 5/8	1/8	3.359±.024	.139±.004
-238	3 1/2	3 3/4	1/8	3.484±.024	.139±.004
-239	3 5/8	3 7/8	1/8	3.609±.028	.139±.004
-240	3 3/4	4	1/8	3.734±.028	.139±.004
-241	3 7/8	4 1/8	1/8	3.859±.028	.139±.004
-242	4	4 1/4	1/8	3.984±.028	.139±.004
-243	4 1/8	4 3/8	1/8	4.109±.028	.139±.004
-244	4 1/4	4 1/2	1/8	4.234±.030	.139±.004
-245	4 3/8	4 5/8	1/8	4.359±.030	.139±.004
-246	4 1/2	4 3/4	1/8	4.484±.030	.139±.004
-247	4 5/8	4 7/8	1/8	4.609±.030	.139±.004
-248	4 3/4	5	1/8	4.734±.030	.139±.004
-249	4 7/8	5 1/8	1/8	4.859±.035	.139±.004
-250	5	5 1/4	1/8	4.984±.035	.139±.004
-251	5 1/8	5 3/8	1/8	5.109±.035	.139±.004
-252	5 1/4	5 1/2	1/8	5.234±.035	.139±.004
-253	5 3/8	5 5/8	1/8	5.359±.035	.139±.004
-254	5 1/2	5 3/4	1/8	5.484±.035	.139±.004
-255	5 5/8	5 7/8	1/8	5.609±.035	.139±.004
-256	5 3/4	6	1/8	5.734±.035	.139±.004
-257	5 7/8	6 1/8	1/8	5.859±.035	.139±.004
-258	6	6 1/4	1/8	5.984±.035	.139±.004
-259	6 1/4	6 1/2	1/8	6.234±.040	.139±.004
-260	6 1/2	6 3/4	1/8	6.484±.040	.139±.004

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O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-261	6 3/4	7	1/8	6.734±.040	.139±.004
-262	7	7 1/4	1/8	6.984±.040	.139±.004
-263	7 1/4	7 1/2	1/8	7.234±.045	.139±.004
-264	7 1/2	7 3/4	1/8	7.484±.045	.139±.004
-265	7 3/4	8	1/8	7.734±.045	.139±.004
-266	8	8 1/4	1/8	7.984±.045	.139±.004
-267	8 1/4	8 1/2	1/8	8.234±.050	.139±.004
-268	8 1/2	8 3/4	1/8	8.484±.050	.139±.004
-269	8 3/4	9	1/8	8.734±.050	.139±.004
-270	9	9 1/4	1/8	8.984±.050	.139±.004
-271	9 1/4	9 1/2	1/8	9.234±.055	.139±.004
-272	9 1/2	9 3/4	1/8	9.484±.055	.139±.004
-273	9 3/4	10	1/8	9.734±.055	.139±.004
-274	10	10 1/4	1/8	9.984±.055	.139±.004
-275	10 1/2	10 3/4	1/8	10.484±.055	.139±.004
-276	11	11 1/4	1/8	10.984±.065	.139±.004
-277	11 1/2	11 3/4	1/8	11.484±.065	.139±.004
-278	12	12 1/4	1/8	11.984±.065	.139±.004
-279	13	13 1/4	1/8	12.984±.065	.139±.004
-280	14	14 1/4	1/8	13.984±.065	.139±.004
-281	15	15 1/4	1/8	14.984±.065	.139±.004
-282	16	16 1/4	1/8	15.955±.075	.139±.004
-283	17	17 1/4	1/8	16.955±.080	.139±.004
-284	18	18 1/4	1/8	17.955±.085	.139±.004
-309	7/16	13/16	3/16	.412±.005	.210±.005
-310	1/2	7/8	3/16	.475±.005	.210±.005
-311	9/16	15/16	3/16	.537±.007	.210±.005
-312	5/8	1	3/16	.600±.009	.210±.005
-313	11/16	1 1/16	3/16	.662±.009	.210±.005
-314	3/4	1 1/8	3/16	.725±.010	.210±.005
-315	13/16	1 3/16	3/16	.787±.010	.210±.005
-316	7/8	1 1/4	3/16	.850±.010	.210±.005
-317	15/16	1 5/16	3/16	.912±.010	.210±.005
-318	1	1 3/8	3/16	.975±.010	.210±.005
-319	1 1/16	1 7/16	3/16	1.037±.010	.210±.005
-320	1 1/8	1 1/2	3/16	1.100±.012	.210±.005
-321	1 3/16	1 9/16	3/16	1.162±.012	.210±.005
-322	1 1/4	1 5/8	3/16	1.225±.012	.210±.005
-323	1 5/16	1 11/16	3/16	1.287±.012	.210±.005
-324	1 3/8	1 3/4	3/16	1.350±.012	.210±.005
-325	1 1/2	1 7/8	3/16	1.475±.015	.210±.005
-326	1 5/8	2	3/16	1.600±.015	.210±.005
-327	1 3/4	2 1/8	3/16	1.725±.015	.210±.005
-328	1 7/8	2 1/4	3/16	1.850±.015	.210±.005
-329	2	2 3/8	3/16	1.975±.018	.210±.005
-330	2 1/8	2 1/2	3/16	2.100±.018	.210±.005
-331	2 1/4	2 5/8	3/16	2.225±.018	.210±.005
AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-332	2 3/8	2 3/4	3/16	2.350±.018	.210±.005
-333	2 1/2	2 7/8	3/16	2.475±.020	.210±.005
-334	2 5/8	3	3/16	2.600±.020	.210±.005
-335	2 3/4	3 1/8	3/16	2.725±.020	.210±.005
-336	2 7/8	3 1/4	3/16	2.850±.020	.210±.005
-337	3	3 3/8	3/16	2.975±.024	.210±.005
-338	3 1/8	3 1/2	3/16	3.100±.024	.210±.005
-339	3 1/4	3 5/8	3/16	3.225±.024	.210±.005
-340	3 3/8	3 3/4	3/16	3.350±.024	.210±.005
-341	3 1/2	3 7/8	3/16	3.475±.024	.210±.005
-342	3 5/8	4	3/16	3.600±.028	.210±.005
-343	3 3/4	4 1/8	3/16	3.725±.028	.210±.005
-344	3 7/8	4 1/4	3/16	3.850±.028	.210±.005
-345	4	4 3/8	3/16	3.975±.028	.210±.005
-346	4 1/8	4 1/2	3/16	4.100±.028	.210±.005
-347	4 1/4	4 5/8	3/16	4.225±.030	.210±.005
-348	4 3/8	4 3/4	3/16	4.350±.030	.210±.005
-349	4 1/2	4 7/8	3/16	4.475±.030	.210±.005
-350	4 5/8	5	3/16	4.600±.030	.210±.005
-351	4 3/4	5 1/8	3/16	4.725±.030	.210±.005
-352	4 7/8	5 1/4	3/16	4.850±.030	.210±.005
-353	5	5 3/8	3/16	4.975±.037	.210±.005
-354	5 1/8	5 1/2	3/16	5.100±.037	.210±.005
-355	5 1/4	5 5/8	3/16	5.225±.037	.210±.005
-356	5 3/8	5 3/4	3/16	5.350±.037	.210±.005
-357	5 1/2	5 7/8	3/16	5.475±.037	.210±.005
-358	5 5/8	6	3/16	5.600±.037	.210±.005
-359	5 3/4	6 1/8	3/16	5.725±.037	.210±.005
-360	5 7/8	6 1/4	3/16	5.850±.037	.210±.005
-361	6	6 3/8	3/16	5.975±.037	.210±.005
-362	6 1/4	6 5/8	3/16	6.225±.040	.210±.005
-363	6 1/2	6 7/8	3/16	6.475±.040	.210±.005
-364	6 3/4	7 1/8	3/16	6.725±.040	.210±.005
-365	7	7 3/8	3/16	6.975±.040	.210±.005
-366	7 1/4	7 5/8	3/16	7.225±.045	.210±.005
-367	7 1/2	7 7/8	3/16	7.475±.045	.210±.005
-368	7 3/4	8 1/8	3/16	7.725±.045	.210±.005
-369	8	8 3/8	3/16	7.975±.045	.210±.005
-370	8 1/4	8 5/8	3/16	8.225±.050	.210±.005
-371	8 1/2	8 7/8	3/16	8.475±.050	.210±.005
-372	8 3/4	9 1/8	3/16	8.725±.050	.210±.005
-373	9	9 3/8	3/16	8.975±.050	.210±.005
-374	9 1/4	9 5/8	3/16	9.225±.055	.210±.005
-375	9 1/2	9 7/8	3/16	9.475±.055	.210±.005
-376	9 3/4	10 1/8	3/16	9.725±.055	.210±.005
-377	10	10 3/8	3/16	9.975±.055	.210±.005
-378	10 1/2	10 7/8	3/16	10.475±.060	.210±.005

O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-379	11	11 3/8	3/16	10.975±.060	.210±.005
-380	11 1/2	11 7/8	3/16	11.475±.065	.210±.005
-381	12	12 3/8	3/16	11.975±.065	.210±.005
-382	13	13 3/8	3/16	12.975±.065	.210±.005
-383	14	14 3/8	3/16	13.975±.070	.210±.005
-384	15	15 3/8	3/16	14.975±.070	.210±.005
-385	16	16 3/8	3/16	15.955±.075	.210±.005
-386	17	17 3/8	3/16	16.955±.080	.210±.005
-387	18	18 3/8	3/16	17.955±.085	.210±.005
-388	19	19 3/8	3/16	18.955±.090	.210±.005
-389	20	20 3/8	3/16	19.955±.095	.210±.005
-390	21	21 3/8	3/16	20.955±.095	.210±.005
-391	22	22 3/8	3/16	21.955±.100	.210±.005
-392	23	23 3/8	3/16	22.940±.105	.210±.005
-393	24	24 3/8	3/16	23.940±.110	.210±.005
-394	25	25 3/8	3/16	24.940±.115	.210±.005
-395	26	26 3/8	3/16	25.940±.120	.210±.005
-400*	1 3/8	1 7/8	1/4	1.225±.012	.275±.006
-401*	1 1/2	2	1/4	1.475±.014	.275±.006
-402*	1 5/8	2 1/8	1/4	1.600±.015	.275±.006
-403*	1 3/4	2 1/4	1/4	1.725±.016	.275±.006
-404*	1 7/8	2 3/8	1/4	1.850±.016	.275±.006
-405*	2	2 1/2	1/4	1.975±.017	.275±.006
-406*	2 1/8	2 5/8	1/4	2.100±.018	.275±.006
-407*	2 1/4	2 3/4	1/4	2.225±.018	.275±.006
-408*	2 3/8	2 7/8	1/4	2.350±.020	.275±.006
-409*	2 1/2	3	1/4	2.475±.020	.275±.006
-410*	2 5/8	3 1/8	1/4	2.600±.020	.275±.006
-411*	2 3/4	3 1/4	1/4	2.725±.022	.275±.006
-412*	2 7/8	3 3/8	1/4	2.850±.022	.275±.006
-413*	3	3 1/2	1/4	2.975±.024	.275±.006
-414*	3 1/8	3 5/8	1/4	3.100±.024	.275±.006
-415*	3 1/4	3 3/4	1/4	3.225±.024	.275±.006
-416*	3 3/8	3 7/8	1/4	3.350±.026	.275±.006
-417*	3 1/2	4	1/4	3.475±.026	.275±.006
-418*	3 5/8	4 1/8	1/4	3.600±.026	.275±.006
-419*	3 3/4	4 1/4	1/4	3.725±.028	.275±.006
-420*	3 7/8	4 3/8	1/4	3.850±.028	.275±.006
-421*	4	4 1/2	1/4	3.975±.028	.275±.006
-422*	4 1/8	4 5/8	1/4	4.100±.030	.275±.006
-423*	4 1/4	4 3/4	1/4	4.225±.030	.275±.006
-424*	4 3/8	4 7/8	1/4	4.350±.030	.275±.006
-425	4 1/2	5	1/4	4.475±.033	.275±.006
-426	4 5/8	5 1/8	1/4	4.600±.033	.275±.006
-427	4 3/4	5 1/4	1/4	4.725±.033	.275±.006
-428	4 7/8	5 3/8	1/4	4.850±.033	.275±.006
-429	5	5 1/2	1/4	4.975±.037	.275±.006
AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	ID	OD	Width	ID Tol.	W. Tol.
-430	5 1/8	5 5/8	1/4	5.100±.037	.275±.006
-431	5 1/4	5 3/4	1/4	5.225±.037	.275±.006
-432	5 3/8	5 7/8	1/4	5.350±.037	.275±.006
-433	5 1/2	6	1/4	5.475±.037	.275±.006
-434	5 5/8	6 1/8	1/4	5.600±.037	.275±.006
-435	5 3/4	6 1/4	1/4	5.725±.037	.275±.006
-436	5 7/8	6 3/8	1/4	5.850±.037	.275±.006
-437	6	6 1/2	1/4	5.975±.037	.275±.006
-438	6 1/4	6 3/4	1/4	6.225±.040	.275±.006
-439	6 1/2	7	1/4	6.475±.040	.275±.006
-440	6 3/4	7 1/4	1/4	6.725±.040	.275±.006
-441	7	7 1/2	1/4	6.975±.040	.275±.006
-442	7 1/4	7 3/4	1/4	7.225±.045	.275±.006
-443	7 1/2	8	1/4	7.475±.045	.275±.006
-444	7 3/4	8 1/4	1/4	7.725±.045	.275±.006
-445	8	8 1/2	1/4	7.975±.045	.275±.006
-446	8 1/2	9	1/4	8.475±.055	.275±.006
-447	9	9 1/2	1/4	8.975±.055	.275±.006
-448	9 1/2	10	1/4	9.475±.055	.275±.006
-449	10	10 1/2	1/4	9.975±.055	.275±.006
-450	10 1/2	11	1/4	10.475±.060	.275±.006
-451	11	11 1/2	1/4	10.975±.060	.275±.006
-452	11 1/2	12	1/4	11.475±.060	.275±.006
-453	12	12 1/2	1/4	11.975±.060	.275±.006
-454	12 1/2	13	1/4	12.475±.060	.275±.006
-455	13	13 1/2	1/4	12.975±.060	.275±.006
-456	13 1/2	14	1/4	13.475±.070	.275±.006
-457	14	14 1/2	1/4	13.975±.070	.275±.006
-458	14 1/2	15	1/4	14.475±.070	.275±.006
-459	15	15 1/2	1/4	14.975±.070	.275±.006
-460	15 1/2	16	1/4	15.475±.070	.275±.006
-461	16	16 1/2	1/4	15.955±.075	.275±.006
-462	16 1/2	17	1/4	16.455±.075	.275±.006
-463	17	17 1/2	1/4	16.955±.080	.275±.006
-464	17 1/2	18	1/4	17.455±.085	.275±.006
-465	18	18 1/2	1/4	17.955±.085	.275±.006
-466	18 1/2	19	1/4	18.455±.085	.275±.006
-467	19	19 1/2	1/4	18.955±.090	.275±.006
-468	19 1/2	20	1/4	19.455±.090	.275±.006
-469	20	20 1/2	1/4	19.955±.090	.275±.006
-470	21	21 1/2	1/4	20.955±.090	.275±.006
-471	22	22 1/2	1/4	21.955±.100	.275±.006
-472	23	23 1/2	1/4	22.940±.105	.275±.006
-473	24	24 1/2	1/4	23.940±.110	.275±.006
-474	25	25 1/2	1/4	24.940±.115	.275±.006
-475	26	26 1/2	1/4	25.940±.120	.275±.006

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