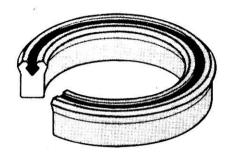
NORTH AMERICAN SEAL

& Packing Company

530 Van Ness Ave. Fresno, CA 93721 (559) 264-7325 -- Fax: (559) 268-5207



U-PACKS

TYPE UP STYLE 30 (INCH SIZES)

CHARACTERISTICS

North American Seal's loaded lip style U-Packs, combines the latest design technology together with the superior field-tested physical characteristics of a liquid cast polyurethane, to produce the best all purpose seal for use in standard hydraulic fluids. Thermosetting Unithane 395 A is a Moca cured liquid cast polyurethane which outperforms injection molded grades of polyurethane in all aspects including cut strength, abrasion resistance, compression set and temperature range.

The inner elastomeric spring element of nitrile rubber is designed and strategically positioned to create the necessary lip interference without excessive friction. This energizer is securely held inside the urethane outer shell so that it will not become disengaged when severely distorted as is sometimes necessary when installing U-Packs in rod seal applications.

The nitrile spring element is split prior to assembly to avoid trapped pressure from forcing the spring element outward into the seal cavity during rapid or severe fluctuations of system pressure. The nitrile spring also enhances low temperature sealing characteristics down to -40 degrees F, insures superior low pressure sealing performance and compensates for the gradual wear associated with normal cylinder cycling thereby providing longer service life.

The sealing lips of NAS Style 30 U-Packs are knife trimmed to eliminate all molding flash and to provide complete circumferential lip contact which also helps to insure maximum low pressure sealing performance.

MATERIAL

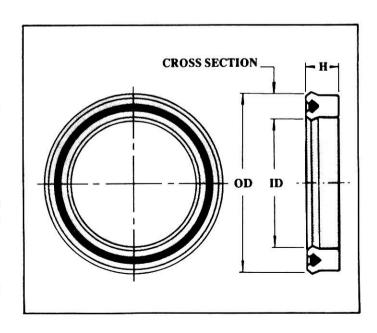
- TYPE: Unithane 395 A, Liquid Cast Polyurethane
- HARDNESS: Durometer 95 A
- ENERGIZER: Nitrile Rubber, Duro 70 A
- FLUID COMPATIBILITY: See Material Specifications Technical Bulletin

ORDERING INFORMATION

Please review current price list for tooling availability before ordering. A nominal tooling charge may be required for some non-tooled sizes.

Add Prefix UP to signify a U-Pack.

e.g. A U-Pack 3 1/2 I.D. X 4 O.D. X 1/4 H is Part No: UP 03500400-025



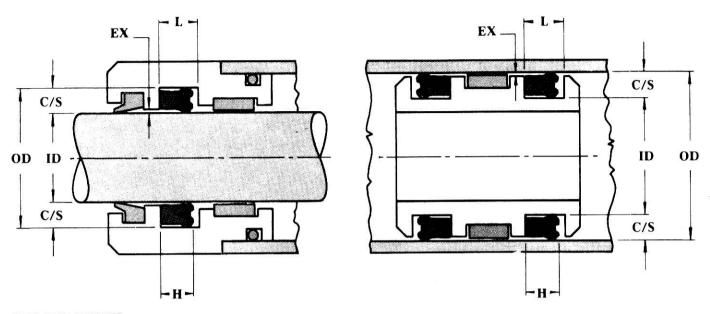
U-PACKS

ROD APPLICATIONS

STYLE 30 (INCH SIZES)

PISTON APPLICATIONS

TYPE UP



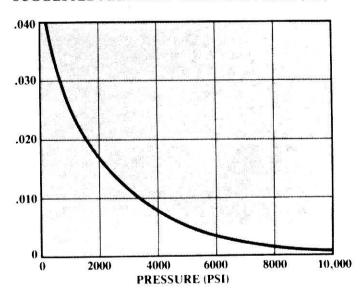
GROOVE WIDTH

H	1/8	3/16	1/4	5/16	3/8	1/2	9/16	5/8	3/4
L	.138	.207	.275	.344	.413	.550	.619	.688	.825
TOLERANCE	+.015 000								

GROOVE DEPTH

		DIA. TOLERANCES							
C/S		RC APPLIC	DD ATIONS	PISTON APPLICATIONS					
FRAC.	DEC.	ROD. DIA.	GROOVE DIA.	CYL. DIA.	GROOVE DIA.				
1/8	.125	+.000 001	+.002 000	+.002 000	+.000 002				
3/16	.187	+.000 002	+.002 000	+.002 000	+.000 002				
1/4	.250	+.000 002	+.003 000	+.003 000	+.000 003				
5/16	.312	+.000 002	+.004 000	+.003 000	+.000 004				
3/8	.375	+.000 002	+.005 000	+.004 000	+.000 005				
1/2	.500	+ .000 003	+.007 000	+.005 000	+.000 007				
5/8	.625	+ .000 003	+.009 000	+ .006	+.000 009				

SUGGESTED MAXIMUM EXTRUSION GAPS (EX)



The EXTRUSION GAP CHART provides recommendations for the maximum acceptable extrusion gap at various pressure ranges. Eccentricity, ovality, bearing clearance, and normal wear of the mating parts must be considered when calculating the extrusion gap. This chart is intended as a guide and each application should be thoroughly tested.