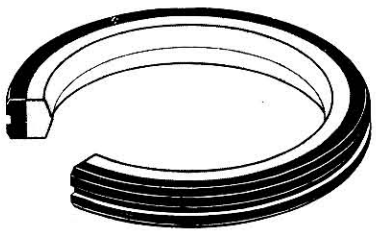
NORTH AMERICAN SEAL
& Packing Company

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



UNIRINGS

TYPE UR
STYLE 12 (INCH SIZES)

CHARACTERISTICS

North American Seal's Uniring, is a dual durometer, one piece double acting piston seal. It consists of a (Duro 60 D) dynamic sealing and wear lamina bonded to a (Duro 57 A) static sealing and activation lamina. The material used for the static lamina has high resilience and extremely low compression set. It functions as a seal energizing spring element and assures positive sealing performance throughout a broad pressure range. The dynamic sealing element is made of a harder material, selected for its high abrasion resistant qualities.

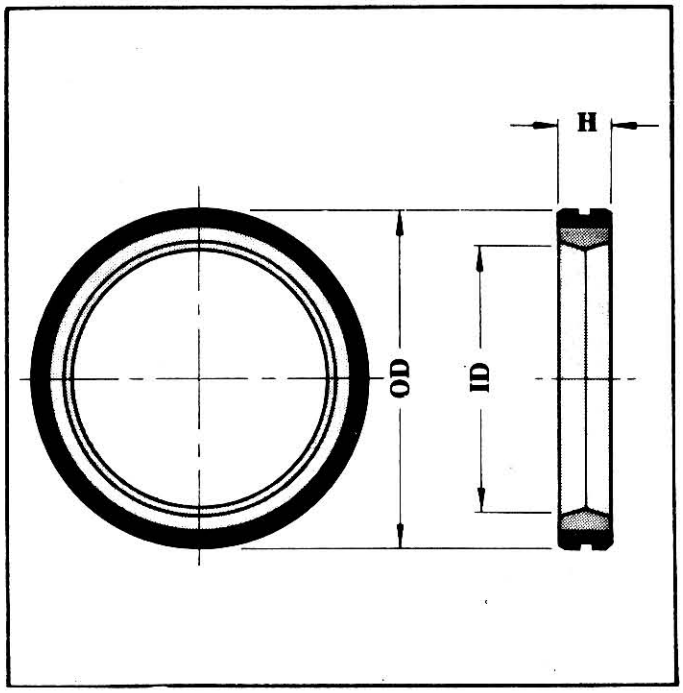
NAS Style 12 Unirings can readily be substituted in existing cavities to replace other types of double acting seals, such as TFE Piston Rings and T Seals.

Unirings can easily be installed on one piece pistons without costly and time consuming assembly fixtures. They simplify the task of eventual field replacement.

NAS Unirings permit substantial cost savings in cylinder design by allowing larger tolerances and poorer surface finishes.

MATERIAL

- TYPE: Sealing Lamina: Unithane 460 D, Liquid Cast Polyurethane, Duro 60 D. Activation Lamina: Unithane 157 A, Liquid Cast Polyurethane, Duro 57 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 UR to signify a Uniring.

e.g. A Uniring 2 I.D. X 2 1/2 O.D. X 3/8 H is Part No: UR 02000250-037

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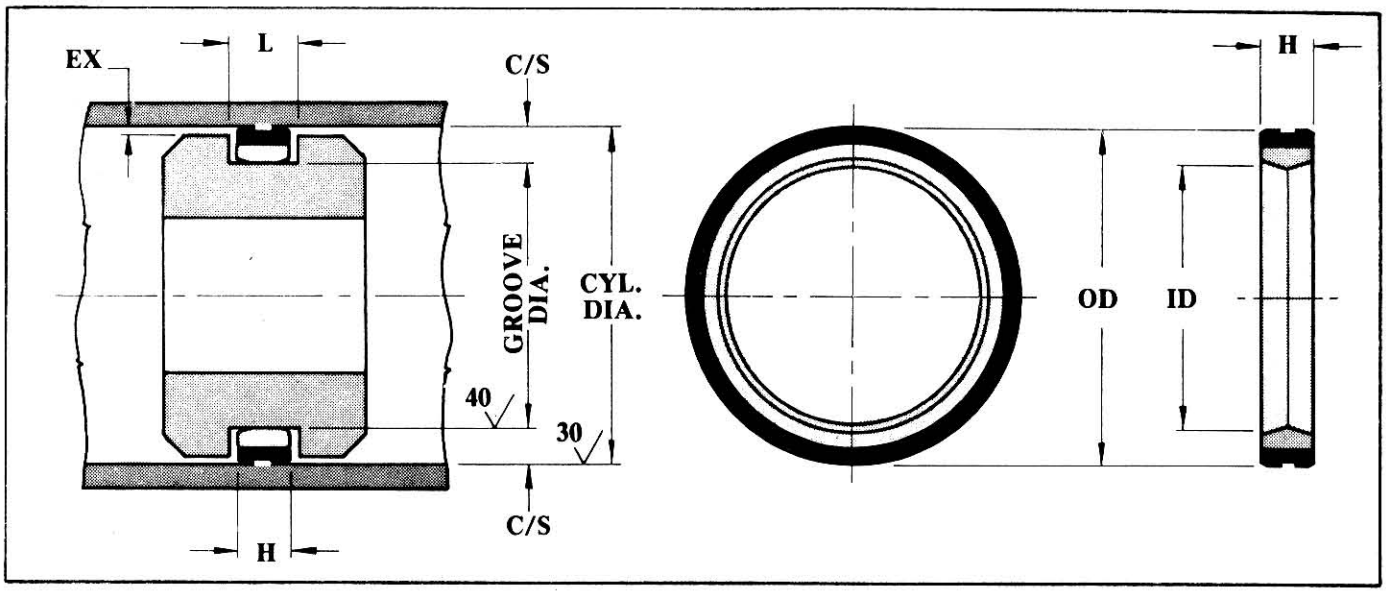


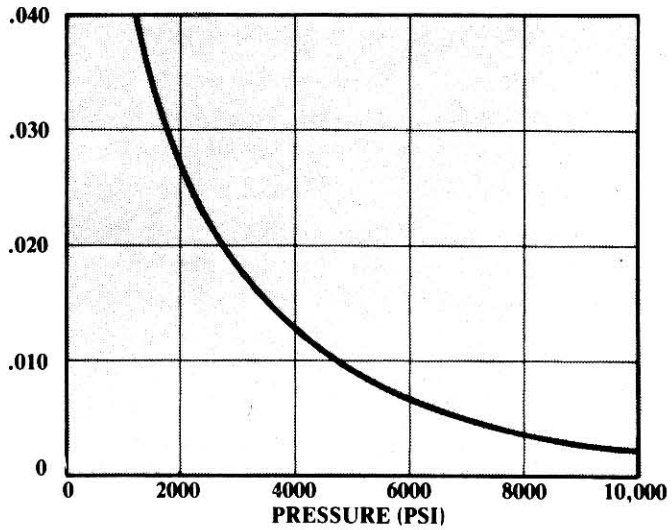
GROOVE WIDTH

H NOMINAL SEAL WIDTH	3/16	1/4	5/16	3/8	1/2	9/16	5/8	3/4
L ACTUAL GROOVE WIDTH	.196	.263	.328	.394	.526	.591	.657	.789
GROOVE WIDTH TOLERANCE	+.015 —.000	+.015 —.000	+.015 —.000	+.015 —.000	+.015 —.000	+.015 —.000	+.015 —.000	+.015 —.000

GROOVE DEPTH

C/S (GROOVE DEPTH)		DIAMETRICAL TOLERANCES	
FRAC.	DEC.	CYL. DIA.	GROOVE DIA.
1/8	.125	+.003 —.000	+.003 —.000
3/16	.187	+.004 —.000	+.004 —.000
1/4	.250	+.006 —.000	+.005 —.000
5/16	.312	+.006 —.000	+.006 —.000
3/8	.375	+.008 —.000	+.007 —.000
1/2	.500	+.010 —.000	+.008 —.000

SUGGESTED MAXIMUM EXTRUSION GAPS (EX)



The EXTRUSION GAP CHART provides recommendations for the maximum acceptable extrusion gap at various pressure ranes. 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.