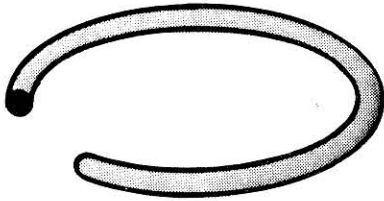


NORTH AMERICAN SEAL

& Packing Company

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



'O'-RINGS

SERIES 20 (INCH SIZES)

CHARACTERISTICS

Series 20 polyurethane 'O'-rings are rugged, versatile seals, suitable for both dynamic and static sealing applications. They are manufactured from thermosetting liquid cast polyurethane of 95A Durometer, and have exceptionally good abrasion resistant and extrusion resistant qualities. Polyurethane normally gives up to 10 times the service of nitrile rubber.

Their consistent quality exceeds the standards recommended for 'O'-rings by the American "Rubber Manufacturers Association".

The suggested temperature and pressure limits are: -40 to +210°F, and 0-5,000 PSI, respectively.

DYNAMIC SEALING APPLICATIONS

'O'-rings are often used as rod or piston seals in hydraulic and pneumatic cylinders. The 'O'-ring must be installed in a rectangular groove with the correct radial squeeze (see Table 1, overleaf).

STATIC SEALING APPLICATIONS

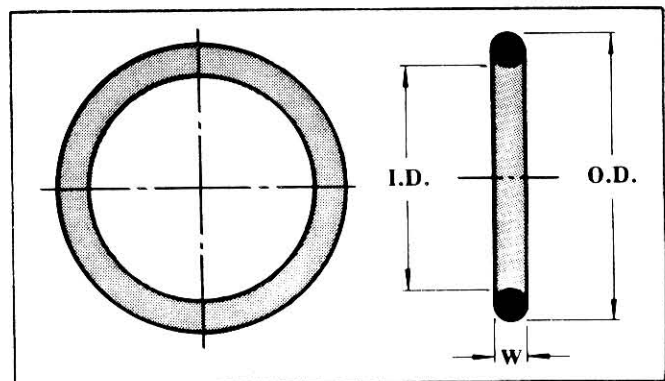
'O'-rings may also be used as static seals, in flange connections, covers, pins, bolts, etc. The hard polyurethane material makes these 'O'-rings especially suitable for applications with high or pulsating pressures. Correct gland dimensions are important for effective sealing (see Table 2, overleaf).

NOTE:

For static face seal applications see also Series 11 Flange Seals, Technical Bulletin UFS-82.

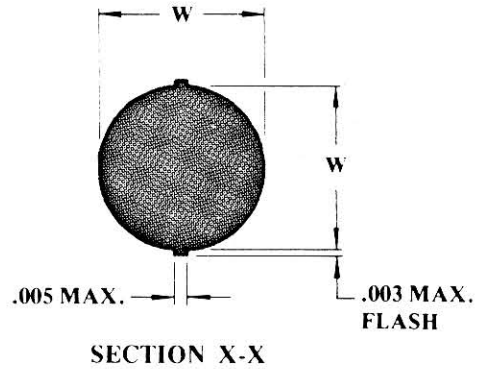
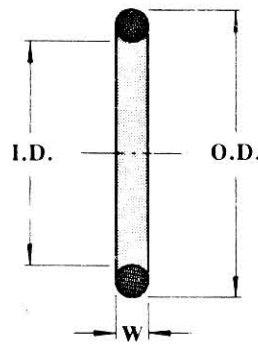
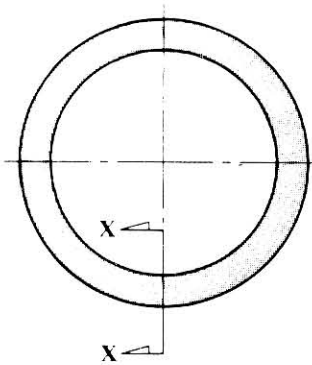
MATERIAL

- TYPE: Unithane 395 A Liquid Cast Polyurethane.
- HARDNESS: Durometer 95A
- FLUID COMPATABILITY: See 'Material Specifications', Technical Bulletin US 82.



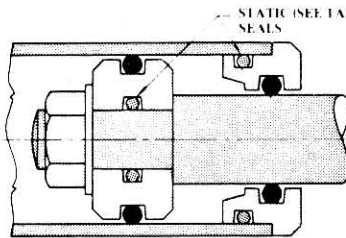
'O'-RINGS

SERIES 20 (INCH SIZES)



INDUSTRIAL RECIPROCATING 'O'-RING GLANDS

RADIAL SQUEEZE SEALS



GROOVE DETAIL

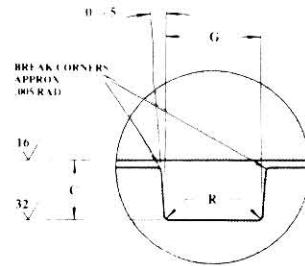
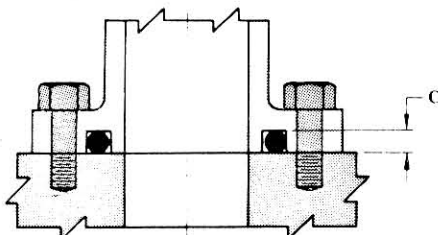


TABLE 1

O-Ring Part No. 20 -	W O-Ring Cross Section	C Gland Depth	Squeeze		G Groove Width	R Groove Radius
			Inches	%		
-008 thru -050	.070 ± .003	.055-.057	.010-.018	15-25	.090/.100	.005-.015
-102 thru -178	.103 ± .003	.087-.090	.010-.019	10-18	.140/.150	.005-.020
-201 thru -278	.139 ± .004	.119-.123	.012-.024	9-17	.190/.200	.005-.030
-309 thru -380	.210 ± .005	.183-.188	.017-.032	8.5-15	.280/.290	.005-.050
-425 thru -452	.275 ± .006	.234-.240	.029-.047	10.5-17	.380/.390	.005-.060

INDUSTRIAL STATIC SEAL 'O'-RING GLANDS

AXIAL SQUEEZE SEAL



GROOVE DETAIL

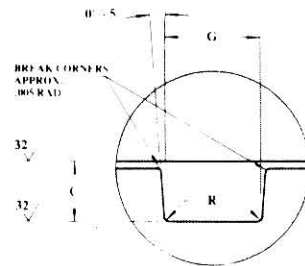


TABLE 2

O-Ring Part No. 20 -	W O-Ring Cross Section	C Gland Depth		Squeeze				G Groove Width	R Groove Radius
		Radial	Axial	Radial		Axial			
				Inches	%	Inches	%		
-008 thru -050	.070 ± .003	.049-.055	.045-.050	.012-.014	18-19	.017-.028	25.5-38.5	.090/.100	.005-.015
-102 thru -178	.103 ± .003	.080-.086	.072-.080	.014-.026	13.5-25	.020-.034	20-32	.140/.150	.005-.020
-201 thru -278	.139 ± .004	.112-.118	.100-.110	.017-.031	12.5-29	.025-.043	18.5-30	.190/.200	.500-.030
-309 thru -380	.210 ± .005	.176-.184	.165-.175	.021-.039	10-18	.030-.050	14.5-23	.280/.290	.005-.050
-425 thru -452	.275 ± .006	.225-.235	.220-.230	.034-.056	12.5-20	.039-.061	14.5-21.5	.380/.390	.005-.060