



Mobile inPHorm Design Analysis

Compound Selection

Compound No.: N0674-70
Durometer: 70
Polymer Family: Nitrile
Uses: General Purpose, MIL-G-21569 CL 1, UL Listed
Low Temp: -30°F
High Temp: 250°F
Color: BLACK

Gland Design - Face Seal

Series: 2-2XX (0.139" c/s)
Size: 2-253 (5.359" ID)
Application: External Pressure, Liquid
Unit of Measure: in

2-253 O-Ring Dimensions (in)

	Nominal	+/-tol
Inner Diameter(ID)	5.359	0.035
Cross Section(W)	0.139	0.004

External Pressure, Liquid Suggested Gland Dimensions

	Nominal	+tol	-tol
Gland Inner Diameter	5.359	0.002	0.000
Gland Depth (L):	0.111	0.003	0.003
Gland Width (G):	0.1805	0.006	0.006
Plate Gap (E):	0.000	0.000	0.000

Resulting Tolerance Stackups

	Min	Nom	Max	Ideal
Stretch	None	None	0.69%	None
Squeeze	15.56%	20.14%	24.48%	20-30%
Volume Fill	66.09%	74.96%	85.05%	60-90%
OD Interference	None	None	None	0-2%

Selected Material: N0674-70

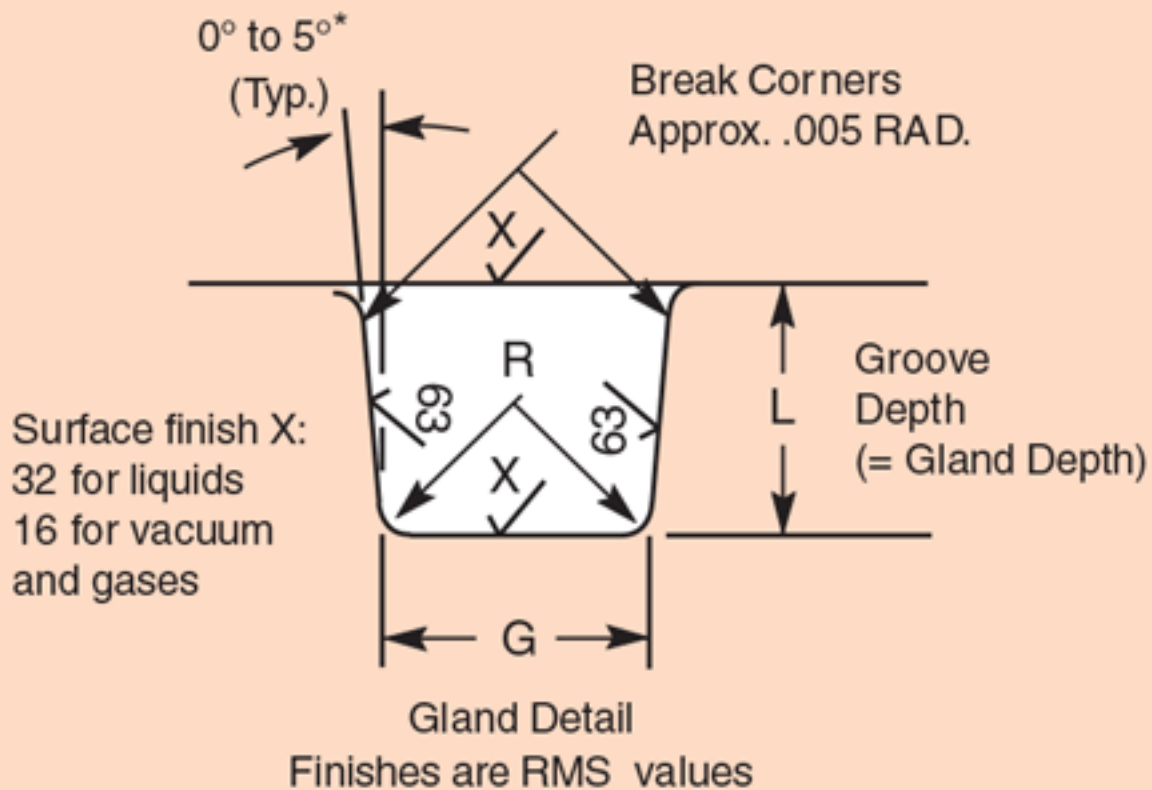
DANGER: FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF SEALS OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This software provides product options for your further investigation. Before using any product, it is important that you analyze all aspects of your application and review the information concerning the product in the current product catalog. Depending on your application, further analysis and testing may be necessary before a suitable product can be selected. Parker shall not be liable for any incidental, consequential or special damages that arise from the use of any product or this software.

Note: inPHorm size calculations conform to the standard O-ring sizes per AS 568A as shown in Table B6 of the on-line REFERENCE GUIDE (Parker Catalog ORD5700). The 5 dash series sizes are non-standard and have been created to special tooling specifications. The dimensions may vary due to materials with unusual shrinkage.



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For Internal Pressure
(outward pressure direction)
dimension the groove by its
outside diameter (H_o) and width:

(H_o) = Mean O.D. of O-ring

Tolerance = Minus 1% of Mean
O.D., but not more than
-.060

For External Pressure
(inward pressure direction)
dimension the groove by its
inside diameter (H_i) and width:

(H_i) = Mean I.D. of O-ring

Tolerance = Plus 1% of Mean
I.D., but not more than
+.060

