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

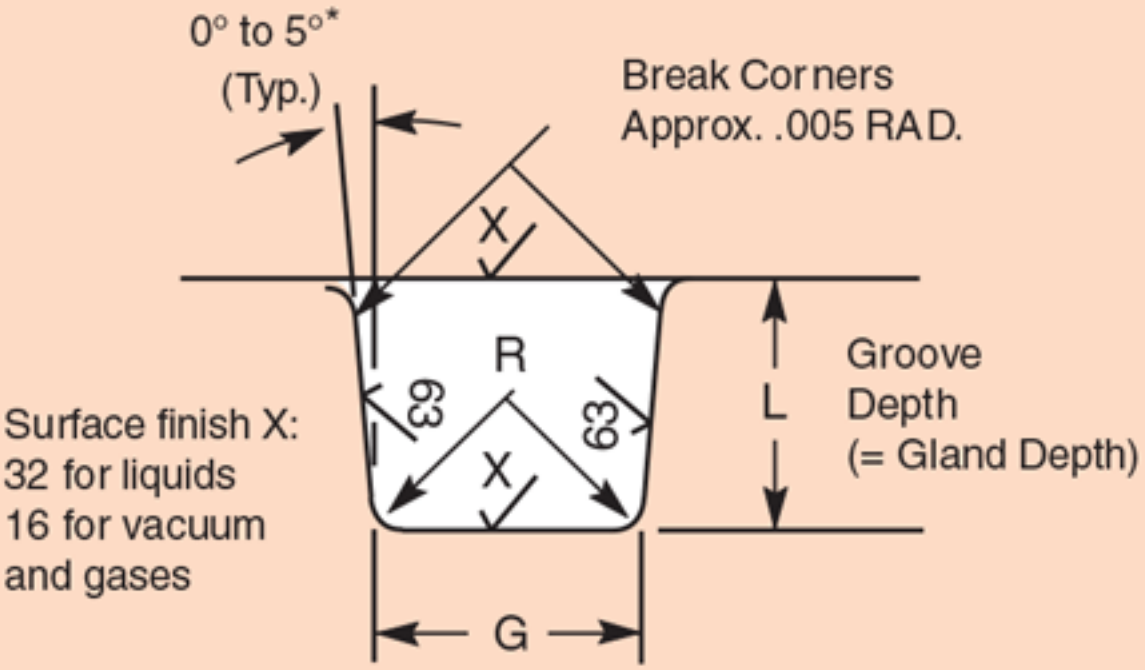
	Nominal	+tol	-tol
Gland Inner Diameter	5.359	0.002	0.000
Gland Depth (L):	0.111	0.003	0.003
Gland Width (G):	0.1805	0.006	0.006
Plate Gap (E):	0.000	0.000	0.000

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

Note: inPHorm size calculations conform to the standard O-ring sizes per AS 568A asshown 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.



Gland Detail
Finishes are RMS values

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