

4600 Quebec Avenue North Minneapolis, MN 55428-4916 Tel.: +1 (763) 535-6737 Fax: +1 (763) 535-0828 sales@robinsonrubber.com www.robinsonrubber.com

## Molded Rubber Parts "A1" High Precision Tolerance Table\*

Size (Inches)	Fixed	Closure	Size (Millimeters)	Fixed	Closure
Above / Including	Tolerances	Tolerances	Above / Including	Tolerances	Tolerances
0.000" - 0.100"	± .002"	± .004"	0.000 - 2.540	±0.050	±0.100
0.101" - 0.190"	± .003"	± .005"	2.570 - 4.830	±0.080	±0.130
0.191" - 0.382"	± .004"	± .006"	4.830 - 9.700	±0.100	±0.150
0.383" - 0.695"	± .005"	± .007"	9.730 - 17.650	±0.130	±0.180
0.696" - 1.064"	± .006"	± .008"	17.680 - 27.030	±0.150	±0.200
1.065" - 1.564"	± .008"	± .010"	27.050 - 39.730	±0.200	±0.250
1.565" - 2.064"	± .009"	± .011"	39.750 - 52.430	±0.230	±0.280
2.065" - 2.564"	± .010"	± .012"	52.450 - 65.130	±0.250	±0.300
2.565" - 3.064"	± .012"	± .014"	65.150 - 77.830	±0.300	±0.360
3.065" - 4.064"	± .013"	± .015"	77.850 - 103.230	±0.330	±0.380
4.065" - 5.064"	± .015"	± .017"	103.250 - 128.630	±0.380	±0.430
5.065" - 6.064"	± .016"	± .018"	128.650 - 154.030	±0.410	±0.460

Drawing designation "A1" is the tightest tolerance classification and indicates a high precision molded rubber product. Such products require complex and expensive molds, fewer cavities per mold, costly in-process controls and inspection procedures. It is desirable that the exact method of measurement be agreed upon between Robinson Rubber Products and the customer, as errors in measurement may be large in relation to the tolerance.

Some materials, particularly those requiring a post curing operation after molding, do not lend themselves to drawing designation "A1" tolerances.

Robinson Rubber Products – "A1" High Precision Tolerance Table © Copyright 2005 Robinson Rubber Products Company, Inc. All rights reserved.

<sup>\*</sup>Source: RMA or Rubber Manufacturers Association