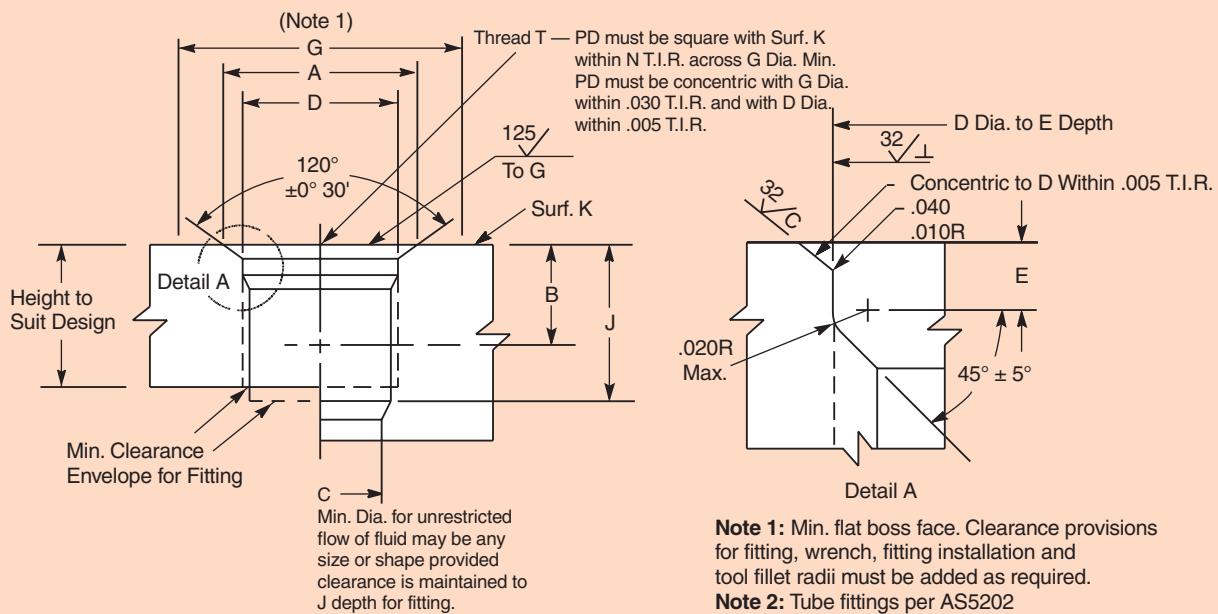


**Tube Fitting Boss Seals**

**Note 1:** Min. flat boss face. Clearance provisions for fitting, wrench, fitting installation and tool fillet radii must be added as required.

**Note 2:** Tube fittings per AS5202

**Boss Dimensions for Military Straight Thread Tube Fitting O-ring Gaskets per AS5202  
(Supersedes AND10049, AND10050 and MS33649)**

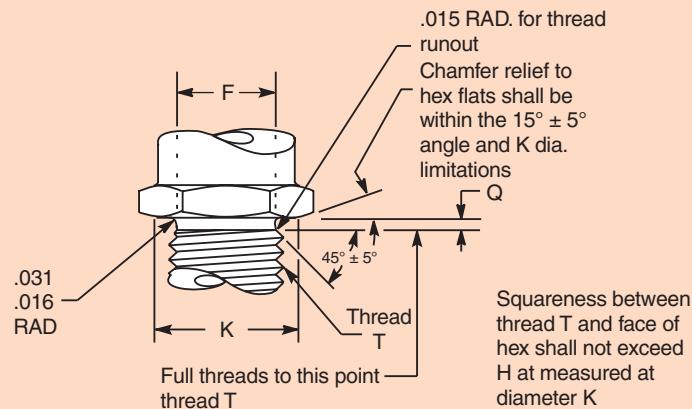
| Parker O-ring Size No.* | Actual O-Ring Dimensions |              | Equiv. Tube Dash No. | Tube OD Min. | Thread T Per Mil-S-8879 | A Dia.<br>+.015<br>-.000 | B Full Thd. Depth | C Dia.<br>+.005<br>-.000 | D Dia.<br>+.015<br>-.000 | E Dia.<br>Min. | G     | J     | N     |
|-------------------------|--------------------------|--------------|----------------------|--------------|-------------------------|--------------------------|-------------------|--------------------------|--------------------------|----------------|-------|-------|-------|
|                         | W                        | ID           |                      |              |                         |                          |                   |                          |                          |                |       |       |       |
| 3-901                   | .056 ± .003              | .185 ± .005  | 1                    | —            | 2500-28UNJF-3B          | 0.359                    | 0.330             | 0.062                    | 0.264                    | 0.063          | 0.478 | 0.402 | 0.002 |
| 3-902                   | .064 ± .003              | .239 ± .005  | 2                    | .125         | 3125-24UNJF-3B          | 0.438                    | 0.482             | 0.062                    | 0.328                    | 0.063          | 0.602 | 0.577 |       |
| 3-903                   | .064 ± .003              | .301 ± .005  | 3                    | .188         | 3750-24UNJF-3B          | 0.500                    | 0.538             | 0.125                    | 0.390                    | 0.063          | 0.665 | 0.583 | 0.003 |
| 3-904                   | .072 ± .003              | .351 ± .005  | 4                    | .250         | 4375-20UNJF-3B          | 0.562                    | 0.568             | 0.172                    | 0.454                    | 0.075          | 0.728 | 0.656 |       |
| 3-905                   | .072 ± .003              | .414 ± .005  | 5                    | .312         | 5000-20UNJF-3B          | 0.625                    | 0.234             | 0.517                    | 0.790                    |                |       |       |       |
| 3-906                   | .078 ± .003              | .468 ± .005  | 6                    | .375         | 5625-18UNJF-3B          | 0.688                    | 0.598             | 0.297                    | 0.580                    | 0.083          | 0.852 | 0.709 |       |
| 3-907                   | .082 ± .003              | .530 ± .007  | 7                    | .438         | 6250-18UNJF-3B          | 0.750                    | 0.614             | 0.360                    | 0.643                    | 0.094          | 0.915 | 0.725 |       |
| 3-908                   | .087 ± .003              | .644 ± .009  | 8                    | .500         | 7500-16UNJF-3B          | 0.875                    | 0.714             | 0.391                    | 0.769                    |                | 1.040 | 0.834 |       |
| 3-909                   | .097 ± .003              | .706 ± .009  | 9                    | .562         | .8125-16UNJ-3B          | 0.938                    | 0.730             | 0.438                    | 0.832                    | 0.107          | 1.102 | 0.850 |       |
| 3-910                   | .097 ± .003              | .755 ± .009  | 10                   | .625         | .8750-14UNJF-3B         | 1.000                    | 0.802             | 0.484                    | 0.896                    |                | 1.165 | 0.960 |       |
| 3-911                   | .116 ± .004              | .863 ± .009  | 11                   | .688         | 1.0000-12UNJF-3B        | 1.156                    |                   | 0.547                    | 1.023                    |                | 1.352 |       | 0.005 |
| 3-912                   | .116 ± .004              | .924 ± .009  | 12                   | .750         | 1.0625-12UNJ-3B         | 1.234                    |                   | 0.609                    | 1.086                    |                | 1.415 |       |       |
| 3-914                   | .116 ± .004              | 1.047 ± .010 | 14                   | .875         | 1.1875-12UNJ-3B         | 1.362                    |                   | 0.734                    | 1.211                    |                | 1.540 |       |       |
| 3-916                   | .116 ± .004              | 1.171 ± .010 | 16                   | 1.000        | 1.3125-12UNJ-3B         | 1.487                    |                   | 0.844                    | 1.336                    |                | 1.665 |       |       |
| 3-918                   | .116 ± .004              | 1.355 ± .012 | 18                   | 1.125        | 1.5000-12UNJF-3B        | 1.675                    |                   | 0.953                    | 1.524                    | 0.125          | 1.790 | 1.116 | 0.008 |
| 3-920                   | .118 ± .004              | 1.475 ± .014 | 20                   | 1.250        | 1.6250-12UNJ-3B         | 1.800                    |                   | 1.078                    | 1.648                    |                | 1.978 |       |       |
| 3-924                   | .118 ± .004              | 1.720 ± .014 | 24                   | 1.500        | 1.8750-12UNJ-3B         | 2.050                    |                   | 1.312                    | 1.898                    |                | 2.228 | 1.127 |       |
| 3-928                   | .118 ± .004              | 2.090 ± .018 | 28                   | 1.750        | 2.2500-12UNJ-3B         | 2.425                    |                   | 1.547                    | 2.273                    |                | 2.602 | 1.243 |       |
| 3-932                   | .118 ± .004              | 2.337 ± .018 | 32                   | 2.000        | 2.5000-12UNJ-3B         | 2.675                    | 0.907             | 1.781                    | 2.524                    |                | 2.852 | 1.368 | 0.010 |

\*Parker dash numbers correspond with those of AS568A

**Design Table 4-3: Boss Dimensions for Military Straight Thread Tube Fitting O-ring Gaskets per AS5202 (Supersedes AND10049, AND10050 and MS33649)**

**Tube Fitting Boss Seals**

Use fitting end per AS4395

**Fitting End AS4395 Used with J1926/1 and AS5202 Bosses (Supercedes MS 33656)**  
(Only the dimensions that define the O-ring Cavity are shown below.)

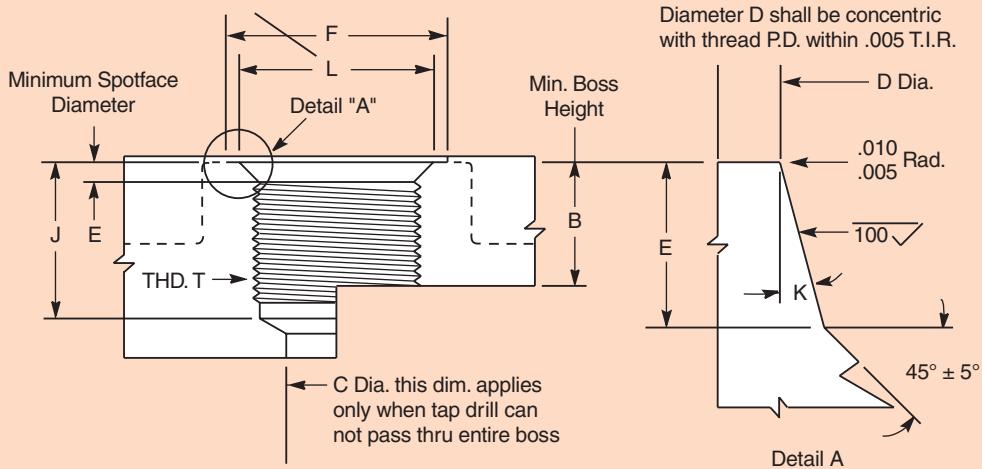
| Parker O-ring Size No. | Tubing OD | Thread T  | E Dimension Across Hex Flats | F<br>+.002<br>-.003 | H<br>Max. | K Dia.<br>±.010 | G<br>+.015<br>-.000 |
|------------------------|-----------|-----------|------------------------------|---------------------|-----------|-----------------|---------------------|
| 3-902                  | 1/8       | 5/16-24   | .563                         | .250                | .549      | .063            |                     |
| 3-903                  | 3/16      | 3/8-24    | .625                         | .312                | .611      | .063            |                     |
| 3-904                  | 1/4       | 7/16-20   | .688                         | .364                | .674      | .075            |                     |
| 3-905                  | 5/16      | 1/2-20    | .750                         | .426                | .736      | .075            |                     |
| 3-906                  | 3/8       | 9/16-18   | .813                         | .481                | .799      | .083            |                     |
| 3-908                  | 1/2       | 3/4-16    | 1.000                        | .660                | .986      | .094            |                     |
| 3-910                  | 5/8       | 7/8-14    | 1.125                        | .773                | 1.111     | .107            |                     |
| 3-912                  | 3/4       | 1 1/16-12 | 1.375                        | .945                | 1.361     |                 |                     |
| 3-914*                 | 7/8       | 1 3/16-12 | 1.500                        | 1.070               | 1.475     |                 |                     |
| 3-916                  | 1         | 1 5/16-12 | 1.625                        | 1.195               | 1.599     |                 |                     |
| 3-920                  | 1 1/4     | 1 5/8-12  | 1.875                        | 1.507               | 1.879     |                 |                     |
| 3-924                  | 1 1/2     | 1 7/8-12  | 2.125                        | 1.756               | 2.095     |                 |                     |
| 3-932                  | 2         | 2 1/2-12  | 2.750                        | 2.381               | 2.718     |                 |                     |

\*No fitting end for the 3-914 O-ring size is included in AS4395, but the dimensions shown here follow the same pattern.

**Design Table Table 4-4: Fitting end AS4395 used with J1926/1 and AS5202 bosses (only the dimensions that define the O-ring cavity are shown.)**

**Tube Fitting Boss Seals**

This surface shall be square with the thread P.D. within .010 T.I.R. when measured at Dia. L



Finished tapered counterbore (Detail A) shall be free from longitudinal and spiral tool marks. Annular tool marks up to 100 micro-inches maximum will be permissible.

**Boss Dimensions for Industrial Straight Thread Tube Fittings**

O-Ring Gaskets per SAE J1926

| Parker O-Ring Size | Actual O-Ring Dimensions |              | Tube OD | Thread T  | B Min. Thread Depth | C     | D     | E    | F     | J    | K   | L     |
|--------------------|--------------------------|--------------|---------|-----------|---------------------|-------|-------|------|-------|------|-----|-------|
|                    | W                        | ID           |         |           |                     |       |       |      |       |      |     |       |
| 3-902              | .064 ± .003              | .239 ± .005  | 1/8     | 5/16-24   | .390                | .062  | .358  | .074 | .672  | .468 | 12° | .438  |
| 3-903              | .064 ± .003              | .301 ± .005  | 3/16    | 3/8-24    | .390                | .125  | .421  | .074 | .750  | .468 | 12° | .500  |
| 3-904              | .072 ± .003              | .351 ± .005  | 1/4     | 7/16-20   | .454                | .172  | .487  | .093 | .828  | .547 | 12° | .563  |
| 3-905              | .072 ± .003              | .414 ± .005  | 5/16    | 1/2-20    | .454                | .234  | .550  | .093 | .960  | .547 | 12° | .625  |
| 3-906              | .078 ± .003              | .468 ± .005  | 3/8     | 9/16-18   | .500                | .297  | .616  | .097 | .906  | .609 | 12° | .688  |
| 3-908              | .087 ± .003              | .644 ± .009  | 1/2     | 3/4-16    | .562                | .391  | .811  | .100 | 1.188 | .688 | 15° | .875  |
| 3-910              | .097 ± .003              | .755 ± .009  | 5/8     | 7/8-14    | .656                | .484  | .942  | .100 | 1.344 | .781 | 15° | 1.000 |
| 3-912              | .116 ± .004              | .924 ± .009  | 3/4     | 1 1/16-12 | .750                | .609  | 1.148 | .130 | 1.625 | .906 | 15° | 1.250 |
| 3-913              | .116 ± .004              | .986 ± .010  | 13/16   |           | .750                | .719  | 1.273 | .130 | 1.765 | .906 | 15° | 1.375 |
| 3-914              | .116 ± .004              | 1.047 ± .010 | 7/8     | 1 3/16-12 | .750                | .844  | 1.398 | .130 | 1.910 | .906 | 15° | 1.500 |
| 3-916              | .116 ± .004              | 1.171 ± .010 | 1       | 1 5/16-12 | .750                |       |       |      |       |      |     |       |
| 3-918              | .116 ± .004              | 1.355 ± .012 | 1 1/8   |           |                     |       |       |      |       |      |     |       |
| 3-920              | .118 ± .004              | 1.475 ± .014 | 1 1/4   | 1 5/8-12  | .750                | .1078 | 1.713 | .132 | 2.270 | .906 | 15° | 1.875 |
| 3-924              | .118 ± .004              | 1.720 ± .014 | 1 1/2   | 1 7/8-12  | .750                | .1312 | 1.962 | .132 | 2.560 | .906 | 15° | 2.125 |
| 3-932              | .118 ± .004              | 2.337 ± .018 | 2       | 2 1/2-12  | .750                | .1781 | 2.587 | .132 | 3.480 | .906 | 15° | 2.750 |

Design Table 4-5: Boss Dimensions for Industrial Straight Thread Tube Fitting O-ring Gaskets Per SAE J1926