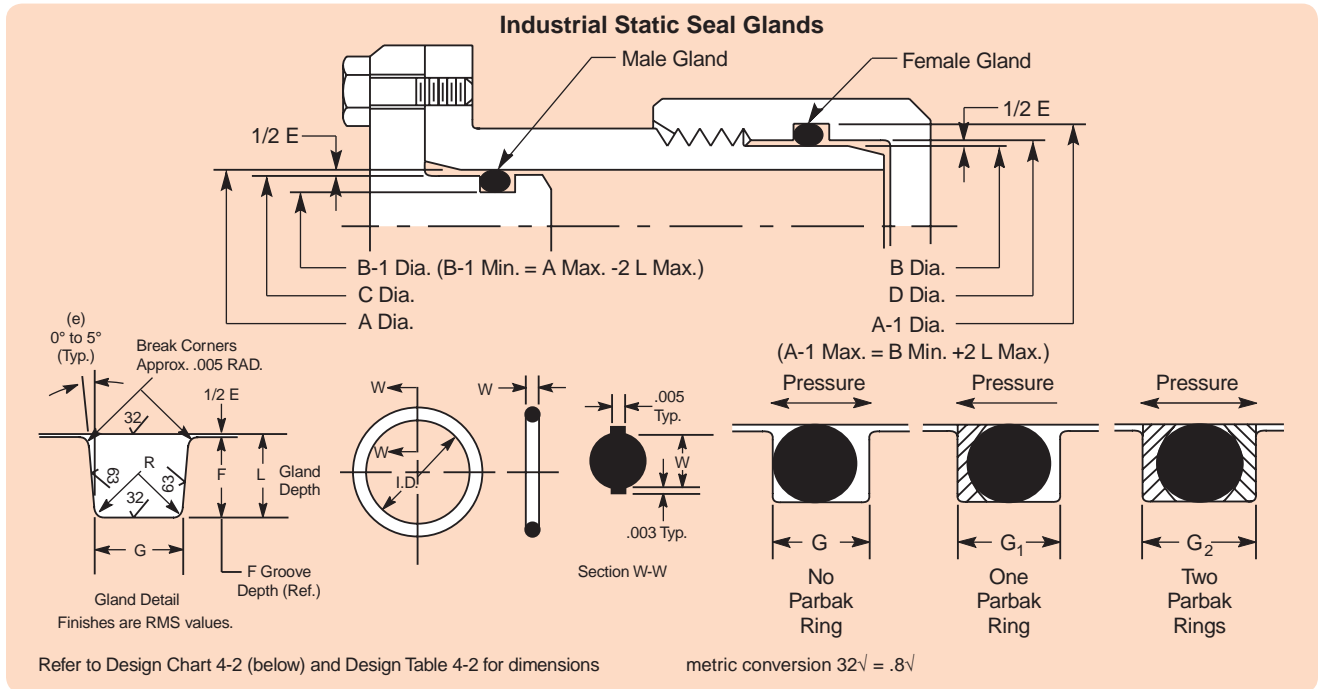


Guide for Design Table 4-2

| If Desired Dimension is Known for | Select Closest Dimension in Column | Read Horizontally in Column | To Determine Dimension for |
|-----------------------------------|------------------------------------|-----------------------------|--|
| Bore Dia. male gland | A | B-1 C G | Groove Dia. (male gland) Plug Dia. (male gland) Groove width |
| Plug Dia. male gland | C | A B-1 G | Bore Dia. (male gland) Groove (male gland) Groove width |
| Tube OD female gland | B | A-1 D G | Groove Dia. (female gland) Throat Dia. (female gland) Groove width |
| Throat Dia. female gland | D | A-1 B G | Groove Dia. (female gland) Tube OD (female gland) Groove width |

Design Guide 4-2: Guide for Design Table 4-2



Industrial O-Ring Static Seal Glands

| O-Ring 2-Size AS568B- | W Cross-Section | | L Gland Depth | Squeeze | | E(a) Diametral Clearance | G - Groove Width | | | R Groove Radius | Max. Eccentricity (b) |
|-----------------------|-----------------|----------------------|---------------|--------------|----------|--------------------------|--------------------|-----------------------------------|-----------------------------------|-----------------|-----------------------|
| | Nominal | Actual | | Actual | % | | No Parbak Ring (G) | One Parbak Ring (G ₁) | Two Parbak Ring (G ₂) | | |
| 004 through 050 | 1/16 | .070 ±.003 (1.78 mm) | .050 to .052 | .015 to .023 | 22 to 32 | .002 to .005 | .093 to .098 | .138 to .143 | .205 to .210 | .005 to .015 | .002 |
| 102 through 178 | 3/32 | .103 ±.003 (2.62 mm) | .081 to .083 | .017 to .025 | 17 to 24 | .002 to .005 | .140 to .145 | .171 to .176 | .238 to .243 | .005 to .015 | .002 |
| 201 through 284 | 1/8 | .139 ±.004 (3.53 mm) | .111 to .113 | .022 to .032 | 16 to 23 | .003 to .006 | .187 to .192 | .208 to .213 | .275 to .280 | .010 to .025 | .003 |
| 309 through 395 | 3/16 | .210 ±.005 (5.33 mm) | .170 to .173 | .032 to .045 | 15 to 21 | .003 to .006 | .281 to .286 | .311 to .316 | .410 to .415 | .020 to .035 | .004 |
| 425 through 475 | 1/4 | .275 ±.006 (6.99 mm) | .226 to .229 | .040 to .055 | 15 to 20 | .004 to .007 | .375 to .380 | .408 to .413 | .538 to .543 | .020 to .035 | .005 |

- (a) Clearance (extrusion gap) must be held to a minimum consistent with design requirements for temperature range variation.
- (b) Total indicator reading between groove and adjacent bearing surface.
- (c) Reduce maximum diametral clearance 50% when using silicone or fluorosilicone O-rings.
- (d) For ease of assembly, when Parbaks are used, gland depth may be increased up to 5%.

Design Chart 4-2: For Industrial O-Ring Static Seal Glands



Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.†

| O-Ring Size Parker No. 2- | Dimensions | | | | A | A-1 | | B | B-1 | | C | D | G† | |
|------------------------------|------------|------|-------|---------------|--|-------------------------------------|------|--|-----------------------------------|------|---------------------------------|--|--------------------------------|------|
| | ID | ± | W | Mean OD (Ref) | Bore Dia. (Male Gland) +.002 -.000 | Groove Dia. (Female Gland) -.000 | | Tube OD (Female Gland) +.000 -.002 | Groove Dia. (Male Gland) +.000 | | Plug Dia. (Male Gland) +.001 | Throat Dia. (Female Gland) +.001 -.000 | Groove Width +.005 -.000 | |
| 2-001 | .029 | .004 | .040 | .109 | .105 | .101 | ↑ | .040 | .044 | ↑ | * | .103 | .042 | .055 |
| 002 | .042 | .004 | .050 | .142 | .138 | .132 | .002 | .053 | .059 | .002 | * | .136 | .055 | .070 |
| 003 | .056 | .004 | .060 | .176 | .172 | .162 | ↓ | .067 | .077 | ↓ | * | .170 | .069 | .083 |
| 004 | .070 | .005 | ↑ | .210 | .206 | .181 | ↑ | .081 | .106 | ↑ | * | .204 | .083 | ↑ |
| 005 | .101 | .005 | ↑ | .241 | .237 | .212 | ↑ | .112 | .137 | ↑ | * | .235 | .114 | ↑ |
| 006 | .114 | .005 | ↑ | .254 | .250 | .225 | ↑ | .125 | .150 | ↑ | * | .248 | .127 | ↑ |
| 007 | .145 | .005 | ↑ | .285 | .281 | .256 | ↑ | .156 | .181 | ↑ | * | .279 | .158 | ↑ |
| 008 | .176 | .005 | ↑ | .316 | .312 | .287 | ↑ | .187 | .212 | ↑ | * | .310 | .189 | ↑ |
| 009 | .208 | .005 | ↑ | .348 | .343 | .318 | ↑ | .218 | .243 | ↑ | * | .341 | .220 | ↑ |
| 010 | .239 | .005 | ↑ | .379 | .375 | .350 | ↑ | .250 | .275 | ↑ | * | .373 | .252 | ↑ |
| 011 | .301 | .005 | ↑ | .441 | .437 | .412 | ↑ | .312 | .337 | ↑ | * | .435 | .314 | ↑ |
| 012 | .364 | .005 | ↑ | .504 | .500 | .475 | ↑ | .375 | .400 | ↑ | * | .498 | .377 | ↑ |
| 013 | .426 | .005 | ↑ | .566 | .562 | .537 | ↑ | .437 | .462 | ↑ | * | .560 | .439 | ↑ |
| 014 | .489 | .005 | ↑ | .629 | .625 | .600 | ↑ | .500 | .525 | ↑ | * | .623 | .502 | ↑ |
| 015 | .551 | .007 | ↑ | .691 | .687 | .662 | ↑ | .562 | .587 | ↑ | * | .685 | .564 | ↑ |
| 016 | .614 | .009 | ↑ | .754 | .750 | .725 | ↑ | .625 | .650 | ↑ | * | .748 | .627 | ↑ |
| 017 | .676 | .009 | ↑ | .816 | .812 | .787 | ↑ | .687 | .712 | ↑ | * | .810 | .689 | ↑ |
| 018 | .739 | .009 | ↑ | .879 | .875 | .850 | ↑ | .750 | .775 | ↑ | * | .873 | .752 | ↑ |
| 019 | .801 | .009 | ↑ | .941 | .937 | .912 | ↑ | .812 | .837 | ↑ | * | .935 | .814 | ↑ |
| 020 | .864 | .009 | ↑ | 1.004 | 1.000 | .975 | ↑ | .875 | .900 | ↑ | * | .998 | .877 | ↑ |
| 021 | .926 | .009 | ↑ | 1.066 | 1.062 | 1.037 | ↑ | .937 | .962 | ↑ | * | 1.060 | .939 | .093 |
| 022 | .989 | .010 | .070 | 1.129 | 1.125 | 1.100 | .002 | 1.000 | 1.025 | .002 | * | 1.123 | 1.002 | ↑ |
| 023 | 1.051 | .010 | ±.003 | 1.191 | 1.187 | 1.162 | ↑ | 1.062 | 1.087 | ↑ | * | 1.185 | 1.064 | ↑ |
| 024 | 1.114 | .010 | ↑ | 1.254 | 1.250 | 1.225 | ↑ | 1.125 | 1.150 | ↑ | * | 1.248 | 1.127 | ↑ |
| 025 | 1.176 | .011 | ↑ | 1.316 | 1.312 | 1.287 | ↑ | 1.187 | 1.212 | ↑ | * | 1.310 | 1.189 | ↑ |
| 026 | 1.239 | .011 | ↑ | 1.379 | 1.375 | 1.350 | ↑ | 1.250 | 1.275 | ↑ | * | 1.373 | 1.252 | ↑ |
| 027 | 1.301 | .011 | ↑ | 1.441 | 1.437 | 1.412 | ↑ | 1.312 | 1.337 | ↑ | * | 1.435 | 1.314 | ↑ |
| 028 | 1.364 | .013 | ↑ | 1.504 | 1.500 | 1.475 | ↑ | 1.375 | 1.400 | ↑ | * | 1.498 | 1.377 | ↑ |
| 029 | 1.489 | .013 | ↑ | 1.629 | 1.625 | 1.600 | ↑ | 1.500 | 1.525 | ↑ | * | 1.623 | 1.502 | ↑ |
| 030 | 1.614 | .013 | ↑ | 1.754 | 1.750 | 1.725 | ↑ | 1.625 | 1.650 | ↑ | * | 1.748 | 1.627 | ↑ |
| 031 | 1.739 | .015 | ↑ | 1.879 | 1.875 | 1.850 | ↑ | 1.750 | 1.775 | ↑ | * | 1.873 | 1.752 | ↑ |
| 032 | 1.864 | .015 | ↑ | 2.004 | 2.000 | 1.975 | ↑ | 1.875 | 1.900 | ↑ | * | 1.998 | 1.877 | ↑ |
| 033 | 1.989 | .018 | ↑ | 2.129 | 2.125 | 2.100 | ↑ | 2.000 | 2.025 | ↑ | * | 2.123 | 2.002 | ↑ |
| 034 | 2.114 | .018 | ↑ | 2.254 | 2.250 | 2.225 | ↑ | 2.125 | 2.150 | ↑ | * | 2.248 | 2.127 | ↑ |
| 035 | 2.239 | .018 | ↑ | 2.379 | 2.375 | 2.350 | ↑ | 2.250 | 2.275 | ↑ | * | 2.373 | 2.252 | ↑ |
| 036 | 2.364 | .018 | ↑ | 2.504 | 2.500 | 2.475 | ↑ | 2.375 | 2.400 | ↑ | * | 2.498 | 2.377 | ↑ |
| 037 | 2.489 | .018 | ↑ | 2.629 | 2.625 | 2.600 | ↑ | 2.500 | 2.525 | ↑ | * | 2.623 | 2.502 | ↑ |
| 038 | 2.614 | .020 | ↑ | 2.754 | 2.750 | 2.725 | ↑ | 2.625 | 2.650 | ↑ | * | 2.748 | 2.627 | ↑ |
| 039 | 2.739 | .020 | ↑ | 2.879 | 2.875 | 2.850 | ↑ | 2.750 | 2.775 | ↑ | * | 2.873 | 2.752 | ↑ |
| 040 | 2.864 | .020 | ↑ | 3.004 | 3.000 | 2.975 | ↑ | 2.875 | 2.900 | ↑ | * | 2.998 | 2.877 | ↑ |
| 041 | 2.989 | .024 | ↑ | 3.129 | 3.125 | 3.100 | ↑ | 3.000 | 3.025 | ↑ | * | 3.123 | 3.002 | ↑ |
| 042 | 3.239 | .024 | ↑ | 3.379 | 3.375 | 3.350 | ↑ | 3.250 | 3.275 | ↑ | * | 3.373 | 3.252 | ↑ |
| 043 | 3.489 | .024 | ↓ | 3.629 | 3.625 | 3.600 | ↓ | 3.500 | 3.525 | ↓ | * | 3.623 | 3.502 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.

Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.† (Continued)

| O-Ring Size Parker No. 2- | Dimensions | | | | A | A-1 | | B | B-1 | | C | D | G† |
|------------------------------|------------|------|-------|---------------|--|-------------------------------------|------|--|-----------------------------------|------|---|--|--------------------------------|
| | ID | ± | W | Mean OD (Ref) | Bore Dia. (Male Gland) +.002 -.000 | Groove Dia. (Female Gland) -.000 | + | Tube OD (Female Gland) +.000 -.002 | Groove Dia. (Male Gland) +.000 | - | Plug Dia. (Male Gland) +.000 .001 | Throat Dia. (Female Gland) +.001 -.000 | Groove Width +.005 -.000 |
| 044 | 3.739 | .027 | ↑ | 3.879 | 3.875 | 3.850 | | 3.750 | 3.775 | ↑ | 3.873 | 3.752 | |
| 045 | 3.989 | .027 | .070 | 4.129 | 4.125 | 4.100 | .002 | 4.000 | 4.025 | .002 | 4.123 | 4.002 | .093 |
| 046 | 4.239 | .030 | ±.003 | 4.379 | 4.375 | 4.350 | | 4.250 | 4.275 | | 4.373 | 4.252 | |
| 047 | 4.489 | .030 | | 4.629 | 4.625 | 4.600 | | 4.500 | 4.525 | | 4.623 | 4.502 | |
| 048 | 4.739 | .030 | | 4.879 | 4.875 | 4.850 | | 4.750 | 4.775 | | 4.873 | 4.752 | |
| 049 | 4.989 | .037 | | 5.129 | 5.125 | 5.100 | | 5.000 | 5.025 | | 5.123 | 5.002 | |
| 050 | 5.239 | .037 | ↓ | 5.379 | 5.375 | 5.350 | ↓ | 5.250 | 5.275 | ↓ | 5.373 | 5.252 | ↓ |
| 102 | .049 | .005 | ↑ | .255 | .247 | .224 | ↑ | .062 | .085 | ↑ | * .245 | .064 | ↑ |
| 103 | .081 | .005 | | .287 | .278 | .256 | | .094 | .116 | | * .276 | .095 | |
| 104 | .112 | .005 | | .318 | .310 | .287 | | .125 | .148 | | * .308 | .127 | |
| 105 | .143 | .005 | | .349 | .342 | .318 | | .156 | .180 | | * .340 | .158 | |
| 106 | .174 | .005 | | .380 | .374 | .349 | | .187 | .212 | | * .372 | .189 | |
| 107 | .206 | .005 | | .412 | .405 | .381 | | .219 | .243 | | * .403 | .221 | |
| 108 | .237 | .005 | | .443 | .437 | .412 | | .250 | .275 | | * .435 | .252 | |
| 109 | .299 | .005 | | .505 | .500 | .474 | | .312 | .338 | | * .498 | .314 | |
| 110 | .362 | .005 | | .568 | .562 | .537 | | .375 | .400 | | * .560 | .377 | |
| 111 | .424 | .005 | | .630 | .625 | .599 | | .437 | .463 | | * .623 | .439 | |
| 112 | .487 | .005 | | .693 | .687 | .662 | | .500 | .525 | | * .685 | .502 | |
| 113 | .549 | .007 | | .755 | .750 | .724 | | .562 | .588 | | * .748 | .564 | |
| 114 | .612 | .009 | | .818 | .812 | .787 | | .625 | .650 | | .810 | .627 | |
| 115 | .674 | .009 | | .880 | .875 | .849 | | .687 | .713 | | .873 | .689 | |
| 116 | .737 | .009 | | .943 | .937 | .912 | | .750 | .775 | | .935 | .752 | |
| 117 | .799 | .010 | | 1.005 | 1.000 | .974 | | .812 | .838 | | .998 | .814 | |
| 118 | .862 | .010 | | 1.068 | 1.062 | 1.037 | | .875 | .900 | | 1.060 | .877 | |
| 119 | .924 | .010 | .103 | 1.130 | 1.125 | 1.099 | .002 | .937 | .963 | .002 | 1.123 | .939 | .140 |
| 120 | .987 | .010 | ±.003 | 1.193 | 1.187 | 1.162 | | 1.000 | 1.025 | | 1.185 | 1.002 | |
| 121 | 1.049 | .010 | | 1.255 | 1.250 | 1.224 | | 1.062 | 1.088 | | 1.248 | 1.064 | |
| 122 | 1.112 | .010 | | 1.318 | 1.312 | 1.287 | | 1.125 | 1.150 | | 1.310 | 1.127 | |
| 123 | 1.174 | .012 | | 1.380 | 1.375 | 1.349 | | 1.187 | 1.213 | | 1.373 | 1.189 | |
| 124 | 1.237 | .012 | | 1.443 | 1.437 | 1.412 | | 1.250 | 1.275 | | 1.435 | 1.252 | |
| 125 | 1.299 | .012 | | 1.505 | 1.500 | 1.474 | | 1.312 | 1.338 | | 1.498 | 1.314 | |
| 126 | 1.362 | .012 | | 1.568 | 1.562 | 1.537 | | 1.375 | 1.400 | | 1.560 | 1.377 | |
| 127 | 1.424 | .012 | | 1.630 | 1.625 | 1.599 | | 1.437 | 1.463 | | 1.623 | 1.439 | |
| 128 | 1.487 | .012 | | 1.693 | 1.687 | 1.662 | | 1.500 | 1.525 | | 1.685 | 1.502 | |
| 129 | 1.549 | .015 | | 1.755 | 1.750 | 1.724 | | 1.562 | 1.588 | | 1.748 | 1.564 | |
| 130 | 1.612 | .015 | | 1.818 | 1.812 | 1.787 | | 1.625 | 1.650 | | 1.810 | 1.627 | |
| 131 | 1.674 | .015 | | 1.880 | 1.875 | 1.849 | | 1.687 | 1.713 | | 1.873 | 1.689 | |
| 132 | 1.737 | .015 | | 1.943 | 1.937 | 1.912 | | 1.750 | 1.775 | | 1.935 | 1.752 | |
| 133 | 1.799 | .015 | | 2.005 | 2.000 | 1.974 | | 1.812 | 1.838 | | 1.998 | 1.814 | |
| 134 | 1.862 | .015 | | 2.068 | 2.062 | 2.037 | | 1.875 | 1.900 | | 2.060 | 1.877 | |
| 135 | 1.925 | .017 | | 2.131 | 2.125 | 2.099 | | 1.937 | 1.963 | | 2.123 | 1.939 | |
| 136 | 1.987 | .017 | | 2.193 | 2.187 | 2.162 | | 2.000 | 2.025 | | 2.185 | 2.002 | |
| 137 | 2.050 | .017 | ↓ | 2.256 | 2.250 | 2.224 | ↓ | 2.062 | 2.088 | ↓ | 2.248 | 2.064 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.

Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.† (Continued)

| O-Ring Size Parker No. 2- | Dimensions | | | | A | A-1 | | B | B-1 | | C | D | G† |
|------------------------------|------------|------|-------|---------------|--|-------------------------------------|------|--|-----------------------------------|------|---|--|--------------------------------|
| | ID | ± | W | Mean OD (Ref) | Bore Dia. (Male Gland) +.002 -.000 | Groove Dia. (Female Gland) -.000 | + | Tube OD (Female Gland) +.000 -.002 | Groove Dia. (Male Gland) +.000 | - | Plug Dia. (Male Gland) +.000 .001 | Throat Dia. (Female Gland) +.001 -.000 | Groove Width +.005 -.000 |
| 138 | 2.112 | .017 | ↑ | 2.318 | 2.312 | 2.287 | ↑ | 2.125 | 2.150 | ↑ | 2.310 | 2.127 | ↑ |
| 139 | 2.175 | .017 | | 2.381 | 2.375 | 2.349 | | 2.187 | 2.213 | | 2.373 | 2.189 | |
| 140 | 2.237 | .017 | | 2.443 | 2.437 | 2.412 | | 2.250 | 2.275 | | 2.435 | 2.252 | |
| 141 | 2.300 | .020 | | 2.506 | 2.500 | 2.474 | | 2.312 | 2.338 | | 2.498 | 2.315 | |
| 142 | 2.362 | .020 | | 2.568 | 2.562 | 2.537 | | 2.375 | 2.400 | | 2.560 | 2.377 | |
| 143 | 2.425 | .020 | | 2.631 | 2.625 | 2.599 | | 2.437 | 2.463 | | 2.623 | 2.439 | |
| 144 | 2.487 | .020 | | 2.693 | 2.687 | 2.662 | | 2.500 | 2.525 | | 2.685 | 2.502 | |
| 145 | 2.550 | .020 | | 2.756 | 2.750 | 2.724 | | 2.562 | 2.588 | | 2.748 | 2.564 | |
| 146 | 2.612 | .020 | | 2.818 | 2.812 | 2.787 | | 2.625 | 2.650 | | 2.810 | 2.627 | |
| 147 | 2.675 | .022 | | 2.881 | 2.875 | 2.849 | | 2.687 | 2.713 | | 2.873 | 2.689 | |
| 148 | 2.737 | .022 | | 2.943 | 2.937 | 2.912 | | 2.750 | 2.775 | | 2.935 | 2.752 | |
| 149 | 2.800 | .022 | | 3.006 | 3.000 | 2.974 | | 2.812 | 2.838 | | 2.998 | 2.814 | |
| 150 | 2.862 | .022 | | 3.068 | 3.062 | 3.037 | | 2.875 | 2.900 | | 3.060 | 2.877 | |
| 151 | 2.987 | .024 | | 3.193 | 3.187 | 3.162 | | 3.000 | 3.025 | | 3.185 | 3.002 | |
| 152 | 3.237 | .024 | | 3.443 | 3.437 | 3.412 | | 3.250 | 3.275 | | 3.435 | 3.252 | |
| 153 | 3.487 | .024 | | 3.693 | 3.687 | 3.662 | | 3.500 | 3.525 | | 3.685 | 3.502 | |
| 154 | 3.737 | .028 | .103 | 3.943 | 3.937 | 3.912 | .002 | 3.750 | 3.775 | .002 | 3.935 | 3.752 | .140 |
| 155 | 3.987 | .028 | ±.003 | 4.193 | 4.187 | 4.162 | | 4.000 | 4.025 | | 4.185 | 4.002 | |
| 156 | 4.237 | .030 | | 4.443 | 4.437 | 4.412 | | 4.250 | 4.275 | | 4.435 | 4.252 | |
| 157 | 4.487 | .030 | | 4.693 | 4.687 | 4.662 | | 4.500 | 4.525 | | 4.685 | 4.502 | |
| 158 | 4.737 | .030 | | 4.943 | 4.937 | 4.912 | | 4.750 | 4.775 | | 4.935 | 4.752 | |
| 159 | 4.987 | .035 | | 5.193 | 5.187 | 5.162 | | 5.000 | 5.025 | | 5.185 | 5.002 | |
| 160 | 5.237 | .035 | | 5.443 | 5.437 | 5.412 | | 5.250 | 5.275 | | 5.435 | 5.252 | |
| 161 | 5.487 | .035 | | 5.693 | 5.687 | 5.662 | | 5.500 | 5.525 | | 5.685 | 5.502 | |
| 162 | 5.737 | .035 | | 5.943 | 5.937 | 5.912 | | 5.750 | 5.775 | | 5.935 | 5.752 | |
| 163 | 5.987 | .035 | | 6.193 | 6.187 | 6.162 | | 6.000 | 6.025 | | 6.185 | 6.002 | |
| 164 | 6.237 | .040 | | 6.443 | 6.437 | 6.412 | | 6.250 | 6.275 | | 6.435 | 6.252 | |
| 165 | 6.487 | .040 | | 6.693 | 6.687 | 6.662 | | 6.500 | 6.525 | | 6.685 | 6.502 | |
| 166 | 6.737 | .040 | | 6.943 | 6.937 | 6.912 | | 6.750 | 6.775 | | 6.935 | 6.752 | |
| 167 | 6.987 | .040 | | 7.193 | 7.187 | 7.162 | | 7.000 | 7.025 | | 7.185 | 7.002 | |
| 168 | 7.237 | .045 | | 7.443 | 7.437 | 7.412 | | 7.250 | 7.275 | | 7.435 | 7.252 | |
| 169 | 7.487 | .045 | | 7.693 | 7.687 | 7.662 | | 7.500 | 7.525 | | 7.685 | 7.502 | |
| 170 | 7.737 | .045 | | 7.943 | 7.937 | 7.912 | | 7.750 | 7.775 | | 7.935 | 7.752 | |
| 171 | 7.987 | .045 | | 8.193 | 8.187 | 8.162 | | 8.000 | 8.025 | | 8.185 | 8.002 | |
| 172 | 8.237 | .050 | | 8.443 | 8.437 | 8.412 | | 8.250 | 8.275 | | 8.435 | 8.252 | |
| 173 | 8.487 | .050 | | 8.693 | 8.687 | 8.662 | | 8.500 | 8.525 | | 8.685 | 8.502 | |
| 174 | 8.737 | .050 | | 8.943 | 8.937 | 8.912 | | 8.750 | 8.775 | | 8.935 | 8.752 | |
| 175 | 8.987 | .050 | | 9.193 | 9.187 | 9.162 | | 9.000 | 9.025 | | 9.185 | 9.002 | |
| 176 | 9.237 | .055 | | 9.443 | 9.437 | 9.412 | | 9.250 | 9.275 | | 9.435 | 9.252 | |
| 177 | 9.487 | .055 | | 9.693 | 9.687 | 9.662 | | 9.500 | 9.525 | | 9.685 | 9.502 | |
| 178 | 9.737 | .055 | ↓ | 9.943 | 9.937 | 9.912 | ↓ | 9.750 | 9.775 | ↓ | 9.935 | 9.752 | ↓ |
| 201 | .171 | .005 | .139 | .449 | .437 | .409 | ↑ | .187 | .215 | ↑ | .434 | .190 | ↑ |
| 202 | .234 | .005 | ±.004 | .512 | .500 | .472 | .002 | .250 | .278 | .002 | .497 | .253 | .187 |
| 203 | .296 | .005 | ↓ | .574 | .562 | .534 | ↓ | .312 | .340 | ↓ | .559 | .315 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.

Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.† (Continued)

| O-Ring Size Parker No. 2- | Dimensions | | | | A | A-1 | | B | B-1 | | C | D | G† |
|------------------------------|------------|------|-------|---------------|--|-------------------------------------|------|--|-----------------------------------|------|---|--|--------------------------------|
| | ID | ± | W | Mean OD (Ref) | Bore Dia. (Male Gland) +.002 -.000 | Groove Dia. (Female Gland) -.000 | + | Tube OD (Female Gland) +.000 -.002 | Groove Dia. (Male Gland) +.000 | - | Plug Dia. (Male Gland) +.000 .001 | Throat Dia. (Female Gland) +.001 -.000 | Groove Width +.005 -.000 |
| 204 | .359 | .005 | ↑ | .637 | .625 | .597 | ↑ | .375 | .403 | ↑ | .622 | .378 | ↑ |
| 205 | .421 | .005 | | .699 | .687 | .659 | | .437 | .465 | | .684 | .440 | |
| 206 | .484 | .005 | | .762 | .750 | .722 | | .500 | .528 | | .747 | .503 | |
| 207 | .546 | .007 | | .824 | .812 | .784 | | .562 | .590 | | .809 | .565 | |
| 208 | .609 | .009 | | .887 | .875 | .847 | | .625 | .653 | | .872 | .628 | |
| 209 | .671 | .009 | | .949 | .937 | .909 | | .687 | .715 | | .934 | .690 | |
| 210 | .734 | .010 | | 1.012 | 1.000 | .972 | | .750 | .778 | | .997 | .753 | |
| 211 | .796 | .010 | | 1.074 | 1.062 | 1.034 | | .812 | .840 | | 1.059 | .815 | |
| 212 | .859 | .010 | | 1.137 | 1.125 | 1.097 | | .875 | .903 | | 1.122 | .878 | |
| 213 | .921 | .010 | | 1.199 | 1.187 | 1.159 | | .937 | .965 | | 1.184 | .940 | |
| 214 | .984 | .010 | | 1.262 | 1.250 | 1.222 | | 1.000 | 1.028 | | 1.247 | 1.003 | |
| 215 | 1.046 | .010 | | 1.324 | 1.312 | 1.284 | | 1.062 | 1.090 | | 1.309 | 1.065 | |
| 216 | 1.109 | .012 | | 1.387 | 1.375 | 1.347 | | 1.125 | 1.153 | | 1.372 | 1.128 | |
| 217 | 1.171 | .012 | | 1.449 | 1.437 | 1.409 | | 1.187 | 1.215 | | 1.434 | 1.190 | |
| 218 | 1.234 | .012 | | 1.512 | 1.500 | 1.472 | | 1.250 | 1.278 | | 1.497 | 1.253 | |
| 219 | 1.296 | .012 | | 1.574 | 1.562 | 1.534 | | 1.312 | 1.340 | | 1.559 | 1.315 | |
| 220 | 1.359 | .012 | .139 | 1.637 | 1.625 | 1.597 | .002 | 1.375 | 1.403 | .002 | 1.622 | 1.378 | .187 |
| 221 | 1.421 | .012 | ±.004 | 1.700 | 1.687 | 1.659 | | 1.437 | 1.465 | | 1.684 | 1.440 | |
| 222 | 1.484 | .015 | | 1.762 | 1.750 | 1.722 | | 1.500 | 1.528 | | 1.747 | 1.503 | |
| 223 | 1.609 | .015 | | 1.887 | 1.875 | 1.847 | | 1.625 | 1.653 | | 1.872 | 1.628 | |
| 224 | 1.734 | .015 | | 2.012 | 2.000 | 1.972 | | 1.750 | 1.778 | | 1.997 | 1.753 | |
| 225 | 1.859 | .015 | | 2.137 | 2.125 | 2.097 | | 1.875 | 1.903 | | 2.122 | 1.878 | |
| 226 | 1.984 | .018 | | 2.262 | 2.250 | 2.222 | | 2.000 | 2.028 | | 2.247 | 2.003 | |
| 227 | 2.109 | .018 | | 2.387 | 2.375 | 2.347 | | 2.125 | 2.153 | | 2.372 | 2.128 | |
| 228 | 2.234 | .020 | | 2.512 | 2.500 | 2.472 | | 2.250 | 2.278 | | 2.497 | 2.253 | |
| 229 | 2.359 | .020 | | 2.637 | 2.625 | 2.597 | | 2.375 | 2.403 | | 2.622 | 2.378 | |
| 230 | 2.484 | .020 | | 2.762 | 2.750 | 2.722 | | 2.500 | 2.528 | | 2.747 | 2.503 | |
| 231 | 2.609 | .020 | | 2.887 | 2.875 | 2.847 | | 2.625 | 2.653 | | 2.872 | 2.628 | |
| 232 | 2.734 | .024 | | 3.012 | 3.000 | 2.972 | | 2.750 | 2.778 | | 2.997 | 2.753 | |
| 233 | 2.859 | .024 | | 3.137 | 3.125 | 3.097 | | 2.875 | 2.903 | | 3.122 | 2.878 | |
| 234 | 2.984 | .024 | | 3.262 | 3.250 | 3.222 | | 3.000 | 3.028 | | 3.247 | 3.003 | |
| 235 | 3.109 | .024 | | 3.387 | 3.375 | 3.347 | | 3.125 | 3.153 | | 3.372 | 3.128 | |
| 236 | 3.234 | .024 | | 3.512 | 3.500 | 3.472 | | 3.250 | 3.278 | | 3.497 | 3.253 | |
| 237 | 3.359 | .024 | | 3.637 | 3.625 | 3.597 | | 3.375 | 3.403 | | 3.622 | 3.378 | |
| 238 | 3.484 | .024 | | 3.762 | 3.750 | 3.722 | | 3.500 | 3.528 | | 3.747 | 3.503 | |
| 239 | 3.609 | .028 | | 3.887 | 3.875 | 3.847 | | 3.625 | 3.653 | | 3.872 | 3.628 | |
| 240 | 3.734 | .028 | | 4.012 | 4.000 | 3.972 | | 3.750 | 3.778 | | 3.997 | 3.753 | |
| 241 | 3.859 | .028 | | 4.137 | 4.125 | 4.097 | | 3.875 | 3.903 | | 4.122 | 3.878 | |
| 242 | 3.984 | .028 | | 4.262 | 4.250 | 4.222 | | 4.000 | 4.028 | | 4.247 | 4.003 | |
| 243 | 4.109 | .028 | | 4.387 | 4.375 | 4.347 | | 4.125 | 4.153 | | 4.372 | 4.128 | |
| 244 | 4.234 | .030 | | 4.512 | 4.500 | 4.472 | | 4.250 | 4.278 | | 4.497 | 4.253 | |
| 245 | 4.359 | .030 | | 4.637 | 4.625 | 4.597 | | 4.375 | 4.403 | | 4.622 | 4.378 | |
| 246 | 4.484 | .030 | | 4.762 | 4.750 | 4.722 | | 4.500 | 4.528 | | 4.747 | 4.503 | |
| 247 | 4.609 | .030 | ↓ | 4.887 | 4.875 | 4.847 | ↓ | 4.625 | 4.653 | ↓ | 4.872 | 4.628 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.

Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.† (Continued)

| O-Ring Size Parker No. 2- | Dimensions | | | | A | A-1 | | B | B-1 | | C | D | G† |
|------------------------------|------------|------|-------|---------------|--|-------------------------------------|------|--|-----------------------------------|------|---|--|--------------------------------|
| | ID | ± | W | Mean OD (Ref) | Bore Dia. (Male Gland) +.002 -.000 | Groove Dia. (Female Gland) -.000 | + | Tube OD (Female Gland) +.000 -.002 | Groove Dia. (Male Gland) +.000 | - | Plug Dia. (Male Gland) +.000 .001 | Throat Dia. (Female Gland) +.001 -.000 | Groove Width +.005 -.000 |
| 248 | 4.734 | .030 | ↑ | 5.012 | 5.000 | 4.972 | ↑ | 4.750 | 4.778 | ↑ | 4.997 | 4.753 | ↑ |
| 249 | 4.859 | .035 | | 5.137 | 5.125 | 5.097 | | 4.875 | 4.903 | | 5.122 | 4.878 | |
| 250 | 4.984 | .035 | | 5.262 | 5.250 | 5.222 | | 5.000 | 5.028 | | 5.247 | 5.003 | |
| 251 | 5.109 | .035 | | 5.387 | 5.375 | 5.347 | | 5.125 | 5.153 | | 5.372 | 5.128 | |
| 252 | 5.234 | .035 | | 5.512 | 5.500 | 5.472 | | 5.250 | 5.278 | | 5.497 | 5.253 | |
| 253 | 5.359 | .035 | | 5.637 | 5.625 | 5.597 | | 5.375 | 5.403 | | 5.622 | 5.378 | |
| 254 | 5.484 | .035 | | 5.762 | 5.750 | 5.722 | | 5.500 | 5.528 | | 5.747 | 5.503 | |
| 255 | 5.609 | .035 | | 5.887 | 5.875 | 5.847 | | 5.625 | 5.653 | | 5.872 | 5.628 | |
| 256 | 5.734 | .035 | | 6.012 | 6.000 | 5.972 | | 5.750 | 5.778 | | 5.997 | 5.753 | |
| 257 | 5.859 | .035 | | 6.137 | 6.125 | 6.097 | | 5.875 | 5.903 | | 6.122 | 5.878 | |
| 258 | 5.984 | .035 | | 6.262 | 6.250 | 6.222 | | 6.000 | 6.028 | | 6.247 | 6.003 | |
| 259 | 6.234 | .040 | | 6.512 | 6.500 | 6.472 | | 6.250 | 6.278 | | 6.497 | 6.253 | |
| 260 | 6.484 | .040 | | 6.762 | 6.750 | 6.722 | | 6.500 | 6.528 | | 6.747 | 6.503 | |
| 261 | 6.734 | .040 | | 7.012 | 7.000 | 6.972 | | 6.750 | 6.778 | | 6.997 | 6.753 | |
| 262 | 6.984 | .040 | | 7.262 | 7.250 | 7.222 | | 7.000 | 7.028 | | 7.247 | 7.003 | |
| 263 | 7.234 | .045 | | 7.512 | 7.500 | 7.472 | | 7.250 | 7.278 | | 7.497 | 7.253 | |
| 264 | 7.484 | .045 | | 7.762 | 7.750 | 7.722 | | 7.500 | 7.528 | | 7.747 | 7.503 | |
| 265 | 7.734 | .045 | .139 | 8.012 | 8.000 | 7.972 | .002 | 7.750 | 7.778 | .002 | 7.997 | 7.753 | .187 |
| 266 | 7.984 | .045 | ±.004 | 8.262 | 8.250 | 8.222 | | 8.000 | 8.028 | | 8.247 | 8.003 | |
| 267 | 8.234 | .050 | | 8.512 | 8.500 | 8.472 | | 8.250 | 8.278 | | 8.497 | 8.253 | |
| 268 | 8.484 | .050 | | 8.762 | 8.750 | 8.722 | | 8.500 | 8.528 | | 8.747 | 8.503 | |
| 269 | 8.734 | .050 | | 9.012 | 9.000 | 8.972 | | 8.750 | 8.778 | | 8.997 | 8.753 | |
| 270 | 8.984 | .050 | | 9.262 | 9.250 | 9.222 | | 9.000 | 9.028 | | 9.247 | 9.003 | |
| 271 | 9.234 | .055 | | 9.512 | 9.500 | 9.472 | | 9.250 | 9.278 | | 9.497 | 9.253 | |
| 272 | 9.484 | .055 | | 9.762 | 9.750 | 9.722 | | 9.500 | 9.528 | | 9.747 | 9.503 | |
| 273 | 9.734 | .055 | | 10.012 | 10.000 | 9.972 | | 9.750 | 9.778 | | 9.997 | 9.753 | |
| 274 | 9.984 | .055 | | 10.262 | 10.250 | 10.222 | | 10.000 | 10.028 | | 10.247 | 10.003 | |
| 275 | 10.484 | .055 | | 10.762 | 10.750 | 10.722 | | 10.500 | 10.528 | | 10.747 | 10.503 | |
| 276 | 10.984 | .065 | | 11.262 | 11.250 | 11.222 | | 11.000 | 11.028 | | 11.247 | 11.003 | |
| 277 | 11.484 | .065 | | 11.762 | 11.750 | 11.722 | | 11.500 | 11.528 | | 11.747 | 11.503 | |
| 278 | 11.984 | .065 | | 12.262 | 12.250 | 12.222 | | 12.000 | 12.028 | | 12.247 | 12.003 | |
| 279 | 12.984 | .065 | | 13.262 | 13.250 | 13.222 | | 13.000 | 13.028 | | 13.247 | 13.003 | |
| 280 | 13.984 | .065 | | 14.262 | 14.250 | 14.222 | | 14.000 | 14.028 | | 14.247 | 14.003 | |
| 281 | 14.984 | .065 | | 15.262 | 15.250 | 15.222 | | 15.000 | 15.028 | | 15.247 | 15.003 | |
| 282 | 15.955 | .075 | | 16.233 | 16.250 | 16.222 | | 16.000 | 16.028 | | 16.247 | 16.003 | |
| 283 | 16.955 | .080 | | 17.233 | 17.250 | 17.222 | | 17.000 | 17.028 | | 17.247 | 17.003 | |
| 284 | 17.955 | .085 | ↓ | 18.233 | 18.250 | 18.222 | ↓ | 18.000 | 18.028 | ↓ | 18.247 | 18.003 | ↓ |
| 309 | .412 | .005 | ↑ | .832 | .812 | .777 | ↑ | .437 | .472 | ↑ | * .809 | .440 | ↑ |
| 310 | .475 | .005 | .210 | .895 | .875 | .840 | | .500 | .535 | | * .872 | .503 | |
| 311 | .537 | .007 | ±.005 | .957 | .937 | .902 | .004 | .562 | .597 | .004 | * .934 | .565 | .281 |
| 312 | .600 | .009 | ↓ | 1.020 | 1.000 | .965 | ↓ | .625 | .660 | ↓ | .997 | .628 | ↓ |
| 313 | .662 | .009 | | 1.082 | 1.062 | 1.027 | | .687 | .722 | | 1.059 | .690 | |
| 314 | .725 | .010 | ↓ | 1.145 | 1.125 | 1.090 | ↓ | .750 | .785 | ↓ | 1.122 | .753 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.

Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.† (Continued)

| O-Ring Size Parker No. 2- | Dimensions | | | Mean OD (Ref) | A | A-1 | + | B | B-1 | - | C | D | G† |
|------------------------------|------------|------|-------|---------------|--|--------------------------------------|------|--|------------------------------------|------|----------------------------------|--|------|
| | ID | ± | W | | Bore Dia. (Male Gland) +0.002 -0.000 | Groove Dia. (Female Gland) -0.000 | | Tube OD (Female Gland) +0.000 -0.002 | Groove Dia. (Male Gland) +0.000 | | Plug Dia. (Male Gland) +0.001 | Throat Dia. (Female Gland) +0.001 -0.000 | |
| 315 | .787 | .010 | ↑ | 1.207 | 1.187 | 1.152 | ↑ | .812 | .847 | ↑ | 1.184 | .815 | ↑ |
| 316 | .850 | .010 | | 1.270 | 1.250 | 1.215 | | .875 | .910 | | 1.247 | .878 | |
| 317 | .912 | .010 | | 1.332 | 1.312 | 1.277 | | .937 | .972 | | 1.309 | .940 | |
| 318 | .975 | .010 | | 1.395 | 1.375 | 1.340 | | 1.000 | 1.035 | | 1.372 | 1.003 | |
| 319 | 1.037 | .010 | | 1.457 | 1.437 | 1.402 | | 1.062 | 1.097 | | 1.434 | 1.065 | |
| 320 | 1.100 | .012 | | 1.520 | 1.500 | 1.465 | | 1.125 | 1.160 | | 1.497 | 1.128 | |
| 321 | 1.162 | .012 | | 1.582 | 1.562 | 1.527 | | 1.187 | 1.222 | | 1.559 | 1.190 | |
| 322 | 1.225 | .012 | | 1.645 | 1.625 | 1.590 | | 1.250 | 1.285 | | 1.622 | 1.253 | |
| 323 | 1.287 | .012 | | 1.707 | 1.687 | 1.652 | | 1.312 | 1.347 | | 1.684 | 1.315 | |
| 324 | 1.350 | .012 | | 1.770 | 1.750 | 1.715 | | 1.375 | 1.410 | | 1.747 | 1.378 | |
| 325 | 1.475 | .015 | | 1.895 | 1.875 | 1.840 | | 1.500 | 1.535 | | 1.872 | 1.503 | |
| 326 | 1.600 | .015 | | 2.020 | 2.000 | 1.965 | | 1.625 | 1.660 | | 1.997 | 1.628 | |
| 327 | 1.725 | .015 | | 2.145 | 2.125 | 2.090 | | 1.750 | 1.785 | | 2.122 | 1.753 | |
| 328 | 1.850 | .015 | | 2.270 | 2.250 | 2.215 | | 1.875 | 1.910 | | 2.247 | 1.878 | |
| 329 | 1.975 | .018 | | 2.395 | 2.375 | 2.340 | | 2.000 | 2.035 | | 2.372 | 2.003 | |
| 330 | 2.100 | .018 | | 2.520 | 2.500 | 2.465 | | 2.125 | 2.160 | | 2.497 | 2.128 | |
| 331 | 2.225 | .018 | | 2.645 | 2.625 | 2.590 | | 2.250 | 2.285 | | 2.622 | 2.253 | |
| 332 | 2.350 | .018 | | 2.770 | 2.750 | 2.715 | | 2.375 | 2.410 | | 2.747 | 2.378 | |
| 333 | 2.475 | .020 | | 2.895 | 2.875 | 2.840 | | 2.500 | 2.535 | | 2.872 | 2.503 | |
| 334 | 2.600 | .020 | | 3.020 | 3.000 | 2.965 | | 2.625 | 2.660 | | 2.997 | 2.628 | |
| 335 | 2.725 | .020 | | 3.145 | 3.125 | 3.090 | | 2.750 | 2.785 | | 3.122 | 2.753 | |
| 336 | 2.850 | .020 | .210 | 3.270 | 3.250 | 3.215 | .004 | 2.875 | 2.910 | .004 | 3.247 | 2.878 | .281 |
| 337 | 2.975 | .024 | ±.005 | 3.395 | 3.375 | 3.340 | | 3.000 | 3.035 | | 3.372 | 3.003 | |
| 338 | 3.100 | .024 | | 3.520 | 3.500 | 3.465 | | 3.125 | 3.160 | | 3.497 | 3.128 | |
| 339 | 3.225 | .024 | | 3.645 | 3.625 | 3.590 | | 3.250 | 3.285 | | 3.622 | 3.253 | |
| 340 | 3.350 | .024 | | 3.770 | 3.750 | 3.715 | | 3.375 | 3.410 | | 3.747 | 3.378 | |
| 341 | 3.475 | .024 | | 3.895 | 3.875 | 3.840 | | 3.500 | 3.535 | | 3.872 | 3.502 | |
| 342 | 3.600 | .028 | | 4.020 | 4.000 | 3.965 | | 3.625 | 3.660 | | 3.997 | 3.628 | |
| 343 | 3.725 | .028 | | 4.145 | 4.125 | 4.090 | | 3.750 | 3.785 | | 4.122 | 3.753 | |
| 344 | 3.850 | .028 | | 4.270 | 4.250 | 4.215 | | 3.875 | 3.910 | | 4.247 | 3.878 | |
| 345 | 3.975 | .028 | | 4.395 | 4.375 | 4.340 | | 4.000 | 4.035 | | 4.372 | 4.003 | |
| 346 | 4.100 | .028 | | 4.520 | 4.500 | 4.465 | | 4.125 | 4.160 | | 4.497 | 4.128 | |
| 347 | 4.225 | .030 | | 4.645 | 4.625 | 4.590 | | 4.250 | 4.285 | | 4.622 | 4.253 | |
| 348 | 4.350 | .030 | | 4.770 | 4.750 | 4.717 | | 4.375 | 4.410 | | 4.747 | 4.378 | |
| 349 | 4.475 | .030 | | 4.895 | 4.875 | 4.840 | | 4.500 | 4.535 | | 4.872 | 4.503 | |
| 350 | 4.600 | .030 | | 5.020 | 5.000 | 4.965 | | 4.625 | 4.660 | | 4.997 | 4.628 | |
| 351 | 4.725 | .030 | | 5.145 | 5.125 | 5.090 | | 4.750 | 4.785 | | 5.122 | 4.753 | |
| 352 | 4.850 | .030 | | 5.270 | 5.250 | 5.215 | | 4.875 | 4.910 | | 5.247 | 4.878 | |
| 353 | 4.975 | .037 | | 5.395 | 5.375 | 5.340 | | 5.000 | 5.035 | | 5.372 | 5.003 | |
| 354 | 5.100 | .037 | | 5.520 | 5.500 | 5.465 | | 5.125 | 5.160 | | 5.497 | 5.128 | |
| 355 | 5.225 | .037 | | 5.645 | 5.625 | 5.590 | | 5.250 | 5.285 | | 5.622 | 5.253 | |
| 356 | 5.350 | .037 | | 5.770 | 5.750 | 5.715 | | 5.375 | 5.410 | | 5.747 | 5.378 | |
| 357 | 5.475 | .037 | | 5.895 | 5.875 | 5.840 | | 5.500 | 5.535 | | 5.872 | 5.503 | |
| 358 | 5.600 | .037 | ↓ | 6.020 | 6.000 | 5.965 | ↓ | 5.625 | 5.660 | ↓ | 5.997 | 5.628 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.

Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.† (Continued)

| O-Ring Size Parker No. 2- | Dimensions | | | | A | A-1 | | B | B-1 | | C | D | G [†] |
|------------------------------|------------|------|-------|---------------|--|-------------------------------------|------|--|-----------------------------------|------|---|--|--------------------------------|
| | ID | ± | W | Mean OD (Ref) | Bore Dia. (Male Gland) +.002 -.000 | Groove Dia. (Female Gland) -.000 | + | Tube OD (Female Gland) +.000 -.002 | Groove Dia. (Male Gland) +.000 | - | Plug Dia. (Male Gland) +.000 .001 | Throat Dia. (Female Gland) +.001 -.000 | Groove Width +.005 -.000 |
| 359 | 5.725 | .037 | ↑ | 6.145 | 6.125 | 6.090 | ↑ | 5.750 | 5.785 | ↑ | 6.122 | 5.753 | ↑ |
| 360 | 5.850 | .037 | | 6.270 | 6.250 | 6.215 | | 5.875 | 5.910 | | 6.247 | 5.878 | |
| 361 | 5.975 | .037 | | 6.395 | 6.375 | 6.340 | | 6.000 | 6.035 | | 6.372 | 6.003 | |
| 362 | 6.225 | .040 | | 6.645 | 6.625 | 6.590 | | 6.250 | 6.285 | | 6.622 | 6.253 | |
| 363 | 6.475 | .040 | | 6.895 | 6.875 | 6.840 | | 6.500 | 6.535 | | 6.872 | 6.503 | |
| 364 | 6.725 | .040 | | 7.145 | 7.125 | 7.090 | | 6.750 | 6.785 | | 7.122 | 6.753 | |
| 365 | 6.975 | .040 | | 7.395 | 7.375 | 7.340 | | 7.000 | 7.035 | | 7.372 | 7.003 | |
| 366 | 7.225 | .045 | | 7.645 | 7.625 | 7.590 | | 7.250 | 7.285 | | 7.622 | 7.253 | |
| 367 | 7.475 | .045 | | 7.895 | 7.875 | 7.840 | | 7.500 | 7.535 | | 7.872 | 7.503 | |
| 368 | 7.725 | .045 | | 8.145 | 8.125 | 8.090 | | 7.750 | 7.785 | | 8.122 | 7.753 | |
| 369 | 7.975 | .045 | | 8.395 | 8.375 | 8.340 | | 8.000 | 8.035 | | 8.372 | 8.003 | |
| 370 | 8.225 | .050 | | 8.645 | 8.625 | 8.590 | | 8.250 | 8.285 | | 8.622 | 8.253 | |
| 371 | 8.475 | .050 | | 8.895 | 8.875 | 8.840 | | 8.500 | 8.535 | | 8.872 | 8.503 | |
| 372 | 8.725 | .050 | | 9.145 | 9.125 | 9.090 | | 8.750 | 8.785 | | 9.122 | 8.753 | |
| 373 | 8.975 | .050 | | 9.395 | 9.375 | 9.340 | | 9.000 | 9.035 | | 9.372 | 9.003 | |
| 374 | 9.225 | .055 | | 9.645 | 9.625 | 9.590 | | 9.250 | 9.285 | | 9.622 | 9.253 | |
| 375 | 9.475 | .055 | | 9.895 | 9.875 | 9.840 | | 9.500 | 9.535 | | 9.872 | 9.503 | |
| 376 | 9.725 | .055 | | 10.145 | 10.125 | 10.090 | | 9.750 | 9.785 | | 10.122 | 9.753 | |
| 377 | 9.975 | .055 | .210 | 10.395 | 10.375 | 10.340 | .004 | 10.000 | 10.035 | .004 | 10.372 | 10.003 | .281 |
| 378 | 10.475 | .060 | ±.005 | 10.895 | 10.875 | 10.840 | | 10.500 | 10.535 | | 10.872 | 10.503 | |
| 379 | 10.975 | .060 | | 11.395 | 11.375 | 11.340 | | 11.000 | 11.035 | | 11.372 | 11.003 | |
| 380 | 11.475 | .065 | | 11.895 | 11.875 | 11.840 | | 11.500 | 11.535 | | 11.872 | 11.503 | |
| 381 | 11.975 | .065 | | 12.395 | 12.375 | 12.340 | | 12.000 | 12.035 | | 12.372 | 12.003 | |
| 382 | 12.975 | .065 | | 13.395 | 13.375 | 13.340 | | 13.000 | 13.035 | | 13.372 | 13.003 | |
| 383 | 13.975 | .070 | | 14.395 | 14.375 | 14.340 | | 14.000 | 14.035 | | 14.372 | 14.003 | |
| 384 | 14.975 | .070 | | 15.395 | 15.375 | 15.340 | | 15.000 | 15.035 | | 15.372 | 15.003 | |
| 385 | 15.955 | .075 | | 16.375 | 16.375 | 16.340 | | 16.000 | 16.035 | | 16.372 | 16.003 | |
| 386 | 16.955 | .080 | | 17.375 | 17.375 | 17.340 | | 17.000 | 17.035 | | 17.372 | 17.003 | |
| 387 | 17.955 | .085 | | 18.375 | 18.375 | 18.340 | | 18.000 | 18.035 | | 18.372 | 18.003 | |
| 388 | 18.955 | .090 | | 19.373 | 19.375 | 19.340 | | 19.000 | 19.035 | | 19.372 | 19.003 | |
| 389 | 19.955 | .095 | | 20.373 | 20.375 | 20.340 | | 20.000 | 20.035 | | 20.372 | 20.003 | |
| 390 | 20.955 | .095 | | 21.373 | 21.375 | 21.340 | | 21.000 | 21.035 | | 21.372 | 21.003 | |
| 391 | 21.955 | .100 | | 22.373 | 22.375 | 22.340 | | 22.000 | 22.035 | | 22.372 | 22.003 | |
| 392 | 22.940 | .105 | | 23.360 | 23.375 | 23.340 | | 23.000 | 23.035 | | 23.372 | 23.003 | |
| 393 | 23.940 | .110 | | 24.360 | 24.375 | 24.340 | | 24.000 | 24.035 | | 24.372 | 24.003 | |
| 394 | 24.940 | .115 | | 25.360 | 25.375 | 25.340 | | 25.000 | 25.035 | | 25.372 | 25.003 | |
| 395 | 25.940 | .120 | ↓ | 26.360 | 26.375 | 26.340 | ↓ | 26.000 | 26.035 | ↓ | 26.372 | 26.003 | ↓ |
| 425 | 4.475 | .033 | ↑ | 5.025 | 5.000 | 4.952 | ↑ | 4.500 | 4.548 | ↑ | 4.996 | 4.504 | ↑ |
| 426 | 4.600 | .033 | | 5.150 | 5.125 | 5.077 | | 4.625 | 4.673 | | 5.121 | 4.629 | |
| 427 | 4.725 | .033 | .275 | 5.275 | 5.250 | 5.202 | .004 | 4.750 | 4.798 | .004 | 5.246 | 4.754 | .375 |
| 428 | 4.850 | .033 | ±.006 | 5.400 | 5.375 | 5.327 | | 4.875 | 4.923 | | 5.371 | 4.879 | |
| 429 | 4.975 | .037 | | 5.525 | 5.500 | 5.452 | | 5.000 | 5.048 | | 5.496 | 5.004 | |
| 430 | 5.100 | .037 | | 5.650 | 5.625 | 5.577 | | 5.125 | 5.173 | | 5.621 | 5.129 | |
| 431 | 5.225 | .037 | ↓ | 5.775 | 5.750 | 5.702 | ↓ | 5.250 | 5.298 | ↓ | 5.746 | 5.254 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.

Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.† (Continued)

| O-Ring Size Parker No. 2- | Dimensions | | | | A | A-1 | | B | B-1 | | C | D | G† |
|------------------------------|------------|------|-------|---------------|--|-------------------------------------|------|--|-----------------------------------|------|---|--|--------------------------------|
| | ID | ± | W | Mean OD (Ref) | Bore Dia. (Male Gland) +.002 -.000 | Groove Dia. (Female Gland) -.000 | + | Tube OD (Female Gland) +.000 -.002 | Groove Dia. (Male Gland) +.000 | - | Plug Dia. (Male Gland) +.000 .001 | Throat Dia. (Female Gland) +.001 -.000 | Groove Width +.005 -.000 |
| 432 | 5.350 | .037 | ↑ | 5.900 | 5.875 | 5.827 | ↑ | 5.375 | 5.423 | ↑ | 5.871 | 5.379 | ↑ |
| 433 | 5.475 | .037 | | 6.025 | 6.000 | 5.952 | | 5.500 | 5.548 | | 5.996 | 5.504 | |
| 434 | 5.600 | .037 | | 6.150 | 6.125 | 6.077 | | 5.625 | 5.673 | | 6.121 | 5.629 | |
| 435 | 5.725 | .037 | | 6.275 | 6.250 | 6.202 | | 5.750 | 5.798 | | 6.246 | 5.754 | |
| 436 | 5.850 | .037 | | 6.400 | 6.375 | 6.327 | | 5.875 | 5.923 | | 6.371 | 5.879 | |
| 437 | 5.975 | .037 | | 6.525 | 6.500 | 6.452 | | 6.000 | 6.048 | | 6.496 | 6.004 | |
| 438 | 6.225 | .040 | | 6.775 | 6.750 | 6.702 | | 6.250 | 6.298 | | 6.746 | 6.254 | |
| 439 | 6.475 | .040 | | 7.025 | 7.000 | 6.952 | | 6.500 | 6.548 | | 6.996 | 6.504 | |
| 440 | 6.725 | .040 | | 7.275 | 7.250 | 7.202 | | 6.750 | 6.798 | | 7.246 | 6.754 | |
| 441 | 6.975 | .040 | | 7.525 | 7.500 | 7.452 | | 7.000 | 7.048 | | 7.496 | 7.004 | |
| 442 | 7.225 | .045 | | 7.775 | 7.750 | 7.702 | | 7.250 | 7.298 | | 7.746 | 7.254 | |
| 443 | 7.475 | .045 | | 8.025 | 8.000 | 7.952 | | 7.500 | 7.548 | | 7.996 | 7.504 | |
| 444 | 7.725 | .045 | | 8.275 | 8.250 | 8.202 | | 7.750 | 7.798 | | 8.246 | 7.754 | |
| 445 | 7.975 | .045 | | 8.525 | 8.500 | 8.452 | | 8.000 | 8.048 | | 8.496 | 8.004 | |
| 446 | 8.475 | .055 | | 9.025 | 9.000 | 8.952 | | 8.500 | 8.548 | | 8.996 | 8.504 | |
| 447 | 8.975 | .055 | | 9.525 | 9.500 | 9.452 | | 9.000 | 9.048 | | 9.496 | 9.004 | |
| 448 | 9.475 | .055 | | 10.025 | 10.000 | 9.952 | | 9.500 | 9.548 | | 9.996 | 9.504 | |
| 449 | 9.975 | .055 | | 10.525 | 10.500 | 10.452 | | 10.000 | 10.048 | | 10.496 | 10.000 | |
| 450 | 10.475 | .060 | | 11.025 | 11.000 | 10.952 | | 10.500 | 10.548 | | 10.996 | 10.504 | |
| 451 | 10.975 | .060 | | 11.525 | 11.500 | 11.452 | | 11.000 | 11.048 | | 11.496 | 11.004 | |
| 452 | 11.475 | .060 | | 12.025 | 12.000 | 11.952 | | 11.500 | 11.548 | | 11.996 | 11.504 | |
| 453 | 11.975 | .060 | | 12.525 | 12.500 | 12.452 | | 12.000 | 12.048 | | 12.496 | 12.004 | |
| 454 | 12.475 | .060 | .275 | 13.025 | 13.000 | 12.952 | .004 | 12.500 | 12.548 | .004 | 12.996 | 12.504 | .375 |
| 455 | 12.975 | .060 | ±.006 | 13.525 | 13.500 | 13.452 | | 13.000 | 13.048 | | 13.496 | 13.004 | |
| 456 | 13.475 | .070 | | 14.025 | 14.000 | 13.952 | | 13.500 | 13.548 | | 13.996 | 13.504 | |
| 457 | 13.975 | .070 | | 14.525 | 14.500 | 14.452 | | 14.000 | 14.048 | | 14.496 | 14.004 | |
| 458 | 14.475 | .070 | | 15.025 | 15.000 | 14.952 | | 14.500 | 14.548 | | 14.996 | 14.504 | |
| 459 | 14.975 | .070 | | 15.525 | 15.500 | 15.452 | | 15.000 | 15.048 | | 15.496 | 15.004 | |
| 460 | 15.475 | .070 | | 16.025 | 16.000 | 15.952 | | 15.500 | 15.548 | | 15.996 | 15.504 | |
| 461 | 15.955 | .075 | | 16.505 | 16.500 | 16.452 | | 16.000 | 16.048 | | 16.496 | 16.004 | |
| 462 | 16.455 | .075 | | 17.005 | 17.000 | 16.952 | | 16.500 | 16.548 | | 16.996 | 16.504 | |
| 463 | 16.955 | .080 | | 17.505 | 17.500 | 17.452 | | 17.000 | 17.048 | | 17.496 | 17.004 | |
| 464 | 17.455 | .085 | | 18.005 | 18.000 | 17.952 | | 17.500 | 17.548 | | 17.996 | 17.504 | |
| 465 | 17.955 | .085 | | 18.505 | 18.500 | 18.452 | | 18.000 | 18.048 | | 18.496 | 18.004 | |
| 466 | 18.455 | .085 | | 19.005 | 19.000 | 18.952 | | 18.500 | 18.548 | | 18.996 | 18.504 | |
| 467 | 18.955 | .090 | | 19.505 | 19.500 | 19.452 | | 19.000 | 19.048 | | 19.496 | 19.004 | |
| 468 | 19.455 | .090 | | 20.005 | 20.000 | 19.952 | | 19.500 | 19.548 | | 19.996 | 19.504 | |
| 469 | 19.955 | .095 | | 20.505 | 20.500 | 20.452 | | 20.000 | 20.048 | | 20.496 | 20.004 | |
| 470 | 20.955 | .095 | | 21.505 | 21.500 | 21.452 | | 21.000 | 21.048 | | 21.496 | 21.004 | |
| 471 | 21.955 | .100 | | 22.505 | 22.500 | 22.452 | | 22.000 | 22.048 | | 22.496 | 22.004 | |
| 472 | 22.940 | .105 | | 23.490 | 23.500 | 23.452 | | 23.000 | 23.048 | | 23.496 | 23.004 | |
| 473 | 23.940 | .110 | | 24.490 | 24.500 | 24.452 | | 24.000 | 24.048 | | 24.496 | 24.004 | |
| 474 | 24.940 | .115 | | 25.490 | 25.500 | 25.452 | | 25.000 | 25.048 | | 25.496 | 25.004 | |
| 475 | 25.940 | .120 | ↓ | 26.490 | 26.500 | 26.452 | ↓ | 26.000 | 26.048 | ↓ | 26.496 | 26.004 | ↓ |

† This groove width does not permit the use of Parbak rings. For pressures above 103.5 Bar (1500 psi), consult Design Chart 4-2 for groove widths where back-up rings must be used.

* These designs require considerable installation stretch. If assembly breakage is incurred, use a compound having higher elongation or use a two-piece piston.

Design Table 4-2: Gland Dimensions for Industrial O-Ring Static Seals, 103.5 Bar (1500 psi) Max.