

Symmetrical Seals

PolyPak® Sealing

Catalog EPS 5370/USA



PolyPak® Sealing

Parker's PolyPak® seal is a patented precision molded multi-purpose seal. The Parker PolyPak combines an O-ring type synthetic rubber o-spring with a conventional lip-type seal to produce a unique sealing device capable of sealing both vacuum, high and low pressure.

Conventional lip seals, such as the standard u-cups are prone to leakage under low pressure because little or no lip loading is inherent in the basic seal design. The Parker PolyPak however, is a squeeze type seal and provides high sealability at low pressure. As system pressure increases, additional force is applied to the PolyPak's seal interface and as pressure continues to increase, lip loading is automatically increased to compensate for this higher pressure and thus maintain a positive, leak-free seal from hard vacuum to over 60,000 psi with proper design and auxiliary devices.

In addition to providing superior sealing in vacuum, low and high pressure applications, the PolyPak seal offers a number of distinct advantages over conventional symmetrical or non-symmetrical u-cup seals including:

- The PolyPak's o-spring stabilizes the seal under extreme pressures, preventing seal lip distortion and rolling or twisting in the gland.
- At low or high temperature extremes, the o-spring maintains lip loading on both I.D. and O.D. of the seal interface.
- The PolyPak seal can be stretched or squeezed to accommodate oversize cylinder bores and undersize rods. As long as the seal cross-section is correct in relation to the radial groove dimensions, the PolyPak will compensate and maintain proper lip loading.
- The range of materials available to the user of the PolyPak seal insures the proper combination for abrasion, extrusion, temperature resistance and fluid compatibility which produces high sealability and long life.

PolyPak seals are available in three styles:

1. Standard PolyPak (SPP Profile)
2. Deep PolyPak (DPP Profile)
3. Type B PolyPak (BPP Profile)

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Rod Sealing with PolyPak® Seals

As a general rule, rod seals are more critical in nature than their companion piston seals. With increasing OEM requirements for “dry rod” capability, both to conserve system fluid and avoid leakage, the design and selection of the rod seal can be more challenging than its piston counterpart.

Parker recommends the use of the Type B PolyPak (BPP Profile) for rod seal applications due to its design features, including:

- Excellent film-breaking capability of the beveled lip design
- The higher level of lip loading provided by the Type B offers maximum sealability
- The long body of the design provides maximum stability

Piston Sealing with PolyPak Seals

Piston seals can be classified in two categories: single-acting and double-acting. The single acting seal is only required to seal in a single direction as system pressure is seen on only one end of the piston (return of the piston in a single-acting system is accomplished either by gravity or spring loading). The double-acting cylinder requires that the piston be sealed in both directions of stroke as system fluid is applied to one side or the other to achieve movement.

Please see the individual PolyPak profile pages for explanation and differentiation on selecting PolyPak profiles for piston applications.

PolyPak Material Combinations

PolyPak seals can be configured in numerous o-spring energizer and shell combinations. Table 6-2 represents “standard” combinations. Care should be taken to insure that both the PolyPak shell and its companion o-spring energizer are compatible with the system temperature, pressure, and fluid requirements.

Table 6-2. Standard Shell and O-spring Energizer Combinations for PolyPak Seals

| PolyPak Shell | O-spring Energizer |
|------------------------|----------------------|
| Molythane® | 70A Nitrile |
| Polymyte® | 70A Nitrile, 75A FKM |
| Nitroxile® | 70A Nitrile |
| Ethylene Propylene | 80A EPR |
| Fluorocarbon | 75A FKM |
| All Plastic and Rubber | Metal O-spring |

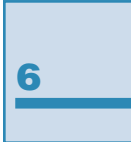
Parker's “smart” part numbering provides for varying standard and custom PolyPak shell and o-spring energizer material combinations. Please refer to the part number nomenclature tables and Technical Data in the PolyPak profile pages for PolyPak shell material options. See Table 6-3 for standard and custom o-spring energizer option details.

Positively-Actuated Back-ups Option

PolyPak seals can be designed with positively-actuated back-ups by designating that option in the part number. See page 10-21 for an explanation of the features of positively-actuated back-ups.

Table 6-3. PolyPak® O-spring Energizers

| Standard O-spring Energizer | | |
|-----------------------------|--|--|
| O-spring Energizer Code | Type of PolyPak | Description |
| – (dash) | Urethane (4615, 4622) | 70A NBR o-spring energizer |
| | Rubber | Indicates that the o-spring material family is to match the rubber PolyPak shell material family. Example: XNBR 4263 PolyPak shell: code (“–”) indicates NBR O-ring EPR 4207 PolyPak shell: code (“–”) indicates EPR O-ring FKM 4208 PolyPak shell: code (“–”) indicates FKM O-ring FKM 4266 PolyPak shell: code (“–”) indicates FKM O-ring |
| | Polymyte® (4651) | must be replaced by a custom o-spring energizer code |
| Custom O-spring Energizers | | |
| O-spring Energizer Code | Energizer Description | |
| C | Continuous O-ring | |
| E | General EPR O-ring | |
| J | General HNBR O-ring | |
| L | Canted coil, spring-loaded with oval spring cavity | |
| N | General nitrile O-ring | |
| R | Low swell nitrile O-ring | |
| S | Spring energizer with O-ring groove | |
| U | Geothermal EPR O-ring | |
| V | Fluorocarbon O-ring | |
| W | Nuclear grade EPR O-ring | |
| X | Premium grade low-temperature O-ring | |
| Y | Low temperature nitrile O-ring | |



Symmetrical Seal SPP Profile, Standard PolyPak®

Catalog EPS 5370/USA

SPP Profile, Standard PolyPak®, Square Cross-Section O-ring Energized Lip Seal



Parker's Standard PolyPak is a squeeze seal with a symmetrical profile for use in either rod or piston applications. The standard Molythane® shell provides high wear resistance and the O-ring energizer functions as a spring to maintain sealing contact under low pressure. The Standard PolyPak utilizes a scraper lip design formed by a precision trimming process. The scraper edge wipes both fluid film and contamination away from the seal. A wide selection of sizes and alternate compounds allow this profile to match up with many hydraulic applications. The Standard PolyPak is an economical choice as a stand alone rod or piston seal. With less squeeze force than the Deep or Type B profiles, the Standard PolyPak can be installed back to back, in separate glands, for bi-directional sealing. To protect against pressure trapping, it is recommended that the O-ring be removed from the Standard PolyPak facing the lower pressure side of the application.

Technical Data

| Standard Materials* | Temperature Range | Pressure Range† | Surface Speed |
|---------------------|------------------------------------|-----------------------|-------------------------|
| Shell | | | |
| P4615A90 | -65°F to 200°F (-54°C to 93°C) | 5000 psi (345 bar) | < 1.6 ft/s (0.5 m/s) |
| P4622A90 | -65°F to 225°F (-54°C to 107°C) | 5000 psi (345 bar) | < 1.6 ft/s (0.5 m/s) |
| Z4651D60 | -65°F to 275°F (-54°C to 135°C) | 7000 psi (482 bar) | < 1.6 ft/s (0.5 m/s) |
| N4263A90 | -20°F to 275°F (-29°C to 135°C) | 2000 psi (138 bar) | < 1.6 ft/s (0.5 m/s) |
| E4207A90 | -65°F to 300°F (-54°C to 149°C) | 2000 psi (138 bar) | < 1.6 ft/s (0.5 m/s) |
| V4208A90 | -5°F to 400°F (-21°C to 204°C) | 2250 psi (155 bar) | < 1.6 ft/s (0.5 m/s) |
| V4266A95 | -5°F to 400°F (-21°F to 204°C) | 2250 psi (155 bar) | < 1.6 ft/s (0.5 m/s) |



Standard PolyPak Cross-Section

Energizer

For Seals With...

4615 or 4622 PolyPak shell
4651 PolyPak shell
Rubber PolyPak shell

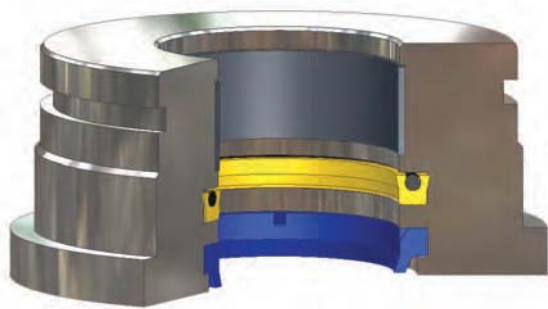
Standard Energizer Material*

Standard energizer is a nitrile O-ring
O-spring energizer code must be identified
Standard energizer is an O-ring from the same rubber material family as the shell

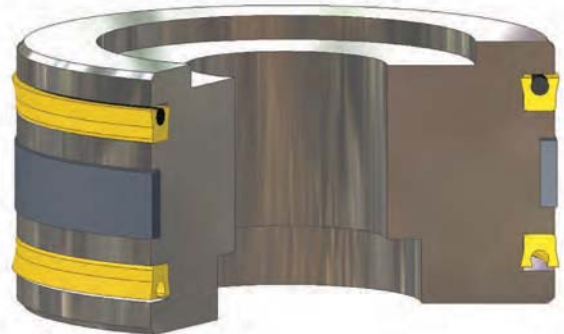
***Alternate Materials:** For custom energizer materials, see Table 6-3. For applications that may require an alternate shell material, please see Section 3 or contact your local Parker Seal representative.

†**Pressure Range** without wear rings (see Table 2-4, page 2-5).

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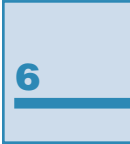
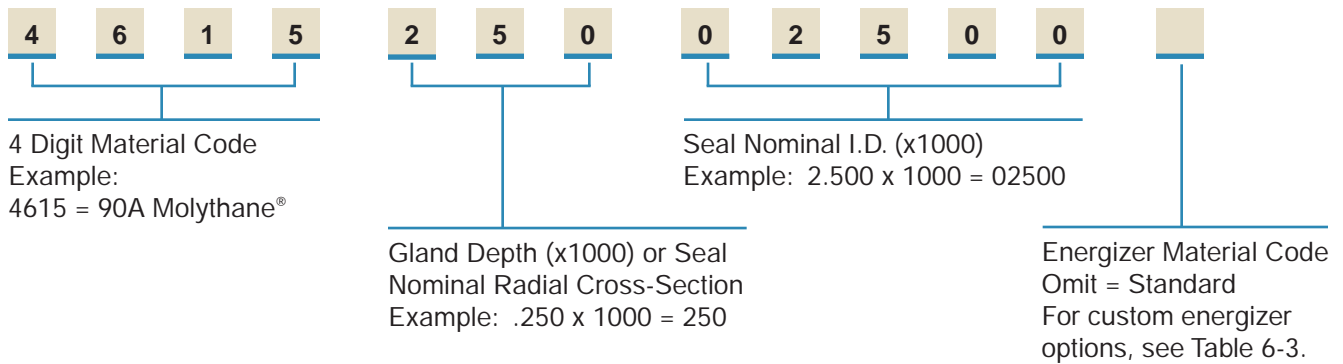
*Standard PolyPak installed
in Rod Gland*



*Standard PolyPak installed
in Piston Gland*

Part Number Nomenclature — Standard PolyPak Profile

Table 6-4. Standard PolyPak Profile — Inch



Gland Dimensions — Standard PolyPak Profile

Standard PolyPak gland dimensions are provided on in Table 6-8, page 6-12.

Symmetrical Seal DPP Profile, Deep PolyPak®

Catalog EPS 5370/USA

DPP Profile, Deep PolyPak®, O-ring Loaded Lip Seal with Scraper Lip Design



Parker's Deep PolyPak is a squeeze seal with a symmetrical profile for use in either rod or piston applications. Its rectangular shape ensures stability in the gland. The standard Molythane® shell provides high wear resistance and the O-ring energizer functions as a spring to maintain sealing contact under low pressure or vacuum applications. The Deep PolyPak scraper lip design cuts fluid film and moves contamination away from the seal. The sharp edge of the lip is formed by a precision knife trimming process. A wide selection of sizes and alternate compounds allow this profile to match up with many hydraulic applications. The Deep PolyPak is an economical choice as a stand alone rod or piston seal. Deep PolyPak seals should not be installed back to back in bi-directional piston applications as a pressure trap between the seals may occur.

Technical Data

| Standard Materials* | Temperature Range | Pressure Range† | Surface Speed |
|---------------------|------------------------------------|------------------------|-------------------------|
| Shell | | | |
| P4615A90 | -65°F to 200°F (-54°C to 93°C) | 5,000 psi (344 bar) | < 1.6 ft/s (0.5 m/s) |
| P4622A90 | -65°F to 225°F (-54°C to 107°C) | 5,000 psi (344 bar) | < 1.6 ft/s (0.5 m/s) |
| Z4651D60 | -65°F to 275°F (-54°C to 135°C) | 7,000 psi (482 bar) | < 1.6 ft/s (0.5 m/s) |
| N4263A90 | -20°F to 275°F (-29°C to 135°C) | 2,000 psi (137 bar) | < 1.6 ft/s (0.5 m/s) |
| E4207A90 | -65°F to 300°F (-54°C to 149°C) | 2,000 psi (137 bar) | < 1.6 ft/s (0.5 m/s) |
| V4208A90 | -5°F to 400°F (-21°C to 204°C) | 2250 psi (155 bar) | < 1.6 ft/s (0.5 m/s) |
| V4266A95 | -5°F to 400°F (-21°C to 204°C) | 2,250 psi (155 bar) | < 1.6 ft/s (0.5 m/s) |



Deep PolyPak Cross-Section

Energizer

For Seals With...

4615 or 4622 PolyPak shell
4651 PolyPak shell
Rubber PolyPak shell

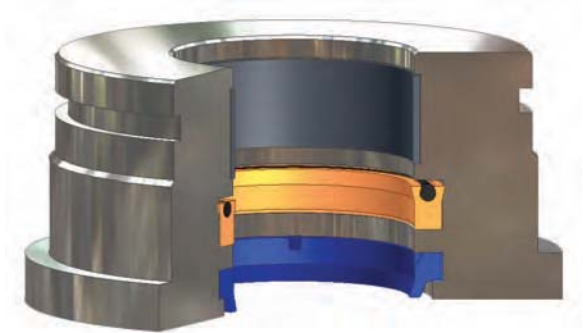
Standard Energizer Material*

Standard energizer is a nitrile O-ring
O-spring energizer code must be identified
Standard energizer is an O-ring from the same rubber material family as the shell

***Alternate Materials:** For custom energizer materials, see Table 6-3. For applications that may require an alternate shell material, please see Section 3 or contact your local Parker Seal representative.

†Pressure Range without wear rings (see Table 2-4, page 2-5).

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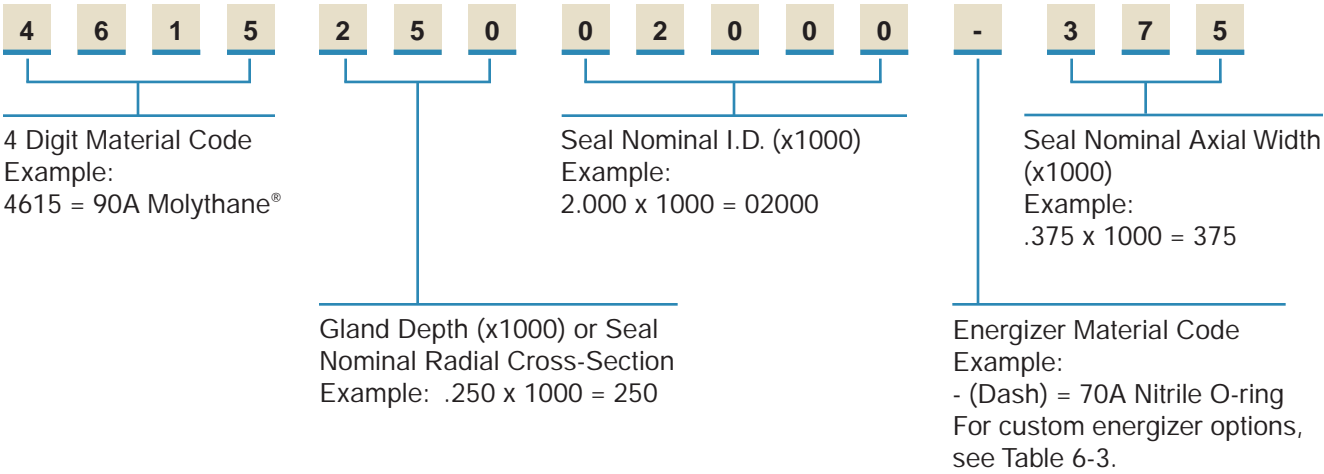
Deep PolyPak installed in Rod Gland



Deep PolyPak installed in Piston Gland

Part Number Nomenclature — Deep PolyPak Profile

Table 6-5. Deep PolyPak Profile — Inch



Gland Dimensions — Deep PolyPak Profile

Deep PolyPak gland dimensions are provided in Table 6-8, page 6-12.

Symmetrical Seal BPP Profile, Type B PolyPak®

Catalog EPS 5370/USA

BPP Profile, Type B PolyPak® O-ring Energized Lip Seal with Beveled Lip Design



Parker's Type B PolyPak is a squeeze seal with a symmetrical profile for use in either rod or piston applications. The rectangular shape of its cross section ensures stability in the gland. The standard Molythane® shell provides high wear resistance and the O-ring energizer functions as a spring to maintain sealing contact under low pressure or vacuum applications. The beveled lip design of the Type B PolyPak is excellent for cutting fluid film. The sharp beveled lip is formed by a precision knife trimming process. A wide selection of sizes and alternate compounds allow this profile to match up with many hydraulic applications. The Type B PolyPak is an economical choice as a stand-alone seal or can be used in tandem with a buffer seal. In piston applications, this seal will function as a unidirectional seal. Instead, for bi-directional piston sealing, incorporate a PIP ring (see page 7-15). Type B PolyPaks should not be installed back to back, in bi-directional pressure applications, as a pressure trap between the seals may occur.

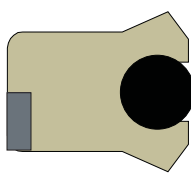
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Technical Data

| Standard Materials* | Temperature Range | Pressure Range† | Surface Speed |
|---------------------|------------------------------------|------------------------|-------------------------|
| Shell | | | |
| P4615A90 | -65°F to 200°F (-54°C to 93°C) | 5,000 psi (344 bar) | < 1.6 ft/s (0.5 m/s) |
| P4622A90 | -65°F to 225°F (-54°C to 107°C) | 5,000 psi (344 bar) | < 1.6 ft/s (0.5 m/s) |
| Z4651D60 | -65°F to 275°F (-54°C to 135°C) | 7,000 psi (482 bar) | < 1.6 ft/s (0.5 m/s) |
| N4263A90 | -20°F to 275°F (-29°C to 135°C) | 7,000 psi (482 bar) | < 1.6 ft/s (0.5 m/s) |
| E4207A90 | -65°F to 300°F (-54°C to 149°C) | 2,000 psi (137 bar) | < 1.6 ft/s (0.5 m/s) |
| V4208A90 | -5°F to 400°F (-21°C to 204°C) | 2,250 psi (155 bar) | < 1.6 ft/s (0.5 m/s) |
| V4266A95 | -5°F to 400°F (-21°C to 204°C) | 2,250 psi (155 bar) | < 1.6 ft/s (0.5 m/s) |



Type B PolyPak
Cross-Section



Type B PolyPak
with Back-up
Cross-Section

Energizer

For Seals With...

4615 or 4622 PolyPak shell
4651 PolyPak shell
Rubber PolyPak shell

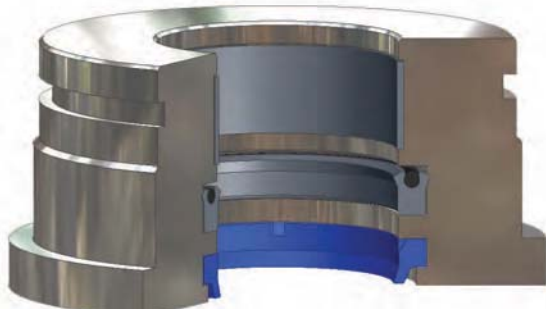
Standard Energizer Material*

Standard energizer is a nitrile O-ring
O-spring energizer code must be identified
Standard energizer is an O-ring from the same rubber material family as the shell

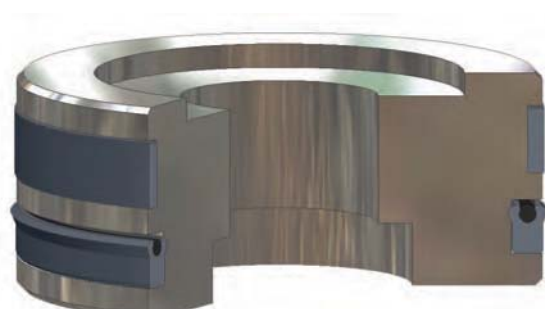
***Alternate Materials:** For custom energizer materials, see Table 6-3. For applications that may require an alternate shell material, please see Section 3 or contact your local Parker Seal representative.

†Pressure Range without wear rings (see Table 2-4, page 2-5).

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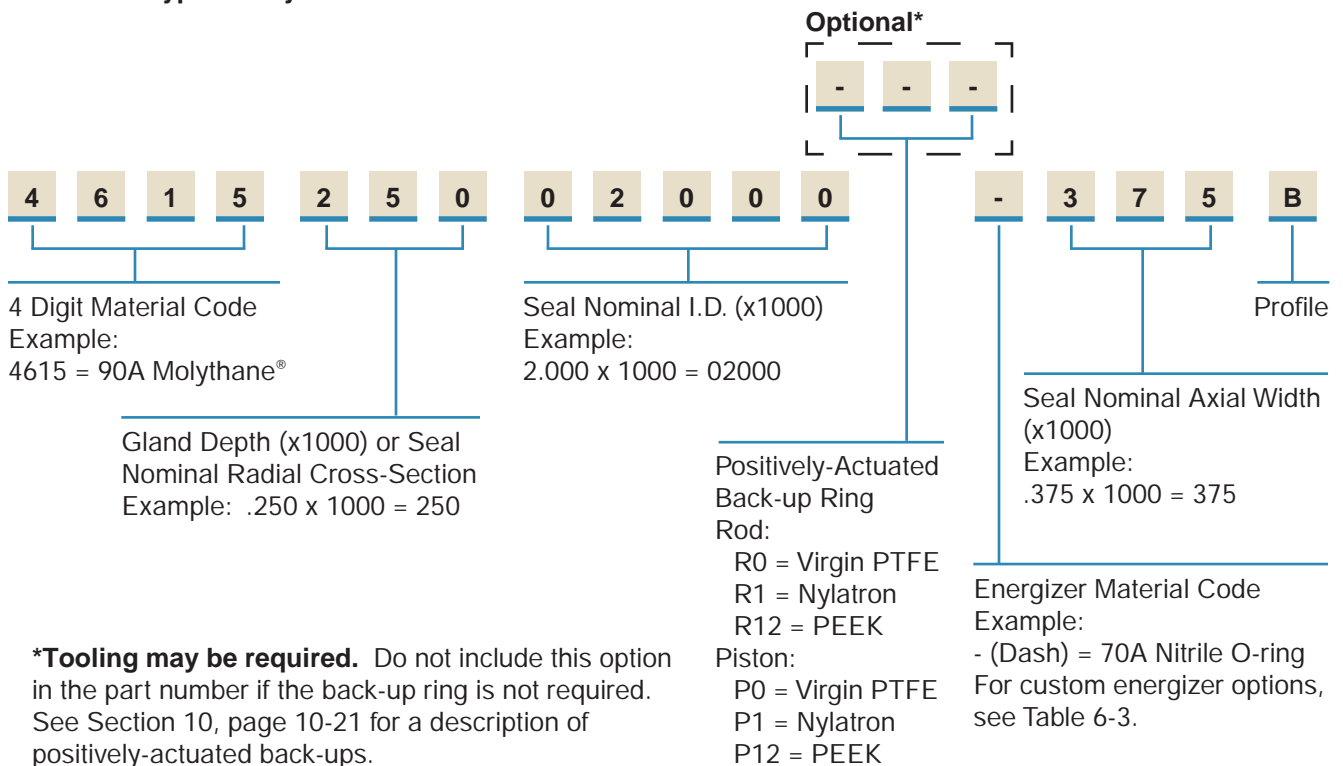
Type B PolyPak installed in Rod Gland



Type B PolyPak installed in Piston Gland

Part Number Nomenclature — Type B PolyPak Profile

Table 6-6. Type B PolyPak Profile — Inch



***Tooling may be required.** Do not include this option in the part number if the back-up ring is not required. See Section 10, page 10-21 for a description of positively-actuated back-ups.

Gland Dimensions — Type B PolyPak Profile

Type B PolyPak gland dimensions are provided in Table 6-8, page 6-12.



Standard, Deep and Type B PolyPak® Gland Dimensions

Catalog EPS 5370/USA

Gland Dimensions — Standard, Deep and Type B PolyPak® Profiles

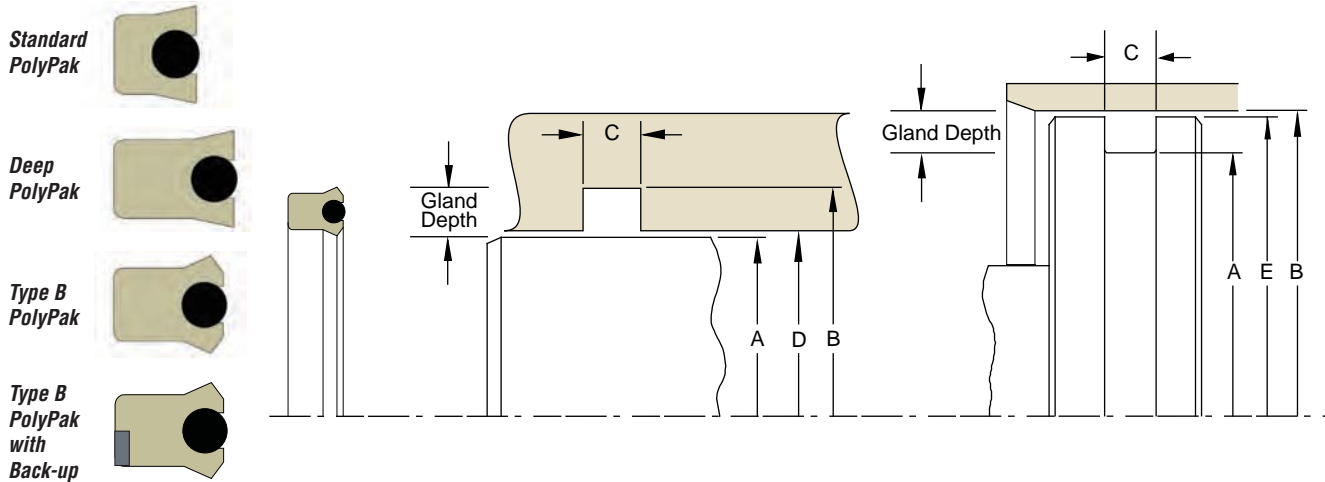


Table 6-7A. Rod Gland Dimension Tolerances

| Nominal Gland Depth | A Rod Diameter | B Groove Diameter | C Groove Width | D Throat Diameter |
|---------------------|----------------|-------------------|----------------|-------------------|
| 1/8 | + .000/- .001 | + .002/- .000 | + .015/- .000 | + .002/- .000 |
| 3/16 | + .000/- .002 | + .002/- .000 | | + .002/- .000 |
| 1/4 | + .000/- .002 | + .003/- .000 | | + .003/- .000 |
| 5/16 | + .000/- .002 | + .004/- .000 | | + .003/- .000 |
| 3/8 | + .000/- .002 | + .005/- .000 | | + .004/- .000 |
| 7/16 | + .000/- .003 | + .006/- .000 | | + .004/- .000 |
| 1/2 | + .000/- .003 | + .007/- .000 | | + .005/- .000 |
| 5/8 | + .000/- .003 | + .009/- .000 | | + .006/- .000 |
| 3/4 | + .000/- .004 | + .011/- .000 | | + .007/- .000 |
| 1 | + .000/- .005 | + .015/- .000 | | + .009/- .000 |

Table 6-7B. Piston Gland Dimension Tolerances

| Nominal Gland Depth | B Bore Diameter | A Groove Diameter | C Groove Width | E Piston Diameter |
|---------------------|-----------------|-------------------|----------------|-------------------|
| 1/8 | + .002/- .000 | + .000/- .002 | + .015/- .000 | + .000/- .001 |
| 3/16 | + .002/- .000 | + .000/- .002 | | + .000/- .002 |
| 1/4 | + .003/- .000 | + .000/- .003 | | + .000/- .002 |
| 5/16 | + .003/- .000 | + .000/- .004 | | + .000/- .002 |
| 3/8 | + .004/- .000 | + .000/- .005 | | + .000/- .002 |
| 7/16 | + .005/- .000 | + .000/- .006 | | + .000/- .002 |
| 1/2 | + .005/- .000 | + .000/- .007 | | + .000/- .003 |
| 9/16 | + .006/- .000 | + .000/- .008 | | + .000/- .003 |
| 5/8 | + .006/- .000 | + .000/- .009 | | + .000/- .003 |
| 3/4 | + .007/- .000 | + .000/- .010 | | + .000/- .004 |
| 7/8 | + .008/- .000 | + .000/- .011 | + .000/- .005 | |
| 1 | + .009/- .000 | + .000/- .012 | + .000/- .005 | |

Please refer to Engineering Section 2, page 2-8 for surface finish and additional hardware considerations.

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|------------------------|-------------------------|------------------------|-------------------------|--------------------|---------------------|---|---------|---------|--------|---------------|----------------|--|--|---|-----|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | Deep PP | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | | | |
| (Bore) Groove Diameter | Bore Diameter | Plastic | Rubber | Plastic | Rubber | | | Plastic | Rubber | | | | | | | |
| 0.062 | 0.312 | | | | | 0.138 | 0.275 | | | 0.063 | 0.311 | X | | | | |
| 0.093 | 0.343 | 0.138 | 0.275 | 0.094 | 0.342 | X | X | | | | | XXXX | 12500093 | - | 250 | B |
| 0.125 | 0.375 | 0.138 | 0.275 | 0.126 | 0.374 | X | X | | X | X | | XXXX | 12500125 | - | 250 | B |
| 0.140 | 0.390 | 0.138 | 0.275 | 0.141 | 0.389 | X | | | | | | XXXX | 12500140 | - | 250 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

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Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 0.187 | 0.437 | 0.138 | 0.275 | 0.188 | 0.436 | X | X | | | X | X | XXXX | 12500187 | - | 250 | B |
| 0.187 | 0.562 | 0.206 | 0.343 | 0.188 | 0.561 | X | X | | | | | XXXX | 18700187 | - | 312 | B |
| 0.187 | 0.750 | 0.309 | 0.550 | 0.188 | 0.749 | X | | | | | | XXXX | 28100187 | - | 500 | B |
| 0.218 | 0.468 | 0.138 | 0.275 | 0.219 | 0.467 | | | | | X | | XXXX | 12500218 | - | 250 | B |
| 0.250 | 0.500 | 0.138 | 0.275 | 0.251 | 0.499 | X | X | X | | X | X | XXXX | 12500250 | - | 250 | B |
| 0.250 | 0.625 | 0.206 | 0.343 | 0.251 | 0.624 | X | X | X | | X | | XXXX | 18700250 | - | 312 | B |
| 0.250 | 0.750 | 0.275 | 0.413 | 0.251 | 0.749 | X | | | | X | | XXXX | 25000250 | - | 375 | B |
| 0.250 | 0.875 | 0.343 | 0.550 | 0.252 | 0.873 | X | | | | | | XXXX | 31200250 | - | 500 | B |
| 0.312 | 0.562 | 0.138 | 0.275 | 0.313 | 0.561 | X | X | X | | X | X | XXXX | 12500312 | - | 250 | B |
| 0.312 | 0.687 | 0.206 | 0.343 | 0.313 | 0.686 | X | | | | X | | XXXX | 18700312 | - | 312 | B |
| 0.312 | 0.750 | 0.240 | 0.413 | 0.313 | 0.749 | X | | | | | | XXXX | 21800312 | - | 375 | B |
| 0.312 | 0.812 | 0.275 | 0.413 | 0.313 | 0.811 | X | | | | | X | XXXX | 25000312 | - | 375 | B |
| 0.359 | 0.609 | 0.138 | 0.275 | 0.360 | 0.608 | X | | | | | | XXXX | 12500359 | - | 250 | B |
| 0.375 | 0.625 | 0.138 | 0.206 | 0.376 | 0.624 | X | X | | | X | | XXXX | 12500375 | - | 187 | B |
| 0.375 | 0.625 | 0.138 | 0.275 | 0.376 | 0.624 | | | | | X | X | XXXX | 12500375 | - | 250 | B |
| 0.375 | 0.750 | 0.206 | 0.293 | 0.376 | 0.749 | X | X | | | X | | XXXX | 18700375 | - | 266 | B |
| 0.375 | 0.750 | 0.206 | 0.343 | 0.376 | 0.749 | | | X | X | X | | XXXX | 18700375 | - | 312 | B |
| 0.375 | 0.875 | 0.275 | 0.413 | 0.376 | 0.874 | X | X | X | | | X | XXXX | 25000375 | - | 375 | B |
| 0.375 | 1.000 | 0.343 | 0.550 | 0.377 | 0.998 | X | | | | | | XXXX | 31200375 | - | 500 | B |
| 0.437 | 0.687 | 0.138 | 0.275 | 0.438 | 0.686 | X | X | X | | X | | XXXX | 12500437 | - | 250 | B |
| 0.437 | 0.750 | 0.172 | 0.275 | 0.438 | 0.749 | X | | | | | | XXXX | 15600437 | - | 250 | B |
| 0.437 | 0.812 | 0.206 | 0.343 | 0.438 | 0.811 | X | X | X | | X | | XXXX | 18700437 | - | 312 | B |
| 0.437 | 0.875 | 0.240 | 0.413 | 0.438 | 0.874 | X | | | | | | XXXX | 21800437 | - | 375 | B |
| 0.437 | 0.937 | 0.275 | 0.413 | 0.438 | 0.936 | X | X | X | | X | | XXXX | 25000437 | - | 375 | B |
| 0.437 | 1.062 | 0.343 | 0.550 | 0.439 | 1.060 | X | | | | | | XXXX | 31200437 | - | 500 | B |
| 0.500 | 0.750 | 0.138 | 0.138 | 0.501 | 0.749 | X | X | | | X | X | XXXX | 12500500 | - | 125 | B |
| 0.500 | 0.750 | 0.138 | 0.275 | 0.501 | 0.749 | | | X | X | X | X | XXXX | 12500500 | - | 250 | B |
| 0.500 | 0.875 | 0.206 | 0.343 | 0.501 | 0.874 | X | X | | | X | X | XXXX | 18700500 | - | 312 | B |
| 0.500 | 1.000 | 0.275 | 0.413 | 0.501 | 0.999 | X | | X | | X | | XXXX | 25000500 | - | 375 | B |
| 0.500 | 1.125 | 0.343 | 0.550 | 0.502 | 1.123 | X | X | | | | | XXXX | 31200500 | - | 500 | B |
| 0.500 | 1.250 | 0.413 | 0.688 | 0.502 | 1.248 | X | | | | | | XXXX | 37500500 | - | 625 | B |
| 0.531 | 0.781 | 0.138 | 0.275 | 0.532 | 0.780 | X | | | | | | XXXX | 12500531 | - | 250 | B |
| 0.562 | 0.812 | 0.138 | 0.138 | 0.563 | 0.811 | X | X | | | | | XXXX | 12500562 | - | 125 | B |
| 0.562 | 0.812 | 0.138 | 0.275 | 0.563 | 0.811 | | | | | X | X | XXXX | 12500562 | - | 250 | B |
| 0.562 | 0.936 | 0.206 | 0.343 | 0.563 | 0.935 | X | | | | X | X | XXXX | 18700562 | - | 312 | B |
| 0.562 | 1.000 | 0.240 | 0.413 | 0.563 | 0.999 | X | | | | | | XXXX | 21800562 | - | 375 | B |
| 0.562 | 1.062 | 0.275 | 0.413 | 0.563 | 1.061 | X | | | | X | | XXXX | 25000562 | - | 375 | B |
| 0.625 | 0.875 | 0.138 | 0.138 | 0.626 | 0.874 | | X | | | X | X | XXXX | 12500625 | - | 125 | B |
| 0.625 | 0.875 | 0.138 | 0.206 | 0.626 | 0.874 | X | | X | | X | | XXXX | 12500625 | - | 187 | B |
| 0.625 | 0.875 | 0.138 | 0.227 | 0.626 | 0.874 | | | | | | X | XXXX | 12500625 | - | 206 | B |
| 0.625 | 0.875 | 0.138 | 0.275 | 0.626 | 0.874 | | | X | X | X | X | XXXX | 12500625 | - | 250 | B |
| 0.625 | 1.000 | 0.206 | 0.343 | 0.626 | 0.999 | X | X | X | X | X | X | XXXX | 18700625 | - | 312 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

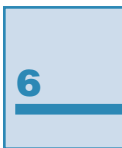


Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|------------------------|----------------------------|---------------------------|----------------------------|-----------------------|------------------------|--|--------|---------|--------|---------------|----------------|---------------|----------------|--|--|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | Compound Code | Energizer Code | | | | | Add to the part number for Type B or Deep only |
| 0.625 | 1.125 | 0.275 | 0.413 | 0.626 | 1.124 | X | X | X | X | X | X | XXXX | 25000625 | - | 375 | B |
| 0.625 | 1.250 | 0.343 | 0.550 | 0.627 | 1.248 | X | | | | | | XXXX | 31200625 | - | 500 | B |
| 0.625 | 1.375 | 0.413 | 0.688 | 0.627 | 1.373 | X | | | | | | XXXX | 37500625 | - | 625 | B |
| 0.656 | 1.031 | 0.206 | 0.343 | 0.657 | 1.030 | X | | | | | | XXXX | 18700656 | - | 312 | B |
| 0.687 | 0.937 | 0.138 | 0.275 | 0.688 | 0.936 | X | X | X | | X | X | XXXX | 12500687 | - | 250 | B |
| 0.687 | 1.061 | 0.206 | 0.206 | 0.688 | 1.060 | X | X | | | | X | XXXX | 18700687 | - | 187 | B |
| 0.687 | 1.061 | 0.206 | 0.343 | 0.688 | 1.060 | | | | | X | | XXXX | 18700687 | - | 312 | B |
| 0.687 | 1.187 | 0.275 | 0.413 | 0.688 | 1.186 | X | | | | X | | XXXX | 25000687 | - | 375 | B |
| 0.687 | 1.250 | 0.309 | 0.550 | 0.688 | 1.249 | X | | | | | | XXXX | 28100687 | - | 500 | B |
| 0.687 | 1.312 | 0.343 | 0.550 | 0.689 | 1.310 | X | | | | | | XXXX | 31200687 | - | 500 | B |
| 0.750 | 1.000 | 0.138 | 0.138 | 0.751 | 0.999 | X | X | | | X | | XXXX | 12500750 | - | 125 | B |
| 0.750 | 1.000 | 0.138 | 0.206 | 0.751 | 0.999 | | | | | X | | XXXX | 12500750 | - | 187 | B |
| 0.750 | 1.000 | 0.138 | 0.275 | 0.751 | 0.999 | | | X | X | X | X | XXXX | 12500750 | - | 250 | B |
| 0.750 | 1.062 | 0.172 | 0.275 | 0.751 | 1.061 | X | | | | | | XXXX | 15600750 | - | 250 | B |
| 0.750 | 1.125 | 0.206 | 0.275 | 0.751 | 1.124 | | | X | X | | | XXXX | 18700750 | - | 250 | B |
| 0.750 | 1.125 | 0.206 | 0.343 | 0.751 | 1.124 | X | X | X | | X | X | XXXX | 18700750 | - | 312 | B |
| 0.750 | 1.188 | 0.240 | 0.413 | 0.751 | 1.187 | X | | | | | | XXXX | 21800750 | - | 375 | B |
| 0.750 | 1.250 | 0.275 | 0.413 | 0.751 | 1.249 | X | X | X | X | X | X | XXXX | 25000750 | - | 375 | B |
| 0.750 | 1.375 | 0.343 | 0.550 | 0.752 | 1.373 | X | X | X | | X | | XXXX | 31200750 | - | 500 | B |
| 0.750 | 1.500 | 0.413 | 0.688 | 0.752 | 1.498 | X | | X | | | | XXXX | 37500750 | - | 625 | B |
| 0.800 | 1.050 | 0.138 | 0.275 | 0.801 | 1.049 | | | | | X | | XXXX | 12500800 | - | 250 | B |
| 0.812 | 1.062 | 0.138 | 0.138 | 0.813 | 1.061 | X | X | | | X | | XXXX | 12500812 | - | 125 | B |
| 0.812 | 1.062 | 0.138 | 0.275 | 0.813 | 1.061 | | | | | X | | XXXX | 12500812 | - | 250 | B |
| 0.812 | 1.186 | 0.206 | 0.343 | 0.813 | 1.185 | X | X | X | | X | X | XXXX | 18700812 | - | 312 | B |
| 0.812 | 1.312 | 0.275 | 0.413 | 0.813 | 1.311 | X | | | | | | XXXX | 25000812 | - | 375 | B |
| 0.812 | 1.436 | 0.343 | 0.550 | 0.814 | 1.434 | X | | | | X | | XXXX | 31200812 | - | 500 | B |
| 0.875 | 1.125 | 0.138 | 0.138 | 0.876 | 1.124 | X | X | | | X | X | XXXX | 12500875 | - | 125 | B |
| 0.875 | 1.125 | 0.138 | 0.206 | 0.876 | 1.124 | | | X | | X | | XXXX | 12500875 | - | 187 | B |
| 0.875 | 1.125 | 0.138 | 0.275 | 0.876 | 1.124 | | | X | X | X | X | XXXX | 12500875 | - | 250 | B |
| 0.875 | 1.250 | 0.206 | 0.275 | 0.876 | 1.249 | | | | X | | | XXXX | 18700875 | - | 250 | B |
| 0.875 | 1.250 | 0.206 | 0.343 | 0.876 | 1.249 | X | X | X | X | X | | XXXX | 18700875 | - | 312 | B |
| 0.875 | 1.250 | 0.206 | 0.413 | 0.876 | 1.249 | | | X | | | | XXXX | 18700875 | - | 375 | B |
| 0.875 | 1.375 | 0.275 | 0.413 | 0.876 | 1.374 | X | X | | | X | X | XXXX | 25000875 | - | 375 | B |
| 0.875 | 1.500 | 0.343 | 0.550 | 0.877 | 1.498 | X | | | | | | XXXX | 31200875 | - | 500 | B |
| 0.875 | 1.625 | 0.413 | 0.688 | 0.877 | 1.623 | X | | | | | | XXXX | 37500875 | - | 625 | B |
| 0.906 | 1.156 | 0.138 | 0.275 | 0.907 | 1.155 | X | | | | | | XXXX | 12500906 | - | 250 | B |
| 0.937 | 1.187 | 0.138 | 0.275 | 0.938 | 1.186 | X | X | | | X | | XXXX | 12500937 | - | 250 | B |
| 0.937 | 1.250 | 0.172 | 0.275 | 0.938 | 1.249 | X | X | | | | | XXXX | 15600937 | - | 250 | B |
| 0.937 | 1.312 | 0.206 | 0.343 | 0.938 | 1.311 | X | X | | | X | X | XXXX | 18700937 | - | 312 | B |
| 0.937 | 1.375 | 0.240 | 0.413 | 0.938 | 1.374 | X | | | | | | XXXX | 21800937 | - | 375 | B |
| 0.937 | 1.437 | 0.275 | 0.413 | 0.938 | 1.436 | X | | | | | | XXXX | 25000937 | - | 375 | B |
| 0.937 | 1.687 | 0.413 | 0.688 | 0.939 | 1.685 | X | | | | | | XXXX | 37500937 | - | 625 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

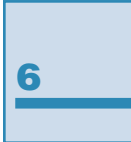
| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|--------|---|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | | | |
| 1.000 | 1.250 | 0.138 | 0.138 | 1.001 | 1.249 | X | X | | | X | | XXXX | 12501000 | - | 125 | B |
| 1.000 | 1.250 | 0.138 | 0.172 | 1.001 | 1.249 | | | | | X | | XXXX | 12501000 | - | 156 | B |
| 1.000 | 1.250 | 0.138 | 0.189 | 1.001 | 1.249 | | | X | | | | XXXX | 12501000 | - | 172 | B |
| 1.000 | 1.250 | 0.138 | 0.206 | 1.001 | 1.249 | | | | | X | | XXXX | 12501000 | - | 187 | B |
| 1.000 | 1.250 | 0.138 | 0.275 | 1.001 | 1.249 | | | X | X | X | X | XXXX | 12501000 | - | 250 | B |
| 1.000 | 1.312 | 0.172 | 0.172 | 1.001 | 1.311 | X | X | | | X | | XXXX | 15601000 | - | 156 | B |
| 1.000 | 1.312 | 0.172 | 0.257 | 1.001 | 1.311 | | | | | X | | XXXX | 15601000 | - | 234 | B |
| 1.000 | 1.375 | 0.206 | 0.275 | 1.001 | 1.374 | | | X | X | | | XXXX | 18701000 | - | 250 | B |
| 1.000 | 1.375 | 0.206 | 0.343 | 1.001 | 1.374 | X | X | X | X | X | X | XXXX | 18701000 | - | 312 | B |
| 1.000 | 1.500 | 0.275 | 0.275 | 1.001 | 1.499 | X | X | | | X | | XXXX | 25001000 | - | 250 | B |
| 1.000 | 1.500 | 0.275 | 0.413 | 1.001 | 1.499 | | | X | X | X | X | XXXX | 25001000 | - | 375 | B |
| 1.000 | 1.625 | 0.343 | 0.550 | 1.002 | 1.623 | X | X | X | | X | | XXXX | 31201000 | - | 500 | B |
| 1.000 | 1.750 | 0.413 | 0.688 | 1.002 | 1.748 | X | X | X | | | | XXXX | 37501000 | - | 625 | B |
| 1.000 | 1.875 | 0.481 | 0.688 | 1.002 | 1.873 | X | | | | | | XXXX | 43701000 | - | 625 | B |
| 1.000 | 2.000 | 0.550 | 0.825 | 1.002 | 1.998 | X | | | | | | XXXX | 50001000 | - | 750 | B |
| 1.000 | 2.000 | 0.550 | 0.825 | 1.002 | 1.998 | | | X | | | | XXXX | 50001000 | - | 750 | B |
| 1.062 | 1.312 | 0.138 | 0.187 | 1.063 | 1.311 | X | X | | | X | | XXXX | 12501062 | - | 170 | B |
| 1.062 | 1.312 | 0.138 | 0.275 | 1.063 | 1.311 | | | | | X | | XXXX | 12501062 | - | 250 | B |
| 1.062 | 1.375 | 0.172 | 0.275 | 1.063 | 1.374 | X | | | | | | XXXX | 15601062 | - | 250 | B |
| 1.062 | 1.436 | 0.206 | 0.343 | 1.063 | 1.435 | X | X | X | X | X | | XXXX | 18701062 | - | 312 | B |
| 1.062 | 1.562 | 0.275 | 0.413 | 1.063 | 1.561 | X | | | | | | XXXX | 25001062 | - | 375 | B |
| 1.062 | 1.687 | 0.343 | 0.550 | 1.064 | 1.685 | X | | | | | | XXXX | 31201062 | - | 500 | B |
| 1.093 | 1.593 | 0.275 | 0.413 | 1.094 | 1.592 | X | | | | | | XXXX | 25001093 | - | 375 | B |
| 1.125 | 1.375 | 0.138 | 0.129 | 1.126 | 1.374 | X | X | | | X | | XXXX | 12501125 | - | 117 | B |
| 1.125 | 1.375 | 0.138 | 0.195 | 1.126 | 1.374 | | | | | X | | XXXX | 12501125 | - | 177 | B |
| 1.125 | 1.375 | 0.138 | 0.275 | 1.126 | 1.374 | | | X | | X | X | XXXX | 12501125 | - | 250 | B |
| 1.125 | 1.500 | 0.206 | 0.206 | 1.126 | 1.499 | X | X | | | X | | XXXX | 18701125 | - | 187 | B |
| 1.125 | 1.500 | 0.206 | 0.343 | 1.126 | 1.499 | | | X | X | X | X | XXXX | 18701125 | - | 312 | B |
| 1.125 | 1.625 | 0.275 | 0.413 | 1.126 | 1.624 | X | X | X | X | X | X | XXXX | 25001125 | - | 375 | B |
| 1.125 | 1.750 | 0.343 | 0.550 | 1.127 | 1.748 | X | X | X | | X | | XXXX | 31201125 | - | 500 | B |
| 1.125 | 1.875 | 0.413 | 0.688 | 1.127 | 1.873 | X | X | | | | | XXXX | 37501125 | - | 625 | B |
| 1.125 | 2.000 | 0.481 | 0.550 | 1.127 | 1.998 | | | | | X | | XXXX | 43701125 | - | 500 | B |
| 1.125 | 2.000 | 0.481 | 0.688 | 1.127 | 1.998 | X | | | | | | XXXX | 43701250 | - | 625 | B |
| 1.187 | 1.437 | 0.138 | 0.196 | 1.188 | 1.436 | X | X | | | X | | XXXX | 12501187 | - | 178 | B |
| 1.187 | 1.437 | 0.138 | 0.206 | 1.188 | 1.436 | | | X | | | | XXXX | 12501187 | - | 187 | B |
| 1.187 | 1.437 | 0.138 | 0.275 | 1.188 | 1.436 | | | | | X | X | XXXX | 12501187 | - | 250 | B |
| 1.187 | 1.500 | 0.172 | 0.275 | 1.188 | 1.499 | X | X | | | | | XXXX | 15601187 | - | 250 | B |
| 1.187 | 1.562 | 0.206 | 0.343 | 1.188 | 1.561 | X | X | | | X | | XXXX | 18701187 | - | 312 | B |
| 1.187 | 1.687 | 0.275 | 0.413 | 1.188 | 1.686 | X | | | | | X | XXXX | 25001187 | - | 375 | B |
| 1.187 | 1.812 | 0.343 | 0.550 | 1.189 | 1.810 | X | | X | | | | XXXX | 31201187 | - | 500 | B |
| 1.187 | 2.000 | 0.447 | 0.688 | 1.189 | 1.998 | X | | | | | | XXXX | 40601187 | - | 625 | B |
| 1.250 | 1.500 | 0.138 | 0.206 | 1.251 | 1.499 | X | X | X | | X | X | XXXX | 12501250 | - | 187 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Standard, Deep and Type B PolyPak® Profile

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|----------|---------------|----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 1.250 | 1.500 | 0.138 | 0.275 | 1.251 | 1.499 | | | | X | X | X | XXXX | 12501250 | - | 250 | B |
| 1.250 | 1.563 | 0.172 | 0.275 | 1.251 | 1.562 | X | X | | | | | XXXX | 15601250 | - | 250 | B |
| 1.250 | 1.625 | 0.206 | 0.275 | 1.251 | 1.624 | X | X | | | X | | XXXX | 18701250 | - | 250 | B |
| 1.250 | 1.625 | 0.206 | 0.343 | 1.251 | 1.624 | | | X | X | X | X | XXXX | 18701250 | - | 312 | B |
| 1.250 | 1.625 | 0.206 | 0.413 | 1.251 | 1.624 | | | | | X | | XXXX | 18701250 | - | 375 | B |
| 1.250 | 1.750 | 0.275 | 0.275 | 1.251 | 1.749 | X | X | | | X | | XXXX | 25001250 | - | 250 | B |
| 1.250 | 1.750 | 0.275 | 0.413 | 1.251 | 1.749 | | | X | X | X | X | XXXX | 25001250 | - | 375 | B |
| 1.250 | 1.875 | 0.343 | 0.550 | 1.252 | 1.873 | X | | X | | X | X | XXXX | 31201250 | - | 500 | B |
| 1.250 | 2.000 | 0.413 | 0.688 | 1.252 | 1.998 | X | X | X | | X | | XXXX | 37501250 | - | 625 | B |
| 1.250 | 2.063 | 0.447 | 0.688 | 1.252 | 2.061 | X | | | | | | XXXX | 40601250 | - | 625 | B |
| 1.250 | 2.250 | 0.550 | 0.825 | 1.252 | 2.248 | X | | | | | | XXXX | 50001250 | - | 750 | B |
| 1.250 | 2.500 | 0.688 | 0.963 | 1.253 | 2.497 | X | | | | | | XXXX | 62501750 | - | 875 | B |
| 1.312 | 1.562 | 0.138 | 0.206 | 1.313 | 1.561 | X | X | | | X | | XXXX | 12501312 | - | 187 | B |
| 1.312 | 1.625 | 0.172 | 0.275 | 1.313 | 1.624 | X | | | | | | XXXX | 15601312 | - | 250 | B |
| 1.312 | 1.686 | 0.206 | 0.206 | 1.313 | 1.685 | X | X | | | X | | XXXX | 18701312 | - | 187 | B |
| 1.312 | 1.686 | 0.206 | 0.343 | 1.313 | 1.685 | | | | | X | | XXXX | 18701312 | - | 312 | B |
| 1.312 | 1.812 | 0.275 | 0.413 | 1.313 | 1.811 | X | X | X | | X | | XXXX | 25001312 | - | 375 | B |
| 1.312 | 1.937 | 0.343 | 0.550 | 1.314 | 1.935 | X | | | | | | XXXX | 31201312 | - | 500 | B |
| 1.312 | 2.000 | 0.377 | 0.688 | 1.314 | 1.998 | X | | | | | | XXXX | 34301312 | - | 625 | B |
| 1.312 | 2.062 | 0.413 | 0.481 | 1.314 | 2.060 | X | | X | | | | XXXX | 37501312 | - | 437 | B |
| 1.312 | 2.312 | 0.550 | 0.825 | 1.314 | 2.310 | X | | | | | | XXXX | 50001312 | - | 750 | B |
| 1.375 | 1.625 | 0.138 | 0.138 | 1.376 | 1.624 | X | X | | | X | | XXXX | 12501375 | - | 125 | B |
| 1.375 | 1.625 | 0.138 | 0.196 | 1.376 | 1.624 | | | | | X | | XXXX | 12501375 | - | 178 | B |
| 1.375 | 1.625 | 0.138 | 0.275 | 1.376 | 1.624 | | | X | X | X | X | XXXX | 12501375 | - | 250 | B |
| 1.375 | 1.687 | 0.172 | 0.172 | 1.376 | 1.686 | X | X | | | X | | XXXX | 15601375 | - | 156 | B |
| 1.375 | 1.750 | 0.206 | 0.343 | 1.376 | 1.749 | X | X | X | X | X | X | XXXX | 18701375 | - | 312 | B |
| 1.375 | 1.750 | 0.206 | 0.413 | 1.376 | 1.749 | | | | | X | | XXXX | 18701375 | - | 375 | B |
| 1.375 | 1.875 | 0.275 | 0.413 | 1.376 | 1.874 | X | X | X | X | X | X | XXXX | 25001375 | - | 375 | B |
| 1.375 | 2.000 | 0.343 | 0.550 | 1.377 | 1.998 | X | X | X | X | X | X | XXXX | 31201375 | - | 500 | B |
| 1.375 | 2.125 | 0.413 | 0.688 | 1.377 | 2.123 | X | X | | | X | | XXXX | 37501375 | - | 625 | B |
| 1.375 | 2.250 | 0.481 | 0.688 | 1.377 | 2.248 | X | | | | | | XXXX | 43701375 | - | 625 | B |
| 1.375 | 2.375 | 0.550 | 0.825 | 1.377 | 2.373 | X | | | | | | XXXX | 50001375 | - | 750 | B |
| 1.437 | 1.687 | 0.138 | 0.275 | 1.438 | 1.686 | X | X | X | X | X | | XXXX | 12501437 | - | 250 | B |
| 1.437 | 1.812 | 0.206 | 0.343 | 1.438 | 1.811 | X | X | X | | X | X | XXXX | 18701437 | - | 312 | B |
| 1.437 | 1.937 | 0.275 | 0.413 | 1.438 | 1.936 | | X | | | | | XXXX | 25001437 | - | 375 | B |
| 1.437 | 2.061 | 0.343 | 0.550 | 1.439 | 2.059 | | | | | X | | XXXX | 31201437 | - | 500 | B |
| 1.437 | 2.187 | 0.413 | 0.688 | 1.439 | 2.185 | X | | | | | | XXXX | 37501437 | - | 625 | B |
| 1.437 | 2.312 | 0.481 | 0.688 | 1.439 | 2.310 | X | | | | | | XXXX | 43701437 | - | 625 | B |
| 1.500 | 1.750 | 0.138 | 0.138 | 1.501 | 1.749 | X | X | | | X | | XXXX | 12501500 | - | 125 | B |
| 1.500 | 1.750 | 0.138 | 0.206 | 1.501 | 1.749 | | | | | X | | XXXX | 12501500 | - | 187 | B |
| 1.500 | 1.750 | 0.138 | 0.275 | 1.501 | 1.749 | | | X | | X | X | XXXX | 12501500 | - | 250 | B |
| 1.500 | 1.750 | 0.138 | 0.343 | 1.501 | 1.749 | | | X | | | | XXXX | 12501500 | - | 312 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|--------|---|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | | | |
| 1.500 | 1.812 | 0.172 | 0.343 | 1.501 | 1.811 | X | | | | X | | XXXX | 15601500 | - | 312 | B |
| 1.500 | 1.875 | 0.206 | 0.206 | 1.501 | 1.874 | X | X | | | X | | XXXX | 18701500 | - | 187 | B |
| 1.500 | 1.875 | 0.206 | 0.275 | 1.501 | 1.874 | | | X | | X | X | XXXX | 18701500 | - | 250 | B |
| 1.500 | 1.875 | 0.206 | 0.309 | 1.501 | 1.874 | | | X | | | | XXXX | 18701500 | - | 281 | B |
| 1.500 | 1.875 | 0.206 | 0.343 | 1.501 | 1.874 | | | | | X | | XXXX | 18701500 | - | 312 | B |
| 1.500 | 1.875 | 0.206 | 0.413 | 1.501 | 1.874 | | | X | X | X | X | XXXX | 18701500 | - | 375 | B |
| 1.500 | 2.000 | 0.275 | 0.275 | 1.501 | 1.999 | X | X | | | X | | XXXX | 25001500 | - | 250 | B |
| 1.500 | 2.000 | 0.275 | 0.413 | 1.501 | 1.999 | | | X | X | X | X | XXXX | 25001500 | - | 375 | B |
| 1.500 | 2.125 | 0.343 | 0.550 | 1.502 | 2.123 | X | X | X | | X | X | XXXX | 31201500 | - | 500 | B |
| 1.500 | 2.250 | 0.413 | 0.688 | 1.502 | 2.248 | X | X | | | X | X | XXXX | 37501500 | - | 625 | B |
| 1.500 | 2.375 | 0.481 | 0.688 | 1.502 | 2.373 | X | | | | | | XXXX | 43701500 | - | 625 | B |
| 1.500 | 2.500 | 0.550 | 0.825 | 1.502 | 2.498 | X | X | | | X | | XXXX | 50001500 | - | 750 | B |
| 1.562 | 1.812 | 0.138 | 0.275 | 1.563 | 1.811 | X | | | | | | XXXX | 12501562 | - | 250 | B |
| 1.562 | 1.937 | 0.206 | 0.275 | 1.563 | 1.936 | X | X | X | | | X | XXXX | 18701562 | - | 250 | B |
| 1.562 | 2.312 | 0.413 | 0.688 | 1.564 | 2.310 | X | | | | | | XXXX | 37501562 | - | 625 | B |
| 1.625 | 1.875 | 0.138 | 0.275 | 1.626 | 1.874 | X | | | | | | XXXX | 12501625 | - | 250 | B |
| 1.625 | 1.875 | 0.138 | 0.275 | 1.626 | 1.874 | | | X | | | | XXXX | 12501625 | - | 250 | B |
| 1.625 | 2.000 | 0.206 | 0.206 | 1.626 | 1.999 | X | X | | | X | | XXXX | 18701625 | - | 187 | B |
| 1.625 | 2.000 | 0.206 | 0.275 | 1.626 | 1.999 | | | X | | | | XXXX | 18701625 | - | 250 | B |
| 1.625 | 2.000 | 0.206 | 0.293 | 1.626 | 1.999 | | | | | X | | XXXX | 18701625 | - | 266 | B |
| 1.625 | 2.000 | 0.206 | 0.343 | 1.626 | 1.999 | | | X | | X | | XXXX | 18701625 | - | 312 | B |
| 1.625 | 2.000 | 0.206 | 0.413 | 1.626 | 1.999 | | | X | X | X | X | XXXX | 18701625 | - | 375 | B |
| 1.625 | 2.125 | 0.275 | 0.413 | 1.626 | 2.124 | X | X | | | X | X | XXXX | 25001625 | - | 375 | B |
| 1.625 | 2.250 | 0.343 | 0.550 | 1.627 | 2.248 | X | X | | | X | | XXXX | 31201625 | - | 500 | B |
| 1.625 | 2.375 | 0.413 | 0.413 | 1.627 | 2.373 | X | X | | | X | | XXXX | 37501625 | - | 375 | B |
| 1.625 | 2.375 | 0.413 | 0.688 | 1.627 | 2.373 | | | | | X | | XXXX | 37501625 | - | 625 | B |
| 1.687 | 1.937 | 0.138 | 0.275 | 1.688 | 1.936 | X | | | | | | XXXX | 12501687 | - | 250 | B |
| 1.687 | 2.062 | 0.206 | 0.413 | 1.688 | 2.061 | | | X | | | | XXXX | 18701687 | - | 375 | B |
| 1.687 | 2.312 | 0.343 | 0.550 | 1.689 | 2.310 | X | | | | X | | XXXX | 31201687 | - | 500 | B |
| 1.750 | 2.000 | 0.138 | 0.138 | 1.751 | 1.999 | X | X | | | X | | XXXX | 12501750 | - | 125 | B |
| 1.750 | 2.000 | 0.138 | 0.275 | 1.751 | 1.999 | | | X | | | | XXXX | 12501750 | - | 250 | B |
| 1.750 | 2.125 | 0.206 | 0.206 | 1.751 | 2.124 | X | X | | | | X | XXXX | 18701750 | - | 187 | B |
| 1.750 | 2.125 | 0.206 | 0.253 | 1.751 | 2.124 | | | X | | X | | XXXX | 18701750 | - | 230 | B |
| 1.750 | 2.125 | 0.206 | 0.275 | 1.751 | 2.124 | | | | X | | | XXXX | 18701750 | - | 250 | B |
| 1.750 | 2.125 | 0.206 | 0.293 | 1.751 | 2.124 | | | | | X | X | XXXX | 18701750 | - | 266 | B |
| 1.750 | 2.125 | 0.206 | 0.343 | 1.751 | 2.124 | | | | | X | X | XXXX | 18701750 | - | 312 | B |
| 1.750 | 2.125 | 0.206 | 0.413 | 1.751 | 2.124 | | | X | X | X | X | XXXX | 18701750 | - | 375 | B |
| 1.750 | 2.188 | 0.240 | 0.413 | 1.751 | 2.187 | X | | | | | | XXXX | 21801750 | - | 375 | B |
| 1.750 | 2.250 | 0.275 | 0.275 | 1.751 | 2.249 | X | X | | | X | | XXXX | 25001750 | - | 250 | B |
| 1.750 | 2.250 | 0.275 | 0.413 | 1.751 | 2.249 | | | X | X | X | X | XXXX | 25001750 | - | 375 | B |
| 1.750 | 2.375 | 0.343 | 0.550 | 1.752 | 2.373 | X | X | X | X | X | X | XXXX | 31201750 | - | 500 | B |
| 1.750 | 2.500 | 0.413 | 0.688 | 1.752 | 2.498 | X | X | | | X | X | XXXX | 37501750 | - | 625 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

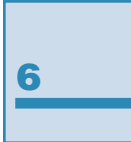


Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|----------|---------------|-----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energi-zer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 1.750 | 2.563 | 0.447 | 0.688 | 1.752 | 2.561 | X | | | | | | XXXX | 40601750 | - | 625 | B |
| 1.750 | 2.625 | 0.481 | 0.688 | 1.752 | 2.623 | X | | | | | | XXXX | 43701750 | - | 625 | B |
| 1.750 | 2.750 | 0.550 | 0.825 | 1.752 | 2.748 | | | X | | | | XXXX | 50001750 | - | 750 | B |
| 1.750 | 3.000 | 0.688 | 0.963 | 1.753 | 2.997 | X | | | | | | XXXX | 62501812 | - | 875 | B |
| 1.812 | 2.187 | 0.206 | 0.343 | 1.813 | 2.186 | X | | | | | | XXXX | 18701812 | - | 312 | B |
| 1.812 | 2.500 | 0.377 | 0.688 | 1.814 | 2.498 | X | | | | | | XXXX | 34301812 | - | 625 | B |
| 1.875 | 2.125 | 0.138 | 0.138 | 1.876 | 2.124 | X | X | | | X | | XXXX | 12501875 | - | 125 | B |
| 1.875 | 2.125 | 0.138 | 0.275 | 1.876 | 2.124 | | | | | X | X | XXXX | 12501875 | - | 250 | B |
| 1.875 | 2.250 | 0.206 | 0.275 | 1.876 | 2.249 | | | | X | | | XXXX | 18701875 | - | 250 | B |
| 1.875 | 2.250 | 0.206 | 0.308 | 1.876 | 2.249 | | | | X | | | XXXX | 18701875 | - | 280 | B |
| 1.875 | 2.250 | 0.206 | 0.413 | 1.876 | 2.249 | X | X | X | X | X | X | XXXX | 18701875 | - | 375 | B |
| 1.875 | 2.375 | 0.275 | 0.413 | 1.876 | 2.374 | X | X | | | X | X | XXXX | 25001875 | - | 375 | B |
| 1.875 | 2.500 | 0.343 | 0.550 | 1.877 | 2.498 | X | X | X | | X | X | XXXX | 31201875 | - | 500 | B |
| 1.875 | 2.625 | 0.413 | 0.688 | 1.877 | 2.623 | X | X | X | | | | XXXX | 37501875 | - | 625 | B |
| 1.875 | 2.750 | 0.481 | 0.688 | 1.877 | 2.748 | X | | | | | | XXXX | 43701875 | - | 625 | B |
| 1.875 | 2.875 | 0.550 | 0.825 | 1.877 | 2.873 | X | | | | | | XXXX | 50001875 | - | 750 | B |
| 1.875 | 3.000 | 0.618 | 0.963 | 1.877 | 2.998 | | | X | | | | XXXX | 56201875 | - | 875 | B |
| 1.875 | 3.125 | 0.688 | 1.100 | 1.878 | 3.122 | | | X | | | | XXXX | 62501875 | - | 1000 | B |
| 1.937 | 2.312 | 0.206 | 0.309 | 1.938 | 2.311 | X | X | | | X | | XXXX | 18701937 | - | 281 | B |
| 1.937 | 2.312 | 0.206 | 0.413 | 1.938 | 2.311 | | | X | | | | XXXX | 18701937 | - | 375 | B |
| 1.937 | 2.437 | 0.275 | 0.413 | 1.938 | 2.436 | | | | | X | | XXXX | 25001937 | - | 375 | B |
| 1.937 | 2.562 | 0.343 | 0.550 | 1.939 | 2.560 | X | | | | | | XXXX | 31201937 | - | 500 | B |
| 2.000 | 2.250 | 0.138 | 0.206 | 2.001 | 2.249 | X | X | | X | X | | XXXX | 12502000 | - | 187 | B |
| 2.000 | 2.250 | 0.138 | 0.275 | 2.001 | 2.249 | | | X | | | | XXXX | 12502000 | - | 250 | B |
| 2.000 | 2.375 | 0.206 | 0.206 | 2.001 | 2.374 | X | X | | | X | X | XXXX | 18702000 | - | 187 | B |
| 2.000 | 2.375 | 0.206 | 0.253 | 2.001 | 2.374 | | | | | X | | XXXX | 18702000 | - | 230 | B |
| 2.000 | 2.375 | 0.206 | 0.289 | 2.001 | 2.374 | | | | | | X | XXXX | 18702000 | - | 263 | B |
| 2.000 | 2.375 | 0.206 | 0.343 | 2.001 | 2.374 | | | | | X | X | XXXX | 18702000 | - | 312 | B |
| 2.000 | 2.375 | 0.206 | 0.413 | 2.001 | 2.374 | | | X | X | X | X | XXXX | 18702000 | - | 375 | B |
| 2.000 | 2.438 | 0.240 | 0.413 | 2.001 | 2.437 | | | X | | | | XXXX | 21802000 | - | 375 | B |
| 2.000 | 2.500 | 0.275 | 0.275 | 2.001 | 2.499 | X | X | | | X | | XXXX | 25002000 | - | 250 | B |
| 2.000 | 2.500 | 0.275 | 0.413 | 2.001 | 2.499 | | | X | X | X | X | XXXX | 25002000 | - | 375 | B |
| 2.000 | 2.625 | 0.343 | 0.550 | 2.002 | 2.623 | | X | X | X | X | | XXXX | 31202000 | - | 500 | B |
| 2.000 | 2.750 | 0.413 | 0.550 | 2.002 | 2.748 | | | X | | | | XXXX | 37502000 | - | 500 | B |
| 2.000 | 2.750 | 0.413 | 0.688 | 2.002 | 2.748 | X | X | X | | X | X | XXXX | 37502000 | - | 625 | B |
| 2.000 | 2.875 | 0.481 | 0.688 | 2.002 | 2.873 | X | | | | | | XXXX | 43702000 | - | 625 | B |
| 2.000 | 3.000 | 0.550 | 0.825 | 2.002 | 2.998 | X | X | | | X | | XXXX | 50002000 | - | 750 | B |
| 2.000 | 3.250 | 0.688 | 1.100 | 2.003 | 3.247 | X | | | | | | XXXX | 62502000 | - | 1000 | B |
| 2.062 | 2.375 | 0.172 | 0.275 | 2.063 | 2.374 | X | | | | | | XXXX | 15602062 | - | 250 | B |
| 2.062 | 2.437 | 0.206 | 0.413 | 2.063 | 2.436 | X | | | | | | XXXX | 18702062 | - | 375 | B |
| 2.062 | 2.500 | 0.240 | 0.413 | 2.063 | 2.499 | X | | | | | | XXXX | 21802062 | - | 375 | B |
| 2.062 | 2.812 | 0.413 | 0.688 | 2.064 | 2.810 | X | | | | | | XXXX | 37502062 | - | 625 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|--------|---|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | | | |
| 2.125 | 2.375 | 0.138 | 0.275 | 2.126 | 2.374 | X | | | | X | | XXXX | 12502125 | - | 250 | B |
| 2.125 | 2.500 | 0.206 | 0.206 | 2.126 | 2.499 | X | X | | | X | | XXXX | 18702125 | - | 187 | B |
| 2.125 | 2.500 | 0.206 | 0.275 | 2.126 | 2.499 | | | X | | X | | XXXX | 18702125 | - | 250 | B |
| 2.125 | 2.500 | 0.206 | 0.413 | 2.126 | 2.499 | | | | X | X | X | XXXX | 18702125 | - | 375 | B |
| 2.125 | 2.625 | 0.275 | 0.275 | 2.126 | 2.624 | X | X | | | X | | XXXX | 25002125 | - | 250 | B |
| 2.125 | 2.625 | 0.275 | 0.413 | 2.126 | 2.624 | | | X | X | X | X | XXXX | 25002125 | - | 375 | B |
| 2.125 | 2.750 | 0.343 | 0.550 | 2.127 | 2.748 | X | X | X | X | X | X | XXXX | 31202125 | - | 500 | B |
| 2.125 | 2.875 | 0.413 | 0.688 | 2.127 | 2.873 | X | X | X | X | | | XXXX | 37502125 | - | 625 | B |
| 2.125 | 3.000 | 0.481 | 0.688 | 2.127 | 2.998 | X | | | | | | XXXX | 43702125 | - | 625 | B |
| 2.125 | 3.125 | 0.550 | 0.825 | 2.127 | 3.123 | X | | | | | | XXXX | 50002125 | - | 750 | B |
| 2.187 | 2.562 | 0.206 | 0.413 | 2.188 | 2.561 | | | X | X | | | XXXX | 18702187 | - | 375 | B |
| 2.250 | 2.500 | 0.138 | 0.206 | 2.251 | 2.499 | X | | | X | | | XXXX | 12502250 | - | 187 | B |
| 2.250 | 2.625 | 0.206 | 0.343 | 2.251 | 2.624 | | | | X | | | XXXX | 18702250 | - | 312 | B |
| 2.250 | 2.625 | 0.206 | 0.413 | 2.251 | 2.624 | X | X | X | X | X | X | XXXX | 18702250 | - | 375 | B |
| 2.250 | 2.750 | 0.275 | 0.413 | 2.251 | 2.749 | X | X | X | X | X | X | XXXX | 25002250 | - | 375 | B |
| 2.250 | 2.812 | 0.309 | 0.413 | 2.251 | 2.811 | | | | | X | | XXXX | 28102250 | - | 375 | B |
| 2.250 | 2.875 | 0.343 | 0.550 | 2.252 | 2.873 | X | X | | | X | X | XXXX | 31202250 | - | 500 | B |
| 2.250 | 3.000 | 0.413 | 0.688 | 2.252 | 2.998 | X | X | X | | X | | XXXX | 37502250 | - | 625 | B |
| 2.250 | 3.125 | 0.481 | 0.413 | 2.252 | 3.123 | | | X | | | | XXXX | 43702250 | - | 375 | B |
| 2.250 | 3.125 | 0.481 | 0.688 | 2.252 | 3.123 | | | | | X | | XXXX | 43702250 | - | 625 | B |
| 2.250 | 3.250 | 0.550 | 0.825 | 2.252 | 3.248 | X | | | | | | XXXX | 50002250 | - | 750 | B |
| 2.312 | 2.875 | 0.309 | 0.550 | 2.313 | 2.874 | X | | | | | | XXXX | 28102312 | - | 500 | B |
| 2.312 | 2.937 | 0.343 | 0.550 | 2.314 | 2.935 | X | | | | | | XXXX | 31202312 | - | 500 | B |
| 2.312 | 3.000 | 0.377 | 0.688 | 2.314 | 2.998 | X | | | | | | XXXX | 34302312 | - | 625 | B |
| 2.375 | 2.625 | 0.138 | 0.275 | 2.376 | 2.624 | X | X | X | | | | XXXX | 12502375 | - | 250 | B |
| 2.375 | 2.750 | 0.206 | 0.275 | 2.376 | 2.749 | | | | X | | | XXXX | 18702375 | - | 250 | B |
| 2.375 | 2.750 | 0.206 | 0.293 | 2.376 | 2.749 | X | X | | | X | | XXXX | 18702375 | - | 266 | B |
| 2.375 | 2.750 | 0.206 | 0.343 | 2.376 | 2.749 | | | | X | | | XXXX | 18702375 | - | 312 | B |
| 2.375 | 2.750 | 0.206 | 0.413 | 2.376 | 2.749 | | | X | | X | X | XXXX | 18702375 | - | 375 | B |
| 2.375 | 2.875 | 0.275 | 0.275 | 2.376 | 2.874 | X | X | | | X | | XXXX | 25002375 | - | 250 | B |
| 2.375 | 2.875 | 0.275 | 0.413 | 2.376 | 2.874 | | | | X | X | X | XXXX | 25002375 | - | 375 | B |
| 2.375 | 3.000 | 0.343 | 0.550 | 2.377 | 2.998 | X | X | X | X | X | | XXXX | 31202375 | - | 500 | B |
| 2.375 | 3.125 | 0.413 | 0.688 | 2.377 | 3.123 | X | X | | | X | X | XXXX | 37502375 | - | 625 | B |
| 2.375 | 3.375 | 0.550 | 0.825 | 2.377 | 3.373 | X | | | | | | XXXX | 50002375 | - | 750 | B |
| 2.437 | 3.187 | 0.413 | 0.688 | 2.439 | 3.185 | X | | | | | | XXXX | 37502437 | - | 625 | B |
| 2.500 | 2.750 | 0.138 | 0.275 | 2.501 | 2.749 | X | | X | X | X | | XXXX | 12502500 | - | 250 | B |
| 2.500 | 2.875 | 0.206 | 0.275 | 2.501 | 2.874 | X | X | | X | X | X | XXXX | 18702500 | - | 250 | B |
| 2.500 | 2.875 | 0.206 | 0.413 | 2.501 | 2.874 | | | X | X | X | X | XXXX | 18702500 | - | 375 | B |
| 2.500 | 2.937 | 0.240 | 0.240 | 2.501 | 2.936 | X | X | | | | X | XXXX | 21802500 | - | 218 | B |
| 2.500 | 2.937 | 0.240 | 0.320 | 2.501 | 2.936 | | | | | | X | XXXX | 21802500 | - | 291 | B |
| 2.500 | 2.937 | 0.240 | 0.413 | 2.501 | 2.936 | | | | | | X | XXXX | 21802500 | - | 375 | B |
| 2.500 | 3.000 | 0.275 | 0.275 | 2.501 | 2.999 | X | X | | | X | | XXXX | 25002500 | - | 250 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

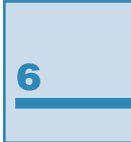


Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|----------|---------------|-----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energi-zer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 2.500 | 3.000 | 0.275 | 0.413 | 2.501 | 2.999 | | | X | X | X | X | XXXX | 25002500 | - | 375 | B |
| 2.500 | 3.125 | 0.343 | 0.550 | 2.502 | 3.123 | X | X | X | | | X | XXXX | 31202500 | - | 500 | B |
| 2.500 | 3.188 | 0.377 | 0.688 | 2.502 | 3.186 | X | | | | | | XXXX | 34302500 | - | 625 | B |
| 2.500 | 3.250 | 0.413 | 0.688 | 2.502 | 3.248 | X | X | X | X | X | X | XXXX | 37502500 | - | 625 | B |
| 2.500 | 3.375 | 0.481 | 0.688 | 2.502 | 3.373 | X | | | | | X | XXXX | 43702500 | - | 625 | B |
| 2.500 | 3.500 | 0.550 | 0.825 | 2.502 | 3.498 | X | X | X | | | X | XXXX | 50002500 | - | 750 | B |
| 2.500 | 3.750 | 0.688 | 1.100 | 2.503 | 3.747 | X | | | | | | XXXX | 62502500 | - | 1000 | B |
| 2.562 | 3.000 | 0.240 | 0.413 | 2.563 | 2.999 | X | X | | | | | XXXX | 21802562 | - | 375 | B |
| 2.562 | 3.062 | 0.275 | 0.413 | 2.563 | 3.061 | | | | | | X | XXXX | 25002562 | - | 375 | B |
| 2.562 | 3.125 | 0.309 | 0.550 | 2.563 | 3.124 | X | | | | | | XXXX | 28102562 | - | 500 | B |
| 2.562 | 3.187 | 0.343 | 0.550 | 2.564 | 3.185 | X | | | | | | XXXX | 31202562 | - | 500 | B |
| 2.625 | 2.875 | 0.138 | 0.275 | 2.626 | 2.874 | X | | | | | | XXXX | 12502625 | - | 250 | B |
| 2.625 | 3.000 | 0.206 | 0.309 | 2.626 | 2.999 | X | X | | | | X | XXXX | 18702625 | - | 281 | B |
| 2.625 | 3.000 | 0.206 | 0.275 | 2.626 | 2.999 | | | | | | X | XXXX | 18702625 | - | 250 | B |
| 2.625 | 3.000 | 0.206 | 0.343 | 2.626 | 2.999 | | | | | | X | XXXX | 18702625 | - | 312 | B |
| 2.625 | 3.000 | 0.206 | 0.413 | 2.626 | 2.999 | | | X | X | X | | XXXX | 18702625 | - | 375 | B |
| 2.625 | 3.125 | 0.275 | 0.413 | 2.626 | 3.124 | X | X | X | X | X | X | XXXX | 25002625 | - | 375 | B |
| 2.625 | 3.250 | 0.343 | 0.550 | 2.627 | 3.248 | X | X | X | X | X | X | XXXX | 31202625 | - | 500 | B |
| 2.625 | 3.375 | 0.413 | 0.688 | 2.627 | 3.373 | X | X | | X | X | X | XXXX | 37502625 | - | 625 | B |
| 2.687 | 3.375 | 0.377 | 0.688 | 2.689 | 3.373 | X | | | | | | XXXX | 34302687 | - | 625 | B |
| 2.687 | 3.437 | 0.413 | 0.688 | 2.689 | 3.435 | X | | | | | | XXXX | 37502687 | - | 625 | B |
| 2.750 | 3.000 | 0.138 | 0.275 | 2.751 | 2.999 | X | X | | | | X | XXXX | 12502750 | - | 250 | B |
| 2.750 | 3.125 | 0.206 | 0.206 | 2.751 | 3.124 | X | X | | | | X | XXXX | 18702750 | - | 187 | B |
| 2.750 | 3.125 | 0.206 | 0.309 | 2.751 | 3.124 | | | | | | X | XXXX | 18702750 | - | 281 | B |
| 2.750 | 3.125 | 0.206 | 0.413 | 2.751 | 3.124 | | | X | X | X | X | XXXX | 18702750 | - | 375 | B |
| 2.750 | 3.250 | 0.275 | 0.413 | 2.751 | 3.249 | X | X | X | X | X | X | XXXX | 25002750 | - | 375 | B |
| 2.750 | 3.375 | 0.343 | 0.550 | 2.752 | 3.373 | X | X | | | | X | XXXX | 31202750 | - | 500 | B |
| 2.750 | 3.500 | 0.413 | 0.688 | 2.752 | 3.498 | X | X | X | X | X | X | XXXX | 37502750 | - | 625 | B |
| 2.750 | 3.750 | 0.550 | 0.825 | 2.752 | 3.748 | X | | | | | | XXXX | 50002750 | - | 750 | B |
| 2.750 | 4.000 | 0.688 | 1.100 | 2.753 | 3.997 | X | | X | | | X | XXXX | 62502750 | - | 1000 | B |
| 2.812 | 3.250 | 0.240 | 0.413 | 2.813 | 3.249 | X | X | | | | | XXXX | 21802812 | - | 375 | B |
| 2.812 | 4.062 | 0.688 | 1.100 | 2.815 | 4.059 | X | | | | | | XXXX | 62502812 | - | 1000 | B |
| 2.875 | 3.125 | 0.138 | 0.275 | 2.876 | 3.124 | X | | | | | | XXXX | 12502875 | - | 250 | B |
| 2.875 | 3.250 | 0.206 | 0.206 | 2.876 | 3.249 | X | X | | | | X | XXXX | 18702875 | - | 187 | B |
| 2.875 | 3.250 | 0.206 | 0.275 | 2.876 | 3.249 | | | | | | X | XXXX | 18702875 | - | 250 | B |
| 2.875 | 3.250 | 0.206 | 0.309 | 2.876 | 3.249 | | | | | | X | XXXX | 18702875 | - | 281 | B |
| 2.875 | 3.250 | 0.206 | 0.413 | 2.876 | 3.249 | | | | | | X | XXXX | 18702875 | - | 375 | B |
| 2.875 | 3.375 | 0.275 | 0.413 | 2.876 | 3.374 | X | X | | | | X | XXXX | 25002875 | - | 375 | B |
| 2.875 | 3.500 | 0.343 | 0.550 | 2.877 | 3.498 | X | X | | | | X | XXXX | 31202875 | - | 500 | B |
| 2.875 | 3.625 | 0.413 | 0.688 | 2.877 | 3.623 | X | X | | | | X | XXXX | 37502875 | - | 625 | B |
| 2.875 | 3.750 | 0.481 | 0.688 | 2.877 | 3.748 | X | | | | | | XXXX | 43702875 | - | 625 | B |
| 2.875 | 3.875 | 0.550 | 0.825 | 2.877 | 3.873 | X | | | | | | XXXX | 50002875 | - | 750 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 2.875 | 4.000 | 0.618 | 0.963 | 2.877 | 3.998 | | | X | | | | XXXX | 56202875 | - | 875 | B |
| 2.875 | 4.125 | 0.688 | 1.100 | 2.878 | 4.122 | | | | | X | | XXXX | 62502875 | - | 1000 | B |
| 3.000 | 3.250 | 0.138 | 0.275 | 3.001 | 3.249 | X | | X | | | | XXXX | 12503000 | - | 250 | B |
| 3.000 | 3.375 | 0.206 | 0.275 | 3.001 | 3.374 | X | X | | | X | | XXXX | 18703000 | - | 250 | B |
| 3.000 | 3.375 | 0.206 | 0.413 | 3.001 | 3.374 | | | X | X | X | X | XXXX | 18703000 | - | 375 | B |
| 3.000 | 3.437 | 0.240 | 0.240 | 3.001 | 3.436 | X | X | | | | | XXXX | 21803000 | - | 218 | B |
| 3.000 | 3.437 | 0.240 | 0.320 | 3.001 | 3.436 | | | | | | X | XXXX | 21803000 | - | 291 | B |
| 3.000 | 3.437 | 0.240 | 0.343 | 3.001 | 3.436 | | | | | | X | XXXX | 21803000 | - | 312 | B |
| 3.000 | 3.500 | 0.275 | 0.275 | 3.001 | 3.499 | X | X | | | X | | XXXX | 25003000 | - | 250 | B |
| 3.000 | 3.500 | 0.275 | 0.413 | 3.001 | 3.499 | | | X | X | X | X | XXXX | 25003000 | - | 375 | B |
| 3.000 | 3.625 | 0.343 | 0.550 | 3.002 | 3.623 | X | X | X | X | X | X | XXXX | 31203000 | - | 500 | B |
| 3.000 | 3.750 | 0.413 | 0.550 | 3.002 | 3.748 | X | X | | | X | X | XXXX | 37503000 | - | 500 | B |
| 3.000 | 3.750 | 0.413 | 0.688 | 3.002 | 3.748 | X | | X | X | X | X | XXXX | 37503000 | - | 625 | B |
| 3.000 | 3.875 | 0.481 | 0.756 | 3.002 | 3.873 | X | | X | | | | XXXX | 43703000 | - | 687 | B |
| 3.000 | 4.000 | 0.550 | 0.825 | 3.002 | 3.998 | X | | X | | X | X | XXXX | 50003000 | - | 750 | B |
| 3.000 | 4.250 | 0.688 | 1.100 | 3.003 | 4.247 | X | | | | | | XXXX | 62503000 | - | 1000 | B |
| 3.062 | 3.500 | 0.240 | 0.413 | 3.063 | 3.499 | X | | | | | | XXXX | 21803062 | - | 375 | B |
| 3.125 | 3.500 | 0.206 | 0.206 | 3.126 | 3.499 | X | X | | | X | | XXXX | 18703125 | - | 187 | B |
| 3.125 | 3.500 | 0.206 | 0.343 | 3.126 | 3.499 | | | | | X | | XXXX | 18703125 | - | 312 | B |
| 3.125 | 3.500 | 0.206 | 0.413 | 3.126 | 3.499 | | | X | X | X | X | XXXX | 18703125 | - | 375 | B |
| 3.125 | 3.625 | 0.275 | 0.413 | 3.126 | 3.624 | X | X | X | | X | X | XXXX | 25003125 | - | 375 | B |
| 3.125 | 3.750 | 0.343 | 0.413 | 3.127 | 3.748 | X | X | | | | X | XXXX | 31203125 | - | 375 | B |
| 3.125 | 3.750 | 0.343 | 0.550 | 3.127 | 3.748 | | | | X | | X | XXXX | 31203125 | - | 500 | B |
| 3.125 | 3.875 | 0.413 | 0.688 | 3.127 | 3.873 | X | | | | X | | XXXX | 37503125 | - | 625 | B |
| 3.125 | 4.000 | 0.481 | 0.688 | 3.127 | 3.998 | X | | | | | | XXXX | 43703125 | - | 625 | B |
| 3.250 | 3.500 | 0.138 | 0.275 | 3.251 | 3.499 | X | | | | | | XXXX | 12503250 | - | 250 | B |
| 3.250 | 3.625 | 0.206 | 0.275 | 3.251 | 3.624 | | | | X | | | XXXX | 18703250 | - | 250 | B |
| 3.250 | 3.625 | 0.206 | 0.413 | 3.251 | 3.624 | X | X | X | | X | X | XXXX | 18703250 | - | 375 | B |
| 3.250 | 3.750 | 0.275 | 0.275 | 3.251 | 3.749 | X | X | | | X | | XXXX | 25003250 | - | 250 | B |
| 3.250 | 3.750 | 0.275 | 0.413 | 3.251 | 3.749 | | | X | X | X | X | XXXX | 25003250 | - | 375 | B |
| 3.250 | 3.875 | 0.343 | 0.550 | 3.252 | 3.873 | X | X | X | X | X | X | XXXX | 31203250 | - | 500 | B |
| 3.250 | 4.000 | 0.413 | 0.550 | 3.252 | 3.998 | X | X | | | | X | XXXX | 37503250 | - | 500 | B |
| 3.250 | 4.000 | 0.413 | 0.688 | 3.252 | 3.998 | | | X | X | X | X | XXXX | 37503250 | - | 625 | B |
| 3.250 | 4.125 | 0.481 | 0.688 | 3.252 | 4.123 | X | | | | | | XXXX | 43703250 | - | 625 | B |
| 3.250 | 4.250 | 0.550 | 0.825 | 3.252 | 4.248 | X | | | | X | | XXXX | 50003250 | - | 750 | B |
| 3.250 | 4.500 | 0.688 | 1.100 | 3.253 | 4.497 | X | | | | X | | XXXX | 62503250 | - | 1000 | B |
| 3.375 | 3.750 | 0.206 | 0.206 | 3.376 | 3.749 | X | | | | X | | XXXX | 18703375 | - | 187 | B |
| 3.375 | 3.750 | 0.206 | 0.275 | 3.376 | 3.749 | | X | | | X | | XXXX | 18703375 | - | 250 | B |
| 3.375 | 3.750 | 0.206 | 0.413 | 3.376 | 3.749 | | | X | | X | X | XXXX | 18703375 | - | 375 | B |
| 3.375 | 3.875 | 0.275 | 0.413 | 3.376 | 3.874 | X | X | X | X | X | X | XXXX | 25003375 | - | 375 | B |
| 3.375 | 4.000 | 0.343 | 0.343 | 3.377 | 3.998 | X | X | | | X | | XXXX | 31203375 | - | 312 | B |
| 3.375 | 4.000 | 0.343 | 0.550 | 3.377 | 3.998 | | | X | X | X | X | XXXX | 31203375 | - | 500 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

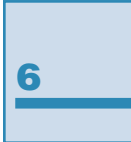


Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|--|--------|---------|--------|--------|---|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | | | |
| 3.375 | 4.125 | 0.413 | 0.688 | 3.377 | 4.123 | X | | | | X | | XXXX | 37503375 | - | 625 | B |
| 3.375 | 4.375 | 0.550 | 0.688 | 3.377 | 4.373 | | | | | X | | XXXX | 50003375 | - | 625 | B |
| 3.375 | 4.625 | 0.688 | 1.100 | 3.378 | 4.622 | X | | | | | | XXXX | 62503375 | - | 1000 | B |
| 3.437 | 3.875 | 0.240 | 0.413 | 3.438 | 3.874 | X | | | | | | XXXX | 21803437 | - | 375 | B |
| 3.500 | 3.750 | 0.138 | 0.275 | 3.501 | 3.749 | X | | | | | | XXXX | 12503500 | - | 250 | B |
| 3.500 | 3.875 | 0.206 | 0.293 | 3.501 | 3.874 | X | X | | | X | | XXXX | 18703500 | - | 266 | B |
| 3.500 | 3.875 | 0.206 | 0.309 | 3.501 | 3.874 | | | | | X | | XXXX | 18703500 | - | 281 | B |
| 3.500 | 3.875 | 0.206 | 0.413 | 3.501 | 3.874 | | | X | X | X | X | XXXX | 18703500 | - | 375 | B |
| 3.500 | 4.000 | 0.275 | 0.275 | 3.501 | 3.999 | X | X | | | | X | XXXX | 25003500 | - | 250 | B |
| 3.500 | 4.000 | 0.275 | 0.362 | 3.501 | 3.999 | | | | | | X | XXXX | 25003500 | - | 329 | B |
| 3.500 | 4.000 | 0.275 | 0.413 | 3.501 | 3.999 | | | X | X | X | X | XXXX | 25003500 | - | 375 | B |
| 3.500 | 4.125 | 0.343 | 0.550 | 3.502 | 4.123 | X | X | X | | X | X | XXXX | 31203500 | - | 500 | B |
| 3.500 | 4.250 | 0.413 | 0.688 | 3.502 | 4.248 | X | X | X | X | X | X | XXXX | 37503500 | - | 625 | B |
| 3.500 | 4.500 | 0.550 | 0.825 | 3.502 | 4.498 | X | X | X | | X | X | XXXX | 50003500 | - | 750 | B |
| 3.500 | 4.750 | 0.688 | 1.100 | 3.503 | 4.747 | X | | | | | | XXXX | 62503500 | - | 1000 | B |
| 3.500 | 5.000 | 0.825 | 1.375 | 3.503 | 4.997 | X | | | | | | XXXX | 75003500 | - | 1250 | B |
| 3.625 | 3.875 | 0.138 | 0.206 | 3.626 | 3.874 | | | | | X | | XXXX | 12503625 | - | 187 | B |
| 3.625 | 4.000 | 0.206 | 0.413 | 3.626 | 3.999 | X | X | X | | X | X | XXXX | 18703625 | - | 375 | B |
| 3.625 | 4.125 | 0.275 | 0.413 | 3.626 | 4.124 | X | X | X | X | X | | XXXX | 25003625 | - | 375 | B |
| 3.625 | 4.250 | 0.343 | 0.550 | 3.627 | 4.248 | X | X | | X | X | X | XXXX | 31203625 | - | 500 | B |
| 3.625 | 4.375 | 0.413 | 0.688 | 3.627 | 4.373 | X | | | | X | X | XXXX | 37503625 | - | 625 | B |
| 3.625 | 4.500 | 0.481 | 0.688 | 3.627 | 4.498 | X | | | | | | XXXX | 43703625 | - | 625 | B |
| 3.625 | 4.625 | 0.550 | 0.825 | 3.627 | 4.623 | | | X | | | | XXXX | 50003625 | - | 750 | B |
| 3.687 | 4.250 | 0.309 | 0.413 | 3.688 | 4.249 | | | X | | | | XXXX | 28103687 | - | 375 | B |
| 3.750 | 4.125 | 0.206 | 0.275 | 3.751 | 4.124 | | | | X | | | XXXX | 18703750 | - | 250 | B |
| 3.750 | 4.125 | 0.206 | 0.413 | 3.751 | 4.124 | X | X | X | | X | X | XXXX | 18703750 | - | 375 | B |
| 3.750 | 4.250 | 0.275 | 0.413 | 3.751 | 4.249 | X | X | X | X | X | X | XXXX | 25003750 | - | 375 | B |
| 3.750 | 4.250 | 0.275 | 0.618 | 3.751 | 4.249 | | | | | X | | XXXX | 25003750 | - | 562 | B |
| 3.750 | 4.375 | 0.343 | 0.413 | 3.752 | 4.373 | X | X | | | X | | XXXX | 31203750 | - | 375 | B |
| 3.750 | 4.375 | 0.343 | 0.550 | 3.752 | 4.373 | | | | | X | X | XXXX | 31203750 | - | 500 | B |
| 3.750 | 4.375 | 0.343 | 0.688 | 3.752 | 4.373 | | | | | X | | XXXX | 31203750 | - | 625 | B |
| 3.750 | 4.500 | 0.413 | 0.550 | 3.752 | 4.498 | | | | X | | | XXXX | 37503750 | - | 500 | B |
| 3.750 | 4.500 | 0.413 | 0.688 | 3.752 | 4.498 | X | X | X | X | X | X | XXXX | 37503750 | - | 625 | B |
| 3.750 | 4.750 | 0.550 | 0.759 | 3.752 | 4.748 | X | X | X | | X | | XXXX | 50003750 | - | 690 | B |
| 3.750 | 5.000 | 0.688 | 1.100 | 3.753 | 4.997 | X | X | | | X | | XXXX | 62503750 | - | 1000 | B |
| 3.875 | 4.250 | 0.206 | 0.413 | 3.876 | 4.249 | X | X | | | X | | XXXX | 18703875 | - | 375 | B |
| 3.875 | 4.375 | 0.275 | 0.413 | 3.876 | 4.374 | X | X | X | | | X | XXXX | 25003875 | - | 375 | B |
| 3.875 | 4.500 | 0.343 | 0.550 | 3.877 | 4.498 | X | X | X | | X | X | XXXX | 31203875 | - | 500 | B |
| 3.875 | 4.625 | 0.413 | 0.688 | 3.877 | 4.623 | X | X | | | X | X | XXXX | 37503875 | - | 625 | B |
| 3.875 | 4.750 | 0.481 | 0.825 | 3.877 | 4.748 | | | | | X | | XXXX | 43703875 | - | 750 | B |
| 3.875 | 4.875 | 0.550 | 0.825 | 3.877 | 4.873 | | | | | X | X | XXXX | 50003875 | - | 750 | B |
| 3.937 | 4.500 | 0.309 | 0.550 | 3.938 | 4.499 | | | | | X | | XXXX | 28103937 | - | 500 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 4.000 | 4.250 | 0.138 | 0.275 | 4.001 | 4.249 | X | | | | | | XXXX | 12504000 | - | 250 | B |
| 4.000 | 4.375 | 0.206 | 0.206 | 4.001 | 4.374 | X | X | | | X | | XXXX | 18704000 | - | 187 | B |
| 4.000 | 4.375 | 0.206 | 0.413 | 4.001 | 4.374 | | | X | | X | X | XXXX | 18704000 | - | 375 | B |
| 4.000 | 4.500 | 0.275 | 0.275 | 4.001 | 4.499 | X | X | | | | X | XXXX | 25004000 | - | 250 | B |
| 4.000 | 4.500 | 0.275 | 0.413 | 4.001 | 4.499 | | | X | X | X | X | XXXX | 25004000 | - | 375 | B |
| 4.000 | 4.500 | 0.275 | 0.618 | 4.001 | 4.499 | | | X | X | X | X | XXXX | 25004000 | - | 562 | B |
| 4.000 | 4.625 | 0.343 | 0.550 | 4.002 | 4.623 | | | X | | | | XXXX | 31204000 | - | 500 | B |
| 4.000 | 4.625 | 0.343 | 0.618 | 4.002 | 4.623 | X | X | X | | X | X | XXXX | 31204000 | - | 562 | B |
| 4.000 | 4.750 | 0.413 | 0.550 | 4.002 | 4.748 | X | X | | | | X | XXXX | 37504000 | - | 500 | B |
| 4.000 | 4.750 | 0.413 | 0.688 | 4.002 | 4.748 | | | X | X | X | X | XXXX | 37504000 | - | 625 | B |
| 4.000 | 4.875 | 0.481 | 0.688 | 4.002 | 4.873 | X | X | X | | X | | XXXX | 43704000 | - | 625 | B |
| 4.000 | 4.875 | 0.481 | 0.825 | 4.002 | 4.873 | | | | | | X | XXXX | 43704000 | - | 750 | B |
| 4.000 | 5.000 | 0.550 | 0.825 | 4.002 | 4.998 | X | X | X | | X | X | XXXX | 50004000 | - | 750 | B |
| 4.000 | 5.250 | 0.688 | 1.100 | 4.003 | 5.247 | X | | | | | | XXXX | 62504000 | - | 1000 | B |
| 4.000 | 5.500 | 0.825 | 1.375 | 4.003 | 5.497 | X | | | | | | XXXX | 75004000 | - | 1250 | B |
| 4.062 | 4.562 | 0.275 | 0.413 | 4.063 | 4.561 | | | | | X | | XXXX | 25004062 | - | 375 | B |
| 4.125 | 4.500 | 0.206 | 0.413 | 4.126 | 4.499 | X | X | X | X | X | X | XXXX | 18704125 | - | 375 | B |
| 4.125 | 4.625 | 0.275 | 0.618 | 4.126 | 4.624 | X | X | | | X | X | XXXX | 25004125 | - | 562 | B |
| 4.125 | 4.750 | 0.343 | 0.618 | 4.127 | 4.748 | X | | X | X | X | | XXXX | 31204125 | - | 562 | B |
| 4.125 | 4.875 | 0.413 | 0.688 | 4.127 | 4.873 | X | | | | X | X | XXXX | 37504125 | - | 625 | B |
| 4.125 | 5.125 | 0.550 | 0.825 | 4.127 | 5.123 | X | | | | X | | XXXX | 50004125 | - | 750 | B |
| 4.125 | 5.250 | 0.618 | 0.963 | 4.127 | 5.248 | X | | | | | | XXXX | 56204125 | - | 875 | B |
| 4.250 | 4.500 | 0.138 | 0.275 | 4.251 | 4.499 | X | | | | | | XXXX | 12504250 | - | 250 | B |
| 4.250 | 4.625 | 0.206 | 0.275 | 4.251 | 4.624 | | | | X | | | XXXX | 18704250 | - | 250 | B |
| 4.250 | 4.625 | 0.206 | 0.309 | 4.251 | 4.624 | X | X | | | X | | XXXX | 18704250 | - | 281 | B |
| 4.250 | 4.625 | 0.206 | 0.413 | 4.251 | 4.624 | | | X | X | X | | XXXX | 18704250 | - | 375 | B |
| 4.250 | 4.750 | 0.275 | 0.413 | 4.251 | 4.749 | X | X | | X | X | X | XXXX | 25004250 | - | 375 | B |
| 4.250 | 4.750 | 0.275 | 0.618 | 4.251 | 4.749 | | | X | X | X | X | XXXX | 25004250 | - | 562 | B |
| 4.250 | 4.875 | 0.343 | 0.618 | 4.252 | 4.873 | X | X | X | | X | X | XXXX | 31204250 | - | 562 | B |
| 4.250 | 5.000 | 0.413 | 0.413 | 4.252 | 4.998 | X | X | | | X | | XXXX | 37504250 | - | 375 | B |
| 4.250 | 5.000 | 0.413 | 0.550 | 4.252 | 4.998 | | | X | X | | | XXXX | 37504250 | - | 500 | B |
| 4.250 | 5.000 | 0.413 | 0.688 | 4.252 | 4.998 | | | X | X | X | X | XXXX | 37504250 | - | 625 | B |
| 4.250 | 5.250 | 0.550 | 0.825 | 4.252 | 5.248 | X | | | | X | | XXXX | 50004250 | - | 750 | B |
| 4.250 | 5.500 | 0.688 | 1.100 | 4.253 | 5.497 | X | | | | X | | XXXX | 62504250 | - | 1000 | B |
| 4.250 | 5.750 | 0.825 | 1.375 | 4.253 | 5.747 | X | | | | | | XXXX | 75004250 | - | 1250 | B |
| 4.312 | 5.312 | 0.550 | 0.825 | 4.314 | 5.310 | X | | | | | | XXXX | 50004312 | - | 750 | B |
| 4.375 | 4.625 | 0.138 | 0.275 | 4.376 | 4.624 | X | | | | | | XXXX | 12504375 | - | 250 | B |
| 4.375 | 4.750 | 0.206 | 0.413 | 4.376 | 4.749 | X | | X | | X | | XXXX | 18704375 | - | 375 | B |
| 4.375 | 4.875 | 0.275 | 0.618 | 4.376 | 4.874 | X | X | X | X | | X | XXXX | 25004375 | - | 562 | B |
| 4.375 | 5.000 | 0.343 | 0.343 | 4.377 | 4.998 | X | X | | | X | | XXXX | 31204375 | - | 312 | B |
| 4.375 | 5.000 | 0.343 | 0.550 | 4.377 | 4.998 | | | X | X | | | XXXX | 31204375 | - | 500 | B |
| 4.375 | 5.000 | 0.343 | 0.618 | 4.377 | 4.998 | | | X | | X | | XXXX | 31204375 | - | 562 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Standard, Deep and Type B PolyPak® Profile

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|--|--------|---------|--------|---------------|----------------|---------------|----------------|--|--|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | Compound Code | Energizer Code | | | | | Add to the part number for Type B or Deep only |
| 4.375 | 5.125 | 0.413 | 0.688 | 4.377 | 5.123 | X | X | X | | X | X | XXXX | 37504375 | - | 625 | B |
| 4.375 | 5.375 | 0.550 | 0.688 | 4.377 | 5.373 | X | | | | X | | XXXX | 50004375 | - | 625 | B |
| 4.375 | 5.375 | 0.550 | 0.825 | 4.377 | 5.373 | | | X | | X | | XXXX | 50004375 | - | 750 | B |
| 4.397 | 5.147 | 0.413 | 0.688 | 4.399 | 5.145 | | | | | X | | XXXX | 37504397 | - | 625 | B |
| 4.416 | 4.916 | 0.275 | 0.618 | 4.417 | 4.915 | | | | | X | | XXXX | 25004416 | - | 562 | B |
| 4.437 | 4.937 | 0.275 | 0.413 | 4.438 | 4.936 | | | | | X | | XXXX | 25004437 | - | 375 | B |
| 4.437 | 5.000 | 0.309 | 0.550 | 4.438 | 4.999 | X | | | | | | XXXX | 28104437 | - | 500 | B |
| 4.500 | 4.750 | 0.138 | 0.206 | 4.501 | 4.749 | X | | | | X | | XXXX | 12504500 | - | 187 | B |
| 4.500 | 4.875 | 0.206 | 0.206 | 4.501 | 4.874 | X | | | | X | | XXXX | 18704500 | - | 187 | B |
| 4.500 | 4.875 | 0.206 | 0.413 | 4.501 | 4.874 | | | X | | X | X | XXXX | 18704500 | - | 375 | B |
| 4.500 | 5.000 | 0.275 | 0.275 | 4.501 | 4.999 | X | X | | | X | X | XXXX | 25004500 | - | 250 | B |
| 4.500 | 5.000 | 0.275 | 0.413 | 4.501 | 4.999 | | | | X | X | X | XXXX | 25004500 | - | 375 | B |
| 4.500 | 5.000 | 0.275 | 0.550 | 4.501 | 4.999 | | | | | X | X | XXXX | 25004500 | - | 500 | B |
| 4.500 | 5.000 | 0.275 | 0.618 | 4.501 | 4.999 | | | X | X | X | X | XXXX | 25004500 | - | 562 | B |
| 4.500 | 5.125 | 0.343 | 0.618 | 4.502 | 5.123 | X | X | | | X | | XXXX | 31204500 | - | 562 | B |
| 4.500 | 5.125 | 0.343 | 0.688 | 4.502 | 5.123 | | | | X | X | | XXXX | 31204500 | - | 625 | B |
| 4.500 | 5.250 | 0.413 | 0.688 | 4.502 | 5.248 | X | X | X | X | X | X | XXXX | 37504500 | - | 625 | B |
| 4.500 | 5.375 | 0.481 | 0.825 | 4.502 | 5.373 | X | | | | X | X | XXXX | 43704500 | - | 750 | B |
| 4.500 | 5.500 | 0.550 | 0.825 | 4.502 | 5.498 | X | X | X | | X | X | XXXX | 50004500 | - | 750 | B |
| 4.500 | 5.750 | 0.688 | 1.100 | 4.503 | 5.747 | X | | | | | | XXXX | 62504500 | - | 1000 | B |
| 4.500 | 6.000 | 0.825 | 1.375 | 4.503 | 5.997 | X | | | | | | XXXX | 75004500 | - | 1250 | B |
| 4.625 | 5.000 | 0.206 | 0.413 | 4.626 | 4.999 | X | | X | | | | XXXX | 18704625 | - | 375 | B |
| 4.625 | 5.125 | 0.275 | 0.618 | 4.626 | 5.124 | X | X | | | X | X | XXXX | 25004625 | - | 562 | B |
| 4.625 | 5.250 | 0.343 | 0.688 | 4.627 | 5.248 | | | X | X | X | | XXXX | 31204625 | - | 625 | B |
| 4.625 | 5.375 | 0.413 | 0.688 | 4.627 | 5.373 | X | | | | X | X | XXXX | 37504625 | - | 625 | B |
| 4.625 | 5.875 | 0.688 | 1.100 | 4.628 | 5.872 | X | | | | | | XXXX | 62504625 | - | 1000 | B |
| 4.687 | 5.250 | 0.309 | 0.688 | 4.688 | 5.249 | | | | | X | | XXXX | 28104687 | - | 625 | B |
| 4.750 | 5.000 | 0.138 | 0.275 | 4.751 | 4.999 | X | | | | | | XXXX | 12504750 | - | 250 | B |
| 4.750 | 5.125 | 0.206 | 0.413 | 4.751 | 5.124 | X | | | | | | XXXX | 18704750 | - | 375 | B |
| 4.750 | 5.250 | 0.275 | 0.413 | 4.751 | 5.249 | X | X | | | X | | XXXX | 25004750 | - | 375 | B |
| 4.750 | 5.250 | 0.275 | 0.618 | 4.751 | 5.249 | | | X | X | X | X | XXXX | 25004750 | - | 562 | B |
| 4.750 | 5.375 | 0.343 | 0.688 | 4.752 | 5.373 | X | | | X | X | | XXXX | 31204750 | - | 625 | B |
| 4.750 | 5.500 | 0.413 | 0.550 | 4.752 | 5.498 | | | X | | | | XXXX | 37504750 | - | 500 | B |
| 4.750 | 5.500 | 0.413 | 0.688 | 4.752 | 5.498 | X | X | X | X | X | X | XXXX | 37504750 | - | 625 | B |
| 4.750 | 5.625 | 0.481 | 0.688 | 4.752 | 5.623 | | | X | X | | | XXXX | 43704750 | - | 625 | B |
| 4.750 | 5.625 | 0.481 | 0.825 | 4.752 | 5.623 | X | X | | | X | | XXXX | 43704750 | - | 750 | B |
| 4.750 | 5.750 | 0.550 | 0.756 | 4.752 | 5.748 | | | X | | | | XXXX | 50004750 | - | 687 | B |
| 4.750 | 5.750 | 0.550 | 0.825 | 4.752 | 5.748 | X | | | | X | | XXXX | 50004750 | - | 750 | B |
| 4.750 | 6.000 | 0.688 | 1.100 | 4.753 | 5.997 | X | | X | | | | XXXX | 62504750 | - | 1000 | B |
| 4.750 | 6.250 | 0.825 | 1.375 | 4.753 | 6.247 | | | X | | | | XXXX | 75004750 | - | 1250 | B |
| 4.875 | 5.250 | 0.206 | 0.413 | 4.876 | 5.249 | X | | | | | | XXXX | 18704875 | - | 375 | B |
| 4.875 | 5.250 | 0.206 | 0.618 | 4.876 | 5.249 | | | X | | | | XXXX | 18704875 | - | 562 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 4.875 | 5.375 | 0.275 | 0.413 | 4.876 | 5.374 | X | X | | | X | X | XXXX | 25004875 | - | 375 | B |
| 4.875 | 5.375 | 0.275 | 0.618 | 4.876 | 5.374 | | | X | X | X | X | XXXX | 25004875 | - | 562 | B |
| 4.875 | 5.500 | 0.343 | 0.343 | 4.877 | 5.498 | X | | | | | | XXXX | 31204875 | - | 312 | B |
| 4.875 | 5.500 | 0.343 | 0.688 | 4.877 | 5.498 | | | | | | X | XXXX | 31204875 | - | 625 | B |
| 4.875 | 5.625 | 0.413 | 0.688 | 4.877 | 5.623 | X | | | | X | X | XXXX | 37504875 | - | 625 | B |
| 4.875 | 5.750 | 0.481 | 0.618 | 4.877 | 5.748 | | | | | X | | XXXX | 43704875 | - | 562 | B |
| 4.875 | 5.875 | 0.550 | 0.618 | 4.877 | 5.873 | | | X | | | | XXXX | 50004875 | - | 562 | B |
| 4.937 | 5.500 | 0.309 | 0.377 | 4.938 | 5.499 | | | | | X | | XXXX | 28104937 | - | 343 | B |
| 4.937 | 5.500 | 0.309 | 0.550 | 4.938 | 5.499 | | | | | X | | XXXX | 28104937 | - | 500 | B |
| 5.000 | 5.250 | 0.138 | 0.275 | 5.001 | 5.249 | X | | | | | | XXXX | 12505000 | - | 250 | B |
| 5.000 | 5.375 | 0.206 | 0.309 | 5.001 | 5.374 | | | | | X | | XXXX | 18705000 | - | 281 | B |
| 5.000 | 5.375 | 0.206 | 0.413 | 5.001 | 5.374 | | | X | | | X | XXXX | 18705000 | - | 375 | B |
| 5.000 | 5.500 | 0.275 | 0.413 | 5.001 | 5.499 | X | X | X | X | X | X | XXXX | 25005000 | - | 375 | B |
| 5.000 | 5.500 | 0.275 | 0.618 | 5.001 | 5.499 | | | X | X | X | X | XXXX | 25005000 | - | 562 | B |
| 5.000 | 5.562 | 0.309 | 0.381 | 5.001 | 5.561 | X | X | | | | X | XXXX | 28105000 | - | 346 | B |
| 5.000 | 5.625 | 0.343 | 0.688 | 5.002 | 5.623 | X | X | | | X | X | XXXX | 31205000 | - | 625 | B |
| 5.000 | 5.750 | 0.413 | 0.413 | 5.002 | 5.748 | X | X | | | | X | XXXX | 37505000 | - | 375 | B |
| 5.000 | 5.750 | 0.413 | 0.550 | 5.002 | 5.748 | | | | | X | | XXXX | 37505000 | - | 500 | B |
| 5.000 | 5.750 | 0.413 | 0.688 | 5.002 | 5.748 | X | | X | X | X | X | XXXX | 37505000 | - | 625 | B |
| 5.000 | 5.875 | 0.481 | 0.825 | 5.002 | 5.873 | | | | | X | X | XXXX | 43705000 | - | 750 | B |
| 5.000 | 6.000 | 0.550 | 0.825 | 5.002 | 5.998 | X | X | | X | X | X | XXXX | 50005000 | - | 750 | B |
| 5.000 | 6.250 | 0.688 | 1.100 | 5.003 | 6.247 | X | | | | X | | XXXX | 62505000 | - | 1000 | B |
| 5.000 | 6.500 | 0.825 | 1.375 | 5.003 | 6.497 | X | | | | | | XXXX | 75005000 | - | 1250 | B |
| 5.000 | 7.000 | 1.100 | 1.650 | 5.004 | 6.996 | | | X | | | | XXXX | 100005000 | - | 1500 | B |
| 5.125 | 5.625 | 0.275 | 0.618 | 5.126 | 5.624 | X | X | | X | | | XXXX | 25005125 | - | 562 | B |
| 5.125 | 5.750 | 0.343 | 0.688 | 5.127 | 5.748 | X | X | X | | X | | XXXX | 31205125 | - | 625 | B |
| 5.125 | 5.875 | 0.413 | 0.688 | 5.127 | 5.873 | X | | | | X | | XXXX | 37505125 | - | 625 | B |
| 5.125 | 6.000 | 0.481 | 0.550 | 5.127 | 5.998 | X | | X | | | | XXXX | 43705125 | - | 500 | B |
| 5.125 | 6.125 | 0.550 | 0.825 | 5.127 | 6.123 | X | | X | | | | XXXX | 50005125 | - | 750 | B |
| 5.250 | 5.625 | 0.206 | 0.413 | 5.251 | 5.624 | X | | | | | | XXXX | 18705250 | - | 375 | B |
| 5.250 | 5.750 | 0.275 | 0.413 | 5.251 | 5.749 | X | X | X | | X | | XXXX | 25005250 | - | 375 | B |
| 5.250 | 5.750 | 0.275 | 0.618 | 5.251 | 5.749 | | | X | X | X | | XXXX | 25005250 | - | 562 | B |
| 5.250 | 5.875 | 0.343 | 0.550 | 5.252 | 5.873 | X | X | | | | X | XXXX | 31205250 | - | 500 | B |
| 5.250 | 5.875 | 0.343 | 0.688 | 5.252 | 5.873 | | | | | X | | XXXX | 31205250 | - | 625 | B |
| 5.250 | 6.000 | 0.413 | 0.413 | 5.252 | 5.998 | X | X | | | X | | XXXX | 37505250 | - | 375 | B |
| 5.250 | 6.000 | 0.413 | 0.550 | 5.252 | 5.998 | | | X | | X | | XXXX | 37505250 | - | 500 | B |
| 5.250 | 6.000 | 0.413 | 0.688 | 5.252 | 5.998 | | | X | X | X | X | XXXX | 37505250 | - | 625 | B |
| 5.250 | 6.250 | 0.550 | 0.550 | 5.252 | 6.248 | X | | | | X | | XXXX | 50005250 | - | 500 | B |
| 5.250 | 6.250 | 0.550 | 0.825 | 5.252 | 6.248 | | | | | X | | XXXX | 50005250 | - | 750 | B |
| 5.250 | 6.500 | 0.688 | 1.100 | 5.253 | 6.497 | | | | | X | | XXXX | 62505250 | - | 1000 | B |
| 5.375 | 5.875 | 0.275 | 0.413 | 5.376 | 5.874 | X | X | | | X | X | XXXX | 25005375 | - | 375 | B |
| 5.375 | 5.875 | 0.275 | 0.618 | 5.376 | 5.874 | | | | | X | | XXXX | 25005375 | - | 562 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

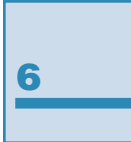


Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|--|--------|---------|--------|---------------|----------------|---------------|----------------|--|--|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | Compound Code | Energizer Code | | | | | Add to the part number for Type B or Deep only |
| 5.375 | 6.000 | 0.343 | 0.688 | 5.377 | 5.998 | X | X | X | | | X | XXXX | 31205375 | - | 625 | B |
| 5.375 | 6.125 | 0.413 | 0.688 | 5.377 | 6.123 | X | | | | X | X | XXXX | 37505375 | - | 625 | B |
| 5.375 | 6.375 | 0.550 | 0.825 | 5.377 | 6.373 | X | | X | | | | XXXX | 50005375 | - | 750 | B |
| 5.437 | 6.000 | 0.309 | 0.550 | 5.438 | 5.999 | X | X | | | | | XXXX | 28105437 | - | 500 | B |
| 5.437 | 6.437 | 0.550 | 0.825 | 5.439 | 6.435 | X | | | | | | XXXX | 50005437 | - | 750 | B |
| 5.500 | 5.875 | 0.206 | 0.413 | 5.501 | 5.874 | | | | | X | | XXXX | 18705500 | - | 375 | B |
| 5.500 | 6.000 | 0.275 | 0.413 | 5.501 | 5.999 | X | X | X | X | X | X | XXXX | 25005500 | - | 375 | B |
| 5.500 | 6.000 | 0.275 | 0.618 | 5.501 | 5.999 | | | X | | X | X | XXXX | 25005500 | - | 562 | B |
| 5.500 | 6.125 | 0.343 | 0.343 | 5.502 | 6.123 | X | X | | | | X | XXXX | 31205500 | - | 312 | B |
| 5.500 | 6.125 | 0.343 | 0.413 | 5.502 | 6.123 | | | | | | X | XXXX | 31205500 | - | 374 | B |
| 5.500 | 6.125 | 0.343 | 0.550 | 5.502 | 6.123 | | | | | | X | XXXX | 31205500 | - | 500 | B |
| 5.500 | 6.125 | 0.343 | 0.688 | 5.502 | 6.123 | | | X | | X | | XXXX | 31205500 | - | 625 | B |
| 5.500 | 6.250 | 0.413 | 0.688 | 5.502 | 6.248 | X | X | X | X | X | X | XXXX | 37505500 | - | 625 | B |
| 5.500 | 6.375 | 0.481 | 0.825 | 5.502 | 6.373 | X | | | | | | XXXX | 43705500 | - | 750 | B |
| 5.500 | 6.500 | 0.550 | 0.825 | 5.502 | 6.498 | X | X | X | X | X | X | XXXX | 50005500 | - | 750 | B |
| 5.500 | 6.625 | 0.618 | 0.963 | 5.502 | 6.623 | X | | | | | | XXXX | 56205500 | - | 875 | B |
| 5.500 | 6.750 | 0.688 | 1.100 | 5.503 | 6.747 | X | | X | | X | | XXXX | 62505500 | - | 1000 | B |
| 5.500 | 7.000 | 0.825 | 1.375 | 5.503 | 6.997 | X | | | | | | XXXX | 75005500 | - | 1250 | B |
| 5.625 | 6.125 | 0.275 | 0.618 | 5.626 | 6.124 | X | X | | | X | X | XXXX | 25005625 | - | 562 | B |
| 5.625 | 6.250 | 0.343 | 0.688 | 5.627 | 6.248 | | | | X | X | | XXXX | 31205625 | - | 625 | B |
| 5.625 | 6.375 | 0.413 | 0.688 | 5.627 | 6.373 | X | X | X | | X | X | XXXX | 37505625 | - | 625 | B |
| 5.687 | 6.062 | 0.206 | 0.413 | 5.688 | 6.061 | X | | | | | | XXXX | 18705687 | - | 375 | B |
| 5.750 | 6.000 | 0.138 | 0.275 | 5.751 | 5.999 | X | | | | | | XXXX | 12505750 | - | 250 | B |
| 5.750 | 6.250 | 0.275 | 0.413 | 5.751 | 6.249 | X | X | | | | X | XXXX | 25005750 | - | 375 | B |
| 5.750 | 6.250 | 0.275 | 0.618 | 5.751 | 6.249 | | | X | X | X | X | XXXX | 25005750 | - | 562 | B |
| 5.750 | 6.375 | 0.343 | 0.688 | 5.752 | 6.373 | | | | | X | | XXXX | 31205750 | - | 625 | B |
| 5.750 | 6.500 | 0.413 | 0.550 | 5.752 | 6.498 | | | X | | | | XXXX | 37505750 | - | 500 | B |
| 5.750 | 6.500 | 0.413 | 0.688 | 5.752 | 6.498 | X | | X | | X | X | XXXX | 37505750 | - | 625 | B |
| 5.750 | 6.750 | 0.550 | 0.825 | 5.752 | 6.748 | X | | | | X | X | XXXX | 50005750 | - | 750 | B |
| 5.750 | 7.000 | 0.688 | 1.100 | 5.753 | 6.997 | X | X | | | | | XXXX | 62505750 | - | 1000 | B |
| 5.812 | 6.312 | 0.275 | 0.413 | 5.813 | 6.311 | | | | X | | | XXXX | 25005812 | - | 375 | B |
| 5.875 | 6.250 | 0.206 | 0.413 | 5.876 | 6.249 | X | | | | | | XXXX | 18705875 | - | 375 | B |
| 5.875 | 6.375 | 0.275 | 0.413 | 5.876 | 6.374 | X | | | | | X | XXXX | 25005875 | - | 375 | B |
| 5.875 | 6.375 | 0.275 | 0.618 | 5.876 | 6.374 | | | X | | | | XXXX | 25005875 | - | 562 | B |
| 5.875 | 6.500 | 0.343 | 0.343 | 5.877 | 6.498 | X | | | | | X | XXXX | 31205875 | - | 312 | B |
| 5.875 | 6.500 | 0.343 | 0.688 | 5.877 | 6.498 | | | | | | X | XXXX | 31205875 | - | 625 | B |
| 5.875 | 6.625 | 0.413 | 0.688 | 5.877 | 6.623 | X | X | | | X | | XXXX | 37505875 | - | 625 | B |
| 5.937 | 6.500 | 0.309 | 0.550 | 5.938 | 6.499 | | | | | X | | XXXX | 28105937 | - | 500 | B |
| 6.000 | 6.375 | 0.206 | 0.413 | 6.001 | 6.374 | X | | X | | | | XXXX | 18706000 | - | 375 | B |
| 6.000 | 6.500 | 0.275 | 0.413 | 6.001 | 6.499 | X | X | | | X | X | XXXX | 25006000 | - | 375 | B |
| 6.000 | 6.500 | 0.275 | 0.481 | 6.001 | 6.499 | | | | | X | | XXXX | 25006000 | - | 437 | B |
| 6.000 | 6.500 | 0.275 | 0.618 | 6.001 | 6.499 | | | X | X | X | X | XXXX | 25006000 | - | 562 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

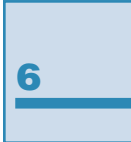
**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|---------|---------|---------|--------|---|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | | |
| 6.000 | 6.625 | 0.343 | 0.688 | 6.002 | 6.623 | X | | | | X | | XXXX | 31206000 | - | 625 | B |
| 6.000 | 6.750 | 0.413 | 0.550 | 6.002 | 6.748 | X | X | | | X | | XXXX | 37506000 | - | 500 | B |
| 6.000 | 6.750 | 0.413 | 0.688 | 6.002 | 6.748 | | | X | X | X | X | XXXX | 37506000 | - | 625 | B |
| 6.000 | 7.000 | 0.550 | 0.825 | 6.002 | 6.998 | | X | X | X | X | X | XXXX | 50006000 | - | 750 | B |
| 6.000 | 7.250 | 0.688 | 1.100 | 6.003 | 7.247 | X | | | | | X | XXXX | 62506000 | - | 1000 | B |
| 6.000 | 7.500 | 0.825 | 1.375 | 6.003 | 7.497 | X | | | | | | XXXX | 75006000 | - | 1250 | B |
| 6.000 | 8.000 | 1.100 | 1.650 | 6.004 | 7.996 | X | | | | | | XXXX | 100006000 | - | 1500 | B |
| 6.125 | 6.625 | 0.275 | 0.413 | 6.126 | 6.624 | X | | | | | | XXXX | 25006125 | - | 375 | B |
| 6.125 | 6.750 | 0.343 | 0.688 | 6.127 | 6.748 | X | | | | | X | XXXX | 31206125 | - | 625 | B |
| 6.250 | 6.750 | 0.275 | 0.413 | 6.251 | 6.749 | X | X | | | | X | XXXX | 25006250 | - | 375 | B |
| 6.250 | 6.750 | 0.275 | 0.618 | 6.251 | 6.749 | | | X | | X | X | XXXX | 25006250 | - | 562 | B |
| 6.250 | 7.000 | 0.413 | 0.550 | 6.252 | 6.998 | X | X | X | | X | | XXXX | 37506250 | - | 500 | B |
| 6.250 | 7.000 | 0.413 | 0.688 | 6.252 | 6.998 | | | X | X | X | X | XXXX | 37506250 | - | 625 | B |
| 6.250 | 7.250 | 0.550 | 0.825 | 6.252 | 7.248 | X | X | | | | X | XXXX | 50006250 | - | 750 | B |
| 6.250 | 7.500 | 0.688 | 1.100 | 6.253 | 7.497 | X | | | | | | XXXX | 62506250 | - | 1000 | B |
| 6.250 | 7.750 | 0.825 | 1.375 | 6.253 | 7.747 | | | X | | | | XXXX | 75006250 | - | 1250 | B |
| 6.312 | 6.687 | 0.206 | 0.413 | 6.313 | 6.686 | X | | | | | | XXXX | 18706312 | - | 375 | B |
| 6.375 | 7.000 | 0.343 | 0.688 | 6.377 | 6.998 | X | X | X | | X | X | XXXX | 31206375 | - | 625 | B |
| 6.375 | 7.375 | 0.550 | 0.825 | 6.377 | 7.373 | X | | | | | | XXXX | 50006375 | - | 750 | B |
| 6.437 | 7.000 | 0.309 | 0.550 | 6.438 | 6.999 | X | X | | | | | XXXX | 28106437 | - | 500 | B |
| 6.500 | 7.000 | 0.275 | 0.413 | 6.501 | 6.999 | X | X | X | X | X | | XXXX | 25006500 | - | 375 | B |
| 6.500 | 7.000 | 0.275 | 0.618 | 6.501 | 6.999 | | | X | X | X | X | XXXX | 25006500 | - | 562 | B |
| 6.500 | 7.125 | 0.343 | 0.688 | 6.502 | 7.123 | X | | | | X | | XXXX | 31206500 | - | 625 | B |
| 6.500 | 7.250 | 0.413 | 0.413 | 6.502 | 7.248 | X | X | | | | X | XXXX | 37506500 | - | 375 | B |
| 6.500 | 7.250 | 0.413 | 0.550 | 6.502 | 7.248 | | | X | | X | | XXXX | 37506500 | - | 500 | B |
| 6.500 | 7.250 | 0.413 | 0.688 | 6.502 | 7.248 | | | X | | X | X | XXXX | 37506500 | - | 625 | B |
| 6.500 | 7.500 | 0.550 | 0.825 | 6.502 | 7.498 | X | | X | X | X | | XXXX | 50006500 | - | 750 | B |
| 6.500 | 7.750 | 0.688 | 1.100 | 6.503 | 7.747 | X | | X | | | | XXXX | 62506500 | - | 1000 | B |
| 6.500 | 8.000 | 0.825 | 1.375 | 6.503 | 7.997 | X | | X | | | | XXXX | 75006500 | - | 1250 | B |
| 6.625 | 7.125 | 0.275 | 0.413 | 6.626 | 7.124 | | | X | X | | | XXXX | 25006625 | - | 375 | B |
| 6.625 | 7.250 | 0.343 | 0.688 | 6.627 | 7.248 | X | | | | X | | XXXX | 31206625 | - | 625 | B |
| 6.625 | 7.875 | 0.688 | 1.100 | 6.628 | 7.872 | X | | | | | | XXXX | 62506625 | - | 1000 | B |
| 6.750 | 7.250 | 0.275 | 0.413 | 6.751 | 7.249 | X | X | | | X | X | XXXX | 25006750 | - | 375 | B |
| 6.750 | 7.250 | 0.275 | 0.618 | 6.751 | 7.249 | | | X | | X | X | XXXX | 25006750 | - | 562 | B |
| 6.750 | 7.375 | 0.343 | 0.688 | 6.752 | 7.373 | X | | | | X | | XXXX | 31206750 | - | 625 | B |
| 6.750 | 7.500 | 0.413 | 0.413 | 6.752 | 7.498 | X | X | | | X | | XXXX | 37506750 | - | 375 | B |
| 6.750 | 7.500 | 0.413 | 0.550 | 6.752 | 7.498 | | | | | X | | XXXX | 37506750 | - | 500 | B |
| 6.750 | 7.500 | 0.413 | 0.618 | 6.752 | 7.498 | | | X | | | | XXXX | 37506750 | - | 562 | B |
| 6.750 | 7.500 | 0.413 | 0.688 | 6.752 | 7.498 | | | X | | X | X | XXXX | 37506750 | - | 625 | B |
| 6.750 | 7.750 | 0.550 | 0.825 | 6.752 | 7.748 | X | | | X | X | | XXXX | 50006750 | - | 750 | B |
| 6.750 | 7.875 | 0.618 | 0.963 | 6.752 | 7.873 | X | | | | | | XXXX | 56206750 | - | 875 | B |
| 6.750 | 8.000 | 0.688 | 1.100 | 6.753 | 7.997 | X | | X | | X | | XXXX | 62506750 | - | 1000 | B |



†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Standard, Deep and Type B PolyPak® Profile

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|-----------|---------------|----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 6.875 | 7.625 | 0.413 | 0.688 | 6.877 | 7.623 | | | | | X | | XXXX | 37506875 | - | 625 | B |
| 6.875 | 8.125 | 0.688 | 1.100 | 6.878 | 8.122 | X | | | | | | XXXX | 62506875 | - | 1000 | B |
| 6.937 | 7.500 | 0.309 | 0.550 | 6.938 | 7.499 | | | | | X | | XXXX | 28106937 | - | 500 | B |
| 7.000 | 7.375 | 0.206 | 0.413 | 7.001 | 7.374 | | | | | X | | XXXX | 18707000 | - | 375 | B |
| 7.000 | 7.500 | 0.275 | 0.413 | 7.001 | 7.499 | X | X | X | | X | X | XXXX | 25007000 | - | 375 | B |
| 7.000 | 7.500 | 0.275 | 0.618 | 7.001 | 7.499 | | | X | X | X | X | XXXX | 25007000 | - | 562 | B |
| 7.000 | 7.625 | 0.343 | 0.688 | 7.002 | 7.623 | X | | | | X | | XXXX | 31207000 | - | 625 | B |
| 7.000 | 7.750 | 0.413 | 0.550 | 7.002 | 7.748 | X | X | | | X | | XXXX | 37507000 | - | 500 | B |
| 7.000 | 7.750 | 0.413 | 0.688 | 7.002 | 7.748 | | | X | | X | X | XXXX | 37507000 | - | 625 | B |
| 7.000 | 8.000 | 0.550 | 0.825 | 7.002 | 7.998 | X | X | X | X | X | X | XXXX | 50007000 | - | 750 | B |
| 7.000 | 8.250 | 0.688 | 1.100 | 7.003 | 8.247 | X | | | | X | | XXXX | 62507000 | - | 1000 | B |
| 7.000 | 8.500 | 0.825 | 1.375 | 7.003 | 8.497 | X | X | X | | | | XXXX | 75007000 | - | 1250 | B |
| 7.000 | 9.000 | 1.100 | 1.650 | 7.004 | 8.996 | X | | | | | | XXXX | 100007000 | - | 1500 | B |
| 7.125 | 7.625 | 0.275 | 0.413 | 7.126 | 7.624 | X | | | X | | | XXXX | 25007125 | - | 375 | B |
| 7.187 | 8.000 | 0.447 | 0.688 | 7.189 | 7.998 | X | | | | | | XXXX | 40607187 | - | 625 | B |
| 7.250 | 7.750 | 0.275 | 0.618 | 7.251 | 7.749 | X | X | | | X | X | XXXX | 25007250 | - | 562 | B |
| 7.250 | 7.875 | 0.343 | 0.688 | 7.252 | 7.873 | X | | | | X | | XXXX | 31207250 | - | 625 | B |
| 7.250 | 8.000 | 0.413 | 0.688 | 7.252 | 7.998 | X | X | X | X | X | X | XXXX | 37507250 | - | 625 | B |
| 7.250 | 8.250 | 0.550 | 0.825 | 7.252 | 8.248 | | | | X | X | X | XXXX | 50007250 | - | 750 | B |
| 7.250 | 8.500 | 0.688 | 1.100 | 7.253 | 8.497 | | | | | X | | XXXX | 62507250 | - | 1000 | B |
| 7.375 | 7.750 | 0.206 | 0.413 | 7.376 | 7.749 | | X | | | | | XXXX | 18707375 | - | 375 | B |
| 7.375 | 8.000 | 0.343 | 0.688 | 7.377 | 7.998 | X | X | | | | | XXXX | 31207375 | - | 625 | B |
| 7.375 | 8.125 | 0.413 | 0.550 | 7.377 | 8.123 | | | | | X | | XXXX | 37507375 | - | 500 | B |
| 7.404 | 8.028 | 0.343 | 0.688 | 7.406 | 8.026 | | | | | X | | XXXX | 31207404 | - | 625 | B |
| 7.500 | 7.875 | 0.206 | 0.275 | 7.501 | 7.874 | | | X | | | | XXXX | 18707500 | - | 250 | B |
| 7.500 | 8.000 | 0.275 | 0.618 | 7.501 | 7.999 | X | X | X | X | X | X | XXXX | 25007500 | - | 562 | B |
| 7.500 | 8.125 | 0.343 | 0.688 | 7.502 | 8.123 | X | | X | | | | XXXX | 31207500 | - | 625 | B |
| 7.500 | 8.250 | 0.413 | 0.550 | 7.502 | 8.248 | X | X | X | | X | | XXXX | 37507500 | - | 500 | B |
| 7.500 | 8.250 | 0.413 | 0.688 | 7.502 | 8.248 | X | | X | X | X | X | XXXX | 37507500 | - | 625 | B |
| 7.500 | 8.500 | 0.550 | 0.825 | 7.502 | 8.498 | X | | X | | X | | XXXX | 50007500 | - | 750 | B |
| 7.500 | 8.750 | 0.688 | 1.100 | 7.503 | 8.747 | | | | | X | | XXXX | 62507500 | - | 1000 | B |
| 7.500 | 9.000 | 0.825 | 1.375 | 7.503 | 8.997 | X | | X | | | | XXXX | 75007500 | - | 1250 | B |
| 7.500 | 9.500 | 1.100 | 1.650 | 7.504 | 9.496 | X | | | | | | XXXX | 100007500 | - | 1500 | B |
| 7.625 | 8.250 | 0.343 | 0.550 | 7.627 | 8.248 | | | X | | | | XXXX | 31207625 | - | 500 | B |
| 7.625 | 8.375 | 0.413 | 0.688 | 7.627 | 8.373 | X | | | | | | XXXX | 37507625 | - | 625 | B |
| 7.750 | 8.250 | 0.275 | 0.618 | 7.751 | 8.249 | X | X | X | | X | | XXXX | 25007750 | - | 562 | B |
| 7.750 | 8.375 | 0.343 | 0.688 | 7.752 | 8.373 | X | | | | | | XXXX | 31207750 | - | 625 | B |
| 7.750 | 8.500 | 0.413 | 0.550 | 7.752 | 8.498 | X | X | X | | X | | XXXX | 37507750 | - | 500 | B |
| 7.750 | 8.500 | 0.413 | 0.688 | 7.752 | 8.498 | | | X | X | X | X | XXXX | 37507750 | - | 625 | B |
| 7.750 | 8.750 | 0.550 | 0.825 | 7.752 | 8.748 | X | | | | X | | XXXX | 50007750 | - | 750 | B |
| 7.750 | 9.000 | 0.688 | 1.100 | 7.753 | 8.997 | X | | | | X | | XXXX | 62507750 | - | 1000 | B |
| 7.790 | 8.540 | 0.413 | 0.413 | 7.792 | 8.538 | | | | | X | | XXXX | 37507790 | - | 375 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 7.875 | 8.500 | 0.343 | 0.688 | 7.877 | 8.498 | X | | | | X | | XXXX | 31207875 | - | 625 | B |
| 7.875 | 8.625 | 0.413 | 0.688 | 7.877 | 8.623 | | | | | | X | XXXX | 37507875 | - | 625 | B |
| 7.875 | 8.875 | 0.550 | 0.825 | 7.877 | 8.873 | | | | | X | | XXXX | 50007875 | - | 750 | B |
| 8.000 | 8.500 | 0.275 | 0.618 | 8.001 | 8.499 | X | X | | | X | X | XXXX | 25008000 | - | 562 | B |
| 8.000 | 8.625 | 0.343 | 0.688 | 8.002 | 8.623 | X | X | | | X | | XXXX | 31208000 | - | 625 | B |
| 8.000 | 8.750 | 0.413 | 0.550 | 8.002 | 8.748 | | | X | | | | XXXX | 37508000 | - | 500 | B |
| 8.000 | 8.750 | 0.413 | 0.688 | 8.002 | 8.748 | X | X | X | | X | X | XXXX | 37508000 | - | 625 | B |
| 8.000 | 9.000 | 0.550 | 0.825 | 8.002 | 8.998 | X | | X | X | X | X | XXXX | 50008000 | - | 750 | B |
| 8.000 | 9.250 | 0.688 | 1.100 | 8.003 | 9.247 | X | | X | | | | XXXX | 62508000 | - | 1000 | B |
| 8.000 | 9.500 | 0.825 | 1.238 | 8.003 | 9.497 | X | | | | X | | XXXX | 75008000 | - | 1125 | B |
| 8.000 | 9.500 | 0.825 | 1.375 | 8.003 | 9.497 | | | | | X | | XXXX | 75008000 | - | 1250 | B |
| 8.000 | 10.000 | 1.100 | 1.650 | 8.004 | 9.996 | X | | | | | | XXXX | 100008000 | - | 1500 | B |
| 8.125 | 8.625 | 0.275 | 0.618 | 8.126 | 8.624 | | | | | X | | XXXX | 25008125 | - | 562 | B |
| 8.187 | 9.437 | 0.688 | 1.100 | 8.190 | 9.434 | X | | | | | | XXXX | 62508187 | - | 1000 | B |
| 8.250 | 8.750 | 0.275 | 0.413 | 8.251 | 8.749 | X | X | | | X | | XXXX | 25008250 | - | 375 | B |
| 8.250 | 8.750 | 0.275 | 0.618 | 8.251 | 8.749 | | | | | X | X | XXXX | 25008250 | - | 562 | B |
| 8.250 | 9.000 | 0.413 | 0.688 | 8.252 | 8.998 | X | X | X | X | X | X | XXXX | 37508250 | - | 625 | B |
| 8.250 | 9.250 | 0.550 | 0.825 | 8.252 | 9.248 | X | | X | | X | | XXXX | 50008250 | - | 750 | B |
| 8.250 | 9.500 | 0.688 | 1.100 | 8.253 | 9.497 | X | | | | X | | XXXX | 62508250 | - | 1000 | B |
| 8.250 | 9.750 | 0.825 | 1.375 | 8.253 | 9.747 | X | | | | | | XXXX | 75008250 | - | 1250 | B |
| 8.375 | 9.000 | 0.343 | 0.688 | 8.377 | 8.998 | X | | X | | | | XXXX | 31208375 | - | 625 | B |
| 8.375 | 9.875 | 0.825 | 1.375 | 8.378 | 9.872 | X | | | | | | XXXX | 75008375 | - | 1250 | B |
| 8.500 | 9.000 | 0.275 | 0.618 | 8.501 | 8.999 | X | X | X | | X | X | XXXX | 25008500 | - | 562 | B |
| 8.500 | 9.125 | 0.343 | 0.688 | 8.502 | 9.123 | X | | | | | | XXXX | 31208500 | - | 625 | B |
| 8.500 | 9.250 | 0.413 | 0.688 | 8.502 | 9.248 | X | X | | | X | X | XXXX | 37508500 | - | 625 | B |
| 8.500 | 9.500 | 0.550 | 0.825 | 8.502 | 9.498 | X | X | X | | X | X | XXXX | 50008500 | - | 750 | B |
| 8.500 | 9.750 | 0.688 | 1.100 | 8.503 | 9.747 | X | | | | X | | XXXX | 62508500 | - | 1000 | B |
| 8.500 | 10.000 | 0.825 | 1.238 | 8.503 | 9.997 | X | X | | | X | | XXXX | 75008500 | - | 1125 | B |
| 8.500 | 10.000 | 0.825 | 1.375 | 8.503 | 9.997 | | | X | | | | XXXX | 75008500 | - | 1250 | B |
| 8.500 | 10.250 | 0.963 | 1.513 | 8.504 | 10.246 | X | | | | | | XXXX | 87508500 | - | 1375 | B |
| 8.625 | 9.375 | 0.413 | 0.688 | 8.627 | 9.373 | X | | | | | | XXXX | 37508625 | - | 625 | B |
| 8.625 | 9.875 | 0.688 | 1.100 | 8.628 | 9.872 | X | | | | | | XXXX | 62508625 | - | 1000 | B |
| 8.750 | 9.250 | 0.275 | 0.618 | 8.751 | 9.249 | X | X | X | | | | XXXX | 25008750 | - | 562 | B |
| 8.750 | 9.500 | 0.413 | 0.413 | 8.752 | 9.498 | X | X | | | | X | XXXX | 37508750 | - | 375 | B |
| 8.750 | 9.500 | 0.413 | 0.550 | 8.752 | 9.498 | X | | | | X | | XXXX | 37508750 | - | 500 | B |
| 8.750 | 9.500 | 0.413 | 0.688 | 8.752 | 9.498 | | | X | X | | | XXXX | 37508750 | - | 625 | B |
| 8.750 | 9.500 | 0.413 | 0.825 | 8.752 | 9.498 | | | X | | X | | XXXX | 37508750 | - | 750 | B |
| 8.750 | 9.750 | 0.550 | 0.825 | 8.752 | 9.748 | X | | X | | X | | XXXX | 50008750 | - | 750 | B |
| 8.750 | 10.000 | 0.688 | 1.100 | 8.753 | 9.997 | X | | X | | | | XXXX | 62508750 | - | 1000 | B |
| 8.795 | 9.545 | 0.413 | 0.413 | 8.797 | 9.543 | | | | | X | | XXXX | 37508795 | - | 375 | B |
| 8.875 | 9.500 | 0.343 | 0.688 | 8.877 | 9.498 | X | | | | | | XXXX | 31208875 | - | 625 | B |
| 8.875 | 9.625 | 0.413 | 0.688 | 8.877 | 9.623 | | | | | X | X | XXXX | 37508875 | - | 625 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

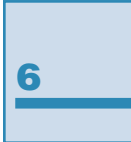


Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|-----------|---------------|----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 8.937 | 9.500 | 0.309 | 0.550 | 8.938 | 9.499 | | | | | X | | XXXX | 28108937 | - | 500 | B |
| 9.000 | 9.500 | 0.275 | 0.413 | 9.001 | 9.499 | X | X | X | | X | | XXXX | 25009000 | - | 375 | B |
| 9.000 | 9.625 | 0.343 | 0.550 | 9.002 | 9.623 | | | X | | | | XXXX | 31209000 | - | 500 | B |
| 9.000 | 9.750 | 0.413 | 0.688 | 9.002 | 9.748 | X | X | X | | X | X | XXXX | 37509000 | - | 625 | B |
| 9.000 | 10.000 | 0.550 | 0.825 | 9.002 | 9.998 | X | X | X | X | X | X | XXXX | 50009000 | - | 750 | B |
| 9.000 | 10.250 | 0.688 | 1.100 | 9.003 | 10.247 | X | | | | X | | XXXX | 62509000 | - | 1000 | B |
| 9.000 | 10.500 | 0.825 | 1.375 | 9.003 | 10.497 | X | | X | | | | XXXX | 75009000 | - | 1250 | B |
| 9.125 | 9.750 | 0.343 | 0.688 | 9.127 | 9.748 | | | | | X | | XXXX | 31209125 | - | 625 | B |
| 9.250 | 9.750 | 0.275 | 0.618 | 9.251 | 9.749 | X | X | X | | | | XXXX | 25009250 | - | 562 | B |
| 9.250 | 9.875 | 0.343 | 0.688 | 9.252 | 9.873 | | | | | X | | XXXX | 31209250 | - | 625 | B |
| 9.250 | 10.000 | 0.413 | 0.550 | 9.252 | 9.998 | | | X | | | | XXXX | 37509250 | - | 500 | B |
| 9.250 | 10.000 | 0.413 | 0.688 | 9.252 | 9.998 | X | X | X | X | X | | XXXX | 37509250 | - | 625 | B |
| 9.250 | 10.250 | 0.550 | 0.825 | 9.252 | 10.248 | | | | | X | | XXXX | 50009250 | - | 750 | B |
| 9.250 | 10.500 | 0.688 | 1.100 | 9.253 | 10.497 | X | | | | | | XXXX | 62509250 | - | 1000 | B |
| 9.312 | 10.000 | 0.377 | 0.688 | 9.314 | 9.998 | X | X | | | | | XXXX | 34309312 | - | 625 | B |
| 9.375 | 10.000 | 0.343 | 0.688 | 9.377 | 9.998 | | | | | X | | XXXX | 31209375 | - | 625 | B |
| 9.500 | 10.000 | 0.275 | 0.413 | 9.501 | 9.999 | | | X | | | | XXXX | 25009500 | - | 375 | B |
| 9.500 | 10.000 | 0.275 | 0.618 | 9.501 | 9.999 | | X | X | X | X | | XXXX | 25009500 | - | 562 | B |
| 9.500 | 10.125 | 0.343 | 0.688 | 9.502 | 10.123 | X | | | | | | XXXX | 31209500 | - | 625 | B |
| 9.500 | 10.250 | 0.413 | 0.688 | 9.502 | 10.248 | X | | | | X | X | XXXX | 37509500 | - | 625 | B |
| 9.500 | 10.500 | 0.550 | 0.825 | 9.502 | 10.498 | X | X | X | | X | | XXXX | 50009500 | - | 750 | B |
| 9.500 | 11.000 | 0.825 | 1.375 | 9.503 | 10.997 | X | | | | | | XXXX | 75009500 | - | 1250 | B |
| 9.500 | 11.500 | 1.100 | 1.650 | 9.504 | 11.496 | X | | | | | | XXXX | 100009500 | - | 1500 | B |
| 9.625 | 10.250 | 0.343 | 0.688 | 9.627 | 10.248 | X | | | | X | | XXXX | 31209625 | - | 625 | B |
| 9.625 | 10.375 | 0.413 | 0.688 | 9.627 | 10.373 | | | X | | | X | XXXX | 37509625 | - | 625 | B |
| 9.625 | 11.500 | 1.031 | 1.650 | 9.629 | 11.496 | | | X | | | | XXXX | 93709625 | - | 1500 | B |
| 9.750 | 10.250 | 0.275 | 0.413 | 9.751 | 10.249 | X | X | | | X | | XXXX | 25009750 | - | 375 | B |
| 9.750 | 10.250 | 0.275 | 0.618 | 9.751 | 10.249 | | | | | X | | XXXX | 25009750 | - | 562 | B |
| 9.750 | 10.375 | 0.343 | 0.688 | 9.752 | 10.373 | | | | | X | | XXXX | 31209750 | - | 625 | B |
| 9.750 | 10.500 | 0.413 | 0.688 | 9.752 | 10.498 | X | | X | | | | XXXX | 37509750 | - | 625 | B |
| 9.750 | 10.750 | 0.550 | 0.825 | 9.752 | 10.748 | X | | | | X | | XXXX | 50009750 | - | 750 | B |
| 9.750 | 11.250 | 0.825 | 1.375 | 9.753 | 11.247 | | | | | X | | XXXX | 75009750 | - | 1250 | B |
| 9.750 | 11.500 | 0.963 | 1.513 | 9.754 | 11.496 | X | | | | | | XXXX | 87509750 | - | 1375 | B |
| 9.812 | 11.312 | 0.825 | 1.375 | 9.815 | 11.309 | | | X | | | | XXXX | 75009812 | - | 1250 | B |
| 9.875 | 10.625 | 0.413 | 0.688 | 9.877 | 10.623 | X | | | | | X | XXXX | 37509875 | - | 625 | B |
| 9.875 | 10.875 | 0.550 | 0.825 | 9.877 | 10.873 | | | X | | | | XXXX | 50009875 | - | 750 | B |
| 10.000 | 10.500 | 0.275 | 0.618 | 10.001 | 10.499 | X | X | | | X | X | XXXX | 25010000 | - | 562 | B |
| 10.000 | 10.625 | 0.343 | 0.688 | 10.002 | 10.623 | X | | | | | | XXXX | 31210000 | - | 625 | B |
| 10.000 | 10.750 | 0.413 | 0.688 | 10.002 | 10.748 | X | X | | | X | X | XXXX | 37510000 | - | 625 | B |
| 10.000 | 11.000 | 0.550 | 0.825 | 10.002 | 10.998 | X | X | X | X | X | X | XXXX | 50010000 | - | 750 | B |
| 10.000 | 11.250 | 0.688 | 1.100 | 10.003 | 11.247 | X | | X | | | | XXXX | 62510000 | - | 1000 | B |
| 10.000 | 11.500 | 0.825 | 1.375 | 10.003 | 11.497 | X | | | | X | | XXXX | 75010000 | - | 1250 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

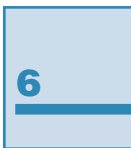
| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 10.000 | 12.000 | 1.100 | 1.650 | 10.004 | 11.996 | X | | | | | | XXXX | 100010000 | - | 1500 | B |
| 10.125 | 10.750 | 0.343 | 0.688 | 10.127 | 10.748 | X | | | | | | XXXX | 31210125 | - | 625 | B |
| 10.125 | 10.875 | 0.413 | 0.688 | 10.127 | 10.873 | | | | | | X | XXXX | 37510125 | - | 625 | B |
| 10.187 | 11.000 | 0.447 | 0.550 | 10.189 | 10.998 | | | X | | | | XXXX | 40610187 | - | 500 | B |
| 10.250 | 10.750 | 0.275 | 0.618 | 10.251 | 10.749 | X | X | | | X | X | XXXX | 25010250 | - | 562 | B |
| 10.250 | 11.000 | 0.413 | 0.550 | 10.252 | 10.998 | X | X | | | X | | XXXX | 37510250 | - | 500 | B |
| 10.250 | 11.000 | 0.413 | 0.688 | 10.252 | 10.998 | | | X | | | | XXXX | 37510250 | - | 625 | B |
| 10.250 | 11.000 | 0.413 | 0.825 | 10.252 | 10.998 | | | | | X | | XXXX | 37510250 | - | 750 | B |
| 10.250 | 11.250 | 0.550 | 0.825 | 10.252 | 11.248 | | | | | X | | XXXX | 50010250 | - | 750 | B |
| 10.250 | 11.500 | 0.688 | 1.100 | 10.253 | 11.497 | X | | | | | | XXXX | 62510250 | - | 1000 | B |
| 10.375 | 11.000 | 0.343 | 0.688 | 10.377 | 10.998 | | | | | X | | XXXX | 31210375 | - | 625 | B |
| 10.500 | 11.000 | 0.275 | 0.550 | 10.501 | 10.999 | | | X | | | | XXXX | 25010500 | - | 500 | B |
| 10.500 | 11.000 | 0.275 | 0.618 | 10.501 | 10.999 | X | | | | X | | XXXX | 25010500 | - | 562 | B |
| 10.500 | 11.125 | 0.343 | 0.550 | 10.502 | 11.123 | | | X | | | | XXXX | 31210500 | - | 500 | B |
| 10.500 | 11.250 | 0.413 | 0.413 | 10.502 | 11.248 | X | | | | X | | XXXX | 37510500 | - | 375 | B |
| 10.500 | 11.250 | 0.413 | 0.688 | 10.502 | 11.248 | | | X | | X | | XXXX | 37510500 | - | 625 | B |
| 10.500 | 11.500 | 0.550 | 0.825 | 10.502 | 11.498 | X | | X | | X | | XXXX | 50010500 | - | 750 | B |
| 10.500 | 11.750 | 0.688 | 0.825 | 10.503 | 11.747 | X | | | | X | | XXXX | 62510500 | - | 750 | B |
| 10.500 | 12.000 | 0.825 | 1.100 | 10.503 | 11.997 | X | X | | | X | | XXXX | 75010500 | - | 1000 | B |
| 10.500 | 12.000 | 0.825 | 1.375 | 10.503 | 11.997 | | | X | | | | XXXX | 75010500 | - | 1250 | B |
| 10.500 | 12.000 | 0.825 | 1.375 | 10.503 | 11.997 | X | | | | | | XXXX | 75010750 | - | 1250 | B |
| 10.625 | 11.625 | 0.550 | 0.688 | 10.627 | 11.623 | | | | X | | | XXXX | 50010625 | - | 625 | B |
| 10.625 | 11.625 | 0.550 | 0.825 | 10.627 | 11.623 | | | X | | | | XXXX | 50010625 | - | 750 | B |
| 10.750 | 11.250 | 0.275 | 0.413 | 10.751 | 11.249 | X | X | | | | | XXXX | 25010750 | - | 375 | B |
| 10.750 | 11.500 | 0.413 | 0.688 | 10.752 | 11.498 | X | X | X | | X | | XXXX | 37510750 | - | 625 | B |
| 10.750 | 11.750 | 0.550 | 0.825 | 10.752 | 11.748 | X | | X | | X | | XXXX | 50010750 | - | 750 | B |
| 11.000 | 11.500 | 0.275 | 0.618 | 11.001 | 11.499 | X | | | | X | | XXXX | 25011000 | - | 562 | B |
| 11.000 | 11.750 | 0.413 | 0.688 | 11.002 | 11.748 | X | | | | | | XXXX | 37511000 | - | 625 | B |
| 11.000 | 12.000 | 0.550 | 0.825 | 11.002 | 11.998 | X | X | X | | X | X | XXXX | 50011000 | - | 750 | B |
| 11.000 | 12.250 | 0.688 | 1.100 | 11.003 | 12.247 | X | | X | | X | | XXXX | 62511000 | - | 1000 | B |
| 11.000 | 12.500 | 0.825 | 1.375 | 11.003 | 12.497 | X | | X | | | | XXXX | 75011000 | - | 1250 | B |
| 11.125 | 11.750 | 0.343 | 0.688 | 11.127 | 11.748 | | | | | | X | XXXX | 31211125 | - | 625 | B |
| 11.250 | 11.750 | 0.275 | 0.413 | 11.251 | 11.749 | X | | | | X | | XXXX | 25011250 | - | 375 | B |
| 11.250 | 11.750 | 0.275 | 0.618 | 11.251 | 11.749 | | | | | X | | XXXX | 25011250 | - | 562 | B |
| 11.250 | 12.000 | 0.413 | 0.688 | 11.252 | 11.998 | X | X | X | X | X | | XXXX | 37511250 | - | 625 | B |
| 11.250 | 12.250 | 0.550 | 0.825 | 11.252 | 12.248 | X | | | | X | | XXXX | 50011250 | - | 750 | B |
| 11.250 | 12.500 | 0.688 | 1.100 | 11.253 | 12.497 | | | | | X | | XXXX | 62511250 | - | 1000 | B |
| 11.375 | 12.375 | 0.550 | 0.825 | 11.377 | 12.373 | X | | | | X | | XXXX | 50011375 | - | 750 | B |
| 11.500 | 12.000 | 0.275 | 0.618 | 11.501 | 11.999 | X | X | | | X | | XXXX | 25011500 | - | 562 | B |
| 11.500 | 12.250 | 0.413 | 0.688 | 11.502 | 12.248 | X | | X | | X | X | XXXX | 37511500 | - | 625 | B |
| 11.500 | 12.500 | 0.550 | 0.825 | 11.502 | 12.498 | X | | X | X | X | | XXXX | 50011500 | - | 750 | B |
| 11.500 | 12.750 | 0.688 | 1.100 | 11.503 | 12.747 | | | | | X | | XXXX | 62511500 | - | 1000 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Standard, Deep and Type B PolyPak® Profile

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|-----------|---------------|----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 11.500 | 13.000 | 0.825 | 1.375 | 11.503 | 12.997 | | | | | X | | XXXX | 75011500 | - | 1250 | B |
| 11.750 | 12.250 | 0.275 | 0.413 | 11.751 | 12.249 | X | | | | | | XXXX | 25011750 | - | 375 | B |
| 11.750 | 12.500 | 0.413 | 0.688 | 11.752 | 12.498 | X | | | | X | | XXXX | 37511750 | - | 625 | B |
| 11.750 | 12.500 | 0.413 | 0.825 | 11.752 | 12.498 | | | | | X | | XXXX | 37511750 | - | 750 | B |
| 11.750 | 12.750 | 0.550 | 0.825 | 11.752 | 12.748 | X | | | | X | | XXXX | 50011750 | - | 750 | B |
| 11.750 | 13.000 | 0.688 | 1.100 | 11.753 | 12.997 | | | | | X | | XXXX | 62511750 | - | 1000 | B |
| 11.875 | 12.875 | 0.550 | 0.825 | 11.877 | 12.873 | | | | | X | | XXXX | 50011875 | - | 750 | B |
| 12.000 | 12.500 | 0.275 | 0.413 | 12.001 | 12.499 | X | | | | | | XXXX | 25012000 | - | 375 | B |
| 12.000 | 12.625 | 0.343 | 0.688 | 12.002 | 12.623 | X | | | | | | XXXX | 31212000 | - | 625 | B |
| 12.000 | 12.750 | 0.413 | 0.688 | 12.002 | 12.748 | X | | | | X | | XXXX | 37512000 | - | 625 | B |
| 12.000 | 13.000 | 0.550 | 0.825 | 12.002 | 12.998 | X | | | | X | | XXXX | 50012000 | - | 750 | B |
| 12.000 | 13.250 | 0.688 | 1.100 | 12.003 | 13.247 | X | | X | | X | | XXXX | 62512000 | - | 1000 | B |
| 12.000 | 13.500 | 0.825 | 1.375 | 12.003 | 13.497 | X | | | | X | | XXXX | 75012000 | - | 1250 | B |
| 12.000 | 14.000 | 1.100 | 1.650 | 12.004 | 13.996 | X | | | | X | | XXXX | 100012000 | - | 1500 | B |
| 12.125 | 13.125 | 0.550 | 0.825 | 12.127 | 13.123 | | | | | X | | XXXX | 50012125 | - | 750 | B |
| 12.250 | 12.875 | 0.343 | 0.688 | 12.252 | 12.873 | | | | | X | | XXXX | 31212250 | - | 625 | B |
| 12.250 | 13.000 | 0.413 | 0.688 | 12.252 | 12.998 | X | | X | | X | X | XXXX | 37512250 | - | 625 | B |
| 12.250 | 13.250 | 0.550 | 0.825 | 12.252 | 13.248 | | | | | X | | XXXX | 50012250 | - | 750 | B |
| 12.250 | 13.500 | 0.688 | 1.100 | 12.253 | 13.497 | X | | | | X | | XXXX | 62512250 | - | 1000 | B |
| 12.250 | 13.875 | 0.893 | 1.238 | 12.253 | 13.872 | | | X | | | | XXXX | 81212250 | - | 1125 | B |
| 12.500 | 13.000 | 0.275 | 0.413 | 12.501 | 12.999 | X | | | | | | XXXX | 25012500 | - | 375 | B |
| 12.500 | 13.125 | 0.343 | 0.688 | 12.502 | 13.123 | | | | | X | | XXXX | 31212500 | - | 625 | B |
| 12.500 | 13.500 | 0.550 | 0.825 | 12.502 | 13.498 | | X | X | | X | X | XXXX | 50012500 | - | 750 | B |
| 12.500 | 13.750 | 0.688 | 1.100 | 12.503 | 13.747 | | | X | | | | XXXX | 62512500 | - | 1000 | B |
| 12.500 | 14.000 | 0.825 | 1.375 | 12.503 | 13.997 | X | X | | | X | | XXXX | 75012500 | - | 1250 | B |
| 12.500 | 14.500 | 1.100 | 1.650 | 12.504 | 14.496 | X | | | | | | XXXX | 100012500 | - | 1500 | B |
| 12.562 | 13.686 | 0.618 | 0.963 | 12.564 | 13.684 | | | | | X | | XXXX | 56212562 | - | 875 | B |
| 12.562 | 13.812 | 0.688 | 0.963 | 12.565 | 13.809 | X | | | | | | XXXX | 62501250 | - | 875 | B |
| 12.750 | 13.250 | 0.275 | 0.618 | 12.751 | 13.249 | X | | | | X | | XXXX | 25012750 | - | 562 | B |
| 12.750 | 13.375 | 0.343 | 0.688 | 12.752 | 13.373 | X | | | | | | XXXX | 31212750 | - | 625 | B |
| 12.750 | 13.500 | 0.413 | 0.688 | 12.752 | 13.498 | X | | | | X | X | XXXX | 37512750 | - | 625 | B |
| 12.750 | 13.750 | 0.550 | 0.825 | 12.752 | 13.748 | X | | | | | | XXXX | 50012750 | - | 750 | B |
| 12.750 | 14.000 | 0.688 | 1.100 | 12.753 | 13.997 | X | | X | X | | | XXXX | 62512750 | - | 1000 | B |
| 13.000 | 13.500 | 0.275 | 0.618 | 13.001 | 13.499 | | X | X | | X | | XXXX | 25013000 | - | 562 | B |
| 13.000 | 13.750 | 0.413 | 0.413 | 13.002 | 13.748 | X | X | | | X | | XXXX | 37513000 | - | 375 | B |
| 13.000 | 13.750 | 0.413 | 0.688 | 13.002 | 13.748 | | | | | X | | XXXX | 37513000 | - | 625 | B |
| 13.000 | 14.000 | 0.550 | 0.825 | 13.002 | 13.998 | X | X | X | X | X | | XXXX | 50013000 | - | 750 | B |
| 13.000 | 14.250 | 0.688 | 1.100 | 13.003 | 14.247 | X | | | | | | XXXX | 62513000 | - | 1000 | B |
| 13.000 | 14.500 | 0.825 | 1.100 | 13.003 | 14.497 | X | | | | X | | XXXX | 75013000 | - | 1000 | B |
| 13.187 | 14.000 | 0.447 | 0.688 | 13.189 | 13.998 | X | | | | | | XXXX | 40613187 | - | 625 | B |
| 13.250 | 14.000 | 0.413 | 0.618 | 13.252 | 13.998 | | | | X | | | XXXX | 37513250 | - | 562 | B |
| 13.250 | 14.000 | 0.413 | 0.688 | 13.252 | 13.998 | X | | | | X | X | XXXX | 37513250 | - | 625 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|--------|---|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | | | |
| 13.250 | 14.250 | 0.550 | 0.825 | 13.252 | 14.248 | | | X | | X | | XXXX | 50013250 | - | 750 | B |
| 13.375 | 14.000 | 0.343 | 0.688 | 13.377 | 13.998 | X | | | | | | XXXX | 31213375 | - | 625 | B |
| 13.500 | 14.000 | 0.275 | 0.618 | 13.501 | 13.999 | X | X | | | X | | XXXX | 25013500 | - | 562 | B |
| 13.500 | 14.250 | 0.413 | 0.688 | 13.502 | 14.248 | X | | X | | X | | XXXX | 37513500 | - | 625 | B |
| 13.500 | 14.500 | 0.550 | 0.825 | 13.502 | 14.498 | X | | X | | X | | XXXX | 50013500 | - | 750 | B |
| 13.500 | 14.750 | 0.688 | 0.963 | 13.503 | 14.747 | | | | | X | X | XXXX | 62513500 | - | 875 | B |
| 13.500 | 15.000 | 0.825 | 1.375 | 13.503 | 14.997 | X | | | | | | XXXX | 75013500 | - | 1250 | B |
| 13.750 | 14.500 | 0.413 | 0.688 | 13.752 | 14.498 | X | | | | X | | XXXX | 37513750 | - | 625 | B |
| 13.750 | 15.250 | 0.825 | 1.375 | 13.753 | 15.247 | X | | | | | | XXXX | 75013750 | - | 1250 | B |
| 14.000 | 14.500 | 0.275 | 0.413 | 14.001 | 14.499 | X | | X | | | | XXXX | 25014000 | - | 375 | B |
| 14.000 | 14.750 | 0.413 | 0.688 | 14.002 | 14.748 | X | | | | | | XXXX | 37514000 | - | 625 | B |
| 14.000 | 15.000 | 0.550 | 0.825 | 14.002 | 14.998 | | | X | | X | | XXXX | 50014000 | - | 750 | B |
| 14.000 | 15.250 | 0.688 | 1.100 | 14.003 | 15.247 | | | | | X | | XXXX | 62514000 | - | 1000 | B |
| 14.000 | 15.250 | 0.688 | 1.100 | 14.003 | 15.247 | X | | | | | | XXXX | 62514750 | - | 1000 | B |
| 14.000 | 15.500 | 0.825 | 1.375 | 14.003 | 15.497 | X | X | | | X | | XXXX | 75014000 | - | 1250 | B |
| 14.000 | 15.750 | 0.963 | 1.650 | 14.004 | 15.746 | | | X | | | | XXXX | 87514000 | - | 1500 | B |
| 14.000 | 16.000 | 1.100 | 1.650 | 14.004 | 15.996 | X | | | | X | | XXXX | 100014000 | - | 1500 | B |
| 14.125 | 14.625 | 0.275 | 0.413 | 14.126 | 14.624 | X | | | | | | XXXX | 25014125 | - | 375 | B |
| 14.250 | 14.750 | 0.275 | 0.413 | 14.251 | 14.749 | X | | | | | | XXXX | 25014250 | - | 375 | B |
| 14.250 | 15.000 | 0.413 | 0.688 | 14.252 | 14.998 | | | | | X | | XXXX | 37514250 | - | 625 | B |
| 14.250 | 15.250 | 0.550 | 0.825 | 14.252 | 15.248 | X | | | | | | XXXX | 50014250 | - | 750 | B |
| 14.250 | 15.750 | 0.825 | 1.375 | 14.253 | 15.747 | X | | | | | | XXXX | 75014250 | - | 1250 | B |
| 14.420 | 15.420 | 0.550 | 0.550 | 14.422 | 15.418 | | | | | X | | XXXX | 50014420 | - | 500 | B |
| 14.500 | 15.000 | 0.275 | 0.413 | 14.501 | 14.999 | X | | | | | | XXXX | 25014500 | - | 375 | B |
| 14.500 | 15.000 | 0.275 | 0.413 | 14.501 | 14.999 | | | X | X | | | XXXX | 25014500 | - | 375 | B |
| 14.500 | 15.250 | 0.413 | 0.688 | 14.502 | 15.248 | X | | | | | | XXXX | 37514500 | - | 625 | B |
| 14.500 | 15.500 | 0.550 | 0.825 | 14.502 | 15.498 | X | | | | | | XXXX | 50014500 | - | 750 | B |
| 14.500 | 16.000 | 0.825 | 1.375 | 14.503 | 15.997 | X | | X | | X | | XXXX | 75014500 | - | 1250 | B |
| 14.750 | 15.500 | 0.413 | 0.688 | 14.752 | 15.498 | X | | X | | X | | XXXX | 37514750 | - | 625 | B |
| 14.750 | 15.750 | 0.550 | 0.825 | 14.752 | 15.748 | | | | | X | | XXXX | 50014750 | - | 750 | B |
| 14.750 | 16.000 | 0.688 | 1.100 | 14.753 | 15.997 | X | | | | | | XXXX | 62515000 | - | 1000 | B |
| 14.750 | 16.250 | 0.825 | 1.375 | 14.753 | 16.247 | X | | | | | | XXXX | 75014750 | - | 1250 | B |
| 14.875 | 15.500 | 0.343 | 0.688 | 14.877 | 15.498 | X | | | | | | XXXX | 31214875 | - | 625 | B |
| 15.000 | 15.500 | 0.275 | 0.618 | 15.001 | 15.499 | | X | | | X | | XXXX | 25015000 | - | 562 | B |
| 15.000 | 15.750 | 0.413 | 0.688 | 15.002 | 15.748 | X | | | | | | XXXX | 37515000 | - | 625 | B |
| 15.000 | 16.000 | 0.550 | 0.825 | 15.002 | 15.998 | X | X | X | X | X | | XXXX | 50015000 | - | 750 | B |
| 15.000 | 16.500 | 0.825 | 1.375 | 15.003 | 16.497 | | | X | | | | XXXX | 75015000 | - | 1250 | B |
| 15.000 | 17.000 | 1.100 | 1.650 | 15.004 | 16.996 | | | | | X | | XXXX | 100015000 | - | 1500 | B |
| 15.250 | 16.000 | 0.413 | 0.688 | 15.252 | 15.998 | | | X | X | | | XXXX | 37515250 | - | 625 | B |
| 15.250 | 16.250 | 0.550 | 0.825 | 15.252 | 16.248 | | | | | X | | XXXX | 50015250 | - | 750 | B |
| 15.250 | 16.500 | 0.688 | 1.100 | 15.253 | 16.497 | | | | | X | | XXXX | 62515250 | - | 1000 | B |
| 15.375 | 16.000 | 0.343 | 0.688 | 15.377 | 15.998 | | | X | | | | XXXX | 31215375 | - | 625 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

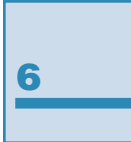


Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|-----------|---------------|----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 15.500 | 16.000 | 0.275 | 0.413 | 15.501 | 15.999 | X | | | | | | XXXX | 25015500 | - | 375 | B |
| 15.500 | 16.250 | 0.413 | 0.688 | 15.502 | 16.248 | X | | | | | | XXXX | 37515500 | - | 625 | B |
| 15.500 | 16.500 | 0.550 | 0.825 | 15.502 | 16.498 | X | | X | X | X | X | XXXX | 50015500 | - | 750 | B |
| 15.500 | 16.750 | 0.688 | 1.100 | 15.503 | 16.747 | | | | | X | X | XXXX | 62515500 | - | 1000 | B |
| 15.625 | 16.250 | 0.343 | 0.688 | 15.627 | 16.248 | | | | | X | | XXXX | 31215625 | - | 625 | B |
| 15.625 | 17.125 | 0.825 | 1.375 | 15.628 | 17.122 | | | | | X | | XXXX | 75015625 | - | 1250 | B |
| 15.750 | 16.250 | 0.275 | 0.618 | 15.751 | 16.249 | | | X | | | | XXXX | 25015750 | - | 562 | B |
| 15.750 | 16.500 | 0.413 | 0.688 | 15.752 | 16.498 | X | | | | | X | XXXX | 37515750 | - | 625 | B |
| 15.750 | 16.750 | 0.550 | 0.825 | 15.752 | 16.748 | X | | | | | | XXXX | 50015750 | - | 750 | B |
| 15.875 | 16.500 | 0.343 | 0.688 | 15.877 | 16.498 | X | | | | | | XXXX | 31215875 | - | 625 | B |
| 16.000 | 16.500 | 0.275 | 0.275 | 16.001 | 16.499 | | | X | | | | XXXX | 25016000 | - | 250 | B |
| 16.000 | 16.500 | 0.275 | 0.413 | 16.001 | 16.499 | | | X | | | | XXXX | 25016000 | - | 375 | B |
| 16.000 | 16.750 | 0.413 | 0.688 | 16.002 | 16.748 | X | | X | | | | XXXX | 37516000 | - | 625 | B |
| 16.000 | 17.000 | 0.550 | 0.825 | 16.002 | 16.998 | X | X | X | X | | | XXXX | 50016000 | - | 750 | B |
| 16.000 | 17.500 | 0.825 | 1.375 | 16.003 | 17.497 | X | X | | | | | XXXX | 75016000 | - | 1250 | B |
| 16.000 | 17.750 | 0.963 | 1.375 | 16.004 | 17.746 | | | X | | | | XXXX | 87516000 | - | 1250 | B |
| 16.000 | 17.750 | 0.963 | 1.513 | 16.004 | 17.746 | | | X | | | | XXXX | 87516000 | - | 1375 | B |
| 16.000 | 18.000 | 1.100 | 1.375 | 16.004 | 17.996 | X | | X | | X | | XXXX | 100016000 | - | 1250 | B |
| 16.250 | 17.000 | 0.413 | 0.688 | 16.252 | 16.998 | X | | | | | | XXXX | 37516250 | - | 625 | B |
| 16.263 | 16.763 | 0.275 | 0.413 | 16.264 | 16.762 | | | | | X | | XXXX | 25016263 | - | 375 | B |
| 16.500 | 17.250 | 0.413 | 0.688 | 16.502 | 17.248 | X | | | | | | XXXX | 37516500 | - | 625 | B |
| 16.500 | 17.500 | 0.550 | 0.825 | 16.502 | 17.498 | | | X | | X | | XXXX | 50016500 | - | 750 | B |
| 16.500 | 18.000 | 0.825 | 0.825 | 16.503 | 17.997 | | | X | | | | XXXX | 75016500 | - | 750 | B |
| 16.500 | 18.000 | 0.825 | 1.375 | 16.503 | 17.997 | | | X | | | | XXXX | 75016500 | - | 1250 | B |
| 16.750 | 17.750 | 0.550 | 0.825 | 16.752 | 17.748 | | | | | X | | XXXX | 50016750 | - | 750 | B |
| 16.750 | 18.000 | 0.688 | 1.100 | 16.753 | 17.997 | X | | | | | | XXXX | 62516750 | - | 1000 | B |
| 17.000 | 18.000 | 0.550 | 0.825 | 17.002 | 17.998 | X | X | X | X | X | | XXXX | 50017000 | - | 750 | B |
| 17.000 | 19.000 | 1.100 | 1.375 | 17.004 | 18.996 | | | X | | | | XXXX | 100017000 | - | 1250 | B |
| 17.250 | 18.000 | 0.413 | 0.688 | 17.252 | 17.998 | X | | | | | | XXXX | 37517250 | - | 625 | B |
| 17.500 | 18.500 | 0.550 | 0.825 | 17.502 | 18.498 | X | | | | X | | XXXX | 50017500 | - | 750 | B |
| 17.500 | 18.750 | 0.688 | 1.100 | 17.503 | 18.747 | | | X | | | | XXXX | 62517500 | - | 1000 | B |
| 17.500 | 19.500 | 1.100 | 1.650 | 17.504 | 19.496 | | | | | X | | XXXX | 100017500 | - | 1500 | B |
| 17.625 | 19.125 | 0.825 | 1.375 | 17.628 | 19.122 | | | | | X | | XXXX | 75017625 | - | 1250 | B |
| 17.750 | 18.500 | 0.413 | 0.550 | 17.752 | 18.498 | | | X | | | | XXXX | 37517750 | - | 500 | B |
| 17.750 | 19.000 | 0.688 | 1.100 | 17.753 | 18.997 | | | | | X | | XXXX | 62517750 | - | 1000 | B |
| 17.875 | 18.500 | 0.343 | 0.550 | 17.877 | 18.498 | | | | | | X | XXXX | 31217875 | - | 500 | B |
| 17.875 | 18.563 | 0.377 | 0.688 | 17.877 | 18.561 | X | | | | | | XXXX | 34301062 | - | 625 | B |
| 18.000 | 19.000 | 0.550 | 0.825 | 18.002 | 18.998 | | | X | | X | | XXXX | 50018000 | - | 750 | B |
| 18.000 | 19.250 | 0.688 | 1.375 | 18.003 | 19.247 | | | X | | | | XXXX | 62518000 | - | 1250 | B |
| 18.000 | 19.500 | 0.825 | 1.375 | 18.003 | 19.497 | X | | X | | | | XXXX | 75018000 | - | 1250 | B |
| 18.000 | 19.750 | 0.963 | 1.375 | 18.004 | 19.746 | | | X | | | | XXXX | 87518000 | - | 1250 | B |
| 18.000 | 20.000 | 1.100 | 1.650 | 18.004 | 19.996 | X | | | | | | XXXX | 100018000 | - | 1500 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

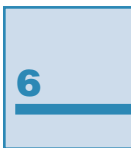
| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 18.187 | 18.937 | 0.413 | 0.688 | 18.189 | 18.935 | X | | | | | | XXXX | 37518187 | - | 625 | B |
| 18.250 | 18.750 | 0.275 | 0.413 | 18.251 | 18.749 | | | | | X | | XXXX | 25018250 | - | 375 | B |
| 18.500 | 19.500 | 0.550 | 0.825 | 18.502 | 19.498 | | | X | | | | XXXX | 50018500 | - | 750 | B |
| 18.500 | 20.500 | 1.100 | 1.650 | 18.504 | 20.496 | X | | | | | | XXXX | 100018500 | - | 1500 | B |
| 18.750 | 20.000 | 0.688 | 1.100 | 18.753 | 19.997 | X | X | | | X | | XXXX | 62518750 | - | 1000 | B |
| 19.000 | 19.500 | 0.275 | 0.413 | 19.001 | 19.499 | X | | | | | | XXXX | 25019000 | - | 375 | B |
| 19.000 | 20.000 | 0.550 | 0.825 | 19.002 | 19.998 | X | X | X | | X | | XXXX | 50019000 | - | 750 | B |
| 19.000 | 20.500 | 0.825 | 1.375 | 19.003 | 20.497 | X | | | | X | | XXXX | 75019000 | - | 1250 | B |
| 19.250 | 20.000 | 0.413 | 0.688 | 19.252 | 19.998 | | | | | X | X | XXXX | 37519250 | - | 625 | B |
| 19.250 | 20.500 | 0.688 | 1.100 | 19.253 | 20.497 | | | | | | | XXXX | 62519250 | - | 1000 | B |
| 19.250 | 21.000 | 0.963 | 1.513 | 19.254 | 20.996 | | | X | | | | XXXX | 87519250 | - | 1375 | B |
| 19.375 | 20.250 | 0.481 | 0.550 | 19.377 | 20.248 | | | | | X | | XXXX | 43719375 | - | 500 | B |
| 19.500 | 20.000 | 0.275 | 0.275 | 19.501 | 19.999 | | | X | | | | XXXX | 25019500 | - | 250 | B |
| 19.500 | 20.000 | 0.275 | 0.343 | 19.501 | 19.999 | | | X | | | | XXXX | 25019500 | - | 312 | B |
| 19.500 | 20.250 | 0.413 | 0.688 | 19.502 | 20.248 | X | | | | | | XXXX | 37519500 | - | 625 | B |
| 19.500 | 20.500 | 0.550 | 0.825 | 19.502 | 20.498 | X | | X | | | | XXXX | 50019500 | - | 750 | B |
| 19.625 | 20.625 | 0.550 | 0.825 | 19.627 | 20.623 | | | | | X | | XXXX | 50019625 | - | 750 | B |
| 19.750 | 21.000 | 0.688 | 1.100 | 19.753 | 20.997 | | | | | X | | XXXX | 62519750 | - | 1000 | B |
| 20.000 | 21.000 | 0.550 | 0.825 | 20.002 | 20.998 | X | | X | | X | | XXXX | 50020000 | - | 750 | B |
| 20.000 | 21.250 | 0.688 | 1.100 | 20.003 | 21.247 | X | | | | | | XXXX | 62520000 | - | 1000 | B |
| 20.000 | 21.500 | 0.825 | 1.100 | 20.003 | 21.497 | | | | | X | | XXXX | 75020000 | - | 1000 | B |
| 20.000 | 21.500 | 0.825 | 1.375 | 20.003 | 21.497 | | | X | | X | | XXXX | 75020000 | - | 1250 | B |
| 20.000 | 21.750 | 0.963 | 1.513 | 20.004 | 21.746 | X | | | | | | XXXX | 87520000 | - | 1375 | B |
| 20.000 | 22.000 | 1.100 | 0.963 | 20.004 | 21.996 | | | X | | | | XXXX | 100020000 | - | 875 | B |
| 20.000 | 22.000 | 1.100 | 1.650 | 20.004 | 21.996 | | | X | | | | XXXX | 100020000 | - | 1500 | B |
| 20.250 | 21.250 | 0.550 | 0.825 | 20.252 | 21.248 | | | | | X | | XXXX | 50020250 | - | 750 | B |
| 20.500 | 21.500 | 0.550 | 0.825 | 20.502 | 21.498 | | | X | | | | XXXX | 50020500 | - | 750 | B |
| 20.500 | 22.000 | 0.825 | 1.100 | 20.503 | 21.997 | X | | | | X | | XXXX | 75020500 | - | 1000 | B |
| 20.750 | 21.500 | 0.413 | 0.550 | 20.752 | 21.498 | | | | | X | | XXXX | 37520750 | - | 500 | B |
| 21.000 | 21.500 | 0.275 | 0.343 | 21.001 | 21.499 | | | X | | | | XXXX | 25021000 | - | 312 | B |
| 21.000 | 22.000 | 0.550 | 0.825 | 21.002 | 21.998 | X | | X | | X | | XXXX | 50021000 | - | 750 | B |
| 21.000 | 22.500 | 0.825 | 1.375 | 21.003 | 22.497 | | | X | | | | XXXX | 75021000 | - | 1250 | B |
| 21.500 | 22.500 | 0.550 | 0.825 | 21.502 | 22.498 | | | X | | | | XXXX | 50021500 | - | 750 | B |
| 21.500 | 23.000 | 0.825 | 1.375 | 21.503 | 22.997 | | | X | | | | XXXX | 75021500 | - | 1250 | B |
| 21.750 | 22.250 | 0.275 | 0.413 | 21.751 | 22.249 | | | | | X | | XXXX | 25021750 | - | 375 | B |
| 21.875 | 22.875 | 0.550 | 0.825 | 21.877 | 22.873 | X | | | | | | XXXX | 50021875 | - | 750 | B |
| 22.000 | 23.000 | 0.550 | 0.825 | 22.002 | 22.998 | | | | | X | | XXXX | 50022000 | - | 750 | B |
| 22.000 | 23.500 | 0.825 | 1.375 | 22.003 | 23.497 | X | | X | | | | XXXX | 75022000 | - | 1250 | B |
| 22.000 | 24.000 | 1.100 | 1.513 | 22.004 | 23.996 | | | X | | | | XXXX | 100022000 | - | 1375 | B |
| 22.062 | 22.562 | 0.275 | 0.413 | 22.063 | 22.561 | | | | | X | | XXXX | 25022062 | - | 375 | B |
| 22.500 | 23.000 | 0.275 | 0.343 | 22.501 | 22.999 | X | | X | | | | XXXX | 25022500 | - | 312 | B |
| 22.500 | 24.000 | 0.825 | 1.375 | 22.503 | 23.997 | | | X | | | | XXXX | 75022500 | - | 1250 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Standard, Deep and Type B PolyPak® Profile

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A | B | C | | D | E | Compound Codes (X = Standard Offering)† | | | | | | Part Number | | | | |
|-----------------------|------------------------|---------------------------|----------------------------|---------|--------|--|-------------------|-------------|--------|---------|--------|-------------|-----------|---------------|-----------------|--|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Throat Diameter* | Piston Diameter** | Standard PP | | Deep PP | | Type B | | Compound Code | Energi-zer Code | Add to the part number for Type B or Deep only |
| (Rod) Groove Diameter | (Bore) Groove Diameter | | | Plastic | Rubber | | | Plastic | Rubber | Plastic | Rubber | | | | | |
| 23.000 | 23.500 | 0.275 | 0.413 | 23.001 | 23.499 | X | | | | X | | XXXX | 25023000 | - | 375 | B |
| 23.000 | 23.750 | 0.413 | 0.688 | 23.002 | 23.748 | X | | | | | | XXXX | 37523000 | - | 625 | B |
| 23.000 | 24.000 | 0.550 | 0.825 | 23.002 | 23.998 | X | | | | | | XXXX | 50023000 | - | 750 | B |
| 23.250 | 24.000 | 0.413 | 0.688 | 23.252 | 23.998 | | | X | | | | XXXX | 37523250 | - | 625 | B |
| 23.375 | 25.375 | 1.100 | 1.650 | 23.379 | 25.371 | X | | | | | | XXXX | 100023375 | - | 1500 | B |
| 23.500 | 24.000 | 0.275 | 0.413 | 23.501 | 23.999 | X | | | | | | XXXX | 25023500 | - | 375 | B |
| 23.500 | 24.500 | 0.550 | 0.825 | 23.502 | 24.498 | X | | | | | | XXXX | 50023500 | - | 750 | B |
| 23.500 | 25.000 | 0.825 | 1.375 | 23.503 | 24.997 | | | | | X | | XXXX | 75023500 | - | 1250 | B |
| 23.750 | 24.250 | 0.275 | 0.413 | 23.751 | 24.249 | | | | | X | | XXXX | 25023750 | - | 375 | B |
| 24.000 | 24.500 | 0.275 | 0.413 | 24.001 | 24.499 | X | | | | X | | XXXX | 25024000 | - | 375 | B |
| 24.000 | 25.000 | 0.550 | 0.825 | 24.002 | 24.998 | | | | | X | | XXXX | 50024000 | - | 750 | B |
| 24.000 | 25.500 | 0.825 | 1.375 | 24.003 | 25.497 | | | X | | | | XXXX | 75024000 | - | 1250 | B |
| 24.000 | 25.750 | 0.963 | 1.375 | 24.004 | 25.746 | | | X | | | | XXXX | 87524000 | - | 1250 | B |
| 24.000 | 26.000 | 1.100 | 1.650 | 24.004 | 25.996 | | | | | X | | XXXX | 100024000 | - | 1500 | B |
| 24.500 | 25.000 | 0.275 | 0.413 | 24.501 | 24.999 | X | | | | | | XXXX | 25024500 | - | 375 | B |
| 24.500 | 25.500 | 0.550 | 0.825 | 24.502 | 25.498 | | | | | X | | XXXX | 50024500 | - | 750 | B |
| 24.750 | 26.000 | 0.688 | 1.100 | 24.753 | 25.997 | X | | | | | | XXXX | 62524750 | - | 1000 | B |
| 24.875 | 25.875 | 0.550 | 0.825 | 24.877 | 25.873 | | | | | X | | XXXX | 50024875 | - | 750 | B |
| 25.000 | 25.750 | 0.413 | 0.688 | 25.002 | 25.748 | X | | | | X | | XXXX | 37525000 | - | 625 | B |
| 25.000 | 26.000 | 0.550 | 0.825 | 25.002 | 25.998 | X | | | | | | XXXX | 50025000 | - | 750 | B |
| 25.000 | 27.000 | 1.100 | 1.477 | 25.004 | 26.996 | | | X | | | | XXXX | 100025000 | - | 1343 | B |
| 25.250 | 25.750 | 0.275 | 0.413 | 25.251 | 25.749 | | | | | X | | XXXX | 25025250 | - | 375 | B |
| 25.250 | 26.000 | 0.413 | 0.688 | 25.252 | 25.998 | X | | | | | | XXXX | 37525250 | - | 625 | B |
| 25.250 | 26.250 | 0.550 | 0.825 | 25.252 | 26.248 | | | X | | | | XXXX | 50025250 | - | 750 | B |
| 25.500 | 27.000 | 0.825 | 1.375 | 25.503 | 26.997 | X | | | | | | XXXX | 75025500 | - | 1250 | B |
| 26.000 | 26.750 | 0.413 | 0.688 | 26.002 | 26.748 | | | | | | X | XXXX | 37526000 | - | 625 | B |
| 26.000 | 27.000 | 0.550 | 0.825 | 26.002 | 26.998 | X | | | | | | XXXX | 50026000 | - | 750 | B |
| 26.000 | 27.500 | 0.825 | 1.375 | 26.003 | 27.497 | X | | | | | | XXXX | 75026000 | - | 1250 | B |
| 26.125 | 27.125 | 0.550 | 0.825 | 26.127 | 27.123 | | | | | X | | XXXX | 50026125 | - | 750 | B |
| 26.500 | 27.500 | 0.550 | 0.825 | 26.502 | 27.498 | X | | | | | | XXXX | 50026500 | - | 750 | B |
| 26.718 | 27.218 | 0.275 | 0.343 | 26.719 | 27.217 | | | X | | | | XXXX | 25026718 | - | 312 | B |
| 27.000 | 28.000 | 0.550 | 0.825 | 27.002 | 27.998 | | | X | | X | | XXXX | 50027000 | - | 750 | B |
| 27.000 | 29.000 | 1.100 | 1.650 | 27.004 | 28.996 | X | | | | | | XXXX | 100027000 | - | 1500 | B |
| 27.250 | 28.000 | 0.413 | 0.688 | 27.252 | 27.998 | X | | | | | | XXXX | 37527250 | - | 625 | B |
| 27.500 | 28.000 | 0.275 | 0.413 | 27.501 | 27.999 | X | | | | | | XXXX | 25027500 | - | 375 | B |
| 27.500 | 28.500 | 0.550 | 0.825 | 27.502 | 28.498 | | | X | | | | XXXX | 50027500 | - | 750 | B |
| 27.625 | 28.625 | 0.550 | 0.825 | 27.627 | 28.623 | | | | | X | | XXXX | 50027625 | - | 750 | B |
| 28.000 | 29.000 | 0.550 | 0.825 | 28.002 | 28.998 | X | | | | | | XXXX | 50028000 | - | 750 | B |
| 28.000 | 30.000 | 1.100 | 1.650 | 28.004 | 29.996 | X | | | | | | XXXX | 100028000 | - | 1500 | B |
| 28.187 | 29.187 | 0.550 | 0.825 | 28.189 | 29.185 | | | | | X | | XXXX | 50028187 | - | 750 | B |
| 28.500 | 29.500 | 0.550 | 0.825 | 28.502 | 29.498 | X | | | | | | XXXX | 50028500 | - | 750 | B |
| 28.500 | 29.500 | 0.550 | 0.825 | 28.502 | 29.498 | | | X | | | | XXXX | 50028500 | - | 750 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

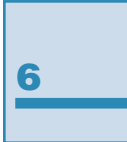
| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|------------------------|-------------------------|-----------------------|------------------------|---|--------|---------|--------|---------|--------|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | |
| 28.750 | 29.500 | 0.413 | 0.688 | 28.752 | 29.498 | | | X | | | | XXXX | 37528750 | - | 625 | B |
| 29.000 | 30.000 | 0.550 | 0.825 | 29.002 | 29.998 | | | X | | X | | XXXX | 50029000 | - | 750 | B |
| 29.000 | 31.000 | 1.100 | 1.650 | 29.004 | 30.996 | | | | | X | | XXXX | 100029000 | - | 1500 | B |
| 29.750 | 30.750 | 0.550 | 0.825 | 29.752 | 30.748 | | | | | X | | XXXX | 50029750 | - | 750 | B |
| 30.000 | 30.750 | 0.413 | 0.688 | 30.002 | 30.748 | | | | | X | | XXXX | 37530000 | - | 625 | B |
| 30.000 | 30.750 | 0.413 | 0.688 | 30.002 | 30.748 | X | | | | | | XXXX | 37531750 | - | 625 | B |
| 30.000 | 31.000 | 0.550 | 0.687 | 30.002 | 30.998 | | | X | | | | XXXX | 50030000 | - | 625 | B |
| 30.000 | 31.250 | 0.688 | 1.100 | 30.003 | 31.247 | | | | | X | | XXXX | 62530000 | - | 1000 | B |
| 30.000 | 32.000 | 1.100 | 1.650 | 30.004 | 31.996 | | | | | X | | XXXX | 100030000 | - | 1500 | B |
| 30.250 | 31.250 | 0.550 | 0.825 | 30.252 | 31.248 | | | X | | | | XXXX | 50030250 | - | 750 | B |
| 30.375 | 31.375 | 0.550 | 0.825 | 30.377 | 31.373 | | | | | X | | XXXX | 50030375 | - | 750 | B |
| 30.750 | 31.750 | 0.550 | 0.825 | 30.752 | 31.748 | | | | | X | | XXXX | 50030750 | - | 750 | B |
| 31.000 | 32.000 | 0.550 | 0.825 | 31.002 | 31.998 | X | | | | | | XXXX | 50031000 | - | 750 | B |
| 31.000 | 33.000 | 1.100 | 1.650 | 31.004 | 32.996 | X | | | | | | XXXX | 100031000 | - | 1500 | B |
| 31.500 | 32.250 | 0.413 | 0.688 | 31.502 | 32.248 | | | X | | | | XXXX | 37531500 | - | 625 | B |
| 31.500 | 32.500 | 0.550 | 0.825 | 31.502 | 32.498 | | | | | X | | XXXX | 50031500 | - | 750 | B |
| 31.750 | 32.500 | 0.413 | 0.688 | 31.752 | 32.498 | X | | | | | | XXXX | 37536250 | - | 625 | B |
| 32.000 | 32.500 | 0.275 | 0.413 | 32.001 | 32.499 | X | | | | | | XXXX | 25032000 | - | 375 | B |
| 32.000 | 33.000 | 0.550 | 0.825 | 32.002 | 32.998 | X | | | | | | XXXX | 50032000 | - | 750 | B |
| 32.000 | 33.500 | 0.825 | 0.963 | 32.003 | 33.497 | | | X | | | | XXXX | 75032000 | - | 875 | B |
| 33.000 | 34.000 | 0.550 | 0.825 | 33.002 | 33.998 | | | X | | X | | XXXX | 50033000 | - | 750 | B |
| 34.000 | 34.750 | 0.413 | 0.688 | 34.002 | 34.748 | | | X | | | | XXXX | 37534000 | - | 625 | B |
| 34.500 | 35.000 | 0.275 | 0.413 | 34.501 | 34.999 | X | | | | | | XXXX | 25034500 | - | 375 | B |
| 34.500 | 35.500 | 0.550 | 0.825 | 34.502 | 35.498 | | | | | X | | XXXX | 50034500 | - | 750 | B |
| 35.000 | 35.750 | 0.413 | 0.688 | 35.002 | 35.748 | | | X | | | | XXXX | 37535000 | - | 625 | B |
| 35.750 | 36.750 | 0.550 | 0.825 | 35.752 | 36.748 | X | | | | | | XXXX | 50035750 | - | 750 | B |
| 36.000 | 36.750 | 0.413 | 0.688 | 36.002 | 36.748 | | | X | | | | XXXX | 37536000 | - | 625 | B |
| 36.000 | 37.000 | 0.550 | 0.825 | 36.002 | 36.998 | X | | | | | | XXXX | 50036000 | - | 750 | B |
| 37.000 | 37.750 | 0.413 | 0.688 | 37.002 | 37.748 | | | X | | | | XXXX | 37537000 | - | 625 | B |
| 37.000 | 38.000 | 0.550 | 0.825 | 37.002 | 37.998 | X | | X | | | | XXXX | 50037000 | - | 750 | B |
| 37.500 | 38.250 | 0.413 | 0.688 | 37.502 | 38.248 | X | | | | | | XXXX | 37537500 | - | 625 | B |
| 38.000 | 39.000 | 0.550 | 0.825 | 38.002 | 38.998 | | | | | X | | XXXX | 50038000 | - | 750 | B |
| 38.250 | 39.250 | 0.550 | 0.825 | 38.252 | 39.248 | | | | | X | | XXXX | 50038250 | - | 750 | B |
| 38.500 | 39.250 | 0.413 | 0.688 | 38.502 | 39.248 | X | | | | | | XXXX | 37538500 | - | 625 | B |
| 38.750 | 39.750 | 0.550 | 0.825 | 38.752 | 39.748 | | | | | X | | XXXX | 50038750 | - | 750 | B |
| 39.135 | 40.135 | 0.550 | 0.825 | 39.137 | 40.133 | X | | | | | | XXXX | 50039135 | - | 750 | B |
| 40.000 | 40.750 | 0.413 | 0.688 | 40.002 | 40.748 | | | X | | | | XXXX | 37540000 | - | 625 | B |
| 41.000 | 42.000 | 0.550 | 0.825 | 41.002 | 41.998 | | | | | X | | XXXX | 50041000 | - | 750 | B |
| 41.485 | 42.485 | 0.550 | 0.825 | 41.487 | 42.483 | X | | | | | | XXXX | 50041485 | - | 750 | B |
| 41.750 | 42.750 | 0.550 | 0.825 | 41.752 | 42.748 | | | | | X | | XXXX | 50041750 | - | 750 | B |
| 42.000 | 43.000 | 0.550 | 0.688 | 42.002 | 42.998 | | | | | X | | XXXX | 50042000 | - | 625 | B |
| 42.000 | 43.000 | 0.550 | 0.825 | 42.002 | 42.998 | | | | | X | | XXXX | 50042000 | - | 750 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.



Standard, Deep and Type B PolyPak® Profile

Table 6-8. Standard, Deep and Type B PolyPak Gland Dimensions — Inch (Continued)

| A Rod Diameter | B (Rod) Groove Diameter | C | | D Throat Diameter* | E Piston Diameter** | Compound Codes (X = Standard Offering) † | | | | | | Part Number | | | | |
|------------------------|----------------------------|---------------------------|----------------------------|-----------------------|------------------------|---|--------|---------|--------|--------|--|---------------|----------------|--|--|---|
| | | (Std. PP) Groove Width | (Deep & B) Groove Width | | | Standard PP | | Deep PP | | Type B | | Compound Code | Energizer Code | Add to the part number for Type B or Deep only | Add to the part number for Type B only | |
| (Bore) Groove Diameter | Bore Diameter | | | Plastic | Rubber | Plastic | Rubber | Plastic | Rubber | | | | | | | |
| 42.267 | 43.267 | 0.550 | 0.825 | 42.269 | 43.265 | X | | | | | | XXXX | 50042267 | - | 750 | B |
| 43.500 | 44.500 | 0.550 | 0.825 | 43.502 | 44.498 | | | | | X | | XXXX | 50043500 | - | 750 | B |
| 44.125 | 45.125 | 0.550 | 0.825 | 44.127 | 45.123 | | | | | X | | XXXX | 50044125 | - | 750 | B |
| 44.618 | 45.618 | 0.550 | 0.825 | 44.620 | 45.616 | X | | | | | | XXXX | 50044618 | - | 750 | B |
| 46.250 | 47.250 | 0.550 | 0.825 | 46.252 | 47.248 | | | | | X | | XXXX | 50046250 | - | 750 | B |
| 47.500 | 48.500 | 0.550 | 0.825 | 47.502 | 48.498 | | | | | X | | XXXX | 50047500 | - | 750 | B |

†For plastic compounds, see Table 3-1, page 3-11. For rubber compounds, see Table 3-3, page 3-14.

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

**If used with wear rings, refer to wear ring piston diameter, see Section 9.

For custom groove calculations, see Appendix C.

NOTE: For sizes larger than those shown in the table, please contact your local Parker Seal representative.