



Axial clamp seals

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Axial clamp seals

General

SKF axial clamp seals are designed for large and very large shaft diameters. They are suitable for use as primary seals or as secondary seals in applications where the primary seals are subjected to excessive solid or fluid contaminants. Axial clamp seals do not rotate but seal axially against a rotating counterface.

SKF axial clamp seals are made of profiled strips of non-reinforced nitrile rubber and are held firmly in position by stainless steel band clamps. They are available for shaft diameters ranging from 150 to 4 600 mm (5.9 to 181 in.).

The standard range of SKF axial clamp seals is intended for inch-size shaft diameters. Because axial clamp seals are typically installed with an approximate 25 mm (0.984 in.) gap between the ends, they may also be used for metric shaft diameters.

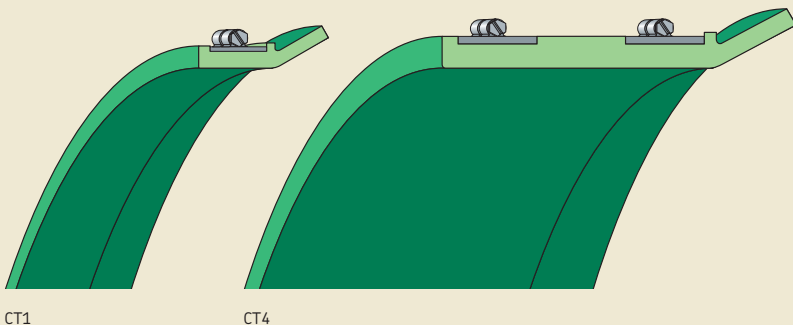
Designs

SKF axial clamp seals are manufactured in two different designs:

- CT1 seals (→ **fig. 1**) have the basic design and are held in position by a band clamp. The maximum permissible axial displacement relative to the counterface is +2,4 mm (0.094 in.).
- CT4 seals (→ **fig. 1**) are extra wide and are designed with two band clamps. The maximum axial displacement relative to the counterface is +4,8 mm (0.189 in.).

Fig. 1

Axial clamp seal designs



Design of the sealing arrangement

To obtain reliable sealing performance, the seal seat diameter (d_1), seal seat width (b_1) and the seal fitted width (B_1) should meet the requirements listed in **table 1**. SKF also recommends that the seal should abut a shoulder to simplify alignment.

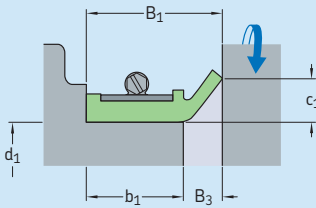
Finely turned counterfaces are adequate for axial clamp seals. The appropriate surface roughness values are R_a 2,5 μm (115 $\mu\text{in.}$) and R_t 12 μm (480 $\mu\text{in.}$).

Typically, after installation, CT axial clamp seals have an approximate 25 mm (1 in.) gap between the ends. This should be arranged at the 6 o'clock position (\rightarrow **fig. 2** on **page 474**) to facilitate installation and drainage of contaminants.

Butt-joint seals are also available for certain applications.

Table 1

Application tolerances



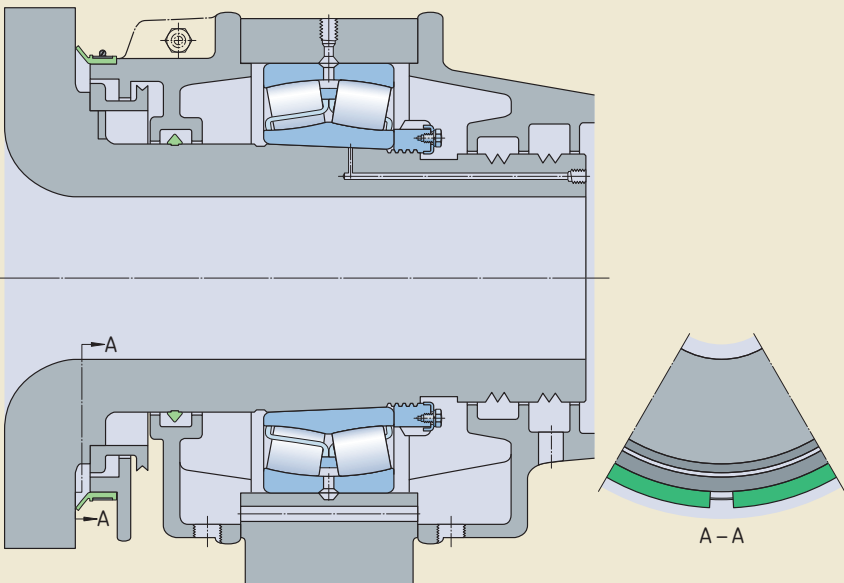
| Dimension | Tolerance | Axial clamp seals | |
|---------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| | | CT1 | CT4 |
| Seal seat diameter, d_1 | mm $\pm 1,6$ in. ± 0.063 | 152,40 – 4 572 6.000 – 180.000 | 304,80 – 1 143 12.000 – 45.000 |
| Seal fitted width, B_1 | mm $\pm 0,8$ in. ± 0.031 | 28,60 – 38,10 1.125 – 1.500 | 38,10 – 92,20 1.500 – 3.750 |
| Seal seat width, b_1 | mm $\pm 3,2$ in. ± 0.125 | 17,50 – 27 0.688 – 1.063 | 27 – 84 1.063 – 3.313 |
| Lip height, c_1 | mm $\pm 0,8$ in. ± 0.031 | 12,70 0.500 | 12,70 0.500 |
| Gap width, B_3 (max) | mm in. | 11,10 0.437 | 11,10 0.437 |

Installation instructions

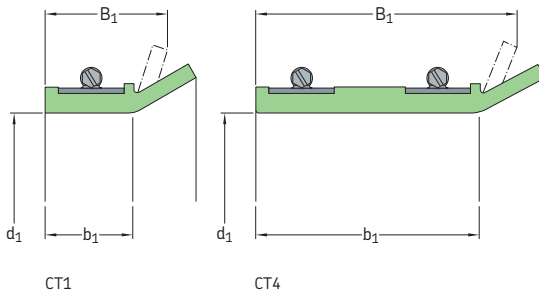
Axial clamp seals are supplied as rolled-up coils. They are placed in position on their seat in the housing and bolted lightly together. They are then pushed forward toward the counterface and the gap (or joint) between the two ends is arranged at the 6 o'clock position (→ **fig. 2**). The clamps are finally tightened. The torque applied to the clamp screws should not exceed 7 Nm.

Fig. 2

Sealing arrangement and installation



Axial clamp seals – CT1 and CT4 – metric dimensions (converted from inch dimensions)
d₁ 168 – 1 080 mm

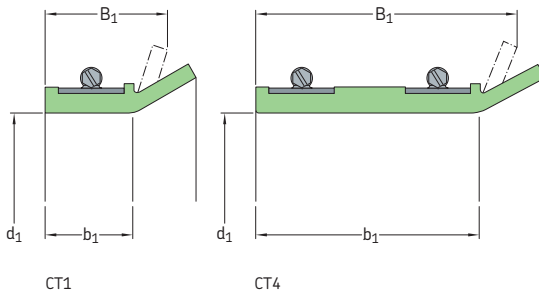


See **table 1, page 473** for application tolerances.

| Dimensions | | | Design | Designation | Dimensions | | | Design | Designation |
|-----------------------------------|----------------------------------|--------------------------------|------------|------------------|-----------------------------------|----------------------------------|--------------------------------|------------|------------------|
| Seal seat diameter d ₁ | Seal fitted width B ₁ | Seal seat width b ₁ | | | Seal seat diameter d ₁ | Seal fitted width B ₁ | Seal seat width b ₁ | | |
| mm | | | – | – | mm | | | – | – |
| 168 | 28,60 | 17,50 | CT1 | 594334 | 381 | 28,60 | 17,50 | CT1 | 594025 |
| 168,30 | 28,60 | 17,50 | CT1 | 529489 | 387 | 28,60 | 17,50 | CT1 | 594954 |
| 178 | 38,10 | 27 | CT1 | 523586 | 410 | 23,80 | 12,70 | CT1 | 595110 |
| 185 | 30 | 18,90 | CT1 | 593637 | 413 | 88,90 | 77,80 | CT4 | 592934 |
| 209,60 | 28,60 | 17,50 | CT1 | 527820 | 425 | 31,80 33,40 | 20,70 22,30 | CT1 CT1 | 523826 524815 |
| 219 | 28,60 | 17,50 | CT1 | 529490 | 432 | 38,10 | 27 | CT1 | 528535 |
| 227 | 28,60 | 17,50 | CT1 | 531635 | 444,50 | 34,90 | 23,80 | CT1 | 525737 |
| 228,60 | 28,60 28,60 | 17,50 17,50 | CT1 CT1 | 524204 527819 | 445 | 31,80 34,90 | 20,70 23,80 | CT1 CT1 | 522679 523547 |
| 229 | 29 | 17,90 | CT1 | 528631 | 449,30 | 95,30 | 84,20 | CT4 | 528070 |
| 254 | 28,60 28,60 | 17,50 17,50 | CT1 CT1 | 524205 527806 | 470 | 28,60 31,80 | 17,50 20,70 | CT1 CT1 | 525708 526192 |
| 273 | 28,60 | 17,50 | CT1 | 594369 | 495 | 28,60 | 17,50 | CT1 | 594181 |
| 280 | 28,60 31,80 | 17,50 20,70 | CT1 CT1 | 524206 524928 | 508 | 31,80 | 20,70 | CT1 | 524587 |
| 298,40 | 28,60 | 17,50 | CT1 | 593629 | 533 | 32 | 20,90 | CT1 | 594241 |
| 305 | 31,80 38,10 | 20,70 27 | CT1 CT1 | 524208 525582 | 546 | 31,80 95,30 | 20,70 84,20 | CT1 CT4 | 524599 526741 |
| 330 | 28,60 38,10 | 17,50 27 | CT1 CT1 | 524209 523587 | 554 | 31,80 | 20,70 | CT1 | 524210 |
| 350,80 | 38,10 | 27 | CT1 | 594110 | 557 | 28,60 | 17,50 | CT1 | 524211 |
| 355,60 | 38,10 34,90 | 27 23,80 | CT1 CT1 | 530733 593037 | 559 | 31,80 | 20,70 | CT1 | 524347 |
| 380 | 38,10 | 27 | CT1 | 593171 | 571,50 | 31,80 | 20,70 | CT1 | 524212 |
| | | | | | 578 | 34,90 | 23,80 | CT1 | 524657 |

| Dimensions | | | Design | Designation | Dimensions | | | Design | Designation |
|--------------------------|-------------------------|-------------------------|-------------------|---|--------------------------|-------------------------|-----------------------|-------------------|---|
| Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | | | Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | | |
| mm | | | - | - | mm | | - | - | |
| 594 | 34,90 | 23,80 | CT1 | 525627 | 876 | 38,10 | 27 | CT1 | 523063 |
| 595 | 28,60 | 17,50 | CT1 | 525031 | 889 | 31,80 | 20,70 | CT1 | 524220 |
| 597 | 34,90 | 23,80 | CT1 | 524364 | 900 | 31,80 | 20,70 | CT1 | 524221 |
| 600 | 30 | 18,90 | CT1 | 594431 | 902 | 38,10 | 27 | CT1 | 524222 |
| 603 | 31,80 34,90 46 | 20,70 23,80 34,90 | CT1 CT1 CT4 | 524365 523184 528651 | 914 | 28,60 30,20 38,10 | 17,50 19,10 27 | CT1 CT1 CT1 | 528416 524223 524224 |
| 603,30 | 34,90 46 | 23,80 34,90 | CT1 CT4 | 525637 528267 | 914,40 | 28,60 31,80 | 17,50 20,70 | CT1 CT1 | 593606 530466 |
| 616 | 47,60 | 36,50 | CT4 | 529276 | 929 | 28,60 75,20 | 17,50 64,10 | CT1 CT4 | 593285 594202 |
| 629 | 31,80 | 20,70 | CT1 | 524213 | 937 | 34,90 | 23,80 | CT1 | 523154 |
| 638 | 34,90 | 23,80 | CT1 | 524214 | 940 | 38,10 | 27 | CT1 | 525320 |
| 655 | 40 | 28,90 | CT4 | 594784 | 943 | 31,80 | 20,70 | CT1 | 524768 |
| 660 | 34,90 | 23,80 | CT1 | 524591 | 946 | 31,80 | 20,70 | CT1 | 524368 |
| 684 | 28,60 73 | 17,50 61,90 | CT1 CT4 | 524215 593604 | 949 | 31,80 | 20,70 | CT1 | 526246 |
| 692 | 34,90 | 23,80 | CT1 | 524592 | 952 | 31,80 | 20,70 | CT1 | 526582 |
| 705 | 34,90 60,30 | 23,80 49,20 | CT1 CT4 | 524216 528268 | 962 | 31,80 | 20,70 | CT1 | 524225 |
| 711 | 31,80 | 20,70 | CT1 | 527232 | 965 | 31,80 | 20,70 | CT1 | 524226 |
| 732 | 28,60 | 17,50 | CT1 | 525032 | 1 003 | 28,60 31,80 | 17,50 20,70 | CT1 CT1 | 529452 526806 |
| 737 | 38,10 44,50 | 27 33,40 | CT1 CT4 | 524940 528269 | 1 013 | 34,90 36,50 | 23,80 25,40 | CT1 CT1 | 523584 529379 |
| 746 | 38,10 39,70 | 27 28,60 | CT1 CT4 | 524853 528270 | 1 016 | 36,50 38,10 | 25,40 27 | CT1 CT1 | 525035 527903 |
| 755 | 34,90 38,10 | 23,80 27 | CT1 CT1 | 524217 524218 | 1 018 | 54,80 | 43,70 | CT4 | 530396 |
| 755,70 | 38,10 | 27 | CT1 | 524973 | 1 022 | 31,80 | 20,70 | CT1 | 525426 |
| 764 | 28,60 | 17,50 | CT1 | 525033 | 1 029 | 38,10 | 27 | CT1 | 528532 |
| 787 | 31,80 | 20,70 | CT1 | 525212 | 1 038 | 38,10 | 27 | CT1 | 525633 |
| 800 | 31,80 | 20,70 | CT1 | 528210 | 1 041 | 38,10 | 27 | CT1 | 524227 |
| 806 | 31,80 | 20,70 | CT1 | 526715 | 1 045 | 38,10 | 27 | CT1 | 525036 |
| 818 | 31,80 | 20,70 | CT1 | 525034 | 1 051 | 33,40 | 22,30 | CT1 | 530448 |
| 819,20 | 31,80 | 20,70 | CT1 | 524294 | 1 054 | 31,80 38,10 | 20,70 27 | CT1 CT1 | 527474 524228 |
| 822,30 | 31,80 | 20,70 | CT1 | 593949 | 1 064 | 41,30 | 30,20 | CT4 | 528272 |
| 825 | 28,60 31,80 | 17,50 20,70 | CT1 CT1 | 594785 524367 | 1 066 | 63,50 | 52,40 | CT4 | 528271 |
| 840 | 31,80 | 20,70 | CT1 | 526867 | 1 066,90 | 38,10 | 27 | CT4 | 594494 |
| 856 | 31,80 | 20,70 | CT1 | 524219 | 1 080 | 28,60 | 17,50 | CT1 | 523133 |

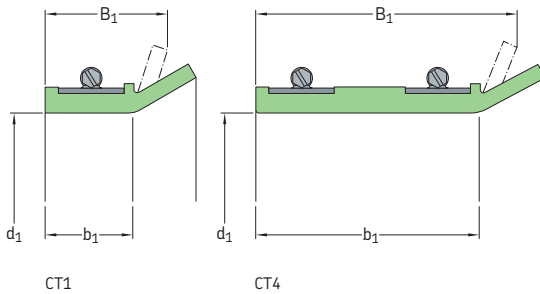
Axial clamp seals – CT1 and CT4 – metric dimensions (converted from inch dimensions)
 d_1 **1 101,70 – 4 142 mm**



See **table 1, page 473** for application tolerances.

| Dimensions | | | Design | Designation | Dimensions | | | Design | Designation | | |
|--------------------------|-------------------------|-----------------------|--------|---------------|--------------------------|-------------------------|-----------------------|--------------|---------------|-------|---------------|
| Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | | | Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | | | | |
| mm | | | - | - | mm | | | - | - | | |
| 1 101,70 | 31,80 | 20,70 | CT1 | 524909 | 1 321 | 38,10 | 27 | CT1 | 528927 | | |
| 1 105 | 38,10 | 27 | CT1 | 524369 | 1 346 | 31,80 | 20,70 | CT1 | 528526 | | |
| 1 118 | 31,80 | 20,70 | CT1 | 524370 | 1 397 | 31,80 | 20,70 | CT1 | 526807 | | |
| | 34,90 | 23,80 | CT1 | 528415 | | | | | | | |
| | 38,10 | 27 | CT1 | 524229 | | | | | | | |
| | 38,10 | 27 | CT1 | 593180 | | | | | | | |
| | 44,50 | 33,40 | CT4 | 528002 | | | | | | | |
| | 44,50 | 33,40 | CT4 | 528273 | 1 448 | 31,80 | 20,70 | CT1 | 528525 | | |
| 1 140 | 38,10 | 27 | CT1 | 522676 | 1 497,60 | 41,30 | 30,20 | CT4 | 594163 | | |
| | | | | | | | 1 613 | 31,80 | | 20,70 | CT1 |
| 1 181 | 31,80 | 20,70 | CT1 | 529086 | 1 721 | 31,80 | 20,70 | CT1 | 528975 | | |
| 1 193,80 | 38,10 | 27 | CT1 | 527211 | 1 778 | 31,80 | 20,70 | CT1 | 526809 | | |
| | | | | | | 1 803 | 31,80 | 20,70 | | CT1 | 524373 |
| 1 206 | 31,80 | 27 | CT1 | 525091 | 1 854 | 38,10 | 27 | CT1 | 531456 | | |
| | 34,90 | 23,80 | CT1 | | 526021 | 1 924 | 31,80 | 20,70 | | CT1 | 525092 |
| | 38,10 | 27 | CT1 | | | | 524230 | 1 968 | | 31,80 | |
| 1 206,50 | 30,20 | 19,10 | CT1 | 530606 | 2 540 | 38,10 | 27 | CT1 | 522856 | | |
| 1 210 | 38,10 | 27 | CT1 | 522677 | 2 616 | 31,80 | 20,70 | CT1 | 594083 | | |
| 1 225 | 38,10 | 27 | CT1 | 524231 | 4 142 | 31,80 | 20,70 | CT1 | 594682 | | |
| 1 241 | 38,10 | 27 | CT1 | 524371 | | | | | | | |
| 1 245 | 31,80 | 20,70 | CT1 | 522828 | | | | | | | |
| 1 270 | 34,90 | 23,80 | CT1 | 529129 | | | | | | | |
| 1 286 | 31,80 | 20,70 | CT1 | 525953 | | | | | | | |
| 1 302 | 34,90 | 23,80 | CT1 | 529130 | | | | | | | |
| 1 308 | 31,80 | 20,70 | CT1 | 524372 | | | | | | | |
| | 34,90 | 23,80 | CT1 | 530661 | | | | | | | |
| | 38,10 | 27 | CT1 | 524232 | | | | | | | |

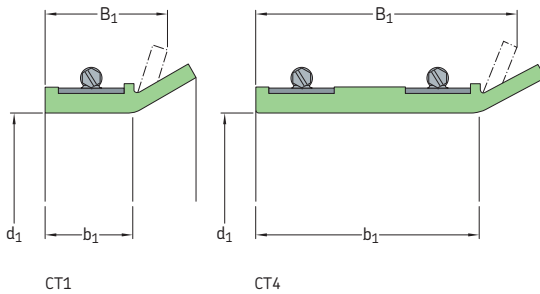
Axial clamp seals – CT1 and CT4 – inch dimensions
 d_1 6.614 – 29.016 in.



See table 1, page 473 for application tolerances.

| Dimensions | | | | Design | Designation | Dimensions | | | |
|--------------------------|-------------------------|-----------------------|-----|--------|-------------|--------------------------|-------------------------|-----------------------|--------|
| Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | in. | | | Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | in. |
| 6.614 | 1.126 | 0.689 | CT1 | 594334 | 18.504 | 1.126 | 0.689 | CT1 | 525708 |
| 6.626 | 1.126 | 0.689 | CT1 | 529489 | 18.504 | 1.252 | 0.815 | CT1 | 526192 |
| 7.008 | 1.500 | 1.063 | CT1 | 523586 | 19.488 | 1.126 | 0.689 | CT1 | 594181 |
| 7.284 | 1.181 | 0.744 | CT1 | 593637 | 20.000 | 1.252 | 0.815 | CT1 | 524587 |
| 8.252 | 1.126 | 0.689 | CT1 | 527820 | 20.984 | 1.260 | 0.823 | CT1 | 594241 |
| 8.622 | 1.126 | 0.689 | CT1 | 529490 | 21.496 | 1.252 | 0.815 | CT1 | 524599 |
| 8.937 | 1.126 | 0.689 | CT1 | 531635 | 21.496 | 3.752 | 3.315 | CT4 | 526741 |
| 9.000 | 1.126 | 0.689 | CT1 | 524204 | 21.811 | 1.252 | 0.815 | CT1 | 524210 |
| 9.000 | 1.126 | 0.689 | CT1 | 527819 | 21.929 | 1.126 | 0.689 | CT1 | 524211 |
| 9.016 | 1.142 | 0.705 | CT1 | 528631 | 22.008 | 1.252 | 0.815 | CT1 | 524347 |
| 10.000 | 1.126 | 0.689 | CT1 | 524205 | 22.500 | 1.252 | 0.815 | CT1 | 524212 |
| 10.000 | 1.126 | 0.689 | CT1 | 527806 | 22.756 | 1.374 | 0.937 | CT1 | 524657 |
| 10.748 | 1.126 | 0.689 | CT1 | 594369 | 23.386 | 1.374 | 0.937 | CT1 | 525627 |
| 11.024 | 1.126 | 0.689 | CT1 | 524206 | 23.426 | 1.126 | 0.689 | CT1 | 525031 |
| 11.024 | 1.252 | 0.815 | CT1 | 524928 | 23.504 | 1.374 | 0.937 | CT1 | 524364 |
| 11.748 | 1.126 | 0.689 | CT1 | 593629 | 23.622 | 1.181 | 0.744 | CT1 | 594431 |
| 12.008 | 1.252 | 0.815 | CT1 | 524208 | 23.740 | 1.252 | 0.815 | CT1 | 524365 |
| 12.008 | 1.500 | 1.063 | CT1 | 525582 | 23.740 | 1.374 | 0.937 | CT1 | 523184 |
| 12.992 | 1.126 | 0.689 | CT1 | 524209 | 23.740 | 1.811 | 1.374 | CT4 | 528651 |
| 12.992 | 1.500 | 1.063 | CT1 | 523587 | 23.752 | 1.374 | 0.937 | CT1 | 525637 |
| 13.811 | 1.500 | 1.063 | CT1 | 594110 | 23.752 | 1.811 | 1.374 | CT4 | 528267 |
| 14.000 | 1.500 | 1.063 | CT1 | 530733 | 24.252 | 1.874 | 1.437 | CT4 | 529276 |
| 14.000 | 1.374 | 0.937 | CT1 | 593037 | 24.764 | 1.252 | 0.815 | CT1 | 524213 |
| 14.961 | 1.500 | 1.063 | CT1 | 593171 | 25.118 | 1.374 | 0.937 | CT1 | 524214 |
| 15.000 | 1.126 | 0.689 | CT1 | 594025 | 25.787 | 1.575 | 1.138 | CT4 | 594784 |
| 15.236 | 1.126 | 0.689 | CT1 | 594954 | 25.984 | 1.374 | 0.937 | CT1 | 524591 |
| 16.142 | 0.937 | 0.500 | CT1 | 595110 | 26.929 | 1.126 | 0.689 | CT1 | 524215 |
| 16.260 | 3.500 | 3.063 | CT4 | 592934 | 26.929 | 2.874 | 2.437 | CT4 | 593604 |
| 16.732 | 1.252 | 0.815 | CT1 | 523826 | 27.244 | 1.374 | 0.937 | CT1 | 524592 |
| 16.732 | 1.315 | 0.878 | CT1 | 524815 | 27.756 | 1.374 | 0.937 | CT1 | 524216 |
| 17.008 | 1.500 | 1.063 | CT1 | 528535 | 27.756 | 2.374 | 1.937 | CT4 | 528268 |
| 17.500 | 1.374 | 0.937 | CT1 | 525737 | 27.992 | 1.252 | 0.815 | CT1 | 527232 |
| 17.520 | 1.252 | 0.815 | CT1 | 526799 | 28.819 | 1.126 | 0.689 | CT1 | 525032 |
| 17.520 | 1.374 | 0.937 | CT1 | 523547 | 29.016 | 1.500 | 1.063 | CT1 | 524940 |
| 17.689 | 3.752 | 3.315 | CT4 | 528070 | 29.016 | 1.752 | 1.315 | CT4 | 528269 |

Axial clamp seals – CT1 and CT4 – inch dimensions
 d_1 29.370 – 163.071 in.



See table 1, page 473 for application tolerances.

| Dimensions | | | | Design | Designation | Dimensions | | | | |
|--------------------------|-------------------------|-----------------------|-----|--------|-------------|--------------------------|-------------------------|-----------------------|--------|-------------|
| Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | | | | Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | Design | Designation |
| in. | | | | – | – | in. | | | – | – |
| 29.370 | 1.500 | 1.063 | CT1 | 524853 | 39.488 | 1.126 | 0.689 | CT1 | 529452 | |
| 29.370 | 1.563 | 1.126 | CT4 | 528270 | 39.488 | 1.252 | 0.815 | CT1 | 526806 | |
| 29.724 | 1.374 | 0.937 | CT1 | 524217 | 39.882 | 1.374 | 0.937 | CT1 | 523584 | |
| 29.724 | 1.500 | 1.063 | CT1 | 524218 | 39.882 | 1.437 | 1.000 | CT1 | 529379 | |
| 29.752 | 1.500 | 1.063 | CT1 | 524973 | 40.000 | 1.437 | 1.000 | CT1 | 525035 | |
| 30.079 | 1.126 | 0.689 | CT1 | 525033 | 40.000 | 1.500 | 1.063 | CT1 | 527903 | |
| 30.984 | 1.252 | 0.815 | CT1 | 525212 | 40.079 | 2.156 | 1.721 | CT4 | 530396 | |
| 31.496 | 1.252 | 0.815 | CT1 | 528210 | 40.236 | 1.252 | 0.815 | CT1 | 525426 | |
| 31.732 | 1.252 | 0.815 | CT1 | 526715 | 40.512 | 1.500 | 1.063 | CT1 | 528532 | |
| 32.205 | 1.252 | 0.815 | CT1 | 525034 | 40.866 | 1.500 | 1.063 | CT1 | 525633 | |
| 32.252 | 1.252 | 0.815 | CT1 | 524294 | 40.984 | 1.500 | 1.063 | CT1 | 524227 | |
| 32.374 | 1.252 | 0.815 | CT1 | 593949 | 41.142 | 1.500 | 1.063 | CT1 | 525036 | |
| 32.480 | 1.126 | 0.689 | CT1 | 594785 | 41.378 | 1.315 | 0.878 | CT1 | 530448 | |
| 32.480 | 1.252 | 0.815 | CT1 | 524367 | 41.496 | 1.252 | 0.815 | CT1 | 527474 | |
| 33.071 | 1.252 | 0.815 | CT1 | 526867 | 41.496 | 1.500 | 1.063 | CT1 | 524228 | |
| 33.701 | 1.252 | 0.815 | CT1 | 524219 | 41.890 | 1.626 | 1.189 | CT4 | 528272 | |
| 34.488 | 1.500 | 1.063 | CT1 | 523063 | 41.968 | 2.500 | 2.063 | CT4 | 528271 | |
| 35.000 | 1.252 | 0.815 | CT1 | 524220 | 42.004 | 1.500 | 1.063 | CT4 | 594494 | |
| 35.433 | 1.252 | 0.815 | CT1 | 524221 | 42.520 | 1.126 | 0.689 | CT1 | 523133 | |
| 35.512 | 1.500 | 1.063 | CT1 | 524222 | 43.374 | 1.252 | 0.815 | CT1 | 524909 | |
| 35.984 | 1.126 | 0.689 | CT1 | 528416 | 43.504 | 1.500 | 1.063 | CT1 | 524369 | |
| 35.984 | 1.189 | 0.752 | CT1 | 524223 | 44.016 | 1.252 | 0.815 | CT1 | 524370 | |
| 35.984 | 1.500 | 1.063 | CT1 | 524224 | 44.016 | 1.374 | 0.937 | CT1 | 528415 | |
| 36.000 | 1.126 | 0.689 | CT1 | 593606 | 44.016 | 1.500 | 1.063 | CT1 | 524229 | |
| 36.000 | 1.252 | 0.815 | CT1 | 530466 | 44.016 | 1.500 | 1.063 | CT1 | 593180 | |
| 36.575 | 1.126 | 0.689 | CT1 | 593285 | 44.016 | 1.752 | 1.315 | CT4 | 528002 | |
| 36.575 | 2.961 | 2.524 | CT4 | 594202 | 44.016 | 1.752 | 1.315 | CT4 | 528273 | |
| 36.890 | 1.374 | 0.937 | CT1 | 523154 | 44.882 | 1.500 | 1.063 | CT1 | 522676 | |
| 37.008 | 1.252 | 0.815 | CT1 | 526246 | 46.496 | 1.252 | 0.815 | CT1 | 529086 | |
| 37.008 | 1.500 | 1.063 | CT1 | 525320 | 47.000 | 1.500 | 1.063 | CT1 | 527211 | |
| 37.126 | 1.252 | 0.815 | CT1 | 524768 | 47.480 | 1.252 | 1.063 | CT1 | 525091 | |
| 37.244 | 1.252 | 0.815 | CT1 | 524368 | 47.480 | 1.374 | 0.937 | CT1 | 526021 | |
| 37.480 | 1.252 | 0.815 | CT1 | 526582 | 47.480 | 1.500 | 1.063 | CT1 | 524230 | |
| 37.874 | 1.252 | 0.815 | CT1 | 524225 | 47.500 | 1.189 | 0.752 | CT1 | 530606 | |
| 37.992 | 1.252 | 0.815 | CT1 | 524226 | 47.638 | 1.500 | 1.063 | CT1 | 522677 | |

| Dimensions | | | Design | Designation |
|-----------------------------|----------------------------|--------------------------|--------|---------------|
| Seal seat diameter d_1 | Seal fitted width B_1 | Seal seat width b_1 | | |
| in. | | | - | - |
| 48.228 | 1.500 | 1.063 | CT1 | 524231 |
| 48.858 | 1.500 | 1.063 | CT1 | 524371 |
| 49.016 | 1.252 | 0.815 | CT1 | 522828 |
| 50.000 | 1.374 | 0.937 | CT1 | 529129 |
| 50.630 | 1.252 | 0.815 | CT1 | 525953 |
| 51.260 | 1.374 | 0.937 | CT1 | 529130 |
| 51.496 | 1.252 | 0.815 | CT1 | 524372 |
| 51.496 | 1.374 | 0.937 | CT1 | 530661 |
| 51.496 | 1.500 | 1.063 | CT1 | 524232 |
| 52.008 | 1.500 | 1.063 | CT1 | 528927 |
| 52.992 | 1.252 | 0.815 | CT1 | 528526 |
| 55.000 | 1.252 | 0.815 | CT1 | 526807 |
| 57.008 | 1.252 | 0.815 | CT1 | 528525 |
| 58.606 | 1.626 | 1.189 | CT4 | 594163 |
| 63.504 | 1.252 | 0.815 | CT1 | 526808 |
| 67.756 | 1.252 | 0.815 | CT1 | 528975 |
| 70.000 | 1.252 | 0.815 | CT1 | 526809 |
| 70.984 | 1.252 | 0.815 | CT1 | 524373 |
| 72.992 | 1.500 | 1.063 | CT1 | 531456 |
| 75.748 | 1.252 | 0.815 | CT1 | 525092 |
| 77.480 | 1.252 | 0.815 | CT1 | 529517 |
| 100.00 | 1.500 | 1.063 | CT1 | 522856 |
| 102.992 | 1.252 | 0.815 | CT1 | 594083 |
| 163.071 | 1.252 | 0.815 | CT1 | 594082 |
| 163.071 | 1.252 | 0.815 | CT1 | 594082 |