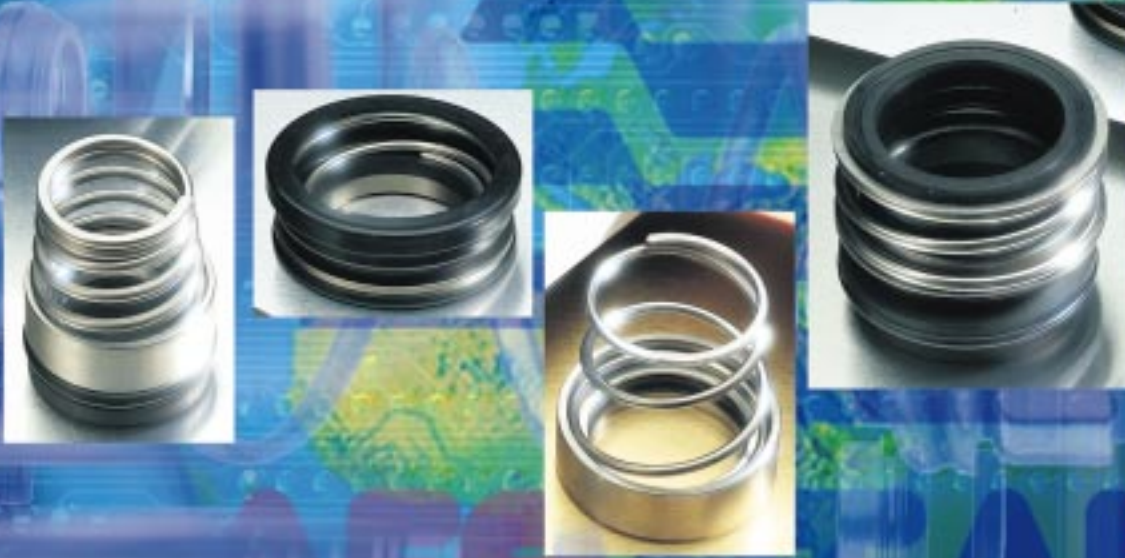


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Typ B01

Gummibalgdichtung mit eingefaßter Einzelfeder zur Anwendung bei eingeschränkten Einbauhöhen für die Dichtung. Hauptvorteil ist die kurze Baulänge.

Typ B02/12/13

Balgdichtung mit eingefaßter Einzelfeder verwendet mit einer Vielzahl von Stationärteilen wie DIN kurz oder lang. Oft in Tauchpumpen eingesetzt mit Stationärteil S01, S02, S03 und S04.

Typ B03

Balgdichtung mit eingefaßter Einzelfeder, häufig in Kühlwasserpumpen eingesetzt. Hauptvorteil ist, daß eine Abmessung durch den großen Spalt zwischen Welle und Dichtungscomponenten auf mehrere Wellenabmessungen paßt.

Typ B04

Niederdruck Dichtung für universelle Anwendungen, in großen Stückzahlen gefertigt, für einige Wellenabmessungen.

Typ B05/52/53

Einzelfederdichtung mit Vollbalg und Manschetten montiertem Stationärteil nach DIN 24960 für Stationärteillgehäuse. Zusätzlich eine Auswahl unterschiedlicher Arbeitslängen, passend für internationale Standards

Typ B06

Phenolharz imprägnierte rot. Gleitfläche gegen O Ring montiertes Ni-Resist. Stationärteil . Für Macerator Anwendungen.

Typ BP02

Einzelfederdichtung mit Vollbalg und Manschetten montiertem Stationärteil, weit verbreitet und einsetzbar für eine lange Standzeit.

Typ BP04

Einzelfederdichtung mit Vollbalg und Manschetten montiertem Stationärteil, passend für Amerikanische Standards und einsetzbar für eine lange Standzeit.

Typ BP05

Einzelfederdichtung mit Vollbalg und Manschetten montiertem Stationärteil, passend für Amerikanische Standards und einsetzbar für eine lange Standzeit.

Typ P01

Einzelfeder Gummiaphragma Dichtung mit manschettenmontiertem Stationärteil für universelle Anwendungen, durchaus für lange Standzeiten einsetzbar.

Typ P02

Einzelfeder Gummiaphragma Dichtung mit manschettenmontiertem Stationärteil für universelle Anwendungen, durchaus für lange Standzeiten einsetzbar.

Typ P03

Einzelfeder Gummiaphragma Dichtung mit manschettenmontiertem Stationärteil für DIN 24960 Dichträume. Erhältlich mit zwei zusätzlichen Stationärteilen S05 und S06 entsprechend DIN 24960

Typ P04

Einzelfeder Gummiaphragma Dichtung ähnlich Typ P02 aber für eine andere Gehäuseabmessung und Arbeitslänge. Oft eingesetzt in amerikanischen Aggregaten.

Typ P05

Einzelfeder Gummiaphragma Dichtung ähnlich Typ P01 aber für eine andere Gehäuseabmessung und Arbeitslänge. Oft eingesetzt in amerikanischen Aggregaten.

Typ P06

Einzelfeder O Ring montierter rot. Kohle Gleitring gegen ein Chromguß Stationärteil. Für hygienische Anwendungsfälle und überwiegend in APV Puma Pumpen eingesetzt.

Typ S01

O Ring montiertes Stationärteil lieferbar in Keramik und Siliziumkarbid. Häufig mit Typ B02 eingesetzt.

Typ S02

O Ring montiertes DIN lang Stationärteil, erhältlich in Keramik und Siliziumkarbid. Bietet ein alternatives Axialmaß zu Typ S05 Stationärteilen. Sehr häufig mit Typ B02 rot. Einheiten verwendet.

Typ S03

O Ring montiertes DIN kurz Stationärteil, erhältlich in Keramik und Siliziumkarbid. Bietet ein alternatives Axialmaß zu Typ S06 Stationärteilen. Sehr häufig mit Typ B02 rot. Einheiten verwendet.

Typ S04

Manschetten montiertes Stationärteil, erhältlich in Keramik und Siliziumkarbid, als komplette Dichtung im Typ P03 angeboten. Dieser Gegenring bietet eine weitere Alternative zusammen mit der B02 rot. Einheit.

Typ S040

Manschetten montiertes Stationärteil erhältlich in Keramik und Siliziumkarbid. Dieses Stationärteil bietet eine weitere Einsatzmöglichkeit in Verbindung mit der B012 rotierenden Einheit.

Typ S05

O Ring montierter DIN lang Sitz nach DIN 24960 lieferbar in Keramik und Siliziumkarbid.

Typ S06

O Ring montierter DIN kurz Sitz nach DIN 24960 lieferbar in Keramik und Siliziumkarbid.

Typ S07

O Ring montierter Sitz in H Form aus Metall. Verwendet als Alternative zu manschettenmontierten Keramik Stationärteilen zusammen mit P01/P02 rot. Einheiten.

Typ T01

O Ring montierte Kegelfederdichtung eingesetzt in Anwendungen bei Flächenkombinationen mit hohen PV Werten.

Typ T01 DIN

O Ring montierte Kegelfederdichtung DIN Standarddichtung mit einem DIN lang Sitz. Einsetzbar in einer Vielzahl von Anwendungen durch eine weite Auswahl an Flächenmaterialien.

Typ T02

O Ring montierte Kegelfederdichtung mit ähnlicher Konstruktion wie Typ T01 aber mit einer rot. Einheit aus Chromstahl gegen ein Kohlestationärteil laufend.

Typ T03

O Ring montierte Kegelfederdichtung mit einer rot. Einheit aus Chromstahl und einem Kohlestationärteil. Einsetzbar über einen breiten Anwendungsbereich.

Typ T03 DIN

O Ring montierte Kegelfederdichtung mit einer rot. Einheit aus Chromstahl und einem Kohlestationärteil wie T03 aber für Gehäuseabmessungen nach DIN 24960 passend.. Einsetzbar über einen breiten Anwendungsbereich wie T03.

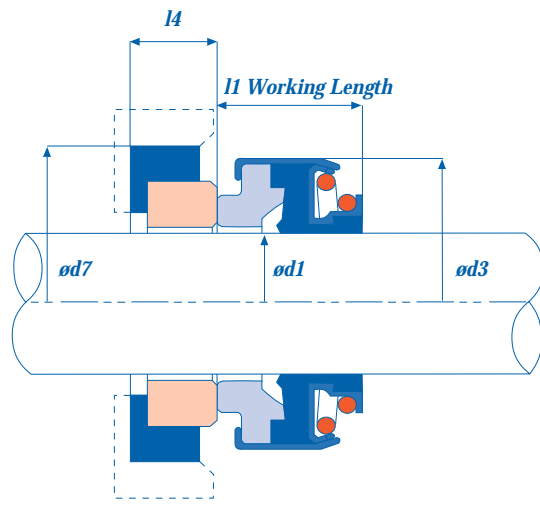
Typ T04

O Ring montierte Kegelfederdichtung mit einer rot. Einheit bestehend aus einem tiefgezogenen Chromstahlhalter mit einer Keramikfläche und einem Kohlestationärteil. Rot. und Stat.Fläche sind gegeneinander austauschbar und leicht zu erneuern.

Typ T04 DIN

O Ring montierte Kegelfederdichtung mit einer Rot. Einheit bestehend aus einem tiefgezogenen Chromstahlhalter mit einer Keramikfläche und einem Kohlestationärteil. Rot. und Stationärfläche sind gegeneinander austauschbar und leicht zu erneuern.





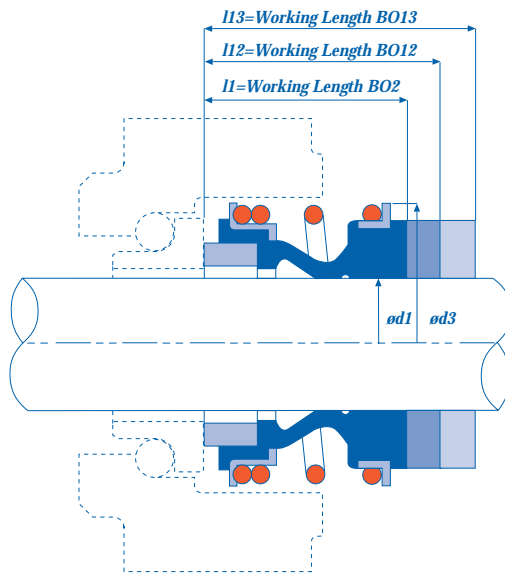
BO1



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 10 | 24 | 26 | 11 | 8 |
| | 11 | 24 | 26 | 11 | 8 |
| ■ | 12 | 24 | 26 | 11 | 8 |
| | 12 | 24 | 26 | 13 | 8 |
| ■ | 12 | 32 | 35 | 13 | 8 |
| | 13 | 24 | 26 | 13 | 8 |
| ■ | 14 | 32 | 35 | 13 | 8 |
| | 15 | 35 | 38 | 13 | 8 |
| ■ | 16 | 35 | 38 | 13 | 8 |
| | 16 | 39 | 42 | 13 | 8 |
| ■ | 17 | 39 | 42 | 13 | 8 |
| | 18 | 39 | 42 | 13 | 8 |
| ■ | 19 | 39 | 42 | 13 | 8 |
| | 20 | 39 | 42 | 13 | 8 |
| ■ | 20 | 42 | 45 | 13 | 10 |
| | 22 | 42 | 45 | 13 | 10 |
| ■ | 23 | 47 | 50 | 14 | 10 |
| | 24 | 47 | 50 | 14 | 10 |
| ■ | 25 | 47 | 50 | 14 | 10 |
| | 28 | 54 | 57 | 15 | 10 |
| ■ | 30 | 54 | 57 | 15 | 10 |
| | 32 | 54 | 57 | 15 | 10 |
| ■ | 35 | 60 | 63 | 16 | 10 |
| | 38 | 65 | 68 | 17 | 12 |
| ■ | 40 | 65 | 68 | 17 | 12 |



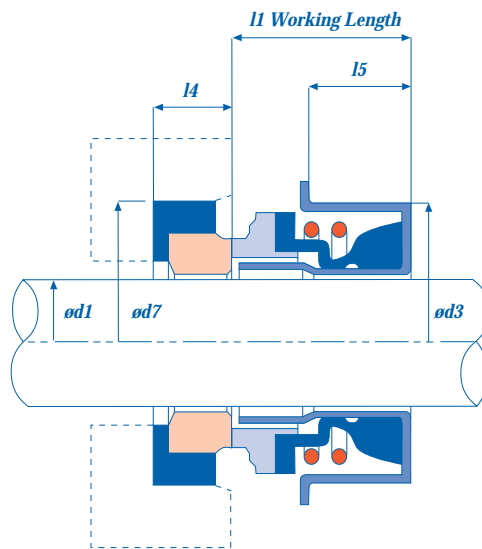
EIN WELTWEITER SPITZENREITER IN



BO2/12/13

| | <i>d1</i> | <i>d3</i> | <i>l1(B02)</i> | <i>l2(B012)</i> | <i>l3(B013)</i> |
|--|-----------|-----------|----------------|-----------------|-----------------|
| | 10 | 24.0 | 14.5 | 25.9 | 33.4 |
| | 12 | 24.0 | 15.0 | 25.9 | 33.4 |
| | 14 | 28.0 | 17.0 | 28.4 | 33.4 |
| | 15 | 28.0 | 17.0 | 28.4 | 33.4 |
| | 16 | 28.0 | 17.0 | 28.4 | 33.4 |
| | 18 | 31.0 | 19.5 | 30.0 | 37.5 |
| | 20 | 36.0 | 21.5 | 30.0 | 37.5 |
| | 22 | 36.0 | 21.5 | 30.0 | 37.5 |
| | 24 | 40.5 | 22.5 | 32.5 | 42.5 |
| | 25 | 41.0 | 23.0 | 32.5 | 42.5 |
| | 28 | 47.0 | 26.5 | 35.0 | 42.5 |
| | 30 | 47.0 | 26.5 | 35.0 | 42.5 |
| | 32 | 51.0 | 27.5 | 35.0 | 47.5 |
| | 33 | 51.0 | 27.5 | 35.0 | 47.5 |
| | 35 | 55.0 | 28.5 | 35.0 | 47.5 |
| | 38 | 58.0 | 30.0 | 36.0 | 46.0 |
| | 40 | 60.0 | 30.0 | 36.0 | 46.0 |
| | 43 | 63.0 | 30.0 | 36.0 | 51.0 |
| | 45 | 65.0 | 30.0 | 36.0 | 51.0 |
| | 48 | 69.0 | 30.5 | 36.0 | 51.0 |
| | 50 | 71.0 | 30.5 | 38.0 | 50.5 |
| | 53 | 76.0 | 33.0 | 36.5 | 59.0 |
| | 55 | 78.0 | 35.0 | 36.5 | 59.0 |
| | 58 | 82.0 | 37.0 | 41.5 | 59.0 |
| | 60 | 85.0 | 38.0 | 41.5 | 59.0 |
| | 65 | 90.0 | 40.0 | 41.5 | 69.0 |
| | 68 | 94.0 | 40.0 | 48.7 | 68.7 |
| | 70 | 97.0 | 40.0 | 48.7 | 68.7 |
| | 75 | 102.0 | 40.0 | 48.0 | 68.7 |
| | 80 | 108.0 | 40.0 | 48.0 | 78.0 |
| | 85 | 117.0 | 41.0 | 46.0 | 76.0 |
| | 90 | 126.0 | 45.0 | 51.0 | 76.0 |
| | 95 | 131.0 | 46.0 | 51.0 | 76.0 |
| | 100 | 136.0 | 47.0 | 51.0 | 76.0 |



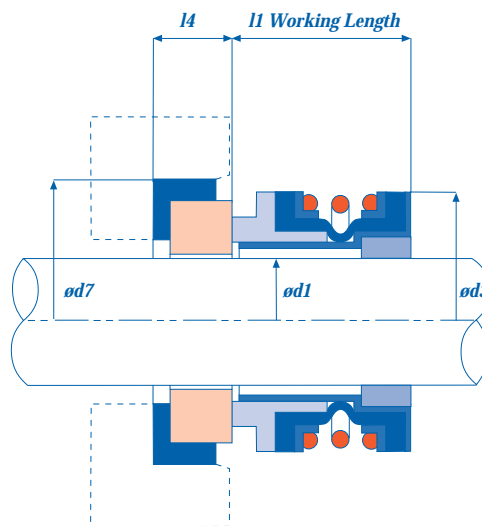


BO3



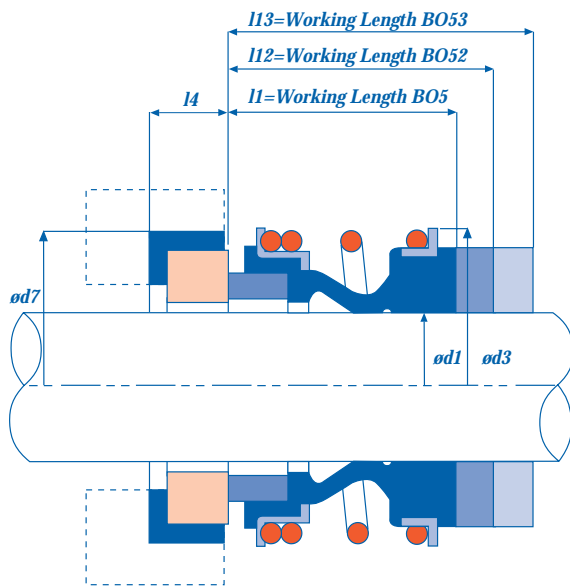
| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> | <i>l5</i> |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| ■ | 13 | 28.55 | 25.00 | 13.20 | 5.00 | 8.00 |
| ■ | 17 | 36.45 | 31.00 | 14.80 | 5.00 | 8.00 |
| ■ | 20 | 40.00 | 35.00 | 15.50 | 5.00 | 9.50 |
| ■ | 30 | 52.00 | 48.00 | 19.00 | 8.00 | 11.00 |

BO4



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 0.375 | 24.00 | 22.22 | 16.02 | 6.20 |
| ■ | 0.500 | 27.00 | 25.40 | 16.60 | 6.20 |
| ■ | 0.625 | 31.00 | 31.75 | 18.70 | 10.30 |
| ■ | 0.750 | 34.25 | 34.93 | 18.70 | 10.30 |
| ■ | 1.000 | 43.00 | 41.28 | 20.60 | 11.10 |

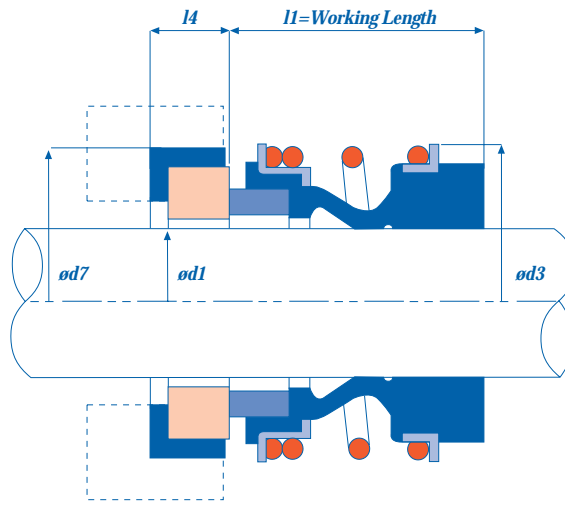




B05/52/53

| | d_1 | d_3 | d_7 | $l_1(B05)$ | $l_{12}(B052)$ | $l_{13}(B053)$ | l_2 |
|--|-------|-------|-------|------------|----------------|----------------|-------|
| | 10 | 20.0 | 21.0 | 13.4 | 25.9 | 33.4 | 6.6 |
| | 12 | 22.0 | 23.0 | 14.4 | 25.9 | 33.4 | 6.6 |
| | 14 | 24.0 | 25.0 | 14.4 | 28.4 | 33.4 | 6.6 |
| | 15 | 25.0 | 27.0 | 14.4 | 28.4 | 33.4 | 6.6 |
| | 16 | 26.0 | 27.0 | 14.4 | 28.4 | 33.4 | 6.6 |
| | 18 | 32.0 | 33.0 | 18.5 | 30.0 | 37.5 | 7.5 |
| | 20 | 34.0 | 35.0 | 18.5 | 30.0 | 37.5 | 7.5 |
| | 22 | 36.0 | 37.0 | 24.5 | 35.0 | 37.5 | 7.5 |
| | 24 | 38.0 | 39.0 | 18.5 | 32.5 | 42.5 | 7.5 |
| | 25 | 39.0 | 40.0 | 18.5 | 32.5 | 42.5 | 7.5 |
| | 28 | 42.0 | 43.0 | 24.5 | 35.0 | 42.5 | 7.5 |
| | 30 | 44.0 | 45.0 | 25.5 | 35.0 | 42.5 | 7.5 |
| | 32 | 46.0 | 48.0 | 25.5 | 35.0 | 47.5 | 7.5 |
| | 33 | 47.0 | 48.0 | 25.5 | 35.0 | 47.5 | 7.5 |
| | 35 | 49.0 | 50.0 | 26.5 | 35.0 | 47.5 | 7.5 |
| | 38 | 54.0 | 56.0 | 29.0 | 36.0 | 46.0 | 9.0 |
| | 40 | 56.0 | 58.0 | 29.0 | 36.0 | 46.0 | 9.0 |
| | 43 | 59.0 | 61.0 | 29.0 | 36.0 | 51.0 | 9.0 |
| | 45 | 61.0 | 63.0 | 29.0 | 36.0 | 51.0 | 9.0 |
| | 48 | 64.0 | 66.0 | 31.0 | 36.0 | 51.0 | 9.0 |
| | 50 | 66.0 | 70.0 | 30.5 | 38.0 | 50.5 | 9.5 |
| | 53 | 69.0 | 73.0 | 29.0 | 36.5 | 59.0 | 11.0 |
| | 55 | 71.0 | 75.0 | 29.0 | 36.5 | 59.0 | 11.0 |
| | 58 | 78.0 | 80.0 | 32.0 | 41.5 | 59.0 | 11.0 |
| | 60 | 80.0 | 80.0 | 34.0 | 41.5 | 59.0 | 11.0 |
| | 65 | 85.0 | 85.0 | 34.0 | 41.5 | 69.0 | 11.0 |
| | 68 | 88.0 | 90.0 | 33.7 | 41.2 | 68.7 | 11.3 |
| | 70 | 90.0 | 92.0 | 33.7 | 48.7 | 68.7 | 11.3 |
| | 75 | 99.0 | 97.0 | 40.7 | 48.7 | 68.7 | 11.3 |
| | 80 | 104.5 | 105.0 | 40.5 | 48.0 | 78.0 | 12.0 |
| | 85 | 109.0 | 110.0 | 38.5 | 46.0 | 76.0 | 14.0 |
| | 90 | 114.0 | 115.0 | 38.5 | 51.0 | 76.0 | 14.0 |
| | 95 | 119.0 | 120.0 | 38.5 | 51.0 | 76.0 | 14.0 |
| | 100 | 124.0 | 125.0 | 38.5 | 51.0 | 76.0 | 14.0 |





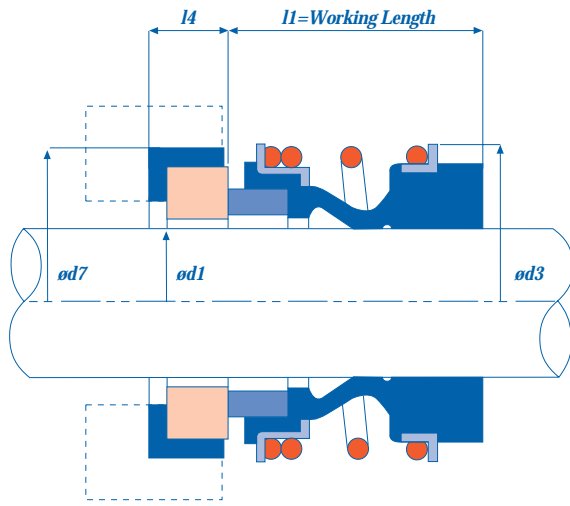
BPO2"



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| — | 0.375 | 20.0 | 24.60 | 25.40 | 08.74 |
| — | 0.500 | 22.0 | 27.79 | 25.40 | 08.74 |
| — | 0.625 | 26.0 | 30.95 | 25.40 | 10.32 |
| — | 0.750 | 32.0 | 34.15 | 25.40 | 10.32 |
| — | 0.875 | 36.0 | 37.30 | 25.40 | 10.32 |
| — | 1.000 | 39.0 | 40.50 | 25.40 | 10.32 |
| — | 1.125 | 42.0 | 47.63 | 33.34 | 11.99 |
| — | 1.250 | 46.0 | 50.80 | 33.34 | 11.99 |
| — | 1.375 | 49.0 | 53.98 | 33.34 | 11.99 |
| — | 1.500 | 54.0 | 57.15 | 33.34 | 11.99 |
| — | 1.625 | 56.0 | 60.35 | 33.34 | 11.99 |
| — | 1.750 | 61.0 | 63.50 | 40.48 | 11.99 |
| — | 1.875 | 64.0 | 66.70 | 40.48 | 11.99 |
| — | 2.000 | 66.0 | 69.85 | 40.48 | 11.99 |
| — | 2.125 | 69.0 | 73.05 | 41.00 | 13.50 |
| — | 2.250 | 71.0 | 76.20 | 41.00 | 13.50 |
| — | 2.375 | 80.0 | 79.40 | 41.00 | 13.50 |
| — | 2.500 | 83.0 | 82.55 | 41.00 | 13.50 |
| — | 2.625 | 85.0 | 92.10 | 49.00 | 15.90 |
| — | 2.750 | 90.0 | 95.25 | 49.00 | 15.90 |
| — | 2.875 | 96.0 | 98.45 | 49.00 | 15.90 |
| — | 3.000 | 99.0 | 101.65 | 49.00 | 15.90 |
| — | 3.125 | 104.0 | 111.15 | 56.00 | 20.00 |
| — | 3.250 | 104.0 | 114.30 | 56.00 | 20.00 |
| — | 3.375 | 109.0 | 117.50 | 56.00 | 20.00 |
| — | 3.500 | 114.0 | 120.65 | 56.00 | 20.00 |
| — | 3.625 | 114.0 | 123.85 | 59.00 | 20.00 |
| — | 3.750 | 119.0 | 127.00 | 59.00 | 20.00 |
| — | 3.875 | 122.0 | 130.20 | 62.00 | 20.00 |
| — | 4.000 | 124.0 | 133.35 | 62.00 | 20.00 |



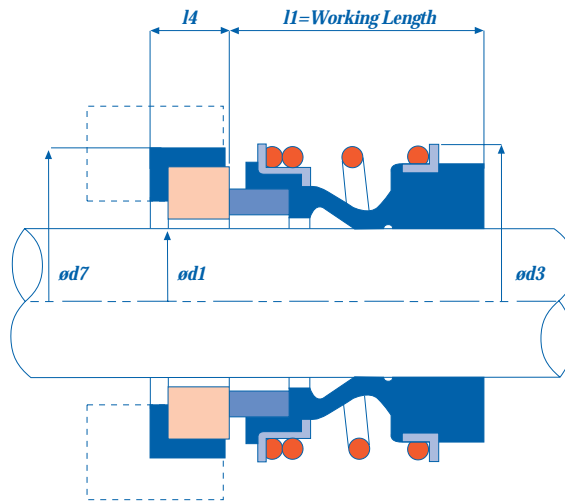
EIN WELTWEITER SPITZENREITER IN



BPO2mm

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| █ | 10 | 20.0 | 24.60 | 25.40 | 08.74 |
| | 12 | 22.0 | 27.79 | 25.40 | 08.74 |
| █ | 13 | 22.0 | 27.79 | 25.40 | 08.74 |
| | 14 | 24.0 | 30.95 | 25.40 | 10.32 |
| █ | 15 | 25.0 | 30.95 | 25.40 | 10.32 |
| | 16 | 26.0 | 30.95 | 25.40 | 10.32 |
| █ | 18 | 32.0 | 34.15 | 25.40 | 10.32 |
| | 19 | 32.0 | 34.15 | 25.40 | 10.32 |
| █ | 20 | 34.0 | 35.70 | 25.40 | 10.32 |
| | 22 | 36.0 | 37.30 | 25.40 | 10.32 |
| █ | 24 | 38.0 | 40.50 | 25.40 | 10.32 |
| | 25 | 39.0 | 40.50 | 25.40 | 10.32 |
| █ | 28 | 42.0 | 47.63 | 33.34 | 11.99 |
| | 30 | 44.0 | 50.80 | 33.34 | 11.99 |
| █ | 32 | 46.0 | 50.80 | 33.34 | 11.99 |
| | 33 | 47.0 | 53.98 | 33.34 | 11.99 |
| █ | 34 | 49.0 | 53.98 | 33.34 | 11.99 |
| | 35 | 49.0 | 53.98 | 33.34 | 11.99 |
| █ | 38 | 54.0 | 57.15 | 33.34 | 11.99 |
| | 40 | 56.0 | 60.35 | 33.34 | 11.99 |
| █ | 42 | 59.0 | 63.50 | 40.48 | 11.99 |
| | 43 | 59.0 | 63.50 | 40.48 | 11.99 |
| █ | 44 | 59.0 | 63.50 | 40.48 | 11.99 |
| | 45 | 61.0 | 63.50 | 40.48 | 11.99 |
| █ | 48 | 64.0 | 66.70 | 40.48 | 11.99 |
| | 50 | 66.0 | 69.85 | 40.48 | 11.99 |
| █ | 53 | 69.0 | 73.05 | 41.00 | 13.50 |
| | 55 | 71.0 | 76.20 | 41.00 | 13.50 |
| █ | 58 | 78.0 | 79.40 | 41.00 | 13.50 |
| | 60 | 80.0 | 79.40 | 41.00 | 13.50 |
| █ | 63 | 83.0 | 82.55 | 41.00 | 13.50 |
| | 65 | 85.0 | 92.10 | 49.00 | 15.90 |
| █ | 70 | 90.0 | 95.25 | 49.00 | 15.90 |
| | 73 | 96.0 | 98.45 | 49.00 | 15.90 |
| █ | 75 | 99.0 | 101.65 | 49.00 | 15.90 |
| | 80 | 104.0 | 114.30 | 56.00 | 20.00 |
| █ | 85 | 109.0 | 117.50 | 56.00 | 20.00 |
| | 90 | 114.0 | 123.85 | 59.00 | 20.00 |
| █ | 95 | 119.0 | 127.00 | 59.00 | 20.00 |
| | 100 | 124.0 | 133.35 | 62.00 | 20.00 |





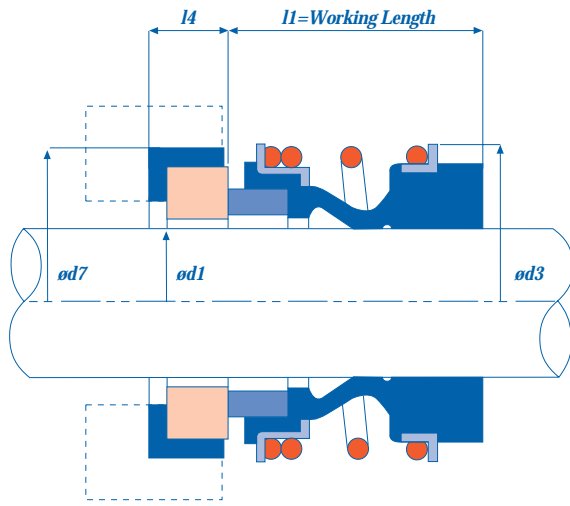
BPO4



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 0.500 | 22.0 | 25.40 | 20.62 | 7.93 |
| | 0.625 | 26.0 | 31.75 | 22.22 | 10.28 |
| ■ | 0.750 | 32.0 | 34.93 | 22.22 | 10.28 |
| | 0.875 | 36.0 | 38.10 | 23.80 | 10.28 |
| ■ | 1.000 | 39.0 | 41.28 | 25.40 | 11.10 |
| | 1.125 | 42.0 | 44.44 | 26.97 | 11.10 |
| ■ | 1.250 | 46.0 | 47.63 | 26.97 | 11.10 |
| | 1.375 | 49.0 | 50.80 | 28.58 | 11.10 |
| ■ | 1.500 | 54.0 | 53.98 | 28.58 | 11.10 |
| | 1.625 | 56.0 | 60.33 | 34.93 | 12.70 |
| ■ | 1.750 | 59.0 | 63.50 | 34.93 | 12.70 |
| | 1.875 | 61.0 | 66.68 | 38.10 | 12.70 |
| ■ | 2.000 | 66.0 | 69.85 | 38.10 | 12.70 |
| | 2.125 | 69.0 | 76.20 | 42.88 | 14.28 |
| ■ | 2.250 | 71.0 | 79.38 | 42.88 | 14.28 |
| | 2.375 | 80.0 | 82.55 | 46.02 | 14.28 |
| ■ | 2.500 | 83.0 | 85.73 | 46.02 | 14.28 |
| | 2.625 | 85.0 | 85.73 | 49.20 | 15.90 |
| ■ | 2.750 | 90.0 | 88.90 | 49.20 | 15.90 |
| | 2.875 | 96.0 | 95.25 | 52.37 | 5.90 |
| ■ | 3.000 | 99.0 | 98.43 | 52.37 | 15.90 |



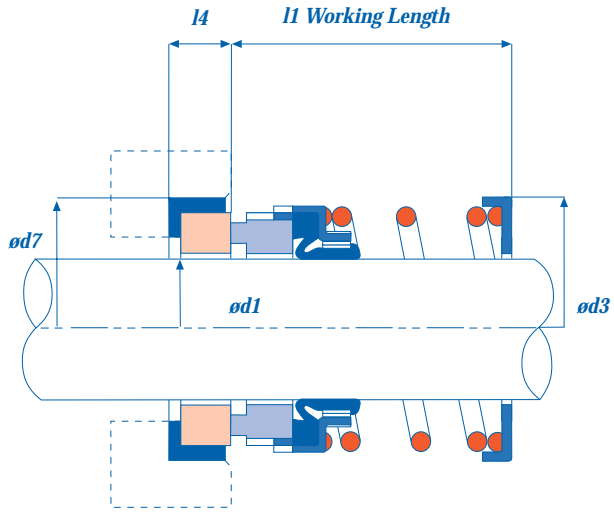
EIN WELTWEITER SPITZENREITER IN



BPO5

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 0.500 | 22.0 | 25.40 | 31.75 | 7.93 |
| | 0.625 | 26.0 | 31.75 | 34.93 | 10.28 |
| ■ | 0.750 | 32.0 | 34.93 | 34.93 | 10.28 |
| | 0.875 | 36.0 | 38.10 | 36.50 | 10.28 |
| ■ | 1.000 | 39.0 | 41.28 | 41.28 | 11.10 |
| | 1.125 | 42.0 | 44.44 | 42.85 | 11.10 |
| ■ | 1.250 | 46.0 | 47.63 | 42.85 | 11.10 |
| | 1.375 | 49.0 | 50.80 | 42.85 | 11.10 |
| ■ | 1.500 | 54.0 | 53.98 | 42.85 | 11.10 |
| | 1.625 | 56.0 | 60.33 | 50.80 | 12.70 |
| ■ | 1.750 | 59.0 | 63.50 | 50.80 | 12.70 |
| | 1.875 | 61.0 | 66.68 | 53.98 | 12.70 |
| ■ | 2.000 | 66.0 | 69.85 | 53.98 | 12.70 |
| | 2.125 | 69.0 | 76.20 | 60.32 | 14.28 |
| ■ | 2.250 | 71.0 | 79.38 | 60.32 | 14.28 |
| | 2.375 | 80.0 | 82.55 | 63.50 | 14.28 |
| ■ | 2.500 | 83.0 | 85.73 | 63.50 | 14.28 |
| | 2.625 | 85.0 | 85.73 | 69.85 | 15.90 |
| ■ | 2.750 | 90.0 | 88.90 | 69.85 | 15.90 |
| | 2.875 | 96.0 | 95.25 | 73.03 | 15.90 |
| ■ | 3.000 | 99.0 | 98.43 | 73.03 | 15.90 |



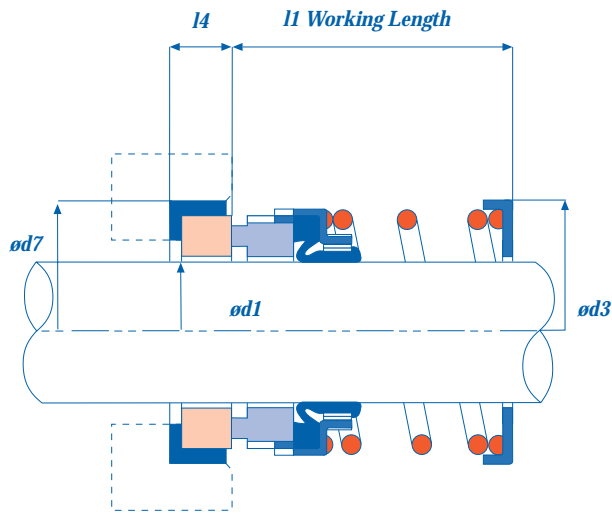


PO1



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 0.375 | 23.00 | 24.60 | 43.65 | 8.74 |
| | 0.500 | 24.00 | 27.79 | 43.65 | 8.74 |
| ■ | 0.625 | 26.75 | 30.95 | 43.65 | 10.32 |
| | 0.750 | 31.25 | 34.15 | 43.65 | 10.32 |
| ■ | 0.875 | 33.50 | 37.30 | 43.65 | 10.32 |
| | 1.000 | 43.25 | 40.50 | 43.65 | 10.32 |
| ■ | 1.125 | 46.50 | 47.63 | 60.33 | 11.99 |
| | 1.250 | 49.50 | 50.80 | 60.33 | 11.99 |
| ■ | 1.375 | 52.75 | 53.98 | 60.33 | 11.99 |
| | 1.500 | 56.00 | 57.15 | 60.33 | 11.99 |
| ■ | 1.625 | 62.25 | 60.35 | 60.33 | 11.99 |
| | 1.750 | 66.00 | 63.50 | 70.64 | 11.99 |
| ■ | 1.875 | 66.00 | 66.70 | 70.64 | 11.99 |
| | 2.000 | 73.00 | 69.85 | 70.64 | 11.99 |
| ■ | 2.125 | 73.50 | 73.05 | 71.00 | 13.50 |
| | 2.250 | 78.50 | 76.20 | 71.00 | 13.50 |
| ■ | 2.375 | 82.00 | 79.40 | 71.00 | 13.50 |
| | 2.500 | 85.00 | 82.55 | 71.00 | 13.50 |
| ■ | 2.500 | 85.00 | 82.55 | 71.00 | 13.50 |
| | 2.625 | 88.50 | 92.10 | 70.00 | 15.90 |
| ■ | 2.750 | 92.75 | 95.25 | 70.00 | 15.90 |
| | 2.875 | 95.00 | 98.45 | 73.00 | 15.90 |
| ■ | 3.000 | 102.00 | 101.65 | 73.00 | 15.90 |



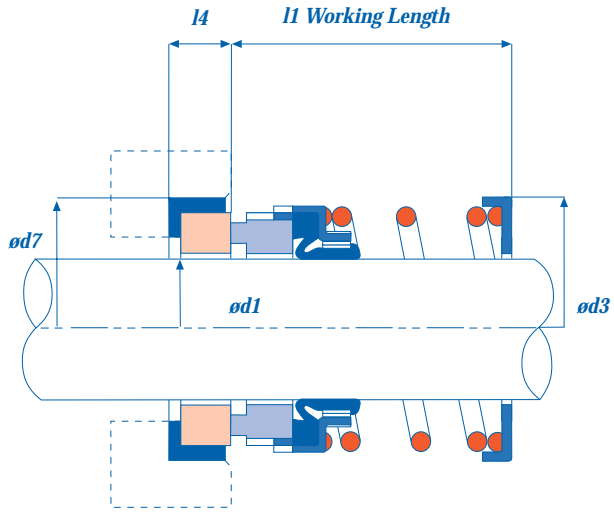


PO1

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| █ | 10 | 23.00 | 24.60 | 43.65 | 8.74 |
| | 12 | 24.00 | 27.79 | 43.65 | 8.74 |
| █ | 13 | 24.00 | 27.79 | 43.65 | 8.74 |
| | 14 | 26.75 | 30.95 | 43.65 | 10.32 |
| █ | 15 | 26.75 | 30.95 | 43.65 | 10.32 |
| | 16 | 26.75 | 30.95 | 43.65 | 10.32 |
| █ | 18 | 31.25 | 34.15 | 43.65 | 10.32 |
| | 19 | 31.25 | 34.15 | 43.65 | 10.32 |
| █ | 20 | 33.50 | 35.70 | 43.65 | 10.32 |
| | 22 | 33.50 | 37.30 | 43.65 | 10.32 |
| █ | 24 | 39.25 | 40.50 | 43.65 | 10.32 |
| | 25 | 39.25 | 40.50 | 43.65 | 10.32 |
| █ | 28 | 46.50 | 47.63 | 60.33 | 11.99 |
| | 30 | 49.50 | 50.80 | 60.33 | 11.99 |
| █ | 32 | 49.50 | 50.80 | 60.33 | 11.99 |
| | 33 | 52.75 | 53.98 | 60.33 | 11.99 |
| █ | 34 | 52.75 | 53.98 | 60.33 | 11.99 |
| | 35 | 52.75 | 53.98 | 60.33 | 11.99 |
| █ | 38 | 56.00 | 57.15 | 60.33 | 11.99 |
| | 40 | 62.25 | 60.35 | 60.33 | 11.99 |
| █ | 42 | 66.00 | 63.50 | 70.64 | 11.99 |
| | 43 | 66.00 | 63.50 | 70.64 | 11.99 |
| █ | 44 | 66.00 | 63.50 | 70.64 | 11.99 |
| | 45 | 66.00 | 63.50 | 70.64 | 11.99 |
| █ | 48 | 66.75 | 66.70 | 70.64 | 11.99 |
| | 50 | 71.75 | 69.85 | 70.64 | 11.99 |
| █ | 53 | 73.50 | 73.05 | 71.00 | 13.50 |
| | 55 | 78.50 | 76.20 | 71.00 | 13.50 |
| █ | 58 | 82.00 | 79.40 | 71.00 | 13.50 |
| | 60 | 82.00 | 79.40 | 71.00 | 13.50 |
| █ | 63 | 85.00 | 82.55 | 71.00 | 13.50 |
| | 65 | 88.50 | 92.10 | 70.00 | 15.90 |
| █ | 70 | 92.75 | 95.52 | 70.00 | 15.90 |
| | 73 | 95.00 | 98.45 | 73.00 | 15.90 |
| █ | 75 | 102.00 | 101.65 | 73.00 | 15.90 |



15

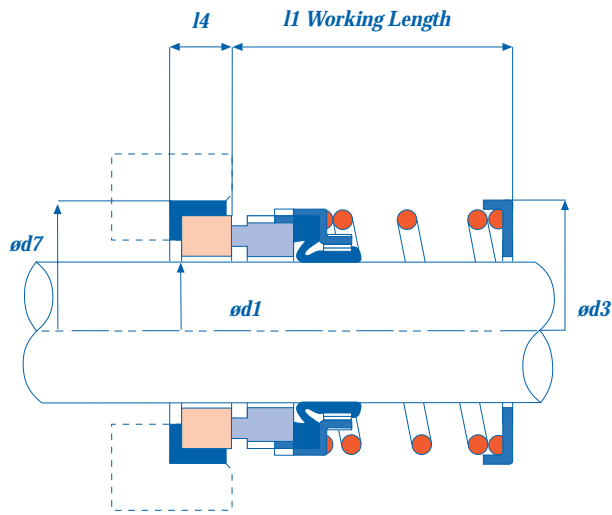


PO2



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|--|-----------|-----------|-----------|-----------|-----------|
| | 0.375 | 23.00 | 24.60 | 25.40 | 8.74 |
| | 0.500 | 24.00 | 27.79 | 25.40 | 8.74 |
| | 0.625 | 26.75 | 30.95 | 25.40 | 10.32 |
| | 0.750 | 31.25 | 34.15 | 25.40 | 10.32 |
| | 0.875 | 33.50 | 37.30 | 25.40 | 10.32 |
| | 1.000 | 43.25 | 40.50 | 25.40 | 10.32 |
| | 1.125 | 46.50 | 47.63 | 33.34 | 11.99 |
| | 1.250 | 49.50 | 50.80 | 33.34 | 11.99 |
| | 1.375 | 52.75 | 53.98 | 33.34 | 11.99 |
| | 1.500 | 56.00 | 57.15 | 33.34 | 11.99 |
| | 1.625 | 62.25 | 60.35 | 33.34 | 11.99 |
| | 1.750 | 66.00 | 63.50 | 40.48 | 11.99 |
| | 1.875 | 66.00 | 66.70 | 40.48 | 11.99 |
| | 2.000 | 73.00 | 69.85 | 40.48 | 11.99 |
| | 2.125 | 73.50 | 73.05 | 41.00 | 13.50 |
| | 2.250 | 78.50 | 76.20 | 41.00 | 13.50 |
| | 2.375 | 82.00 | 79.40 | 41.00 | 13.50 |
| | 2.500 | 85.00 | 82.55 | 41.00 | 13.50 |
| | 2.625 | 88.50 | 92.10 | 49.00 | 15.90 |
| | 2.750 | 92.75 | 95.25 | 49.00 | 15.90 |
| | 2.875 | 95.00 | 98.45 | 49.00 | 15.90 |
| | 3.000 | 102.00 | 101.65 | 49.00 | 15.90 |

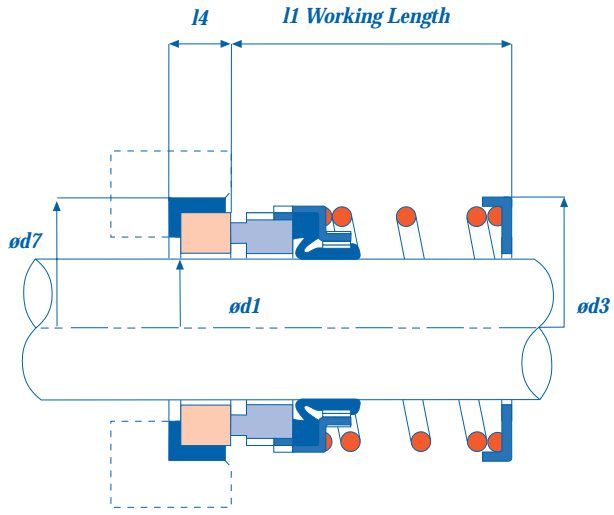




PO2

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|--|-----------|-----------|-----------|-----------|-----------|
| | 10 | 23.00 | 24.60 | 25.40 | 8.74 |
| | 12 | 24.00 | 27.79 | 25.40 | 8.74 |
| | 13 | 24.00 | 27.79 | 25.40 | 8.74 |
| | 14 | 26.75 | 30.95 | 25.40 | 10.32 |
| | 15 | 26.75 | 30.95 | 25.40 | 10.32 |
| | 16 | 26.75 | 30.95 | 25.40 | 10.32 |
| | 18 | 31.25 | 34.15 | 25.40 | 10.32 |
| | 19 | 31.25 | 34.15 | 25.40 | 10.32 |
| | 20 | 33.50 | 35.70 | 25.40 | 10.32 |
| | 22 | 33.50 | 37.30 | 25.40 | 10.32 |
| | 24 | 39.25 | 40.50 | 25.40 | 10.32 |
| | 25 | 39.25 | 40.50 | 25.40 | 10.32 |
| | 28 | 46.50 | 47.63 | 33.34 | 11.99 |
| | 30 | 49.50 | 50.80 | 33.34 | 11.99 |
| | 32 | 49.50 | 50.80 | 33.34 | 11.99 |
| | 33 | 52.75 | 53.98 | 33.34 | 11.99 |
| | 34 | 52.75 | 53.98 | 33.34 | 11.99 |
| | 35 | 52.75 | 53.98 | 33.34 | 11.99 |
| | 38 | 56.00 | 57.15 | 33.34 | 11.99 |
| | 40 | 62.25 | 60.35 | 33.34 | 11.99 |
| | 42 | 66.00 | 63.50 | 40.48 | 11.99 |
| | 43 | 66.00 | 63.50 | 40.48 | 11.99 |
| | 44 | 66.00 | 63.50 | 40.48 | 11.99 |
| | 45 | 66.00 | 63.50 | 40.48 | 11.99 |
| | 48 | 66.75 | 66.70 | 40.48 | 11.99 |
| | 50 | 71.75 | 69.85 | 40.48 | 11.99 |
| | 53 | 73.50 | 73.05 | 41.00 | 13.50 |
| | 55 | 78.50 | 76.20 | 41.00 | 13.50 |
| | 58 | 82.00 | 79.40 | 41.00 | 13.50 |
| | 60 | 82.00 | 79.40 | 41.00 | 13.50 |
| | 63 | 85.00 | 82.55 | 41.00 | 13.50 |
| | 65 | 88.50 | 92.10 | 49.00 | 15.90 |
| | 70 | 92.75 | 95.52 | 49.00 | 15.90 |
| | 73 | 95.00 | 98.45 | 49.00 | 15.90 |
| | 75 | 102.00 | 101.65 | 49.00 | 15.90 |



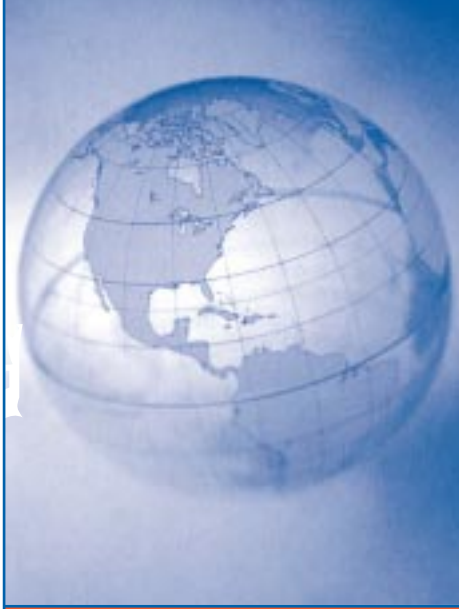
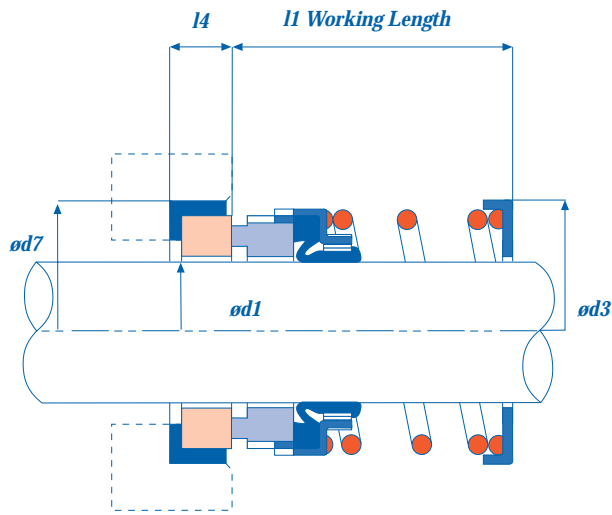


PO3



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 12 | 21.75 | 23.00 | 23.90 | 8.60 |
| ■ | 14 | 24.00 | 25.00 | 26.40 | 8.60 |
| ■ | 16 | 26.75 | 27.00 | 26.40 | 8.60 |
| ■ | 18 | 30.50 | 33.00 | 27.50 | 10.00 |
| ■ | 20 | 33.50 | 35.00 | 27.50 | 10.00 |
| ■ | 22 | 33.50 | 37.00 | 27.50 | 10.00 |
| ■ | 24 | 38.00 | 39.00 | 30.00 | 10.00 |
| ■ | 25 | 39.50 | 40.00 | 30.00 | 10.00 |
| ■ | 28 | 42.00 | 43.00 | 32.50 | 10.00 |
| ■ | 30 | 44.00 | 45.00 | 32.50 | 10.00 |
| ■ | 32 | 46.00 | 48.00 | 32.50 | 10.00 |
| ■ | 33 | 46.00 | 48.00 | 32.50 | 10.00 |
| ■ | 35 | 49.00 | 50.00 | 32.50 | 10.00 |
| ■ | 38 | 53.00 | 56.00 | 34.00 | 11.00 |
| ■ | 40 | 56.00 | 58.00 | 34.00 | 11.00 |
| ■ | 43 | 56.00 | 61.00 | 34.00 | 11.00 |
| ■ | 45 | 61.00 | 63.00 | 34.00 | 11.00 |
| ■ | 48 | 64.00 | 66.00 | 34.00 | 11.00 |
| ■ | 50 | 66.00 | 70.00 | 34.50 | 13.00 |
| ■ | 55 | 71.75 | 75.00 | 34.50 | 13.00 |
| ■ | 58 | 78.50 | 78.00 | 39.50 | 13.00 |
| ■ | 60 | 78.50 | 80.00 | 39.50 | 13.00 |
| ■ | 63 | 81.50 | 83.00 | 39.50 | 13.00 |
| ■ | 65 | 84.50 | 85.00 | 39.50 | 13.00 |
| ■ | 68 | 89.75 | 90.00 | 37.20 | 15.30 |
| ■ | 70 | 89.75 | 92.00 | 37.20 | 15.30 |
| ■ | 75 | 97.00 | 97.00 | 44.70 | 15.30 |

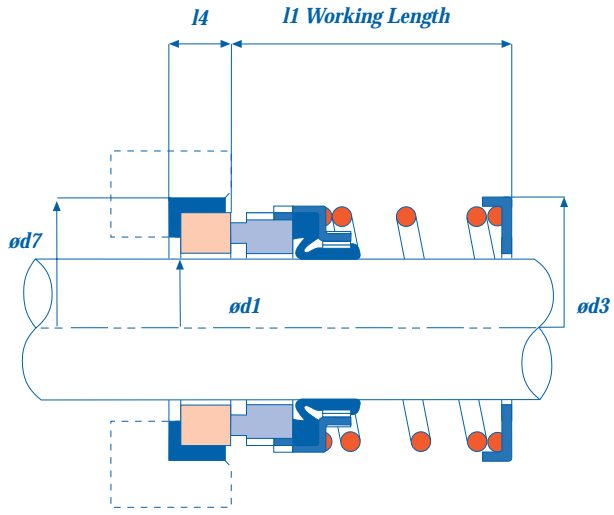




PO4

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 0.500 | 24.00 | 25.40 | 20.62 | 7.93 |
| | 0.625 | 26.75 | 31.75 | 22.22 | 10.28 |
| ■ | 0.750 | 31.25 | 34.93 | 22.22 | 10.28 |
| | 0.875 | 33.50 | 38.10 | 23.80 | 10.28 |
| ■ | 1.000 | 43.25 | 41.28 | 25.40 | 11.10 |
| | 1.125 | 46.50 | 44.44 | 26.97 | 11.10 |
| ■ | 1.250 | 49.50 | 47.63 | 26.97 | 11.10 |
| | 1.375 | 52.75 | 50.80 | 28.58 | 11.10 |
| ■ | 1.500 | 56.00 | 53.98 | 28.58 | 11.10 |
| | 1.625 | 62.25 | 60.33 | 34.93 | 12.70 |
| ■ | 1.750 | 66.00 | 63.50 | 34.93 | 12.70 |
| | 1.875 | 66.00 | 66.68 | 38.10 | 12.70 |
| ■ | 2.000 | 73.00 | 69.85 | 38.10 | 12.70 |
| | 2.125 | 73.50 | 76.20 | 42.88 | 14.28 |
| ■ | 2.250 | 78.50 | 79.38 | 42.88 | 14.28 |
| | 2.375 | 82.00 | 82.55 | 46.02 | 14.28 |
| ■ | 2.500 | 85.00 | 85.73 | 46.02 | 14.28 |
| | 2.625 | 88.50 | 85.73 | 49.20 | 15.90 |
| ■ | 2.750 | 92.75 | 88.90 | 49.20 | 15.90 |
| | 2.875 | 95.00 | 95.25 | 52.37 | 15.90 |
| ■ | 3.000 | 102.00 | 98.43 | 52.37 | 15.90 |





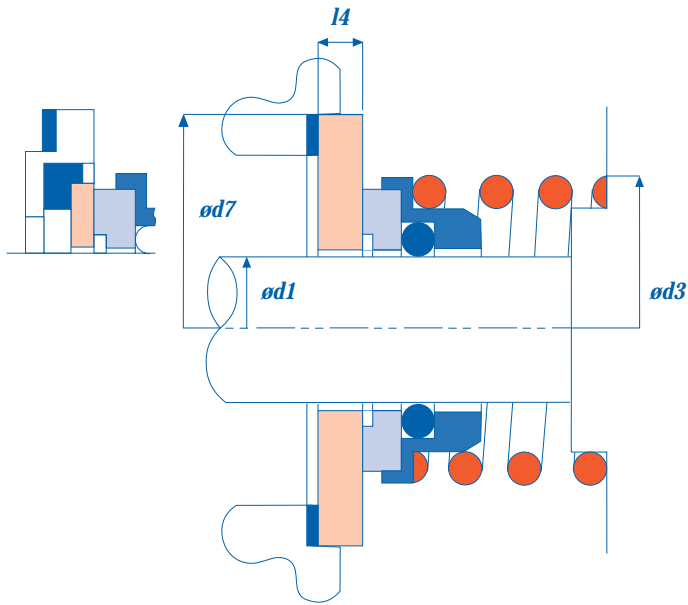
PO5



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 0.500 | 24.00 | 25.40 | 31.75 | 7.93 |
| | 0.625 | 26.75 | 31.75 | 34.93 | 10.28 |
| ■ | 0.750 | 31.25 | 34.93 | 34.93 | 10.28 |
| | 0.875 | 33.50 | 38.10 | 36.50 | 10.28 |
| ■ | 1.000 | 43.25 | 41.28 | 41.28 | 11.10 |
| | 1.125 | 46.50 | 44.44 | 42.85 | 11.10 |
| ■ | 1.250 | 49.50 | 47.63 | 42.85 | 11.10 |
| | 1.375 | 52.75 | 50.80 | 42.85 | 11.10 |
| ■ | 1.500 | 56.00 | 53.98 | 42.85 | 11.10 |
| | 1.625 | 62.25 | 60.33 | 50.80 | 12.70 |
| ■ | 1.750 | 66.00 | 63.50 | 50.80 | 12.70 |
| | 1.875 | 66.00 | 66.68 | 53.98 | 12.70 |
| ■ | 2.000 | 73.00 | 69.85 | 53.98 | 12.70 |
| | 2.125 | 73.50 | 76.20 | 60.32 | 14.28 |
| ■ | 2.250 | 78.50 | 79.38 | 60.32 | 14.28 |
| | 2.375 | 82.00 | 82.55 | 63.50 | 14.28 |
| ■ | 2.500 | 85.00 | 85.73 | 63.50 | 14.28 |
| | 2.625 | 88.50 | 85.73 | 69.85 | 15.90 |
| ■ | 2.750 | 92.75 | 88.90 | 69.85 | 15.90 |
| | 2.875 | 95.00 | 95.25 | 73.03 | 15.90 |
| ■ | 3.000 | 102.00 | 98.43 | 73.03 | 15.90 |



EIN WELTWEITER SPITZENREITER IN

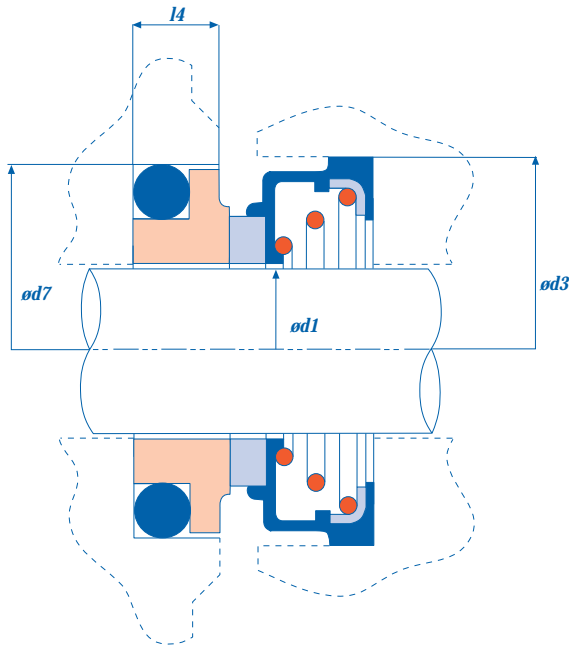


PO6

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|
| ■ | 1.000 | 41.25 | 68.20 | 7.80 |
| | 1.500 | 55.75 | 80.10 | 9.00 |

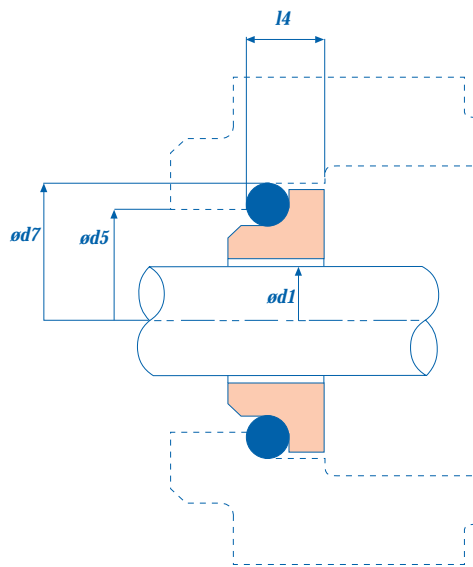


BO6



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|
| ■ | 1.750 | 70.00 | 67.00 | 7.80 |



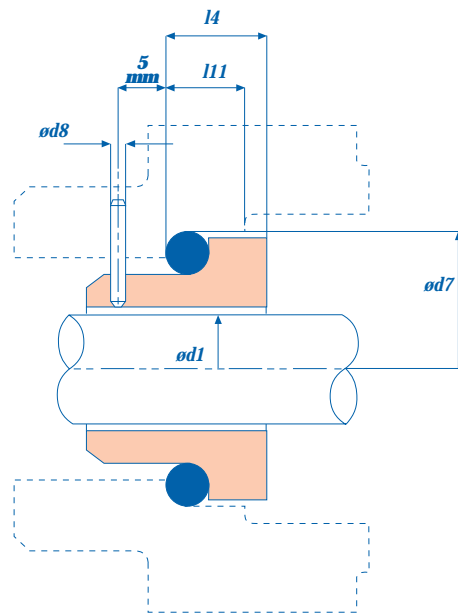


SO1



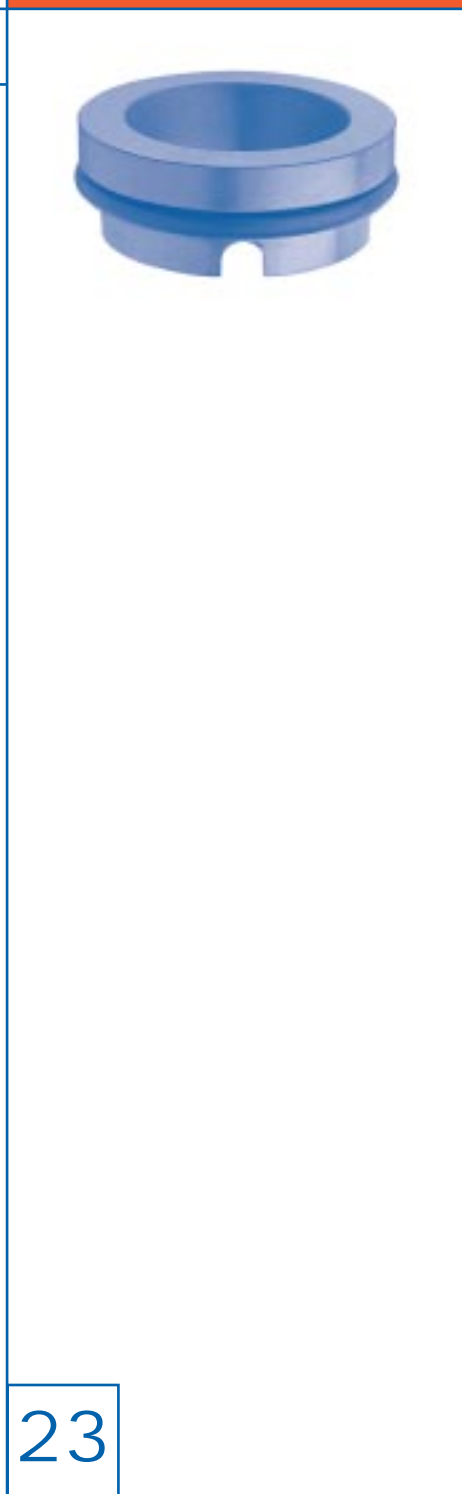
| | <i>d1</i> | <i>d5</i> | <i>d7</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|
| █ | 10 | 15.5 | 19.2 | 6.6 |
| █ | 12 | 17.5 | 21.6 | 5.6 |
| █ | 14 | 20.5 | 24.6 | 5.6 |
| █ | 15 | 20.5 | 24.6 | 6.6 |
| █ | 16 | 22.0 | 28.0 | 7.5 |
| █ | 18 | 24.0 | 30.0 | 8.0 |
| █ | 20 | 29.5 | 35.0 | 7.5 |
| █ | 22 | 29.5 | 35.0 | 7.5 |
| █ | 24 | 32.0 | 38.0 | 7.5 |
| █ | 25 | 32.0 | 38.0 | 7.5 |
| █ | 28 | 36.0 | 42.0 | 9.0 |
| █ | 30 | 39.2 | 45.0 | 10.5 |
| █ | 32 | 42.2 | 48.0 | 10.5 |
| █ | 33 | 42.2 | 50.0 | 11.0 |
| █ | 35 | 46.2 | 52.0 | 11.0 |
| █ | 38 | 49.2 | 55.0 | 10.3 |
| █ | 40 | 52.2 | 58.0 | 10.8 |
| █ | 43 | 53.3 | 62.0 | 12.0 |
| █ | 45 | 53.3 | 64.0 | 11.6 |
| █ | 48 | 59.7 | 68.4 | 11.6 |
| █ | 50 | 60.8 | 69.3 | 11.6 |
| █ | 53 | 63.8 | 72.3 | 12.3 |
| █ | 55 | 66.5 | 75.4 | 13.3 |
| █ | 58 | 69.5 | 78.4 | 13.3 |
| █ | 60 | 71.5 | 80.4 | 13.3 |
| █ | 65 | 76.5 | 85.4 | 13.0 |
| █ | 68 | 82.7 | 91.5 | 13.7 |
| █ | 70 | 83.0 | 92.0 | 13.0 |
| █ | 75 | 90.2 | 99.0 | 14.0 |
| █ | 80 | 95.2 | 104.0 | 15.0 |
| █ | 85 | 100.2 | 109.0 | 14.8 |
| █ | 90 | 105.2 | 114.0 | 14.8 |
| █ | 95 | 111.6 | 120.3 | 15.8 |
| █ | 100 | 114.2 | 123.3 | 15.8 |

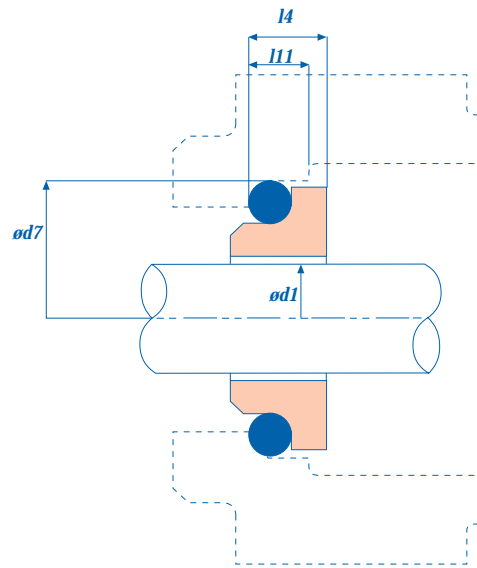




SO2

| | <i>d1</i> | <i>d7</i> | <i>d8</i> | <i>l4</i> | <i>l11</i> |
|---|-----------|-----------|-----------|-----------|------------|
| █ | 10 | 21.0 | 3.0 | 10.0 | 5.5 |
| | 12 | 23.0 | 3.0 | 10.0 | 5.5 |
| █ | 14 | 25.0 | 3.0 | 10.0 | 5.5 |
| | 16 | 27.0 | 3.0 | 10.0 | 5.5 |
| █ | 18 | 33.0 | 3.0 | 11.5 | 7.0 |
| | 20 | 35.0 | 3.0 | 11.5 | 7.0 |
| █ | 22 | 37.0 | 3.0 | 11.5 | 7.0 |
| | 24 | 39.0 | 3.0 | 11.5 | 7.0 |
| █ | 25 | 40.0 | 3.0 | 11.5 | 7.0 |
| | 28 | 43.0 | 3.0 | 11.5 | 7.0 |
| █ | 30 | 45.0 | 3.0 | 11.5 | 7.0 |
| | 32 | 48.0 | 3.0 | 11.5 | 7.0 |
| █ | 33 | 48.0 | 3.0 | 11.5 | 7.0 |
| | 35 | 50.0 | 3.0 | 11.5 | 7.0 |
| █ | 38 | 56.0 | 4.0 | 14.0 | 8.0 |
| | 40 | 58.0 | 4.0 | 14.0 | 8.0 |
| █ | 43 | 61.0 | 4.0 | 14.0 | 8.0 |
| | 45 | 63.0 | 4.0 | 14.0 | 8.0 |
| █ | 48 | 66.0 | 4.0 | 14.0 | 8.0 |
| | 50 | 70.0 | 4.0 | 15.0 | 8.5 |
| █ | 53 | 73.0 | 4.0 | 15.0 | 8.5 |
| | 55 | 75.0 | 4.0 | 15.0 | 8.5 |
| █ | 58 | 78.0 | 4.0 | 15.0 | 8.5 |
| | 60 | 80.0 | 4.0 | 15.0 | 8.5 |
| █ | 65 | 85.0 | 4.0 | 15.0 | 8.5 |
| | 68 | 90.0 | 4.0 | 18.0 | 9.5 |
| █ | 70 | 92.0 | 4.0 | 18.0 | 9.5 |
| | 75 | 97.0 | 4.0 | 18.0 | 9.5 |
| █ | 80 | 105.0 | 4.0 | 18.2 | 10.0 |
| | 85 | 110.0 | 4.0 | 18.2 | 10.0 |
| █ | 90 | 116.0 | 4.0 | 18.2 | 10.0 |
| | 95 | 120.0 | 4.0 | 17.2 | 10.0 |
| █ | 100 | 125.0 | 4.0 | 17.2 | 10.0 |



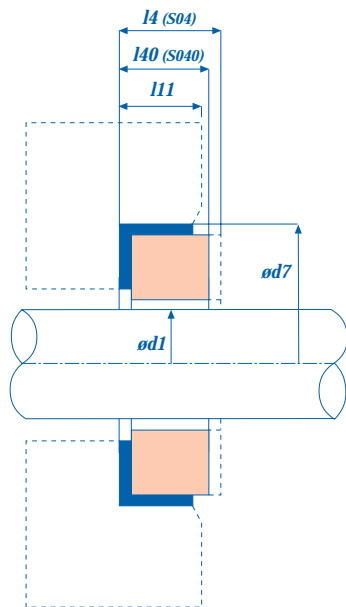


SO3



| | <i>d1</i> | <i>d7</i> | <i>l4</i> | <i>l11</i> |
|---|-----------|-----------|-----------|------------|
| █ | 10 | 21.0 | 6.6 | 5.5 |
| | 12 | 23.0 | 6.6 | 5.5 |
| █ | 14 | 25.0 | 6.6 | 5.5 |
| | 16 | 27.0 | 6.6 | 5.5 |
| █ | 18 | 33.0 | 7.5 | 7.0 |
| | 20 | 35.0 | 7.5 | 7.0 |
| █ | 22 | 37.0 | 7.5 | 7.0 |
| | 24 | 39.0 | 7.5 | 7.0 |
| █ | 25 | 40.0 | 7.5 | 7.0 |
| | 28 | 43.0 | 7.5 | 7.0 |
| █ | 30 | 45.0 | 7.5 | 7.0 |
| | 32 | 48.0 | 7.5 | 7.0 |
| █ | 33 | 48.0 | 7.5 | 7.0 |
| | 35 | 50.0 | 7.5 | 7.0 |
| █ | 38 | 56.0 | 9.0 | 8.0 |
| | 40 | 58.0 | 9.0 | 8.0 |
| █ | 43 | 61.0 | 9.0 | 8.0 |
| | 45 | 63.0 | 9.0 | 8.0 |
| █ | 48 | 66.0 | 9.0 | 8.0 |
| | 50 | 70.0 | 9.5 | 8.5 |
| █ | 53 | 73.0 | 11.0 | 8.5 |
| | 55 | 75.0 | 11.0 | 8.5 |
| █ | 58 | 78.0 | 11.0 | 8.5 |
| | 60 | 80.0 | 11.0 | 8.5 |
| █ | 65 | 85.0 | 11.0 | 8.5 |
| | 68 | 90.0 | 11.3 | 9.5 |
| █ | 70 | 92.0 | 11.3 | 9.5 |
| | 75 | 97.0 | 11.3 | 9.5 |
| █ | 80 | 105.0 | 12.0 | 10.0 |
| | 85 | 110.0 | 14.0 | 10.0 |
| █ | 95 | 120.0 | 14.0 | 10.0 |
| | 100 | 125.0 | 14.0 | 10.0 |

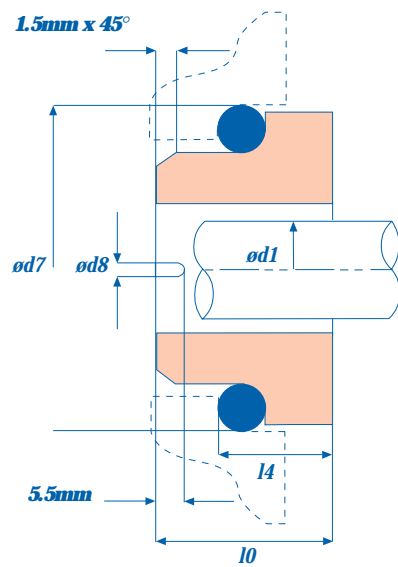




SO4/40

| | <i>d1</i> | <i>d7</i> | <i>l4(S04)</i> | <i>l40(S040)</i> | <i>l11</i> |
|---|-----------|-----------|----------------|------------------|------------|
| █ | 12 | 23.0 | 8.6 | 6.6 | 5.5 |
| | 14 | 25.0 | 8.6 | 6.6 | 5.5 |
| █ | 16 | 27.0 | 8.6 | 6.6 | 5.5 |
| | 18 | 33.0 | 10.0 | 7.5 | 7.0 |
| █ | 20 | 35.0 | 10.0 | 7.5 | 7.0 |
| | 22 | 37.0 | 10.0 | 7.5 | 7.0 |
| █ | 24 | 39.0 | 10.0 | 7.5 | 7.0 |
| | 25 | 40.0 | 10.0 | 7.5 | 7.0 |
| █ | 28 | 43.0 | 10.0 | 7.5 | 7.0 |
| | 30 | 45.0 | 10.0 | 7.5 | 7.0 |
| █ | 32 | 48.0 | 10.0 | 7.5 | 7.0 |
| | 33 | 48.0 | 10.0 | 7.5 | 7.0 |
| █ | 35 | 50.0 | 10.0 | 7.5 | 7.0 |
| | 38 | 56.0 | 11.0 | 9.0 | 8.0 |
| █ | 40 | 58.0 | 11.0 | 9.0 | 8.0 |
| | 43 | 61.0 | 11.0 | 9.0 | 8.0 |
| █ | 45 | 63.0 | 11.0 | 9.0 | 8.0 |
| | 48 | 66.0 | 11.0 | 9.0 | 8.0 |
| █ | 50 | 70.0 | 13.0 | 9.5 | 8.5 |
| | 55 | 75.0 | 13.0 | 11.0 | 8.5 |
| █ | 58 | 78.0 | 13.0 | 11.0 | 8.5 |
| | 60 | 80.0 | 13.0 | 11.0 | 8.5 |
| █ | 63 | 83.0 | 13.0 | 11.0 | 8.5 |
| | 65 | 85.0 | 13.0 | 11.0 | 8.5 |
| █ | 68 | 90.0 | 15.3 | 11.3 | 9.5 |
| | 70 | 92.0 | 15.3 | 11.3 | 9.5 |
| █ | 75 | 97.0 | 15.3 | 11.3 | 9.5 |
| | 80 | 105.0 | 15.7 | 12.0 | 10.0 |
| █ | 85 | 110.0 | 15.7 | 14.0 | 10.0 |
| | 90 | 115.0 | 15.7 | 14.0 | 10.0 |
| █ | 95 | 120.0 | 15.7 | 14.0 | 10.0 |
| | 100 | 125.0 | 15.7 | 14.0 | 10.0 |



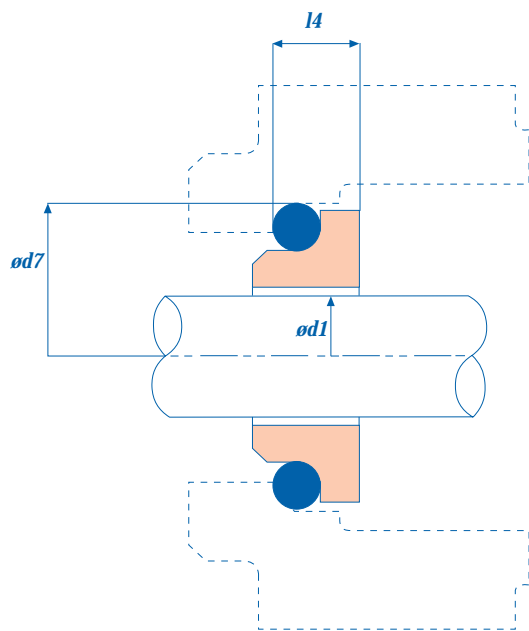


SO5



| | <i>d1</i> | <i>d7</i> | <i>l8</i> | <i>l0</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| █ | 10 | 21.0 | 4.0 | 15.0 | 8.6 |
| | 12 | 23.0 | 4.0 | 15.0 | 8.6 |
| █ | 14 | 25.0 | 4.0 | 15.0 | 8.6 |
| | 16 | 27.0 | 4.0 | 15.0 | 8.6 |
| █ | 18 | 33.0 | 5.0 | 17.0 | 10.0 |
| | 20 | 35.0 | 5.0 | 17.0 | 10.0 |
| █ | 22 | 37.0 | 5.0 | 17.0 | 10.0 |
| | 24 | 39.0 | 5.0 | 17.0 | 10.0 |
| █ | 25 | 40.0 | 5.0 | 17.0 | 10.0 |
| | 28 | 43.0 | 5.0 | 17.0 | 10.0 |
| █ | 30 | 45.0 | 5.0 | 17.0 | 10.0 |
| | 32 | 48.0 | 5.0 | 17.0 | 10.0 |
| █ | 33 | 48.0 | 5.0 | 17.0 | 10.0 |
| | 35 | 50.0 | 5.0 | 17.0 | 10.0 |
| █ | 38 | 56.0 | 5.0 | 18.0 | 11.0 |
| | 40 | 58.0 | 5.0 | 18.0 | 11.0 |
| █ | 43 | 61.0 | 5.0 | 18.0 | 11.0 |
| | 45 | 63.0 | 5.0 | 18.0 | 11.0 |
| █ | 48 | 66.0 | 5.0 | 18.0 | 11.0 |
| | 50 | 70.0 | 5.0 | 20.0 | 13.0 |
| █ | 53 | 73.0 | 5.0 | 20.0 | 13.0 |
| | 55 | 75.0 | 5.0 | 20.0 | 13.0 |
| █ | 58 | 78.0 | 5.0 | 20.0 | 13.0 |
| | 60 | 80.0 | 5.0 | 20.0 | 13.0 |
| █ | 63 | 83.0 | 5.0 | 20.0 | 13.0 |
| | 65 | 85.0 | 5.0 | 20.0 | 13.0 |
| █ | 68 | 90.0 | 5.0 | 22.0 | 15.3 |
| | 70 | 92.0 | 5.0 | 22.0 | 15.3 |
| █ | 75 | 97.0 | 5.0 | 22.0 | 15.3 |
| | 80 | 105.0 | 5.0 | 23.0 | 15.7 |
| █ | 85 | 110.0 | 5.0 | 23.0 | 15.7 |
| | 90 | 115.0 | 5.0 | 23.0 | 15.7 |
| █ | 95 | 120.0 | 5.0 | 23.0 | 15.7 |
| | 100 | 125.0 | 5.0 | 23.0 | 15.7 |

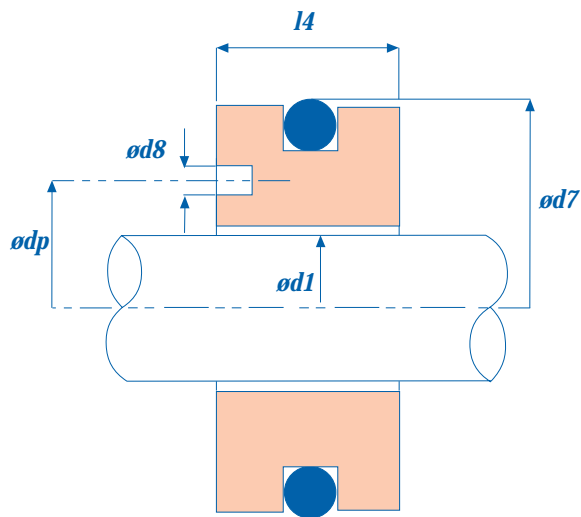




SO6

| | <i>d1</i> | <i>d7</i> | <i>l4</i> |
|---|-----------|-----------|-----------|
| █ | 10 | 21.0 | 8.6 |
| | 12 | 23.0 | 8.6 |
| █ | 14 | 25.0 | 8.6 |
| | 16 | 27.0 | 8.6 |
| █ | 18 | 33.0 | 10.0 |
| | 20 | 35.0 | 10.0 |
| █ | 22 | 37.0 | 10.0 |
| | 24 | 39.0 | 10.0 |
| █ | 25 | 40.0 | 10.0 |
| | 28 | 43.0 | 10.0 |
| █ | 30 | 45.0 | 10.0 |
| | 32 | 48.0 | 10.0 |
| █ | 33 | 48.0 | 10.0 |
| | 35 | 50.0 | 10.0 |
| █ | 38 | 56.0 | 11.0 |
| | 40 | 58.0 | 11.0 |
| █ | 43 | 61.0 | 11.0 |
| | 45 | 63.0 | 11.0 |
| █ | 48 | 66.0 | 11.0 |
| | 50 | 70.0 | 13.0 |
| █ | 53 | 73.0 | 13.0 |
| | 55 | 75.0 | 13.0 |
| █ | 58 | 78.0 | 13.0 |
| | 60 | 80.0 | 13.0 |
| █ | 63 | 83.0 | 13.0 |
| | 65 | 85.0 | 13.0 |
| █ | 68 | 90.0 | 15.3 |
| | 70 | 92.0 | 15.3 |
| █ | 75 | 97.0 | 15.3 |
| | 80 | 105.0 | 15.7 |
| █ | 85 | 110.0 | 15.7 |
| | 90 | 115.0 | 15.7 |
| █ | 95 | 120.0 | 15.7 |
| | 100 | 125.0 | 15.7 |



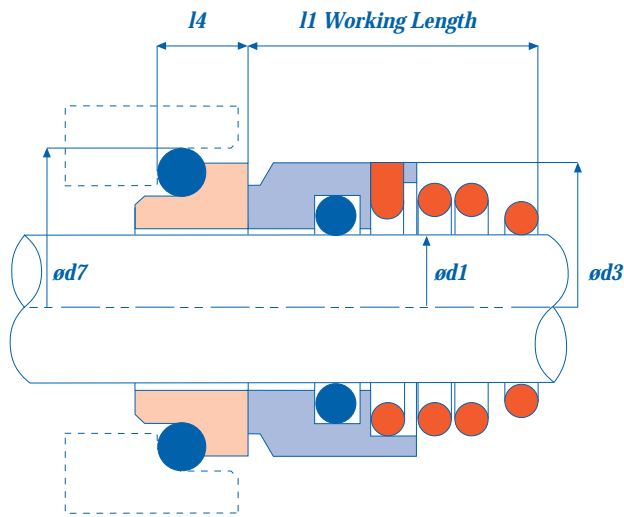


SO7



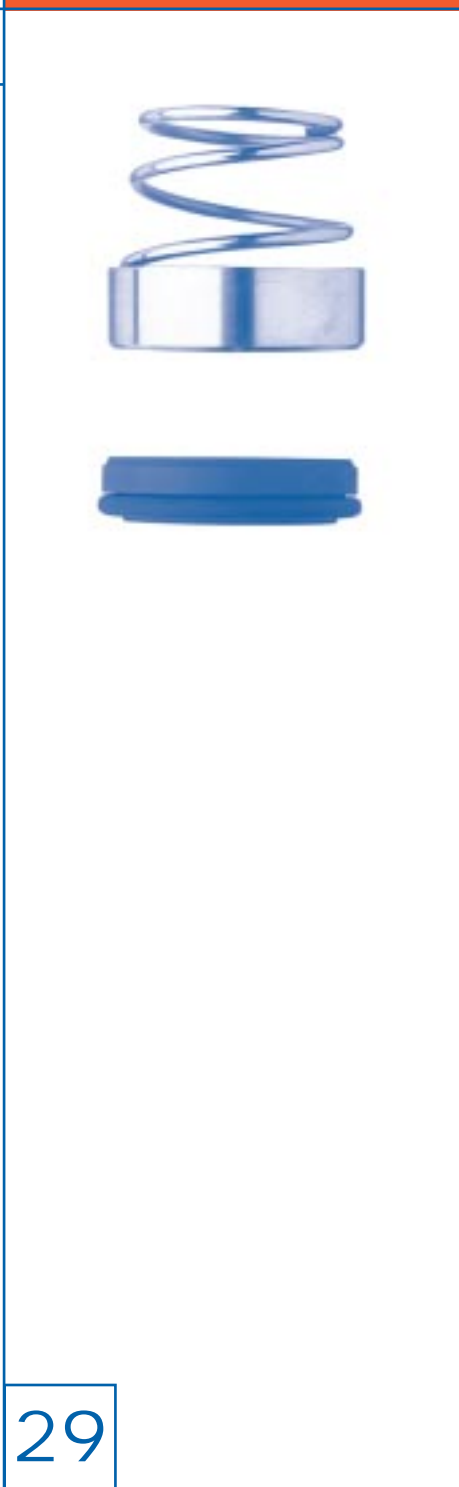
| | <i>d1</i> | <i>d7</i> | <i>d8</i> | <i>dp</i> | <i>l4</i> |
|---|-------------------|-----------|-----------|-----------|-----------|
| ■ | 0.375 10 | 24.60 | 4.00 | 16.50 | 8.70 |
| | 0.500 12,13 | 27.79 | 4.00 | 19.00 | 8.70 |
| ■ | 0.625 14,15,16 | 30.95 | 4.00 | 22.00 | 10.30 |
| | 0.750 18,19 | 34.15 | 4.00 | 26.00 | 10.30 |
| ■ | 0.812 20 | 35.70 | 4.00 | 28.00 | 10.30 |
| | 0.875 22 | 37.30 | 4.00 | 29.50 | 10.30 |
| ■ | 0.937 24 | 40.50 | 4.00 | 32.50 | 10.30 |
| | 1.00 25,26 | 40.50 | 4.00 | 32.50 | 10.30 |
| ■ | 1.125 28 | 47.63 | 4.50 | 38.00 | 11.90 |
| | 1.250 30,32 | 50.80 | 4.50 | 41.50 | 11.90 |
| ■ | 1.375 33,34,35 | 53.98 | 4.50 | 44.50 | 11.50 |
| | 1.500 38 | 57.15 | 4.50 | 47.50 | 11.90 |
| ■ | 1.625 40 | 60.35 | 4.50 | 51.00 | 11.90 |
| | 1.750 42,43,44,45 | 63.50 | 4.50 | 54.00 | 11.90 |
| ■ | 1.875 48 | 66.70 | 4.50 | 57.00 | 11.90 |
| | 2.000 50 | 69.85 | 4.50 | 60.50 | 13.50 |
| ■ | 2.125 53 | 73.05 | 4.50 | 63.50 | 13.50 |
| | 2.250 55 | 76.20 | 4.50 | 66.50 | 13.50 |
| ■ | 2.375 58,60 | 79.40 | 4.50 | 70.00 | 13.50 |
| | 2.500 63 | 82.55 | 4.50 | 73.00 | 13.50 |
| ■ | 2.625 65 | 92.10 | 5.50 | 79.50 | 15.90 |
| | 2.750 68,70 | 95.25 | 5.50 | 82.50 | 15.90 |
| ■ | 2.875 73 | 98.45 | 5.50 | 85.50 | 15.90 |
| | 3.000 75 | 101.65 | 5.50 | 89.00 | 15.90 |

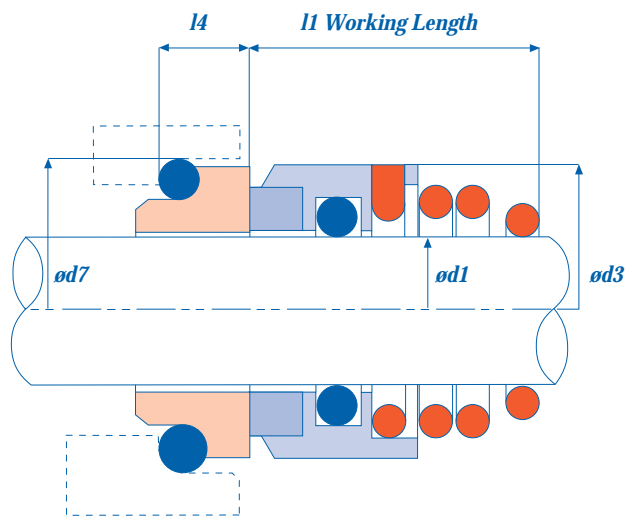




T02

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 10 | 19.00 | 19.20 | 15.50 | 7.10 |
| | 12 | 20.00 | 21.60 | 15.50 | 7.60 |
| ■ | 14 | 23.00 | 24.60 | 15.50 | 7.60 |
| | 15 | 24.00 | 24.60 | 15.50 | 8.60 |
| ■ | 16 | 26.00 | 28.00 | 17.50 | 9.00 |
| | 18 | 29.00 | 30.00 | 18.50 | 10.00 |
| ■ | 19 | 31.00 | 31.00 | 20.00 | 9.00 |
| | 20 | 31.00 | 35.00 | 20.00 | 9.50 |
| ■ | 22 | 33.00 | 35.00 | 21.50 | 9.50 |
| | 24 | 35.00 | 38.00 | 23.00 | 9.50 |
| ■ | 25 | 36.00 | 38.00 | 24.50 | 9.50 |
| | 26 | 36.00 | 40.00 | 24.50 | 10.00 |
| ■ | 28 | 40.00 | 42.00 | 24.50 | 11.00 |
| | 30 | 43.00 | 45.00 | 24.50 | 11.00 |
| ■ | 32 | 46.00 | 48.00 | 28.00 | 11.00 |
| | 35 | 49.00 | 52.00 | 28.00 | 11.50 |
| ■ | 38 | 53.00 | 55.00 | 31.00 | 11.50 |
| | 40 | 56.00 | 58.00 | 34.00 | 11.50 |
| ■ | 42 | 59.00 | 62.00 | 35.00 | 14.30 |
| | 43 | 59.00 | 63.00 | 35.00 | 14.30 |
| ■ | 45 | 61.00 | 64.00 | 36.50 | 14.30 |
| | 48 | 64.00 | 68.40 | 42.00 | 14.30 |
| ■ | 50 | 66.00 | 69.30 | 43.00 | 14.30 |
| | 55 | 71.00 | 75.40 | 47.00 | 15.30 |
| ■ | 58 | 76.00 | 78.40 | 50.00 | 15.30 |
| | 60 | 78.00 | 80.40 | 51.00 | 15.30 |
| ■ | 65 | 84.00 | 85.40 | 52.00 | 15.30 |
| | 68 | 87.00 | 91.50 | 53.00 | 16.00 |
| ■ | 70 | 90.00 | 92.00 | 54.00 | 15.30 |
| | 75 | 98.00 | 99.00 | 55.00 | 15.30 |
| ■ | 80 | 100.00 | 104.00 | 58.00 | 16.30 |





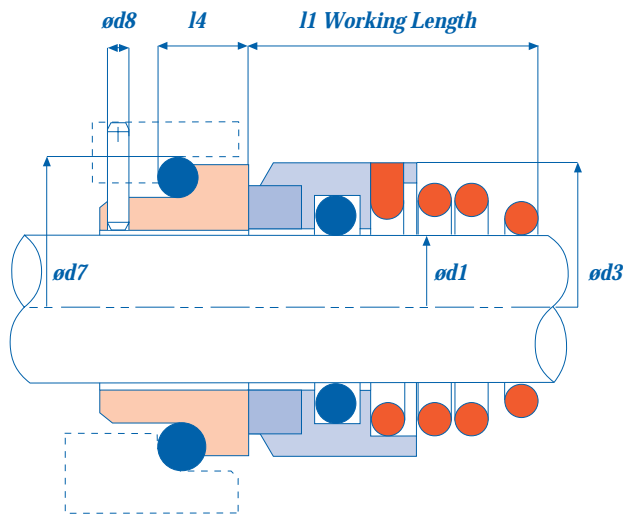
TO1



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| — | 10 | 19.00 | 19.20 | 15.50 | 6.60 |
| — | 12 | 20.00 | 21.60 | 15.50 | 5.60 |
| — | 14 | 23.00 | 24.60 | 15.50 | 5.60 |
| — | 15 | 24.00 | 24.60 | 15.50 | 6.60 |
| — | 16 | 26.00 | 28.00 | 17.50 | 7.50 |
| — | 18 | 29.00 | 30.00 | 18.50 | 8.00 |
| — | 19 | 31.00 | 31.00 | 20.00 | 7.50 |
| — | 20 | 31.00 | 35.00 | 20.00 | 7.50 |
| — | 22 | 33.00 | 35.00 | 21.50 | 7.50 |
| — | 24 | 35.00 | 38.00 | 23.00 | 7.50 |
| — | 25 | 36.00 | 38.00 | 24.50 | 7.50 |
| — | 26 | 36.00 | 40.00 | 24.50 | 8.00 |
| — | 28 | 40.00 | 42.00 | 24.50 | 9.00 |
| — | 30 | 43.00 | 45.00 | 24.50 | 10.50 |
| — | 32 | 46.00 | 48.00 | 28.00 | 10.50 |
| — | 33 | 46.00 | 48.00 | 28.00 | 10.50 |
| — | 35 | 49.00 | 52.00 | 28.00 | 11.00 |
| — | 38 | 53.00 | 55.00 | 31.00 | 10.30 |
| — | 40 | 56.00 | 58.00 | 34.00 | 10.80 |
| — | 42 | 59.00 | 62.00 | 35.00 | 12.00 |
| — | 43 | 59.00 | 63.00 | 35.00 | 12.00 |
| — | 45 | 61.00 | 64.00 | 36.50 | 11.60 |
| — | 48 | 64.00 | 68.40 | 42.00 | 11.60 |
| — | 50 | 66.00 | 69.30 | 43.00 | 11.60 |
| — | 55 | 71.00 | 75.40 | 47.00 | 13.30 |
| — | 58 | 76.00 | 78.40 | 50.00 | 13.30 |
| — | 60 | 78.00 | 80.40 | 51.00 | 13.30 |
| — | 65 | 84.00 | 85.40 | 52.00 | 13.00 |
| — | 68 | 87.00 | 91.50 | 53.00 | 13.70 |
| — | 70 | 90.00 | 92.00 | 54.00 | 13.00 |
| — | 75 | 98.00 | 99.00 | 55.00 | 14.00 |
| — | 80 | 100.00 | 104.00 | 58.00 | 15.00 |

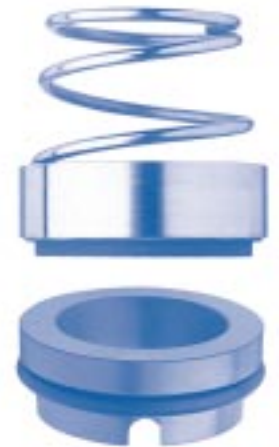


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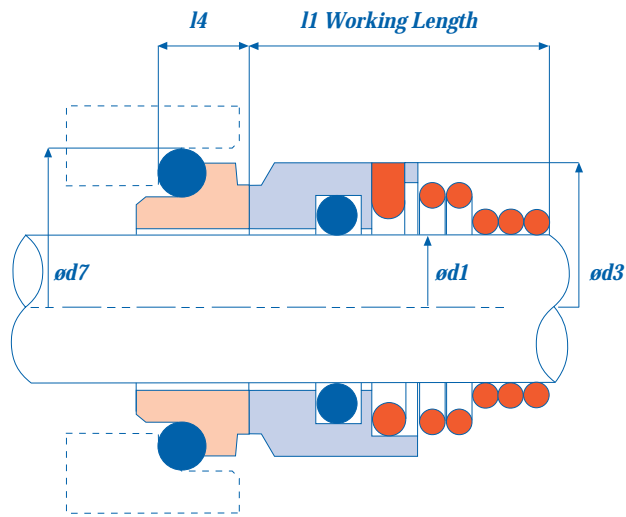


TO1 DIN

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>d8</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| █ | 10 | 19.00 | 21.00 | 3.0 | 15.50 | 10.00 |
| | 12 | 20.00 | 23.00 | 3.0 | 16.00 | 10.00 |
| █ | 14 | 23.00 | 25.00 | 3.0 | 16.50 | 10.00 |
| | 16 | 26.00 | 27.00 | 3.0 | 18.00 | 10.00 |
| █ | 18 | 29.00 | 33.00 | 3.0 | 19.50 | 11.50 |
| | 20 | 31.00 | 35.00 | 3.0 | 22.00 | 11.50 |
| █ | 22 | 33.00 | 37.00 | 3.0 | 21.50 | 11.50 |
| | 24 | 35.00 | 39.00 | 3.0 | 23.50 | 11.50 |
| █ | 25 | 36.00 | 40.00 | 3.0 | 26.50 | 11.50 |
| | 28 | 40.00 | 43.00 | 3.0 | 26.50 | 11.50 |
| █ | 30 | 43.00 | 45.00 | 3.0 | 26.50 | 11.50 |
| | 32 | 46.00 | 48.00 | 3.0 | 28.50 | 11.50 |
| █ | 33 | 46.00 | 48.00 | 3.0 | 28.50 | 11.50 |
| | 35 | 49.00 | 50.00 | 3.0 | 28.50 | 11.50 |
| █ | 28 | 53.00 | 56.00 | 4.0 | 33.50 | 14.00 |
| | 40 | 56.00 | 58.00 | 4.0 | 36.00 | 14.00 |
| █ | 43 | 59.00 | 61.00 | 4.0 | 38.50 | 14.00 |
| | 45 | 61.00 | 63.00 | 4.0 | 39.50 | 14.00 |
| █ | 48 | 64.00 | 66.00 | 4.0 | 46.00 | 14.00 |
| | 50 | 66.00 | 70.00 | 4.0 | 45.00 | 15.00 |
| █ | 53 | 69.00 | 73.00 | 4.0 | 47.00 | 15.00 |
| | 55 | 71.00 | 75.00 | 4.0 | 49.00 | 15.00 |
| █ | 58 | 76.00 | 78.00 | 4.0 | 55.00 | 15.00 |
| | 60 | 78.00 | 80.00 | 4.0 | 55.00 | 15.00 |
| █ | 65 | 84.00 | 85.00 | 4.0 | 55.00 | 15.00 |
| | 68 | 88.00 | 90.00 | 4.0 | 55.00 | 18.00 |
| █ | 70 | 90.00 | 92.00 | 4.0 | 57.00 | 18.00 |
| | 75 | 98.00 | 97.00 | 4.0 | 62.00 | 18.00 |
| █ | 80 | 100.00 | 105.00 | 4.0 | 61.80 | 18.20 |



31



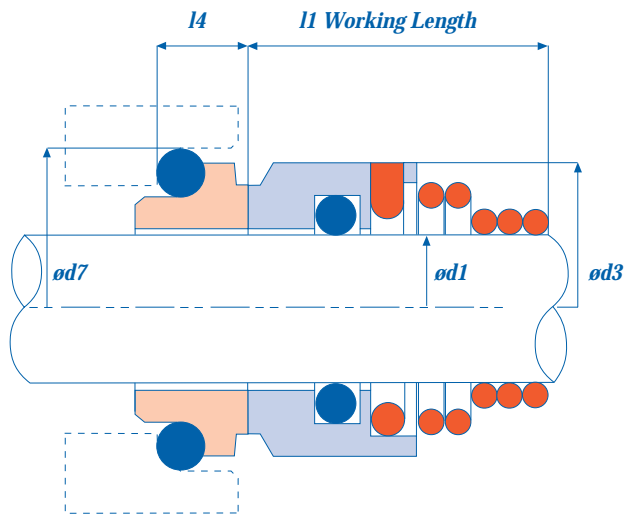
TO3



| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|-----|-----------|-----------|-----------|-----------|-----------|
| 10 | | 19.00 | 18.10 | 15.00 | 5.50 |
| 11 | | 20.00 | 20.60 | 18.00 | 5.50 |
| 12 | | 21.00 | 20.60 | 18.00 | 5.50 |
| 13 | | 23.00 | 23.10 | 22.00 | 6.00 |
| 14 | | 23.00 | 23.10 | 22.00 | 6.00 |
| 15 | | 24.00 | 26.90 | 22.00 | 7.00 |
| 16 | | 26.00 | 26.90 | 23.00 | 7.00 |
| 17 | | 26.00 | 26.90 | 23.00 | 7.00 |
| 19 | | 31.00 | 30.90 | 25.00 | 8.00 |
| 20 | | 31.00 | 30.90 | 25.00 | 8.00 |
| 21 | | 33.00 | 35.40 | 25.00 | 8.00 |
| 22 | | 33.00 | 35.40 | 25.00 | 8.00 |
| 23 | | 35.00 | 35.40 | 27.00 | 8.00 |
| 24 | | 35.00 | 35.40 | 27.00 | 8.00 |
| 25 | | 36.00 | 38.20 | 27.00 | 8.50 |
| 26 | | 36.00 | 38.20 | 27.00 | 8.50 |
| 28 | | 40.00 | 43.30 | 29.00 | 9.00 |
| 30 | | 43.00 | 43.30 | 30.00 | 9.00 |
| 32 | | 46.00 | 43.30 | 30.00 | 9.00 |
| 33 | | 46.00 | 53.50 | 39.00 | 11.50 |
| 34 | | 49.00 | 53.50 | 39.00 | 11.50 |
| 35 | | 49.00 | 53.50 | 39.00 | 11.50 |
| 36 | | 49.00 | 53.50 | 39.00 | 11.50 |
| 38 | | 53.00 | 60.50 | 39.00 | 11.50 |
| 40 | | 56.00 | 60.50 | 39.00 | 11.50 |
| 42 | | 59.00 | 60.50 | 39.00 | 11.50 |
| 43 | | 59.00 | 60.50 | 39.00 | 11.50 |
| 44 | | 61.00 | 65.50 | 41.00 | 11.50 |
| 45 | | 61.00 | 65.50 | 41.00 | 11.50 |
| 48 | | 64.00 | 65.50 | 41.00 | 11.50 |
| 50 | | 66.00 | 72.50 | 45.00 | 11.50 |
| 55 | | 71.00 | 72.50 | 47.00 | 11.50 |
| 60 | | 78.00 | 79.30 | 49.00 | 11.50 |
| 65 | | 84.00 | 84.50 | 51.00 | 11.50 |
| 70 | | 89.75 | 89.50 | 51.00 | 11.50 |
| 75 | | 98.00 | 94.50 | 57.00 | 11.50 |
| 80 | | 100.00 | 99.50 | 59.00 | 11.50 |
| 85 | | 107.50 | 105.50 | 59.00 | 13.50 |
| 90 | | 111.00 | 111.50 | 62.00 | 13.50 |
| 95 | | 119.00 | 116.50 | 62.00 | 13.50 |
| 100 | | 124.00 | 119.50 | 75.00 | 13.50 |

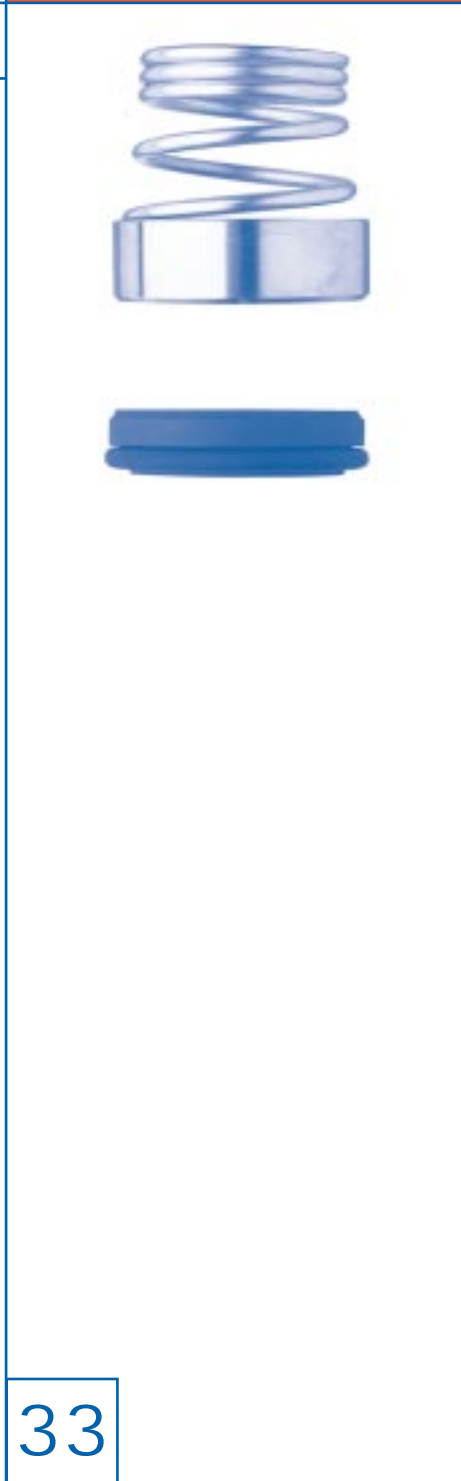


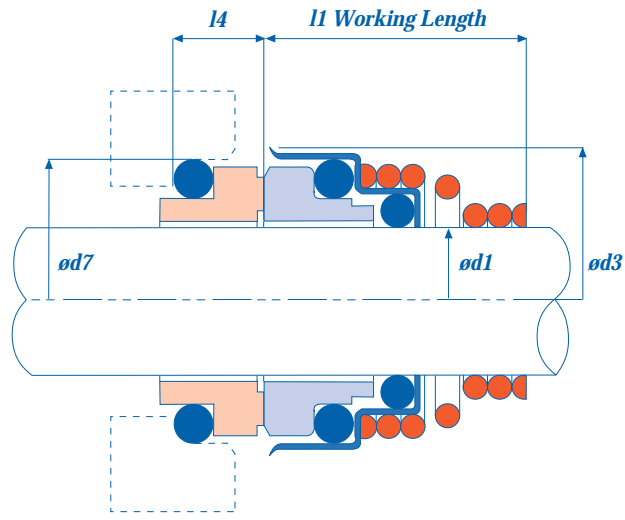
EIN WELTWEITER SPITZENREITER IN



TO3 DIN

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| █ | 10 | 19.00 | 21.00 | 15.00 | 7.00 |
| | 12 | 20.00 | 23.00 | 18.00 | 7.00 |
| █ | 14 | 23.00 | 25.00 | 22.00 | 7.00 |
| | 16 | 26.00 | 27.00 | 23.00 | 7.00 |
| █ | 18 | 29.00 | 33.00 | 24.00 | 10.00 |
| | 20 | 31.00 | 35.00 | 25.00 | 10.00 |
| █ | 22 | 33.00 | 37.00 | 25.00 | 10.00 |
| | 24 | 35.00 | 39.00 | 27.00 | 10.00 |
| █ | 25 | 36.00 | 40.00 | 27.00 | 10.00 |
| | 28 | 40.00 | 43.00 | 29.00 | 10.00 |
| █ | 30 | 43.00 | 45.00 | 30.00 | 10.00 |
| | 32 | 46.00 | 48.00 | 30.00 | 10.00 |
| █ | 33 | 46.00 | 48.00 | 39.00 | 10.00 |
| | 35 | 49.00 | 50.00 | 39.00 | 10.00 |
| █ | 38 | 53.00 | 56.00 | 42.00 | 13.00 |
| | 40 | 56.00 | 58.00 | 42.00 | 13.00 |
| █ | 43 | 59.00 | 61.00 | 47.00 | 13.00 |
| | 45 | 61.00 | 63.00 | 47.00 | 13.00 |
| █ | 48 | 64.00 | 66.00 | 47.00 | 13.00 |
| | 50 | 66.00 | 70.00 | 46.00 | 14.00 |
| █ | 53 | 69.00 | 73.00 | 56.00 | 14.00 |
| | 55 | 71.00 | 75.00 | 56.00 | 14.00 |
| █ | 58 | 76.00 | 78.00 | 56.00 | 14.00 |
| | 60 | 78.00 | 80.00 | 56.00 | 14.00 |
| █ | 63 | 81.00 | 83.00 | 56.00 | 14.00 |
| | 65 | 84.00 | 85.00 | 66.00 | 14.00 |
| █ | 68 | 87.00 | 90.00 | 64.00 | 16.00 |
| | 70 | 89.60 | 92.00 | 64.00 | 16.00 |
| █ | 75 | 98.00 | 97.00 | 64.00 | 16.00 |
| | 80 | 100.00 | 105.00 | 72.00 | 18.00 |
| █ | 85 | 107.50 | 110.00 | 72.00 | 18.00 |
| | 90 | 111.00 | 115.00 | 72.00 | 18.00 |
| █ | 95 | 119.00 | 120.00 | 72.00 | 18.00 |
| | 100 | 123.80 | 125.00 | 72.00 | 18.00 |



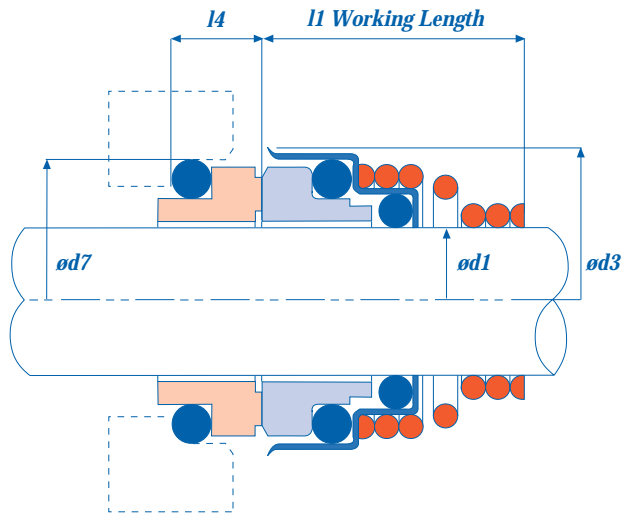


TO4



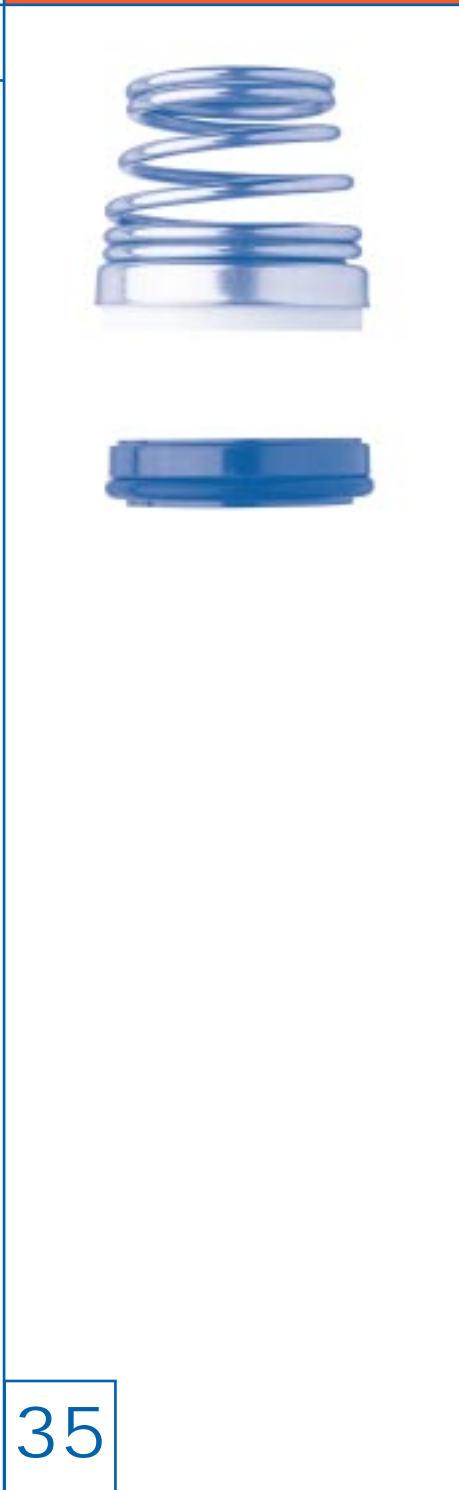
| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| ■ | 10 | 19.50 | 18.10 | 15.00 | 5.50 |
| | 11 | 22.00 | 20.60 | 18.00 | 5.50 |
| ■ | 12 | 23.00 | 20.60 | 18.00 | 5.50 |
| | 13 | 25.00 | 23.10 | 22.00 | 6.00 |
| ■ | 14 | 25.00 | 23.10 | 22.00 | 6.00 |
| | 15 | 28.75 | 26.90 | 22.00 | 7.00 |
| ■ | 16 | 28.75 | 26.90 | 23.00 | 7.00 |
| | 17 | 28.75 | 26.90 | 23.00 | 7.00 |
| ■ | 18 | 32.75 | 30.90 | 24.00 | 8.00 |
| | 19 | 32.75 | 30.90 | 25.00 | 8.00 |
| ■ | 20 | 32.75 | 30.90 | 25.00 | 8.00 |
| | 21 | 37.50 | 35.40 | 25.00 | 8.00 |
| ■ | 22 | 37.50 | 35.40 | 25.00 | 8.00 |
| | 23 | 37.50 | 35.40 | 27.00 | 8.00 |
| ■ | 24 | 37.50 | 35.40 | 27.00 | 8.00 |
| | 25 | 40.00 | 38.20 | 27.00 | 8.50 |
| ■ | 28 | 45.50 | 43.30 | 29.00 | 9.00 |
| | 29 | 45.50 | 43.30 | 30.00 | 9.00 |
| ■ | 30 | 45.50 | 43.30 | 30.00 | 9.00 |
| | 32 | 45.50 | 43.30 | 30.00 | 9.00 |
| ■ | 33 | 48.00 | 53.30 | 39.00 | 11.50 |
| | 35 | 50.00 | 53.30 | 39.00 | 11.50 |
| ■ | 38 | 56.00 | 60.50 | 39.00 | 11.50 |
| | 40 | 58.00 | 60.50 | 39.00 | 11.50 |





TO4 DIN

| | <i>d1</i> | <i>d3</i> | <i>d7</i> | <i>l1</i> | <i>l4</i> |
|---|-----------|-----------|-----------|-----------|-----------|
| █ | 10 | 20.00 | 21.00 | 15.00 | 7.00 |
| | 12 | 22.00 | 23.00 | 18.00 | 7.00 |
| █ | 14 | 24.00 | 25.00 | 22.00 | 7.00 |
| | 16 | 26.00 | 27.00 | 23.00 | 7.00 |
| █ | 18 | 32.00 | 33.00 | 24.00 | 10.00 |
| | 20 | 33.00 | 35.00 | 25.00 | 10.00 |
| █ | 22 | 36.00 | 37.00 | 25.00 | 10.00 |
| | 24 | 37.40 | 39.00 | 27.00 | 10.00 |
| █ | 25 | 38.00 | 40.00 | 27.00 | 10.00 |
| | 28 | 42.00 | 43.00 | 29.00 | 10.00 |
| █ | 30 | 44.00 | 45.00 | 30.00 | 10.00 |
| | 32 | 45.50 | 48.00 | 30.00 | 10.00 |
| █ | 33 | 46.50 | 48.00 | 39.00 | 10.00 |
| | 35 | 49.00 | 50.00 | 39.00 | 10.00 |
| █ | 38 | 56.00 | 56.00 | 42.00 | 13.00 |
| | 40 | 58.00 | 58.00 | 42.00 | 13.00 |





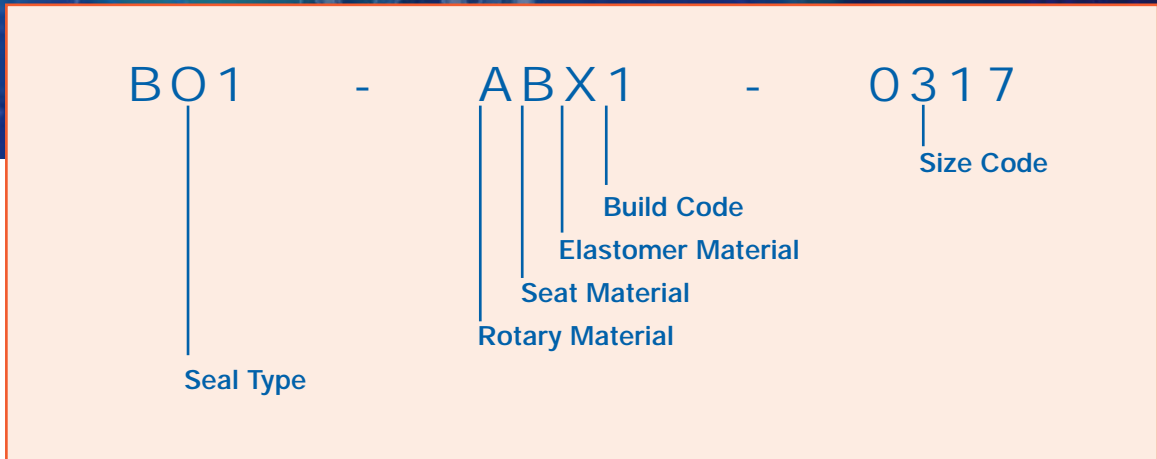
| AES | BURGMANN | CRANE | PIONEER WESTON | SEALOL | STERLING |
|------------|----------|-------------|-------------------|-------------|-----------|
| B01 | | | | | SBT |
| B02 | MG1 ROT | | | | |
| B03 | | 6A | | 7 | S268 |
| B04 | | 106 | 5 | 6 | S216 |
| B05 | | 2100 | | | |
| B052 | | 2100 (L1K) | | | |
| B053 | | 2100 (L1N) | | | |
| B06 | | | | | |
| P01 | | 1A (N TYPE) | KAB | 43 CE LONG | S211/S511 |
| P02 (BP02) | | 2 (N TYPE) | KAC | 43 CE SHORT | S212 |
| P03 (B052) | | 521 | | 43 DIN | S522 |
| P04 (BP04) | | 21 | KAJ | 43 CU SHORT | |
| P05 (BP05) | | | KAK | 43 CU LONG | S212A |
| P06 | | | | | S225/S238 |
| S01 | G4 | | | | |
| S02 | G9 | | | | |
| S03 | G6 | | | | |
| S04 | | | | | |
| S040 | G60 | | | | |
| S05 | | BP | | | |
| S06 | | B0 | | | |
| S07 | | W TYPE | | | |
| T01 | M32 | | | | |
| T01 DIN | M32 DIN | | | | |
| T02 | M3 | | | | |
| T03 | | | | | SR 2 |
| T03 DIN | | | | | SU 2 |
| T04 | | | | | SR 3 |
| T04 DIN | | | | | SU 3 |

| AES | TEKHNISEAL | VULCAN | A J ROTEN | OTHER MANUFACTURERS |
|------------|------------|--------------|-----------|-----------------------|
| B01 | | 18 | 37B | CYCLAM |
| B02 | | 19 Rotary | | ALPHA LAVAL PUMP SEAL |
| B03 | 700 | 70 | 68 | |
| B04 | 600 | 60 | 16 | |
| B05 | | 14 DIN | | |
| B052 | | 142 DIN | | |
| B053 | | 143 DIN | | |
| B06 | MACERATOR | 28 | 41 | HAIGH MACERATOR |
| P01 | 100 | 10 | 51 | |
| P02 (BP02) | 200 | 20 | 21 | |
| P03 (BP03) | 500/552 | 24 | 52 | |
| P04 (BP04) | 800 | 11 | 21A | |
| P05 (BP05) | 900 | 22 | 51A | |
| P06 | 304 | 26 | 37 | APV 1" |
| S01 | | 19 STAT | | |
| S02 | | 8 DIN LONG | | |
| S03 | | 8 DIN SHORT | | |
| S04 | | | | |
| S040 | | | | |
| S05 | | 24 DIN LONG | | |
| S06 | | 24 DIN SHORT | | |
| S07 | | 21 | | |
| T01 | | 8 | | FRISTAM |
| T01 DIN | | 8 DIN | | |
| T02 | | 8 B | | |
| T03 | 400 | 12 | ROTEN 2 | |
| T03 DIN | 406 | 12 DIN | UNITEN 2 | |
| T04 | 402 | 13 | ROTEN 3 | |
| T04 DIN | 404 | 13 DIN | UNITEN 3 | |



EIN WELTWEITER SPITZENREITER IN

SEAL CODING SYSTEM



*MATERIAL CODE
(Rotary & Seat)*

- A - Carbon
- B - Alumina Ceramic
- C -
- D - Silicon Carbide
- E - Stainless Steel
- F - Ni-Resist
- G - Tungsten Carbide

*MATERIAL CODE
(Elastomer)*

- X - Nitrile
- Y - EPR
- Z - Viton

*BUILD
CODE*

- 1 - Standard
- R - RH Spring
- L - LH Spring
- P - Rotary Only
- Q - Seat Only

*SIZE
CODE*

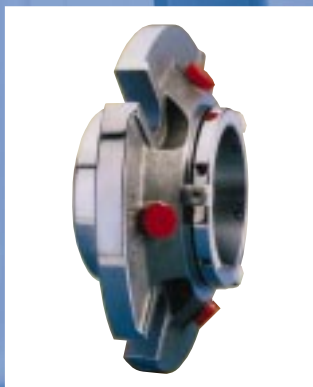
- 0300 - 30 mm
- 0317 - 1 1/4"
- etc.,

EXAMPLES

| | | | |
|-----------------------------------|---|------------------------------|----------------------------|
| Seal Code Seal type PO1 | PO1 - ABX1 - 0317 Material Code A - Carbon (Rotary) B - Alumina Ceramic (Seat) X - Nitrile | Build Code 1 Standard | Size Code 0317 = 1 1/4" |
| Seal Code Seal type SO1 | SO1 - BXQ - 0508 Material Code - - (No Rotary) B - Alumina Ceramic (Seat) X - Nitrile | Build Code Q SEAT only | Size Code 0508 = 2" |
| Seal Code Seal type TO4 DIN | TO4D - BAXR - 0300 Material Code B - Alumina Ceramic (Rotary) A - Carbon (Seat) X - Nitrile | Build Code R -R.H. Spring | Size Code 0300 = 30 mm |

ENVIRONMENTAL

INVESTMENT IN TECHNOLOGY
PROVIDING SUPERIOR DESIGNED PRODUCTS



TECHNOLOGY



CARTRIDGE MECHANICAL SEALS

A comprehensive range of cartridge mechanical seals, built around a modular design concept places A.E.S. Engineering Ltd. at the fore of environmental sealing across a range of industries as diverse as Pulp & Paper, Corn Milling, Chemical & Pharmaceutical, Food Processing and Power Generation.

Seals are pre-assembled at the factory, pressure tested and shipped as a unit, dramatically increasing performance as errors due to installation decline.

- Balanced seal faces
- Self-aligning stationaries
- Non-clogging internal rotaries
- No shaft fretting
- Easy to install
- Factory pre-set



The information contained in this brochure is given based upon the supplier's experience and knowledge. The supplier, however, cannot take responsibility for the safe operation of any product where its ultimate use is neither stated nor known at the time of supply. It is incumbent upon the end user to take the responsibility for ensuring that the product is used for a purpose within the product's limits of performance. Any application limits contained within this brochure are for guidance only.

For information on a specific application the end-user should seek the supplier's assistance/ advice prior to the product being supplied or put into service.

The fitting and operation of any product contained in this brochure should only be undertaken by skilled personnel. The incorrect fitting or operation of any product contained within this brochure can result in rapid deterioration of the product and can, in some circumstances, result in serious failure.

When mechanical seals are fitted and operated correctly, leakage is minimal. Where hazardous product is being sealed a *DOUBLE MECHANICAL SEAL AND COMPATIBLE SUPPORT SYSTEM* must be used.

If in any doubt regarding the safe operation of any product, your supplier must be contacted for further advice or assistance. Your supplier details are contained in the relevant box on the outside back cover of this brochure.

STANDARD MATERIALS OF CONSTRUCTION

| Face Materials | Elastomers | Other Component Parts |
|--|---|--|
| Resin Impregnated Carbon Ceramic Solid Silicon Carbide Solid Tungsten Carbide Ni-Resist Stainless Steel | Nitrile Ethylene Propylene Viton Additional 'O' Rings available in: Aflas, Neoprene | AISI316 Stainless Steel AISI304 Stainless Steel |

ELASTOMER SELECTION

| Material | Typical Duties |
|--|---|
| Nitrile Ethylene Propylene Viton Neoprene | General General & Hot Water Chemical Applications Compressor & Refrigeration |

THIS DOCUMENT IS DESIGNED TO PROVIDE DIMENSIONAL INFORMATION AND AN INDICATION OF AVAILABILITY. FOR FURTHER INFORMATION AND SAFE OPERATING LIMITS CONTACT OUR TECHNICAL SPECIALISTS AT THE LOCATIONS BELOW.



INVESTOR IN PEOPLE

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- GUARD YOUR EQUIPMENT
- WEAR PROTECTIVE CLOTHING



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