



sterling range

www.first4seals.com



single spring

mechanical seal range

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DOC / F4S 5018 12/2005

Reference Issue • L - UK - F4SSPRING - 01

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TYPES 211 & 212 MECHANICAL

Types 211 and 212 Seals are part of a family of Diaphragm Rubber Bellows Seals and are interchangeable with many other makes including Crane Types 1A and 2 and Sealol 043 CE Long and Short. The Bellows rotates with the shaft and can accommodate some end float, eccentricity and misalignment.



Benefits

- Positive drive – Reduces Bellows Stress
- Self adjusting – Bellows takes care of wear and shaft float
- Long life – Due to minimum face loading
- Non clogging – Due to open single spring design
- Non fretting – No moving O-rings
- Bi-directional – Due to positive drive

All metal parts in Stainless Steel as standard

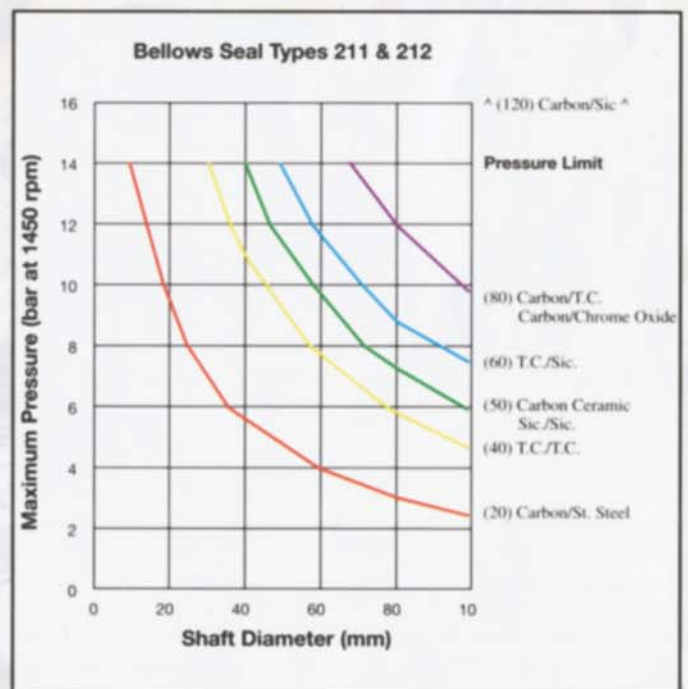
Service Capability

- Maximum Speed – 15 m/sec*
- Maximum Pressure – 14 bar*
- Temperature – -40° to 200°C
- Media – Dependant on materials

* See P.V. Curves for maximum speed/pressure combination

NOTE

P.V. Curves for water at 20°C

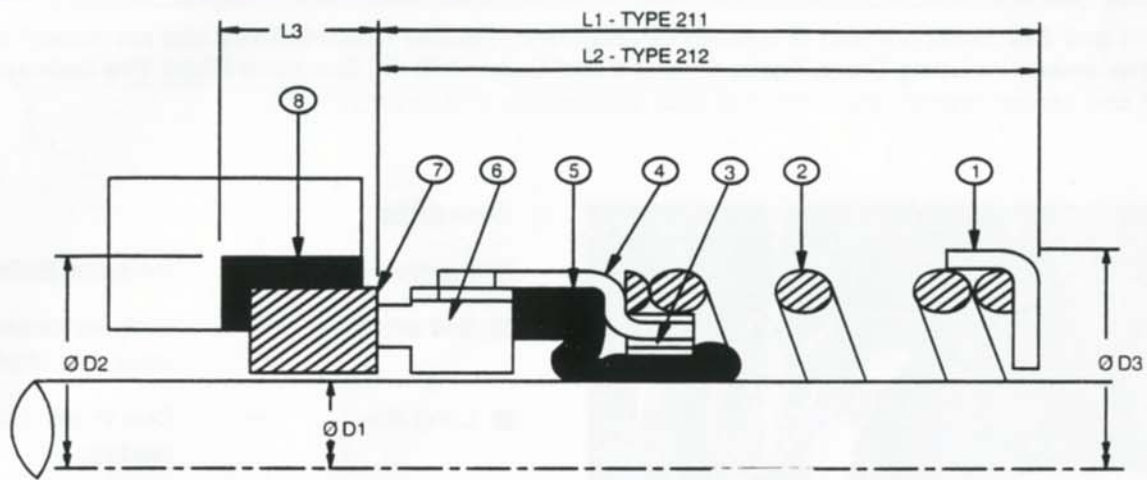


Materials

- Rotary Face (6) – Carbon, reaction bonded Silicon Carbide
- Stationary Face (7) – Ceramic, reaction bonded Silicon Carbide
- Spring (2) – 304 Stainless Steel
- Metal Parts (1, 3, 4) – 316 Stainless Steel
- Elastomers (5, 8) – Nitrile, Viton, E.P.

OTHER MATERIALS AVAILABLE TO SPECIAL ORDER

SEAL TYPES 211 and 212



DIMENSIONS - METRIC AND IMPERIAL

| D1 METRIC | ORDER CODE | D1 INCH | ORDER CODE | D2 mm | D3 mm | L1 mm | L2 mm | L3 mm |
|--------------|---------------|------------|---------------|----------|----------|----------|----------|----------|
| 10 | 0100 | 3/8 | 0095 | 24.60 | 22.95 | 43.65 | 25.40 | 8.74 |
| 12 | 0120 | 1/2 | 0127 | 27.79 | 23.90 | 43.65 | 25.40 | 8.74 |
| 13 | 0130 | - | - | 27.79 | 23.90 | 43.65 | 25.40 | 8.74 |
| 14 | 0140 | - | - | 30.95 | 26.70 | 43.65 | 25.40 | 10.32 |
| 15 | 0150 | - | - | 30.95 | 26.70 | 43.65 | 25.40 | 10.32 |
| 16 | 0160 | 5/8 | 0158 | 30.95 | 26.70 | 43.65 | 25.40 | 10.32 |
| 18 | 0180 | - | - | 34.15 | 31.10 | 43.65 | 25.40 | 10.32 |
| 19 | 0190 | 3/4 | 0191 | 34.15 | 31.10 | 43.65 | 25.40 | 10.32 |
| 20 | 0200 | - | - | 35.70 | 33.40 | 43.65 | 25.40 | 10.32 |
| 22 | 0220 | 7/8 | 0222 | 37.30 | 33.40 | 43.65 | 25.40 | 10.32 |
| 24 | 0240 | - | - | 40.50 | 39.20 | 43.65 | 25.40 | 10.32 |
| 25 | 0250 | 1 | 0254 | 40.50 | 39.20 | 43.65 | 25.40 | 10.32 |
| 28 | 0280 | 1 1/8 | 0286 | 47.63 | 46.30 | 60.33 | 33.34 | 11.99 |
| 30 | 0300 | - | - | 50.80 | 49.40 | 60.33 | 33.34 | 11.99 |
| 32 | 0320 | 1 1/4 | 0317 | 50.80 | 49.40 | 60.33 | 33.34 | 11.99 |
| 33 | 0330 | - | - | 53.98 | 52.60 | 60.33 | 33.34 | 11.99 |
| 34 | 0340 | - | - | 53.98 | 52.60 | 60.33 | 33.34 | 11.99 |
| 35 | 0350 | 1 3/8 | 0349 | 53.98 | 52.60 | 60.33 | 33.34 | 11.99 |
| 38 | 0380 | 1 1/2 | 0381 | 57.15 | 55.80 | 60.33 | 33.34 | 11.99 |
| 40 | 0400 | 1 5/8 | 0412 | 60.35 | 59.20 | 60.33 | 33.34 | 11.99 |
| 42 | 0420 | - | - | 63.50 | 66.00 | 70.64 | 40.48 | 11.99 |
| 43 | 0430 | - | - | 63.50 | 66.00 | 70.64 | 40.48 | 11.99 |
| 44 | 0440 | 1 3/4 | 0444 | 63.50 | 66.00 | 70.64 | 40.48 | 11.99 |
| 45 | 0450 | - | - | 63.50 | 66.00 | 70.64 | 40.48 | 11.99 |
| 48 | 0480 | 1 7/8 | 0476 | 66.70 | 66.60 | 70.64 | 40.48 | 11.99 |
| 50 | 0500 | 2 | 0508 | 69.85 | 71.65 | 70.64 | 40.48 | 13.50 |
| 53 | 0530 | 2 1/8 | 0539 | 73.05 | 73.30 | 71.00 | 41.00 | 13.50 |
| 55 | 0550 | 2 1/4 | 0571 | 76.20 | 78.40 | 71.00 | 41.00 | 13.50 |
| 58 | 0580 | - | - | 79.40 | 82.00 | 71.00 | 41.00 | 13.50 |
| 60 | 0600 | 2 3/8 | 0603 | 79.40 | 82.00 | 71.00 | 41.00 | 13.50 |
| 63 | 0630 | 2 1/2 | 0635 | 82.55 | 84.90 | 71.00 | 41.00 | 13.50 |
| 65 | 0650 | 2 5/8 | 0666 | 92.10 | 88.40 | 70.00 | 49.00 | 15.90 |
| 70 | 0700 | 2 3/4 | 0698 | 95.25 | 92.60 | 70.00 | 49.00 | 15.90 |
| 73 | 0730 | 2 7/8 | 0730 | 98.45 | 94.85 | 73.00 | 49.00 | 15.90 |
| 75 | 0750 | 3 | 0762 | 101.65 | 102.70 | 73.00 | 49.00 | 15.90 |