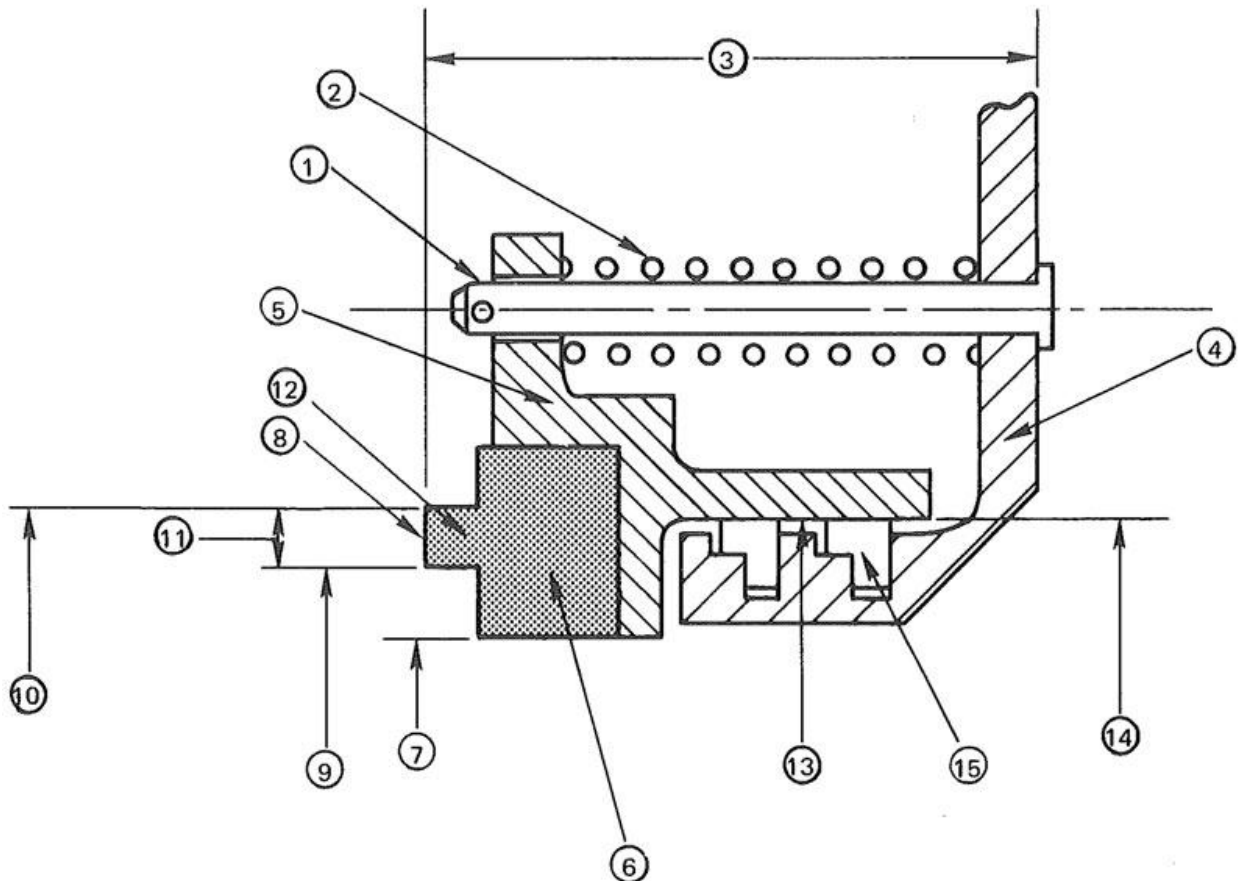


Mechanical Face Seal Assembly



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|--------------------------------|---|
| 1. Torque Pin | 9. Sealing-Face Inner Diameter |
| 2. Coil Spring | 10. Sealing-Face Outer Diameter |
| 3. Free Length | 11. Sealing-Face Width |
| 4. Piston-Ring Carrier | 12. Seal Nose |
| 5. Primary-Seal Carrier | 13. Secondary-Seal Land |
| 6. Primary Seal Ring | 14. Secondary-Seal Land Diameter |
| 7. Seal Bore | 15. Piston Ring |
| 8. Sealing Face | |

1. Torque Pin: A type of anti-rotation device. It consists of a metal pin, one end of which fits loosely in a hole or slot in the primary-seal carrier with the other end being solidly attached to the secondary-seal carrier.

2. Coil Spring: A type of spring which is formed from wire wrapped in a helix. The spring so formed encloses a volume in the shape of a right cylinder. It is normally used in multiples, with the individual springs oriented about the circumference of a seal assembly. Thus placed, the springs transmit a uniform closing force on the sealing face.

3. Free Length: The uncompressed axial length of a face-seal assembly. The term is also applicable to a spring or a bellows.

4. Piston-Ring Carrier: Also known as Secondary Seal Carrier: That component of a face seal assembly or its surrounding stationary structure which contains grooves or slots into which the secondary seals are mounted.

5. Primary-Seal Carrier: That component of a face seal assembly or its surrounding stationary structure which contains grooves or slots into which the secondary seals are mounted.

6. Primary Seal Ring: A ring-shaped member in a face seal or in a ring seal. It is normally made of carbon. The face of the primary-seal ring forms the primary seal with the mating ring.

7. Seal Bore: The diameter which corresponds to the innermost surface of a face-seal assembly. The surface referred to can be on the primary-seal ring, the primary-seal carrier, or the secondary-seal carrier, whichever has the smallest inner diameter.

8. Sealing Face: The lapped surface of the seal, which comes in closest proximity to the face of the mating ring of a face seal, thus forming the primary seal. With reference to lip seals, the preferred term is 'seal contact surface'.

9. Sealing-Face Inner Diameter: The diameter which corresponds to the inner edge of the sealing face on the seal nose.

10. Sealing-Face Outer Diameter: The diameter which corresponds to the outer edge of the sealing face on the seal nose.

11. Sealing-Face Width: The radial distance from the inside edge to the outside edge of the nose part of the sealing face.

12. Seal Nose: The part of the primary seal ring of a face seal which comes in closest proximity to the mating surface and which together with the mating surface, forms the primary seal.

13. Secondary-Seal Land: The cylindrical surface against which the secondary seal rides to effect the secondary sealing.

14. Secondary-Seal Land Diameter: The diameter of the surface of the face-seal assembly which contacts the secondary seal. The sealing land may also be on a stationary surface which is not a part of the seal assembly. For a balanced seal, this diameter is also the balance diameter.

15. Piston Ring: A ring with a basically rectangular cross-section and a single small gap. It seals by expanding or contracting against a mating cylindrical surface.