



## O-Ring and Backup | O-Rings tolerances

O-Ring dimensional tolerances according with DIN 3771 and ISO 3601/1

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#### Cross Section Tolerances (mm)

|                      |          |          |          |          |          |          |          |          |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>cross section</b> | 1.78     | 2.62     | 3.53     | 5.33     | 7.00     | 8.00     | 10.00    | 12.00    |
| <b>tolerance</b>     | +/- 0.08 | +/- 0.09 | +/- 0.10 | +/- 0.13 | +/- 0.15 | +/- 0.18 | +/- 0.21 | +/- 0.28 |

#### Inner diameter tolerance (mm)

|                  |           |            |             |             |             |
|------------------|-----------|------------|-------------|-------------|-------------|
| <b>diameter</b>  | 1.8 - 6.3 | 6.7 - 11.2 | 11.8 - 21.2 | 22.4 - 40.0 | 41.2 - 80.0 |
| <b>tolerance</b> | +/- 0.13  | +/- 0.16   | +/- 0.19    | +/- 0.95%   | +/- 0.86%   |

|                  |              |               |             |           |            |
|------------------|--------------|---------------|-------------|-----------|------------|
| <b>diameter</b>  | 82.5 - 160.0 | 165.0 - 300.0 | 300.0 - 650 | 670 - 910 | 910 - 1180 |
| <b>tolerance</b> | +/- 0.78%    | +/- 0.74%     | +/- 0.67%   | +/- 0.60% | +/- 0.55%  |

### COMPRESSION SET

Compression Set is the permanent residual deformation of an elastomeric sample after conditioning in standard conditions of deformation, temperature, time and environment.

It is expressed with the the residual percentage of the initial deformation and is inversely proportional to the capability of the seal to maintain the pre-load.

For this reason, the C.S. of the elastomer should be the lowest as possible to allow the seal to assure a perfect sealing for a long time even when stressed with strong changes of temperature and pressure.

Please note that, due to molding conditions, the C.S. improves the bigger is the O-Ring's cross section.

Upon request we supply batches with the C.S. certified by our laboratory.