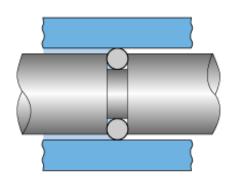


know-how makes the difference

o-ring.info o-ring design



| Piston - groove dimensions | | + | - | |
|----------------------------|-----------|-------------------|--------|-----------|
| material | Steel (Cl | Steel (Ck45 etc.) | | |
| bore diameter (mm) | 5.00 | 0.018 | 0 | H8 |
| piston diameter (mm) | 4.90 | -0.01 | -0.022 | f7 |
| groove diameter (mm) | 4.25 | 0 | -0.03 | h9 |
| groove width (mm) | 0.80 | 0.2 | 0si | uggestion |
| radius (mm) | 0.2 | | | |

| Application | | O-Ring | | | ± | |
|--------------------------------|----------------------------|-----------------------------|--------|--------------|------|----------|
| Sealing principle | Piston | compound | | FKM / Viton® | | |
| design Design. O-Ring & Groove | chemical volume swell (%) | | 0 | | | |
| | Groove | inner diameter (mm) | | 4.29 | 0.15 | ISO 3601 |
| temperature (°C) | 21 | cross section diameter (mm) | | 0.5 | 0.08 | ISO 3601 |
| Results at Service | | | min. | nom. | | max. |
| Calculated Values a | t Centrical Position of Pi | ston: | | | | |
| O-Ring Compression | on (%) | | 1.63 | 25.00 | | 35.34 |
| Free Groove Volum | ne (%) | | - 1.39 | 28.10 | | 64.18 |
| O Ping Inner Diame | otor Strotch (%) | | 4.05 | 0.03 | | 2.66 |

| Free Groove Volume (%) | - 1.39 | 28.10 | 64.18 |
|--|---------|--------|-------|
| O-Ring Inner Diameter Stretch (%) | - 4.95 | - 0.93 | 2.66 |
| Groove Depth incl. Gap (mm) | 0.38 | 0.38 | 0.40 |
| Sealing Gap (mm) | 0.05 | 0.05 | 0.07 |
| Calculated Values at Excentrical Position of Piston: | | | |
| O-Ring Compression (%) | - 15.63 | | 45.86 |
| Groove Depth incl. Gap (mm) | 0.31 | | 0.47 |
| Sealing Gap (mm) | 0.00 | | 0.14 |

Comments

Results at Service

Caution, excessive compression may result in high compression set and possible splitting of parts Caution, excessive groove fill may result in decreased part life, extrusion, or part degradation

Disclaimer

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.