

Statotherm P Foil 9591

Features

Statotherm P Foil 9591 is a gasket sheet consisting of unreinforced, flexible graphite foil with a purity of $\geq 99.85\%$ and a low ash content. Statotherm P foil 9591 a basic gasket material without measurable cold or warm flow, making it usable as a gasket material for fittings and pumps in all branches of industry (especially for emergency repairs and complicated shapes). Equates to the SGL Sigraflex standard.

Key physical characteristics (2.0 mm thick)

| | | |
|--|---------------|------------|
| Bulk density of the graphite [g/cm ³] | | 1 |
| Ash content of the graphite [%] | DIN 51 903 | $\leq 2,0$ |
| Purity [%] | | ≥ 98 |
| Total chloride content [ppm] | | ≤ 25 |
| Total halogen content [ppm] | | ≤ 100 |
| Total sulfur content [ppm] | | < 300 |
| Total loss to the air at 670 °C: [%/h] | | < 4 |
| Oxidation inhibitor | | ja |
| Passive corrosion inhibitor | ASTM F2168-13 | ja |
| Metal insert | | - |
| ASTM material number | | - |
| Thickness (mm) | | - |
| Number | | - |
| Compressive strength $\sigma_{dE/16}$ [MPa] (300 °C, 50 MPa, 16 h) | DIN 52 913 | ≥ 47 |
| Cold compressibility ϵ_{KSW} [%] | DIN 28090-2 | 45 |
| Cold recovery ϵ_{KRW} [%] | DIN 28090-2 | 5 |
| Hot creep ϵ_{WSW} [%] | DIN 28090-2 | < 3 |
| Hot recovery ϵ_{WRW} [%] | DIN 28090-2 | 4 |
| Compressibility [%] | ASTM F36 | 45 |
| Resiliency [%] | ASTM F36 | 11 |

m- und y-Factors

| Thickness | y (PSI) | y (Mpa) |
|-----------|---------|-------------|
| 1,00 | 2 | 1500, 10.34 |
| 1,50 | 2 | 1500, 10.34 |
| 2,00 | 2 | 1500, 10.34 |
| 3,00 | 2 | 1500, 10.34 |

Gasket Constants acc. DIN 28090-1, AD-Merkblatt B7, DIN V 2505

| DIN 28090 Part 1 (9/95) (DIN E 2505 Part 2) | | | | | | | AD-Merkblatt B7 DIN V 2505 | | | | |
|---|------------------------------|---------------------------------------|---------------------------------------|-----|---------------------------------------|-------|-------------------------------|-------|---------------------------------|---|------------------------|
| P _i [bar] | Dicke H _D [mm] | σ_{VU} [N/mm ²] | σ_{VO} [N/mm ²] | m | σ_{b0} [N/mm ²] | | | | b _D : h _D | k ₀ x K _D [N/mm ²] | k ₁ [mm] |
| | | | | | 20°C | 100°C | 200°C | 300°C | | | |
| 10 | 1 | 11 | 160 | 1,3 | | | | 140 | | | |
| 16 | 1 | 13 | 160 | 1,3 | | | | 140 | | | |
| 25 | 1 | 16 | 160 | 1,3 | | | | 140 | | | |
| 40 | 1 | 20 | 160 | 1,3 | | | | 140 | | | |

All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications, however, means that they can serve only as guide values.

We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. This is subject to change.