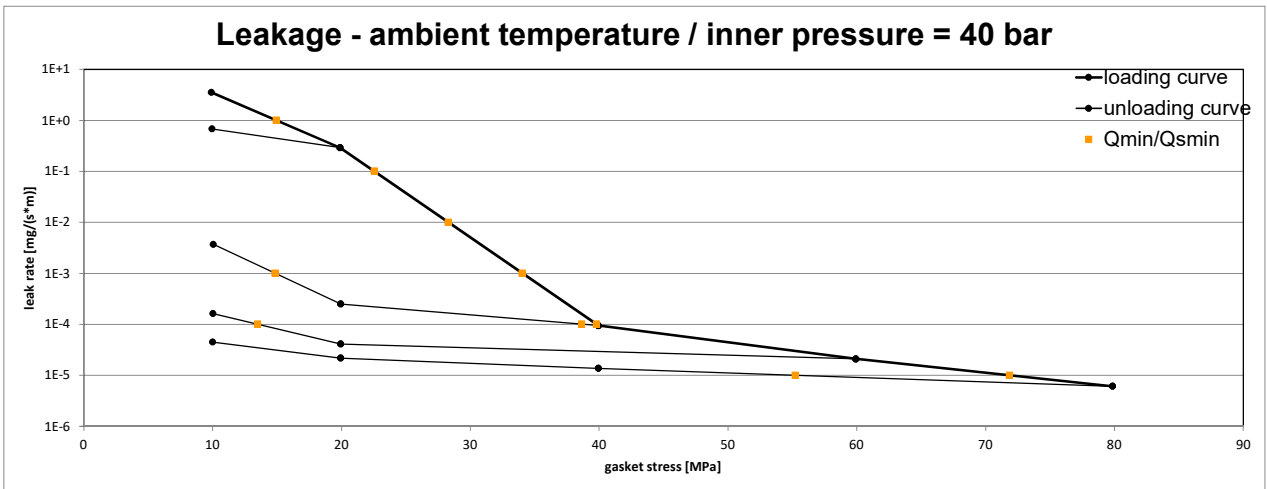


| | | |
|---------------------------------|---|---|
| Company Address | Flexitallic Ltd., Scandinavia Mill, Hunsworth Lane, Cleckheaton, UK | According to DIN EN 13555 2014-07 |
| Gasket Type | Sigma 511 (PTFE with Silica filler) | |
| Sealing element dimensions [mm] | 92 x 49 x 2.0 | |

| L [mg/(s*m)] | Q _{minL} [MPa] | Minimum stress to seal Q _{minL} (at assembly), Q _{SminL} (after off-loading) for p = 40 bar | | | | | | | |
|------------------|-------------------------|---|-------------------------|-------------------------|-------------------------|--|--|--|--|
| | | Q _A = 20 MPa | Q _A = 40 MPa | Q _A = 60 MPa | Q _A = 80 MPa | | | | |
| 10 ⁰ | 15 | 10 | 10 | 10 | 10 | | | | |
| 10 ⁻¹ | 23 | | 10 | 10 | 10 | | | | |
| 10 ⁻² | 28 | | 10 | 10 | 10 | | | | |
| 10 ⁻³ | 34 | | 15 | 10 | 10 | | | | |
| 10 ⁻⁴ | 40 | | 39 | 14 | 10 | | | | |
| 10 ⁻⁵ | 72 | | | | 55 | | | | |
| 10 ⁻⁶ | | | | | | | | | |
| 10 ⁻⁷ | | | | | | | | | |
| 10 ⁻⁸ | | | | | | | | | |

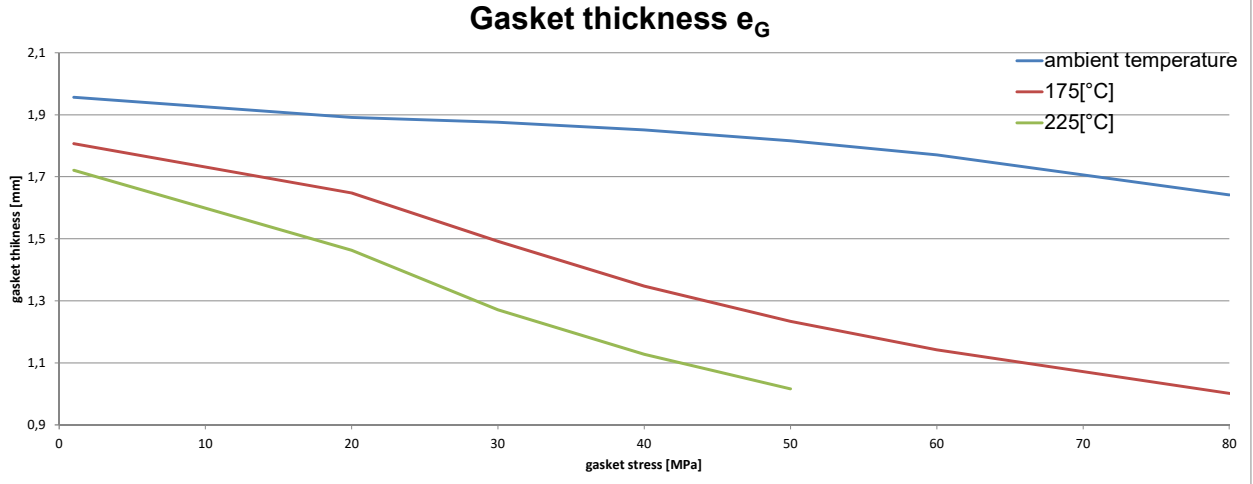


Note: the content of darkened cells was not determined respectively is unnecessary Rev - No: 1 Creation date of this sheet: 2018-05-23

| | | |
|---------------------------------|---|---|
| Company Address | Flexitallic Ltd., Scandinavia Mill, Hunsworth Lane, Cleckheaton, UK | According to DIN EN 13555 2014-07 |
| Gasket Type | Sigma 511 (PTFE with Silica filler) | |
| Sealing element dimensions [mm] | 92 x 49 x 2.0 | |

| Relaxation ratio P_{QR} for stiffness $C = 500 \text{ kN/mm}$ | | | | | | | | | | |
|---|---------------------|----------------------|------------------------|----------------------|------------------------|----------------------|----------|----------------------|----------|----------------------|
| Gasket stress | ambient temperature | | temperature 1 [175 °C] | | temperature 2 [225 °C] | | P_{QR} | Δe_{Gc} [mm] | P_{QR} | Δe_{Gc} [mm] |
| | P_{QR} | Δe_{Gc} [mm] | P_{QR} | Δe_{Gc} [mm] | P_{QR} | Δe_{Gc} [mm] | | | | |
| Stress level 1 [30 MPa] | 0.97 | 0.009 | 0.61 | 0.099 | 0.59 | 0.104 | | | | |
| Stress level 2 [50 MPa] | 0.95 | 0.021 | 0.55 | 0.191 | 0.43 | 0.239 | | | | |
| Stress level 3 [80 MPa] | 0.93 | 0.050 | 0.59 | 0.275 | | | | | | |
| P_{QR} and Δe_{Gc} at maximal applicable gasket stress Q_{Smax} | | | | | | | | | | |
| P_{QR} at Q_{Smax} | 0.93 | 0.050 | 0.59 | 0.275 | 0.43 | 0.239 | | | | |
| Q_{Smax} | 80 MPa | | 80 MPa | | 50 MPa | | | | | |

| Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm] | | | | | | | | | | |
|--|---------------------|------------|------------------------|------------|------------------------|------------|-------------|------------|-------------|------------|
| Gasket stress [MPa] | ambient temperature | | temperature 1 [175 °C] | | temperature 2 [225 °C] | | E_G [MPa] | e_G [mm] | E_G [MPa] | e_G [mm] |
| | E_G [MPa] | e_G [mm] | E_G [MPa] | e_G [mm] | E_G [MPa] | e_G [mm] | | | | |
| 0 | | 2.000 | | 2.000 | | 2.000 | | | | |
| 1 | | 1.957 | | 1.807 | | 1.721 | | | | |
| 20 | 1879 | 1.891 | 1245 | 1.647 | 1092 | 1.463 | | | | |
| 30 | 6935 | 1.876 | 1643 | 1.491 | 1214 | 1.271 | | | | |
| 40 | 5159 | 1.851 | 1772 | 1.347 | 1511 | 1.128 | | | | |
| 50 | 5025 | 1.816 | 2009 | 1.234 | 1693 | 1.016 | | | | |
| 60 | 5069 | 1.771 | 2219 | 1.142 | | | | | | |
| 80 | 3133 | 1.642 | 2518 | 1.002 | | | | | | |
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