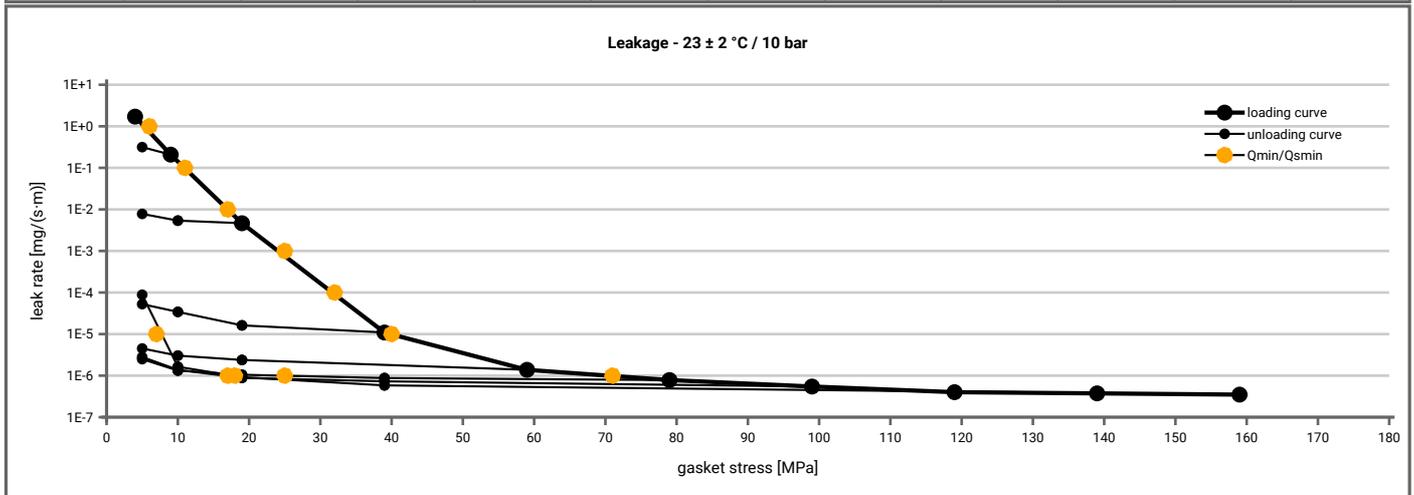


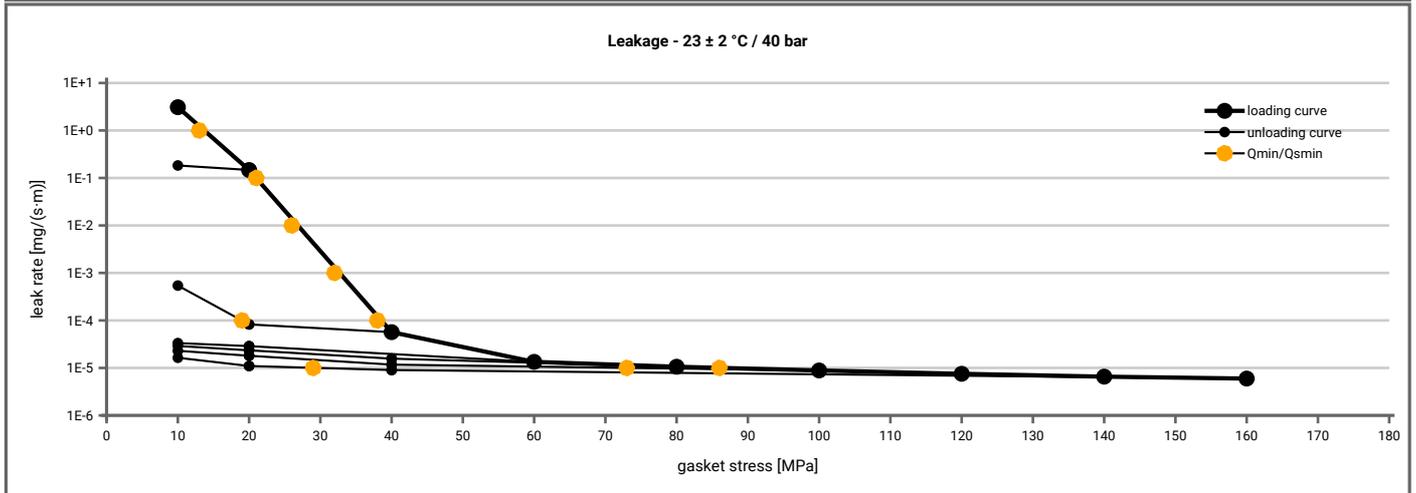
|                             |   |  |
|-----------------------------|---|--|
| <b>Manufacturer address</b> | AVKO jsc., 38A Panoramen pat Str., 1616 Sofia, BG           | According to<br><b>DIN EN 13555</b><br><b>2014-7</b> |
| <b>Product name</b>         | Sheet gasket material of expanded PTFE, 3.0 mm, AVKOSEAL eC |  |
| <b>Product dimensions</b>   | 92 x 49 x 3 mm (DIN EN 1514-1 1997-8)                       |  |

| Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 10$ bar ( $T = 23 \pm 2$ °C) |                    |                     |                  |                  |                  |                  |                  |                   |                   |                   |                   |
|--|--------------------|---------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| L [mg/(s·m)]   | $Q_{min(L)}$ [MPa] | $Q_{smin(L)}$ [MPa] |                  |                  |                  |                  |                  |                   |                   |                   |                   |
|  |                    | $Q_A = 5$ [MPa]     | $Q_A = 10$ [MPa] | $Q_A = 20$ [MPa] | $Q_A = 40$ [MPa] | $Q_A = 60$ [MPa] | $Q_A = 80$ [MPa] | $Q_A = 100$ [MPa] | $Q_A = 120$ [MPa] | $Q_A = 140$ [MPa] | $Q_A = 160$ [MPa] |
| 1E+1   | 5                  |                     | 5                | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-0   | 6                  |                     | 5                | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-1   | 12                 |                     |                  | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-2   | 18                 |                     |                  | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-3   | 25                 |                     |                  |                  | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-4   | 33                 |                     |                  |                  | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-5   | 41                 |                     |                  |                  |                  | 5                | 5                | 5                 |                   |                   | 8                 |
| 1E-6   | 71                 |                     |                  |                  |                  |                  | 25               | 17                |                   |                   | 18                |
| 1E-7   |                    |                     |                  |                  |                  |                  |                  |                   |                   |                   |                   |
| 1E-8   |                    |                     |                  |                  |                  |                  |                  |                   |                   |                   |                   |



| Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 40$ bar ( $T = 23 \pm 2$ °C) |                    |                     |                  |                  |                  |                  |                   |                   |                   |                   |    |
|--|--------------------|---------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|----|
| L [mg/(s·m)]   | $Q_{min(L)}$ [MPa] | $Q_{smin(L)}$ [MPa] |                  |                  |                  |                  |                   |                   |                   |                   |    |
|  |                    | $Q_A = 10$ [MPa]    | $Q_A = 20$ [MPa] | $Q_A = 40$ [MPa] | $Q_A = 60$ [MPa] | $Q_A = 80$ [MPa] | $Q_A = 100$ [MPa] | $Q_A = 120$ [MPa] | $Q_A = 140$ [MPa] | $Q_A = 160$ [MPa] |    |
| 1E+1   | 10                 |                     | 10               | 10               | 10               | 10               | 10                | 10                |                   |                   | 10 |
| 1E-0   | 14                 |                     | 10               | 10               | 10               | 10               | 10                | 10                |                   |                   | 10 |
| 1E-1   | 21                 |                     |                  | 10               | 10               | 10               | 10                | 10                |                   |                   | 10 |
| 1E-2   | 27                 |                     |                  | 10               | 10               | 10               | 10                | 10                |                   |                   | 10 |
| 1E-3   | 33                 |                     |                  | 10               | 10               | 10               | 10                | 10                |                   |                   | 10 |
| 1E-4   | 39                 |                     |                  | 19               | 10               | 10               | 10                | 10                |                   |                   | 10 |
| 1E-5   | 86                 |                     |                  |                  |                  |                  |                   | 74                |                   |                   | 30 |
| 1E-6   |                    |                     |                  |                  |                  |                  |                   |                   |                   |                   |    |
| 1E-7   |                    |                     |                  |                  |                  |                  |                   |                   |                   |                   |    |
| 1E-8   |                    |                     |                  |                  |                  |                  |                   |                   |                   |                   |    |

|                             |   |  |
|-----------------------------|---|--|
| <b>Manufacturer address</b> | AVKO jsc., 38A Panoramen pat Str., 1616 Sofia, BG           | According to<br><b>DIN EN 13555</b><br><b>2014-7</b> |
| <b>Product name</b>         | Sheet gasket material of expanded PTFE, 3.0 mm, AVKOSEAL eC |  |
| <b>Product dimensions</b>   | 92 x 49 x 3 mm (DIN EN 1514-1 1997-8)                       |  |



|  |            |   |
|--|------------|---|
| Note: the content of darkened cells was not determined respectively is unnecessary | Rev-No.: 1 | Creation date of this sheet: 2017-08-16 |
|--|------------|---|

|                             |   |   |
|-----------------------------|---|---|
| <b>Manufacturer address</b> | AVKO jsc., 38A Panoramen pat Str., 1616 Sofia, BG           | According to<br><b>DIN EN 13555</b><br>2014-7 |
| <b>Product name</b>         | Sheet gasket material of expanded PTFE, 3.0 mm, AVKOSEAL eC |   |
| <b>Product dimensions</b>   | 92 x 49 x 3 mm (DIN EN 1514-1 1997-8)                       |   |

| Relaxation ratio $P_{QR}$ for stiffness $C = 500$ [kN/mm]                      |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|--|-----------|----------------------|------------------------|----------------------|------------------------|----------------------|----------|----------------------|----------|----------------------|
| Gasket stress  | 23 ± 2 °C |                      | Temperature 1 [150 °C] |                      | Temperature 2 [230 °C] |                      | $P_{QR}$ | $\Delta e_{Gc}$ [µm] | $P_{QR}$ | $\Delta e_{Gc}$ [µm] |
|  | $P_{QR}$  | $\Delta e_{Gc}$ [µm] | $P_{QR}$               | $\Delta e_{Gc}$ [µm] | $P_{QR}$               | $\Delta e_{Gc}$ [µm] |          |                      |          |                      |
| Stress level 1 [30 MPa]  | 0.92      | 21                   | 0.42                   | 146                  | 0.34                   | 166                  |          |                      |          |                      |
| Stress level 2 [50 MPa]  | 0.92      | 34                   | 0.41                   | 248                  |                        |                      |          |                      |          |                      |
| Stress level 3 [80 MPa]  | 0.91      | 64                   |                        |                      |                        |                      |          |                      |          |                      |
|  |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|  |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|  |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|  |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|  |           |                      |                        |                      |                        |                      |          |                      |          |                      |
| $P_{QR}$ and $\Delta e_{Gc}$ at maximum gasket stress to be applied $Q_{smax}$ |           |                      |                        |                      |                        |                      |          |                      |          |                      |
| $P_{QR}$ at $Q_{smax}$   | 0.94      | 109                  | 0.41                   | 248                  | 0.34                   | 222                  |          |                      |          |                      |
| $Q_{smax}$   | 200 MPa   |                      | 50 MPa                 |                      | 40 MPa                 |                      |          |                      |          |                      |

| Sekant unloading modulus of the gasket $E_G$ [MPa] and gasket thickness $e_G$ [mm] |             |            |                        |            |                        |            |             |            |             |            |
|--|-------------|------------|------------------------|------------|------------------------|------------|-------------|------------|-------------|------------|
| Gasket stress [MPa]  | 23 ± 2 °C   |            | Temperature 1 [150 °C] |            | Temperature 2 [230 °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  | 0           | 2.985      | 0                      | 2.930      | 0                      | 2.995      |             |            |             |            |
| 1  | 0           | 2.468      | 0                      | 2.487      | 0                      | 2.482      |             |            |             |            |
| 20   | 806         | 1.181      | 1786                   | 0.826      | 865                    | 0.729      |             |            |             |            |
| 30   | 2555        | 1.120      | 1806                   | 0.717      | 1139                   | 0.589      |             |            |             |            |
| 40   | 4852        | 1.086      | 1945                   | 0.622      | 1253                   | 0.490      |             |            |             |            |
| 50   | 6723        | 1.057      | 2101                   | 0.554      |                        |            |             |            |             |            |
| 60   | 6191        | 1.027      |                        |            |                        |            |             |            |             |            |
| 80   | 4465        | 0.986      |                        |            |                        |            |             |            |             |            |
| 100  | 3798        | 0.948      |                        |            |                        |            |             |            |             |            |
| 120  | 3703        | 0.914      |                        |            |                        |            |             |            |             |            |
| 140  | 3679        | 0.884      |                        |            |                        |            |             |            |             |            |
| 160  | 3691        | 0.857      |                        |            |                        |            |             |            |             |            |
| 180  | 3686        | 0.831      |                        |            |                        |            |             |            |             |            |
| 200  | 3736        | 0.808      |                        |            |                        |            |             |            |             |            |
| 220  | 3780        | 0.785      |                        |            |                        |            |             |            |             |            |
| 240  | 3581        | 0.762      |                        |            |                        |            |             |            |             |            |

