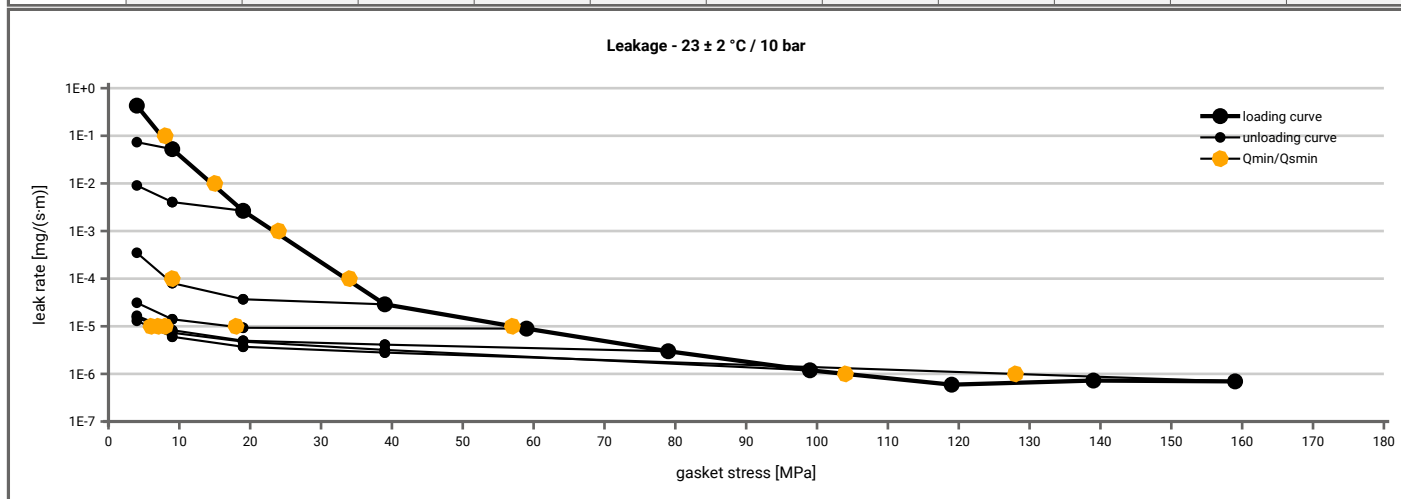
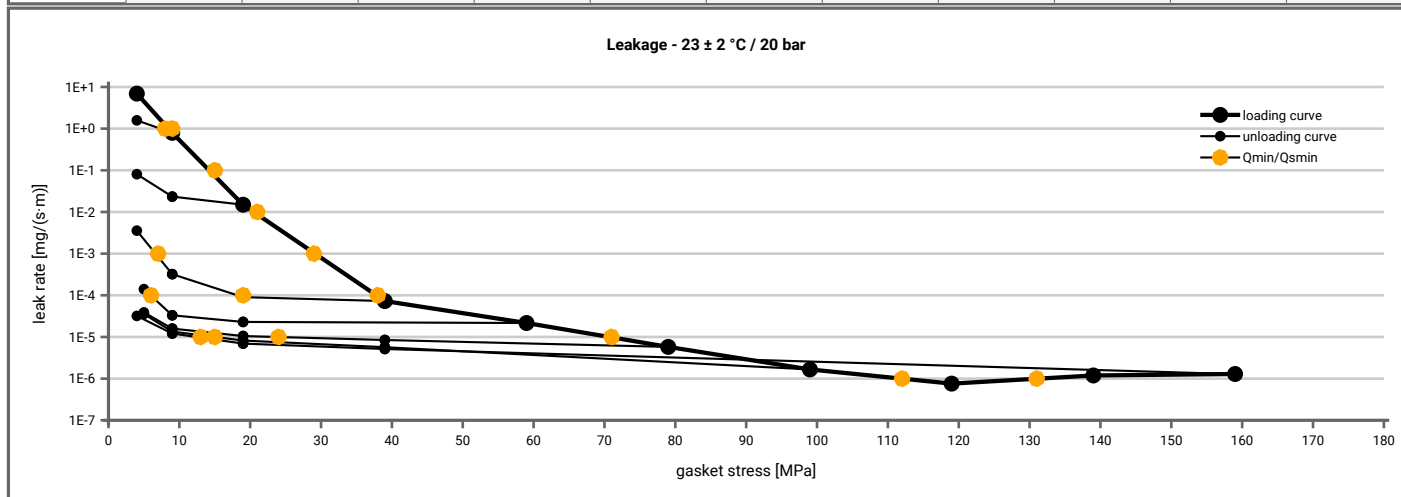


|                      |                                            |                                                      |
|----------------------|--------------------------------------------|------------------------------------------------------|
| Manufacturer address | Garlock GmbH, Falkenweg 1, 41468 Neuss, DE | According to<br><b>DIN EN 13555</b><br><b>2005-2</b> |
| Product name         | GYLON® Style 3501E                         |                                                      |
| Product dimensions   | 92 x 49 x 2 mm (DIN EN 1514-1 1997-8)      |                                                      |

| Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 10 \text{ bar}$ ( $T = 23 \pm 2 \text{ }^{\circ}\text{C}$ ) |                    |                         |                          |                          |                          |                          |                          |                           |                           |                           |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| L [mg/(s·m)]                                                                                                                                              | $Q_{min(L)}$ [MPa] | $Q_{smin(L)}$ [MPa]     |                          |                          |                          |                          |                          |                           |                           |                           |                           |
|                                                                                                                                                           |                    | $Q_A = 5 \text{ [MPa]}$ | $Q_A = 10 \text{ [MPa]}$ | $Q_A = 20 \text{ [MPa]}$ | $Q_A = 40 \text{ [MPa]}$ | $Q_A = 60 \text{ [MPa]}$ | $Q_A = 80 \text{ [MPa]}$ | $Q_A = 100 \text{ [MPa]}$ | $Q_A = 120 \text{ [MPa]}$ | $Q_A = 140 \text{ [MPa]}$ | $Q_A = 160 \text{ [MPa]}$ |
| 1E-0                                                                                                                                                      | 5                  |                         | 5                        | 5                        | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-1                                                                                                                                                      | 8                  |                         | 5                        | 5                        | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-2                                                                                                                                                      | 15                 |                         |                          | 5                        | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-3                                                                                                                                                      | 24                 |                         |                          |                          | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-4                                                                                                                                                      | 34                 |                         |                          |                          | 9                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-5                                                                                                                                                      | 58                 |                         |                          |                          |                          | 18                       | 9                        | 8                         |                           |                           | 7                         |
| 1E-6                                                                                                                                                      | 105                |                         |                          |                          |                          |                          |                          |                           |                           |                           | 129                       |
| 1E-7                                                                                                                                                      |                    |                         |                          |                          |                          |                          |                          |                           |                           |                           |                           |
| 1E-8                                                                                                                                                      |                    |                         |                          |                          |                          |                          |                          |                           |                           |                           |                           |



| Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for $p = 20 \text{ bar}$ ( $T = 23 \pm 2 \text{ }^{\circ}\text{C}$ ) |                    |                         |                          |                          |                          |                          |                          |                           |                           |                           |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| L [mg/(s·m)]                                                                                                                                              | $Q_{min(L)}$ [MPa] | $Q_{smin(L)}$ [MPa]     |                          |                          |                          |                          |                          |                           |                           |                           |                           |
|                                                                                                                                                           |                    | $Q_A = 5 \text{ [MPa]}$ | $Q_A = 10 \text{ [MPa]}$ | $Q_A = 20 \text{ [MPa]}$ | $Q_A = 40 \text{ [MPa]}$ | $Q_A = 60 \text{ [MPa]}$ | $Q_A = 80 \text{ [MPa]}$ | $Q_A = 100 \text{ [MPa]}$ | $Q_A = 120 \text{ [MPa]}$ | $Q_A = 140 \text{ [MPa]}$ | $Q_A = 160 \text{ [MPa]}$ |
| 1E+1                                                                                                                                                      | 5                  |                         | 5                        | 5                        | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-0                                                                                                                                                      | 9                  |                         | 8                        | 5                        | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-1                                                                                                                                                      | 15                 |                         |                          | 5                        | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-2                                                                                                                                                      | 21                 |                         |                          |                          | 5                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-3                                                                                                                                                      | 30                 |                         |                          |                          | 8                        | 5                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-4                                                                                                                                                      | 39                 |                         |                          |                          | 19                       | 6                        | 5                        | 5                         |                           |                           | 5                         |
| 1E-5                                                                                                                                                      | 71                 |                         |                          |                          |                          |                          | 24                       | 16                        |                           |                           | 13                        |
| 1E-6                                                                                                                                                      | 113                |                         |                          |                          |                          |                          |                          |                           |                           |                           |                           |
| 1E-7                                                                                                                                                      |                    |                         |                          |                          |                          |                          |                          |                           |                           |                           |                           |
| 1E-8                                                                                                                                                      |                    |                         |                          |                          |                          |                          |                          |                           |                           |                           |                           |



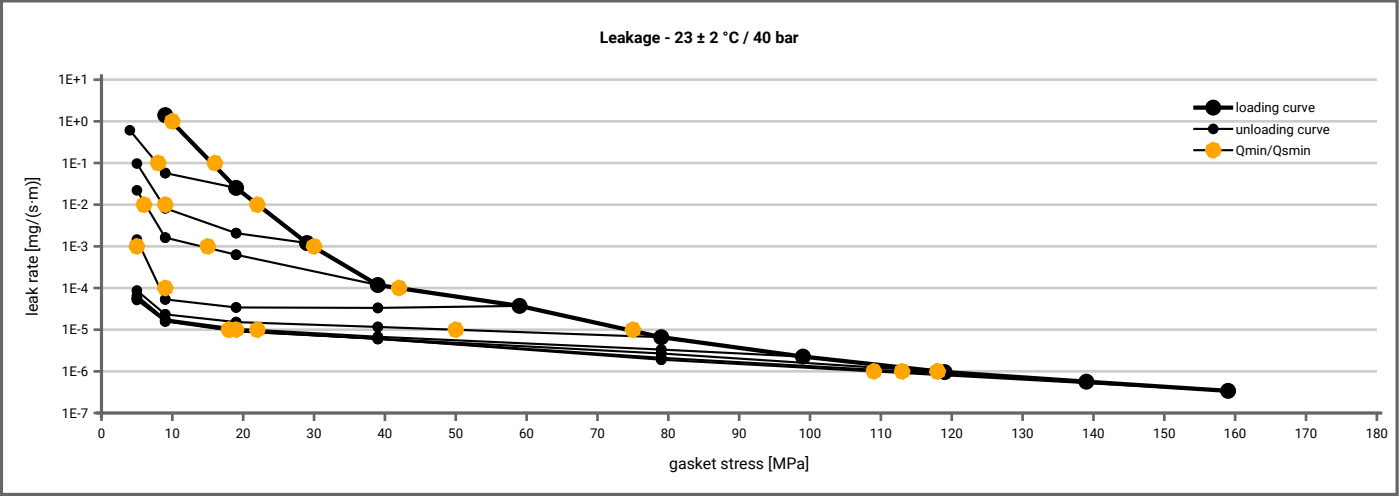
Note: the content of darkened cells was not determined respectively is unnecessary

Rev.-No.: 1

Creation date of this sheet: 2012-04-16

|                      |                                            |                                                      |
|----------------------|--------------------------------------------|------------------------------------------------------|
| Manufacturer address | Garlock GmbH, Falkenweg 1, 41468 Neuss, DE | According to<br><b>DIN EN 13555</b><br><b>2005-2</b> |
| Product name         | GYLON® Style 3501E                         |                                                      |
| Product dimensions   | 92 x 49 x 2 mm (DIN EN 1514-1 1997-8)      |                                                      |

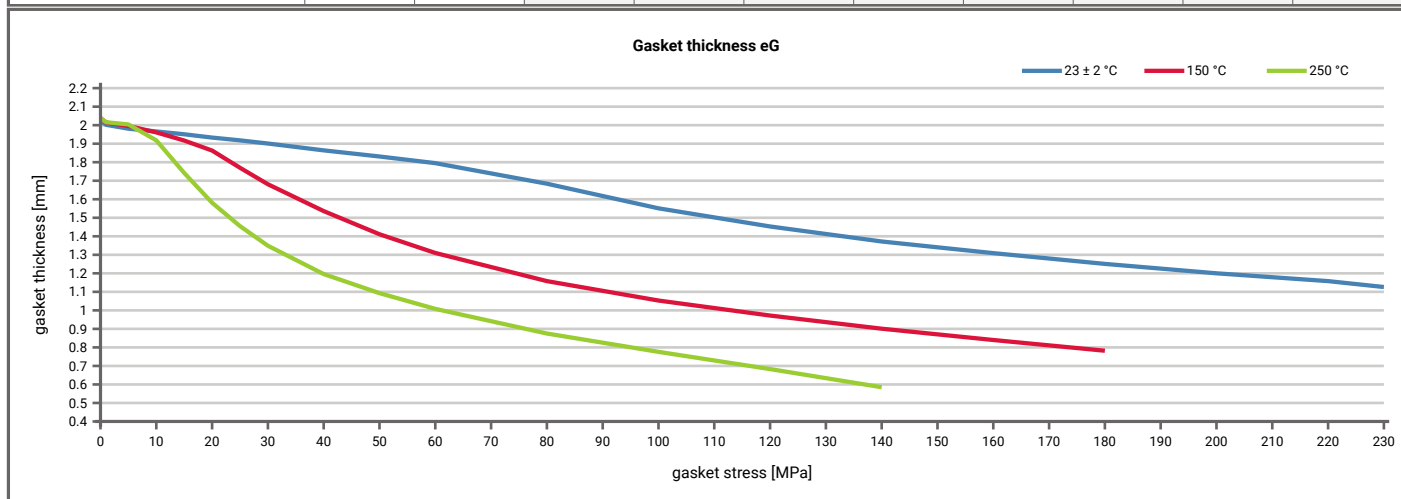
| Minimum stress to seal $Q_{min(L)}$ (at assembly), $Q_{smin(L)}$ (after off-loading) for p = 40 bar (T = 23 ± 2 °C) |                    |                     |                  |                  |                  |                  |                  |                   |                   |                   |                   |
|---------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| L [mg/(s·m)]                                                                                                        | $Q_{min(L)}$ [MPa] | $Q_{smin(L)}$ [MPa] |                  |                  |                  |                  |                  |                   |                   |                   |                   |
|                                                                                                                     |                    | $Q_A = 10$ [MPa]    | $Q_A = 20$ [MPa] | $Q_A = 30$ [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                 |                     | 5                | 5                | 5                | 5                | 5                | 5                 | 5                 | 5                 | 5                 |
| 1E-0                                                                                                                | 11                 |                     | 5                | 5                | 5                | 5                | 5                | 5                 | 5                 | 5                 | 5                 |
| 1E-1                                                                                                                | 16                 |                     | 9                | 5                | 5                | 5                | 5                | 5                 | 5                 | 5                 | 5                 |
| 1E-2                                                                                                                | 23                 |                     |                  | 10               | 6                | 5                | 5                | 5                 | 5                 | 5                 | 5                 |
| 1E-3                                                                                                                | 31                 |                     |                  |                  | 15               | 6                | 5                | 5                 | 5                 | 5                 | 5                 |
| 1E-4                                                                                                                | 43                 |                     |                  |                  |                  | 9                | 5                | 5                 | 5                 | 5                 | 5                 |
| 1E-5                                                                                                                | 75                 |                     |                  |                  |                  |                  | 50               | 22                | 18                | 19                | 18                |
| 1E-6                                                                                                                | 119                |                     |                  |                  |                  |                  |                  |                   | 118               | 114               | 110               |
| 1E-7                                                                                                                |                    |                     |                  |                  |                  |                  |                  |                   |                   |                   |                   |
| 1E-8                                                                                                                |                    |                     |                  |                  |                  |                  |                  |                   |                   |                   |                   |



|                      |                                            |                                                      |
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| Product name         | GYLON® Style 3501E                         |                                                      |
| Product dimensions   | 92 x 49 x 2 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 [250 °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 [10 MPa]                                                        | 0.92      | 7                    | 0.84                   | 13                   | 0.65                   | 30                   |          |                      |          |                      |
| Stress level 2 [30 MPa]                                                        | 0.93      | 18                   | 0.76                   | 62                   | 0.53                   | 120                  |          |                      |          |                      |
|                                                                                |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |           |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |           |                      |                        |                      |                        |                      |          |                      |          |                      |
| $P_{QR}$ and $\Delta e_{Gc}$ at maximum gasket stress to be applied $Q_{smax}$ |           |                      |                        |                      |                        |                      |          |                      |          |                      |
| $P_{QR}$ at $Q_{smax}$                                                         | 0.93      | 145                  | 0.72                   | 423                  | 0.59                   | 482                  |          |                      |          |                      |
| $Q_{smax}$                                                                     | 230 MPa   |                      | 180 MPa                |                      | 140 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 [250 °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           | 2.023      | 0                      | 2.039      | 0                      | 2.038      |             |            |             |            |
| 1                                                                                  | 0           | 2.002      | 0                      | 2.014      | 0                      | 2.016      |             |            |             |            |
| 5                                                                                  | 1515        | 1.981      | 858                    | 1.996      | 581                    | 2.004      |             |            |             |            |
| 10                                                                                 | 1348        | 1.966      | 722                    | 1.961      | 630                    | 1.918      |             |            |             |            |
| 15                                                                                 | 1734        | 1.951      | 833                    | 1.917      | 660                    | 1.742      |             |            |             |            |
| 20                                                                                 | 1487        | 1.933      | 1021                   | 1.863      | 911                    | 1.581      |             |            |             |            |
| 25                                                                                 | 1905        | 1.918      | 1304                   | 1.770      | 1220                   | 1.455      |             |            |             |            |
| 30                                                                                 | 1971        | 1.901      | 1484                   | 1.681      | 1013                   | 1.349      |             |            |             |            |
| 40                                                                                 | 2476        | 1.864      | 1892                   | 1.536      | 1327                   | 1.196      |             |            |             |            |
| 50                                                                                 | 2761        | 1.831      | 1890                   | 1.411      | 1875                   | 1.093      |             |            |             |            |
| 60                                                                                 | 3795        | 1.795      | 2452                   | 1.310      | 1645                   | 1.008      |             |            |             |            |
| 80                                                                                 | 6922        | 1.684      | 2588                   | 1.158      | 2066                   | 0.875      |             |            |             |            |
| 100                                                                                | 7360        | 1.551      | 2486                   | 1.053      | 2679                   | 0.776      |             |            |             |            |
| 120                                                                                | 8145        | 1.453      | 3616                   | 0.972      | 3096                   | 0.683      |             |            |             |            |
| 140                                                                                | 6099        | 1.372      | 3265                   | 0.901      | 4554                   | 0.585      |             |            |             |            |
| 160                                                                                | 7401        | 1.309      | 3265                   | 0.840      |                        |            |             |            |             |            |
| 180                                                                                | 7533        | 1.251      | 5417                   | 0.782      |                        |            |             |            |             |            |
| 200                                                                                | 7788        | 1.200      |                        |            |                        |            |             |            |             |            |
| 220                                                                                | 6563        | 1.158      |                        |            |                        |            |             |            |             |            |
| 230                                                                                | 6358        | 1.126      |                        |            |                        |            |             |            |             |            |



|                                                                                    |             |                                         |
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| Note: the content of darkened cells was not determined respectively is unnecessary | Rev.-No.: 1 | Creation date of this sheet: 2012-04-16 |
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