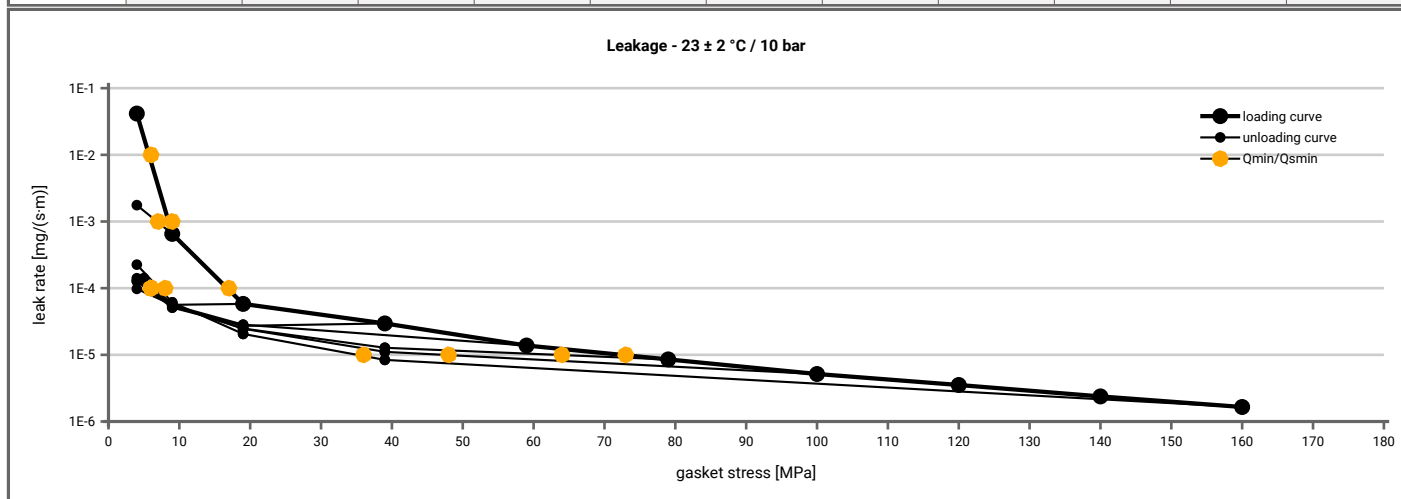
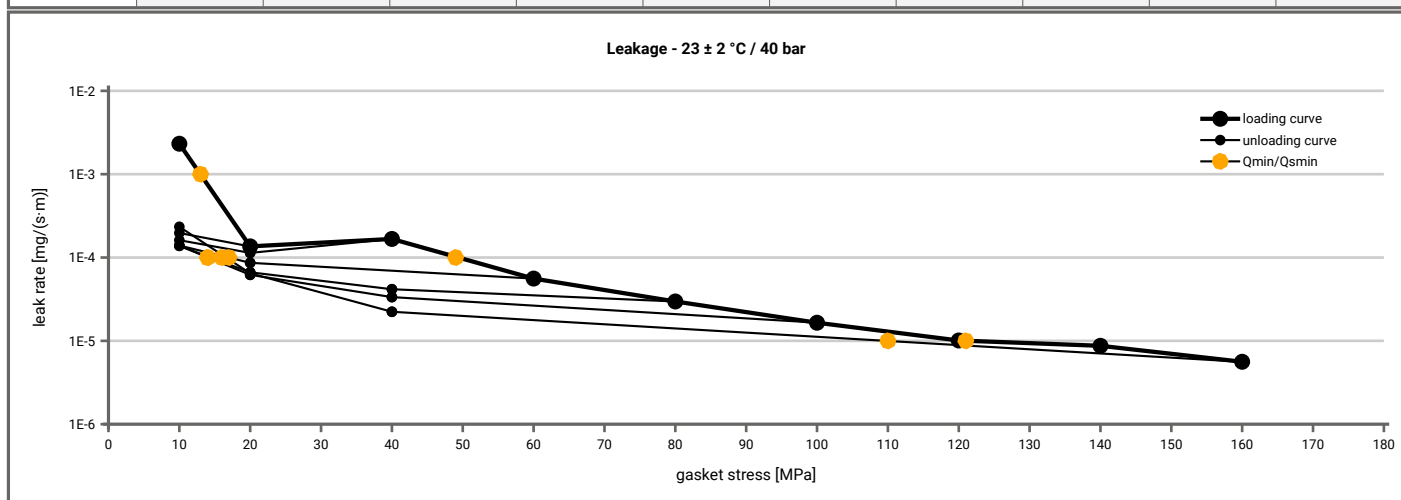


|                      |                                                                        |                                                      |
|----------------------|------------------------------------------------------------------------|------------------------------------------------------|
| Manufacturer address | TEADIT International Produktions GmbH, Schanzenstr. 35, 51063 Köln, DE | According to<br><b>DIN EN 13555</b><br><b>2005-2</b> |
| Product name         | TF 1570                                                                |                                                      |
| 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 $p = 10$ 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-0                                                                                                                       | 5                  |                     | 5                | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-1                                                                                                                       | 5                  |                     | 5                | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-2                                                                                                                       | 7                  |                     | 5                | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-3                                                                                                                       | 9                  |                     | 8                | 5                | 5                | 5                | 5                | 5                 |                   |                   | 5                 |
| 1E-4                                                                                                                       | 18                 |                     |                  | 5                | 6                | 7                | 6                | 7                 |                   |                   | 8                 |
| 1E-5                                                                                                                       | 73                 |                     |                  |                  |                  |                  | 64               | 48                |                   |                   | 36                |
| 1E-6                                                                                                                       |                    |                     |                  |                  |                  |                  |                  |                   |                   |                   |                   |
| 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 ± 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-0                                                                                                                | 10                 |                     | 10               | 10               | 10               | 10               | 10                |                   |                   | 10                |
| 1E-1                                                                                                                | 10                 |                     | 10               | 10               | 10               | 10               | 10                |                   |                   | 10                |
| 1E-2                                                                                                                | 10                 |                     | 10               | 10               | 10               | 10               | 10                |                   |                   | 10                |
| 1E-3                                                                                                                | 13                 |                     | 10               | 10               | 10               | 10               | 10                |                   |                   | 10                |
| 1E-4                                                                                                                | 50                 |                     |                  |                  | 17               | 15               | 14                |                   |                   | 17                |
| 1E-5                                                                                                                | 122                |                     |                  |                  |                  |                  |                   |                   |                   | 110               |
| 1E-6                                                                                                                |                    |                     |                  |                  |                  |                  |                   |                   |                   |                   |
| 1E-7                                                                                                                |                    |                     |                  |                  |                  |                  |                   |                   |                   |                   |
| 1E-8                                                                                                                |                    |                     |                  |                  |                  |                  |                   |                   |                   |                   |



|                                                                                    |             |                                         |
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| Note: the content of darkened cells was not determined respectively is unnecessary | Rev.-No.: 1 | Creation date of this sheet: 2011-12-07 |
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|                      |                                                                        |                                                      |
|----------------------|------------------------------------------------------------------------|------------------------------------------------------|
| Manufacturer address | TEADIT International Produktions GmbH, Schanzenstr. 35, 51063 Köln, DE | According to<br><b>DIN EN 13555</b><br><b>2005-2</b> |
| Product name         | TF 1570                                                                |                                                      |
| 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                                                                  | Temperature [30 °C] |                      | Temperature 1 [100 °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 [30 MPa]                                                        | 0.77                | 59                   | 0.50                   | 127                  | 0.27                   | 184                  |          |                      |          |                      |
| Stress level 2 [80 MPa]                                                        |                     |                      | 0.68                   | 215                  |                        |                      |          |                      |          |                      |
| Stress level 3 [140 MPa]                                                       | 0.93                | 88                   |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |                     |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |                     |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |                     |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |                     |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |                     |                      |                        |                      |                        |                      |          |                      |          |                      |
|                                                                                |                     |                      |                        |                      |                        |                      |          |                      |          |                      |
| $P_{QR}$ and $\Delta e_{Gc}$ at maximum gasket stress to be applied $Q_{smax}$ |                     |                      |                        |                      |                        |                      |          |                      |          |                      |
| $P_{QR}$ at $Q_{smax}$                                                         | 0.98                | 48                   | 0.78                   | 227                  | 0.38                   | 315                  |          |                      |          |                      |
| $Q_{smax}$                                                                     | 230 MPa             |                      | 120 MPa                |                      | 60 MPa                 |                      |          |                      |          |                      |

| Sekant unloading modulus of the gasket $E_G$ [MPa] and gasket thickness $e_G$ [mm] |             |            |                        |            |                        |            |             |            |             |            |
|------------------------------------------------------------------------------------|-------------|------------|------------------------|------------|------------------------|------------|-------------|------------|-------------|------------|
| Gasket stress [MPa]                                                                | 23 ± 2 °C   |            | Temperature 1 [100 °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           | 2.100      | 0                      | 2.140      | 0                      | 2.100      |             |            |             |            |
| 1                                                                                  | 0           | 2.100      | 0                      | 2.140      | 0                      | 2.100      |             |            |             |            |
| 20                                                                                 | 959         | 1.830      | 588                    | 1.190      | 559                    | 0.670      |             |            |             |            |
| 30                                                                                 | 1100        | 1.500      | 1226                   | 0.930      | 657                    | 0.550      |             |            |             |            |
| 40                                                                                 | 1453        | 1.310      | 1141                   | 0.770      | 838                    | 0.490      |             |            |             |            |
| 50                                                                                 | 1962        | 1.190      | 1425                   | 0.680      | 1065                   | 0.440      |             |            |             |            |
| 60                                                                                 | 2646        | 1.080      | 1407                   | 0.610      | 1175                   | 0.400      |             |            |             |            |
| 80                                                                                 | 2863        | 0.940      | 1355                   | 0.530      |                        |            |             |            |             |            |
| 100                                                                                | 3475        | 0.830      | 1788                   | 0.480      |                        |            |             |            |             |            |
| 120                                                                                | 2733        | 0.760      | 2176                   | 0.450      |                        |            |             |            |             |            |
| 140                                                                                | 2747        | 0.700      |                        |            |                        |            |             |            |             |            |
| 160                                                                                | 2744        | 0.660      |                        |            |                        |            |             |            |             |            |
| 180                                                                                | 2526        | 0.620      |                        |            |                        |            |             |            |             |            |
| 200                                                                                | 2597        | 0.590      |                        |            |                        |            |             |            |             |            |
| 220                                                                                | 2281        | 0.560      |                        |            |                        |            |             |            |             |            |
| 230                                                                                | 2141        | 0.530      |                        |            |                        |            |             |            |             |            |

