

Jawa Industrie-Dichtungen GmbH

**Corrugated Gasket TYPE SW201A 1.4571/GR 0,8 mm**

Corrugated Gasket - 1.4571/Graphite - EN 1514-4 - 94 x 49 x 3 mm


**Maximum allowable gasket stress  $Q_{Smax}$** 

| T / °C           | 22                | 200               | 400               |  |  |  |
|------------------|-------------------|-------------------|-------------------|--|--|--|
| $Q_{Smax}$ / MPa | 240 <sup>1)</sup> | 240 <sup>1)</sup> | 240 <sup>1)</sup> |  |  |  |

**Modulus of elasticity  $E_G$  and gasket thickness  $e_G$** 

| T / °C | 22          |            | 200         |            | 400         |            |  |  |  |
|--------|-------------|------------|-------------|------------|-------------|------------|--|--|--|
|        | $Q_A$ / MPa | $e_G$ / mm | $E_G$ / MPa | $e_G$ / mm | $E_G$ / MPa | $e_G$ / mm |  |  |  |
| 1      | 2,729       | -          | 2,724       | -          | 2,705       | -          |  |  |  |
| 10     | 1,977       | 426        | 1,754       | 537        | 1,726       | 547        |  |  |  |
| 20     | 1,506       | 969        | 1,489       | 1016       | 1,464       | 1047       |  |  |  |
| 30     | 1,432       | 1382       | 1,407       | 1357       | 1,377       | 1509       |  |  |  |
| 40     | 1,384       | 1733       | 1,358       | 1700       | 1,324       | 1898       |  |  |  |
| 50     | 1,349       | 2165       | 1,319       | 2077       | 1,282       | 2248       |  |  |  |
| 60     | 1,319       | 2573       | 1,289       | 2504       | 1,247       | 2660       |  |  |  |
| 80     | 1,271       | 3377       | 1,240       | 3223       | 1,191       | 3301       |  |  |  |
| 100    | 1,234       | 4161       | 1,205       | 3979       | 1,155       | 3956       |  |  |  |
| 120    | 1,207       | 5037       | 1,177       | 4696       | 1,128       | 4529       |  |  |  |
| 140    | 1,185       | 5780       | 1,155       | 5358       | 1,108       | 5129       |  |  |  |
| 160    | 1,167       | 6479       | 1,134       | 5864       | 1,091       | 5721       |  |  |  |
| 180    | 1,152       | 7191       | 1,115       | 6106       | 1,078       | 6444       |  |  |  |
| 200    | 1,137       | 7754       | 1,096       | 6991       | 1,063       | 6880       |  |  |  |
| 220    | 1,126       | 8393       | 1,070       | 7478       | 1,050       | 7706       |  |  |  |
| 240    | 1,115       | 9016       | 1,037       | 7829       | 1,036       | 8042       |  |  |  |

**Creep relaxation factor  $P_{QR}$  for stiffness  $C = 500$  kN/mm**

| T / °C      | 22           | 200          | 400          |  |  |  |
|-------------|--------------|--------------|--------------|--|--|--|
| $Q_A$ / MPa | $P_{QR}$ / - | $P_{QR}$ / - | $P_{QR}$ / - |  |  |  |
| 30          | 0,96         | 0,85         | 0,79         |  |  |  |
| 90          | 0,99         | 0,92         | 0,89         |  |  |  |
| 240         | 1,00         | 0,96         | 0,93         |  |  |  |

Note:

<sup>1)</sup> Limited by capability of test rig

<sup>2)</sup> Bore intrusion

**Minimum required gasket stress in assembly  $Q_{min(L)}$** 

| L / mg/m/s         | $10^0$ |    | $10^{-1}$ |    | $10^{-2}$ |    | $10^{-3}$ |    | $10^{-4}$ |    | $10^{-5}$ |    | $10^{-6}$ |    | $10^{-7}$ |    |
|--------------------|--------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|
| p / bar            | 10     | 40 | 10        | 40 | 10        | 40 | 10        | 40 | 10        | 40 | 10        | 40 | 10        | 40 | 10        | 40 |
| $Q_{min(L)}$ / MPa | 5      | 10 | 5         | 10 | 5         | 14 | 16        | 25 | 33        | 39 | 63        | 92 | x         | x  | x         | x  |

**Minimum required gasket stress in service  $Q_{Smin(L)}$  [MPa]**

| L / mg/m/s  | $10^0$ |      | $10^{-1}$ |      | $10^{-2}$ |      | $10^{-3}$ |      | $10^{-4}$ |      | $10^{-5}$ |      | $10^{-6}$ |    | $10^{-7}$ |    |
|-------------|--------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|----|-----------|----|
| p / bar     | 10     | 40   | 10        | 40   | 10        | 40   | 10        | 40   | 10        | 40   | 10        | 40   | 10        | 40 | 10        | 40 |
| $Q_A$ / MPa | 10     | < 5  | < 10      | < 5  | < 10      | < 5  | x         | x    | x         | x    | x         | x    | x         | x  | x         | x  |
|             | 20     | < 5  | < 10      | < 5  | < 10      | < 5  | < 10      | 9    | x         | x    | x         | x    | x         | x  | x         | x  |
|             | 30     | < 5  | < 10      | < 5  | < 10      | < 5  | < 10      | 7    | 17        | x    | x         | x    | x         | x  | x         | x  |
|             | 40     | < 5  | < 10      | < 5  | < 10      | < 5  | < 10      | 7    | 15        | 23   | 37        | x    | x         | x  | x         | x  |
|             | 60     | < 5  | < 10      | < 5  | < 10      | < 5  | < 10      | 6    | 14        | 19   | 35        | x    | x         | x  | x         | x  |
|             | 80     | < 5  | < 10      | < 5  | < 10      | < 5  | < 10      | < 5  | 15        | 21   | 33        | 61   | x         | x  | x         | x  |
|             | 100    | < 5  | < 10      | < 5  | < 10      | < 5  | < 10      | < 5  | 16        | 23   | 34        | 70   | 95        | x  | x         | x  |
| 160         | < 5    | < 10 | < 5       | < 10 | < 5       | < 10 | < 5       | < 10 | 22        | < 10 | 62        | < 10 | x         | x  | x         |    |

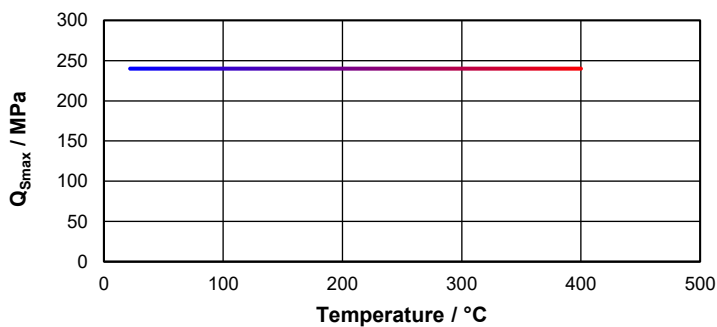
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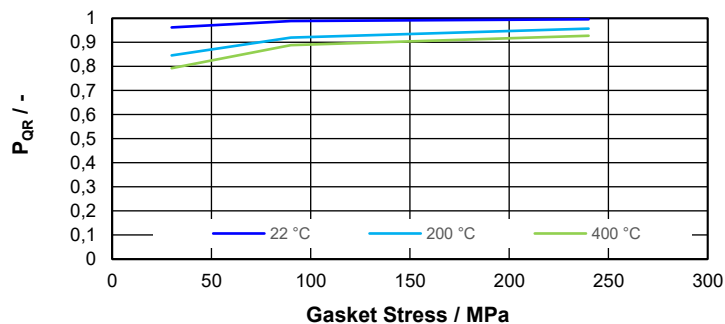
Corrugated Gasket - 1.4571/Graphite - EN 1514-4 - 94 x 49 x 3 mm



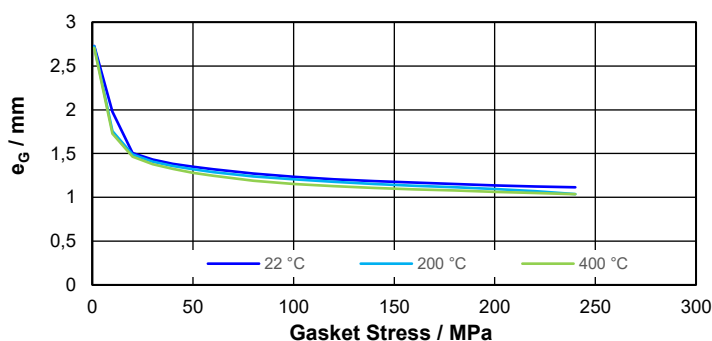
Maximum allowable Gasket Stress  $Q_{Smax}$



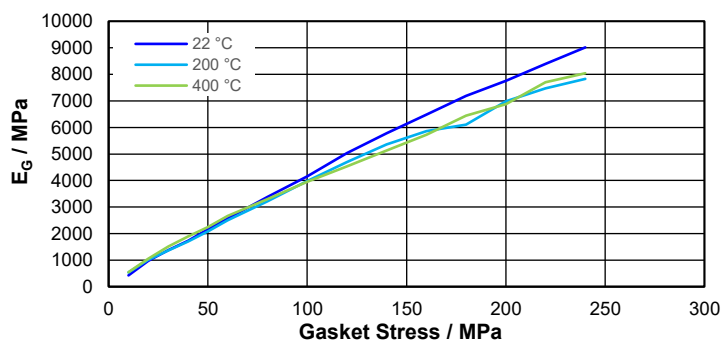
Creep Relaxation Factor  $P_{QR}$



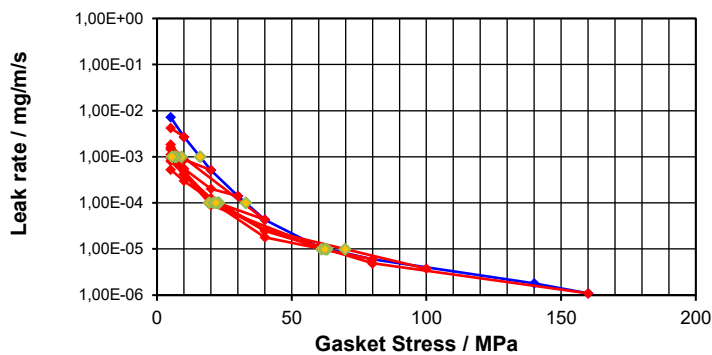
Gasket Thickness  $e_G$



Modulus of Elasticity  $E_G$



10 bar



40 bar

