

# KLINGERSIL® C-4430plus

KLINGERSIL® C-4430 plus is a premium-quality, high-pressure gasket with outstanding stress relaxation and outstanding resistance to hot water and steam.

Optimum combination of synthetic fibres, bonded with NBR. Suitable for use with water and steam at higher temperatures and resistant to oils, hydrocarbons, gases, salt solutions, fuels, alcohols, lubricants, refrigerants, as well as to moderate organic and inorganic acids.



## Key features:

- » Utilization of KLINGER®Quantum production technology
- » Optimum combination of synthetic and glass fibres
- » Outstanding stress relaxation

## Benefits:

- » More safety
- » Better lifetime
- » Better high temperature tightness
- » Improved thermal stability

## Certificates and approvals:

- » BAM-tested
- » DIN-DVGW
- » DIN-DVGW W 270
- » Elastomer-Guideline
- » WRAS approval
- » TA-Luft (Clean air)
- » Fire-Safe acc. to DIN EN ISO 10497

## Properties: referring to KLINGERSIL® product range

|           |                       |                    |             |                     |
|-----------|-----------------------|--------------------|-------------|---------------------|
| SUPERIOR  | _____                 |                    |             |                     |
| EXCELLENT | ████████████████████  |                    |             |                     |
| VERY GOOD | ████████████████████  |                    |             |                     |
| GOOD      | ████████████████████  |                    |             |                     |
| MODERATE  | ████████████████████  |                    |             |                     |
|           | MECHANICAL RESISTANCE | THERMAL RESISTANCE | SEALABILITY | CHEMICAL RESISTANCE |

## Industries:



## Typical technical data for thickness 2.0 mm:

|                                     |                              |                   |               |
|-------------------------------------|------------------------------|-------------------|---------------|
| Compressibility ASTM F 36 J         |                              | %                 | 9             |
| Recovery ASTM F 36 J                |                              | %                 | 55            |
| Stress relaxation DIN 52913         | 50 MPa, 16 h/175°C           | MPa               | 39            |
|                                     | 50 MPa, 16 h/300°C           | MPa               | 35            |
| Stress relaxation BS 7531           | 40 MPa, 16 h/300°C           | MPa               | 31            |
| KLINGER cold/hot compression        | thickness decrease at 23°C   | %                 | 8             |
| 50 MPa                              | thickness decrease at 300°C  | %                 | 11            |
|                                     | thickness decrease at 400°C  | %                 | 14            |
| Tightness                           | DIN 28090-2                  | mg/s x m          | 0.05          |
| Specific leakrate $\lambda$         | VDI 2440                     | mbar x l/s x m    | 2.9E-06       |
| Thickness increase after fluid      | oil IRM 903: 5 h/150°C       | %                 | 3             |
| immersion ASTM F 146                | fuel B: 5 h/23°C             | %                 | 5             |
| Density                             |                              | g/cm <sup>3</sup> | 1.8           |
| Average surface resistance          | $\rho O$                     | $\Omega$          | 4.1x10E13     |
| Average specific volume resistance  | $\rho D$                     | $\Omega$ cm       | 4.5x10E12     |
| Average dielectric strength         | $E_d$                        | kV/mm             | 21.3          |
| Average power factor                | 50 Hz                        | $\tan \delta$     | 0.03          |
| Average dielectric coefficient      | 50 Hz                        | $\epsilon_r$      | 6.7           |
| Thermal conductivity                | $\lambda$                    | W/mK              | 0.38          |
| Classification acc. to BS 7531:2006 | Grade AX                     |                   |               |
| <b>ASME-Code sealing factors</b>    |                              |                   |               |
| for gasket thickness 1.0 mm         | tightness class 0.1 mg/s x m | MPa               | y 20<br>m 1.1 |
| for gasket thickness 2.0 mm         | tightness class 0.1 mg/s x m | MPa               | y 20<br>m 1.6 |
| for gasket thickness 3.0 mm         | tightness class 0.1 mg/s x m | MPa               | y 20<br>m 2.2 |

## Dimensions of the standard sheets:

### Sizes:

1000 x 1500 mm, 2000 x 1500 mm

### Thicknesses:

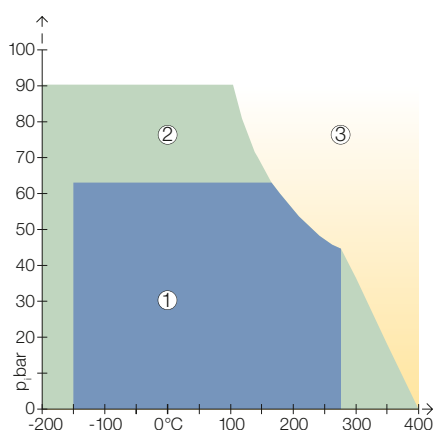
0.5 mm, 1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm

### Tolerances:

Thickness acc. DIN 28091-1  
 Length  $\pm$  50 mm, width  $\pm$  50 mm

Other thicknesses, sizes and tolerances on request.

## pT diagram for thickness 2.0 mm:



①

In area one, the gasket material is normally suitable subject to chemical compatibility.

②

In area two, the gasket material may be suitable but a technical evaluation is recommended.

③

In area three, do not install the gasket without a technical evaluation.

Always refer to the chemical resistance of the gasket to the media.

