

# HiMod® FlatSeal™ 34

Easier handling and  
strong performance



**Your Partner for Sealing Technology**

## A range of gaskets to meet market needs

The HiMod® flat gasket range consists of products that will satisfy the requirements of the majority of gasket applications within aerospace, chemical and processing industries. It offers compliance with virtually all relevant standards including FDA and those for blowout and fugitive emissions.

### HiMod® FlatSeal™ 34

For universal use in a wide variety of general and chemical processing applications, the gaskets metal insert guarantees easy handling and a strong performance.

### Applications

- Aircraft engine and APU Gaskets
- Aerospace anti-ice systems and high temperature applications such as vanes
- Chemical processing
- In high thermal and mechanical loads, as well as when loads frequently change
- Diesel Engines
- Saturated steam, superheated steam, heat carrier oils.

## Features and benefits

- Metal insert guarantees easy handling before installation and a strong performance in the flange
- Operating temperatures from -240 °C to +550 °C
- Withstands extreme pressure up to 150 bar
- Suitable for use in extreme charging loads and cycles
- Compatible with practically all organic and inorganic acids, alkalis, oils and solvents
- Resistant to corrosion
- Blowout resistant

## Good for people and the environment

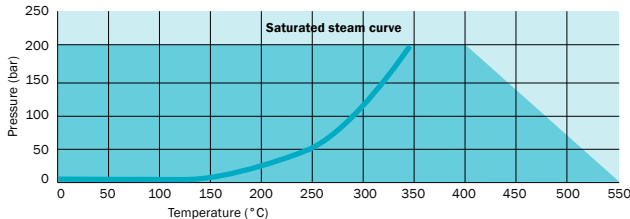
HiMod® FlatSeal™ 34 is manufactured in facilities that comply with ISO/TS 16949 and ISO 14001. This means complete transparency in all areas of production and a high degree of security for our customers.

# Technical information about HiMod® FlatSeal™ 34

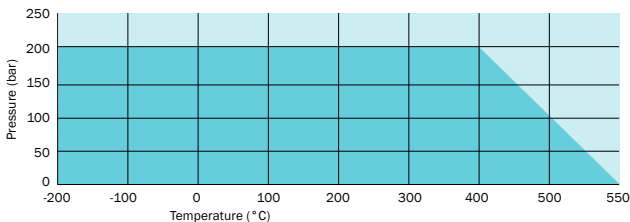
## Recommendations for use

according to pressure and temperature

### Water/steam



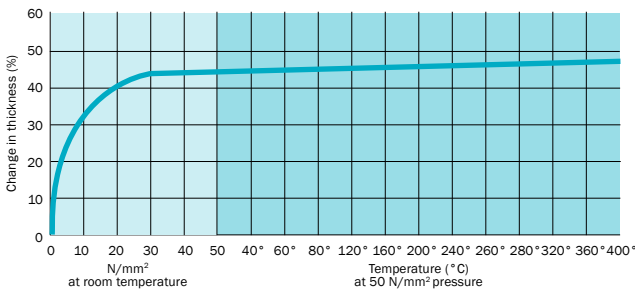
### Other Media



The temperature and pressure recommendations in the graphs apply to gaskets with a thickness of 2.0 mm and smooth flanges. Higher stresses are possible when thinner gaskets are used.

Example for the most commonly other media used. Exact data for specific, individual cases are available on demand.

### Deformation under temperature 2.0 mm



## Material data

General data	
<b>Elements</b>	Gasket material made of expanded graphite with a purity of 99 percent minimum reinforced with a stainless steel wire mesh insert (material no. 1.4301/AISI 304.)
<b>Color</b>	Gray with black label
<b>Thickness in mm</b>	1.0/ 1.5/ 2.0/ 3.0 Further thicknesses are available on request.
<b>Thickness tolerance</b>	According to DIN28091-1

Physical properties	Standard	Unity	Value*
Gasket thickness 2.0 mm			
<b>Identification</b>	DIN 28 091-4		GR-10-I-1M-Cr
<b>Density</b>	DIN 28 090-2	[g/cm <sup>3</sup> ]	1.20
<b>Tensile strength</b> longitudinal transverse	DIN 52 910	[N/mm <sup>2</sup> ] [N/mm <sup>2</sup> ]	8 7
<b>Residual stress</b> $\sigma_{dE/16}$ 175 °C 300 °C	DIN 52 913	[N/mm <sup>2</sup> ] [N/mm <sup>2</sup> ]	46 45
<b>Compressibility</b>	ASTM F 36 J	[%]	40
<b>Recovery</b>	ASTM F 36 J	[%]	10
<b>Cold compressibility</b> $\epsilon_{KSW}$	DIN 28 090-2	[%]	40
<b>Cold recovery</b> $\epsilon_{KRW}$	DIN 28 090-2	[%]	4
<b>Hot creep</b> $\epsilon_{WSW/300}$	DIN 28 090-2	[%]	2.5
<b>Hot recovery</b> $\epsilon_{WRW/300}$	DIN 28 090-2	[%]	3
<b>Recovery R</b>	DIN 28 090-2	[mm]	0.060
<b>Specific leakage rate</b>	DIN 3535-6	[mg/(s·m)]	≤ 0.250
<b>Specific leakage rate</b> $\lambda_{2,0}$	DIN 28 090-2	[mg/(s·m)]	≤ 0.250
<b>Fluid resistance</b>	ASTM F 146		
<b>ASTM IRM 903</b> Weight change Thickness increase	5h/150 °C	[%] [%]	33 5
<b>ASTM Fuel B</b> Weight change Thickness increase	5h/23 °C	[%] [%]	33 5
<b>Chloride content</b>	DIN 28 090-2	[ppm]	≤ 50

\* Mode (typical value)

For further information on the entire HiMod® FlatSeal™ range please contact your local Trelleborg Sealing Solutions marketing company.

[www.tss.trelleborg.com](http://www.tss.trelleborg.com)