

# HiMod® FlatSeal™ 15

Ideal for steam, oils, fuels  
and hydrocarbons



**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™ 15

This gasket shows exceptionally good resistance to steam and fluids such as oils, fuels and hydrocarbons.

### Applications

- Aircraft gear boxes, pumps, hydraulic systems and actuators
- Instrumentation
- Pumps, valves, compressors, drives and engines
- Gas and water supply including heating (sanitary engineering)
- Pipeline construction
- Plant construction and maintenance
- Machine manufacturing

## Features and benefits

- Ideal for use in medium to high temperatures and pressures
- Outstanding mechanical strength
- Leakage less than limits specified in DIN 3535-6
- Exceptionally good resistance to steam and fluids such as oils, fuels and hydrocarbons
- WRAS approved for use in hot and cold potable water
- Anti-stick coating on one side
- Approvals: BS7531, DVGW, KTW\*, BAM\*, TA Luft, WRAS\*

## Good for people and the environment

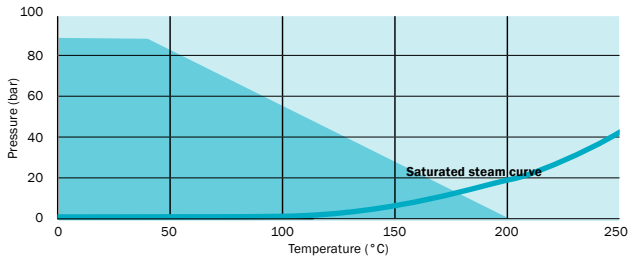
HiMod® FlatSeal™ 15 is manufactured in facilities that comply with ISO/TS 16949 and ISO 14001. This means complete transparency in all areas of production and a high degree of security for our customers.

# Technical information about HiMod® FlatSeal™ 15

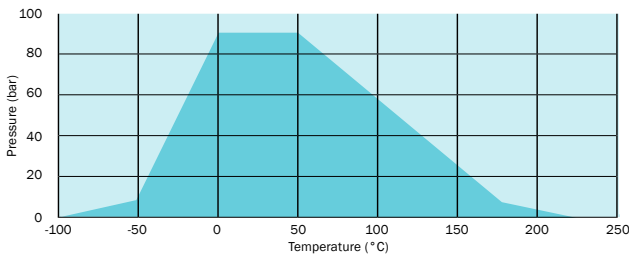
## Recommendations for use

according to pressure and temperature

### Water/steam



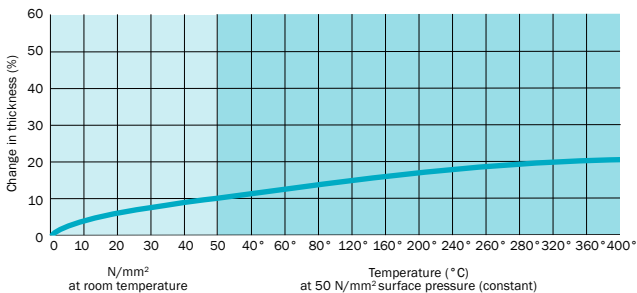
### Other Media



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 used other media. Exact data for specific, individual cases are available on demand.

### Deformation under temperature 2.0 mm



## Material data

General data	
<b>Elements</b>	Glass fibers, functional fillers and NBR (Nitrile Butadiene Rubber)
<b>Approvals</b>	BS7531, DVGW, KTW*, BAM*, TA Luft, WRAS*
<b>Color</b>	Silver grey
<b>Anti-stick coating</b>	On one side
<b>Thickness in mm</b>	0.5/ 1.0/ 1.5/ 3.0 Further thicknesses are available on request.
<b>Thickness tolerance</b>	According to DIN 28 091-1

Physical properties	Standard	Unit	Value**
Gasket thickness 2.0 mm			
<b>Density</b>	DIN 28 090-2	[g/cm <sup>3</sup> ]	1.80
<b>Tensile strength</b>	DIN 52 910		
longitudinal		[N/mm <sup>2</sup> ]	21
transverse		[N/mm <sup>2</sup> ]	9
<b>Residual stress</b> $\sigma_{DE/16}$	DIN 52 913		
175 °C		[N/mm <sup>2</sup> ]	38
300 °C		[N/mm <sup>2</sup> ]	28
<b>Compressibility</b>	ASTM F 36 J	[%]	7
<b>Recovery</b>	ASTM F 36 J	[%]	62
<b>Cold compressibility</b> $\epsilon_{KSW}$	DIN 28 090-2	[%]	5.5
<b>Cold recovery</b> $\epsilon_{KRW}$	DIN 28 090-2	[%]	3
<b>Hot creep</b> $\epsilon_{WSW/200}$	DIN 28 090-2	[%]	12
<b>Hot recovery</b> $\epsilon_{WRW/200}$	DIN 28 090-2	[%]	1.5
<b>Specific leakage rate</b>	DIN 3535-6	[mg/(s·m)]	≤ 0.100
<b>Fluid resistance</b>	ASTM F146		
<b>ASTM IRM 903</b>	5h/150 °C		
Weight change		[%]	7
Thickness increase		[%]	2
<b>ASTM Fuel B</b>	5h/23 °C		
Weight change		[%]	9
Thickness increase		[%]	4
<b>Leachable Chloride content</b>	FZT PV-001-133	[ppm]	≤ 150

\* Approvals applied for. \*\* 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)