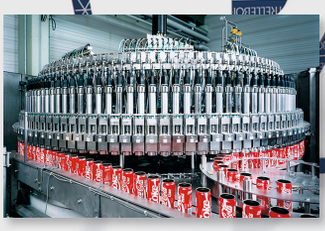
HiMod® FlatSeal™ 20

LONG-TERM RESISTANCE TO HIGH PRESSURE



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™ 20

Providing high long-term pressure resistance, this gasket is also blowout resistant and complies with fugitive emissions standards.

Applications

- Petrochemicals
- Chemical processing
- Plant construction and maintenance
- General industrial applications

Features and benefits

- Very high long-term pressure resistance
- Compatible with a high proportion of media commonly used in the chemical industry including oils, greases, acids, alkalis, solvents, refrigerants, water and steam
- Good temperature resistance
- Extended life reduces intervals for planned maintenance
- Compensates for flange unevenness and roughness
- Environmentally-friendly solvent-free
- Leakage less than limits specified in DIN 3535-6
- Blowout resistant
- Complies to fugitive emissions standards
- Approvals: DVGW, KTW, WRAS, W 270, VP 401, BAM* (max. 110°C/130 bar), TA Luft, EC 1935/2004, BS7531 (X)

Good for people and the environment

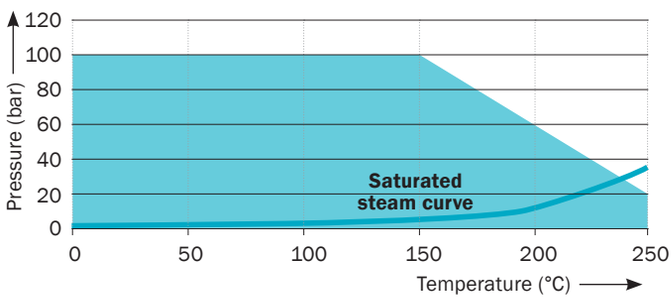
HiMod® FlatSeal™ 20 is manufactured in facilities that comply with ISO/TS 16949 and ISO 14001. This means complete transparency in all areas of production and a high degree of security for our customers.

TECHNICAL INFORMATION ABOUT HIMOD® FLATSEAL™ 20

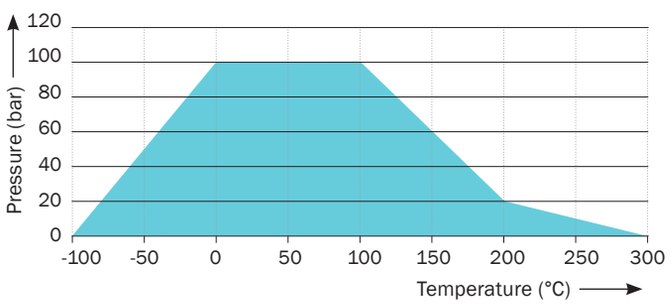
Recommendations for use

according to pressure and temperature

Water/steam

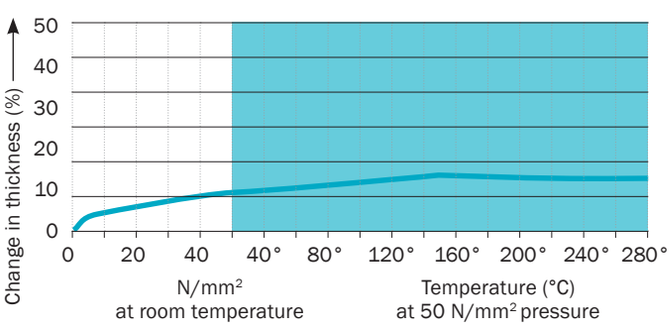


Other Media



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	
Elements	Graphite, aramide fibers and NBR (Nitrile Butadiene Rubber)
Approvals	DVGW, KTW, WRAS, W 270, VP 401, BAM* (max. 110 °C/130 bar), TA Luft, EC 1935/2004, BS7531 (X)
Color	Royal blue
Anti-stick coating	Both sides to A 310 standard
Thickness in mm	1.0/ 1.5/ 2.0/ 3.0 Further thicknesses are available on request.
Thickness tolerance	According to DIN28091-1

Physical properties Gasket thickness 2.0 mm	**Standard**	**Unit**	**Value****
Identification	DIN 28 091-2		FA - A 1 - 0
Density	DIN 28 090-2	[g/cm³]	1.70
Tensile strength longitudinal transverse	DIN 52 910	 [N/mm²] [N/mm²]	 18 14
Residual stress $\sigma_{dE/16}$ 175 °C 300 °C	DIN 52 913	 [N/mm²] [N/mm²]	 37 30
Compressibility	ASTM F 36 J	[%]	7
Recovery	ASTM F 36 J	[%]	60
Cold compressibility ε_{KSW}	DIN 28 090-2	[%]	6
Cold recovery ε_{KRW}	DIN 28 090-2	[%]	3
Hot creep $\varepsilon_{WSW/200}$	DIN 28 090-2	[%]	6
Hot recovery $\varepsilon_{WRW/200}$	DIN 28 090-2	[%]	2
Recovery R	DIN 28 090-2	[mm]	0.04
Specific leakage rate	DIN 3535-6	[mg/(sm)]	≤ 0.1
Specific leakage rate $\lambda_{2.0}$	DIN 28 090-2	[mg/(sm)]	≤ 0.1
Fluid restistance	ASTM F 146		
ASTM IRM 903 Weight change Thickness increase	5h/150 °C	 [%] [%]	 ≤ 10 ≤ 5
ASTM Fuel B Weight change Thickness increase	5h/23 °C	 [%] [%]	 ≤ 10 ≤ 5
Chloride content	FZT PV-001-1330	[ppm]	≤ 50

* Approvals applied for. ** Mode (typical value).

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