

TRELLE

# FlatSeal<sup>™</sup> HMF16

## **COST-EFFECTIVE SOLUTION FOR STANDARD APPLICATIONS**

## The versatile FlatSeal<sup>™</sup> HMF16 is suitable for use in a broad range of standard applications with non-critical media and moderate temperatures and pressures.

Produced using a unique manufacturing process, FlatSeal™ HMF16 is a cost-effective solution for industrial applications. It offers optimum sealing performance in operating environments with low to moderate pressures and temperatures containing non-aggressive media.

FlatSeal<sup>™</sup> HMF16 has an anti-stick coating on both sides for optimized maintenance and assembly. Due to sheet dimensions of 1500 x 2000 mm / 59.1 x 78.7 inch, seals can be cut into a wide range of shapes and sizes.

#### **Applications**

- · Heating and sanitary systems
- · Pipework
- · Machine tools and manufacturing equipment
- PTFE envelope gaskets for chemical transportation applications

#### **Features and benefits**

- Good media resistance
- · Excellent residual stress characteristics
- Ideal for use in low to moderate temperatures and pressures
- Satisfies leakage limits specified in DIN 3535-6
- Anti-stick coating on both sides

#### Insuring the highest quality every step of the way

Using a state-of-the-art processes, HMF FlatSeal<sup>™</sup> gaskets are manufactured with the highest quality raw materials. Every batch of material must match precise specifications and is subjected to rigorous inspection to ensure that only approved materials are used in production.

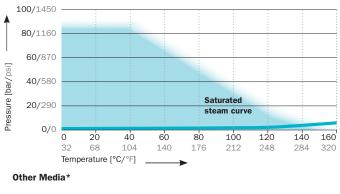
To guarantee consistent high quality at all steps, a process control system monitors and controls the preparation of formulations, their blending operation, and the process that forms the material sheet from which a FlatSeal<sup>™</sup> is formed.

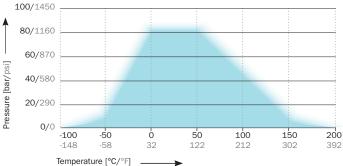
## **TECHNICAL INFORMATION ABOUT FLATSEAL™ HMF16**

### **Recommendations for use**

The temperature and pressure recommendations in the graphs apply to gaskets 2.0 mm / 0.08 inch thick that are used with raised face flanges. Higher stresses are possible when thinner gaskets are used. The recommendations are based on material characteristics and installation conditions. The information provided should therefore be considered cautious estimates rather than specific operational limits.

#### Water/water vapor

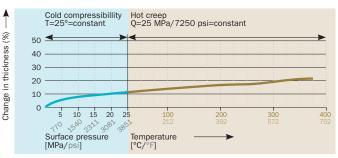




\* Other media refers to other media commonly used in gasket applications that is not chemically critical.

#### **Temperature Test**

at 25 MPa - sample thickness: 2.0 mm



A precise description of the temperature test can be found in FlatSeal™ Guide 10.



General Data			
Elements	Aramid fibers, functional fillers and NBR (Nitrile Butadiene Rubber)		
Approvals / Tests	DVGW, KTW, VP-401, W270, WRAS, EC 1935/2004, BS7531 (Y)		
Color	Green		
Anti-stick coating	On both sides		
Thickness in mm	0.5 / 1.0 / 1.5 / 2.0 / 3.0 Further thicknesses are available on request		
Thickness tolerance	According to DIN 28091-1		

\* Details concerning approvals and tests can be found in the Declaration of Compliance which can be requested from your local Customer Solution Center.

Physical Properties Gasket thickness 2.0 mm	Standard	Unity	Modal Value
Density	DIN 28090-2	[g/cm <sup>3</sup> ]	1.7
Tensile strength transverse	DIN 52910	[N/mm <sup>2</sup> ]	7.5
<b>Residual stress</b> σ <sub>dE/16</sub> 175°C 300°C	DIN 52913	[N/mm <sup>2</sup> ] [N/mm <sup>2</sup> ]	27 22
Compressibility	ASTM F 36 J	[%]	9
Recovery	ASTM F 36 J	[%]	45
Specific leakage rate	DIN 3535-6	[mg/(m*s)]	0.08
Fluid resistance	ASTM F 146		
<b>ASTM IRM 903</b> Weight change Thickness change	5h/150°C	[%] [%]	10 4
<b>ASTM Fuel B</b> Weight change Thickness change	5h/23°C	[%] [%]	11 9
Leachable chloride content	PV 01605	[ppm]	≤ 150

