

# F20-HE

## Normal Gap Filler (Silicone)

F20HE is a high elastic film and characterized by its excellent compressibility as well as its moderate thermal and excellent dielectric behaviour.

F20HE has a good thermal conductivity and good dielectric and mechanical properties.

The F20HE is a Single layer, fibre glass reinforcement gapfiller



Properties	Unit	F20-HE	Test method
Base material		Silicone	
Color		Orange	Visual
<b>Thermal Properties</b>			
Operating temperature	°C	-40 to 180	
Thermal Impedance $R_{\theta i}$	°Cmm <sup>2</sup> /W	240	Test factory
	Kin <sup>2</sup> /W	0.37	Test factory

Ordering example:

### F20-HE

F = Filler / 20 = 2.0 W/mK / HE = High elastic

## Normal Gap Filler (Silicone)

Properties	Unit	F20-HE	Test method
Base material		Silicone	
Color		Orange	Visual
Reinforcement carrier		Single layer, fibre class reinforcement up to 4.0 mm	
Thickness tolerance	%	± 10	
<b>Thermal Properties</b>			
Operating temperature	°C	-40 up to 180	
Thermal conductivity	W/mK	2.0	ASTM D5470
Thermal Impedance $R_{ti}$	°Cmm <sup>2</sup> /W	240	Test factory
	Kin <sup>2</sup> /W	0.37	Test factory
Thermal Resistance $R_{th}$	K/W	0.6	Test factory
<b>Electrical Properties</b>			
Breakdown voltage $U_{d; ac}$	kV	6.0	ASTM D149
Dielectric breakdown $E_{d; ac}$	kV/mm	12.0	
Volume resistivity	Ω·m	$2.2 \times 10^{11}$	ASTM D257
Dielectric loss factor $\tan \delta$		$1.0 \times 10^{-3}$	ASTM D150
Dielectric constant $\epsilon_r$		3.6	ASTM D150
<b>Mechanical Properties</b>			
Measured thickness (+/- 10%)	mm	0.500	
Hardness	Shore 00	30-45	ASTM D2240
Youngs modulus	N/cm <sup>2</sup>	58	ASTM D575
<b>Physical Properties</b>			
Density	g/cm <sup>3</sup>	1.65	
Total mass loss	Ma.-%	< 0.44	ASTM E 595
Flame rating	UL-94	V-0	UL94
Standard thicknesses	mm	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0	

The data presented in this leaflet are in accordance with the present state of our knowledge. All statements, technical information and recommendations herein are based on tests we believe to be reliable. The customer is thereby not absolved from carefully checking all supplies immediately on receipt. The recommendations made in this catalogue should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. We reserve the right to alter product constants within the

scope of technical process or new developments. The recommendations do not absolve the customer from the obligation of investigating the possibility of infringement of third parties right and, if necessary, clarifying the position. Sellers' and manufacturer' only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable either in tort or contract for any loss or damage, direct or incidental, or consequential, including loss of profits or revenue arising out of the use or the inability to use a product. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller