

PRODUCT DESCRIPTION

Nanobar warm edge spacers are extruded of a plastic polymer material reinforced with high concentration glassfibres and coated with AL-PET foil. Only for insulated glass manufacturing and air drying applications, for different applications please contact NEDEX Technical Department.

TECHNICAL SPECIFICATION

Technical characteristic	Nanobar is a high performance, low heat conductive rigid warm edge spacer bar, extruded of high technology engineering plastic material and coated with a thermally improved gas and moisture diffusion barrier. High rigidity and stability, UV and chemical resistancy, The applied thermally improved high tech aluminium gas and moisture barrier stops water vapour getting in and gas getting out of the sealed unit and guarantees the durability of the insulating glass unit, Lowest Psi value, Reduced thermal extension, Bendable by welding or heating, Improved perforation for better ventilation, Compatible with all type of sealant, Maximum cavity volume for desiccant filling
Appearance	black/grey/white
Surface	Regular and suitable finishing. Clean Surface. The surface is clean and no need for any treatment with
chemical	
ϕ -value-material	0,145 W/mK (EN 12664 2001-01 EN 10456:2009:12)
Compression Resistance	max Load 55 N / cm
Thermal Resistance	between -40 Celsius and +90 Celsius
Thermal extension	$30 \cdot 10^{-6} / K$ (acc. DIN 53752)
Height of profile	7 mm
Wall thickness	1,0mm +/-0,10 mm (by micrometer)
Weight of profile	54 grams for 19,5 mm wide profile, other sizes accordingly
Electrostatic	less than 0,1 mV (internal measurement)
Volatiles	less than 0,01 mg for 10 g profile (90 Celsius; 168 hrs) (Volatile test, Weight loss, MV measured acc. EN 1279:6)

H-test	0,3 MPa > 10 min
Perforation	171 cm ³ /sec ± 25 Calibrated perforation holes drilled and measured for maximum performance. (by anemometer)
UV stability	The body is a plastic material with effective UV stabilizer, UV blocker, UV adsorbers and HALS additives in order to minimize the ageing effect caused by sun light. The material is tested for 3.000 hours according to EN ISO 4892-1 & En 4892-2 method A, cycle 1. Evaluation is done according to grey scale index.

DIMENSION



Nominal Size [mm]	W ± 0.1 mm	H ± 0.1 mm	A ± 0.1 mm	B ± 0.05 mm	C ± 0.05 mm	T ± 0.1 mm
8	7,50	7,00	3,50	4,80	2,00	1,00
10	9,50	7,00	5,50	4,80	2,00	1,00
12	11,50	7,00	7,50	4,80	2,00	1,00
14	13,50	7,00	9,50	4,80	2,00	1,00
16	15,50	7,00	11,50	4,80	2,00	1,00
18	17,50	7,00	13,50	4,80	2,00	1,00
20	19,50	7,00	15,50	4,80	2,00	1,00

APPLICATION

Preliminary statement

Prior to application it is necessary to read the Safety Data Sheet for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labelling, the relevant precautions should always be observed.

Tests of the product

Processes are established to have secured quality of the delivered material. All the production processes, incoming raw materials and the spacers are regularly monitored through random checks. Data will be stored for a period of 5 years.

Cleaning of surface

If the plastic surface get dirty by dust from outside or from other materials, it can be cleaned again with a lightly wet cloth pad or air. Dust can easily be removed with antistatic loaded compressed air or a moist cloth.

System performance

The IG producer must be sure of the whole system containing the spacer, connector/corner key, bending machine (thermally bending or welding), desiccant, butyl and sealant works well together. Compatibility of those different products, adhesion, dust and corner labour quality is important. After handling and transport of the frames, it's important to check if the connector/corner keys are still in the correct position, if not there is a risk for desiccant dust inside the IG unit.

STORAGE

Frost-sensitive

None. Material must be stored at application conditions prior to use to avoid condensation.

Recommended storage temperature

The spacers must be stored, installed and used according to present norms and technical standards.

Related to temperature standardized condition for IG is -30° to 80° C. To secure the performance of the spacers, the stock conditions must be acceptable. Broken packaging, humidity and variation in temperature will have an effect on the spacer in general. Make sure the spacer should be conditioned at room temperature before use. Preferred conditions will be a room temperature $15 - 25^{\circ}$ C and humidity RH of minimum 45%. Avoid having an environment with a high concentration of dust. General handling according to safety data sheet for the spacer. Use gloves when handling the spacer/frames and make sure there is exhausting when cutting the spacer.

Shelf life

24 months in original closed packaging

PACKAGING

Carton Boxes The amount per box is determined depending on spacer size.

Hazard Indications Safety Recommendations Transport Regulations

See Safety Data Sheet

Disclaimer:

The information, specified in this Product Information, is based on careful laboratory tests and prevailing practical experience. The information is not binding, which is also generally true for our practical customer service, given verbally, in writing and by tests, since, on account of the diversity of applications and use, also including possible industrial property rights of third parties. Analysis results and all information regarding state and suitability of our products are only guidelines with no obligation on our part. In addition, our General Sales and Delivery Conditions are applicable.

Warranty Information:

NEDEX warrants only that its product will meet its technical specifications. NEDEX shall in no event be liable for incidental or consequential damage.

NEDEX's liability expressed or implied is limited to the stated selling price of any goods found

defective.

This Technical Data Sheet supersedes all previous editions.