

DATA SHEET 4832x.180.xxxxx

GO-HC/AN NQ

Scratch-resistant polyester film with a hardcoat on the front side suitable for structured printing with UV lacquers. High UV stability. The reverse side has an ink receptive coating for screen printing inks. In addition it has a slightly opaque micro rough surface to avoid Newton's rings. Material is available with a thickness of 0.13 mm and 0.18 mm. Available in sheets and rolls. Sheets available in standard packing unit or on demand. All sheets are equipped with interleaving paper as standard.

Formats

Art.Number	Nominal thickness (mm)	Packing quantity
4832x.130.xxxxx	0.13	100
4832x.180.xxxxx	0.18	100

Rolls

Art.Number	Length (m)	Nominal thickness (mm)
4832x.130.xxxxx	100	0.13
4832x.180.xxxxx	100	0.18

Technical data

Characteristic



- Ink receptive coating
- Suitable for textured lacquers
- With UV protection

Excellent chemical resistance to common industrial solvents and household chemicals - please refer to Folex "Chemical Resistance Datasheet".

Folex products can be printed digital and screen in many cases with excellent results. We offer improved versions dedicated for digital printing.

Finish

- Clear

Specifications

Length (m)	100
Nominal thickness (mil)	8.2
Nominal thickness (mm)	0.18
Base Material	Polyester

Product Applications

- Suitable for Membrane Switches, sign production as well as for production of labels

Handling

- Preliminary testing necessary by customer

Storage

- Once packaging is opened, store at a room temperature of 15 - 25°C and at a humidity of 30 - 60 %
- Shelf life 1 year after delivery (under above storage conditions)

Properties

Property	Test Method	Value
thickness	Folex Test Methode	0,135 - 0,150mm (0,13mm), 0,185 - 0,20mm (0,18mm)
Optical		
Haze	ASTM D1003-77	5 - 15%
Transmission	ASTM D1003-77	89 - 91%
Gloss level (20°)	ASTM D2457-70, ASTM D523	120 - 145 GU (20°, HC-Seite)
Yellowness Index	DIN 6167	1,39 (0,13mm), 1,74 (0,18mm)
Mechanical		
Embossing	Folex method	possible
Tensile strength at break	ASTM D 882	170 N/mm ²
Switch life	Folex method according to DIN 42115	> 5 Mio. flexes
adhesion of coating	Folex method	passed
Electrical		
Breakdown Voltage ¹	ASTM D 149	16,5 kV (0,13mm)/ 19,0 kV (0,18mm)
Chemical		
Chemical stability	Folex method	very good

Thermal		
Shrinkage TD	130°C 30 min Folex method	< 0,5%
Shrinkage MD	130°C 30 min Folex method	< 1,0%
Maximum processing temperature		120°C
Maximum use temp		45°C/ 70°C (with embossing/ without embossing at 50%RH without condensation)
Minimum use temp		0°C/ -20°C (with embossing/ without embossing at 50%RH without condensation)
Melting temperature ¹	ASTM E794-85	255°C
Surface		
Roughness Ra	EN ISO 4287, ASME B46.1	0,04-0,25 µm
Surface hardness	Folex method	3 H
Scratch resistance	Folex method	very good
Surface tension front side	DIN 53364, ASTM D2578	35 - 38 mN/m
Surface tension reverse side	DIN 53364, ASTM D2578	38 ± 2 mN/m

¹ Data derived from base film Polyester manufacturer's literature

Product liability clause

The foregoing information and any consulting provided by us in terms of application engineering shall be given to our best knowledge, but shall not be considered binding information neither with regard to any third party industrial property rights. Any such consulting shall not relieve you from your own review of our current consulting information as to their suitability for the intended procedures and applications. It is the users responsibility to determine the suitability for his/her own use and application and test through the complete production process to ensure the product is fully suitable for the intended use, since conditions of use are beyond our control. The sale of our products shall be subject to our current General Terms and Conditions. We reserve the right to make changes that serve to improve the product.