

Fabrics for Appliances - Screen Printing

Stovetop and Oven Door

Saatilene HI-Glass

Exclusively developed for glass screen printing industry, Saatilene HI-Glass is an innovative high modulus, low elongation monofilament polyester screen printing fabric with a proprietary surface treatment. Its excellent dimensional stability improves the printing registration, while its uniform mesh openings and fabric thickness guarantee controlled ink deposit.



BENEFITS:

- Excellent mechanical behavior
- Low elongation
- Low relaxation
- Optimized mesh geometry and precise mesh openings due to improved production process
- Long Lasting surface modification thanks to Plasma treatment
- Excellent antistatic property.

Saatilene HI-Glass - Technical Data

Article	Mesh count		Nominal thread diameter µm	Mesh opening µm	Open Area %	Fabric thickness µm	Theoretical ink volume cm ³ /m ²	Specific cross-section mm ² /cm	Maximum recommended tension from-to N/cm
	n°/cm	n°/inc							
PE AM 43.80 PW	43	110	80	150	43	138	59	0,216	35-37
PE AM 49.70 PW	49	125	70	130	40	116	46	0,188	30-34
PE AM 51.70 PW	51	130	70	120	38	118	45	0,677	30-35
PE AM 55.64 PW	55	140	64	120	41	105	43	0,177	26-31
PE AM 62.64 PW	62	158	64	90	32	106	34	0,199	30-34
PE AM 68.55 PW	68	173	55	89	36	89	32	0,161	25-30
PE AM 71.55 PW	71	180	55	80	33	93	31	0,169	25-30
PE AM 77.48 PW	77	196	48	78	36	78	28	0,139	24-26
PE AM 77.55 PW	77	196	55	70	28	90	25	0,183	27-32
PE AM 90.48 PW	90	230	48	55	27	81	22	0,163	27-29
PE AM 100.40 PW	100	255	40	55	31	63	20	0,126	26-28
PE AM 120.34 PW	120	305	34	45	29	54	16	0,108	24-26
PE AM 140.31 PW	140	355	31	38	28	48	13	0,106	20-22

The above data are average values measured on piece-good in relaxed state, manufactured with yarns of a perfect nominal diameter (cfr. international standards), under normal hygrometric conditions (20°C=68°F, 65% relative humidity). They are subject to normal variations up to 7% if conditions vary from those stated above.

The listed technical specifications, exception made for the thread diameter indicated with its nominal value, are referred to the arithmetic mean value of production samples and are subject to change, in accordance with our policy of continuously improving our products.

The tension tests are realised with TOP 12 Plus series clamp system and appropriate frames at our laboratories.

PW: plain weave (1:1)

Saatilene Variant

Saatilene Variant is an ultra-yellow fabric, with an orange thread between the repeats to better identify one repeat from the other.

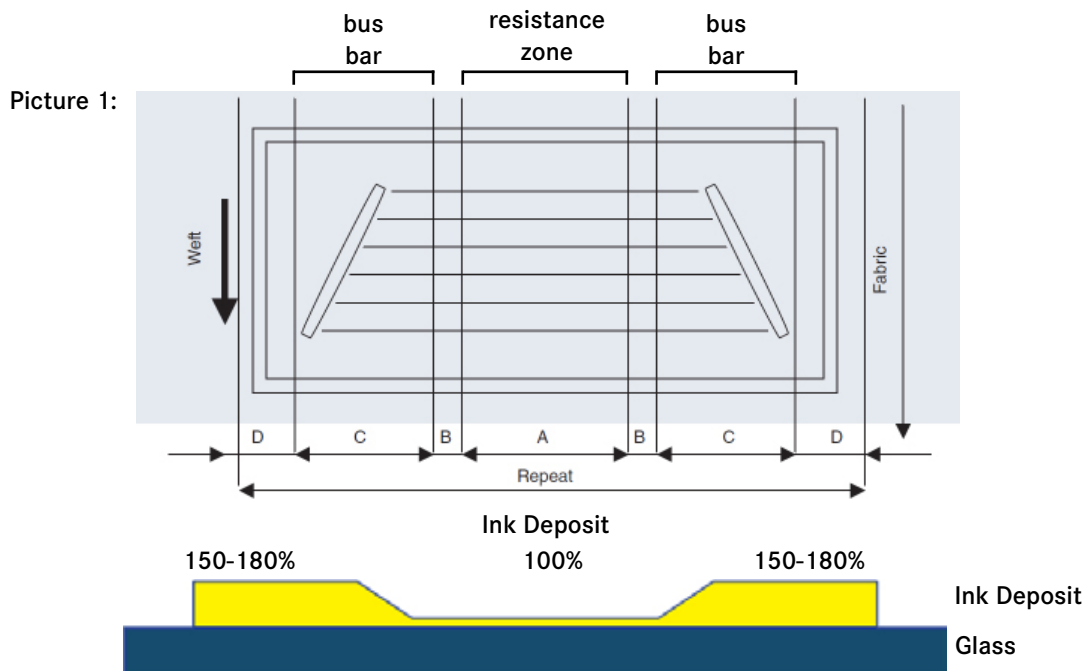
In warp it's used a 77 mesh per cm, 196 thread per inch, with 48 micron diameter and at our New Saatilene Variant 101 that is 90 mesh per cm, 230 thread per inch, with 40 micron diameter.

The standard finishing of Saatilene Variant is the anti-static treatment; it also possible to get the plasma treatment on every kind of Saatilene Variant, which will increase stencil resistance.

Saatilene Variant is a high modulus polyester mesh used in those applications where a different ink deposit is required, with the printing process optimisation.

Picture 1:

- In the A zone, Resistance Zone, is necessary to have a low ink deposit to reduce the resistances and avoid the heat dissipation (Joule effect).
- C zone or bus-bar zone, is the connection zone between lighting set and resistances: it needs an high ink deposit to reduce the heat dissipation and to avoid the connector welding.
- D zone is the stretching area and does not effect the printing zone and can be considered together with the C one.



You can find here below the technical characteristics of the already existing types of Saatilene Variant; other items can be weaved and customized based on customer's specific requests.

You have to consider a 5% tolerance in the mesh count per cm.

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #2	A	900	90	48 µm
	B	Lower than 10	Degradé	64 µm
	C	260	48	80 µm
	D	415	55	64 µm
	Repeat	2260		

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #5	A	770	77	55 µm
	B	Lower than 10	Degradé	64 µm
	C	950	49	70 µm
	Repeat	2680		

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #6,2	A	760	77	48 µm
	B	Lower than 10	Degradé	64 µm
	C	420	42	80 µm
	D	545	60	64 µm
	Repeat	2700		

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #9	A	870	77	48 µm
	B	Lower than 10	Degradé	64 µm
	C	415	42	80 µm
	D	405	60	64 µm
	Repeat	2520		

Variant 101 is 90 mesh count per cm, 230 thread per inch, with 40 micron diameter in warp

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #101	A	900	90	40 µm
	B	Lower than 10	Degradé	64 µm
	C	425	55	70 µm
	D	405	43	64 µm
	Repeat	2570		

