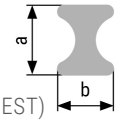
FIBROLUX
VERSTÄRKTE KUNSTSTOFFE

PROFILES FOR TRANSFORMERS

Fire protection classification EN 45545-2 R22/R23, HL1-HL3

GRP GFK TWS PRFV GVK PRV PAFS

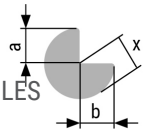
DOGBONES
(CROSS-REINFORCED ON REQUEST)



a (mm)	b (mm)	a (mm)	b (mm)
5,3	8	16	10
4,5	8		12
8	6		13
10	8		14
11	10	18	14
12	10	19	10
13	10		12
14	10		16
14	12	20	16
15	10	22	20
		24	16
		25	22

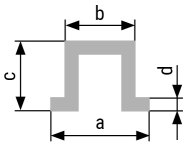
ROHS, ELV and REACH compliant

CORNER PROFILES
(cross-reinforced)



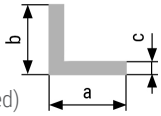
a (mm)	b (mm)	x (mm)
4,9	4,9	3,3
6	6	7
6	6	6
7	7	7
7,1	7,1	4,4
8	8	8
9	9	7,2
10	10	10
12	12	12,8
16	16	19
25	25	15
39	39	18,5

HATPROFILES
(cross-reinforced)



a (mm)	b (mm)	c (mm)	d (mm)
24,5	14,7	14	2,5
24,5	14,7	18	2,5
24,5	14,7	24	2,5
82	75	35	5

ANGLE-PROFILES
(cross-reinforced)



a (mm)	b (mm)	c (mm)
20	20	3
25	25	3
30	30	3
30	30	5

Electrical properties	
Dielectric strength transverse (kV/mm)	5 - 10
Dielectric strength longitudinal (kV/mm)	3 - 8
Verlustfaktor bei 50 Hz	13 x 10^{-3}
Dissipation factor at 50 Hz	5,5

Mechanical properties	
Breaking stress (MPa)	450
Elongation at break (%)	2
Modulus of elasticity (GPa)	25 - 40

Other properties	
Warmth class (H) °C	180
Water absorption After 24h (%)	0,3
Glass content (%)	60 - 70
Density (g/cm³)	2,0
Thermal expansion (mm/m · K)	12 x 10^{-6}
Fire behaviour UL94, halogen-free	V0

U-PROFILES
(cross-reinforced)

20 x 21 x 4 mm
40 x 20 x 4 mm
70 x 30 x 5 mm

C-PROFILES
(cross-reinforced)

25 x 15 x 11 x 3 mm
43 x 43 x 22 x 4 mm
45 x 20 x 15 x 4 mm

TUBES
(cross-reinforced)

20 x 14 mm
32 x 26 mm
40 x 32 mm

FULL RODS
from 2 to 80 mm

THREAD-RODS
from M6 to M 30

LAMINATED PRESSINGS MACHINED ACCORDING TO CUSTOMER DRAWINGS

GRP sheets / polyester resin		
IEC 60893	**NEMA LI-1**	**DIN 7735**
UP GM 203	GPO-3	HM 2471
UP GM 203	GPO-3	HM 2472

These panels have a matrix of unsaturated polyester resin (UP) and a glass mat reinforcement. They are characterised by excellent electrical properties, as well as very low smoke density and toxicity.

Areas of application:
The standard material for electrical installations, high-voltage switchgear, transformers, control cabinets, electrical installations, chemical plant construction, use in corrosive environments.

Glass Hard Fabric Panels / Epoxy Resin		
EN 60893	**NEMA LI-1**	**DIN 7735**
EP GC 202	FR 4	HGW 2372.1
EP GC 204	FR 5	HGW 2372.2
EP GC 203	G 11	HGW 2372.4
EP GC 306 / 308	G 11	HGW 2372.4

Epoxy resin panels consist of an epoxy resin (EP) with glass fabric reinforcement.
reinforcement. The sheets have excellent mechanical and electrical properties, as well as high flame resistance.

Areas of application:
High-frequency technology, base material for printed circuits, mechanically demanding parts, workpieces with threads, use in chemically aggressive environments.

Hard cotton fabric / phenolic resin		
IEC 60893	**NEMA LI-1**	**DIN 7735**
PF CC 201	C	HGW 2082
PF CC 202	CE	HGW 2082.5
PF CC 203	L	HGW 2083

Cotton rigid fabric is a composite material made of phenol formaldehyde resin (PF) and cotton fabric. It has excellent mechanical strengths and also has good sliding properties and is resistant to solvents, weak alkalis, oils and fuels.

Areas of application:
Fine mechanical parts , gear wheels, pressure rollers, track rollers, sliding parts, bearing shells.

Hard paper / phenolic resin		
IEC 60893	**NEMA LI-1**	**DIN 7735**
PF CP 201	XXP	HP 2061
PF CP 202	XX	HP 2061.5
PF CP 204	XXXPC	HP 2063

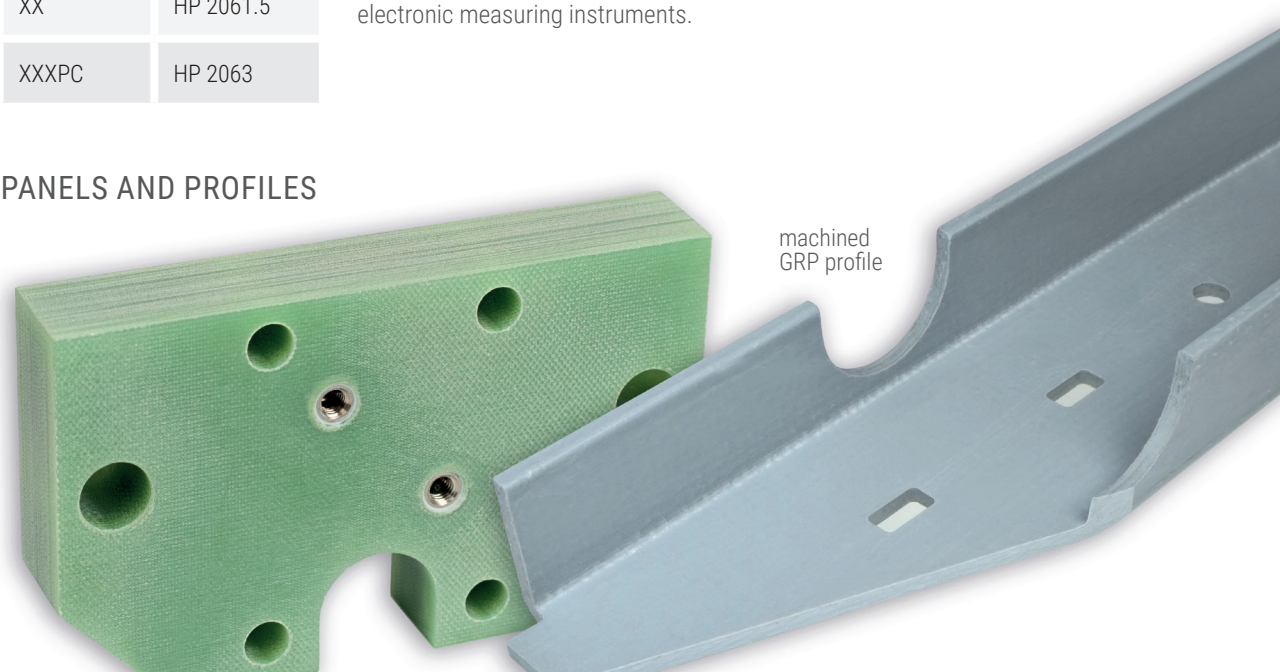
Rigid paper (Pertinax) consists of phenol formaldehyde resin (PF) and paper layers. It has good mechanical and electrical strengths as well as very good weather and moisture resistance.

Areas of application:
Low voltage, textile, automotive industry, mechanical engineering, stampings, transformers, high voltage switches,
electronic measuring instruments.

MACHINED PANELS AND PROFILES

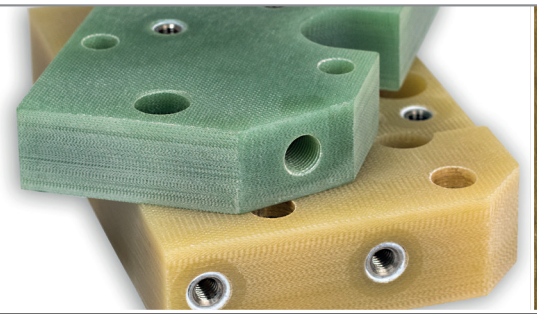
edited
Board

machined
GRP profile



	Self-extinguishing and halogen-free
	RoHS-compliant ELV-compliant WEEE-compliant RLAP compliant REACH compliant
	Corrosion resistant and chemical resistant
	High economic efficiency
	Simple assembly and short construction time
	Application range -100°C to +180°C
	Linear stress-strain Behaviour
	Electrically insulating
	UV and weather resistant
	High strength

	Fire protection classification EN 45545-2 R22/R23 HL1-HL3



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