



ROUND PROFILES TRIGLASS®

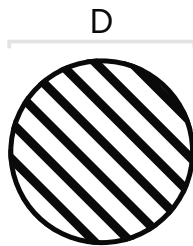
ROUND TRIGLASS® composite profiles, reinforced with fibreglass and/or carbon, represent one of the pultruded profiles made by Top Glass.

Partially available from stock, our pultruded profiles are intended for use in a wide range of sectors.

They are used as semi-finished bases in **construction**, in **agriculture**, for **electrical applications**, as **structural reinforcements** and for **street furniture**.

Round rods are also used in making technical items such as **umbrellas**, **antennas** and **sport and leisure articles** (for example, tent poles, in modelling and kites and as flagpoles or supports for banner advertisements).

Their shape and characteristics make them also widely used as reinforcements for sails in the **marine sector**.



Nominal dimension: mm

IN RED colour: dimensions available **in stock** (subject to prior sale)

IN GREY colour: dimensions available **upon request** and produced with a variety of reinforcements, resins and colours and based on **minimum production quantities** that can differ depending on the profile

SPECIFICATIONS OF IN-STOCK PROFILES:

LENGTH IN STOCK: 2.000 mm

COLOUR IN STOCK: NATURAL

MATRIX IN STOCK: STANDARD POLYESTER

DIAMETER				
2,2	2,5	3	3,1	4
4,1	5	5,1	6	7
8	9	10	11	12
13	14	15	15,3	16
16,8	18	19	20	20,7
22	24	24,7	25	27,7
30	32	38	40	45,5
50	55,4	60	63,3	76

MEAN PHYSICAL-MECHANICAL PROPERTIES

PROPERTY	TEST METHOD	UNIT OF MEASUREMENT	STANDARD MATRIX MEAN VALUE	EPOXY MATRIX MEAN VALUE
Specific weight	ASTM D792	g/cm ³	1,9	2,05
Dielectric strength	ASTM D149	kV/mm	3	5
Water absorption	ISO 62	%	0,15	0,1
Surface electrical resistivity	EN 61340	Ω	10 ¹²	10 ¹²
Loss factor at 50 HZ (tg δ)	ASTM D150	-----	0,05	0,04
Thermal class	-----	CLASS	F	F
Longitudinal thermal expansion coefficient	ISO 11359 - 2	K ⁻¹	7.5x10 ⁻⁶	7x10 ⁻⁶
Thermal conductivity	EN 12667 EN 12664	W/mK	0,3	0,3
Longitudinal flexural strength	ASTM D790	MPa	700	900
Longitudinal flexural modulus	EN 13706	GPa	33	40
Longitudinal compression strength	ASTM D695	MPa	350	450
Longitudinal compression modulus	ASTM D695	GPa	25	30
Fire reaction	UL 94	CLASS	HB	HB
Shear strength	ASTM D4475	MPa	30	50

VALUES REFER TO REINFORCED PROFILES WITH FIBREGLASS IN A **POLYESTER AND EPOXY MATRIX**

Tolerance for mechanical properties refers to longitudinal direction: ± 10%.

The data provided is accurate. However, Top Glass does not assume any liability as to its use.

NOTES:

- POLYESTER MATRIX POSSIBLE IN H CLASS TILL 38 mm DIAMETER
- RODS OVER 38 mm DIAMETER ONLY IN EPOXY MATRIX
- POLYESTER RODS AVAILABLE ALSO ACCORDING TO FIRE REACTION UL 94 V0 WITH HALOGENS
- EPOXY RODS GIVE HIGHER CREEP AND FATIGUE PERFORMANCES
- FOR CHEMICAL RESISTANCE POSSIBLE TO USE VINYLESTER MATRIX FOR RODS TILL 30 mm DIAMETER

