

## Heat shrink tubing for fire hazard environments

thick wall cross-linked polyolefin - 1.5 m bars

GTRF tubings are suitable for use in safety and emergency networks which requires circuit service integrity and/or insulation in fire hazard environments




### APPLICATIONS

- Electrical insulation of conductors, cables and accessories in low voltage applications up to 0.6/1 kV
- Mechanical protection of low and medium voltage cables
- **Suitable for use in emergency and safety systems on ships, in tunnels, underground, public buildings, power plants, and in low fire hazard environments**

### FEATURES

- Thick wall cross-linked polyolefin
- High electrical and mechanical resistance
- Halogen-, lead- and aluminium-free
- Non-corrosive
- UV-stabilized against irradiation
- Black

	ref.	item	D/d (mm)	bar length (m)	thickness T (mm)    t (mm)		cable/wire diameter range (mm)	pack. (pcs)	min./ mult ord. qty (pcs)
	GT50008	GTRF-8/3-1500/U	8/3	1.5	0.6	2.0	3.5 – 7	1	1
	GT50016	GTRF-16/5-1500/U	16/5	1.5	0.7	2.4	5.5 – 14.5	1	1
	GT50024	GTRF-24/8-1500/U	24/8	1.5	0.9	2.9	9 – 21.5	1	1
	GT50032	GTRF-32/12-1500/U	32/12	1.5	1.0	4.0	13 – 29	1	1
	GT50045	GTRF-45/16-1500/U	45/16	1.5	1.0	4.0	17.5 – 40.5	1	1
	GT50060	GTRF-60/22-1500/U	60/22	1.5	1.0	4.0	24 – 54	1	1
	GT50070	GTRF-70/25-1500/U	70/25	1.5	1.0	4.0	27.5 – 63	1	1

Dielectric strength (IEC 60243)  
**10 kV/mm (min)**

Volume resistivity (IEC 60093)  
 **$1 \times 10^{10} \Omega \cdot \text{cm}$  (min)**

Operating temperature  
**-40 °C / 120 °C**

Flammability and flame  
propagation test (EN 60332-1)  
pass

Smoke density test (IEC 61034)  
pass

Temperature index  
(NES 715 Type B)  
**250 °C (min)**

Longitudinal shrink after free recovery  
 **$\leq -15\%$**

Density (ISO 1183 method A)  
 **$1.5 \text{ g/cm}^3$**

Tensile strength (ISO37)  
**8 MPa (min)**

Elongation (ISO 37)  
**200 % (min)**

Corrosion (ASTM D 2671 proc. A)  
No corrosion after 16 hours at 150 °C

Low temperature flexibility  
(ASTM D 2671 procedure C)  
**No cracking** after 4 hours at -40 °C

Hardness (ISO 868)  
 **$\geq 40 \text{ SHORE D}$**



**D** Supplied diameter (before shrinkage)  
**T** Thickness before shrinkage  
**d** Recovered diameter (after free shrinkage)  
**t** Recovered thickness (after free shrinkage)



Shrink ratio



Compliant to  
Directive EU  
2015/863 (RoHS 3)



Halogen free