

HFF-105 HALOGEN FREE

EN 45545

(Shrink ratio 2÷1)



Halogen Free



According to RFI Italian
Railways Company rules



Note: knowing the diameter of the object to be covered, the width of the flattened tubing can be calculated using the formula **1.57079 x diameter**. Knowing the width of the tubing, the diameter of the object to be covered can be calculated using the formula **0.6366 x width of tubing**.

BEFORE SHRINKING	AFTER FREE SHRINKING		
	Internal diameter in mm (D)	Internal diameter in mm (d)	Wall thickness in mm (e)
2,5 ÷ 2,8	1,2	0,43 ÷ 0,60	300
3,6 ÷ 3,9	1,6	0,55 ÷ 0,72	300
5,2 ÷ 5,5	2,4	0,55 ÷ 0,72	300
6,7 ÷ 7,0	3,2	0,65 ÷ 0,80	300
10,0 ÷ 10,40	4,8	0,65 ÷ 0,75	150
13,6 ÷ 14,0	6,4	0,65 ÷ 0,75	150
20,4 ÷ 20,8	9,5	0,70 ÷ 0,85	50
27,0 ÷ 27,4	12,7	0,85 ÷ 1,00	50
40,0 ÷ 40,5	19,1	0,90 ÷ 1,05	50
50,8 ÷ 53,0	25,4	0,90 ÷ 1,05	50

General features

Series HFF-105 in polyolefin tubing is a heatshrinkable tubing with excellent physical and electrical properties.

The main characteristics of this sleeving are: the correspondence to the most important Regulations which refer to the low emission of toxic fumes in case of fire, such as the Railway normative EN 45545-2 and BOEING BS7239, and optional predisposition for marking purpose by thermal transfer system.

**HEATSHRINKABLE
TUBING IN
POLYOLEFIN**
"SERIES HFF-105"
SHRINK RATIO 2÷1

RTE[®]
componenti industriali

Technical features

• Shrink ratio	2 ÷ 1	
• Operating temperature	-55 °C ÷ +105 °C	
• Flammability		ACCORDING TO STANDARD ASTM D 635-HB
• Fire behavior and resolution gas and smoke		BS6853(1999) Vehicle category 1 ^a HL3 ACCORDING REQUIREMENT R22 - R23 OF THE RAILWAY RULE EN 45545-2:2013+A1:2015 LVL1-085 compliant A3 Boeing BS7239
• Oxygen index	35%	ACCORDING TO STANDARD EN ISO 4589-2
• Standard colors	Black - White - Yellow	Diameter 1,2 mm available only in Black color
• Packing	On reels	
• Traction resistance	10 N/mm ²	ACCORDING TO STANDARD ASTM D 638
• Elongation at break	200%	ACCORDING TO STANDARD ASTM D 638
• Longitudinal change	-10% / +5%	ACCORDING TO STANDARD ASTM D 2671
• Water absorption	≤ 0,15%	ACCORDING TO STANDARD ASTM D 570
• Specific gravity	1.40 gr/cm ³	ACCORDING TO STANDARD ASTM D 792
• Min. shrinking temperature	> 90 °C	
• Heat shock (4h at 175 °C)	No damage	ACCORDING TO STANDARD ASTM D 2671
• Elongation after ageing (168h at 150 °C)	≥ 100%	ACCORDING TO STANDARD ASTM D 638
• Bending at low temperature (-55 °C)	No break	ACCORDING TO STANDARD IEC 60684-2
• Resistance to fluids	Good	ACCORDING TO STANDARD AMS-DTL-23053/5
• Copper corrosion	No corrosion	ACCORDING TO STANDARD ASTM D 2671 B
• Volume resistivity	10 ¹⁴ ohm.cm	ACCORDING TO STANDARD ASTM D 257
• Dielectric strength	20 KV/mm	ACCORDING TO STANDARD ASTM D 2671
• Printability	Excellent	Thermal transfer
• Information regarding application	See chapter "Choice of heatshrinkable tubing and information regarding its application"	

COMPANY WITH QUALITY MANAGEMENT
SYSTEM CERTIFIED BY DNV
= ISO 9001:2008 =

La RTE si riserva il diritto di apportare eventuali modifiche al presente catalogo senza preavviso. RTE reserves the right to make any modification to this catalogue without prior notice.

I dati contenuti in questo catalogo sono basati su test che riteniamo validi, ma che non costituiscono garanzia implicita od espresa. Potranno variare in qualunque momento in funzione di nuove conoscenze od esigenze, senza preavviso da parte della ns. società.

The information given in this catalogue is based on tests we believe to be valid, but it does not constitute intended or explicit guarantee. The information may vary at any time in accordance with updated knowledge and needs, without prior notification from our company.

Consigliamo ai ns. clienti di valutare l'idoneità dei ns. prodotti secondo la loro applicazione specifica.

We recommend that our customers assess the suitability of our products in regard to their specific application.

In nessun caso ci riterremo responsabili per qualsiasi eventuale danno, indiretto o conseguente alla vendita, rivendita, trasferimento, uso o uso improprio del prodotto.

In no case shall we be considered liable for any damages, whether indirect or in consequence of the sale, resale, transfer, use or incorrect use of the product.