



+ INFORMATION

EF - Extended Fire Resistant Printable Heat Shrink Sleeves

Flame retardant, zero halogen, low smoke, low toxicity radiation cross linked UV stabilised and printable polyolefin sleeves used for wire identification. Ideal for use where limited fire hazard properties are required. Developed for use in mass transit, and marine applications where human life is at risk. Meets London Underground Limited Standard 1-085.

- + Flame Retardant
- + Self Extinguishing
- + Zero Halogen
- + Easy Pick Application
- + Backing card perforated after every sleeve
- + Print performance to Military Specifications
- + RoHS and REACH Compliant

+ SPECIFICATIONS

Temperature range
-40°C to +105°C

Material
flexible polyolefin

Print
thermal transfer

Standard colours
yellow and white

Shrink ratio
2:1

Fluid resistance
Meets: MIL202G Method 215K

Specifications:
Meets DEF STAN 59-97, issue 3 type 8
LUL Standard 1-085 (Limited, dispersed usage)
Formerly LUL 2-01001-002
BS6583 - Vehicle Cat. 1a

+ PROPERTIES

THERMAL PROPERTIES	VALUE	TEST METHOD
Continuous Operating Temperature	-40°C to +105°C	-
Elongation After Heat Ageing (158°Cx168hrs)	150%	ISO 37
Cold Bend (-40°C)	Does not break	ASTM-D 2671 Meth. C
Elongation After Heat Shock (150°Cx4hrs)	100% Min.	ASTM-D 2671
Minimum Shrink Temperature	+115°C	ASTM-D 2671
Flammability	Flame retardant	ASTM-D 635

PHYSICAL PROPERTIES	VALUE	TEST METHOD
Longitudinal Change	+/-10% Max.	ASTM-D 2671
Specific Gravity	1.45 g/cm³	ISO/R 1183
Tensile Strength	10.0 MPa Min.	IEC 60684-2
Elongation at Break	200% Min.	IEC 60684-2
Secant Modulus	130 MPa Max.	ASTM-D 882

CHEMICAL PROPERTIES	VALUE	TEST METHOD
Chemical Resistance	Good to Excellent	-
Corrosion Action	Non-Corrosive	ASTM-D 2671 Meth. A
Copper Compatibility	Non-Corrosive	ASTM-D 2671

ELECTRICAL PROPERTIES	VALUE	TEST METHOD
Dielectric Strength	24kV/mm	IEC 243
Volume Resistivity	61 ¹⁶ ohmxcm	ASTM-D 2671 Meth. A
Dielectric Voltage Withstand (after aging)	No Breakdown	ASTM-D 2671
Water Absorbion	0.20%	ASTM-D 570

LOW FIRE HAZARD PROPERTIES	VALUE	TEST METHOD
Oxygen Index	32	ISO 4589-2
Toxicity (R Value)	0.31	BS6853 B1
Smoke Emission (Ao)	0.014	BS6853 D8.3

PROSLEEVE - EF

EXTENDED FIRE SPECIFICATION

+ PRODUCT RANGE

TYPE	DIAMETER [mm] BEFORE SHRINKING	DIAMETER [mm] AFTER SHRINKING	SLEEVE LENGTH [mm]	MARKERS ACCROSS	MARKERS / BOX
EF^024125LR*	2.4	1.2	12.5	4	4000
EF^024250LR*	2.4	1.2	25	2	2000
EF^024500LR*	2.4	1.2	50	1	1000
EF^032125LR*	3.2	1.6	12.5	4	4000
EF^032250LR*	3.2	1.6	25	2	2000
EF^032500LR*	3.2	1.6	50	1	1000
EF^048125LR*	4.8	2.4	12.5	4	4000
EF^048250LR*	4.8	2.4	25	2	2000
EF^048500LR*	4.8	2.4	50	1	1000
EF^064125LR*	6.4	3.2	12.5	4	4000
EF^064250LR*	6.4	3.2	25	2	2000
EF^064500LR*	6.4	3.2	50	1	1000
EF^095125LR*	9.5	4.75	12.5	4	2000
EF^095250LR*	9.5	4.75	25	2	1000
EF^095500LR*	9.5	4.75	50	1	500
EF^127125LR*	12.7	6.4	12.5	4	2000
EF^127250LR*	12.7	6.4	25	2	1000
EF^127500LR*	12.7	6.4	50	1	500
EF^190125LR*	19.0	9.5	12.5	4	2000
EF^190250LR*	19.0	9.5	25	2	1000
EF^190500LR*	19.0	9.5	50	1	500
EF^254250LR*	25.4	12.7	25	2	600
EF^254500LR*	25.4	12.7	50	1	300
EF^381500LR*	38.1	19.0	50	1	100

^ = S (single sided), D (double sided); * = Colour (4=Yellow, 9=White)
Recommended ribbon: 2020 series

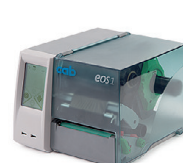
+ RELATED PRODUCTS



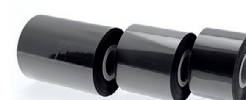
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