

Manufacturers & Suppliers of:

SLEEVING

General Purpose PVC
High Temperature Fibreglass Sleeves
Fire Sleeves
Electric Insulation Sleeving
Heat Shrink
Mechanical & Abrasion Protection Sleeves

SILICONE

Profiles
Sleeves
Compounds

INSULATION MATERIALS

PVC Shrink Sleeving
Adhesive Tapes

EASYWARN

Pipe and Scaffolding Hazard Warning Sleeves



SLEEVINGS AND CABLE PRODUCTS

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Sleeve It Limited is an independent company established in 2003 and has grown through innovation and customer service. We pride ourselves on offering competitive technical solutions to your problems.

We supply a diverse range of products including:

- Protective/thermal sleeving
- Identification products
- Insulation Materials
- Pipe covers

Our customer list is extensive and we supply our products worldwide. Here are just a few of our happy customers.



We also manufacture a diverse range of customer specific products, however if you cannot find a product to suit your requirements, please contact us and we will endeavour to offer a solution.

Fire Sleeve

Red Oxide Silicone Coated Glass Fibre Sleeving

Fire Sleeve is manufactured from 'E' glass fibre yarn knitted to form a sleeve and coated with high-grade silicone elastomer rubber. This is a very flexible sleeving designed to protect wires, cables, and hoses from high ambient temperatures. It will offer continuous protection at an operating temperature of 260°C and can withstand a molten metal splash at 1200°C.



Standard format

Inside diameter: 6mm to 127mm

Method of supply: 15m coils

Technical Information

Wall thickness: 4mm +/- 0.5mm

Average Dielectric Strength: 30kV +

Features

- High Flexibility
- Continuous protection at an operating temperature of 260°C
- Ability to withstand a molten metal splash at 1200°C
- High resistant to most oils, hydraulic fluids, fuels, acids and alkalis
- When exposed to flame the high grade rubber will form a protective SiO₂ layer
- Health & Safety - Provides personnel with protection against burns from hot hoses, steam lines etc.
- Helps to reduce energy loss by retaining heat within pipe work
- Excellent flame resistance
- Good abrasion resistance

Colour

Red Oxide

Standard Available Sizes	Characteristics	Result
Nominal inside diameter (mm)		
6, 10, 12, 16	Effect of heat	Will not burn. Retains 75% tensile at 340°C
20, 22, 25, 28	Effects of acids & alkalis	Resistance to acids are fair. Resistance to alkalis are good
32, 35, 38, 41, 44	Silicone rubber Durometer, Shore A. Aged 240hrs at 200°C	35/45 Shore
51		
57	Dielectric Strength	30kV+
63		
70, 76	Tensile Strength	400,000 - 500,000 psi
83	Elastic Recovery	100%
89		
95	Specific Gravity	2.54 - 2.69 kg/m ³
102		
114	Effect of bleaches and solvent	Unaffected
127		

Other diameters

Velcro fasten versions (for retro fit) or larger inside diameter sleeves with Velcro and/or turnbuckle fastenings can be produced to order. These are available up to 300mm inside diameter.

Flexguard Firesleeve

Flexguard Firesleeve is a high abrasion strength and heat resistance woven ballistic Nylon® which protects personnel against hose spray-out failures. Flexguard Firesleeve stays intact at the highest operating temperature possible for any Nylon® abrasion fire sleeve treated with our proprietary heat and flame resistant coating technology.



Standard format

Inside diameter: from 12mm up to 88mm.

Method of supply: 50m coil

Colour

Black

(Available in other colours by special order).

Continuous Operating Temperature	126°C (260°F)
Max short term exposure	232°C (450°F)
Molten splash resistance	Not recommended
Flame resistance	Good
Abrasion resistance	Outstanding
Flexibility	Outstanding
Water and oil resistance	Good

Fire-Fabric 3250

Fire Fabric 3250 is specially woven giving it high strength and high insulating properties. This super heavy-weight flexible fiberglass fabric is coated and impregnated on one side with a thick layer of specially compounded red, liquid silicone rubber. Fire Fabric 3250 is designed to provide excellent protection in the most severe industrial applications.



The silicone rubber coating is completely impervious to water, moisture, hydraulic oils. When exposed to high temperatures or molten splash for extended periods, the coating transforms into a silica refractory crust.

Fire Fabric 3250 can be supplied in short cut lengths, custom shapes, or as fabricated curtains with grommets.

Continuous Operating Temperature	260°C
Max short term exposure	1650°C
Molten splash resistance	Outstanding
Weld Spatter Resistance	Outstanding
Flame Resistance	Outstanding
Abrasion Resistance	Outstanding
Flexibility	Very Good
Water and Oil Resistance	Very Good
Nominal Weight	3250 g/m ²
Nominal Thickness	3.68mm (0.145")

Copper Clad

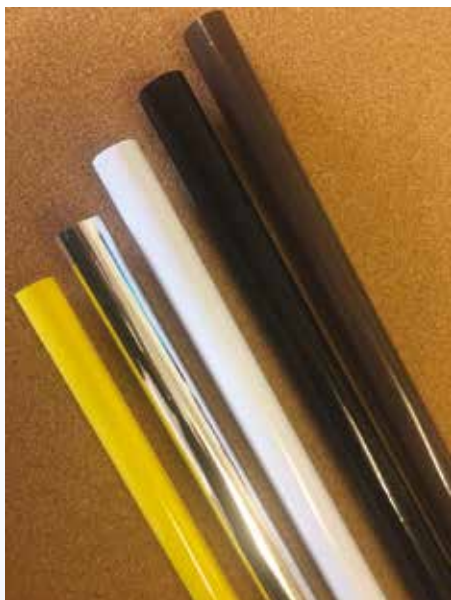
PVC Pipe Covers Rated at 90°C Copper-Clad are a range of PVC snap-on pipe covers for use in domestic and industrial installations. We supply a range of popular sizes in 1 metre lengths.

Electrical Performance

300kV/cm

Features

- Standard colours are White and Chrome - others available
- Fast, easy installation
- Attractive, easy wipe down finish
- No need to paint pipes
- 10mm - 35mm diameter
- Can be printed for identification and logos
- Suitable for hot and cold supply



XGR

Sleeve It XGR is based on a unique glass braid construction that permits up to 300% expansion of the internal bore. Sleeve It XGR is constructed from braided E glass yarn with a tough hard resin to impart increased abrasion resistance.

Colour

Available in black or natural



Features

- Resistance to abrasion
- Range 2 - 50mm
- Operational temperature -20°C to 220°C
- Maximum temperature 450°C
- 500v electrical strength (@ 20°C not expanded)
- Hot splash resistant

Reference

Nominal Relaxed Bore (mm)

Maximum Expanded Bore (mm)

No 1	20.0	50.0
No 2	15.0	38.0
No 3	10.0	30.0
No 4	8.0	25.0
No 5	6.0	18.0
No 6	3.0	9.0
No 7	2.0	6.0

Sleeve It AGS

Sleeve It AGS is manufactured from braided 'E' glass yarn coated with formulated acrylic resins applied as an aqueous solution and hence the manufacturing process has no significant environmental hazard. The acrylic coated sleeveings are characterised by excellent flexibility with high abrasion resistance and mechanical strength. The AGS range is capable of continuous performance at Class F (155°C) and short term exposure up to 200°C.



Features

- Resistance to abrasion
- Range 0.5 - 25.0mm
- Operation Temperature -20 °C to 155 °C
- Maximum Temperature 200 °C
- 1.0kV - 4.0kV electrical strength (at 20 °C)

	AGS 942	AGS 942A	AGS 944
Electrical Strength at 20°C	2.5kV for 1 min	1.0kV for 1 min	4.0kV for 1 min
Thermal Classification	Class F (155°C)	Class F (155°C)	Class F (155°C)
Max. Short Term Temperature	200°C	200°C	200°C
Bore Size Available	0.5 - 25.0mm	0.5 - 25.0mm	1.0 - 25.0mm
Standards Applicable			
IEC	684-3-404	684-3-404	684-3-403
NEMA VS-1	Type 6 - Grade C1	Type 6 - Grade C1	Type 6 - Grade C1
Supply Parameters	Reels or cut to length	Reels or cut to length	Reels or cut to length
Colours Available	Various	Various	Black or yellow

Reflectosleeve

Reflectosleeve is a range of highly reflective, woven glass fibre reinforced sleeveings for use in protecting components from both radiant and conductive heat sources. The outer aluminium maintains a highly reflective finish with the inner layer of woven glass fibre offering significant thermal insulation.



Reflectosleeve coverings are constructed of a woven E glass fabric with aluminium foil laminated to its outer surface utilising a resilient high temperature adhesive. The sleeve is formed by folding the material and sewing the edge with an Aramid or Fibre-glass thread. To minimise fraying the glass fabric is treated with a suitable high temperature resin.

Reflectosleeve is a low profile, easy to apply solution for the component it protects. It offers superior thermal protection to components, especially in the Automotive Industry, where they are in close proximity to engines and exhaust systems.

Typically used to cover/protect

- Engine wire harnesses
- Hoses and tubing
- A/C line
- Hydraulic and fuel lines
- Control cables

Features

- Working temperature 200°C
- Flexible
- Fluid and chemical resistant
- Easy Installation

Ara - Braid X

Ara-Braid X is manufactured by braiding Nomex™ Yarn to produce a thin walled highly expandable structure. The ready ‘concertina’ action of the sleeve will expand the bore and thus assisting fitting over complex shapes.



Ara-Braid X is light weight, flexible and non-flammable, it will perform without deterioration in the most diverse and demanding environments. It is also oil and water repellent and offers excellent resistance to gamma and x-rays.

Ara-Braid X is designed for the protection of wires and cable bundles against flame, high temperatures and mechanical abrasion. It is used on a variety of applications in the military, railway, marine, aeronautical and electrical equipment industries.

Standard colour

Olive Green

Description	Nominal Diameter	Recommended Diameter Range		Standard Packaging
		Min	Max	
Ara-Braid X - 4	4mm	1.5mm	4.5mm	100M
Ara-Braid X - 6	6mm	3.5mm	10.5mm	100M
Ara-Braid X - 8	8mm	4mm	13mm	100M
Ara-Braid X - 10	10mm	7mm	17mm	100M
Ara-Braid X - 15	15mm	10mm	20mm	100M
Ara-Braid X - 20	20mm	12mm	25mm	100M

Other sizes are available on request.

Note: Longitudinal shrinkage should be taken into account when utilising the expansion properties of the sleeve.

Features

- 1: 3 expansion ratio
- Thin Wall
- Lightweight
- Self-extinguishing
- Excellent abrasion protection
- Low temperature flexibility to -60°C

Operating Temperature

-60°C to +240°C

Property	Test Method	Result
Working Temperature		60°C to + 240°C continuous Up to + 310°C short term
Carbonisation	Above + 370°C	Does not melt
Bending Strength	50,000 bending Cycles at +180°C	Pass
Flame Resistance	UL224	VW-1
Flame Resistance FAR 25 AMDT.25-72	UL94	Base material classified VO Pass
Fluid Resistance	EN6059 Part 303	
	Fuel: JP5 (NATO F44)	Pass
	Hydraulic Fluid	Pass
	Skydrol 500B4 & L D4	Pass
	Mineral Oil: Mil-L 787OA	Pass
	Synthetic Oil: Mil-L 23699	Pass
	Cleaning Fluid	Pass
	De-Icing Fluid: MIL-A 8243	Pass
Humidity Resistance	100h at 150°C in air saturated with water vapour	Retains 70% of original tensile strength

Sleeve It L124

Sleeve It L124 is manufactured by braiding 'E' Glass yarn. The sleeving is uncoated but has been subjected to a heat process to caramelize the glass yarn size, induce braid roundness and some interyarn bonding. The heat treatment also reduces the fray of the sleeving when cut.



Range: 0.5 - 25.0mm

Operational temperature: -20°C to 220°C

Maximum temperature: 600°C

Features

- Resistance to abrasion
- Hot splash resistant
- Available in natural

Sizes Available

- Bore Size 0.5 - 1.5mm : Reel Size 500mtrs
- Bore Size 2.0 - 3.5mm : Reel Size 250mtrs
- Bore Size 4.0 - 8mm : Reel Size 100mtrs
- Bore Size >9.0mm : Reel Size 50mtrs

SCGK

Sleeve It SCGK is a high temperature insulating sleeve offering excellent thermal and electrical properties for the protection of cables and hoses in hostile environments.



The Sleeve is available in several grades depending on specific requirements.

SCGK sleeving will retain flexibility from -60°C to 250°C and will operate continuously at 180°C. The SCGK range of sleeving is classed as self-extinguishing.

Substrate: Glass Knit

Coating: Silicone

Thermal Class: H

Flammability: Self Extinguishing

Max. Short Term Temp: 250°C

Sizes Available

1 - 3.5mm	250m
4 - 8mm	100m
9 - 25mm	50m

Colours available

Black (other available dependant on quality)

Product	Range (mm)	Electrical Strength kV for 1 min
S300	1 - 25	2
S350	1 - 25	4
S375	4 - 20	10
S360	1 - 25	4
S367	1 - 25	6
S320	1 - 25	1
S350	1 - 25	4

SIGB

Glass fibre braided sleeving lightly impregnated silicone resin.

Sizes

Manufactured diameters: 0.5 to 30 mm
Standard colour: Light brown (Natural)



Standard packaging Coils

Diameter: 0.5 to 4mm: 200m
Diameter: 5 to 12mm: 100m
Diameter: 14 to 20mm: 50m
Diameter: 22 to 30mm: 25m

Features

- Temperature class: CLASS C
- Continuous working temperature: From - 60°C to + 350°C. Peak to + 400°C (a few hours)
- Dielectric strength: 1 kV
- Flammability: Non flammable
- Good mechanical resistance
- Good resistance to UV
- Resistance to transformer oils according to UTEC 93641
- Good compatibility with class C impregnation varnishes
- Good performance with soldering iron
- Good performance with liquid combustibles, no decomposition
- Flexible
- Non-watertight

SCGB

Sleeve It SCGB is a high temperature insulating sleeve offering excellent thermal and electrical properties for the protection of cables and hoses in hostile environments.



The Sleeve is available in several grades depending on specific requirements. SCGB sleeving will retain flexibility from -60°C to 250°C and will operate continuously at 180°C. The SCGB range of sleeving is classed as self-extinguishing.

Substrate: Glass Braided

Coating: Silicone

Thermal Class: H

Flammability: Self Extinguishing

Max. Short Term Temp: 250°C

Sizes Available

1 - 3.5mm	250m
4 - 8mm	100m
9 - 25mm	50m

Product	Range (mm)	Electrical Strength kV for 1 min
S500	1 - 25	2
S550	1 - 25	4
S575	4 - 20	10
S567	1 - 25	4
S560	2 - 22	6
S520	3 - 12	1

Colours available

Black (other available dependant on quality)

Thermal Exhaust Sleeve

Sleeve It Thermal Exhaust Sleeve is manufactured from Basalt fibre yarn knitted to form a sleeve which provides excellent thermal protection. The sleeve possesses outstanding characteristics making it ideal for use on vehicle exhaust systems.



Typical applications include heavy goods vehicles, buses, and certain automotive applications. It can also be used for high temperature Industrial applications over pipe-work and to protect hoses and cables etc.

Features

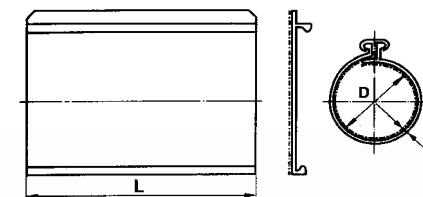
- Highly conformable/expandable – allowing ease of assembly over awkward shapes
- Continuous thermal protection up to 750°C
- Thick single wall construction provides optimal coverage and will not snag on exhaust welds etc.
- Highly resistant to most oils, hydraulic fluids, fuels, acids and alkalis, and moisture
- When installed, the thermal exhaust sleeve is designed to help keep exhaust gases as hot as possible as they flow through the exhaust to catalytic converters - this increases burn efficiency and helps to reduce emissions
- Because of its insulation properties, the sleeve will also provide protection to sensitive electrical wiring and components running close to the exhaust system
- Good abrasion resistance
- Nominal wall thickness 4mm

Availability

Currently available in 102mm inside diameter
 Other sizes can be developed subject to potential volumes
 Can be supplied in boxes of up to 30m in length, or cut to length

Shrink Wrap

Heatshrink wraparound sleeving is manufactured from cross-linked polyolefin. The hot melt adhesive inner lining melts during shrinking to form a permanent seal.



Packaging

1 pcs

Product	Dimensions (mm)			Lengths Available
	D (max)	D (min)	Shrink Ratio	
RM 122/38	122	38	3	250, 500, 750, 1000, 1500
RM 160/55	160	55	3	250, 500, 750, 1000, 1500
RM 210/55	210	55	3	250, 500, 750, 1000, 1500

Deray H

Flexible thin wall, multi purpose polyolefin heat shrink tubing, designed for electrical, automotive, industrial and pipe applications requiring electrical and/or mechanical insulation.



Features

- -55°C to +135°C Operating Temp
- Shrink Temperature 90°C
- 2:1 minimum Shrink Ratio
- MIL UL CSA
- Flexible
- Flame Retardant; UL VW-1
- Good Fluid Resistance
- Excellent Electrical Insulation
- Radiation Cross Linked

Expanded Internal Diameter Min (mm)	Recovered		Standard Lengths (m)
	Internal Diameter Max (min)	Wall Thickness Min (mm)	
1.2	0.6	0.40	200
1.6	0.8	0.40	200
2.4	1.2	0.50	200
3.2	1.6	0.50	200
4.8	2.4	0.50	100
6.4	3.2	0.60	100
9.6	4.8	0.60	100
12.7	6.4	0.60	50
16.0	8.0	0.60	50
19.1	9.5	0.80	50
25.4	12.7	0.90	50
32.0	15.9	0.90	50
38.1	19.0	1.00	50
50.8	25.4	1.10	30
76.2	38.1	1.30	30
101.6	50.8	1.40	30

Colours

Black, Green, Clear, Red, Yellow, Blue, White, Grey, Brown

Printability

Hot Stamp: V Good

Ink Jet: Good

Offset: Good

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D-638, MIL-I-23053	Min 1.1kgf/mm ²
Elongation	ASTM D-638, MIL-I-23053	200% min
Secant Modulus	ASTM D-882	max 173Mpa
Specific Gravity	ASTM D-792, ISO R1183	1.3 (colours) 0.95 (clear)
Restricted Shrinkage	ASTM D-2671	No cracking
Elongation after Heat Aging (168hrs at 175°C)	ASTM D-638, MIL-I-23053	Min 100%
Heat Shock (4hrs @ 250°C)	MIL-I-23053	Pass
Low Temp Flexibility (4hrs at -55°C)	MIL-I-23053	No cracking
Flammability	UL224	Flame retardant (except clear)

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	ASTM D-2671	min 19.7kV/mm
Volume Resistivity	ASTM D-876	min 10 ¹⁵ Ω x cm

Chemical

Property	Test Method	Typical Performance
Fluid Resistance	MIL-1-23053	Good - Excellent
Copper Corrosion	MIL-I-23053	Non-corrosive
Flammability (VW-1)	UL224	Pass
Fungus Resistance	ASTM G-21	No growth

Deray I3000

Flexible thin wall, multi purpose polyolefin heat shrink tubing, designed for electrical, automotive, industrial and pipe applications requiring electrical and/or mechanical insulation.



Features

- -55°C to +135°C Operating Temp
- Shrink Temperature 90°C
- 3:1 minimum Shrink Ratio
- MIL UL CSA
- Flexible
- Flame Retardant; UL VW-1
- Good Fluid Resistance
- Excellent Electrical Insulation
- Radiation Cross Linked

Colours

Black, Green, Clear, Red, Yellow, Blue, White, Grey, Brown

Expanded Internal Diameter Min (mm)	Recovered Internal Diameter Max (min)	Wall Thickness Min (mm)	Standard Lengths (m)
1.5	0.5	0.40	200
3.0	1.0	0.50	200
4.5	1.5	0.54	200
6.0	2.0	0.59	200
9.0	3.0	0.68	100
12.0	4.0	0.68	100
18.0	6.0	0.77	100
24.0	8.0	0.90	50
38.0	13.0	1.04	50

Printability

Hot Stamp: V Good
Ink Jet: Good
Offset: Good

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D-638, MIL-I-23053	Min 1.1kgf/mm ²
Elongation	ASTM D-638, MIL-I-23053	200% min
Secant Modulus	ASTM D-882	max 173Mpa
Specific Gravity	ASTM D-792, ISO R1183	1.3 (colours) 0.95 (clear)
Restricted Shrinkage	ASTM D-2671	No cracking
Elongation after Heat Aging (168hrs at 175°C)	ASTM D-638, MIL-I-23053	Min 100%
Heat Shock (4hrs @ 250°C)	MIL-I-23053	Pass
Low Temp Flexibility (4hrs at -55°C)	MIL-I-23053	No cracking
Flammability	UL224	Flame retardant (except clear)

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	ASTM D-2671	min 19.7kV/mm
Volume Resistivity	ASTM D-876	min 10 ¹⁵ Ω x cm

Chemical

Property	Test Method	Typical Performance
Fluid Resistance	MIL-1-23053	Good - Excellent
Copper Corrosion	MIL-I-23053	Non-corrosive
Flammability (VW-1)	UL224	Pass
Fungus Resistance	ASTM G-21	No growth

Deray IAKT 3X

Thin Wall Adhesive Lined Radiation Cross linked Polyolefin. IAKT is a heat shrink tubing which is ideal for effective moisture resistant insulation.



Continuous Operating Temperature

-55°C to 110°C

Shrink Temperature

95°C

Expanded Internal Diameter Min (mm)	Recovered Internal Diameter Max (min)	Wall Thickness Min (mm)	Standard Lengths (m)
3.0	1.0	1.0	1.22
4.5	1.5	1.1	1.22
6.0	2.0	1.2	1.22
9.0	3.0	1.4	1.22
12.0	4.0	1.7	1.22
19.0	6.0	2.1	1.22
24.0	8.0	2.4	1.22
40.0	13.0	2.4	1.22

Colours

Black, Clear

Printability

Hot Stamp: V Good

Ink Jet: Good

Offset: Good

Features

- Flexible
- Flame Retardant (jacket/black only)
- Resistant to common fluids
- IP68 sealing
- 3:1 Shrink Ratio

Physical

Property	Test Method	Typical Performance
Tensile Strength	IEC 60684-2	15.0 Mpa
Elongation	IEC 60684-2	400%
Longitudinal Change	ASTM D-2671	-15% max
2% Secant Modulus	ASTM D-2671	16,000psi (110Mpa)
Specific Gravity	ASTM D-792, ISO R1183	1.25 g/cm ³
Heat Resistant Properties (16hrs @ 175°C)	MIL-DTL-23053/4	No cracking or flowing of outer wall
Heat Shock	ASTM D-2671	No cracking or flowing of outer wall
Low Temp Flexibility (4hrs @ -55°C)	ASTM D-2671	No cracking
Flammability	ASTM D-876	Flame retardant jacket

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	VDE 0303 Part 2	22kV/mm
Volume Resistivity	VDE 0303 Part 3	min 10 ¹⁴ Ω x cm

Chemical

Property	Test Method	Typical Performance
Corrosive Action	ASTM D-2671	Non Corrosive
Copper Compatibility	ASTM D-2671	No corrosion
Water Absorption	VDE 0472	0.15%
Fungus Resistance	ASTM G-21	No growth

Twist It GP

Twist It GP is a woven PET wraparound sleeve designed for protecting wire harnesses and cables. The 'spring wrap' action enables application after termination of wires and cables. Installation is efficient and breakouts are quickly produced during harnesses building.



Specific Gravity	ISO R1183	1.38g/cm ³
Tensile Stress		650N/mm ²
Tenacity		5.3g/d
Elongation		20%
Operating Temperature Range		-50°C to 150°C +
Melt Temperature		275°C
Low Temperature Flexibility	ASTM D 2671	No cracking/crazing
	(4h at -55°C)	
Shrinkage	Water 100°C	2 - 4%
	Air 200°C	24 - 28%

Features

- Flexible
- Wraparound - Side Entry
- Zero Halogen
- High Resistance to abrasion
- Range 2 - 30mm
- Operation temperature -50°C to 150°C

Sizes

- 5mm x 50m Coil
- 9mm x 50m Coil
- 13mm x 50m Coil
- 18mm x 50m Coil
- 25mm x 25m Coil
- 35mm x 25m Coil
- 50mm x 25m Coil

Sleeve It EP22 FR

EP22 FR is an expandable close weave sleeving produced from braided polybutylene terephthalate monofilaments. The yarn is treated with a non-burning agent. The special braid construction permits the sleeving bore to be expanded up to 300% and a particular feature is the retention of roundness.



EP22 FR is flame retardant and will operate at temperatures within the range -50°C to +150°C. It also has excellent resistance to damage by mechanical abrasion and repeated flexing. The monofilaments will resist attack by salt water, oils and most common fuels and solvents.

Typical applications

- Cable management (Audio/Video)
- Automotive; Hydraulic hoses, tubing and wiring harnesses

Features

- Flame retardant
- Flexible/expandable
- Easy installation

Standard Sizes

From 2.4mm – 76mm internal diameters

Colours available

Black (with Grey tracer)
Grey (with Black tracer)

Available Sizes	Min/max bundle diameter (mm)	Standard Package (m)
103	2.4 / 6.4	250
104	2.0 / 7.0	250
105	3.0 / 9.0	250
106	3.2 / 9.5	250
108	5.0 / 12.0	150
110	5.7 / 16.0	150
112	6.4 / 19.0	150
116	8.0 / 23.0	100
120	13.0 / 32.0	100
125	18.0 / 34.0	50
132	19.0 / 45.0	50
140	25.0 / 60.0	50
145	32.0 / 70.0	50
150	38.0 / 76.0	50

Sleeve It EP 22

A proven solution for protecting, strengthening, bundling, wires, cables and flexible pipe systems. Sleeve It EP 22 expandable braided sleeving is made of lightweight 0.22mm, but tough polyester monofilaments of the highest quality and tensile properties.



The push back expansion effect of this product enables a few sizes to cover a wide range of applications.

Sleeve It EP 22 readily expands which makes installation efficient even over large diameter transitions and around bends. Once installed it retracts to conform to the application shape resulting in a smooth, close fitting sleeve.

With continuous working temperature of -50°C to +150°C and a resistance to most chemicals, Sleeve It EP 22 can be used in hostile environments and is suitable for all industries.

Features

- Resistance to abrasion
- Range 2 - 50mm
- Operational temperature -20°C to 220°C
- Maximum temperature 450°C
- 500v electrical strength (@ 20°C not expanded)
- Hot splash resistant

Colour

Available in black or natural

Packing Options

Supplied in standard coils

Reels from bulk to small user mini reels

Mini Boxes

Cut Lengths: Sealed with our special hot knife to stop fraying

Sleeve It EP 22 is self-extinguishing due to its braided construction and low toxicity during combustion making it ideal for use in public areas or near sensitive electronic equipment.

A proven solution for protecting, strengthening, bundling, wires, cables and flexible pipe systems. Sleeve It EP 22 expandable braided sleeving is made of lightweight 0.22mm, but tough polyester monofilaments of the highest quality and tensile properties.

Applications

Electrical Harnesses, Flexible Technical Hoses, Ripped Pipes

Markets

Automotive, Rail Traction

Nominal diameter (mm)	Inside Diameter (mm)		Suggested Range of Use (mm)	Construction		Packaging Coils (M)
	Mini	Maxi		N° Yarns	Weight g/m	
3	2	6	1 - 3	60	3.95	100
4	3	8	1 - 5	72	4.45	100
5	4	10	2 - 7	84	5.15	100
6	5	12	3 - 9	96	5.80	100
8	6	14	4 - 11	120	7.70	100
10	8	18	5 - 12	144	9.00	100
12	10	21	7 - 15	168	10.10	50
15	13	25	8 - 17	192	12.30	50
20	18	29	10 - 21	216	14.00	25
25	22	36	14 - 25	286	17.20	25
30	27	45	18 - 32	360	21.60	25
40	35	64	20 - 40	480	28.70	25
50	45	75	30 - 55	600	39.60	25

Sleeve It EP22 UL

Expandable sleeving with flame retardant PET Monofilaments.

Product Features

Operating temperature: 50°C to 150°C

Flame retardant to UL94 – VO

Zero Halogen and Low smoke toxicity



Monofilament Polyester Polyethylene Terephthalate PETFR - size 0.25mm dia

Melting Point +225°C

Maximum Working Temperature 150°C

Withstand Peaks 200°C

Minimum Working Temperature -50°C

Flame Resistance Passes flame requirement UL94-V0 and FMVSS 302

Limiting Oxygen Level 34.7% (Report Available)

Fumes Toxicity Low smoke density, zero Halogen fumes

Chemical Resistance Resistant to most chemical fluids

Nominal diameter (mm)	Inside Diameter (mm) Maxi	Suggested Range of Use (mm)	Construction		Packaging Coils (M)
			N° Yarns	Weight g/m	
3	5.00	2 - 4.5	48	3.75	100
4	8.75	3 - 7.5	72	5.29	100
5	10	4 - 9	84	6.87	100
6	11.25	5 - 10	96	7.49	100
8	13	7 - 11	120	9.28	100
10	16	8 - 14	144	11.61	50
12	17	9 - 15	168	13.33	50
15	23	12 - 20	192	14.37	50
20	32	17 - 27	256	19.28	25
25	35	20 - 30	288	22.35	25
30	45	25 - 40	384	29.18	25
40	64	35 - 56	480	39.00	25
50	72	45 - 63	480	45.88	25

Applications

- Electrical harnesses
- Flexible Technical Hoses
- Rigid pipes

Colour

Black or natural

Easywarn

Re-usable easy fit hazard warning.



Features

- Easy to install
- Reusable
- Can be supplied with company details
- Long life

Coiled Pipe Markers

Coiled Pipe Markers are a polyester moulded identification strip, which are used to display information and can be applied on both interior and exterior pipework. These Pipe Markers are screen printed to give a 5-7 year life span which is superior to digital print methods. They are extremely quick and easy to apply. Coiled Pipe Markers can be made to your specifications and comply to national and international legislation.



Features

- Coiled self locating material
- Keeps secure even on angled or vertical pipes
- Pipe surface needs no preparation before applying marker
- Perfect for dirty, rusty or sweating pipes where conventional markers are unacceptable
- Coiled pipe markers are suitable in temperatures from -40°F ,to 160°F
- For larger pipes, plastic straps are used to secure markers in place.
- All Coiled Pipe Markers comply with National and International legislation

Standard Pipe Diameters

Imperial	Metric
3/4" - 1"	19mm - 25mm
1 1/8" - 2 3/8"	28mm - 60mm
2 1/2" - 4 1/2"	63mm - 114mm
4 5/8" - 5 7/8"	117mm - 149mm
6" - 8"	152mm - 203mm

PVLF Shrink Sleeve Lay-Flat PVC

PVC Tubing 2:1 Ratio

Thin wall, low cost material made of PVC that offers excellent electrical insulation and a low shrink temperature. It is rigid and resists most chemicals and oils. Lay-flat PVC is available in widths from 7mm to 300mm.



Colours available

Black, Red, Yellow, White, Blue, Green, Violet, Brown, Clear
(other colours available to order)

Lay Flat Size (mm)	Lay Flat Size Tolerance (mm)	Ordering thickness (mm)	Transverse Shrink Ratio (%)	Longitudinal Shrink Ratio* (%)
7~14	+0.5/-0	0.05~0.10	45+/-5	10+/-5
15~24	+0.8/-0	0.05~0.15	45+/-5	10+/-5
25~39	+1.0/-0	0.05~0.30	45+/-5	10+/-5
40~54	+1.3/-0	0.05~0.30	45+/-5	10+/-5
55~74	+1.5/-0	0.05~0.30	45+/-5	10+/-5
75~91	+2.0/-0	0.05~0.30	45+/-5	10+/-5
92~149	+3.0/-0	0.05~0.30	45+/-5	10+/-5
150~199	+4.0/-0	0.10~0.25	45+/-5	10+/-5
200~249	+6.0/-0	0.10~0.20	45+/-5	10+/-5
250~300	+8.0/-0	0.10~0.15	45+/-5	10+/-5

* this is a guide for tolerance only

Specification References

Underwriters Lab	British Standard	Flame Retardant
UL224 VW1	BS EN 60695-11-10	Yes
File No. E129478 (S)	:1999 V-O Grade	

Features

- Operating Temperature Range -40°C to 105°C
- Shrink Temperature 100°C
- Excellent Shape Insulation
- Self Extinguishing
- UL & BS Approvals

Property	Test Method	Values
Tensile Strength	JIS 6723	450 kg/cm ²
Ultimate Strength	JIS 6723	100%
Specific Gravity	ASTM D 1505	1.20 ~ 1.30
Cycle Temperature	300hrs at -40 °C	No Cracking
List Test	~105°C 300 times	Or splitting
Low Temperature	JIS K 723	
Impact	-15 °C	
Volume Resistivity	SSTM D 2671	Pass
Electric Strength	JIS C 8430	20kV/mm min
Break Down Voltage	Thickness 0.07mm	6,000
	Thickness 0.10mm	JIS C 8430 8,000 V
	Thickness 0.15mm	10,000 V
	H ₂ O Absorbability	within 0.5%
	Abstraction	within 0.5%
Immersion Test	10% NaCl Solution	KM M 3406 within +/- 0.5%
	30% H ₂ SO ₄ Solution	within +/- 0.5%
	40% HNO ₃ Solution	within +/- 0.5%
	40% NaOH	within +/- 0.5%

Self Fusing Tape

369 Tape

Self-fusing tape is made of special fully cured silicone rubber compound that fuses to itself forming a permanent bond. Whether you call it fusible tape, self-fusing, self-vulcanising, self amalgamating tape or just silicone tape, this product is amazingly useful.



This tape is ideal for electrical insulation, moisture protection, and high or low temperature applications. Since there is no adhesive, no residue remains when the tape is removed. This silicone tape is the perfect alternative to adhesive electrical tape, duct tape, and heat shrink tape for many applications.

Standard Formats

Sleeve It 369 tape is stocked as 25mm wide tape, the cross section of the tape is triangular for a smooth appearance when applied. The tape is offered in 11m rolls. Other formats and colours are available

What's it used for?

- Harness wrapping and wire bundling for high temperature applications
- Insulation of field armature and interpole coils in large motors
- Insulation and sealing of electrical connectors
- Masking tape in powder coating
- High temperature sealing tape

Tape Thickness (mm)	Tape Width (mm)	Roll Length (m)	Colours
0.5	25.4	3	Black, blue, bright red, clear, grey, green, orange, red, white, yellow
0.5	25.4	11	Black, red
0.5	38.1	3	Black, red
0.5	38.1	11	Black, red
0.5	50.8	11	Black, red, clear

Technical information

Thermal stability : 180 °C

Short term maximum temperature : 260°C

Self-adhesive bond : Forms within 24 Hours

Relation and Compliance to Industry Standards

A-A-59163: Which supercedes MIL-I-46852C

CPSIA: Consumer Product Safety Improvement Act

PROP 65: The Safe Drinking Water and Toxic Enforcement Act of 1986

Class H Insulator: National Electrical Manufacturers Association (NEMA)

RoHS: Restriction of Hazardous Substances Directive 2002/95/EC

REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (EU Regulation)

Flammability Testing: Per CPSC's ASTM F963-08

Typical Properties	Test Method	Performance
Operating Temp Ranges:		
	Continuous	-45°C to 200°C
	Intermittent	-65°C to 260°C
Specific Gravity	ASTM D792	1.2 .03
Hardness, Durometer, Shore A	ASTM D2240	
	Room Cured - 24 hr	55±5
Tensile Strength	ASTM D412	700 psi min
Elongation	ASTM D412	300% min
Tear Strength	ASTM D624, Die B	60ppi min
Bond Strength	MIL-I-46852	2 lbs. min
Adhesion, unwind	ASTM D2148	3 in. min
Cold Brittle Point	ASTM D2137	-54°C
Water Absorption by weight	Fed. Std. 601, Meth. 6251	5% max
Dielectric Strength	ASTM D149	400Vpm min
Dielectric Constant, 1kHz	ASTM D150	2.95
Dissipation Factor 1kHz	ASTM D150	<0.0004
Vol. Resistivity	ASTM D257	1X10 ¹³ OHMS/cm min
Dielectric Strength	ASTM D149	400Vpm min

Silicone Extruded Profiles

Sleeve It manufacture customer specific silicone profiles. Particular attention to detail plays a vital role in the manufacture of our silicone extrusions. Various applications demand different tolerance control and specific performance from the extrudates.



Sleeve It takes a keen interest in the intended use of products to ensure that they are always suitable in terms of dimensional stability, shore hardness, accuracy and that the most suitable compounds are used.

An almost infinite range of sections and profiles are available in all the usual grades of silicones i.e. food grades, flame retardant, high and low temperature and steam resistant grades etc..

Shore Hardness	30°C - 80°C
Operating Temperature	-60°C - 250°C
Colours	Any colour available

Symel Sleevings

Sleeve It Symel is an extruded silicone elastomer sleeve. It can be supplied in a range of colours and sizes to suit your application.



Sleeve It Symel is used in many applications including the insulation of lead-outs and connections in transformers and coils employing fine gauge winding wire.

Symel is also used to insulate carbon brushes and thyristor connections. Sleeve It Symel can be supplied in reels, hanks or cut to length.

Sizes

Bore Size: 0.5 - 125mm
Wall Sizes: From 0.2mm

Features

- Flexible
- Resistance to soldering
- Operating Temperature -60°C to 250°C

Thermal Classification	Class H (180°C)
Maximum Short Term Temperature	250°C
Bore Sizes	0.5 - 125mm
Wall Thickness	From 0.2mm
Electrical Strength	1.0kV per 0.1mm wall thickness
Shore Hardness	30°C - 80°C
Colours	Any colour available

Symel Sponge

Symel Sponge is our range of expanded silicone sponge that has a closed cell structure with a smooth outer wall.



It offers excellent thermal stability to withstand the extremes of temperature from -50°C up to 250°C, resistance to UV and Ozone and also an excellent compression set of 15% typical.

This makes the product particularly suited to demanding temperature applications that require a soft compressible material and is company used in environmental shields, electrical and automotive gaskets across a variety of markets.

Symel is also used to insulate carbon brushes and thyristor connections. Sleeve It Symel can be supplied in reels, hanks or cut to length.

Density

Silicone Sponge is available in four standard densities;

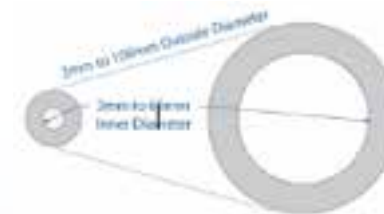
- P10 soft
- P16 medium
- P24 firm
- P33 extra firm As part of our Premium Service we can additionally offer tailored grades and densities on request

Options

- Our product can be provided on spools
- We can produce in a range of standard colours and also offer a colour matching service
- We can also provide self adhesive backing and fabric finishes to our products

Properties

- Excellent moisture resistance.
- Excellent temperature resistance (-50°C up to +250°C)
- Resistance to UV/oxidation.



Sizes

From our standard range we can produce sizes from 2.0mm to 100mm and the majority of our range (up to 70mm diameter) can be produced to the tightest ISO 3302 high precision tolerance.

We have an enviable level of experience and track record at providing custom densities and can produce practically any shape that you require.

Size	Tolerance ISO 3302-1: 1996	
	Standard	High Precision
	E2	E1
1 to 1.5mm	+/- 0.25	+/- 0.15
>1.5 to 2.5mm	+/- 0.35	+/- 0.20
>2.4 to 4.0mm	+/- 0.40	+/- 0.25
>4.0 to 6.3mm	+/- 0.50	+/- 0.35
>6.3 to 10.0mm	+/- 0.70	+/- 0.40
>10.0 to 16.0mm	+/- 0.80	+/- 0.50
>16.0 to 25.0mm	+/- 1.00	+/- 0.70
>25.0 to 40.0mm	+/- 1.30	+/- 0.80
>40.0 to 63.0mm	+/- 1.60	+/- 1.00
>63.0 to 70.0mm	+/- 2.00	+/- 1.30
>70.0 to 80.0mm	+/- 2.00	
>80.0 to 100.0mm	+/- 3.00	

Please note our information is based on lab tested samples. Technical data is provided in good faith, but without warranty. End users should check to ensure our products are suitable for their intended use.

Silicone Compound

Sleeve it Ltd offer a mixing service of Silicone compounds that can be supplied in sheet form for use in manufacture of composite structures. We can offer any quantity you require; pre-catalysed with peroxide or Platinum catalyst. Any colour and most grades available ex stock.



Specially formulated uncured silicone sheet for use as an intensifier in composite manufacture. Material will significantly increase mould pressure resulting in improved consolidation of end component. The material is supplied in sheet form and is available in a range of thickness's, colours and hardness.

Type: Mixed silicone compound

Colours: White, Transparent, Translucent Green (high temp)

Grade	Standard Grade	High Temperature
Continuous Operating Temp °C	180	230
Max Short Term Temp °C	250	290
Tensile Strength (cured) N/mm ²	10	10
Elongation to break (cured) %	425	425
Tear Strength (cured) N/mm	20	20
Standard Shore Hardness	60 or 70	
Standard Thickness	6mm	6mm
Storage	Room Temperature	Room Temperature
Shelf life @ Room Temp.	6 months	6 months
Vulcanisation conditions	10 min @ 125°C	10 min @ 125°C

Sleeve It Limited

For further information on any of the products we stock, or to place an order, please contact us using the information below.

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