



CABLE JOINTS, CABLE TERMINATIONS, CABLE GLANDS, CABLE CLEATS
FEEDER PILLARS, FUSE LINKS, ARC FLASH, CABLE ROLLERS, CUT-OUTS

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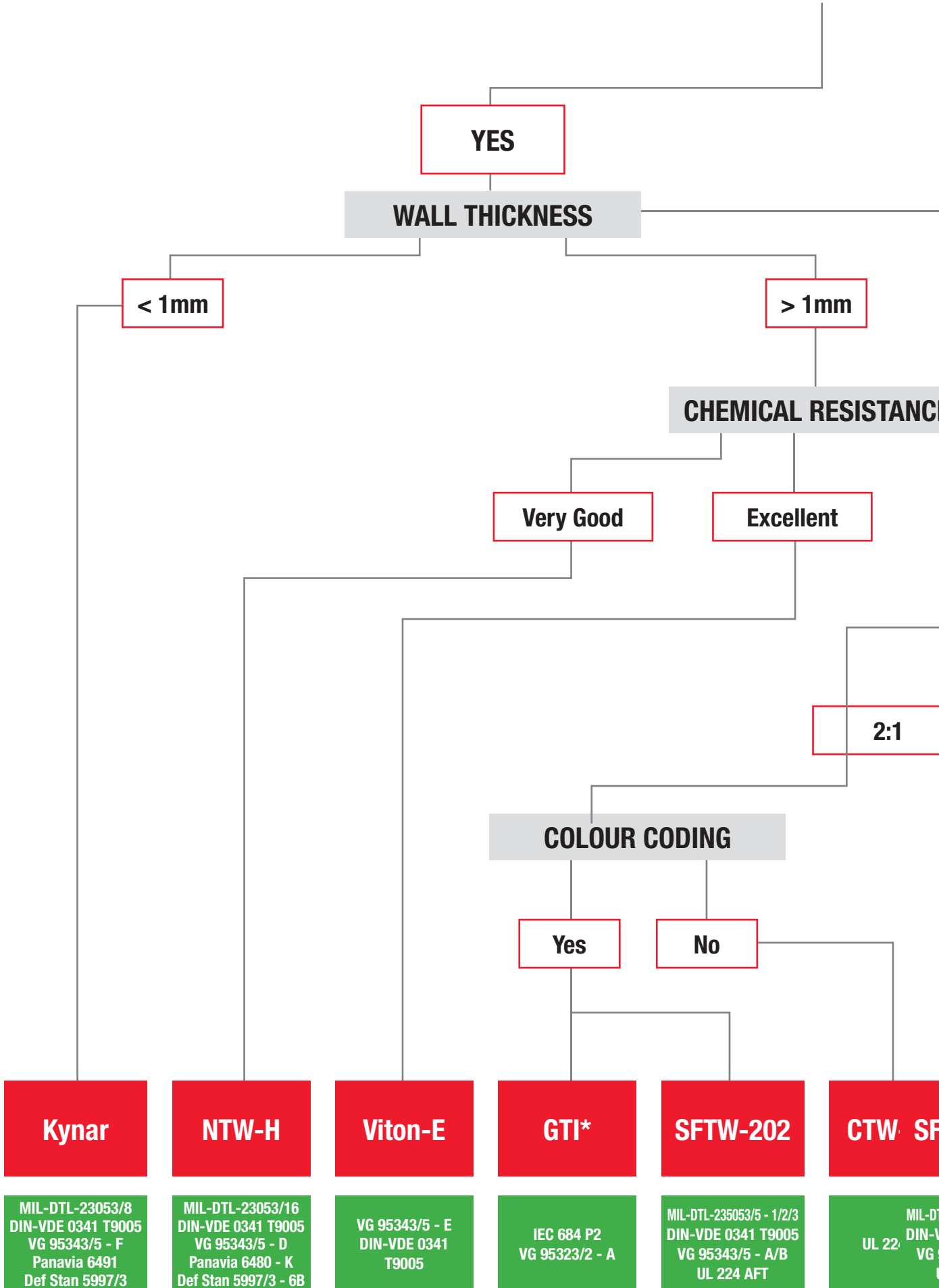
Continuous operating

EMC & RFI Products

OEM Electrical Insulation Tapes

OEM Liquid Resins

Heat Shrink

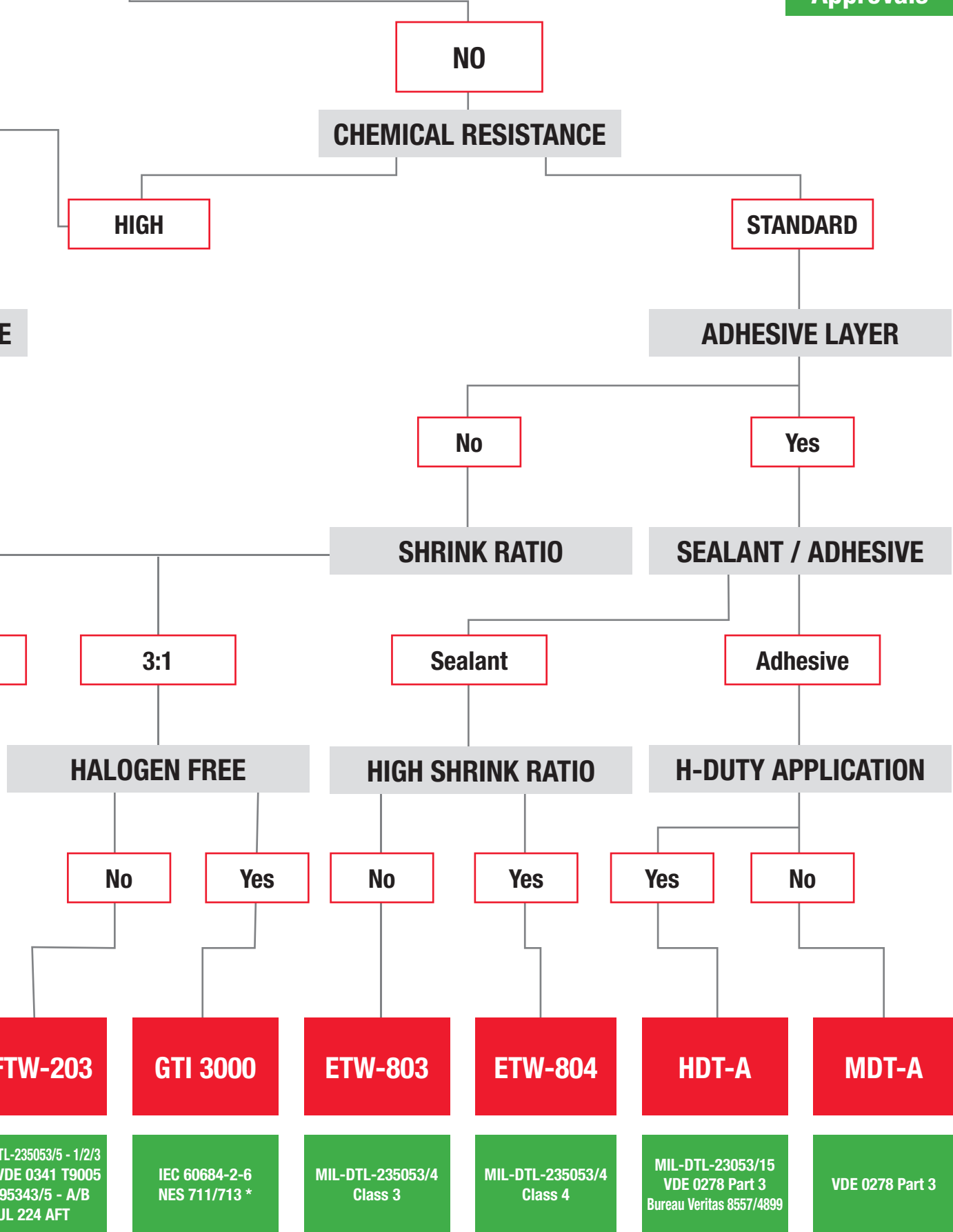


Attributes

Product

Approvals

temperature >135°C



EMC & RFI Products

OEM Electrical Insulation Tapes

OEM Liquid Resins

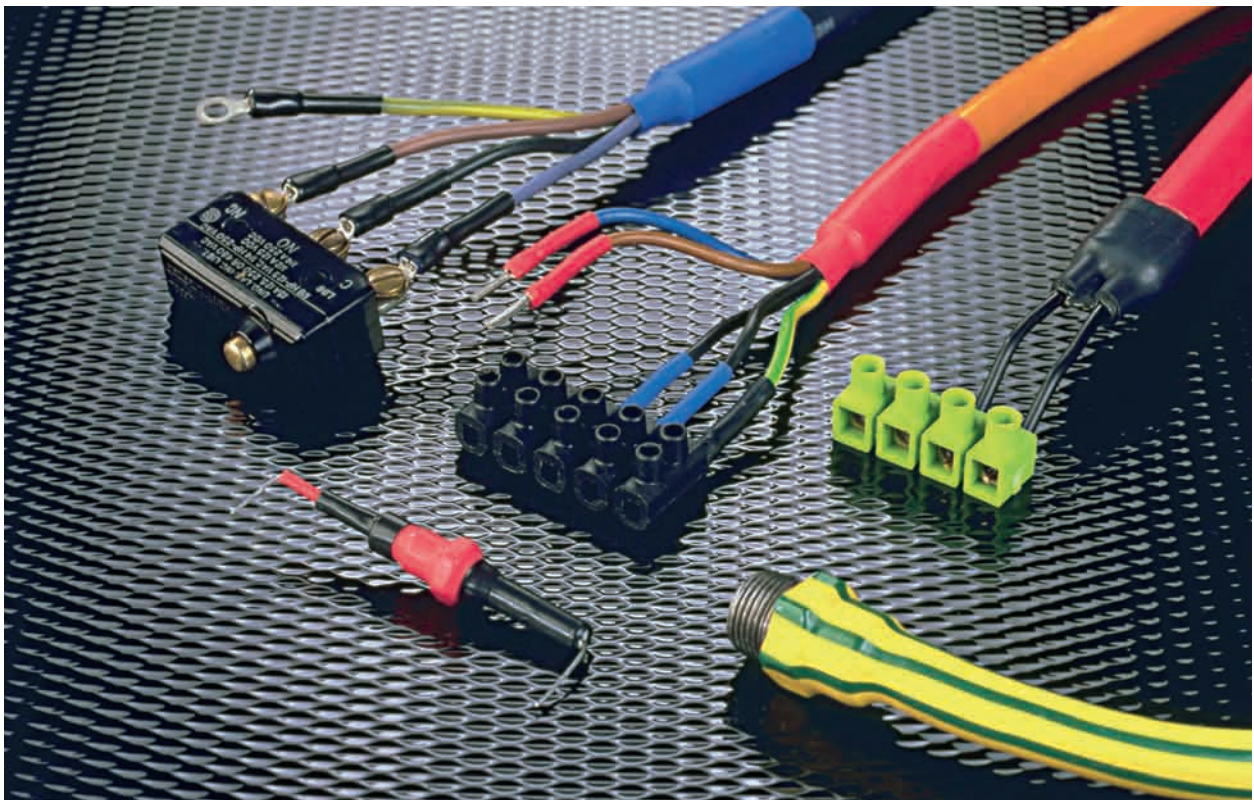
Heat Shrink

* from 2007

3M Heat Shrink products provide long-term reliable performance and excellent mechanical and environment protection. Easy to install, 3M Heat Shrink tubing comes ready to use and with the application of moderate heat automatically moulds to a skin tight fit – even over irregularly shaped objects.

The comprehensive 3M range includes, thin-walled, medium and thick walled tubing, adhesive lined tubing, and a range of moulded parts, featuring:

- High temperature resistance
- High strength and good mechanical properties
- Excellent solvent and chemical resistance
- Superior thermal and form stability
- Shape memory
- Precise shrink ratio and recovery
- Superior split and crack resistance



3M™ CTW - 602 Commercial Grade Polyolefin

CTW-602 is ideal for providing insulation of electrical connections, terminals, components and wiring systems. It requires a minimum shrink temperature of 120°C and is well suited to manual as well as automatic methods of application. CTW-602 is very suitable for use as a continuous insulation sleeve in a variety of industrial applications. Continuous operating temperature range: -55°C to +135°C.

Shrink ratio: 2:1. Supplied in continuous reels.

Available in black only.

Bore Supplied min/ Bore Recovery Max

1.2mm/0.6mm	19mm/9.5mm
1.6mm/0.8mm	25.4mm/12.7mm
2.4mm/1.2mm	38mm/19mm
3.2mm/1.6mm	51mm/25.4mm
4.8mm/2.4mm	76/38mm
9.5mm/4.8mm	102mm/51mm
12.7mm/6.4mm	

Bore Supplied min/ Bore Recovery Max

1.2mm/0.6mm	12.7mm/6mm
1.6mm/0.8mm	19mm/9.5mm
2.4mm/1.2mm	25.4mm/12.7mm
3.2mm/1.6mm	38mm/19mm
4.8mm/2.4mm	51mm/25.4mm
6.4mm/3.2mm	76.2mm/38mm
9.5mm/4.8mm	102mm/51mm

3M™ SFTW - 202 High Grade Polyolefin

SFTW-202 is a highly flexible, fast shrinking tubing, offering superior properties. With excellent chemical and thermal resistance it is capable of meeting the toughest demands of the aerospace, military, offshore and railway industries.

It meets the stringent requirements of VG 95343, UL 224, Def Stan and other international specifications with a Continuous operating temperature range: -55°C to +135°C.

Shrink ratio: 2:1.

Supplied in either continuous reels or 1 metre pieces.

Available in the following colour combinations;

Black	Clear
White	Red
Blue	Yellow
Brown	Green

Bore Supplied min/ Bore Recovery Max

3.2mm/1.6mm	12.7mm/6mm
4.8mm/2.4mm	19mm/9.5mm
6.4mm/3.2mm	25.4mm/12.7mm
9.5mm/4.8mm	38mm/19mm

3M™ SFTW - 202 GYS High Grade Polyolefin

SFTW-202-GYS is a very flexible, fast shrinking tubing specially designed for electrical equipment ground lead applications.

This tubing is manufactured using a special co-extrusion process ensuring that the green and yellow coding is fully integrated into the tubing wall.

Shrink ratio: 2:1

- It offers excellent chemical and thermal resistance
- Operating temperature -55°C to 135°C
- Available in Green/Yellow Striped
- Supplied in either continuous reels or 1 metre pieces.

Bore Supplied min/ Bore Recovery Max

1.5mm/0.5mm	12mm/4mm
3mm/1mm	18mm/6mm
6mm/2mm	24mm/8mm
9mm/3mm	39mm/12.7mm

3M™ SFTW - 203 High Grade Polyolefin

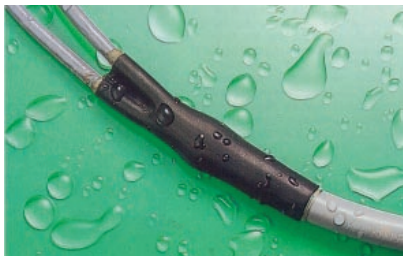
SFTW-203 is a highly flexible, fast shrinking tubing offering superior properties. With excellent chemical and thermal resistance, it is capable of meeting the toughest demands of the aerospace, military and railways industries.

With a continuous operating temperature range of -55°C to +135°C, SFTW-203 has a 3:1 shrink ratio, and therefore can easily cope with components of varying diameter, with no tendency to split.

Available in black or clear.

Supplied in continuous reels.





Bore Supplied min/ Bore Recovery Max

ETW-803	ETW-804
3mm/1mm	4mm/1mm
6mm/2mm	8mm/2mm
9mm/3mm	12mm/3mm
12mm/4mm	16mm/4mm
19mm/6mm	24mm/6mm
24mm/8mm	32mm/8mm
40mm/13mm	

3M™ ETW-803 / ETW-804 - Dual Wall Polyolefin

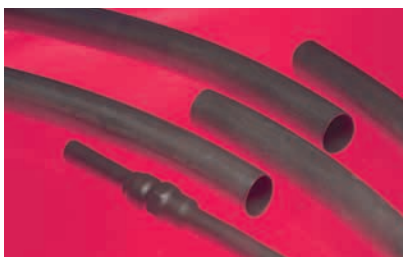
ETW-803 / ETW-804 is a flexible heat shrinkable tubing with a co-extruded hot melt adhesive inner wall. The excellent flow properties of the adhesive ensure good environmental sealing of complex parts. As this tubing shrinks, molten adhesive flows and is forced into gaps and crevices. When the adhesive cools it forms a seal against moisture and other fluids whilst the outer wall provides mechanical protection with a continuous operating temperature range: -55°C to 110°C.

ETW-803 is well suited for environmental sealing of a variety of electronic, electrical and mechanical applications such as connections, joints etc. Shrink ratio: 3: 1.

ETW-804 has a shrink ratio of 4:1, which accommodates wide variances in diameter.

Available in black.

Supplied in 1 metre pieces.



Bore Supplied min/ Bore Recovery Max

3.2mm/1.6mm	25.4mm/12.7mm
4.8mm/2.4mm	38mm/19mm
6.4mm/3.2mm	51mm/25.4mm
9.5mm/4.8mm	76mm/38mm
12.7mm/6.4mm	102mm/51mm
19mm/9.5mm	

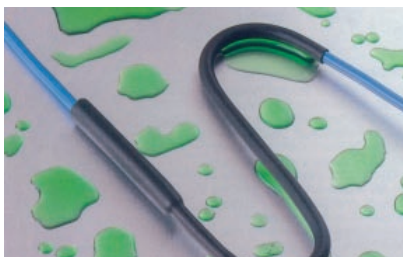
3M™ NTW - H High Performance Elastomeric

NTW-H is a superior flexible high performance elastomeric tubing. Meeting the most stringent requirements of international specifications, NTW-H is used in aerospace, railways and defence applications.

It is supplied, printed with the VG-95343/5D print and provides protection against many chemicals (including diesel and petrol) and against abrasion, thus ensuring excellent performance of aerospace cable harnesses – even after many years of use in severe environmental conditions.

Shrink ratio: 2: 1 with a continuous operating temperature range: -75°C to 150°C.

Available in black.



Bore Supplied min/ Bore Recovery Max

3.2mm/1.6mm	19.0mm/9.5mm
4.8mm/2.4mm	25.4mm/12.7mm
6.4mm/3.2mm	38mm/19mm
9.5mm/4.8mm	51.0mm/25.4mm
12.7mm/6.4mm	

3M™ Viton™ - E Fluorelastomer

3M Viton™-E is fluorelastomeric tubing. It possesses extremely high resistance to chemicals and will maintain its excellent mechanical and flexibility even after long term exposure to high temperatures. It is suitable for protection of cables against contamination by almost all commercial hydraulic fluids, minerals and synthetic oils.

It is widely used in hydraulic equipment, aircraft manufacture and ship building applications. Due to its very high operating temperature (-55°C to +220°C). VITON-E is well suited for the protection of sensitive devices and aerospace harnesses against heat. Shrink ratio: 2: 1.

3M Viton™-E is approved to VG 95343/5E and is therefore suitable to be used in military and aerospace applications. VITON-E is supplied printed to the requirements of VG.

Available in black.

Supplied in continuous reels.

Bore Supplied min/ Bore Recovery Max

12mm/3mm	50mm/18mm
19mm/6mm	70mm/26mm
27mm/8mm	90mm/36mm
32mm/7.5mm	120mm/40mm
38mm/12mm	

3M™ MDT - A - Adhesive Lined Medium Duty Polyolefin

MDT-A is specially designed medium wall tubing, which provides tough and flexible insulation and is ideal for the protection of cable joints and terminations. MDT-A is lined with a specially designed adhesive, which is applied during the tubing's extrusion process. This achieves a very smooth adhesive layer, which ensures excellent sealing properties. MDT-A meets the requirements of VDE 0278 part 3.

A Non adhesive version is available (MDT), please contact customer service for details.

The adhesive lining makes it especially suitable for underground cable joint applications. For Offshore and Naval applications, a modified MDT-A approved by Det Norske Veritas is available (MDT-A-F471).

Supplied in 1 metre pieces.

Continuous operating temperature range: -35°C to 130°C, outdoor wall only.

Available in black - Shrink ratio is up to 4.5: 1.

Bore Supplied min/ Bore Recovery Max

12mm/3mm	48mm/15mm
19mm/6mm	85mm/26mm
30mm/8mm	115mm/38mm
38mm/12mm	

3M™ HDT - A - Adhesive Lined Heavy Duty Polyolefin

HDT-A is thick wall polyolefin tubing. The toughness and weather ability of the tubing make it well suited for exposed applications. HDT-A is supplied with a specially designed hot melt adhesive layer. The adhesive is applied during extrusion of the tubing thus achieving a very smooth, constant adhesive layer, which ensures excellent sealing properties. Shrink ratio: Up to 4 : 1.

HDT-A meets the longitudinal sealing requirements of VDE 0278 part 3 and is, therefore, ideal for sealing underground or exposed inline joints and terminations.

Supplied in 1 metre pieces.

Continuous operating temperature range: -55°C to 130°C, outer wall only.

Available in black.

Bore Supplied min/ Bore Recovery Max

1.2/0.6mm	9.5/4.8mm
1.6/0.8mm	12.7/6.4mm
2.4/1.2mm	19/9.5mm
3.2/1.6mm	25.4/12.7mm
4.8/2.4mm	38/19mm
6.4mm/3.2mm	

3M™ Kynar® Fluoropolymer Tubing

3M Kynar® is a semi-rigid highly transparent material, which maintains excellent mechanical strength even at high temperatures. It has high chemical and puncture resistance. It provides protection against aggressive fluids and excellent mechanical protection. Suitable for military, aerospace and industrial applications, 3M Kynar® is approved to specifications such as VG 95343/5F. Shrink ratio: 2 : 1. Continuous operating temperature range: -55°C to 175°C. Available in clear, supplied in 1.2 metre pieces.



Bore Supplied min/ Bore Recovery Max

1.5mm/0.5mm	18.0mm/6.0mm
3.0mm/1.0mm	39.0mm/12.7mm
9.0mm/3.0mm	



Bore Supplied min/ Bore Recovery Max

51mm/25.4mm
76mm/38mm
102mm/51mm

3M™ GTI 3000 - General Purpose Thin Wall Insulation Polyolefin

GTI 3000 is flexible, thin walled heat shrink tubing, made of cross-linked, halogen free polyolefin. The tubing meets the latest requirements regarding shrinking time, flexibility, and material characteristics.

GTI 3000 is designed to provide excellent insulation and protection in various industrial applications. The large diameter range, and 3:1 shrink ratio offers many solutions within a small range of products. GTI 3000 is available in a wide range of colours, with a shiny, smooth, particle free surface. Suitable for cable marking and identification applications. Continuous operating temperature -55°C to 135°C. Supplied in 1 metre pieces.

GTI 3000 fulfils the strict requirements of many standards, including RoHS.

Available in the following colours:

- Black
- White
- Blue
- Brown
- Red
- Clear
- Yellow
- Green/Yellow*

* Size 1.5 / 0.5 not available in Green / Yellow

3M™ GTI - General Purpose Thin Wall Insulation Polyolefin

3M GTI is flexible thin walled polyolefin tubing, with fast shrink time and excellent electrical and mechanical properties.

GTI is designed to provide excellent insulation and protection in various industrial applications.

Continuous operating temperature -55°C to 135°C with a 2:1 Shrink Ratio. Supplied in 1 metre pieces.

Available in the following colour & size combinations to complement the GTI-3000 Range;

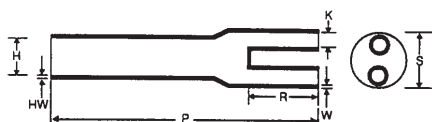
- Black
- White
- Blue
- Brown
- Red
- Clear
- Yellow

Heat Shrink - Moulded Parts



3M Heat Shrink Moulded Parts offer excellent electrical and mechanical protection and are resistant to a range of corrosive fuels, fluids and chemicals. By ordering a combination of tubing and breakouts you can customize your termination on site to suit all cable diameters, conductor tail lengths etc.

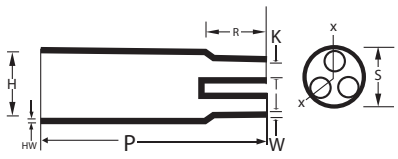
3M™ Breakouts



3M SKE 2F / 2 Way Outlet Sleeve Breakout

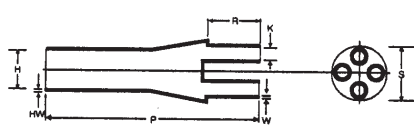
Part No.	Expanded Diameter (as supplied)		Recovered Diameter		Recovered Dimensions (fully shrunk)					Conductor Size Range (Mm²)
	H (Min) mm	K (Min) mm	H (Max) mm	K (Max) mm	S (Nom) mm	P± 10% mm	R± 10% mm	HW± 20% mm	W± 20% mm	
SKE - 2F/1	30.0	15.0	9.4	4.1	20.0	94.0	30.0	1.5	1.2	4-35

3M™ Break Outs



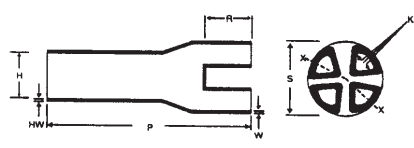
3M™ SKE 3F / 3 Way Outlet Sleeve Breakouts

Part No.	Expanded Diameter (as supplied)		Recovered Diameter		Recovered Dimensions (fully shrunk)					Conductor Size Range (Mm ²)
	H (Min) mm	K (Min) mm	H (Max) mm	K (Max) mm	S (Nom) mm	P [±] 10% mm	R [±] 10% mm	HW [±] 20% mm	W [±] 20% mm	
SKE-3F/1=1.5	25.0	9.0	9.0	3.0	16.0	68.0	18.0	2.5	2.0	4-16
SKE-3F/2	31.0	15.0	18.0	5.0	23.0	89.0	24.0	2.5	2.3	16-34
SKE-3F/4	55.8	30.4	22.5	9.0	37.0	180.0	44.0	3.0	2.0	50-150
SKE-3F/5	72.0	37.0	35.0	17.5	55.0	178.0	38.0	4.0	3.0	185-300



3M™ SKE 4F / 4 Way Outlet Sleeve Breakouts

Part No.	Expanded Diameter (as supplied)		Recovered Diameter		Recovered Dimensions (fully shrunk)					Conductor Size Range (Mm ²)
	H (Min) mm	K (Min) mm	H (Max) mm	K (Max) mm	S (Nom) mm	P [±] 10% mm	R [±] 10% mm	HW [±] 20% mm	W [±] 20% mm	
SKE-4F/1+2	35.0	15.0	12.0	3.0	22.0	95.0	24.0	2.5	2.0	4-35
SKE-4F/3+4	47.4	21.5	22.9	6.4	38.1	202.0	38.1	4.1	3.3	35-95



3M™ SKE 4F/5

Part No.	Expanded Diameter (as supplied)			Recovered Dimensions (fully shrunk)							Conductor Size Range (Mm ²)
	H (Min) mm	K (Min) mm	S (Nom) mm	H (Max) mm	K (Area Max) mm ²	S (Max) mm	P [±] 10% mm	R [±] 10% mm	HW [±] 20% mm	W [±] 20% mm	
SKE - 4F/5	78.7	38.1	76.2	35.6	129.0	50.8	205.0	38.1	3.8	3.3	120-300

3M™ End Caps

3M Polyolefin End Caps provide a reliable and easy method of sealing cables for both indoor and outdoor application whilst offering excellent electrical and mechanical protection.



Cable Diameter (mm)	Diameter before shrinkage (mm)	Full recovered dimensions (mm)	
		A	C
SKE 4/10	4 - 8	10	33.5
SKE 8/20	8 - 16	20	55.3
SKE 15/40	15 - 32	40	90.0
SKE 25/63	25 - 51	63	143.3
SKE 30/76	30 - 61	76	158.0
SKE 45/100	45 - 80	100	162.5
SKE 61/158	61 - 126	158	182.0