

NFD301

Flame retardant, dual wall, flexible heat shrink tubing. The hot melt adhesive will melt and flow to seal and encapsulate the inner components, offering excellent insulation and protection against moisture.

Features

1. Adhesive lined for environmental protection
2. High shrink ratio 3:1
3. Very flexible
4. Good adherence to steel, plastics & many other materials
5. Excellent chemical, physical & electrical properties
6. Shrink temperature > 100°C
7. Operating temperature -55°C to +110°C*



SAE-AMS-DTL-23053/4
Class 3**

Standard packaging

Reel, dispenser box, meter length

Physical properties

Description	Test method	Typical value
Tensile strength	ASTM D 638	11 N/mm ²
Elongation at break	ASTM D 638	300%
Longitudinal change	ASTM D 2671	-15% to +1%
Water absorption	ASTM D 570	≤ 0.5%
Specific gravity	ASTM D 792	1.45

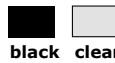
Electrical properties

Description	Test method	Typical value
Dielectric strength	ASTM D 2671	15 kV/mm
Volume resistivity	ASTM D 257	10 ¹⁴ ohm cm
Adhesive properties		
Peel strength	EN 60684-2	PE: 120 N/25 mm
		Steel: 60 N/25 mm
		Aluminium: 30 N/25 mm
		Copper: 13 N/25 mm

Dimensions

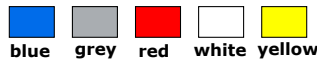
Size mm	Min. ID supplied mm	Max. ID recovered mm	Recovered wall thickness (NOM) mm
3/1	3.0	1.0	1.0
4.8/1.5	4.8	1.5	1.0
6/2	6.0	2.0	1.1
9/3	9.0	3.0	1.3
12/4	12.0	4.0	1.7
18/6	18.0	6.0	2.0
24/8	24.0	8.0	2.5
39/13	39.0	13.0	2.5

Standard colours



black clear

Non standard colours



blue grey red white yellow

Thermal properties

Description	Test method	Typical value
Heat shock 4 hours at 250°C	ASTM D 2671	no dripping, cracking or flowing
Heat aging 168 hours at 175°C	ASTM D 638	elongation 250%
Low temp. flexibility at -55°C	ASTM 2671 C	no cracking
Flammability	ASTM D 2671 B	pass

Chemical properties

Description	Test method	Typical value
Chemical resistance	AMS-DTL-23053/4C	good
Copper corrosion	ASTM D 2671 B	no corrosion

*Outer wall operating temperature is -55°C to +135°C. **Except clear