



## TECHNICAL DATA

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# CABLE GUARD

## Double-Walled Heat Shrink Tubing 4:1

Cable Guard is a flexible heat shrink tube with internal, meltable adhesive and a shrink factor of 4:1.

Cable Guard is designed for durable, moisture and vibration-resistant encapsulating of a wide variety of materials.

### FEATURES:

- Is suitable for many different applications such as electrical and mechanical components, cables, cable sheathings, connections, wire breakthroughs, ropes and hand rails.
- Due to the 4:1 shrink factor, only a few sizes are required to cover the entire range of a variety of applications and irregular shapes.
- Is very adaptable and can be used to protect, as a marker, or also for the production of various shapes (e.g.: handle covers or caps).
- Has a unique adhesive layer that melts when heated and is forced into cracks and gaps by the shrinking outer casing.
- The glue adheres many materials including plastic, rubber, neoprene, steel and polyethylene.
- Provides excellent protection against corrosion, UV rays, water, chemicals and acids.
- Suitable for connecting cables of different diameter.

### APPLICATION EXAMPLES:

- Isolation and protection of wires and components.
- Wire terminal protection.
- Prevention against electrolytic corrosion.
- Impregnation.
- Connection and sealing of underwater main motor cables.
- Isolation of neon tubes supply lines.
- Isolation and protection of electrical wiring and automotive components.
- Protection of coaxial cable connections.
- Protection from marten bites.
- Frost protection on metal handrails and handles.
- Application areas that require resistance to synthetic fuels and hydraulic oils and much more.

### APPLICATION AREAS:

- Plant construction, elevator and conveyor systems, devices and mechanical engineering, agricultural machines and municipal equipment, motor vehicles and commercial vehicles, trailer and caravan construction, Hi-Fi systems and entertainment, fire brigade and police, aeronautical engineering and marine, amusement parks and maintenance services, light and switch cabinet construction, racing, etc.



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##### TECHNICAL DATA:

Outer Wall:	Modified Polyolefin, lead and cadmium free			
Colour:	black			
Specific Gravity:	1.25 g/ cm <sup>3</sup> max.			
Shrink Rate:	≥ 4:1			
Inner Wall:	Thermoplastic Adhesive			
Length:	1 m or 100mm			
Size: mm before/after shrinking:	4.0 ▶ 1.0	8.0 ▶ 2.0	12.0 ▶ 3.0	16.0 ▶ 4.0
	24.0 ▶ 6.0	32.0 ▶ 8.0	52.0 ▶ 13.0	

##### Mechanical Properties:

Tensile Strength:	12 MPa	UL224
Elongation at Break:	400 %	UL224
Longitudinal shrinkage:	≤5%	UL224

##### Thermal Properties:

Thermal Ageing		
Tensile Strength: (168 hours at +158°C)	10.8 MPa	UL224
Elongation at Break: (168 hours at +158°C)	300 %	UL224
Heat Shock: (4 hours 250°C)	No cracking	UL224
Flexibility at low temperatures: (4 hours at -40°C)	No cracking	UL224
Flammability:	VW-1	UL1581
Installation Temperature:	+100°C > +200°C*	(* material dependent)
Operating Temperature:	-55°C > +125°C*	(* outer wall)

##### Electrical Properties:

Dielectric Strength:	>25 kV/mm	ASTM D2671
Specific Volume Resistance:	10 <sup>14</sup> Ω x cm	UL224
Voltage withstands: (2.5kV for 1 min.)	Pass	UL224

##### Chemical Properties:

Chemical Resistance:	good	
Corrosiveness: (168 hours at +158°C)	non-corrosive	UL224

**Instructions for use:** Cable Guard should ideally be processed with a hot air blower. For smaller dimensions, a lighter is also sufficient. The connection should be heated evenly all around. When cooled, the total mass is a flexible, tough and homogeneous layer with controlled wall thickness. For the manufacture of detachable protective covers, the form should be treated beforehand with silicone spray. The storage temperature should not exceed +40°C.

**General information:** The information contained herein serves merely as an indication and is given to the best of knowledge. The users must test the suitability of the product for her/its/their respective application independently however. All products purchased from or supplied by Nohtec are subject to terms and conditions set out in the contract. Nohtec warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Nohtec is considered accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Nohtec makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will infringe any patent.