

# Heat Shrinkable Tubing

Heat shrinkable tubing provides a durable, environmentally sealed covering for wires, cables, and connections. It is suitable for cable termination and intermediate connecting insulation protection.



## Product Overview

### High-Performance Heat Shrinkable Tubing

The MR3 series heat shrinkable tubing is designed for medium voltage applications up to 36kV, providing reliable insulation and protection for cable terminations and intermediate connections. Featuring a thick-wall construction with a 3:1 shrink ratio, it offers excellent resistance to corrosion, UV radiation, and weathering. This halogen-free solution ensures superior electrical and mechanical integrity, making it ideal for protecting against moisture and pressure in demanding environments.

## Key Features

### Product Highlights

Halogen-free, UV Resistant, Corrosion Resistant, Weather Resistant, Thick Wall

## Technical Specifications

### Color Standard

Black

### Shrinkage Ratio

3:1

### Operating Temperature Range

-40°C to +110°C

### Max Voltage Rating

36 kV

### Standards

IEC 60684

## Dimensional Data

	Type	Application Diameter Range(mm)	Expanded(mm)		Recovered(mm)	
			D(min)	d(max)	W(min)	
	MR3 13/4	4.5-8	13	4	2.4	
	MR3 20/6	6.5-14	20	6	2.5	
	MR3 33/8	9-23	33	8	3.2	
	MR3 43/12	13-30	43	12	4.3	
	MR3 51/16	17-35	51	16	4.35	
	MR3 65/19	21-45	65	19	4.35	
	MR3 75/22	24-52	75	22	4.35	
	MR3 85/25	27-60	85	25	4.35	
	MR3 105/30	32-75	105	30	4.35	
	MR3 130/36	38-91	130	36	4.3	
	MR3 160/50	55-112	160	50	4.3	

Dimensional reference chart for selecting the correct tubing size based on application diameter.

## Standard Sizes and Dimensions

Type	Application Range (mm)	Expanded D(min) (mm)	Recovered d(max) (mm)	Wall W(min) (mm)
MR3 13/4	4.5-8	13	4	2.4
MR3 20/6	6.5-14	20	6	2.5
MR3 33/8	9-23	33	8	3.2
MR3 43/12	13-30	43	12	4.3
MR3 51/16	17-35	51	16	4.35
MR3 65/19	21-45	65	19	4.35
MR3 75/22	24-52	75	22	4.35
MR3 85/25	27-60	85	25	4.35
MR3 105/30	32-75	105	30	4.35
MR3 130/36	38-91	130	36	4.3
MR3 160/50	55-112	160	50	4.3

## Performance Data

Property	Test Method	Requirements
Tensile strength	IEC 60684-2	>13MPa
Elongation at break	IEC 60684-2	>350%
Longitudinal shrinkage	IEC 60684-2	+5% to -15%
Bending at low temperature	IEC 60684-2	-40°C No cracking
Volume resistivity	IEC 60684-2	>10 <sup>12</sup> Ωm
Water absorption	IEC 60684-2	<0.2%
Breakdown strength	IEC 60684-2	>10KV/mm
Copper corrosion	IEC 60684-2	None above the allowable 8%
Heat aging		
Tensile strength	IEC 60684-2	>10MPa
Elongation at break	IEC 60684-2	>200%
Heat shock		
Tensile strength	IEC 60684-2	>10MPa
Elongation at break	IEC 60684-2	>200%
Resistance to selected fluids		
Tensile strength	IEC 60684-2	>10MPa
Elongation at break	IEC 60684-2	>350%
Change in weight	IEC 60684-2	<10%

Detailed performance requirements and test methods according to IEC 60684-2 standards.

## Material Performance Requirements

Property	Requirement
Tensile Strength	>13 MPa
Elongation at Break	>350%
Longitudinal Shrinkage	+5% to -15%
Bending at Low Temp (-40°C)	No cracking
Volume Resistivity	>10 <sup>12</sup> Ωm
Water Absorption	<0.2%
Breakdown Strength	>10 KV/mm
Change in Weight	<10%