

DERAY®-PROTECTBOX

This adhesive-coated heat shrink tubing reliably provides effective, moisture-resistant insulation.

Due to its high shrink rate, the tubing is ideal for shrinking objects with larger diameter differences.

Characteristics

- Flexible
- High shrinkage rate
- Adhesive adheres to plastic,
Rubber, neoprene, steel and
Polyethylene
- Continuous operating temperature:
-55°C to 110°C*
- Shrink temperature: 95°C

*Outer shell



Market Specific Products

flame-
retardant
(outer coat)

3:1
Schrumpfrate

DERAY® -PROTECTBOX

Dimensions

Size	before shrinkage		after shrinkage		Delivery unit	
	Inner diameter		Inner diameter	wall thickness	Quantity in one box	MOQ
	D		Dw			
	mm	Customs	mm	mm	m	Piece
Protect 3/1	3,0	-	1,0	1,00	5,0	10
Protect 6/2	6,0	-	2,0	1,20	3,5	10
Protect 9/3	9,0	-	3,0	1,40	3,0	10
Protect 12/4	12,0	-	4,0	1,70	2,5	10
Protect 19/6	19,0	-	6,0	2,10	2,0	10
Protect 24/8	24,0	-	8,0	2,40	1,5	10

Technical data

Physical properties

Characteristic	Test method	Current values
Tensile strength	IEC 60684-2	15,0 MPa
Elongation at break	IEC 60684-2	400%
Longitudinal shrinkage	ASTM-D 2671	- 15% max.
Specific gravity	ASTM-D 792, A-I	1.25 g/cm3
Elongation at break after Heat aging (168 hours at 150°C)	IEC 811-1-2	320%
Tensile strength according to Heat aging (168 hours at 150°C)	IEC 811-1-2	14 MPa
Elongation at break after Thermal shock (4 hours at 200°C)	IEC 811-1-2	360%
Tensile strength according to Thermal shock (4 hours at 200°C)	IEC 811-1-2	15 MPa
Courage in cold weather	ASTM-D 2671 Method C does	not break at -55°C
Flammability	ASTM-D 876	Coat flame-resistant

Colors
black


Electrical properties

Characteristic	Test method	Current values
Dielectric strength VDE 0303 Part 2 Spec. Volume resistance		22 kV/mm
	VDE 0303 Part 3	1014 γ x cm

Chemical properties

Characteristics	Test method	Current values
Corrosive effect	ASTM-D 2671 Meth. A non	-corrosive
Copper tolerance	ASTM-D 2671 Meth. B non	-corrosive
Chemical resistance		gut
Water absorption	VDE 0472	0,15%

Printability	Hot stamping	Inkjet	Offset
	very good	gut	gut