



Heat-shrinkable Polyolefin tubing for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.

Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

#### General characteristics:

- Operating temperature: -55°C + 125°C
- Minimum shrinkage temperature: 70°C
- Temperature for complete shrinkage: 110°C
- RoHS compliant
- Colours: Black, Red, White, Blue, Grey, Brown, Yellow/Green.
- Packaging: Roll in Dispenser Box

#### Technical Specifications:

| Property                                    | Test Method           | Performance             |
|---------------------------------------------|-----------------------|-------------------------|
| Traction resistance (MPa):                  | ASTM D2671            | ≥10.4                   |
| Elongation at failure (%):                  | ASTM D2671            | ≥200                    |
| Traction resistance after heat aging (MPa): | UL 224<br>158°Cx168hr | ≥7.3                    |
| Elongation at failure after heat aging (%): | UL 224<br>158°Cx168hr | ≥100                    |
| Heat resistance:                            | UL 224<br>250°Cx4hr   | No failure              |
| Low temperature flexibility:                | UL 224<br>-30°Cx4hr   | No failure              |
| Dielectric strength (kv/mm):                | IEC 243               | ≥15                     |
| Insulation resistance:                      | 600V UL 224           | No perforation at 2500V |
| Volume resistance (Ω.cm):                   | IEC 93                | ≥1x10 <sup>14</sup>     |
| Corrosive action:                           | UL 224<br>158°Cx168hr | Not corrosive           |
| Copper compatibility:                       | UL 224<br>158°Cx168hr | Not corrosive           |
| Flammability:                               | UL 224                | VW-1                    |

| Type        | Reel Length | before shrinking |               | after shrinking |              | Colour |
|-------------|-------------|------------------|---------------|-----------------|--------------|--------|
|             |             | Internal Ø mm    | Internal Ø mm | Thickness mm    | Thickness mm |        |
| TBS16X20BK  | 20 m        | Ø 1,5 mm         | Ø 0,65 mm     | 0,36 mm         | 0,36 mm      | BLACK  |
| TBS24X20BK  | 20 m        | Ø 2,5 mm         | Ø 1,00 mm     | 0,45 mm         | 0,45 mm      | BLACK  |
| TBS32X10BK  | 10 m        | Ø 3,0 mm         | Ø 1,30 mm     | 0,45 mm         | 0,45 mm      | BLACK  |
| TBS48X10BK  | 10 m        | Ø 4,7 mm         | Ø 2,00 mm     | 0,45 mm         | 0,45 mm      | BLACK  |
| TBS64X10BK  | 10 m        | Ø 6,5 mm         | Ø 3,00 mm     | 0,56 mm         | 0,56 mm      | BLACK  |
| TBS95X10BK  | 10 m        | Ø 9,5 mm         | Ø 4,50 mm     | 0,56 mm         | 0,56 mm      | BLACK  |
| TBS127X10BK | 10 m        | Ø 12,5 mm        | Ø 6,00 mm     | 0,56 mm         | 0,56 mm      | BLACK  |
| TBS190X5BK  | 5 m         | Ø 19,0 mm        | Ø 9,00 mm     | 0,70 mm         | 0,70 mm      | BLACK  |
| TBS254X5BK  | 5 m         | Ø 26,0 mm        | Ø 12,5 mm     | 0,90 mm         | 0,90 mm      | BLACK  |
| TBS16X20RE  | 20 m        | Ø 1,5 mm         | Ø 0,65 mm     | 0,36 mm         | 0,36 mm      | RED    |
| TBS24X20RE  | 20 m        | Ø 2,5 mm         | Ø 1,00 mm     | 0,45 mm         | 0,45 mm      | RED    |
| TBS32X10RE  | 10 m        | Ø 3,0 mm         | Ø 1,30 mm     | 0,45 mm         | 0,45 mm      | RED    |
| TBS48X10RE  | 10 m        | Ø 4,7 mm         | Ø 2,00 mm     | 0,45 mm         | 0,45 mm      | RED    |
| TBS64X10RE  | 10 m        | Ø 6,5 mm         | Ø 3,00 mm     | 0,56 mm         | 0,56 mm      | RED    |
| TBS95X10RE  | 10 m        | Ø 9,5 mm         | Ø 4,50 mm     | 0,56 mm         | 0,56 mm      | RED    |
| TBS127X10RE | 10 m        | Ø 12,5 mm        | Ø 6,00 mm     | 0,56 mm         | 0,56 mm      | RED    |
| TBS190X5RE  | 5 m         | Ø 19,0 mm        | Ø 9,00 mm     | 0,70 mm         | 0,70 mm      | RED    |
| TBS254X5RE  | 5 m         | Ø 26,0 mm        | Ø 12,5 mm     | 0,90 mm         | 0,90 mm      | RED    |
| TBS16X20WH  | 20 m        | Ø 1,5 mm         | Ø 0,65 mm     | 0,36 mm         | 0,36 mm      | WHITE  |
| TBS24X20WH  | 20 m        | Ø 2,5 mm         | Ø 1,00 mm     | 0,45 mm         | 0,45 mm      | WHITE  |
| TBS32X10WH  | 10 m        | Ø 3,0 mm         | Ø 1,30 mm     | 0,45 mm         | 0,45 mm      | WHITE  |
| TBS48X10WH  | 10 m        | Ø 4,7 mm         | Ø 2,00 mm     | 0,45 mm         | 0,45 mm      | WHITE  |
| TBS64X10WH  | 10 m        | Ø 6,5 mm         | Ø 3,00 mm     | 0,56 mm         | 0,56 mm      | WHITE  |
| TBS95X10WH  | 10 m        | Ø 9,5 mm         | Ø 4,50 mm     | 0,56 mm         | 0,56 mm      | WHITE  |
| TBS127X10WH | 10 m        | Ø 12,5 mm        | Ø 6,00 mm     | 0,56 mm         | 0,56 mm      | WHITE  |
| TBS190X5WH  | 5 m         | Ø 19,0 mm        | Ø 9,00 mm     | 0,70 mm         | 0,70 mm      | WHITE  |
| TBS254X5WH  | 5 m         | Ø 26,0 mm        | Ø 12,5 mm     | 0,90 mm         | 0,90 mm      | WHITE  |
| TBS16X20BU  | 20 m        | Ø 1,5 mm         | Ø 0,65 mm     | 0,36 mm         | 0,36 mm      | BLUE   |
| TBS24X20BU  | 20 m        | Ø 2,5 mm         | Ø 1,00 mm     | 0,45 mm         | 0,45 mm      | BLUE   |
| TBS32X10BU  | 10 m        | Ø 3,0 mm         | Ø 1,30 mm     | 0,45 mm         | 0,45 mm      | BLUE   |
| TBS48X10BU  | 10 m        | Ø 4,7 mm         | Ø 2,00 mm     | 0,45 mm         | 0,45 mm      | BLUE   |
| TBS64X10BU  | 10 m        | Ø 6,5 mm         | Ø 3,00 mm     | 0,56 mm         | 0,56 mm      | BLUE   |
| TBS95X10BU  | 10 m        | Ø 9,5 mm         | Ø 4,50 mm     | 0,56 mm         | 0,56 mm      | BLUE   |
| TBS127X10BU | 10 m        | Ø 12,5 mm        | Ø 6,00 mm     | 0,56 mm         | 0,56 mm      | BLUE   |
| TBS190X5BU  | 5 m         | Ø 19,0 mm        | Ø 9,00 mm     | 0,70 mm         | 0,70 mm      | BLUE   |
| TBS254X5BU  | 5 m         | Ø 26,0 mm        | Ø 12,5 mm     | 0,90 mm         | 0,90 mm      | BLUE   |

| Type         | Reel Length | before shrinking |               | after shrinking |              | Colour       |
|--------------|-------------|------------------|---------------|-----------------|--------------|--------------|
|              |             | Internal Ø mm    | Internal Ø mm | Thickness mm    | Thickness mm |              |
| TBS16X20GY   | 20 m        | Ø 1,5 mm         | Ø 0,65 mm     | 0,36 mm         | 0,36 mm      | GREY         |
| TBS24X20GY   | 20 m        | Ø 2,5 mm         | Ø 1,00 mm     | 0,45 mm         | 0,45 mm      | GREY         |
| TBS32X10GY   | 10 m        | Ø 3,0 mm         | Ø 1,30 mm     | 0,45 mm         | 0,45 mm      | GREY         |
| TBS48X10GY   | 10 m        | Ø 4,7 mm         | Ø 2,00 mm     | 0,45 mm         | 0,45 mm      | GREY         |
| TBS64X10GY   | 10 m        | Ø 6,5 mm         | Ø 3,00 mm     | 0,56 mm         | 0,56 mm      | GREY         |
| TBS95X10GY   | 10 m        | Ø 9,5 mm         | Ø 4,50 mm     | 0,56 mm         | 0,56 mm      | GREY         |
| TBS127X10GY  | 10 m        | Ø 12,5 mm        | Ø 6,00 mm     | 0,56 mm         | 0,56 mm      | GREY         |
| TBS190X5GY   | 5 m         | Ø 19,0 mm        | Ø 9,00 mm     | 0,70 mm         | 0,70 mm      | GREY         |
| TBS254X5GY   | 5 m         | Ø 26,0 mm        | Ø 12,5 mm     | 0,90 mm         | 0,90 mm      | GREY         |
| TBS16X20BR   | 20 m        | Ø 1,5 mm         | Ø 0,65 mm     | 0,36 mm         | 0,36 mm      | BROWN        |
| TBS24X20BR   | 20 m        | Ø 2,5 mm         | Ø 1,00 mm     | 0,45 mm         | 0,45 mm      | BROWN        |
| TBS32X10BR   | 10 m        | Ø 3,0 mm         | Ø 1,30 mm     | 0,45 mm         | 0,45 mm      | BROWN        |
| TBS48X10BR   | 10 m        | Ø 4,7 mm         | Ø 2,00 mm     | 0,45 mm         | 0,45 mm      | BROWN        |
| TBS64X10BR   | 10 m        | Ø 6,5 mm         | Ø 3,00 mm     | 0,56 mm         | 0,56 mm      | BROWN        |
| TBS95X10BR   | 10 m        | Ø 9,5 mm         | Ø 4,50 mm     | 0,56 mm         | 0,56 mm      | BROWN        |
| TBS127X10BR  | 10 m        | Ø 12,5 mm        | Ø 6,00 mm     | 0,56 mm         | 0,56 mm      | BROWN        |
| TBS190X5BR   | 5 m         | Ø 19,0 mm        | Ø 9,00 mm     | 0,70 mm         | 0,70 mm      | BROWN        |
| TBS254X5BR   | 5 m         | Ø 26,0 mm        | Ø 12,5 mm     | 0,90 mm         | 0,90 mm      | BROWN        |
| TBS16X20Y/G  | 20 m        | Ø 1,5 mm         | Ø 0,65 mm     | 0,36 mm         | 0,36 mm      | YELLOW/GREEN |
| TBS24X20Y/G  | 20 m        | Ø 2,5 mm         | Ø 1,00 mm     | 0,45 mm         | 0,45 mm      | YELLOW/GREEN |
| TBS32X10Y/G  | 10 m        | Ø 3,0 mm         | Ø 1,30 mm     | 0,45 mm         | 0,45 mm      | YELLOW/GREEN |
| TBS48X10Y/G  | 10 m        | Ø 4,7 mm         | Ø 2,00 mm     | 0,45 mm         | 0,45 mm      | YELLOW/GREEN |
| TBS64X10Y/G  | 10 m        | Ø 6,5 mm         | Ø 3,00 mm     | 0,56 mm         | 0,56 mm      | YELLOW/GREEN |
| TBS95X10Y/G  | 10 m        | Ø 9,5 mm         | Ø 4,50 mm     | 0,56 mm         | 0,56 mm      | YELLOW/GREEN |
| TBS127X10Y/G | 10 m        | Ø 12,5 mm        | Ø 6,00 mm     | 0,56 mm         | 0,56 mm      | YELLOW/GREEN |
| TBS190X5Y/G  | 5 m         | Ø 19,0 mm        | Ø 9,00 mm     | 0,70 mm         | 0,70 mm      | YELLOW/GREEN |
| TBS254X5Y/G  | 5 m         | Ø 26,0 mm        | Ø 12,5 mm     | 0,90 mm         | 0,90 mm      | YELLOW/GREEN |