

## Technical data sheet

Article number:  
553-60051

TLFX190DS-3x16YE



|                                                          |                                                                                                                                                                 |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Group</b>                                     | Shrinkable markers "Ladder Style", thermal transfer                                                                                                             |
| <b>Product Family</b>                                    | TLFX DS – 2:1 Rail Limited Fire Hazard "Ladder Style"                                                                                                           |
| <b>Material</b>                                          | Polyolefin, cross-linked (PO-X)                                                                                                                                 |
| <b>Colour</b>                                            | Yellow (YE)                                                                                                                                                     |
|                                                          |                                                                                                                                                                 |
| <b>Dielectric Strength [Test method]</b>                 | 20 kV/mm [ASTM D2671]                                                                                                                                           |
| <b>Elongation at break [Test method]</b>                 | 200 % [ASTM D2671]                                                                                                                                              |
| <b>Heat Aging Test [Test method]</b>                     | 168h/150°C [ASTM D638]                                                                                                                                          |
| <b>Heat Shock Test</b>                                   | 4h/175°                                                                                                                                                         |
| <b>Longitudinal Change After Shrinkage [Test method]</b> | -5% max. [UL 224]                                                                                                                                               |
| <b>Low Temperature Test [Test method]</b>                | 4h/-40°C [ASTM D2671]                                                                                                                                           |
| <b>Min. Shrink Temperature - °C</b>                      | +100 °C                                                                                                                                                         |
| <b>Operating Temperature</b>                             | -55 °C to +105 °C                                                                                                                                               |
| <b>Oxygen index [Test method]</b>                        | 34.9 % [ISO 4589]                                                                                                                                               |
| <b>Package Content packed in</b>                         | carton                                                                                                                                                          |
| <b>Pack Cont.</b>                                        | 4500 pcs.                                                                                                                                                       |
| <b>Print Method</b>                                      | thermal transfer print                                                                                                                                          |
| <b>Recommended Ribbon Type</b>                           | TTDTHOUT                                                                                                                                                        |
| <b>Recov. Ø d max.</b>                                   | 9.5 mm                                                                                                                                                          |
| <b>Shelf Life</b>                                        | 24 months                                                                                                                                                       |
| <b>Shrink Ratio</b>                                      | 2:1                                                                                                                                                             |
| <b>Specifications</b>                                    | ASTM 1354, ASTM E 162, ASTM E 662, EN 45545-2, NFPA 130 compliant                                                                                               |
| <b>Storage conditions</b>                                | 50% relative humidity., The storage in the original packaging is recommended., Please avoid warehousing under impacts such as high humidity, heat and coldness. |
| <b>Supplied Ø D min.</b>                                 | 19.0 mm                                                                                                                                                         |
| <b>Tensile Strength [Test method]</b>                    | 11 MPa [ASTM D2671]                                                                                                                                             |
| <b>Thermal Transfer Printer</b>                          | TT431, TT4030DS, TT4030                                                                                                                                         |
| <b>Toxicity index [Test method]</b>                      | 0.03 CITg [EN 17084]                                                                                                                                            |
| <b>Volume Resistance [Test method]</b>                   | 10 <sup>14</sup> Ω cm [ASTM D257]                                                                                                                               |

|           |          |
|-----------|----------|
| Wall (WT) | 0.775 mm |
|-----------|----------|

|                  |        |
|------------------|--------|
| Water Absorption | 0.15 % |
|------------------|--------|

HF ✓

LFH ✓

RoHS ✓

EN 45545-2

ASTM

NFPA 130