

RNF-100

Raychem

A premium grade flame-retarded polyolefin heat-shrinkable tubing. Outstanding all round performance, excellent physical and electrical performance, good chemical and solvent resistance, flexible.

RNF-100 is a premium grade polyolefin based heat-shrinkable tubing with an outstanding overall balance of properties. The product has a wide range of both military and industrial approvals. RNF-100 tubing possesses a unique blend of physical, chemical and electrical properties and is suitable for a wide range of applications.

Used extensively in military applications for lightweight harness jackets, insulation, color coding, identification, protection against fluids and provides mechanical strength.

Temperature rating

| Operating temperature range: | -55°C to +135°C |
|------------------------------------|-----------------|
| Minimum shrink temperature: | +95°C |
| Minimum full recovery temperature: | +121°C |

Ordering information



| Inside diameter | | Wall thickness | Standard pack | kage | |
|-----------------|---------------|----------------|---------------|----------|-------------------------------------------------------|
| D (min) | d (max) | W (nom) | 1.22m | | |
| Expanded as | Recovered | Recovered | Length | Spool | |
| supplied | after heating | after heating | quantity | quantity | |
| mm | mm | mm | m | m | Ordering description |
| 1.2 | 0.6 | 0.45 | 60 | 300 | RNF-100- ³ /64-color code |
| 1.6 | 0.8 | 0.45 | 60 | 300 | RNF-100- ¹ /16-color code |
| 2.4 | 1.2 | 0.50 | 60 | 150 | RNF-100- ³ /32-color code |
| 3.2 | 1.6 | 0.50 | 60 | 150 | RNF-100-1/8-color code |
| 4.8 | 2.4 | 0.50 | 60 | 150 | RNF-100- ³ / ₁₆ -color code |
| 6.4 | 3.2 | 0.65 | 30 | 75 | RNF-100-1/4-color code |
| 9.5 | 4.8 | 0.65 | 30 | 121 | RNF-100- ³ / ₈ -color code-FSP* |
| 12.7 | 6.4 | 0.65 | 30 | 90 | RNF-100- ¹ / ₂ -color code-FSP* |
| 19.0 | 9.5 | 0.75 | 30 | 60 | RNF-100- ³ / ₄ -color code-FSP* |
| 25.4 | 12.7 | 0.90 | 30 | 60 | RNF-100-1-color code-FSP* |
| 31.0 | 16.0 | 0.95 | 12 | 30 | RNF-100-1 ¹ / ₄ -color code |
| 38.0 | 19.0 | 1.00 | 12 | 91 | RNF-100-1 ¹ / ₂ -color code |
| 51.0 | 25.4 | 1.15 | 6 | 30 | RNF-100-2-color code |
| 76.0 | 38.0 | 1.25 | 6 | 15 | RNF-100-3-color code |
| 102.0 | 51.0 | 1.40 | 6 | 15 | RNF-100-4-color code |
| 127.0 | 63.5 | 1.52 | 6 | 30 | RNF-100-5-color code** |

^{*}Material supplied on Flat Spooled Packaging (FSP) as standard.
**Only available in black.

Standard colors

| Standard color | Clear | Black | Red | Yellow | Green | Blue | White |
|--------------------|-------|--------|--------|--------|-------|------|-------|
| Code | Х | 0 | 2 | 4 | 5 | 6 | 9 |
| Non Standard color | Brown | Orange | Violet | Grey | | | |
| Code | 1 | 3 | 7 | 8 | | | |

Approvals

| *UL File E35586 | Def Stan 59-97 Type 2b | |
|------------------------------|------------------------------------------------------------------------------|--|
| *CSA LR31929 | MIL-DTL-23053/5 Class 1 (colors), Class 2 (Clear) (exclude $1-\frac{3}{4}$) | |
| VG 95343 Part 5 Type A and B | BS 4G-198 Part 3 11B | |
| VDE 0341/Pt 9005 | | |

^{*} Not clear product (X).

Performance

| Test | Test method | Test requirement | | |
|-----------------------|------------------------------------|---------------------------------|--|--|
| Heat Ageing: | ISO 188 (168h at 175°C) | Ultimate elongation: 150% (min) | | |
| Corrosion resistance: | ASTM D2671 (16h at 175°C) | No corrosion of mirrors | | |
| Dielectric strength: | IEC 243 | Ø ≤ 25.4 20 MV/m | | |
| | | $\emptyset > 25.4$ 10 MV/m | | |
| Flame retardancy: | ASTM D876 | Duration of burning 30s max | | |
| | UL 224 (All tube flame test) | | | |
| Fluid resistance: | 24 h at 23°C, ISO 37 | Tensile strength: 7 MPa (min) | | |
| | | Ultimate elongation: 200% (min) | | |
| Test fluids: | Aircraft fuel to ISO1817 liquid B | | | |
| | Phosphate ester ISO1817 liquid 103 | | | |
| | Lubricating oil ISO1817 liquid 101 | | | |

Specifications

Raychem Specification RK 6001. Material Safety Data Sheet available on request. Installation instructions available on request.

Raychem and RNF-100 are trademarks of Tyco Electronics Corporation.

Users should independently evaluate the suitability of the product for their application.

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