Belden

# Product: 50105HFT

Belden High flex 4P26AWG CAT5E SF/UTP industrial ethernet cable

## Product Description

Belden High flex CAT5e industrial ethernet 4P 26AWG cable, oil resistant, 80C 300V FT2 ROHS

## Technical Specifications

### Product Overview

| | |
|---|---|
| Suitable Applications: | Internal wiring of electronic equipment and appliances. |

### Construction Details

**Conductor**

| Element | Size | Material |
|---|---|---|
| Pair(s) | 26 AWG | BC - Bare Copper |

**Insulation**

| Material | Nom. Insulation Diameter | Color Code |
|---|---|---|
| PE - Polyethylene | 1.0 mm (0.039 in) | White/Blue, Blue, White/Orange, Orange, White/Green, Green, White/Brown, Brown |

**Outer Shield**

| Shield Type | Material | Coverage |
|---|---|---|
| Tape | Bi-Laminate (Alum+Poly) | 100% |
| Braid | Tinned Copper (TC) | 75% |

**Outer Jacket**

| Material |
|---|
| PUR - Polyurethane |

| | |
|---|---|
| Overall Cable Diameter (Nominal): | 7.1 mm (0.28 in) |

### Electrical Characteristics

**Electricals**

| Max. Conductor DCR |
|---|
| 145 Ω/km @ 20°C |

**High Frequency**

| Frequency [MHz] | Max. Insertion Loss (Attenuation) [dB/100m] | Min. NEXT [dB] | Min. RL (Return Loss) [dB] | Nom. Characteristic Impedance [Ohm] |
|---|---|---|---|---|
| 1 | 3.4 | 65.3 | 20 | 100 |
| 4 | 6.8 | 56.3 | 23 | 100 |
| 8 | 9.6 | 51.8 | 24.5 | 100 |
| 10 | 10.8 | 50.3 | 25 | 100 |
| 16 | 13.7 | 47.2 | 25 | 100 |
| 20 | 15.4 | 45.8 | 25 | 100 |
| 25 | 17.4 | 44.3 | 24.3 | 100 |
| 31.25 | 19.5 | 42.9 | 23.6 | 100 |
| 62.5 | 28.3 | 38.4 | 21.5 | 100 |
| 100 | 36.6 | 35.3 | 20.1 | 100 |

| | |
|---|---|
| High Frequency Table Notes: | Max. Transmission Length : 60 M |

**Voltage**

| UL Voltage Rating |
| --- |
| 300 V |

## Mechanical Characteristics

**Temperature**

| Operating |
| --- |
| -40 to + 80 |

| | |
| --- | --- |
| Table Notes: | Flexibility,:Trailing Chain: ≥ 10 Million Cycles, Chain Distance: 1000 mm, Bending radius: 100mm, Speed: 30 Cycles/min. Torsion: ≥ 10 Million Cycles, length: 1000 mm, ±180° |

## Standards and Compliance

| | |
| --- | --- |
| Environmental Suitability: | UV Resistance, Oil Resistance |
| Flammability / Reaction to Fire: | FT2 |
| AWM Compliance: | AWM 20549 |
| CEC / C(UL) Compliance: | . |
| Data Category: | Category 5e |
| European Halogen Free Standards: | IEC 60754-1 - Halogen Amount = ≤0.5% |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

## History

| | |
| --- | --- |
| Update and Revision: | Revision Number: 0.12 Revision Date: 07-15-2026 |

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