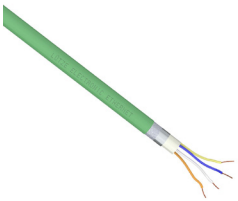
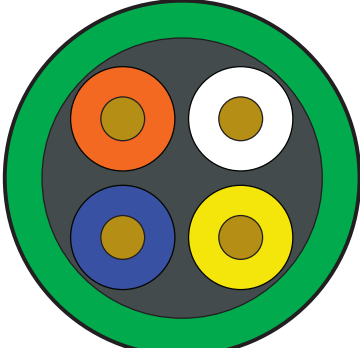


PROFINET Type B Cable



SYSTEMATIC TECHNOLOGY

| A104307-1 Cable Specifications | | | | | | |
|---|--|---|---|--------------------------|----------------------------|----------------|
|  | Part Number | Wire/Cable Type | Flexibility | Minimum Cut Length (ft)* | Approximate Weight (lb/ft) | Price per foot |
| | A104307-1 | PROFINET Type B | Flexible | 20ft | 0.044 lb | \$1.73 |
| Physical Properties | | | | | | |
| Conductor Gauge | 22 AWG | Conductor Stranding | 7-stranded tinned copper | | | |
| Conductor Material | Tinned Copper | Conductor Insulation Wall Thickness | 0.015in; nominal | | | |
| Conductor Assembly | 1 star quad | Bare Conductor Diameter | 0.029in; nominal | | | |
| Color Code | Pair 1 | White, Blue | Insulated Conductor Diameter | 0.059in; nominal | | |
| | Pair 2 | Yellow, Orange | Twisted Conductor Diameter | 0.118in; nominal | | |
| | Pair 3 | N/A | Overall Cable Diameter | 0.256in; nominal | | |
| | Pair 4 | N/A | Jacket Color | Green | | |
| Voltage Rating | 600V | Jacket Thickness | 0.039in; nominal | | | |
| Temperature Rating | -40 to +80 °C [-40 to +176 °F] | Jacket Material | PVC | | | |
| Plenum | No | Sunlight Resistant | Yes | | | |
| Shield | Overall Aluminized Polyester Foil And Tinned Copper Braid | Oil Resistance | Yes | | | |
| Drain | No | Flame Retardant | Yes | | | |
| Conductor Insulation Material | Special Polyolefin | Sample Print Legend | <Lütze logo> ELECTRONIC ETHERNET (C) PVC 104307 (2x2xAWG22/7) PROFINET TYPE B Cat 5e E336436 (UL) TYPE PLTC FT4 or c(UL)us TYPE CMG 75°C or <logo cURus> AWM STYLE 20201 60°C 600V I/II A/B FT1 RoHS <date YYYYWW> UKCA CE-44 <metermarking>m | | | |
| Minimum Bend Radius | 1.54in | | | | | |
| Cabled Core Diameter | 0.182in | | | | | |
| Electrical Characteristics (for 100 meters of cable) | | | | | | |
| Impedance (1-100 MHz) | 100Ω 1 – 100 MHz | UL Classification | (cULus) TYPE CMG/PLTC or AWM Style 20201; (cURus) Class I and II, Div. 2; Class 1 Div. 2 | | | |
| Capacitance | 15.2 pF/ft @ 1MHz; Nominal | Approvals** | cULus, cURus, CE, RoHS | | | |
| Resistance, Max. | 29.5Ω DC per 1000ft | Attenuation Crosstalk Ratio, Far End (ACRF) | $1 \leq f \leq 100 \text{ MHz: } 23.8 - 20 \text{ LOG}(f/100) \text{ dB MIN}$ | | | |
| Dielectric Withstanding, Min. | 1500V RMS | Insertion Loss | $1 \leq f \leq 100 \text{ MHz: } 1.967 \sqrt{f} + 0.023(f) + 0.050/\sqrt{f} \text{ dB MAX}$ | | | |
| Return Loss | $1 \leq f < 10 \text{ MHz: } 20 + 5 \text{ LOG}(f) \text{ dB MIN}$ $10 \leq f < 20 \text{ MHz: } 25 \text{ dB MIN}$ $20 \leq f \leq 100 \text{ MHz: } 25 - 7.0 \text{ LOG}(f/20) \text{ dB MIN}$ | Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF) | $1 \leq f \leq 100 \text{ MHz: } 20.8 - 20 \text{ LOG}(f/100) \text{ dB MIN}$ | | | |
| Near End Crosstalk (NEXT) | $1 \leq f \leq 100 \text{ MHz: } 35.3 - 15 \text{ LOG}(f/100) \text{ dB MIN}$ | Cross Section |  | | | |
| Power Sum Near End Crosstalk (PSNEXT) | $1 \leq f \leq 100 \text{ MHz: } 32.3 - 15 \text{ LOG}(f/100) \text{ dB MIN}$ | | | | | |
| TCL | $1 \leq f \leq 100 \text{ MHz: } 30 - 10 \text{ LOG}(f/100) \text{ dB MIN}$ | | | | | |
| ELTCTL | $1 \leq f \leq 30 \text{ MHz: } 35 - 20 \text{ LOG}(f) \text{ dB MIN}$ | | | | | |
| Velocity Of Propagation | 65% | | | | | |
| Delay | $4 \leq f \leq 100 \text{ MHz: } 534 + 36/\sqrt{f} \text{ ns MAX}$ | | | | | |
| Delay Skew | $1 \leq f \leq 100 \text{ MHz: } <20\text{ns}/100\text{m}$ | | | | | |

* See web store www.AutomationDirect.com for maximum cut lengths

** To obtain the most current agency approval information, see the Agency Approval Checklist section on the part number's web page at www.AutomationDirect.com



Please Note: Our prices on Continuous Flexing IE Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.