

INDUSTRIAL ETHERNET QUICK GUIDE

Turck offers a complete line of molded Industrial Ethernet cordsets to facilitate network installation, resulting in faster start-up and fewer wiring errors. These robust cables are available with stranded or solid-core conductors, and with or without shielding. Most Turck Ethernet equipment uses the 4 or 8-pin (M12) **euromast**® connector specifications. These connectors provide a tough, rugged seal and are IP67-rated. Turck provides RJ45 cordsets, as well as a variety of devices made to convert between RJ45 and Eurofast connectors. Turck cordsets for the Ethernet system are available in standard lengths, in addition to custom lengths through the company's sales representatives.

Turck Industrial Ethernet Cables

- Turck Ethernet stranded cables meet full CAT 5e performance to 85 meter length (see types 440, 441, 840, 841)
- Turck Ethernet cables are PoE (Power over Ethernet) and PoE+ compliant, per IEEE 802.3 at, to 80 meters, when installed per recommendations in TIA TSB-184 (see types 440, 441, 840, 841)
- Turck Ethernet cable type 444 is ITC rated and approved for use in C1D2 (hazardous location) environments when used with our 4 pin D-code M12
- Gigabit Ethernet (X-code) options available

TPE Cable Jacket Material

- Excellent oil resistance (including lubricant used in most robot dress packs)
- Excellent moisture resistance
- Good ozone resistance
- Excellent UV and weathering resistance
- Excellent weld spatter resistance
- Very good flame retardance
- High flexing up to 10 million cycles for stranded cable
- Low temperature brittle point

600V Rated Cable

- Can be run in a tray with other high voltage cables (upon entering a panel, communications circuits must be separated/protected from the power circuit)

Standards Information

- UL Listed Communications Cable (CM), style #2463
- Cordset assemblies are UL Listed (DUXR) Communications, Audio-Video, Data- and Signaling-circuit Accessories, #E464271
- UL Listing for assemblies
- Comply with ODVA, EIA/TIA 568-C.2 and ISO/IEC standards



Supported Ethernet Protocols



Industrial Ethernet Cable Options

| Type | Approvals | Data Pair | | Outer Jacket | Shields | Bulk Cable Part Number/Weight/300 M | Flexlife Ratings |
|--------------------------------|---------------------|----------------------|---------------------------|-------------------------------|--------------------|--|---|
| | | AWG Color Code | DCR (/1000 ft) Insulation | Material Color Nominal O.D. | Type | | |
| 440 80°C 600 Volts | c(UL)us Type CM AWM | 2UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Teal 6.1 mm (.240 in) | - | RB51210-*M 26 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 441 80°C 600 Volts | c(UL)us Type CM AWM | 2UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Teal 6.7 mm (.240 in) | Foil/Braid | RB51211-*M 35 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 442 75°C 300 Volts | c(UL)us Type CM | 2UTPx24 AWG Solid | 31.5 Ohms PE | TPE Teal 6.1 mm (.220 in) | - | RB51212-*M 18 lbs. | - |
| 443 80°C 600 Volts | c(UL)us Type CM AWM | 2UTPx24 AWG Solid | 31.5 Ohms PE | TPE Teal 6.9 mm (.270 in) | Foil/Braid | RB51213-*M 38 lbs. | - |
| 444 80°C 600 Volts | UL ITC, PLTC AWM | 2UTPx22 AWG Stranded | 17.5 Ohms PE | TPE Teal 8.1 mm (.317 in) | Foil/Braid | RB52071-*M 49 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 440RD 80°C 600 Volts | c(UL)us Type CM AWM | 2UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Red 6.1 mm (.240 in) | - | RB52115-*M 26 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 441RD 80°C 600 Volts | c(UL)us Type CM AWM | 2UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Red 6.7 mm (.240 in) | Foil/Braid | RB52075-*M 35 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 440BU 80°C 600 Volts | c(UL)us Type CM AWM | 2UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Blue 6.1 mm (.240 in) | - | RB52110-*M 26 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 440G 80°C 600 Volts | c(UL)us Type CM AWM | 2UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Gray 6.1 mm (.240 in) | - | RB52300-*M 26 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 421 80°C 600 Volts | UL ITC, PLTC AWM | 2UTPx22 AWG Solid | 17.2 Ohms PE | TPE Green 7.8 mm (.305 in) | Foil/Braid | RB51604-*M 49 lbs. | - |
| 423 80°C 600 Volts | UL ITC, PLTC AWM | 2UTPx22 AWG Stranded | 17.5 Ohms PE | TPE Green 8.1 mm (.317 in) | Foil/Braid | RB51216-*M 49 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 4413 75°C 300 Volts | c(ETL)us CMX | 2UTPx24 AWG Stranded | 44 Ohms PE | TPU Teal 5.7 mm (.225 in) | Overall Foil/Braid | RB51306-*M 35 lbs. | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |

| Type | Approvals | Data Pair | | Outer Jacket | Shields | Bulk Cable Part Number/Weight/300 M | Flexlife Ratings |
|--------------------------------|---------------------|----------------------|---------------------------|-------------------------------|------------|--|---|
| | | AWG Color Code | DCR (/1000 ft) Insulation | Material Color Nominal O.D. | Type | | |
| 840 80°C 600 Volts | c(UL)us Type CM AWM | 4UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Teal 6.3 mm (.118 in) | - | RB51460-*M 29 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 841 80°C 600 Volts | c(UL)us Type CM AWM | 4UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Teal 7.7 mm (.303 in) | Foil/Braid | RB50893-*M 43 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 842 75°C 300 Volts | c(UL)us Type CM | 4UTPx24 AWG Solid | 31.5 Ohms PE | TPE Teal 6.1 mm (.240 in) | - | RB51462-*M 26 lbs. | - |
| 843 80°C 600 Volts | c(UL)us Type CM AWM | 4UTPx24 AWG Solid | 28.6 Ohms PE | TPE Teal 7.3 mm (.287 in) | Foil/Braid | RB51463-*M 41 lbs. | - |
| 841BK 80°C 600 Volts | c(UL)us Type CM AWM | 4UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Black 7.7 mm (.301 in) | Foil/Braid | RB51624-*M 46 lbs. | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 841G 80°C 600 Volts | c(UL)us Type CM AWM | 4UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Gray 7.7 mm (.301 in) | Foil/Braid | RB51348-*M 46 lbs. | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |
| 840RD 80°C 600 Volts | c(UL)us Type CM AWM | 4UTPx24 AWG Stranded | 26.5 Ohms PE | TPE Red 6.3 mm (.118 in) | - | RB52151-*M 29 lbs. <i>flexlife</i> | 10xO.D. 1 million cycles 20xO.D. 10 million cycles |

* Indicates length in meters.

Standard spool lengths are 30, 75, 100, 150, 200, 225, 300 meters.

In-Stock Ethernet Options



| ETHERNET PATCH CORDS | | | |
|----------------------|--------------------------------|-------------------------|-------------------|
| # | u | P/N: | |
| | kK kK | kK kK U # | |
| | | kK kK U # | |
| | | kK kK U # | |
| | | kK kK U # | |
| | | kK kK U # | |
| | | kK kK U # | |
| | | kK kK U # | |
| | | kK kK U # | |
| | | kK kK U # | |
| y | kK kK | kK kK U | |
| | | kK kK U | |
| | | kK kK U | |
| | U U | ko#) ko#) U | |
| | | ko#) ko#) U | |
| | | ko#) ko#) U | |
| | | ko#) ko#) U | |
| | | ko#) ko#) U | |
| | | ko#) ko#) U | |
| | U kK | ko#) kK U | |
| | | ko#) kK U | |
| | | ko#) kK U | |
| | | ko#) kK U | |
| | | ko#) kK U | |
| | 441 - stranded shielded/2 pair | RJ45/RJ45 Standard Boot | kK okK o -5M |
| | | | RJ45SRJ45S441-10M |
| | | M12/M12 | RSSDRSSD441-1M |
| | | | RSSDRSSD441-2M |
| RSSDRSSD441-5M | | | |
| RSSDRSSD441-10M | | | |
| M12/RJ45 | | RSSDRJ45S441-5M | |
| | | RSSDRJ45S441-10M | |

Turck's Connectivity In-Stock Program ensures elevated levels of Turck stock on all of our standard connectivity products, resulting in quicker shipping times and fewer headaches for you. Turck is better suited than ever to work with you to develop the perfect solution for your application challenges, whether it comes from our In-Stock Program or a customized solution created specifically for your applications unique challenges.

Order from Turck's Connectivity In-Stock Program, and rest assured your order is on its way, because Turck works!

Your Global Automation Partner

TURCK



130 N. Helmer Road
Battle Creek, MI 49037
269-963-6282

3838 Clay Avenue SW
Wyoming, MI 49548
616-583-1564
800-465-8207

glasupply.com