

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		
CABLE TYPE	TERMINATION TYPE	PRODUCT DESCRIPTION
440 - Stranded Unshielded/2 Pair	RJ45/RJ45	RJ45 RJ45 440-1M
		RJ45 RJ45 440-2M
	M12/M12	RSCD RSCD 440-1M
		RSCD RSCD 440-2M
		RSCD RSCD 440-5M
		RSCD RSCD 440-10M
		RSCD RSCD 440-20M
	M12/RJ45	RSCD RJ45 440-2M
		RSCD RJ45 440-5M
RSCD RJ45 440-10M		
441 - Stranded Shielded/2 Pair	RJ45/RJ45	RJ45S RJ45S 441-1M
		RJ45S RJ45S 441-2M
		RJ45S RJ45S 441-5M
		RJ45S RJ45S 441-10M
	M12/M12	RSSD RSSD 441-1M
		RSSD RSSD 441-2M
		RSSD RSSD 441-5M
		RSSD RSSD 441-10M
	M12/RJ45	RSSD RJ45S 441-1M
		RSSD RJ45S 441-2M
		RSSD RJ45S 441-5M
		RSSD RJ45S 441-10M
RSSD RJ45S 441-20M		
444 - Stranded Shielded/2 Pair, ITC/PLTC	M12/M12	RSSD RSSD 444-1M
		RSSD RSSD 444-5M
		RSSD RSSD 444-10M
		RSSD RSSD 444-15M
		RSSD RSSD 444-20M
		RSSD RSSD 444-25M
		RSSD RSSD 444-30M
4413 - Stranded Shielded/2 Pair	M8/M8	PSGS 4M PSGS 4M 4413-0.2M
		PSGS 4M PSGS 4M 4413-0.3M
		PSGS 4M PSGS 4M 4413-0.5M
		PSGS 4M PSGS 4M 4413-0.6M
		PSGS 4M PSGS 4M 4413-1M
		PSGS 4M PSGS 4M 4413-2M
		PSGS 4M PSGS 4M 4413-5M
	M12/M8	RSSD PSGS 4M 4413-0.5M
	M8/RJ45	PSGS 4M RJ45S 4413-0.5M
		PSGS 4M RJ45S 4413-1M
		PSGS 4M RJ45 4413-2M

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!

In-Stock Ethernet Options (continued)

ETHERNET PATCH CORDS		
CABLE TYPE	TERMINATION TYPE	PRODUCT DESCRIPTION
840- Stranded Unshielded/4 Pair	RJ45/RJ45	RJ45 RJ45 840-1M
		RJ45 RJ45 840-2M
		RJ45 RJ45 840-5M
	M12/RJ45	RSC RJ45 840-1M
		RSC RJ45 840-2M
		RSC RJ45 840-5M
		RSC RJ45 840-10M
	841 - Stranded Shielded/4 Pair	RJ45/RJ45
RJ45S RJ45S 841-2M		
RJ45S RJ45S 841-5M		
RJ45S RJ45S 841-10M		
M12/M12		RSS RSS 841-2M
		RSS RSS 841-5M
		RSS RSS 841-10M
M12/RJ45		RSS RJ45S 841-1M
		RSS RJ45S 841-2M
		RSS RJ45S 841-5M
		RSS RJ45S 841-10M

PANEL & FIELD WIREABLE ACCESSORIES			
PIN COUNT	CONNECTOR	TYPE	PRODUCT DESCRIPTION
4 Pin	M12 to RJ45	Feed-Thru	FKSDD RJ45SF 44
	M12	PCB Mount Receptacle	FKFDD 44-PCB
	RJ45	Field Wireable	CONNECTOR, RJ45S IDC
	M12	Field Wireable	CMBSD 8141-0/PG9
8 Pin	M12	PCB Mount Receptacle	FKFD 84-PCB
	M12	Short PCB Mount Receptacle	FKFD 84-PCB/S
	RJ45	Field Wireable	CONNECTOR, FW,RJ45S 84 IDC