

Industrial Ethernet Cordsets

The use of both RJ45 and M12 connectors in Ethernet network protocols is common. Lapp continuous flex CAT.5e & CAT.6A cables offer a unique solution for the demanding needs of motion systems, where a network connection has been integrated for program interface from remote locations. Lapp's product offering supports both flexing and stationary industrial Ethernet requirements.



Available Configurations

- Single-Ended Cordsets: 4 Pair
- Single-Ended Cordsets: 2 Pair
- Extension Cordsets: 4 Pair
- Extension Cordsets: 2 Pair

Technical Data

Materials:

- Contact carrier: Thermoplastic polyurethane; black
- M12: Polycarbonate
- RJ45: Polycarbonate
- Molded head: Thermoplastic polyurethane; black*
- M12, 8-position: Thermoplastic polyurethane; black*
- M12, 4-position D-code: Thermoplastic polyurethane; blue-gray*
- RJ45: Thermoplastic polyurethane; black*
- Contacts: Gold-plated brass
- Coupling nut: Nickel-plated brass
- Shield: Copper braid or foil & copper braid
- Outer jacket: Polyurethane; teal or green
- Conductor insulation: Polyethylene

* Color is typical, not standard

Temperature Range: see specific cable catalog page

Rated Voltage: 42V

Rated Current: 1.5A

Number of Conductors:

- M12 D-code/RJ45 shielded: 26 - 22 AWG/2pr, stranded or solid
- M12 8-pos. & RJ45S: 26 - 22 AWG/4pr, stranded or solid

IP Protection Class:

- M12: Meets NEMA 1, 3, 4, 6P & IEC IP67
- RJ45: Meets NEMA 1, 3, 4, 6P & IEC IP20

Cable Type:

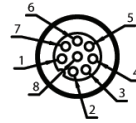
- for stationary use: CAT.5e: ETHERLINE® 2 Pair CAT.5e, page 233
- ETHERLINE® 4 Pair CAT.5e, page 240
- CAT.6A: ETHERLINE® 4 Pair CAT.6A, page 243
- continuous flex: CAT.5e: ETHERLINE® 2 Pair CAT.5e, page 234
- ETHERLINE® 4 Pair CAT.5e, page 241
- CAT.6A: ETHERLINE® 4 Pair CAT.6A, page 244

Cable Rated Voltage: 1000V (not for power applications)

Pin Outs

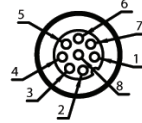
Ethernet M12 8-position, 4 Pair

Male



- 1 = White/Blue
- 2 = White/Brown
- 3 = Brown
- 4 = Orange (-TX)

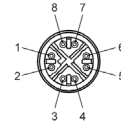
Female



- 5 = White/Green (+RX)
- 6 = White/Orange (+TX)
- 7 = Blue
- 8 = Green (-RX)

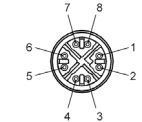
Ethernet M12 X-coded, 4 Pair

Male



- 1 = White/Orange (+TX)
- 2 = Orange (-TX)
- 3 = White/Green (+RX)
- 4 = Green (-RX)

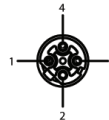
Female



- 5 = White/Brown
- 6 = Brown
- 7 = White/Blue
- 8 = Blue

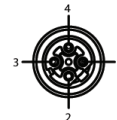
Ethernet M12 D-coded, 2 Pair

Male



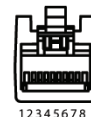
- 1 = White/Orange (+TX)
- 2 = White/Green (+RX)
- 3 = Orange (-TX)
- 4 = Green (-RX)

Female



Ethernet RJ45 Shielded

4 Pair



- 1 = White/Orange (+TX)
- 2 = Orange (-TX)
- 3 = White/Green (+RX)
- 4 = Blue
- 5 = White/Blue
- 6 = Green (-RX)
- 7 = White/Brown
- 8 = Brown

2 Pair









- 1 = White/Orange (+TX)
- 2 = Orange (-TX)
- 3 = White/Green (+RX)
- 4 = N/C
- 5 = N/C
- 6 = Green (-RX)
- 7 = N/C
- 8 = N/C

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question. For current information go to our website.

Ethernet Single-Ended Cordsets: 4 Pair CAT.5e

8-Pos. M12 or 8-Wire RJ45 Connectors to Flying Leads

	Connector 1	ETHERLINE® 4 Pair CAT.5e	Connector 2	
Male M12 Straight Connector		stationary use: 2170300, page 240 continuous flexing: 2170489, page 241		Flying Leads
Male M12 Bulkhead				
Female M12 Straight Connector				
Female M12 Bulkhead				
RJ45 Shielded Connector				







90° M12 connectors are also available.

Connector 1	Connector 2	Stationary Cable	Continuous Flex Cable
M12 to Flying Leads			
Male M12 Straight	Flying Leads	C5E003Sxx	C5E003Fxx
Male M12 Bulkhead	Flying Leads	C5E010Sxx	C5E010Fxx
Female M12 Straight	Flying Leads	C5E004Sxx	C5E004Fxx
Female M12 Bulkhead	Flying Leads	C5E011Sxx	C5E011Fxx
RJ45 to Flying Leads			
RJ45 Shielded	Flying Leads	C5E002Sxx	C5E002Fxx

For part number, replace "xx" with the desired cable length in meters.

Ethernet Extension Cordsets: 4 Pair CAT.5e

8-Pos. M12 or 8-Wire RJ45 Connectors

	Connector 1	ETHERLINE® 4 Pair CAT.5e	Connector 2	
Male M12 Straight Connector		stationary use: 2170300, page 240 continuous flexing: 2170489, page 241		Male M12 Straight Connector
Female M12 Straight Connector				Female M12 Straight Connector
RJ45 Shielded Connector				RJ45 Shielded Connector

90° M12 connectors are also available.

Connector 1	Connector 2	Stationary Cable	Continuous Flex Cable	Connector 1	Connector 2	Stationary Cable	Continuous Flex Cable
M12 to M12 Cordsets				M12 to RJ45 Cordsets			
Male M12 Straight	Male M12 Straight	C5E005Sxx	C5E005Fxx	Male M12 Straight	RJ45 Shielded	C5E008Sxx	C5E008Fxx
Male M12 Straight	Female M12 Straight	C5E007Sxx	C5E007Fxx	Female M12 Straight	RJ45 Shielded	C5E009Sxx	C5E009Fxx
Female M12 Straight	Female M12 Straight	C5E006Sxx	C5E006Fxx	RJ45 to RJ45 Cordsets			
				RJ45 Shielded	RJ45 Shielded	C5E001Sxx	C5E001Fxx

For part number, replace "xx" with the desired cable length in meters.

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