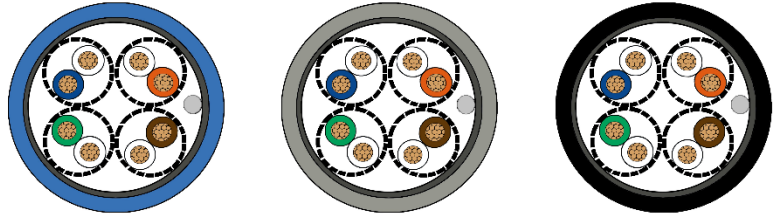


Belden P/N 50105FL
Industrial Category 5e F/UTP



Applications

Industrial Ethernet cables are used for interconnecting Industrial Ethernet Switches, IP controllers, media converters, distributed control system, programmable logic controller and transmitting industrial protocol data signals. These cables are suitable for transmitting 1000BASE-TX Gigabit Ethernet, 100BASE-T Fast Ethernet, 100BaseVG ANYLAN, 155ATM, 622ATM, RS-422, 100MHz Category 5e, EtherCAT. The LSZH sheath makes it suitable for indoor use and durable for both indoor and outdoor use meeting IEC 60332-1 and IEC 60754-1 & 2

General Reference Standards

- IEC/ISO 11801, IEC 61156-5 & TIA-568 -C.2
- IEC 60332-1, IEC 60754-1, IEC 60754-2, IEC 61034-2, ICEA S-73-532
- EU RoHS

Physical Characteristics	
Conductor Size	24 AWG
Conductor Material	Solid Bare Copper
Insulation Material	PO - Polyolefin
Number of Pairs	4 Pairs
Shield Drain Wire	Solid Tinned Copper
Shield	Aluminium Foil – Tape Polyester
Outer jacket Ripcord	Yes
Outer Jacket	LSZH – Low Smoke Zero Halogen
Nom. Diameter	6.0 mm
Suitability	Indoor and Outdoor
UV Resistance	Yes
Oil Resistance	ICEA S-73-532
Flame Retardant	IEC 60332-1
Other Specifications	ISO/IEC 11801 IEC 61156 TIA/EIA 568-C.2
Mechanical Characteristics	
Operating Temperature Range	-20°C To +75°C
Bulk Cable Weight	40 kg/km
Max. Recommended Pulling Tension	110 N
Min. Bending Radius (Install)	48 mm

Electrical Characteristics	
Max. Conductor DCR @ 20°C	9.5 Ω/100m
DCR Unbalance @ 20°C	Max. 5%
Characteristic Impedance	100 ± 15 Ω
Nom. Mutual Capacitance @ 1KHz	5.6 nF/100m
Max. Pair to Ground Capacitance Unbalance @ 1kHz	330 pF/100m
Max. Delay @ 100MHz	538 ns/100m
Max. Delay Skew	45 ns/100m
Max. Operating Voltage	300 V RMS
Other Properties	
Halogen Content per IEC 60754-1	≤ 5 mg/g
Acid Gas Emission pH per IEC 60754-2	≥ 4.3
Acid Gas Emission Conductivity per IEC 60754-2	≤ 10 μs/mm
Smoke Density as per IEC 61034-2	≥ 60% Light Transmittance

Technical Data Sheet

Industrial Category 5e Shielded LSZH Cable

Electrical Characteristic - Premises:

Frequency (MHz)	Max. Attenuation (dB/100m)	Min. Return Loss (dB)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	2.0	20.0	65.3	62.3	63.8	60.8
4	4.1	23.0	56.3	53.3	51.8	48.8
8	5.8	24.5	51.8	48.8	45.7	42.7
10	6.5	25.0	50.3	47.3	43.8	40.8
16	8.3	25.0	47.2	44.2	39.7	36.7
20	9.3	25.0	45.8	42.8	37.8	34.8
25	10.4	24.3	44.3	41.3	35.8	32.8
31.25	11.7	23.6	42.9	39.9	33.9	30.9
62.5	17.0	21.5	38.4	35.4	27.9	24.9
100	22.0	20.1	35.3	32.3	23.8	20.8

Put Ups & Colours:

Stock Code	Cable Description	Put Up (MT)	Jacket Colour	Ship Weight (kg/reel)
50105FL 006305M	4P X 24 AWG PO LSZH FTP CAT5E	305	BLU	12.5
50105FL 008305M	4P X 24 AWG PO LSZH FTP CAT5E	305	GRY	12.5
50105FL 010305M	4P X 24 AWG PO LSZH FTP CAT5E	305	BLK	12.5

