

DATA Sheet

GigaFlex 1200 Cable Series Category 5E

GigaFlex 1200 Cable Series consists of 4-pair UTP cables that exceeds the Category 5e requirements per the ANSI/TIA/EIA-568-A-5 and ANSI/TIA/EIA-568-B standard. When used as the horizontal cable in the Belden 1200, the channel provides 160 MHz of bandwidth.

Features & Benefits

- > Minimized skew for parallel transmission protocols
- > High flexibility design eases cable installation and dressing
- > Size minimized for compactness of installations
- > Materials selected to support 25 year performance warranties
- > Descending distance marking for cable length reduces waste
- > Matching tip and ring color code for ease of installation.

Applications

- > GigaFlex 1200 Cable Series is intended to be used for horizontal cable installations of high speed Local Area Networks (LANs) for transmission speeds of up to 1.2 Gb/s. Specific application protocols supported include:
 - 1000BASE-T Ethernet (1000 Mb/s)
 - 155 Mb/s ATM, 100 Mb/s TP-PMD, 100 Mb/s Ethernet (100BASE-T), and other systems using up to 622 Mb/s transmission speeds
 - 10 Mb/s Ethernet (ANSI/IEEE 802.3 10BASE-T)
 - 4 Mb/s and 16 Mb/s Token Ring (ANSI/IEEE 802.5)
 - Broadband video (77 channels at 550 MHz).

Technical Specifications

- > Conductors: 24 AWG solid copper

- > Insulation – CMR & LSOH: Polyolefin (PE)
- > Insulation – CMP (Dual Insulation):
 - Under layer: Polyolefin base
 - Over layer: Fluorinated Ethylene Propylene (FEP)
 - Color coding as per ANSI/TIA/EIA-568-B.
- > Cable Core: Four twisted pairs formed into a cable core, equipped with jacket splitting cord
- > Jacket:
 - CMR: PVC
 - CMP: LSPVC
 - LSZH: Low Smoke & Fume Zero Halogen Polymer AlloyJacket printed at intervals indicating cable code, AWG, listings (NEC Code), verification, date, time and manufacturing traceability code
- Descending length markings start at highest number and end at 0.

Transmission Characteristics

- > Values up to 200 MHz are minimum guaranteed values
- > Values above 200 MHz are for information only
- > DC Resistance @ 20°C, max.: 9.38 ohms/100 m
- > DC Resistance Unbalance, max.: 5%
- > Mutual Capacitance, max.: 5.6 nF/100 m
- > Capacitance Unbalance Pair to Ground, max.: 330 pF/100 m
- > Input Impedance: 100 ± 15 ohms from 1 to 100 MHz,
 - 100 ± 22 ohms from 101 to 200 MHz
- > Nominal Velocity of Propagation (NVP):
 - Plenum: 72% @ 10 MHz
 - Non-Plenum: 68% @ 10 MHz.
- > Propagation Delay (Skew), max.: 25 ns/100 m.



24570161 GigaFlex 1212 Cable, Riser



24570810 GigaFlex 1213 Cable, Plenum



24570157 GigaFlex 1224 Cable, LSZH

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FREQUENCY (MHz)	ATTENUATION (dB/100 m) (max.)	NEXT (dB) (min.)	PSNEXT (dB) (min.)	ACR (dB) (min.)	PSACR (dB) (min.)	ELFEXT (dB) (min.)	PSELFEXT (dB) (min.)	RETURN LOSS (DB) (min.)
0.772	1.8	71.0	69.0	69.2	67.2	66.0	63.0	—
1.0	2.0	69.3	67.3	67.3	65.3	63.8	60.8	20.0
4.0	4.0	60.3	58.3	56.3	54.3	51.7	48.7	23.0
8.0	5.7	55.8	53.8	50.1	48.1	45.7	42.7	24.5
10.0	6.3	54.3	52.3	48.0	46.0	43.8	40.8	25.0
16.0	8.1	51.3	49.3	43.2	41.2	39.7	36.7	25.0
20.0	9.1	49.8	47.8	40.7	38.7	37.7	34.7	25.0
25.0	10.2	48.3	46.3	38.1	36.1	35.8	32.8	24.3
31.25	11.5	46.9	44.9	35.4	33.4	33.9	30.9	23.6
62.5	16.7	42.4	40.4	25.7	23.7	27.8	24.8	21.5
100.0	21.6	39.3	37.3	17.7	15.7	23.8	20.8	20.1
200.0	31.9	34.8	32.8	2.9	0.9	17.7	14.7	18.0
250.0	36.3	33.3	31.3	-2.9	-4.9	15.8	12.8	17.3
300.0	40.3	32.2	30.2	-8.2	-10.2	14.2	11.2	16.8
350.0	44.2	31.2	29.2	-13.0	-15.0	12.9	9.9	16.3

Mechanical Characteristics

- Minimum Recommended Installation Temperature: 5°C (40°F)
- Temperature Rating: 60°C (140°F).

4-PAIR, 24 AWG	NOMINAL O.D.	MIN. BEND RADIUS	WEIGHT (CABLE ONLY)
2412 Cable, CMR	5.44 mm (0.214 in.)	22.15 mm (0.872 in.)	3.9 kg/100 m (26.0 lb/kft)
2413 Cable, CMP	5.33 mm (0.210 in.)	21.04 mm (0.828 in.)	3.6 kg/100 m (24.0 lb/kft)
2424 Cable, LSZH	5.44 mm (0.214 in.)	23.28 mm (0.916 in.)	4.2 kg/100 m (28.0 lb/kft)

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Qualifications

- Exceeds Category 6 requirements per ANSI/TIA/EIA-568-B
- Exceeds the Category 5e requirements per ANSI/TIA/EIA-568-A.5 or ANSI/TIA/EIA-568-B
- Exceeds the Category 5 requirements per ANSI/TIA/EIA-568-A, CSA T529-95 and ISO/IEC 11801-1995
- Exceeds the Category 5 requirements per NEMA Standard WC 63.1-1996
- Exceeds the Category 5 requirements of ICEA S-90-661-1997
- Non-Plenum: ITS/ETL Certified as CMR, and listed as NEC Type CMR per UL Standard 444
- Plenum: ITS/ETL Certified as CMP, and listed as NEC Type CMP per UL Standard 444
- LSOH: ISO/IEC 332-1, 754-2 and 1034-2.

For More Information

For any other product information call: 1-800-BELDEN-1 or visit us at www.Belden.com

All information is subject to change without notice, since Belden reserves the right to change its products as progress in engineering and manufacturing methods or other circumstances may warrant.

Ordering Information

GigaFlex 1212 Cable, 4-pair, 24 AWG, CMR, Cat 6

COLOR	LENGTH	PACKAGING	NO. OF PACK PER PALLET	TOTAL PER PALLET	ORDERING NUMBER
White	305 m (1000 ft.)	Spool-in-Box	45 boxes/pallet	13725 m (45000 ft.)	24570166
Yellow	305 m (1000 ft.)	Spool-in-Box	45 boxes/pallet	13725 m (45000 ft.)	24570464
Blue	305 m (1000 ft.)	Spool-in-Box	45 boxes/pallet	13725 m (45000 ft.)	24570161
White	305 m (1000 ft.)	11N Spool	60 spools/pallet	18300 m (60000 ft.)	24570460
Yellow	305 m (1000 ft.)	11N Spool	60 spools/pallet	18300 m (60000 ft.)	24570462
Blue	305 m (1000 ft.)	11N Spool	60 spools/pallet	18300 m (60000 ft.)	24570452
White	762 m (2500 ft.)	14N Spool	27 spools/pallet	20574 m (67500 ft.)	24570470
Yellow	762 m (2500 ft.)	14N Spool	27 spools/pallet	20574 m (67500 ft.)	24570471
Blue	762 m (2500 ft.)	14N Spool	27 spools/pallet	20574 m (67500 ft.)	24570469

GigaFlex 1213 Cable, 4-pair, 24 AWG, CMP, Cat 5e

White	305 m (1000 ft.)	Spool-in-Box	45 boxes/pallet	13725 m (45000 ft.)	24570810
Yellow	305 m (1000 ft.)	Spool-in-Box	45 boxes/pallet	13725 m (45000 ft.)	24570835
Blue	305 m (1000 ft.)	Spool-in-Box	45 boxes/pallet	13725 m (45000 ft.)	24570800
White	305 m (1000 ft.)	11N Spool	60 spools/pallet	18300 m (60000 ft.)	24570808
Yellow	305 m (1000 ft.)	11N Spool	60 spools/pallet	18300 m (60000 ft.)	24570927
Blue	305 m (1000 ft.)	11N Spool	60 spools/pallet	18300 m (60000 ft.)	24570812
White	762 m (2500 ft.)	14N Spool	27 spools/pallet	20574 m (67500 ft.)	24570942
Yellow	762 m (2500 ft.)	14N Spool	27 spools/pallet	20574 m (67500 ft.)	24570940
Blue	762 m (2500 ft.)	14N Spool	27 spools/pallet	20574 m (67500 ft.)	24570944

GigaFlex 1224 Cable, 4-pair, 24 AWG, LSZH, Cat 6

Purple	305 m (1000 ft.)	Box	45 boxes/pallet	13725 m (45000 ft.)	24570157
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