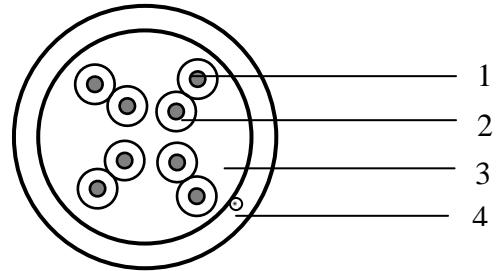


2424DB

Networking Cables
Gigaflex 2400 cable series
Cat. 6 U/UTP LSNH
2017-06-19 V1



Applications

- Horizontal and building backbone cable
- Support current and future Category 6 and 5e applications, such as: 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM

General standards

- U.S. Standards: ANSI/TIA/EIA 568-B.2.1 (2002)
- International standard: ISO/IEC 11801 edition 2.1 (2008)

Construction & Dimensions

- Conductor**
 Material: Solid bare copper ETP
 Diameter: AWG 24
- Insulation**
 Material: Polyethylene
 Nominal diameter over insulation: 1.0 mm
- Cable core**
 Pair: 2 twisted insulated conductors
 Number of pairs: 4, all twisted together
 Colour code pair 1: White / Blue & Blue
 Colour code pair 2: White / Orange & Orange
 Colour code pair 3: White / Green & Green
 Colour code pair 4: White / Brown & Brown
- Jacket**
 Material: LSNH
 Diameter: 6.6 ± 0.3 mm
 Ripcord: Under jacket

Electrical characteristics

Reference standard: ANSI/TIA/EIA-568 B.2.1

Low frequency and D.C. (at 20°C)	Specification	Unit
D.C. resistance conductor	< 9.38	Ω/100m
Resistance unbalance: within a pair / between pairs	< 2 / < 4	%
Insulation resistance	≥ 5000	MΩ.km
Dielectric strength conductor-conductor (2 sec.)	2.5	kV DC
Mutual capacitance	< 56	nF/km
Capacitance unbalance pair to ground	< 1600	pF/km
Nominal velocity of propagation (for information only)	0.70	C
Delay skew (differential delay)	≤ 25	ns/100m

High frequency (at 20°)												
TYPE	1*	4	10	16	31.2	62.5	100	200	250	300	350	MHz
Attenuation	2.0	3.7	5.8	7.4	10.4	15.0	19.3	28.3	32.1	35.6	38.9	dB/100m
NEXT	75.3	66.3	60.3	57.2	52.9	48.4	45.3	40.8	39.3	38.1	37.1	dB/100m
PS NEXT	75.3	66.3	60.3	57.2	52.9	48.4	45.3	40.8	39.3	36.1	35.1	dB/100m
ACR	73.3	62.6	54.5	49.9	42.5	33.4	26.0	12.5	7.2	2.5	-1.7	dB/100m
PS ACR	73.3	62.6	54.5	49.9	42.5	33.4	26.0	12.5	7.2	0.5	-3.7	dB/100m
ELFEXT	70.8	58.8	50.8	46.7	40.9	34.9	30.8	24.8	22.8	21.3	19.9	dB/100m
PS ELFEXT	67.8	55.8	47.8	43.7	37.9	31.9	27.8	21.8	19.8	18.3	16.9	dB/100m
Return Loss	20.0	23.0	25.0	25.0	23.6	21.5	20.8	18.7	18.0	17.5	17.0	dB/100m
TCL	40.0	40.0	40.0	38.0	35.1	32.0	30.0	27.0	26.0			dB/100m
EL TCTL	35.0	23.0	15.0	10.9	5.1							dB/100m
Propagation delay	570	552	545	543	539	538	537	537	537	536	536	dB/100m

NOTE: Limits below 4MHz are for information only

Mechanical characteristics

	Specification	Unit
Elongation at break of the conductors	10	%
Minimum elongation at break of the insulation	≥ 100	%
Minimum elongation at break of the sheath	≥ 100	%
Tensile strength of sheath	> 9	MPa

Environmental and overall characteristics

	Specification	Unit
Maximum operating voltage (for all temperatures cable is intended to be used)	72	V d.c.
Maximum continuous current per conductor (@25°C)	1.5	A
Temperature rating installation	0 / 50	°C
Temperature rating operation	- 20 / 75	°C
Total cable weight	52	kg/km
Minimum bending radius (during operation and installation)	26 / 52	mm
Maximum pulling strength	80	N
Burning load	600	kJ/m
Smoke density acc. to IEC 61034-1/2 & EN50268-1/2; transmittance	> 60	%
Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2; pH	> 4.3	
Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2; Conductivity	< 10	µS/mm
Reaction to fire according IEC 60332-3-25 and IEC 60332-1	Pass	
Reaction to fire according EN 50575	B2ca-s1,d1,a1	

Belden declares this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.

