

10GA24 Paired - Category 6A Unbonded – U/UTP LSZH JACKET

	<p style="text-align: center;">For more information please call 1-800-Belden1</p> <p style="text-align: center;"><u>See Put-ups and Colors</u></p> <p style="text-align: center;">Related Documents: No.8 for Data Twist Cables (Modified Western Electric).pdf</p>
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Description:

23 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, overall cabling tape, special barrier tape, LSZH jacket.

SUITABLE APPLICATIONS:

Suitable Applications	Horizontal and building backbone Cable. Support current and future category 6A and 6 applications: such as 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, ISDN, ATM etc.
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CONSTRUCTION & DIMENSIONS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	23
Stranding	Solid
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	PO - Polyolefin
Insulation Nominal Diameter	1.14mm
Pair Color Code Chart:	

Pair Number	Insulation Color	
	Wire 1	Wire 2
1	Blue	White with Blue Stripe
2	Orange	White with Orange Stripe
3	Green	White with Green Stripe
4	Brown	White with Brown Stripe

OVERALL CABLING:

Overall Cabling Fillers	Central Spline(Red color)
Overall Cabling With Separation Tape	Yes

Barrier:

Outer Barrier Material	Special barrier tape
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OUTER JACKET:

Outer Jacket Material	LSZH – Low Smoke Zero Halogen
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OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	7.2±0.3 mm
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	- 20°C To + 60°C
Temperature rating installation	0°C to 50°C
Bulk Cable Weight	52 kg/km
Max. Recommended Pulling Tension	80 N
Min. Bend Radius (Installation)	50 mm
Elongation at break of the conductors	10%
Minimum elongation at break of the insulation	100%
Minimum elongation at break of the sheath	100%

APPLICABLE SPECIFICATION AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

IEC Specification	61156-5 Category 6A
EU RoHS Compliant (Y/N)	Y
EU RoHS Compliance Date	Sept 2007
IEC Standards	IEC61156-5(2009) ,ISO/IEC 11801(2002)

FLAME TEST:

Flame Test	IEC 60332-1
Smoke density acc. to IEC 61034-1/2 transmittance	> 60%
Amount of halogen acid gas acc. to IEC 60754-1/2	pH> 4.3
Amount of halogen acid gas acc. to IEC 60754-1/2	< 10µS/m

SUITABILITY:

Suitability – Indoor (Y/N)	Y
Non-halogenated	Y

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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ELECTRICAL CHARACTERISTICS:

Maximum operating voltage (for all temperatures cable is intended to be used)	72Vdc
Dielectric strength conductor-conductor and	2.5kV DC

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conductor-screen (2 sec.)	
Nom. Mutual Capacitance @ 1 KHz	5.6 nF/100m
Maximum Capacitance Unbalance	160 pF/100m
Nominal Velocity of Propagation (for information only)	0.67c
Maximum Delay Skew	45 ns/100m
Maximum Conductor DC Resistance @ 20 Deg.C	95 Ohms/km
Maximum DCR Unbalance within a pair/between pairs @ 20 Deg.C	2%/4%
Minimum Insulation resistance	5000 MΩ.km

TRANSMISSION CHARACTERISTICS:

Horizontal Cable transmission characteristics Table 1:

High frequency(at 20 °C)														
TYPE	1	4	10	16	31.25	62.5	100	125	200	250	300	500	600	650
Attention (dB/100m)	2.1	3.8	5.9	7.5	10.5	15.0	19.1	21.5	27.6	31.1	34.3	45.3	50.1	52.3
NEXT (dB)	75.3	66.3	60.3	57.2	52.9	48.4	45.3	43.8	40.8	39.3	38.1	34.8	33.6	33.1
PS NEXT (dB)	72.3	63.3	57.3	54.2	49.9	45.4	42.3	40.8	37.8	36.3	35.1	31.8	30.6	30.1
Return Loss (dB/100m)	20.0	23.0	25.0	25.0	23.6	21.5	20.1	19.4	18.0	17.3	17.3	17.3	17.3	17.3
TCL level 1 (dB)	40.0	34.0	30.0	28.0	25.1	22.0	20.0	19.0	17.0	16.0	/	/	/	/
ELTCTL (dB)	35.0	23.0	15.0	10.9	/	/	/	/	/	/	/	/	/	/
ACRF (dB/100m)	68.0	56.0	48.0	43.9	38.1	32.1	28.0	26.1	22.0	20.0	18.5	14.0	12.4	11.7
PS ACRF (dB/100m)	65.0	53.0	45.0	40.9	35.1	29.1	25.0	23.1	19.0	17.0	15.5	11.0	9.4	8.7
Propagation delay (ns/100m)	570	552	545	543	540	539	538	537	537	536	536	536	535	535
PS ANEXT (dB)	67.0	67.0	67.0	67.0	67.0	65.6	62.5	61.0	58.0	56.5	55.3	52.0	50.8	50.3
PS AACR-F(dB)	67.0	66.2	58.2	54.1	48.3	42.3	38.2	36.3	32.2	30.2	28.7	24.2	22.6	21.9

NOTES:

Notes

Jacket sequentially marked.
Limits for 1MHz ,600MHz, 650MHz are for information only

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PUT-UPS AND COLORS:

Item	Description	Put-Up (meters.)	Ship Weight (kg)	Jacket Color
10GA24 006305M	4PR 23 AWG CAT 6A U/UTP LSZH	305	18.5	BLU
10GA24 008305M	4PR 23 AWG CAT 6A U/UTP LSZH	305	18.5	GRY
10GA24 010305M	4PR 23 AWG CAT 6A U/UTP LSZH	305	18.5	BLK

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