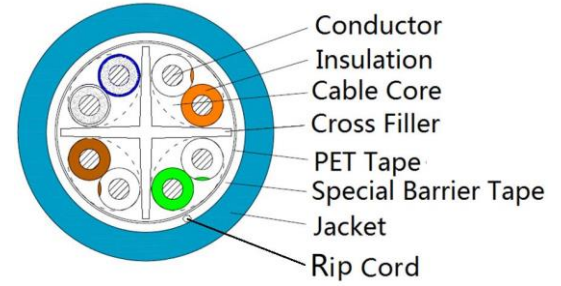


# Technical Data Sheet

## Belden Category 6A Unbonded-U/UTP LSZH Jacket IEC 60332-3-22 Flame Rating Cable

**Belden 10GA22**  
Category 6A U/UTP LSZH Cable  
IEC 60332-3-22 Flame Rating



### Applications

Horizontal and building cables are used to support current and future Category 6a and 6 applications mainly within smart building and data center such as 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, ISDN, ATM and PoE. This LSZH material emits limited smoke and no halogen when exposed to high sources of heat. It can considerably reduce the amount and density of the smoke, toxic and corrosive gas emitted during a fire, enable easier evacuation as well as safer firefighting operations.

### General Reference Standards

- IEC/ISO 11801, IEC 61156-5
- IEC 60754-1, IEC 60754-2, IEC 61034-2
- IEC 60332-1, IEC 60332-3-22
- EU RoHS
- IEEE 802.3bt, Type1 (15W), Type2 (30W), Type3 (60W), Type4 (100W)

<b>Physical Characteristics</b>	
Conductor Size	23 AWG
Conductor Material	Solid Bare Copper
Insulation Material	PO - Polyolefin
Number of Pairs	4 Pairs
Outer jacket Ripcord	Yes
Outer Jacket	LSZH – Low Smoke Zero Halogen
Nom. Diameter	7.5 mm
Suitability	Indoor
Flame Retardant	IEC 60332-3-22
<b>Mechanical Characteristics</b>	
Operating Temperature Range	-20°C To +60°C
Bulk Cable Weight	52 kg/km
Max. Recommended Pulling Tension	80 N
Min. Bending Radius (Install)	50 mm

<b>Electrical Characteristics</b>	
Max. Conductor DCR @ 20°C	9.5 Ω/100m
DCR Unbalance @ 20°C	2% / 4% (within a pair/ between pairs)
Nom. Mutual Capacitance @ 1kHz	5.6 nF/100m
Max. Capacitance Unbalance	160 pF/100m
Characteristic Impedance	100 Ω
Max. Delay @ 100MHz	538 ns/100m
Max. Delay Skew	45 ns/100m
Max. Operating Voltage	72 V DC
<b>Other Properties</b>	
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

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### Electrical Characteristic - Premises:

Frequency (MHz)	Max. Attenuation (dB/100m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. Return Loss (dB)	Min. ACRF (dB)	Min. PSACRF (dB)
*1	2.1	75.3	72.3	20.0	68.0	65.0
4	3.8	66.3	63.3	23.0	56.0	53.0
10	5.9	60.3	57.3	25.0	48.0	45.0
16	7.5	57.2	54.2	25.0	43.9	40.9
31.25	10.5	52.9	49.9	23.6	38.1	35.1
62.5	15.0	48.4	45.4	21.5	32.1	29.1
100	19.1	45.3	42.3	20.1	28.0	25.0
125	21.5	43.8	40.8	19.4	26.1	23.1
200	27.6	40.8	37.8	18.0	22.0	19.0
250	31.1	39.3	36.3	17.3	20.0	17.0
300	34.3	38.1	35.1	17.3	18.5	15.5
500	45.3	34.8	31.8	17.3	14.0	11.0
*600	50.1	33.6	30.6	17.3	12.4	9.4
*650	52.3	33.1	30.1	17.3	11.7	8.7

\*Note: Limits below 1MHz, and at 600MHz & 650MHz are for information only

### Put Ups & Colours:

Stock Code	Cable Description	Put Up (MT)	Jacket Colour	Ship Weight (kg/reel)
<b>10GA22 006305M</b>	CAT6A 4PR 23AWG U/UTP LSZH IEC 60332-3-22	305	BLU	18.5
<b>10GA22 008305M</b>	CAT6A 4PR 23AWG U/UTP LSZH IEC 60332-3-22	305	GRY	18.5
<b>10GA22 010305M</b>	CAT6A 4PR 23AWG U/UTP LSZH IEC 60332-3-22	305	BLK	18.5



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