

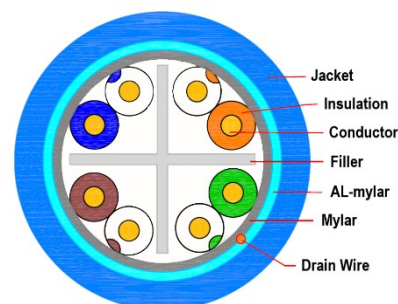
Network Cable

Category 6 F/UTP 4-Pair 23AWG Solid Bare Copper LSZH Bulk Cable, 250 MHz

Model: C6F23U25-LSZH-305XX (XX – Colour)

PRODUCT DESCRIPTION

F/UTP Category 6 cable constructed with 23AWG solid bare copper conductors, polyolefin insulation, cross filler, aluminium/Mylar foil shield with drain wire, and LSZH outer jacket.



Highlights

- F/UTP Category 6 cable with 23AWG solid bare copper conductors and LSZH jacket
- Cross filler maintains pair geometry and improves crosstalk performance
- Overall aluminium/Mylar foil shield with drain wire for effective EMI suppression

Features

- High transmission performance up to 250 MHz
- Low DC resistance for stable signal and power transmission
- Effective shielding reduces electromagnetic interference (EMI)
- Robust construction for reliable installation and long-term performance
- Suitable for PoE and PoE+ applications (IEEE 802.3af/at)

Applications

- Structured cabling for horizontal and backbone installations
- Transmission of digital and analogue signals (data, video, and audio)
- Suitable for Gigabit Ethernet networks and legacy systems
- Ideal for environments requiring protection against EMI

Applicable Standards

Performance and Transmission

- ✓ ANSI/TIA-568.2-E (2024)
- ✓ ISO/IEC 11801-1
- ✓ IEC 61156-5 (Edition 2.1)
- ✓ EN 50288-5-1

Fire & Safety

- ✓ IEC 60332-1-2
- ✓ IEC 61034-1 / 61034-2
- ✓ IEC 60754-2
- ✓ CPR Fire Class: EN 50575

Material and Construction

- ✓ IEC 61156-5 (Edition 2.1)
- ✓ All materials comply with SS-00259

Regulatory

- ✓ EU RoHS Directive 2011/65/EU & 2015/863/EU
- ✓ EU Low Voltage Directive (LVD) 2006/95/EC
- ✓ Construction Products Regulation (CPR) Class Eca

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Material and Construction

Conductor	Material	23AWG Solid Bare Copper	
Insulation	Material	Polyolefin (PO)	
	Colour Code & Diameter	Blue & White/Blue Stripe	1.08 ± 0.03 mm
		Orange & White/Orange Stripe	1.05 ± 0.03 mm
		Green & White/Green Stripe	1.08 ± 0.03 mm
Brown & White/Brown Stripe		1.05 ± 0.03 mm	
Twisted	Description	2 Insulated Conductors Twisted Together	
Filler	Material	Polyolefin (PO)	
Assembly	Description	4 Twisted Pairs Cabled Together	
Wrap	Material	Mylar Tape	
Drain Wire	Material	26AWG Solid Tinned Copper	
Shield	Material	Aluminium-Mylar (AL-Mylar) Foil	
	Description	100% Coverage and Aluminium Side Facing Inward	
Jacket	Material	Low Smoke Zero Halogen (LSZH)	
	Diameter	7.10 ± 0.3 mm	
	Thickness	0.60 ± 0.1 mm	
	Colour	Per customer's request	
Marking	DSGIO CAT 6 LSZH CABLE F/UTP 4PR 23AWG 75°C---VERIFIED TO EN 50288 ISO/IEC 11801 ANSI/TIA-568.2-E MMY Y RoHS COMPLIANT XXXM Note 1: MMY Y is date code.		

Usage & Environmental Condition

Temperature Range	Storage & Shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum Bending Radius		≥ 8 times of overall diameter
Maximum Pulling Tension		≤ 110 N

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Physical & Electrical Characteristics (at 20°C)

Spark Test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable Cold Bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance Unbalance between two conductors of any pair	≤ 5%
Resistance Unbalance between pairs	≤ 5%
Dielectric Strength	1.5 KV ac for 2 secs
Insulation Resistance	≥ 5000 MΩ•km
Mutual Capacitance	≤ 5.6 nF/100m
Capacitance Unbalance Pair-to-Ground	≤ 330 pF/100m

Transmission Performance (at 20°C)

Frequency (MHz)	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
1	2.03	74.30	72.30	72.28	70.28	67.80	64.80	20.00	570.00	45.00
4	3.78	65.27	63.27	61.49	59.49	55.76	52.76	23.01	552.00	
8	5.32	60.75	58.75	55.43	53.43	49.74	46.74	24.52	546.73	
10	5.95	59.30	57.30	53.35	51.35	47.80	44.80	25.00	545.38	
16	7.55	56.24	53.24	48.68	46.68	43.72	40.72	25.00	543.00	
20	8.47	54.78	52.78	46.31	44.31	41.78	38.78	25.00	542.05	
25	9.51	53.33	51.33	43.83	41.83	39.84	36.84	24.32	541.20	
31.25	10.67	51.88	49.88	41.20	39.20	37.90	34.90	23.64	540.44	
62.5	15.38	47.36	45.36	31.98	29.98	31.88	29.88	21.54	538.55	
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	
150	24.71	41.66	39.66	16.95	14.95	24.28	21.28	18.87	536.94	
200	28.98	39.78	37.78	10.80	8.80	21.78	18.78	18.00	536.55	
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	

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PACKAGE CONTENTS

- 1 x 305 m (1000 ft) Category 6 F/UTP Bulk Cable, supplied on a reel.

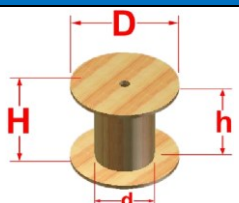
WARRANTY

- 3-Year Limited Warranty against defects in materials and workmanship under normal use and installation

ORDERING INFORMATION

Part Number	Descriptions
C6F23U25-LSZH-305XX	Cat 6 F/UTP 4-Pair 23AWG Solid Bare Copper LSZH Bulk Cable, 250 MHz, XX(Colour) – 305 m (1000 ft)

SHIPPING INFORMATION

Item	Dimension	Nominal Net Weight	Schematic Drawing of Reel
Cable	305 m	16.30 Kg (35.93 lb)	 <p>Fumigated Plywood Reel</p>
Plywood Reel	D380 x d210 x H280 x h260 mm	3.5 Kg	
Pallet	1140 x 1140 x 120 mm	14.1 Kg	

Container Type	Capacity of Pallet	Pallet of Reel	Capacity of Reel
20 feet	20	24/24	480
40 feet	40	24/24	960

Each package of pallet delivered with plastic wrap and packing strap.

Package information above is calculated by maximum container capacity, and for reference only. All shipments must follow your local transportation regulation for gross weight limit.



CONTACT INFORMATION

For more information, please visit our website or contact our customer service team:

- **Website:** www.dsgio.com
- **Email:** sales.apac@dsgio.com

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