



Product: [50106ASFLA](#)

CAT 6A 4P23AWG, S/FTP, SWA, LSZH Jkt, Indoor/Outdoor

Product Description

CAT 6A 4PR x 23AWG S/FTP, Solid Bare Copper Conductor, FMPE Insulation, Individual Al-mylar Shield, TC Braid Over Shield, LSZH Inner Jacket, Steel Wire Armoring, Water Blocking Tape, LSZH Outer Jacket, Indoor/Outdoor

Technical Specifications

Product Overview

Suitable Applications:	Industrial Ethernet cables are used for interconnecting Industrial Ethernet Switches, IP controllers, media converters, distributed control system, programmable logic controller and transmitting industrial protocol data signals. These cables are suitable for transmitting 1000BASE-TX Gigabit Ethernet, 100BASE-T Ethernet, 100BaseVG ANYLAN, 155ATM, 622ATM, RS-422, 250MHz Category 6, EtherCAT. These are highly durable & ruggedized cables for both indoor and outdoor use meeting IEC 60332-3-24 and IEC 60754-1 & 2.
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Construction Details

Conductor

Element	Size	Material
Pair(s)	23 AWG	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	1.40 mm (0.0551 in)	1.White & Blue, 2. White & Orange, 3. White & Green, 4. White & Brown

Inner Shield

Element	Shield Type	Material
Pair(s)	Tapes (Each Pair)	Bi-Laminate (Alum+Poly)

Inner Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	30%

Armor

Armor Type & Material
SWA - Steel Wire Armor

Outer Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Overall Cable Diameter (Nominal):	12.5 mm (0.492 in)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance
95 Ohm/km (29 Ohm/1000ft)	0.56 pF/m (0.17 pF/ft)

Delay

Max. Delay Skew
25 ns/100m

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. PSANEXT [dB]	Min. PSAACRF [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1	75.3	72.3	68.0	65.0	20.0	67.0	67.0	40.0	35.0
4	3.8	66.3	63.3	56.0	53.0	23.0	67.0	66.2	34.0	23.0
10.0	5.9	60.3	57.3	48.0	45.0	25.0	67.0	58.2	30.0	15.0
16	7.5	57.2	54.2	43.9	40.9	25.0	67.0	54.1	28.0	10.9
31.2	10.5	52.9	49.9	38.1	35.1	23.6	67.0	48.3	25.1	5.1
62.5	15.0	48.4	45.4	32.1	29.1	21.5	65.6	42.3	22.0	
100	19.1	45.3	42.3	28.0	25.0	20.1	62.5	38.2	20.0	
125	21.5	43.8	40.8	26.1	23.1	19.4	61.0	36.3	19.0	
200	27.6	40.8	37.8	22.0	19.0	18.0	58.0	32.2	17.0	
250	31.1	39.3	36.3	20.0	17.0	17.3	56.5	30.2	16.0	
300	34.3	38.1	35.1	18.5	15.5	17.3	53.3	28.7		
500	45.3	34.8	31.8	14.0	11.0	17.3	52.0	24.2		

Voltage

Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating
-30°C to + 70°C

Bend Radius

Installation Min.
125 mm (4.92 in)

Bulk Cable Weight:	290 kg/km (190 lbs/1000ft)
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Standards and Compliance

Environmental Suitability:	Indoor, Outdoor
Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60332-3-22
Data Category:	Category 6A
ISO/IEC Compliance:	IEC 61156-5, ISO/IEC 11801

History

Update and Revision:	Revision Number: 0.27 Revision Date: 03-27-2025
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Part Numbers

Variants

Item #	Color	Length
50106ASFLA 010305M	Black	305 m
50106ASFLA 009305M	White	305 m

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