



Cable Master Electric Wire & Cable Co., Ltd

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CATEGORY 6A S-FTP, 500MHz

STANDARD COMPLIANCE

UL LISTED: UL 444

ISO/IEC 11801 CATEGORY 6A: HORIZONTAL CABLE & PATCH CABLE

IEC 61156-5 FOR HORIZONTAL CABLE

RoHS COMPLIANCE FOR THE REQUIREMENT OF EUROPEAN UNION ISSUED DIRECTIVE 2011/65/EU

IEC 60332-1-2 FLAME TEST

UL VERIFIED TO IEC 62821-1 LSHF(Low-Smoke-Halogen-Free) JACKET



CONSTRUCTION

		CAT. 6A S/FTP SOLID	CAT. 6A S/FTP STRANDED
CONDUCTOR	MATERIAL & SIZE	BARE COPPER, 23AWG	BARE COPPER, 26AWG
INSULATION	MATERIAL	HDPE(CMI-75E)	HDPE(CMI-75E)
	THICKNESS	MIN. AVERAGE THICKNESS: 0.45mm MIN. THICKNESS: 0.38mm	MIN. AVERAGE THICKNESS: 0.38mm: MIN. THICKNESS: 0.295mm
	COLOR CODE	Pair 1: Blue & White/Blue Pair 2: Orange & White/Orange	Pair 3: Green & White/Green Pair 4: Brown & White/Brown
SHIELD	MATERIAL	-ALUMINUM-MYLAR TAPE -DRAIN WIRE (TINNED COPPER CONDUCTOR) -TINNED COPPER BRAID	
JACKET	MATERIAL	75 ° C PVC Compound (CMI-80S) OR 75 ° C LSHF (Low-Smoke Halogen Free)	75 ° C PVC Compound (CMI-80S) OR 75 ° C LSHF (Low-Smoke Halogen Free)
	THICKNESS	MIN. AVERAGE THICKNESS: 0.585mm MIN. THICKNESS: 0.458mm	MIN. AVERAGE THICKNESS: 0.585mm: MIN. THICKNESS: 0.458mm
	OVERALL DIAMETER	8.0 mm +/- 0.3mm	6.6 mm +/- 0.3mm

ELECTRIC REQUIREMENT (CABLE LENGTH/100M)

	CAT. 6A S/FTP SOLID	CAT. 6A S/FTP STRANDED
CHARACTERISTIC IMPEDENCE(Zo)	85~115Ω (1~500 MHz)	85~115Ω (1~500 MHz)
DC. RESISTANCE CAPACITANCE UNBALANCE	3%	5%
PAIR-TO-GROUND CAPACITANCE UNBALANCE	330 pF/100M Max	330 pF/100M Max
CONDUCTOR RESISTANCE	7.32Ω/ 100M 20 ° C MAX.	14.0Ω/ 100M 20 ° C MAX.
MUTUAL CAPACITANCE	5600 pF/100M Max.	5600 pF/100M Max.
SPARK TEST	2.5KV	2.5KV
NOMINAL VELOCITY OF	76%	76%



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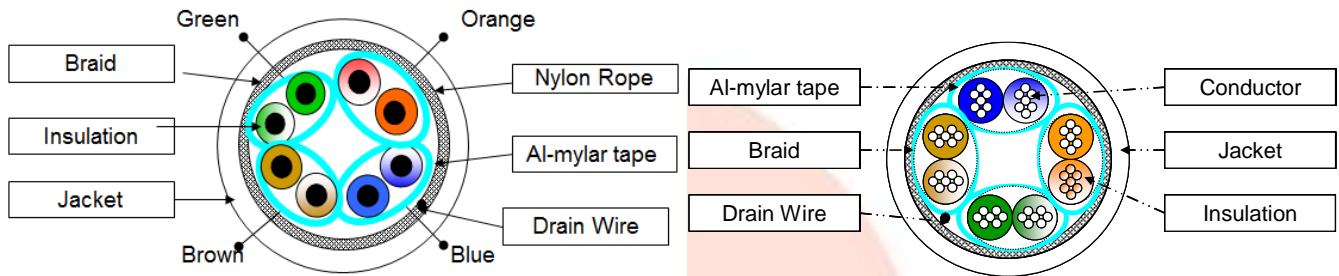
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PROPAGATION (N.V.P.)		
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ENVIRONMENTAL CONDITION & USAGE

TEMPERATURE RANGE	SHIPPING & STORAGE	-40°C to 75°C
	INSTALLATION	0°C to 60°C
	OPERATION	-40°C to 75°C
MINIMUM BENDING RADIUS	≥ 4 TIMES OF OVERALL DIAMETER	
MAXIMUM PULLING TENSION	≤ 110 N	

SECTION PLANS



TRANSMISSION REQUIREMENTS

FREQUENCY (MHz)	MAX. ATTENUATION (dB/100m)		MIN, Pr-Pr NEXT (dB)	MIN. PSNEXT (dB)	MIN. RETURN LOSS (dB)	
	SOLID	STRANDED			SOLID	STRANDED
1	3.4	4.5	74.3	72.3	20.0	20.0
8	6.4	6.8	60.8	58.8	24.5	24.5
16	9.1	9.5	56.2	54.2	25.0	25.0
25	11.4	11.9	53.3	51.3	24.3	24.2
100	23.8	23.8	44.3	42.3	19.0	19.0
250	39.4	39.4	38.3	36.3	15.6	15.6
400	51.6	51.6	35.3	33.3	13.8	13.8
500	56.4	56.4	33.8	31.8	13.0	13.0

Values show on tables above are for reference purpose only.