

# Category 6A FTP 10G Riser (CMR) Cable



Cable Detail		
Description		
23 AWG CAT 6A 4-Pairs FTP CMR, High-Performance Data Cable		
Applicable Standards		
<ul style="list-style-type: none"> <li>• UL VERIFIED</li> <li>• ANSI/TIA-568-C.2</li> <li>• RoHS Compliant</li> <li>• ATM 155 Mbps</li> <li>• 10/100/1000/10G Base-T (IEEE 802.3)</li> <li>• 4/16 Mbps Token Ring (IEEE 802.5)</li> <li>• 100 Mbps TP-PMD</li> <li>• ISDN, ADSL</li> <li>• ATM LAN 1.2G</li> <li>• Horizontal Distribution &amp; Backbone Cabling</li> </ul>		
Physical Characteristics		
Conductor Material	Solid Bare Copper	
Number of Conductor Pairs	4	
Size	23 AWG	
Shield Material	Aluminum Tape	
Insulation Material	HDPE	
Overall Diameter	0.041 in	
Average Thickness	0.0106 in	
Jacket Material	Riser/CMR Rated PVC	
Jacket Diameter	0.3153 in.	
Spacer Thickness	0.0393 in.	
Outer Sheath Thickness	0.0177 in.	
Nominal Weight	38 lbs.	
Ripcord	Yes	
Mechanical Characteristics		
Temperature Rating	Installation	0°C to + 60°C
	Operating	-20°C to + 80°C
Tensile Strength	Before	>= 13.8 Mpa
Elongation	Aging	>= 100%
	Aging Condition	100°C x 168 hours
		After
	Aging	>= 50% of unaged
Insulation Colors		
Pair 1	White / Blue	Blue
Pair 2	White / Orange	Orange
Pair 3	White / Green	Green
Pair 4	White / Brown	Brown
Part Numbers	Jacket Color	Package
<b>6A04FRBL2</b>	Blue	1000FT / Reel

## Electrical Characteristics

Maximum Conductor DC Resistance @ 20°C	≤ 9.38 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	≤ 4%
Max. Pair-to-Pair Ground Capacitance Unbalance	≤ 330 pF / 100 Meters
Characteristic Impedance (1 ~ 350 MHz)	≤ 100 ± 15 Ω
Mutual Capacitance	≤ 5.6 nF / 100 Meters
Max. Delay Skew	≤ 45 nS / 100 Meters

## Electrical Performance

Frequency (MHz)	Attenuation (dB/100m) Max.	Return loss (dB) Min.	NEXT (dB) Min.	PS-NEXT (dB) Min.
1	2.1	20.0	74.3	72.3
4	3.8	23.0	65.3	63.3
8	5.3	24.5	60.8	58.8
10	5.9	25.0	59.3	57.3
16	7.5	25.0	56.2	54.2
20	8.4	25.0	54.8	52.8
25	9.4	24.3	53.3	51.3
31.25	10.5	23.6	51.9	49.9
62.5	15.0	21.5	47.4	45.4
100	19.1	20.1	44.3	42.3
200	27.6	18.0	39.8	37.8
250	31.1	17.3	38.3	36.3
300	34.3	16.8	37.1	35.1
400	40.1	15.9	35.3	33.3
500	45.3	15.2	33.8	31.8

Frequency (MHz)	ELFEXT (dB/100m) Min.	PS-ELFEXT (dB) Min.	PS-ANEXT (dB/100m)	PS-AELFEXT (dB/100m)
1	67.8	64.8	67.0	67.0
4	55.8	52.8	67.0	66.2
8	49.7	46.7	67.0	60.1
10	47.8	44.8	67.0	56.2
16	43.7	40.7	67.0	54.1
20	41.8	38.8	67.0	52.2
25	39.8	36.8	67.0	50.2
31.25	37.9	34.9	67.0	48.3
62.5	31.9	28.9	65.6	42.3
100	27.8	24.8	62.5	38.2
200	21.8	18.8	58.0	32.2
250	19.8	16.8	56.5	30.2
300	18.3	15.3	55.3	28.7
400	15.8	12.8	53.5	26.2
500	13.8	10.8	52.0	24.2

\* Values above provided are for information only.

## Cable Marking

EXXXXXX 23AWG 4 PR FTP CMR 75C C(UL)US VERIFIED (UL)  
CATEGORY 6A ANSI/TIA-568-C.2 \*\*\*\*\*FT