



BIT MAXX

USB3 LONG DISTANCE CABLES

CEI's USB3 BitMaxx active Plug & Play cable, supporting full 5 gig USB3 throughput and power delivery up to 20 meters with full USB2 backward compatibility. Assembly is NOT to be used in conjunction with other cables.

PART NUMBER REFERENCE: **MVB3 - X - X - X - X XM**

Select Connector Type: End "A"

- Type A, Friction Fit = 1
- Type A, w/Thumbscrews = 2A
- Type A, w/Single Thumbscrew = 2B

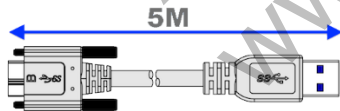
Select Cable Type:

- Extended Distance = 1
- *Available lengths: 10, 15 & 20 Meters
- Robotic / Drag Chain = 2
- *Available length: 10Meters

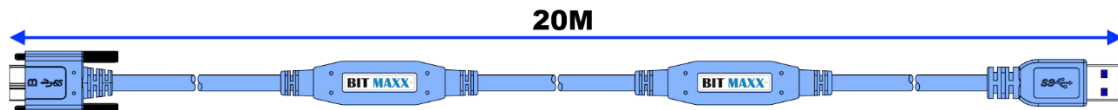
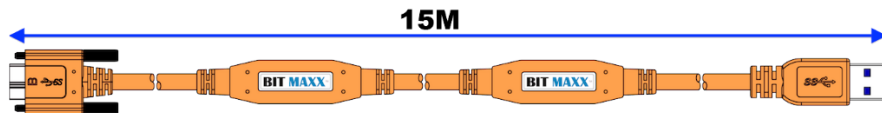
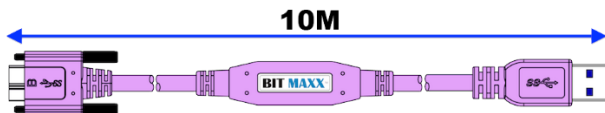
Select Connector Type: End "B"

- Micro B, Straight w/Thumbscrews = 3
- Micro B, R/A Up w/Recessed Screws = 4
- Micro B, R/A Down w/Recessed Screws = 5
- Micro B, Exit Right w/Recessed Screws = 6
- Micro B, Exit Left w/Recessed Screws = 7
- Type B, w/Thumbscrews = 8
- Type B, Friction Fit = 9

*Length in Meters: 10, 15, 20



Standard USB3 Vision Cables
Maximum Length is 5 Meters



CEI BitMaxx™
Extended Distance
USB3 Vision Cables
Super Speed USB 3.0
Available lengths:
10M, 15M, AND 20M

BITMAXX

USB3 LONG DISTANCE CABLES



1



Type A
Friction Fit

2A



Type A
W/Thumbscrews

2B



Type A
W/Thumbscrew

3



Micro B, Straight
W/Thumbscrews

4



Micro B, R/A Up
W/Recessed Screws

5



Micro B, R/A Down
W/Recessed Screws

6



Micro B, Exit Right
W/Recessed Screws

7



Micro B, Exit Left
W/Recessed Screws

8



Type B
W/Thumbscrews

9



Type B
Friction Fit

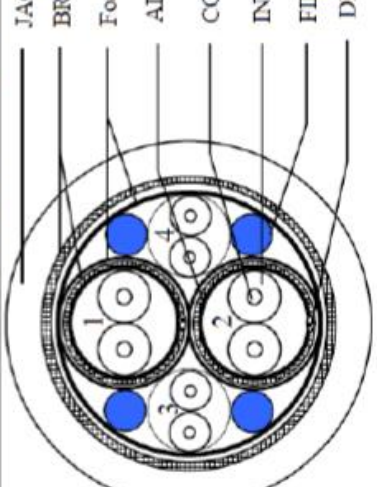


USB 3.0 BitMaxx Cable Type #: 1

SPECIFICATION:		(1P*24#+DAM)2C+1P*26#+2C*18#+F+AL+B/UL2725				CONSTRUCTION		D.W.G	
ITEM		SPECIFICATION				D.W.G			
CONDUCTOR	AWG	24AWG	26AWG	18AWG	TINNED COPPER	TINNED COPPER	TINNED COPPER	JACKET	BRAID COPPER
	MATERIAL	TINNED COPPER	TINNED COPPER	TINNED COPPER	7/0.20±0.008MM	7/0.16±0.008MM	43/0.16±0.008MM		MYLAR
	COND.SIZE	0.35MM	0.23MM	0.23MM	FM-PE+SKIN	HD-PE	PVC		FILLER
INSULATION	MIN.AVG.THICK	1.35±0.10MM	1.00±0.10MM	1.80±0.10MM	IP*2	IP*2	2C		CONDUCTOR
	O.D	IP*2	IP*2	2C					INSULATION
	N.O.	24AWG	24AWG	2C					AL.MYLAR
DRAIN	AWG	TINNED COPPER	TINNED COPPER	TINNED COPPER	7/0.20±0.008MM	7/0.20±0.008MM	7/0.20±0.008MM		DRAIN
	MATERIAL	TINNED COPPER	TINNED COPPER	TINNED COPPER	100%	100%	100%		
	SIZE	100%	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN		
Face Inside	COVER	100%	100%	100%	100%	100%	100%		
AL.MYLAR	OVERLAP	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN		
Hot-MYLAR	COVER	100%	100%	100%	100%	100%	100%		
	OVERLAP	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN		
	OVERLAP	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN		
	N.O.	(1P+DAM)2C	(1P+DAM)2C	2C					
Face Outside	COVER	100%	100%	100%	100%	100%	100%		
AL.MYLAR	OVERLAP	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN	25% MIN		
DRAIN	MATERIAL	TINNED COPPER	TINNED COPPER	TINNED COPPER	7/0.20±0.008MM	7/0.20±0.008MM	7/0.20±0.008MM		
	SIZE	100%	100%	100%	100%	100%	100%		
BRAID	MATERIAL	TINNED COPPER	TINNED COPPER	TINNED COPPER	24*9/0.10±0.008MM (COVERAGE :85% MIN)	24*9/0.10±0.008MM (COVERAGE :85% MIN)	24*9/0.10±0.008MM (COVERAGE :85% MIN)		
COPPER	SIZE	0.50MM	0.50MM	0.50MM	0.50MM	0.50MM	0.50MM		
	MIN.AVG.THICK	PVC	PVC	PVC	PVC	PVC	PVC		
JACKET	MATERIAL	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK		
	COLOUR	7.50±0.20MM	7.50±0.20MM	7.50±0.20MM	7.50±0.20MM	7.50±0.20MM	7.50±0.20MM		
	O.D								
ELECTRICAL CHARACTERISTICS									
USB2.0 UTP					USB3.0 STP*2P				
1. Rating Temperature: 80°C; VOLTAGE: 30V					1. Differential Impedance: 90±7Ω				
2. Conductor Resistance: at 20°C max					2. Intra-Pair Skew: 15ps /m				
24AWG: 94.2Ω/Km; 18AWG: 23.2Ω/Km					3. Attenuation/Insertion Loss:				
3. Insulation Resistance: 10MΩ/Km min at 20°C dc 500V					1.5dB/1.5M@0.1GHz				
4. Propagation Delay Skew: 100ps (Full-/High-speed only)					5.0dB/1.5M@1.25GHz				
5. Time Delay: 5.2ns/m(max.)					7.5dB/1.5M@2.5GHz				
6. Impedance: 90±15%Ω					25dB/1.5M@7.5GHz				
7. Attenuation(Full/High-speed only):					4. Differential to common mode:				
F(MHz)	Attenuation(dB)	F(MHz)	Attenuation(dB)	20dB/cable @ 0.1-7.5GHz					
0.064	0.08	24	0.95	5. NEXT:					
0.256	0.11	48	1.35	32dB@0.1GHz					
0.512	0.13	96	1.90	32dB@2.5GHz					
0.772	0.15	200	3.20	23dB@3.0GHz					
1	0.20	400	5.80	23dB@7.5GHz					
4	0.39								
8	0.57								
12	0.76								
PHYSICAL PROPERTIES OF JACKET									
1. Tensile Strength: Unaged:									
1500PSI min Aged: 70% min									
2. Elongation: Unaged:									
100% min Aged: 65%									
3. Heat shock test:									
NO CRACKING									
4. Cold bend test:									
NO CRACKING									
5. Deformation test: MAX 50%									
6. Flame test: PASS VW-1									
MINIMUM BEND RADIUS: 10X O.D.									
COLOUR CODE:									
(1P*24#+DAM)2C:									
1. YELLOW*BLUE									
2. ORANGE*PURPLE									
IP*26#: GREEN *WHITE									
2C*18#: 1.BLACK 2.RED									
APPROVED									
CHECKED									
DRAWING									
CUSTOMER									
REV									
DATE									
CHEN									
A / I									
2018/5/17									

(E1013), 8-12-19

USB 3.0 BitMaxx Cable Type #: 2

SPECIFICATION:		(1P*26#+ADBP)2C+1P*26#+1P*24#+FPB			
ITEM		SPECIFICATION			
CONDUCTOR	AWG	26AWG	26AWG	24AWG	
	MATERIAL	TINNED COPPER	TINNED COPPER	TINNED COPPER	BRAID COPPER
	COND.SIZE	19/0.10±0.008 mm	19/0.10±0.008 mm	41/0.08±0.008 mm	Foamed PP film
INSULATION	MIN.AVG.THICK	0.23 mm	0.23 mm	0.23 mm	AL.FOIL
	MATERIAL	FM-PE+SKIN	HD-PE	HD-PE	CONDUCTOR
	O. D	1.20±0.10 mm	0.90±0.05 mm	0.95±0.05 mm	INSULATION
	N.O.	1P*2	1P	1P	FILLER
Face Outside	COVERGE	100%	/	/	DRAIN
AL.MYLAR	OVERLAP	25% MIN	/	/	
DRAIN	MATERIAL	TINNED COPPER			
	SIZE	19/0.08±0.008 mm			
BRAID	MATERIAL	TINNED COPPER			
COPPER	SIZE	16*6/0.08±0.008MM			
	COVERGE	90%MIN			
Foamed PP film	COVERGE	100%			
	OVERLAP	25%MIN			
	N.O.	(1P+ADBP)2C	1P	1P	
Foamed PP film	COVERGE		100%		
	OVERLAP		25% MIN		
BRAID	MATERIAL	TINNED COPPER			
COPPER	SIZE	16*10/0.08±0.008MM (Coverage : 85%MIN)			
	MIN.AVG.THICK	0.76 mm			
JACKET	MATERIAL	MIXING PVC			
	COLOUR	PURPLE			
	O. D	7.00 ± 0.30 mm			
		MINIMUM BEND RADIUS: 10X O.D.			
		CONSTRUCTION D.W.G			
					
		COLOUR CODE:			
		(IP*26#+ADBP)*2C:			
		1. YELLOW * BLUE			
		2. ORANGE * PURPLE			
		IP*26#: 1.GREEN *WHITE			
		IP*24#: 1. BLACK RED			
		Y S2018111302, 8-12-19			
		APPROVED			
		CHECKED			
		DRAWING			
		CUSTOMER			
		REV			
		DATE			
		2018/11/13			
		A / I			

ELECTRICAL CHARACTERISTICS		PHYSICAL PROPERTIES OF JACKET	
USB2.0 UTP 1. Rating Temperature: 80°C ; VOLTAGE: 30V 2. Conductor Resistance: at 20°C max 26AWG: 150Ω/km 3. Insulation Resistance: 10MΩ/km min at 20°C dc 500V 4. Propagation Delay Skew:100ps (Full-/High-speed only) 5. Time Delay: 5.2ns/m(max) 6. Impedance: 90±15%Ω 7. Attenuation(Full/High-speed only):		USB3.0 STP*2P 1. Differential Impedance:90±7Ω 2. Intra-Pair Skew : 15ps/m 3. Attenuation/Insertion Loss: 5.0dB@1.25GHz 7.5dB@2.5GHz 25dB@7.5GHz 4 Differential to common mode: 20dB/cable @ 0.1-7.5GHz	
F(MHz)	Attenuation(dB)	F(MHz)	Attenuation(dB)
0.061	0.08	24	0.95
0.256	0.11	48	1.35
0.512	0.13	96	1.90
0.772	0.15	200	3.20
1	0.20	400	5.80
4	0.30		
8	0.57		
12	0.76		