

USB 2.0 CABLES

Universal Serial Bus with increased data transfer of 480 Mbps available in various configurations.

PART NUMBER REFERENCE



USB-A Connector Type: End "1":

Connector types: 1 -5 (See Below)

Cable Type Options:

- HI FLEX = 1
- ROBOTIC = 2

Select Connector Type: End "2"

- USB-A = 1
- USB-B = 2
- USB-B w/Screws = 3
- Mini USB-B = 4
- Mini USB-B w/Screws = 5

Option: Length in Meters

CONNECTOR TYPE OPTIONS:

1



USB-A

2



USB-B

3



USB-B w/Screws

4



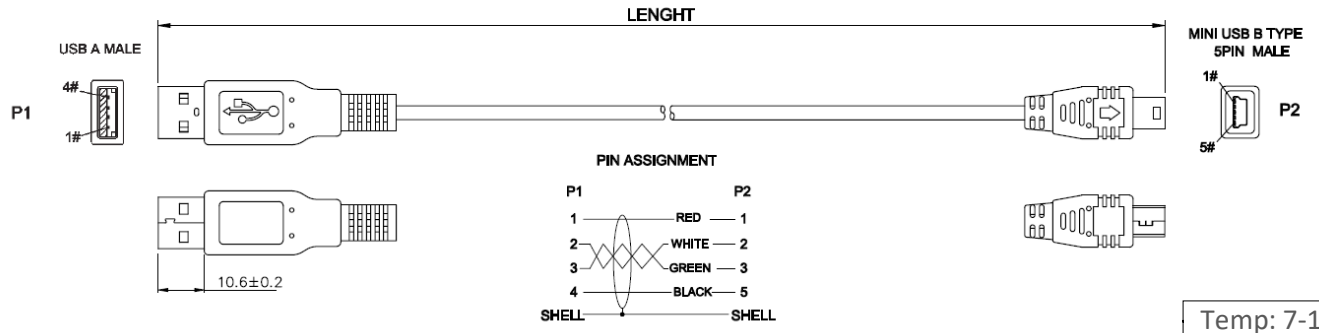
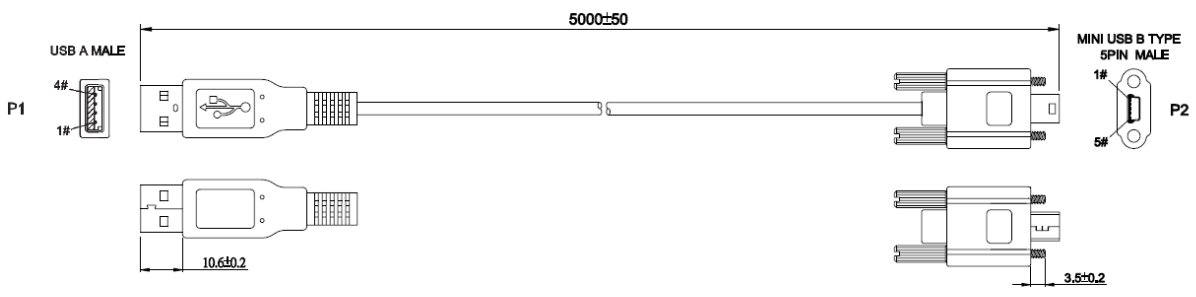
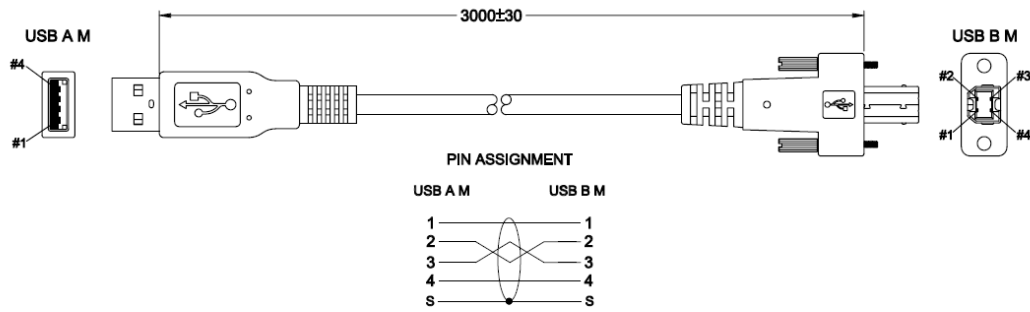
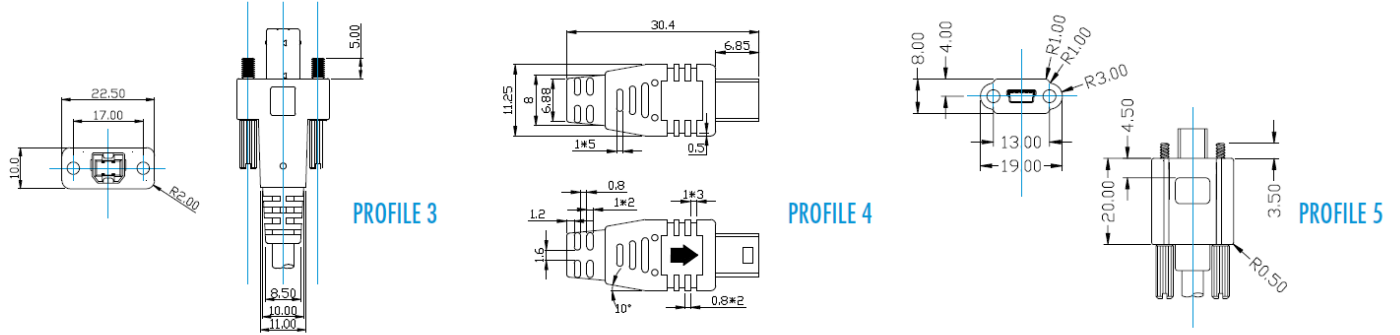
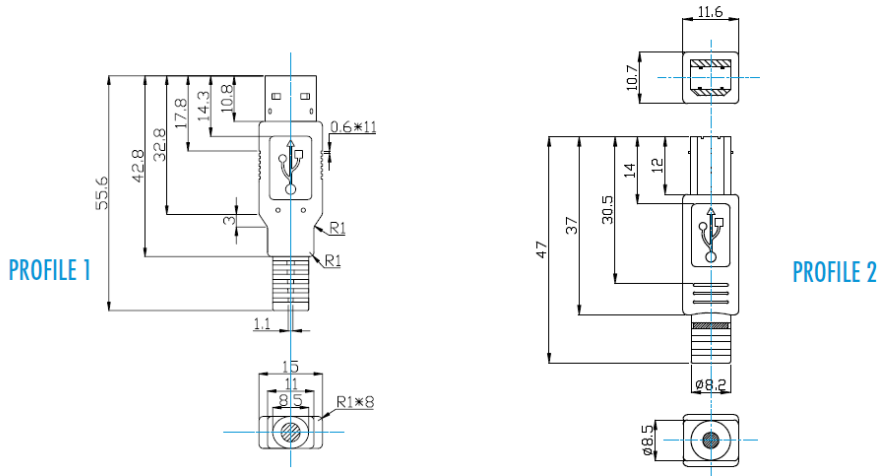
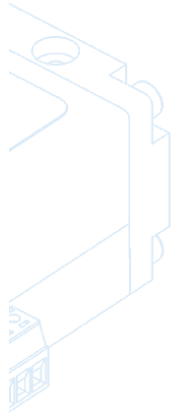
Mini USB-B

5



Mini USB-B w/Screws

Temp: 7-1-20



Temp: 7-1-20

USB 2.0 Cable Type #: 1

SPECIFICATION:		1P*28AWG + 2C*26AWG + Foamed PP Type+ AL..Mylar + S	
ITEM		SPECIFICATION	
CONDUCTOR	AWG	28AWG	26AWG
	MATERIAL	TINNED COPPER	TINNED COPPER
	COND.SIZE	19/0.08±0.008 mm	19/0.10±0.008 mm
	MIN.AVG.THICK	0.15 mm	0.23 mm
INSULATION	MATERIAL	HD-PE	SR-PVC
	O . D	0.77±0.05 mm	1.00 ± 0.05 mm
	N.O.	1P	2C
Foamed PP Type	COVERAGE		100%
Face Outside	OVERLAP		25% MIN
AL.MYLAR	COVERAGE		100%
	OVERLAP		25% MIN
DRAIN	AWG	/	/
	MATERIAL	/	/
	SIZE	/	/
SPIRAL	MATERIAL	TINNED COPPER	
	SIZE	98±2/0.08±0.008 mm	
JACKET	MIN.AVG.THICK	0.51 mm	
	MATERIAL	HALF MATT PVC	
	COLOR	UL813	
	O . D	4.50 ± 0.15 mm	

ELECTRICAL CHARACTERISTICS	PHYSICAL PROPERTIES OF JACKET
1. Rating : TEMP 80 °C ; VOLTAGE 30V 2. Conductor Resistance: at 20°C MAX 28AWG: 237.25Ω/km; 26AWG: 148.94Ω/km 3. Insulation Resistance: 10MΩ·km min at 20°C dc 500V.(EIA-364-21) 4. Dielectric Strength: AC 500V/1minute no breakdown. (EIA-364-20)	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

CONSTRUCTION DWG	
	PVC JACKET SPIRAL AL. MYLAR CONDUCTOR INSULATION FILLER Foamed PP Type
COLOR CODE:	
1P*28AWG: 1.GREEN 2.WHITE	
2C*26AWG: 1.RED 2.BLACK	
MINIMUM BEND RADIUS: 10X O.D.	

		COMPONENTS EXPRESS, INC. 10330 Argonne Woods Drive, Ste100 Woodridge, IL 60517	
<h2>96051271002 (E0849), 8/12/19</h2>		APPROVED	CUSTOMER
CHECKED	REV	B	B
DRAWING	CWJ	DATE	16/06/06

USB 2.0 Type #: 2

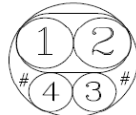
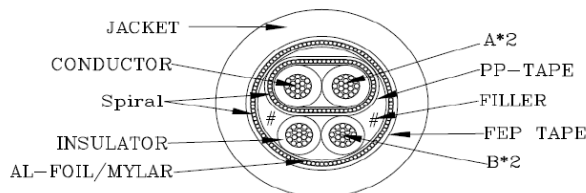
SPEC No.:	(19/0.08TA*2K+AS 90%+PP-TAPE)+(19/0.1TA+250D NYLON)*2C+AS 90%+FEP TAPE USB 2.0						
Customer		Customer NO.	-----	8 Code		Sample NO:	Y161015004
UL File NO.	E101344	UL Style:	UL 20276	Date:	10/26/16	Spec NO:	
CSA File NO.	0	CSA Style:	0	Edition:.	Original edition	Operation NO:	0
Structure		Structure A			Structure B		
Conductors	Structure AWG	AWG	28# (19/40)			26# (19/38)	
	Material	--	Tinned Copper			Tinned Copper	
	Filler	--	--			250D NYLON	
	O.D.	mm	0.38 Ref			0.49 Ref	
Insulation	Material	--	PE			PE	
	Diameter	mm	1.10±0.07			1.00±0.07	
	Average Thickness	mm	0.360 Ref			0.255 Ref	
	Color	--	AS Color Code			AS Color Code	
Shielding 1	Material	--	AL-foil/mylar			--	
	Conductive Side	--	Inside			--	
	Overlap Rate	%	25 MIN			--	
Shielding 2	Shield	--	Spiral			--	
	Material	--	Tinned Copper			--	
	Coverage Rate	%	90			--	
Shielding 1	Material	--	PP-TAPE			--	
	Conductive Side	--	--			--	
	Overlap Rate	%	25 MIN			--	
Layer	Direction	--	Left (Z)			--	
	Pitch	mm	50 Ref			--	
	Diameter	mm	2.95 Ref			--	
Shielding 1	Material	--	--	AL-foil/mylar		--	
	Conductive Side	--	--	Outside		--	
	Overlap Rate	%	--	25		--	
Shielding 2	Shield	--	Spiral			--	
	Material	--	Tinned Copper			--	
	Coverage Rate	%	90 MIN			--	
Shielding 1	Material	--	FEP TAPE			--	
	Conductive Side	--	--			--	
	Overlap Rate	%	25 MIN			--	
Jacket	Material	--	PVC			--	
	Diameter	mm	5.2 ± 0.19			--	
	Min Average Thickness	mm	0.50			--	
	Extrusion	--	Solid			--	
	Externals	--	Plane			--	
	Color	--	PA7Q(P4459) (VIOLET)				



COMPONENTS EXPRESS, INC.
10330 Argonne Woods Drive, Ste100
Woodridge, IL 60517

Y161015004 (E1014)

Rev. A, 10/26/2016, 8/12/19



COLOR CODE

- 1.GREEN
- 2.WHITE
- 3.BLACK
- 4.RED

USB 2.0 Type #: 2

CABLE CHARACTERS

SPEC No.:	(19/0.08TA*2K+AS 90%+PP-TAPE)+(19/0.1TA+250D NYLON)*2C+AS 90%+FEP TAPE USB 2.0						
Customer		Customer NO.		8 Code		Sample NO:	Y161015004
UL File NO.	E101344	UL Style:	UL 20276	Date:	10/26/16	Spec NO:	
CSA File NO.	0	CSA Style:	0	Edition.:	Original edition	Operation NO:	0

Electric Characters

- 1.Voltage rating:30V
- 2.Temperature rating :80 °C
- 3.Spark test: AC 500V / 0.15 sec MIN
- 4.Dielectric strength : AC 750V/1sec MIN
- 5.Insulation resistance: PE: DC-500V 100MΩ/KM MIN. at 20°C
- 6.Conductor resistance: 28AWG-244Ω/KM MAX. at 25°C
26AWG-153Ω/KM MAX. at 25°C

Transmission Characters :

- 1.Conductor resistance unbalance: 5%
- 2.Attenuation :

Frequency(MHz)	0.512	0.772	1.00	4.00	8.00	12.0	24.0	48.0	96.0	200.0	400.0
Attenuation(MAX)dB/cable	0.130	0.150	0.20	0.390	0.570	0.760	0.950	1.350	1.90	3.20	5.80

- 3.Impedance : 30Ω±30% @ TDR (Common mode)
90Ω±15% @ TDR (differential)
- 4.Propagation Delay : 5.2ns/M MAX
- 5.Propagation Delay skew : 100PS MAX

Physical Characters

- 1.Flame test of cable :
 - 1.1: VW-1
- 2.Tensile strength test (before aging):
 - 2.1 Sheath : > 1.05kg/mm²
 - 2.2 Insulation: > 1.05kg/mm² (PE)
- 3.Tensile strength test (after aging):
 - 3.1 Sheath : > 70%
 - 3.2 Insulation : > 70% (PE)
- 4.Elongation (before aging) :
 - 4.1 Sheath : > 100%
 - 4.2 Insulation : > 100% (PE)
5. Elongation(after aging):
 - 5.1 Sheath : > 65%
 - 5.2 Insulation : > 65% (PE)
- 6.Requirements for green environment protection :Accord with RoHS



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