

Electrical

Voltage: 30 V

Temperature: 80 °C

Flammability: VW-1

Transmission USB3.2 Gen1x1 and USB3.2 Gen2x1 @

Speed rating: 10Gbps @ 20V, 5A max

Type-C to Type-C ratings @ 2m long wire:

Differential to common mode conversion: <-17dB @0.1~10GHz

Differential impedance: $90 \pm 5\Omega$

Intra-pair skew: ≤ 10 ps/m

Attenuation @ 2.0M	
GHz	dB
0.1	-2
2.5	-4
5.0	-7

1 PR: Green & White:

Impedance: $90 \pm 15\Omega$

Propagation delay: 20 ns max.

Intra-pair skew: 100 ps/m

Attenuation 1PR: Green & White	
MHz	dB
50	-1.52
100	-2.03
200	-2.91
400	-4.35

Tests

Dielectric test: 750 Vac/s for 1 minute without breakdown.

Spark test: 0.5kV (500 Vac)

Tensile strength

Jacket: 1.05 kgf/mm²

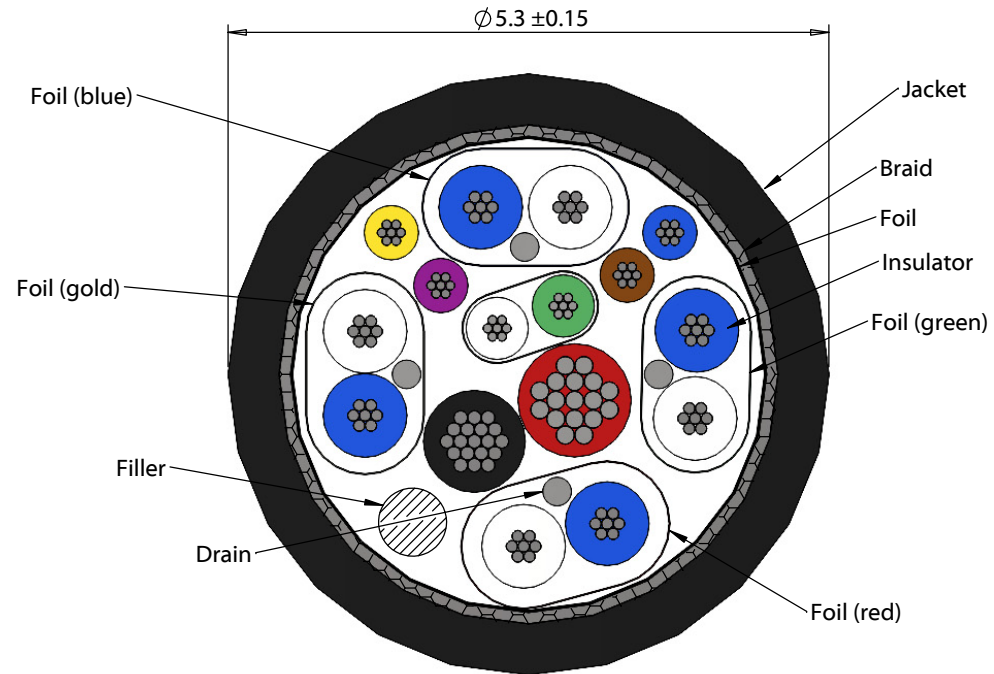
Insulation (PP): 2.1 kgf/mm²

After aging at 113 ± 2 °C for 7 days:

Minimum jacket tensile strength 75 % original

Minimum insulation tensile strength 70% original (PP)

Minimum elongation 70 % original



Revision:	Date:	Description:	Prepared:	Notes:	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com		
A	06/18/2024	Initial release	Verified:	RoHS compliant Function test: no open, no short circuit, no intermittent			
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Wire, 16C TS, 5PR + 6C, 32 to 22 AWG, UL21104, 30 V, 80C, 5.30 mm, shielded, VW-1, TPE, USB 3.2	Size: A	Part number: 30-03508	Sheet 1 of 2
					Scale: 15:1		

Contraction Item			Contraction Item A	Contraction Item B	Contraction Item C	Contraction Item D	Contraction Item E			
Conductor	Gauge		30 AWG	32 AWG	32 AWG	24 AWG	22 AWG			
	Material		Tinned copper	Tinned copper	Tinned copper	Tinned copper	Tinned copper			
	Strand size		7/0.1	7/0.08	7/0.08	19/0.12	17/0.16			
	Resistance at 20 °C		376 Ω/km max	588 Ω/km max	588 Ω/km max	86 Ω/km max	55 Ω/km max			
Insulator	Material		LLD-PE	PP	PP	PP	PP			
	Diameter		0.74±0.05 mm	0.42±0.05 mm	0.45±0.05 mm	0.85±0.05 mm	1.1±0.05 mm			
	Average thickness		0.22 mm	0.1 mm	0.12 mm	0.12 mm	0.17 mm			
	Color		See color code	See color code	See color code	See color code	See color code			
	Resistance at 20 °C		10 MΩ/km min	10 MΩ/km min	10 MΩ/km min	10 MΩ/km min	10 MΩ/km min			
Twist pair	Direction		Left (Z)	Left (Z)	-	-	-			
	Diameter		1.48 mm	1.10 mm	-	-	-			
Drain wire	Gauge		30 AWG (1/0.254)	-	-	-	-			
	Material		Tinned copper	-	-	-	-			
Inside-Tape Wrap (1)	Material		Aluminum mylar	-	-	-	-			
	Conductive Side		facing inside	-	-	-	-			
	Overlap		25% min	-	-	-	-			
Inside-Tape Wrap (2)	Material		Hot-Mylar	Mylar	-	-	-			
	Overlap		25% min	25% min	-					
Layer	Direction		Left (Z)							
	Filler		Nylon							
Outside-Tape Wrap	Material		Aluminum mylar foil				A		Color Code	
	Conductive Side		Facing Outside						White & Blue (al-mylar foil red)	
	Overlap		25% min						White & Blue (al-mylar foil green)	
Outside-Shield	Type		Braid				B		White & Blue (al-mylar foil blue)	
	Material		Tinned copper						White & Blue (al-mylar foil gold)	
	Coverage		75% min						White & Green	
Outside-Jacket	Material		TPE				C		Yellow	
	Diameter		5.3±0.15 mm						Purple	
	Average thickness		0.5 mm						Brown	
	Color		Black						Blue	
Wire Marking	Color		White				D		Black	
	Marking		E339579 UL AWM STYLE 21104 80°C 30V VW-1 USB 3.2 CABLE TENSILITY				E		Red	
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		5	4	3		2		1		