

Electrical
Voltage: 30 V
Temperature: 80 °C
Flammability: VW-1

Transmission USB3.2 Gen1x1 and USB3.2 Gen2x1 @
Speed rating: 10Gbps @ 20V, 5A max

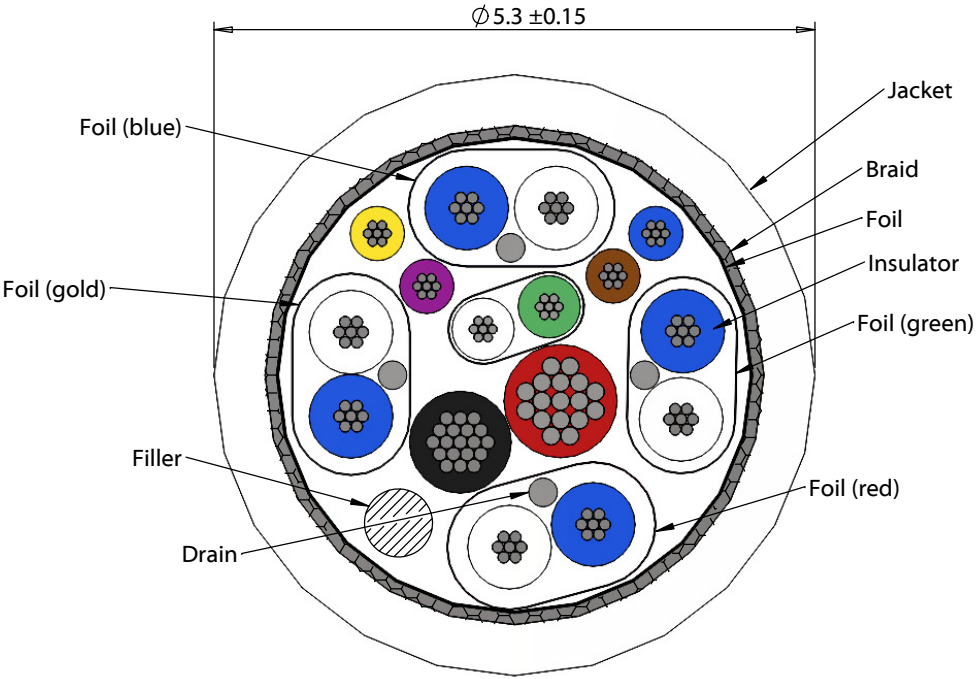
Type-C to Type-C ratings @ 2m long wire:
Differential to common mode conversion: <-17dB @0.1~10GHz
Differential impedance: 90 ± 5Ω
Intra-pair skew: <= 10 ps/m

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

1 PR: Green & White:
Impedance: 90 ± 15Ω
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:
A	06/18/2024	Initial release

Prepared:
Verified:
Dimensions are in millimeters.
Tolerances:
X: ± 0.5 mm
X.X: ± 0.3 mm
X.XX: ± 0.05 mm

Notes:
RoHS compliant
Function test: no open, no short circuit, no intermittent
Description:
Wire, 16C TS, 5PR + 6C, 32 to 22 AWG, UL21104, 30 V, 80C, 5.30 mm, shielded, VW-1, TPE, USB 3.2, white

TENSILITY	
tel 1.541.323.3228	800 877.670.7118
fax 1.541.323.4202	web tensility.com
Size:	Part number:
A	30-03509
Scale:	15:1

Contruction Item			Contruction Item A	Contruction Item B	Contruction Item C	Contruction Item D	Contruction 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				Color Code		
	Conductive Side		Facing Outside				A	White & Blue (al-mylar foil red)	
	Overlap		25% min					White & Blue (al-mylar foil green)	
Outside-Shield	Type		Braid					White & Blue (al-mylar foil blue)	
	Material		Tinned copper				White & Blue (al-mylar foil gold)		
	Coverage		75% min				B	White & Green	
Outside-Jacket	Material		TPE				C	Yellow	
	Diameter		5.3±0.15 mm					Purple	
	Average thickness		0.5 mm					Brown	
	Color		White					Blue	
Wire Marking	Color		Black				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			2	1		
						3			
						1			
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