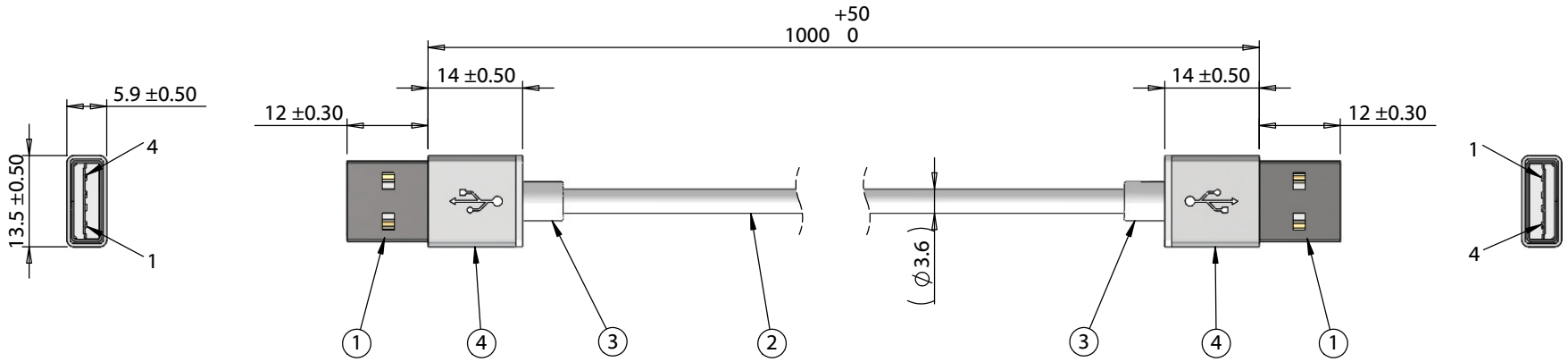
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	COMPONENT NOTES
1	50-00575	Connector, USB A 2.0 plug, molding style, 180°, nickel plated shell, white insulator	2	
2	30-00099	Wire, 4C, 1PR + 2C, 28 AWG, UL2725, 30V, 80C, 3.6mm, shielded, VW-1, PVC, 79A, USB 2.0, white	1	
3	24-00210	Overmold, plug, USB A, slim design for aluminum shell	2	PVC, white
4	55-00106	USB A plug aluminum shell, 13x13.5x5.9 mm, silver	2	



Wiring diagram		
50-00575	Wire Color	50-00575
1	Red	1
2	White	2
3	Green	3
4	Black	4
Shell	Drain & Shield	Shell

Notes:
Functionally equivalent components may be substituted

Revision:	Date:	Description:
A	1/16/2018	Initial release

Prepared: RS Digitally signed by RS Date: 2018.11.01 14:19:24 -07'00'

Verified: PS Digitally signed by PS Date: 2018.11.02 09:25:57 -07'00'

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:

Cable, 1000 mm, 50-00575 USB A plug to same, 28 AWG, 30-00099 wire, white

TENSILITY
tel 1.541.323.3228 800 877.670.7118
fax 1.541.323.4202 web tensility.com

Size: A

Part number: 10-02344

Scale: 1:1

Sheet 1 of 1

5 4 3 2 1

To see a custom version of this cable assembly, call Tensility at 541-323-3228 or email engineering@tensility.com

Downloaded from Arrow.com.

Ratings
Voltage: 30 V
Temperature: -10° to 80° C
Flammability: VW-1, FT1

Conductor
Conductor count: 4 (1 twisted pair, 2 single conductors)
Gauge: 28 AWG, 0.089 mm²
Material: tinned copper strands
Strand size: ∅0.13 x 7
Max Resistance at 20° C: 239 Ω/km

Insulator
Material: HD-PE (1P), SR-PVC/35P (2C)
Color: white,green (1P), black, red (2C)
Diameter: ∅0.85 ±0.15 mm
Nominal thickness: 0.22 mm (1P), 0.24 mm (2C)
Resistance at 20° C: 100 MΩ/km (1P), 10 MΩ/km (2C)

Shield
Type: foil + braided
Material: aluminum mylar, tinned copper strands
Stranding: 16/5/ ∅0.10 mm
Coverage: 100% (foil), 65% minimum (braid)

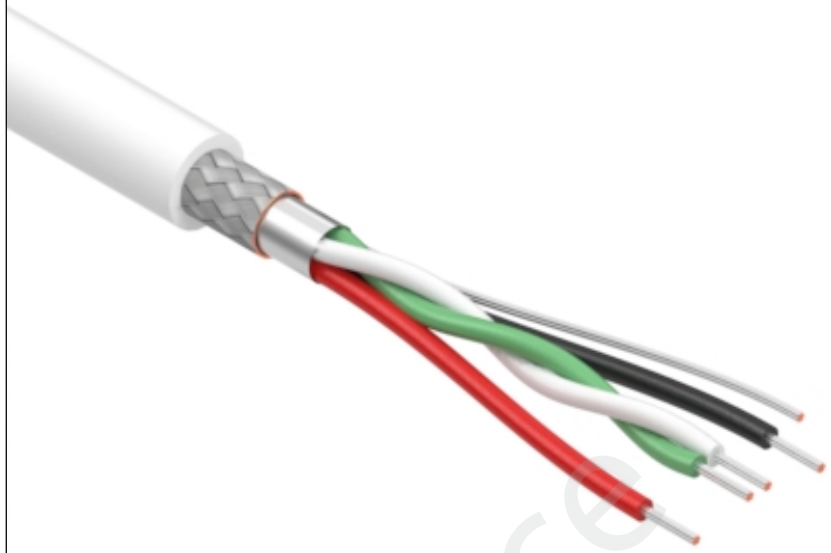
Drain
Material: tinned copper strands
Stranding: ∅0.13 x 7

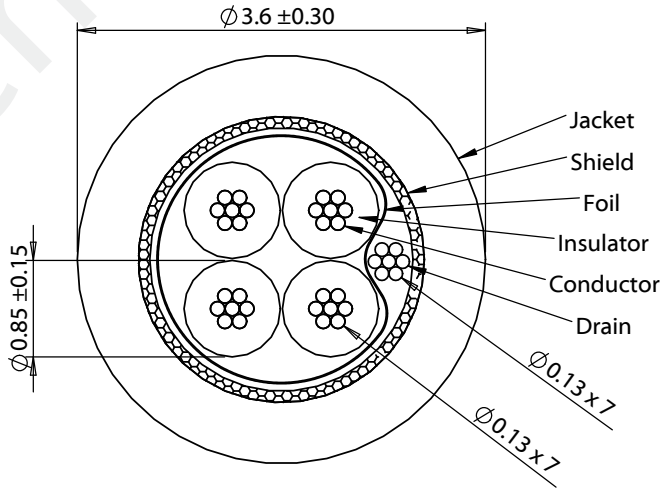
Outer jacket
Material: PVC/79A
Color: white
Diameter: ∅3.6 ±0.30 mm
Nominal thickness: 0.65 mm

Wire marking: E339579 UL AWM STYLE 2725
28AWG/1P+28AWG/2C 80°C 30V VW-1 - - - cUL AWM
28AWG/1P+28AWG/2C I/II A 80°C 300V FT1 HIGH SPEED
USB 2.0 TENSILITY

Tests
Jacket tensile strength: 1.05 kgf/mm²
HD-PE Insulator tensile strength: 1.69 kgf/mm²
SR-PVC Insulator tensile strength: 2.11 kgf/mm²
After aging at 113 ±2 °C for 7 days:
- Minimum jacket tensile strength 70 % original
- Minimum jacket elongation 65 % original
- Minimum HD-PE insulator tensile strength 75 % original
- Minimum HD-PE insulator elongation 75 % original
- Minimum SR-PVC insulator tensile strength 70 % original
- Minimum SR-PVC insulator elongation 70 % original

Heat shock: 121 ±1 °C /1 hour, no observed degradation
Deformation: 121 ±1 °C /1 hour, ≤ 50 %
Cold bend: -10 ±2 °C /4 hour, no observed cracking
Dielectric test: 1500 Vac for 1 minute without breakdown





Reference

Revision:	Date:	Description:
A	9/21/2011	Initial release
A1	8/19/2013	updated wire marking
A2	1/29/2014	corrected shield type
A3	10/21/2015	updated format and tolerances
A4	12/22/2016	updates format and wire specs

Prepared: AW
Digitally signed by AW
Date: 2018.02.05 09:56:41 -08'00'

Verified: GL
Digitally signed by GL
Date: 2018.02.05 10:57:32 -08'00'

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

Notes:
RoHS and REACH compliant

Function test: no open, no short circuit, no intermittent

Description:
Wire, 4C, 1PR + 2C, 28 AWG, UL2725, 30V, 80C, 3.6mm, shielded, VW-1, PVC, 79A, USB 2.0, white

TENSILITY
tel 1.541.323.3228 800 877.670.7118
fax 1.541.323.4202 web tensility.com

Size: A
Part number: 30-00099
Scale: 15:1
Sheet 1 of 1

5 4 3 2 1

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