

## Part Information:



**Part Number:** 159-2801-020

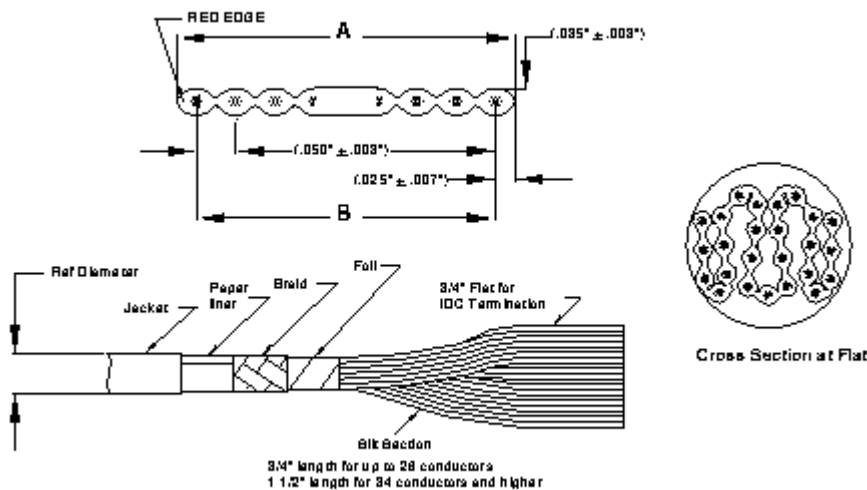
**Description:** Round and flat, aluminum and braid shield, .050 pitch, 28 awg, 20 conductors

**Family:** Round and Flat

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## Outline Drawing



## Introduction

Round 'n' Flat cable combines the handling and shielding features of round cable and the mass termination capabilities of flat cable into a single construction. This product is designed for routing in tight spaces where a round shape is more practical and where a foil braid shield is necessary to help meet FCC requirements for EMI/RFI suppression.

The inner cable is extruded Spectra-Zip with alternating sections that are flat and slit. Each flat section is 3/4" in length with conductors on controlled spacing of  $.050" \pm .003"$  making it ideally suited for IDC mass termination methods. The alternating flat and slit sections also offer an advantage over standard round cable for hand termination. The flat sections keep the conductors aligned for conductor positioning while the slit zip feature provides easy breakout of individual conductors

One edge of the flat cable is marked for conductor referencing. Two layers of shielding, aluminum- polyester foil and tinned copper braid are used to protect signals from EMI interference.

## Benefits

- Round cable that mass terminates
- High flexibility
- Helps meet FCC requirements
- UL, CL2
- CSA Certified

## Specifications

Physical	
<b>Conductors</b>	28 AWG, 7/36 Tinned Copper
<b>Color code</b>	Gray with Red Edge
<b>Insulation</b>	PVC, .010" WALL Thickness: .035" ± .003"
<b>Pitch</b>	.050" ± .00"
<b>Shielding</b>	Aluminum/Polyester Foil, with Minimum 85% Coverage Tinned Copper Braid
<b>Jacket</b>	Black PVC, .030" nom Wall
<b>Liner</b>	Paper Liner Between Jacket and Braid
<b>Temperature Rating</b>	-20°C to +105°C (-4°F to 221°F)
<b>UL style</b>	Inner Cable: 2651
<b>Composite</b>	UL Listed Power Limited Circuit Cable CL2 CSA AWM I/II A 105uC 300V, FT-1

Electrical	
<b>Voltage</b>	300 volts
<b>*Impedance</b>	75 ohms
<b>*Capacitance</b>	24 pf/ft at 1 MHz (78.7 pf/m)
<b>*Inductance</b>	15 µH/ft at 1 MHz (.49 µH/m)
<b>Propagation Delay</b>	1.60 ns/ft (5.25 ns/m)
<p><i>* Above values measure in the ground-signal-ground mode with the shield also grounded.</i></p> <p><i>* Above values measure in the ground-signal-ground mode with the shield also grounded.</i></p> <p>Reference diameters for - 1XX and - 2XX are .030" to .040" smaller than above. Standard put-up is 100 feet on cardboard reels. Consult factory for larger put-ups.</p>	

## Ordering Information

	Width 'A'	Span 'B'	

<b>Part Number</b>	<b>No. Cond.</b>	<b>Inches</b>	<b>(mm)</b>	<b>Inches</b>	<b>(mm)</b>	<b>Ref. Dia. Inches</b>
843-159-2801-009	9	.450	(11,43)	.400+.007	(10,16+0,18)	.270
843-159-2801-010	10	.500	(12,70)	.450+.007	(11,43+0,18)	.270
843-159-2801-015	15	.750	(19,05)	.700+.011	(17,78+0,28)	.300
843-159-2801-016	16	.800	(20,32)	.750+.011	(19,05+0,28)	.310
843-159-2801-020	20	1.000	(25,40)	.950+.011	(24,13+0,28)	.330
843-159-2801-024	24	1.200	(30,48)	1.150+.011	(29,21+0,28)	.350
843-159-2801-025	25	1.250	(31,75)	1.200+.011	(30,48+0,28)	.360
843-159-2801-026	26	1.300	(33,02)	1.250+.011	(31,75+0,28)	.360
843-159-2801-034	34	1.700	(43,18)	1.650+.011	(41,91+0,28)	.400
843-159-2801-036	36	1.800	(45,72)	1.750+.015	(44,45+0,38)	.410
843-159-2801-037	37	1.850	(47,00)	1.800+.015	(45,72+0,38)	.410
843-159-2801-	40	2.000	(50,80)	1.950+.015	(49,53+0,38)	.430

040						
843-159-2801-050	50	2.500	(63,50)	2.450+.015	(62,23+0,38)	.480
843-159-2801-060	60	3.000	(76,20)	2.950+.015	(74,93+0,38)	.520
843-159-2801-064	64	3.200	(81,28)	3.150+.015	(80,01+0,38)	.530
Shielding Variations: -OXX Foil/Braid, -1XX Foil only, -2XX No Shield, Jacket only						