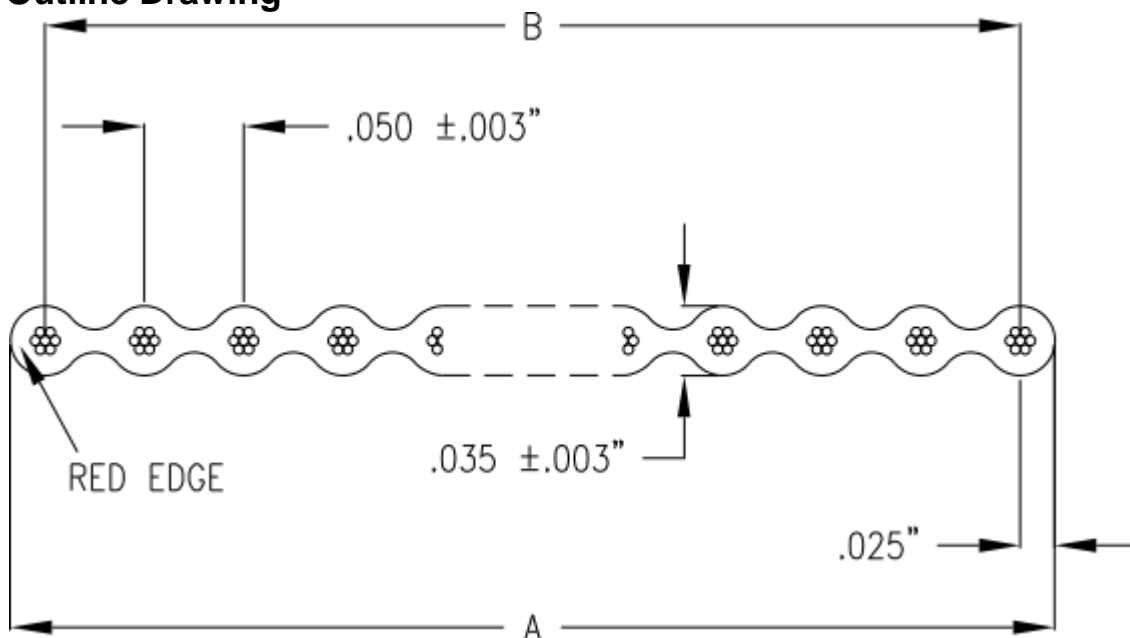


**Part Number:** 193-2829-0XX

**Description:** .050" centerline, 28 awg Low Smoke / Halogen Free Flame Retardant Zip Cable

**Family:** Zero Halogen

## Outline Drawing



## Introduction

Spectra-Strip's Low Smoke / Halogen Free Zip cable is extruded with flame retardant non-halogenated materials ideal for use in closed environments where ventilation is poor, such as subways, elevators, and ships. It is designed to reduce the generation of toxic and corrosive gases that are emitted from typical PVC insulated cables during combustion. These gases can injure personnel enclosed within these confined spaces and can also corrode delicate components within electronic equipment. Many well-documented cases exist of extensive injury and death occurring as a result of fires involving these PVC generated toxic gasses, e.g., the London Subway fire, the Beverly Hills Supperclub fire, the Dusseldorf Airport fire, and the HMS Sheffield sinking. [\(Click here for good background reading\)](#)

## Features/Benefits

- 9 through 64 conductors, precision extruded on .050" centerlines
- Compatible with IDC connectors
- Reduced generation of toxic gases during combustion
- Highly flame retardant (limiting oxygen index 39%)

## Specifications

Physical	
Conductors	28 AWG 7/36 strand tinned copper
Color	White
Insulation	.010" Non Halogenated FR Polyolefin
Cable Thickness:	.035" ± .003"
Conductor spacing:	.050" ± .003"
Temperature Rating	-25° C to 90° C

Electrical	
Impedance	100 ohms nom single ended
Capacitance	13pF / ft @ 1 MHz, single ended
Propagation Delay	1.45 ns / ft nom
Voltage Rating	300 V
Current Rating	1.3 A

## Toxicity and Corrosivity Results

Property	Standard	Requirement	Results
Flame and Fire Propagation	IEC 332-1	Pass	Pass
Smoke Density	ASTM E 662	DS < 250 flaming and non flaming modes	Flaming 0.62/0.75, non-flaming 0.24/16.2
	IEC 1034-1 and ⬥2	Pass	Pass
Toxicity of Fire Gasses	AIS 1000.001	HF < 100	HF <100
		HCl < 150	HCl <150
		HCN <150	HCN<150
		S02 +H2 S <100	S02 +H2 S <100
		CO <3500	CO <3500
		NO + N02 <100	NO + N02 <100

Corrosivity of Fire Gasses	IEC 754-2	PH >4, conductivity <100uS / cm	PH 4.5, conductivity none
UV Resistance	IEC 68-2-5	No discoloration or stickness	NA
Radiation Resistance	IEC 544-2-5	Index >5.7	NA
Acid Gas Generation	MIL-C- 24643		0.47%
Smoke Index	NES-711		5.3
Toxicity Index	NES-713		1.4
Limiting Oxygen Index	ASTM D 2863		39

### Notes On Standards:

1. ASTM E662: STANDARD TEST METHOD FOR SPECIFIC OPTICAL DENSITY OF SMOKE
2. ATS 1000.001: AIRBUS INDUSTRY TECHNICAL SPECIFICATION, FIRE TEST SPECIFICATION
3. IEC 68-2-5 SIMULATED SOLAR RADIATION AT GROUND LEVEL
4. IEC 332-1: TESTS ON ELECTRIC CABLES UNDER FIRE CONDITIONS
5. IEC 754-2: TEST ON GASES EVOLVED DURING COMBUSTION OF ELECTRIC CABLES
6. IEC 544-2-4: GUIDE FOR DETERMINING THE EFFECTS OF IONIZING RADIATION ON INSULATING MATERIALS.
7. IEC 1034-1-2: TEST FOR THE MEASUREMENT OF SMOKE DENSITY OF ELECTRIC CABLES BURNING UNDER DEFINED CONDITIONS

### Ordering Information

		Width 'A'		Span 'B'	
Part Number	No. Cond.	Inches	(mm)	Inches	(mm)
193-2829-009	9	.450	(11,43)	.400 $\diamond$ .007	(10,16 $\diamond$ 0,18)
193-2829-010	10	.500	(12,73)	.450 $\diamond$ .007	(11,43 $\diamond$ 0,18)
193-2829-014	14	.700	(17,78)	.650 $\diamond$ .007	(16,51 $\diamond$ 0,18)
193-2829-015	15	.750	(19,05)	.700 $\diamond$ .007	(17,78 $\diamond$ 0,18)
193-2829-016	16	.800	(20,32)	.750 $\diamond$ .011	(19,05 $\diamond$ 0,28)
193-2829-020	20	1.000	(25,40)	.950 $\diamond$ .011	(24,13 $\diamond$ 0,28)
193-2829-024	24	1.200	(30,48)	1.150 $\diamond$ .011	(29,21 $\diamond$ 0,28)
193-2829-025	25	1.250	(31,75)	1.200 $\diamond$ .011	(30,48 $\diamond$ 0,28)
193-2829-026	26	1.300	(33,02)	1.250 $\diamond$ .011	(31,75 $\diamond$ 0,28)
193-2829-034	34	1.700	(43,18)	1.650 $\diamond$ .011	(41,91 $\diamond$ 0,28)
193-2829-036	36	1.800	(45,72)	1.750 $\diamond$ .015	(44,45 $\diamond$ 0,38)

193-2829-037	37	1.850	(47,00)	1.800 ♦ .015	(45,72 ♦ 0,38)
193-2829-040	40	2.000	(50,80)	1.950 ♦ .015	(49,53 ♦ 0,38)
193-2829-050	50	2.500	(63,50)	2.450 ♦ .015	(62,23 ♦ 0,38)
193-2829-060	60	3.000	(76,20)	2.950 ♦ .015	(74,93 ♦ 0,38)
193-2829-064	64	3.200	(81,28)	3.150 ♦ .015	(80,01 ♦ 0,38)

\*\* XX =s number of conductors