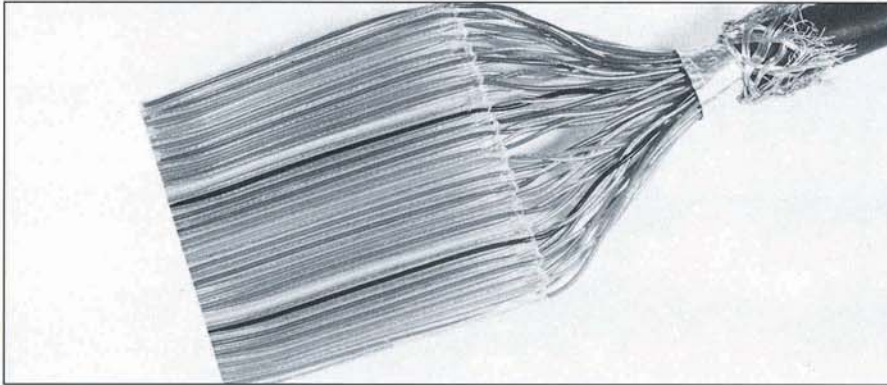


# Halogen-Free Loose Pair Round Twist 'N' Flat® cable 168-2829 series



## description

Halogen-free, Loose Pair Round Twist 'N' Flat Cable combines the electrical characteristics of loose conductor, twisted pair cable with the time and cost savings of mass-terminated cable...with the added bonus of halogen-free materials ideal for use in closed environments. It is designed to reduce the generation of toxic and corrosive gases during combustion. It consists of an inner cable of insulated stranded round conductors, twisted into loose pairs. Every 20", the conductors are laminated into parallel .050" center 2.5" sections for mass-termination. It is covered with a foil shield, a tinned-copper braid, and a halogen-free jacket.

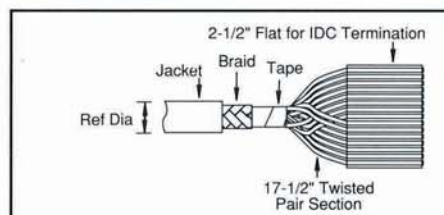
## benefits

- Highly flame retardant
- Reduced generation of smoke or toxic/corrosive gases during combustion
- Help meet FCC requirements for EMI/RFI suppression
- Custom capabilities: laminated sections can be fabricated at custom intervals, from 6" minimum twist length, to maximum determined by put-up, up to ten different twist lengths in same cable and repeat

## order information

PART #	# PAIRS	WIDTH A " (mm)	SPAN B " (mm)	REF. DIA. " X=0 (X=1,2)
168-2829-X10	5	.526 (13,36)	.450 (11,43)	.250 (.220)
168-2829-X14	7	.726 (18,44)	.650 (16,51)	.260 (.230)
168-2829-X16	8	.826 (20,98)	.750 (19,05)	.280 (.250)
168-2829-X20	10	1.026 (26,06)	.950 (24,13)	.290 (.260)
168-2829-X26	13	1.326 (33,68)	1.250 (31,75)	.310 (.280)
168-2829-X34	17	1.726 (43,84)	1.650 (41,91)	.360 (.330)
168-2829-X40	20	2.026 (51,46)	1.950 (49,53)	.390 (.360)
168-2829-X50	25	2.526 (64,16)	2.450 (62,23)	.430 (.400)
168-2829-X60	30	3.026 (76,86)	2.950 (74,93)	.470 (.440)
168-2829-X64	32	3.226 (81,94)	3.150 (80,01)	.480 (.450)

Consult factory for  
168-2832-XXX  
-65°C to +150°C version



## characteristics

### physical

**Conductors:** 28 AWG, 7/36 strand, tinned copper  
**Insulation:** .010" wall extruded, Halogen-Free, FR, Polyolefin  
**Color code:** tan common, brown, red, orange, yellow, green, blue, violet, gray, white, black, (repeat)  
**Flat pitch:** .050" centers,  $\pm .005$ "  
**Flat laminate:** halogen-free polyolefin, white, .005"  
**Foil Shield:** Aluminum/polyester  
**Braid:** tinned-copper, with minimum 90% coverage  
**Jacket:** Halogen-free polyolefin, .030" wall  
**Overall cable length:** 8-24":  $\pm .500$ ", 24"-25":  $\pm 1.0$ ", 25'+:  $\pm 2.0$ "  
**Limiting oxygen index:** ASTM-D-2863 39%

### electrical

#### (fully shielded version)

**Voltage:** 300 V  
**Current rating:** 1 amp nominal @ 10°C above ambient  
**Temperature rating:** -25°C to +90°C (-13°F to 194°F)  
**Jacket:** -20°C to +90°C  
**Impedance:** 75 ohms nominal  
**Capacitance:** 24.0 pf/ft. (78,7 pf/m) nominal @ 1.0 MHz  
**Propagation delay:** 1.6 ns/ft. (5,3 ns/m) nominal  
**Insulation resistance:** 10<sup>10</sup> ohms - 10 ft. (3 m) min.  
**Unbalanced crosstalk:** 10' sample, 5 ns rise time with 2 lines driven, near end = 2.3% far end = 1.3% nominal  
**Mode:** ground-signal, with shield grounded  
**UL:** pending

