

InterFlex LVDS High-Flex Cable

CONSTRUCTION - Twisted Pairs

28awg (19/40) Tinned Copper
Polypropylene
0.029" +/- 0.002" OD

CONSTRUCTION - Overall Cabling

Number of pairs (Per table 1)
Color Code (Per table 2)
Filler: optional
Foam Polypropylene Tape (50% overlap)
Aluminum (out)/Polyester Tape (25% overlap)

CONSTRUCTION - Reverse Spiral Shield

36awg Tinned Copper
80% minimum coverage

CONSTRUCTION - Cable Jacket

Thermo Plastic Elastomer
Color: Black (standard)
Wall thickness (Per table 1)

FINISHED PRODUCT REQUIREMENT

Intercon 1 design standards
Operating Temperature Range: -24°C to +80°C

ELECTRICAL CHARACTERISTICS

Insulation Resistance: 100 Mohms - 1K ft
(30.5 Mohms-Km) minimum
Velocity of Propagation: 67% nominal
Propagation Delay: 1.52 ns/Ft (4.99 ns. M)

BALANCED -

Characteristic Impedance: 100 Ohms
Capacitance: 15.3 pF/Ft (50.2 pF/M)
Inductance: .15 µH/Ft (.49 µH/M)
Attenuation: 8 dB/100 Ft (26.2 dB/100M)@50 MHz

UNBALANCED -

Characteristic Impedance: 63 Ohms
Capacitance: 24.2 pF/Ft (79.4 pF/M)
Inductance: .10 µH/Ft (.33 µH/M)
Attenuation: 15 dB/100Ft (49.2 dB/100M)@50 MHz

DIFFERENTIAL IMPEDANCE / ATTENUATION - TWP

Conductor Diameter (in.)	0.0160
Strand Factor	0.9700
Insulation Diameter (in.)	0.0290
Velocity of Propagation (%)	0.675
Zdiff = \ln^{***} X 120 X Vg	97.2989 Ohms
Zse - Zdiff / 1.55	62.7735 Ohms
Cmut = $1016.7 / Z_{diff} * Vg$	15.4804 pF/Ft
Cse = $1016.7 / (Z_{se} * Vg)$	23.9946 pF/Ft
Dissipation Factor	0.00045
Conductor Resistivity	11133
Shield Resistivity	17008
Braid Factor	1
ATTENUATION	
50MHz	8.37 dB/100 Ft
100MHz	11.97 dB/100Ft
350MHz	23.2 dB/100Ft

Product Number: **89802-**P**

Table 1

Intercon 1 Part Number	Rev	No. of Pairs	Jacket Wall		Jacket Diameter	
			Inches	Millimeters	Inches	Millimeters
89802-02P	G	2	.025	.635	.187 +/- .010	4.750 +/- .254
89802-04P	G	4	.025	.635	.207 +/- .010	5.3258 +/- .254
89802-05P	G	5	.025	.635	.229 +/- .010	5.817 +/- .254
89802-06P	G	6	.025	.635	.242 +/- .010	6.147 +/- .254
89802-07P	G	7	.025	.635	.254 +/- .010	6.452 +/- .254
89802-15P	G	15	.025	.635	.321 +/- .010	8.153 +/- .254
89802-18P	G	18	.025	.635	.337 +/- .010	8.560 +/- .254
89802-25P	G	25	.025	.635	.377 +/- .012	9.576 +/- .305
89802-37P	G	37	.025	.635	.419 +/- .012	10.643 +/- .305
89802-50P	G	50	.025	.635	.490 +/- .020	12.446 +/- .508

Note: **Bold (Dark Green)** print indicates standard stock item.

Product Number: 89802-P**

Table 2

#	Color Code (Pair)	#	Color Code (Pair)
1	White & Black	26	Red & Yellow
2	White & Brown	27	Red & Green
3	White & Red	28	Red & Blue
4	White & Orange	29	Red & Violet
5	White & Yellow	30	Red & Gray
6	White & Green	31	Orange & Yellow
7	White & Blue	32	Orange & Green
8	White & Violet	33	Orange & blue
9	White & Gray	34	Orange & Violet
10	Black & Brown	35	Orange & Gray
11	Black & Red	36	Yellow & Green
12	Black & Orange	37	Yellow & Blue
13	Black & Yellow	38	Yellow & Violet
14	Black & Green	39	Yellow & Gray
15	Black & Blue	40	Green & Blue
16	Black & Violet	41	Green & Violet
17	Black & Gray	42	Green & Gray
18	Brown & Red	43	Blue & Violet
19	Brown & Orange	44	Blue & Gray
20	Brown & Yellow	45	Violet & Gray
21	Brown & Green	46	White/Black & Black
22	Brown & Blue	47	White/Black & Brown
23	Brown & Violet	48	White/Black & Red
24	Brown & Gray	49	White/Black & Orange
25	Red & Orange	50	White/Black & Yellow