

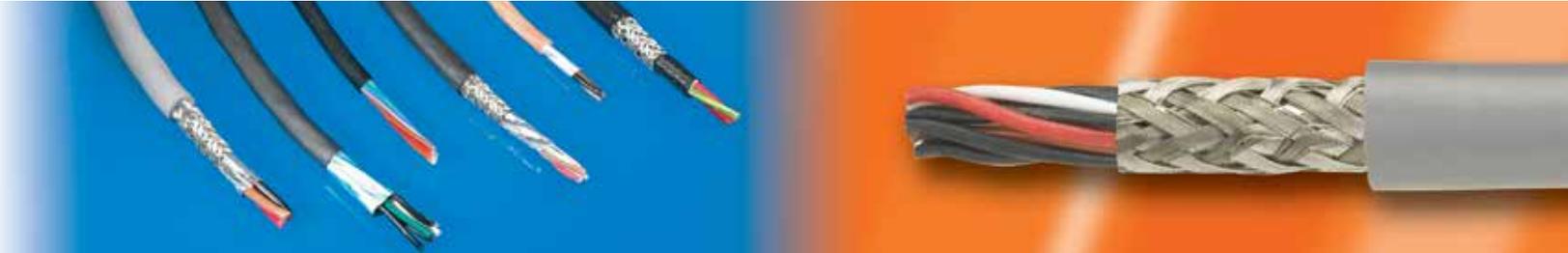
Xtra-Guard®
Performance Cable

Wire & Cable
Solution

we make the difference

Tel. +41 (0) 43 433 56 01 / info@wacs.ch

[authorized distributor](#)



AlphaWire

Cables you trust. Service you deserve.

Xtra-Guard® 3

Direct Burial Polyethylene



Features

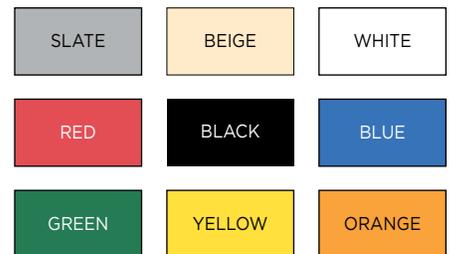
- The preferred outdoor cable for direct burial
- Resistant to the effects of weathering, moisture, and UV aging without the costly use of conduit
- 6x the water resistance of PVC
- Specially formulated polyethylene jacket for outstanding service life and ultraviolet light stability in all jacket colors
- Fast, easy stripping of insulation and jacket
- Color-coded, tinned copper conductors
- 300 V and 600 V
- Unshielded, foil shielded, or Supra-Shield® Foil + Braid
- Temperature ratings to 80°C
- Outstanding ultraviolet light stability in all jacket colors

Applications

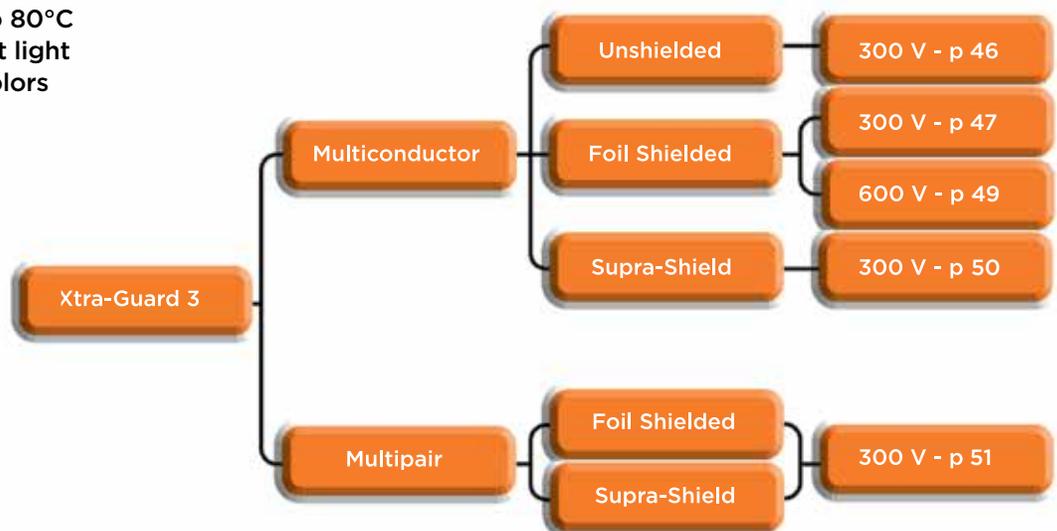
- Interbuilding communications
- Satellite communications equipment
- Land irrigation systems
- Outdoor security systems
- Outdoor scoreboards and displays
- Pipeline sensor controls

FIT® Tubing Recommendations

- FIT-700: Bonding thermoplastic adhesive lined, cross-linked polyolefin

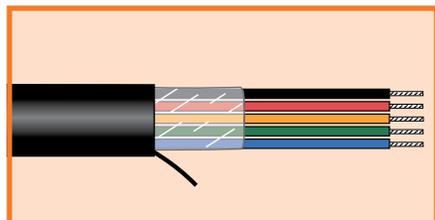


Xtra-Guard cables are available in a range of long-lasting colors for fast, easy identification, for safety reasons, and for matching the color of your system.



Xtra-Guard® 3

Direct Burial
300 V Unshielded, Multiconductor



Operating Temperature

- 30°C to +80°C

Conductor Color Coding

- 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D
- Jacket Colors: Nine available (black standard)

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyethylene jacket
- UV resistant
- Nylon ripcord

Availability

Made to order
1000 ft (305 m) minimum

FIT® Tubing Recommendations

- FIT-700: Bonding, thermoplastic adhesive lined, cross-linked polyolefin

22 AWG (0.35 mm ²)					
Stranding: 7/30 (7 x 0.25 mm)					
Insulation thickness: 0.010 (0.25 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35002	2	0.167	4.24	0.032	0.81
35003	3	0.175	4.45	0.032	0.81
35004	4	0.188	4.78	0.032	0.81
35006	6	0.218	5.54	0.032	0.81
35008	8	0.233	5.92	0.032	0.81
35010	10	0.267	6.78	0.032	0.81
35010/15	15	0.297	7.54	0.032	0.81

20 AWG (0.56 mm ²)					
Stranding: 7/28 (7 x 0.32 mm)					
Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35052	2	0.207	5.26	0.032	0.81
35053	3	0.218	5.54	0.032	0.81
35054	4	0.236	5.99	0.032	0.81
35056	6	0.278	7.06	0.032	0.81
35058	8	0.300	7.62	0.032	0.81
35060	10	0.347	8.81	0.032	0.81
35060/15	15	0.389	9.88	0.032	0.81

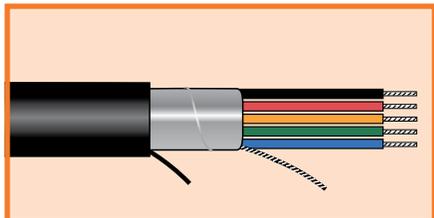
18 AWG (0.81 mm ²)					
Stranding: 16/30 (16 x 0.25 mm)					
Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35062	2	0.225	5.72	0.032	0.81
35063	3	0.237	6.02	0.032	0.81
35064	4	0.258	6.55	0.032	0.81
35066	6	0.305	7.75	0.032	0.81
35068	8	0.330	8.38	0.032	0.81
35070	10	0.383	9.73	0.032	0.81
35070/15	15	0.430	10.92	0.032	0.81

16 AWG (1.23 mm ²)					
Stranding: 19/0.0117 (19 x 0.29 mm)					
Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35072	2	0.249	6.32	0.032	0.81
35073	3	0.263	6.68	0.032	0.81
35074	4	0.287	7.29	0.032	0.81
35076	6	0.341	8.66	0.032	0.81
35078	8	0.370	9.40	0.032	0.81
35080	10	0.431	10.95	0.032	0.81
35080/15	15	0.485	12.32	0.032	0.81



Xtra-Guard® 3

Direct Burial
300 V Foil Shield, Multiconductor



Operating Temperature

- -30°C to +80°C

Conductor Color Coding

- 22 AWG: Chart E
- 20 AWG: Chart D
- Jacket Colors: Nine available (black standard)

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyethylene jacket
- UV resistant
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord

Availability

Made to order
1000 ft (305 m) minimum

FIT® Tubing Recommendations

- FIT-700: Bonding, thermoplastic adhesive lined, cross-linked polyolefin

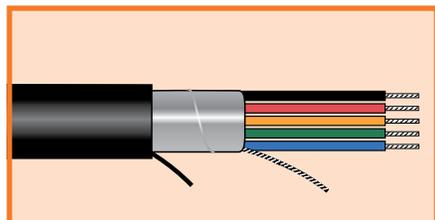
22 AWG (0.35 mm ²)					
Stranding: 7/30 (7 x 0.25 mm)					
Insulation thickness: 0.010 (0.25 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35192	2	0.171	4.34	0.032	0.81
35193	3	0.179	4.55	0.032	0.81
35194	4	0.192	4.88	0.032	0.81
35196	6	0.222	5.64	0.032	0.81
35198	8	0.237	6.02	0.032	0.81
35199/10	10	0.271	6.88	0.032	0.81
35199/15	15	0.301	7.65	0.032	0.81
35199/20	20	0.333	8.46	0.032	0.81
35199/25	25	0.371	9.42	0.032	0.81
35199/30	30	0.392	9.96	0.032	0.81
35199/40	40	0.436	11.07	0.032	0.81
35199/50	50	0.479	12.17	0.032	0.81
35199/60	60	0.521	13.23	0.032	0.81

20 AWG (0.56 mm ²)					
Stranding: 7/28 (7 x 0.32 mm)					
Insulation thickness: 0.016 (0.41 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35462	2	0.211	5.36	0.032	0.81
35463	3	0.222	5.64	0.032	0.81
35464	4	0.240	6.10	0.032	0.81
35466	6	0.282	7.16	0.032	0.81
35468	8	0.304	7.72	0.032	0.81
35470	10	0.351	8.92	0.032	0.81
35470/15	15	0.393	9.98	0.032	0.81
35470/20	20	0.437	11.10	0.032	0.81
35470/25	25	0.491	12.47	0.032	0.81



Xtra-Guard® 3

Direct Burial
300 V Foil Shield, Multiconductor



Operating Temperature

- 30°C to +80°C

Conductor Color Coding

- Chart D
- Jacket Colors: Nine available (black standard)

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyethylene jacket
- UV resistant
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord

Availability

Made to order
1000 ft (305 m) minimum

FIT® Tubing Recommendations

- FIT-700: Bonding, thermoplastic adhesive lined, cross-linked polyolefin

18 AWG (0.81 mm²)

Stranding: 16/30 (16 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35382	2	0.229	5.82	0.032	0.81
35383	3	0.241	6.12	0.032	0.81
35384	4	0.262	6.65	0.032	0.81
35386	6	0.309	7.85	0.032	0.81
35388	8	0.334	8.48	0.032	0.81
35390	10	0.387	9.83	0.032	0.81
35390/15	15	0.434	11.02	0.032	0.81
35390/20	20	0.485	12.32	0.032	0.81
35390/25	25	0.587	14.91	0.053	1.35

16 AWG (1.23 mm²)

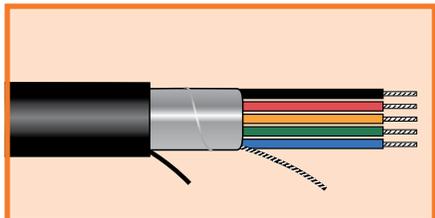
Stranding: 19/0.0117 (19 x 0.29 mm)
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35362	2	0.253	6.43	0.032	0.81
35363	3	0.267	6.78	0.032	0.81
35364	4	0.291	7.39	0.032	0.81
35366	6	0.345	8.76	0.032	0.81
35368	8	0.374	9.50	0.032	0.81
35370	10	0.435	11.05	0.032	0.81
35370/15	15	0.489	12.42	0.032	0.81
35370/20	20	0.589	14.96	0.053	1.35
35370/25	25	0.659	16.74	0.053	1.35



Xtra-Guard® 3

Direct Burial
600 V Foil Shield, Multiconductor



Operating Temperature

- -30°C to +80°C

Conductor Color Coding

- Chart D
- Jacket Colors: Nine available (black standard)

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyethylene jacket
- UV resistant
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord

Availability

Made to order
1000 ft (305 m) minimum

FIT® Tubing Recommendations

- FIT-700: Bonding, thermoplastic adhesive lined, cross-linked polyolefin

18 AWG (0.81 mm²)					
Stranding: 16/30 (16 x 0.25 mm) Insulation thickness: 0.032 (0.81 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35430/2	2	0.355	9.02	0.063	1.60
35430/3	3	0.372	9.45	0.063	1.60
35430/5	5	0.434	11.02	0.063	1.60
35430/7	7	0.468	11.89	0.063	1.60
35430/9	9	0.537	13.64	0.063	1.60
35430/12	12	0.594	15.09	0.063	1.60

16 AWG (1.23 mm²)					
Stranding: 19/0.0117 (19 x 0.29 mm) Insulation thickness: 0.032 (0.81 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35440/2	2	0.379	9.63	0.063	1.60
35440/3	3	0.398	10.11	0.063	1.60
35440/5	5	0.466	11.84	0.063	1.60
35440/7	7	0.504	12.80	0.063	1.60
35440/9	9	0.581	14.76	0.063	1.60
35440/12	12	0.644	16.36	0.063	1.60

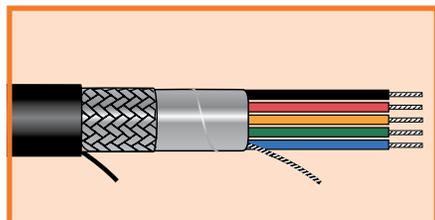
14 AWG (2.08 mm²)					
Stranding: 41/30 (41 x 0.25 mm) Insulation thickness: 0.032 (0.81 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35450/2	2	0.409	10.39	0.063	1.60
35450/3	3	0.431	10.95	0.063	1.60
35450/5	5	0.507	12.88	0.063	1.60
35450/7	7	0.549	13.94	0.063	1.60
35450/9	9	0.635	16.13	0.063	1.60
35450/12	12	0.706	17.93	0.063	1.60



Xtra-Guard® 3

Direct Burial

300 V Supra-Shield® Foil + Braid, Multiconductor



Operating Temperature

- 30°C to +80°C

Conductor Color Coding

- 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D
- Jacket Colors: Nine available (black standard)

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyethylene jacket
- UV resistant
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors
- Tinned copper braid, 70% coverage min.
- Nylon ripcord

Availability

Made to order
1000 ft (305 m) minimum

FIT® Tubing Recommendations

- FIT-700: Bonding, thermoplastic adhesive lined, cross-linked polyolefin



22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35102	2	0.195	4.95	0.032	0.81
35103	3	0.203	5.16	0.032	0.81
35104	4	0.216	5.49	0.032	0.81
35106	6	0.246	6.25	0.032	0.81
35108	8	0.261	6.63	0.032	0.81
35110	10	0.295	7.49	0.032	0.81
35110/15	15	0.325	8.26	0.032	0.81

20 AWG (0.56 mm²)

Stranding: 7/28 (7 x 0.32 mm)
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35152	2	0.235	5.97	0.032	0.81
35153	3	0.246	6.25	0.032	0.81
35154	4	0.264	6.71	0.032	0.81
35156	6	0.306	7.77	0.032	0.81
35158	8	0.328	8.33	0.032	0.81
35160	10	0.375	9.53	0.032	0.81
35160/15	15	0.417	10.59	0.032	0.81

18 AWG (0.81 mm²)

Stranding: 16/30 (16 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35162	2	0.253	6.43	0.032	0.81
35162/1*	2	0.253	6.43	0.032	0.81
35163	3	0.265	6.73	0.032	0.81
35163/1*	3	0.265	6.73	0.032	0.81
35164	4	0.286	7.26	0.032	0.81
35166	6	0.333	8.46	0.032	0.81
35168	8	0.358	9.09	0.032	0.81
35170	10	0.411	10.44	0.032	0.81
35170/15	15	0.458	11.63	0.032	0.81

*Conductors color-coded per international standards: brown, blue, green/yellow.

16 AWG (1.23 mm²)

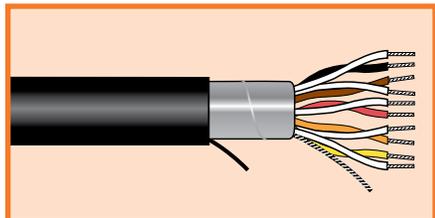
Stranding: 19/0.0117 (19 x 0.29 mm)
Insulation thickness: 0.016 (0.41 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35172	2	0.277	7.04	0.032	0.81
35172/1*	2	0.277	7.04	0.032	0.81
35173	3	0.291	7.39	0.032	0.81
35173/1*	3	0.291	7.39	0.032	0.81
35174	4	0.315	8.00	0.032	0.81
35176	6	0.369	9.37	0.032	0.81
35178	8	0.398	10.11	0.032	0.81
35180	10	0.459	11.66	0.032	0.81
35180/15	15	0.513	13.03	0.032	0.81

*Conductors color-coded per international standards: brown, blue, green/yellow.

Xtra-Guard® 3

Direct Burial
300 V Foil Shield, Multipair



Operating Temperature

- 30°C to +80°C

Conductor Color Coding

- 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A
- Jacket Colors: Nine available (black standard)

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyethylene jacket
- UV resistant
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord

Availability

Made to order
1000 ft (305 m) minimum

FIT® Tubing Recommendations

- FIT-700: Bonding, thermoplastic adhesive lined, cross-linked polyolefin

24 AWG (0.23 mm²)

Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35491	1	0.159	4.04	0.032	0.81
35492	2	0.215	5.46	0.032	0.81
35493	3	0.227	5.77	0.032	0.81
35494	4	0.246	6.25	0.032	0.81

22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35481	1	0.171	4.34	0.032	0.81
35482	2	0.235	5.97	0.032	0.81
35483	3	0.248	6.30	0.032	0.81
35484	4	0.269	6.83	0.032	0.81
35485	5	0.293	7.44	0.032	0.81

20 AWG (0.56 mm²)

Stranding: 7/28 (7 x 0.32 mm)
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35452	2	0.301	7.65	0.032	0.81
35453	3	0.319	8.10	0.032	0.81

18 AWG (0.81 mm²)

Stranding: 16/30 (16 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)

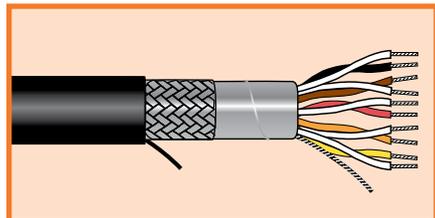
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35372	2	0.330	8.38	0.032	0.81
35373	3	0.350	8.89	0.032	0.81
35376	6	0.462	11.73	0.032	0.81



Xtra-Guard® 3

Direct Burial

300 V Supra-Shield® Foil + Braid, Multipair



Operating Temperature

- 30°C to +80°C

Conductor Color Coding

- Chart B
- Jacket Colors: Nine available (black standard)

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyethylene jacket
- UV resistant
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord

Availability

Made to order
1000 ft (305 m) minimum

FIT® Tubing Recommendations

- FIT-700: Bonding, thermoplastic adhesive lined, cross-linked polyolefin

24 AWG (0.23 mm ²)					
Stranding: 7/32 (7 x 0.20 mm)					
Insulation thickness: 0.010 (0.25 mm)					
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35272	2	0.239	6.07	0.032	0.81

22 AWG (0.35 mm ²)					
Stranding: 7/30 (7 x 0.25 mm)					
Insulation thickness: 0.010 (0.25 mm)					
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
35121	1	0.195	4.95	0.032	0.081
35122	2	0.259	6.58	0.032	0.081
35123	3	0.272	6.91	0.032	0.081
35124	4	0.293	7.44	0.032	0.081
35125	5	0.317	8.05	0.032	0.081
35126	6	0.342	8.69	0.032	0.081
35129	9	0.393	9.98	0.032	0.081



Conductor Color Coding

Multipair Cables

Chart A

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Black +Red	14	Green + Blue	27	Brown + Yellow
2	Black + White	15	Green + White	28	Violet + Red
3	Black + Green	16	Green + Brown	29	Violet + White
4	Black + Blue	17	Green + Orange	30	Violet + Green
5	Black + Brown	18	Green + Yellow	31	Violet + Blue
6	Black + Yellow	19	White + Blue	32	Violet + Brown
7	Black + Orange	20	White + Brown	33	Violet + Yellow
8	Red + Green	21	White + Orange	34	Violet + Orange
9	Red + White	22	White + Yellow	35	Violet + Slate
10	Red + Blue	23	Blue + Brown	36	Violet + Black
11	Red + Yellow	24	Blue + Orange	37	Slate + Red
12	Red + Brown	25	Blue + Yellow	38	Slate + White
13	Red + Orange	26	Brown + Orange	39	Slate + Green

Chart B

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	White +Black	35	Orange +Slate	69	White/Red +Green
2	White +Brown	36	Yellow +Green	70	White/Red +Blue
3	White +Red	37	Yellow +Blue	71	White/Red +Violet
4	White +Orange	38	Yellow +Violet	72	White/Red +Slate
5	White +Yellow	39	Yellow +Slate	73	White/Orange +Black
6	White +Green	40	Green +Blue	74	White/Orange +Brown
7	White +Blue	41	Green +Violet	75	White/Orange +Red
8	White +Violet	42	Green +Slate	76	White/Orange +Orange
9	White +Slate	43	Blue +Violet	77	White/Orange +Yellow
10	Black +Brown	44	Blue +Slate	78	White/Orange +Green
11	Black +Red	45	Violet +Slate	79	White/Orange +Blue
12	Black +Orange	46	White/Black +Black	80	White/Orange +Violet
13	Black +Yellow	47	White/Black +Brown	81	White/Orange +Slate
14	Black +Green	48	White/Black +Red	82	White/Yellow +Black
15	Black +Blue	49	White/Black +Orange	83	White/Yellow +Brown
16	Black +Violet	50	White/Black +Yellow	84	White/Yellow +Red
17	Black +Slate	51	White/Black +Green	85	White/Yellow +Orange
18	Brown +Red	52	White/Black +Blue	86	White/Yellow +Yellow
19	Brown +Orange	53	White/Black +Violet	87	White/Yellow +Green
20	Brown +Yellow	54	White/Black +Slate	88	White/Yellow +Blue
21	Brown +Green	55	White/Brown +Black	89	White/Yellow +Violet
22	Brown +Blue	56	White/Brown +Brown	90	White/Yellow +Slate
23	Brown +Violet	57	White/Brown +Red	91	White/Green +Black
24	Brown +Slate	58	White/Brown +Orange	92	White/Green +Brown
25	Red +Orange	59	White/Brown +Yellow	93	White/Green +Red
26	Red +Yellow	60	White/Brown +Green	94	White/Green +Orange
27	Red +Green	61	White/Brown +Blue	95	White/Green +Yellow
28	Red +Blue	62	White/Brown +Violet	96	White/Green +Green
29	Red +Violet	63	White/Brown +Slate	97	White/Green +Blue
30	Red +Slate	64	White/Red +Black	98	White/Green +Violet
31	Orange +Yellow	65	White/Red +Brown	99	White/Green +Slate
32	Orange +Green	66	White/Red +Red	100	White/Blue +Black
33	Orange +Blue	67	White/Red +Orange	101	White/Blue +Brown
34	Orange +Violet	68	White/Red +Yellow	102	White/Blue +Red