Pro-Tekt™
High-Performance Cable

AlphaWire

Cables you trust. Service you deserve.

High-Performance Cables for Demanding Applications

Downtime is costly — whether caused by a minor malfunction or a complete cable failure. Pro-Tekt cable is a long lasting and high-performing solution, which is hazard-matched to survive in the most demanding operating conditions.

Pro-Tekt Cable

High Performance PVC

Offering rugged, reliable performance, Pro-Tekt cables unique premium-grade PVC insulation and jacket combined with perfect round construction, makes routing of the cable easier in small, tight spaces.

Industries

- Industrial Automation
- Commercial Electronics
- Medical devices
- Defense & Aerospace
- PetroChemical
- Semi-Conductor
- Energy

Product Overview

- Oil and Sun resistant PVC jacket
- Rated for temperatures -30°C to 105°C
- 2-80 conductors, configured as single conductors or pairs
- 28-16 AWG
- Stranded conductors for flexibility
- Choice of shielding options:
  - Unshielded
  - Aluminum Foil or Braid for good EMC performance
  - Supra-Shield foil + braid for exceptional EMC performance

Pro-Tekt™

Pro-Tekt Shielding Options

Alpha Wire offers Pro-Tekt cables in three shielding options to handle virtually any electrical environment.

Unshielded

Unshielded cables provide the smallest cable diameter for use in low-noise controlled environments.

Foil shielded

Foil-shielded cables use a sturdy aluminum/polyester shield for moderate EMI needs, especially at lower frequencies. A tinned copper drain wire makes grounding the cable easy. Foil shields allow lighter weights and smaller cables.

Supra-Shield® (premium foil + braid)

Alpha's exclusive Supra-Shield cables combine a triple-layer aluminum/polyester/aluminum foil with a tinned copper braid shield with tight 70% coverage.

Supra-Shield offers exceptional EMI performance and flexibility to protect against noise and maintain overall system integrity. The combination of foil and braid offers better shielding effectiveness than either approach alone against both low- and high-frequency noise.

Product Details

Features

- Fast, easy stripping of insulation and jacket
- Color-coded, tinned copper conductors
- Premium-grade PVC insulation and jacket for easier cable routing in small spaces
- 300 V
- Unshielded, foil shielded, or Supra-Shield® Foil + Braid
- 105°C temperature rating
- UL VW-1, UL 10002, UL 2464, CSA CMG, and CSA FT-4 flammability rating
- IEC 60322-1 and -2 Flame Behavior
- Nylon ripcord for easy jacket stripping
- UV and oil resistant

Applications

- High technology applications in controlled environments
- Medical electronics
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls

FIT® Tubing Recommendations

- For maximized wire management, Alpha's FIT® Tubing protects from flammability, high heat, abrasion, and chemicals.
- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

Pro-Tekt	Application							
	High Temp	Low Temp	UV	Oil/Water/ Chemical	Abrasion	Direct Burial	EMI Protection with Supra-Shield	High Flex/ Continuous Flex
	●○○	●○○	●●○	●○○	●○○	NR	●●●	NR

●○○ = Good; ●●○ = Very Good; ●●● = Excellent; NR = Not Recommended

Pro-Tekt™

300 V Unshielded, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.127 mm)
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B951021	2	0.137	3.48	0.032	0.81
B951031	3	0.143	3.63	0.032	0.81
B951041	4	0.152	3.86	0.032	0.81
B951061	6	0.173	4.39	0.032	0.81
B951071	7	0.173	4.39	0.032	0.81
B951081	8	0.184	4.67	0.032	0.81

26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B952021	2	0.145	3.68	0.032	0.81
B952031	3	0.151	3.84	0.032	0.81
B952041	4	0.161	4.09	0.032	0.81
B952061	6	0.185	4.70	0.032	0.81
B952071	7	0.185	4.70	0.032	0.81
B952081	8	0.197	5.00	0.032	0.81
B952101	10	0.223	5.66	0.032	0.81
B952151	15	0.247	6.27	0.032	0.81

24 AWG (0.23 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B953021	2	0.155	3.94	0.032	0.81
B953031	3	0.162	4.11	0.032	0.81
B953041	4	0.174	4.42	0.032	0.81
B953061	6	0.20	5.08	0.032	0.81
B953081	8	0.214	5.44	0.032	0.81
B953101	10	0.243	6.17	0.032	0.81
B953151	15	0.270	6.86	0.032	0.81
B953201	20	0.299	7.59	0.032	0.81
B953251	25	0.331	8.41	0.032	0.81
B953301	30	0.349	8.86	0.032	0.81
B953401	40	0.389	9.88	0.032	0.81
B953501	50	0.428	10.87	0.032	0.81
B953801	80	0.525	13.34	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Unshielded, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

22 AWG (0.35 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B954021	2	0.167	4.24	0.032	0.81
B954031	3	0.175	4.44	0.032	0.81
B954041	4	0.188	4.78	0.032	0.81
B954061	6	0.218	5.54	0.032	0.81
B954081	8	0.234	5.94	0.032	0.81
B954101	10	0.267	6.78	0.032	0.81
B954151	15	0.298	7.57	0.032	0.81
B954201	20	0.330	8.38	0.032	0.81
B954251	25	0.367	9.32	0.032	0.81
B954301	30	0.388	9.86	0.032	0.81
B954401	40	0.433	11.00	0.032	0.81
B954501	50	0.477	12.12	0.032	0.81
B954601	60	0.517	13.13	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 Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B955021	2	0.207	5.26	0.032	0.81
B955031	3	0.218	5.54	0.032	0.81
B955041	4	0.237	6.02	0.032	0.81
B955061	6	0.279	7.09	0.032	0.81
B955081	8	0.301	7.65	0.032	0.81
B955101	10	0.347	8.81	0.032	0.81
B955151	15	0.390	9.91	0.032	0.81
B955201	20	0.436	11.07	0.032	0.81
B955251	25	0.487	12.37	0.032	0.81
B955301	30	0.516	13.11	0.032	0.81
B955401	40	0.621	15.77	0.053	1.35
B955501	50	0.683	17.35	0.053	1.35

RoHS Compliant

Pro-Tekt™

300 V Unshielded, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

18 AWG (0.81 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B956021	2	0.225	5.72	0.032	0.81
B956021N*	2	0.225	5.72	0.032	0.81
B956031	3	0.237	6.02	0.032	0.81
B956031N	3	0.237	6.02	0.032	0.81
B956041	4	0.258	6.55	0.032	0.81
B956061	6	0.306	7.77	0.032	0.81
B956081	8	0.331	8.41	0.032	0.81
B956101	10	0.383	9.73	0.032	0.81
B956151	15	0.432	10.97	0.032	0.81
B956201	20	0.483	12.27	0.032	0.81
B956251	25	0.541	13.74	0.032	0.81
B956301	30	0.616	15.65	0.053	1.35
B956401	40	0.687	17.45	0.053	1.35
B956501	50	0.757	19.23	0.053	1.35
B956601	60	0.880	22.35	0.083	2.11

*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 Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B957021	2	0.249	6.32	0.032	0.81
B957021N	2	0.249	6.32	0.032	0.81
B957031	3	0.263	6.68	0.032	0.81
B957031N	3	0.263	6.68	0.032	0.81
B957041	4	0.287	7.29	0.032	0.81
B957061	6	0.342	8.69	0.032	0.81
B957081	8	0.371	9.42	0.032	0.81
B957101	10	0.431	10.95	0.032	0.81
B957151	15	0.487	12.37	0.032	0.81
B957201	20	0.546	13.87	0.053	0.81
B957251	25	0.655	16.64	0.053	0.81
B957301	30	0.693	17.60	0.053	0.81
B957401	40	0.774	19.66	0.083	2.11
B957501	50	0.916	23.27	0.083	2.11

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

RoHS Compliant

Pro-Tekt™

300 V Foil Shielded, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

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

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.127 mm)
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B951022	2	0.141	3.58	0.032	0.81
B951032	3	0.147	3.73	0.032	0.81
B951042	4	0.156	3.96	0.032	0.81
B951062	6	0.177	4.50	0.032	0.81
B951072	7	0.177	4.50	0.032	0.81
B951082	8	0.188	4.78	0.032	0.81

26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B952022	2	0.149	3.78	0.032	0.81
B952032	3	0.155	3.94	0.032	0.81
B952042	4	0.165	4.19	0.032	0.81
B952062	6	0.189	4.80	0.032	0.81
B952072	7	0.189	4.80	0.032	0.81
B952082	8	0.201	5.11	0.032	0.81
B952102	10	0.227	5.77	0.032	0.81
B952152	15	0.251	6.38	0.032	0.81

24 AWG (0.23 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B953022	2	0.159	4.04	0.032	0.81
B953032	3	0.166	4.22	0.032	0.81
B953042	4	0.178	4.52	0.032	0.81
B953062	6	0.204	5.18	0.032	0.81
B953082	8	0.218	5.54	0.032	0.81
B953102	10	0.247	6.27	0.032	0.81
B953152	15	0.274	6.96	0.032	0.81
B953202	20	0.303	7.70	0.032	0.81
B953252	25	0.335	8.51	0.032	0.81
B953302	30	0.353	8.97	0.032	0.81
B953402	40	0.393	9.98	0.032	0.81
B953502	50	0.432	10.97	0.032	0.81
B953602	60	0.467	11.86	0.032	0.81
B953702	70	0.504	12.80	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Foil Shielded, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

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

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

22 AWG (0.35 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B954022	2	0.171	4.34	0.032	0.81
B954032	3	0.179	4.55	0.032	0.81
B954042	4	0.192	4.88	0.032	0.81
B954062	6	0.222	5.64	0.032	0.81
B954082	8	0.238	6.05	0.032	0.81
B954102	10	0.271	6.88	0.032	0.81
B954152	15	0.302	7.67	0.032	0.81
B954202	20	0.334	8.48	0.032	0.81
B954252	25	0.371	9.42	0.032	0.81
B954302	30	0.392	9.96	0.032	0.81
B954402	40	0.437	11.10	0.032	0.81
B954502	50	0.481	12.22	0.032	0.81
B954602	60	0.521	13.23	0.032	0.81
B954702	70	0.605	15.37	0.053	1.35

20 AWG (0.56 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B955022	2	0.211	5.36	0.032	0.81
B955032	3	0.222	5.64	0.032	0.81
B955042	4	0.241	6.12	0.032	0.81
B955062	6	0.283	7.19	0.032	0.81
B955082	8	0.305	7.75	0.032	0.81
B955102	10	0.351	8.92	0.032	0.81
B955152	15	0.394	10.01	0.032	0.81
B955202	20	0.440	11.18	0.032	0.81
B955252	25	0.491	12.47	0.032	0.81
B955302	30	0.520	13.21	0.032	0.81
B955402	40	0.625	15.88	0.053	1.35
B955502	50	0.687	17.45	0.053	1.35

RoHS Compliant

Pro-Tekt™

300 V Foil Shielded, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

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

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

18 AWG (0.81 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B956022	2	0.229	5.82	0.032	0.81
B956022N*	2	0.229	5.82	0.032	0.81
B956032	3	0.241	6.12	0.032	0.81
B956032N*	3	0.241	6.12	0.032	0.81
B956042	4	0.262	6.65	0.032	0.81
B956062	6	0.310	7.87	0.032	0.81
B956082	8	0.335	8.51	0.032	0.81
B956102	10	0.387	9.83	0.032	0.81
B956152	15	0.436	11.07	0.032	0.81
B956202	20	0.487	12.37	0.032	0.81
B956252	25	0.587	14.91	0.053	1.35
B956302	30	0.620	15.75	0.053	1.35
B956402	40	0.691	17.55	0.053	1.35
B956502	50	0.761	19.33	0.053	1.35
B956602	60	0.884	22.45	0.083	2.11

*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 Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B957022	2	0.253	6.43	0.032	0.81
B957022N*	2	0.253	6.43	0.032	0.81
B957032	3	0.267	6.78	0.032	0.81
B957032N*	3	0.267	6.78	0.032	0.81
B957042	4	0.291	7.39	0.032	0.81
B957062	6	0.346	8.79	0.032	0.81
B957082	8	0.375	9.52	0.032	0.81
B957102	10	0.435	11.05	0.032	0.81
B957152	15	0.491	12.47	0.032	0.81
B957202	20	0.592	15.04	0.053	1.35
B957252	25	0.659	16.74	0.053	1.35
B957302	30	0.697	17.70	0.053	1.35
B957402	40	0.778	19.76	0.083	2.11

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

RoHS Compliant

Pro-Tekt™

300 V Braid Shield, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.12 mm)
Insulation Thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B951023	2	0.159	4.04	0.032	0.81
B951033	3	0.165	4.19	0.032	0.81
B951043	4	0.174	4.42	0.032	0.81
B951063	6	0.195	4.95	0.032	0.81
B951073	7	0.195	4.95	0.032	0.81
B951083	8	0.206	5.23	0.032	0.81

26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B952023	2	0.167	4.24	0.032	0.81
B952033	3	0.173	4.39	0.032	0.81
B952043	4	0.183	4.65	0.032	0.81
B952063	6	0.207	5.26	0.032	0.81
B952073	7	0.207	5.26	0.032	0.81
B952083	8	0.219	5.56	0.032	0.81
B952103	10	0.245	6.22	0.032	0.81
B952153	15	0.269	6.83	0.032	0.81

24 AWG (0.23 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B953023	2	0.177	4.50	0.032	0.81
B953033	3	0.184	4.67	0.032	0.81
B953043	4	0.196	4.98	0.032	0.81
B953063	6	0.222	5.64	0.032	0.81
B953083	8	0.236	5.99	0.032	0.81
B953103	10	0.265	6.73	0.032	0.81
B953153	15	0.292	7.42	0.032	0.81
B953203	20	0.321	8.15	0.032	0.81
B953253	25	0.353	8.97	0.032	0.81
B953303	30	0.371	9.42	0.032	0.81
B953403	40	0.411	10.44	0.032	0.81
B953503	50	0.450	11.43	0.032	0.81
B953603	60	0.491	12.47	0.032	0.81
B953703	70	0.528	13.41	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Braid Shield, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

22 AWG (0.35 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B954023	2	0.189	4.80	0.032	0.81
B954033	3	0.197	5.00	0.032	0.81
B954043	4	0.210	5.33	0.032	0.81
B954063	6	0.240	6.10	0.032	0.81
B954083	8	0.256	6.50	0.032	0.81
B954103	10	0.289	7.34	0.032	0.81
B954153	15	0.320	8.13	0.032	0.81
B954203	20	0.352	8.94	0.032	0.81
B954253	25	0.389	9.88	0.032	0.81
B954303	30	0.410	10.41	0.032	0.81
B954403	40	0.455	11.56	0.032	0.81
B954503	50	0.505	12.83	0.032	0.81
B954603	60	0.587	14.91	0.032	0.81
B954703	70	0.629	15.98	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 Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B955023	2	0.229	5.82	0.032	0.81
B955033	3	0.240	6.10	0.032	0.81
B955043	4	0.259	6.58	0.032	0.81
B955063	6	0.301	7.65	0.032	0.81
B955083	8	0.323	8.20	0.032	0.81
B955103	10	0.369	9.37	0.032	0.81
B955153	15	0.412	10.46	0.032	0.81
B955203	20	0.458	11.63	0.032	0.81
B955253	25	0.515	13.08	0.032	0.81
B955303	30	0.544	13.82	0.032	0.81
B955403	40	0.649	16.48	0.053	1.35
B955503	50	0.718	18.24	0.053	1.35

RoHS Compliant

Pro-Tekt™

300 V Braid Shield, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

18 AWG (0.81 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B956023	2	0.247	6.27	0.032	0.81
B956023N*	2	0.247	6.27	0.032	0.81
B956033	3	0.259	6.58	0.032	0.81
B956033N*	3	0.259	6.58	0.032	0.81
B956043	4	0.28	7.11	0.032	0.81
B956063	6	0.328	8.33	0.032	0.81
B956083	8	0.353	8.97	0.032	0.81
B956103	10	0.405	10.29	0.032	0.81
B956153	15	0.454	11.53	0.032	0.81
B956203	20	0.511	12.98	0.032	0.81
B956253	25	0.611	15.52	0.032	0.81
B956303	30	0.644	16.36	0.053	1.35
B956403	40	0.722	18.34	0.053	1.35
B956503	60	0.792	20.12	0.053	1.35

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

16 AWG (1.23 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B957023	2	0.271	6.88	0.032	0.81
B957023N*	2	0.271	6.88	0.032	0.81
B957033	3	0.285	7.24	0.032	0.81
B957033N*	3	0.285	7.24	0.032	0.81
B957043	4	0.309	7.85	0.032	0.81
B957063	6	0.364	9.25	0.032	0.81
B957083	8	0.393	9.98	0.032	0.81
B957103	10	0.453	11.51	0.032	0.81
B957153	15	0.515	13.08	0.032	0.81
B957203	20	0.616	15.65	0.053	1.35
B957253	25	0.690	17.53	0.053	1.35
B957303	30	0.728	18.49	0.053	1.35
B957403	40	0.809	20.55	0.083	2.11

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

RoHS Compliant

Pro-Tekt™

300 V Foil/Braid, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- 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
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.127 mm)
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B951024	2	0.165	4.19	0.032	0.81
B951034	3	0.171	4.34	0.032	0.81
B951044	4	0.180	4.57	0.032	0.81
B951064	6	0.201	5.11	0.032	0.81
B951074	7	0.201	5.11	0.032	0.81
B951084	8	0.212	5.38	0.032	0.81

26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B952024	2	0.173	4.39	0.032	0.81
B952034	3	0.179	4.55	0.032	0.81
B952044	4	0.189	4.80	0.032	0.81
B952064	6	0.213	5.41	0.032	0.81
B952074	7	0.213	5.41	0.032	0.81
B952084	8	0.225	5.72	0.032	0.81
B952104	10	0.251	6.38	0.032	0.81
B952154	15	0.275	6.98	0.032	0.81

24 AWG (0.23 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B953024	2	0.183	4.65	0.032	0.81
B953034	3	0.190	4.83	0.032	0.81
B953044	4	0.202	5.13	0.032	0.81
B953064	6	0.228	5.79	0.032	0.81
B953084	8	0.242	6.15	0.032	0.81
B953104	10	0.271	6.88	0.032	0.81
B953154	15	0.298	7.57	0.032	0.81
B953204	20	0.327	8.31	0.032	0.81
B953254	25	0.359	9.12	0.032	0.81
B953304	30	0.377	9.58	0.032	0.81
B953404	40	0.417	10.59	0.032	0.81
B953504	50	0.456	11.58	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Foil/Braid, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- 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
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

22 AWG (0.35 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B954024	2	0.195	4.95	0.032	0.81
B954034	3	0.203	5.16	0.032	0.81
B954044	4	0.216	5.49	0.032	0.81
B954064	6	0.246	6.25	0.032	0.81
B954084	8	0.262	6.65	0.032	0.81
B954104	10	0.295	7.49	0.032	0.81
B954154	15	0.326	8.28	0.032	0.81
B954204	20	0.358	9.09	0.032	0.81
B954254	25	0.395	10.03	0.032	0.81
B954304	30	0.416	10.57	0.032	0.81
B954404	40	0.461	11.71	0.032	0.81
B954504	50	0.511	12.98	0.032	0.81
B954604	60	0.587	14.91	0.053	1.35
B954704	70	0.629	15.98	0.053	1.35
B954804	80	0.664	16.87	0.053	1.35

20 AWG (0.56 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B955024	2	0.235	5.97	0.032	0.81
B955034	3	0.246	6.25	0.032	0.81
B955044	4	0.265	6.73	0.032	0.81
B955064	6	0.307	7.80	0.032	0.81
B955084	8	0.329	8.36	0.032	0.81
B955104	10	0.375	9.52	0.032	0.81
B955154	15	0.418	10.62	0.032	0.81
B955204	20	0.464	11.79	0.032	0.81
B955254	25	0.515	13.08	0.032	0.81
B955304	30	0.544	13.82	0.032	0.81
B955404	40	0.655	16.64	0.053	1.35
B955504	50	0.717	18.21	0.053	1.35
B955604	60	0.773	19.63	0.053	1.35

RoHS Compliant

Pro-Tekt™

300 V Foil/Braid, Multiconductor

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E
- 20, 18, 16 AWG: Chart D

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- 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
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

18 AWG (0.81 mm²)

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

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B956024	2	0.253	6.43	0.032	0.81
B956024N*	2	0.253	6.43	0.032	0.81
B956034	3	0.265	6.73	0.032	0.81
B956034N*	3	0.265	6.73	0.032	0.81
B956044	4	0.286	7.26	0.032	0.81
B956064	6	0.334	8.48	0.032	0.81
B956084	8	0.359	9.12	0.032	0.81
B956104	10	0.411	10.44	0.032	0.81
B956154	15	0.460	11.68	0.032	0.81
B956204	20	0.511	12.98	0.032	0.81
B956254	25	0.611	15.52	0.053	1.35
B956304	30	0.650	16.51	0.053	1.35
B956404	40	0.721	18.31	0.053	1.35
B956603		0.921	23.39	0.053	1.35

*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 Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B957024	2	0.277	7.04	0.032	0.81
B957024N*	2	0.277	7.04	0.032	0.81
B957034	3	0.291	7.39	0.032	0.81
B957034N*	3	0.291	7.39	0.032	0.81
B957044	4	0.315	8.00	0.032	0.81
B957064	6	0.370	9.40	0.032	0.81
B957084	8	0.399	10.13	0.032	0.81
B957104	10	0.459	11.66	0.032	0.81
B957154	15	0.515	13.08	0.032	0.81
B957204	20	0.616	15.65	0.053	1.35
B957254	25	0.689	17.50	0.053	1.35

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

RoHS Compliant

Pro-Tekt™

300 V Unshielded, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

24 AWG (0.23 mm²)

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

Part Number	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B963011	1	0.155	3.94	0.032	0.81
B963021	2	0.211	5.36	0.032	0.81
B963031	3	0.223	5.66	0.032	0.81
B963041	4	0.242	6.15	0.032	0.81
B963051	5	0.263	6.68	0.032	0.81
B963061	6	0.285	7.24	0.032	0.81
B963091	9	0.331	8.41	0.032	0.81
B963111	11	0.356	9.04	0.032	0.81
B963151	15	0.400	10.16	0.032	0.81
B963271	27	0.511	12.98	0.032	0.81
B963771	77	0.903	22.94	0.083	0.81

22 AWG (0.35 mm²)

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

Part Number	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B964011	1	0.167	4.24	0.032	0.81
B964021	2	0.231	5.87	0.032	0.81
B964031	3	0.244	6.20	0.032	0.81
B964041	4	0.266	6.76	0.032	0.81
B964051	5	0.290	7.37	0.032	0.81
B964061	6	0.315	8.00	0.032	0.81
B964151	15	0.446	11.33	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Unshielded, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

20 AWG (0.56 mm²)

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

Part Number	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B965021	2	0.297	7.54	0.032	0.81
B965031	3	0.315	8.00	0.032	0.81
B965061	6	0.414	10.52	0.032	0.81
B965091	9	0.486	12.34	0.032	0.81
B965121	12	0.544	13.82	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 Number	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B966021	2	0.326	8.28	0.032	0.81
B966031	3	0.347	8.81	0.032	0.81
B966061	6	0.459	11.66	0.032	0.81
B966091	9	0.54	13.72	0.053	1.35
B966121	12	0.647	16.43	0.053	1.35

RoHS Compliant

Pro-Tekt™

300 V Foil Shield, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

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

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.12 mm)
Insulation Thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B961022	2	0.186	4.72	0.032	0.81
B961032	3	0.195	4.95	0.032	0.81
B961042	4	0.210	5.33	0.032	0.81
B961052	5	0.227	5.77	0.032	0.81
B961062	6	0.245	6.22	0.032	0.81

26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B962022	2	0.199	5.05	0.032	0.81
B962032	3	0.209	5.31	0.032	0.81
B962042	4	0.226	5.74	0.032	0.81
B962052	5	0.245	6.22	0.032	0.81
B962062	6	0.264	6.71	0.032	0.81

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
B963012	1	0.159	4.04	0.032	0.81
B963022	2	0.215	5.46	0.032	0.81
B963032	3	0.227	5.77	0.032	0.81
B963042	4	0.246	6.25	0.032	0.81
B963052	5	0.267	6.78	0.032	0.81
B963062	6	0.289	7.34	0.032	0.81
B963092	9	0.335	8.51	0.032	0.81
B963112	11	0.360	9.14	0.032	0.81
B963152	15	0.404	10.26	0.032	0.81
B963192	19	0.432	10.97	0.032	0.81
B963272	27	0.515	13.08	0.32	0.81

RoHS Compliant

Pro-Tekt™

300 V Foil Shield, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

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

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

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
B964012	1	0.171	4.34	0.032	0.81
B964022	2	0.235	5.97	0.032	0.81
B964032	3	0.248	6.30	0.032	0.81
B964042	4	0.270	6.86	0.032	0.81
B964052	5	0.294	7.47	0.032	0.81
B964062	6	0.319	8.10	0.032	0.81
B964092	9	0.371	9.42	0.032	0.81
B964112	11	0.399	10.13	0.032	0.81
B964152	15	0.450	11.43	0.032	0.81
B964192	19	0.482	12.24	0.032	0.81
B964272	27	0.618	15.70	0.053	1.35

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
B965022	2	0.301	7.65	0.032	0.81
B965032	3	0.319	8.10	0.032	0.81
B965062	6	0.418	10.62	0.032	0.81
B965092	9	0.490	12.45	0.032	0.81
B965122	12	0.548	13.92	0.032	0.81
B965192	19	0.688	17.48	0.053	1.35

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
B966032	3	0.351	8.92	0.032	0.81
B966062	6	0.463	11.76	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Braid Shield, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.12 mm)
Insulation Thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B961023	2	0.204	5.18	0.032	0.81
B961033	3	0.213	5.41	0.032	0.81
B961043	4	0.228	5.79	0.032	0.81
B961053	5	0.245	6.22	0.032	0.81
B961063	6	0.263	6.68	0.032	0.81

26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B962023	2	0.217	5.51	0.032	0.81
B962033	3	0.227	5.77	0.032	0.81
B962043	4	0.244	6.20	0.032	0.81
B962053	5	0.263	6.68	0.032	0.81
B962063	6	0.282	7.16	0.032	0.81

24 AWG (0.32 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
B963013	1	0.177	4.50	0.032	0.81
B963023	2	0.233	5.92	0.032	0.81
B963033	3	0.245	6.22	0.032	0.81
B963043	4	0.264	6.71	0.032	0.81
B963053	5	0.285	7.24	0.032	0.81
B963063	6	0.307	7.80	0.032	0.81
B963093	9	0.353	8.97	0.032	0.81
B963113	11	0.378	9.60	0.032	0.81
B963153	15	0.422	10.72	0.032	0.81
B963193	19	0.450	11.43	0.032	0.81
B963273	27	0.539	13.69	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Braid Shield, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

22 AWG (0.35 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
B964013	1	0.189	4.80	0.032	0.81
B964023	2	0.253	6.43	0.032	0.81
B964033	3	0.266	6.76	0.032	0.81
B964043	4	0.288	7.32	0.032	0.81
B964053	5	0.312	7.92	0.032	0.81
B964063	6	0.337	8.56	0.032	0.81
B964093	9	0.389	9.88	0.032	0.81
B964113	11	0.417	10.59	0.032	0.81
B964153	15	0.474	12.04	0.032	0.81
B964193	19	0.506	12.85	0.032	0.81
B964273	27	0.642	16.31	0.053	1.35

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
B965023	2	0.319	8.10	0.032	0.81
B965033	3	0.337	8.56	0.032	0.81
B965063	6	0.436	11.07	0.032	0.81
B965093	9	0.514	13.06	0.032	0.81
B965123	12	0.572	14.53	0.032	0.81
B965193	19	0.719	18.26	0.053	1.35

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
B966033	3	0.369	9.37	0.032	0.81
B966063	6	0.487	12.37	0.032	0.81

RoHS Compliant

Pro-Tekt™

300 V Foil/Braid, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- 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
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.12 mm)
Insulation Thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B961024	2	0.210	5.33	0.032	0.81
B961034	3	0.219	5.56	0.032	0.81
B961044	4	0.234	5.94	0.032	0.81
B961054	5	0.251	6.38	0.032	0.81
B961064	6	0.269	6.83	0.032	0.81

26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
B962024	2	0.210	5.33	0.032	0.81
B962034	3	0.219	5.56	0.032	0.81
B962044	4	0.234	5.94	0.032	0.81
B962054	5	0.251	6.38	0.032	0.81
B962064	6	0.269	6.83	0.032	0.81

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
B963014	1	0.183	4.65	0.032	0.81
B963024	2	0.239	6.07	0.032	0.81
B963034	3	0.251	6.38	0.032	0.81
B963044	4	0.270	6.86	0.032	0.81
B963054	5	0.291	7.39	0.032	0.81
B963064	6	0.313	7.95	0.032	0.81
B963094	9	0.359	9.12	0.032	0.81
B963114	11	0.384	9.75	0.032	0.81
B963154	15	0.428	10.87	0.032	0.81
B963194	19	0.456	11.58	0.032	0.81
B963274	27	0.539	13.69	0.032	0.81
B963514	51	0.738	18.75	0.053	1.35

RoHS Compliant

Pro-Tekt™

300 V Foil/Braid, Multipair

IEC EN 60332-1
IEC EN 60332-2
UL CM
UL AWM 2464 VW-1
CSA CMG FT-4

Operating Temperature

- –30°C to +80°C (AWM)
- –30°C to +105°C (CM)

Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B
- 20, 18 AWG: Chart A

Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- 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
- Premium grey PVC jacket
- UV resistant

Availability

- 50, 100, 500, 1000 m

FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

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
B964014	1	0.195	4.95	0.032	0.81
B964024	2	0.259	6.58	0.032	0.81
B964034	3	0.272	6.91	0.032	0.81
B964044	4	0.294	7.47	0.032	0.81
B964054	5	0.318	8.08	0.032	0.81
B964064	6	0.343	8.71	0.032	0.81
B964094	9	0.395	10.03	0.032	0.81
B964114	11	0.423	10.74	0.032	0.81
B964154	15	0.474	12.04	0.032	0.81
B964194	19	0.506	12.85	0.032	0.81
B964274	27	0.648	16.46	0.053	1.35

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
B965024	2	0.325	8.25	0.032	0.81
B965034	3	0.343	8.71	0.032	0.81
B965064	6	0.442	11.23	0.032	0.81
B965094	9	0.514	13.06	0.032	0.81
B965194	19	0.718	18.24	0.053	1.35

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
B966024	2	0.354	8.99	0.032	0.81
B966034	3	0.375	9.52	0.032	0.81
B966064	6	0.487	12.37	0.032	0.81
B966094	9	0.610	15.49	0.053	1.35
B966274	27	1.007	25.58	0.083	2.11

RoHS Compliant

Heat-Shrink Tubing for Every Application

Material	Features	Shrink Temperature	Shrink Ratio (approx.)	FIT Family
Single-Wall Cross-linked Polyolefin for General-Purpose Use				
Thin-wall irradiated polyolefin	LSZH: reduced smoke generation and gas emission Low outgassing	-55°C to 105°C	2:1	FIT-221L
Cross-linked polyolefin	General-purpose heat-shrink tubing Range of shrink ratios	90°C	2:1	FIT-221
		90°C	4:1	FIT-421
Flame-retardant cross-linked polyolefin	Low shrink temp Passes UL VW-1 flame test	90°C	2:1	FIT-221V
		90°C	3:1	FIT-321V
Cross-linked polyolefin	Approved for 600-V ground lead identification Green with yellow stripe Passes UL VW-1 flame test	90°C	2:1	FIT-260
Semirigid cross-linked polyolefin	30% stronger and 25% stiffer than standard polyolefin	110°C	2:1	FIT-295
Dual-Wall Polyolefin for Additional Sealing				
Surface cross-linked, dual extruded	Meltable inner wall to encapsulate without adhesive	140°C	2.5:1	FIT-300
		110°C	3:1	FIT-321
		121°C	5.6:1	FIT-621
Bonding, thermoplastic adhesive lined	Bonds to most materials High voltage: to 2 kV at 90°C continuous use	120°C	3:1	FIT-700
Bonding, adhesive lined	Permanent water and corrosion protection	110°C	2:1	FIT-750
Special-Application Tubing				
Irradiated PVC	Low shrink temperature Passes UL VW-1 flame test 30% stronger than standard polyolefin	100°C	2:1	FIT-105
Cross-linked PVDF	High shrink temperature Fast recovery time Excellent chemical, heat, and flame resistance Passes UL VW-1 flame test 3x the tensile strength of standard polyolefin	170°C	2:1	FIT-350
FEP	High shrink temperature Excellent chemical resistance Excellent dielectric properties Thinnest wall thickness available	200°C	1.2:1	FIT-400
PTFE	High shrink temperature Excellent chemical resistance Excellent dielectric properties Very thin wall thickness	250°C	1.5:1	FIT-500
Chlorinated polyolefin	Highly flexible Oil and abrasion resistant Passes UL VW-1 flame test	130°C	2:1	FIT-600
Flexible fluoroelastomer	High shrink temperature Excellent chemical resistance Flexible	120°C	2:1	FIT-650
Polyethylene/ polyester	Superior abrasion resistance Excellent flexibility Resists harsh environments	80°C	2:1	FIT-FABRIC
Cross-linked silicone rubber	High flexibility available Pliable Scrape abrasion resistant Passes UL VW-1 flame test	200°C	1.7:1	FIT-FLEX
Cross-linked PVDF	Transparent after shrink Fast recovery time Excellent chemical, heat, and flame resistance Passes UL VW-1 flame test 2x the tensile strength of standard polyolefin	150°C	2:1	FIT-CLEAR

FIT® Heat-Shrink Tubing

FIT®-221 Heat-Shrink Tubing
2:1 Shrink Ratio, XLPO

AMS-DTL-23053/4 Class 3
UL 224
CSA 198

- Thicker wall for increased durability
- Water-resistant inner permanent-bonding adhesive

Operating Temperature
- –55°C to +125°C

Shrink Temperature
- 110°C min.
- 110°C full recovery

Material
- Dual-wall flexible polyolefin with thick-wall adhesive

Color
- Black

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm²)
- Elongation: 250% min
- Longitudinal change: +1%/-15%
- Flame tested
- Shelf life: 3 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 1.0% max
- Fluid resistance: 900 psi (6.20 N/mm²)
- UV resistant
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 300 V/mil (118 kV/cm)
- Volume resistivity: 10^{12} ohm-cm

Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Melt Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
FIT-321-1/8	0.125	3.18	0.024	0.61	0.037	0.94	0.020	0.51
FIT-321-1/4	0.252	6.40	0.073	1.85	0.047	1.19	0.020	0.51
FIT-303-3/8	0.374	9.50	0.118	3.00	0.051	1.30	0.025	0.64
FIT-321-1/2	0.500	12.70	0.157	3.99	0.071	1.80	0.030	0.76
FIT-303-3/4	0.748	19.00	0.236	5.99	0.071	1.80	0.035	0.89
FIT-321-1	0.945	24.00	0.315	8.00	0.098	2.49	0.040	1.02
FIT-321-1-1/2	1.575	40.01	0.512	13.00	0.098	2.49	0.040	1.02

Availability

Part No.	Qty., Cut Pieces at Length	
	4 ft (1.2 m)	6" (152 mm)
FIT-321-1/8	25	28
FIT-321-1/4	25	20
FIT-321-1/2	5	14
FIT-321-1	5	8
FIT-321-1-1/2	5	5

Packaged Assortments

Assorted sizes of 6" (15 cm) lengths

FIT-321-MS-1 Colors: Black

Part No.	Size		Quantity
	Inch	mm	
FIT-321-1/8	0.125	3.18	5
FIT-321-1/4	0.252	6.40	5
FIT-321-1/2	0.500	12.70	5
FIT-321-1	0.945	24.00	5

CA PROP 65 RoHS Compliant

FIT® Heat-Shrink Tubing

FIT®-321 Heat-Shrink Tubing
3:1 Shrink Ratio, Dual-Wall XLPO, Adhesive Lined

AMS-DTL-23053/4 Class 3
UL 224
CSA 198

- Thicker wall for increased durability
- Water-resistant inner permanent-bonding adhesive

Operating Temperature
- –55°C to +125°C

Shrink Temperature
- 110°C min.
- 110°C full recovery

Material
- Dual-wall flexible polyolefin with thick-wall adhesive

Color
- Black

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm²)
- Elongation: 250% min
- Longitudinal change: +1%/-15%
- Flame tested
- Shelf life: 3 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 1.0% max
- Fluid resistance: 900 psi (6.20 N/mm²)
- UV resistant
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 300 V/mil (118 kV/cm)
- Volume resistivity: 10^{12} ohm-cm

Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Melt Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
FIT-321-1/8	0.125	3.18	0.024	0.61	0.037	0.94	0.020	0.51
FIT-321-1/4	0.252	6.40	0.073	1.85	0.047	1.19	0.020	0.51
FIT-303-3/8	0.374	9.50	0.118	3.00	0.051	1.30	0.025	0.64
FIT-321-1/2	0.500	12.70	0.157	3.99	0.071	1.80	0.030	0.76
FIT-303-3/4	0.748	19.00	0.236	5.99	0.071	1.80	0.035	0.89
FIT-321-1	0.945	24.00	0.315	8.00	0.098	2.49	0.040	1.02
FIT-321-1-1/2	1.575	40.01	0.512	13.00	0.098	2.49	0.040	1.02

Availability

Part No.	Qty., Cut Pieces at Length	
	4 ft (1.2 m)	6" (152 mm)
FIT-321-1/8	25	28
FIT-321-1/4	25	20
FIT-321-1/2	5	14
FIT-321-1	5	8
FIT-321-1-1/2	5	5

Packaged Assortments

Assorted sizes of 6" (15 cm) lengths

FIT-321-MS-1 Colors: Black

Part No.	Size		Quantity
	Inch	mm	
FIT-321-1/8	0.125	3.18	5
FIT-321-1/4	0.252	6.40	5
FIT-321-1/2	0.500	12.70	5
FIT-321-1	0.945	24.00	5

CA PROP 65 RoHS Compliant

FIT-FILL Adhesive

A unique adhesive filler, FIT-FILL is amber bead-like balls of adhesive that are ideal for use when additional adhesive is needed, or when the tubing does not effectively cover the desired locations. FIT-FILL is an ideal complement to FIT heat-shrink tubing for applications involving multiple wires in a tubing array, where the tubing's inner adhesive does not touch the inner wires. FIT-FILL aids in creating a better tubing-to-cable seal to prevent water entry, while providing extra protection to maintain the integrity of the cable.

Part No.

- FITFILL1

Material

- Modified Polyamide

Color

- Amber

Dimensions

- ID: 0.138" (3.51 mm)
- OD: 0.295" (7.49 mm)
- Opening: 0.055" (1.40 mm)
- Length: 0.197" (5 mm)

Operating Temperature

- -10°C to 105°C

Shrink Temperature

- 90°C

Availability

- Packs of 1000

Cable Gland

High-Quality Cable Strain Relief and Sealing

Alpha Wire's cable glands are a great solution for providing premium cable strain relief and protection against environmental factors such as flames and dust for a wide range of industries including renewable energy, industrial automation, and electrical equipment.

Plastic Glands: Specifications

Temperature Rating

- -20°C to +100°C (Permanent)
- -30°C to +150°C (Intermittent)

Materials

- Nickel-plated brass (Body)
- Polyamide 6 (Body)
- Chloroprene rubber (O-ring/seal)

Color

- Slate, RAL 7001
- Black
- Metal

Protection Class

- IP68 (5 bar, 30 min)
- IP66

Flammability

- V2 (According to UL94)

Thread Type

- NPT, metric, or PG

Approvals

- CSA C22.2
- UL 514
- RoHS

- Optimum strain relief for static and flex applications
- High-strength polyamide body composition
- Large clamping range
- IP68 up to 5 bar rating
- Robust rubber seals to protect against dripping water and water pressure
- Up to +150°C temperature rating
- UL, CSA, RoHS rated

Pro-Tekt Conductor Color Coding

Multipair Cables

Chart A							
Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Black + Red	14	Green + Blue	27	Brown + Yellow	40	State + Blue
2	Black + White	15	Green + White	28	Violet + Red	41	Slate + Brown
3	Black + Green	16	Green + Brown	29	Violet + White	42	Slate + Yellow
4	Black + Blue	17	Green + Orange	30	Violet + Green	43	Slate + Orange
5	Black + Brown	18	Green + Yellow	31	Violet + Blue	44	Slate + Black
6	Black + Yellow	19	White + Blue	32	Violet + Brown	45	White/Black + Red
7	Black + Orange	20	White + Brown	33	Violet + Yellow	46	White/Black + Green
8	Red + Green	21	White + Orange	34	Violet + Orange	47	White/Black + Blue
9	Red + White	22	White + Yellow	35	Violet + Slate	48	White/Black + Brown
10	Red + Blue	23	Blue + Brown	36	Violet + Black	49	White/Black + Yellow
11	Red + Yellow	24	Blue + Orange	37	Slate + Red	50	White/Black + Orange
12	Red + Brown	25	Blue + Yellow	38	Slate + White	51	White/Black + Violet
13	Red + Orange	26	Brown + Orange	39	Slate + Green		

Multipair Cables

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

Pro-Tekt Conductor Color Coding

Multiconductor Cables

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

Pro-Tekt Conductor Color Coding

Multiconductor Cables

Chart E

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

Notes

The cables you trust. The service you deserve.

Every application is critical and cable failure is not an option when the safety of equipment and personnel is paramount. Specify Alpha cable for rugged, reliable performance, since the integrity of your system is only as robust as the products you use.

Custom cable is standard.

Alpha Wire goes one step further: manufacturing custom cables to meet unique applications—offering specific conductor counts, shielding options, jacket materials, and versatile product designs. Our custom cable orders are often shipped in less than a week, once again giving you products with more convenience and less delay.

Service and support, second-to-none.

Selecting the correct cable for your critical application is essential to overall system reliability, performance, and safety. So we make it easy for you to select the right Alpha cable for your specific application. Our online resources include a wire and cable selection guide, technical information, full product catalog, and a distributor locator to make it easy to select and get the cable you need. Can't find what you're looking for? Design the cable to your specification. It's easy, just visit **www.alphawire.com!**

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