

**Xtra-Guard®**  
**Performance Cable**

Wire & Cable  
Solution

we make the difference

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[authorized distributor](#)



 **AlphaWire**  
*Cables you trust. Service you deserve.*

# Xtra-Guard® 2

## Oil and Abrasion Resistant



### Features

- Fast, easy stripping of insulation and jacket
- Color-coded, tinned copper conductors
- Specially formulated, rugged polyurethane jacket offering 3x the tear and abrasion resistance of ordinary PVC
- Resistance to cut-through and physical damage
- 300 V and 600 V
- Unshielded, foil shielded, or Supra-Shield® Foil + Braid
- Temperature ratings to 90°C (300 V) and 105°C (600 V)
- Superior low-temperature flexibility to -30°C
- Outstanding ultraviolet light stability in all jacket colors
- UL VW-1 and CSA FT-1 flammability ratings
- Nylon ripcord for easy jacket stripping

### Applications

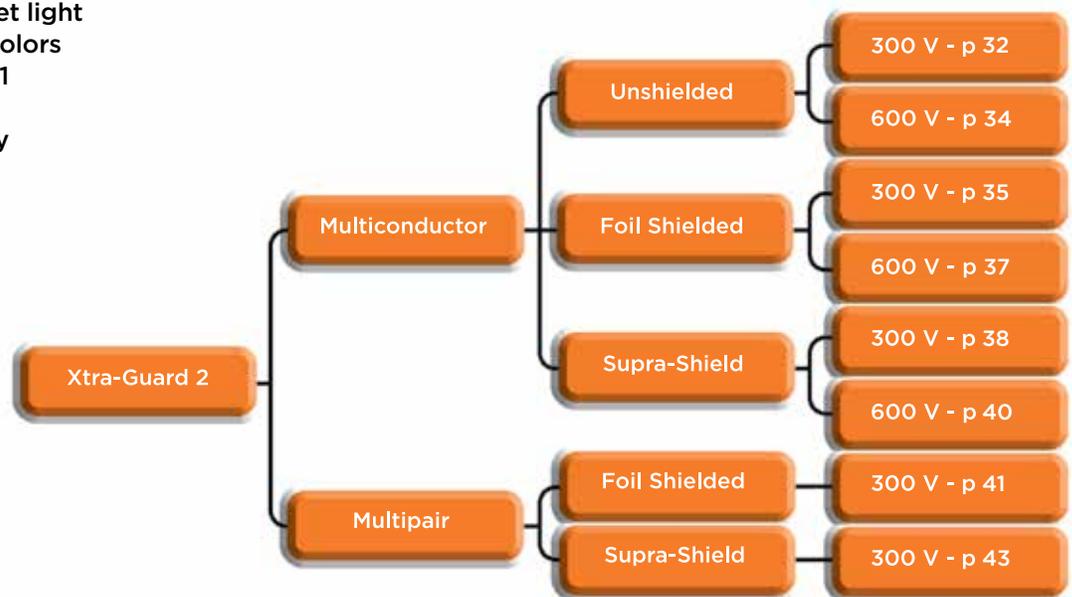
- CNC machine centers
- Automotive assembly plant operations
- Military ground support systems
- Packaging machinery
- Petrochemical plant operations
- Geophysical exploration equipment

### FIT® Tubing Recommendations

- FIT-750: Bonding adhesive lined, cross-linked polyolefin

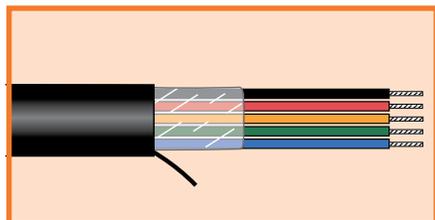


Xtra-Guard cables are available in a range of long-lasting colors for fast, easy identification, for safety reasons, and for matching the color of your system.



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Unshielded, Multiconductor



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- 30°C to +90°C

### Conductor Color Coding

- 24, 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 polyurethane jacket
- UV resistant
- Nylon ripcord

### Availability

Made to order  
1000 ft (305 m) minimum

### FIT® Tubing Recommendations

- FIT-750: Bonding 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
25012	2	0.156	3.96	0.032	0.81
25013	3	0.163	4.14	0.032	0.81
25014	4	0.175	4.45	0.032	0.81
25016	6	0.201	5.11	0.032	0.81
25018	8	0.215	5.46	0.032	0.81
25020	10	0.244	6.20	0.032	0.81
25020/15	15	0.271	6.88	0.032	0.81
25020/20	20	0.300	7.62	0.032	0.81
25020/25	25	0.332	8.43	0.032	0.81

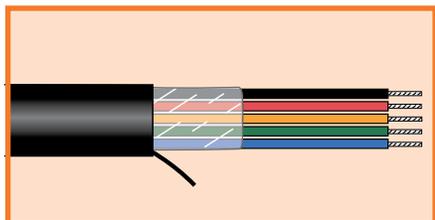
22 AWG (0.35 mm²)					
Stranding: 7/30 (7 x 0.25 mm)					
Insulation thickness: 0.010 (0.25 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
25002	2	0.168	4.27	0.032	0.81
25003	3	0.176	4.47	0.032	0.81
25004	4	0.189	4.80	0.032	0.81
25006	6	0.219	5.56	0.032	0.81
25008	8	0.235	5.97	0.032	0.81
25010	10	0.268	6.81	0.032	0.81
25010/15	15	0.299	7.59	0.032	0.81
25010/20	20	0.331	8.41	0.032	0.81
25010/25	25	0.368	9.35	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
25052	2	0.208	5.28	0.032	0.81
25053	3	0.219	5.56	0.032	0.81
25054	4	0.238	6.05	0.032	0.81
25056	6	0.280	7.11	0.032	0.81
25058	8	0.302	7.67	0.032	0.81
25060	10	0.348	8.84	0.032	0.81
25060/15	15	0.391	9.93	0.032	0.81
25060/20	20	0.437	11.10	0.032	0.81
25060/25	25	0.488	12.40	0.032	0.81
25060/30	30	0.517	13.13	0.032	0.81
25060/40	40	0.622	15.80	0.053	1.35
25060/50	50	0.684	17.37	0.053	1.35
25060/60	60	0.740	18.80	0.053	1.35
25060/70	70	0.859	21.82	0.053	1.35



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Unshielded, Multiconductor



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- -30°C to +90°C

### Conductor Color Coding

- 24, 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 polyurethane jacket
- UV resistant
- Nylon ripcord

### Availability

Made to order  
1000 ft (305 m) minimum

### FIT® Tubing Recommendations

- FIT-750: Bonding adhesive lined, cross-linked polyolefin

## 18 AWG (0.81 mm<sup>2</sup>)

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
<b>25062</b>	2	0.226	5.74	0.032	0.81
<b>25062/1*</b>	2	0.226	5.74	0.032	0.81
<b>25063</b>	3	0.238	6.05	0.032	0.81
<b>25063/1*</b>	3	0.238	6.05	0.032	0.81
<b>25064</b>	4	0.259	6.58	0.032	0.81
<b>25066</b>	6	0.307	7.80	0.032	0.81
<b>25068</b>	8	0.332	8.43	0.032	0.81
<b>25070</b>	10	0.384	9.75	0.032	0.81
<b>25070/15</b>	15	0.433	11.00	0.032	0.81
<b>25070/20</b>	20	0.484	12.29	0.032	0.81
<b>25070/25</b>	25	0.542	13.77	0.032	0.81

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

## 16 AWG (1.23 mm<sup>2</sup>)

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

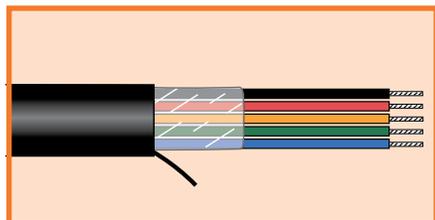
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25072</b>	2	0.250	6.35	0.032	0.81
<b>25072/1*</b>	2	0.250	6.35	0.032	0.81
<b>25073</b>	3	0.264	6.71	0.032	0.81
<b>25073/1*</b>	3	0.264	6.71	0.032	0.81
<b>25074</b>	4	0.288	7.32	0.032	0.81
<b>25076</b>	6	0.343	8.71	0.032	0.81
<b>25078</b>	8	0.372	9.45	0.032	0.81
<b>25080</b>	10	0.432	10.97	0.032	0.81
<b>25080/15</b>	15	0.488	12.40	0.032	0.81
<b>25080/20</b>	20	0.547	13.89	0.053	1.35
<b>25080/25</b>	25	0.656	16.66	0.053	1.35

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



# Xtra-Guard® 2

Oil and Abrasion Resistant  
600 V Unshielded, Multiconductor



**UL AWM 20952 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- -30°C to +105°C

### Conductor Color Coding

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

### Materials

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

### Availability

Made to order  
1000 ft (305 m) minimum

### FIT® Tubing Recommendations

- FIT-750: Bonding adhesive lined, cross-linked polyolefin

## 18 AWG (0.81 mm<sup>2</sup>)

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
<b>25422</b>	2	0.352	8.94	0.063	1.60
<b>25423</b>	3	0.369	9.37	0.063	1.60
<b>25424</b>	4	0.399	10.13	0.063	1.60
<b>25427</b>	7	0.466	11.84	0.063	1.60
<b>25429</b>	9	0.535	13.59	0.063	1.60
<b>25429/12</b>	12	0.591	15.01	0.063	1.60

## 16 AWG (1.23 mm<sup>2</sup>)

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
<b>25432</b>	2	0.376	9.55	0.063	1.60
<b>25433</b>	3	0.395	10.03	0.063	1.60
<b>25434</b>	4	0.428	10.87	0.063	1.60
<b>25435</b>	5	0.464	11.79	0.063	1.60
<b>25439</b>	9	0.579	14.71	0.063	1.60
<b>25439/12</b>	12	0.641	16.28	0.063	1.60
<b>25439/19</b>	19	0.746	18.95	0.083	2.11

## 14 AWG (2.08 mm<sup>2</sup>)

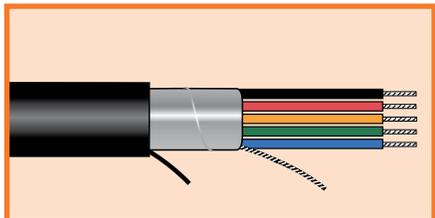
Stranding: 41/30 (41 x 0.25 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25442</b>	2	0.406	10.31	0.063	1.60
<b>25443</b>	3	0.428	10.87	0.063	1.60
<b>25444</b>	4	0.464	11.79	0.063	1.60
<b>25445</b>	5	0.505	12.83	0.063	1.60
<b>25449</b>	9	0.634	16.10	0.063	1.60
<b>25449/12</b>	12	0.703	17.86	0.063	1.60



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Foil Shielded, Multiconductor



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- 30°C to +90°C

### Conductor Color Coding

- 24, 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 polyurethane jacket
- UV resistant
- Aluminum/polyester/aluminum 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-750: Bonding adhesive lined, cross-linked polyolefin



## 24 AWG (0.23 mm<sup>2</sup>)

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

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25092</b>	2	0.160	4.06	0.032	0.81
<b>25093</b>	3	0.167	4.24	0.032	0.81
<b>25094</b>	4	0.179	4.55	0.032	0.81
<b>25096</b>	6	0.205	5.21	0.032	0.81
<b>25098</b>	8	0.219	5.56	0.032	0.81
<b>25100</b>	10	0.248	6.30	0.032	0.81
<b>25100/15</b>	15	0.275	6.99	0.032	0.81
<b>25100/20</b>	20	0.304	7.72	0.032	0.81
<b>25100/25</b>	25	0.336	8.53	0.032	0.81

## 22 AWG (0.35 mm<sup>2</sup>)

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
<b>25192</b>	2	0.172	4.37	0.032	0.81
<b>25193</b>	3	0.180	4.57	0.032	0.81
<b>25194</b>	4	0.193	4.90	0.032	0.81
<b>25196</b>	6	0.223	5.66	0.032	0.81
<b>25198</b>	8	0.239	6.07	0.032	0.81
<b>25199/10</b>	10	0.272	6.91	0.032	0.81
<b>25199/15</b>	15	0.303	7.70	0.032	0.81
<b>25199/20</b>	20	0.335	8.51	0.032	0.81
<b>25199/25</b>	25	0.372	9.45	0.032	0.81
<b>25199/30</b>	30	0.393	9.98	0.032	0.81
<b>25199/40</b>	40	0.438	11.13	0.032	0.81
<b>25199/50</b>	50	0.482	12.24	0.032	0.81

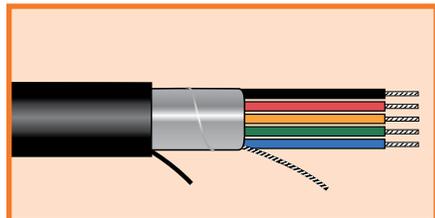
## 20 AWG (0.56 mm<sup>2</sup>)

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
<b>25462</b>	2	0.212	5.38	0.032	0.81
<b>25463</b>	3	0.223	5.66	0.032	0.81
<b>25464</b>	4	0.242	6.15	0.032	0.81
<b>25466</b>	6	0.284	7.21	0.032	0.81
<b>25468</b>	8	0.306	7.77	0.032	0.81
<b>25470</b>	10	0.352	8.94	0.032	0.81
<b>25470/15</b>	15	0.395	10.03	0.032	0.81
<b>25470/20</b>	20	0.441	11.20	0.032	0.81
<b>25470/25</b>	25	0.492	12.50	0.032	0.81
<b>25470/30</b>	30	0.521	13.23	0.032	0.81
<b>25470/40</b>	40	0.626	15.90	0.053	1.35
<b>25470/50</b>	50	0.688	17.48	0.053	1.35

# Xtra-Guard® 2

## Oil and Abrasion Resistant 300 V Foil Shielded, Multiconductor



**UL AWM 20668 VW-1  
CSA AWM I/II A/B FT1**

### Operating Temperature

- -30°C to +90°C

### Conductor Color Coding

- 24, 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 polyurethane jacket
- UV resistant
- Aluminum/polyester/aluminum 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-750: Bonding 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
<b>25382</b>	2	0.230	5.84	0.032	0.81
<b>25382/1*</b>	2	0.230	5.84	0.032	0.81
<b>25383</b>	3	0.242	6.14	0.032	0.81
<b>25383/1*</b>	3	0.242	6.14	0.032	0.81
<b>25384</b>	4	0.263	6.68	0.032	0.81
<b>25386</b>	6	0.311	7.90	0.032	0.81
<b>25388</b>	8	0.336	8.53	0.032	0.81
<b>25390</b>	10	0.388	9.86	0.032	0.81
<b>25390/15</b>	15	0.437	11.10	0.032	0.81
<b>25390/20</b>	20	0.488	12.40	0.032	0.81
<b>25390/25</b>	25	0.588	14.94	0.053	1.35
<b>25390/30</b>	30	0.621	15.77	0.053	1.35
<b>25390/40</b>	40	0.692	17.58	0.053	1.35
<b>25390/50</b>	50	0.762	19.35	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)

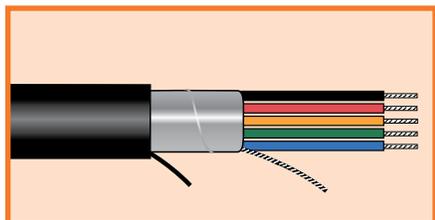
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25362</b>	2	0.254	6.45	0.032	0.81
<b>25362/1*</b>	2	0.254	6.45	0.032	0.81
<b>25363</b>	3	0.268	6.81	0.032	0.81
<b>25363/1*</b>	3	0.268	6.81	0.032	0.81
<b>25364</b>	4	0.292	7.42	0.032	0.81
<b>25366</b>	6	0.347	8.81	0.032	0.81
<b>25368</b>	8	0.376	9.55	0.032	0.81
<b>25370</b>	10	0.436	11.07	0.032	0.81
<b>25370/15</b>	15	0.492	12.50	0.032	0.81
<b>25370/20</b>	20	0.593	15.06	0.053	1.35
<b>25370/25</b>	25	0.660	16.76	0.053	1.35
<b>25370/30</b>	30	0.698	17.73	0.053	1.35
<b>25370/40</b>	40	0.779	19.79	0.083	2.11
<b>25370/50</b>	50	0.921	23.39	0.083	2.11

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



# Xtra-Guard® 2

Oil and Abrasion Resistant  
600 V Foil Shielded, Multiconductor



**UL AWM 20952 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- -30°C to +105°C

### Conductor Color Coding

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

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyurethane jacket
- UV resistant
- Aluminum/polyester/aluminum 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-750: Bonding adhesive lined, cross-linked polyolefin

## 18 AWG (0.81 mm<sup>2</sup>)

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
<b>25430/2</b>	2	0.356	9.04	0.063	1.60
<b>25430/3</b>	3	0.373	9.47	0.063	1.60
<b>25430/4</b>	4	0.403	10.24	0.063	1.60
<b>25430/5</b>	5	0.436	11.07	0.063	1.60
<b>25430/7</b>	7	0.470	11.94	0.063	1.60
<b>25430/9</b>	9	0.539	13.69	0.063	1.60
<b>25430/12</b>	12	0.595	15.11	0.063	1.60
<b>25430/15</b>	15	0.647	16.43	0.063	1.60
<b>25430/19</b>	19	0.690	17.53	0.063	1.60

## 16 AWG (1.23 mm<sup>2</sup>)

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
<b>25440/2</b>	2	0.380	9.65	0.063	1.60
<b>25440/3</b>	3	0.399	10.13	0.063	1.60
<b>25440/4</b>	4	0.432	10.97	0.063	1.60
<b>25440/5</b>	5	0.468	11.89	0.063	1.60
<b>25440/7</b>	7	0.506	12.85	0.063	1.60
<b>25440/9</b>	9	0.583	14.81	0.063	1.60
<b>25440/12</b>	12	0.645	16.38	0.063	1.60
<b>25440/15</b>	15	0.702	17.83	0.063	1.60

## 14 AWG (2.08 mm<sup>2</sup>)

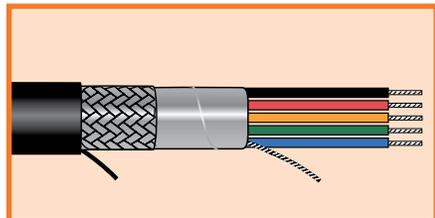
Stranding: 41/30 (41 x 0.25 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25450/2</b>	2	0.410	10.41	0.063	1.60
<b>25450/3</b>	3	0.432	10.97	0.063	1.60
<b>25450/4</b>	4	0.468	11.89	0.063	1.60
<b>25450/5</b>	5	0.509	12.93	0.063	1.60
<b>25450/7</b>	7	0.551	14.00	0.063	1.60
<b>25450/9</b>	9	0.638	16.21	0.063	1.60
<b>25450/12</b>	12	0.707	17.96	0.063	1.60
<b>25450/15</b>	15	0.771	19.58	0.063	1.60



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Supra-Shield® Foil + Braid, Multiconductor



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- 30°C to +90°C

### Conductor Color Coding

- 24, 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 polyurethane 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-750: Bonding 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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
25112	2	0.184	4.67	0.032	0.81
25113	3	0.191	4.85	0.032	0.81
25114	4	0.203	5.16	0.032	0.81
25116	6	0.229	5.82	0.032	0.81
25118	8	0.243	6.17	0.032	0.81
25120	10	0.272	6.91	0.032	0.81
25120/15	15	0.299	7.59	0.032	0.81
25120/20	20	0.328	8.33	0.032	0.81
25120/25	25	0.360	9.14	0.032	0.81
25120/30	30	0.378	9.60	0.032	0.81
25120/40	40	0.418	10.62	0.032	0.81
25120/50	50	0.457	11.61	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.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
25102	2	0.196	4.97	0.032	0.81
25103	3	0.204	5.18	0.032	0.81
25104	4	0.217	5.51	0.032	0.81
25106	6	0.247	6.27	0.032	0.81
25108	8	0.263	6.68	0.032	0.81
25110	10	0.296	7.52	0.032	0.81
25110/15	15	0.327	8.31	0.032	0.81
25110/20	20	0.359	9.12	0.032	0.81
25110/25	25	0.396	10.06	0.032	0.81
25110/30	30	0.417	10.59	0.032	0.81
25110/40	40	0.462	11.73	0.032	0.81
25110/50	50	0.506	12.85	0.032	0.81

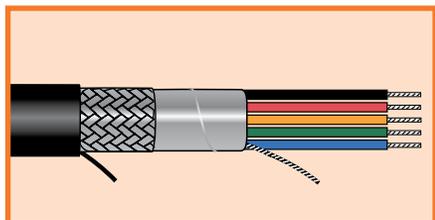
## 20 AWG (0.56 mm²)

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
25152	2	0.236	5.99	0.032	0.81
25153	3	0.247	6.27	0.032	0.81
25154	4	0.266	6.76	0.032	0.81
25156	6	0.308	7.82	0.032	0.81
25158	8	0.330	8.38	0.032	0.81
25160	10	0.376	9.55	0.032	0.81
25160/15	15	0.419	10.64	0.032	0.81
25160/20	20	0.465	11.81	0.032	0.81
25160/25	25	0.516	13.11	0.032	0.81
25160/30	30	0.545	13.84	0.032	0.81
25160/40	40	0.656	16.66	0.053	1.35
25160/50	50	0.718	18.24	0.053	1.35

# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Supra-Shield® Foil + Braid, Multiconductor



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- 30°C to +90°C

### Conductor Color Coding

- 24, 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 polyurethane 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-750: Bonding adhesive lined, cross-linked polyolefin

## 18 AWG (0.81 mm<sup>2</sup>)

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
<b>25162</b>	2	0.254	6.45	0.032	0.81
<b>25162/1*</b>	2	0.254	6.45	0.032	0.81
<b>25163</b>	3	0.266	6.76	0.032	0.81
<b>25163/1*</b>	3	0.266	6.76	0.032	0.81
<b>25164</b>	4	0.287	7.29	0.032	0.81
<b>25166</b>	6	0.335	8.51	0.032	0.81
<b>25168</b>	8	0.360	9.14	0.032	0.81
<b>25170</b>	10	0.412	10.46	0.032	0.81
<b>25170/15</b>	15	0.461	11.71	0.032	0.81
<b>25170/20</b>	20	0.512	13.00	0.032	0.81
<b>25170/25</b>	25	0.612	15.54	0.053	1.35
<b>25170/30</b>	30	0.651	16.54	0.053	1.35
<b>25170/40</b>	40	0.722	18.34	0.053	1.35

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

## 16 AWG (1.23 mm<sup>2</sup>)

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

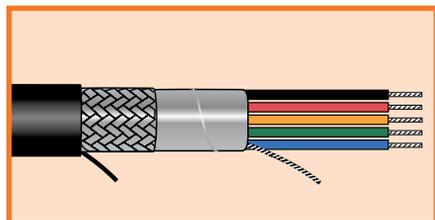
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25172</b>	2	0.278	7.06	0.032	0.81
<b>25172/1*</b>	2	0.278	7.06	0.032	0.81
<b>25173</b>	3	0.292	7.42	0.032	0.81
<b>25173/1*</b>	3	0.292	7.42	0.032	0.81
<b>25174</b>	4	0.316	8.03	0.032	0.81
<b>25176</b>	6	0.371	9.42	0.032	0.81
<b>25178</b>	8	0.400	10.16	0.032	0.81
<b>25180</b>	10	0.460	11.68	0.032	0.81
<b>25180/15</b>	15	0.516	13.11	0.032	0.81
<b>25180/20</b>	20	0.617	15.67	0.053	1.35
<b>25180/25</b>	25	0.690	17.53	0.053	1.35
<b>25180/30</b>	30	0.728	18.49	0.053	1.35
<b>25180/40</b>	40	0.869	22.07	0.083	2.11

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



# Xtra-Guard® 2

Oil and Abrasion Resistant  
600 V Supra-Shield® Foil + Braid, Multiconductor



**UL AWM 20952 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- 30°C to +105°C

### Conductor Color Coding

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

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Specially formulated polyurethane 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-750: Bonding adhesive lined, cross-linked polyolefin

18 AWG (0.81 mm <sup>2</sup> )					
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
<b>25522</b>	2	0.380	9.65	0.063	1.60
<b>25523</b>	3	0.397	10.08	0.063	1.60
<b>25524</b>	4	0.427	10.85	0.063	1.60
<b>25525</b>	5	0.460	11.68	0.063	1.60
<b>25527</b>	7	0.494	12.55	0.063	1.60
<b>25529</b>	9	0.563	14.30	0.063	1.60

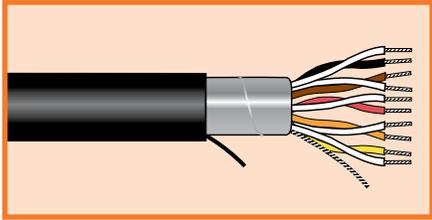
16 AWG (1.23 mm <sup>2</sup> )					
Stranding: 19/0.0117 (19 x 0.29 mm) Insulation thickness: 0.032 (0.81 mm)					
Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25532</b>	2	0.404	10.26	0.063	1.60
<b>25533</b>	3	0.423	10.74	0.063	1.60
<b>25534</b>	4	0.456	11.58	0.063	1.60
<b>25535</b>	5	0.492	12.50	0.063	1.60
<b>25537</b>	7	0.530	13.46	0.063	1.60
<b>25539</b>	9	0.607	15.42	0.063	1.60
<b>25539/12</b>	12	0.675	17.15	0.063	1.60
<b>25539/15</b>	15	0.772	19.61	0.083	2.11
<b>25539/19</b>	19	0.820	20.83	0.083	2.11

14 AWG (2.08 mm <sup>2</sup> )					
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
<b>25542</b>	2	0.434	11.02	0.063	1.60
<b>25543</b>	3	0.456	11.58	0.063	1.60
<b>25544</b>	4	0.492	12.50	0.063	1.60
<b>25545</b>	5	0.533	13.54	0.063	1.60
<b>25547</b>	7	0.575	14.61	0.063	1.60
<b>25549</b>	9	0.668	16.97	0.063	1.60
<b>25549/12</b>	12	0.777	19.74	0.083	2.11



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Foil Shield, Multipair



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- -30°C to +90°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 polyurethane jacket
- UV resistant
- Aluminum/polyester/aluminum 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-750: Bonding adhesive lined, cross-linked polyolefin

## 24 AWG (0.23 mm<sup>2</sup>)

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
<b>25491</b>	1	0.160	4.06	0.032	0.81
<b>25492</b>	2	0.216	5.48	0.032	0.81
<b>25493</b>	3	0.228	5.79	0.032	0.81
<b>25494</b>	4	0.247	6.27	0.032	0.81
<b>25495</b>	5	0.268	6.81	0.032	0.81
<b>25496</b>	6	0.290	7.37	0.032	0.81
<b>25499</b>	9	0.336	8.53	0.032	0.81
<b>25499/11</b>	11	0.361	9.17	0.032	0.81
<b>25499/15</b>	15	0.405	10.29	0.032	0.81
<b>25499/19</b>	19	0.433	11.00	0.032	0.81
<b>25499/27</b>	27	0.516	13.11	0.032	0.81

## 22 AWG (0.35 mm<sup>2</sup>)

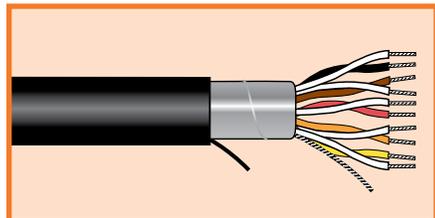
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25481</b>	1	0.172	4.37	0.032	0.81
<b>25482</b>	2	0.236	5.99	0.032	0.81
<b>25483</b>	3	0.249	6.32	0.032	0.81
<b>25484</b>	4	0.271	6.88	0.032	0.81
<b>25485</b>	5	0.295	7.49	0.032	0.81
<b>25486</b>	6	0.320	8.13	0.032	0.81
<b>25489</b>	9	0.372	9.45	0.032	0.81
<b>25489/11</b>	11	0.400	10.16	0.032	0.81
<b>25489/15</b>	15	0.451	11.46	0.032	0.81
<b>25489/19</b>	19	0.483	12.27	0.032	0.81



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Foil Shield, Multipair



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- 30°C to +90°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 polyurethane jacket
- UV resistant
- Aluminum/polyester/aluminum 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-750: Bonding adhesive lined, cross-linked polyolefin

## 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
<b>25452</b>	2	0.302	7.67	0.032	0.81
<b>25453</b>	3	0.320	8.13	0.032	0.81
<b>25456</b>	6	0.419	10.64	0.032	0.81
<b>25459</b>	9	0.491	12.47	0.032	0.81
<b>25459/12</b>	12	0.549	13.94	0.032	0.81
<b>25459/15</b>	15	0.644	16.36	0.053	1.35

## 18 AWG (0.81 mm²)

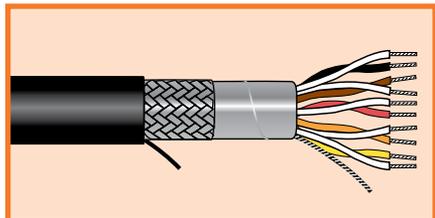
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25372</b>	2	0.331	8.41	0.032	0.81
<b>25373</b>	3	0.352	8.94	0.032	0.81
<b>25376</b>	6	0.464	11.79	0.032	0.81
<b>25379</b>	9	0.545	13.84	0.053	1.35
<b>25379/12</b>	12	0.652	16.56	0.053	1.35



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Supra-Shield® Foil + Braid, Multipair



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- -30°C to +90°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 polyurethane 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-750: Bonding adhesive lined, cross-linked polyolefin

## 24 AWG (0.23 mm<sup>2</sup>)

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
<b>25271</b>	1	0.184	4.67	0.032	0.81
<b>25272</b>	2	0.240	6.10	0.032	0.81
<b>25273</b>	3	0.252	6.40	0.032	0.81
<b>25274</b>	4	0.271	6.88	0.032	0.81
<b>25275</b>	5	0.292	7.42	0.032	0.81
<b>25276</b>	6	0.314	7.98	0.032	0.81
<b>25279</b>	9	0.360	9.14	0.032	0.81
<b>25279/11</b>	11	0.385	9.78	0.032	0.81
<b>25279/15</b>	15	0.429	10.90	0.032	0.81
<b>25279/19</b>	19	0.457	11.61	0.032	0.81

## 22 AWG (0.35 mm<sup>2</sup>)

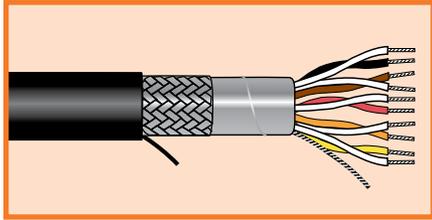
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>25121</b>	1	0.196	4.98	0.032	0.81
<b>25122</b>	2	0.260	6.60	0.032	0.81
<b>25123</b>	3	0.273	6.93	0.032	0.81
<b>25124</b>	4	0.295	7.49	0.032	0.81
<b>25125</b>	5	0.319	8.10	0.032	0.81
<b>25126</b>	6	0.344	8.74	0.032	0.81
<b>25129</b>	9	0.396	10.06	0.032	0.81
<b>25129/11</b>	11	0.424	10.77	0.032	0.81
<b>25129/15</b>	15	0.475	12.07	0.032	0.81



# Xtra-Guard® 2

Oil and Abrasion Resistant  
300 V Supra-Shield® Foil + Braid, Multipair



**UL AWM 20668 VW-1**  
**CSA AWM I/II A/B FT1**

### Operating Temperature

- 30°C to +90°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 polyurethane 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-750: Bonding adhesive lined, cross-linked polyolefin

## 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
<b>25292</b>	2	0.326	8.28	0.032	0.81
<b>25293</b>	3	0.344	8.74	0.032	0.81
<b>25296</b>	6	0.443	11.25	0.032	0.81
<b>25299</b>	9	0.515	13.08	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
<b>25132</b>	2	0.355	9.02	0.032	0.81
<b>25133</b>	3	0.376	9.55	0.032	0.81
<b>25136</b>	6	0.488	12.40	0.032	0.81
<b>25139</b>	9	0.611	15.52	0.053	1.35
<b>25139/12</b>	12	0.682	17.32	0.053	1.35



# 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