

EcoFlex® PUR

Zero Halogen, Reduced Diameter,  
Oil Resistant, Continuous Flex Cable



AlphaWire

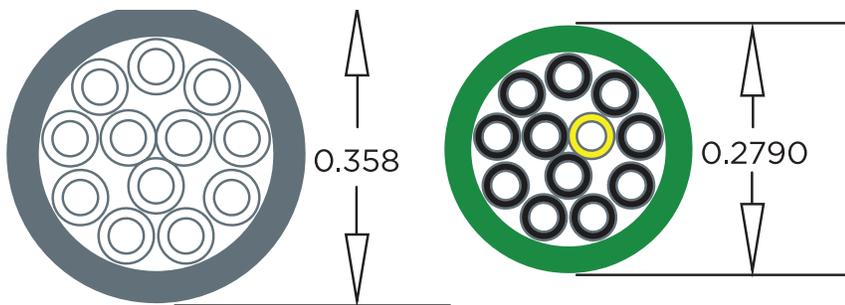
*Cables you trust. Service you deserve.*

# EcoFlex® PUR Flex Cable



**G**et the abrasion, UV, and oil resistance of a tough zero-halogen polyurethane jacket in a flex cable that's up to 40% smaller and 44% lighter than other 600 V continuous flex cables.

20 AWG, 12 conductor cable



Traditional PUR Cable

EcoFlex® PUR

## The Smaller Continuous Flex Cable

Compared to other 600 V continuous flex cables, our new EcoFlex PUR cables save you significant space and weight. The thin-wall mPPE insulation provides cables that are up to 40% smaller and 44% lighter than traditional flex cables.

## Tough Polyurethane Jacket

The rugged, zero-halogen PUR jacket is tough enough for demanding applications in industrial machinery, mining, and outdoor applications. It offers exceptional resistance to abrasion, oils and solvents, and UV radiation. It remains flexible even at low temperatures.

## Specifications

- 28 to 10 AWG
- 2 to 36 conductors
- Unshielded or braid shielding

### Operating Temperature

- -50°C to +90°C (static)
- -40°C to +80°C (dynamic)

### Materials

- Conductors: Finely stranded tinned copper
- Insulation: mPPE
- Shielding: Tinned copper braid, 85% coverage
- Jacket: PUR, zero halogen, slate

### Flex Life Cycles

- 8 million and counting

### Bend Radius

- Static: 4x
- Dynamic: 6x

### Conductor Color Coding

- Black, numbered
- One green/yellow conductor
- 26 AWG and 28 AWG use Color Code D

### Chemical Properties

- Zero-halogen
- Contains no heavy metals or phthalates

### Electrical Properties

- 600 V (UL)

### Approvals

- UL AWM 21959 (90°C/600 V<sub>RMS</sub>)
- UL Oil Res I
- UL Sunlight Resistant
- CSA AWM I/II A/B FT2
- IEC60332-1 Flame Behavior
- IEC60332-2 Flame Behavior
- IEC60754-2 Acid Gas Generation
- IEC60228 Conductors, Class 6
- EU Low Voltage Directive 2006/95/EC

### Availability

- 100' put-up in stock
- Bulk (Min. 1000')



Alpha Wire's next generation of eco-friendly, high-performance wire and cable, designed to provide better performance in a smaller package.

- EcoCable®
- EcoWire®
- EcoFlex® Cable
- EcoWire® Plus
- EcoCable® Mini
- EcoFlex® PUR

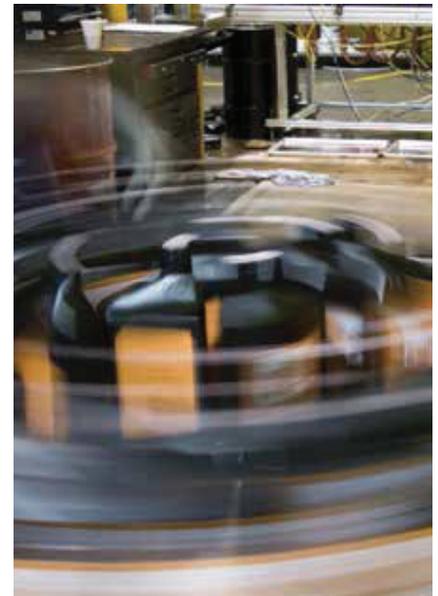
Learn more about the new EcoGen family of products at [www.alphawire.com/EcoGen](http://www.alphawire.com/EcoGen)

## Zero Halogen

EcoFlex PUR cables contain no halogens, phthalates, or heavy metals, making it ideal for meeting RoHS and WEEE requirements.

## The Flexible Choice in Flex Cables

With its rugged PUR jacket and finely stranded conductors, EcoFlex PUR cable provides 8+ million flex cycles in tough application conditions—while saving space and reducing weight. And with a wide range of conductor sizes, conductor counts, and shielded and unshielded versions, you can find the cable you need.



## Unshielded

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80001	2	0.140	3.56
80002	3	0.146	3.71

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80003	2	0.150	3.81
80004	3	0.156	3.96
80005	5	0.179	4.55
80006	7	0.192	4.88
80007	9	0.231	5.87

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80008	2	0.158	4.01
80009	3	0.165	4.19
80010	5	0.190	4.83
80011	7	0.204	5.18
80012	9	0.247	6.27
80013	10	0.248	6.30

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80014	2	0.172	4.37
80015	3	0.180	4.57
80016	4	0.195	4.95
80017	6	0.225	5.72
80018	9	0.275	6.98
80019	10	0.276	7.01

### 20 AWG (0.523 mm<sup>2</sup>)

Stranding: 26/34 (26 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80020	2	0.178	4.52
80021	3	0.187	4.75
80022	5	0.217	5.51
80023	6	0.234	5.94
80024	7	0.234	5.94
80025	9	0.287	7.29
80026	12	0.297	7.54
80027	18	0.344	8.74
80028	20	0.361	9.17
80029	25	0.398	10.11
80030	30	0.421	10.69
80031	36	0.454	11.53

### 18 AWG (0.825 mm<sup>2</sup>)

Stranding: 41/34 (41 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80032	2	0.202	5.13
80033	3	0.213	5.41
80034	4	0.231	5.87
80035	5	0.250	6.35
80036	7	0.271	6.88
80037	9	0.334	8.48
80038	12	0.347	8.81
80039	18	0.405	10.29
80040	25	0.470	11.94

# EcoFlex® PUR Flex Cable



## Unshielded

### 16 AWG (1.31 mm<sup>2</sup>)

Stranding: 65/34 (65 x 0.16 mm)  
Insulation thickness: 0.012 (0.30 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80041	2	0.228	5.79
80042	3	0.241	6.12
80043	4	0.263	6.68
80044	5	0.285	7.24
80045	7	0.310	7.87
80046	9	0.386	9.80
80047	12	0.401	10.19
80048	18	0.470	11.94
80049	25	0.548	13.92
80050*	36	0.672	17.07

\*0.053 (1.35 mm) jacket thickness

### 14 AWG (2.11 mm<sup>2</sup>)

Stranding: 105/34 (105 x 0.16 mm)  
Insulation thickness: 0.013 (0.33 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80052	3	0.275	6.98
80053	4	0.301	7.65
80054	5	0.329	8.36
80055	7	0.358	9.09
80056	9	0.449	11.40
80057	12	0.467	11.86
80058	18	0.550	13.97
80059*	25	0.686	17.42

\*0.053 (1.35 mm) jacket thickness

### 12 AWG (3.38 mm<sup>2</sup>)

Stranding: 168/34 (168 x 0.16 mm)  
Insulation thickness: 0.015 (0.38 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80060	3	0.357	9.07
80061	4	0.393	9.98
80062	5	0.432	10.97
80063	7	0.473	12.01
80064*	9	0.642	16.31

\*0.053 (1.35 mm) jacket thickness

### 10 AWG (5.21 mm<sup>2</sup>)

Stranding: 259/34 (259 x 0.16 mm)  
Insulation thickness: 0.020 (0.51 mm)  
Jacket thickness: 0.053 (1.35 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80065	3	0.481	12.23
80066	4	0.528	13.41
80067	5	0.577	14.66
80068	7	0.630	16.00

## More Choice!

EcoFlex PUR cables can be built in other configurations. Consult Alpha Wire about your specific requirements and other available options—and for custom and composite configurations.

## Sample the Performance

Samples of EcoFlex PUR cable are available today!

Request yours at [www.alphawire.com/ecogen](http://www.alphawire.com/ecogen)

or call 1-800-52 ALPHA

## Braid Shielded

### 28 AWG (0.0925 mm<sup>2</sup>)

Stranding: 19/40 (19 x 0.079 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80101	2	0.168	4.27
80102	3	0.174	4.42

### 26 AWG (0.154 mm<sup>2</sup>)

Stranding: 19/38 (19 x 0.102 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80103	2	0.178	4.52
80104	3	0.184	4.67
80105	4	0.196	4.98
80106	6	0.220	5.59
80107	8	0.246	6.25

### 24 AWG (0.241 mm<sup>2</sup>)

Stranding: 19/36 (19 x 0.127 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80108	2	0.186	4.72
80109	3	0.193	4.90
80110	5	0.218	5.54
80111	7	0.232	5.89
80112	9	0.275	6.98
80113	10	0.276	7.01

### 22 AWG (0.382 mm<sup>2</sup>)

Stranding: 19/34 (19 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80114	2	0.200	5.08
80115	3	0.208	5.28
80116	4	0.223	5.66
80117	6	0.253	6.43
80118	9	0.303	7.70
80119	10	0.304	7.72

### 20 AWG (0.523 mm<sup>2</sup>)

Stranding: 26/34 (26 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80120	2	0.206	5.23
80121	3	0.215	5.46
80122	5	0.245	6.22
80123	6	0.262	6.65
80124	7	0.262	6.65
80125	9	0.315	8.00
80126	12	0.325	8.25
80127	18	0.372	9.45
80128	20	0.389	9.88
80129	25	0.426	10.82
80130	30	0.449	11.40
80131	36	0.488	12.40

### 18 AWG (0.825 mm<sup>2</sup>)

Stranding: 41/34 (41 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80132	2	0.223	5.66
80133	3	0.241	6.12
80134	4	0.259	6.58
80135	5	0.278	7.06
80136	7	0.299	7.59
80137	9	0.362	9.19
80138	12	0.375	9.53
80139	18	0.433	11.00
80140	25	0.504	12.80

## Braid Shielded

### 16 AWG (1.31 mm<sup>2</sup>)

Stranding: 65/34 (65 x 0.16 mm)  
Insulation thickness: 0.012 (0.30 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80141	2	0.256	6.50
80142	3	0.269	6.83
80143	4	0.291	7.39
80144	5	0.313	7.95
80145	7	0.338	8.59
80146	9	0.414	10.52
80147	12	0.429	10.90
80148	18	0.504	12.80
80149*	25	0.624	15.85
80150*	36	0.672	17.07

\*0.053 (1.35 mm) jacket thickness

### 14 AWG (2.11 mm<sup>2</sup>)

Stranding: 105/34 (105 x 0.16 mm)  
Insulation thickness: 0.013 (0.33 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80150	3	0.303	7.70
80151	4	0.329	8.36
80152	5	0.357	9.07
80153	7	0.386	9.80
80154	9	0.483	12.27
80155	12	0.501	12.73
80156*	18	0.626	15.90
80157*	25	0.727	18.47

\*0.053 (1.35 mm) jacket thickness

### 12 AWG (3.38 mm<sup>2</sup>)

Stranding: 168/34 (168 x 0.16 mm)  
Insulation thickness: 0.015 (0.38 mm)  
Jacket thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80158	3	0.385	9.78
80159	4	0.421	10.69
80160	5	0.460	11.68
80161	7	0.507	12.88
80162*	9	0.676	17.17

\*0.053 (1.35 mm) jacket thickness

### 10 AWG (5.21 mm<sup>2</sup>)

Stranding: 259/34 (259 x 0.16 mm)  
Insulation thickness: 0.020 (0.51 mm)  
Jacket thickness: 0.053 (1.35 mm)

Part Number	Conductors	Nominal Diameter	
		Inch	mm
80163	3	0.509	12.93
80164	4	0.562	14.27
80165	5	0.611	15.52
80166	7	0.644	16.36

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or call 1-800-52 ALPHA

## Cables you trust. Service you deserve.

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

## Superior availability

Alpha Wire offers wire and cable from stock in most sizes and constructions, in both small and large put-ups, so you can order it when you need it. Our products are available for same-day shipment, eliminating long lead times.

## 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 product 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 wire or 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](http://www.alphawire.com)**!

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Alpha Wire's next generation of eco-friendly, high-performance wire and cable, designed to provide better performance in a smaller package.

