

EcoFlex® PUR

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

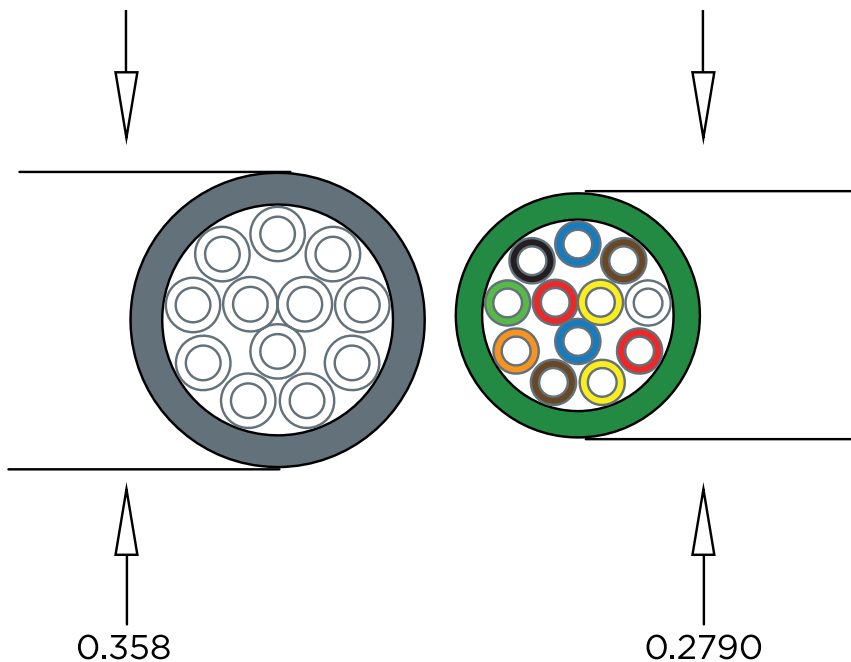


# EcoFlex® PUR Flex Cable



**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

### 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
- EN60332-1 Flame Behavior
- EN60332-2 Flame Behavior
- EN60754-2 Acid Gas Generation
- EN60228 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          | 0.194            | 4.93  |
| 80033       | 3          | 0.204            | 5.18  |
| 80034       | 4          | 0.221            | 5.61  |
| 80035       | 5          | 0.239            | 6.07  |
| 80036       | 7          | 0.258            | 6.55  |
| 80037       | 9          | 0.318            | 8.08  |
| 80038       | 12         | 0.330            | 8.38  |
| 80039       | 18         | 0.384            | 9.75  |
| 80040       | 25         | 0.446            | 11.33 |

# EcoFlex® PUR Flex Cable



## Unshielded

### 16 AWG (1.31 mm²)

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 mm²)

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 mm²)

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 mm²)

Stranding: 259/34 (259 x 0.16 mm)  
Insulation thickness: 0.016 (0.41 mm)  
Jacket thickness: 0.053 (1.35 mm)

| Part Number | Conductors | Nominal Diameter |       |
|-------------|------------|------------------|-------|
|             |            | Inch             | mm    |
| 80065       | 3          | 0.464            | 11.79 |
| 80066       | 4          | 0.508            | 12.90 |
| 80067       | 5          | 0.556            | 14.12 |
| 80068       | 7          | 0.606            | 15.39 |

## 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          | 0.222            | 5.64  |
| 80133       | 3          | 0.232            | 5.89  |
| 80134       | 4          | 0.249            | 6.32  |
| 80135       | 5          | 0.267            | 6.78  |
| 80136       | 7          | 0.286            | 7.26  |
| 80137       | 9          | 0.346            | 8.79  |
| 80138       | 12         | 0.358            | 9.09  |
| 80139       | 18         | 0.412            | 10.46 |
| 80140       | 25         | 0.676            | 17.17 |

## 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    |
| <b>80141</b>  | 2          | 0.256            | 6.50  |
| <b>80142</b>  | 3          | 0.269            | 6.83  |
| <b>80143</b>  | 4          | 0.291            | 7.39  |
| <b>80144</b>  | 5          | 0.313            | 7.95  |
| <b>80145</b>  | 7          | 0.338            | 8.59  |
| <b>80146</b>  | 9          | 0.414            | 10.52 |
| <b>80147</b>  | 12         | 0.429            | 10.90 |
| <b>80148</b>  | 18         | 0.504            | 12.80 |
| <b>80149*</b> | 25         | 0.624            | 15.85 |

\*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    |
| <b>80150</b>  | 3          | 0.303            | 7.70  |
| <b>80151</b>  | 4          | 0.329            | 8.36  |
| <b>80152</b>  | 5          | 0.357            | 9.07  |
| <b>80153</b>  | 7          | 0.386            | 9.80  |
| <b>80154</b>  | 9          | 0.483            | 12.27 |
| <b>80155</b>  | 12         | 0.501            | 12.73 |
| <b>80156*</b> | 18         | 0.626            | 15.90 |
| <b>80157*</b> | 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    |
| <b>80158</b>  | 3          | 0.385            | 9.78  |
| <b>80159</b>  | 4          | 0.421            | 10.69 |
| <b>80160</b>  | 5          | 0.460            | 11.68 |
| <b>80161</b>  | 7          | 0.507            | 12.88 |
| <b>80162*</b> | 9          | 0.683            | 17.35 |

\*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: 0.016 (0.41 mm)  
Jacket thickness: 0.053 (1.35 mm)

| Part Number  | Conductors | Nominal Diameter |       |
|--------------|------------|------------------|-------|
|              |            | Inch             | mm    |
| <b>80163</b> | 3          | 0.492            | 12.50 |
| <b>80164</b> | 4          | 0.542            | 13.77 |
| <b>80165</b> | 5          | 0.590            | 14.99 |
| <b>80166</b> | 7          | 0.640            | 16.26 |

## More Choice!

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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.

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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.

