

# ITC/PLTC 105°C unshielded PVC 300V Cable



Eland Product Group: B4U

## APPLICATION

Soft annealed bare or tinned copper conductors and PVC flame retardant insulations and jackets are the standard for 300V instrumentation installation. Constructions with Heat resistant PVC/PVC that have three or more conductors and 20 AWG or larger conductors may also be used for direct burial installations.

## CHARACTERISTICS

**Voltage Rating**  
300V

**Test Voltage**  
Core-Core: 1500V  
Core-Screen: 1500V

**Temperature Rating**  
Fixed: -40°C +105°C  
During installation: -5°C +50°C

**Minimum Bending Radius**  
7.5 x overall diameter

## CONSTRUCTION

**Conductor**  
Plain annealed copper wires

**Insulation**  
PVC (Polyvinyl Chloride)

**Tape**  
Polyester tape

**Sheath**  
PVC (Polyvinyl Chloride)

**Core Identification**  
Pairs: ● Black ○ White numbered  
Triads: ● Black ○ White numbered ● Red

**Sheath Colour**  
● Black ● Blue

## STANDARDS

UL 1685 (vertical tray), UL 13 (VW-1), IEC/EN 60332-1, IEC 60332-3-22 (CAT-A), (BS 4066 part 1&3), EN 50266-2-2 ASTM No 2 oil 70°C 4 (ICEA S-73-532), ASTM B-3, ASTM B-8, UL 1581 class 105°C, EN 50363-3 TI3, UL 13 - UL 2250

## THE CABLE LAB<sup>®</sup>

AN ISO/IEC 17025 AND IECCE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



## SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: [www.elandcables.com/company/about-us/esg-sustainability](http://www.elandcables.com/company/about-us/esg-sustainability)



## REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.





## DIMENSIONS

| ELAND PART NO. | NO. OF<br>PAIRS/TRIADS | CONDUCTOR<br>AWG | NOMINAL THICKNESS<br>OF INSULATION<br>mm | NOMINAL THICKNESS<br>OF OUTER SHEATH<br>mm | NOMINAL OVERALL<br>DIAMETER<br>mm | NOMINAL<br>WEIGHT<br>kg/km |
|----------------|------------------------|------------------|------------------------------------------|--------------------------------------------|-----------------------------------|----------------------------|
| B4U01P14AWGBK  | 1P                     | 14               | 0.51                                     | 1.02                                       | 7.94                              | 119                        |
| B4U01P16AWGBK  | 1P                     | 16               | 0.38                                     | 0.89                                       | 6.48                              | 76                         |
| B4U01P18AWGBK  | 1P                     | 18               | 0.38                                     | 0.89                                       | 5.88                              | 57                         |
| B4U01P20AWGBK  | 1P                     | 20               | 0.3                                      | 0.89                                       | 5.08                              | 40                         |
| B4U02P14AWGBK  | 2P                     | 14               | 0.51                                     | 1.27                                       | 12.14                             | 270                        |
| B4U02P16AWGBK  | 2P                     | 16               | 0.38                                     | 1.27                                       | 10.14                             | 182                        |
| B4U02P18AWGBK  | 2P                     | 18               | 0.38                                     | 1.27                                       | 9.14                              | 139                        |
| B4U02P20AWGBK  | 2P                     | 20               | 0.3                                      | 1.02                                       | 7.34                              | 86                         |
| B4U04P14AWGBK  | 4P                     | 14               | 0.51                                     | 1.52                                       | 14.54                             | 454                        |
| B4U04P16AWGBK  | 4P                     | 16               | 0.38                                     | 1.27                                       | 11.74                             | 289                        |
| B4U04P18AWGBK  | 4P                     | 18               | 0.38                                     | 1.27                                       | 10.54                             | 215                        |
| B4U04P20AWGBK  | 4P                     | 20               | 0.3                                      | 1.27                                       | 8.84                              | 147                        |
| B4U06P14AWGBK  | 6P                     | 14               | 0.51                                     | 1.52                                       | 17.34                             | 665                        |
| B4U06P16AWGBK  | 6P                     | 16               | 0.38                                     | 1.52                                       | 14.44                             | 440                        |
| B4U06P18AWGBK  | 6P                     | 18               | 0.38                                     | 1.27                                       | 12.44                             | 310                        |
| B4U06P20AWGBK  | 6P                     | 20               | 0.3                                      | 1.27                                       | 10.34                             | 207                        |
| B4U10P14AWGBK  | 10P                    | 14               | 0.51                                     | 1.78                                       | 22.56                             | 1128                       |
| B4U10P16AWGBK  | 10P                    | 16               | 0.38                                     | 1.52                                       | 18.14                             | 716                        |
| B4U10P18AWGBK  | 10P                    | 18               | 0.38                                     | 1.52                                       | 16.14                             | 529                        |
| B4U10P20AWGBK  | 10P                    | 20               | 0.3                                      | 1.52                                       | 13.44                             | 355                        |
| B4U12P14AWGBK  | 12P                    | 14               | 0.51                                     | 1.78                                       | 23.26                             | 1271                       |
| B4U12P16AWGBK  | 12P                    | 16               | 0.38                                     | 1.78                                       | 19.26                             | 837                        |
| B4U12P18AWGBK  | 12P                    | 18               | 0.38                                     | 1.52                                       | 16.74                             | 596                        |
| B4U12P20AWGBK  | 12P                    | 20               | 0.3                                      | 1.52                                       | 13.84                             | 395                        |
| B4U18P14AWGBK  | 18P                    | 14               | 0.51                                     | 2.03                                       | 27.76                             | 1870                       |
| B4U18P16AWGBK  | 18P                    | 16               | 0.38                                     | 1.78                                       | 22.46                             | 1195                       |
| B4U18P18AWGBK  | 18P                    | 18               | 0.38                                     | 1.78                                       | 19.96                             | 877                        |
| B4U18P20AWGBK  | 18P                    | 20               | 0.3                                      | 1.52                                       | 16.04                             | 556                        |
| B4U24P14AWGBK  | 24P                    | 14               | 0.51                                     | 2.03                                       | 32.46                             | 2525                       |
| B4U24P16AWGBK  | 24P                    | 16               | 0.38                                     | 2.03                                       | 26.66                             | 3220                       |
| B4U24P18AWGBK  | 24P                    | 18               | 0.38                                     | 1.78                                       | 23.16                             | 1176                       |
| B4U24P20AWGBK  | 24P                    | 20               | 0.3                                      | 1.78                                       | 19.06                             | 775                        |
| B4U50P14AWGBK  | 50P                    | 14               | 0.51                                     | 2.29                                       | 44.08                             | 4979                       |
| B4U50P16AWGBK  | 50P                    | 16               | 0.38                                     | 2.29                                       | 35.98                             | 3878                       |
| B4U50P18AWGBK  | 50P                    | 18               | 0.38                                     | 2.03                                       | 31.36                             | 2301                       |
| B4U50P20AWGBK  | 50P                    | 20               | 0.3                                      | 1.78                                       | 25.16                             | 1466                       |
| B4U01T14AWGBK  | 1T                     | 14               | 0.51                                     | 1.02                                       | 8.34                              | 154                        |
| B4U01T16AWGBK  | 1T                     | 16               | 0.38                                     | 1.02                                       | 7.14                              | 103                        |
| B4U01T18AWGBK  | 1T                     | 18               | 0.38                                     | 0.89                                       | 6.18                              | 73                         |
| B4U01T20AWGBK  | 1T                     | 20               | 0.3                                      | 0.89                                       | 5.28                              | 50                         |
| B4U02T14AWGBK  | 2T                     | 14               | 0.51                                     | 1.27                                       | 13.44                             | 362                        |
| B4U02T16AWGBK  | 2T                     | 16               | 0.38                                     | 1.27                                       | 11.24                             | 243                        |
| B4U02T18AWGBK  | 2T                     | 18               | 0.38                                     | 1.27                                       | 10.14                             | 181                        |
| B4U02T20AWGBK  | 2T                     | 20               | 0.3                                      | 1.02                                       | 8.04                              | 113                        |
| B4U04T14AWGBK  | 4T                     | 14               | 0.51                                     | 1.52                                       | 16.14                             | 616                        |
| B4U04T16AWGBK  | 4T                     | 16               | 0.38                                     | 1.27                                       | 13.04                             | 391                        |
| B4U04T18AWGBK  | 4T                     | 18               | 0.38                                     | 1.27                                       | 11.64                             | 289                        |
| B4U04T20AWGBK  | 4T                     | 20               | 0.3                                      | 1.27                                       | 9.74                              | 193                        |



| ELAND PART NO. | NO. OF<br>PAIRS/TRIADS | CONDUCTOR<br>AWG | NOMINAL THICKNESS<br>OF INSULATION<br>mm | NOMINAL THICKNESS<br>OF OUTER SHEATH<br>mm | NOMINAL OVERALL<br>DIAMETER<br>mm | NOMINAL<br>WEIGHT<br>kg/km |
|----------------|------------------------|------------------|------------------------------------------|--------------------------------------------|-----------------------------------|----------------------------|
| B4U06T14AWGBK  | 6T                     | 14               | 0.51                                     | 1.78                                       | 19.86                             | 940                        |
| B4U06T16AWGBK  | 6T                     | 16               | 0.38                                     | 1.52                                       | 16.04                             | 599                        |
| B4U06T18AWGBK  | 6T                     | 18               | 0.38                                     | 1.52                                       | 14.34                             | 441                        |
| B4U06T20AWGBK  | 6T                     | 20               | 0.3                                      | 1.27                                       | 11.54                             | 277                        |
| B4U08T14AWGBK  | 8T                     | 14               | 0.51                                     | 1.78                                       | 22.36                             | 1215                       |
| B4U08T16AWGBK  | 8T                     | 16               | 0.38                                     | 1.52                                       | 18.04                             | 771                        |
| B4U08T18AWGBK  | 8T                     | 18               | 0.38                                     | 1.52                                       | 16.04                             | 567                        |
| B4U08T20AWGBK  | 8T                     | 20               | 0.3                                      | 1.27                                       | 12.84                             | 358                        |
| B4U10T14AWGBK  | 10T                    | 14               | 0.51                                     | 1.78                                       | 25.16                             | 1544                       |
| B4U10T16AWGBK  | 10T                    | 16               | 0.38                                     | 1.78                                       | 20.86                             | 1011                       |
| B4U10T18AWGBK  | 10T                    | 18               | 0.38                                     | 1.52                                       | 18.04                             | 714                        |
| B4U10T20AWGBK  | 10T                    | 20               | 0.3                                      | 1.52                                       | 14.94                             | 475                        |
| B4U12T14AWGBK  | 12T                    | 14               | 0.51                                     | 1.78                                       | 26.16                             | 1759                       |
| B4U12T16AWGBK  | 12T                    | 16               | 0.38                                     | 1.78                                       | 21.56                             | 1146                       |
| B4U12T18AWGBK  | 12T                    | 18               | 0.38                                     | 1.52                                       | 18.64                             | 810                        |
| B4U12T20AWGBK  | 12T                    | 20               | 0.3                                      | 1.52                                       | 15.44                             | 534                        |
| B4U16T14AWGBK  | 16T                    | 14               | 0.51                                     | 2.03                                       | 29.56                             | 2305                       |
| B4U16T16AWGBK  | 16T                    | 16               | 0.38                                     | 1.78                                       | 23.86                             | 1472                       |
| B4U16T18AWGBK  | 16T                    | 18               | 0.38                                     | 1.78                                       | 21.16                             | 1070                       |
| B4U16T20AWGBK  | 16T                    | 20               | 0.3                                      | 1.78                                       | 17.04                             | 678                        |
| B4U18T14AWGBK  | 18T                    | 14               | 0.51                                     | 2.03                                       | 31.16                             | 2584                       |
| B4U18T16AWGBK  | 18T                    | 16               | 0.38                                     | 1.78                                       | 25.16                             | 1646                       |
| B4U18T18AWGBK  | 18T                    | 18               | 0.38                                     | 1.78                                       | 22.36                             | 1191                       |
| B4U18T20AWGBK  | 18T                    | 20               | 0.3                                      | 1.78                                       | 17.94                             | 756                        |
| B4U24T14AWGBK  | 24T                    | 14               | 0.51                                     | 2.29                                       | 37.08                             | 3551                       |
| B4U24T16AWGBK  | 24T                    | 16               | 0.38                                     | 2.03                                       | 29.96                             | 2267                       |
| B4U24T18AWGBK  | 24T                    | 18               | 0.38                                     | 1.78                                       | 26.06                             | 1612                       |
| B4U24T20AWGBK  | 24T                    | 20               | 0.3                                      | 1.78                                       | 21.36                             | 1052                       |
| B4U50T14AWGBK  | 50T                    | 14               | 0.51                                     | 2.29                                       | 49.78                             | 6945                       |
| B4U50T16AWGBK  | 50T                    | 16               | 0.38                                     | 2.29                                       | 40.88                             | 4470                       |
| B4U50T18AWGBK  | 50T                    | 18               | 0.38                                     | 2.03                                       | 35.26                             | 3177                       |
| B4U50T20AWGBK  | 50T                    | 20               | 0.3                                      | 2.03                                       | 28.76                             | 2056                       |

## ELECTRICAL CHARACTERISTICS

| NOMINAL CROSS<br>SECTIONAL AREA<br>AWG | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C<br>Ω/kft | INSULATION RESISTANCE AT 15.6°C<br>MΩxkft |
|----------------------------------------|--------------------------------------------------|-------------------------------------------|
| 14                                     | 2.71                                             | 100.1                                     |
| 16                                     | 4.36                                             | 100.1                                     |
| 18                                     | 6.95                                             | 100.1                                     |
| 20                                     | 10.92                                            | 100.1                                     |