

Belden 8106 Multi-Conductor Low Capacitance Cable



Eland Product Group: A4B

APPLICATION

An overall foil and braid screen cable used over extended distances at high data rates for RS 232 and RS 422 applications.

CHARACTERISTICS

Voltage Rating

300V

Temperature Rating

-30°C to +80°C

Minimum Bending Radius

10 x overall diameter

CONSTRUCTION

Conductor

Class 2 stranded tinned copper

Insulation

Datalene[®] FPE (Foam Polyethylene)

Screen 1

Beldfoil[®] (Aluminium foil polyester tape)

Drain Wire

Tinned copper

Screen 2

TCWB (Tinned Copper Wire Braid)

Sheath

PVC (Polyvinyl Chloride)

Core Identification

Pair 1: White/Blue Blue/White

Pair 2: White/Orange Orange/White

Pair 3: White/Green Green/White

Pair 4: White/Brown Brown/White

Pair 5: White/Grey Grey/White

Pair 6: Red/Blue Blue/Red

Sheath Colour

Grey

STANDARDS

Generally to Belden 8106, EIA RS 232, RS 422

Vertical tray fire propagation and smoke release test UL 1685



THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECEE 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



REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].





DIMENSIONS

| ELAND PART NO. | BELDEN REFERENCE | NO. OF PAIRS | AWG (NO. OF STRANDS) | NOMINAL DIAMETER OF STRANDS mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|------------------|--------------|----------------------|--------------------------------|-----------------------------|----------------------|
| A4B8106 | 8106 | 6 | AWG24(7) | 0.032 | 8.66 | 80.36 |

ELECTRICAL CHARACTERISTICS

| AWG (NO. OF STRANDS) | CAPACITANCE pF/m | | VELOCITY OF PROPAGATION % | IMPEDANCE ohms | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km |
|----------------------|------------------------|---------------------|---------------------------|----------------|---|
| | Conductor to Conductor | Conductor to Shield | | | |
| AWG24(7) | 41.01 | 72.18 | 78 | 100 | 78.74 |

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.