



# Belden 8105 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 RS232 and RS422 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<sup>®</sup> FPE (Foam Polyethylene)

### Screen 1

Beldfoil<sup>®</sup> (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

### Sheath Colour

Grey

## STANDARDS

Generally to Belden 8105, EIA RS 232, RS 422

Vertical tray fire propagation and smoke release test UL 1685



## THE CABLE LAB<sup>®</sup>

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](http://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<sup>®</sup>.



## 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
A4B8105	8105	5	AWG24(7)	0.032	7.69	63.9

## 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.