

# 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.

## CONSTRUCTION

### Conductor

Class 2 stranded tinned copper conductor

### 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)

## CABLE STANDARDS

EIA RS232, RS422



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

## CHARACTERISTICS

### Voltage Rating

300V

### Temperature Rating

-30°C to +80°C

### Minimum Bending Radius

10 x overall diameter

### Pair 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

## 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		VELOCITY OF PROPAGATION %	IMPEDANCE ohms	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
	Conductor to Conductor pF/m	Conductor to Shield pF/m			
AWG24(7)	41.01	72.18	78	100	78.74