

# Belden 8103 Multi-Conductor Low Capacitance Cable



Eland Product Group: A4B

## APPLICATION

An overall foil and braid screened cable used 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 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)

**Core Identification**  
Pair 1: White/Blue Blue/White  
Pair 2: White/Orange Orange/White  
Pair 3: White/Green Green/White

**Sheath Colour**  
 Grey

## STANDARDS

Belden 8103, EIA RS 232, EIA/RS 422

Vertical tray fire propagation and smoke release test UL 1685



## ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab<sup>®</sup>, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



## 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 and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup> as meeting the requirements of the BSI RoHS Trusted Kitemark<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
A4B8103	8103	3	AWG24(7)	0.032	7.18	58

## 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.