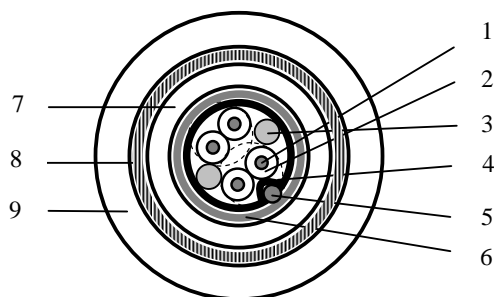
	TECHNICAL DATA SHEET		code	9842LS
			version	8
			date	2011-08-17
	9842LS		page	1/2


APPLICATION

Instrumentation and computer cable for EIA RS-485 data transmission applications.

CONSTRUCTION



1. Conductor	AWG24 (7xAWG32) tinned Cu
2. Insulation	
Material	Polyethylene
Diameter over insulation	1.73 ± 0.05 mm
Colour of insulation	Pair #1: White/blue and blue/white Pair #2: White/orange and orange/white
3. Filler (2x)	
Material	Polypropylene
Diameter	2.87 mm
Colour	White
4. Foil (Z-fold®)	
Material	Aluminium / Polyester
Thickness	9 / 23 µm
5. Drainwire	AWG24 (7xAWG32) tinned Cu
6. Braiding	
Material	0.122 mm tinned Cu
Coverage	90%
7. Sheath	
Material	FRNC
Colour	Chrome (like RAL 7037)
Nominal thickness	1.10 mm
Nominal diameter	8.65 mm
8. Armouring	
Material	Single steel wire 0.90 mm
Optical coverage	>95 %
9. Sheath	
Material	FRNC (UV stabilised)
Colour	Black
Nominal thickness	1.35 mm
Nominal diameter	13.10 mm

	TECHNICAL DATA SHEET		code	9842LS
			version	8
			date	2011-08-17
	9842LS		page	2/2

REQUIREMENTS AND TEST METHODS

Electrical:

Nominal resistance conductor	78.7 Ω /km
Nominal resistance shield	7.2 Ω /km
Nominal capacitance conductor to conductor	42.0 pF/m
Nominal capacitance conductor to shield + other cond.	75.5 pF/m
Nominal impedance @ 1 MHz	120 Ω
Nominal velocity of propagation	66 %
Nominal delay	5.2 ns/m
Nominal attenuation @ 1 MHz	1.97 dB/100m
Testvoltage conductor-conductor	2500 VDC, 3 seconds
Testvoltage conductor-screen	2500 VDC, 3 seconds
Voltage rating	300 V RMS (CM application) 30 V RMS (AWM application)
Maximum continues current per conductor @ 25 °C	2.1 A

Mechanical and physical:

Flame resistance	IEC 60332-3-24 (Cat C)
Oil resistance	ASTMD741
Radiation resistance	IEC544 (CERN)
Application specification	BS 7655 section 6.1 table 1, LTS 3
Halogen content according to IEC754-1	zero
Corrosivity of fire gasses according to IEC754-2	
Conductivity	$\leq 100 \mu\text{S/cm}$
pH value	≥ 3.5
Temperature range installing	-15 to +80 °C
Temperature range operating (moving installation)	-15 to +80 °C
Temperature range operating (fixed installation)	-45 to +80 °C
Temperature range storage	-45 to +80 °C
Minimum bending radius	15 x cable diameter

PACKAGING

On non-returnable reels with a nominal length of 500m (-0, +20%) or on non-returnable reels with a nominal length of 1000m (-0, +20%).

Each reel is labelled with the following data:


Belden Logo. Belden code number. Item description. Length on the reel. Date of manufacture. CE-marking.



Belden declares this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.

© Belden Wire & Cable B.V.

All rights are reserved. Reproduction in whole or in part is prohibited without the written consent of the copyright owner

	TECHNICAL DATA SHEET	code	9842LS
		version	8
		date	2011-08-17
	9842LS	page	3/2