DataGuard® (SWA)

DeviceNet[™] THIN Cable for Permanent Installation



Cable Design

Data Pair 1x2x23awg

Conductor Stranded tinned copper wire (19/0,13mm) 23awg Ø 0,67 mm

Insulation Foamed Polyethylene (PE) with skin Ø 1,90 mm

Pair 2 insulated conductors twisted to a pair, WH/BU

Screen Alulaminate foil overlapped

Power Pair 1x2x22awg

Conductor Stranded tinned copper wire (19/0,16mm) 22awg Ø 0,75 mm
Insulation Polyethylene (PE) Ø 1,40 mm

Pair 2 insulated conductors twisted to a pair, RD/BK

Screen Alulaminate foil overlapped

Core

Central Element Stranded tinned copper drain wire 0,38mm² (19/0.16mm)

1 Pair1 x2x23awg screened1 Pair1 x2x22awg screened

Braid Tinned copper wire braid, 70% coverage \varnothing 4,80 mm Inner Jacket LSZH (Low Smoke Zero Halogen), Violet \varnothing 6,90 ± 0,30 mm

Armour DataGuard® Steel Wire Armour (DSWA)

Outer Jacket LSZH FireFighter[®], Black \emptyset 11,50 \pm 0,50 mm

Characteristics

- Indoor/Outdoor applications
- Mechanical protection
- Rodent Protection
- UV-Stable and colourfast
- Flame retardant acc. IEC 60332-2-1
- Halogen free acc. to IEC 60754,
- Smoke density acc. to IEC 61034



DataGuard® (SWA)

DeviceNetTM THIN Cable for Permanent Installation

Electrical Data @ 20°C

Conductor Resistance	Data pair	S	90	Ohm/km
Conductor Resistance	Power pair	≤	55	Ohm/km
Ampacity (up to 25 °C)	Power pair	\leq	6	A
Capacitance (1 kHz wire/wire)	Data pair	≈	39,8	nF/km
Characteristic Impedance (1 MHz)	Data pair		120±12	Ohm
Signal Run Time	Data pair	\leq	4,46	ns/m
Capacity Unbalanced to ground	Data pair	≤	3937	pF/km
Operating Voltage (peak)		\leq	300	V
Insulation Resistance		≥	200	MOhm*km
Test Voltage (wire/wire/screen 50Hz)		=	2000	V
Attenuation	125 MHz		0,95	dB/100m
Attenuation	500 MHz		1,64	dB/100m
Attenuation	1000 MHz		2,29	dB/100m

Mechanical & Thermal Characteristics

Permissable temperature range		- 25 ~ +80	°C
Min. Bending radius allowed	repeated	10	x Ø (see Ø tolerance)
Weight (approx.)		359	kg/km

Specification

Part Number	Туре
14L45467-F16-W6	DeviceNet thin cable for permanent installation (LSZH), 2x23AWG + 2x22AWG, DataGuard® (SWA) / LSZH FireFighter®

Belcom Cables Ltd. ("Belcom") reserves the right to make changes to the product described in this specification without prior notice. Belcom does not assume any liability which may occur due to the use of the specification described herein. Drawings are not to scale unless otherwise specified and are provided for general and informational purposes only. All values represented in this specification should be used as a guide only and exact product details can be confirmed at point of enquiry.