

IndustriCore DeviceNet Thin Cable

24AWG Data, 22AWG Power, PUR Sheath



Applications

For links between industrial devices such as sensors and actuators and higher-level devices such as PLCs and PCs. Suitable for highly flexible applications in power chains and permanent moved machine parts

Construction

Conductor Material	Stranded tinned copper
Insulation Material (Data)	Foam Polyethylene (FPE)
Insulation Material (Power)	Polyethylene (PE)
Core Identification	White/blue (Data) Red/black (Power)
Individual Screen	AL-PET Tape
Overall Screen	Tinned copper wire (80%)
Drain Wire	Stranded tinned copper
Sheath Material	Polyurethane (PUR)
Sheath Color	Violet

Dimensions

Conductor Diameter (Data)	24AWG (19/0.13 mm)
Conductor Diameter (Power)	22AWG (19/0.16 mm)
Insulation Diameter (Data)	2.00 mm Nom.
Insulation Diameter (Power)	1.40 mm Nom.
Braid Wire Diameter	0.12 mm
Drain Wire Diameter	22AWG (19/0.16 mm)
Overall Diameter	7.00 mm Nom.

Physical Characteristi

Bend Radius	Flexing 15 x OD Static 8 x OD
Temperature Rating	Flexing -30°C to +70°C Static -40°C to +80°C

Electrical Characteristics

Conductor DCR (Data)	80 Ω/KM Max. @20°C
Conductor DCR (Power)	54 Ω/KM Max. @20°C
Insulation Resistance	5GΩ·km Min. (Data) 200MΩ·km Min. (Power)
Mutual Capacitance	
Core/Core	39.37 nF/km Nom. @1kHz
Core/Screen	78.74 nF/km Nom. @1kHz
Capacitance Unbalance	3937 pF/km Nom. @1kHz
Characteristic Impedance	120 ± 12 Ω
Attenuation	
125 kHz	0.95 dB/100 m Nom.
500 kHz	1.64 dB/100 m Nom.
1 MHz	2.3 dB/100 m Nom.
Signal Propagation Time	4.8 ns/m Nom. @1MHz
Rated Voltage	300V
Dielectric Strength	2000Vx1min (Core/Core) 2000Vx1min (Core/Screen)

Standards

RoHS Compliant	Yes
Reach Compliant	Yes
CE Compliant	Yes
UV Resistance	ISO 4892-2, method A
Oil Resistant	ISO 6722
Flame Retardant	IEC 60332-1-2 UL 1581 VW-1
Halogen & Corrosive Gas	IEC 60754-1/2
Smoke density	IEC 61034-2
CPR Classification	Eca EN 50575:2014+A1:2016