

24AWG/1PR + 22AWG/1PR DeviceNet Thin Cable

PVC Outer Sheath



PRODUCT DATA SHEET

DeviceNet is a field bus cable based on proven CAN (Control Area Network) technology with length-related transmission rates (125/250 and 500) kbit/s. Up to 64 participants can communicate in the network with one another. These cable includes two wires for data transmission and also two wires for the power supply. The product with a nominal impedance of 120 Ohm has a moderate UV-resistant and is suitable for fixed installation.

CONSTRUCTION

Element A

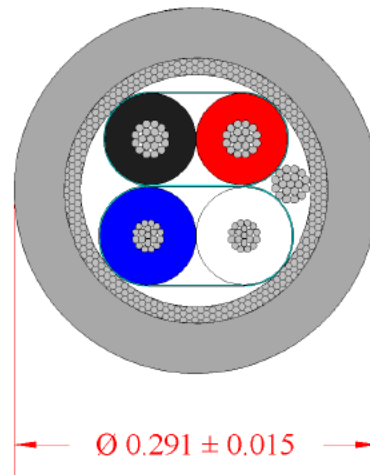
Conductor A	Stranded tinned copper
Conductor Size	24AWG, 19 strands Class C
Insulation Material	Foamed Polyethylene
Insulation Thickness	0.026" Nom.
Core Diameter	0.077" Nom.
Pair Assembly	Aluminum/Mylar Shield 100% Coverage

Element B

Conductor B	Stranded tinned copper
Conductor Size	22AWG, 19 strands Class C
Insulation Material	Polyvinyl Chloride
Insulation Thickness	0.021" Nom.
Core Diameter	0.073" Nom.
Pair Assembly	Aluminum/Mylar Shield 100% Coverage
Overall Cable Assembly	Aluminum foil screened Data pair twisted together with Aluminum foil screened Power pair around a drain wire
Drain Wire	22AWG, 19 strands, tinned copper
Braid	36AWG Tinned copper, coverage 65%
Jacket Material	Polyvinyl Chloride
Jacket Thickness	0.040" Nom.
Overall Diameter	0.291" ± 0.015"
Jacket Color	Gray

Print Legend

ASCENT DeviceNet™ E478021 22AWG 1PR/SH (POWER) + 24AWG 1PR/SH (DATA) 75C C(UL)US CMG SUN RES FT4 OR AWM STYLE 2463 600V 80C "ROHS COMPLIANT" MADE IN USA



COLOR CODE

Data Pair: White, Blue
Power Pair: Red, Black

ELECTRICAL PROPERTIES

Operating Temperature	-40°C to +80°C
Maximum Operating Voltage	CMG 300V RMS, AWM 600V RMS
Conductor DC Resistance@20°C	28 Ω/Mft (24AWG) 17.5 Ω/Mft (22AWG)
Outer Shield DC Resistance@20°C	3.2 Ω/Mft
Characteristic Impedance	120 Ω for Data pair
Capacitance	11pF/ft for Data pair
Inductance	0.221 μH/ft (22AWG power pair) 0.251 μH/ft (24AWG power pair)
Weight	45 Lbs/Mft

SAFETY PROPERTIES

Cable suitable for installation under NEC (NFPA 70) article 800 guidelines
Cable suitable for installation in Canada under Section 60 of CEC, Part I
C(UL)US listed as CMG per UL standard 444 and per CSA C22.2 No. 214-17
UL recognized component as AWM 2463, 80°C, 600V per UL standard 758
For internal wiring or external interconnection of electronic equipment
Cable meets (UL) 1685 FT4 flame test
Cable meets RoHS 2002/95/EC Directive, RoHS 2 2011/65/EU Directive, RoHS 3 2015/863/EU Directive

Application: DeviceNet connects industrial devices e.g. limit switches, photoelectric switches, valve islands, motor starters, drives, PLCs, etc

Design Number	11113
Revision History	
00	2025/05/09 Initial Release
Created L. Jian	Approved T. Plochoki

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