

BUS cables

Bus system CAN / DeviceNet • DeviceNet - fixed installation

1



UNITRONIC® DeviceNet THICK + THIN



Application range

- Fixed installation
- DeviceNet™ connects industrial devices e.g. limit switches, photoelectric switches, valve islands, motor starters, drives, PLCs, etc.

Product features

- Resistant to oils
- Based on proven CAN (Controller Area Network) technology.
- Permissible cable lengths vary with the data rate and the cable thickness
- FRNC Version: Halogene free and flame retardant

Norm references / Approvals

- CMG UL/CSA certification 75°C or PLTC, Sun Res
- FRNC variant additionally with Germanischer Lloyd certification

Product Make-up

- Core insulation made of foam skin
- Outer sheath: Halogene free (FRNC) or Polyvinylchlorid (PVC)

Technical data

	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable
	Core identification code Data pair: light blue + white Power supply: red + black
	Mutual capacitance (800 Hz): max. 39.8 nF/km
	Peak operating voltage 300 V (not for power applications)
	Conductor resistance Thick (loop): max. 45 ohm/km Thin (loop): max. 180 ohm/km
	Minimum bending radius Fixed installation: 15 x outer diameter
	Test voltage Core/core: 2000 V
	Characteristic impedance 120 ohm
	Temperature range Fixed installation: -25°C to +80°C

Article number	Article designation	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
Halogen-free					
2170340	UNITRONIC® BUS DN THICK FRNC	1x2xAWG18 + 1x2xAWG15	12.2	82.8	195
2170341	UNITRONIC® BUS DN THIN FRNC	1x2xAWG24 + 1x2xAWG22	6.9	33.4	69.5
With PVC outer sheath					
2170342	UNITRONIC® BUS DN THICK Y	1x2xAWG18 + 1x2xAWG15	12.2	88.4	192
2170343	UNITRONIC® BUS DN THIN Y	1x2xAWG24 + 1x2xAWG22	6.9	33.4	66.9

UNITRONIC® DeviceNet THICK + THIN



Application range

- Stationary application
- DeviceNet™ connects industrial devices e.g. limit switches, photoelectric switches, valve islands, motor starters, drives, PLCs, etc.
- DeviceNet™ Bus system (Rockwell Automation)

Product features

- Based on proven CAN (Controller Area Network) technology.
- Permissible cable lengths vary with the data rate and the cable thickness
- THICK cable total trunk length
 - 125 kbit/s = 500 m
 - 250 kbit/s = 250 m
 - 500 kbit/s = 100 m
- THIN cable total trunk length
 - 125 kbit/s = 6 m
 - 250 kbit/s = 6 m
 - 500 kbit/s = 6 m

Approvals



Product Make-up

- Strained tinned copper conductor
- PE core insulation
- PVC outer sheath
- Colour: chrome grey, RAL 7005

Info

- DeviceNet

Technical data

	Core identification code Data pair: light blue + white Power supply: red + black
	Mutual capacitance (800 Hz): max. 4 nF/km
	Peak operating voltage 300 V (not for power applications)
	Conductor resistance Thick (loop): max. 45 ohm/km Thin (loop): max. 180 ohm/km
	Minimum bending radius Fixed installation: 10 x outer diameter
	Test voltage 1000 V
	Characteristic impedance at 1 MHz: 120 +/- 10 Ohm
	Temperature range Fixed installation: -20°C to +70°C

Article number	Article designation	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
3801234	DeviceNet THICK	1x2x18AWG + 1x2x15AWG	12.0	80.9	158.7
3801235	DeviceNet THIN	1x2x24AWG + 1x2x22AWG	7.2	30.5	66.9