

UNITRONIC® DeviceNet FD THICK+THIN

For highly flexible applications.



Application

DeviceNet™ connects industrial devices e. g. limit switches, photoelectric switches, variable frequency drives, valve islands, motor starters, PLCs, etc.. Based on proven CAN (Controller Area Network) technology. Permissible cable lengths vary with the data rate and the cable thickness:

THICK cable

Main cable total
 125 kbit/s 500 m
 250 kbit/s 250m
 500 kbit/s 100 m
THIN cable
 Main cable total
 125 kbit/s 100m
 250 kbit/s 100m
 500 kbit/s 100 m
 Max. drop length:

6m each, all data rates
 Cumulative drop length
 125 kBit/s 156m
 250 kBit/s 78m
 500 kbit/s 39m

(2170346 + 2170347)

Approvals

PUR: UL/CSA approved (CMX)
 PVC: UL/CSA approved (CMG)
 Further details: see Data Sheet (on request)

Cable Make-up

Versions

- a) Polyurethane (PUR)
(2170344 + 2170345)
- b) Polyvinylchloride (PVC)

Technical Data

- Core identification code
Data pair: light blue + white
Power supply: red + black
- Mutual capacitance
(800 Hz): max. 39.8 nF/km

- Peak working voltage
(not for power applications)
300 V
- Conductor resistance
Thick (loop): max. 45 Ohm/km
Thin (loop): max. 180 Ohm/km

- Minimum bending radius
fixed installation: 15 x cable diameter
Flexing: 15 x cable diameter
- Test voltage
Core/core: 2000 V

- Range of temperature
PUR: -40°C to +80°C
PVC: -10°C to +80°C
- Characteristic impedance
120 ohms

Part number	Type	Number of pairs and AWG size	Outer diameter in mm approx.	Copper weight kg/km	Weight kg/km approx.
2170344	UNITRONIC® FD P DeviceNet THICK UL/CSA (CMX)	1x2xAWG18 + 1x2xAWG15	18,3	88,4	184,0
2170345	UNITRONIC® FD P DeviceNet THIN UL/CSA (CMX)	1x2xAWG24 + 1x2xAWG22	10,4	33,4	67,7
2170346	UNITRONIC® FD Y DeviceNet THICK UL/CSA (CMG)	1x2xAWG18 + 1x2xAWG15	12,2	84,0	195,0
2170347	UNITRONIC® FD Y DeviceNet THIN UL/CSA (CMG)	1x2xAWG24 + 1x 2xAWG22	6,9	33,4	69,8

Copper price basis: EUR 150 / 100 kg
 Standard lengths: (152; 305) m
 DeviceNet is a registered trademark of ODVA