



<b>Cable Type</b>	ODVA DeviceNet Thin Cable
<b>Version</b>	ODVA Thin CL2, AWM
<b>Part Number</b>	FCL224C-007
<b>Network Standard</b>	ODVA DeviceNet

## Data Pair Specifications

Physical Characteristics	Specification
Conductor Pair Size	24 AWG 19 Strand TC
Insulation Diameter	0.079 ± .002" "
Colors	Bu, Wh
Pair Twist/ft.	Approx. 3
Tape Shield Over Pair	Al/Polyester Foil Out w/Shorting Fold (Pull-On Applied)
Electrical Characteristics	Specification
Impedance	120 Ω ± 10%
Propagation Delay	1.36 ns/ ft. (nom)
Capacitance Between Conductors	11.33pF/ ft @ 1KHz
Capacitance Between One Conductor and Other Conductor Connected to Shield	24pF/ ft @ 1KHz
Capacitive Unbalance	1200 pF/ 1000 ft. Maximum
DCR – @ 20° C	28.72 Ω/1000 ft.
Attenuation	@ 125 kHz: 0.29 dB/100 ft. Max. @ 500 kHz: 0.50 dB/100 ft. Max. @ 1 MHz: 0.70 dB/100 ft. Max.

## DC Power Pair Specifications

Physical Characteristics	Specification
Conductor Pair Size	22 AWG 19 Strand TC
Insulation Diameter	0.056 ± .002" "
Colors	Rd, Bk
Pair Twist/ft.	Approx. 3
Tape Shield Over Pair	Al/Polyester Foil Out w/Shorting Fold (Pull-On Applied)
Electrical Characteristics	Specification
DCR – @ 20° C	18.1Ω /1000 ft.

## General Specifications

Physical Characteristics	Specification
Geometry	2 Shielded Pairs, Common Axis w/Drain Wire in Center
Overall Braid Shield	65% Minimum 36 AWG TC
Drain Wire	22 AWG 19 Strand TC
Outside Diameter	0.290 ± .010" "
Roundness	Radius Delta Less Than 15% of 1/2 O.D.
Jacket Marking	Northwire Inc. DataCELL® FIELD DeviceNet Thin – FCL224C-007 (UL) 22AWG/2 24AWG/2 CL2 75°C E90625 or AWM 80°C 300V or CSA AWM I/II A/B 80°C 300V FT4
Electrical Characteristics	Specification
DCR (Braid+Tape+Drain)	3.2 Ω/1000 ft. Nnominal @ 20°C
Applicable Environmental Characteristics	Specification
Agency Certifications (US and Canada)	NEC (UL) Type CL2 or AWM; CSA AWM
Flexure	Tested 2000 Cycles Minimum at 4.5 Bend Radius 90 Degrees 2 lb. Minimum Pull Force, 30 Cycles Per Minute, Tick-Toc Method
Bend Radius	20 x diameter (installation); 7 x diameter (fixed)
Operating Ambient Temperature	-20..75°C
Storage Temperature	-40..85°C
Pull Tension	65 lb. Maximum
Connector Compatibility	Mini, Micro, Open
Topology Compatibility	Trunk, Drop