LDF2RN-50-200KT

LDF2RN-50 Jumper, 60.976 m

OBSOLETE

This product was discontinued on: February 10, 2016

Product Classification

Product Type	Wireless transmission cable assembly
Product Brand	HELIAX®
Product Series	LDF2-50

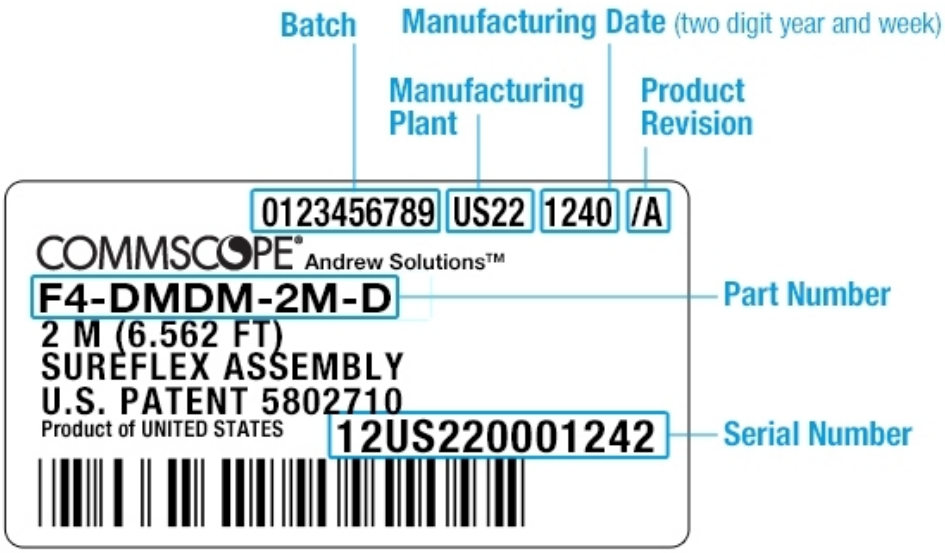
General Specifications

Interface, Connector A	Sold separately
Interface, Connector B	Sold separately
Specification Sheet Revision Level	A

Dimensions

Length	60.976 m | 200.053 ft
Nominal Size	3/8 in

Jumper Assembly Sample Label



LDF2RN-50-200KT

Environmental Specifications

Immersion Test Method	Meets IEC 60529:2001, IP68 in mated condition

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Included Products

LDF2RN-50	–	LDF2-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 3/8 in, gray non-halogenated, fire retardant polyolefin jacket

LDF2RN-50

LDF2-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 3/8 in, gray non-halogenated, fire retardant polyolefin jacket

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX® | SureFlex®
Product Series	LDF2-50

General Specifications

Flexibility	Standard
Jacket Color	Gray
Performance Note	Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric	8.636 mm | 0.34 in
Diameter Over Jacket	11.43 mm | 0.45 in
Inner Conductor OD	3.048 mm | 0.12 in
Outer Conductor OD	9.652 mm | 0.38 in
Nominal Size	3/8 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	75.5 pF/m | 23.012 pF/ft
dc Resistance, Inner Conductor	3.478 ohms/km | 1.06 ohms/kft
dc Resistance, Outer Conductor	2.854 ohms/km | 0.87 ohms/kft
dc Test Voltage	2500 V
Inductance	0.19 µH/m | 0.058 µH/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 13000 MHz
Peak Power	15.6 kW
Velocity	88 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.332	0.101	15.6
1.5	0.407	0.124	15.6
2.0	0.471	0.143	15.6
10.0	1.059	0.323	7.28
20.0	1.503	0.458	5.13
30.0	1.847	0.563	4.17
50.0	2.397	0.73	3.22
85.0	3.146	0.959	2.45
88.0	3.203	0.976	2.41
100.0	3.421	1.043	2.25
108.0	3.559	1.085	2.17
150.0	4.219	1.286	1.83
174.0	4.558	1.389	1.69
200.0	4.901	1.494	1.57
204.0	4.952	1.509	1.56
300.0	6.062	1.847	1.27
400.0	7.057	2.151	1.09
450.0	7.513	2.29	1.03
460.0	7.601	2.317	1.01
500.0	7.947	2.422	0.97
512.0	8.048	2.453	0.96
600.0	8.761	2.67	0.88
700.0	9.519	2.901	0.81
800.0	10.232	3.119	0.75
824.0	10.398	3.169	0.74
894.0	10.869	3.313	0.71
960.0	11.299	3.444	0.68
1000.0	11.554	3.521	0.67
1218.0	12.874	3.924	0.6
1250.0	13.059	3.98	0.59
1500.0	14.446	4.403	0.53

1700.0	15.49	4.721	0.5
1794.0	15.964	4.866	0.48
1800.0	15.994	4.875	0.48
2000.0	16.97	5.172	0.45
2100.0	17.443	5.316	0.44
2200.0	17.908	5.458	0.43
2300.0	18.365	5.597	0.42
2500.0	19.257	5.869	0.4
2700.0	20.122	6.133	0.38
3000.0	21.376	6.515	0.36
3400.0	22.978	7.003	0.34
3600.0	23.754	7.24	0.32
3700.0	24.136	7.356	0.32
3800.0	24.514	7.471	0.31
3900.0	24.888	7.586	0.31
4000.0	25.26	7.699	0.31
4100.0	25.627	7.811	0.3
4200.0	25.992	7.922	0.3
4300.0	26.354	8.032	0.29
4400.0	26.713	8.142	0.29
4500.0	27.069	8.25	0.28
4600.0	27.422	8.358	0.28
4700.0	27.773	8.465	0.28
4800.0	28.12	8.571	0.27
4900.0	28.466	8.676	0.27
5000.0	28.809	8.781	0.27
6000.0	32.121	9.79	0.24
8000.0	38.244	11.656	0.2
8800.0	40.551	12.359	0.19
10000.0	43.894	13.378	0.18
12000.0	49.209	14.998	0.16

Material Specifications

Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin

LDF2RN-50

Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends	95.25 mm | 3.75 in
Minimum Bend Radius, single Bend	40.64 mm | 1.6 in
Number of Bends, minimum	15
Number of Bends, typical	50
Tensile Strength	113 kg | 249.122 lb
Bending Moment	1.9 N-m | 16.816 in lb
Flat Plate Crush Strength	2 kg/mm | 111.995 lb/in

Environmental Specifications

Installation temperature	-25 °C to +60 °C (-13 °F to +140 °F)
Operating Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Attenuation, Ambient Temperature	68 °F | 20 °C
Average Power, Ambient Temperature	104 °F | 40 °C
Average Power, Inner Conductor Temperature	212 °F | 100 °C
Fire Retardancy Test Method	UL 1666/CATVR
Smoke Index Test Method	IEC 61034
Toxicity Index Test Method	IEC 60754-1 | IEC 60754-2

Packaging and Weights

Cable weight	0.13 kg/m | 0.087 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
UL/ETL Certification	CATVR