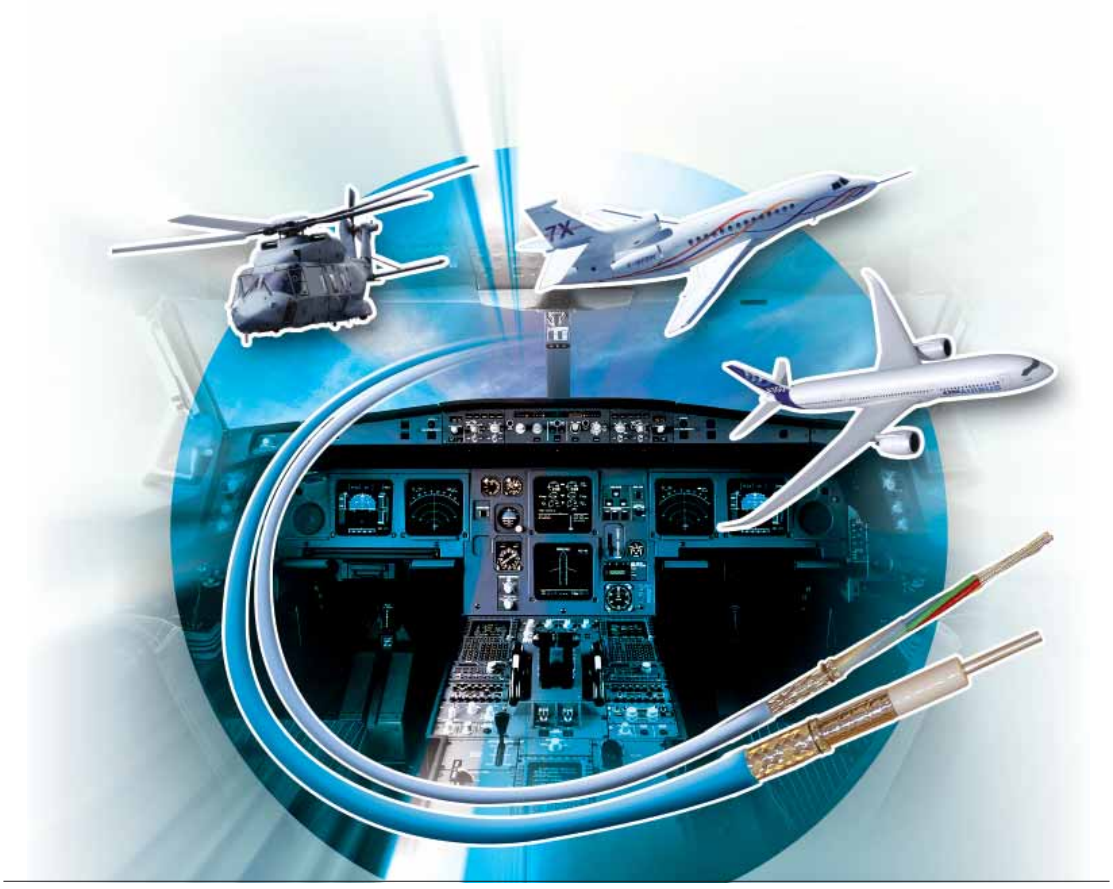
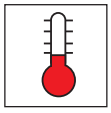
Nexans



Complete, reliable cables range for Aircraft

Issue 8 - June 2011

Symbols

Rating temperature	
Flexibility	
Chemical attacks	
Fire performances	
Smoke	
Corrosivity	
Electro magnetic interference	
Halogen free	
RoHs compliant	
Arc tracking resistant	
Bending Radius	

PART 1 - HOOK-UP WIRES FOR CIVIL, MILITARY AIRCRAFT AND HELIOPTERS

PART 2 - CABLES FOR POWER TRANSMISSION

PART 3 - NACELLES AND ENGINES : HIGH TEMPERATURE, FIRE RESISTANT CABLES

PART 4 - COAXIAL CABLES FOR HIGH FREQUENCY TRANSMISSION

PART 5 - DATA BUS AND HIGH SPEED TRANSMISSION CABLES

PART 6 - SPECIAL CABLES

PART 7 - OPTICAL CABLES

PART 8 - WIRES AND CABLES FOR AVIONICS

A specialised activity...

Fly high in safety and comfort with Nexans

Aerospace industries are looking for :

- high reliability,
- resistance to harsh conditions,
- cleanliness,
- flexibility,
- low toxicity.

That is why Nexans has come up with **new materials, cable types and configurations** to improve overall system performance.

Goods and people protection, miniaturization, electromagnetic compatibility, high temperature resistance, mechanical and chemical resistance in harsh environments, weight and space saving: answering any of these major industrial challenges Nexans offer you the **innovative technical solution,** either with standard products or customized designs.

Our strengths

- **High technology capabilities:**
  - Insulation knowledge: different materials & processes,
  - Screen knowledge: braid and/or tape, spiral,
  - Miniaturization: exclusive technology process,
  - High bit rate technology,
  - New insulation for coaxial and data bus range.
- **Worldwide experience (different markets)**
- **Development & production capacity:**
  - Standard or customized products,
  - Small or long series,
  - Several R&D and production centres.
- **ISO 9001 and 14001 certifications.**

An industrial presence in 40 countries and commercial activities worldwide:

Three production units :

- Draveil (91) in France,
- Elm City (NC) in USA,
- Mohammedia in Morocco since sept. 2009,

recognising the environmental constraints of this market such as light weight and therefore less space, longevity, electrical performances, fire resistant, quality assurance, environmental standards, etc.

... within a leader group

The largest range to meet your requirements

About Nexans:

Since 1938 and the creation of Filotex in Draveil (France), Nexans has been a driving force in the world of aerospace cables. Today, Nexans is proud to provide a complete range of aircraft wires and cables – which is also the largest in the industry.

From high temperature cables to low-loss coaxial cables and from data-buses for In Flight Entertainment Systems to fire resistant engine wires, Nexans supplies every aircraft application.

Our only concern is to provide you with the cable solution you need and – thanks to a combined expertise in the USA and Europe in technologies as diverse as PTFE Powder Extrusion, Tape Wrap cables, Cross-Linked cables and Melt Extrusion – we can do it.

Hook-up wires for Civil, Military aircraft and helicopters

Voltage rating: 600 Volts RMS / Maximum operating frequency: 2000 Hz

Specification	Description	Maximum operating temperature					Arc tracking resistant	Single core	Multi-core	Screened	Sheathed	Page
		150	180	210	200	260						
ABS 0949 AD AWG 24 to 4	- Light weight wires - Nickel copper clad aluminium - UV Laser printable		●				●	●				18
ABS 0949 AD AWG 3 to 000	- Light weight wires - Nickel aluminium - UV Laser printable		●				●	●				20
ABS 1354 ADA, ADB, ADC, ADD	- Light weight wires - Nickel copper clad aluminium		●				●	●	●			22
ABS 1356	- UV laser printable - Nickel copper clad aluminium		●				●	●	●	●	●	26
EN 2267-010 A DR	- UV laser printable - Light weight wires - Composite insulation					●	●	●				28
EN 2267-009 DRB, DRC, DRD	- Light weight wires - Composite insulation					●	●		●			30
EN 2714-013 MLA, MLB, MLC, MLD	- UV laser printable - Light weight wires - Composite insulation					●	●	●	●	●	●	32
EN 2714-014 MME, MMF, MMG	- UV laser printable - Light weight wires - Composite insulation					●	●		●	●	●	34
EN2266-008 DRP - DRT - DRQ	- DR Multicores jacketed - UV Laser printable - Light weight wires				●		●		●		●	36
EN2713-012 MNA - MNB - MNC MND	- DR Multicores - Shielded jacketed - Silver plated screen - UV Laser printable - Light weight wires				●		●	●	●	●	●	38
VG 95218-20 type H FX 5301	- Flexible light weight wires - Silver plated conductors	●					●	●				40
VG 95218-22 type E VG 95218-23 type D FX 5303	- Single core and multicore	●					●	●	●	●	●	42
MIL-W-16878/4 to 28 MIL-W-22759/5 to 31 MIL-W-22759/32 to 46 MIL-W-22759/80 to 92 MIL-DTL-81381/7 to 22	- Aerospace composite wires (see MIL-SPEC product selection catalogue)	●			●	●		●				-
JN 1007	- Flexible light weight wires	●					●	●				44
JN 1018	- Flexible light weight wires	●					●		●		●	46
JN 1019	- Flexible light weight wires	●					●	●		●	●	48
JN 1026	- Flexible light weight wires with EMI protection	●					●	●		●	●	50

Cables for power transmission

Voltage rating: 600 Volts RMS

Specification	Description	Maximum operating temperature			Page
		150	180	260	
ASNE 0438 YV	- Flexible nickel plated aluminium wires - Single core, large sizes		●		56
ABS 0949 AD AWG 3 to 000	- Arc tracking resistant - Light weight wires - Nickel aluminium wires		●		58
NSA 935 308 YU	- Flexible aluminium wires - Polyimide insulation	●			60

Nacelles and engines : high temperature

Voltage rating: 600 Volts RMS
Maximum operating frequency : 2000 Hz

Specification	Nexans reference	Description	Maximum operating temperature				Single core	Multi-core	Screened	Sheathed	Page
			250	260	280	300 +					
VG 95218-20 type J	FX 5400	- High temperature - General purpose		●			●				64
NSA 935 131 DG EN 2854-003	-	- High temperature - General purpose		●			●				66
BMS 13-58 type 1 & type 5	-	- High temperature - General purpose - UV laser printable		●			●				68
AIR 4524	2100	- Flexible cables for high ambiant temperatures	●				●				72
AIR 4524	2103	- Flexible cables for high ambiant temperatures		●			●				74
AIR 4524	1050	- Screened cables for high ambiant temperatures	●				●	●	●	●	76
AIR 4524	1053	- Screened cables for high ambiant temperatures		●			●	●	●	●	78
ESW 1000-010-XXX	-	- Large section - High temperature wire		●			●				80
9310-N01 9310-N02 9310-N03 AWG 24 & 22	-	- High temperature wire and cables for engine - Nickel coated Hight strength copper alloy - Composite insulation			●		●	●	●	●	82

Nacelles and engines : high temperature, fire resistant/fire proof cables

Voltage rating: 600 Volts RMS
Maximum operating frequency : 2000 Hz

Specification	Nexans reference	Description	Maximum operating temperature				Single core	Multi-core	Screened	Sheathed	Page
			250	260	280	300 +					
ESW 1200-010-XXX ESW 1201-010-XXX	-	- Fire resistant cable		●			●				86
ESW 1202-+++-XXX ESW 1203-+++-XXX	-	- Fire resistant cable		●			●	●	●	●	88
ESW 1250-010-XXX ESW 1251-010-XXX	-	- Fireproof cable		●			●				90
ESW 1252-+++-XXX ESW 1253-+++-XXX	-	- Fireproof cable		●			●	●	●	●	92
ESW 1254-010-002	-	- Fireproof cable		●			●				94
ESW 1254-022-002 ESW 1254-032-002	-	- Fireproof cable - 2 or 3 twisted cores		●				●	●	●	96
ESW 1600-010-XXX ESW 1601-010-XXX	-	- Thermocouple - Fire resistant cable		●			●				98
ESW 1602-022-XXX	-	- Thermocouple - Fire resistant cable - 2 twisted cores		●			●		●	●	100
EN 2346-005 DW	-	- Fire resistant wires - Light weight - UV laser printable		●			●				102
EN 4608-004 GPA, GPB, GPC	-	- Fire resistant cable - Light weight cables - UV laser printable		●			●	●	●	●	104
ASNE 0437 DL EN 2346-003	-	- Fire resistant wires - Normal weight		●			●				106
MIL-W-25038/1 (QPL)	TMF	- High temperature fire resistant wires		●			●				108
MIL-W-25038/3 (QPL)	TMF VRA-US TMF VR-US	- High temperature fire resistant wires		●			●				110
MIL-W-25038/3 (QPL)	FRM-A-US FRM-US	- High temperature fire resistant wires		●			●				112
MIL-W-25038/3, MIL-DTL-27500	M27500A** JF + 1 N 06	- High temperature fire resistant cables		●			●	●	●	●	114
MIL-W-25038/3, MIL-DTL-27500	M27500A** JF + N 24	- High temperature fire resistant cables		●			●	●	●	●	116
BMS 13-55 type 2 class 1	-	- High temperature fire resistant wires		●			●				118
AIR 4527	3000A	- Fire resistant cable			●		●				120
BMS 13-67	TMF 350-A FLEX SBJ	- Very high temperature - Fire resistant cable				●	●	●	●	●	124
	ET 124 585	- Very high temperature - Fire resistant cable				●	●		●	●	126

Coaxial cables for high frequency transmission

For information about MIL-C-17 specifications, see our standard catalogue

Specification	Nexans reference	Description	Maximum operating temperature			Impe-dance		Maximum operating frequency (MHz)	Maximum operating voltage	Page
			150	200	250	50	75			
KX RG	-	50 and 75 ohms								130
SP 124962	ET 124962	UV laser miniature	●			●		3000	250	136
SP 132868	ET 132868	UV laser miniature	●				●	3000	900	138
SP 124964	ET 124964	UV laser miniature triaxial cable	●			●		3000	250	140
SP 132869	ET 132869	UV laser miniature triaxial cable	●				●	3000	900	142
EN 4604-003 WZ	-	50 ohms		●		●		3000	1700	144
EN 4604-004 WS	-	50 ohms		●		●		3000	1300	144
EN 4604-005 WL	-	75 ohms		●			●	3000	900	148
EN 4604-006 WM	-	50 ohms		●		●		5000	750	150
EN 4604-007 WN	-	50 ohms		●		●		6000	1000	152
EN 4604-008 WD	-	50 ohms		●		●		8000	1000	154
ECS 0757 KE	-	50 ohms triaxial cable		●		●		3000	250	156
ECS 0745 KC	ET 132954	75 ohms triaxial cable		●			●	3000	500	158
PAN 6422	-	50 ohms UV laser markable		●		●		1000	From 750 to 3700	160
ASNE 0293 XF	-	50 ohms		●		●		3000	1400	160
NSA 935 344 XE	-	50 ohms			●	●		3000	900	164

Data bus and high speed transmission cables

Voltage rating: from 250 to 750 Volts RMS

Specification	Nexans reference	Description	Maximum operating temperature				Impedance (ohms)				Maximum operating voltage	Page
			125	150	200	260	75	77	100	125		
ABS 0972 KB 24	ET 2PC236	Shielded quad	●						●		600	168
ABS 1503 KD 24	ET 2PF870	Shielded quad	●						●		600	170
ABS 1580 KH 24	ET 132927	Shielded quad				●			●		600	172
EN 3375 - 011 C KL	ET 133139	Shielded quad	●						●		600	174
SP 69794 EN 3375-004-C WJ	ET 69794-01 ET 69794-02	Twinaxial cable high immunity			●			●			600	176
EN 3375-005-C WV	ET 133189	Twinaxial cable high immunity			●			●			250	180
EN 3375-006-D ASNE 0290 XM	-				●			●			600	182
EN 3375-007-C WW ECS 0700	ET 132041				●			●			250	184
EN 3375-009-C WX	ET 133199	Twinaxial cable BUS CAN			●						600	188
SP 124960	ET 124960			●				●			250	190
SP 124961	ET 124961			●				●			250	192
SP 96770 ASNE 0479 WJ EN 3375-004B	ET 96770-01 ET 96770-02			●				●	●		250	194
EN 4608-005-B 002 GPB 24	-	Twinaxial cable Fireproof				●				● (120)	600	196
PAN 6421 ZA 002	ET 65529			●				●			600	198
ASNE 0259 HE	ET 63247			●						●	600	200
Honeywell P7500579	ET 69654			●						●	600	202
ASNE 0849 HJ 26	ET 124843	Twinaxial cable high immunity			●		●				600	204
SP 554	ET 61333	Twinaxial cable high immunity			●		●				600	206
SP 69899 ASNE 0811 WY	ET 69899-01 ET 68899-02	Twinaxial cable high immunity			●			●			250	208
ABS 0386 WF	ET 96897	Twinaxial cable high immunity			●				●		600	210
132873	ET 132873	Twinaxial cable Fireproof				●			●		600	212
133026	ET 133026	Twinaxial cable Dual shield	●							●	600	214
133195	ET 133195	Twinaxial cable 120 Ω	●							●	600	216

Special cables

Specification	Nexans reference	Description	Maximum operating temperature		Maximum operating voltage	Page
			200	260		
	ET 124401	Low noise screened pair cable, transmission cable		●	600	220
NSA 935 306 YK	ET 86891	Low noise screened pair cable, transmission cable		●	600	222
ESW 1404-022-006	ET 124762	Low noise screened pair cable, transmission cable		●	600	224
ESW 1405-024-006	ET 132057	Low noise screened pair cable, transmission cable		●	600	226
CAS 85-22 CAS 250-20P CAS 250-20SP CAS 250-22	ET 87067 ET 87208 ET 87209 ET 87068	Low noise coaxial cable	●		-	228
MBBN YH +++ EN 4049	ET 96532 ET 96533	Thermocouple extension Nickel chromium/nickel aluminium		●	600	230
ASNE 0409 BG ASNE 0410 SU ASNE 0411 TV ASNE 0412 VF	-	Flight test wire, UV laser printable	●		600	232
ECS 0828 MQB	ET 133235	Multipair AWG 24	●		600	234
ECS 0829 MQD	ET 133236	Multipair AWG 24	●		600	234

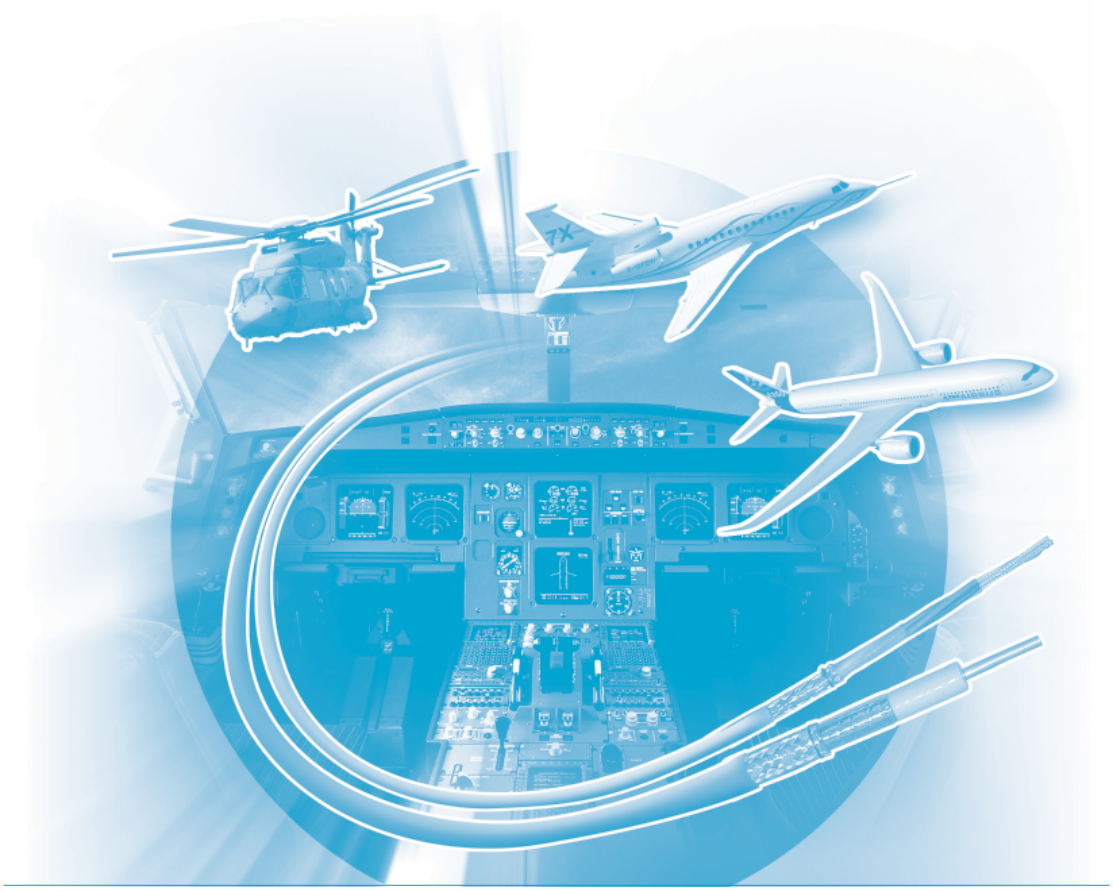
Optical cables

Maximum operating temperature: 125°C

Specification	Nexans reference	Description	Insulation	Sheath	Page
ABS 0963-003 LF	ET 132126	Multimode fiber optic cable	Zero halogen copolymer, high temperature	Polymer aromatic fiber braid + zero halogen	238

Wires and cables for avionics

Specification	Description	Maximum operating temperature	Single core	Multi-core	Insulation	Page
KZ 04, KZ 05, KZ 06	- Unscreened hook-up wires - High temperature	200°C	●		PTFE	242
KZ 55, KZ 57, KZ 59	- Screened and jacketed hook-up wires - High temperature	200°C	●		PTFE	244
KZ 67, KZ 69, KZ 71	- Screened and jacketed pairs - High temperature	200°C		●	PTFE	246
KZ 79, KZ 81, KZ 83	- Screened and jacketed triples - High temperature	200°C		●	PTFE	248
ETF, EF, EEF	- Unscreened hook-up wires - High temperature	200°C	●		PTFE	250



PART 1
Hook-up wires for Civil, Military aircraft and helicopters

ABS 0949 - AD AWG 24 to 4

Nickel copper clad aluminium alloy conductors
UV laser printable

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

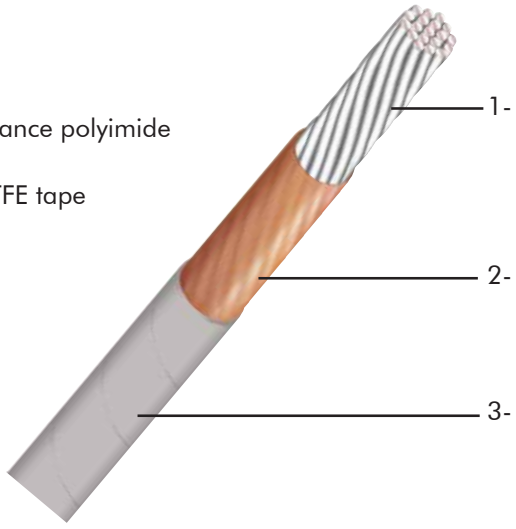
Construction

CONDUCTOR

1- AWG 24 and 22 :
1 nickel plated copper alloy wire + 6 nickel copper clad aluminium alloy wire
AWG 20 to 8 :
Nickel copper clad aluminium alloy concentric conductor
AWG 6 and 4 :
Nickel copper clad aluminium alloy rope-lay conductor

INSULATION

2- High performance polyimide tape
3- Special UV PTFE tape



Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

ABS 0957 (conductors)
ABS 0958 (technical specification)
ABS 0949 AD (product specification)

-65°C to +180°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

RoHS

Very good resistance to aircraft fluids

ABS 0949 - AD AWG 24 to 4

Nexans references	AWG	Conductor			Finished wire				
		Stranding (Nbr x mm)	Diameter		Maximum DC resistance at 20°C (68°F) (Ohms/Km)	Diameter		Weight	
			Min. (mm)	Max. (mm)		Min. (mm)	Max. (mm)	Nom. (g/m)	Max. (g/m)
ABS 0949 AD 24	24	7 x 0.20	0.56	0.58	145	0.85	0.96	1.70	1.75
ABS 0949 AD 22	22	7 x 0.25	0.71	0.73	90.2	1.00	1.10	2.37	2.50
ABS 0949 AD 20	20	19 x 0.20	0.94	0.97	49.6	1.22	1.34	3.55	3.65
ABS 0949 AD 18	18	19 x 0.25	1.19	1.22	33.2	1.46	1.61	5.14	5.45
ABS 0949 AD 16	16	19 x 0.30	1.41	1.45	23	1.76	1.92	7.37	7.60
ABS 0949 AD 14	14	37 x 0.25	1.69	1.73	15.5	2.04	2.24	9.91	10.94
ABS 0949 AD 12	12	37 x 0.32	2.13	2.18	10.9	2.50	2.70	14.12	15.10
ABS 0949 AD 10	10	61 x 0.32	2.73	2.77	5.8	3.09	3.33	22.20	24.02
ABS 0949 AD 8	8	7 X 19 X 0.30	3.55	3.85	3.8	4.10	4.40	37.94	39.00
ABS 0949 AD 6	6	7 x 10 x 0.51	4.8	5.2	2.3	5.30	5.70	62.52	63.70
ABS 0949 AD 4	4	7 x 15 x 0.51	5.90	6.30	1.5	6.60	7.40	93.50	96.30

Identification

Standard color :

Grey

Marking on Jacket :

Green for AWG22, Blue for other gauges

Wording :

AD ** FR F++

with :

** = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++= Year of production (i.e. 08 = 2008)

ABS 0949 - AD AWG3 to 000

AWG 3 to 000
Nickel plated aluminium alloy conductors
UV laser printable

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

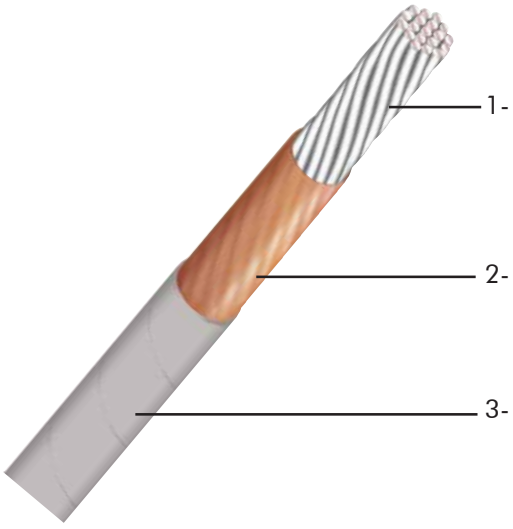
CONDUCTOR

1- Nickel plated aluminium rope-lay conductor

INSULATION

2- High performance polyimide tape

3- Special UV PTFE tape



Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

ABS 0957 (conductors)
ABS 0958 (technical specification)
ABS 0949 AD (product specification)

-65°C to +180°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

RoHS

Very good resistance to aircraft fluids

ABS 0949 - AD AWG 3 to 000

Nexans references	AWG	Conductor			Finished wire				
		Stranding (Nbr x mm)	Diameter		Maximum DC resistance at 20°C (68°F) (Ohms/Km)	Diameter		Weight	
			Min. (mm)	Max. (mm)		Min. (mm)	Max. (mm)	Nom. (g/m)	Max. (g/m)
ABS 0949 AD 3	3	7 x 19 x 0.51	6.5	7.1	1.18	7.28	7.74	91.26	94.00
ABS 0949 AD 2	2	7 x 24 x 0.51	7.4	8.0	0.94	8.07	8.57	113.1	116.5
ABS 0949 AD 1	1	7 x 30 x 0.51	8.3	8.9	0.75	8.94	9.50	139.17	143.5
ABS 0949 AD 0	0	19 x 14 x 0.51	9.7	10.3	0.60	0.29	10.93	175.81	181.0
ABS 0949 AD 00	00	19 x 18 x 0.51	11.1	11.7	0.43	11.65	12.37	222.96	230.0
ABS 0949 AD 000	000	19 x 22 x 0.51	12.4	13	0.36	12.91	13.71	267.57	276.0

Identification

Standard color :

Grey

Marking on Jacket :

Blue

Wording :

AD ** FR F++

with :

** = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++= Year of production (i.e. 08 = 2008)

ABS 1354 ADB, ADC, ADD

Multicores nickel copper clad aluminium (AWG 24 to 4)
Multicores aluminium alloy (AWG 3 to 000)

Applications

Designed for general purpose aircraft wiring applications.

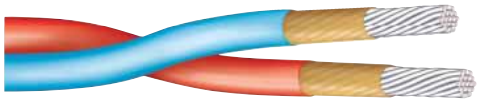
600 Volts RMS

Construction

CORES

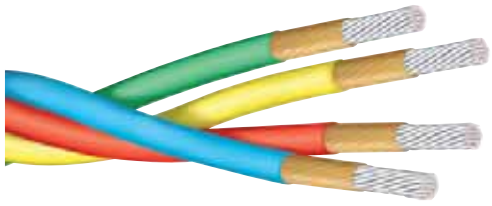
2, 3 or 4 cores ABS 0949 ADA

ADB



ADC

ADD



Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

ABS 1354 (product standard)
ABS 0958 (technical specification)

-65°C to +180°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

RoHS

Very good resistance to aircraft fluids

ABS 1354

PART NUMBERS	AWG	Nbr of cores	Finished Wire				
			Colours cores	Maximum DC resistance at 20°C (68°K) (Ohms/Km)	Diameter (mm)		Weight (g/m)	
					Nom.	Max.	Nom.	Max.
ABS 1354 ADB	24	2	1 Red 1 Blue	149.4	1.78	1.9	3.47	3.70
ABS 1354 ADB	22	2		92.9	2.04	2.16	4.83	5.27
ABS 1354 ADB	20	2		51.1	2.58	2.75	7.24	7.53
ABS 1354 ADB	18	2		34.2	3.08	3.25	10.49	10.91
ABS 1354 ADB	16	2		23.7	3.70	3.85	15.03	15.63
ABS 1354 ADB	14	2		16	4.30	4.47	20.22	21.03
ABS 1354 ADB	12	2		11.2	5.12	5.31	28.80	30.07
ABS 1354 ADB	10	2		6	6.34	6.98	45.29	51.94
ABS 1354 ADB	8	2		3.91	8.58	8.92	77.4	80.5
ABS 1354 ADB	6	2		2.37	11.0	11.44	127.54	132.64
ABS 1354 ADB	4	2		1.55	13.42	13.96	190.74	198.37
ABS 1354 ADB	3	2		1.22	15.02	15.62	186.17	193.62
ABS 1354 ADB	2	2		0.97	16.64	17.31	230.72	239.95
ABS 1354 ADB	1	2		0.77	18.44	18.99	283.91	295.27
ABS 1354 ADB	0	2		0.62	21.22	21.86	358.65	372.99
ABS 1354 ADB	00	2		0.44	24.02	24.74	454.84	473.03
ABS 1354 ADB	000	2		0.37	26.62	27.42	545.84	567.68
ABS 1354 ADC	24	3	1 Red 1 Blue 1 Yellow	149.4	1.92	2.04	5.20	5.55
ABS 1354 ADC	22	3		92.9	2.20	2.33	7.25	7.91
ABS 1354 ADC	20	3		51.1	2.78	2.96	10.86	11.29
ABS 1354 ADC	18	3		34.2	3.32	3.49	15.73	16.36
ABS 1354 ADC	16	3		23.7	3.99	4.15	22.55	23.45
ABS 1354 ADC	14	3		16	4.63	4.83	30.32	31.54
ABS 1354 ADC	12	3		11.2	5.52	5.73	43.21	45.10
ABS 1354 ADC	10	3		6	6.83	7.53	67.93	77.91
ABS 1354 ADC	8	3		3.91	9.24	9.61	116.10	120.74
ABS 1354 ADC	6	3		2.37	11.85	12.32	191.31	198.96
ABS 1354 ADC	4	3		1.55	14.46	15.04	286.11	297.55
ABS 1354 ADC	3	3		1.22	16.18	16.83	279.26	290.43
ABS 1354 ADC	2	3		0.97	17.93	18.65	346.09	359.93
ABS 1354 ADC	1	3		0.77	19.87	20.66	425.86	442.89
ABS 1354 ADC	0	3		0.62	22.86	23.50	537.98	559.5
ABS 1354 ADC	00	3		0.44	25.88	26.60	682.26	709.55
ABS 1354 ADC	000	3		0.37	28.68	29.48	818.76	851.51

ABS 1354

PART NUMBERS	US AWG	Nbr of cores	Finished Wire				
			Colours cores	Maximum DC resistance at 20°C (68°K) (Ohms/Km	Diameter (mm)		Weight (g/m)	
					Nom.	Max.	Nom.	Max.
ABS 1354 ADD	24	4	1 Red 1 Blue 1 Yellow 1 Green	149.4	2.15	2.28	6.94	7.41
ABS 1354 ADD	22	4		92.9	2.46	2.61	9.67	10.54
ABS 1354 ADD	20	4		51.1	3.11	3.32	14.48	15.06
ABS 1354 ADD	18	4		34.2	3.72	3.92	20.97	21.81
ABS 1354 ADD	16	4		23.7	4.47	4.65	30.07	31.27
ABS 1354 ADD	14	4		16	5.19	5.40	40.43	42.05
ABS 1354 ADD	12	4		11.2	6.18	6.42	57.61	60.13
ABS 1354 ADD	10	4		6	7.65	8.43	90.58	103.89
ABS 1354 ADD	8	4		3.91	10.36	10.77	154.8	160.99
ABS 1354 ADD	6	4		2.37	13.28	13.81	255.08	265.28
ABS 1354 ADD	4	4		1.55	16.20	16.85	381.48	396.74
ABS 1354 ADD	3	4		1.22	18.13	18.86	372.34	387.23
ABS 1354 ADD	2	4		0.97	20.08	20.88	461.45	479.91
ABS 1354 ADD	1	4		0.77	22.26	23.15	567.81	590.52

Identification

2 cores (ADB) : Red - Blue
3 cores (ADC) : Red - Blue - Yellow
4 cores (ADD) : Red - Blue - Yellow - Green

Marking in black

ADA ** FR F++

with :

** = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++= Year of production (i.e. 08 = 2008)

nexans

ABS 1356 VNA, VNB, VNC, VND

Screened and jacketed single and multicores
UV laser printable

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

CORES
1, 2, 3 or 4 cores ABS 0949 AD

SCREEN
Nickel plated copper spiral screen

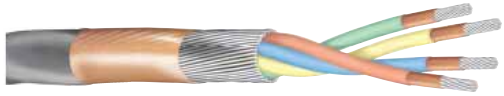
JACKET
Polyimide tape
UV PTFE tape

VNA

VNB

VNC

VND



Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

ABS 1356

-65°C to +180°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

RoHS

Very good resistance to aircraft fluids

ABS 1356

PART NUMBERS	US AWG	Nbr of Cores	Screen strands nominal diameter (mm)	Finished Wire						
				Colours		Maximum DC Resistance at 20°C (68°K) (Ohms/Km)	Diameter (mm)		Weight (g/m)	
				Cores	Jacket		Nom.	Max.	Nom.	Max.
ABS 1356 VNA	24	1	0.08	1 Grey	Grey	145	1.38	1.45	4.57	4.80
ABS 1356 VNA	22	1	0.08		Grey	90.2	1.51	1.60	5.58	5.86
ABS 1356 VNA	20	1	0.08		Grey	49.6	1.78	1.87	7.48	7.75
ABS 1356 VNA	18	1	0.08		Grey	33.2	2.03	2.11	9.73	10.40
ABS 1356 VNA	16	1	0.10		Grey	23	2.38	2.48	13.64	14.51
ABS 1356 VNA	14	1	0.10		Grey	15.5	2.68	2.79	17.10	17.96
ABS 1356 VNA	12	1	0.10		Grey	10.9	3.09	3.20	22.56	24.30
ABS 1356 VNA	10	1	0.12		Grey	5.8	3.74	3.89	33.91	36.07
ABS 1356 VNB	24	2	0.08	1 Red 1 Blue	Grey	149.4	2.27	2.40	7.84	8.15
ABS 1356 VNB	22	2	0.08		Grey	92.9	2.53	2.70	9.77	10.16
ABS 1356 VNB	20	2	0.10		Grey	51.1	3.11	3.27	14.31	14.88
ABS 1356 VNB	18	2	0.10		Grey	34.2	3.61	3.75	18.81	20.20
ABS 1356 VNB	16	2	0.12		Grey	23.7	4.27	4.44	26.26	28.10
ABS 1356 VNB	14	2	0.15		Grey	16.0	4.93	5.13	35.5	37.27
ABS 1356 VNB	12	2	0.20		Grey	11.2	5.85	6.09	51.50	55.78
ABS 1356 VNB	10	2	0.20		Grey	6.0	7.07	7.39	73.05	78.19
ABS 1356 VNC	24	3	0.10	1 Red 1 Blue 1 Yellow	Grey	149.4	2.45	2.59	11.14	11.59
ABS 1356 VNC	22	3	0.10		Grey	92.9	2.73	2.91	13.96	14.52
ABS 1356 VNC	20	3	0.12		Grey	51.1	3.35	3.52	20.34	21.15
ABS 1356 VNC	18	3	0.12		Grey	34.2	3.89	4.05	26.89	28.80
ABS 1356 VNC	16	3	0.15		Grey	23.7	4.62	4.80	38.23	40.80
ABS 1356 VNC	14	3	0.15		Grey	16.0	5.26	5.47	48.38	50.80
ABS 1356 VNC	12	3	0.20		Grey	11.2	6.25	6.50	70.04	75.81
ABS 1356 VNC	10	3	0.20		Grey	6.0	7.56	7.90	100.81	107.60
ABS 1356 VND	24	4	0.10	1 Red 1 Blue 1 Yellow 1 Green	Grey	149.4	2.68	2.84	13.74	14.29
ABS 1356 VND	22	4	0.10		Grey	92.9	2.99	3.19	17.37	18.06
ABS 1356 VND	20	4	0.12		Grey	51.1	3.68	3.86	25.38	26.39
ABS 1356 VND	18	4	0.12		Grey	34.2	4.29	4.46	33.83	36.22
ABS 1356 VND	16	4	0.15		Grey	23.7	5.10	5.30	48.14	51.30
ABS 1356 VND	14	4	0.20		Grey	16.0	5.92	6.16	66.67	70.00

Identification

Core marking in black

ADA ** FR F++

Jacket marking

XXX ** FR F++

Color : Green for AWG 22, 18, 14 and 10 ; Blue for AWG 24, 20, 16 and 12

with :

XXX= Short designation (VNA, VNB, VNC, VND)

** = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++= Year of production (i.e. 08 = 2008)

EN 2267-010A DR

Ligth weight UV laser printable

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

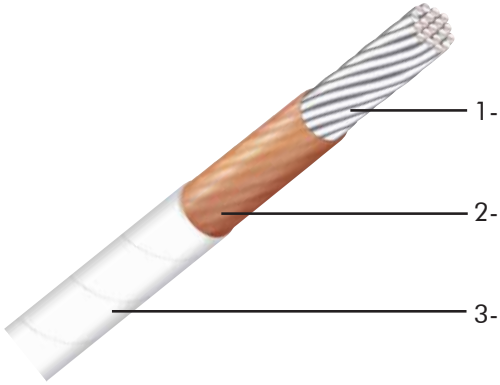
CORES

1- Stranded conductor in nickel plated high strength copper alloy (AWG 26 & 24) or nickel plated copper (AWG 22 to 2)

INSULATION

2- Special polyimide tape

3- Special UV PTFE tape(s)



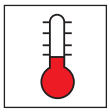
Other characteristics

Operating frequency : up to 2000 Hz

Mould and fungus resistant

Standards

prEN2267-010 product standard
prEN4434 for conductors AWG 26 to 6
prEN2083 for conductors AWG 4 to 2
prEN3475 for tests & performances



-55°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

EN 2267-010A

PART NUMBERS	Code of nominal section	Color code	AWG	Conductor			Finished Wire				
				Stranding Number x Dia. of strands (mm)	Diameter (mm)		Maximum DC resistance at 20°C (68°F) (Ohms/Km)	Diameter (mm)		tWeight (g/m)	
					Min.	Max.		Mini.	Max.	Nom.	Max.
EN 2267-010A	001	S	26	19 x 0.100	0.47	0.49	160.0	0.75	0.84	1.95	2.08
EN 2267-010A	002	S	24	19 x 0.120	0.555	0.585	114.0	0.85	0.96	2.64	2.72
EN 2267-010A	004	S	22	19 x 0.150	0.71	0.73	60.0	1.00	1.10	3.89	4.14
EN 2267-010A	006	S	20	19 x 0.200	0.94	0.97	33.2	1.22	1.34	6.57	6.85
EN 2267-010A	010	S	18	19 x 0.250	1.19	1.22	21.1	1.46	1.61	10.15	10.43
EN 2267-010A	012	S	16	19 x 0.300	1.41	1.45	14.5	1.76	1.92	14.05	14.61
EN 2267-010A	020	S	14	37 x 0.250	1.69	1.73	10.9	2.04	2.24	19.31	19.78
EN 2267-010A	030	S	12	37 x 0.320	2.13	2.18	6.8	2.50	2.70	29.25	31.33
EN 2267-010A	051	S	10	61 x 0.320	2.73	2.77	4.1	3.13	3.33	47.37	49.85
EN 2267-010A	090	S	8	127 x 0.300	3.55	3.85	2.3	4.10	4.40	87.81	90.00
EN 2267-010A	140	S	6	27 x 7 x 0.300	4.80	5.20	1.58	5.30	5.70	132.41	135.00
EN 2267-010A	220	S	4	37 x 12 x 0.250	-	6.80	0.97	6.71	7.41	215.15	222.00
EN 2267-010A	340	S	2	37 x 19 x 0.250	-	8.60	0.61	8.28	9.16	336.10	347.00

Identification

Standard colors code :

White except AWG 26 which is light yellow and AWG 22 which is light green
AWG 24 is available in light blue color (EN2267-010A 02B)

Marking green color:

EN DR ** FR F ++

with :

DR = Short designation
** = AWG
FR = Country of origin (FR = France)
F = Manufacturer (F = Nexans)
++ = Year of production (i.e. 08 = 2008)

EN 2267-009 DRB DRC DRD

Multicore DRA

Applications

Designed for general purpose aircraft wiring applications.

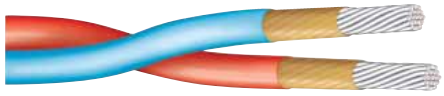
600 Volts RMS

Construction

CORES

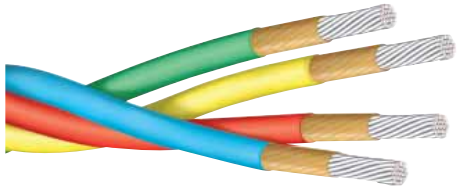
2, 3 or 4 cores EN2267-009A

DRB



DRC

DRD

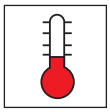


Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

prEN2267-009 product standard
prEN2267-002 general specification



-55°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

EN 2267-009

PART NUMBERS	Code of nominal section	Color code	US AWG	Number of cores	Finished Wire					
					Colors Cores	Maximum DC resistance at 20°C (68°K) (Ohms/Km)	Diameter (mm)		Weight (g/m)	
							Nom.	Max.	Nom.	Max.
EN 2267-009B	001	P	26	2	1 Red 1 Blue	165	1.56	1.68	3.98	4.28
EN 2267-009B	002	P	24	2		117	1.82	1.92	5.39	5.60
EN 2267-009B	004	P	22	2		61.7	2.10	2.20	7.94	8.53
EN 2267-009B	006	P	20	2		34.1	2.60	2.68	13.40	14.11
EN 2267-009B	010	P	18	2		21.7	3.08	3.22	20.71	21.49
EN 2267-009B	012	P	16	2		14.9	3.66	3.84	28.66	30.10
EN 2267-009B	020	P	14	2		11.2	4.32	4.48	39.39	40.75
EN 2267-009B	030	P	12	2		6.99	5.14	5.40	59.67	64.54
EN 2267-009B	051	P	10	2		4.22	6.42	6.66	96.63	102.69
EN 2267-009B	090	P	8	2		2.37	8.60	8.80	179.13	185.40
EN 2267-009B	140	P	6	2		1.63	11.10	11.40	270.12	278.10
EN 2267-009B	220	P	4	2		1	14.12	14.82	438.91	457.32
EN 2267-009C	001	P	26	3	1 Red 1 Blue 1 Yellow	165	1.68	1.81	5.97	6.43
EN 2267-009C	002	P	24	3		117	1.96	2.06	8.08	8.40
EN 2267-009C	004	P	22	3		61.7	2.26	2.37	11.90	12.79
EN 2267-009C	006	P	20	3		34.1	2.80	2.88	20.10	21.17
EN 2267-009C	010	P	18	3		21.7	3.32	3.46	31.06	32.23
EN 2267-009C	012	P	16	3		14.9	3.94	4.13	42.99	45.14
EN 2267-009C	020	P	14	3		11.2	4.65	4.82	59.09	61.12
EN 2267-009C	030	P	12	3		6.99	5.54	5.81	89.50	96.81
EN 2267-009C	051	P	10	3		4.22	6.92	7.16	144.95	154.04
EN 2267-009C	090	P	8	3		2.37	9.27	9.46	268.7	278.10
EN 2267-009C	140	P	6	3		1.63	11.96	12.26	405.17	417.15
EN 2267-009C	220	P	4	3		1	15.21	15.93	658.36	685.98
EN 2267-009D	001	P	26	4	1 Red 1 Blue 1 Yellow 1 Green	165	1.88	2.02	7.96	8.57
EN 2267-009D	002	P	24	4		117	2.20	2.30	10.77	11.21
EN 2267-009D	004	P	22	4		61.7	2.53	2.64	15.87	17.06
EN 2267-009D	006	P	20	4		34.1	3.14	3.22	26.81	28.22
EN 2267-009D	010	P	18	4		21.7	3.72	3.86	41.41	42.97
EN 2267-009D	012	P	16	4		14.9	4.42	4.61	57.32	60.19
EN 2267-009D	020	P	14	4		11.2	5.21	5.38	78.78	81.49
EN 2267-009D	030	P	12	4		6.99	6.20	6.48	119.34	129.08
EN 2267-009D	051	P	10	4		4.22	7.75	7.99	193.27	205.38
EN 2267-009D	090	P	8	4		2.37	10.38	10.56	358.26	370.80
EN 2267-009D	140	P	6	4		1.63	13.40	13.68	540.23	556.20
EN 2267-009D	220	P	4	4		1	17.04	17.78	877.81	914.64

Identification

Marking white for red and green cores, green for blue and yellow cores :

EN DRA ** FR F ++

with :

DRA = short designation

** = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++ = Year of production (i.e. 08 = 2008)

EN 2714-013 MLA MLB MLC MLD

Screened and jacketed, light weight, UV cable

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

CORES

1, 2, 3 or 4 cores
EN2267-009A

SCREEN

Nickel plated copper spiral screen

JACKET

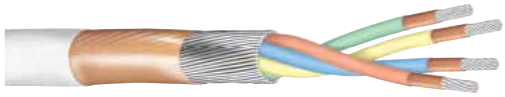
Polyimide tape
UV PTFE tape

MLA

MLB

MLC

MLD

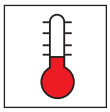


Other characteristics

Operating frequency : up to 2000 Hz

Standards

prEN4434 for conductors
prEN2267-009 for cores
prEN2714-013 for screened and jacketed single and multicores



-55°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

EN 2714-013

PART NUMBERS	Code of nom. section	Color code	AWG	Num-ber of cores	Screen strands nom. Ø (mm)	Finished Wire						
						Colors		Maximum DC resistance at 20°C (68°K) (Ohms/Km)	Diameter (mm)		Weight (g/m)	
						Cores	Jacket		Nom.	Max.	Nom.	Max.
EN 2714-013A	001	F	26	1	0.08	Light yellow	White	160	1.23	1.31	4.35	4.68
EN 2714-013A	002	F	24	1	0.08	White	Light blue	114	1.36	1.45	5.37	5.76
EN 2714-013A	004	F	22	1	0.08	Light green	White	60	1.50	1.60	6.97	7.51
EN 2714-013A	006	F	20	1	0.08	White	Light blue	33.2	1.75	1.84	10.28	10.77
EN 2714-013A	010	F	18	1	0.08	White	White	21.1	1.99	2.08	14.47	14.97
EN 2714-013A	012	F	16	1	0.10	White	Light blue	14.5	2.32	2.43	19.95	20.97
EN 2714-013A	020	F	14	1	0.10	White	White	10.9	2.65	2.74	26.17	27.03
EN 2714-013A	030	F	12	1	0.10	White	White	6.8	3.06	3.20	37.31	39.70
EN 2714-013A	051	F	10	1	0.12	White	White	4.1	3.74	3.89	58.72	61.94
EN 2714-013B	001	F	26	2	0.08	1 Red 1 Blue	White	165	2.01	2.13	7.63	8.17
EN 2714-013B	002	F	24	2	0.08		Light blue	117	2.27	2.40	9.58	10.23
EN 2714-013B	004	F	22	2	0.08		White	61.7	2.55	2.70	12.70	13.64
EN 2714-013B	006	F	20	2	0.10		Light blue	34.1	3.09	3.22	20.17	21.05
EN 2714-013B	010	F	18	2	0.10		White	21.7	3.57	3.71	28.62	29.52
EN 2714-013B	012	F	16	2	0.12		Light blue	14.9	4.19	4.38	39.30	41.20
EN 2714-013B	020	F	14	2	0.15		White	11.2	4.91	5.04	54.19	55.83
EN 2714-013B	030	F	12	2	0.20		White	6.99	5.83	6.09	81.80	86.79
EN 2714-013B	051	F	10	2	0.20		White	4.22	7.11	7.39	123.94	130.51
EN 2714-013C	001	F	26	3	0.08	1 Red 1 Blue 1 Yellow	White	165	2.13	2.26	10.25	10.94
EN 2714-013C	002	F	24	3	0.10		Light blue	117	2.45	2.59	13.83	14.72
EN 2714-013C	004	F	22	3	0.10		White	61.7	2.75	2.91	18.45	19.76
EN 2714-013C	006	F	20	3	0.12		Light blue	34.1	3.33	3.48	29.23	30.44
EN 2714-013C	010	F	18	3	0.12		White	21.7	3.85	4.00	41.75	42.96
EN 2714-013C	012	F	16	3	0.15		Light blue	14.9	4.53	4.73	57.96	60.67
EN 2714-013C	020	F	14	3	0.15		White	11.2	5.25	5.39	76.59	78.83
EN 2714-013C	030	F	12	3	0.20		White	6.99	6.23	6.50	115.68	122.72
EN 2714-013C	051	F	10	3	0.20		White	4.22	7.61	7.90	177.31	186.69
EN 2714-013D	001	F	26	4	0.10	1 Red 1 Blue 1 Yellow 1 Green	White	165	2.37	2.51	13.69	14.57
EN 2714-013D	002	F	24	4	0.10		Light blue	117	2.69	2.84	17.37	18.47
EN 2714-013D	004	F	22	4	0.10		White	61.7	3.03	3.19	23.4	25.04
EN 2714-013D	006	F	20	4	0.12		Light blue	34.1	3.67	3.82	37.31	38.81
EN 2714-013D	010	F	18	4	0.12		White	21.7	4.25	4.41	53.73	55.22
EN 2714-013D	012	F	16	4	0.15		Light blue	14.9	5.01	5.23	74.58	78.02
EN 2714-013D	020	F	14	4	0.20		White	11.2	5.91	6.06	104.39	107.36

Identification

Marking on cores:

EN DRA ++ FR F ** color : white for red and green cores, green for blue and yellow cores

Marking on jacket:

EN xxx ++ FR F ** color : green

with :

xxx = short designation (MLA, MLB, MLC, MLD)

++ = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

** = Year of production (i.e. 08 = 2008)

MME/MMF/MMG EN 2714-014

Screened and jacketed, light weight, UV cable

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

CORES

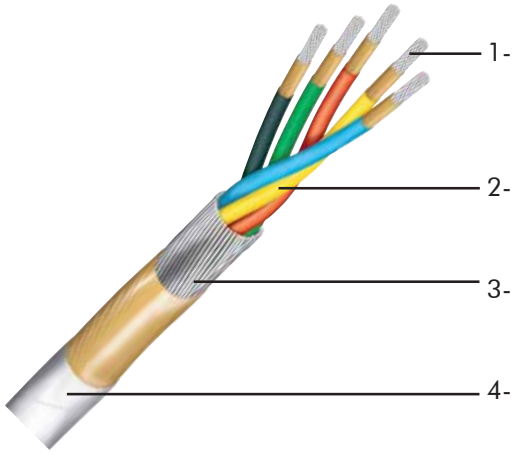
1- EN 2267-009A
2- Polyimide tape

SCREEN

3- Nickel plated copper braid

JACKET

4- Polyimide tape
UV PTFE tape



Other characteristics

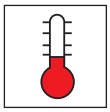
Operating frequency : up to 2000 Hz

Short designation

5 cores : MME
6 cores : MMF
7 cores : MMG
8 cores : MMH
10 cores : MMK

Standards

prEN4434 for conductors
prEN2267-009 for cores
prEN2714-014 for screened and jacketed multicores



-55°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

EN 2714-014

PART NUMBERS	Code of nominal section	Color code	AWG	Nbr of cores	Screen strands nominal diameter (mm)	Finished Wire						
						Colours		Maximum DC resistance at 20°C (68°K) (Ohms/Km)	Diameter (mm)		Weight (g/m)	
						Cores	Jacket		Nom.	Max.	Nom.	Max.
EN 2714-014E	010	J	18	5	0.12	White, Blue, Yellow, Red, Green	White	21.7	5.03	5.26	73.22	76.0
EN 2714-014E	012	J	16	5	0.12		Light blue	14.9	5.82	6.10	97.31	102.2
EN 2714-014E	020	J	14	5	0.12		White	11.2	6.71	7.05	28.62	135.0
EN 2714-014E	030	H	12	5	0.15	Black, Blue, Yellow, Red, Green	Light blue	6.99	7.94	8.41	91.30	205.6
EN 2714-014E	002	F	24	5	0.10	Red, Blue, Yellow, Green, White	Light blue	117	3.21	3.29	24.79	26.2
EN 2714-014F	002	F	24	6	0.12	Red, Blue, Yellow, Green, White, Black	Light blue	117	3.56	3.65	31.9	32.2
EN 2714-014G	002	F	24	7	0.12	Red, Blue, Yellow, Green, White, Black, Brown	Light blue	117	3.61	3.80	32.96	34.60
EN 2714-014H	002	F	24	8	0.12	Red, Blue, Yellow, Green, White, Black, Brown, Orange	Light blue	117	4.12	4.37	42.25	42.95
EN 2714-014K	002	F	24	10	0.12	Red, Blue, Yellow, Green, White, Black, Brown, Orange, Violet, Grey	Light blue	117	4.51	4.74	46.43	48.75

Identification

Marking on cores:

EN DRA ++ FR F **

White for black, red, brown, green and violet core

Green for blue, yellow, white, orange and grey core

Marking on jacket:

EN xxx ++ FR F ** color : green

with :

xxx = short designation

++ = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

** = Year of production (i.e. 08 = 2008)

DRP/DRT/DRQ - EN 2266-008 TYPE

Multicore cables unshielded and jacketed
200 °C, Light Weight , UV
Arc Tracking Resistant

Applications

Designed for general Purpose
Aircraft Wiring Applications.

600 Volts RMS

Construction

CORES
2, 3 or 4 cores
EN 2267-009A
JACKET
Polyimide Tape
UV Laser Markable
Top coat

DRP

DRT

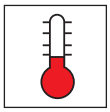
DRQ

Other characteristics

Operating frequency: up to 2000 Hz
Mould and fungus resistant

Standards

For conductors:
prEN 4434
For cores:
prEN 2267-09
For Jacketed multicore cable:
EN 2266-008
For laser marking:
EN 3475 - 705 –706



-55°C to +200°C
(Ambient. + Rise.)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Arc tracking
resistant

Very good
resistance to
aircraft fluids

EN 2266-008 Type

PART NUMBERS	Code of nominal section	Color code	US AWG	Nbr of Cores Number of cores	Finished Wire						
					Colours		Maximum DC resistance at 20°C (68°K)	Diameter (mm)		Weight (g/m)	
					Cores	Jacket	(Ohms/Km)	Nom.	Max.	Nom.	Max.
DRP 26	001	P	26	2	1 Red 1 Blue	White	165	1.76	1.86	4.81	5.01
DRP 24	002	P	24	2		Light blue	117	2.02	2.10	6.34	6.54
DRP 22	004	P	22	2		White	61.7	2.30	2.39	9.26	9.47
DRP 20	006	P	20	2		Light blue	34.1	2.80	2.91	14.92	15.28
DRP 18	010	P	18	2		White	21.7	3.28	3.44	22.26	22.90
DRP 16	012	P	16	2		Light blue	14.9	3.85	4.02	30.48	31.78
DRP 14	020	P	14	2		White	11.2	4.53	4.67	41.59	42.61
DRP 12	030	P	12	2		White	6.99	5.34	5.50	63.88	65.82
DRP 26	001	P	26	3	1 Red 1 Blue 1 Yellow	White	165	1.87	1.99	6.94	7.28
DRP 24	002	P	24	3		Light blue	117	2.16	2.24	9.21	9.50
DRP 22	004	P	22	3		White	61.7	2.46	2.55	13.55	13.91
DRP 20	006	P	20	3		Light blue	34.1	3.00	3.12	21.96	22.55
DRP 18	010	P	18	3		White	21.7	3.52	3.68	32.91	33.91
DRP 16	012	P	16	3		Light blue	14.9	4.13	4.30	45.16	47.15
DRP 14	020	P	14	3		White	11.2	4.6	5.01	61.72	63.34
DRP 12	030	P	12	3		White	6.99	5.73	5.98	95.05	99.57
DRP 26	001	P	26	4	1 Red 1 Blue 1 Yellow 1 Green	White	165	2.08	2.22	9.08	9.56
DRP 24	002	P	24	4		Light blue	117	2.39	2.49	12.08	12.48
DRP 22	004	P	22	4		White	61.7	2.73	2.87	17.84	18.34
DRP 20	006	P	20	4		Light blue	34.1	3.34	3.50	29.00	29.82
DRP 18	010	P	18	4		White	21.7	3.92	4.15	43.56	44.92
DRP 16	012	P	16	4		Light blue	14.9	4.60	4.80	59.84	62.52
DRP 14	020	P	14	4		White	11.2	5.42	5.48	81.85	84.06
DRP 12	030	P	12	4		White	6.99	6.40	6.61	126.21	129.96

Identification

Cores:

Colour of marking: White for Red and Green core.
Green for Blue, White and Yellow core.

Marking: EN DR A ++ FRF**

Jacket:

Colour of marking: Green

Marking: DRx ++ FRF**

DRx = Short designation (DRP, DRT, DRQ)
++ =Awg
FR =Country of Origin (FR = France)
F =Manufacturer (F = Nexans)
** =Year of manufacturing (ie. 10 = 2010)

MNA/MNB/MNC/MND - EN 2713-012 TYPE

Multicore cables shielded an jacketed
200 °C, Light Weight , UV
Arc Tracking Resistant

Applications

Designed for general purpose
aircraft wiring applications

600 Volts RMS

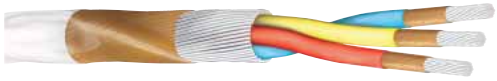
Construction

CORES
1, 2, 3 or 4
cores EN 2267-009A
SCREEN
Silver plated copper spiral
screen
JACKET
Polyimide Tape
UV Laser Markable
Top coat

MNA

MNB

MNC



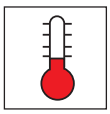
MND

Other characteristics

Operating frequency: up to 2000 Hz
Mould and fungus resistant

Standards

For conductors:
prEN 4434
For cores:
prEN 2267-009
For Screened and Jacketed
multicore cable:
EN 2713-012
For laser marking:
EN 3475 - 705 –706



-55°C to +200°C
(Ambient. + Rise.)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Arc tracking
resistant

Very good
resistance to
aircraft fluids

EN 2713-012 Type

PART NUMBERS	Code of nominal section	Color code	US AWG	Nbr of Cores Number of cores	Screen Strands nominal diameter (mm)	Finished Wire						
						Colours		Maximum DC resistance at 20°C (68°K)	Diameter (mm)		Weight (g/m)	
						Cores	Jacket	(Ohms/Km)	Nom.	Max.	Nom.	Max.
MNA 26	001	F	26	1		Light yellow	White	160	1.15	1.23	4.01	4.45
MNA 24	002	F	24	1		White	Light blue	114	1.28	1.35	4.99	5.30
MNA 22	004	F	22	1	0.08	Light green	White	60	1.42	1.49	6.67	7.16
MNA 20	006	F	20	1		White	Light blue	33.2	1.67	1.73	9.88	10.53
MNA 18	010	F	18	1		White	White	21.1	1.92	2.00	13.90	14.90
MNA 16	012	F	16	1		White	Light blue	14.5	2.24	2.35	19.27	20.82
MNA 14	020	F	14	1	0.1	White	White	10.9	2.58	2.66	25.44	26.54
MNA 12	030	F	12	1		White	White	6.8	2.99	3.13	37.25	39.75
MNA 10	051	F	10	1		White	White	4.1	3.61	3.76	57.28	60.05
MNB 26	001	F	26	2			White	165	1.94	2.07	7.15	7.96
MNB 24	002	F	24	2	0.08		Light blue	117	2.20	2.31	9.03	9.61
MNB 22	004	F	22	2			White	61.7	2.48	2.59	12.33	13.28
MNB 20	006	F	20	2	0.01	1 Red	Light blue	34.1	3.02	3.14	19.61	20.96
MNB 18	010	F	18	2		1 Blue	White	21.7	3.50	3.65	27.77	29.71
MNB 16	012	F	16	2			Light blue	14.9	4.11	4.31	38.26	41.29
MNB 14	020	F	14	2	0.12		White	11.2	4.79	4.93	50.73	53.08
MNB 12	030	F	12	2			White	6.99	5.61	5.83	74.69	78.84
MNC 26	001	F	26	3	0.08	1 Blue	White	165	2.05	2.20	9.69	10.75
MNC 24	002	F	24	3			Light blue	117	2.34	2.45	12.38	13.17
MNC 22	004	F	22	3	0.01	1 Red	White	61.7	2.64	2.76	17.17	18.36
MNC 20	006	F	20	3		1 Blue	Light blue	34.1	3.22	3.35	27.51	29.27
MNC 18	010	F	18	3	0.12	1 Yellow	White	21.7	3.73	3.89	39.42	42.02
MNC 16	012	F	16	3			Light blue	14.9	4.39	4.6	54.37	58.47
MNC 14	020	F	14	3	0.15		White	11.2	5.18	5.33	75.33	78.63
MNC 12	030	F	12	3			White	6.99	6.14	6.34	112.27	115.71
MND 26	001	F	26	4	0.08	1 Blue	White	165	2.26	2.41	12.24	13.54
MND 24	002	F	24	4			Light blue	117	2.57	2.70	15.72	16.67
MND 22	004	F	22	4	0.01	1 Red	White	61.7	2.95	3.08	23.07	24.55
MND 20	006	F	20	4		1 Blue	Light blue	34.1	3.56	3.70	35.40	37.59
MND 18	010	F	18	4	0.12	1 Yellow	White	21.7	4.18	4.35	52.61	55.87
MND 16	012	F	16	4		1 Green	Light blue	14.9	4.86	5.10	70.47	75.54
MND 14	020	F	14	4	0.15		White	11.2	5.83	6.06	98.75	104.47
MND 12	030	F	12	4			White	6.99	6.81	7.09	146.12	154.71

Identification

Cores:

Colour of marking: White for Red and Green core.
Green for Blue, White and Yellow core.
Marking: EN DR A ++ FRF**

Jacket:

Colour of Jacket: See table on this datasheet
Colour of marking: Green
Marking: MNx ++ FRF**

MNx = Short designation (MNA, MNB, MNC, MND)
++ =Awg
FR =Country of Origin (FR = France)
F =Manufacturer (F = Nexans)
** =Year of manufacturing (ie. 10 = 2010)

FX 5301

VG 95218-20 type H
Single wire

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

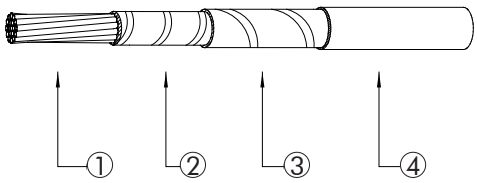
Construction

CONDUCTOR

1- Stranded conductor made of silver plated copper or high strength copper alloy (size 002)

INSULATION

2- PTFE tape
3- Polyimide tape
4- UV laser markable FEP lacquer top coat



Other characteristics

Operating frequency : up to 2000 Hz

Standards

VG 95218-2 (may 1998)
VG 95218-20 (february 2000)

-65°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

RoHS

FX 5301

VG Reference	NEXANS Part Number	Dash Number (VG)	Size Code (NEXANS)	AWG (1)	Conductor		
					Stranding Nbr x diam of strands (mm)	Diameter Min. (mm)	Diameter Max. (mm)
VG 95218T020H019	FX 5301-002	01	002	24	19 x 0.12	0.55	0.62
VG 95218T020H02A	FX 5301-004	02	004	22	19 x 0.15	0.70	0.80
VG 95218T020H039	FX 5301-006	03	006	20	19 x 0.20	0.94	1.04
VG 95218T020H049	FX 5301-010	04	010	18	19 x 0.25	1.18	1.29
VG 95218T020H059	FX 5301-012	05	012	16	19 x 0.30	1.39	1.53
VG 95218T020H069	FX 5301-020	06	020	14	37 x 0.25	1.68	1.82
VG 95218T020H079	FX 5301-030	07	030	12	37 x 0.32	2.12	2.28

VG Reference	NEXANS Part Number	Finished Wire			
		Diameter		Weight Max. (g/m)	Maximum DC resistance at 20°C (68°F) (Ohms/Km)
		Min. (mm)	Max. (mm)		
VG 95218T020H019	FX 5301-002	0.98	1.08	3.23	106
VG 95218T020H02A	FX 5301-004	1.12	1.24	4.59	55.3
VG 95218T020H039	FX 5301-006	1.33	1.47	7.29	31
VG 95218T020H049	FX 5301-010	1.58	1.72	10.69	19.6
VG 95218T020H059	FX 5301-012	1.81	1.97	14.86	13.6
VG 95218T020H069	FX 5301-020	2.07	2.19	19.43	10.2
VG 95218T020H079	FX 5301-030	2.53	2.69	30.83	6.4

(1) For information only.

Identification

Colors :

White (except size 004 in pale blue)

Marking :

VG95218T020H **£ F 0241 ++ AC

with :

** = Dash number

£ = color (9=white, A=pale blue)

F0241= Manufacturer's cage code

++= Year of production (i.e. 08 = 2008)

AC = Cable code according to TR 6058

FX 5303

VG 95218-22 type E
Single core shielded and jacketed
VG 95218-23 type D
Multicore shielded and jacketed

Applications

Designed for general purpose aircraft wiring applications.

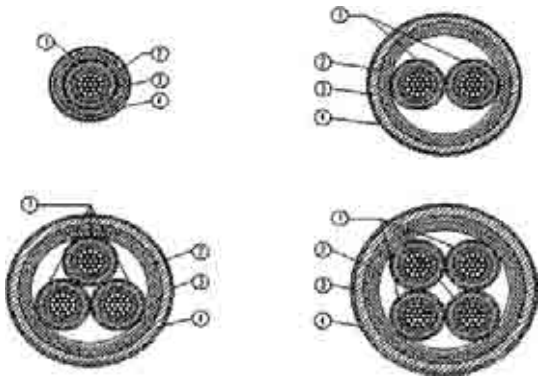
600 Volts RMS

Construction

CORE
1- FX 5301

SCREEN
2- Silver plated copper braided screen

JACKET
3- Polyimide tapes
4- UV laser markable FEP lacquer top coat



Other characteristics

Operating frequency : up to 2000 Hz

Standards

VG 95218-2 (may 1998)
VG 95218-22 (october 1999)
VG 95218-23 (october 1999)

-65°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

RoHS

FX 5303

VG reference	NEXANS part number	Nbr. of cores	Dash number (VG)	Size code (NEXANS)	AWG	Diam.of screen strand (mm)	Finished Wire			
							Diameter		Weight Max. (g/m)	Max. DC Resistance at 20°C (68°F) (Ohms/Km)
							Min. (mm)	Max. (mm)		
VG 95218T022E001	FX 5303-1-002	1	001	002	24	0.08	1.52	1.68	7.04	106
VG 95218T022E002	FX 5303-1-004	1	002	004	22	0.08	1.66	1.85	8.85	55.3
VG 95218T022E003	FX 5303-1-006	1	003	006	20	0.08	1.87	2.08	12.2	31
VG 95218T022E004	FX 5303-1-010	1	004	010	18	0.10	2.21	2.39	17.56	19.6
VG 95218T022E005	FX 5303-1-012	1	005	012	16	0.10	2.44	2.64	22.59	13.6
VG 95218T022E006	FX 5303-1-020	1	006	020	14	0.10	2.70	2.86	27.94	10.2
VG 95218T022E007	FX 5303-1-030	1	007	030	12	0.10	3.16	3.36	41.06	6.4
VG 95218T023D001	FX 5303-2-002	2	001	002	24	0.08	2.47	2.73	12.27	109.2
VG 95218T023D002	FX 5303-2-004	2	002	004	22	0.08	2.76	3.05	15.77	57
VG 95218T023D003	FX 5303-2-006	2	003	006	20	0.10	3.25	3.59	23.97	31.9
VG 95218T023D004	FX 5303-2-010	2	004	010	18	0.10	3.76	4.08	32.29	30.2
VG 95218T023D005	FX 5303-2-012	2	005	012	16	0.10	4.22	4.58	42.20	14.0
VG 95218T023D006	FX 5303-2-020	2	006	020	14	0.10	4.73	5.03	52.81	10.5
VG 95218T023D007	FX 5303-2-030	2	007	030	12	0.10	5.66	6.02	78.85	6.6
VG 95218T023D008	FX 5303-3-002	3	008	002	24	0.08	2.61	2.89	16.44	109.2
VG 95218T023D009	FX 5303-3-004	3	009	004	22	0.08	2.93	3.23	21.45	57
VG 95218T023D010	FX 5303-3-006	3	010	006	20	0.10	3.45	3.81	32.85	31.9
VG 95218T023D011	FX 5303-3-010	3	011	010	18	0.10	4.00	4.34	44.90	30.2
VG 95218T023D012	FX 5303-3-012	3	012	012	16	0.10	4.50	4.88	59.32	14.0
VG 95218T023D013	FX 5303-3-020	3	013	020	14	0.10	5.04	5.36	74.82	10.5
VG 95218T023D014	FX 5303-3-030	3	014	030	12	0.10	6.05	6.43	113.00	6.6
VG 95218T023D015	FX 5303-4-002	4	015	002	24	0.08	2.86	3.16	20.61	109.2
VG 95218T023D016	FX 5303-4-004	4	016	004	22	0.08	3.20	3.54	27.13	57
VG 95218T023D017	FX 5303-4-006	4	017	006	20	0.10	3.78	4.18	41.74	31.9
VG 95218T023D018	FX 5303-4-010	4	018	010	18	0.10	4.41	4.77	57.51	30.2
VG 95218T023D019	FX 5303-4-012	4	019	012	16	0.10	4.96	5.38	76.43	14.0
VG 95218T023D020	FX 5303-4-020	4	020	020	14	0.10	5.58	5.92	96.83	10.5
VG 95218T023D021	FX 5303-4-030	4	021	030	12	0.10	6.69	7.11	147.14	6.6

Identification

Single core shielded and jacketed (type E)

Core color :

White (with exception of size 004 : Pale Blue)

Marking on Jacket :

White (with exception of size 004 : Pale Blue)

Marking VG95218T022E*** F 0241 ++ GE

Multicore shielded and jacketed (type D)

Core Identification :

White (except size 004 : Pale Blue)

Marking with colored arabic digits printed on the core and a dash placed under-neath it. :

Core number 1 : digit = 1

Core number 2 : digit = 2, a.s.o.

Marking on Jacket :

White (with exception of size 004 : Pale Blue)

Marking VG95218T023D*** F 0241 ++ ##

with :

*** = Dash number (VG)

F0241= Manufacturer's cage code

++= Year of production (i.e. 08 = 2008)

##= Cable code according to TR 6058 : GF=2 cores - GG=3 cores - GH=4 cores

TYPE «JN 1007»

Flexible light weight wires
Unscreened and unsheathed single core types

Applications

Designed for general purpose aircraft wiring applications

600 Volts RMS

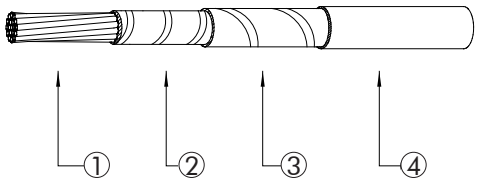
Construction

CONDUCTOR

1- Stranded conductor made up of nickel plated copper, except size code 002 in high strength copper alloy conductor

INSULATION

2- PTFE tape
3- Polyimide tape
4- UV laser markable FEP lacquer top coat



Other characteristics

Operating frequency: up to 2000 Hz

Standards

EUROFIGHTER SPE-J-920-A-0061
EFA : J61.010

-65°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

RoHS

Type «JN 1007»

Part numbers	US AWG	Conductor			Finished Wire			
		Stranding (Nbr x Diam. of strands in mm)	Diameter		Maximum DC resistance at 20°C (68°F) (Ohms/ Km)	Diameter		Maximum weight (g/m)
			Mini. (mm)	Maxi. (mm)		Min. (mm)	Max. (mm)	
JN 1007 CH 002	24	19 x 0.12	0.55	0.59	114	0.93	1.03	2.75
JN 1007 CH 004	22	19 x 0.15	0.70	0.74	60	1.08	1.18	4.05
JN 1007 CH 006	20	19 x 0.20	0.94	0.99	33.20	1.30	1.41	6.70
JN 1007 CH 010	18	19 x 0.25	1.18	1.24	21.10	1.54	1.66	9.90
JN 1007 CH 012	16	19 x 0.30	1.41	1.49	14.50	1.78	1.91	13.80
JN 1007 CH 020	14	19 x 0.25	1.65	1.74	10.90	2.02	2.16	18.30
JN 1007 CH 030	12	37 x 0.32	2.12	2.22	6.80	2.47	2.62	29.00

Identification

Colors : White (size 004 : pale blue)

Marking :

JN1007 CH*** FR F ++

*** = size code

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++= Year of production (i.e. 08 = 2008)

TYPE «JN 1018»

Flexible light weight wires
Unscreened and sheathed multicore types

Applications

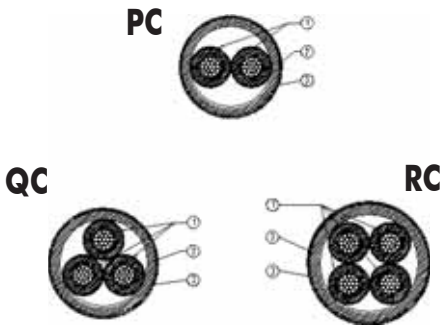
Designed for general purpose
aircraft wiring applications

600 Volts RMS

Construction

CONDUCTOR
1- Type JN 1007

INSULATION
2- Polyimide tapes
3- UV laser markable FEP
lacquer top coat



Other characteristics

Operating frequency : up to 2000 Hz

Standards

EUROFIGHTER SPE-J-920-A-0061
EFA : J61.014

-65°C to +150°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Arc tracking
resistant

Very good
resistance to
aircraft fluids

RoHS

Type «JN 1018»

Part numbers	US AWG	Nbr of cores	Finished Wire			
			Maximum resistance at 20°C (68°F) of cores (Ohms/Km)	Diameter		Maximum weight (Kg/Km)
				Min. (mm)	Max. (mm)	
JN 1018 PC 002	24	2	116.28	2.14	2.30	6.95
JN 1018 PC 004	22	2	61.20	2.44	2.60	9.80
JN 1018 PC 006	20	2	33.90	2.90	3.06	15.40
JN 1018 PC 010	18	2	21.50	3.38	3.55	22.30
JN 1018 PC 012	16	2	14.80	3.86	4.04	30.50
JN 1018 PC 020	14	2	11.10	4.34	4.53	39.70
JN 1018 PC 030	12	2	6.94	5.26	5.46	62.10
JN 1018 QC 002	24	3	116.28	2.29	2.47	9.95
JN 1018 QC 004	22	3	61.20	2.61	2.77	14.20
JN 1018 QC 006	20	3	33.90	3.11	3.27	22.50
JN 1018 QC 010	18	3	21.50	3.63	3.80	32.70
JN 1018 QC 012	16	3	14.80	4.15	4.33	44.90
JN 1018 QC 020	14	3	11.10	4.66	4.85	58.70
JN 1018 QC 030	12	3	6.94	5.66	5.86	91.80
JN 1018 RC 002	24	4	116.28	2.52	2.68	13.00
JN 1018 RC 004	22	4	61.20	2.88	3.04	18.60
JN 1018 RC 006	20	4	33.90	3.44	3.60	29.70
JN 1018 RC 010	18	4	21.50	4.01	4.18	43.10
JN 1018 RC 012	16	4	14.80	4.59	4.77	59.40
JN 1018 RC 020	14	4	11.10	5.17	5.36	77.80
JN 1018 RC 030	12	4	6.94	6.28	6.48	122.00

Identification

Core colors :

2 cores : Red - Blue
3 cores : Red - Blue - Yellow
4 cores : Red - Blue - Yellow - Green

External identification :

White with exception of size 004 (Pale blue)

Marking :

JN1018 xx *** FR F ++

with :
xx = type code (PC or QC or RC)
*** = Size code (002, 004, 006, a.s.o.)
FR = country of origin (FR=France)
F = Manufacturer (F=Nexans)
++= Year of production (i.e. 08 = 2008)

TYPE «JN 1019»

Flexible light weight wires
Screened and sheathed single and multicore types

Applications

Designed for general purpose
aircraft wiring applications

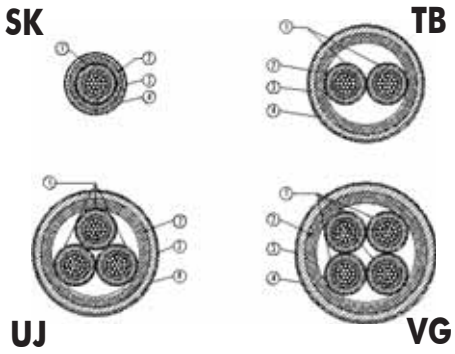
600 Volts RMS

Construction

CONDUCTOR
1- Type JN 1007

INSULATION
2- Nickel copper braided screen

JACKET
3- Polyimide tapes
4- UV laser markable FEP lacquer
top coat



Other characteristics

Operating frequency : up to 2000 Hz

Standards

EUROFIGHTER SPE-J-920-A-0061
EFA : J61.015

-65°C to +150°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Arc tracking
resistant

Very good
resistance to
aircraft fluids

RoHS

Type «JN 1019»

Part numbers	US AWG	Nbr of cores	Screen		Finished Wire			
			Strands AWG size	O.D. (mm) Nom.	Maximum resistance at 20°C (68°F) of cores (Ohms/Km)	Diameter		Maximum weight (Kg/Km)
						Min. (mm)	Max. (mm)	
JN 1019 SK 002	24	1	40	1.32	114	1.56	1.70	6.95
JN 1019 SK 004	22	1	40	1.47	60	1.71	1.85	8.85
JN 1019 SK 006	20	1	40	1.77	33.20	1.94	2.08	12.20
JN 1019 SK 010	18	1	38	2.01	21.10	2.18	2.33	16.30
JN 1019 SK 012	16	1	38	2.26	14.50	2.42	2.58	21.00
JN 1019 SK 020	14	1	38	2.50	10.90	2.66	2.80	26.30
JN 1019 SK 030	12	1	38	2.98	6.80	3.12	3.26	38.50
JN 1019 TB 002	24	2	40	2.32	116.28	2.49	2.67	12.00
JN 1019 TB 004	22	2	40	2.62	61.20	2.79	2.97	15.60
JN 1019 TB 006	20	2	38	3.14	33.90	3.25	3.44	22.40
JN 1019 TB 010	18	2	38	3.62	21.50	3.73	3.93	30.20
JN 1019 TB 012	16	2	38	4.12	14.80	4.21	4.42	39.50
JN 1019 TB 020	14	2	38	4.60	1110	4.69	4.91	49.80
JN 1019 TB 030	12	2	38	5.56	6.94	5.61	5.84	74.10
JN 1019 UJ 002	24	3	40	2.47	116.28	2.64	2.82	16.00
JN 1019 UJ 004	22	3	40	2.79	61.20	2.96	3.14	21.10
JN 1019 UJ 006	20	3	38	3.35	33.90	3.46	3.64	30.60
JN 1019 UJ 010	18	3	38	3.86	21.50	3.98	4.18	42.00
JN 1019 UJ 012	16	3	38	4.40	14.80	4.50	4.72	55.60
JN 1019 UJ 020	14	3	38	4.91	11.10	5.02	5.26	70.60
JN 1019 UJ 030	12	3	38	5.95	6.94	6.01	6.28	106.00
JN 1019 VG 002	24	4	40	2.72	116.28	2.87	3.07	20.00
JN 1019 VG 004	22	4	40	3.08	61.20	3.23	3.43	26.50
JN 1019 VG 006	20	4	38	3.69	33.90	3.79	3.99	39.00
JN 1019 VG 010	18	4	38	4.26	21.50	4.37	4.59	54.00
JN 1019 VG 012	16	4	38	4.86	14.80	4.97	5.16	71.90
JN 1019 VG 020	14	4	38	5.44	11.10	5.52	5.76	91.70
JN 1019 VG 030	12	4	38	6.59	6.94	6.63	6.90	139.00

Identification

Core colors :

1 core (SK) : White with exception of size 004 pale blue
2 cores (TB) : Red - Blue
3 cores (UJ) : Red - Blue - Yellow
4 cores (VG) : Red - Blue - Yellow - Green

External identification :

White with exception of size 004 (Pale blue)

Marking :

JN1019 xx *** FR F ++
with :
xx = type code (SK, TB, UJ or VG)
*** = Size code (002, 004, 006, a.s.o.)
FR = country of origin (FR=France)
F = Manufacturer (F=Nexans)
++= Year of production (i.e. 08 = 2008)

JN 1026

Screened and sheathed single and multicores types

Applications

Designed for general purpose aircraft wiring applications when ECM is required.

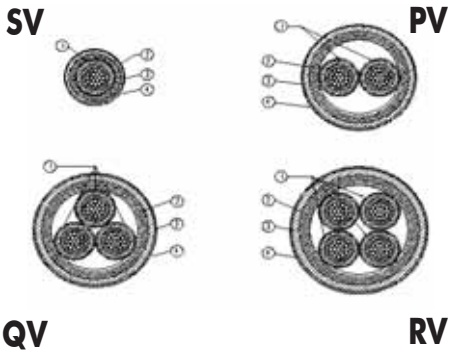
600 Volts RMS

Construction

CONDUCTOR
1- Type PAN 6411

SCREEN
2- Optimized nickel copper braided screen

JACKET
3- Polyimide tapes
4- UV laser markable PTFE tape



Other characteristics

Operating frequency : up to 2000 Hz

Standards

PANAVIA SPECIFICATION
SP-P-99300-00-P
EUROFIGHTER JN 1026/J61.016
EUROFIGHTER J61.011 (basic core)
EUROFIGHTER : J56.010 (EMC requirement)

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

EMI

RoHS

JN 1026

Part numbers	US AWG	Nbr of cores	Screen		Finished Wire			
			Strands AWG size	O.D. (mm) Nom.	Maximum resistance at 20°C (68°F) of cores (Ohms/Km)	Diameter		Maxi-mum weight (Kg/Km)
						Nom. (mm)	Max. (mm)	
JN 1026 SV 002	24	1	40	1.41	114.70	1.74	2.03	8.80
JN 1026 SV 004	22	1	40	1.55	58.80	1.88	2.19	10.80
JN 1026 SV 006	20	1	40	1.78	32.80	2.11	2.46	14.90
JN 1026 SV 010	18	1	38	2.11	20.80	2.44	2.72	19.40
JN 1026 SV 012	16	1	38	2.35	14.40	2.68	2.98	24.70
JN 1026 SV 020	14	1	38	2.59	10.60	2.92	3.35	31.70
JN 1026 SV 030	12	1	38	3.07	6.60	3.44	3.83	44.66
JN 1026 PV 002	24	2	38	2.58	116.99	2.91	3.18	15.50
JN 1026 PV 004	22	2	38	2.86	60.00	3.19	3.52	19.70
JN 1026 PV 006	20	2	38	3.32	33.50	3.65	4.04	27.60
JN 1026 PV 010	18	2	38	3.82	21.20	4.19	4.57	36.40
JN 1026 PV 012	16	2	38	4.30	14.70	4.67	5.09	47.00
JN 1026 PV 020	14	2	38	4.78	10.80	5.15	5.89	61.90
JN 1026 PV 030	12	2	36	5.82	6.73	6.19	6.86	88.30
JN 1026 QV 002	24	3	38	2.75	116.99	3.08	3.36	19.80
JN 1026 QV 004	22	3	38	3.05	60.00	3.38	3.72	25.70
JN 1026 QV 006	20	3	38	3.55	33.50	3.92	4.28	36.50
JN 1026 QV 010	18	3	38	4.09	21.20	4.46	4.84	49.40
JN 1026 QV 012	16	3	36	4.67	14.70	5.04	5.41	64.60
JN 1026 QV 020	14	3	36	5.19	10.80	5.56	6.26	85.70
JN 1026 QV 030	12	3	36	6.22	6.73	6.59	7.30	124
JN 1026 RV 002	24	4	38	3.05	116.99	3.36	3.65	24.30
JN 1026 RV 004	22	4	38	3.37	60.00	3.74	4.06	31.90
JN 1026 RV 006	20	4	38	3.92	33.50	4.3	4.69	46.10
JN 1026 RV 010	18	4	36	4.61	21.20	4.98	5.32	62.80
JN 1026 RV 012	16	4	36	5.19	14.70	5.56	6.02	83.60
JN 1026 RV 020	14	4	36	5.77	10.80	6.14	6.91	110
JN 1026 RV 030	12	4	36	6.93	6.73	7.30	8.07	160

Identification

Core colors :

1 core (SV) : White
2 cores (PV) : Red - Blue
3 cores (QV) : Red - Blue - Yellow
4 cores (RV) : Red - Blue - Yellow - Green

External identification :

White

Marking green color :

JN1026 xx *** FR F ++

with :

xx = type code (SV, PV, QV or RV)
*** = Size code (002, 004, 006, a.s.o.)
FR = country of origin (FR=France)
F = Manufacturer (F=Nexans)
++= Year of production (i.e. 08 = 2008)

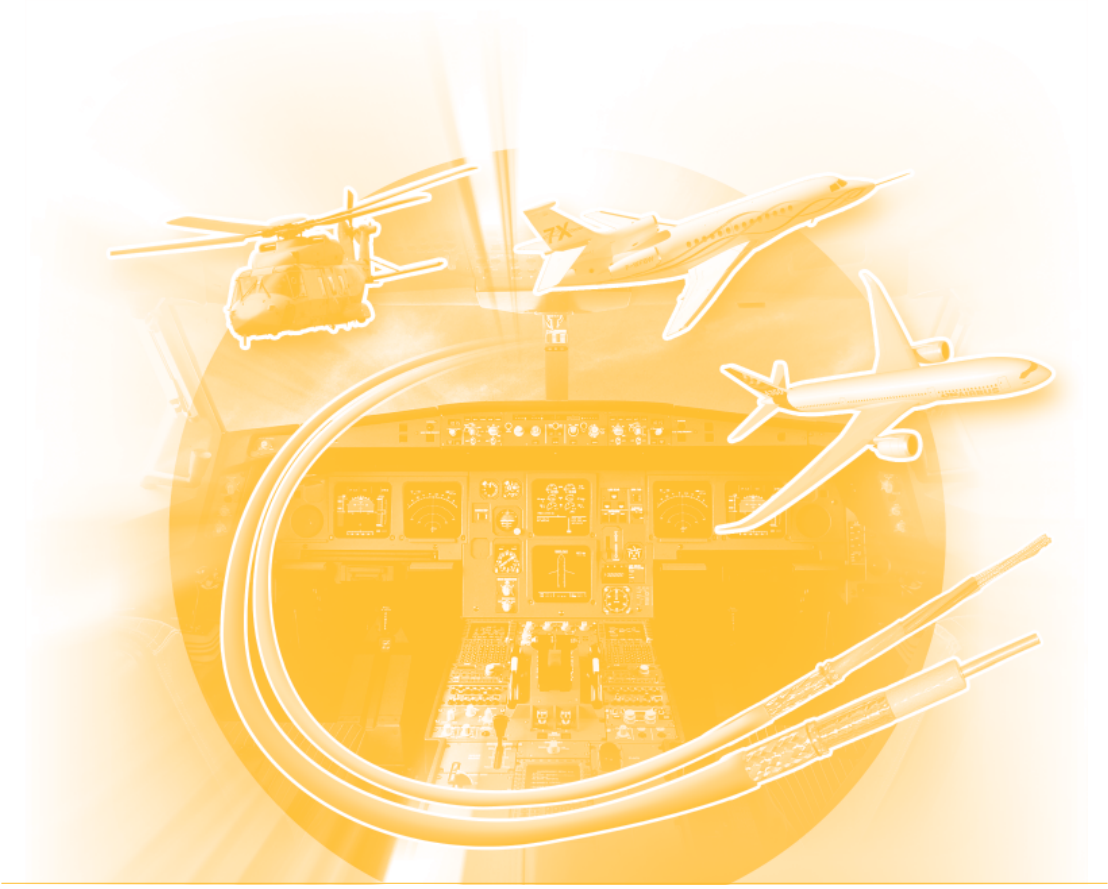
Basic core PAN 6411/J61.011

Wire type PAN 6411	Cond. Size mm²	N° of strands	Diameter of strands	Conductor diameter		Finished wire			Resistance at 20°C Ohms/km
				Min.	Max.	Diameter		Weight kg/km	
						Min.	Max.	Max.	Max.
DP 002	0.208	19	0.118	0.59	0.63	1.00	1.16	3.55	114.7
DP 004	0.336	19	0.15	0.75	0.79	1.16	1.32	4.90	58.80
DP 006	0.597	19	0.20	1.00	1.04	1.35	1.55	7.70	32.80
DP 010	0.933	19	0.25	1.25	1.29	1.60	1.80	11.30	20.80
DP 012	1.34	19	0.30	1.50	1.55	1.85	2.05	15.80	14.40
DP 020	1.82	37	0.25	1.75	1.81	2.10	2.40	21.00	10.60
DP 030	2.91	37	0.315	2.21	2.27	2.55	2.90	32.00	6.60

Maximum transfer impedance values (mΩ/m)

Size code JN 1026	Single core (SV)	Two core cable (PV)	Three core cable (QV)	Four core cable (RV)
002	70,00	60,00	50,00	45,00
004	70,00	50,00	45,00	35,00
006	60,00	35,00	30,00	25,00
010	50,00	35,00	25,00	25,00
012	40,00	25,00	20,00	20,00
020	35,00	25,00	20,00	18,00
030	35,00	20,00	18,00	18,00

nexans



PART 2
Cables for power transmission

ASNE 0438 YV

Flexible light weight wires single core large sizes

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

CONDUCTOR
Stranded conductor made of nickel plated aluminium

INSULATION
3 polyimide tapes

EXTERNAL PROTECTION
Aromatic polyimide braid impregnated with a non flammable varnish

Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

AECMA EN3719 (conductors)
ASNE 0438
NSA 935000
NSA 307110
AS N°462396/85

-55°C to +180°C
(up to +200°C peak)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Very good
resistance to
aircraft fluids

ASNE 0438 YV (Inch, pound)

PART NUMBER	AWG	Conductor				Finished wire or cable		
		Stranding m x n x Diam. in inch	Diam. inch	Nbr of strands missing allowed	Maximum DC Resistance at 20°C (68°F) (Ohms/1000 ft)	Diameter (inch)		Maximum Weight (lb/1000 ft)
						Min.	Max.	
YV 06	6	7 x 10 x 0.020	0.197 ± 0.010	0	0.671	0.228	0.252	36.9
YV 04	4	7 x 15 x 0.020	0.240 ± 0.012	0	0.457	0.272	0.295	51.7
YV 03	3	7 x 19 x 0.020	0.268 ± 0.012	0	0.360	0.315	0.331	64.5
YV 02	2	7 x 24 x 0.020	0.303 ± 0.012	2	0.287	0.339	0.362	79.9
YV 01	1	7 x 30 x 0.020	0.339 ± 0.012	2	0.229	0.374	0.398	100.0
YV 0A	0	19 x 14 x 0.020	0.394 ± 0.012	3	0.183	0.425	0.457	124.9
YV 00	00	19 x 18 x 0.020	0.449 ± 0.012	3	0.131	0.480	0.520	161.1
YV 000 (1)	000	19 x 22 x 0.020	0.500 ± 0.012	4	0.110	0.524	0.571	194.7
YV 0000 (1)	0000	37 x 15 x 0.020	0.569 ± 0.014	5	0.088	0.594	0.642	248.4

ASNE 0438 YV (Metric units)

PART NUMBER	AWG	Conductor				Finished wire or cable		
		Stranding (m x n x Diam.) mm	Diam. (mm)	Nbr of strands missing allowed	Maximum DC resistance at 20°C (68°F) (Ohms/Km)	Diameter (mm)		Maximum weight (g/m)
						Min.	Max.	
YV 06	6	7 x 10 x 0.51	5.0 ± 0.25	0	2.20	5.8	6.4	55
YV 04	4	7 x 15 x 0.51	6.1 ± 0.30	0	1.50	6.9	7.5	77
YV 03	3	7 x 19 x 0.51	6.8 ± 0.30	0	1.18	8.0	8.4	96
YV 02	2	7 x 24 x 0.51	7.7 ± 0.30	2	0.94	8.6	9.2	119
YV 01	1	7 x 30 x 0.51	8.6 ± 0.30	2	0.75	9.5	10.1	149
YV 0A	0	19 x 14 x 0.51	10.0 ± 0.30	3	0.60	10.8	11.6	186
YV 00	00	19 x 18 x 0.51	11.4 ± 0.30	3	0.43	12.2	13.2	240
YV 000 (1)	000	19 x 22 x 0.51	12.7 ± 0.30	4	0.36	13.3	14.5	290
YV 0000 (1)	0000	37 x 15 x 0.51	14.45 ± 0.35	5	0.29	15.1	16.3	370

(1) AWG not defined in ASN specification, values obtained by extension with defined construction

Identification

By colored threads between polyimide tapes and external braid

1, 2 or 3 threads for manufacturer : i.e. Black + Grey = Nexans

2 threads for year of manufacturing : i.e. Yellow + Purple = 2008

Wire size AWG 06, 03, 01, 00 and 0000 are identified with 1 black carrier in the external aromatic polyamide braid

ABS 0949 - AD AWG3 to 000

AWG 3 to 000
Nickel plated aluminium alloy conductors
UV laser printable

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

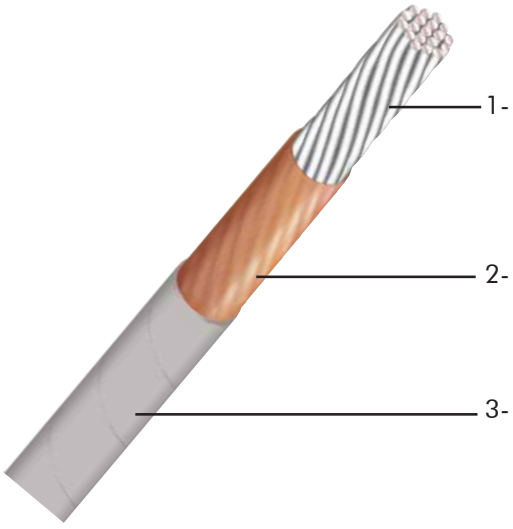
CONDUCTOR

1- Nickel plated aluminium rope-lay conductor

INSULATION

2- High performance polyimide tape

3- Special UV PTFE tape



Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

ABS 0957 (conductors)
ABS 0958 (technical specification)
ABS 0949 AD (product specification)

-65°C to +180°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

RoHS

Very good resistance to aircraft fluids

ABS 0949 - AD AWG 3 to 000

Nexans references	AWG	Conductor			Finished wire				
		Stranding (Nbr x mm)	Diameter		Maximum DC resistance at 20°C (68°F) (Ohms/Km)	Diameter		Weight	
			Min. (mm)	Max. (mm)		Min. (mm)	Max. (mm)	Nom. (g/m)	Max. (g/m)
ABS 0949 AD 3	3	7 x 19 x 0.51	6.5	7.1	1.18	7.28	7.74	91.26	94.00
ABS 0949 AD 2	2	7 x 24 x 0.51	7.4	8.0	0.94	8.07	8.57	113.1	116.5
ABS 0949 AD 1	1	7 x 30 x 0.51	8.3	8.9	0.75	8.94	9.50	139.17	143.5
ABS 0949 AD 0	0	19 x 14 x 0.51	9.7	10.3	0.60	0.29	10.93	175.81	181.0
ABS 0949 AD 00	00	19 x 18 x 0.51	11.1	11.7	0.43	11.65	12.37	222.96	230.0
ABS 0949 AD 000	000	19 x 22 x 0.51	12.4	13	0.36	12.91	13.71	267.57	276.0

Identification

Standard color :

Grey

Marking on Jacket :

Blue

Wording :

AD ** FR F++

with :

** = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++= Year of production (i.e. 08 = 2008)

NSA 935 308 YU

Flexible single core large sizes

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

Construction

CONDUCTOR
Stranded conductor made of aluminium alloy

INSULATION
3 polyimide tapes

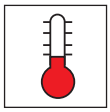
EXTERNAL PROTECTION
Aromatic polyimide braid impregnated with a non flammable varnish

Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant

Standards

AECMA EN3719 (conductors)
NSA 935 308
NSA 935000
NSA 307110



-55°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

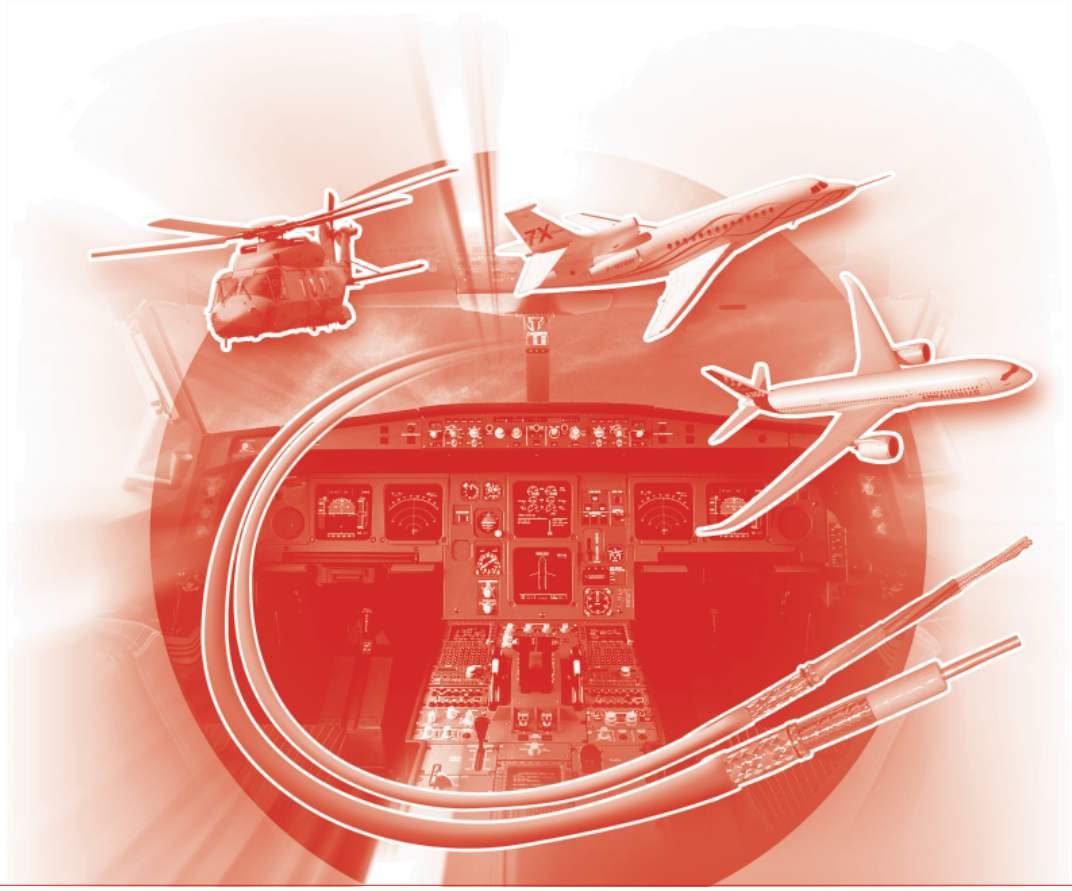
NSA 935 308 YU (Metric units)

PART NUMBER	AWG	Conductor				Finished wire or cable		
		Stranding (m x n x Diam.) mm	Diameter (mm)	Nbr of strands missing allowed	Max. DC resistance at 20°C (68°F) Ohms/Km	Diameter (mm)		Maximum weight (g/m)
						Min.	Max.	
YU 12 (1)	12	45 x 0.30	2.4 ±0.20	0	10			16.5
YU 10 (1)	10	27 x 0.51	2.9 ± 0.20	0	5.8			26
YU 8 (1)	8	41 x 0.51	3.7 ± 0.20	0	3.8			35
YU 6 (1)	6	7 x 10 x 0.51	5.0 ± 0.25	0	2.20			55
YU 4	4	7 x 15 x 0.51	6.1 ± 0.30	0	1.50			84
YU 3 (1)	3	7 x 19 x 0.51	6.8 ± 0.30	0	1.18			96
YU 2 (1)	2	7 x 24 x 0.51	7.7 ± 0.30	2	0.94			120
YU 1 (1)	1	7 x 30 x 0.51	8.6 ± 0.30	2	0.75			149
YU 0	0	19 x 14 x 0.51	10.0 ± 0.30	3	0.66			199
YU 00	00	19 x 18 x 0.51	11.4 ± 0.30	3	0.43			256
YU 000	000	19 x 22 x 0.51	12.7 ± 0.30	4	0.36			309
YU 000	0000	37 x 15 x 0.51	14.45 ± 0.35	5	0.29			390

(1) AWG not defined in NSA specification, values obtained by extension with defined construction

Identification

By colored threads between polyimide tapes and external braid
Manufacturer color: Black + Grey = Nexans
Manufacturing year : Yellow + Purple = 2008



PART 3-1
Nacelles and engines high temperature

FX 5400 DG

VG 95218-20 type J
Single wire

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

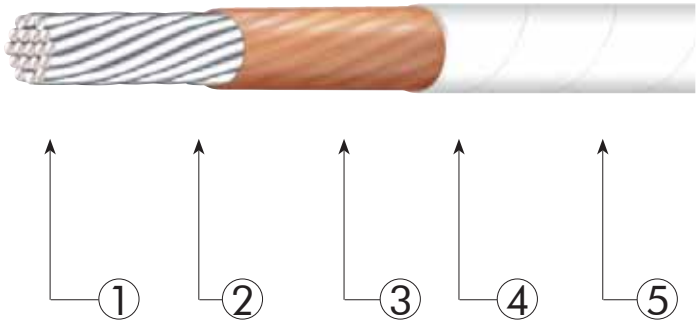
Construction

CONDUCTOR

1- Stranded conductor made of nickel plated copper

INSULATION

2- Polyimide tape
3- PTFE tape
4- Glass fiber tape
5- PTFE tape



Other characteristics

Operating frequency : up to 2000 Hz

Standards

VG 95218-2
VG 95218-20

-55°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

FX 5400

TYPE J : single core nickel plated copper

VG Reference	NEXANS Part number	Dash number (VG)	Size code (NEXANS)	AWG (1)	Conductor	
					Stranding Nbr x Diam of strands	Diameter Max.
					(mm)	(mm)
VG 95218T020J019	FX 5400-050	01	050	10	73 x 0.30	3.3
VG 95218T020J029	FX 5400-090	02	090	8	127 x 0.30	4.5
VG 95218T020J039	FX 5400-140	03	140	6	27 x 7 x 0.30	5.6
VG 95218T020J049	FX 5400-220	04	220	4	37 x 12 x 0.25	7.3
VG 95218T020J059	FX 5400-340	05	340	2	37 x 19 x 0.25	8.8
VG 95218T020J069	FX 5400-420	06	420	1	37 x 23 x 0.25	10.0
VG 95218T020J079	FX 5400-530	07	530	0	37 x 29 x 0.25	11.3
VG 95218T020J089	FX 5400-680	08	680	00	37 x 37 x 0.25	12.5
VG 95218T020J099	FX 5400-850	09	850	000	48 x 36 x 0.25	14.4
VG 95218T020J109	FX 5400-107	10	107	0000	61 x 36 x 0.25	15.9

(1) For information only

VG Reference	NEXANS Part number	Finished Wire			
		Diameter (mm)		Weight max. (g/m)	Maximum DC resistance at 20°C (68°F) (Ohms/Km)
		min.	max.		
VG 95218T020J019	FX 5400-050	4.1	4.5	64.5	3.9
VG 95218T020J029	FX 5400-090	5.2	5.6	108	2.3
VG 95218T020J039	FX 5400-140	6.3	7.3	160	1.6
VG 95218T020J049	FX 5400-220	8.1	9.3	245	0.97
VG 95218T020J059	FX 5400-340	9.7	10.9	396	0.61
VG 95218T020J069	FX 5400-420	10.6	12.1	470	0.50
VG 95218T020J079	FX 5400-530	11.8	13.4	600	0.40
VG 95218T020J089	FX 5400-680	13.6	14.5	750	0.31
VG 95218T020J099	FX 5400-850	15.6	16.8	950	0.25
VG 95218T020J109	FX 5400-107	17.0	18.4	1200	0.20

Identification

Color : white

Marking :

VG 95218T020J ** £ F 0241 ++ DG

With :

** = Dash number

£ = Color (9: white)

F 0241 = Manufacturer's cage code

++ = Year of production (i.e. 08 = 2008)

DG = Cable code according to TR 6058

NSA 935 131 - EN 2854-003 DG

Aircraft wire

Applications

Designed for general purpose aircraft wiring applications.

600 Volts RMS

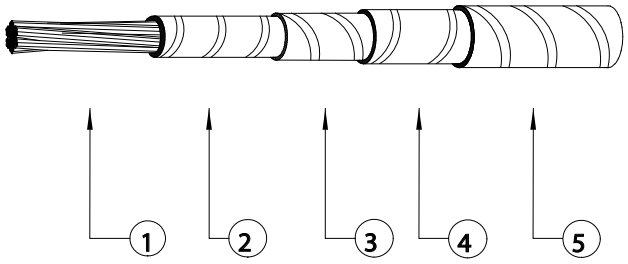
Construction

CONDUCTOR

1- Stranded conductor nickel plated copper

INSULATION

2- Polyimide tape
3- PTFE tape(s)
4- Glass fiber tape
5- PTFE tape(s)

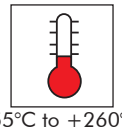


Other characteristics

Operating frequency : up to 2000 Hz
Mould and fungus resistant
Non flammable

Standards

NSA 935131
EN 2854-003


-55°C to +260°C


Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)


Arc tracking resistant


Very good resistance to aircraft fluids

NSA 935 131 - EN 2854-003

NEXANS Part Number	Nominal section (mm^2)	AWG	Conductor		Finished Wire			
			Stranding Nbr x Dia. of strands (mm)	Diameter Max. (mm)	Diameter (mm)		Weight max. (g/m)	Maximum DC Resistance at 20°C (68°F) (Ohms/Km)
					Min.	Max.		
NSA 935 131 DG 10	5.15	10	73 x 0.30	3.3	4.1	4.5	64.5	3.9
NSA 935 131 DG 8	8.98	8	127 x 0.30	4.5	5.2	5.6	108	2.3
NSA 935 131 DG 6	13.4	6	27 x 7 x 0.30	5.6	6.3	7.3	160	1.6
NSA 935 131 DG 4	21.8	4	37 x 12 x 0.25	7.3	8.1	9.3	245	0.97
NSA 935 131 DG 2	34.5	2	37 x 19 x 0.25	8.8	9.7	10.9	396	0.61
NSA 935 131 DG 1	41.8	1	37 x 23 x 0.25	10.0	10.6	12.1	470	0.50
NSA 935 131 DG 0	52.7	0	37 x 29 x 0.25	11.3	11.8	13.4	600	0.40
NSA 935 131 DG 00	67.2	00	37 x 37 x 0.25	12.5	13.6	14.5	750	0.31
NSA 935 131 DG 000	84.8	000	48 x 36 x 0.25	14.4	15.6	16.8	950	0.25
NSA 935 131 DG 0000	107.8	0000	61 x 36 x 0.25	15.9	17.0	18.4	1200	0.20

Identification

Color : white

Marking :

DG ** FR F ++

With :

** = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

++ = Year of production (i.e. 08 = 2008)

BMS 13-58

High temperature, UV laser printable aircraft wire

Applications

Designed for general purpose aircraft wiring where exposure to thermal changes and corrosive fluids is normal.

600 Volts RMS

Construction

CONDUCTOR

Nickel coated copper (type 1)
Nickel coated high strength copper alloy (type 5)

INSULATION

PTFE tape
Polyimide tape
PTFE coated glass tape (AWG 8 to 4/0 only)
PTFE coated glass braid
UV PTFE tapes jacket

Other characteristics

Operating frequency : up to 2000 Hz
Abrasion resistant
Good mechanical and electrical performances

Standards

BMS 13-58 QPL

Product range

Shielded and jacketed T3, T7, T9 cables are available upon request
Shielded T2, T6 cables are available upon request
Jacketed T4, T8 cables are available upon request

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Arc tracking resistant

Very good resistance to aircraft fluids

BMS 13-58 Type 1 (Metric units)

PART NUMBER	US AWG	Conductor			Finished Wire				
		Stranding (Number of strands x Dia.of Strands (mm)	Diameter (mm)		Resistance at 20°C (68°F) (Ohms/Km)	Diameter (mm)		Weight (Kg/Km)	
			Nom.	Max.	Max.	Min.	Max.	Min.	Max.
BMS 13-58 T1	24	19 x 0.127	0.58	0.66	86	1.75	1.91	6.4	7.23
BMS 13-58 T1	22	19 x 0.16	0.74	0.84	52.5	1.85	2.01	7.89	8.72
BMS 13-58 T1	22	19 x 0.20	0.94	1.04	32.1	2.03	2.18	9.73	11.55
BMS 13-58 T1	18	19 x 0.25	1.17	1.30	22	2.31	2.46	13.91	16.07
BMS 13-58 T1	16	19 x 0.30	1.32	1.47	15.6	2.41	2.62	17.26	19.05
BMS 13-58 T1	14	19 x 0.36	1.65	1.85	9.84	2.77	2.97	24.10	26.93
BMS 13-58 T1	12	37 x 0.32	2.13	2.29	6.5	3.25	3.45	34.60	38.69
BMS 13-58 T1	10	37 x 0.40	2.69	2.90	4.07	3.71	4.01	51.48	57.88
BMS 13-58 T1	8	19 x 7 x 0.287	4.01	4.39	2.28	5.46	5.77	94.04	106.84
BMS 13-58 T1	6	19 x 7 x 0.360	5.03	5.51	1.43	6.38	7.14	138.23	161.75
BMS 13-58 T1	4	19 x 7 x 0.455	6.35	6.96	0.902	7.77	8.64	217.54	254.15
BMS 13-58 T1	2	19 x 35 x 0.254	8.13	8.64	0.581	9.83	10.49	348.04	401.46
BMS 13-58 T1	1/0	19 x 55 x 0.254	10.03	10.80	0.371	11.79	12.6	510.23	610.53
BMS 13-58 T1	2/0	19 x 70 x 0.254	11.18	12.07	0.292	12.88	14.15	566.18	765.58
BMS 13-58 T1	3/0	37 x 45 x 0.254	12.70	13.72	0.233	14.17	15.44	793.10	941.9
BMS 13-58 T1	4/0	37 x 57 x 0.254	14.35	15.37	0.184	15.95	17.25	1031.63	1125

BMS 13-58 Type 1 (Inch, Pound)

PART NUMBER	US AWG	Conductor			Finished Wire				
		Stranding (number of strands x dia.of strands) inch	Diameter (inch)		Resistance at 20°C (68°F) Ohms/1000 ft	Diameter (inch)		Weight (Pound/1000 ft)	
			Min.	Max.	Max.	Min.	Max.	Min.	Max.
BMS 13-58 T1	24	19 x 0.050	0.023	0.026	26.20	0.069	0.075	4.30	4.86
BMS 13-58 T1	22	19 x 0.0063	0.029	0.033	16.00	0.073	0.079	5.30	5.86
BMS 13-58 T1	22	19 x 0.0080	0.037	0.041	9.77	0.080	0.086	6.54	7.76
BMS 13-58 T1	18	19 x 0.010	0.046	0.051	6.70	0.091	0.097	9.35	10.80
BMS 13-58 T1	16	19 x 0.0113	0.052	0.058	4.76	0.095	0.103	11.60	12.80
BMS 13-58 T1	14	19 x 0.0142	0.065	0.073	3.00	0.109	0.117	16.20	18.10
BMS 13-58 T1	12	37 x 0.0126	0.084	0.090	1.98	0.128	0.136	23.25	26.00
BMS 13-58 T1	10	37 x 0.0159	0.106	0.114	1.24	0.146	0.158	34.50	38.90
BMS 13-58 T1	8	19 x 7 x 0.0113	0.158	0.173	0.694	0.215	0.227	63.20	71.80
BMS 13-58 T1	6	19 x 7 x 0.0142	0.198	0.217	0.436	0.251	0.281	92.90	108.70
BMS 13-58 T1	4	19 x 7 x 0.0179	0.250	0.274	0.275	0.306	0.340	146.20	170.80
BMS 13-58 T1	2	19 x 35 x 0.0100	0.320	0.340	0.177	0.387	0.413	233.90	269.80
BMS 13-58 T1	1/0	19 x 55 x 0.0100	0.395	0.425	0.113	0.464	0.496	342.90	410.30
BMS 13-58 T1	2/0	19 x 70 x 0.0100	0.440	0.475	0.089	0.507	0.557	380.50	514.50
BMS 13-58 T1	3/0	37 x 45 x 0.0100	0.500	0.540	0.071	0.558	0.608	533.00	633.00
BMS 13-58 T1	4/0	37 x 57 x 0.0100	0.565	0.605	0.056	0.628	0.679	693.30	756.20

BMS 13-58 Type 5 (Metric units)

PART NUMBER	US AWG	Conductor			Finished Wire				
		Stranding (number of strands x dia. of strands) (mm)	Diameter (mm)		Resistance at 20°C (68°F) (Ohms/Km)	Diameter (mm)		Weight (Kg/Km)	
			Min.	Max.	Max.	Min.	Max.	Min.	Max.
BMS 13-58 T5	24	19 x 0.127	0.58	0.66	98.8	1.75	1.91	6.4	7.23
BMS 13-58 T5	22	19 x 0.16	0.74	0.84	61.0	1.85	2.01	7.89	8.72
BMS 13-58 T5	20	19 x 0.20	0.94	1.04	37.4	2.03	2.18	10.42	11.55
BMS 13-58 T5	18	19 x 0.25	1.17	1.30	23.6	2.31	2.46	15.19	16.07
BMS 13-58 T5	16	19 x 0.30	1.32	1.47	18.4	2.41	2.62	17.26	19.05

BMS 13-58 Type 5 (Inch, Pound)

PART NUMBER	US AWG	Conductor			Finished Wire				
		Stranding (Number of Strands x Dia.of Strands) inch	Diameter (inch)		Resistance at 20°C (68°F) (Ohms/1000ft)	Diameter (inch)		Weight (Pounds/1000 ft)	
			Min.	Max.	Max.	Min.	Max.	Min.	Max.
BMS 13-58 T5	24	19 x 0.050	0.023	0.026	30.1	0.069	0.075	4.30	4.86
BMS 13-58 T5	22	19 x 0.0063	0.029	0.033	18.6	0.073	0.079	5.30	5.86
BMS 13-58 T5	20	19 x 0.0080	0.037	0.041	11.4	0.080	0.086	7.00	7.76
BMS 13-58 T5	18	19 x 0.010	0.046	0.051	7.2	0.091	0.097	10.20	10.80
BMS 13-58 T5	16	19 x 0.0113	0.052	0.058	5.6	0.095	0.103	11.60	12.80

Identification

Marking :

In accordance with BMS 13-58 specification.

TYPE 2100

Flexible cables for high ambient temperatures

Applications

Designed for use at high ambient temperatures up to 289°C at peak. Excellent flame resistance, non-flammable, they withstand most solvents.

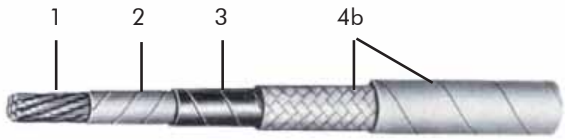
600 Volts RMS

Construction

1- CONDUCTOR
Stranded nickel plated copper
2- Thin wrapped PTFE layer
3- INSULATION
Polyimide
4- OUTER JACKET
a) From 0.38 to 1.34 mm²:
Extruded PTFE sheath (high abrasion resistance)
b) From 1.91 mm² :
Composite glass fiber + PTFE + wrapped and sintered PTFE sheath

Cross sections from 0.38 to 1.34 mm²

Cross sections from 1.91 mm²



Technical requirements and control conditions

AIR 4524 specification (09/1965) - Category 250/280°C, NF.L 52-125A french draft specification (07/1978) - Category C - Standard cables.

Interchangeability

MIL-W-22759 D specification - Index 8 A (06/1973) and MS 18001 (up to 12 AWG).

Standards

AIR 4524, B.N.Aé, MIL-W-22759 D
Approved by the Air Ministry under letter: N°42707 STA/EQ/E2 (03-12- 68)
Registred at B.N.Aé : N° 6418 401

-50 °C to +250 °C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

RoHS

TYPE 2100

Nexans reference			Conductor		Core			Electrical Values	
			Construction	Maxi. Ø	Overall Ø	Weight		DC resistance at 20°C (max.)	Current rating
Type	Cross section	Gauge AWG	n x Ø mm	mm	mm	nom. g/m	max. g/m	Ω / km	A
2100	**0.38**	**22**	12 x 0.20	0.85	1.90 ± 0.10	8.6	9.3	54.50	7
2100	**0.60**	**20**	19 x 0.20	1.00	2.20 ± 0.10	12.1	12.4	34.40	11
2100	**0.93**	**18**	19 x 0.25	1.25	2.40 ± 0.10	15.8	17	22.00	16
2100	**1.34**	**16**	19 x 0.30	1.50	2.70 ± 0.10	19.6	20	15.30	22
2100	**1.91**	**14**	27 x 0.30	1.85	2.95 ± 0.10	26.1	27	10.80	32
2100	**3.18**	**12**	45 x 0.30	2.40	3.60 ± 0.15	40.8	46.7	6.50	41
2100	**5.15**	**10**	73 x 0.30	3.10	4.20 ± 0.20	60.4	65	3.40	55
2100	**8.98**	**8**	127 x 0.30	4.00	5.30 ± 0.20	102	108	2.30	75
2100	**13.40**	**6**	27 x 7 x 0.30	5.10	7.00 ± 0.30	158	160	1.60	100
2100	**21.80**	**4**	37 x 12 x 0.25	6.60	9.00 ± 0.30	237	245	0.97	135
2100	**34.50**	**2**	37 x 19 x 0.25	8.20	10.60 ± 0.30	391	396	0.61	181
2100	**41.80**	**1**	37 x 23 x 0.25	9.80	11.80 ± 0.30	460	470	0.50	211
2100	**52.70**	**0**	37 x 29 x 0.25	10.80	13.10 ± 0.30	580	600	0.40	245
2100	**67.20**	**00**	37 x 37 x 0.25	12.40	14.20 ± 0.30	736	750	0.31	283

The currents shown are valid for single wires in air. For current ratings in bundle see AIR 7822 specification.

Identification

According to AIR 0107 (10/1961).

TYPE 2103

Flexible cables for high ambient temperature

Applications

Designed for use at high ambient temperature up to 300°C at peak. Vital circuits : they withstand overloads for 15 seconds to 2 minutes (870°C to 1040°C) according to MIL-W-7139 B standard. Non-flammable, good abrasion resistance, they withstand most solvents.

600 Volts RMS

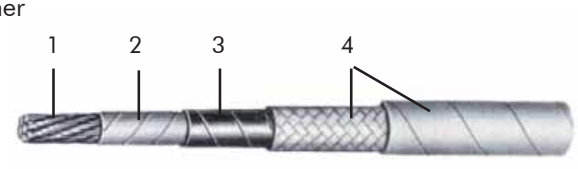
Construction

1- CONDUCTOR
Stranded nickel plated copper or nickel plated copper alloy for 0.21 sq mm size (alloy providing a high mechanical resistance)

2- Thin PTFE layer

3- INSULATION
Polyimide insulation

4- PROTECTIVE INSULATION
PTFE + glass fiber tape coated with PTFE
Wrapped PTFE finish sheath
Theses tapes are intimately bonded to each other



Technical requirements and control conditions

AIR 4524 specification - Category 250/280°C
NF.L 52-125A french draft specification (high temperature cable)
MIL-W-22759 B specification class 2 (Nickel plated copper conductor).

Standards

AIR 4524, MIL-W-22759 B
Approved by the Air Ministry under letters : N°34672 STA/EQ/E3 (25-05-77) for cross section from 0.38 mm² to 107.80 mm² ; N°40784 STA/EQ/E3 (22-12-77) for cross section 0.21 mm²
Registred at B.N.Aé : N° 6418404A


-90°C to +260°C


Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)


Very good resistance to aircraft fluids

TYPE 2103

References		Gauge AWG	Conductor			Core		Electrical Values	
Type	Cross Section		Construction n x Ø mm	Maxi. diameter mm	Tensile Strength daN	Overall diameter (max.) mm	Maxi. weight g/m	D.C. resistance at 20°C (max.) Ω / km	Current rating A
2103	0.21	24	19 x 0.12 N.P.C.A.	0.65	7	1.80	8.4	112.30	4
2103	0.38	22	12 x 0.20 N.P.C.	0.85	8	1.95	9.5	54.50	7
2103	0.60	20	19 x 0.20 N.P.C.	1.03	16	2.10	12.5	34.40	11
2103	0.93	18	19 x 0.25 N.P.C.	1.28	> 20	2.20	17.5	22.00	16
2103	1.34	16	19 x 0.30 N.P.C.	1.53	> 20	2.80	21.5	15.30	22
2103	1.91	14	27 x 0.30 N.P.C.	1.87	> 20	3.20	31.5	10.80	32
2103	3.18	12	45 x 0.30 N.P.C.	2.40	> 20	3.70	47.5	6.40	41
2103	5.15	10	73 x 0.30 N.P.C.	3.10	> 20	4.35	65	3.98	55
2103	8.98	8	127 x 0.30 N.P.C.	4.20	> 20	5.55	108	2.29	75
2103	13.40	6	27 x 7 x 0.30 N.P.C.	5.60	> 20	7.30	160	1.58	100
2103	21.80	4	37 x 12 x 0.25 N.P.C.	7.30	> 20	9.30	262	0.97	135
2103	34.50	2	37 x 19 x 0.25 N.P.C.	8.80	> 20	10.90	396	0.61	181
2103	41.80	1	37 x 23 x 0.25 N.P.C.	9.80	> 20	12.10	470	0.50	211
2103	52.70	0	37 x 29 x 0.25 N.P.C.	10.80	> 20	13.40	600	0.40	245
2103	67.20	00	37 x 37 x 0.25 N.P.C.	12.40	> 20	14.50	750	0.31	283
2103	84.80	000	48 x 36 x 0.25 N.P.C.	13.80	> 20	16.90	980	0.25	328
2103	107.80	0000	61 x 36 x 0.25 N.P.C.	15.80	> 20	18.70	1220	0.19	380

The currents shown are valid for single wires in air. For current ratings in bundle see AIR 7822 specification.
N.P.C.A. = nickel plated annealed copper alloy - N.P.C. = nickel plated annealed electrolytic copper

Identification

Color coding:

According to AIR 0107 (10/1961).
Other color codings on request (stripes or printed identification).

TYPE 1050

Screened cables for high ambient temperatures

Applications

Designed for use at high ambient temperatures up to 280°C at peak.
Non-flammable, they withstand most solvents.

Very good electrical insulation of the screen, very efficient protection of the screen against oxidation and corrosion, easy fitting of the cable, good mechanical protection of the screen, safer handling.

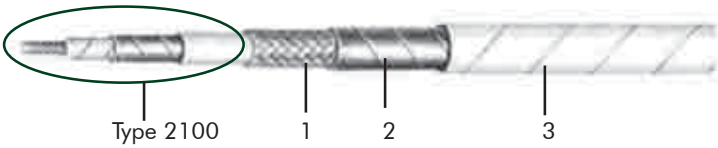
600 Volts RMS

Construction

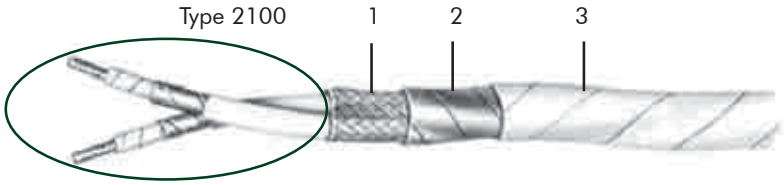
1, 2 or 3 cores, type 2100 covered with

1- A braided screen made u of nickel plated copper
2- A polyimide sheath
3- A wrapped and sintered PTFE sheath

1 core



2 cores



Technical requirements and control conditions

Cores: see datasheet on type 2100
Screen: MIL-7078 A specification (08/1971)
Coding : AIR 0107 A specification (10/1961) and note N°348/SIB distributed under N°5927/STT/SIB (05/1961).

Standards

AIR 4524, B.N.Aé, MIL-W-22759 D & B.M.S. 13-58

-50 °C to +250 °C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

TYPE 1050

References			2100 Cores				Screen and Protection			
Type	Nb. cores	Cross section	Gauge AWG	Construction n x Ø mm	Overall diameter of the core mm	Colour of cores	Screen strands Ø mm	PTFE outer sheath Color	Overall diameter (max.) mm	Average weight g/m
1050	1	0.38	22	12 x 0.20 NPC	1.90	White	12/100	White	3.2	20.8
1050	1	0.60	20	19 x 0.20 NPC	2.20	Light blue	12/100	Blue	3.5	25.9
1050	1	0.93	18	19 x 0.25 NPC	2.40	White	12/100	White	3.8	30.8
1050	1	1.34	16	19 x 0.30 NPC	2.70	Light blue	12/100	Blue	4.1	36.3
1050	1	1.91	14	27 x 0.30 NPC	2.95	White	12/100	White	4.4	44.3
1050	2	0.38	22	12 x 0.20 NPC	1.90	White + blue	12/100	White	5.3	42.2
1050	2	0.60	20	19 x 0.20 NPC	2.20	Light blue + blue	12/100	Blue	5.9	51.0
1050	2	0.93	18	19 x 0.25 NPC	2.40	White + blue	12/100	White	6.3	63.2
1050	2	1.34	16	19 x 0.30 NPC	2.70	Light blue + blue	12/100	Blue	6.9	75.2
1050	2	1.91	14	27 x 0.30 NPC	2.95	White + blue	12/100	White	7.6	92.6
1050	3	0.38	22	12 x 0.20 NPC	1.90	White + blue + Yellow	12/100	White	5.6	53.0
1050	3	0.60	20	19 x 0.20 NPC	2.20	Light blue + blue + Yellow	12/100	Blue	6.2	66.1
1050	3	0.93	18	19 x 0.25 NPC	2.40	White + blue + Yellow	12/100	White	6.6	82.7
1050	3	1.34	16	19 x 0.30 NPC	2.70	Light blue + blue + Yellow	12/100	Blue	7.3	98.6
1050	3	1.91	14	27 x 0.30 NPC	2.95	White + blue + Yellow	12/100	White	8.1	122.3

N.P.C. = nickel plated copper

TYPE 1053

Screened cables for high ambient temperatures

Applications

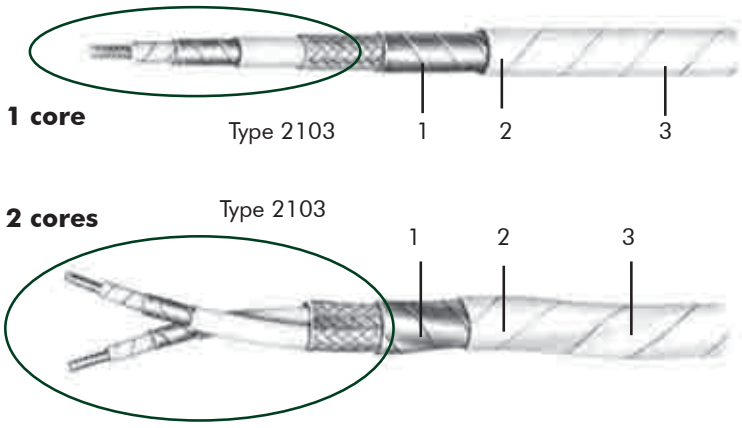
Designed for use at high ambient temperatures up to 300°C at peak.
Non-flammable, good abrasion resistance, they withstand most solvents.
Very good electrical insulation of the screen, very efficient protection of the screen against oxidation and corrosion, easy fitting of the cable, safer handling.

600 Volts RMS

Construction

1, 2 or 3 cores type 2103 covered with:

1- A braided screen made up of nickel plated copper (62% minimum coverage)
2- A polyimide sheath
3- A wrapped and sintered PTFE sheath



Technical requirements and control conditions

Cores: see datasheet on type 2103
Screen: MIL-C-7078 A specification (08/1971)
Coding: AIR 0107 A specification (10/1961) and note N°348/SIB distributed under N°5927/STT/SIB (05/1961)

Standards

AIR 4524, B.N.Aé, MIL-W-22759 B & MIL-C-7078C

-90°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

RoHS

TYPE 1053

References			2103 Cores				Screen and Protection			
Type	Nb. cores	Cross Section	Gauge AWG	Construction n x Ø mm	Overall diameter of the core mm	Colour of cores	Screen strands Ø mm	PTFE outer sheath Color	Overall diameter (max.) mm	Average weight g/m
1053	1	0.38	22	12 x 0.20 NPC	1.80	White	10/100	White	2.9	16.5
1053	1	0.60	20	19 x 0.20 NPC	1.95	Light blue	10/100	Blue	3.0	19.3
1053	1	0.93	18	19 x 0.25 NPC	2.10	White	10/100	White	3.2	24.0
1053	1	1.34	16	19 x 0.30 NPC	2.20	Light blue	12/100	Blue	4.1	32.7
1053	1	1.91	14	27 x 0.30 NPC	2.80	White	12/100	White	4.4	41.3
1053	2	0.38	22	12 x 0.20 NPC	1.80	White + blue	12/100	White	4.9	38.0
1053	2	0.60	20	19 x 0.20 NPC	1.95	Light blue + blue	12/100	Blue	5.2	44.0
1053	2	0.93	18	19 x 0.25 NPC	2.10	White + blue	12/100	White	5.5	56.0
1053	2	1.34	16	19 x 0.30 NPC	2.20	Light blue + blue	12/100	Blue	7.1	70.0
1053	2	1.91	14	27 x 0.30 NPC	2.80	White + blue	12/100	White	7.8	91.0
1053	3	0.38	22	12 x 0.20 NPC	1.80	White + blue + Yellow	12/100	White	5.4	48.0
1053	3	0.60	20	19 x 0.20 NPC	1.95	Light blue + blue + Yellow	12/100	Blue	5.6	57.0
1053	3	0.93	18	19 x 0.25 NPC	2.10	White + blue + Yellow	12/100	White	5.8	73.0
1053	3	1.34	16	19 x 0.30 NPC	2.20	Light blue + blue + Yellow	12/100	Blue	7.5	95.0
1053	3	1.91	14	27 x 0.30 NPC	2.80	White + blue + Yellow	12/100	White	8.4	121.0

This cable type accomodates connectors according to MIL-C-83723 specification
N.P.C. = nickel plated annealed electrolytic copper

ESW 1000-010-XXX

Large section high temperature cable

Applications

Use in Aero-engine services

600 Volts RMS

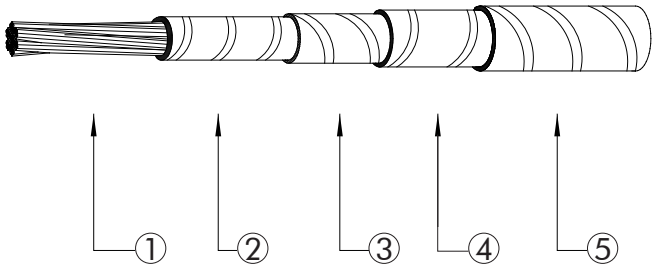
Construction

CONDUCTOR

1- Stranded conductor made of nickel plated copper

INSULATION

2- Polyimide tape
3- PTFE tapes
4- PTFE coated fiberglass tape
5- PTFE tapes



Other characteristics

Mould and funfus resistant

Standards

ESW 1000-010

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

ESW 1000-010- XXX (Metric units)

REFERENCE	AWG	Conductor				Finished Cable		
		Stranding m x n x Diam. (mm)	Diameter (mm)	Number of Strands Max	Maximum DC resistance at 20°C (68°F)	Diameter (mm)		Maximum Weight
			Max.		(Ohms/Km)	Nom.	Max.	(Kg/Km)
ESW1000-010-090	8	127 x 0.30	4.5	127	2.30	*	6.25	108
ESW1000-010-140	6	27 x 7 x 0.30	5.6	189	1.58	*	7.30	160
ESW1000-010-220	4	37 x 12 x 0.25	7.3	444	0.97	9.24	9.30	245
ESW1000-010-340	2	37 x 19 x 0.25	8.8	703	0.61	10.93	11.30	420
ESW1000-010-420	1	37 x 23 x 0.25	10.0	851	0.51	*	12.40	500
ESW1000-010-530	0	37 x 29 x 0.25	11.3	1073	0.40	12.55	13.15	630
ESW1000-010-680	00	37 x 37 x 0.25	12.5	1369	0.32	14.20	14.45	800
ESW1000-010-850	000	48 x 36 x 0.25	14.4	1728	0.25	15.58	16.05	1010
ESW1000-010-107	0000	61 x 36 x 0.25	15.9	2196	0.20	17.22	17.55	1270

* To be defined

Identification

Color of cable : white
Marking :
Color : Green
Marking:
ESW1000-010-xxx-FX-FF-**
With :
xxx = Size code
** = Year of production (ie. 08 = 2008)

9310/N01/N02/N03
AWG 24 & AWG 22

260 C°
Wire Jacketed Shielded Cable

Applications

Aero Engine and High Temperature Application

600 Volts RMS

Construction

CONDUCTOR

1- AWG 24
19 x 0.127 mm
(S = 0.24 mm^2)
AWG 22
19 x 0.16 mm
(S = 0.38 mm2)
Nickel coated high strength copper alloy

INSULATION

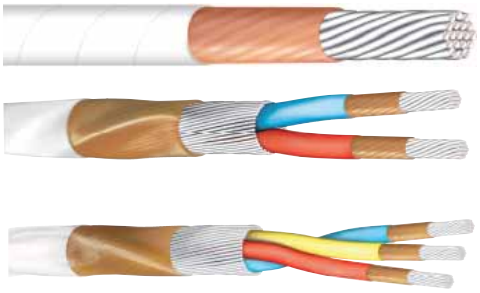
Polyimide tape
PTFE tapes

SHIELD

2- Nickel plated copper spiral screen

JACKET

3- Polyimide Tape
4- PTFE Tape

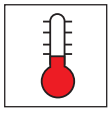


Other characteristics

Operating frequency : up to 2000 Hz

Standards

448-009-3-10



-65°C to +260°C

Very good resistance to aircraft fluids

9310-N01 – N02 – N03 - AWG 24 & AWG 22 (Metric units)

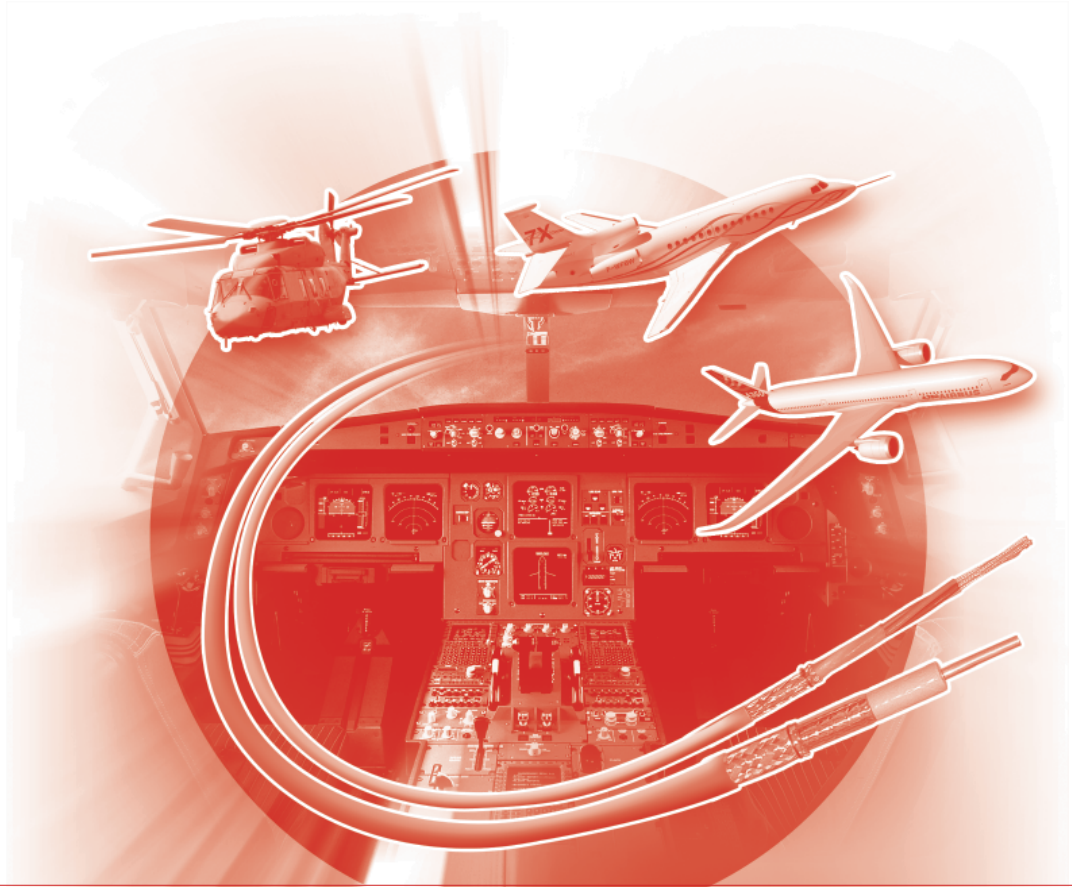
AWG	Number of cores	Screen	Nominal DC resistance of screen at 20°C (Ohms/Km)	Maximum DC resistance of conducteor at 20°C (Ohms/Km)	Finished Cable			
		Strand Diameter (mm)			Min. Diameter (mm)	Max. Diameter (mm)	Max. Weight (g.m)	Cores colour single wires
24	2	0,08	71	117	2.20	2.55	12.4	white
22	2	0.08	56	62	2.60	2.90	18.0	green
24	3	0.10	44	117	2.40	2.70	17.9	white
22	3	0.10	37	62	2.85	3.15	24.9	green

AWG	Conductor		Maximum DC resistance at 20°C (Ω/Km)	Finished Wire			
	Construction	Nom. Diameter (mm)		Min. Diameter (mm)	Max. Diameter (mm)	Max. Weight (g/m)	Wire colour
24	19 x 0.127	0.61	114	0.96	1.11	3.50	white
22	19 x 0.16	0.76	60	1.15	1.30	5.40	white

Identification

Marking :

Colour : Green
9310-N££CA**## F0241 ++++
££ = Number of Cores
** = AWG
(++++) = Year of manufacturing
= BL (Spiral screen), ( ) Single wire



PART 3-2
Nacelles and engines high temperature, fire resistant/fire proof cables

ESW 1200-010-XXX
ESW 1201-010-XXX

Fire resistant cable single core

Applications

Use in Aero-engine services

600 Volts RMS

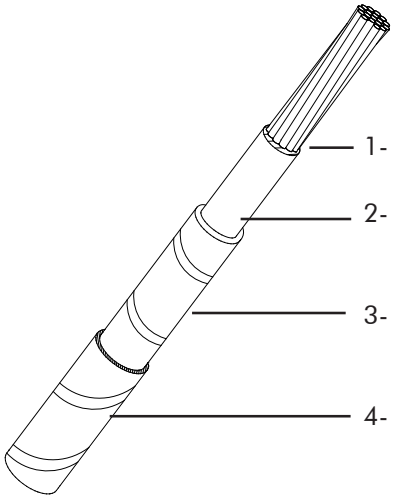
Construction

CONDUCTOR

1- Stranded conductor made of nickel clad copper alloy (ESW1200)
Nickel clad copper (ESW1201)

INSULATION

2- Fire resistant insulation
3- Polyimide tape
4- PTFE tape



Other characteristics

Very good fire resistance

Standards

ESW 1200-010 / 1201-010

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

ESW 1200-010- XXX (Metric units)

REFERENCE	Size Code (AECMA)	Gauge (AWG)	Finished Cable			
			DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
			Max.	Min.	Max.	Max.
ESW1200-010-004	004	22	95	1.45	1.85	8.4
ESW1200-010-006	006	20	51.1	1.60	2.00	10.5
ESW1200-010-010	010	18	32.7	1.90	2.32	14.4
ESW1200-010-012	012	16	25.6	2.10	2.57	18.7

ESW 1201-010-XXX (Metric units)

REFERENCE	Size Code (AECMA)	Gauge (AWG)	Finished Cable			
			DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
			Max.	Min.	Max.	Max.
ESW1201-010-004	004	22	87.9	1.45	1.85	8.4
ESW1201-010-006	006	20	43.6	1.60	2.00	10.5
ESW1201-010-010	010	18	27.9	1.90	2.32	14.4
ESW1201-010-012	012	16	21.9	2.10	2.57	18.7

Identification

Color of cable : white with a helical red stripe
Marking :
ESW1200-010-xxx-FX-FF-**
ESW1201-010-xxx-FX-FF-**
With :
xxx = Size code
** = Year of production (ie. 08 = 2008)

ESW 1202-+++-XXX
ESW 1203-+++-XXX

Fire resistant cable
single and multi-cores screened and jacketed

Applications

Use in Aero-engine services

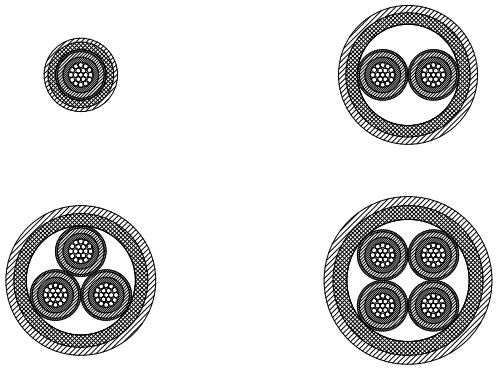
600 Volts RMS

Construction

CORE
ESW 1200
ESW 1201
004 : 19 x 0.15 mm
006 : 19 x 0.20 mm
010 : 19 x 0.25 mm
012 : 19 x 0.30 mm

SCREEN
Nickel plated copper braid

JACKET
PTFE tape(s)



Other characteristics

Very good fire resistance

Standards

ESW 1202 / 1203-+++-XXX

-65°C to +260°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Very good
resistance to
aircraft fluids

ESW 1202-+++- XXX (Metric units)

REFERENCE	AWG	Size Code	Finished Cable					
			Nbr of cores	Colours of cores	DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
					Max.	Min.	Max.	Max.
ESW1202-012-004	22	004	1	White	95.0	2.40	3.25	22.5
ESW1202-012-006	20	006	1		51.1	2.65	3.35	28.3
ESW1202-012-010	18	010	1		32.7	2.90	3.60	34.0
ESW1202-012-012	16	012	1		25.6	3.15	3.90	40.5
ESW1202-022-004	22	004	2	1 Red 1 Blue	96.9	3.89	5.35	43.5
ESW1202-022-006	20	006	2		52.1	4.21	5.64	50.6
ESW1202-022-010	18	010	2		33.4	4.70	6.00	60.3
ESW1202-022-012	16	012	2		26.1	5.20	6.50	72.8
ESW1202-032-004	22	004	3	1 Red 1 Blue 1 Yellow	96.9	4.10	5.65	55.7
ESW1202-032-006	20	006	3		52.1	4.40	5.97	67.0
ESW1202-032-010	18	010	3		33.4	5.16	6.40	81.0
ESW1202-032-012	16	012	3		26.1	5.54	6.80	94.0
ESW1202-042-004	22	004	4	1 Red 1 Blue 1 Yellow 1 Green	96.9	4.55	5.95	66.5
ESW1202-042-006	20	006	4		52.1	4.92	6.30	76.3
ESW1202-042-010	18	010	4		33.4	5.69	7.00	98.9
ESW1202-042-012	16	012	4		26.1	6.29	7.50	115.0

ESW 1203-+++-XXX (Metric units)

REFERENCE	AWG	Size Code	Finished Cable					
			Nbr of cores	Colours of cores	DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
					Max.	Min.	Max.	Max.
ESW1203-012-004	22	004	1	White	87.9	2.40	3.25	22.5
ESW1203-012-006	20	006	1		43.6	2.65	3.35	28.3
ESW1203-012-010	18	010	1		27.9	2.90	3.60	34.0
ESW1203-012-012	16	012	1		21.9	3.15	3.90	40.5
ESW1203-022-004	22	004	2	1 Red 1 Blue	89.66	3.89	5.35	43.5
ESW1203-022-006	20	006	2		44.47	4.21	5.64	50.6
ESW1203-022-010	18	010	2		28.46	4.70	6.00	60.3
ESW1203-022-012	16	012	2		22.34	5.20	6.50	72.8
ESW1203-032-004	22	004	3	1 Red 1 Blue 1 Yellow	89.66	4.10	5.65	55.7
ESW1203-032-006	20	006	3		44.47	4.40	5.97	67.0
ESW1203-032-010	18	010	3		28.46	5.16	6.40	81.0
ESW1203-032-012	16	012	3		22.34	5.54	6.80	94.0
ESW1203-042-004	22	004	4	1 Red 1 Blue 1 Yellow 1 Green	89.66	4.55	5.95	66.5
ESW1203-042-006	20	006	4		44.47	4.92	6.30	76.3
ESW1203-042-010	18	010	4		28.46	5.69	7.00	98.9
ESW1203-042-012	16	012	4		22.34	6.29	7.50	115.0

Identification

Jacket identification :

White with narrow red stripe

Marking :

ESW1202-+++-xxx-FX-FF-**
ESW1203-+++-xxx-FX-FF-**

With :
+++ = Form code
xxx = Size code
** = Year of production (ie. 08 = 2008)

ESW 1250-010-XXX
ESW 1251-010-XXX

Fireproof cable single core

Applications

Use in essential services

600 Volts RMS

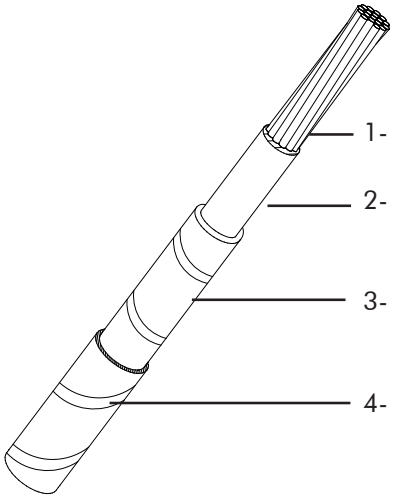
Construction

CONDUCTOR

1- Stranded conductor made of nickel clad copper alloy (ESW1250)
Nickel clad copper (ESW1251)

INSULATION

2- Fire resistant insulation
3- Polyimide tape
4- PTFE tape



Other characteristics

Very good fire resistance

Standards

ESW 1250-010 / 1251-010

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

ESW 1250-010- XXX (Metric units)

REFERENCE	Size Code (AECMA)	Gauge (AWG)	Finished Cable			
			DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
			Max.	Min.	Max.	Max.
ESW1250-010-004	004	22	95	1.45	1.85	10.4
ESW1250-010-006	006	20	51.1	1.60	2.00	13.0
ESW1250-010-010	010	18	32.7	1.90	2.32	17.0
ESW1250-010-012	012	16	25.6	2.10	2.57	22.0

ESW 1251-010-XXX (Metric units)

REFERENCE	Size Code (AECMA)	Gauge (AWG)	Finished Cable			
			DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
			Max.	Min.	Max.	Max.
ESW1251-010-004	004	22	87.9	1.45	1.85	10.4
ESW1251-010-006	006	20	43.6	1.60	2.00	13.0
ESW1251-010-010	010	18	27.9	1.90	2.32	17.0
ESW1251-010-012	012	16	21.9	2.10	2.57	22.0

Identification

Core identification :

White with a helical red stripe

Marking :

ESW1250-010-xxx-FX-FF-**

ESW1251-010-xxx-FX-FF-**

With :

xxx = Size code

** = Year of production (ie. 08 = 2008)

ESW 1252-+++-XXX
ESW 1253-+++-XXX

Fireproof cable
single and multi-cores screened and jacketed

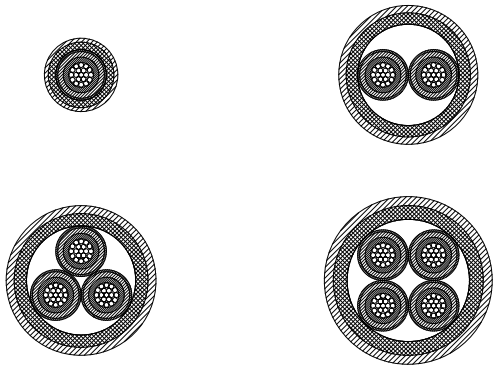
Applications

Use in essential services

600 Volts RMS

Construction

CORE
ESW 1250
ESW 1251
SCREEN
Nickel plated copper braid
JACKET
PTFE tape(s)



Other characteristics

Very good fire resistance

Standards

ESW 1252 / 1253-+++-XXX

-65°C to +260°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Very good
resistance to
aircraft fluids

ESW 1252-+++- XXX (Metric units)

REFERENCE	AWG	Size Code	Finished Cable					
			Nbr of cores	Colours of cores	DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
					Max.	Min.	Max.	Max.
ESW1252-012-004	22	004	1	White	95.0	2.40	3.25	22.5
ESW1252-012-006	20	006	1		51.1	2.65	3.50	30.0
ESW1252-012-010	18	010	1		32.7	2.90	3.80	36.0
ESW1252-012-012	16	012	1		25.6	3.15	4.10	38.0
ESW1252-022-004	22	004	2	1 Red 1 Blue	96.9	3.89	5.35	40.0
ESW1252-022-006	20	006	2		52.1	4.21	5.64	48.0
ESW1252-022-010	18	010	2		33.4	4.70	6.00	59.0
ESW1252-022-012	16	012	2		26.1	5.20	6.50	72.8
ESW1252-032-004	22	004	3	1 Red 1 Blue 1 Yellow	96.9	4.10	5.65	52.0
ESW1252-032-006	20	006	3		52.1	4.40	5.97	62.0
ESW1252-032-010	18	010	3		33.4	5.16	6.40	81.0
ESW1252-032-012	16	012	3		26.1	5.54	6.80	94.0
ESW1252-042-004	22	004	4	1 Red 1 Blue 1 Yellow 1 Green	96.9	4.55	5.95	66.5
ESW1252-042-006	20	006	4		52.1	4.92	6.30	76.3
ESW1252-042-010	18	010	4		33.4	5.69	7.00	98.9
ESW1252-042-012	16	012	4		26.1	6.29	7.50	115.0

ESW 1253-+++-XXX (Metric units)

REFERENCE	AWG	Size Code	Finished Cable					
			Nbr of cores	Colours of cores	DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
					Max.	Min.	Max.	Max.
ESW1253-012-004	22	004	1	White	87.9	2.40	3.25	22.5
ESW1253-012-006	20	006	1		43.6	2.65	3.50	33.4
ESW1253-012-010	18	010	1		27.9	2.90	3.80	40.12
ESW1253-012-012	16	012	1		21.9	3.15	4.10	47.8
ESW1253-022-004	22	004	2	1 Red 1 Blue	89.66	3.89	5.35	43.5
ESW1253-022-006	20	006	2		44.47	4.21	5.64	50.6
ESW1253-022-010	18	010	2		28.46	4.70	6.00	60.3
ESW1253-022-012	16	012	2		22.34	5.20	6.50	72.8
ESW1253-032-004	22	004	3	1 Red 1 Blue 1 Yellow	89.66	4.10	5.65	55.7
ESW1253-032-006	20	006	3		44.47	4.40	5.97	67.0
ESW1253-032-010	18	010	3		28.46	5.16	6.40	81.0
ESW1253-032-012	16	012	3		22.34	5.54	6.80	94.0
ESW1253-042-004	22	004	4	1 Red 1 Blue 1 Yellow 1 Green	89.66	4.55	5.95	66.5
ESW1253-042-006	20	006	4		44.47	4.92	6.30	76.3
ESW1253-042-010	18	010	4		28.46	5.69	7.00	98.9
ESW1253-042-012	16	012	4		22.34	6.29	7.50	115.0

Identification

Core identification :

White with narrow red stripe

Marking :

ESW1252-+++-xxx-FX-FF-**
ESW1253-+++-xxx-FX-FF-**

With :
+++ = Form code
xxx = Size code
** = Year of production (ie. 08 = 2008)

ESW 1254-010-002

Fireproof cable single core

Applications

Use in Aero engine services

600 Volts RMS

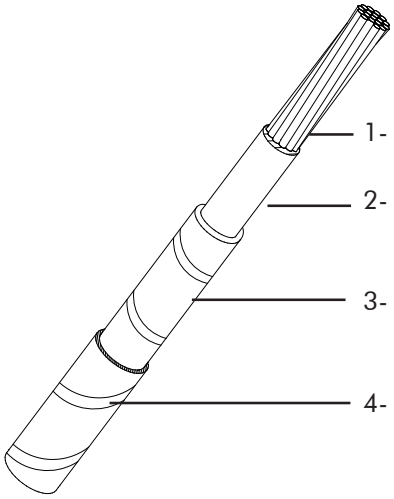
Construction

CONDUCTOR

1- Stranded conductor made of nickel clad copper alloy
002 : 19 x 0.12 mm

INSULATION

2- Fire resistant insulation
3- Polyimide tape
4- PTFE tape



Other characteristics

Very good fire resistance

Standards

ESW 1254-010-002

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

ESW 1254-010-002 (Metric units)

REFERENCE	Size Code	Gauge (AWG)	Finished Cable			
			DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)
			Max.	Min.	Max.	Max.
ESW1254-010-002	002	24	131	1.20	1.65	9.50

Identification

Core identification :

White with a helical red stripe

Marking :

ESW1254-010-002-FX-FF-**

With :

FX = Country of origin

FF = Manufaturer's code

** = Year of production (ie. 08 = 2008)

ESW 1254-022-002
ESW 1254-032-002

Fireproof cable
Two or three-cores twisted screened and jacketed

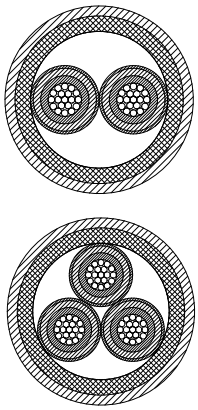
Applications

Use in Aero engine services

600 Volts RMS

Construction

CORE
ESW 1254-010
SCREEN
Nickel plated copper braid
JACKET
PTFE tape(s)



Other characteristics

Very good fire resistance

Standards

ESW 1254-022-002
ESW 1254-032-002

-65°C to +260°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Very good
resistance to
aircraft fluids

RoHS

ESW 1254-022-002 & ESW 1254-032-002 (Metric units)

REFERENCE	AWG	Size Code	Finished Cable						
			Nbr of cores	Colours of cores	DC Resistance at 20°C (Ohms/Km)	Diameter (mm)		Nom. Weight	Max weight ESW Spec. (g/m)
					Max.	Min.	Max.	(g/m)	
ESW1254-022-002	24	002	2	1 Red 1 Blue	135	2.95	4.45	25	38
ESW1254-032-002	24	002	3	1 Red 1 Blue 1 Yellow	135	3.50	4.75	31	37

Identification

Core identification :

White with narrow red stripe

Marking :

ESW1254-022-002-FX-FF-**

With :

FX = Country of origin

FF = Manufaturer's code

** = Year of production (ie. 08 = 2008)

ESW 1600-010-XXX
Thermocouple nickel chromium
ESW 1601-010-XXX
Thermocouple nickel aluminium
Fire resistant cable

Applications

Use in Aero engine services

600 Volts RMS

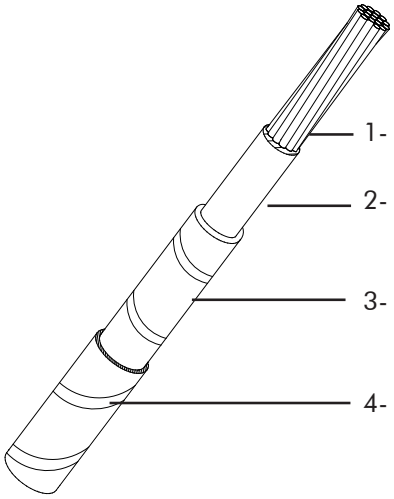
Construction

CONDUCTOR

1- Stranded conductor made of
nickel chromium (ESW 1600)
nickel aluminium (ESW 1601)

INSULATION

2- Fire resistant insulation
3- Polyimide tape
4- PTFE tape

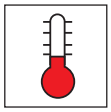


Other characteristics

Very good fire resistance

Standards

ESW 1600-010-XXX
ESW 1601-010-XXX


-65°C to +260°C


Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)


Very good
resistance to
aircraft fluids

RoHS

ESW 1600-010-XXX (Metric units)

REFERENCE	Size Code (AECMA)	Gauge (AWG)	Finished Cable				
			DC Resistance at 20°C (Ohms/Km)		Diameter (mm)		Weight (g/m)
			Min.	Max.	Min.	Max.	Max.
ESW1600-010-006	006	20	1100	1300	1.60	2.00	10.5
ESW1600-010-010	010	18	705	851	1.92	2.32	14.4
ESW1600-010-012	012	16	489	591	2.17	2.57	18.7
ESW1600-010-050	050	10	133	162	3.65	4.05	56.5

ESW 1601-010-XXX (Metric units)

REFERENCE	Size Code (AECMA)	Gauge (AWG)	Finished Cable				
			DC Resistance at 20°C (Ohms/Km)		Diameter (mm)		Weight (g/m)
			Min.	Max.	Min.	Max.	Max.
ESW1601-010-006	006	20	434	524	1.60	2.00	10.5
ESW1601-010-010	010	18	278	336	1.92	2.32	14.4
ESW1601-010-012	012	16	193	234	2.17	2.57	18.7
ESW1601-010-050	050	10	52	64	3.65	4.05	56.5

Identification

Core identification :

White (ESW 1600)

Green (ESW 1601)

Marking :

ESW1600-010-xxx-FX-FF-**

ESW1601-010-xxx-FX-FF-**

With :

xxx = Size code

** = Year of production (ie. 08 = 2008)

ESW 1602-022-XXX

Fire resistant cable
Thermocouple nickel chromium / nickel alumium

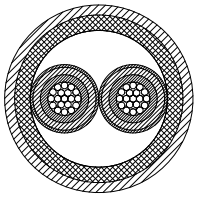
Applications

Use in Aero engine services

600 Volts RMS

Construction

CORE
ESW 1600-010
ESW 1601-010
SCREEN
Nickel plated copper braid
JACKET
PTFE tape(s)



Other characteristics

Very good fire resistance

Standards

ESW 1602-022-xxx

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

ESW 1602-022-XXX (Metric units)

REFERENCE	AWG	Size Code	Finished Cable						
			DC Resistance at 20°C (Ohms/Km)				Diameter (mm)		Weight (g/m)
			Nickel Chromium		Nickel Aluminium		Min.	Max.	Max.
			Min.	Max.	Min.	Max.			
ESW1602-022-006	20	006	1122	1357	443	534	4.40	5.64	50.6
ESW1602-022-010	18	010	719	868	283	343	4.70	6.0	60.3
ESW1602-022-012	16	012	499	603	197	239	5.20	6.50	72.8
ESW1602-022-050	10	050	136	165	53	65	7.50	9.50	148.8

Identification

Core identification :

Nickel chromium : White

Nickel aluminium : Green

Marking :

ESW1602-022-xxx-FX-FF-**

With :

xxx = Size code

FX = Country of origin

FF = Manufacturer's code

** = Year of production (ie. 08 = 2008)

EN 2346-005 DW - DWB - DWC

Fireproof cables single and multicore assembly light weight

Applications

Use in the on-board electrical systems of aircraft.

600 Volts RMS

Construction

CONDUCTOR

Stranded conductor
Nickel clad copper alloy for size 24 and 22
Nickel clad copper for other sizes

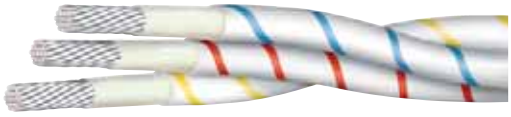
INSULATION

Fireproof insulation
Polyimide tape
PTFE tape, UV laser markable (for single core)

DW

DWB

DWC



Other characteristics

Operating frequency : up to 2000 Hz
Fire resistance : >10 kΩ

Standards

EN 2346-005

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 2346-005 DW - DWB - DWC (Metric units)

REFERENCE	No of core	Size Code (AECMA)	Gauge (AWG)	Finished Cable			
				DC Resistance at 20°C (Ohms/km)	Diameter (mm)		Weight (g/m)
				Max.	Min.	Max.	Max.
EN 2346-005A 002	1	002	24	131.0	1.53	1.68	5.00
EN 2346-005A 004	1	004	22	80.9	1.59	1.80	6.66
EN 2346-005A 006	1	006	20	44.3	1.89	2.11	10.61
EN 2346-005A 010	1	010	18	27.9	2.34	2.54	16.45
EN 2346-005A 012	1	012	16	18.8	2.50	2.70	20.35
EN 2346-005A 020	1	020	14	13.9	2.95	3.25	28.02
EN 2346-005A 030	1	030	12	8.9	3.48	3.80	42.31
EN 2346-005B 002	2	002	24	133.6	-	3.36	10.30
EN 2346-005B 004	2	004	22	82.5	-	3.60	13.72
EN 2346-005B 006	2	006	20	45.2	-	4.22	21.86
EN 2346-005B 010	2	010	18	28.5	-	5.08	33.89
EN 2346-005B 012	2	012	16	19.2	-	5.40	41.92
EN 2346-005B 020	2	020	14	14.2	-	6.50	57.72
EN 2346-005B 030	2	030	12	9.1	-	7.60	87.16
EN 2346-005C 002	3	002	24	133.6	-	3.61	15.45
EN 2346-005C 004	3	004	22	82.5	-	3.87	20.58
EN 2346-005C 006	3	006	20	45.2	-	4.54	32.79
EN 2346-005C 010	3	010	18	28.5	-	5.46	50.83
EN 2346-005C 012	3	012	16	19.2	-	5.81	62.88
EN 2346-005C 020	3	020	14	14.2	-	6.99	86.58
EN 2346-005C 030	3	030	12	9.1	-	8.17	130.74

Identification

Core identification :

Colors:

1 core : white with helical red stripe

2 cores : white with helical red / blue stripe

3 cores : white with helical red / blue / yellow stripe

Marking :

EN DW ++ FR F** for single core

EN DW A ++ FR F** for multicore

With :

DW = short designation

++ = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

** = Year of production (ie. 08 = 2008)

EN 4608-004

Fireproof cables single and multicore screened and jacketed

Applications

Use in the on-board electrical systems of aircraft.

600 Volts RMS

Construction

CONDUCTOR

Stranded conductor : Nickel clad copper alloy for size 22
Nickel clad copper for other sizes

INSULATION

Fireproof insulation
Polyimide tape
PTFE tape

SCREEN

Nickel plated copper braid

JACKET

UV PTFE tape(s)

GPA

GPB

GPC

Other characteristics

Operating frequency : up to 2000 Hz
Fire resistance : >10 kΩ

Standards

EN 4608-004

-65°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 4608-004 (Metric units)

REFERENCE	Size Code	AWG	Max. Transfer Impedance from 0 to 1 MHz	Finished Cable				
				Nbr of cores	Nom. Diameter of shield strands (mm)	DC Resistance at 20°C (Ohms/Km)	Diameter (mm)	Weight (g/m)
			(mΩ/m)			Max.	Max.	Max.
EN 4608-004A 002	002	24	60	1	0.10	131.0	2.61	14.15
EN 4608-004A 004	004	22		1	0.10	80.9	2.73	16.51
EN 4608-004A 006	006	20		1	0.10	44.3	3.01	21.54
EN 4608-004A 010	010	18		1	0.12	27.9	3.57	31.19
EN 4608-004A 012	012	16		1	0.12	18.8	3.72	36.94
EN 4608-004A 020	020	14		1	0.12	13.9	4.24	46.40
EN 4608-004A 030	030	12		1	0.12	8.9	4.79	62.87
EN 4608-004B 002	002	24	40	2	See EN 4608-005B			
EN 4608-004B 004	004	22		2	0.12	82.5	4.30	29.66
EN 4608-004B 006	006	20		2	0.12	45.2	4.90	40.51
EN 4608-004B 010	010	18		2	0.12	28.5	5.90	56.25
EN 4608-004B 012	012	16		2	0.12	19.2	6.20	65.71
EN 4608-004B 020	020	14		2	0.12	14.2	7.20	85.98
EN 4608-004B 030	030	12		2	0.12	9.1	8.30	118.48
EN 4608-004C 002	002	24	35	3	0.12	133.6	4.40	33.61
EN 4608-004C 004	004	22		3	0.12	82.5	4.50	39.15
EN 4608-004C 006	006	20		3	0.12	45.2	5.20	54.46
EN 4608-004C 010	010	18		3	0.12	28.5	6.20	77.01
EN 4608-004C 012	012	16		3	0.12	19.2	6.60	90.47
EN 4608-004C 020	020	14		3	0.15	14.2	7.80	125.75
EN 4608-004C 030	030	12		3	0.15	9.1	9.00	174.02

Identification

Core identification :

Colors:

1 core : white with helical red stripe

2 cores : white with helical red / blue stripe

3 cores : white with helical red / blue / yellow stripe

Marking:

EN DW A ++ FR F **

Jacket identification :

Color : white with narrow red stripe

Marking:

EN £££ ++ FR F**

With :

£££ = short designation (GPA, GPB, GPC)

++ = AWG

FR = Country of origin (FR = France)

F = Manufacturer (F = Nexans)

** = Year of production (ie. 08 = 2008)

TYPE ASNE 0437

High temperature fire resistant cables

Applications

Heavy duty applications in aero-engines and high temperature areas with good mechanical and electrical performances.

600 Volts RMS

Construction

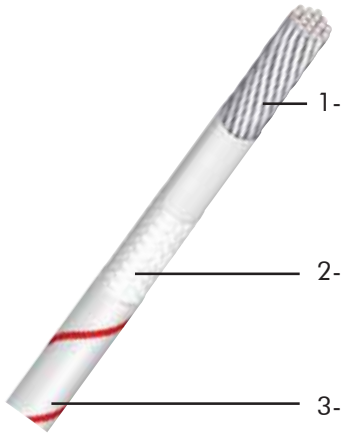
CONDUCTOR

1- Stranded conductor:
Nickel clad high strength copper alloy for size 22
Nickel clad copper for other sizes

INSULATION

2- Special fire resistant composite insulation

3- PTFE tape(s)



Other characteristics

Operating frequency : up to 2000 Hz

Standards

ASNE 0437 DL
MIL-W-25038

-55°C to +260°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

TYPE ASNE 0437 (Metric units)

PART NUMBERS	US AWG	Conductor			Finished Wire				
		Stranding (Nbr x Diam. of strands) mm	Diameter (mm)		Maximum DC resistance at 20°C (Ohms/Km)	Diameter (mm)		Weight (g/m)	
			Nom.	Maxi.		Min.	Max.	Nom.	Max.
ASNE 0437 DL 22	22	19 x 0.160	0.78	0.84	84.0	1.93	2.11	8.33	9.7
ASNE 0437 DL 20	20	19 x 0.204	0.98	1.04	47.8	2.13	2.36	11.38	13.4
ASNE 0437 DL 18	18	19 x 0.254	1.22	1.32	30.0	2.38	2.61	15.08	17.1
ASNE 0437 DL 16	16	19 x 0.287	1.40	1.55	22.5	2.51	2.97	18.22	21.6

Identification

Color : white with red stripe
Marking : green color
DL ++ FR F**
With :
++ = AWG
FR = Country of origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of production (ie. 08 = 2008)

TYPE TMF

High temperature and fire resistant wires

Applications

Heavy duty applications in aero-engines and high temperature areas with good mechanical and electrical performances.
Intended for use in essential services.

600 Volts RMS

Construction

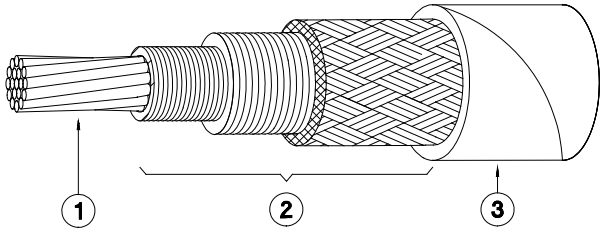
CONDUCTOR

1- Nickel clad copper conductor

INSULATION

2- Special fire resistant composite insulation

3- PTFE tape(s)



Other characteristics

Operating frequency : up to 2000 Hz
Very good fire resistance: pass BMS 13-55 and M25038 fire test (aged and unaged)

Standards

MIL-W-25038/1 and BMS 13-55 for fire tests
Military QPL approval

-65°C to +260°C
-85°F to +500°F

Flame retardant
FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

TYPE TMF (Inch, pound)

PART NUMBER	US AWG	Conductor			Finished Wire			
		Stranding (Nbr of strands x AWG gauge of strands)	Diameter (inch)		Resistance at 20°C (68°F) (Ohms/1000 ft) Max.	Diameter (inch)		Weight (lb/1000ft)
			Nom.	Max.		Min.	Max.	Max.
TMF-1-22	22	19 x 34	0.031	0.033	23.7	0.100	0.116	10.0
TMF-1-20	20	19 x 32	0.039	0.041	14.6	0.109	0.125	12.0
TMF-1-18	18	19 x 30	0.048	0.052	9.14	0.119	0.135	15.0
TMF-1-16	16	19 x 29	0.055	0.061	6.85	0.127	0.147	19.0
TMF-1-14	14	19 x 27	0.069	0.074	4.32	0.150	0.170	25.0
TMF-1-12	12	19 x 25	0.087	0.093	2.78	0.165	0.185	35.0
TMF-1-10	10	49 x 27	0.122	0.128	1.68	0.210	0.230	55.0
TMF-1-8	8	133 x 29	0.159	0.176	0.936	0.256	0.280	85.0
TMF-1-6	6	133 x 27	0.200	0.218	0.591	0.318	0.342	127
TMF-1-4	4	133 x 25	0.253	0.272	0.375	0.383	0.407	192
TMF-1-2	2	665 x 30	0.315	0.345	0.241	0.460	0.484	291
TMF-1-1	1	817 x 30	0.350	0.384	0.196	0.497	0.533	347
TMF-1-01	0	1045 x 30	0.395	0.432	0.153	0.537	0.573	415
TMF-1-02	00	1330 x 30	0.446	0.490	0.120	0.595	0.635	520
TMF-1-03	000	1672 x 30	0.505	0.548	0.096	0.660	0.700	648
TMF-1-04	0000	2109 x 30	0.562	0.615	0.077	0.730	0.770	793

TYPE TMF (Metric units)

PART NUMBER	US AWG	Conductor			Finished Wire			
		Stranding (Nbr of Strands x Diam. of Strands in mm)	Diameter (mm)		Resistance at 20°C (68°F) (Ohms/Km) Max.	Diameter (mm)		Weight (Kg/Km)
			Nom.	Max.		Nom.	Max.	Max.
TMF-1-22	22	19 x 0.160	0.78	0.84	77.8	2.54	2.94	14.9
TMF-1-20	20	19 x 0.203	0.98	1.04	47.9	2.77	3.17	17.9
TMF-1-18	18	19 x 0.254	1.22	1.32	30.0	3.03	3.43	22.3
TMF-1-16	16	19 x 0.287	1.40	1.55	22.5	3.23	3.73	28.3
TMF-1-14	14	19 x 0.361	1.76	1.88	14.8	3.81	4.31	37.2
TMF-1-12	12	19 x 0.455	2.20	2.36	9.12	4.20	4.70	52.1
TMF-1-10	10	7 x 7 x 0.360	3.09	3.25	5.51	5.30	5.84	81.8
TMF-1-8	8	19 x 7 x 0.287	4.05	4.47	3.07	6.50	7.12	127
TMF-1-6	6	19 x 7 x 0.361	5.09	5.54	1.94	8.10	8.69	189
TMF-1-4	4	19 x 7 x 0.455	6.42	6.91	1.23	9.70	10.4	286
TMF-1-2	2	19 x 35 x 0.254	8.01	8.76	0.790	11.7	12.3	433
TMF-1-1	1	19 x 43 x 0.254	8.88	9.75	0.643	12.6	13.6	516
TMF-1-01	0	19 x 55 x 0.254	10.04	10.97	0.502	13.6	14.6	618
TMF-1-02	00	19 x 70 x 0.254	11.33	12.45	0.394	15.1	16.1	774
TMF-1-03	000	37 x 46 x 0.254	12.82	13.92	0.315	16.8	17.8	964
TMF-1-04	0000	37 x 57 x 0.254	14.27	15.62	0.253	18.5	19.6	1180

TYPE TMF-VRA-US
TMF-VR-US

High temperature fire resistant cables

Applications

Heavy duty applications in aero-engines and high temperature areas with good mechanical and electrical performances.
Intended for use in essential services.

600 Volts RMS

Construction

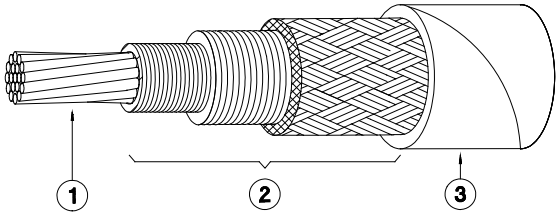
CONDUCTOR

1- **TMF-VRA-US** (AWG 22H and 20)
nickel clad high strength copper alloy conductor
TMF-VR-US (other AWG)
Nickel clad copper conductor

INSULATION

2- Special fire resistant composite insulation

3- PTFE tape(s)



Other characteristics

Operating frequency : up to 2000 Hz
Very good resistance fire resistance: according to MIL-W-25038

Standards

MIL-W-25038/3
Military QPL approval

-65°C to +260°C
-85°F to +500°F

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

TYPE TMF-VRA-US & TMF-VR-US (Inch, pound)

PART NUMBER	US AWG	Conductor			Finished Wire			
		Stranding (Nbr of Strands x AWG of Strands)	O.D. (inch)		Resistance at 20°C (68°F)(Ohms/1000 ft)	Diameter (inch)		Weight (lb/1000ft)
			Nom.	Max.	Max.	Mini.	Max.	Max.
TMF-VRA-US-22H	22	19 x 34	0.031	0.033	23.70	0.055	0.075	6.00
TMF-VRA-US-20	20	19 x 32	0.039	0.041	15.27	0.048	0.083	9.00
TMF-VR-US-18	18	19 x 30	0.048	0.052	8.50	0.065	0.097	10.5
TMF-VR-US-16	16	19 x 29	0.055	0.061	6.66	0.068	0.103	13.5
TMF-VR-US-14	14	19 x 27	0.069	0.074	4.32	0.097	0.123	19.5
TMF-VR-US-12	12	19 x 25	0.088	0.093	2.78	0.100	0.142	28.0

TYPE TMF-VRA-US & TMF-VR-US (Metric units)

PART NUMBER	US AWG	Conductor			Finished Wire			
		Stranding (Nbr of Strands x Diam. of Strands in mm)	O.D. (mm)		Resistance at 20°C (68°F) (Ohms/Km)	Diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Mini.	Max.	Max.
TMF-VRA-US-22H	22	19 x 0.160	0.78	0.84	77.8	1.40	1.91	8.90
TMF-VRA-US-20	20	19 x 0.203	0.99	1.04	50.1	1.22	2.11	13.40
TMF-VR-US-18	18	19 x 0.254	1.22	1.32	30.0	1.65	2.46	15.60
TMF-VR-US-16	16	19 x 0.287	1.40	1.55	22.5	1.73	2.62	20.10
TMF-VR-US-14	14	19 x 0.361	1.76	1.88	14.2	2.46	3.12	29.00
TMF-VR-US-12	12	19 x 0.455	2.23	2.36	9.12	2.54	3.61	41.70

TYPE FRM-A-US
FRM-US

High temperature fire resistant cables

Applications

Heavy duty applications in aero-engines and high temperature areas with good mechanical and electrical performances.
Intended for use in essential services.

600 Volts RMS

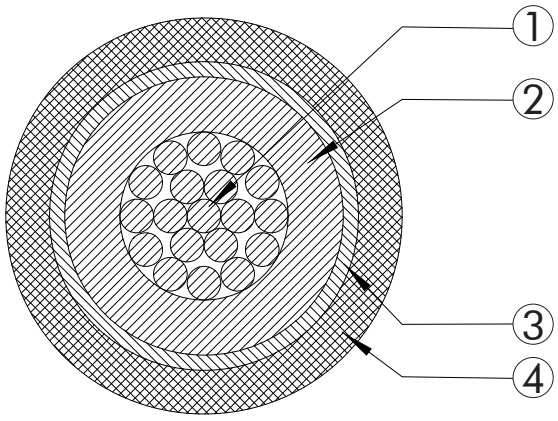
Construction

CONDUCTOR

1- **FRM-A-US** (AWG 22, 22H and 20)
nickel clad high strength copper alloy conductor
FRM-US (other AWG)
Nickel clad copper conductor

INSULATION

2- Inorganic barrier
3- Polyimide tape
4- PTFE tape



Other characteristics

Operating frequency : up to 2000 Hz

Standards

MIL-W-25038/3

-65°C to +260°C
-85°C to +500°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

RoHS

TYPE FRM-A-US & FRM-US (Inch, pound)

US AWG	Conductors			Finished Wire				
	Strands (No / AWG)	O.D. (inch)		Maximum DC resistance at 20°C (68°F) (Ohms/1000 ft)	Diameter (inch)			Weight (lb/1000ft)
		Nom.	Max.		Min.	Nom.	Max.	Nom.
22	19/34	0.031	0.033	23.70	0.040	0.053	0.054	3.37
22H	19/34	0.031	0.033	23.70	0.055	0.060	0.075	3.84
20	19/32	0.039	0.041	15.27	0.048	0.067	0.083	5.38
18	19/30	0.049	0.052	8.50	0.065	0.077	0.097	7.72
16	19/29	0.055	0.061	6.66	0.068	0.084	0.103	9.75
14	19/27	0.069	0.074	4.32	0.097	0.101	0.123	14.95
12	19/25	0.087	0.093	2.78	0.100	0.118	0.142	22.20

TYPE FRM-A-US & FRM-US (Metric units)

US AWG	Conductors			Finished Wire				
	Strands (No / AWG)	O.D. (mm)		Maximum DC resistance at 20°C (68°F) (Ohms/Km)	Diameter (mm)			Weight (Kg/Km)
		Nom.	Max.		Min.	Nom.	Max.	Nom.
22	19/34	0.78	0.84	77.8	1.02	1.34	1.37	5.01
22H	19/34	0.78	0.84	77.8	1.40	1.52	1.91	5.72
20	19/32	0.99	1.04	50.1	1.22	1.71	2.11	8.00
18	19/30	1.24	1.32	27.9	1.65	1.95	2.46	11.49
16	19/29	1.40	1.55	21.8	1.73	2.13	2.62	14.51
14	19/27	1.76	1.88	14.2	2.46	2.56	3.12	22.24
12	19/25	2.20	2.36	9.12	2.54	3.00	3.61	33.03

M27500A ** JF +N 06

High temperature fire resistant shielded and jacketed cables

Applications

Fire resistant cable with good mechanical and electrical performances. Intended for use in essential services.

600 Volts RMS

Construction

CONDUCTOR

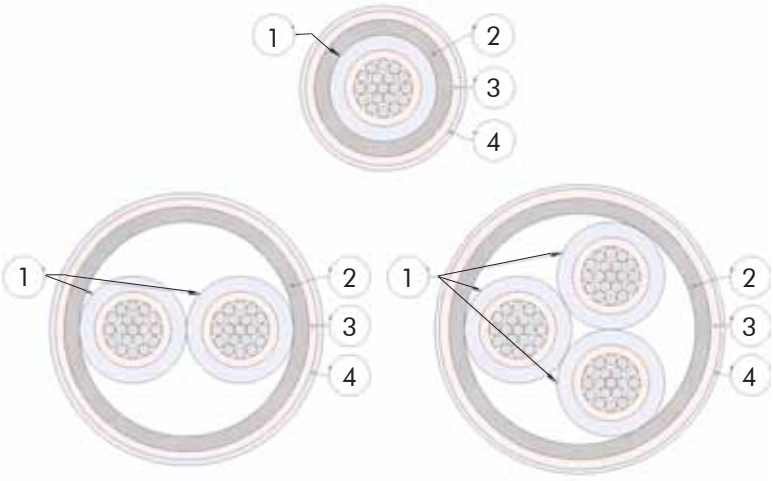
1- FRM-A-US (AWG 22 and 20)
FRM-US (other AWG)

SCREEN

2- Nickel coated copper braided screen

JACKET

3- PTFE tapes
4-



Other characteristics

Operating frequency : up to 2000 Hz

Standards

MIL-W-25038/3
MIL-DTL-27500

-65°C to +260°C
-85°C to +500°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Very good resistance to aircraft fluids

RoHS

TYPE M27500 ** JF + N 06 (Inch, pound)

PART NUMBERS	US AWG	Number of cores	Screen		Finished Cable				
			Strands AWG size	O.D. (inch) Nom.	Resistance at 20°C (68°F) of cores (Ohms/1000 ft)	Diameter (inch)		Weight (lb/1000ft)	
					Max.	Nom.	Max.	Nom.	Max.
M27500A22 JF 1 N 06	22	1	38	0.069	23.7	0.094	0.111	9.33	12.86
M27500A20 JF 1 N 06	20	1	36	0.088	15.27	0.113	0.146	13.92	22.88
M27500A18 JF 1 N 06	18	1	36	0.097	8.53	0.122	0.159	17.19	26.12
M27500A16 JF 1 N 06	16	1	36	0.104	6.67	0.130	0.166	19.91	29.99
M27500A14 JF 1 N 06	14	1	36	0.121	4.33	0.146	0.185	26.75	38.55
M27500A12 JF 1 N 06	12	1	36	0.139	2.78	0.164	0.205	35.69	49.67
M27500A22 JF 2 N 06	22	2	36	0.126	24.2	0.151	0.170	17.27	23.92
M27500A20 JF 2 N 06	20	2	36	0.155	15.58	0.180	0.229	23.69	40.38
M27500A18 JF 2 N 06	18	2	36	0.174	8.72	0.199	0.256	29.98	46.50
M27500A16 JF 2 N 06	16	2	36	0.188	6.80	0.213	0.269	35.25	54.09
M27500A14 JF 2 N 06	14	2	36	0.222	4.39	0.247	0.308	48.55	70.72
M27500A12 JF 2 N 06	12	2	36	0.257	2.83	0.282	0.347	66.10	92.48
M27500A22 JF 3 N 06	22	3	36	0.134	24.2	0.159	0.179	22.34	30.18
M27500A20 JF 3 N 06	20	3	36	0.166	15.58	0.191	0.242	31.26	52.68
M27500A18 JF 3 N 06	18	3	36	0.186	8.72	0.211	0.272	40.24	60.83
M27500A16 JF 3 N 06	16	3	36	0.201	6.80	0.226	0.285	47.80	71.73
M27500A14 JF 3 N 06	14	3	36	0.238	4.39	0.263	0.328	66.92	95.21
M27500A12 JF 3 N 06	12	3	36	0.275	2.83	0.300	0.370	92.40	126.40

TYPE M27500 ** JF + N 06 (Metric units)

PART NUMBERS	US AWG	Number of cores	Screen		Finished Cable				
			Strands (mm)	O.D. (mm) Nom.	Resistance at 20°C (68°F) of cores (Ohms/Km)	Diameter (mm)		Weight (Kg/Km)	
					Max.	Nom.	Max.	Nom.	Max.
M27500A22 JF 1 N 06	22	1	0.10	1.74	77.8	2.38	2.83	13.89	19.13
M27500A20 JF 1 N 06	20	1	0.13	2.23	50.1	2.87	3.70	20.72	34.05
M27500A18 JF 1 N 06	18	1	0.13	2.47	28.0	3.11	4.05	25.58	38.86
M27500A16 JF 1 N 06	16	1	0.13	2.65	21.9	3.29	4.21	29.63	44.62
M27500A14 JF 1 N 06	14	1	0.13	3.08	14.2	3.72	4.71	39.81	57.36
M27500A12 JF 1 N 06	12	1	0.13	3.52	9.12	4.16	5.20	53.11	73.91
M27500A22 JF 2 N 06	22	2	0.13	3.20	79.4	3.84	4.33	25.70	35.60
M27500A20 JF 2 N 06	20	2	0.13	3.94	51.1	4.58	5.81	35.26	60.09
M27500A18 JF 2 N 06	18	2	0.13	4.42	28.6	5.06	6.51	44.62	69.19
M27500A16 JF 2 N 06	16	2	0.13	4.78	22.3	5.42	6.83	52.46	80.48
M27500A14 JF 2 N 06	14	2	0.13	5.64	14.4	6.28	7.83	72.24	105.23
M27500A12 JF 2 N 06	12	2	0.13	6.52	9.3	7.16	8.81	98.36	137.61
M27500A22 JF 3 N 06	22	3	0.13	3.41	79.4	4.05	4.55	33.25	44.91
M27500A20 JF 3 N 06	20	3	0.13	4.21	51.1	4.84	6.15	46.52	78.39
M27500A18 JF 3 N 06	18	3	0.13	4.72	28.6	5.36	6.91	59.88	90.51
M27500A16 JF 3 N 06	16	3	0.13	5.11	22.3	5.75	7.25	71.13	106.74
M27500A14 JF 3 N 06	14	3	0.13	6.04	14.4	6.68	8.33	99.58	141.67
M27500A12 JF 3 N 06	12	3	0.13	6.99	9.3	7.62	9.39	137.50	188.08

M27500A ** JF +N 24

High temperature fire resistant shielded and jacketed cables

Applications

Fire resistant cable with good mechanical and electrical performances. Intended for use in essential services.

600 Volts RMS

Construction

CONDUCTOR

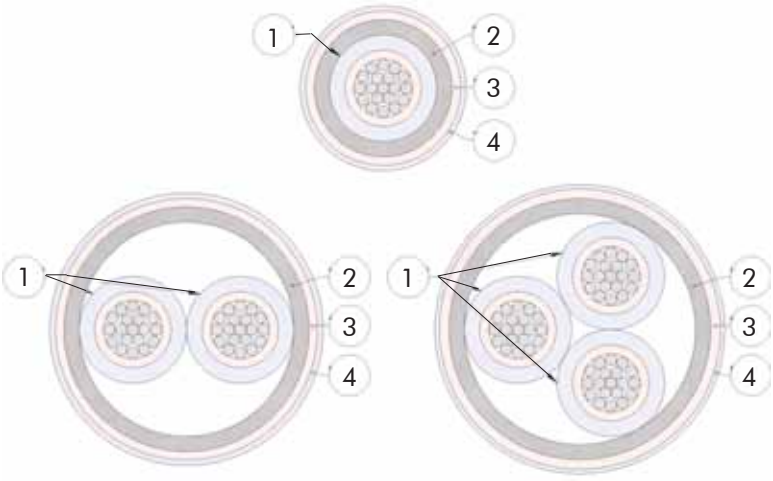
1- FRM-A-US (AWG 22 and 20)
FRM-US (other AWG)

SCREEN

2- Nickel coated copper braid

JACKET

3- Polyimide tape
4- UV PTFE tapes



Other characteristics

Operating frequency : up to 2000 Hz

Standards

MIL-W-25038/3
MIL-DTL-27500

-65°C to +200°C
-85°F to +392°F

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Very good
resistance to
aircraft fluids

RoHS

TYPE M27500 ** JF + N 24 (Inch, pound)

PART NUMBERS	US AWG	Number of Cores	Screen		Finished Cable				
			Strands AWG Size	O.D. (inch) Nom.	Resistance at 20°C (68°F) of Cores (Ohms/1000 ft)	Diameter (inch)		Weight (lb/1000ft)	
					Max.	Nom.	Max.	Nom.	Max.
M27500A22 JF 1 N 24	22	1	38	0.069	23.7	0.083	0.095	7.69	9.97
M27500A20 JF 1 N 24	20	1	36	0.091	15.27	0.105	0.130	12.23	19.01
M27500A18 JF 1 N 24	18	1	36	0.100	8.53	0.115	0.144	15.34	21.84
M27500A16 JF 1 N 24	16	1	36	0.107	6.67	0.122	0.150	17.96	25.53
M27500A14 JF 1 N 24	14	1	36	0.124	4.33	0.139	0.170	24.53	33.53
M27500A12 JF 1 N 24	12	1	36	0.142	2.78	0.156	0.189	33.17	44.13
M27500A22 JF 2 N 24	22	2	36	0.126	24.2	0.141	0.155	14.95	19.64
M27500A20 JF 2 N 24	20	2	36	0.161	15.58	0.175	0.213	21.45	34.59
M27500A18 JF 2 N 24	18	2	36	0.180	8.72	0.194	0.241	27.49	39.99
M27500A16 JF 2 N 24	16	2	36	0.194	6.80	0.209	0.253	32.60	47.25
M27500A14 JF 2 N 24	14	2	36	0.228	4.39	0.243	0.293	45.46	62.86
M27500A12 JF 2 N 24	12	2	36	0.263	2.83	0.278	0331	62.53	83.62
M27500A22 JF 3 N 24	22	3	36	0.134	24.2	0.149	0.163	19.73	25.44
M27500A20 JF 3 N 24	20	3	36	0.172	15.58	0.186	0.226	28.78	46.17
M27500A18 JF 3 N 24	18	3	36	0.192	8.72	0.207	0.256	37.46	53.48
M27500A16 JF 3 N 24	16	3	36	0.208	6.80	0.222	0.270	44.84	64.01
M27500A14 JF 3 N 24	14	3	36	0.244	4.39	0.259	0.312	63.43	86.29
M27500A12 JF 3 N 24	12	3	36	0.282	2.83	0.296	0.354	88.35	116.31

TYPE M27500 ** JF + N 24 (Metric units)

PART NUMBERS	US AWG	Number of cores	Screen		Finished Cable				
			Strands (mm)	O.D. (mm) Nom.	Resistance at 20°C (68°F) of Cores (Ohms/Km)	Diameter (mm)		Weight (Kg/Km)	
					Max.	Nom.	Max.	Nom.	Max.
M27500A22 JF 1 N 24	22	1	0.10	1.74	77.8	2.11	2.42	11.44	14.84
M27500A20 JF 1 N 24	20	1	0.13	2.30	50.1	2.67	3.30	18.20	28.28
M27500A18 JF 1 N 24	18	1	0.13	2.54	28.0	2.91	3.65	22.82	32.50
M27500A16 JF 1 N 24	16	1	0.13	2.73	21.9	3.10	3.81	26.73	37.99
M27500A14 JF 1 N 24	14	1	0.13	3.16	14.2	3.53	4.31	36.50	49.89
M27500A12 JF 1 N 24	12	1	0.13	3.60	9.12	3.97	4.80	49.36	65.67
M27500A22 JF 2 N 24	22	2	0.13	3.20	79.4	3.57	3.93	22.25	29.23
M27500A20 JF 2 N 24	20	2	0.13	4.08	51.1	4.45	5.41	31.92	51.47
M27500A18 JF 2 N 24	18	2	0.13	4.56	28.6	4.93	6.11	40.90	59.51
M27500A16 JF 2 N 24	16	2	0.13	4.94	22.3	5.31	6.43	48.51	70.31
M27500A14 JF 2 N 24	14	2	0.13	5.80	14.4	6.17	7.43	67.64	93.54
M27500A12 JF 2 N 24	12	2	0.13	6.68	9.3	7.05	8.41	93.04	124.43
M27500A22 JF 3 N 24	22	3	0.13	3.41	79.4	3.78	4.15	29.36	37.85
M27500A20 JF 3 N 24	20	3	0.13	4.36	51.1	4.73	5.75	42.83	68.70
M27500A18 JF 3 N 24	18	3	0.13	4.87	28.6	5.25	6.50	55.74	79.58
M27500A16 JF 3 N 24	16	3	0.13	5.28	22.3	5.65	6.85	66.72	95.25
M27500A14 JF 3 N 24	14	3	0.13	6.21	14.4	6.58	7.93	94.39	128.40
M27500A12 JF 3 N 24	12	3	0.13	7.16	9.3	7.53	8.99	131.47	173.07

BMS 13-55 TYPE 2 CLASS 1

High temperature fire resistant wires

Applications

Heavy duty applications in aero-engines and high temperature areas with good mechanical and electrical performances.

600 Volts RMS

Construction

CONDUCTOR

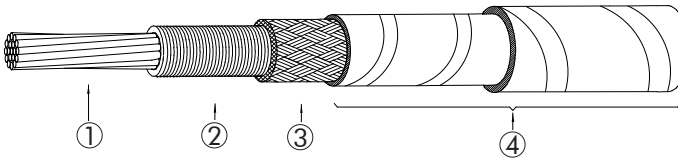
1- Nickel clad high strength copper alloy strands

INSULATION

2- Impregnated inorganic fiber

3- TFE coated glass braid

4- PTFE tapes (fused)



Other characteristics

Operating frequency : up to 2000 Hz

Standards

BMS 13-55 fire test (aged and unaged)

-65°C to +260°C
-85°F to 500°F

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

Very good resistance to aircraft fluids

RoHS

BMS 13-55 TYPE 2 CLASS 1 (Inch, pound)

PART NUMBER	US AWG	Conductor			Finished Wire					
		Stranding (Nbr of strands / gauge of strands)	Diameter (inch)		Nominal aera (circular mils)	Resistance at 20°C (68°F) Ohms/1000 ft	Diameter (inch)		Weight (lb/1000ft)	
			Nom.	Max.		Max.	Min.	Max.	Min.	Max.
BMS 13-55 T02 C01 G022	22	19 / 34	0.031	0.033	754	24.63	0.082	0.090	6.03	6.76
BMS 13-55 T02 C01 G020	20	19 / 32	0.039	0.041	1214	15.27	0.088	0.097	7.61	8.55
BMS 13-55 T02 C01 G018	18	19 / 30	0.049	0.052	1900	9.77	0.096	0.105	10.00	11.21
BMS 13-55 T02 C01 G016	16	19 / 29	0.055	0.061	2426	7.66	0.103	0.112	12.07	13.67
BMS 13-55 T02 C01 G014	14	19 / 27	0.070	0.074	3838	4.97	0.117	0.128	17.33	19.46
BMS 13-55 T02 C01 G012	12	19 / 25	0.088	0.093	6097	3.20	0.149	0.164	27.65	30.56
BMS 13-55 T02 C01 G010	10	7 x 7 / 25	0.122	0.128	9898	1.93	0.183	0.200	42.74	47.24

BMS 13-55 TYPE 2 CLASS 1 (Metric units)

PART NUMBER	US AWG	Conductor			Finished Wire					
		Stranding (Nbr of Strand x Diam. of strands) mm	Diameter (mm)		Nominal Aera	Resistance at 20°C (68°F) (Ohms/Km.)	Diameter (mm)		Weight (Kg/Km)	
			Nom.	Max.	(mm^2)	Max.	Min..	Max.	Min..	Max.
BMS 13-55 T02 C01 G022	22	19 x 0.16	0.79	0.84	0.38	80.81	2.08	2.29	8.97	10.6
BMS 13-55 T02 C01 G020	20	19 x 0.20	0.99	1.04	0.62	50.10	2.24	2.46	11.32	12.72
BMS 13-55 T02 C01 G018	18	19 x 0.25	1.24	1.32	0.96	32.05	2.44	2.67	14.88	16.68
BMS 13-55 T02 C01 G016	16	19 x 0.287	1.40	1.55	1.23	25.13	2.62	2.84	17.96	20.34
BMS 13-55 T02 C01 G014	14	19 x 0.36	1.78	1.88	1.94	16.31	2.97	3.25	25.79	28.96
BMS 13-55 T02 C01 G012	12	19 x 0.45	2.24	2.36	3.09	10.50	3.78	4.17	41.14	45.47
BMS 13-55 T02 C01 G010	10	7 x 7 x 0.36	3.10	3.25	5.02	6.33	4.65	5.08	63.60	70.29

Identification

Color : white with red stripe

Marking :

*W55/2/1- ** F0241

With :

* = Specification revision letter

** = AWG

TYPE 3000 A

Fire resistant cable

Applications

Used at high ambient temperatures, up to 300°C at peak. They withstand a 1090°C flame applied for 5 minutes. Non-flammable, they withstand most solvents.

600 Volts RMS

Construction

CONDUCTOR

1- Stranded nickel clad copper Feltlike winding of siliceous fibers

INSULATION

2- PTFE (wrapped)

BRAID

3- Glass fiber braid coated with a

4- PTFE varnish

Other characteristics

Very good fire resistance

Technical requirements and control conditions

AIR 4527 specification (high temperature cables and fire resistant cables),
B.N.Aé NF.L 52-127 specification (07/1978)
- RC Aero 140-55 A (03/1962).

Interchangeability

MIL-W-25038

Standards

AIR 4527, B.N.Aé
Approved by the Air Ministry under letters n°31573 STA/EQ/E2 (10-02-65)
Registred at the B.N.Aé n°6418
400 C

-50°C to +280°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

RoHS

TYPE 3000 A (Metric units)

References		Gauge	Conductor			Core		Electrical Values	
			Construction	Nominal diameter	Tensile strength	Overall diameter + 0.1	Average weight	D.C. resistance at 20°C (maxi.)	Current rating
Type	Cross section	AWG	n x Ø mm	mm	daN	mm	g/m	Ω / km	A
3000A	0.38	22	12 x 0.20	0.85	10.5	2.5	9.5	71.20	7
3000A	0.60	20	19 x 0.20	1.03	16.5	2.8	12.5	45.00	11
3000A	0.93	18	19 x 0.25	1.28	24.0	3.1	17.5	28.80	16
3000A	1.34	16	19 x0.30	1.53	> 30.0	3.5	21.5	20.00	22
3000A	1.91	14	27 x0.30	1.87	> 30.0	4.0	31.5	14.40	32
3000A	3.18	12	45 x0.30	2.40	> 30.0	4.5	47.5	8.45	41
3000A	5.15	10	73 x0.30	3.10	> 30.0	5.3	71.0	5.20	55
3000A	8.98	8	127 x 0.30	4.20	> 30.0	6.7	114.0	3.00	75
3000A	13.40	6	27 x 7 x 0.30	5.60	> 30.0	8.1	172.0	2.07	100
3000A	21.80	4	37 x 12 x 0.25	7.30	> 30.0	9.6	262.0	1.27	135
3000A	34.50	2	37 x 19 x 0.25	8.80	> 30.0	11.5	414.0	0.80	181
3000A	41.80	1	37 x 23 x 0.25	9.80	> 30.0	12.8	480.0	0.66	211
3000A	52.70	0	37 x 29 x 0.25	10.80	> 30.0	14.2	618.0	0.52	245
3000A	67.20	00	37 x 37 x 0.25	12.40	> 30.0	15.7	781.0	0.41	283

The currents shown are valid for single wires in air. If the ambient temperature is lower than 250°C the current ratings can be above those quoted in Air 7822 Specification, provided that the conductor temperature does not exceed 300°C. For cables in bundle please refer to Air 7822 Specification.

Identification

Color coding :

Natural color + red stripe

BMS 13-67

310°C rating very high temperatures fire resistant shielded and jacketed cables

Applications

Aero engines and very high temperature applications, fire resistant cable.

600 Volts RMS

Construction

CONDUCTOR

1- Nickel clad high strength copper alloy conductor

INSULATION

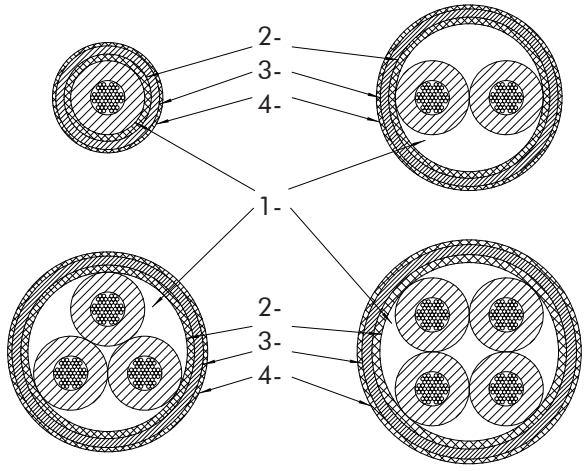
Very high temperature and fire resistant insulation
High temperature PTFE tapes
PTFE coated fiber glass braid

SHIELD

2- Nickel clad copper braid

JACKET

3- High temperature PTFE tapes
4- PTFE coated fiber glass braid



Other characteristics

Operating frequency : up to 2000 Hz
Fire resistance : insulation resistance 10 000 Ohms minimum
Bend radius : minimum 5 times cable O.D.

Standards

BMS 13-67 QPL

-65°C to +321°C (for 10 000 hours)
-85°F to +610°F (for 10 000 hours)
-65°C to +313°C (for 20 000 hours)
-85°F to +595°F (for 20 000 hours)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

RoHS

BMS 13-67 (Metric units)

CORE (only for use as BMS13-67T02 Core)

CORE	US AWG	Conductors			Finished Wire				
		Strands (Nbr x mm)	O.D. (mm)		Maximum DC Resistance (Ohms/Km)		Diameter (mm)		Weight (g/m)
			Nom.	Max .	at 23°C (73°F)	at 370°C (698°F)	Nom.	Max.	Nom.
BMS13-67T0*C01G022	22	37 x 0.115	0.78	0.84	80.8	192.59	2.49	2.61	11.33
BMS13-67T0*C01G020	20	7 x 7 x 0.115	0.99	1.04	50.1	118.37	2.65	2.78	12.72
BMS13-67T0*C01G018	18	7 x 7 x 0.150	1.30	1.32	32.0	74.28	2.91	3.03	16.70
BMS13-67T0*C01G016	16	7 x 7 x 0.175	1.51	1.55	25.1	55.77	3.10	3.22	20.11
BMS13-67T0*C01G014	14	7 x 7 x 0.210	1.81	1.88	16.3	36.09	3.38	3.52	25.52
BMS13-67T0*C01G012	12	7 x 7 x 0.270	2.33	2.36	10.5	23.23	3.92	4.04	37.21
BMS13-67T0*C01G010	10	7 x 7 x 0.360	3.11	3.25	6.34	14.01	4.78	4.92	59.90

FINISHED CABLE

PART NUMBER	US AWG	Nbr of cores	Shield		Finished Cable							
			Strands O.D. (mm)	O.D. (mm)	Resistance at 23°C (73°F) of Cores (Ohms/Km)	Diameter (mm)			Weight (g/m)		
				Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.
BMS13-67T02C01G022	22	1	0.13	3.01	80.8	3.53	3.71	3.89	27.83	29.60	31.37
BMS13-67T02C01G020	20	1	0.13	3.17	50.1	3.66	3.87	4.06	30.03	31.95	33.87
BMS13-67T02C01G018	18	1	0.13	3.43	32.0	4.04	4.18	4.34	35.77	38.06	40.34
BMS13-67T02C01G016	16	1	0.13	3.62	25.1	4.19	4.36	4.55	39.51	42.02	44.55
BMS13-67T02C01G014	14	1	0.13	3.90	16.3	4.47	4.68	4.88	47.62	50.12	52.63
BMS13-67T02C01G012	12	1	0.13	4.44	10.5	5.03	5.19	5.33	61.60	64.85	68.09
BMS13-67T02C01G010	10	1	0.13	5.30	6.34	5.87	6.04	6.22	87.99	92.61	97.26
BMS13-67T02C02G022	22	2	0.13	5.50	82.4	6.02	6.32	6.63	49.64	52.81	55.98
BMS13-67T02C02G020	20	2	0.13	5.82	51.1	6.30	6.62	6.96	53.61	57.04	60.46
BMS13-67T02C02G018	18	2	0.13	6.34	32.7	6.86	7.13	7.42	63.64	67.70	71.77
BMS13-67T02C02G016	16	2	0.13	6.72	25.6	7.21	7.52	7.82	72.12	76.74	81.33
BMS13-67T02C02G014	14	2	0.13	7.28	16.6	7.77	8.10	8.43	86.44	90.99	95.53
BMS13-67T02C03G022	22	3	0.13	5.89	82.4	6.35	6.68	7.01	64.74	68.86	73.00
BMS13-67T02C03G020	20	3	0.13	6.23	51.1	6.65	7.02	7.37	70.58	75.08	79.59
BMS13-67T02C03G018	18	3	0.13	6.79	32.7	7.29	7.60	7.90	85.37	90.81	96.26
BMS13-67T02C03G016	16	3	0.13	7.20	25.6	7.67	8.00	8.33	97.12	103.31	109.52
BMS13-67T02C03G014	14	3	0.13	7.80	16.6	8.28	8.60	8.94	117.08	123.24	129.41
BMS13-67T02C04G022	22	4	0.13	6.53	82.4	6.99	7.34	7.70	80.50	85.63	90.77
BMS13-67T02C04G020	20	4	0.13	6.92	51.1	7.34	7.71	8.10	87.78	93.39	98.98
BMS13-67T02C04G018	18	4	0.13	7.54	32.7	8.00	8.34	8.66	106.51	113.31	120.11
BMS13-67T02C04G016	16	4	0.13	8.00	25.6	8.43	8.80	9.14	122.21	130.01	137.80
BMS13-67T02C04G014	14	4	0.13	8.68	16.6	9.09	9.47	9.86	148.19	156.00	163.80

BMS 13-67 (Inch, pound)

CORE (only for use as BMS13-67T02 Core)

CORE	US AWG	Conductors			Finished Wire				
		Strands (No. x AWG)	O.D. (inch)		Maximum DC resistance (Ohms/1000 ft)		Diameter (inch)		Weight (lb/1000 ft)
			Nom.	Max .	at 23°C (73°F)	at 370°C (698°F)	Nom.	Max.	Nom.
BMS13-67T0*C01G022	22	37 / 37	0.031	0.033	24.6	58.7	0.098	0.103	7.61
BMS13-67T0*C01G020	20	7 x 7 / 37	0.039	0.041	15.3	36.08	0.104	0.110	8.55
BMS13-67T0*C01G018	18	7 x 7 / 35	0.051	0.052	9.77	22.64	0.115	0.119	11.22
BMS13-67T0*C01G016	16	7 x 7 / 33	0.059	0.061	7.66	17.00	0.122	0.127	13.51
BMS13-67T0*C01G014	14	7 x 7 / 32	0.071	0.074	4.97	11.00	0.133	0.138	17.15
BMS13-67T0*C01G012	12	7 x 7 / 30	0.092	0.093	3.20	7.08	0.154	0.159	25.01
BMS13-67T0*C01G010	10	7 x 7 / 27	0.122	0.128	1.93	4.27	0.188	0.194	40.25

FINISHED CABLE

PART NUMBER	US AWG	Nbr of cores	Shield		Finished Cable							
			Strands AWG Size	O.D. (inch)	Resistance at 23°C (73°F) of cores Ohms/1000 ft	Diameter (inch)			Weight (lb/1000ft)		
				Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.
BMS13-67T02C01G022	22	1	36	0.119	24.6	0.139	0.146	0.153	18.7	19.89	21.08
BMS13-67T02C01G020	20	1	36	0.125	15.3	0.144	0.152	0.160	20.18	21.47	22.76
BMS13-67T02C01G018	18	1	36	0.135	9.77	0.159	0.165	0.171	24.04	25.58	27.11
BMS13-67T02C01G016	16	1	36	0.143	7.66	0.165	0.172	0.179	26.55	28.24	29.94
BMS13-67T02C01G014	14	1	36	0.154	4.97	0.176	0.184	0.192	32	33.68	35.37
BMS13-67T02C01G012	12	1	36	0.175	3.20	0.198	0.204	0.210	41.4	43.58	45.76
BMS13-67T02C01G010	10	1	36	0.209	1.93	0.231	0.238	0.245	59.13	62.24	65.36
BMS13-67T02C02G022	22	2	36	0.217	25.1	0.237	0.249	0.261	33.36	35.49	37.62
BMS13-67T02C02G020	20	2	36	0.229	15.6	0.248	0.261	0.274	36.03	38.33	40.63
BMS13-67T02C02G018	18	2	36	0.250	9.97	0.270	0.281	0.292	42.77	45.5	48.23
BMS13-67T02C02G016	16	2	36	0.265	7.81	0.284	0.296	0.308	48.47	51.57	54.66
BMS13-67T02C02G014	14	2	36	0.287	5.07	0.306	0.319	0.332	58.09	61.15	64.2
BMS13-67T02C03G022	22	3	36	0.232	25.1	0.250	0.263	0.276	43.51	46.28	49.06
BMS13-67T02C03G020	20	3	36	0.245	15.6	0.262	0.276	0.290	47.43	50.46	53.49
BMS13-67T02C03G018	18	3	36	0.267	9.97	0.287	0.299	0.311	57.37	61.03	64.69
BMS13-67T02C03G016	16	3	36	0.283	7.81	0.302	0.315	0.328	65.27	69.43	73.6
BMS13-67T02C03G014	14	3	36	0.307	5.07	0.326	0.339	0.352	78.68	82.82	86.97
BMS13-67T02C04G022	22	4	36	0.257	25.1	0.275	0.289	0.303	54.1	57.55	61
BMS13-67T02C04G020	20	4	36	0.272	15.6	0.289	0.304	0.319	58.99	62.76	66.52
BMS13-67T02C04G018	18	4	36	0.297	9.97	0.315	0.328	0.341	71.58	76.15	80.72
BMS13-67T02C04G016	16	4	36	0.315	7.81	0.332	0.346	0.360	82.13	87.37	92.61
BMS13-67T02C04G014	14	4	36	0.342	5.07	0.358	0.373	0.388	99.59	104.84	110.08

STUDY 124585

Very high temperatures fire resistant wires

Applications

Heavy duty applications in Aero-engines and very high temperature areas.

600 Volts RMS

Construction

CONDUCTOR

1- 19 strands of nickel clad copper conductor (Ø of the strands 0.287 mm)

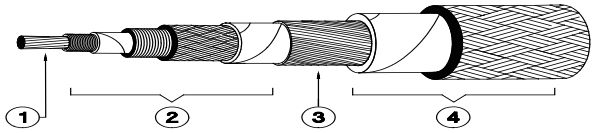
2- Special fire resistant composite insulation, very high temperature

SCREEN

3- Nickel clad copper helicoidal screen (Ø of the strands 0.13 mm)

JACKET

4- Very high temperature resistant composite



Other characteristics

Operating frequency : up to 2000 Hz

Standards

BMS 13-55 for fluids and fire resistance

ST 448 006 3 01 A

-65°C to +300°C
(for 20 000 hours)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

RoHS

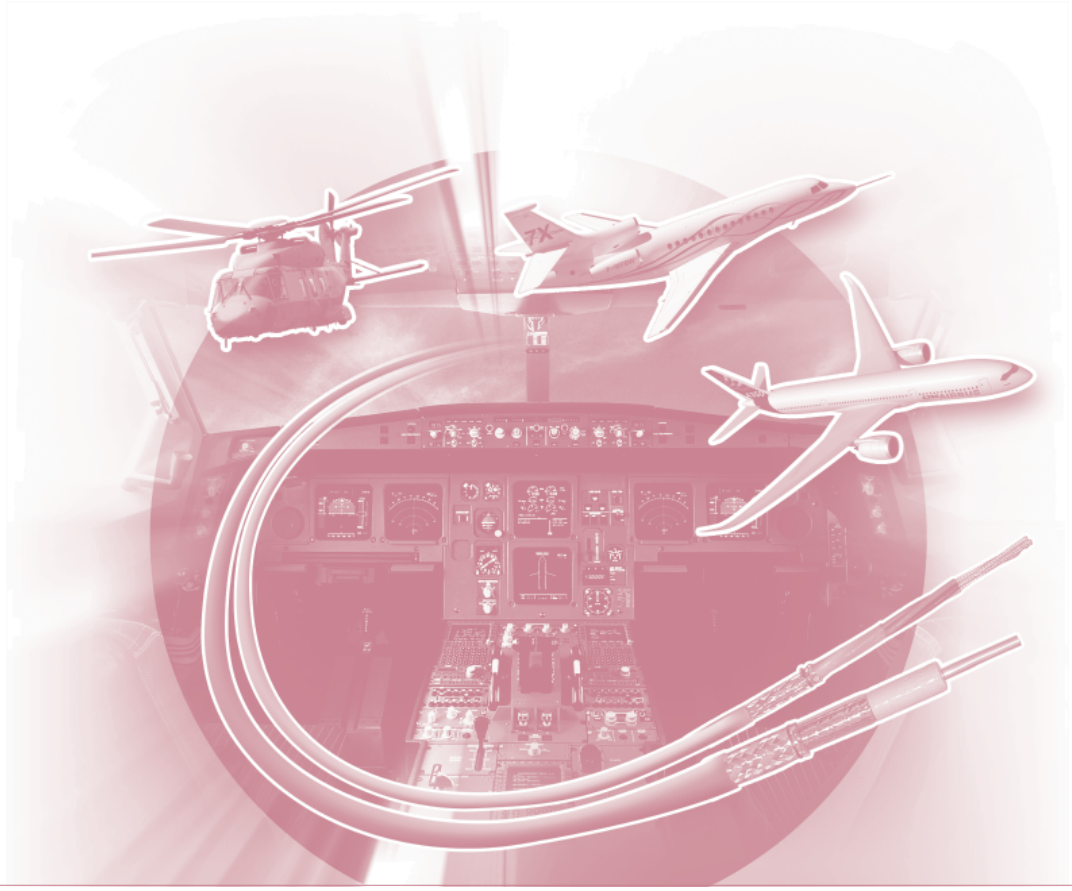
STUDY 124585 (Metric units)

Reference	US AWG	Conductor					Insulation		Screen		Finished cable		
		Construction (N x mm)	Diameter (mm)		DC resistance (Ohms/Km)		Diameter (mm)		Strands	Nom.	Ext. Diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.at 20°C	Nom. 370°C	Nom.	Max.	(mm)	(mm)	Mini.	Max.	Max.
Et.124585	16	19 x 0.287	1.40	1.55	22.5	55.8	2.90	3.40	0.13	3.45	4.15	4.45	42

Operating life (approx.)

Combinaison of :

30 hours at +370°C
+ 330 hours at +350°C
+ 300 hours at +310°C
+ 2500 hours at +300°C
+ 32840 hours at +260°C



PART 4
Coaxial cables for high frequency transmission

KX & RG COAXIAL CABLES

KX/RG

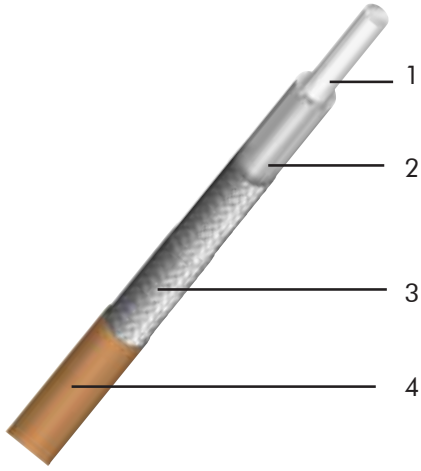
Applications

Coaxial cables for high frequency connections.

Coaxial cables from 50 Ω to 95 Ω

Construction

1- CONDUCTOR
Stranded or solid, silver plated copper (SPC) or silver plated copper clad steel (SPCCS)
2- DIELECTRIC
PTFE
3- SCREEN
Single or double braid in bare silver plated copper
4- SHEATH
FEP, PFA or glass fiber

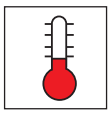


Bending radius

5 x overall diameter (for most coaxial cables)

Standards

MIL-DTL-17
NF-C 93-550


See on the following pages


See on the following pages


Flexible

50 Ω KX & RG coaxial cables

Max. oper. temp.	Dielectric	References according to		Nexans ref.	Conductor			Dielectric Ø mm	Braids		Sheath		Av. weight kg/km	Application
		NF C93-550	MIL C17		Composition n x mm	Nature	Ø mm		Nb	Nature	Nature	Overall Ø mm		
85°C	PE	KX 3B		373095	7 x 0.16	CCS	0.48	1.50 ±0.10	1	TPC	PVC	2.54 ±0.13	10	①
			RG 174 AU	373171	7 x 0.16	CCS	0.48	1.52 ±0.08	1	TPC	PVC	2.79 ±0.13	12	①
		KX 15	RG 58 CU	373117	19 x 0.18	TPC	0.90	2.95 ±0.10	1	TPC	PVC	4.95 ±0.15	36	①
			RG 223 U	373184	1 x 0.89	SPC	0.89	2.95 ±0.10	2	SPC	PVC	5.38 ±0.10	55	①
		KX 4		373099	7 x 0.75	BC	2.25	7.25 ±0.15	1	BC	PVC	10.30 ±0.20	158	①
			RG 213 U	87023	7 x 0.75	BC	2.25	7.25 ±0.15	1	BC	PVC	10.30 ±0.20	158	①
			RG 214 U	373181	7 x 0.75	SPC	2.25	7.25 ±0.18	2	SPC	PVC	10.80 ±0.18	196	①
200°C AND +	PTFE	KX 21 A		87126	7 x 0.10	SPCCS	0.30	0.87 ±0.07	1	SPC	FEP	1.80 ±0.10	9.6	②
			RG 178 BU (M17/169-00001)	87069	7 x 0.10	SPCCS	0.30	0.84 ±0.05	1	SPC	FEP	1.80 ±0.10	9.6	②
			RG 196 (M17/93-00001)	87247	7 x 0.10	SPCCS	0.30	0.84 ±0.05	1	SPC	PFA	1.80 ±0.10	9.6	②
		KX 22 A		87017	7 x 0.17	SPCCS	0.51	1.50 ±0.10	1	SPC	FEP	2.50 ±0.10	17	②
			RG 316 U (M17/172-00001)	85790	7 x 0.17	SPCCS	0.51	1.52 ±0.08	1	SPC	FEP	2.49 ±0.10	17	②
			RG 188 AU (M17/138-00001)	87245	7 x 0.17	SPCCS	0.51	1.52 ±0.08	1	SPC	PFA	2.49 ±0.10	17	②
			RG 142 AU	87009	1 x 0.94	SPCCS	0.94	2.95 ±0.13	2	SPC	Glass fiber	5.10 ±0.15	66	③
			RG 142 BU (M17/158-00001)	87066	1 x 0.94	SPCCS	0.94	2.95 ±0.13	2	SPC	FEP	4.95 ±0.13	68	③
			RG 400 U (M17/175-00001)	87125	19 x 0.20	SPC	0.98	2.95 ±0.13	2	SPC	FEP	4.95 ±0.13	66	③
		KX 23		87063	7 x 0.34	SPC	1.02	2.95 ±0.15	2	SPC	Glass fiber	5.10 ±0.20	70	③
			RG 393 (M17/174-00001)	85398	7 x 0.80	SPC	2.40	7.24 ±0.13	2	SPC	FEP	9.91 ±0.25	241	③
		KX 24		87029	7 x 0.80	SPC	2.40	7.25 ±0.12	2	SPC	Glass fiber	10.90 ±0.25	216	③

BC : bare copper
TPC : tin plated copper
SPC : silver plated copper
CCS : copper clad steel
SPCCS : silver plated copper clad steel

① High frequency connections.

② High frequency connections operating at high temperature. By their small dimensions, they are mainly designed for miniaturized connections, operating at high or low temperature.

50 Ω KX & RG coaxial cables

Oper. temperature Min / Max	Fire properties	Max. op. frequency GHz	Nominal capacitance pF/m	Attenuation (db/100m)				Dielectric strength kV	Powers at 40°C (kw)				Velocity of propagation	Continuous working voltage
				200 MHz	400 MHz	3000 MHz	10000 MHZ		200 MHz	400 MHz	3000 MHz	10000 MHz		
-40 +85	NF C 32070/C2 IEC 60332-1&2	3	100.0	42	60	220		2	0.057	0.042	0.013		65.9	1100
-40 +85	NF C 32070/C2 IEC 60332-1&2	1	106.0	42	60	220		4.5	0.057	0.042	0.013		65.9	1100
-40 +85	NF C 32070/C2 IEC 60332-1&2	3	100.0	23	32	98		5	0.125	0.09	0.031		65.9	1400
-40 +85	NF C 32070/C2 IEC 60332-1&2	12.4	106.0	20	30	100	240	5	0.125	0.09	0.031	0.017	65.9	1400
-40 +85	NF C 32070/C2 IEC 60332-1&2	3	100.0	9.5	14.5	55		5	0.42	0.3	0.095	0.05	65.9	3700
-40 +85	NF C 32070/C2 IEC 60332-1&2	3	100.0	9.5	14.5	55		5	0.42	0.3	0.095	0.05	65.9	3700
-40 +85	NF C 32070/C2 IEC 60332-1&2	11	106.0	9	13	46	100	10	0.42	0.3	0.095	0.05	65.9	3700
-90 +200	NF C 32070/C1&C2 IEC 60332-1	3	95.0	65	95	300		1	0.085	0.057	0.018		69.5	750
-90 +200	NF C 32070/C1&C2 IEC 60332-1	3	105.0	58	80	225		2	0.085	0.057	0.018		69.5	750
-90 +230	NF C 32070/C1&C2 IEC 60332-1	3	105.0	58	80	225		2	0.085	0.057	0.018		69.5	750
-90 +200	NF C 32070/C1&C2 IEC 60332-1	3	95.0	40	55	160		2	0.17	0.11	0.032		69.5	900
-90 +200	NF C 32070/C1&C2 IEC 60332-1	3	105.0	40	55	160		2	0.17	0.11	0.032		69.5	900
-90 +230	NF C 32070/C1&C2 IEC 60332-1	3	105.0	40	55	160		2	0.17	0.11	0.032		69.5	900
-90 +250	NF C 32070/C1&C2 IEC 60332-1	3	95.0	19	27	79	163	5	0.66	0.45	0.15	0.08	69.5	1400
-90 +200	NF C 32070/C1&C2 IEC 60332-1	3	105.0	19	27	79	163	5	0.66	0.45	0.15	0.08	69.5	1400
-90 +200	NF C 32070/C1&C2 IEC 60332-1	3	105.0	20	29	89	185	5	0.66	0.45	0.15	0.08	69.5	1400
-90 +250	NF C 32070/C1&C2 IEC 60332-1	3	95.0	20	29	89	185	5	0.66	0.45	0.15	0.08	69.5	1400
-90 +200	NF C 32070/C1&C2 IEC 60332-1	11	105.0	9.3	14	47	109	4	2	1.3	0.43	0.22	69.5	3700
-90 +250	NF C 32070/C1&C2 IEC 60332-1	3	95.0	9.3	14	47	109	10	2	1.3	0.43	0.22	69.5	3700

③ High frequency connections operating at high temperature, or on equipment excepted to work under severe conditions without failure.

75 Ω KX & RG coaxial cables

Max. op. temp.	Dielectric	References according to		Nexans ref.	Conductor			Dielectric Ø mm	Braids		Sheath		Av. weight kg/km	Application
		NF C 93-550	MIL C17		Compo-sition n x Ø mm	Nature	Ø mm		Nb	Nature	Nature	Overall Ø mm		
85°C	PE		RG 59 BU	390650	1 x 0.58	CCS	0.58	3.71 ± 0.10	1	BC	PVC	6.15 ± 0.10	50	①
		KX 6A		373100	7 x 0.20	BC	0.60	3.70 ± 0.12	1	BC	PVC	6.10 ± 0.15	53	①
			RG 11 AU	373135	7 x 0.40	TPC	1.20	7.24 ± 0.18	1	BC	PVC	10.30 ± 0.18	136	①
			RG 216 U	373182	7 x 0.40	TPC	1.20	7.24 ± 0.18	2	BC	PVC	10.80 ± 0.18	177	①
		KX 8		373113	7 x 0.40	BC	1.20	7.25 ± 0.15	1	BC	PVC	10.30 ± 0.20	135	①
200°C and +	PTFE		RG 179 BU (M17/94-RG 179)	081997	7 x 0.10	SPCCS	0.30	1.60 ± 0.08	1	SPC	FEP	2.54 ± 0.13	16.9	②
			RG 187 AU (M17/136-00001)	087244	7 x 0.10	SPCCS	0.30	1.60 ± 0.08	1	SPC	PFA	2.54 ± 0.13	16.9	②

93-95 Ω KX & RG coaxial cables

Max. op. temp.	Dielectric	References according to		Nexans ref.	Conductor			Dielectric Ø mm	Braids		Sheath		Av. weight kg/km	Application
		NF C 93-550	MIL C17		Compo-sition n x Ø mm	Nature	Ø mm		Nb	Nature	Nature	Overall Ø mm		
93 Ω														
85°C	PE		RG 62 AU	373148	1 x 0.64	CCS	0.64	3.71 ± 0.13	1	BC	PVC	6.15 ± 0.18	46	①
95 Ω														
200°C and +	PTFE		RG 180 BU (M17/95-RG 180)	087241	7 x 0.10	SPCCS	0.30	2.59 ± 0.08	1	SPC	FEP	3.58 ± 0.10	27	②
			RG 195 AU (M17/137-00001)	087246	7 x 0.10	SPCCS	0.30	2.59 ± 0.08	1	SPC	PFA	3.58 ± 0.10	27	②

BC : bare copper
TPC : tin plated copper
SPC : silver plated copper
CCS : copper clad steel
SPCCS : silver plated copper clad steel

① High frequency connections.

② High frequency connections operating at high temperature. By their small dimensions, they are mainly designed for miniaturized connections, operating at high or low temperature.

75 Ω KX & RG coaxial cables

Oper. temperature Min/Max	Fire properties	Max. op. frequency GHz	Nominal capaci-tance pF/m	Attenuation (db/100 m)				Dielectric strength kV	Powers at 40°C (kw)				Velocity of propa-gation	Conti-nuous working voltage
				200 MHz	400 MHz	3000 MHz	10000 MHz		200 MHz	400 MHz	3000 MHz	10000 MHz		
-40 +85	NF C 32070/C2 IEC 60332 – 1&2	1	72.2	16	23	73		7	0.17	0.12	0.042		65.9	1700
-40 +85	NF C 32070/C2 IEC 60332 – 1&2	3	67.0	16	23	73		4.2	0.17	0.12	0.042		65.9	1700
-40 +85	NF C 32070/C2 IEC 60332 – 1&2	1	72.2	9.5	13	45		10	0.42	0.3	0.095		65.9	3700
-40 +85	NF C 32070/C2 IEC 60332 – 1&2	3	72.2	9.5	13	45		10	0.42	0.3	0.095		65.9	3700
-40 +85	NF C 32070/C2 IEC 60332 – 1&2	3	67.0	9.5	13	45		8	0.42	0.3	0.095		65.9	3700
-90 +200	NF C 32070/C1&C2 IEC 60332 – 1	3	75.5	40	56	160		2	0.17	0.11	0.032		69.5	900
-90 +230	NF C 32070/C1&C2 IEC 60332 – 1	3	72.2	40	56	160		2	0.17	0.11	0.032		69.5	900

93-95 Ω KX & RG coaxial cables

Oper. temperature Min/Max	Fire properties	Max. op. frequency GHz	Nominal capaci-tance pF/m	Attenuation (db/100 m)				Dielectric strength kV	Powers at 40°C (kw)				Velocity of propa-gation	Conti-nuous working voltage
				200 MHz	400 MHz	3000 MHz	10000 MHz		200 MHz	400 MHz	3000 MHz	10000 MHz		
-40 +85	NF C 32070/C2 IEC 60332 – 1&2	1	47.6	14	22	100		3					83.0	750
-90 +200	NF C 32070/C1&C2 IEC 60332 – 1	3	50.5	30	43	120		2	0.35	0.25	0.08		69.5	900
-90 +230	NF C 32070/C1&C2 IEC 60332 – 1	3	50.5	30	43	120		2	0.35	0.25	0.08		69.5	900

nexans

STUDY 124962

50 Ohms, UV laser miniature coaxial cable

Applications

With similar transmission characteristics to KX 22A / RG 316U.
This cable has the following advantages :

- Lower diameter and weight .
- Better bendability.
- Better screening effectiveness (Double braid)
- UV Laser markability

Recommended for Aeronautics uses and miniature systems.

Construction

CONDUCTOR

1- 19x0.098 mm silvered plated copper alloy (Nom. Ø = 0.48 mm)

INSULATION

2- Expanded PTFE (Nom. Ø = 1.35 mm)

SHIELD

3- Silver plated copper 7/100 double braid
Coverage ≥62% US
(Nom. Ø = 2.00 mm)

JACKET

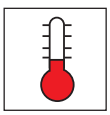
4- ETFE UV Laser markable
OD 2.35 ± 0.35 mm

Bend radius

Static : 12 mm
Dynamic : 25 mm

Standards

NF C 93-550
MIL C 17



-65°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

Study 124962 - Electrical characteristics

Characteristic impedance		50 ± 5 Ω
Linear capacitance a 1 kHz	Nominal value	90 pF/m
	Maximal value	100 pF/m
Attenuation at	10 MHz	0.09 dB/m
	100 MHz	0.26 dB/m
	200 MHz	0.37 dB/m
	500 MHz	0.65 dB/m
	1000 MHz	1.06 dB/m
	1500 MHz	1.33 dB/m
Voltage rating		250 Volts eff. 50 Hz
Voltage withstanding between dielectric and shield		3000 Volts eff. 50 Hz
Jacket dry impulse test		5000 Volts
DC resistance at 20°C		≤ 144 Ω/km
Insulation resistance	Between dielectric and shield	≥ 1500 MΩ.km
	Jacket	≥ 1500 MΩ.km
Nominal relative velocity of propagation		76 %

Study 124962 - Physical characteristics

Weight	Nominal	13.0 g/m
	Maximum	14.0 g/m
Strippability		Mechanical device or automatic stripper
Outer jacket color		Green

STUDY 132868

CAC 875 - 75 Ohms coaxial cable
UV laser markable cable

Applications

Designed for high frequency signal transmission in aircraft radio communication systems.

900 Volts RMS

Construction

CONDUCTOR

1- 7x0.10 mm high strength silver plated copper alloy (∅ 0.30 ± 0.025 mm)

INSULATION

2- Fluorocarbon dielectric with low epsilon (Max. ∅ 1.30 mm)

SHIELD

3- Silver plated copper double braid
Strands ∅ 0.08mm
Min. ∅ 1.75 mm
Max. ∅ 1.95 mm

JACKET

4- ETFE UV laser markable
Max. ∅ 2.37 mm

Bending radius

Static : 15 mm
Dynamic : 25 mm

Standards

prEN 4604-001, -002 and SP132868
prEN 3475

Other characteristics

Operating frequency : up to 3 GHz
Mould and fungus resistant

-65°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

Study 132868 - Electrical characteristics

Dry test voltage between core and shield	2000 V eff 50 Hz
Jacket dry impulse test	5000 V
Ohmic resistance of conductor	384 Ω/km max.
Insulation resistance	≥5000 MΩ.km
Characteristic impedance	75 ±5 Ω
Linear capacitance	60 pF/m max.
Velocity of propagation	≥ 222 000 km/s (74% relative)

Frequency (MHz)	Max rated power (W)	Attenuation at 20°C (dB/100m)
50	1250	23
100	900	30
200	600	43
300	450	53
400	400	63
1000	270	102
3000	150	176

Study 132868 - Physical characteristics

Maximum weight	12.5 g/m
Outer jacket color	Light blue

STUDY 124964

50 Ohms, UV laser miniature triaxial cable

Applications

With similar transmission characteristics to KX 22A / RG 316U. This cable has the following advantages :

- Lower diameter and weight
- Better bendability
- Better screening effectiveness (Double braid)
- UV Laser markability

Recommended for Aeronautics uses and miniature systems.

Construction

CONDUCTOR

1- 19x0.098 mm silver plated copper alloy (Nom. ∅ 0.48 mm)

INSULATION

2- Expanded PTFE
Nom. ∅ 1.35 mm

SHIELD

3- Silver plated copper 7/100 double braid
Coverage ≥ 62% US
Nom. ∅ 2.00 mm

INNER JACKET

4- FEP OD ∅ 2.35 ±0.05 mm

SHIELD

5- Silver plated copper 10/100
Coverage ≥ 62%
Nom. ∅ 2.80 mm

OUTER JACKET

6- ETFE UV laser markable
OD ∅ 3.45 ±0.10 mm

Minimum bending radius

Static : 17 mm
Dynamic : 35 mm

Standards

NF C 93 550
MIL C 17

-65°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

Study 124964 - Electrical characteristics

Characteristic impedance		50 ± 5 Ω
Linear capacitance a 1 kHz	Nominal value	90 pF/m
	Maximal value	100 pF/m
Attenuation at	10 MHz	0.09 dB/m
	100 MHz	0.26 dB/m
	200 MHz	0.37 dB/m
	500 MHz	0.65 dB/m
	1000 MHz	1.06 dB/m
	1500 MHz	1.33 dB/m
Voltage rating		250 Volts eff. 50 Hz
Voltage withstanding between dielectric and shield		3000 Volts eff. 50 Hz
Jacket dry impulse test		5000 Volts
DC resistance at 20°C		≤ 144 Ω/km
Insulation resistance	Between dielectric and shield	≥ 1500 M Ω.km
	Jacket	≥ 1500 M Ω.km
Nominal relative velocity of propagation		76 %

Study 124964 - Physical characteristics

Weight	Nominal	27.0 g/m
	Maximum	30.0 g/m
Strippability		Mechanical device or automatic stripper
Outer jacket color		Green

STUDY 132869

CAC 876 - 75 Ohms triaxial cable
UV laser markable cable

Applications

Designed for high frequency signal transmission in aircraft radio communication systems.

900 Volts RMS

Construction

CONDUCTOR
1- 7x0.10 mm high strength silver plated copper alloy (∅ 0.30 ±0.025mm)

INSULATION
2- Fluorocarbon dielectric with low epsilon (Max. ∅ 1.30 mm)

SHIELD
3- Silver plated copper double braid
Strand ∅ 0.08 mm
Min. ∅ 1.75 mm
Max. ∅ 1.95 mm

INNER JACKET
4- ETFE
∅ 2.32 ±0.05 mm

SHIELD
Silver plated copper
Strands ∅ 0.10 mm

OUTER JACKET
Laser UV ETFE
Max. ∅ 3.47 mm

Bend radius

Static : 17 mm
Dynamic : 35 mm

Standards

prEN 4604-001, -002 and SP132869
prEN 3475

Other characteristics

Operating frequency : up to 3 GHz
Mould and fungus resistant

-65°C to +150°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

Study 132869 - Electrical characteristics

Dry tes voltage between core and shield	2000 V eff 50 Hz
Jacket dry impulse test	5000 V
Ohmic resistance of conductor	384 Ω/km max.
Insulation resistance	≥5000 MΩ.km
Characteristic impedance	75 ±5 Ω
Linear capacitance	60 pF/m max.
Velocity of propagation	≥ 222 000 km/s (74% relative)

Frequency (MHz)	Max rated power (W)	Attenuation at 20°C (dB/100m)
50	1250	23
100	900	30
200	600	43
300	450	53
400	400	63
1000	270	102
3000	150	176

Study 132869 - Physical characteristics

Maximum weight	25.5 g/m
Inner color jacket	Light blue
Outer jacket color	Light blue

EN 4604-003 WZ

50 Ohms coaxial cable

Applications

Designed for signal transmission applications in aeronautic environment.

Construction

CONDUCTOR
Solid silver plated copper
(OD 0.88 to 0.93 mm)

INSULATION
Fluoropolymer
(OD 2.35 ±0.15 mm)

SHIELD
Metallized foil
Silver plated copper braid
(OD 3.05 ±0.15 mm)

JACKET
White Fluoropolymer - UV laser
(OD 3.55 ±0.15 mm)

Bend radius

Static : 37 mm
Dynamic : 100 mm

Standards

prEN 4604-001, -002 and -003
prEN 3475 and prEN 3838

Other characteristics

Operating frequency : up to 3 GHz
Mould and fungus resistant
UV laser markable

-65°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 4604-003 WZ - Electrical characteristics

Dielectric strength	4000 V eff 50 Hz
Corona extinction	1700 V eff 50 Hz
Insulation resistance	≥1000 MΩ.km
Characteristic impedance	50 ±2 Ω
Linear capacitance	88 pF/m max.
Velocity of propagation	≥ 225 000 Km/s (75% relative)
Transfert impedance	30 mΩ/m, up to 3 GHz

Frequency (MHz)	Max rated power (W)	Attenuation at 20°C (dB/100m)
50	1100	11
200	660	19
400	450	28
1000	250	47
3000	150	90

EN 4604-003 WZ - Physical characteristics

Maximum weight	30 g/m
Jacket color identification	Green or black
Cable identification	EN WN FRF**

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

EN 4604-004 WS

50 Ohms coaxial cable

Applications

Designed for high frequency signal transmission application in aircraft radio communication systems.

Construction

CONDUCTOR
7x0.16 mm silver plated copper - (OD 0.48 mm)

INSULATION
Fluorocarbon
(OD 1.50 mm)

SHIELD
1st layer
Silver plated copper braid
(Strand ∅ 0.085 mm)
2nd layer
High permeability tape
3rd layer
Silver plated copper braid
Strand ∅ 0.085 mm
OD : 2.20 ± 0.14 mm

JACKET
4- 2 polyimide tapes
OD 2.40 ± 0.16 mm
Color : amber

Bend radius

Static : 15 mm
Dynamic : 28 mm

Standards

prEN 4604-001, -002 and -004
prEN 3475

Other characteristics

Operating frequency : up to 3 GHz
Mould and fungus resistant
Specially designed for high EMC performances

-55°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 4604-004 WS - Electrical characteristics

Dielectric strength	1500 Vac
Operating voltage	1300 Vac
Insulation resistance	≥5000 MΩ.km
Characteristic impedance	50 ±5 Ω
Linear capacitance	95 ±10 pF/m
Velocity of propagation	207 000 km/s nominal (69% relative)
Transfert impedance	45 mΩ/m, up to 100 MHz

Frequency (MHz)	Max rated power (W)	Attenuation at 20°C (dB/100m)
50	600	26
100	400	36
200	270	55
400	180	78
1000	120	140
3000	75	195

EN 4604-004 WS - Physical characteristics

Maximum weight	20 g/m
Cable identification in black	EN WS FRF**

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

EN 4604-005 WL

75 Ohms coaxial cable

Applications

Designed for high frequency signal transmission in aircraft radio communication systems.

Construction

CONDUCTOR

7x0.10 mm strands of high strength silver plated copper alloy (∅ 0.30 ±0.025 mm)

INSULATION

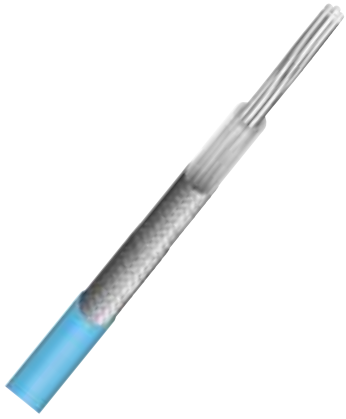
Fluorocarbon
Max ∅ 1.30 mm

SHIELD

Silver plated copper double braid
Strand ∅ 0.08 mm
Min. ∅ 1.75 mm
Max. ∅ 1.95 mm

JACKET

4- Fluorocarbon
(Max. ∅ 2.35 mm)



Bend radius

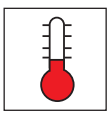
Static : 15 mm
Dynamic : 25 mm

Standards

prEN 4604-001, -002 and -005
prEN 3475-100

Other characteristics

Operating frequency : up to 3 GHz
Mould and fungus resistant



-55°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 4604-005 WL - Electrical characteristics

Dielectric strength	2000 Vac
Operating voltage	900 V RMS max.
Ohmic resistance of conductor	384 Ω/Km max.
Insulation resistance	≥5000 MΩ/Km
Characteristic impedance at 200 MHz	75 ±5 Ω
Linear capacitance	60 pF/m max.
Velocity of propagation	222 000 Km/s nominal (74% relative)
Transfert impedance max.	30 mΩ/m, up to 1 MHz
	5 mΩ/m, at 20 MHz
	30 mΩ/m, at 100 MHz

Frequency (MHz)	Max. rated power (W)	Attenuation at 20°C (dB/100m)
50	1250	23
100	900	30
200	600	43
300	450	53
400	400	63
1000	270	102
3000	150	176

EN 4604-005 WL - Physical characteristics

Maximum weight	12.5 g/m
Jacket color	Blue
Cable identification in black	EN WL FRF**

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

EN 4604-006 WM

50 Ohms coaxial cable

Applications

Designed for high frequency signal transmission in aircraft electrical systems.

Construction

CONDUCTOR
Solid silver plated copper
OD 1.02 ±0.03 mm

INSULATION
Low density PTFE
OD 2.84 ±0.10 mm

SHIELD
1st layer
Silver plated copper tape
2nd layer
Silver plated copper braid
Strand ∅ 0.10 mm
OD 3.50 ±0.20 mm

JACKET
Violet Fluoropolymer
OD 3.85 ±0.15 mm

Bend radius

Static : 25 mm
Dynamic : 70 mm

Standards

prEN 4604-001, -002 and -006
prEN 3475

Other characteristics

Operating frequency : up to 5 GHz
Mould and fungus resistant

-55°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 4604-006 WM - Electrical characteristics

Dielectric strength	2500 Vac
Operating voltage	750 Vac
Insulation resistance	≥5000 MΩ.km
Characteristic impedance	50 ±3 Ω
Linear capacitance	82 pF/m max.
Velocity of propagation	243 000 km/s nominal (81% relative)

Frequency (MHz)	Max rated power (W)	Attenuation at 20°C (dB/100m)
50	2800	8
100	2000	11.5
400	1100	20.5
1000	600	40
5000	300	85

EN 4604-006 WM - Physical characteristics

Maximum weight	35 g/m
Jacket color	Violet
Cable identification in black	EN WM FRF**

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

EN 4604-007 WN

50 Ohms coaxial cable

Applications

Designed for high frequency signal transmission in aircraft electrical systems.

Construction

CONDUCTOR
Solid silver plated copper
OD 2.30 ± 0.03 mm

INSULATION
Expanded PTFE
OD 6.20 ± 0.10 mm

SHIELD
1st layer
Silver plated copper tape
2nd layer
Silver plated copper braid
Strand ∅ 0.20 mm
OD 7.50 ± 0.20 mm

JACKET
Violet Fluoropolymer
OD 8.00 ± 0.20 mm

Bend radius

Static : 80 mm
Dynamic : 120 mm

Standards

prEN 4604-001, -002 and -007
prEN 3475

Other characteristics

Operating frequency : up to 6 GHz
Mould and fungus resistant

-55°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 4604-007 WN - Electrical characteristics

Dielectric strength	3000 Vac
Operating voltage	1000 Vac
Insulation resistance	≥5000 MΩ.km
Characteristic impedance	50 ±3 Ω
Linear capacitance	82 pF/m max.
Velocity of propagation	243 000 km/s nominal (81% relative)

Frequency (MHz)	Max. rated power (W)	Attenuation at 20°C (dB/100m)
50	8000	3.5
100	5000	5.5
400	3000	10
1000	2000	15
5000	800	35
6000	700	41

EN 4604-007 WN - Physical characteristics

Maximum weight	145 g/m
Jacket color	Violet
Cable identification in black	EN WN FRF**

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

EN 4604-008 WD

50 Ohms coaxial cable

Applications

Designed for high frequency radio communications applications in aeronautic environment.

Construction

CONDUCTOR
37x0.34 mm silver plated copper
∅ 2.33 ± 0.05 mm

DIELECTRIC
Low density Fluorocarbon
∅ 6.0 ± 0.10 mm

SHIELD
Two braids
Silver plated copper 0.13 mm
∅ 7.10 ± 0.10 mm

JACKET
White Fluoropolymer
∅ 7.70 ± 0.20 mm

Bend radius

Static : 40 mm
Dynamic : 80 mm

Standards

prEN 4604-001, -002 and -008
prEN 3475

Other characteristics

Operating frequency : up to 8 GHz
Mould and fungus resistant

-55°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

EN 4604-008 WD - Electrical characteristics

Dielectric strength	2500 Vac
Ionization extinction voltage	1500 Vac
Insulation resistance	≥1000 MΩ.km
Characteristic impedance	50 ±2 Ω
Linear capacitance	90 pF/m max.
Velocity of propagation	240 000 km/s nominal

Frequency (MHz)	Max. rated power (W)	Attenuation at 20°C (dB/100m)
50	5700	5.0
100	4000	7.2
150	3100	9.1
200	2700	10.7
400	1800	16.1
1000	1000	28.6
1600	730	39.6
2500	530	55.0
3000	480	61.0
8000	250	110.0

EN 4604-008 WD - Transfer impedance

Frequency (MHz)	Maximum values (mΩ/m)
From 0 to 0.01	4.2
0.1	4.0
1	1.3
5	0.6
10	1.0
30	2.2
100	5.3

EN 4604-008 WD - Physical characteristics

Maximum weight	137 g/m
Jacket color	White
Cable identification in black	EN WD FRF**

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

ECS 0757 KE

Miniature triaxial cable

Applications

Miniature triaxial cable in aeronautic environment.

Construction

CONDUCTOR
7 x 0.175 mm silver plated copper alloy
∅ 0.53 mm

INSULATION
PTFE
∅ 1.52 mm

SHIELD
Silver plated copper 10/100
Coverage ≥ 65%
Nom. ∅ 1.98 mm

INNER JACKET
FEP (OD 2.49 ± 0.10 mm)

SHIELD
Silver plated copper 10/100
Coverage ≥ 65%
Nom. ∅ 2.94 mm

JACKET
FEP (OD 3.50 ± 0.15 mm)

Minimum bending radius

Static : 18 mm
Dynamic : 35 mm

Standards

ECS 0757

Nexans part number

Study 132847

-65°C to +200°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

RoHS

ECS 057 KE - Electrical characteristics

Characteristic impedance		50 ± 2 Ω
Linear capacitance at 1 kHz	Maximal value	105 pF/m
Attenuation at	10 MHz	9.5 dB/100 m
	100 MHz	35 dB/100 m
	200 MHz	49 dB/100 m
	400 MHz	69 dB/100 m
	500 MHz	77 dB/100 m
	1000 MHz	108 dB/100 m
	1500 MHz	133 dB/100 m
Voltage rating		900 Volts eff. 50 Hz
Voltage withstanding between dielectric and shield		2000 Volts eff. 50 Hz
Jacket dry impulse test		5000 Volts impulse
DC resistance at 20°C		≤ 124 Ω/km
Insulation resistance	Between dielectric and shield	≥ 5000 MΩ.km
	Jacket	≥ 1500 MΩ.km
Nominal relative velocity of propagation		69.5 %

ECS 057 KE - Physical characteristics

Nominal weight	30.0 g/m
Strippability	Mechanical device or automatic stripper
Inner and Outer color jacket	Transparent green
Cable identification	KE FR F **

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

ECS 0745 KC

75 Ohms triaxial cable
200°C operating temperature

Applications

Designed for radio frequency signal transmission in aircraft radio communication systems.

Construction

CONDUCTOR
7 x 0.10 mm strands of high strength silver plated copper alloy
∅ 0.30 ± 0.025 mm

INSULATION
Fluorocarbon
Max. ∅ 1.30 mm

SHIELD
Silver plated copper double braid
Strands ∅ 0.08 mm
Max. ∅ 1.95 mm

INNER JACKET
Fluorocarbon
Max. ∅ 2.37 mm

SHIELD
Silver plated copper
Strands ∅ 0.10 mm

OUTER JACKET
Fluorocarbon
∅ 3.40 ± 0.10mm

Bend radius

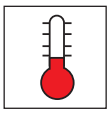
Static : 17 mm
Dynamic : 35 mm

Standards

ECS 0745
prEN 3475

Other characteristics

Operating frequency : up to 3 GHz
Mould and fungus resistant



-65°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

ECS 0745 KC - Electrical characteristics

Dry test voltage between core and shield	2000 Vac
Inner and outer jacket dry impulse test	5000 V
Operating voltage	500 V RMS max.
Ohmic resistance of conductor	384 Ω/km max.
Insulation resistance	≥ 5000 MΩ.km (conductor/shield) ≥ 1500 MΩ.km (between shields)
Characteristic impedance	75 ±5 Ω
Linear capacitance	60 pF/m max. at 1kHz
Velocity of propagation	222 000 km/s (74% relative)
Transfer impedance	30 mΩ/m up to 100 MHz

Frequency (MHz)	Max rated power (W)	Attenuation at 20°C (dB/100m)
10	640	10
50	290	23
100	200	30
200	140	43
300	110	53
400	100	63
1000	65	102
3000	37	176

ECS 0745 KC - Physical characteristics

Maximum weight	27 g/m
Inner and Outer jacket color	Blue
Cable identification in black	KC FR F**

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

PAN 6422

PTFE coaxial laser markable cables

Applications

Designed for general purpose coaxial cables.

Construction

CONDUCTOR
Stranded conductor in silver plated copper or silver plated copper covered steel

INSULATION
Extruded PTFE

SHIELD
Silver plated copper single or double braid

JACKET
Polyimide tape, UV laser PTFE tape(s) (Munsell color limits 5YR 6/4 to 5YR 7/4)

Bend radius

6 times cable O.D.

Standards

PAN 6422
MIL-C-17
BS 2316

Other characteristics

Operating frequency : up to 1 GHz
Very good resistance to solvents
Very good resistance to soldering operations.

-65°C to +200°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

RoHS

PAN 6422 (Metric units)

PART NUMBER	MIL-C-17 PART NUMBER	CONDUCTOR			INSULATION	SHIELD		FINISHED CABLE	
		Composition (Nbr x Dia. of strand) (mm)	Nature	Nom. Dia. (mm)	Nom. Diameter (mm)	Number	Nature	Nom. Diameter (mm)	Nom. Weight (Kg/ Km)
PAN 6422 XQ	M17/172-00001 (RG316/U)	7 x 0.17	SPCCS	0.51	1.52	1	SPC	2.22	14
PAN 6422 XR	M17/175-00001 (RG400/U)	19 x 0.195	SPC	0.96	2.95	2	SPC	4.28	58
PAN 6422 XT	M17/169-00001 (RG178/U)	7 x 0.10	SPCCS	0.30	0.82	1	SPC	1.54	7.2
PAN 6422 XU	URM107	7 x 0.82	SPC	2.46	7.25	1	SPC	8.66	180
PAN 6422 XY	M17/94-RG179 (RG179/U)	7 x 0.10	SPCCS	0.30	1.60	1	SPC	2.30	14
PAN 6422 XZ	M17/95-RG180 (RG180/U)	7 x 0.10	SPCCS	0.30	2.59	1	SPC	3.29	26

SPC : Silver plated copper

SPCCS : Silver plated Copper covered Steel

PAN 6422 - Electrical characteristics

PART NUMBER	MIL-C-17 PART NUMBER	Nominal Impedance (Ω)	Attenuation dB/100m at (MHz)				Volts RMS (Max)
			10	100	400	1000	
PAN 6422 XQ	M17/172-00001 (RG316/U)	50	19.7	37.4	65.6	101.5	900
PAN 6422 XR	M17/175-00001 (RG400/U)	50	3.96	14.4	31.6	53.2	1400
PAN 6422 XT	M17/169-00001 (RG178/U)	50	18.45	46.0	92.0	151.0	750
PAN 6422 XU	URM107	50	1.7	6.3	13.6	23.4	3500
PAN 6422 XY	M17/94-RG179 (RG179/U)	75	17.45	32.9	52.5	79.0	900
PAN 6422 XZ	M17/95-RG180 (RG180/U)	95	3.96	14.4	31.6	53.2	1100

ASNE 0293 XF

50 Ohms coaxial cables

Applications

Designed for avionic interconnection.

Construction

CORE

19 x 0.20 silver plated copper

INSULATION

Extruded PTFE

Nom. ∅ 2.95 mm

SCREEN

Dual silver plated copper braid

Strands ∅ 0.13 mm

Overall nom. ∅ 4.06 mm

JACKET

FEP (Max. ∅ 5.08 mm)

Minimum bend radius

50 mm

Standards

ASNE 0293

-65°C to +200°C

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Very good resistance to aircraft fluids

RoHS

ASNE 0293 XF - Electrical characteristics

Characteristic impedance		50 ± 2 Ω
Nominal capacitance		95 pF/m
Attenuation at	10 MHz	4.3 dB/100 m
	200 MHz	19 dB/100 m
	400 MHz	28 dB/100 m
	3000 MHz	95 dB/100 m
	10000 MHz	210 dB/100 m
Voltage rating		600 Volts RMS

ASNE 0293 XF - Physical characteristics

Nominal weight	67 g/m
Outer jacket color	Brown
Cable identification in green	XF FR F **

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

TYPE NSA 935344 XE

Applications

Designed for high frequency interconnections.

Construction

CONDUCTOR
7 x 0.17 silver plated copper covered steel (∅ 0.51 mm)

INSULATION
Extruded PTFE
∅ 1.52 ± 0.07 mm

SHIELD
Single silver plated copper braid
Strands ∅ 0.10 mm

JACKET
White PTFE tapes
(∅ 2.70 ± 0.10 mm)

Other characteristics

Maximum operating frequency : 1.8 Ghz

Standards

NSA 935344 XE

-65°C to +250°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

NSA 935344 XE - Electrical characteristics

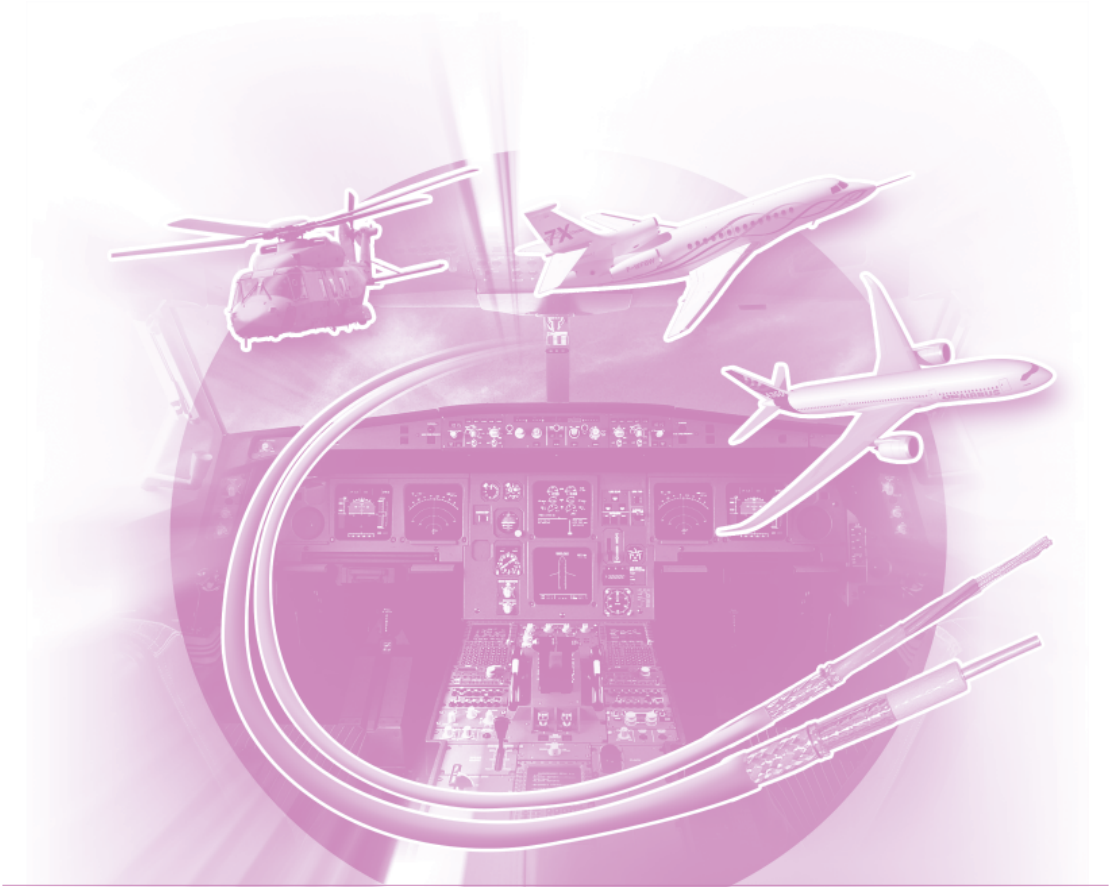
Impedance at 200 Mhz	50 ± 2 Ω
Nominal capacitance	95 pF/m
Nominal attenuation at 900 MHz	0.8 dB/m
Voltage rating	900 Volts RMS

NSA 935344 XE - Physical characteristics

Nominal weight	18 g/m
Outer jacket color	White
Cable identification	XE ** FR F

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)



PART 5
Data bus and high speed transmission cables

ABS 0972 KB 24

Shielded quad 100 Ohms

Applications

High speed data transmission (Ethernet networks) 100 Mbit/s and in-flight entertainment application.

600 Volts RMS

Construction

4 CONDUCTORS

19 x 0.13 mm silver copper stranded AWG 24
FEP Insulated
∅ = 1.40 ± 0.05 mm
Color : Blue, Red, Yellow, Green

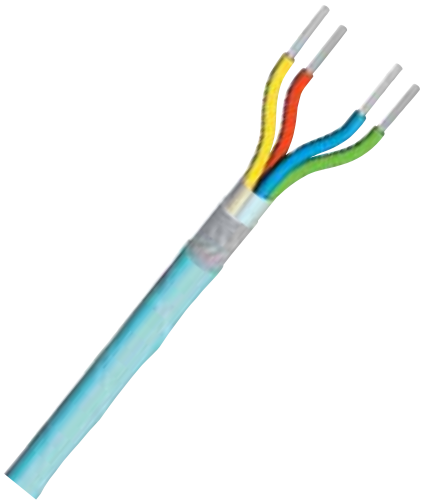
Natural FEP filler

SCREEN

Wrapping tape
0.10 mm silver copper braid
∅ = 3.90 ± 0.15 mm

SHEATH

Clear blue FEP jacket for UV laser marking
∅ = 4.40 ± 0.20 mm



Other characteristics

Minimum Bending Radius
Static = 20 mm

Standards

ABS 0972

Nexans part number

Study 2PC236

-55°C to +125°C
(operating temperature)
-55°C to +200°C
(storage temperature)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

ABS 0972 KB 24 - Electrical characteristics

Loop resistance at 20°C (Max)		19.2 Ω/100 m
Insulation resistance at 20°C		1500 MΩ.km
Impedance		100 Ω ± 15 Ω from 1 to 100 MHz
Velocity of propagation		≥69%
N.E.X.T.		> 68 -15 x log (F) dB from 1 to 100 MHz
Attenuation at (nominal values)	1 MHz	2.1 dB/100m
	4 MHz	4.1 dB/100m
	10 MHz	6.5 dB/100m
	16 MHz	8.2 dB/100m
	20 MHz	9.3 dB/100m
	31.25 MHz	11.7 dB/100m
	62.5 MHz	17 dB/100m
	100 MHz	22 dB/100m

ABS 1503 KD 24 - Physical characteristics

Nominal weight	40.28 g/m

Identification

Inkjet marking pitch length ≈ 300 mm
Pitch length between the two next marking ≈ 150 mm
AB KB 24 FR F “year of manufacturing”

ABS 1503 KD 24

Shielded quad 100 Ohms

Applications

High speed data transmission (Ethernet networks) 100 Mbit/s and in-flight entertainment application.

600 Volts RMS

Construction

4 CONDUCTORS

19 x 0.13 mm silver copper stranded AWG 24
FEP Insulated
∅ = 1.40 ± 0.05 mm
Color : Blue, Red, Yellow, Green

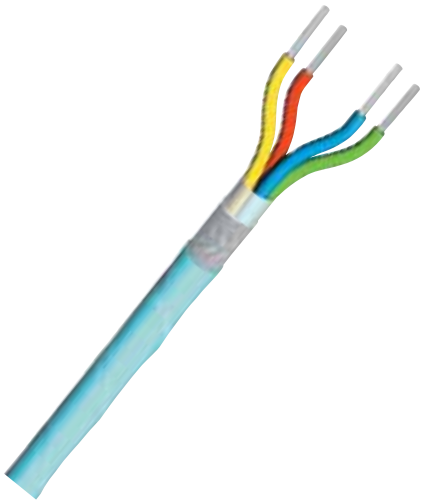
Natural FEP filler

SCREEN

Wrapping tape
0.10 mm silver copper braid
∅ = 3.90 ± 0.15 mm

SHEATH

Clear blue FEP jacket for UV laser marking
∅ = 4.40 ± 0.20 mm



Other characteristics

Minimum Bending Radius
Static = 20 mm

Standards

ABS 1503

Nexans part number

Study 2PF870

-55°C to +125°C
(operating temperature)
-55°C to +200°C
(storage temperature)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

ABS 1503 KD 24 - Electrical characteristics

Loop resistance at 20°C (Max)		19.2 Ω/100 m
Insulation resistance at 20°C		1500 MΩ.km
Impedance		100 Ω ± 15 Ω from 1 to 100 MHz
Velocity of propagation		≥70%
N.E.X.T.		> 68 -15 x log (F) dB from 1 to 100 MHz
Attenuation at (nominal values)	1 MHz	2.1 dB/100m
	4 MHz	4.1 dB/100m
	10 MHz	6.5 dB/100m
	16 MHz	8.2 dB/100m
	20 MHz	9.3 dB/100m
	31.25 MHz	11.7 dB/100m
	62.5 MHz	17 dB/100m
	100 MHz	22 dB/100m

ABS 1503 KD 24 - Physical characteristics

Nominal weight	40.28 g/m

Identification

Inkjet marking pitch length ≈ 300 mm
Pitch length between the two next marking ≈ 150 mm
AB KD 24 FR F "year of manufacturing"

ABS 1580 KH 24

100 Ohms shielded quad

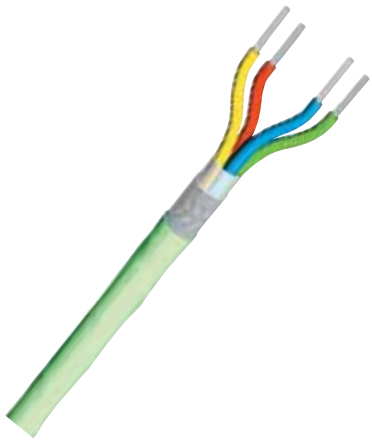
Applications

Quad cable used for aero engine, AFDX (Avionics Full Duplex switched Ethernet) network application.

600 Volts RMS

Construction

CONDUCTOR
19 x 0.13 mm nickel plated copper AWG 24
INSULATION
Extruded PTFE
∅ = 1.40 ± 0.05 mm
FILLER
Extruded PTFE, natural
BINDER
Wrapped PTFE tape
Nom. ∅ = 3.50 ± 0.10 mm
SHIELD
0.10 mm nickel plated copper braid
Nom. ∅ = 3.95 ± 0.10 mm
JACKET
Light green fluropolymer jacket
UV laser markable
∅ = 4.45 ± 0.10 mm



Standards

ABS 1580

-65°C to +260°C
(Peak = 290°C)

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

ABS 1580 KH - Electrical characteristics

Impedance from 1 to 100 MHz		100 Ω
Maximum capacitance		60 pF/m
Loop resistance at 20 °C		192 Ω/Km
Insulation resistance at 20°C		1500 MΩ/Km
Velocity of propagation		69%
Maximum attenuation values (20°C)	1 MHz	2.1 dB/100 m
	4 MHz	4.9 dB/100 m
	10 MHz	8.2 dB/100 m
	16 MHz	10.6 dB/100 m
	20 MHz	TBD*
	31.25 MHz	TBD*
	62.5 MHz	TBD*
	100 MHz	TBD*

* To Be Confirm : ABS 1580 is a draft document.

ABS 1580 KH - Physical characteristics

Maximum weight	45 g/m
Outer jacket color	Light green
Marking text color	Dark green
Color of cores	Pair 1 : Red, blue - Pair 2 : Yellow, green

EN 3375-011 C KL - ET 133139

100 OHMS AWG 24 QUADRAX Cable

Applications

High speed data transmission (Ethernet networks) 100 Mbit/s and in-flight entertainment application.

600 Volts RMS

Construction

CORES

19 x 0.13 mm
Silver Plated Copper
Aerated fluoropolymer insulation

ASSEMBLY

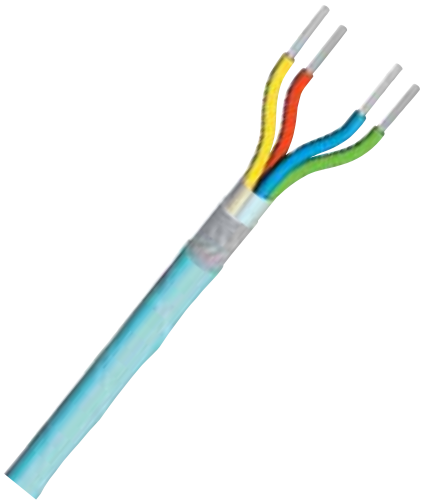
4 cores twisted around 1 aerated filler in the centre + PTFE Tape

SHIELD

Silver Plated Copper braid
Strand diameter : 0.10 mm
Coverage ≥ 62 %

JACKET

Fluoropolymer
UV laser markable
Ø : 3.85 ± 0.10 mm
Max. lineic mass : 32 kg/km



Other characteristics

Minimum Bending Radius
Static = 20 mm

Specification

EN 3375-011

-55°C to +125°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

EN 3375-011 KL - ET 133139 - Dimensions and weight

Reference	US AWG	Conductor				Insulation		Braid		Finished cable		
		Compo. n x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/km)	Diameter		Strand (mm)	Nom. (mm)	Overall diameter (mm)		Weight (kg/km)
			Nom.	Max.	Max.	Nom.	Max.			Nom.	Max.	Max.
133139	24	19 x 0.13	0.60	0.63	80	1.22	1.25	0.10	3.44	3.85	3.95	32

EN 3375-011 KL - ET 133139 - Electrical characteristics

Maximum capacitance	60 pF/m
Relative Velocity of propagation	80 % nom.
impedance from 1 to 100 Mhz :	100 ± 15 Ohms

EN 3375-011 KL - ET 133139 - High Frequency performances

Frequency (MHz)	Max Attenuation (dB/100m)
1	2.1
4	4.4
10	6.9
16	8.8
20	9.9
31.25	12.5
62.5	18
100	23.3
100	23.3

Frequency (MHz)	Nom. Transfert impedance (MΩ/m)
DC	20
0.1	20
1	19
5	16
10	15
20	20
50	35
100	55

Identification

Colour of cores : Red + Yellow + Blue + Green
Colour of jacket : Light Blue
Colour of marking : Black
Marking text : EN KL 24 FRF** A-B
(**) = Year of manufacturing

STUDY 69794 - EN 3375-004 C - WJ

77 Ohms, Bus lines for multiplexed transmission

Applications

Data bus cables for multiplexed transmission.
Used for bus system MIL STD 1553.

600 Volts RMS

Construction

2 FILLERS

2 CORES

AWG 24, 0.21mm²
19 x 0.12 silver plated copper alloy (EN 2083)
Fluoropolymer
∅ = 1.05 ± 0.10 mm

LAY-UP

∅ nom. = 2.10 mm

SHIELD

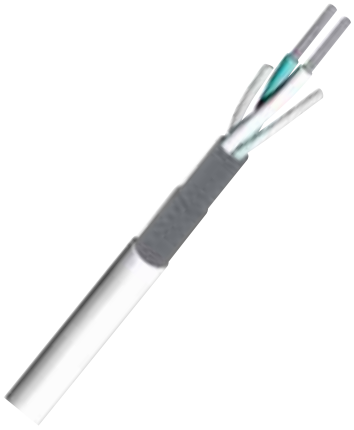
Silver plated copper 10/100

SHIELD

Silver plated copper 10/100
∅ < 3.50 mm

JACKET

FEP jacket
∅ = 3.65 ± 0.25 mm



Other characteristics

Minimum Bending Radius
45 mm

Standards

EN 3375

-65°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

EN 3375-004 C - WJ - Dimensions and weight

Reference	US AWG	Conductor				Insulation		Braid		Finished cable		
		Compos. N x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Ø Max.	Overall diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
69794	24	19 x 0.12	0.59	0.62	109	1.05	1.30	0.10	3.50	3.65	3.90	37

EN 3375-004 C - WJ - Electrical characteristics

Characteristic impedance at 1 MHz		77 ± 7 Ω
Nominal mutual capacitance		65 pF/m
Nominal capacitance between 1 core and shield		110 pF/m
Nominal capacitance between cores and shield		180 pF/m
Nominal attenuation at 1 MHz		2.7 dB/100m
Linear resistance		≤ 109 Ω/km
Insulation resistance		≥ 1500 MΩ.km
Voltage withstanding	between conductors	1000 Volts
	between conductors and shield	1000 Volts
Jacket dry impulse		5000 Volts
Voltage rating		250 Volts
Maximum transfer impedance	DC current	15 $^{10-3}$ mΩ/m
	1 MHz	5 $^{10-3}$ mΩ/m
	10 MHz	5 $^{10-3}$ mΩ/m
	30 MHz	10 $^{10-3}$ mΩ/m

EN 3375-004 C - WJ - Physical characteristics

Nominal weight	28 g/m
Maximum weight	37 g/m
Outer jacket color	White
Color of cores	White, blue
Marking	FILOTEX FRANCE ET 69794-**

With :

** = Year of manufacturing (ie. 08 = 2008)

Red marking for the main line (EN 3375-004 C01, Nexans reference : ETUDE 69794-01)

Blue marking for the branch line (EN 3375-004 C02, Nexans reference : ETUDE 69794-02)

Marking

Jacket code “none”:
Colour of marking: Green
Marking text: FILOTEX FRANCE ET 69794-**

Jacket code “01”:
Colour of marking: Red for the main line
Marking text: FILOTEX FRANCE ET 69794-**

Jacket code “02”:
Colour of marking: Blue for the branch line
Marking text : FILOTEX FRANCE ET 69794-**

(**) = Year of manufacturing

EN 3375-004 C - WJ - Maximum transfert impedance

Frequency (MHz)	Max. Transfert impedance (mohm/m)
DC	15
1	5
10	5
30	10

EN 3375-005 C - WV

Bus lines for multiplexed transmission

Applications

Use for bus system MIL STD 1553

600 Volts RMS

Construction

2 FILLERS
2 CORES
AWG 24, 0.21mm²
19 x 0.12 silver plated copper alloy (EN 2083)
Fluoropolymer
∅ = 1.05 ± 0.10 mm
LAY-UP
∅ nom. = 2.10 mm
SHIELD
Silver plated copper 10/100
HIGH IMMUNITY TAPE
SHIELD
Silver plated copper 10/100
∅ < 3.75 mm
JACKET
FEP jacket
∅ = 3.85 ± 0.25 mm

Other characteristics

Minimum Bending Radius
Static : 40 mm

Standards

EN 3375

Nexans part number

Study 133189

-65°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

EN 3375-005 C - WV - Dimensions and weight

Reference	US AWG	Conductor				Insulation		Braid		Finish cable		
		Compos. N x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Ø Max.	Overall diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
133189	24	19 x 0.12	0.59	0.62	109	1.05	1.30	0.10	3.75	3.85	4.10	43.3

EN 3375-005 C - WV - Electrical characteristics

Characteristic impedance at 1 MHz		77 ± 7 Ω
Maximum mutual capacitance		78 pF/m
Maximum attenuation at 1 MHz		3.6 dB/100m
Maximum linear resistance		109 Ω/km
Minimum insulation resistance		1500 MΩ.km
Voltage withstanding	between conductors	1500 Volts
	between conductors and shield	1000 Volts
Jacket dry impulse		5000 Volts
Voltage rating		600 Volts AC

EN 3375-005 C - WV - Maximum transfert impedance

Frequency (MHz)	Max. Transfert impedance (mohm/m)
DC	15
1	0.025
10	0.025
30	0.1

EN 3375-005 C - WV - Physical characteristics

Nominal weight	34 g/m
Maximum weight	43.3 g/m

Marking

- Jacket code “none”:
  - Colour of marking : Green
  - Marking text : EN WV 24 FRF**
- Jacket code “01”:
  - Colour of marking : Red for the main line
  - Marking text : EN WV R24 FRF**
- Jacket code “02”:
  - Colour of marking : Blue for the branch line
  - Marking text : EN WV B24 FRF**

(**) = Year of manufacturing

ASNE 0290 XM 24 - EN 3375-006 D

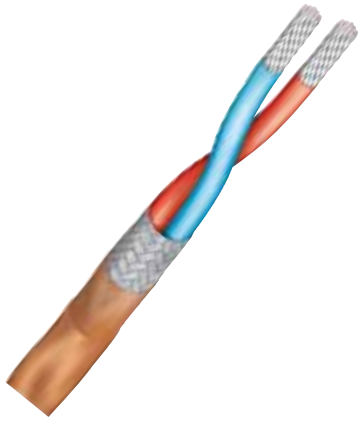
Bus pair, high temperature

Applications

General electronic wiring.
Communication data bus,
compatible RS 422.

Construction

2 CORES
Standed conductors
19 x 0.12 nickel plated high strength copper alloy
Extruded colored PTFE insulation
∅ = 1.13 to 1.33 mm
SCREEN
0.08 mm nickel plated copper braid (Kr = 0.65 min.)
JACKET
Polyimide tapes
□ Max. = 3.10 mm



Other characteristics

Minimum Bending Radius
25 mm

Standards

ASNE 0290
EN 3375-006

-55°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

ASNE 0290 XM 24 - Electrical characteristics

Impedance at 200 MHz		78 ± 7 Ω
Lineic capacitance		64 ± 10 % pF/m
Linear attenuation (max)	at 1 MHz	0.035 dB/m
	at 10 MHz	0.15 dB/m
Voltage rating		600 Volts RMS

ASNE 0290 XM 24 - Physical characteristics

Maximum weight	15 g/m
Outer jacket color	Natural
Color of cores	Light blue, red
Marking	- XM 24 ** -FRF

With :

FR = Country of origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 09 = 2009)

ECS 0700 - EN 3375-007 C - WW

AWG 26 Bus line for multiplexed transmission

Applications

Bus line for multiplexed transmission

Construction

2 FILLERS
2 CORES
AWG 26, 0.15 mm²
19 x 0.10 silver plated copper alloy (EN2083)
Fluoropolymer
∅ = 0.80 ± 0.05 mm
LAY-UP
∅ nom. = 1.60 mm
SHIELD
Silver plated copper 8/100
∅ < 2.00 mm

SHIELD
Silver plated copper 8/100
∅ < 2.40 mm
JACKET
FEP jacket
∅ = 2.90 ± 0.10 mm

Minimum bending radius

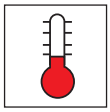
Static : 20 mm

Standards

ECS 0700
EN 3375-007

Nexans part number

Study 132041


-65°C to +200°C


Very good resistance to aircraft fluids


Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

ECS 0700 - EN 3375-007 C - WW - Dimensions and weight

Reference	US AWG	Conductor				Insulation		Braid		Finish cable		
		Compos. N x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Ø Max.	Overall diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
132041	26	19 x 0.10	0.49	0.53	153	0.8	0.85	0.08	2.40	2.90	3.10	21

ECS 0700 - EN 3375-007 C - WW - Electrical characteristics

Characteristic impedance at 1 MHz		77 ± 7 Ω
Maximum mutual capacitance		75 pF/m
Maximum attenuation at 1 MHz		4.1 dB/100m
Linear resistance		≤ 153 Ω/Km
Insulation resistance		≥ 1500 MΩ.km
Voltage withstanding	between conductors	1000 Volts
	between conductors and shield	1000 Volts
Jacket dry impulse		5000 Volts
Voltage rating		250 Volts

ECS 0700 - EN 3375-007 C - WW - Maximum transfer impedance

DC current	30 mΩ/m
1 MHz	15 mΩ/m
10 MHz	15 mΩ/m
30 MHz	15 mΩ/m

ECS 0700 - EN 3375-007 C - WW - Physical characteristics

Maximum weight	21 g/m
Outer jacket color	White
Color of cores	White, blue

Marking

For ECS 0700 & Study 133041:

Colour of marking:	Black
Marking text:	ECS 0700 WW FR F **

For EN 3375-007:

Jacket code “none”:

Colour of marking:	Green
Marking text :	EN WW 26 FRF **

Jacket code “C01”:

Colour of marking:	Red for the main line
Marking text:	EN WW R 26 FRF **

Jacket code “C02”:

Colour of marking:	Blue for the branch line
Marking text:	EN WW B 26 FRF **

(**) = Year of manufacturing

EN 3375-009-C WX
ET 133199

120 Ohms AWG26, Data Bus cable Hight Teperature

Applications

Data bus cables for aeronotic application.
Used for BUS CAN.

600 Volts RMS

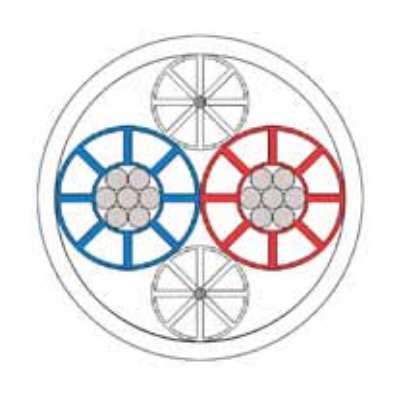
Construction

CORES
7 x 0.16 mm Silver Plated High Strength Copper Alloy Aerated fluoropolymer insulation

ASSEMBLY
2 cores twisted with 2 aerated fillers

SHIELD
Silver Plated Copper braid
Strand diameter : 0.08 mm
Coverage ≥ 62 %

JACKET
Fluoropolymer
Ø : 2.80 ± 0.10 mm
Max. lineic mass : 18 kg/km



Other characteristics

Minimum Bending Radius
Static : 45 mm
Dynamic: 30 mm

Standards

EN 3375-009

-55°C to +200°C

EN 3375-009-C WX - ET 133139 - Dimensions and weight

Reference	US AWG	Conductor				Insulation		Braid		Finished cable		
		Compos. N x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Ø Max.	Overall diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
133199	26	7 x 0.16	0.47	0.48	145	1.05	1.10	0.08	2.50	2.80	3.95	18

EN 3375-009-C WX - ET 133139 - High Frequency performances

Frequency (MHz)	Max Attenuation (dB/100m)
1	108 < Zc < 132
20	100 < Zc < 120

Frequency (MHz)	Max Attenuation (dB/100m)
1	3
5	8

Frequency (MHz)	Nom. Transfert impedance (MΩ/m)
DC	50
1	50
10	50
30	100

STUDY 124960

77 Ohms, bus lines for multiplexed transmission

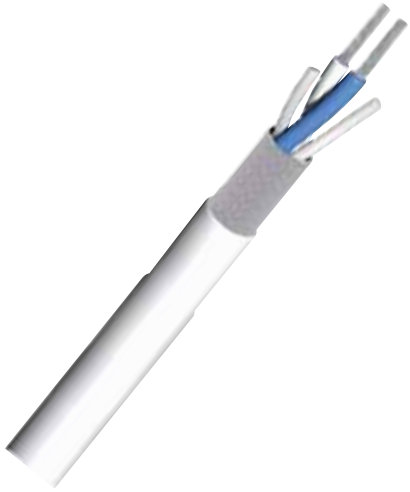
Applications

Bus lines for multiplexed transmissions.

Construction

2 FILLERS
1- PTFE
2 CORES
2- AWG 26, 0.15mm²
19 x 0.10 mm silver plated copper alloy (EN2083)
Extruded PTFE insulation
∅ = 0.80 ± 0.05 mm
LAY-UP
3- Nominal ∅ = 1.60 mm

SHIELD
4- Silver plated copper 10/100
∅ < 2.00 mm
JACKET
5- UV laser markabke ETFE
∅ = 2.50 ± 0.10 mm



Minimum radius bending

Static : 15 mm

Standards

EN 3375

-65°C to +150°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Study 124960 - Electrical characteristics

Characteristic impedance at 1 MHz		77 ± 7 Ω
Nominal mutual capacitance		65 pF/m
Nominal capacitance between 1 core and shield		110 pF/m
Nominal capacitance between cores and shield		180 pF/m
Nominal attenuation at 1 MHZ		3.5 dB/100 m
Linear resistance		≤ 146 Ω/km
Insulation resistance		≥ 1500 MΩ.km
Voltage withstanding between conductors		1000 Volts
Voltage withstanding between conductors and shield		1000 Volts
Jacket dry impulse		5000 Volts
Voltage rating		250 Volts
Maximum transfer impedance (mΩ/m)	DC current	50
	1 MHz	50
	10 MHz	50
	30 MHz	100

Study 124960 - Physical characteristics

Nominal weight	14.5 g/m
Maximum weight	19 g/m
Outer jacket color	White
Color of cores	White, blue
Marking	FILOTEX FRANCE ET 124960 - **

With :

** = Year of manufacturing (ie. 08 = 2008)

Red marking for the main line (Nexans reference : ETUDE 124960-01)

Blue marking for the branch line (Nexans reference : ETUDE 124960-02)

STUDY 124961

77 Ohms, Bus lines for multiplexed transmission

Applications

Bus lines for multiplexed transmission.

Construction

2 FILLERS
PTFE

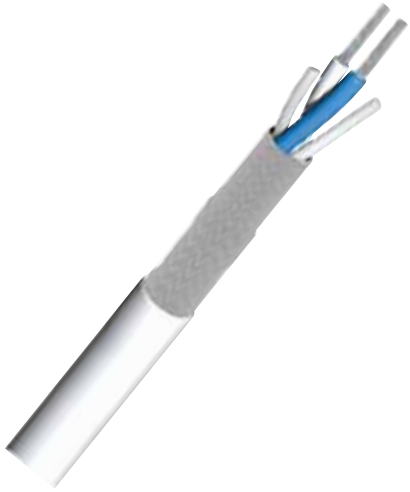
2 CORES
AWG 24, 0.21mm²
19 x 0.12 mm silver plated copper alloy (EN2083)
Extruded PTFE insulation
∅ = 1.05 ± 0.10 mm

LAY-UP
Nominal ∅ = 2.10 mm

SHIELD
Silver plated copper 10/100

SHIELD
Silver plated copper 10/100
∅ < 3.50 mm

JACKET
UV laser markabke ETFE
∅ = 3.65 ± 0.25 mm



Minimum bending radius

Static : 20 mm

Standards

EN 3375

-65°C to +150°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Study 124961 - Electrical characteristics

Characteristic impedance at 1 MHz		77 ± 7 Ω
Nominal mutual capacitance		65 pF/m
Nominal capacitance between 1 core and shield		110 pF/m
Nominal capacitance between cores and shield		180 pF/m
Nominal attenuation at 1 MHZ		2.7 dB/100 m
Linear resistance		≤ 109 Ω/km
Insulation resistance		≥ 1500 MΩ.km
Voltage withstanding between conductors		1000 Volts
Voltage withstanding between conductors and shield		1000 Volts
Jacket dry impulse		5000 Volts
Voltage rating		250 Volts
Maximum transfer impedance (Ω/m)	DC current	$15.\ 10^{-3}$
	1 MHz	$5.\ 10^{-3}$
	10 MHz	$5.\ 10^{-3}$
	30 MHz	$10.\ 10^{-3}$

Study 124961 - Physical characteristics

Nominal weight	28 g/m
Maximum weight	37 g/m
Outer jacket color	White
Color of cores	White, blue
Marking	FILOTEX FRANCE ET 124961 - **

With :

** = Year of manufacturing (ie. 08 = 2008)

Red marking for the main line (EN 3375-004C01, Nexans reference : ETUDE 124961-01)

Blue marking for the branch line (EN 3375-004C02, Nexans reference : ETUDE 124961-02)

STUDY 96770 - ASNE 0479 WJ - EN 3375-004B

77 Ohms, Bus lines for multiplexed transmission

Applications

Bus lines for multiplexed transmission.

Construction

2 FILLERS
PTFE

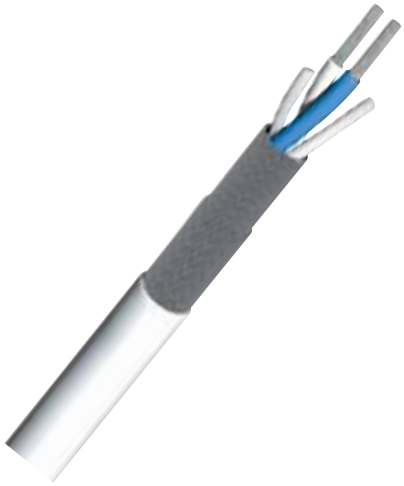
2 CORES
AWG 24, 0.21mm²
19 x 0.12 mm silver plated copper alloy (EN2083)
Extruded PTFE insulation
∅ = 1.05 ± 0.10 mm

LAY-UP
Nominal ∅ = 2.10 mm

SHIELD
Tin plated copper 10/100

SHIELD
Tin plated copper 10/100
∅ < 3.50 mm

JACKET
FEP jacket
∅ = 3.65 ± 0.25 mm



Minimum bending radius

Static : 20 mm

Standards

EN 3375

-65°C to +150°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Study 96770 - Electrical characteristics

Characteristic impedance at 1 MHz		77 ± 7 Ω
Nominal mutual capacitance		65 pF/m
Nominal capacitance between 1 core and shield		110 pF/m
Nominal capacitance between cores and shield		180 pF/m
Nominal attenuation at 1 MHZ		2.7 dB/100 m
Linear resistance		≤ 109 Ω/km
Insulation resistance		≥ 1500 MΩ.km
Voltage withstanding between conductors		1000 Volts
Voltage withstanding between conductors and shield		1000 Volts
Jacket dry impulse		5000 Volts
Voltage rating		250 Volts
Maximum transfer impedance (Ω/m)	DC current	$15.\ 10^{-3}$
	1 MHz	$5.\ 10^{-3}$
	10 MHz	$5.\ 10^{-3}$
	30 MHz	$10.\ 10^{-3}$

Study 96770 - Physical characteristics

Nominal weight	28 g/m
Maximum weight	37 g/m
Outer jacket color	White
Color of cores	White, blue
Marking	FILOTEX FRANCE ET 96770 - **

With :

** = Year of manufacturing (ie. 08 = 2008)

Red marking for the main line (EN 3375-004B01, Nexans reference : ETUDE 96770-01)

Blue marking for the branch line (EN 3375-004B02, Nexans reference : ETUDE 96770-02)

EN 4608-005 B - GPB 24

Fireproof cable for data transmission
2 cores twisted screened and jacketed

Applications

Use in the onboard electrical systems of aircraft.

Construction

2 CORES
Stranded conductor 19 x 0.120 nickel clad copper alloy
INSULATION
Fire resistant insulation
Polyimide tape
PTFE tape
∅ = 1.20 to 1.65 mm
SCREEN
0.12 mm nickel plated copper braid
JACKET
UV PTFE tape(s)

Other characteristics

Operating frequency : up to 125 KHz

Standards

EN 4608-005

-65°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

EN 4608-005 B 002 - GPB 24 - Dimensions and weight

REFERENCE	Size Code	AWG	Finished Cable			
			No of cores	DC Resistance at 20°C (Ohms/Km) Max.	Diameter (mm) Max.	Weight (g/m) Max.
EN 4608-005B 002	002	24	2	135	4.00	27.5

EN 4608-005 B 002 - GPB 24 - Electrical characteristics

Impedance at 100 KHz	120 ± 20 % Ω
Transfer impedance at 100 KHz	< 30 mΩ
Capacitance at 100 KHz	< 85 pF/m
Attenuation at 100 KHz	1.6 dB/100m
Voltage rating	600 Volts RMS
Fire resistance -15 mn	> 10k Ω

EN 4608-005 B 002 - GPB 24 - Physical characteristics

Core identification	2 cores	White with a helical red/blue stripe
	Marking	EN DW A 24 FRF **
Jacket identification	Color	White with narrow red stripe
	Marking	EN GPB 24 FRF

With :

FR = Country of origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

PAN 6421 ZA

77 Ohms, Special electric cable (MIL-STD-1553B Data bus)

Applications

Bus lines for multiplexed transmissions.

Construction

CORES

Stranded conductor :
19 x 0.118 mm silver plated copper alloy
Insulation : Polyimide/FEP tape plus dispersion
∅ = 1.22, Max. = 1.26 mm

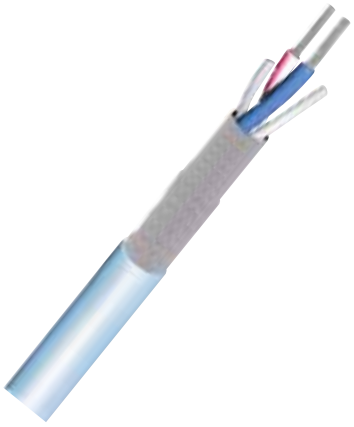
PTFE FILLERS

SCREEN

Inner screen 0.08 mm silver plated copper braid
Outer screen 0.08 mm silver plated copper braid

SHEATH

Extruded FEP jacket
0.20 mm minimum wall thickness
∅ min. = 3.15 mm
□ Max. = 3.80 mm



Standards

PANAVIA 75.6421
SP-P-99301-00-P

Nexans part number

Study 65529

-65°C to +150°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

PAN 6421 ZA 002 - Electrical characteristics

Characteristic impedance	77 ± 3 Ω
Mutual capacitance	98.4 pF/m
Attenuation	4.92 dB/100 m max.
Voltage rating	600 Volts RMS

PAN 6421 ZA 002 - Physical characteristics

Maximal weight	29 kg/km
Outer jacket color	Blue
Color of cores	Red, blue
Marking in black	PAN 6421 ZA 002 FR F **

With :

** = Year of manufacturing (ie. 08 = 2008)

ASNE 0259 HE 24

125 Ohms, Bus cable (AWG 24, single braid, polyimide jacket)

Applications

Bus lines.

Construction

CORES

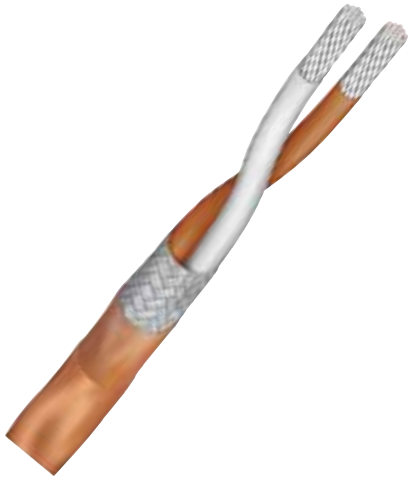
2 twisted cores AWG 24
Stranded conductor :
19 x 0.12 mm silver plated high strength copper alloy
Insulation : Extruded PTFE
∅ = 1.97 ± 0.03 mm

SHIELD

0.10 mm nickel plated copper braid (covering ≥62%)

JACKET

Polyimide tape(s)
Max. ∅ = 4.50 mm



Other characteristics

Non flamable

Standards

ASNE 0259

Nexans part number

Study 63247

-55°C to +150°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

ASNE 0259 HE 24 - Electrical characteristics

Characteristic impedance	125 Ω ± 10%
Mutual capacitance	40 pF/m
Attenuation at 500 KHZ	2.5 dB/100m
Attenuation at 1 MHZ	3.1 dB/100m
Voltage withstanding between conductors	1500 Volts
Voltage withstanding between conductors and shield	1500 Volts
Maximum linear resistance of conductor at 20°C	97.2 Ω/km
Voltage rating	600 Volts RMS

ASNE 0259 HE 24 - Physical characteristics

Nominal weight	27 g/m
Outer jacket color	Natural jacket
Color of cores	White, brown

STUDY 69654

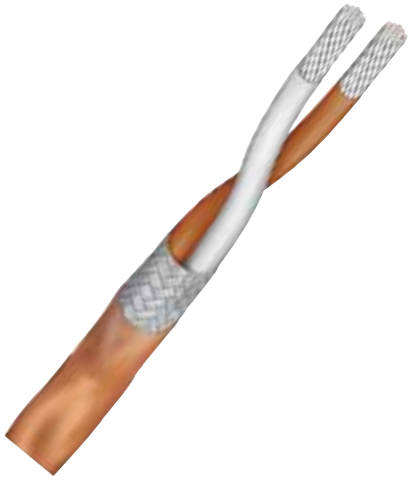
125Ohms, Bus cable (AWG 24, single braid, polyimide jacket)

Applications

Bus lines.

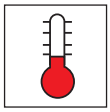
Construction

1- **CORES**
19 x 0.127 mm silver plated copper alloy
Extruded PTFE insulation
∅ = 1.85 ± 0.13 mm
Assembly 2 cores
SHIELD
2- 0.10 mm tin plated copper braid (covering : 68%)
JACKET
3- Polyimide tape
∅ = 4.45 ± 0.38 mm



Standards

Honeywell n° P7500579 (12/01/1988)



-55°C to +150°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Study 69654 - Electrical characteristics

Impedance at 1 MHz	125 Ω ± 10%
Capacitance	40 ± 6.5 pF/m
Voltage withstanding between conductors	1500 Volts
Voltage withstanding between conductors and shield	1500 Volts
Voltage withstanding dry impulse of the jacket	3500 Volts
Insulation resistance	≥1500 MΩ.km
Voltage rating	600 Volts RMS

Study 69654 - Physical characteristics

Nominal weight	27 g/m
Outer jacket color	Natural jacket
Color of cores	White, brown

STUDY 124843 - ASNE 0849 HJ 26

75 Ohms, Twinaxial cable high immunity

Applications

General electronic wiring.

Construction

2 CORES

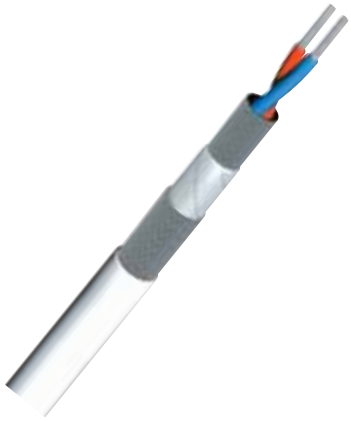
Stranded conductor
19 x 0.100 mm nickel plated high strength copper alloy
Insulation :
Polyimide tape(s)
PTFE topcoat
□ Max. = 0.84 mm

SCREEN

0.08 mm nickel plated copper braid High immunity tapes
∅ nom. = 2.06 mm
0.10 mm nickel plated copper braid
∅ nom. = 2.50 mm

JACKET

FEP
□ Max. = 3 mm

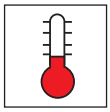


Minimum bend radius

30 mm

Standards

ASNE 0849



-65°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

ASNE 0849 HJ 26 - Electrical characteristics

Impedance max.		75 Ω
Capacitance		40 ± 6.5 pF/m
Transfer impedance	DC	28.10^{-3} Ω/m
	10 kHz	$8.7.10^{-3}$ Ω/m
	100 kHz	$0.85.10^{-3}$ Ω/m
	2 MHz	$0.8.10^{-5}$ Ω/m
Voltage rating		600 Volts RMS

ASNE 0849 HJ 26 - Physical characteristics

Nominal weight	22 g/m
Outer jacket color	White
Color of cores	Light blue, red
Marking of the external sheath in black	HJ 26 FR F

With :

FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 08 = 2008)

STUDY 61333

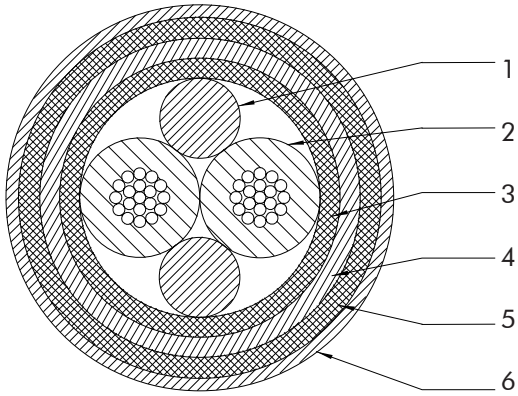
75 Ohms, Bus lines for multiplexed transmission

Applications

Bus lines for multiplex transmission.

Construction

1- **2 PTFE FILLERS**
2- **2 CORES**
AWG 22, 0.38mm²
19 x 0.16 silver plated copper
Insulation : Extruded PTFE
∅ = 1.50 ± 0.03 mm
Lay up :
∅ nom. = 3.00 mm
3- **SHIELD**
Silver plated copper 12/100
4- **TAPE**
High permeability alloy
5- **SHIELD**
Silver plated copper 12/100
∅ nom. = 4.06 mm
6- **JACKET**
Polyimide PTFE
∅ = 4.55 ± 0.25 mm



Standards

Approved by the Defense Ministry
under letters N°8981/STTE/CTG
(10/09/1986)
Registered at B.N.Aé N°6415 401

-65°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Study 61333 - Electrical characteristics

Characteristic impedance		75 ± 5 Ω
Nominal mutual capacitance		65 ± 5 pF/m
Capacitance unbalance		≤ 5%
Nominal attenuation	at 1 MHz	2.6 dB/100m
	at 10 MHz	10 dB/100m
Linear resistance		≤ 50.2 Ω/km
Insulation resistance under 500 volts		> 5000 MΩ.km
Voltage withstanding	between conductors	2000 Volts RMS
	between conductors and shield	2000 Volts RMS
Jacket dry impulse		5000 Volts
Voltage rating		600 Volts
Transfer impedance at 1 MHz		2.5 $^{10\text{-}5}$ Ω/m

Study 61333 - Physical characteristics

Nominal weight	55 g/m
Maximum weight	55.4 g/m
Outer jacket color	White
Color of cores	White, blue

ASNE 0811 WY

77 Ohms, Bus lines for multiplexed transmission

Applications

Use for bus system MIL STD 1553

Construction

2 PTFE FILLERS

2 CORES

AWG 26, 0.15mm² 19x0.10
silver plated copper alloy
(EN2083)
Insulation : Extruded PTFE
∅ = 0.80 ± 0.05 mm

Lay up :

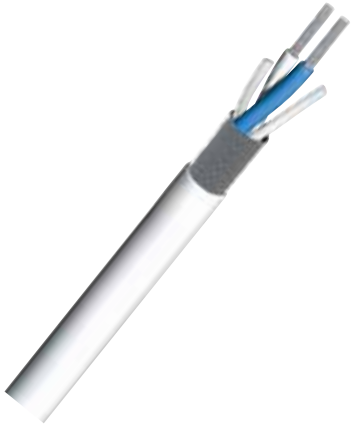
∅ nom. = 1.60 mm

SHIELD

Silver plated copper 10/100
∅ < 2.00 mm

JACKET

FEP
∅ = 2.50 ± 0.10 mm



Minimum bending radius

Static : 15 mm

Standards

ASNE 0811

Nexans part number

Study 69899-01
Study 69899-02

-65°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

ASNE 0811 WY - Electrical characteristics

Characteristic impedance at 1 MHz			77 ± 7 Ω
Nominal mutual capacitance			65 pF/m
Nominal capacitance between 1 core and shield			110 pF/m
Nominal capacitance between cores and shield			180 pF/m
Nominal attenuation at 1 MHz			3.5 dB/100m
Linear resistance			≤ 146 Ω/km
Insulation resistance			≥ 1500 MΩ.km
Voltage withstanding	between conductors		1000 Volts
	between conductors and shield		1000 Volts
Jacket dry impulse			5000 Volts
Voltage rating			250 Volts
Maximum transfer impedance		DC current	50 $^{10-3}$ mΩ/m
		1 MHz	50 $^{10-3}$ mΩ/m
		10 MHz	50 $^{10-3}$ mΩ/m
		30 MHz	100 $^{10-3}$ mΩ/m

ASNE 0811 WY - Physical characteristics

Nominal weight	14.5 g/m
Maximum weight	19 g/m
Outer jacket color	White
Color of cores	White, blue
Marking	FILOTEX FRANCE ET 69899-**

With :

** = Year of manufacturing (ie. 08 = 2008)
Red marking for the main line (Nexans reference : ETUDE 69899-01)
Blue marking for the branch line (Nexans reference : ETUDE 69899-02)

ABS 0386 WF

100 Ohms

Applications

Data bus cable

Construction

2 CORES

19 x 0.12 nickel plated copper alloy

PTFE insulation

ASSEMBLY

2 cores twisted with fiber glass fillers

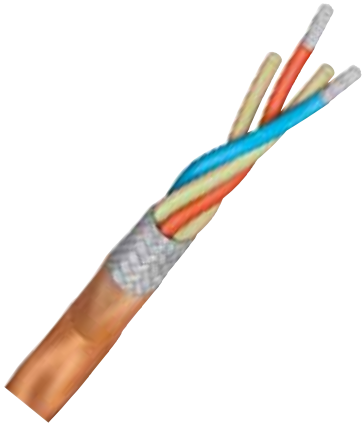
SCREEN

Nickel coated copper braid

Strand ∅ 0.08 mm

JACKET

Polyimide tapes



Minimum bend radius

25 mm

Standards

ABS 0386

Nexans part number

Study 96897

-55°C to +200°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

ASNE 0386 WF - Dimensions and weight

Reference	US AWG	Conductor			Insulation		Braid		Finish cable		
		Composition (N x mm)	Diameter (mm) Nom.	Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Nom.	Overall diameter (mm)		Weight (Kg/Km)
				Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
Study 96897	24	19 x 0.12	0.59	117.5	1.40	1.50	0.08	3.12	3.30	3.50	23.4

ASNE 0386 WF - Electrical characteristics

Characteristic impedance at 5 MHz		100 ± 10 Ω
Maximum capacitance		60 pF/m
Attenuation	at 1 MHz	0.03 dB/m
	at 5 MHz	0.06 dB/m
	at 10 MHz	0.12 dB/m
Voltage rating		600 Volts

ASNE 0386 WF - Physical characteristics

Identification	1 core	Light blue with green marking WF 24 FR F **
Color of cores	1 core	Red with white marking WF 24 FR F **
Outer color jacket		Amber
Marking		WF 24 FR F ** + dash

With :

** = Year of manufacturing (ie. 08 = 2008)

ET 132873

100 OHMS AWG 24 DATA BUS CABLE
FIREPROOF CABLE

Applications

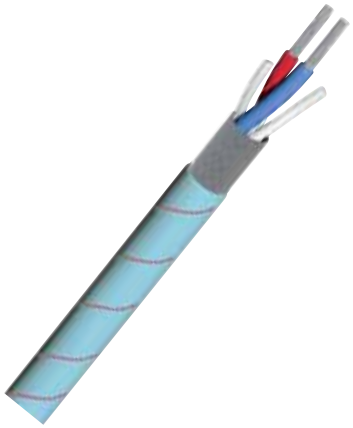
Data bus cable for aeronautic applications.

600 Volts RMS

Construction

CORES
19 x 0.12 mm
Nickel Clad Copper Alloy
Fire resistant insulation
Polyimide Tape
PTFE Tape
ASSEMBLY
2 cores twisted

SHIELD
Nickel Plated Copper braid
Strand diameter : 0.12 mm
Coverage ≥ 62 %
JACKET
PTFE Tape(s)
Ø : 4.12 mm
Max. lineic mass : 38 kg/km



Standards

ESW 1254-010 (For cores)

-65°C to +260°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

Fire resistant > 10k Ω during 15 min

ET 132873 - Dimensions and weight

Reference	US AWG	Conductor				Insulation		Braid		Finished cable		
		Compos. N x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Ø Max.	Overall diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
132873	24	19 x 0.12	0.58	0.62	135	1.58	1.65	0.12	3.64	4.12	4.45	38

ET 132873 - Electrical characteristics

Operating frequency	125 kHz
Maximum capacitance	85 pF/m
Characteristic impedance	100 Ω at 1 MHz
Maximum attenuation	1.6 dB/100 m at 0.1 MHz
Maximum transfert impedance	30m Ω /m at 0.1 MHz

ET 132873 - Identification

Colour of cores	Blue + Red
Colour of jacket	Light Blue with narrow red stripe
Colour of marking	Green
Marking text	ET 132873 FRF**

** = Year of manufacturing (ie. 09 = 2009)

ET 133026

124 OHMS AWG 24 DATA BUS CABLE

Applications

Data bus cable for aeronautic applications.

600 Volts RMS

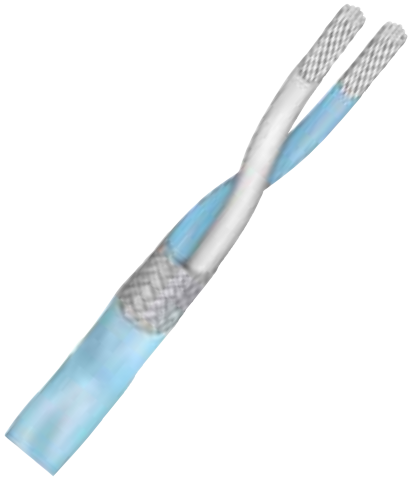
Construction

CORES
19 x 0.12 mm Silver Plated High Strength Copper Alloy
Aerated fluoropolymer insulation

ASSEMBLY
2 cores twisted with 2 fillers

SHIELD
Metallized foil
Silver Plated Copper braid
Strand diameter : 0.10 mm
Coverage ≥ 62 %

JACKET
Fluoropolymer
Ø : 4.10 ± 0.20 mm
Max. lineic mass : 35 kg/km



Other characteristics

Minimum Bending Radius
23 mm

-55°C to +125°C

ET 133026 - Dimensions and weight

Reference	US AWG	Conductor				Insulation		Braid		Finished cable		
		Compos. N x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Ø Max.	Overall diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
133026	24	19 x 0.12	0.59	0.63	105	1.55	1.60	0.10	2.50	4.10	4.30	18

ET 133026 - Electrical characteristics

Characteristic impedance at 1 MHz	124 ± 7 Ω
Nominal capacitance	36 pF/m
Relative Velocity of propagation	80 % nom.
Attenuation (typical) at 10 MHz	6.6 dB/100 m

ET 133026 - Identification

Colour of cores	Blue + White
Colour of jacket	Translucent Blue
No marking text	

ET 133195

120 OHMS AWG 22 DATA BUS CABLE

Applications

Data bus cable for aeronautic applications.

600 Volts RMS

Construction

CORES
19 x 0.15 mm
Silver Plated Copper
Aerated fluoropolymer insulation

ASSEMBLY
2 cores twisted with 2 aerated fillers

SHIELD
Silver Plated Copper braid
Strand diameter : 0.10 mm
Coverage ≥ 62 %

JACKET
Fluoropolymer
Ø : 4.66 ± 0.25 mm
Max. lineic mass : 38 kg/km

Other characteristics

Minimum Bending Radius
45 mm

-55°C to +125°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

ET 133195 - Dimensions and weight

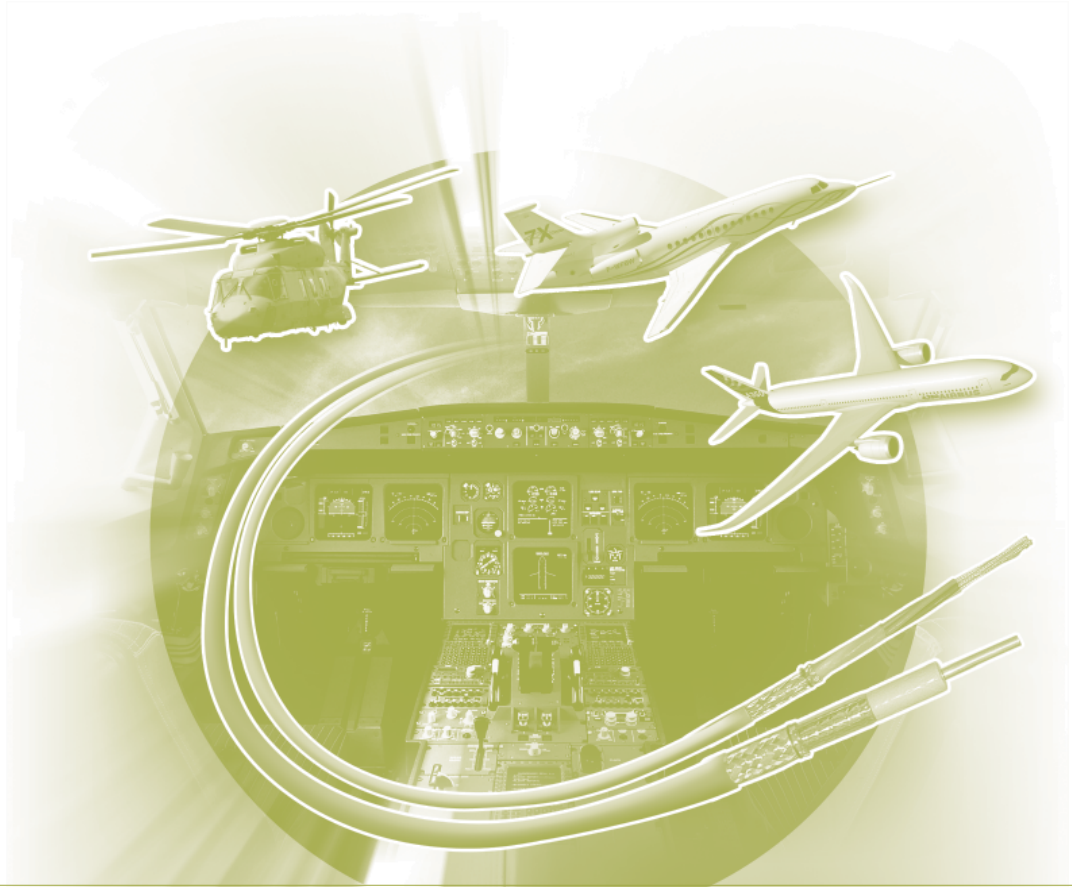
Reference	US AWG	Conductor				Insulation		Braid		Finished cable		
		Compos. N x d (mm)	Diameter (mm)		Ohmic resistance at 20°C (Ohms/Km)	Diameter (mm)		Ø Strand	Ø Max.	Overall diameter (mm)		Weight (Kg/Km)
			Nom.	Max.	Max.	Nom.	Max.	(mm)	(mm)	Nom.	Max.	Max.
133195	22	19 x 0.15	0.74	0.76	56	1.90	1.97	0.10	4.11	4.66	4.91	38

ET 133195 - Electrical characteristics

Characteristic impedance at 1 MHz	120 ± 7 Ω
Nominal capacitance	36 pF/m
Relative Velocity of propagation	80 % nom.
Attenuation (typical) at 10 MHz	5.6 dB/100 m

ET 133195 - Identification

Colour of cores	Blue + White
Colour of jacket	Translucent Blue
No marking text	-



PART 6
Special cables

STUDY 124401

Low noise screened pair transmission cable

Applications

General electronic wiring.

Construction

1- **2 CORES**
Stranded conductor 19 x 0.203
nickel plated copper alloy
Insulation : Extruded PTFE +
Semi-conductive tape
∅ = 1.78 mm

2- **GLASS FIBER FILLERS**

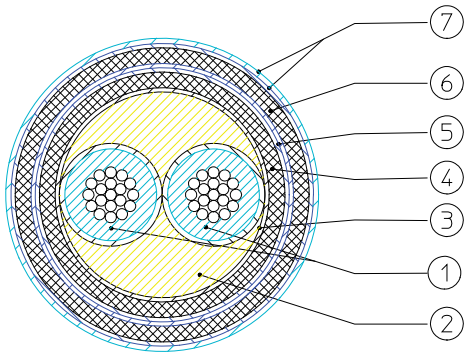
3- **SEMI-CONDUCTIVE TAPE**
∅ = 3.74 mm

4- **SHIELD**
0.12 mm nickel plated copper
braid - 91% (US) min. coverage
∅ = 4.22 mm

5- **INNER JACKET**
Polyimide tape(s)
51% minimum overlap

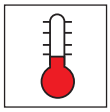
6- **SHIELD**
0.12 mm nickel plated copper
braid
91%(US) minimum coverage
∅ = 4.83 mm

7- **OUTER JACKET**
Polyimide tape(s)
PTFE tape(s)
51% minimum overlap
∅ = 5.20 ± 0.20 mm



Standards

Nexans specification



-54°C to +260°C

Very good
resistance to
aircraft fluids

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

STUDY 124401 - Electrical characteristics

Capacitance	between conductors	100 pF/m
	between conductors and shield	200 pF/m
Voltage withstanding	insulation	2000 Volts RMS
	jacket	5000 Volts Impulse
Voltage rating		600 Volts RMS
Insulation resistance (core/core and core/screen)		> 10^{12} Ω.m
Tribolelectrical noise	from 30 to 90 Hz	Displacement 2 mm pk-pk <0.15 pC
	from 20 to 50 Hz	Displacement 5 mm pk-pk <1 pC
	at 2 Hz	Displacement 40 mm pk-pk <10 pC

STUDY 124401 - Physical characteristics

Nominal weight	68.9 g/m
Outer jacket color	Black
Color of cores	Red, blue

NSA 935 306 YK

Low noise transmission cable

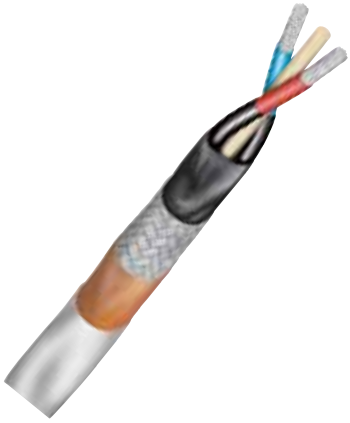
Applications

Low noise cable.

Construction

2 CORES
19 x 0.17 silver plated copper clad steel
Insulation :
Extrusion PTFE 1.40 ±0.05mm
Semi-conductive tape
∅ nom. = 1.58 mm
GLASS FIBER FILLERS
SEMI-CONDUCTIVE TAPE
SHIELD
Nickel plated copper braid
Kr>70% - ∅ = 0.12 mm

JACKET
Polyimide tape(s)
PTFE tape(s)
□ Max. = 4.35 mm



Standards

Nexans specification

Nexans part number

Study 86891

-55°C to +260°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

NSA 935 306 YK - Electrical characteristics

Capacitance	between conductors	100 pF/m
	between conductors and shield	200 pF/m
Voltage withstanding	between conductors	1500 Volts AC
	between conductors and shield	1500 Volts AC
Voltage rating		600 Volts AC
Insulation resistance		≥ 1000 MΩ.km
Tribolelectrical noise	at 2 Hz	Displacement 40 mm pk-pk ≤10 pC
	from 5 to 50 Hz	Displacement 5 mm pk-pk ≤1 pC
	from 10 to 70 Hz	Displacement 2 mm pk-pk ≤0.15 pC

NSA 935 306 YK - Physical characteristics

Nominal weight	38.2 g/m
Outer jacket color	White
Color of cores	Red, blue

ESW 1404-022-006

Low noise transmission cable

Applications

Low noise transmission cable.

Construction

1- **2 CORES**
19x0.20 mm nickel plated copper clad steel
Semi-conductive tape
PTFE tape(s) insulation
∅ = 1.80 ±0.10 mm
Semi-conductive tape
∅ nom. = 1.95 mm

2- **GLASS FIBER FILLERS**

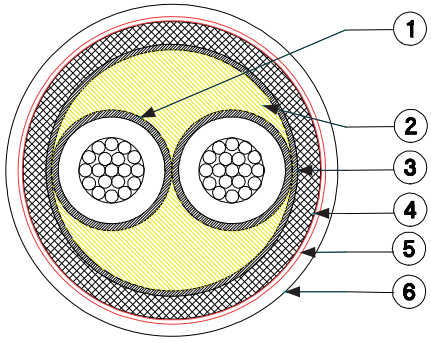
3- **SEMI-CONDUCTIVE TAPE**

4- **SHIELD**
Nickel plated copper 12/100
Coverage factor > 85%

JACKET

5- Polyimide tape(s)

6- PTFE tape(s)
∅ min. = 4.50 mm
□ Max. = 4.80 mm



Standards

ESW 1404-022-006
DSS-1747

Nexans part number

Study 124762

-65°C to +260°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

ESW 1404-022-006 - Electrical characteristics

Capacitance between conductors and shield		310 pF/m ± 10%
Maximum unbalance capacitance		15 pF/m
Voltage withstanding	between conductors	1500 Volts AC
	between conductors and shield	1500 Volts AC
Voltage rating		600 Volts AC
Insulation resistance		≥ 1000 MΩ.km
Electrical resistance at 20°C		≤75.1 Ω/km
Tribolelectrical noise	from 5 to 50 Hz	Displacement 10 mm pk-pk ≤0.3 pC
	from 10 to 70 Hz	Displacement 2 mm pk-pk ≤0.3 pC
	from 50 to 100 Hz	Displacement 20 g pk ≤0.3 pC

ESW 1404-022-006 - Physical characteristics

Maximum weight	53 g/m
Outer jacket color	White
Color of cores	White, blue
Marking	ESW1404-022-006-FX-FF-** 957.37.20.6999

With :

** = Year of manufacturing (ie. 09 = 2009)

ESW 1405-024-006

Over screened and jacketed low microphony transmission cable

Applications

Low microphony transmission cable.

Construction

1- **2 CORES**
19 x 0.20 mm nickel plated copper clad steel
∅ = 0.99 ± 0.05 mm
Semi-conductive tape
PTFE tape(s) insulation
∅ = 1.80 ±0.10 mm
Semi-conductive tape
∅ nom. = 1.95 mm

2- **GLASS FIBER FILLERS**

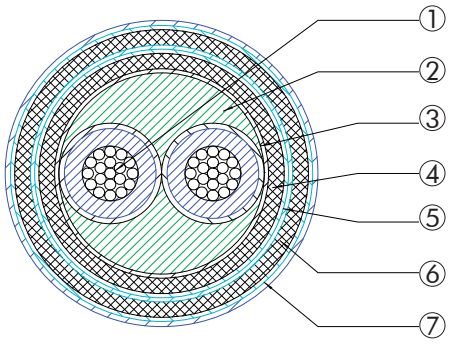
3- **SEMI-CONDUCTIVE TAPE**

4- **1st SHIELD**
Nickel plated copper 12/100

5- **INNER JACKET**
Polyimide tape(s)

6- **2nd SHIELD**
Nickel plated copper 12/100

7- **OUTER JACKET**
Polyimide tape(s)
PTFE tape(s)
∅ min. = 5.30 mm
∅ Max. = 5.70 mm



Standards

ESW 1405-024-xxx

Nexans part number

Study 132057

-65°C to +260°C

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

ESW 1405-024-006 - Electrical characteristics

Capacitance between conductors and shield		310 pF/m ± 10%
Voltage withstanding	between conductors	1500 Volts RMS
	between conductors and shield	1500 Volts RMS
	between shields	500 Volts DC
Voltage rating		600 Volts RMS
Insulation resistance		≥ 1000 MΩ.km
Electrical resistance at 20°C		≤75.1 Ω/Km
Tribolelectrical noise	from 5 to 50 Hz	Displacement 5 mm pk-pk ≤0.1 pC
	from 10 to 70 Hz	Displacement 2 mm pk-pk ≤0.1 pC
	from 50 to 100 Hz	Displacement 20 g pk ≤0.1 pC

ESW 1405-024-006 - Physical characteristics

Maximum weight	77 g/m
Outer jacket color	White
Color of cores	White, blue
Marking	ESW1405-024-006-FX-FF-**

With :

** = Year of manufacturing (ie. 08 = 2008)

LOW NOISE COAXIAL CABLES

CAS 85-22P
CAS 250-20 P
CAS 250-20 SP
CAS 250-22

Applications

Cables designed for low frequency connections submitted to displacements and vibration during their operation.

250/600 Volts RMS

Construction

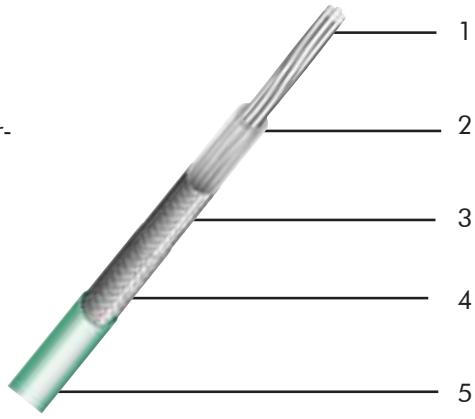
1- CONDUCTOR
Stranded or solid silver plated copper covered steel (SPCCS)

2- DIELECTRIC
PE (CAS 85) or PTFE (CAS 250)

3- ANTIMICROPHONIC NOISE COATING

4- SCREEN
Bare copper or silver plated copper single braid

5- SHEATH
PVC or PTFE tape(s)
Color: green (for standard version), other colors on request.



Mininum bend radius

Static : 10 x outeur diameter

Standards

NEXANS specification

Up to +85°C (CAS 85)
Up to +200°C (CAS 250)

Flexible

EMI

RoHS

Low noise cables

Dielectric	Designation	Nexans reference	Conductor			Dielectric Ø mm	Braids		Sheath	
			Composition n x Ø mm	Nature	Ø mm		Nb	Nature	Nature	Overall Ø mm
PE	**CAS 85-22P**	87067	1 x 0.30	SPCCS	0.30	1.10 ± 0.05	1	BC	PVC	2.15 ± 0.05
PTFE	**CAS 250-20 P**	87208	1 x 0.30	SPCCS	0.30	1.05 ± 0.05	1	SPC	PTFE	1.90 ± 0.10
PTFE	**CAS 250-20 SP**	87209	7 x 0.10	SPCCS	0.30	1.05 ± 0.05	1	SPC	PTFE	1.90 ± 0.10
PTFE	**CAS 250-22**	87068	1 x 0.30	SPCCS	0.30	0.98 ± 0.05	1	SPC	PTFE	2.15 ± 0.05

BC: Bare copper
SPC: Silver plated copper

Designation	Nexans reference	Average weight kg/km	Nominal capacitance pF/m	Velocity of propagation	Continuous working voltage	Triboelectric low noise level
CAS 85-22P	87067	8.0	95	70	600	<200 µvolts
CAS 250-20 P	87208	8.9	90	76	600	<200 µvolts
CAS 250-20 SP	87209	8.8	90	76	600	<200 µvolts
CAS 250-22	87068	11.6	90	76	250	<200 µvolts

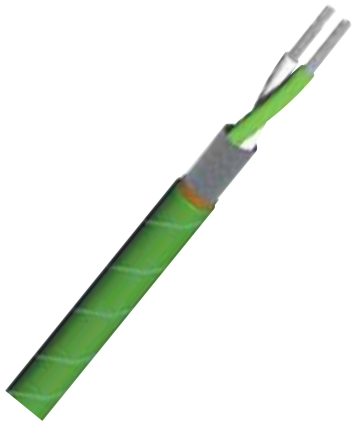
MBBN 3320 YH +++ - EN 4049-004
Thermocouple cable

Applications
Thermocouple cable

600 Volts RMS

Construction

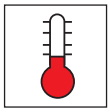
CONDUCTOR 1
Stranded conductor nickel chromium
PTFE/Polyimide/PTFE tapes
CONDUCTOR 2
Stranded conductor nickel aluminium
PTFE/Polyimide/PTFE tapes
SCREEN
Nickel plated copper braid
JACKET
Polyimide tape
PTFE tape



Other characteristics
Resistant to fungus

Standards
MBBN 3320
prEN 4049-004
ISO 8056

Nexans part number
Study 96532 (AWG 20)
Study 96533 (AWG 22)


-55°C to +260°C


Very good resistance to aircraft fluids


Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

MBBN 3320 YH +++ - EN 4049-004 - Dimensions and weight

Code for nominal section	US AWG	Conductors		Cores	Screen	Ohmic resistance at 20°C				Finished cables	
		Construction n x mm	Nominal diameter (mm)	Maximal diameter (mm)	Strands diameter (mm)	Nickel chromium (Ω/m)		Nickel aluminium (Ω/m)		Maximal diameter (mm)	Maximal weight (g/m)
						Min.	Max.	Min.	Max.		
004	22	19 x 0.15	0.75	1.45	0.12	1.995	2.411	0.786	0.951	4.00	24.3
006	20	19 x 0.20	1.00	1.67	0.12	1.122	1.357	0.443	0.534	4.55	31.4

Identification

Conductor color :

Nickel chromium conductor : White

Nickel aluminium conductor : Green

Jacket color :

Green (size 006)

Green with narrow white stripe (size 004)

Marking in black :

MBBN 3320 YH +++ FR F **

with :

+++ = Code for nominal section

FR = Country of origin (FR = France)

F = Manufacturer (F= Nexans)

** = Year of manufacturing (ie. 08 = 2008)

TYPE ASNE 0409 BG - ASNE 0410 SU
ASNE 0411 TV - ASNE 0412 VF

Applications

Designed for flight testing wiring.

600 Volts RMS

Construction

CORE (ASNE 0409)
Conductor: 19 x 0.120 mm
nickel plated copper (suitable for solderability)
PTFE tape insulation
ASSEMBLY (2 and 4 cores)
PTFE tape
SHIELD
Nickel plated copper spinning
SHEATH
Polyimide tape
Orange PTFE UV tape

ASNE 0409 BG

ASNE 0410 SU

ASNE 0411 TV

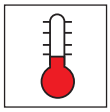
ASNE 0412 VF

Other characteristics

Operating frequency : up to 2500 Hz
Mould and fungus resistant
Solderability test on conductors : according to ASNE 0243

Standards

ASNE 0409, ASNE 0410, ASNE 0411, ASNE 0412, ASNE 0243
NSA 935000
SDF/B67-04/A/108/1128



-55°C to +200°C

Very good resistance to aircraft fluids

Flame retardant FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3)

ASNE 0409 BG - ASNE 0410 SU - ASNE 0411 TV ASNE 0412 VF

Nexans PART NUMBER	Nbr of cores	Dia. of strand (mm)	Finished Cable						
			Colors		Max. DC resistance at 20°C (68°F) (Ohms/Km)	Diameter (mm)			Max. Weight g/m
			Cores	Sheath		Min.	Nom.	Max	
ASNE 0409 BG 24 UV	1	-	Orange	-	91.2	0.86	0.97	1.02	3.10
ASNE 0410 SU 24 UV	1	0.08	White	Orange	91.2	-	1.42	1.50	6.40
ASNE 0411 TV 24 UV	2	0.08	White + Light Blue	Orange	94	-	2.54	2.70	12.4
ASNE 0412 VF 24 UV	4	0.10	White + Light Blue + Red + Black	Orange	94	-	2.99	3.10	21.8

Identification

Marking color :

White on red and black wires

Dark green on other colors

Marking on cores :

BG ** FR F ++

Marking on sheath :

$$ ** £ FR F ++

with :

$$ = ASNE type (SU, TV or VF)

** = AWG wire size

£ = Topcoat code (U or None)

FR = Country of origin (FR = France)

F = Manufacturer (F= Nexans)

++ = Year of manufacturing (ie. 08 = 2008)

ECS0828 MQB, PAIR OF PAIRS
ECS0829 MQD, QUAD OF PAIRS

Multi-cores Shielded and FEP Jacketed cable

Applications

Designed for general Purpose Aircraft Wiring Applications,
in replacement of AWG 24 ASN-E0642 HU and ASN-E0643 HV.

600 Volts RMS

Construction

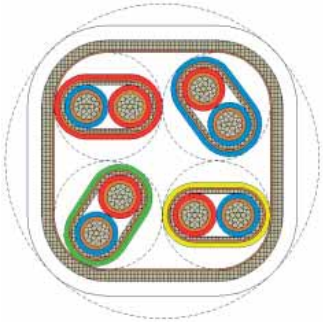
CORES
Assembly 2 cores of
EN 2267-009A
Screen: 0.08 mm Nickel plated copper spiral screen
Jacket: Polyimide Tape
PTFE Tape

Assembly Two or Four cores
Polyimide Tape

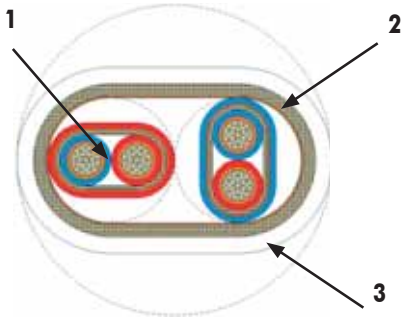
SCREEN
Nickel plated copper braid

JACKET
FEP

MQD



MQB

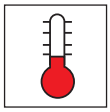


Other caracteristics

Mould and Fungus Resistant
Operating frequency: up to 2000 Hz

Standards

EN 2267-009 for cores
EN 2714-013 for Screened and Jacketed multi-cores
ECS 0828 / ECS 0829 for Screened and Jacketed cable



-55°C to 200°C
(Ambient. + Rise.)

Very Good
Resistance to
Aircraft Fluids

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

EN 2714-014 - Dimensions and weight

PART NUMBERS	US AWG	Nbr of Cores Number of cores	Screen Strands nominal diameter (mm)	Finished Cable						
				Colours		Maximum DC resistance at 20°C (68°K) (Ohms/Km)	Diameter (mm)		Weight (g/m)	
				Cores	Sheath		Nom.	Max.	Nom.	Max.
ECS0828 MQB	24	2	0.12	1 Red 1 Blue	White	117	5.16	5.90	44.15	47
ECS0829 MQD	24	4	0.12	1 Red 1 Blue 1 Yellow 1 Green	White	117	6.29	6.80	70.18	77

Identification

Basic Core identification Colours:

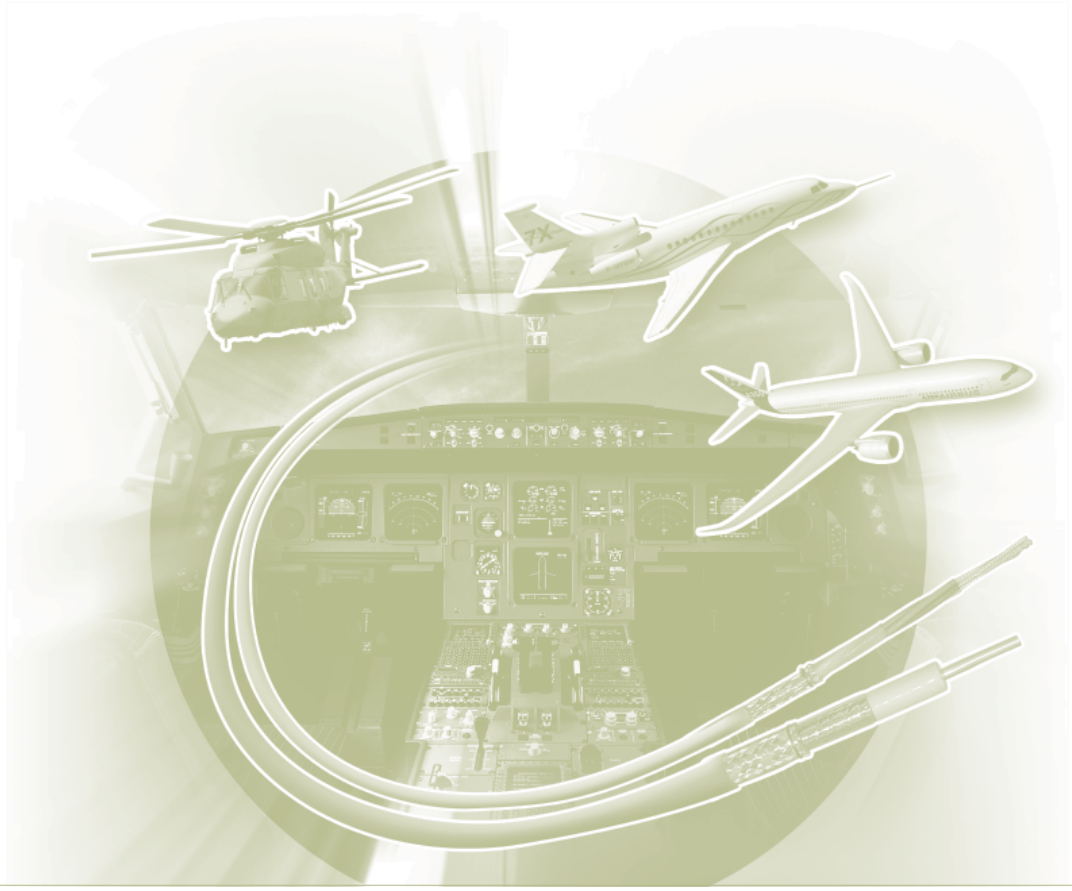
Two cores: Red - Blue
Marking : EN DR A ++ FRF**
Colour : White for Red and
Green for Blue core.

Finished Cable identification Colour:

Outer jacket : White

Marking : ### ++ FRF**
Colour : Green

= MQB Pair of pairs, MQD Quad of pairs
++ = AWG
FR = Country of Origin (FR = France)
F = Manufacturer (F = Nexans)
** = Year of manufacturing (ie. 10 = 2010)



PART 7
Optical cables

ABS 0963-003 LF

Multimode fiber optic cable 62.5/125

Applications

With these high mechanical, chemical and optical properties, this cable has been designed for harsh environments such as :

- Aeronautical
- Geophysics,
- Space,
- Missile,
- Chemical industry.

Construction

OPTICAL FIBER
Core + cladding + coating
Silica/Silica/Silicone
type 62.5/125/400 µm

PRIMARY JACKET
Copolymer zero halogen high temperature
∅ = 0.90 ± 0.05 mm

MECHANICAL STRENGTH
Polymer aromatic fiber braid

OUTER JACKET
Copolymer zero halogen high temperature
∅ = 1.50 mm (for info.)
+ ETFE
∅ = 1.80 ± 0.1 mm

Minimum bend radius

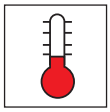
Storage > 40 mm
Long term > 20 mm
Short term (installation) > 12 mm

Standards

ABS 0963-003 LF

Nexans part number

Study 132126



-55°C to +125°C
(long term)
-65°C to +150°C
(peak)

High chemical resistance

Flame retardant
FAR/JAR part 25
sec 25.869 (a)(4)
Appendix F
part 1 (3)

ABS 0963-003 LF - Main data

- **Maximum pulling force :**
  Long term : 10 daN
  Short term : 25 daN
- **Tensile strength : > 100 daN**
- **Nominal weight : < 4 kg/km**
- **Maximum attenuation at 20°C :**
  at 850 nm : 4 dB/km
  at 1310 nm : 2 dB/km
- **Effective index of refraction:**
  at 850 nm : 1.4970
  at 1300 nm : 1.4919
- **Numerical aperture : 0.275 ± 0.015**
- **Cable Bandwidth (MHz. km) :**
  at 850 nm : > 400
  at 1310 nm : > 1000

ABS 0963-003 LF - Strong points

Mechanical properties :

- High temperature
- High tensile resistance
- High flexibility
- Low weight / Small diameter
- Low bending radius
- Easy strippability

Optical properties :

- High bandwidth
- Low cost ferrules (Telecom components)

Chemical properties :

- High chemical resistance to on board fluids
- Very low smoke and toxicity (according to ABD0031 chart 1)
- Flamability : non flammable

ABS 0963-003 LF - Connection

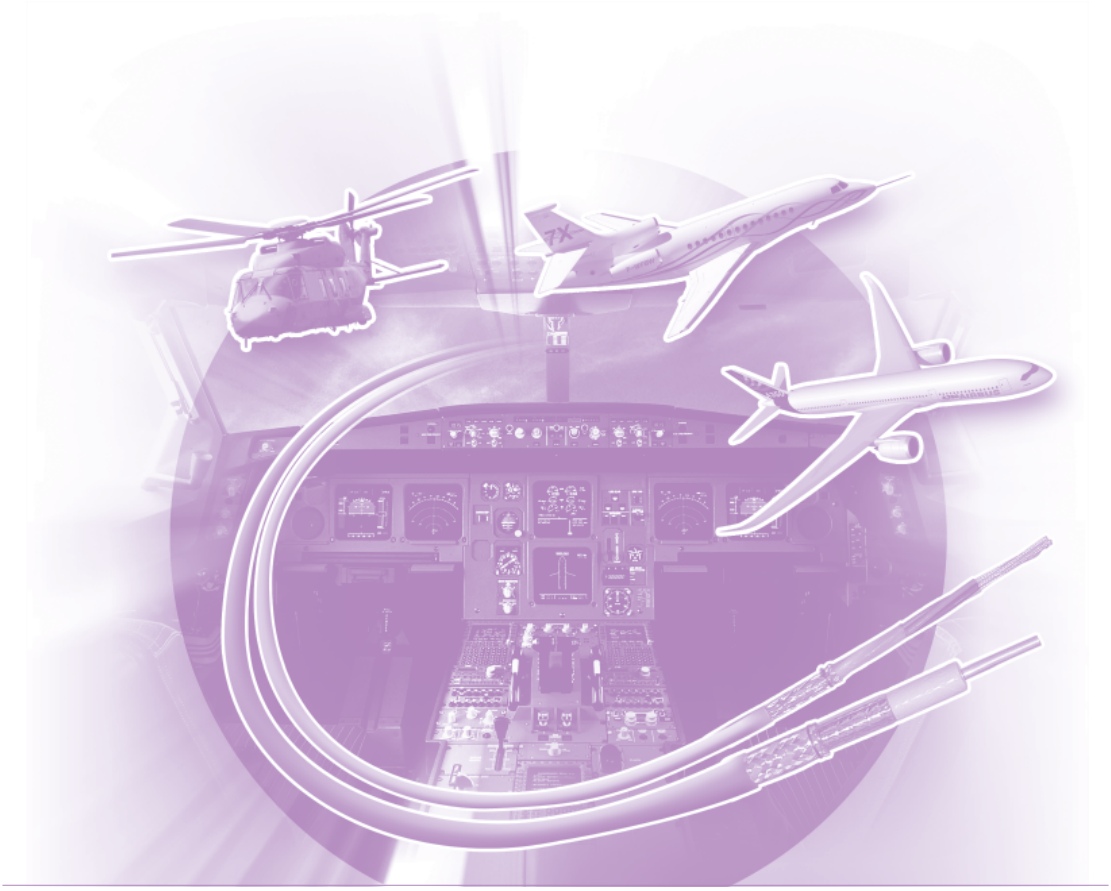
Stripping of primary jacket , buffer and coating.

If mechanical stripping is used , we highly recommend :

- To strip directly from primary jacket to silica
- To carefully clean silica with a solvent such as MEK (Methylethylketone).

Residues of silicone can be removed with a wet tissue by wiping off of different angles in order to clean all the circumference of the silica.

If you dip bare fibre into solvent , take care to avoid contact between solvent and other part of the cable such as strength members, silicone and jacket.



PART 8
Wires and cables for avionics

KZ 04, KZ 05, KZ 06

Single core, unscreened hook-up wires
High temperature

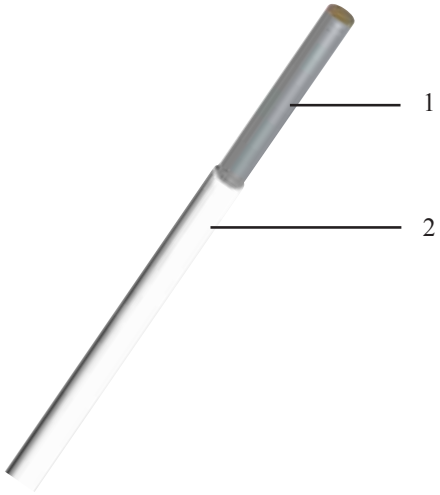
Applications

Internal wiring in electronic equipment, aircraft and satellites.
Excelent chemical resistance.
In order to increase the operating temperature of the cables up to 250°C, all KZ types can be produced with a nickel plated copper conductor on request.

From 250 to 1000 Volts

Construction

1- CONDUCTOR
Stranded silver copper wires
2- INSULATION
Extruded PTFE
or taped PTFE (for AWG 14 and 12)



Standards

NF C 93-523
NF C 32-070 C1

-55 °C to+200 °C

Fire retardant
(NF C 32-070/C1)

Flexible

RoHS

KZ - Unscreened hook-up wires high temperature

NF C 93-523 and Nexans references	Gauge AWG	Cross section mm²	Construction n x Ø mm	Nominal Ø mm	DC resistance at 20°C max. Ohms/km	overall Ø mm		Max. weight kg/km	Operating voltage Volts
						min.	max.		
KZ 04 - 01	32	0.035	7 x 0.08	0.24	546	0.48	0.58	0.95	250
KZ 04 - 02	30	0.055	7 x 0.10	0.30	349	0.56	0.66	1.3	
KZ 04 - 03	28	0.093	7 x 0.13	0.39	201	0.63	0.73	1.75	
KZ 04 - 04	26	0.14	7 x 0.16	0.48	132	0.74	0.84	2.4	
KZ 04 - 05	24	0.22	7 x 0.20	0.60	86	0.86	0.96	3.4	
KZ 04 - 06	22	0.34	7 x 0.25	0.75	54.4	1.01	1.11	5.0	
KZ 04 - 07	20	0.60	19 x 0.20	1.00	31.3	1.30	1.40	8.25	
KZ 05 - 01	32	0.035	7 x 0.08	0.24	546	0.63	0.84	1.65	600
KZ 05 - 02	30	0.055	7 x 0.10	0.30	349	0.71	0.91	2.1	
KZ 05 - 03	28	0.093	7 x 0.13	0.39	201	0.79	1.00	2.6	
KZ 05 - 04	26	0.14	7 x 0.16	0.48	132	0.89	1.10	3.4	
KZ 05 - 05	24	0.22	7 x 0.20	0.60	86	1.04	1.22	4.5	
KZ 05 - 06	22	0.34	7 x 0.25	0.75	54.4	1.17	1.37	6.2	
KZ 05 - 07	20	0.60	19 x 0.20	1.00	31.3	1.42	1.62	9.5	
KZ 05 - 08	18	0.93	19 x 0.25	1.25	20.5	1.67	1.92	14.1	
KZ 05 - 09	16	1.34	19 x 0.30	1.50	13.9	1.92	2.27	20.0	
KZ 05 - 10	14	1.91	27 x 0.30	1.85	10.0	2.30	2.66	27.0	
KZ 05 - 11	12	3.18	45 x 0.30	2.45	6.0	2.89	3.24	42.5	
KZ 06 - 01	32	0.035	7 x 0.08	0.24	546	0.88	1.09	2.6	1000
KZ 06 - 02	30	0.055	7 x 0.10	0.30	349	0.95	1.16	3.0	
KZ 06 - 03	28	0.093	7 x 0.13	0.39	201	1.04	1.24	3.7	
KZ 06 - 04	26	0.14	7 x 0.16	0.48	132	1.14	1.34	4.6	
KZ 06 - 05	24	0.22	7 x 0.20	0.60	86	1.27	1.47	5.75	
KZ 06 - 06	22	0.34	7 x 0.25	0.75	54.4	1.42	1.63	7.7	
KZ 06 - 07	20	0.60	19 x 0.20	1.00	31.3	1.66	1.86	11.0	
KZ 06 - 08	18	0.93	19 x 0.25	1.25	20.5	1.92	2.17	16.0	
KZ 06 - 09	16	1.34	19 x 0.30	1.50	13.9	2.10	2.41	21.1	
KZ 06 - 10	14	1.91	27 x 0.30	1.85	10.0	2.51	2.92	30.0	
KZ 06 - 11	12	3.18	45 x 0.30	2.45	6.0	3.14	3.55	47.5	

KZ 55, KZ 57, KZ 59

Single core, screened and jacketed hook-up wires
High temperature

Applications

Internal wiring in electronic equipment, aircraft and satellites. Excelent chemical resistance. In order to increase temperaure of the cables up to 250°C, all KZ can be produced with a nickel plated copper conductor on request.

From 250 to 1000 Volts

Construction

1- CONDUCTOR
Stranded silver copper wires
2- INSULATION
Extruded PTFE or taped PTFE
3- SCREEN
Silver copper braid
KZ 55 are reinforced with a polyimide tape
4- OUTER JACKET
FEP
Radial thickness : 0.30 mm nominal

Standards

NF C 93-523
NF C 32-070 C1

-55 °C to +200 °C

Fire retardant
(NF C 32-070/C1)

Flexible

EMI

RoHS

KZ 55, KZ 57, KZ 59 - Screened and jacketed hook-up wires

NF C 93-523 and Nexans references	Base core					D.C. resistance at 20°C max. Ohms/km	Braid nom. Ø of strands mm	Overall Ø		Max. weight kg/km	Operating voltage Volts
	Type	Conductor						min.	max.		
		Gauge AWG	Cross section mm²	Construction n x Ø mm	Nom. Ø mm			mm			
KZ 55-04	KZ 04-04	26	0.14	7 x 0.16	0.48	132	0.10	1.85	2.05	8.11	**250**
KZ 55-05	KZ 04-05	24	0.22	7 x 0.20	0.60	86	0.10	1.97	2.17	9.66	
KZ 55-06	KZ 04-06	22	0.34	7 x 0.25	0.75	54.4	0.10	2.12	2.32	11.90	
KZ 55-07	KZ 04-07	20	0.60	19 x 0.20	1.00	31.3	0.10	2.40	2.60	16.50	
KZ 57-01	KZ 05-01	32	0.035	7 x 0.08	0.24	546	0.10	1.72	1.97	6.72	**600**
KZ 57-02	KZ 05-02	30	0.055	7 x 0.10	0.30	349	0.10	1.79	2.04	7.49	
KZ 57-03	KZ 05-03	28	0.093	7 x 0.13	0.39	201	0.10	1.88	2.13	8.39	
KZ 57-04	KZ 05-04	26	0.14	7 x 0.16	0.48	132	0.10	1.98	2.23	9.63	
KZ 57-05	KZ 05-05	24	0.22	7 x 0.20	0.60	86	0.10	2.11	2.36	11.30	
KZ 57-06	KZ 05-06	22	0.34	7 x 0.25	0.75	54.4	0.10	2.25	2.50	13.60	
KZ 57-07	KZ 05-07	20	0.60	19 x 0.20	1.00	31.3	0.13	2.65	2.90	20.00	
KZ 57-08	KZ 05-08	18	0.93	19 x 0.25	1.25	20.5	0.13	2.93	3.18	26.10	
KZ 57-09	KZ 05-09	16	1.34	19 x 0.30	1.50	13.9	0.13	3.23	3.53	33.50	
KZ 57-10	KZ 05-10	14	1.91	27 x 0.30	1.85	10.0	0.13	3.61	3.91	42.60	
KZ 57-11	KZ 05-11	12	3.18	45 x 0.30	2.45	6.0	0.13	4.19	4.49	61.10	
KZ 59-01	KZ 06-01	32	0.035	7 x 0.08	0.24	546	0.10	1.97	2.22	8.79	**1000**
KZ 59-02	KZ 06-02	30	0.055	7 x 0.10	0.30	349	0.10	2.03	2.28	9.45	
KZ 59-03	KZ 06-03	28	0.093	7 x 0.13	0.39	201	0.10	2.12	2.37	10.6	
KZ 59-04	KZ 06-04	26	0.14	7 x 0.16	0.48	132	0.10	2.22	2.47	11.9	
KZ 59-05	KZ 06-05	24	0.22	7 x 0.20	0.60	86	0.10	2.35	2.60	13.6	
KZ 59-06	KZ 06-06	22	0.34	7 x 0.25	0.75	54.4	0.13	2.65	2.90	18.2	
KZ 59-07	KZ 06-07	20	0.60	19 x 0.20	1.00	31.3	0.13	2.89	3.14	22.7	
KZ 59-08	KZ 06-08	18	0.93	19 x 0.25	1.25	20.5	0.13	3.18	3.43	29.2	
KZ 59-09	KZ 06-09	16	1.34	19 x 0.30	1.50	13.9	0.13	3.38	3.68	35.4	
KZ 59-10	KZ 06-10	14	1.91	27 x 0.30	1.85	10.0	0.13	3.84	4.19	46.8	
KZ 59-11	KZ 06-11	12	3.18	45 x 0.30	2.45	6.0	0.13	4.65	5.00	70.4	

Identification

- White insulation
- White outer jacket

KZ 67, KZ 69, KZ 71

2 cores, Screened and jacketed pairs
High temperature

Applications

Internal wiring in electronic equipment, aircrafts and satellites.

From 250 to 1000 Volts

Construction

1- CONDUCTOR
Stranded silver copper wires
2- INSULATION
Extruded PTFE or taped PTFE
3- SCREEN
Silver copper braid
KZ 67 are reinforced with a polyimide tape
4- OUTER JACKET
FEP
Radial thickness : 0.30 mm nominal

Standards

NF C 93-523
NF C 31-070 C1

-55°C to +200°C

Fire retardant (NF C 32-070/C1)

Flexible

EMI

RoHS

KZ 67, KZ 69, KZ 71 - Screened and jacketed pairs

NF C 93-523 and Nexans references	Base core					D.C. resistance at 20°C max. Ohms/km	Braid nom. Ø of strands mm	Overall Ø		Average weight kg/km	Operating voltage Volts
	Type	Conductor						Min.	Max.		
		Gauge AWG	Cross section mm²	Construction n x Ø mm	Nom. Ø mm			mm			
KZ 67-01	KZ 04-01	32	0.035	7 x 0.08	0.24	573	0.10	2.11	2.36	8.03	
KZ 67-02	KZ 04-02	30	0.055	7 x 0.10	0.30	366	0.10	2.27	2.52	9.35	
KZ 67-03	KZ 04-03	28	0.093	7 x 0.13	0.39	211	0.10	2.41	2.62	10.8	
KZ 67-04	KZ 04-04	26	0.14	7 x 0.16	0.48	138	0.10	2.63	2.88	13.0	250
KZ 67-05	KZ 04-05	24	0.22	7 x 0.20	0.60	90	0.13	3.02	3.27	17.9	
KZ 67-06	KZ 04-06	22	0.34	7 x 0.25	0.75	57	0.13	3.32	3.57	22.5	
KZ 67-07	KZ 04-07	20	0.60	19 x 0.20	1.00	33	0.13	3.90	4.15	31.7	
KZ 69-01	KZ 05-01	32	0.035	7 x 0.08	0.24	573	0.10	2.46	2.71	10.6	
KZ 69-02	KZ 05-02	30	0.055	7 x 0.10	0.30	366	0.10	2.60	2.85	12.0	
KZ 69-03	KZ 05-03	28	0.093	7 x 0.13	0.39	211	0.10	2.78	3.03	13.7	
KZ 69-04	KZ 05-04	26	0.14	7 x 0.16	0.48	138	0.13	3.13	3.38	18.1	
KZ 69-05	KZ 05-05	24	0.22	7 x 0.20	0.60	90	0.13	3.39	3.64	21.5	
KZ 69-06	KZ 05-06	22	0.34	7 x 0.25	0.75	57	0.13	3.67	3.92	26.2	600
KZ 69-07	KZ 05-07	20	0.60	19 x 0.20	1.00	33	0.13	4.17	4.42	35.1	
KZ 69-08	KZ 05-08	18	0.93	19 x 0.25	1.25	21.5	0.13	4.73	5.08	46.9	
KZ 69-09	KZ 05-09	16	1.34	19 x 0.30	1.50	14.6	0.13	5.51	5.86	64.4	
KZ 69-10	KZ 05-10	14	1.91	27 x 0.30	1.85	10.5	0.13	6.27	6.62	82.4	
KZ 69-11	KZ 05-11	12	3.18	45 x 0.30	2.45	6.3	0.13	7.43	7.78	120.0	
KZ 71-01	KZ 06-01	32	0.035	7 x 0.08	0.24	573	0.13	3.11	3.36	16.4	
KZ 71-02	KZ 06-02	30	0.055	7 x 0.10	0.30	366	0.13	3.23	3.48	17.7	
KZ 71-03	KZ 06-03	28	0.093	7 x 0.13	0.39	211	0.13	3.41	3.66	19.9	
KZ 71-04	KZ 06-04	26	0.14	7 x 0.16	0.48	138	0.13	3.61	3.86	22.6	
KZ 71-05	KZ 06-05	24	0.22	7 x 0.20	0.60	90	0.13	3.87	4.12	26.1	
KZ 71-06	KZ 06-06	22	0.34	7 x 0.25	0.75	57	0.13	4.17	4.42	31.4	1000
KZ 71-07	KZ 06-07	20	0.60	19 x 0.20	1.00	33	0.13	4.65	4.90	40.2	
KZ 71-08	KZ 06-08	18	0.93	19 x 0.25	1.25	21.5	0.13	5.39	5.64	55.6	
KZ 71-09	KZ 06-09	16	1.34	19 x 0.30	1.50	14.6	0.13	5.81	6.16	68.1	
KZ 71-10	KZ 06-10	14	1.91	27 x 0.30	1.85	10.5	0.13	6.73	7.08	90.7	
KZ 71-11	KZ 06-11	12	3.18	45 x 0.30	2.45	6.3	0.13	7.99	8.34	133	

Identification

- White and light blue insulation
- White outer jacket

KZ 79, KZ 81, KZ 83

3 cores, screened and jacketed triples
High temperature

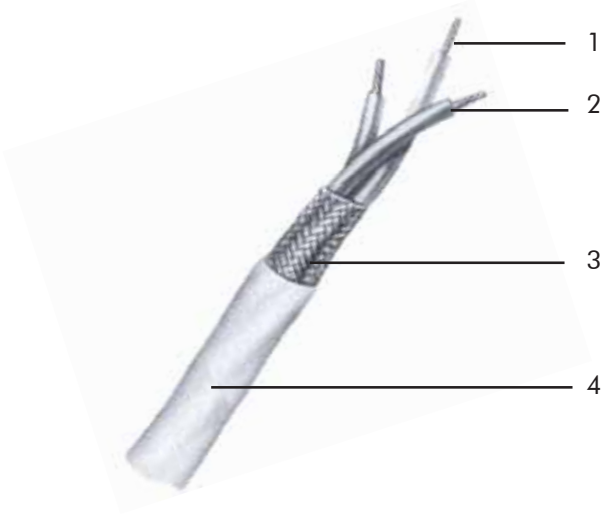
Applications

Internal wiring in electronic equipment, aircrafts and satellites.

From 250 to 1000 Volts

Construction

1- CONDUCTOR
Stranded silver copper wires
2- INSULATION
Extruded PTFE or tape PTFE
3- SCREEN
Silver copper braid
KZ 79 are reinforced with a polyimide tape
4- OUTER JACKET
FEP
Radial thickness : 0.30 mm nominal



Standards

NF C 93-523
NF C 32-070 C1

-55°C to +200°C

Fire retardant
(NF C 32-070/C1)

Flexible

EMI

RoHS

KZ 79, KZ 81, KZ 83- Screened jacketed triples

NF C 93-523 and Nexans references	Base core					D.C. resistance at 20°C max. Ohms/km	Braid nom. Ø of strands mm	Overall Ø		Average weight kg/km	Operating voltage Volts
	Type	Conductor						min.	max.		
		Gauge AWG	Cross section mm²	Construction n x Ø mm	Nom. Ø mm			mm			
KZ 79-01	KZ 04-01	32	0.035	7 x 0.08	0.24	573	0.10	2.19	2.44	9.85	
KZ 79-02	KZ 04-02	30	0.055	7 x 0.10	0.30	366	0.10	2.36	2.61	11.7	
KZ 79-03	KZ 04-03	28	0.093	7 x 0.13	0.39	211	0.10	2.51	2.76	13.7	
KZ 79-04	KZ 04-04	26	0.14	7 x 0.16	0.48	138	0.13	2.90	3.15	18.7	250
KZ 79-05	KZ 04-05	24	0.22	7 x 0.20	0.60	90	0.13	3.15	3.40	23.1	
KZ 79-06	KZ 04-06	22	0.34	7 x 0.25	0.75	57	0.13	3.48	3.73	29.6	
KZ 79-07	KZ 04-07	20	0.60	19 x 0.20	1.00	33	0.13	4.10	4.35	42.7	
KZ 81-01	KZ 05-01	32	0.035	7 x 0.08	0.24	573	0.10	2.57	2.82	13.4	
KZ 81-02	KZ 05-02	30	0.055	7 x 0.10	0.30	366	0.13	2.87	3.12	17.4	
KZ 81-03	KZ 05-03	28	0.093	7 x 0.13	0.39	211	0.13	3.07	3.32	19.9	
KZ 81-04	KZ 05-04	26	0.14	7 x 0.16	0.48	138	0.13	3.28	3.53	23.4	
KZ 81-05	KZ 05-05	24	0.22	7 x 0.20	0.60	90	0.13	3.56	3.81	28.2	
KZ 81-06	KZ 05-06	22	0.34	7 x 0.25	0.75	57	0.13	3.86	4.11	34.8	600
KZ 81-07	KZ 05-07	20	0.60	19 x 0.20	1.00	33	0.13	4.40	4.65	47.6	
KZ 81-08	KZ 05-08	18	0.93	19 x 0.25	1.25	21.5	0.13	5.18	5.53	67.5	
KZ 81-09	KZ 05-09	16	1.34	19 x 0.30	1.50	14.6	0.13	5.83	6.18	89.1	
KZ 81-10	KZ 05-10	14	1.91	27 x 0.30	1.85	10.5	0.13	6.64	7.00	115	
KZ 81-11	KZ 05-11	12	3.18	45 x 0.30	2.45	6.3	0.13	7.89	8.24	169	
KZ 83-01	KZ 06-01	32	0.035	7 x 0.08	0.24	573	0.13	3.26	3.51	20.9	
KZ 83-02	KZ 06-02	30	0.055	7 x 0.10	0.30	366	0.13	3.39	3.64	22.7	
KZ 83-03	KZ 06-03	28	0.093	7 x 0.13	0.39	211	0.13	3.58	3.83	25.8	
KZ 83-04	KZ 06-04	26	0.14	7 x 0.16	0.48	138	0.13	3.80	4.05	29.6	
KZ 83-05	KZ 06-05	24	0.22	7 x 0.20	0.60	90	0.13	4.08	4.33	34.5	
KZ 83-06	KZ 06-06	22	0.34	7 x 0.25	0.75	57	0.13	4.40	4.65	42.1	1000
KZ 83-07	KZ 06-07	20	0.60	19 x 0.20	1.00	33	0.13	5.09	5.34	57.6	
KZ 83-08	KZ 06-08	18	0.93	19 x 0.25	1.25	21.5	0.13	5.70	6.15	76.2	
KZ 83-09	KZ 06-09	16	1.34	19 x 0.30	1.50	14.6	0.13	6.15	6.60	94.8	
KZ 83-10	KZ 06-10	14	1.91	27 x 0.30	1.85	10.5	0.13	7.14	7.59	127	
KZ 83-11	KZ 06-11	12	3.18	45 x 0.30	2.45	6.3	0.13	8.49	8.94	188	

Identification

- White, light blue and orange insulation
- White outer jacket

ETF, EF & EEF

Unscreened hook-up wires
High temperature

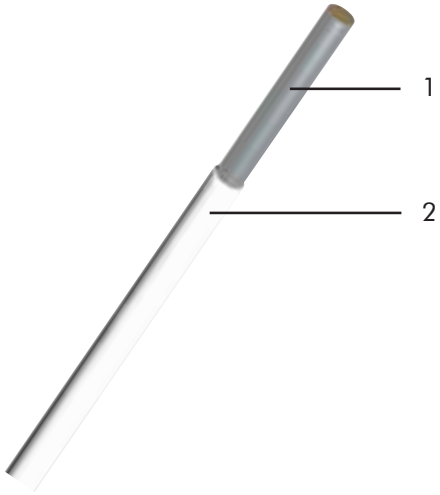
Applications

Internal wiring in electronic equipment, aircraft and satellites.
Excellent chemical resistance.

250, 600 and 1000 Volts

Construction

1- CONDUCTOR
Stranded silver copper wires
2- INSULATION
Extruded PTFE



Standards

According to
MIL W 16878/4 (EF),
MIL W 16878/5 (EEF)
MIL W 16878/6 (ETF)
NF C 32-070 C1

-55 °C to +200 °C

Fire retardant
(NF C 32-070/C1)

Flexible

RoHS

ETF, EF & EEF - Unscreened hook-up wires, high temperature

Nexans references	Gauge AWG	Croos section mm²	Construction n x Ø mm	Nominal Ø mm	Overall Ø		Operating voltage Volts
					min.	max.	
					mm		
ETF 32-07	32	0.035	7 x 0.079	0.24	0.50	0.61	
ETF 30-07	30	0.057	7 x 0.102	0.30	0.56	0.66	
ETF 30-19	30	0.054	19 x 0.06	0.30	0.56	0.66	
ETF 28-07	28	0.089	7 x 0.127	0.39	0.63	0.74	
ETF 28-19	28	0.093	19 x 0.079	0.39	0.63	0.74	
ETF 26-07	26	0.14	7 x 0.16	0.48	0.74	0.84	
ETF 26-19	26	0.15	19 x 0.102	0.48	0.74	0.84	**250**
ETF 24-07	24	0.22	7 x 0.203	0.59	0.86	0.96	
ETF 24-19	24	0.24	19 x 0.127	0.63	0.86	0.96	
ETF 22-07	22	0.36	7 x 0.254	0.74	1.01	1.12	
ETF 22-19	22	0.38	19 x 0.16	0.78	1.01	1.12	
ETF 20-07	20	0.56	7 x 0.32	0.95	1.22	1.32	
ETF 20-19	20	0.61	19 x 0.203	0.97	1.22	1.32	
EF 32-07	32	0.035	7 x 0.079	0.24	0.66	0.86	
EF 30-07	30	0.057	7 x 0.102	0.30	0.71	0.91	
EF 30-19	30	0.054	19 x 0.06	0.34	0.71	0.91	
EF 28-07	28	0.089	7 x 0.127	0.39	0.79	1.00	
EF 28-19	28	0.093	19 x 0.079	0.39	0.79	1.00	
EF 26-07	26	0.14	7 x 0.16	0.48	0.89	1.10	
EF 26-19	26	0.15	19 x 0.102	0.48	0.89	1.10	
EF 24-07	24	0.22	7 x 0.203	0.59	1.02	1.22	**600**
EF 24-19	24	0.24	19 x 0.127	0.63	1.02	1.22	
EF 22-07	22	0.36	7 x 0.254	0.74	1.17	1.37	
EF 22-19	22	0.38	19 x 0.16	0.78	1.17	1.37	
EF 20-07	20	0.56	7 x 0.32	0.95	1.37	1.57	
EF 20-19	20	0.61	19 x 0.203	0.97	1.37	1.57	
EF 18-07	18	0.89	7 x 0.404	1.19	1.63	1.88	
EF 18-19	18	0.96	19 x 0.254	1.21	1.63	1.88	
EF 16-19	16	1.23	19 x 0.287	1.45	1.85	2.21	
EEF 32-07	32	0.035	7 x 0.079	0.24	0.91	1.12	
EEF 30-07	30	0.057	7 x 0.102	0.30	0.97	1.17	
EEF 30-19	30	0.054	19 x 0.06	0.34	0.97	1.17	
EEF 28-07	28	0.089	7 x 0.127	0.39	1.04	1.24	
EEF 28-19	28	0.093	19 x 0.079	0.39	1.04	1.24	
EEF 26-07	26	0.14	7 x 0.16	0.48	1.14	1.35	
EEF 26-19	26	0.15	19 x 0.102	0.48	1.14	1.35	
EEF 24-07	24	0.22	7 x 0.203	0.59	1.27	1.47	**1000**
EEF 24-19	24	0.24	19 x 0.127	0.63	1.27	1.47	
EEF 22-07	22	0.36	7 x 0.254	0.74	1.42	1.63	
EEF 22-19	22	0.38	19 x 0.16	0.78	1.42	1.63	
EEF 20-07	20	0.56	7 x 0.32	0.95	1.63	1.83	
EEF 20-19	20	0.61	19 x 0.203	0.97	1.63	1.83	
EEF 18-07	18	0.89	7 x 0.404	1.19	1.88	2.13	
EEF 18-19	18	0.96	19 x 0.254	1.21	1.88	2.13	
EEF 16-19	16	1.23	19 x 0.287	1.45	2.10	2.41	

Nexans

Global expert in cables and cabling systems

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Nexans is a responsible industrial company that regards sustainable development as integral to its global and operational strategy. Continuous innovation in products, solutions and services, employee development and engagement, and the introduction of safe industrial processes with limited environmental impact are among the key initiatives that place Nexans at the core of a sustainable future.

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