



AVIONICS AND COAXIAL CABLES

EN 4604-008 WD



Oil resistance
Very good resistance
to aircraft fluids

Designed for high frequency radio communications applications in aeronautic environment.

50 Ohms, Coaxial Cable. Product designed according to : prEN 4604-001,-002 and 008. Tested according to prEN 3475.

CABLE DESIGN

Conductor

Strand, Silver plated copper

Insulation

Fluorocarbon

2 braids

Silver plated copper

Jacket

Fluoropolymer

IDENTIFICATION

Color of jacket: White

Color of marking: Black

Marking text: EN WD FRF**

FR = Country of Origin (FR = France)

F = Manufacturer (F = Nexans)

** = Year of manufacturing (ie. 14 = 2014)

STANDARDS

International EN 4604-008

ELECTRICAL AND HIGH FREQUENCY PERFORMANCES

Operating frequency	up to 8 GHz
Dielectric strength	2500 VAC
 Corona extinction voltage	1500 VAC
Insulation resistance	$\geq 5000 \text{ M}\Omega \cdot \text{km}$
 Characteristic impedance	$50 \pm 2 \Omega$ at 200 MHz
Maximum linear capacitance	85 pF/m
Nominal velocity of propagation	240 000 km/s



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



Temperature
Operating:
-55°C to
+200°C



Dynamic operating
bending radius **min. 80 mm**



Static operating bending
radius **min. 40 mm**



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DIMENSIONS AND WEIGHTS

NEXANS REFERENCES	CONDUCTOR			BRAID	FINISHED CABLE	
	Composition N x d (mm)	Diameter (mm)	Diameter (mm)	Diameter (mm)	Diameter (mm)	Weight (g/m)
						Nom.
EN 4604-008 WD	37 x 0.34	2.33 ± 0.05	6.0 ± 0.10	7.10 ± 0.10	7.70 ± 0.20	130 137

ATTENUATION AND POWER HANDLING

Frequency (MHz)	Nom. Rated Power (W)	Max Attenuation at 20°C (dB/100m)	Max Return Loss
50	5700	5.0	1.1
100	4000	7.2	1.1
150	3100	9.1	1.1
200	2700	10.7	1.15
400	1800	16.1	1.15
1000	1000	28.6	1.15
1600	730	39.6	1.2
2500	530	55.0	1.2
3000	480	61.0	1.2
8000	250	110.0	1.35

TRANSFERT IMPEDANCE

Maximum Values (mΩ/m)	4.2 from 0 to 0.01 MHz
	4.0 at 0.1 MHz
	1.3 at 1 MHz
	0.6 at 5 MHz
	1.0 at 10 MHz
	2.3 at 30 MHz
	5.5 at 100 MHz

