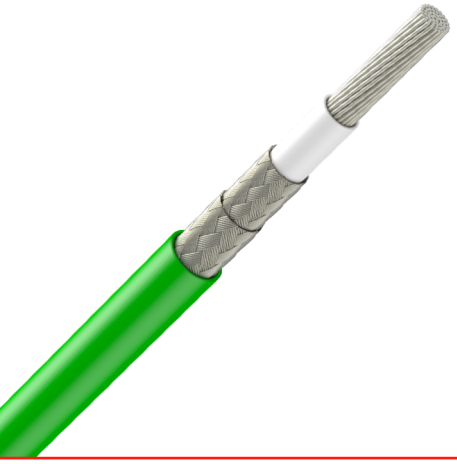
# EN 4604-010 KX



## CONTACT

Market information
industryprojects.business@lynxeogroup.com

50 Ohms, Low Loss Light Weight Coaxial Cable.

**Designed for high frequency signal transmission in aircraft electrical systems.**

## DESIGN CONSTRUCTION

Product designed according to : EN 4604-001, -002 and -010

corE
Solid silver plated copper
Diameter : 1.40 ± 0.02 mm

insulation
Fluoropolymer
Diameter : 4.20 +0.10/-0.15 mm

shield
*1st layer*
Silver plated copper tape

*2nd layer*
Silver plated copper braid
Strand diameter : 0.13 mm
Diameter : 4.80 ± 0.20 mm

jacket
Fluoropolymer

Diameter : 5.40 ± 0.15 mm
Nominal weight : 74 g/m
Maximum weight : 80 g/m

## IDENTIFICATION

Colour of jacket : Light Green
Colour of marking : Black

Marking text : " EN KX FRF** "

FR = Country of origin (FR = France)
F = Manufacturer (F = Lynxeo)
** = Year of manufacturing (i.e. 18 = 2018)

Static bending rad.
**30 mm**

Min. dynamic operating bending rad.
**50.0 mm**

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

Oil resistance
**Very good resistance to aircraft fluids**

## CHARACTERISTICS

| Usage characteristics | |
|---|---|
| Operating temperature flexing, range | -55 ... 200 °C |
| Minimum static operating bending radius | 30 mm |
| Minimum dynamic operating bending radius | 50.0 mm |
| Flame retardant | FAR/JAR part 25 sec 25.869 (a)(4) Appendix F part 1 (3) |
| Oil resistance | Very good resistance to aircraft fluids |

## ELECTRICAL CHARACTERISTICS

| | |
|---|---|
| Operating frequency | : up to 6 GHz |
| Dielectric strength | : 2500 Vac |
| Operating voltage | : 1000 Vrms max. |
| Minimum insulation resistance | : 5000 MΩ.km |
| Characteristic impedance at 200MHz | : 50 ± 2 Ω |
| Maximum linear capacitance | : 88 pF/m |
| Minimum relative velocity of propagation | : 75% |
| Maximum conductor ohmic resistance | : 11.53 Ω/km |

## HIGH FREQUENCY PERFORMANCES

| Frequency (MHz) | Max. Attenuation at 20°C (dB/100m) | Max. Return Loss |
|---|---|---|
| 50 | 5.5 | 1.10 |
| 100 | 7.8 | 1.10 |
| 150 | 9.7 | 1.10 |
| 200 | 11 | 1.15 |
| 400 | 15.5 | 1.15 |
| 1000 | 24.5 | 1.15 |
| 1600 | 31.5 | 1.20 |
| 2500 | 38.9 | 1.20 |
| 3000 | 43.8 | 1.20 |
| 6000 | 63.5 | 1.35 |

## TRANSFERT IMPEDANCE

**Maximum Values (mΩ/m)** : 9.0 from 0 to 0.01 MHz
: 9.0 at 0.1 MHz
: 5.0 at 1 MHz
: 1.8 at 5 MHz
: 1.0 at 10 MHz
: 0.5 at 30 MHz
: 0.5 at 100 MHz

## SELLING AND DELIVERY INFORMATION