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**Coaxial cables  
for broad transmission capability**

# Nexans, worldwide leader in cables and cabling systems

As a global expert in cables and cabling systems, Nexans brings an extensive range of advanced copper and optical fiber solutions to three key sectors of the economy: **infrastructure, industry and buildings.**

Its cables and systems can be found in every area of people's lives, from rolling stock and railway infrastructure to telecommunications and energy networks, aeronautics, aerospace, automobiles,

petrochemicals, windmills, medical applications, etc.

The presence of Nexans in over 65 countries gives it a full mastery of both national and international standards. Its 10 Competence Centers and International Research Center work closely with customers to constantly improve its standard range of products and technologies and to develop customized, country and industry-specific solutions.



# Coaxial cables from Nexans, a wide range of products covering diverse railway standards

The rolling stock industry is now at a crucial point in its development. New challenges must be met due to long-awaited equipment upgrades, booming freight traffic and high-speed train projects, and the growing need for conventional subways, fully-automated metros, and light-rail suburban vehicles worldwide.

Nexans manufactures a complete range of rolling stock cables and components, meeting national and international standards, in addition to providing system integration, extensive customer service and innovative products for future needs. We supply both standard items and customized solutions, and reinforce system interoperability to meet the challenge of ERTMS and ETCS.

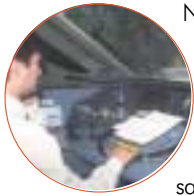
With the level of telecommunication requirements increasing drastically onboard, you are looking for a time-proven high-frequency (HF) cable that offers excellent performance to serve a number of requirements: security monitors, passenger information, entertainment, mobile phones, and especially radio-based train management and control. The cables need to endure +90°C heat, vibrations, chemicals, fluids, and oils, and meet electromagnetic-compatibility requirements, as well delivering high fire-performance.

To help you achieve this, Nexans offers safe, high-capacity **coaxial cables**.

**Coaxial cables**  
for multimedia and GSM  
radio transmission



# Coaxial cables: a proven solution that offers plug-and-play efficiency



Nexans produces a whole range of coaxial cables which all meet standard dimensions and electrical characteristics, while at the same time being adapted to special railway requirements in terms of impedance, insulation and outer sheaths. These coaxial cables are a cost-effective solution for antenna links, video transmission, mobile phone connections, and advanced train management and control functions. To assure long-life, heat resistance and fire-performance, the cables are subjected to rigorous tests (flame tests, toxicity, etc.). Cross-linked materials guarantee optimal performance for the use of these cables in railway rolling stock.

## This Nexans solution gives you:

- A **wide range** of cables to meet railway requirements
- **Fire protection** for people and equipment through Halogen-Free Fire-Retardant (HFFR) materials
- **Easy connectivity** since plug-and-play connectors and pre-cut lengths are possible
- **High capacity** using a familiar, reliable technology
- **Convenience** since standard plugs and connectors can be used and no specialized tools are required
- **High availability** in Europe and worldwide



**A mammoth loco project turns to Nexans for coax.**

For the BR 185 1 & 2 project, Nexans supplied coaxial cables

to outfit over 400 locomotives being built by Bombardier in Germany. This is, in fact, the largest single order that Deutsche Bahn has ever given to an original equipment manufacturer, although a number of the units will also be sold to private institutions.

# Coaxial cables



Product families	Product family names	Standards / Specs
Flamex range, coaxial 50 ohms cables	<b>Flamex</b> <b>RG 58 (KX15)</b> <b>RG 174 (KX3B)</b> <b>RG 213 (KX4)</b> <b>RG 214 (KX13)</b>	<ul style="list-style-type: none"> <li>• IEC 332/1 &amp; 3, IEC 754 - 1/2, IEC 1034, NFC 93550 (KX) and MIL C 17 (RG)</li> </ul>
Flamex range, coaxial 75 ohms cables	<b>Flamex</b> <b>RG 59 (KX6)</b> <b>RG 11 (KX8)</b>	<ul style="list-style-type: none"> <li>• IEC 332/1 &amp; 3, IEC 754 - 1/2, IEC 1034, NFC 93550 (KX) and MIL C 17 (RG)</li> </ul>
Flamex coaxial mixed (coax. 75 ohms + energy)	<b>2PF704</b> <b>1 x coax. 75 ohms</b> <b>+ 2 x 0.6 mm<sup>2</sup></b>	<ul style="list-style-type: none"> <li>• IEC 332/1 &amp; 3, IEC 754 - 1/2, IEC 1034, NFC 93550 (KX) and MIL C 17 (RG)</li> </ul>
High frequency application (for example antennas, railway radio, GPS, mobile phone)	<b>RG 213</b> <b>RG 214</b> <b>RG 223</b>	<ul style="list-style-type: none"> <li>• Acc. to internal spec. 43111919</li> <li>• Acc. to internal spec. 43111419</li> <li>• Acc. to internal spec. 43112319</li> </ul>



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