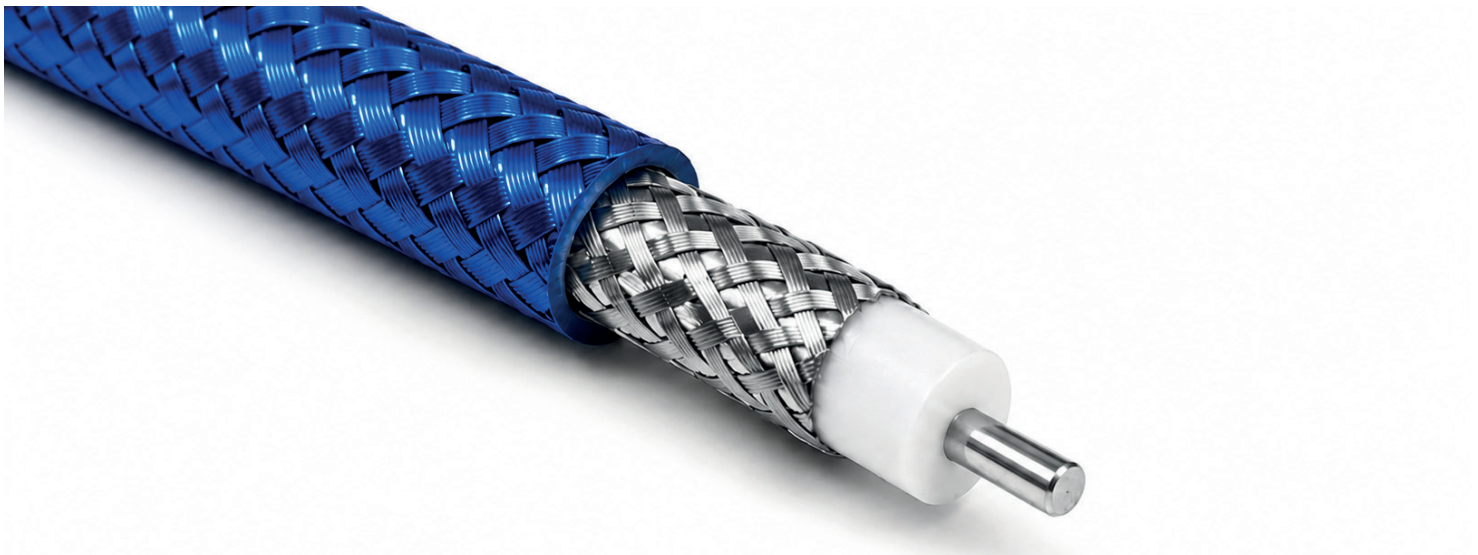


PRESS RELEASE | July 17th, 2026

elspec presents fully non-magnetic 2.92-mm cable assemblies up to 38 GHz

el-spec GmbH is introducing a new, high-precision RF cable solution that was developed specifically for demanding applications in quantum technology and medical technology. The new, non-magnetic cable assemblies are based on semi-rigid/conformable, hand-formable, and flexible coaxial cable types and are equipped with 2.92-mm connectors. They offer reliable signal transmission at frequencies up to 38 GHz in environments that must be completely free of magnetic interference.



MAXIMUM PRECISION FOR SENSITIVE RF ENVIRONMENTS

In quantum technology—for example, in the control of quantum computers in cryostats—as well as in sensitive medical technology (such as magnetic resonance imaging, MRI), even the tiniest magnetic traces can distort measurement results or disrupt sensitive quantum states. elspec's new development consistently solves this problem: in rigorous magnetic measurements, the residual magnetization of all tested cable assemblies was demonstrably below 10 nT, officially classifying them as completely non-magnetic.

In addition to their magnetic neutrality, the cable assemblies impress technically with outstanding electrical performance values. Up to a frequency of 30 GHz, the cables exhibit a typical insertion loss of just 4.72 dB/m. An excellent return loss of at least -16 dB is guaranteed for 80% of the assemblies and remains stable up to a cutoff frequency of 30 GHz. Due to the occurrence of higher modes starting at approximately 39 GHz, the assembly is optimally specified for applications up to 38 GHz. Optimized lengths ranging from 28 mm to 1,500 mm are available.

A MILESTONE FOR QUANTUM AND MEDICAL TECHNOLOGY

"With the successful qualification of our fully antimagnetic, tested coaxial assemblies, we are closing a critical gap for developers in quantum and medical technology. It was particularly important to us to establish a genuine 'Made in Europe' product. Developed by engineers in Germany, these high-end components specifically strengthen technological sovereignty as well as supply chains in Germany and our European neighboring countries. This gives our customers the absolute assurance of interference-free signal transmission without magnetic interactions—directly from a reliable, regional production facility."

Thomas Weber, CEO / Technical Sales Management, el-spec GmbH

AVAILABILITY

The new SRF087-NM antimagnetic cable assemblies are now available for customer projects and for sampling. elspec will be happy to provide detailed measurement data and electrical test reports upon request.

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About elspec

el-spec GmbH, headquartered in Geretsried, is a specialized engineering and technology partner for advanced high-frequency technology, cable solutions, and complex cabling systems. The company supports national and international customers in key industries such as aerospace, quantum technology, and scientific research with customized, high-precision product and system solutions. A particular focus is on technical consulting, the selection of suitable components, and the development and qualification of application-specific cable and connection solutions. To this end, el-spec GmbH maintains its own laboratory on the DESY campus. There, products are tested under realistic condition, including for their phase stability during movement and under the influence of temperature and humidity.

With many years of experience, in-depth radio frequency expertise, and close collaboration with customers, manufacturers, and research institutions, elspec supports projects from the initial technical inquiry through to a solution ready for series production.