Philtec

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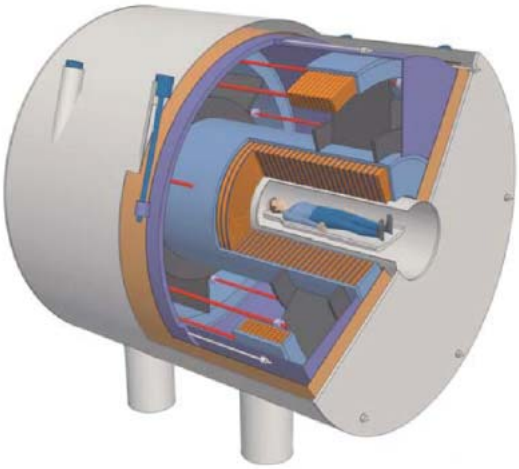
E-NEWSLETTER

YOUR SOURCE FOR THE LATEST SENSOR APPLICATION NEWS

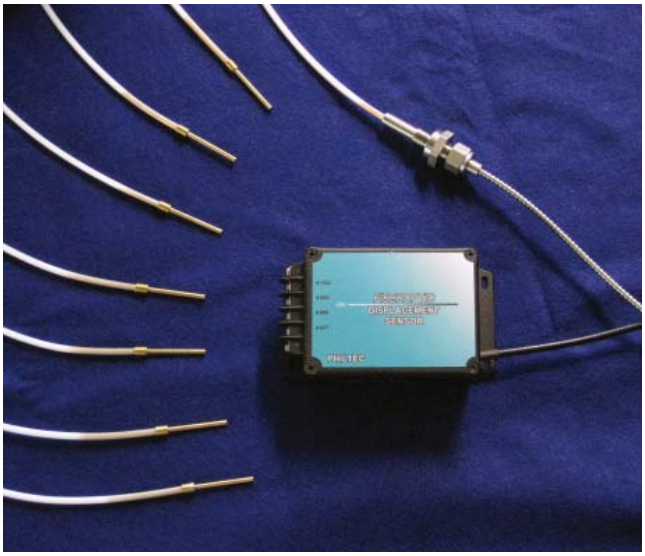
GAP SENSORS FOR MRI APPLICATIONS

The 11.7T Whole Body MRI under development at CEA Saclay, France, in collaboration with Siemens Healthcare UK, is scheduled for commissioning in 2011*.



Philtec's fiber optic sensors are playing a vital role in the development and testing of this unique machine with unprecedented power. Displacements of many items inside the cryogenic system are being measured successfully to sub-micron level resolution.

Siemens Healthcare purchased 14 Philtec sensor systems in 2009** to measure deflections of the magnet structures. An order for 7 additional sensors was recently delivered to Siemens via our UK sales agent, Scantron Industrial Products Ltd.



*CLEFS CEA - No.56 - WINTER 2007-2008
** http://www.philtec.com/ENEWS090901mri.pdf

SENSOR REQUIREMENTS

Measure ±2mm range displacement of the Magnet Structural Elements

- Liquid Helium @ 1.8K
- High Magnetic Field 12 T
- Pressure 15 mbar

The fiber optic cable assemblies were 9.3 m long and featured:

- Passivated Brass Sensor Tips
- PTFE Sheathing
- Bulkhead Passthru Fittings

The sensors are capable of providing sub-micron resolution with several mm of operating range.