

# Medical System solutions

Edition 2012



# Diagnostic – Components

## Nonmagnetic components

There are different requirements for materials depending on the application. If connectors and cables are placed directly into the magnetic field of MRI systems, HUBER+SUHNER not only utilises virgin nonmagnetic raw materials but also ensures material purity throughout its fabrication processes. The following list shows a non complete product overview of components which are used with direct magnetic field exposure.

## Nonmagnetic coaxial connector

Type	Suitable for cable
11_SMC-50-2-16/111T	RG_316, EF_316
16_MCX-50-2-19/111T	EF_316D, K02252_D08/60
16_MCX-50-2-18/111T	RG_316, EF_316, RG_174, RG_188
16_MCX-50-1-8/111T	RG_178, EF_178, RG_196
23_BNO-0-0-5/133T	panel mount
82_MCX-50-0-42/111T	female board connector (through hole)
82_MCX-50-0-52/111T	female board connector (surface mount)
84_SMC-50-0-4/111T	right angle male board connector (through hole)
85_SMA-50-0-52/111T	right angle female board connector (through hole)



## Nonmagnetic coaxial cables

Type	
K_02252-D-08	
K_02252-D-60	(UL AWM Style 1354)
K_01152-07	
K_01152-15	(UL AWM Style 1354)
SM_047_CU	(also available with PE jacket)
SM_141_CU	(also available with PE or FEP jacket)
SM_250-01	(also available with FEP jacket)





### Hermetically sealed components

Cooled, complex equipment such as NMR systems (nuclear magnetic resonance) often require signal transfer through thermo isolation layers. Therefore HUBER+SUHNER develops and manufactures hermetically sealed coaxial connectors featuring:

- Leak rates of smaller than  $4 \times 10^{-10}$  Torr l/s
- Strong mechanical design
- Common interfaces
- Single connectors but also multi coaxial solutions such as the 14 x MCX plus 2 x SMA (see picture)



### Fiber optic connectors

The broad HUBER+SUHNER connector portfolio is continuously enhanced through new innovative solutions such as MTP, which unites 12 fibers in one housing which is the overall size of a common SC connector or the robust ODC® interconnect systems featuring water tightness and mechanical stability. These are especially suited for heavy equipment installations such as MRI.



### Corrugated cables

High power pulses for gradients inside of MRI systems or the like can be cost effectively fed through these cables. HUBER+SUHNER offers a complete range between  $\frac{1}{4}$  inch and  $1 \frac{5}{8}$  inch cables in standard or high flex designs. A broad portfolio of compatible connectors with different interfaces and various patterns is available.