

Do LEMO connectors have UL / CSA recognition?

Yes, many LEMO connectors have Underwriters Laboratories (UL) recognition and UL for Canada recognition. For further details go directly to the **UL web site** and search by the file number: **E119802**.

Does LEMO have ISO certification?

LEMO worldwide is ISO 9001 certified.

Are any of the LEMO connectors built to a specific connector standard?

Yes, two product series are built to standards, the LEMO NIM-CAMAC 00 Series, and the LEMO 3K.93C HDTV Camera Connector (see www.smppte.org for the standards).

LEMO NIM-CAMAC 00 Series

NIM modules (Nuclear Instrumentation Methods) are used to collect scientific data in nuclear particle research. The NIM-CAMAC 00 Series front panel connectors are defined in this standard, NBS-549. View the NIM-CAMAC 00 Series.

LEMO HTDV Camera Connector – 3K.93C Series

The 3K.93C Series is used in the High Definition Television (HDTV) industry. The standard is the ANSI/SMPTE 304M-1998 "Television - Broadcast Cameras - Hybrid Electrical and Fiber optic Connector." The associated UL safety standard is UL1419 "Professional Video and Audio Equipment."

Does LEMO have MIL-SPEC connectors?

All LEMO connectors are tested to MIL standard test requirements (see table below). LEMO's F Series connectors meet or exceed performance requirements of military standards but are not "MIL-SPEC" connectors. Examples of LEMO's B and F series testing include:

Tests	MIL	Method
<i>Electrical Tests</i>		
Test Voltage rms	1344A	3001.1
Rated Voltage rms	1344A	3001.1
Contact Resistance	202	307
Shell Electrical Continuity	1344A	3007
Insulation Resistance	1344A	3003.1
VSWR f (Ghz)	1344A	3005
Mating Force	1344A	2013.1
Unmating Force	1344A	2013.1
Latching Force	1344A	2010.1
Straight Pull force on Cable	1344A	2009.1
Insertion Force on Contacts	1344A	2014
Retention Force on Contacts	1344A	2007.1
Lifetime	1344A	2016
Vibration	202	204C
<i>Environmental Tests</i>		
Vacuum Test (if applicable)	1344A	1008
Hydrostatic Pressure Resistance (if applicable)	1344A	1006.1

What is LEMO's position in regards to the requirements of RoHS (Restriction of Hazardous Substances) legislation?

LEMO Connectors and Accessories

LEMO certifies that its connectors and accessories marketed, manufactured, and shipped after January 1, 2006 are in full compliance with the requirements of **Directive 2002/95/EC of the European Parliament and of the Council dated 27th January 2003** regarding the presence of: mercury, cadmium, lead, hexavalent chromium, polybromide biphenyl (PBB) or polybromide diphenyl ether (PBDE), including DecaBDE.

The Directive (**EU Directive 2002/95/EC**) specifies restriction of the use of certain hazardous substances in electrical and electronic equipment by July 1, 2006 and is known as the **RoHS Directive**

All part numbers will remain unchanged. The vast majority of all LEMO products require no adjustment for RoHS compliance. The few items that have internal solder connections have moved to lead-free solder. There are a few connectors with an optional aluminum-alloy shell that contains lead in that alloy. For that shell option LEMO will switch to a RoHS compliant aluminum alloy by January 1, 2006.

Contacts Designed for Solder Connection

All LEMO connectors with solder-style contacts are fully compatible with lead-free solder and the required higher temperatures. LEMO insulators are made of high temperature material and the standard connecting surfaces are made of an Au/Ni plating. In addition, LEMO has conducted verification testing of contacts and cable assemblies with lead-free solder.

Cable and Product Assemblies by LEMO

Standard cable and product assemblies from LEMO use lead-free solder. Cable assemblies and other value added products that require RoHS declarations of compliance will be available by June 1, 2006. Call us if you need help with certification earlier. LEMO also continues to offer custom services to meet customer specific requirements for both material and process (such as with solder selection) in cable and other product assemblies. Lead based or lead-free soldering processes are available.
