

Harmonized <HAR> Approved Conforms to CE

Lapp's Harmonized and CE conforming cables are utilized on Electronic and Electrical equipment that is intended for use in Europe.

The development and implementation of common standards for the European marketplace facilitates export trade to European countries. An international safety standards agency called CENELEC (European Committee for Electrotechnical Standardization) was formed to develop electrical standards that would be universally acceptable to all CENELEC member nations which are noted in the table below.

The electrical standards are classified as Harmonization Documents. OLFLEX®'s "HAR" cordage and hook-up wire conforms to Harmonization Documents HD-21 and HD-22:

HD-21 Specification for polyvinyl chloride insulated wire and cables.

HD-22 Specification for rubber insulated flexible cords and cables.

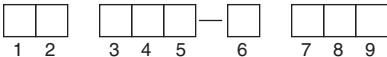
In order to identify a harmonized wire or cable, one of the following identification methods are required: (1) Printed

letters (HAR) on either the overall jacket or insulation or (2) Printed tape or identification threads.

Recommended applications as defined in the Harmonization Documents are as follows:

- PVC Cord (H05VV-F) - for use in offices, domestic premises, household appliances. Permitted for cooking and heating applications, provided cable does not contact hot parts and is not subjected to radiation.
(NOT SUITABLE FOR OUTDOOR USE)
- Rubber Cord (H05RR-F/H07RN-F) - for use when cable is subjected to mechanical stress in dry and damp areas. May be used as power supply cable for portable motors, appliances, domestic electric and electrical tools, agricultural and utility water equipment. May be installed on plaster or directly on structural parts of heavy machinery.

The CE symbol identifies a product that conforms to a European Directive developed by a coalition of European countries that form the European Union (EU). This compliance is necessary for exporting certain cable types to countries within the European community.

HARMONIZED WIRE CODING SYSTEM	LICENSING BODIES OF CENELEC*																														
 <ol style="list-style-type: none"> BASIC TYPE H Harmonized Type A National Type WORKING VOLTAGE 03 300/300 Volt 05 300/500 Volt 07 450/750 Volt INSULATING V PVC R Rubber S Silicone Rubber SHEATH-CLADDING MATERIAL V PVC R Rubber N Chloroprene Rubber J Glass-filament Braiding T Textile Braiding SPECIAL FEATURES H Ribbon Cable, Separable H2 Ribbon Cable, Non-Separable CONDUCTOR TYPES U Single Wire R Multi-Wire K Fine Wire (Permanently Installed) F Fine Wire (Flexible) H Super Fine Wire Y Tinsel Strand NUMBER OF CONDUCTORS PROTECTIVE CONDUCTOR X Without Protective Conductor G With Protective Conductor CONDUCTOR CROSS-SECTIONAL Area specified in mm² 	<table border="0"> <tr> <td data-bbox="550 978 790 1039">AUSTRIA</td> <td data-bbox="805 978 1479 1039">Osterreichischer Verband for Elektrotechnik (OVE)</td> </tr> <tr> <td data-bbox="550 1050 790 1092">BELGIUM</td> <td data-bbox="805 1050 1479 1092">Comite' Electrotechnique Belge (CEBEC)</td> </tr> <tr> <td data-bbox="550 1102 790 1165">DENMARK</td> <td data-bbox="805 1102 1479 1165">Denmarks Elektriske Materiel Kontrol (DEMKO)</td> </tr> <tr> <td data-bbox="550 1176 790 1218">FINLAND</td> <td data-bbox="805 1176 1479 1218">Electrical Inspectorate (SETI)</td> </tr> <tr> <td data-bbox="550 1228 790 1270">FRANCE</td> <td data-bbox="805 1228 1479 1270">Union Technique de l' Electricite' (UTE)</td> </tr> <tr> <td data-bbox="550 1281 790 1344">GERMANY</td> <td data-bbox="805 1281 1479 1344">Verband Deutscher Elektrotechniker (VDE) e.V, Prüfstelle</td> </tr> <tr> <td data-bbox="550 1354 790 1417">GREECE</td> <td data-bbox="805 1354 1479 1417">Hellenic Organization for Standardization (ELOT)</td> </tr> <tr> <td data-bbox="550 1428 790 1470">IRELAND</td> <td data-bbox="805 1428 1479 1470">National Standards Authority of Ireland (NSAI)</td> </tr> <tr> <td data-bbox="550 1480 790 1522">ITALY</td> <td data-bbox="805 1480 1479 1522">Istituto Italiano del Marchio di Quanta (IMQ)</td> </tr> <tr> <td data-bbox="550 1533 790 1575">LUXEMBOURG</td> <td data-bbox="805 1533 1479 1575">ITM</td> </tr> <tr> <td data-bbox="550 1585 790 1648">NETHERLANDS</td> <td data-bbox="805 1585 1479 1648">N.V. tot Keuring van Elektrotechnische Materialen (KEMA)</td> </tr> <tr> <td data-bbox="550 1659 790 1701">PORTUGAL</td> <td data-bbox="805 1659 1479 1701">Institute Petugues Da Qualidede (IPQ)</td> </tr> <tr> <td data-bbox="550 1711 790 1774">SPAIN</td> <td data-bbox="805 1711 1479 1774">Asociacion Electrotcenica Y Electronica Espanola</td> </tr> <tr> <td data-bbox="550 1785 790 1848">SWEDEN</td> <td data-bbox="805 1785 1479 1848">Svenska Elektriska Materiel Kontrollanstalten (SEMKO)</td> </tr> <tr> <td data-bbox="550 1858 790 1950">UNITED KINGDOM</td> <td data-bbox="805 1858 1479 1950">B.A.S.E.C. — British Approvals Service for Electric Cables Ltd.</td> </tr> </table>	AUSTRIA	Osterreichischer Verband for Elektrotechnik (OVE)	BELGIUM	Comite' Electrotechnique Belge (CEBEC)	DENMARK	Denmarks Elektriske Materiel Kontrol (DEMKO)	FINLAND	Electrical Inspectorate (SETI)	FRANCE	Union Technique de l' Electricite' (UTE)	GERMANY	Verband Deutscher Elektrotechniker (VDE) e.V, Prüfstelle	GREECE	Hellenic Organization for Standardization (ELOT)	IRELAND	National Standards Authority of Ireland (NSAI)	ITALY	Istituto Italiano del Marchio di Quanta (IMQ)	LUXEMBOURG	ITM	NETHERLANDS	N.V. tot Keuring van Elektrotechnische Materialen (KEMA)	PORTUGAL	Institute Petugues Da Qualidede (IPQ)	SPAIN	Asociacion Electrotcenica Y Electronica Espanola	SWEDEN	Svenska Elektriska Materiel Kontrollanstalten (SEMKO)	UNITED KINGDOM	B.A.S.E.C. — British Approvals Service for Electric Cables Ltd.
AUSTRIA	Osterreichischer Verband for Elektrotechnik (OVE)																														
BELGIUM	Comite' Electrotechnique Belge (CEBEC)																														
DENMARK	Denmarks Elektriske Materiel Kontrol (DEMKO)																														
FINLAND	Electrical Inspectorate (SETI)																														
FRANCE	Union Technique de l' Electricite' (UTE)																														
GERMANY	Verband Deutscher Elektrotechniker (VDE) e.V, Prüfstelle																														
GREECE	Hellenic Organization for Standardization (ELOT)																														
IRELAND	National Standards Authority of Ireland (NSAI)																														
ITALY	Istituto Italiano del Marchio di Quanta (IMQ)																														
LUXEMBOURG	ITM																														
NETHERLANDS	N.V. tot Keuring van Elektrotechnische Materialen (KEMA)																														
PORTUGAL	Institute Petugues Da Qualidede (IPQ)																														
SPAIN	Asociacion Electrotcenica Y Electronica Espanola																														
SWEDEN	Svenska Elektriska Materiel Kontrollanstalten (SEMKO)																														
UNITED KINGDOM	B.A.S.E.C. — British Approvals Service for Electric Cables Ltd.																														