



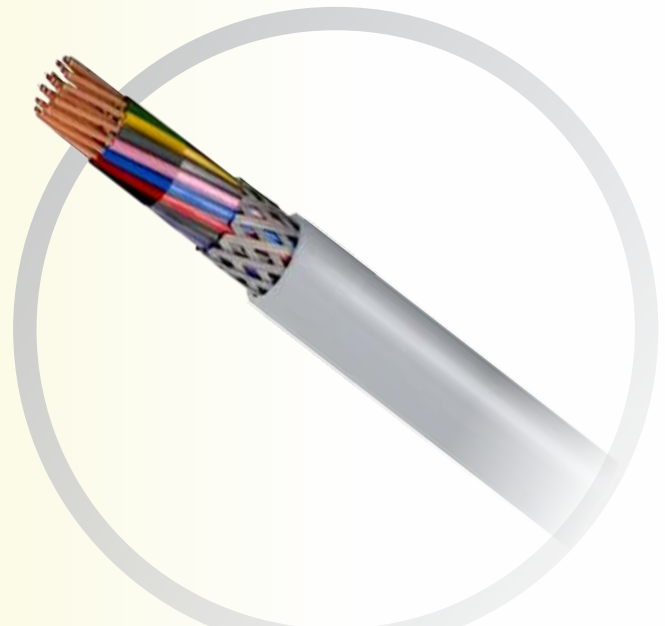
# Instrumentation & Data Cables

— Evolving Together —

# Multi Core Cables

## Features

- ▶ Cores with Different Colors for Easy Identification
- ▶ Low Bending Radius
- ▶ Low Diameters
- ▶ Space Saving
- ▶ Cost-Effective
- ▶ Easy Routing
- ▶ Screened Versions Offer Good EMI Protection
- ▶ Based on EN & VDE Standards



## APPLICATIONS

Indoor/ Outdoor Installations

Industrial Control Systems for Measurement

Conduit installations

General Wiring of Plant & Machinery

Control, Signalling & Analog Data Transmission

Available Voltage Ratings

90V | 300V

Min. Bending Radius

8 Times of Cable Diameter

Lead Free



Cert No. EU4093



## Variants:

	LiYY	LiYCY	LiHH	LiHCH
Environmental friendly	Good	Good	Excellent	Excellent
EMI protection	No protection	Excellent	No protection	Excellent
Halogen content	High	High	Low	Low
Corrosive gas generation on burning	High	High	Low	Low
Electrical properties	Good	Good	Excellent	Excellent
Capacitance	Moderate	Moderate	Low	Low

Note: These cables can be custommanufactured for upto 1.1kV also, on request.

IS : 9968-1



CML-8651081  
Elastomer Insulated Cables

IS : 9968-2



CML-8835701  
Elastomer Insulated Cables

IS : 1554-1



CML-3113634  
PVC Insulated (Heavy Duty) Electric Cables

IS : 694



CML-3113432  
PVC Insulated Cables /Cords with Rigid & Flexible Conductor

IS : 7098-1



CML-3113533  
Crosslinked Polyethylene (XLPE) Insulated Thermoplastic Sheathed Cables

IS : 14494



CML-8660789  
Elastomer Insulated Flexible Cables for Use in Mines

IS : 2465



CML-8400127710  
Cables for Motor Vehicles

IS : 9857



CML-8631378  
Welding Cables

# Hook-up Cables

## Applications

- General Wiring of Plant & Machinery
- Indoor/ Outdoor Installations
- Conduit Installations
- Industrial Control Systems for
- Measurement, Control and Signalling



Generally Based on EN, VDE, IEC & IS Standards

Twisted Core Construction Available in Pair, Triad or Quad

## Feature

Armored Versions Available

Multiple Color or Number Options Available for Easy unit Identification

## Variants

- Multi-pair / Multi-triad / Multi-quad
- Armored / Unarmored
- Individually Shielded and/or Overall Shielded
- Shielding options : Tape shielded, Braid screened or Combination of Both

## Available Voltage Ratings

300V | 500V | 1100V

## Min. Bending Radius

8-12 Times of Cable Diameter

**Lead Free**



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# SERVO & ENCODER Cables

Temperature Ratings	Available Voltage Ratings	Min. Bending Radius
Upto 75°C	90V   300V   500V   1100V	8 to 12 Times of Cable Diameter



## Features

- ▶ Cores with Different Colors or Number Printing for Easy Identification
- ▶ Composite Construction with Cores and Pairs
- ▶ Screened Versions Offer Good EMI Protection
- ▶ Generally Based on EN, IEC, IS and VDE Standards
- ▶ Lower Capacitance Versions Available

## Variants

- ▶ Cores and Pairs can be Combined Together
- ▶ Individual Screening on Pairs and Cores Available on Request
- ▶ Pair and Cores Bedding also Available on Special Request
- ▶ Available in PVC and Halogen free Insulation and Sheathing Compounds
- ▶ Highly Flexible Versions also Available
- ▶ Polyurethane Sheathed Version also Available

## Applications

- ▶ Servo Motors and Drives
- ▶ Sensors Wiring



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IS : 2465



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# ELASTOMERIC Cables

Temperature Ratings	Available Voltage Ratings	Min. Bending Radius
Upto 90°C	500V   1100V	8 to 12 Times of Cable Diameter

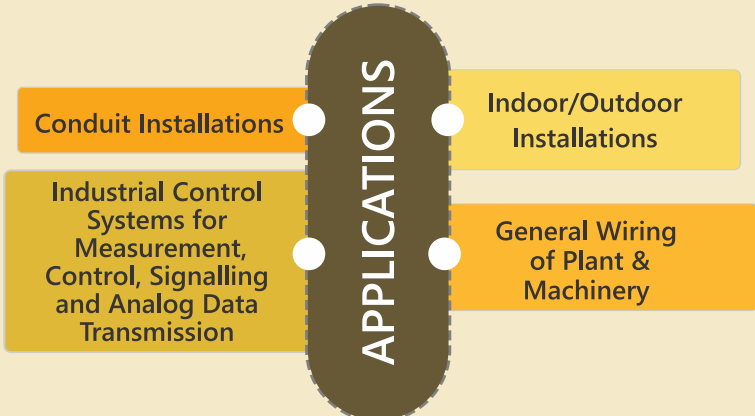


## Features

- ▶ Twisted Core Construction Available in Pair, Triad or Quad
- ▶ Identification by Number Printed Tapes
- ▶ Screened Versions offer Good EMI Protection
- ▶ Generally Based on EN, IEC, IS and VDE Standards
- ▶ Excellent Electrical Properties

## Variants

- ▶ Multi-Pair / Multi-Triad / Multi-Quad Contructions
- ▶ Armored / Unarmored
- ▶ Individually Shielded and/or Overall Shielded
- ▶ Shielding Options  
Tape Shielded, Braid Screened or Combination of Both

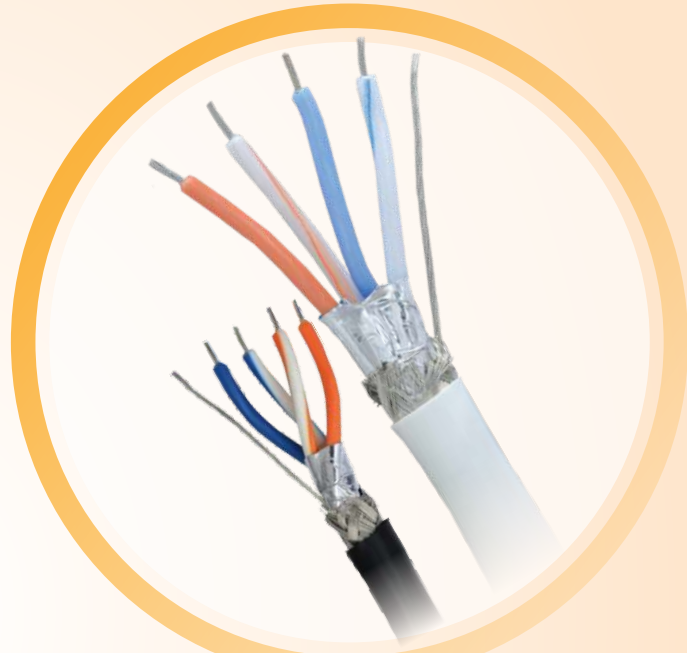


<b>IS : 9968-1</b>  CML-8651081 Elastomer Insulated Cables	<b>IS : 9968-2</b>  CML-8835701 Elastomer Insulated Cables	<b>IS : 1554-1</b>  CML-3113634 PVC Insulated (Heavy Duty) Electric Cables	<b>IS : 694</b>  CML-3113432 PVC Insulated Cables /Cords with Rigid & Flexible Conductor	<b>IS : 7098-1</b>  CML-3113533 Crosslinked Polyethylene (XLPE) Insulated Thermoplastic Sheathed Cables	<b>IS : 14494</b>  CML-8660789 Elastomer Insulated Flexible Cables for Use in Mines	<b>IS : 2465</b>  CML-840012710 Cables for Motor Vehicles	<b>IS : 9857</b>  CML-8631378 Welding Cables
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# Data Cables & Modbus (RS-485 and RS-232)

## Features

- ▶ Cores with Different Colors for Easy Identification
- ▶ Twisted Core Construction Available in Pair, Triad or Quad
- ▶ Screened Versions offer Good EMI Protection
- ▶ Generally based on EN, IEC, IS and VDE Standards
- ▶ Armored Versions also Available on Request
- ▶ Lower Capacitance
- ▶ Excellent Electrical Properties
- ▶ Modbus Cables, RS 485 and RS 232 cables also Available on Request



## Applications

- ▶ General Wiring of Plant & Machinery
- ▶ Indoor/Outdoor Installations Conduit Installations
- ▶ Industrial Control Systems for Measurement, Control, Signalling and Analog Data Transmission

Temperature Ratings Upto 90°C	Available Voltage Ratings 90V   300V   500V   1100V	Min. Bending Radius 8 to 12 Times of Cable Diameter
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## Variants:

	Li2YY	Li2YCY	Li2YH	Li2YCH
Environmentalfriendly	Good	Good	Excellent	Excellent
EMI protection	No protection	Excellent	No protection	Excellent
Halogen content	High	High	Low	Low
Corrosive gas generation on burning	High	High	Low	Low
Electrical properties	Excellent	Excellent	Excellent	Excellent
Capacitance	Low	Low	Low	Low

## Note

- 1.) Multi-pair / Multi-triad / Multi-quad constructions
- 2.) Armored / Unarmored
- 3.) Individually shielded and/or overall shielded
- 4.) Shielding options : Tape shielded, Braid screened or combination of both
- 5.) Above cables also available in XLPE insulation for temperature rating upto 90C

IS : 9968-1



IS : 9968-2



IS : 1554-1



IS : 694



IS : 7098-1



IS : 14494



IS : 2465



IS : 9857





# HIGH TEMPERATURE Cables

## Features

- ▶ Cores with Different Colors for easy Identification
- ▶ Twisted Core Construction Available in Pair, Triad or Quad
- ▶ Overall Screened Versions offer Good EMI Protection
- ▶ Generally Based on JSS / MIL Standards
- ▶ Flexible Braid Armored Versions also Available on Request
- ▶ Lower Capacitance
- ▶ Excellent Electrical Properties

## Applications

- ▶ Areas with High Temperature Requirement
- ▶ Indoor/Outdoor Installations
- ▶ Conduit Installations
- ▶ Industrial Control Systems for Measurement, Control, Signalling and Analog Data Transmission



Temperature Ratings	Available Voltage Ratings	Min. Bending Radius
Upto 90°C	90V   300V   500V   1100V	8 to 12 Times of Cable Diameter



## Variants:

	Silicone	FEP	PTFE
Temperature rating	Upto 180°C	Upto 200°C	Upto 260°C
Halogen content	Low	Very High	Very High
Electrical properties	Excellent	Excellent	Excellent
Capacitance	Low	Low	Low

## Note

- 1.) Multi-Pair / Multi-triad / Multi-quad Constructions
- 2.) Unarmored / Flexible braid Armored
- 3.) Individually Shielded options Available in Silicone Rubber and FEP
- 4.) Shielding options : Tape shielded, Braid screened or Combination of Both, for PTFE only Braid Screen Versions
- 5.) Even Higher Ambient Temperature Versions for upto 300-400°C also Available on Request

IS : 9968-1



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IS : 9968-2



CMIL-8836701  
Elastomer Insulated Cables

IS : 1554-1



CMIL-3113634  
PVC Insulated (Heavy Duty) Electric Cables

IS : 694



CMIL-3113432  
PVC Insulated Cables /Cords with Rigid & Flexible Conductor

IS : 7098-1



CMIL-3113533  
Crosslinked Polyethylene (XLPE) Insulated Thermoplastic Sheathed Cables

IS : 14494



CMIL-8660789  
Elastomer Insulated Flexible Cables for Use in Mines

IS : 2465



CMIL-8400127710  
Cables for Motor Vehicles

IS : 9857



CMIL-8631378  
Welding Cables

# Load Cell Cables

### Temperature Ratings

Upto 70°C

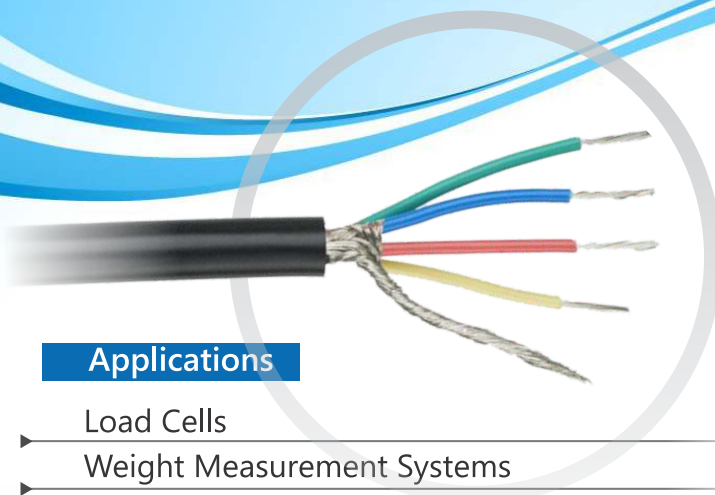
### Available Voltage Ratings

90V | 300V | 500V | 1100V

### Min. Bending Radius

8 to 14 Times of Cable Diameter

**Lead Free**



## Applications

- ▶ Load Cells
- ▶ Weight Measurement Systems
- ▶ General Wiring and for Analog Data Transmission Systems
- ▶ Suitable for Conduit Installations

## Features

Lower Capacitance Versions Available

Screened Versions Offer Good EMI Protection

Available in Both Multi-core and Multi-Pair form

Generally based on EN, IEC, IS and VDE Standards

Cores with Different Colors or Number Printing for Easy Identification

## Variants

- ▶ Available in multi-core and multi-pair constructions
- ▶ Individual shielding on pairs available on request
- ▶ Pair and cores bedding also available on special request
- ▶ Available in PVC and halogen free insulation and sheathing compounds
- ▶ Highly flexible versions also available
- ▶ Armored version also available
- ▶ Can be offered in XLPE version also for upto 90°C

IS : 9968-1



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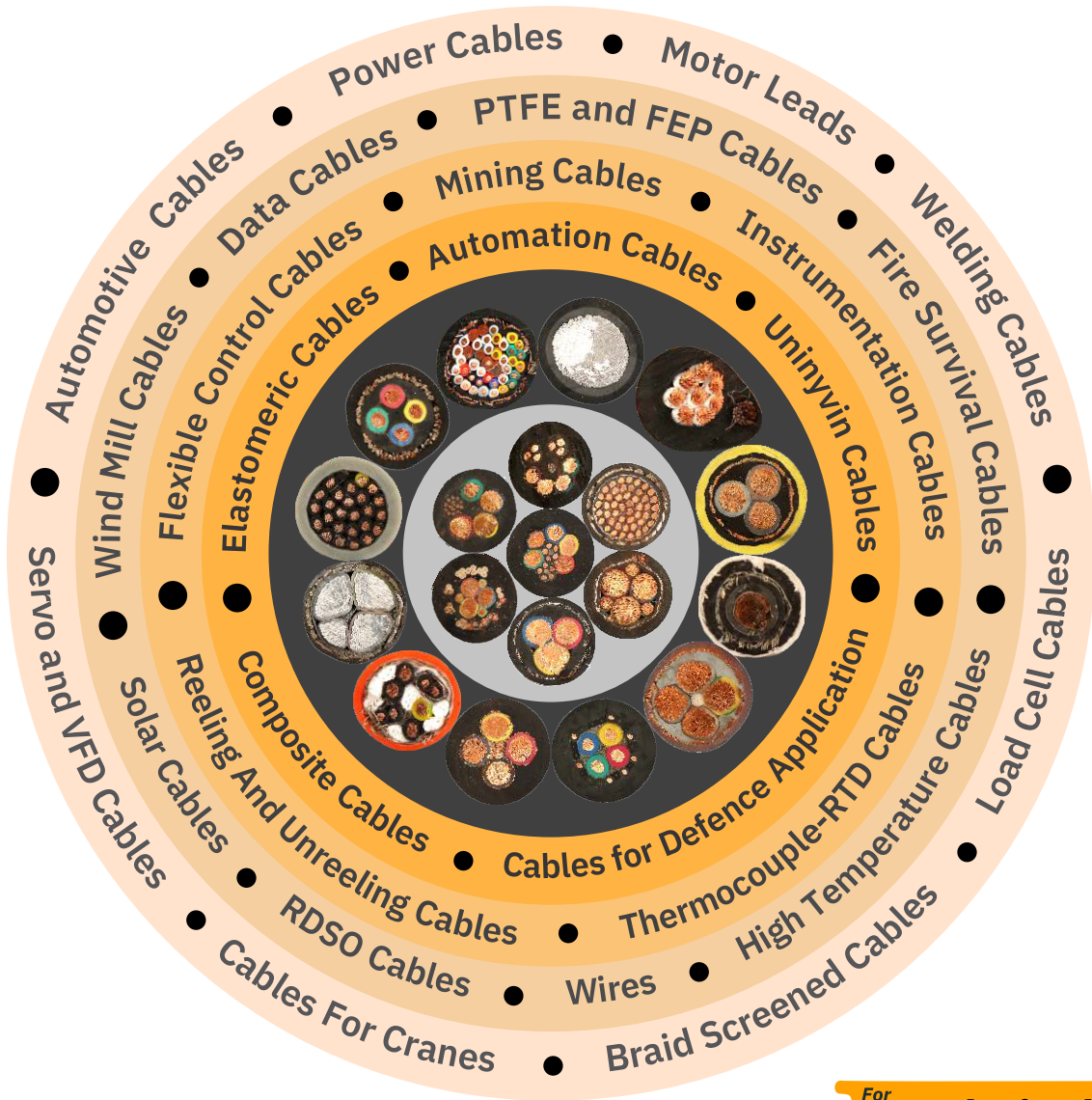


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# Evolving TOGETHER



For **Technical Assistance**  
Contact **9636498001**

