

Heat Resistant Cables, Thermocouple Cables



Cable Solutions for Industries

THE QUALITY CONNECTION

LEONI

Wire • Cable • Wiring Systems

LEONI Special Cables

LEONI Special Cables stands for many years of experience and innovation within the field of cables and cable systems. Our catalogues give you an overview of the variety of cables we offer. You can find the most frequently used types ranging from insulated wires and strands to coaxial cables and cable assemblies.

In addition we develop and manufacture many more cable varieties than can be shown in our brochures. Please contact us if you are looking for a product to suit your special application. Together we create your cable solution.



Cable Solutions for Industries



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Heat resistant extension and compensation cables (thermocouple cables)

Thermocouple cable

Type: LI7YC7Y 2x2x0.75
NICR-NI M GN

Order-No.: V45493-D 49-A 19



Application

Thermocouple cables for measuring serve as thermocouples from the measuring point to the central comparison junction. The conductor is either made of the same material as the thermocouple or of surrogate materials.

Construction

Conductor of solid or stranded extension or compensating wires.

Insulation: PVC, silicon, ETFE etc.
Overall Screening: Copper
Outer sheath: PVC, silicon, ETFE etc.

Conductor

According to specification

Test voltage

Up to 2500 V

Temperature range

-65 °C up to +200 °C
depending on the materials used

Core identification

According to the specific elements/standards

Bending radius

≥ 15 x outer diameter

Standards

IEC, DIN, British Standard, ANSI, NFE, Gost and others

Con-ductor	Annotation	Type designation	Outer diameter in mm	Copper value in kg/km	Net weight in kg/km	Delivery length in m	Pack-aging	Order-Number
NICR	Suitable for steam sterilisation	LI6Y 1x0.057 NICR 6Y 1x0.057 NI 6Y D2G 2x1x0.055 VS WS	3.0	6	16	2000	drum	V45493-D 49-A 79
NICR-NI	Colour code acc. DIN 43710-14	LIYCY 1x2x0.75 NICR-NI M GN	8.0	31	93	1000	drum	V45493-D 21-A 25
NICR-NI	Suitable for steam sterilisation	LI6Y 2x1x0.057 NICR 6Y 2x1x0.057 NI 6Y D2G 4x1x0.055 VS GR	3.8	9	26	2000	drum	V45493-D 89-A 29
NICR-NI	Colour code acc. DIN 43710-14	LI7YC7Y 1x2x0.75 NICR-NI M GN	5.6	23	53	1000	drum	V45493-D 29-A 9
NICR-NI	Colour code acc. DIN 43710-14	L-HCH 1x2x0.75 M NICR-NI BL FRNC	8.2	22	99	1000	drum	V45493-D 29-A 69
NICR-NI	Colour code acc. IEC 584	L-7Y(ST)C7Y 1x2x0.75 NICR-NI M GN	4.8	27	48	2000	drum	V45493-D 29-A 79
NICR-NI	Colour code acc. DIN 43710-14	L-7Y(ST)C7Y 1x2x0.75 NICR-NI M GN	4.8	27	48	2000	drum	V45493-D 29-A 89
NICR-NI	Colour code acc. IEC 584	L-YCY 2x2x0.75 NICR-NI M GN	9.8	41	119	1000	drum	V45493-D 41-A185
NICR-NI	Colour code acc. DIN 43710-14	LI7YC7Y 2x2x0.75 NICR-NI M GN	8.0	44	115	1000	drum	V45493-D 49-A 19
NICR-NI	Colour code acc. DIN 43710-14	L-HCH 2x2x0.75 M NICR-NI GN FRNC	11.4	35	147	1000	drum	V45493-D 49-A 69
NICR-NI	Colour code acc. DIN 43710-14	LI7YC7Y 3x2x0.75 NICR-NI M GN	8.9	45	132	1000	drum	V45493-D 69-A 19
FE-CUNI	B: extension flat cable folded to round cable	LIY(ST)CY 6x1x0.09 FE-CUNI M GR	5.2	12	36	3000	drum	V45493-D 61-A 5
FE-CUNI	Colour code acc. DIN 43710-14	LI7YC7Y 1x2x0.75 FE-CUNI M GR	5.8	24	60	1000	drum	V45493-D 29-A 39
CU-CUNI	Thermocouple pair without sheath	6Y 2x1x0.5 CU-CUNI M RT/BR	2.0	3	6	500	cone	V45493-D 29-A 10

Heat resistant control cables

Control cable for turbines

Type: L-7YC7Y 4x2x0.5 SI GR

Order-No.: V45551-C 42-H 29



Application

In dry or moist rooms and above average temperatures different insulation materials are used. Depending on the application the most commonly used plastics are PU, ETFE, PFA, FEP or silicon. These materials also have different characteristics concerning their elasticity.

Temperature range

for different insulation materials

PU	– 40 °C up to + 80 °C
ETFE	– 90 °C up to + 135 °C (temporary up to 200 °C)
FEP	– 90 °C up to + 180 °C (temporary up to 200 °C)
PFA	– 90 °C up to + 260 °C
Silicon	– 50 °C up to + 180 °C

Maximum temperature subject to different conductor surface

bare	up to 125 °C
tinned	up to 135 °C
silver-plated	up to 200 °C
nickel-plated	up to 260 °C

Construction

Cable designs can be in accordance with VDE, MIL, BS, UL and CSA.

Con-ductor	Annotation	Type designation	Outer diameter	Copper value	Net weight	Delivery length	Pack-aging	Order-Number
Wire in mm ²			in mm	in kg/km	in kg/km	in m		
0.035	Colour code acc. IEC 584	LI6Y 7x1x0.035 HVS	3.3	3	13	2000	drum	V45493-D 99-A 17
0.24	UL-Style 20326. CSA	LI7YC7Y 2x1x0.24 VS WS	3.6	11	20	500	coil	V45551-B 21-H 9
0.5	Control cable for Turbines	L-7YC7Y 2x2x0.5 SI GR	7.5	48	92	1000	drum	V45551-C 22-H 29
0.5	Control cable for Turbines	L-7YC7Y 2x2x0.5 BL	7.5	48	92	1000	drum	V45551-C 22-H 39
0.5	Control cable for Turbines	L-7YC7Y 4x2x0.5 SI GR	8.5	72	122	1000	drum	V45551-C 42-H 29
0.75	Motor control cable	L-7Y2G 3x1x0.75 VZN GR	6.0	23	48	1000	drum	V45550-D 31-H 1
1.5	Control cable	LI7Y7Y 2x1x1.5 VZN GR	6.3	30	67	2000	drum	V45550-F 21-H 9
7.5	Fuelling cable	L-99YYCYC11Y 2x1x7.5 GR	15.0	272	410	500	drum	V45493-D 29-A109

Customer benefit by means of quality and flexibility

We place very high demands on the quality of our products. Stable manufacturing methods using innovative technologies and strict quality assurance give you and your customers the reliability for smooth operation. This is how we provide the basis for communication applications of today and tomorrow.

Flexibility is our strength.

This means regarding each individual project as something special. In close co-operation with our customers we develop made-to-measure cable solutions for the widest range of applications – quick and to a high quality. Our team with the comprehensive know-how that has been gained on a large number of projects supports you from the idea to the product launch.

Conditional on to the specific application our products are approved by various organisations

Our quality management and environmental management is DIN EN ISO 9001/14001 certified.



This is where you will find more information about our company and our products.

■ **Product brochures:**

Insulated Strands and Wires

Flexible Cables

Radio-frequency Cables

Switchboard Cables

Heat Resistant Cables, Thermocouple Cables

■ **Special brochures:**

LEONI Special Cables

Flexibility made to measure

FlexLine™

Coaxial cabling and connection technology for wireless communication systems

CATWay™

Cable Solutions for CATV Networks

Special Cables for Automation Systems

Special Cables for Diagnostic and Therapy Systems

■ **Other LEONI product catalogues :**

Copper Data Cables

Fibre Optic Cables

Coaxial Cables

Power Cables

**LEONI Special Cables
GmbH**

Eschstrasse 1
D-26169 Friesoythe
Phone +49-4491-292-292
Fax +49-4491-292-169
E-mail info@lsc.leoni.com
www.leoni-special-cables.com