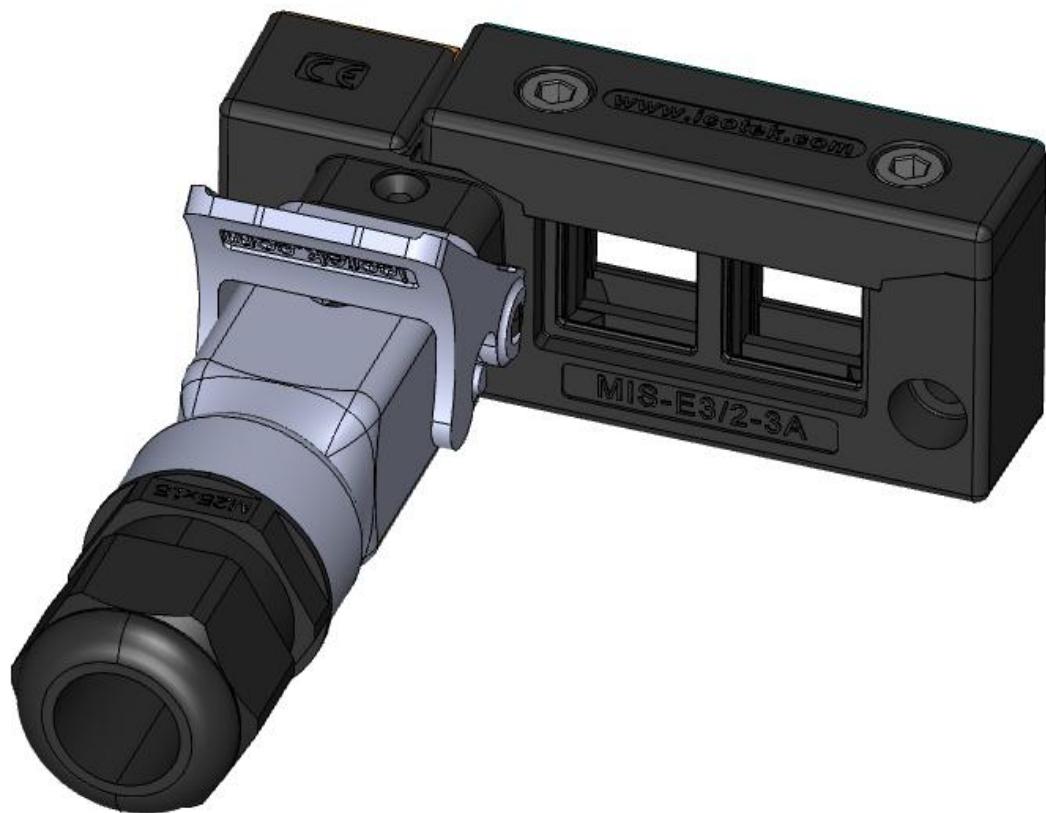


ORIGINAL OPERATING AND INSTALLATION INSTRUCTIONS

Plug connector including cable entry system



Save for future use!

icotek GmbH& Co KG
Bischof-von-Lipp-Str. 1
D-73569 Eschach

phone +49-(0)7175 / 92380-0
fax +49-(0)7175 / 92380-50
e-mail info@icotek.com
Internet www.icotek.com

Product: Plug connector including cable entry system

Productnumber : see nameplate

Year of construction: 2023

Version of the 02

Original operating and
installation instructions :

Date of issue of the 21.11.2023

Original operating and
installation instructions :

Product changes

Year	type	Changes

Revisions to the document

Date	version	Changes
21.11.2023	01	First draft
October 14, 2024	02	Final standings
January 28, 2025	03	Supplement to component release 3.1.4

Permits

This document requires the following approvals:

name	title
Florian Ocker	Head of Technology
Michael Bär	Technical Project Manager

© 2025 by icotek GmbH& Co KG

This Original operating and installation instructions and all illustrations contained therein are protected by copyright. Any use beyond the limits of copyright law is prohibited and punishable without the prior written consent of the publisher. This applies in particular to reproduction, translation, microfilming, storage, and processing in electronic systems. For permission requests, please contact the publisher.

Contents

Contents.....	3
List of illustrations	4
1 Introduction	5
1.1 Presentation means	5
1.1.1 Section-specific warnings	6
1.1.2 Embedded warnings	6
1.1.3 Other means of presentation	7
1.1.4 Symbols used in the Original operating and installation instructions	7
1.2 Warranty and liability.....	8
1.2.1 General control activities	8
1.2.2 Inspection activities of electrical lines.....	9
2 Troubleshooting	10
3 Maintenance and cleaning	11
3.1 Safety measures during maintenance work.....	11
3.1.1 General safety precautions during maintenance work	11
3.2 Inspection and maintenance work	11
3.2.1 Maintenance intervals.....	11
3.2.2 Preparatory measures for electrical work	12
3.2.3 Maintenance - annual	12
4 out of service and dismantle.....	13
4.1 Take out of service.....	13
4.1.1 Take the electrical system out of service ..	13
4.2 disassemble	14
4.3 Dispose	15
5 Attachment.....	16
5.1 EU Declaration of Conformity	16

List of illustrations

Figure 1: Overview of functional elements Fehler! Textmarke nicht definiert.

Figure 2: Overview of connector pin assignments Fehler! Textmarke nicht definiert.

Image 3: Examples of pictograms on packaging Fehler! Textmarke nicht definiert.

1 Introduction

This Original operating and installation instructions provides you with all the information you need for the smooth operation of the Plug connector including cable entry system (hereinafter also referred to as Product).

The Original operating and installation instructions must be read, understood, and followed by all persons responsible for the assembly/installation, transport, commissioning, use, maintenance, cleaning, troubleshooting, decommissioning, dismantling, and disposal of the Product. This applies in particular to the safety instructions listed.

After studying the Original operating and installation instructions you can

- the Plug connector including cable entry system transport safely,
- the Plug connector including cable entry system Mount/install safely,
- the Plug connector including cable entry system put into operation safely,
- the Plug connector including cable entry system Use safely,
- Take appropriate action when a problem occurs
- the Plug connector including cable entry system wait according to regulations,
- the Plug connector including cable entry system clean according to regulations,
- the Plug connector including cable entry system take out of service safely,
- the Plug connector including cable entry system Dismantle safely,
- the Plug connector including cable entry system Dispose of properly.

In addition to the Original operating and installation instructions generally applicable, legal and other binding regulations for accident prevention and environmental protection of the country of use must be observed.

The Original operating and installation instructions are always kept at the installation site of the Plug connector including cable entry system to store.

1.1 Presentation means

As a guide and direct warning of dangers, particularly important text statements in these Original operating and installation instructions marked as follows:

1.1.1 Section-specific warnings

Section-specific warnings apply not only to a specific action, but to all actions within a section.

Construction

⚠ SIGNAL WORD



Symbol to further explain the danger

Type and source of the danger!

Possible consequences of non-compliance!

- ▶ Measure(s) to avoid the danger.

Hazard levels

⚠ DANGER

A high-risk hazard which, if not avoided, will result in death or serious bodily injury.

⚠ WARNING

A medium-risk hazard which, if not avoided, could result in death or serious bodily injury.

⚠ CAUTION

Low-risk hazard which, if not avoided, may result in minor or moderate bodily injury.

A NOTICE

A low-risk hazard that, if not avoided, could result in property damage.

1.1.2 Embedded warnings

Embedded warnings apply to specific actions and are integrated directly into the action.

Construction

⚠ SIGNAL WORD, type and source of danger

Possible consequences of non-compliance

- ▶ Measures to avoid the danger

Hazard levels

– ⚠ DANGER / WARNING / CAUTION

- **NOTICE** (without warning triangle)

1.1.3 Other means of presentation



The info symbol provides useful information.

- Texts that follow this marker are lists.
- Texts that follow this marker describe measures in warnings and action steps.
- a) Texts that follow this marker describe activities that must be carried out in the specified order.
- “ Text in quotation marks refers to other chapters or sections.

1.1.4 Symbols used in the Original operating and installation instructions

In warning notices, special hazards are additionally marked as follows:

symbol	Description
Warning signs	
	<p>Warning: Electrical voltage This symbol warns of the dangers of electrical voltage.</p>
Prohibition sign	
	<p>No entry for unauthorized persons This symbol prohibits unauthorized access to the danger zone. Unauthorized persons cannot recognize the dangers.</p>
Mandatory signs	
	<p>Original operating and installation instructions This symbol indicates that the Original operating and installation instructions be followed.</p>
	<p>Use safety goggles This symbol indicates that protective goggles must be worn in the area of operation.</p>
	<p>Use safety shoes This symbol indicates that safety shoes must be worn in the work area.</p>
	<p>Use hand protection This symbol indicates that hand protection must be worn in the operational area.</p>

1 Introduction

1.2 Warranty and liability

symbol	Description
	Use personal protective clothing This symbol indicates that personal protective equipment must be worn in the area of operation.
Other symbols	
	Functional grounding This symbol describes the connection points of the functional earthing in the Product.
1, 2, 3	Designation contact chambers and contact carriers The numbers denote the individual contact chambers and contact carriers.
	Disposal instructions This symbol indicates that the marked product must not be disposed of with household waste.
	recycling This symbol represents the return of various materials to the recycling loop.
	CE marking The CE marking on the product is the manufacturer's declaration that the product meets the essential requirements of the relevant European health, safety and environmental protection laws.

1.2 Warranty and liability

- connectors including cable glands apply .Plug connector including cable entry system use other than that specified here is prohibited beyond their intended use and/or in a different manner is prohibited .Plug connector including cable entry system is prohibited .Plug connector including cable entry system check Plug connector including cable entry system during operation .
DOC PROPERTY Maschinenbezeichnung * MERGEFORMAT
- Ensure that only authorized persons are in the area where the Plug connector including cable entry system stop.

1.2.1 General control activities

- Perform the following checks once a day:
 - Check Plug connector including cable entry system for any externally visible damage.
 - Check all cases for damage.

1.2.2 Inspection activities of electrical lines

- ▶ Perform the following checks once a day:
 - ▶ Check all electrical wiring for correct connection.

2 Troubleshooting

WARNING

with the Product during troubleshooting!

Failure to follow these instructions may result in damage, malfunctions or total failure of the Plug connector including cable entry system , as well as compromised safety of the Plug connector including cable entry system

The result!

- ▶ Before troubleshooting, disconnect the Plug connector including cable entry system from the power supply .
- ▶ Only qualified personnel should carry out troubleshooting.

3 Maintenance and cleaning

3.1 Safety measures during maintenance work

3.1.1 General safety precautions during maintenance work

Perform the prescribed maintenance work, such as cleaning, servicing, and inspections, on time. Irregular maintenance shortens the operating life and service life.

- ▶ Read chapter “ **Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden.** ”.
- ▶ Block access to the area where the Plug connector including cable entry system. Ensure that only authorized personnel are in the area where the Plug connector including cable entry system stop.
- ▶ Replace any defective Productparts immediately. Use only original accessories and spare parts. Using other parts will void the warranty and the product's suitability and may result in injury.

After completing maintenance work and before using the Plug connector including cable entry system The following activities are performed:

- ▶ Double-check that all previously loosened screw connections are tight.
- ▶ Check that all previously removed housings are properly reinstalled.
- ▶ Make sure that all tools, materials and other equipment used have been removed from the work area.
- ▶ Clean the area where the product will be used.

3.2 Inspection and maintenance work

3.2.1 Maintenance intervals

Maintenance point	Maintenance work	See section
Yearly		
Electrical connections and screw fittings	Check electrical connections and screw fittings	3.2.3.1
Moving cables	Check moving cables	3.2.3.2

3.2.2 Preparatory measures for electrical work

DANGER

Danger of electrocution!

Live components can cause electric shock or serious injury upon contact!

- ▶ Only allow work on electrical equipment to be carried out by a qualified electrician who is specifically trained to work on electrical equipment and can recognize and avoid hazards.
- ▶ Switch off the power before performing maintenance and inspection work on the Plug connector including cable entry system the Plug connector including cable entry system stress-free.
- ▶ Secure it Plug connector including cable entry system against unexpected restart by locking the main switch with a lock.
- ▶ Attach a warning sign against reactivation to the main switch.
- ▶ Please note that electrical and electronic components must not be cleaned.



3.2.3 Maintenance - annual

3.2.3.1 Check electrical connections and screw fittings

DANGER

Danger of electrocution!

Live components can cause electric shock or serious injury upon contact!



- ▶ Only allow a qualified electrician to carry out work on the electrical equipment.
- ▶ Before all maintenance and inspection work, disconnect the Plug connector including cable entry system stress-free.

- a) Check all electrical connections and screw fittings to Plug connector including cable entry system ensure they are tight.
- b) Tighten loose screws securely (screw tightening torque according to screw size and strength class).

3.2.3.2 Check moving cables

- a) Check all movable cables for secure fit and mechanical damage.

4 out of service and dismantle

⚠ WARNING

Risk of serious injury due to improper decommissioning/disposal!

Failure to heed this advice can result in serious injury!

- ▶ Only qualified or trained personnel should carry out the disassembly work. Note that the personnel must have practical experience in disassembling Product.
- ▶ Before disassembly work, disconnect the Plug connector including cable entry system stress-free.
- ▶ Always wear the necessary protective equipment for the job at hand (e.g. work clothes, safety shoes and protective gloves).
- ▶ If in doubt, contact theicotek GmbH & Co KG .

4.1 Take out of service

4.1.1 Take the electrical system out of service .

- a) Disconnect the Plug connector including cable entry system .
- b) Prevent or restrict access to the Plug connector including cable entry system a.
- c) Have power supply lines disconnected by qualified personnel.

⚠ DANGER

Danger of electrocution!

Working on electrical systems poses a risk of death to unqualified personnel!



- ▶ Have all work on the electrical system carried out only by qualified electricians. Qualified electricians are specifically trained to work on electrical systems, are aware of the dangers of electrical voltage, and can independently avoid potential hazards through correct procedures.
- ▶ Before taking the Product disconnect it from the power supply.

DANGER

Danger to life from uncontrolled reactivation and electric shock!

Uncontrolled reactivation or electric shock can lead to serious personal injury or death!



- ▶ Only authorized and qualified specialists should carry out the decommissioning work.
- ▶ Apply the 5 safety rules:
 1. Unlock.
 2. Secure against accidental reactivation.
 3. Determine the absence of tension.
 4. Ground and short-circuit.
 5. Cover or barricade adjacent live parts.

4.2 disassemble

CAUTION

Danger due to dismantling work!

Disassembly carries a risk of injury such as scratches, punctures, or crushing!

- ▶ Only allow trained and authorized personnel to carry out dismantling work.
- ▶ Always wear the necessary protective equipment for the job at hand (e.g. work clothes, safety glasses, protective gloves and safety shoes).

WARNING

Risk of injury due to overly dense arrangement!

Failure to heed this warning can result in serious injury !

- ▶ Block off the danger zone.
- ▶ Keep unauthorized persons out of the danger zone.
- ▶ Designate a person responsible for the dismantling activities.
- ▶ Always wear the necessary protective equipment for the job at hand (e.g. work clothes, safety glasses, safety gloves and safety shoes).

4.3 Dispose

WARNING

Risk of environmental pollution / waste of resources!

Failure to comply may result in environmental damage!



- ▶ Only allow trained and authorized personnel to carry out disposal work.
- ▶ Separate materials and packaging waste by type and recycle them. Recycle materials marked with a recycling symbol. The packaging is made of various materials that can be disposed of at your local recycling facility. By disposing of the packaging properly, you help prevent potential hazards to the environment and public health.
- ▶ dispose of the Productwith household waste.
- ▶ Please observe local recycling regulations.

5 Attachment

5.1 EU Declaration of Conformity

On the following pages you will find the EU declaration of conformity for this Product and the attached documents.



EU Declaration of Conformity

(Original Declaration of Conformity)

Manufacturer / Authorized Representative:	icotek GmbH& Co KG Bischof-von-Lipp-Str. 1 D-73569 Eschach
Authorized person responsible for compiling the technical documentation:	icotek GmbH& Co KG Bischof-von-Lipp-Str. 1 D-73569 Eschach
Product:	Plug connector including cable entry system
Productnumber :	see nameplate
Function:	The cable entry system with plug enables electrical conductors to be connected securely. Connectors must not be plugged in or disconnected while live. When unplugged, the connector must be de-energized.

The manufacturer bears sole responsibility for issuing this declaration of conformity. The product described above complies with the relevant Union harmonization legislation, depending on the components used, as described in the annexes to the directives, which form an integral part of this declaration of conformity.

- 2014/35/EU - Low Voltage Directive
- 2011/65/EU + (EU) 2015/863 - RoHs EU Directive

Indication of the relevant harmonized standards (or parts thereof) that were used as a basis, including the date of the standard, or indication of other technical specifications for which conformity is declared, including the date of the specification:

- EN 61984:2009-11 - Connectors - Safety requirements and tests
- EN IEC 60664-1:2022-07 - Insulation coordination for equipment in low-voltage power supply systems - Part 1: Principles, requirements and tests
- EN 60529:2014-09 - Degrees of protection provided by enclosures (IP code)

D-73569 Eschach, 05.02.2026

Name first Name

D-73569 Eschach, 05.02.2026

Name first Name