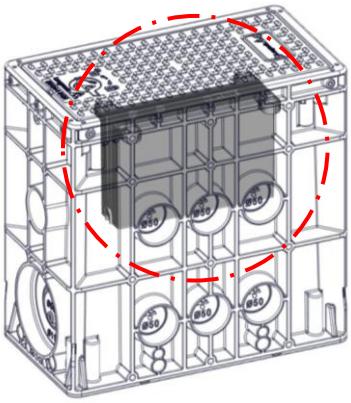
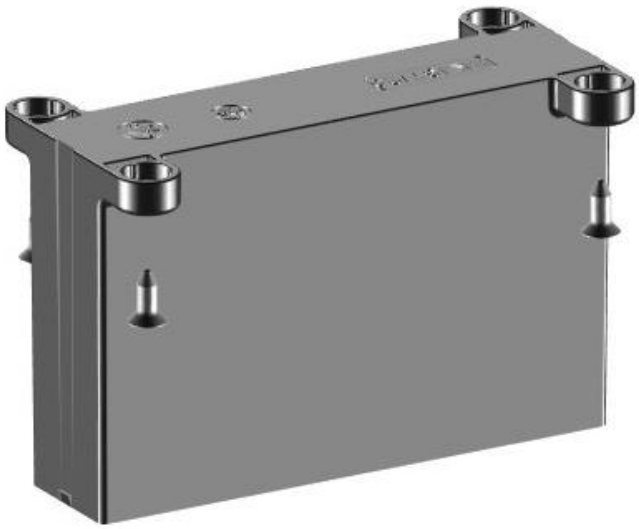
Langmatz

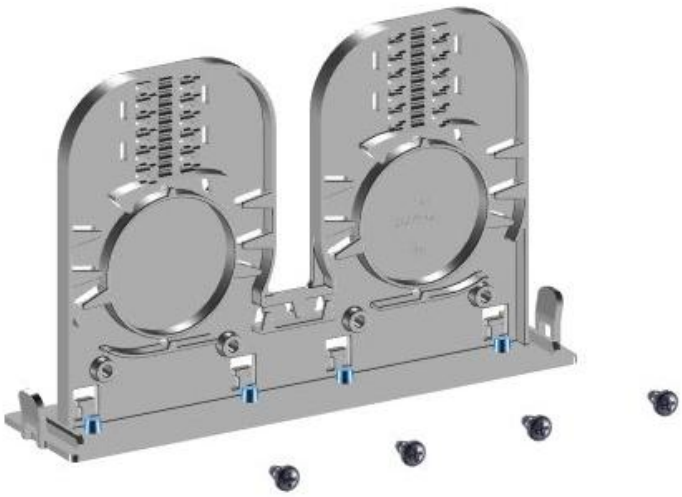
Installation Instructions

Fiber Optic Handover Chamber Retrofit Kit

EK437







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1 General information

These instructions are supplied with the equipment.

Warning!
Any person involved in the installation, operation and repair of the product must first read, understand, and follow these installation instructions.
They must also read the installation instructions and other product-related documents, and retain them for subsequent use.
We accept no liability for damage and operating malfunctions caused by failure to comply with these instructions.

In the interest of further development, we reserve the right to change individual assemblies and accessories as considered necessary for enhanced safety and performance improvements, while preserving the main features.

2 Safety information

The optical fibre transfer system is designed for stationary and underground installation as

- telecommunication distribution points / fibre distribution points,
- energy distribution systems.

Langmatz GmbH warns against the misuse of the product.
Work on electrical or electronic fixtures may only be performed by qualified electricians or skilled optical fibre personnel.

The product complies with the state-of-the-art technology at the time of printing and is delivered in an operationally safe condition. Unauthorised modifications, particularly to safety-related parts, are prohibited.

The operator is responsible for installing, operating and maintaining the fixtures.

The operator is responsible for the following:

- Preventing danger to the life and limb of users and third parties.
- Ensuring operational safety.
- Preventing downtime and environmental impact due to incorrect handling.
- Ensuring that protective clothing is worn when working with or on the product.

3 Product description

3.1 Dimensions

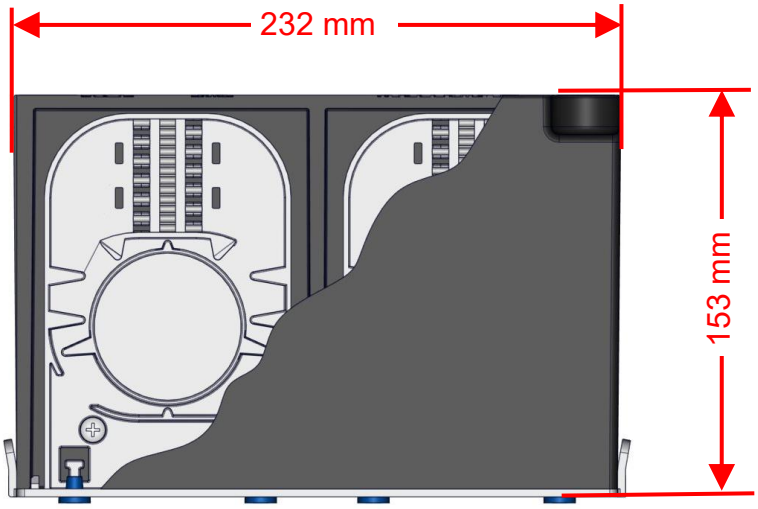


Fig. 1

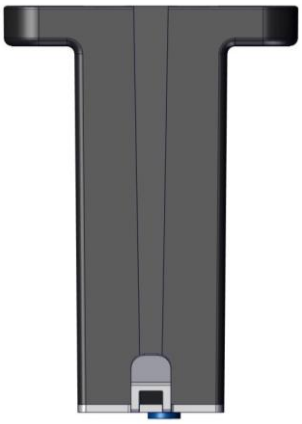


Fig. 2

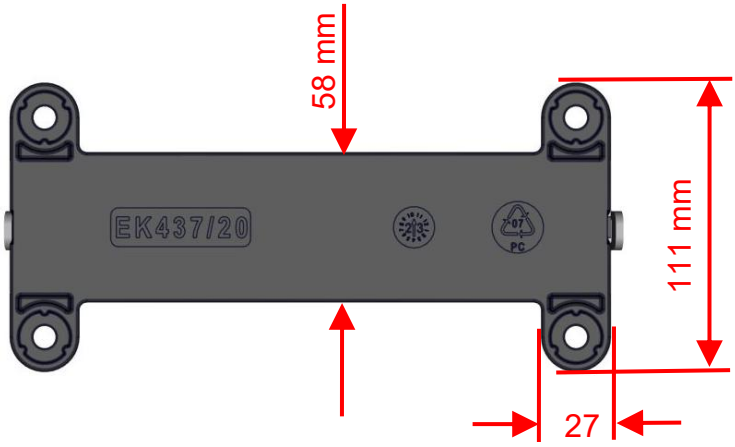
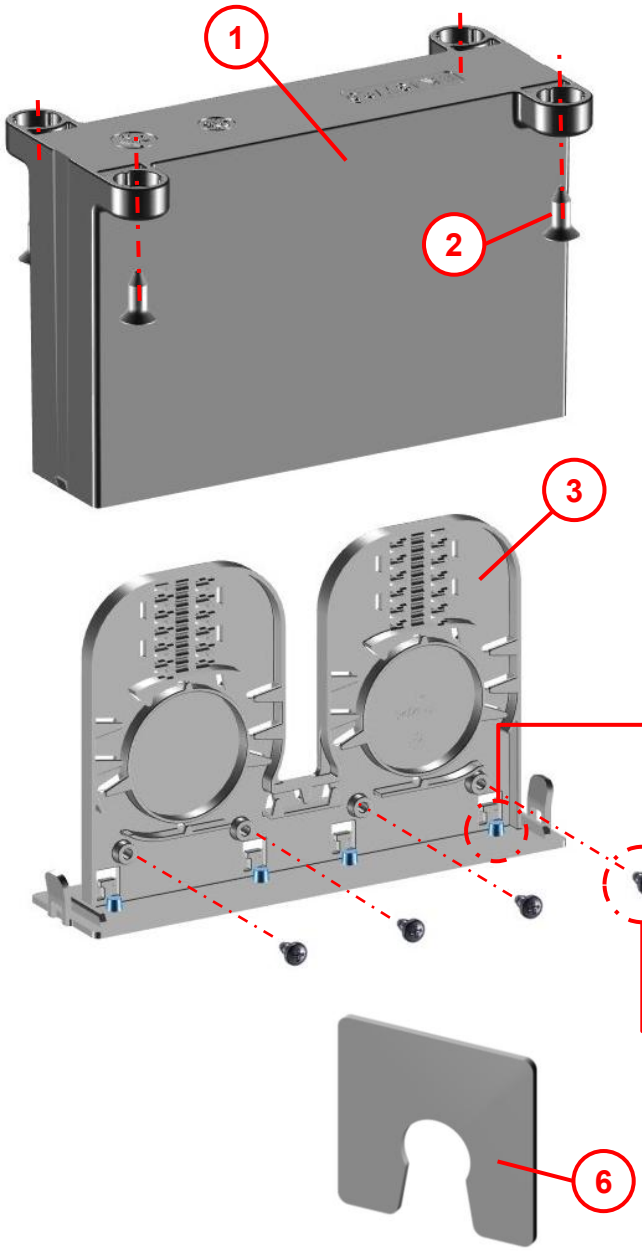


Fig. 3

3.2 Technical data

Dimensions L x W x H:	232 x 111 x 153 mm
Total weight	Approx. 0.8 kg
Diving-bell cabinet material	Polycarbonate (PC)
Splice plate material	Polycarbonate (PC)
Number of splices	48
Splice protector	Heat shrink splice protector
Water penetration depth in the diving-bell cabinet with a water column above the upper edge of the manhole	15 mm with 1 m of water column 25 mm with 2 m of water column

3.3 Scope of delivery



Item 1 1x diving-bell cabinet EK437 / 20

Item 2 4x thermoplastic screws STS 80 x 20 T40 (accessories kit)

Item 3 1x splice plate 48

Item 4 4x conical caps

Item 5 4x serrated screws 4.8 x 9.5 (accessories kit)

Item 6 2x strain relief washers (accessories kit)

Fig. 4

4 Required tools (not included)

1 Phillips screwdriver (for serrated screws 4.8 x 9.5)

2 Torx T40 screwdriver (to screw the diving-bell cabinet using the thermoplastic screws STS 80 x 20 T40).

Fig. 5

5 Installation

5.1 Removing the cover of the optical fibre transfer manhole

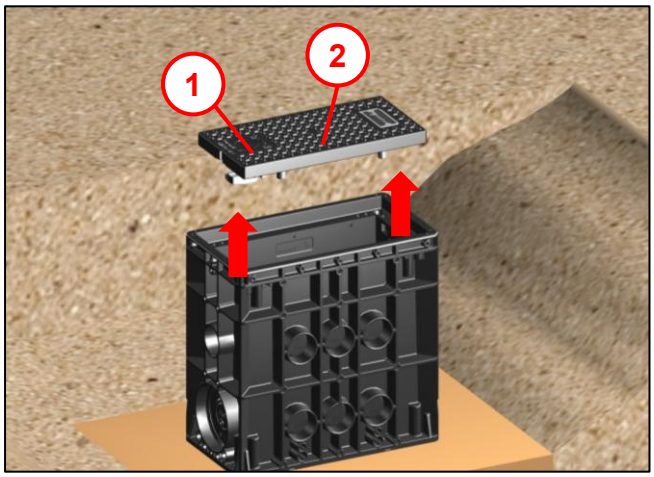


Fig. 6

- Use an appropriate key to unlock **(1)** the cover **(2)** of the optical fibre transfer manhole.
- Remove the cover.

5.2 Installing the complete diving-bell cabinet on the cover

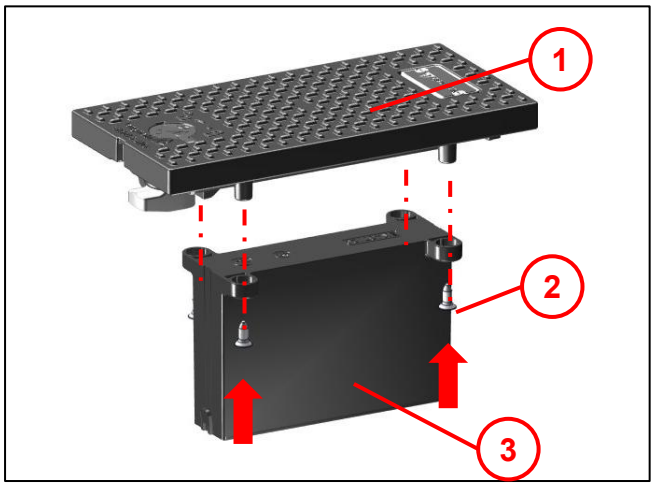


Fig. 7

- Screw the complete diving-bell cabinet **(3)** with
  4x thermoplastic screws
  STS 80 x 20 T40 **(2)**
  to the cover **(1)**.

5.3 Inserting the optical fibre cable

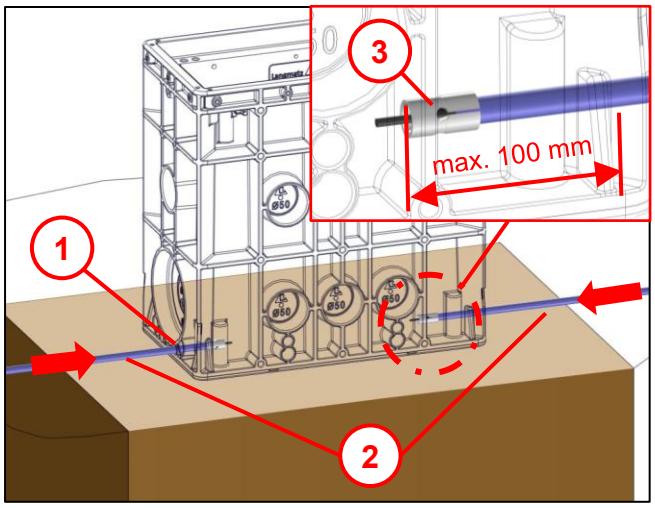


Fig. 8

- Punch through the corresponding predetermined breaking point **(1)** on the optical fibre transfer manhole.
- Insert the micro-duct pipes **(2)** into the manhole.
  Note!
  Distance from the manhole inner wall max. 100 mm!

Caution!
A special tool is used to shorten the pre-assembled micro-duct pipe (coming from the building side) to prevent the optical fibre cable being damaged!

- Fit the micro-duct gas stops **(3)** to the inside of the manhole**.**
  (not included).

5.4 Installing the strain relief

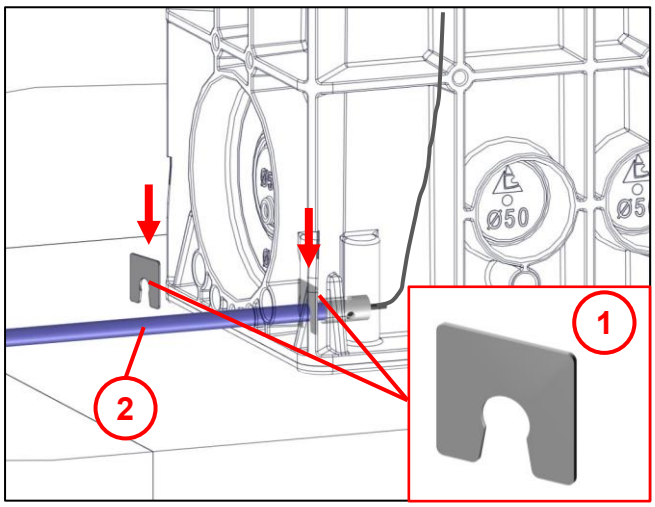


Fig. 9

- Attach 2x strain relief washers **(1)** on the manhole wall to the micro-duct pipe (drop) **(2)** (1x on the inside – 1x on the outside).

Note!
Two additional strain relief washers are included with our pre-assembled optical fibre distribution and termination boxes for the transfer system for installation at the "feeder".

5.5 Cabling the splice plate – 1 to 24 splices

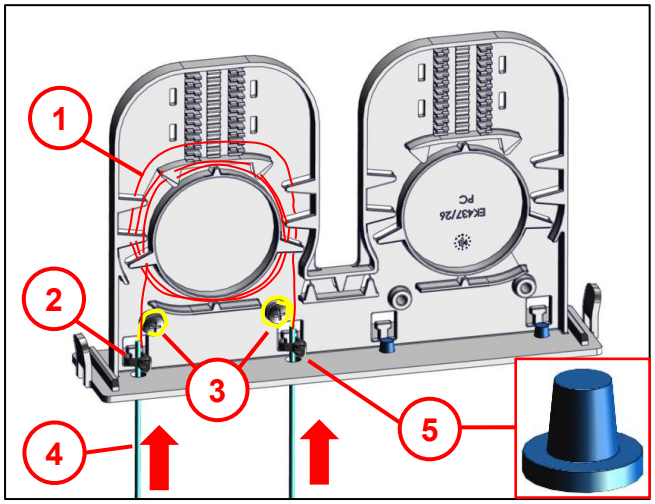


Fig. 10

Cable the splice plate outside of the optical fibre transfer manhole.

- Remove 2x conical caps **(5)**.
- Insert the optical fibre cable **(4)** as far as the mounting bar **(2)**.
- Use cable ties to fix the optical fibre cable in place.
- For strain relief:
  Wind and fix the aramid fibres of the optical fibre cable separately to serrated screws **(3)**.
- Splice and store the fibres **(1)**.

Note!
Only use heat shrink splice protectors to protect the splice connections.

5.6 Cabling the splice plate – 25 to 48 splices

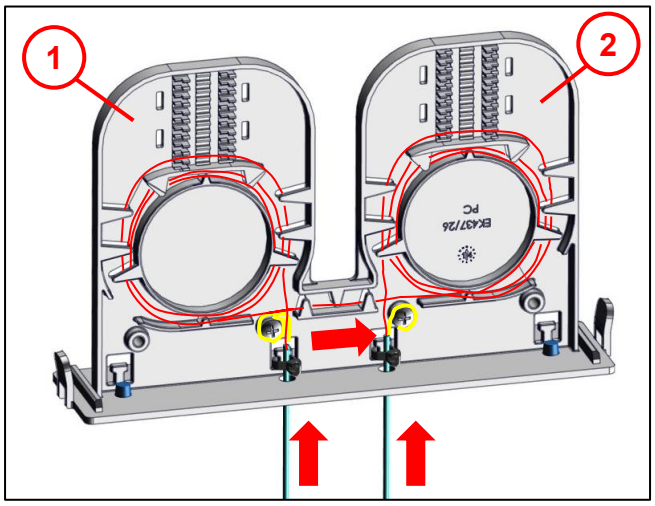


Fig. 11

Cables with more than 24 fibres:

- Splice 24x fibres.
- Store the fibres on the left side **(1).**
- Route the remaining fibres on the right side **(2).**
- Splice and store the fibres.

Note!
Maximum number accommodated
24x heat shrink splice protectors on the left
24x heat shrink splice protectors on the right.

5.7 Inserting the splice plate into the diving-bell cabinet

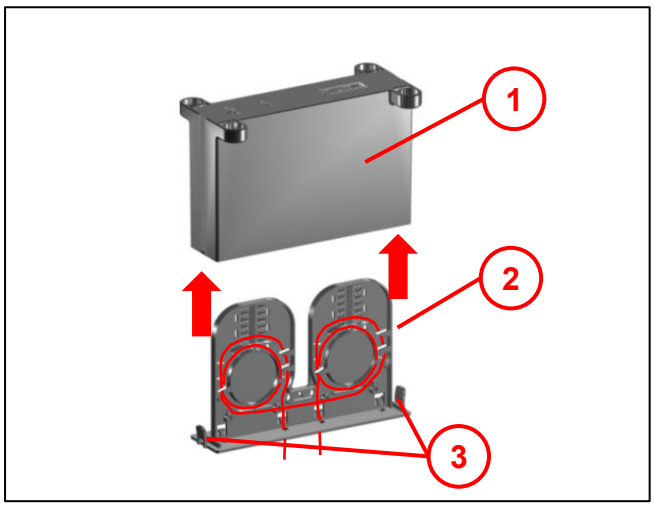


Fig. 12

- Insert the splice plate **(2)** into the diving-bell cabinet **(1)** until the side lugs **(3)** engage.

5.8 Inserting the cover with diving-bell cabinet into the optical fibre transfer manhole

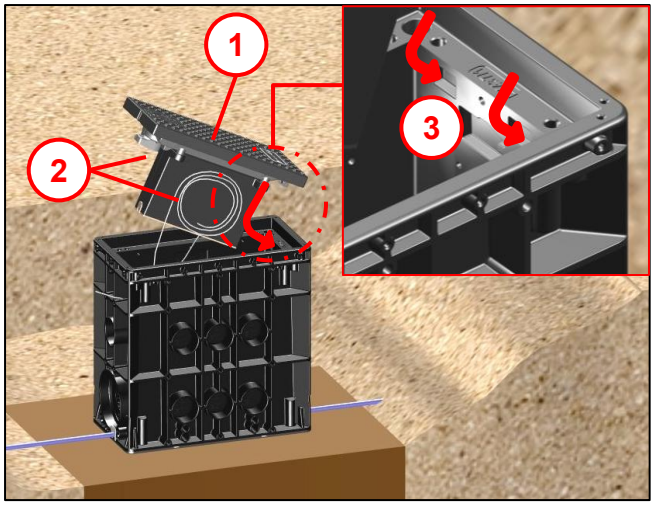


Fig. 13

- Store excess lengths of optical fibre cables **(2)** in the manhole on the left and right of the diving-bell cabinet.
- Insert the cover with diving-bell cabinet **(1)** into the manhole at an angle.
- Insert the cover with the formed hook into the recesses provided **(3)** and close.

5.9 Locking the cover

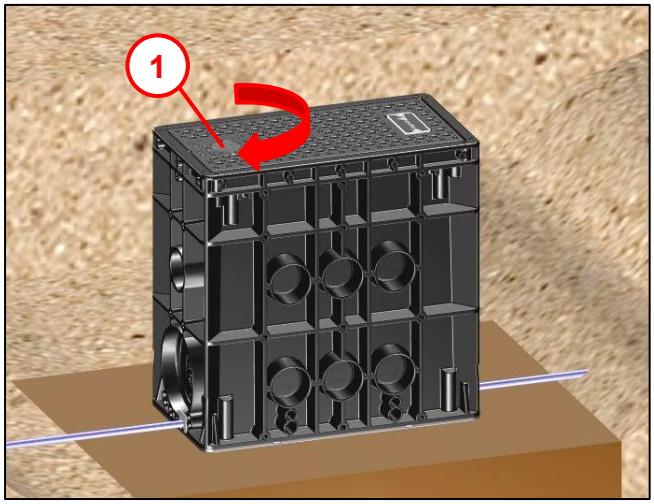


Fig. 14

- Use an appropriate tool to lock the cover.

6 Material defects

Langmatz GmbH accepts liability for material defects in the product as per Section 434 BGB (German Civil Code) for 24 months, starting from the date on the purchase receipt.

Within the scope of liability, all parts that become damaged due to manufacturing faults or material defects will be replaced or repaired free of charge.

The purchaser must report any deficiency complaints immediately in writing.

Claims by the purchaser for damages due to material defects or for whatever legal reason will not be accepted.

Any damage or failure caused by the following are also excluded from liability
- Incorrect use,
- Natural wear and tear
- Intervention by third parties.

We accept no liability for damage caused by force majeure or transport.

Repairs due to a complaint about a defect do not extend the warranty period for the replaced parts or for the product.

7 Quality management

The Langmatz GmbH quality management system is certified to DIN EN ISO 9001.

8 Disclaimer/Warranty

The information in this technical document is presented appropriately and correctly in compliance with the technical regulations, and to the best of our knowledge. However, this does not confer any guarantee of particular characteristics. In this context, the operator of the Langmatz GmbH products is expressly obliged to decide, based on their own judgement, whether the products are suitable and appropriate for the application or use being considered. The product liability accepted by Langmatz GmbH relates exclusively to our conditions of sale, delivery, and payment. Langmatz GmbH accepts no liability on the basis of random, indirect and resultant consequential damage, or of any damage attributable to any use of the product other than its intended purpose as described.

9 Contact

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