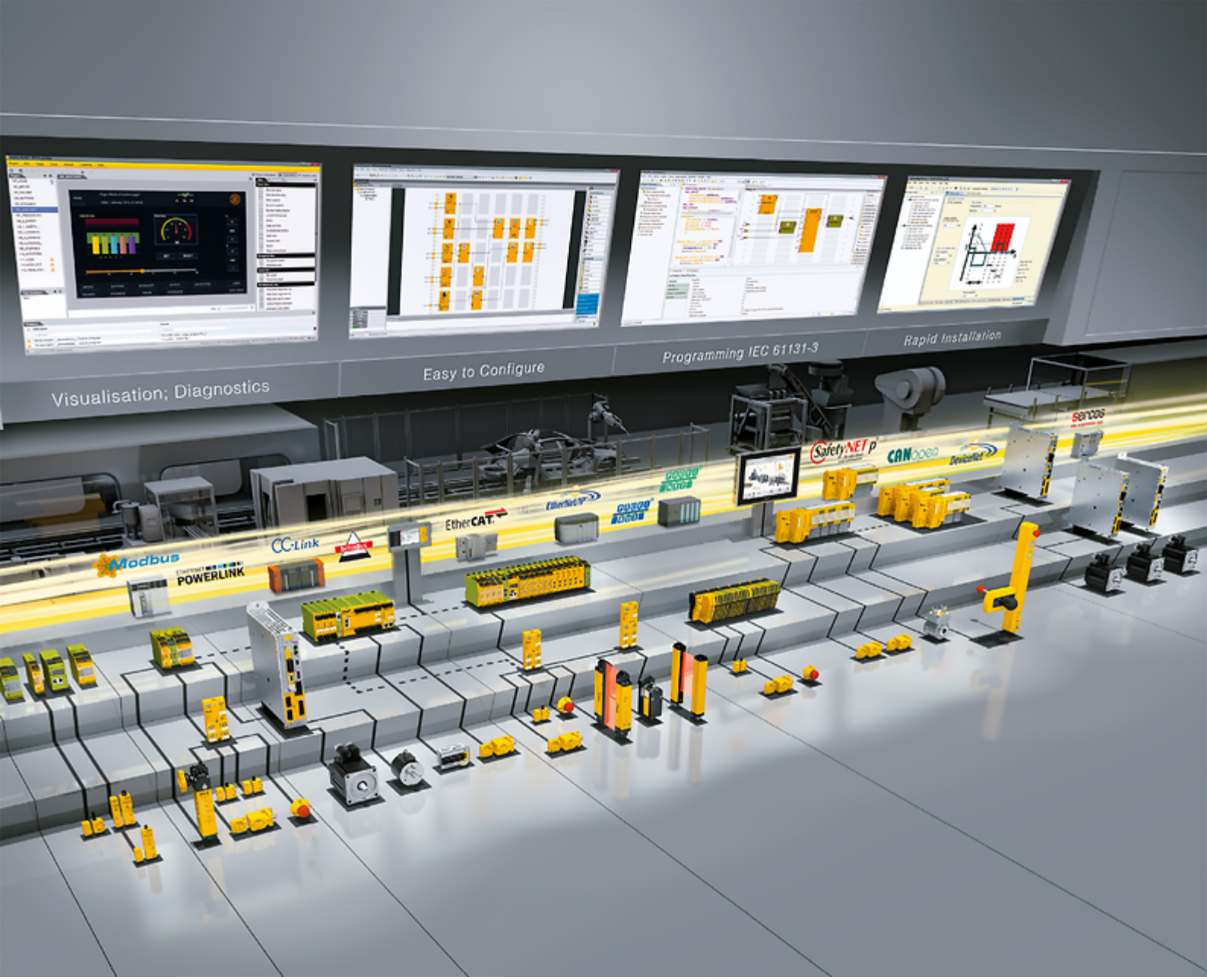

PIT si3.1

PILZ
THE SPIRIT OF SAFETY

Control and signal devices

Operating Manual-21864-EN-04

This document is the original document.

Where unavoidable, for reasons of readability, the masculine form has been selected when formulating this document. We do assure you that all persons are regarded without discrimination and on an equal basis.

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Introduction

Validity of documentation

This documentation is valid for the product PIT si3.1. It is valid until new documentation is published.

This operating manual explains the function and operation, describes the installation and provides guidelines on how to connect the product.

Using the documentation

This document is intended for instruction. Only install and commission the product if you have read and understood this document. The document should be retained for future reference.

Definition of symbols

Information that is particularly important is identified as follows:

DANGER!

This warning must be heeded! It warns of a hazardous situation that poses an immediate threat of serious injury and death and indicates preventive measures that can be taken.

WARNING!

This warning must be heeded! It warns of a hazardous situation that could lead to serious injury and death and indicates preventive measures that can be taken.

CAUTION!

This refers to a hazard that can lead to a less serious or minor injury plus material damage, and also provides information on preventive measures that can be taken.

NOTICE

This describes a situation in which the product or devices could be damaged and also provides information on preventive measures that can be taken. It also highlights areas within the text that are of particular importance.

INFORMATION

This gives advice on applications and provides information on special features.

Safety

Intended use

The indicator light unit is intended to signal various operating or plant statuses (e.g. for SafetyEYE).

The following is deemed improper use in particular:

- Any component, technical or electrical modification to the product
- Use of the product outside the areas described in this manual
- Use of the product outside the technical details (see chapter entitled "Technical details").

Safety regulations

Use of qualified personnel

The products may only be assembled, installed, programmed, commissioned, operated, maintained and decommissioned by persons who are competent to do so.

A competent person is a qualified and knowledgeable person who, because of their training, experience and current professional activity, has the specialist knowledge required. To be able to inspect, assess and operate devices, systems and machines, the person has to be informed of the state of the art and the applicable national, European and international laws, directives and standards.

It is the company’s responsibility only to employ personnel who

- Are familiar with the basic regulations concerning health and safety / accident prevention,
- Have read and understood the information provided in the section entitled Safety
- Have a good knowledge of the generic and specialist standards applicable to the specific application.

Warranty and liability

All claims to warranty and liability will be rendered invalid if

- The product was used contrary to the purpose for which it is intended,
- Damage can be attributed to not having followed the guidelines in the manual,
- Operating personnel are not suitably qualified,
- Any type of modification has been made (e.g. exchanging components on the PCB boards, soldering work etc.).

Disposal

- When decommissioning, please comply with local regulations regarding the disposal of electronic devices (e.g. Electrical and Electronic Equipment Act).

Unit features

- Indicator light unit to signal various operating and plant statuses
- Scope of supply:
  - Indicator light unit
    Red, yellow and green including LED
  - Mounting foot
  - Conduit pipe (250 mm)
  - 1 x flat gasket
    1 x O-ring gasket
  - Safety screw (3.5 x 16 mm)

Function description

The red and green light element on the indicator light unit is used to signal various operating and plant statuses (e.g. detection zone violation on SafetyEYE).
The yellow light element on the indicator light unit is used to signal process errors and warning zone violations.

Installation and wiring

NOTICE

The indicator light unit should be positioned so that operating personnel can see it at all times from every working position.

Installation

Installing the mounting foot:

INFORMATION

Make sure it is properly secured! When selecting the fixing material, consider the composition of the surface beneath the assembly (e.g. ceiling, steel girder) as well as the environment (e.g. vibration).

- Drill holes in the surface beneath the assembly, as shown in the diagram "Preparing for installation, mounting foot dimensions and conduit pipe" [1].
  Don't forget to drill a hole for the cable feed [2]!
- When installing, use the flat gasket provided [2]!

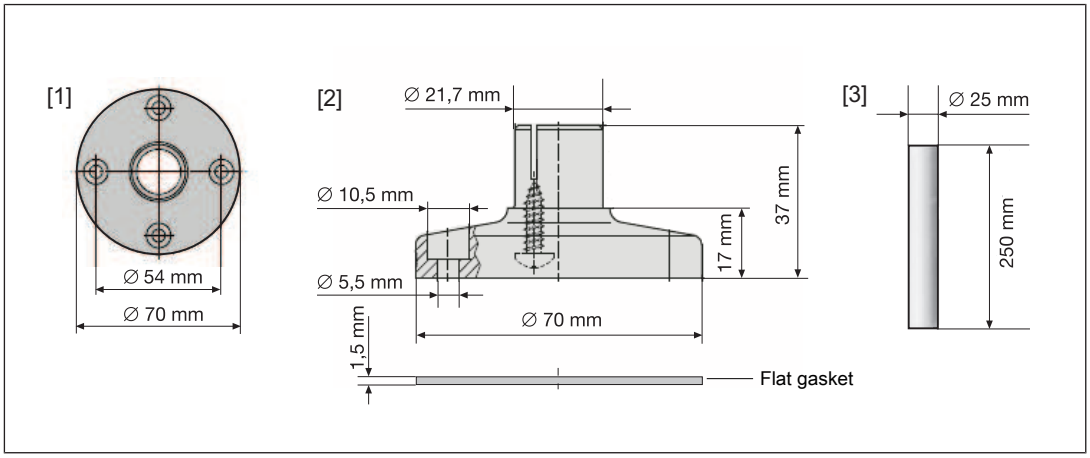

Fig.: Preparing for installation, mounting foot dimensions and conduit pipe

Attaching the conduit pipe to the mounting foot:

- Cut the conduit pipe [3] to the required length (minimum length: 60 mm).
- Insert the O-ring gasket on to the mounting foot's pipe entry point.
- Fit the conduit pipe to the mounting foot. Use the safety screw to secure the conduit pipe from underneath the mounting foot.

Attach the connection unit to the mounting foot:

- Separate the light elements from the connection unit. The light elements are fastened via bayonet connections.
- Place the connection unit on to the conduit pipe and attach the connection unit using the cross head screw [7].

CAUTION!

Press down firmly when tightening the screw!

Attach the connection cable for the light elements:

- Guide the connection cable for the light elements through the conduit pipe [3] and through the cable feed in the mounting foot.
- Refer to the diagram "Wiring the connection unit and assembling the light elements" for details of how to wire the light elements.

Wiring

CAUTION!

Wire the indicator light unit when it is isolated from the power supply.

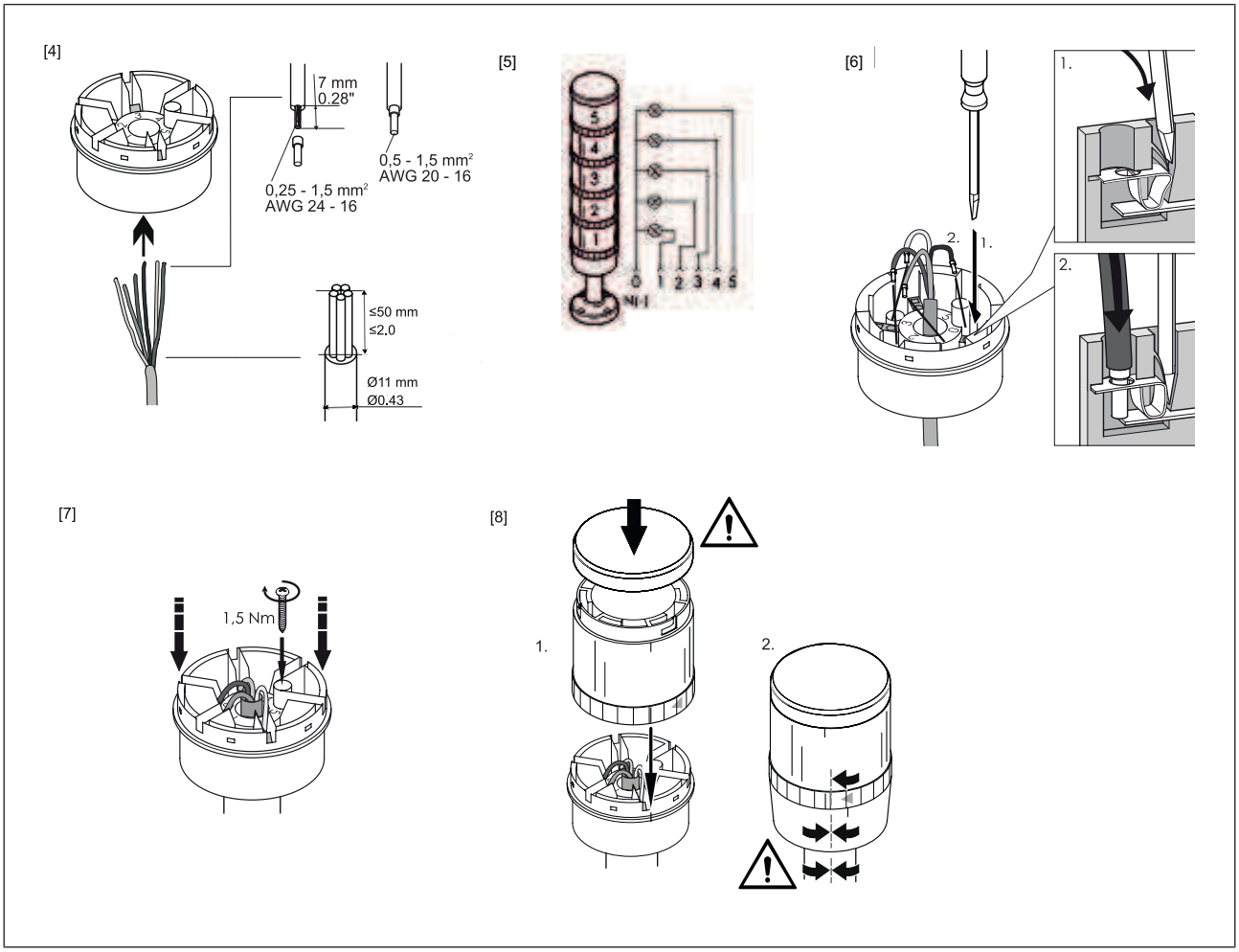

Fig.: Wiring the connection unit and assembling the light elements

Attaching the light elements on the connection unit:

- Attach the light elements in the required colour sequence [8].
- Place the end cover on the topmost light element.

Note the markings for the start position!

Maintenance

Clean the indicator light unit using mild, non-scouring and non-scratching materials. Never use aggressive cleaning agents such as solvents, for example.

Connection example

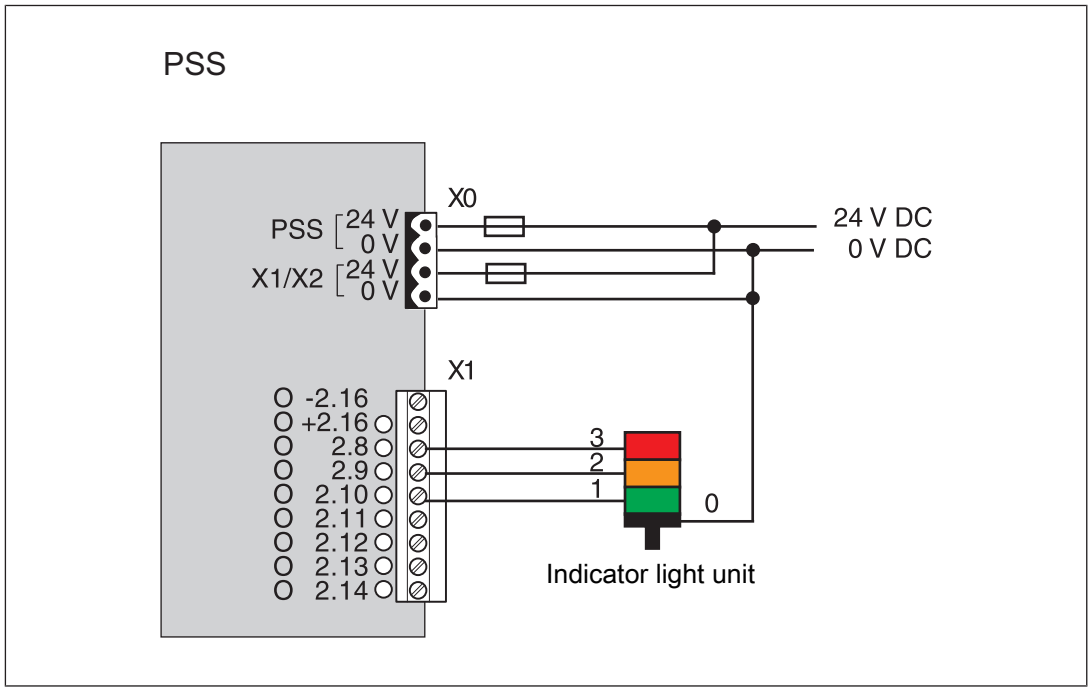

Fig.: SafetyEYE connection example

Dimensions

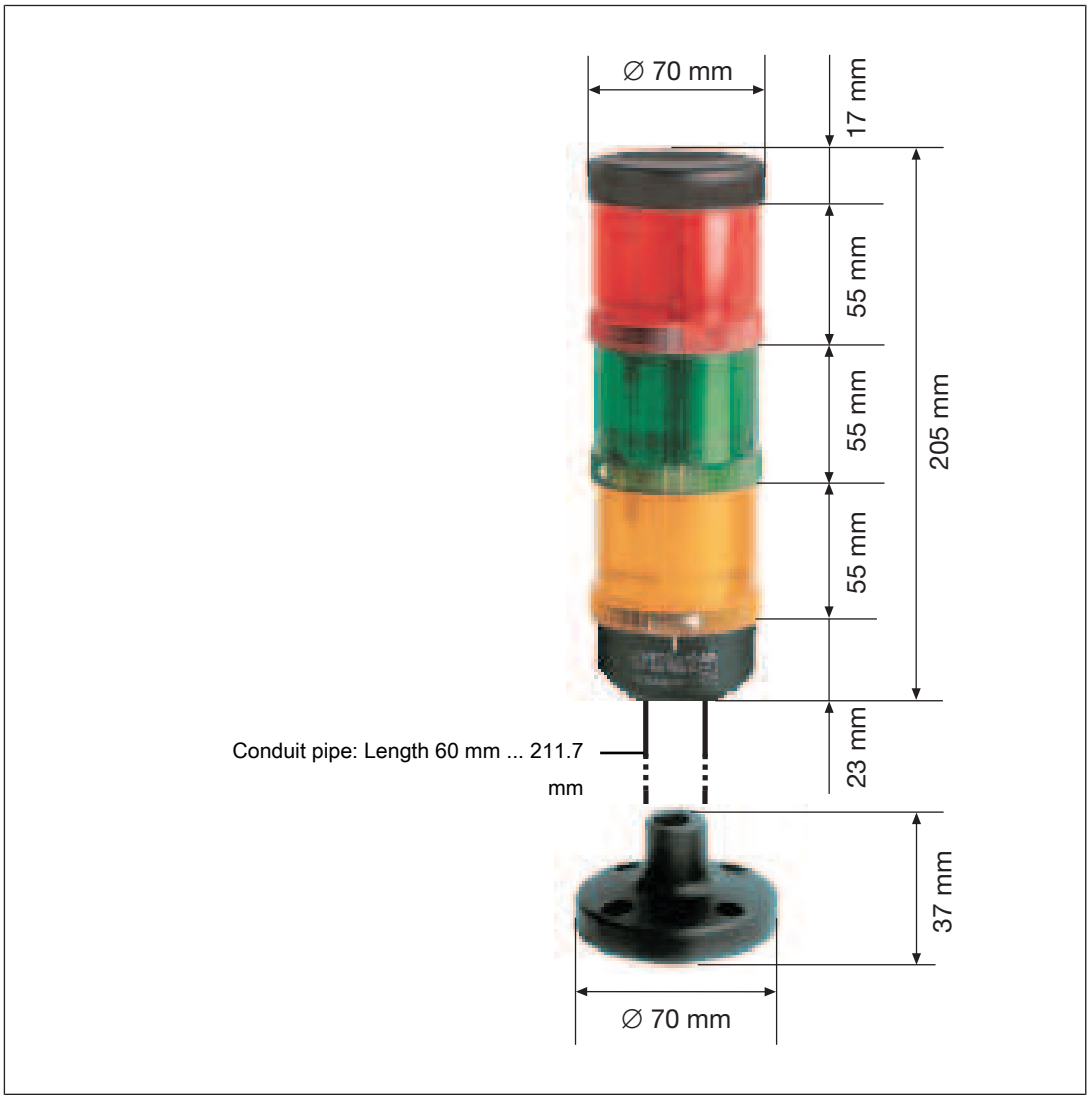

Fig.: Dimensions

Technical details

General	
Certifications	**CE, UKCA**
Self-monitored	**No**
Lamp	
Kind	**LED**
Colour	**Yellow, green, red**
Electrical data	
Supply voltage	
Voltage	**24 V**
Kind	**DC**
Voltage tolerance	**-10 %/+10 %**
Output of external power supply (DC)	**5 W**
Duty cycle	**100 %**
Environmental data	
Ambient temperature	
Temperature range	**-20 - 50 °C**
Storage temperature	
Temperature range	**-20 - 50 °C**
Protection type	
Housing	**IP65**
Mechanical data	
Cable diameter	**8 - 11 mm**
Cable gland	**ISO 14 mm**
Mounting position	**Any**
Material	
Cover	**PC**
Light element	**PC**
Connection element	**PA-GF**
Conduit pipe	**Anodised aluminium**
Connection type	**Spring-loaded terminal**
Conductor cross section with spring-loaded terminals: Flexible with/without crimp connector	**0,5 - 1,5 mm²**
Dimensions	
Height	**453,7 mm**
Diameter of pushbutton	**70 mm**
Weight	**250 g**

Order reference

Product type	Features	Order no.
PIT si3.1 indicator light unit	Indicator light unit red, yellow, green	581190

Support

Technical support is available from Pilz round the clock.

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