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Operating instructions
Ultrasonic diffuse-reflection sensor
with IO-Link

UK

UGT212
UGT213
UGT214
UGT524
UGT525
UGT526
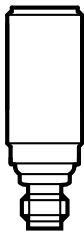
1 Preliminary note

1.1 Symbols used

▶   Instructions

>   Reaction, result

[…]   Designation of keys, buttons or indications

→   Cross-reference

⚠   Important note
     Non-compliance may result in malfunction or interference.

ⓘ   Information
   Supplementary note.

2 Safety instructions

- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ 3 Functions and features).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, operation and maintenance of the product must be carried out by qualified personnel authorised by the machine operator.
- Protect units and cables against damage.

3 Functions and features

Ultrasonic sensor for monitoring levels and detecting objects.

4 Installation
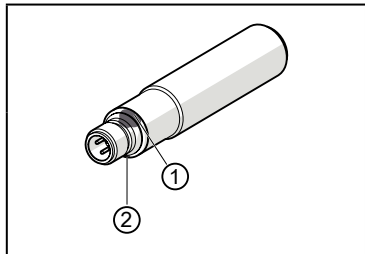
▶ Secure the unit to a bracket.

1: status LED (yellow), setting aid and output indication
2: echo LED (green), is on when object or background is detected

[!] Sound-absorbing surfaces have a negative effect on a reliable function.

[!] ▶ Consider the dead zone (→ Technical data sheet):
No object detection in the dead zone.

[!] For units with metal housing (according to UL 508):

▶ Observe a minimum distance of 12.7 mm between the sensor and non-insulated live parts.

[ℹ] For further information please refer to www.ifm.com
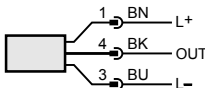→ General information about installation and operation.

5 Electrical connection

▶ Disconnect power.

▶ Connect device (depending on the type selected):

BK: black
BN: brown
BU: blue   colours to DIN EN 60947-5-2

• OUT: switching output / IO-Link

6 Settings

ℹ️ The unit and the parameters are set by means of IO-Link (→ 6.1).

ℹ️ On delivery the unit can also be used without IO-Link setting with the preset switch points.

6.1 IO-Link

6.1.1 General information

This unit has an IO-Link communication interface which enables direct access to process and diagnostic data. In addition it is possible to set the parameters of the unit while it is in operation. Operation of the unit via an IO-Link interface requires an IO-Link master.

With a PC, suitable IO-Link software and an IO-Link adapter cable communication is possible when the system is not in operation.

The IODDs necessary for the configuration of the unit, detailed information about process data structure, diagnostic information, parameter addresses and the necessary information about the required IO-Link hardware and software can be found at www.ifm.com.

6.1.2 Process data via IO-Link

All process data is available via IO-Link:

- The unit is designed for fully bidirectional communication.
- The following options are available:
  - Remote display: Read and display the current status.
  - Remote parameter setting: Read and change the current parameters via IO-Link parameter setting.

7 Operation

Check whether the unit operates correctly. Bring about a sensor response by taking suitable measures.

Display by LEDs (independent of the programmed output configuration):

Status LED yellow ON	Switching output is active.
Echo LED green ON	Echo is received.
Echo LED green flashing	Short circuit at the output.