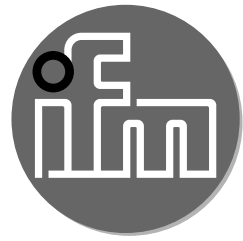


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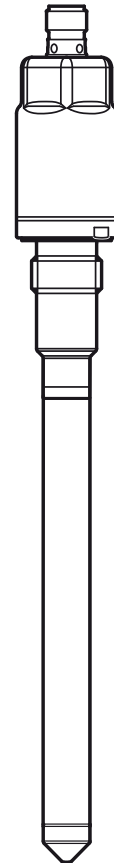
Operating instructions
Binary level sensor

efector160[®]

LX0020

UK

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1 Safety instructions

- In order to guarantee the correct condition of the unit for the operating time it is necessary to use the unit only for media to which the wetted materials are sufficiently resistant (→ Technical data).
- The responsibility whether the unit is suitable for the respective application lies with the operator. The manufacturer assumes no liability for consequences of misuse by the operator. Improper installation and use of the unit result in a loss of the warranty claims.
- The unit complies with the standard EN 61000-6-4. In domestic areas (EN 61000-6-3) the unit must be installed in closed metal tanks / pipes.

2 Functions and features

The unit monitors the level of liquid, aqueous media in tanks and pipes. It is in particular intended for the detection of coolants (e.g. R134a, R22 or R717) and oils. It can be used for point level detection and run-dry protection.

- The unit can be operated at medium temperatures of -20...85 °C.
- Tank pressure: -1...40 bar.

3 Installation

The device is either installed and sealed directly via the G1/2 internal thread or via a suitable mounting adapter.

For direct installation via the internal thread:

- ▶ Use suitable sealing material or a suitable (for refrigeration systems) sealing method. The sensor housing must be in electrical contact with the metal process connection.

For installation via mounting adapter:



A correct fit and function of the unit and ingress resistance of the connection are only ensured using ifm adapters.

Available accessories: www.ifm.com → Data sheet search → Accessories

- ▶ Observe the installation instructions of the adapter used.
- ▶ Weld or install the adapter into the tank / pipe.
- ▶ Slightly grease the thread of the sensor using a lubricating paste which is suitable and approved for the application.

- ▶ Screw the sensor into the adapter and tighten.
Max. tightening torque: 20...25 Nm.
- ▶ After installation check the tank / pipe for ingress resistance.

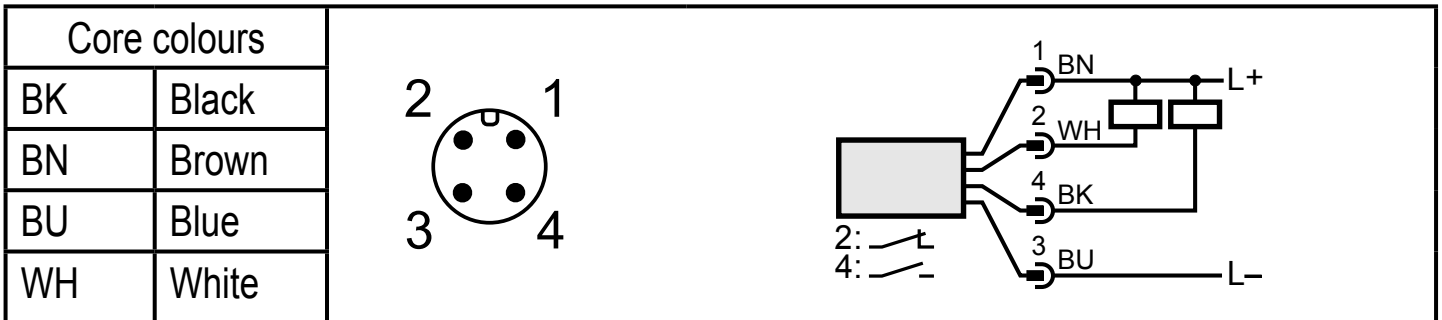
4 Electrical connection



The unit must be connected by a qualified electrician.

The national and international regulations for the installation of electrical equipment must be adhered to. Voltage supply according to EN 50178, SELV, PELV.

- ▶ Disconnect power and connect unit as follows:



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5 Operation

When the supply voltage has been applied, the unit is in the operating mode. It carries out its evaluation functions and switches the outputs.

Operation indication by LED and output signals:

	LED	OUT1	OUT2
Unit ready for operation, no medium detected	Green	OFF	ON
Unit ready for operation, medium detected	Yellow	ON	OFF
no operating voltage	OFF	OFF	OFF
Error / failure	-	OFF	OFF

6 Maintenance, repair, disposal

- ▶ From time to time check the probe cap for deposits and damage. Clean the unit if badly soiled. In case of damage replace the unit.
- ▶ After removal and before reinstallation of the unit carefully clean the probe neck and the installation slot - especially the sealing cone - with appropriate methods to ensure that it is resistant to ingress and without dead space.
- ▶ It is not possible to repair the unit.