



### Model Number

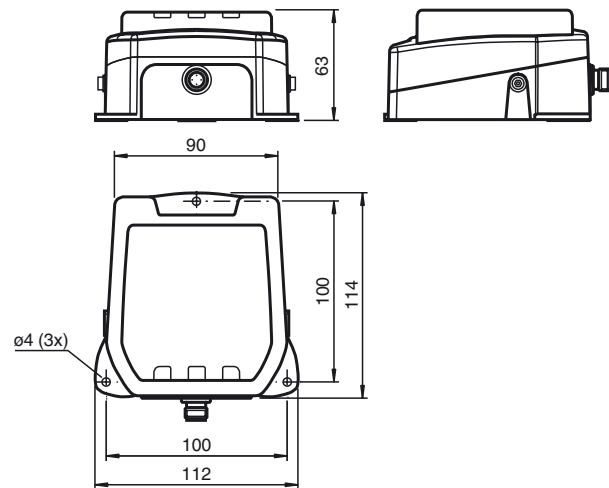
**IUH-F190-V1-FR1-01**

UHF read/write head for IDENTControl, Europe

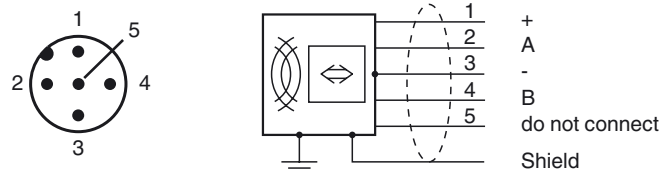
### Features

- Flexible UHF read/write head with medium detection range
- Ready-made PLC function blocks designed for quick and easy system integration
- Compact and robust housing for harsh industrial environments
- Switchable antenna polarization guarantees reliable tag detection and enhances process flow
- Multi-tag reading of up to 40 tags ensures increased productivity
- For connection to IDENTControl control interface

### Dimensions



### Electrical connection



### Technical data

#### General specifications

|                     |   |
|---------------------|---|
| Operating frequency | 865 ... 868 MHz: EU, Turkey<br>Transmission licenses for other countries on request |
| Emitted power       | 3 ... 1000 mW ERP adjustable  |
| Operating distance  | typ. 2 m  |

#### Indicators/operating means

|            |                                 |
|------------|---------------------------------|
| LED green  | Power on                        |
| LED yellow | Read/write operation successful |
| LED blue   | Transmission mode               |

#### Electrical specifications

|                     |                       |
|---------------------|-----------------------|
| Current consumption | ≤ 450 mA              |
| Power consumption   | $P_0$ ≤ 9 W           |
| Supply              | from the IDENTControl |
| Surge protection    | category 2            |

#### Directive conformity

|  |   |
|--|---|
| Radio and telecommunication terminal equipment |   |
| Directive 2014/53/EU                           | EN 301489-1 V2.1.1:2017<br>EN 301489-3 V2.1.1:2017<br>EN 302208 V3.1.1:2016<br>EN 50364:2010<br>EN 62368-1:2014+AC:2015 |

#### Standard conformity

|                      |               |
|----------------------|---------------|
| Degree of protection | EN 60529:2000 |
|----------------------|---------------|

#### Ambient conditions

|                     |  |
|---------------------|--|
| Classification      | Environmental situation A (controlled environment)   |
| Ambient temperature | -20 ... 70 °C (-4 ... 158 °F) (Operation with nontransmission periods, adjustable)<br>-20 ... 60 °C (-4 ... 140 °F) (Continuous transmission mode) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F)   |
| Pollution degree    | 2  |

#### Mechanical specifications

|                      |                   |
|----------------------|-------------------|
| Degree of protection | IP67              |
| Connection           | M12 x 1 connector |
| Material             |                   |
| Housing              | PA 6              |
| Base                 | diecast aluminum  |
| Mass                 | 810 g             |

**Notes**

This product is a wireless device and may be operated only in the country for which a transmission license exists. Information regarding transmission licenses can be found on the datasheet for the product. If a product is released to a customer in a country for which there is no transmission license, the product may be operated only in the country for which a transmission license exists.

If a product does not correspond to the legal requirements in force in the EU but is released to a purchaser within the EU, the product is intended for use solely in the destination country of the end customer outside of the EU for which a transmission license exists. The product may therefore under no circumstances be used directly by the purchaser or released to third parties for the purpose of distribution, application or use on the market within the EU as part of a commercial activity.

In the event of an infringement, the purchaser is obliged to indemnify the supplier against any resulting damages, costs, penalty payments and other expenses.

**Function**

The compact IUH-F190-V1-FR1-01 read/write head operates in the UHF frequency range and is optimized for use in industrial applications involving medium distances. The device reads and writes passive tags in line with EPC Generation 2 (ISO/IEC 18000-63). The read/write head can be used in locations including Europe. The read/write head is compliant with the relevant transmission regulations.

Wide range of options supported for filtering data. The read/write head is connected to the IDENTControl interface using an M12 connector. The user can monitor the status of the read/write head using the integrated LEDs.

The read/write head has a typical detection range of around 2 meters; this range is determined by the tag used and can be adjusted by configuring the transmission power. Other influencing factors include the setup and installation of the specific application and the surrounding materials, particularly metal. The read and write distances for the relevant tag, which are detailed separately, have been established in a test laboratory under ideal conditions. For the actual read and write distances under real conditions, the combination of read/write head and tag must be tested in the desired application.

**Accessories****IC-KP-B17-AIDA1**

IDENTControl control interface  
With Ethernet interface for TCP/IP,  
PROFINET, EtherNet/IP, and MODBUS  
TCP protocols

**IC-KP2-1HB17-2V1D**

IDENTControl Compact control interface  
With Ethernet interface for TCP/IP,  
PROFINET, EtherNet/IP, and MODBUS  
TCP protocols

**IC-KP2-2HB17-2V1D**

IDENTControl Compact control interface  
With Ethernet interface for TCP/IP,  
PROFINET, EtherNet/IP, and MODBUS  
TCP protocols

**IC-KP2-1HB6-V15B**

Control interface unit  
IDENTControl Compact  
with PROFIBUS DP interface

**IC-KP2-2HB6-V15B**

Control interface unit  
IDENTControl Compact  
with PROFIBUS DP interface

**IC-KP2-1HB6-2V15B**

Control interface unit  
IDENTControl Compact  
with PROFIBUS DP interface

**IC-KP2-1HRX-2V1**

Control interface unit  
IDENTControl Compact  
with serial interface RS-232 and RS-485

**IC-KP2-2HRX-2V1**

Control interface unit  
IDENTControl Compact  
with serial interface RS-232 and RS-485

**IC-KP2-2HB21-2V1D**

Control interface unit  
IDENTControl Compact  
with EtherCAT interface

**V1-G-5M-PUR-ABG-V1-W**

Connecting cable, M12 to M12, PUR ca-  
ble 4-pin, shielded

**V1-G-10M-PUR-ABG-V1-W**

Connecting cable, M12 to M12, PUR ca-  
ble 4-pin, shielded

**IUC72-F152-M-FR1**

Data carrier

**IUC76-50-FR1**

Data carrier

**IUC76-F157-M-FR1**

Data carrier

**IUC76-F203-M-FR1 10pcs**

Data carrier

**IUC77-F151-M-GBL**

Data carrier

**IUC77-25L110-GBL 1000pcs**

Data carrier

**IUZ-MH12**

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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**Accessories**

Mounting bracket for pole and wall mounting

**IUZ-MH13**

Mounting bracket for wall mounting

**IUZ-MH15**

Mounting aid for round steel  $\varnothing$  12 mm or sheet 1.5 mm ... 3 mm

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