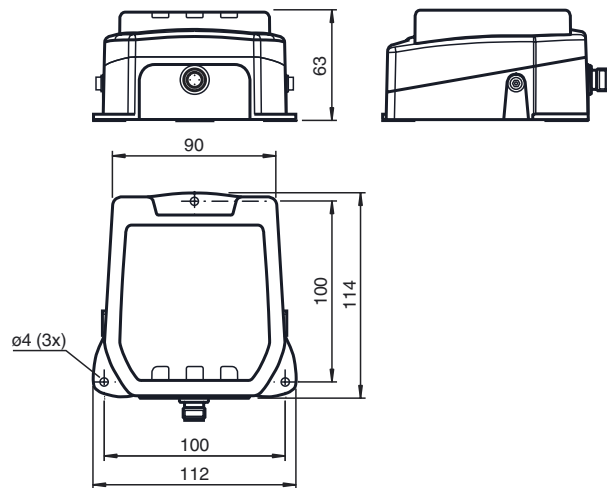## Model Number

IUH-F190-V1-FR2

UHF read/write head, for IDENT*Control*, Asia and America, excluding Canada, USA, and Mexico
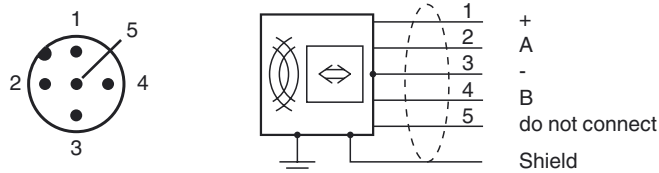
Features

- Most flexible midrange UHF read/write head for worldwide use
- 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

Dimensions

Electrical connection

Pin	
1	+
2	A
3	-
4	B
5	do not connect
	Shield

Technical data

General specifications

Operating frequency	920.0 MHz ... 926.0 MHz: Australia
	920.5 MHz ... 924.5 MHz: China
	915.0 MHz ... 928.0 MHz: Brazil
	916.7 MHz ... 920.5 MHz: Japan
	919.0 MHz ... 923.0 MHz: Malaysia
	921.5 MHz ... 928.0 MHz: New Zealand
	917.2 MHz ... 920.4 MHz: South Korea
	920.0 MHz ... 925.0 MHz: Singapore, Vietnam
	920.0 MHz ... 925.0 MHz: Thailand, Hong Kong
Emitted power	50 ... 500 mW EIRP = 30 ... 300 mW ERP adjustable
Operating distance	typ. 1 m
UL File Number	468231

Indicators/operating means

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

Electrical specifications

Power consumption	P_0	$\leq$ 7 W
Supply		from the IDENTControl

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F) (Operation with nontransmission periods, adjustable)
	-25 ... 50 °C (-13 ... 122 °F) (Continuous transmission mode)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Degree of protection	IP67
Connection	M12 x 1 connector
Material	
Housing	PA 6
Base	diecast aluminum
Mass	approx. 900 g

Compliance with standards and directives

Standard conformity	
Electromagnetic compatibility	EN 301489-1 V1.9.2:2011
	EN 301489-3 V1.4.1:2003
Safety	EN 60950-1:2006/A1:2010
Degree of protection	EN 60529:2000

Approvals and certificates

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

| Pepperl+Fuchs Group | USA: +1 330 486 0001 | Germany: +49 621 776 4411 | Singapore: +65 6779 9091 |
| www.pepperl-fuchs.com | fa-info@us.pepperl-fuchs.com | fa-info@de.pepperl-fuchs.com | fa-info@sg.pepperl-fuchs.com |

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1

UL approval	UL 61010-1 3rd Edition CSA C22.2 NO. 61010-1-12 3rd Edition (EN 60950-, EN 60529 and IP67 are not included)
Radio approval	China: CMIIT ID 2014DJ1548

Function

The compact IUH-F190-V1-FR2 read/write head operates in the UHF frequency range and is optimized for use in industrial applications involving shorter distances. The device reads and writes passive tags according to EPC Generation 2 (ISO/IEC 18000-63). The read/write head can be operated in different countries, e.g. China. The read/write head complies with the respective radio regulations.

Wide range of options supported for filtering data. The read/write head is connected to the IDENT*Control* 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 approx. 1 meter; this range is determined by the tag used and can be changed by adjusting the transmission power. Other influencing factors are the application specific setup and surrounding materials, particularly metal. The read and write distances measured under ideal conditions can be found in a separate document. For the actual read and write distances under real conditions, the combination of read/write head and tag must be tested in the intended application.

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

Pepperl+Fuchs Group	USA: +1 330 486 0001	Germany: +49 621 776 4411	Singapore: +65 6779 9091
www.pepperl-fuchs.com	fa-info@us.pepperl-fuchs.com	fa-info@de.pepperl-fuchs.com	fa-info@sg.pepperl-fuchs.com

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Accessories

IUC76-F203-M-FR2 10pcs
Data carrier

IUZ-MH12
Mounting bracket for pole and wall mounting

V1-G-5M-PUR-ABG-V1-W
Connecting cable, M12 to M12, PUR cable 4-pin, shielded

V1-G-10M-PUR-ABG-V1-W
Connecting cable, M12 to M12, PUR cable 4-pin, shielded

IUC72-F152-M-FR2
Data carrier

IUC76-F157-M-FR2-Y
Data carrier

IUC76-50-M-FR2
Data carrier

IUC76-50-FR2
Data carrier

IC-KP-B17-AIDA1
IDENTControl control interface
With Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols

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-KP2-1HB6-V15B
Control interface unit
IDENTControl Compact
with PROFIBUS DP interface

IC-KP2-1HB6-2V15B
Control interface unit
IDENTControl Compact
with PROFIBUS DP interface

IC-KP2-2HB6-V15B
Control interface unit
IDENTControl Compact
with PROFIBUS DP interface

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

IUC76-F157-M-FR2
Data carrier

IUC76-C8-T14-GBL
Data carrier

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

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Accessories

IUC77-F151-M-GBL
Data carrier

IUC77-25L100-GBL 1000pcs
Data carrier

IUC77-25L110-GBL 1000pcs
Data carrier

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