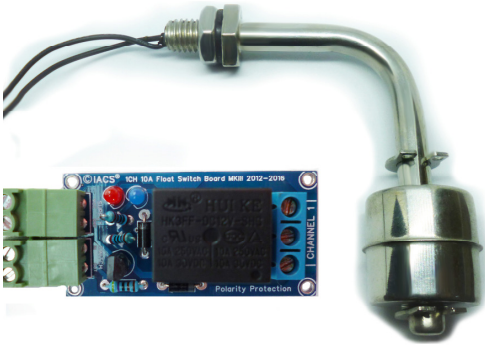


IACS® 1CH 10A Float Switch Board (Float Kit #5 / FK5) (Water / Liquid Level Switch Board, Single Channel) Information / Instructions / Datasheet

Last Updated: July 2019

Versions & Variations

'Float Kit #5' (FK5)



Float switch specification see
page 2 >>>

Figure 1

Specification & Features

- Switch rating of 10 Amperes at domestic voltage (250V AC) or 10A at 30V DC. (Take care when working with potentially hazardous voltages)
- Pluggable terminals with screw connectors for power source and float switch and high quality screw terminals on the channel (NO, COM, NC) - **NO SOLDERING REQUIRED!**
- This board will trigger when the water (or other liquids) level drops or raises above a certain level. You can wire devices to turn on or off as the state changes as the board has both Normally Open and Normally Closed.
- Power indicator (Red) and level indicator (Blue).
- Powered by a separate DC circuit, therefore the circuit / power source powering the board does not necessarily have to be what you are switching.
- Dual-plated tracks conduct more current and make the device more reliable, the quality coating on the board makes it more resistant to residual moisture (not visible moisture) and corrosion.
- M2 Screw mounting holes (one at each corner).
- Flywheel protection and input polarity protection.
- Suitable for industrial use, robotics and for reliable switching situations.
- Available in different bundles (with different types of switches (that can be used with different types of liquid). You should not allow the board to get wet. Switches may be available in: Polypropylene, Nylon, or metal.
- Also available in 'Premium version' – Faster switch time of around 5ms and longer life expectancy on relay contacts.
- CE Mark, RoHS and WEEE compliant, manufactured in Europe. This product is designed for integration into your own design which may require further certification.

Supply Voltage	Part Number	Availability*** (Work Days)	Intended Use	Power Usage	PCB Dimensions** (L x W x H - mm)
3V	FK5-3V	Discontinued (unless special request)	General (NO / COM / NC)	Off State <= 20mA, On State <100mA	25 x 50 x 20
5V	FK5-5V	1-2 Days Lead Time	General (NO / COM / NC)	Off State <= 20mA, On State <100mA	25 x 50 x 20
9V	FK5-9V	1-2 Days Lead Time	General (NO / COM / NC)	Off State <= 20mA, On State <100mA	25 x 50 x 20
12V	FK5-12V	1-2 Days Lead Time	General (NO / COM / NC)	Off State <= 20mA, On State <100mA	25 x 50 x 20
24V	FK5-24V	1-2 Days Lead Time	General (NO / COM / NC)	Off State <= 20mA, On State <100mA	25 x 50 x 20
36V	FK5-36V	3-5 Days Lead Time	General (NO / COM / NC)	Off State <= 20mA, On State <100mA	25 x 50 x 20
48V	FK5-48V	3-5 Days Lead Time	General (NO / COM / NC)	Off State <= 20mA, On State <100mA	25 x 50 x 20

* All versions of this product are tested before shipping but relay / connectors / LED colour / size may vary per batch listing.

** DIMENSIONS: The pluggable connectors overhang the board by approx. 14mm on its length and we recommend some allowance on it's height; so overall size for all versions should be considered as: 25mm x 65mm x 22mm

*** Availability / dispatch time, we process your order as fast as we can. **Time estimates are provided as an ESTIMATE not as a guarantee. We usually perform ahead of schedule and rare delays are often the cause of weather, customs, courier or other sources outside our control.**

DISCLAIMER: As this product is an electronic device it should be installed with care, and if in any doubt consult a professional. All power sources must be isolated before touching the circuit or interacting with the board. The PCB should be mounted away from water or liquids to ensure it does not get wet. Where needed it may be appropriate to mount the PCB inside an 'IP rated' water proof enclosure or securely mounted away from liquids. It may also be necessary to extend the wires that connect the float switch to the board, which can be done easily. Diagrams and instructions provided in this datasheet are given as an example in good faith and are accurate to the best of our knowledge. The manufacturer / retailer is not responsible for accidents, damage or injury.



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Float Switch Specification

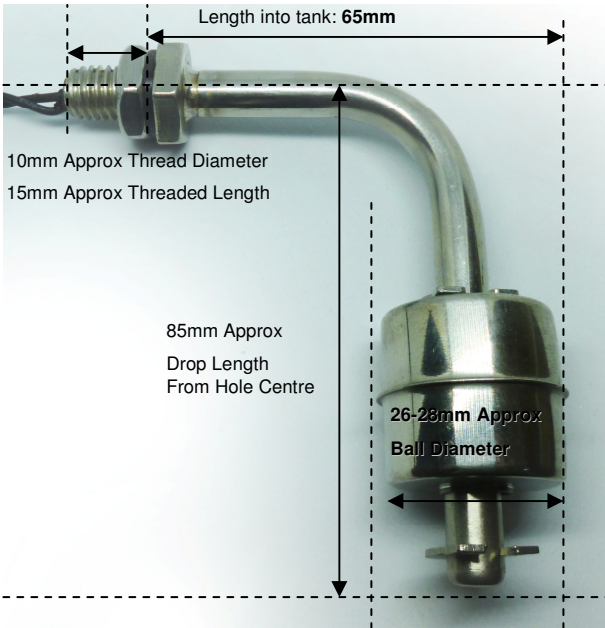


Figure 2

*Some float switches may have small marks that resemble dents, this is from the manufacturing process and does not indicate damage and in does not affect their specified performance. If you spot something that looks more serious, please contact us.

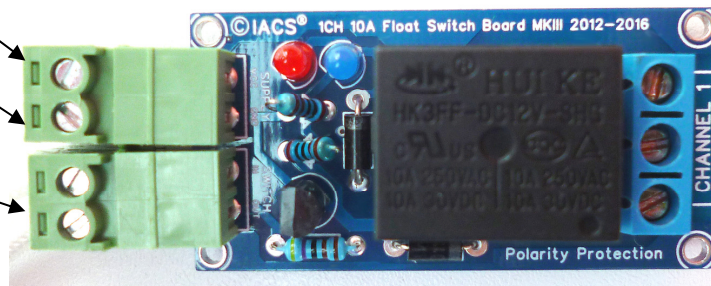
Float Switch Name (s) / Type	Side Entry Stainless Steel Float Switch Right Angle (90 Degrees)
Rated Switching Power	10 Watts, with board: 2.4kW / 2400 Watts
Maximum Switching Voltage	100V DC, with board: 250V AC or 30V DC @ 10A (Higher DC voltages achievable if running lower amperage)
Maximum Switching Current	0.5 Amp, with board: 10 Amps
Max Breakdown Voltage	220V DC (switch only)
Max Carry Current	1A, with board: 10 Amps
Max Contact Resistance	100mΩ (Switch Only)
Max Temperature	-30°C - +125°C (Can be used with boiling water)
Material	Stainless Steel (SUS304)
Thread Diameter (Approximate)	10mm / M10 (Pitch 1.5mm)
Thread Length	15mm / 0.59"
Switch Protruding Length	65mm / 2.55" Approx
Cable Length	At least 25cm of cable will be attached to the switch, this can be extended easily using appropriate 2 core cable.

Basic how to connect (Wiring)

VCC+ (Put your DC supply positive here e.g. +12V DC)

GND (Put your DC supply negative here)

These two terminals go to the two wires on the float switch. It should not matter which way around they are and the wires can be easily extended.



These three terminals operate like a light switch. Also known as 'SPDT' you get three terminals:

Normally Open
Common
Normally Closed

Generally whatever you want to control, if it fits the specification and is safe: you should be able to cut / intersect one of the wires e.g. positive or live (take care when working with high voltages) and route it through the switch, usually COM and NO.

Normally Open (NO) – usually this goes to your device on the positive side

Common (COM) – Usually this goes to your power source e.g. positive side of battery

Normally Closed (NC) – depends on set up – leave empty if not in use. **DO NOT GROUND**

When the blue light is ON / float switch is activated the COM and NO terminals are closed and in effect 'connected together'.

Power does not go through the board from the control side to the switch side.

