RK23191 and RK23191-01
Steel (WIF) Probe
Marine Type Approved For All Vessels

Instruction Part Number 14455 Rev -

This kit includes one water-in-fuel (WIF) probe and one connector harness.

The WIF is of rugged construction, designed to be used in marine machinery spaces that must conform to International Marine Organization (IMO) standards. This WIF is American Bureau of Shipping (ABS) certified for use aboard ABS classed vessels and may be acceptable under other International Association of Classification Societies (IACS) members.

In use, when the collected water level within the Racor filter bowl/sump rises to the height of the probe tip, a Racor Water Detection Amplifier (ordered separately) will detect the change in electrical resistance (ohms) of the fluid.

When this happens, the Amplifier will alert the operator that draining of the Racor is required.

This WIF may be used with all Racor Water Detection Amplifiers and the following Racor filter models: Turbine Series, Spin-on Series, DFBO, FBO and 800 Series.

Contact Information:

Parker Hannifin Corporation
Racor Division
P.O. Box 3208
3400 Finch Road
Modesto, CA 95353

phone 800 344 3286
209 521 7860
fax 209 529 3278
racor@parker.com
parker.com/racor

Product Features:

• ABS Marine Type Approved, Cert. #11-HS800012-PDA.
• UL Marine Listed, 168Y.
• Meets requirements of ISO19921 fire resistance test.
• 303 Stainless Steel and Ceramic construction.
• SAEJ1926 Straight thread with O-ring sealing design.
• Fluorocarbon (FKM) O-ring for durable service life.
• Detachable Packard GT-Series 2-terminal connector.
• 36” long 18AWG yellow/black wires (no polarity) (RK23191).
• 8” long 18AWG yellow/black wires (no polarity) harness with Deutsch DT04-3P connector (RH23191-01).
## Technical Information

<table>
<thead>
<tr>
<th>Specifications</th>
<th>RK23191</th>
<th>RK23191-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volts</td>
<td>12 or 24</td>
<td>12 or 24</td>
</tr>
<tr>
<td>Wire Length</td>
<td>36.0 in. (83.8 cm)</td>
<td>8.0 in. (20.3 cm)</td>
</tr>
<tr>
<td>Internal Resistor</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Mating Connector</td>
<td>None</td>
<td>Deutsch DT04-3P</td>
</tr>
</tbody>
</table>

## Mounting Information

![Mounting Diagram](image)

- **Probe Tip**
- **Ceramic Insulator**
- **1/2"-20 UNF Threads**
- **Stainless Steel**
- **0.95 HEX**
- **Connector**

Dimensions: 3.19 in. (8.1 cm)
Installation Guidelines

Note: When installing the WIF in a DFBO, FBO, or 800 Series model, the use of a thread adapter (73249) is required. Apply thread paste to the male threads and install the adapter into the housing port. Tighten adequately and then continue.

1. The WIF is installed in Turbine Series or Spin-on Series contaminant collection bowls by removing the existing probe port plug. This plug will have 1/2"-20 straight threads and an o-ring will be present.

2. Clean the sealing gland of the port with a clean cloth to remove any debris.

3. Apply silicone grease or clean diesel fuel to the WIF O-ring.

4. Install the WIF into the port and tighten to 90 inch pounds (10 newton/m) max.

5. Refer to the instructions provided with the Racor Water Detection Amplifier to complete the wiring procedure.

Note: The WIF is passive so it has no polarity (no hot or ground) but you may use the black wire as the ‘ground’ and the ‘yellow’ wire for the signal wire, just to make it easier to hook the WIF up to your Amplifier wiring diagram. Use cable tie-wraps to secure the wires away from moving or hot surfaces.

6. Ensure the final connection of the harness to the WIF connector housing is made prior to testing the system.

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**Water Detection Modules & Kits**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>RK 12870</td>
<td>Under-dash Water Detection Module Light and sound when water is detected. Water must be drained to reset light and stop horn. Plastic enclosure measures: 1.36&quot; square x 1.25&quot; deep.</td>
<td>12 vdc</td>
</tr>
<tr>
<td>RK 12971</td>
<td>Same as above</td>
<td>24 vdc</td>
</tr>
<tr>
<td>RK 20725</td>
<td>Under-dash Mount Water Detection Module Light only. Green ‘ON’ lamp illuminates with power on. Red ‘DRAIN’ lamp illuminates when water is detected. Initial power-up self diagnosis feature and circuit protection included. Plastic enclosure measures: 2.75&quot; x 1” x 1.5”.</td>
<td>12 vdc</td>
</tr>
<tr>
<td>RK 20725-24</td>
<td>Same as above</td>
<td>24 vdc</td>
</tr>
<tr>
<td>RK 20726</td>
<td>2” Gauge Type Water Detection Module Light and audio. Red ‘DRAIN’ lamp illuminates and horn sounds when water is detected. Initial power-up self diagnosis feature and circuit protection included. Plastic case, satin black dial with white lettering.</td>
<td>12 or 24 vdc</td>
</tr>
<tr>
<td>RK 11-1570</td>
<td>2” Gauge Type Water Detector &amp; Filter Restriction Module Includes pre-set vacuum switch (7in.Hg.), connector, and outlet adapter fitting. Red ‘DRAIN’ or ‘CHANGE FILTER’ lamp illuminate and horn sounds when water is detected.</td>
<td>12 or 24 vdc</td>
</tr>
<tr>
<td>RK 14329</td>
<td>Remote Detection Unit Sends 12 V DC hot (+) signal when water is detected or an input ground signal from a vacuum switch (not included) is received. Must be used with a relay to power a horn or indicator lamp (if draw is over 1 amp). Plastic enclosure measures: 3” x 2.5” x .75”</td>
<td>12 vdc</td>
</tr>
<tr>
<td>RK 14321</td>
<td>Same as above</td>
<td>24 vdc</td>
</tr>
<tr>
<td>14332</td>
<td>Under-dash mount Same as RK14329 but sends a ground (−) signal. Enclosure size is same as RK 20725, above.</td>
<td>12 vdc</td>
</tr>
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</table>
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