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Tilt Float Switch
WA150
Congratulations on your purchase of the Global Water WA150 Tilt Float Switch. This instrument has been quality tested and approved for providing accurate and reliable measurements. We are confident that you will find the WA150 to be a valuable asset for your application. Should you require assistance, our technical staff will be happy to help.

Table of Contents

I. WA150 Checklist 3
II. Inspection 3
III. Features 3
IV. Specifications 4
V. Operation 4
VI. Installation 5
VII. Maintenance 5
VIII. Trouble Shooting 5
IX. Warranty 6

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I. WA150 Checklist

   a. WA150 Tilt Float Switch

   b. WA150 Manual

II. Inspection

   a. Your WA150 unit was carefully inspected and certified by our Quality Assurance Team before shipping. If any damage has occurred during shipping, please notify Global Water Instrumentation, Inc. and file a claim with the carrier involved.

   b. Use the checklist to ensure that you have received everything needed to operate the WA150.

III. Features

   a. Global Water's WA150 Tilt Float Switch is an inexpensive, efficient and highly reliable level detector for open vessels, sumps and ponds. The Tilt Float Switch's molded rubber float has an integral three-conductor cable and operates on a micro-switch device that is located inside the rubber float on an anti-vibration mount. The WA150 Tilt Float Switch includes an adjustable cable weight, which allows it to be suspended from a convenient location above the water rather than having to tie it off at your desired actuation point. The Tilt Float Switch's rubber float is constructed of EPDM, a synthetic rubber with rigid and durable characteristics for long service life and resistance to heat, oxidation, ozone and aging due to weather. As a non-polar elastomer, EPDM has good electrical resistivity, as well as resistance to polar solvents such as water, acids, alkalis, phosphate esters and many ketones and alcohols.
IV. Specifications

Contact Rating 16(8)A 250V ~ 16(4)A 380V; Form C (SPDT)
Max. Temperature 70°C (158°F)
Standard Cable Length 6.5’ (2 m); Additional lengths available
Max. Submerged Depth 65’ (20 m)
Max. Working Pressure 1 bar
Circuit Breaking Capacity Directly 1KW with 250V
Wetted Materials
  Float: EPDM rubber
  Cable: Polypropylene jacket
  Weight: Polypropylene sealed housing
Specific Gravity
  – Stem & Float: 2.16 g/cm$^3$
  – Operational in specific gravity from 0.9 to 1.3
Weight 1 lb. (454 g)
Dimensions 5” x 3 1/8” 1 1/2” (12.7cm x 8cm x 3.8cm)

V. Operation

a. The WA150 Tilt Float Switch's basic operating principle is that as the fluid level rises the rubber float will rise, causing the micro-switch to tilt and generate a signal that can be used to operate a motor starter, open or close a valve or actuate indicator alarms as required. The Tilt Float Switch's three-conductor cable allows operation on increasing level or decreasing level. One lead is common, one is normally open (NO), the other is normally closed (NC).
VI. Installation

a. There are no specific installation concerns for the WA150 Tilt Float Switch. However, the Tilt Float Switch's lead cable should be supported in an enclosed tank. Additionally, in an open tank, sump, or pond, it is advantageous to clip the Tilt Float Switch's lead cable to the side, especially if excessive turbulence is experienced (a nylon cable-tie is included).

b. To alleviate the effects of rapid switching conditions if such turbulence is expected, it is recommended that a maintaining circuit be used to both safeguard the Tilt Float Switch's micro-switch and cut out any chatter from the starters of associated equipment, such as pumps.

c. An optional stabilizing weight and rubber "O" ring are included with the WA150 Tilt Float Switch. This may be installed at any point on the Tilt Float Switch's lead cable.

Warnings:

- Do not connect directly to line voltage.
- Install according to applicable electrical codes.
- Do not use in hazardous (explosive) environments.
- Do not exceed pressure and temperature ratings.

VII. Maintenance

a. The unit must be checked periodically. The suggested maintenance rate depends on the installation area.

VIII. Trouble Shooting

a. Call Global Water for technical support: 800-876-1172 or 916-638-3429 (many problems can be solved over the phone). Fax: 916-638-3270 or Email: globalw@globalw.com.

Be prepared to describe the problem you are experiencing including specific details of the application and installation and any additional pertinent information.
b. In the event that the equipment needs to be returned to the factory for any reason, please call to obtain an RMA# (Return Material authorization). Do not return items without an RMA# displayed on the outside of the package.

Clean and decontaminate the WA150 if necessary.

Include a written statement describing the problems.

Send the package with shipping prepaid to our factory address. Insure your shipment, as the warranty does not cover damage incurred during transit.

c. When calling for tech support, please have the following information ready:

1. Model #.
2. Unit serial number.
3. P.O.# the equipment was purchased on.
4. Our sales order number or the invoice number.
5. Repair instructions and/or specific problems relating to the product.

IX. Warranty

a. Global Water Instrumentation, Inc. warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from date of shipment from factory. Global Water’s obligations under this warranty are limited to, at Global Water’s option: (I) replacing or (II) repairing; any products determined to be defective. In no case shall Global Water’s liability exceed the products original purchase price. This warranty does not apply to any equipment that has been repaired or altered, except by Global Water Instrumentation, Inc., or which has been subject to misuse, negligence or accident. It is expressly agreed that this warranty will be in lieu of all warranties of fitness and in lieu of the warranty of merchantability.

b. The warranty begins on the date of your invoice.