

WD-xS Water Detection Sensors



Features:

- WD-CS is easy to lay and detects along its entire length
- More than one WD-CS or WD-PS can be connected to a WD-AMX
- Self-contained heater to avoid nuisance alarms of WD-RS

Benefits:

- Detects water leaks under floors or isolated plant rooms
- Rain detector to automatically close windows or vents

Technical Overview

The WD-xS range are designed to detect water leaks either at localised points using the WD-PS point sensor or larger areas with the WD-CS cable sensor. The surface of the WD-RS rain sensor can be heated to avoid false detection alarms resulting from dew forming, the detector can be swivelled on the mounting bracket and is held in place by a wing nut.

All these sensors must be used with the WD-AMX range of modules and should not be directly connected to a BMS controller. As the cable excitation used is an isolated AC signal which ensures the detector cable will not be subject to oxidation or erosion over time, avoiding the degradation problems associated with DC systems.

Specification:

WD-CS

Material	PVC Twisted pair with stainless steel sensing elements
Dimensions	3.5mm dia. (0.14")
Leader cable length	3m (9.84ft)

WD-PS

Housing:	
Material	ABS
Dimensions	58 x 58 x 31mm (2.28 x 2.28 x 1.22")
Probes:	
Material	Stainless steel
Dimensions	13 x 3mm dia. (0.51 x 0.12")
Leader cable length	2m (6.56ft)

WD-RS

Housing:	
Material	ABS
Dimensions	70 x 30 x 45mm (2.76 x 1.18 x 1.77")
Bracket	Stainless steel

Common Specification

Maximum cable run	200m (656ft) including all leader and detection cables
Weights:	
WD-CS	520g (1.15lb) max.
WD-PS	100g (0.22lb)
WD-RS	125g (0.28lb)
Country of origin	UK



(WD-RS only)

The products referred to in this data sheet meet the requirements of EU Directive 2004/108/EC

Part Codes:

WD-CS

Water Cable Sensor

Sensing Cable Length (add type to above code)

-2M	2 meters (6.56ft)
-5M	5 meters (16.4ft)
-10M	10 meters (32.81ft)
-15M	15 meters (49.21ft)
-20M	20meters (65.62ft)
-25M	25 meters (82.02ft)

Custom lengths available on request

WD-PS

Water Point Sensor

WD-RS

Rain Sensor with Internal heater, 2 meter (6.56ft)

WD-RS-5M

Rain Sensor with Internal heater, 5 meter (16.4ft)

Accessory

WD-FC

Pack of 20 fixing clips for WD-CS

Installation (WD-CS):

1. Fit the cable sensor to the floor, using the WD-FC or other suitable nonconductive fixings.
2. Connect the 2-core leader cable to the WD-AMX alarm module and terminate at the sensor input (polarity independent). The cable can be extended if required using a 2-core cable to a maximum of 200 meters (656ft)
3. Power the WD-AMX, and adjust the pot on the PCB clockwise until the LED comes on, and then back until the LED goes off (when short a cable is used the LED may not even come on when set to max sensitivity).
4. You can test the cable by placing a wet cloth over the cable to simulate a water leak, the relay will come on. Remove the rag and when the cable dries the relay will go off.

Installation (WD-PS):

1. Fix the WD-PS in the location where leak detection is required.
2. Connect the 2-core leader cable (This can then be lengthen to a maximum of 200 meters (656ft) to the WD-AMX alarm module, and terminate at the sensor input (polarity independent).
3. Power the WD-AMX, and adjust the pot on the PCB clockwise until the LED comes on, and then back until the LED goes off (when a short cable run is used the LED may not even come on when set to max sensitivity).
4. Test the sensor by placing a wet cloth over the stainless steel probes to simulate a water leak, the relay will come on. Remove the rag and the relay will go off.

Installation (WD-RS):

1. Fix the WD-RS in a suitable location, fix the bracket with suitable screws.
2. If required terminate the cores at junction box., from the junction box connect the cable to the WD-AMX alarm module (This can then be lengthen to a maximum of 200 meters (656ft) and terminate the red and blue to the sensor input (polarity independent), and the yellow and green to a 24Vac/dc supply (if required).
3. Power the WD-AMX, and adjust the pot on the PCB clockwise until the LED comes on, and then back until the LED goes off (when a short cable run is used the LED may not even come on when set to max sensitivity).
4. Test the sensor by placing a wet cloth over the face of the sensor, the relay will come on. Remove the rag and the relay will go off.

Red	To detector (WD-AMX)	Yellow	Heater 24Vac.dc (40mA max)
Blue	To detector (WD-AMX)	Green	Heater 0V