









## Detector/Sensor Specifications

### Detector specification





		Single-circuit system			
Specifications	Model No.	AD-AS-1AM	AD-AS-1WM	AD-AS-1DM	AD-AS-1C-SR
					
Number of sensor circuits		1	1	1	1
Power supply voltage		AC100 V-240 V		AC24 V, DC24 V	AC100 V, AC200 V
Frequency		50/60 Hz			
Sensor-applied voltage		2.8 VAC maximum	5.3 VAC maximum	5.3 VAC maximum	2.8 VAC maximum
Water leakage warning		Blinking red LED lamp/Buzzer		Blinking orange LED lamp	
Disconnection warning		Blinking green LED lamp/Buzzer		Blinking orange LED lamp	
Control output contact rated load (resistance load)		AC250 V 6.0 A, DC24 V 6.0 A		AC125 V 0.4 A, DC30 V 2.0 A	
Current consumption		4.5 VA maximum	2 VA maximum	3 VA maximum	2 VA maximum
Sensitivity adjustment		Yes			
Check function		Yes		—	
Outer dimensions (mm)		120 × 124 × 55	45 × 72 × 75	22 × 76 × 87	45 × 72 × 67
Weight (kg)		Approx. 0.3	Approx. 0.12	Approx. 0.08	Approx. 0.18
Box color		Ivory white		Gray	





		Multiple-circuit system		Leak location detection type	
Specifications	Model No.	AD-AS-5DRM	AD-AS-10DRM	AD-AS-1LCM-A	AD-AS-1LDMA
					
Number of sensor circuits		5	10	1	1
Power supply voltage		AC100 V-240 V		AC100 V-240 V	AC24 V, DC24 V
Frequency		50/60 Hz			
Sensor-applied voltage		5.5 VAC maximum		5.5 VAC maximum	12.5 VAC maximum
Water leakage warning		Blinking red LED lamp/Buzzer		Blinking red LED lamp/Buzzer/Digital display of leak location 4-20 mA analog output	
Disconnection warning		Blinking red LED lamp/Buzzer		Blinking red LED lamp/Buzzer/'_ _ _' indication	
Control output contact rated load (resistance load)		AC125 V 0.4 A, DC30 V 2.0 A		AC125 V 0.4 A, DC30 V 2.0 A	
Current consumption		12 VA maximum	20 VA maximum	5 W maximum	5 W maximum
Sensitivity adjustment		Yes			
Check function		Yes		—	
Outer dimensions (mm)		300 × 330 × 100		180 × 125 × 35	106 × 96 × 57
Weight (kg)		Approx. 5.5		Approx. 0.3	Approx. 0.25
Box color		Light beige (5Y7/1)		Gray	

\* For more details, see our website <http://tatsuta.com>

\* The above catalog shows standard specifications. Custom-made specifications (such as number of circuits) are available.

## Sensor specification

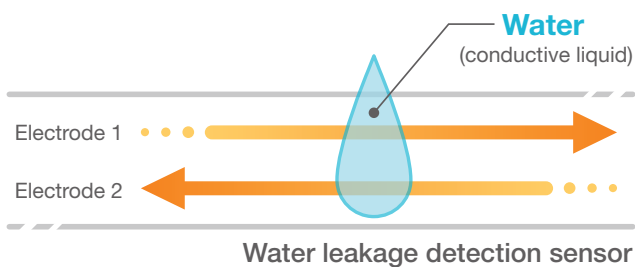
Specifications	Model No.	AD-S sensor	AD-RS sensor	AD-HS sensor	FR-AD sensor
					
Electrode inner layer		Electrode 1, Electrode 2: Plastic single yarn braided to tin-plated soft copper wire, 0.3 mm <sup>2</sup>			Electrode 1, Electrode 2: Glass fiber braided to tin-plated soft copper wire, 0.75 mm <sup>2</sup>
		—		Via red color emitting yarn	—
Outer layer		Plastic yarn braided			Flame-retardant (aramid fiber) braided
Outer diameter		Approx. ø4 mm			Approx. ø5 mm
Lead wire		—			
Detection sensitivity		3 ml maximum: One drop (0.05 ml) per second *1			

Specifications	Model No.	AD-FH sensor	AD-FH-S sensor	AD-PA sensor	AD-LS sensor
					
Electrode inner layer		Electrode 1, Electrode 2: Plastic single yarn braided to tin-plated soft copper wire, 0.3 mm <sup>2</sup>	Plastic single yarn braided to SUS316, 0.33 mm <sup>2</sup>	Electrode 1, Electrode 2: Stainless steel sheet (1 mm)	Electrode 1, Electrode 2: Plastic single yarn braided to tin-plated soft copper wire, 0.3 mm <sup>2</sup>  Electrode 3: Plastic single yarn braided to resistance wire, dia. 0.4
Outer layer		Plastic yarn braided		Soft PVC resin mold	Plastic yarn braided
Outer diameter		Approx. 6.5 mm × 2.0 mm		Approx. 40 mm × 50 mm × 14 mm	Approx. ø3.5 mm
Lead wire		—		MF-VCTF0.5 mm <sup>2</sup> 3.5 m	—
Detection sensitivity		Sensing leak length: 60–90 mm (reference water volume: 14–18 ml)		Water level 10 mm minimum	3 ml maximum: One drop (0.05 ml) per second

\*1 Ex-factory setting

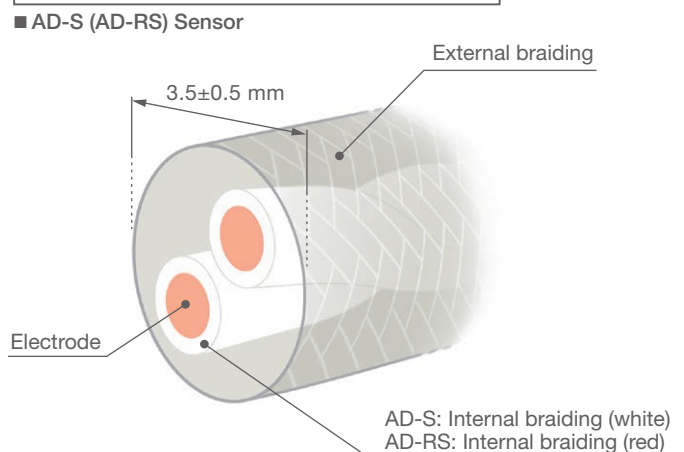
## Water leakage detection system

### Water leakage detection principle



An electrical path is formed between electrodes 1 and 2 using water (conductive liquid) as a medium and the resistance lowers, which allows liquid leakage detection.

### Cross section of leakage detection sensor



■ For more information about water leakage detection, please contact: [sensor@tatsuta.com](mailto:sensor@tatsuta.com).

We also develop custom-made sensor systems by request. Please contact us at any time for details.

**TATSUTA**

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\* The information contained in this catalog is subject to change without notice, because TATSUTA is constantly striving to improve its high-quality products.