

# Liquid Flow Switch HTW-AFS Series



Cable Entry M14 Fitting Replaceable



## Description

Waterproof liquid flow switches.

## Application

Control and monitor liquid flow of boilers, pumps, etc., of heating, cooling, and air conditioning equipment.

## Features

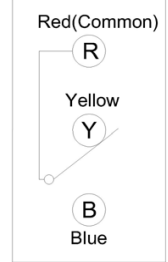
- Flow control of water and normal media
- Renovated SPDT micro switch ensures the reliable switch function
- 15(8A) 250VAC switch rating
- IP65, class I enclosure
- Setpoint adjustable
- Stainless steel paddle
- Brass/S.S material
- Max. liquid temp 120°
- Max. working pressure: 1.5Mpa

## Specifications

Type of operation	On/Off, single-stage, micro switch
Output	SPDT 15(8A) 24/250VAC
Flow rates	See flow rate table
Flow rate setting adjustment	Internal screw
Sensing element	Paddle
Liquid applications	Hot, chilled, well, pool and sea water, Brine or ethylene glycol
Parts material in contact with fluid	Brass/Stainless Steel
Paddle material	Stainless steel
Liquid temperature	-30°C~120°C
Permissible ambient temperature	-40°C~85°C
Permissible ambient humidity	10...90% RH, non-condensing
Cable entry	M14 Fitting(If with)
Housing	Fire Resistance ABS or PC
Protection	IP65
Color	White
Weight	1.0Kg

## Liquid Flow Rate Table Required to actuate switch (m³/h)

Line pipe size(in.)	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	
Min. flow	Flow increase R to B closes	1.0	1.3	1.7	3.1	4.1	6.2	8.4	12.9	16.8	46.6
	Flow decrease R to Y closes	0.6	0.8	1.1	2.2	2.8	4.3	6.1	9.3	12.3	38.6
Max. flow	Flow increase R to B closes	2.0	3.0	4.4	6.6	7.8	12.0	18.4	26.8	32.7	94.2
	Flow decrease R to Y closes	1.9	2.8	4.1	6.1	7.3	11.4	17.3	25.2	30.7	90.8



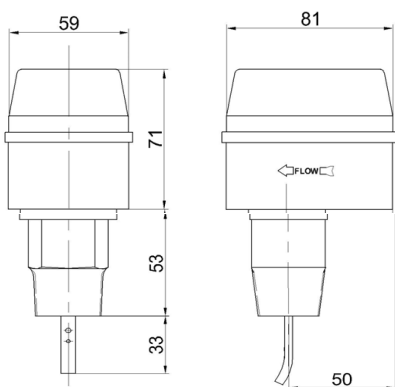
## Electrical data

		Voltage (V)	
		A.C. 110	A.C.220
Current (A)	Non-inductive current	10	8
	Inductive current	Full load	10
		Starting	60

## Installation

The flow switch can be installed in every position far from elbows or throttlings, with arrow on flow direction. If pipe is vertical, recalibrate range to balance paddle weight. If the device is downwards mounted, take care to slugs and apply it in a straight pipe that is far from filters, valves, etc., with length at least 5 times the diameter of pipe upstream and downstream the unit.

## Dimension (Unit: mm)



## Type & Data

Model	Connection	Medium	Materials
HTW-AFS-15	1/2"-14NPT	Water	brass
HTW-AFS-20	3/4"-14NPT		
HTW-AFS-25	1"-11 1/2NPT		
HTW-AFS-15S	1/2"-14NPT	Caustic liquid	Stainless steel
HTW-AFS-20S	3/4"-14NPT		
HTW-AFS-25S	1"-11 1/2NPT		

## Dimension of the paddle (Unit: mm)

