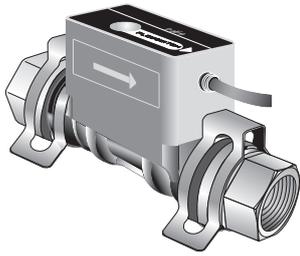


Karman vortex flow switch

PALDRA Instructions manual

JPSW-5L/10L/30L



Features

Karman vortex flow switch JPSW-5L/10L/30L is the new series of flow switch to measure flow rate, with simple functions and reasonable price. LED turns red from green if flow deviates from the set value. Due to compact construction it can be installed in narrow space and simple structure resulting easy maintenance, easy installation and de-installation.

Before using our product.

- Please read carefully the instructions before you use our product.
- Please follow the procedures, conditions and cautions as per the instructions.

Safety information

	Warning Mishandling could cause injury or even death at drastic conditions.		Never do it.
	caution Mishandling could cause disability, fire or other damages to the building or properties.		Do it only with following instructions.

Warning

Unusual or faulty conditions

- ❗ If you continue using our product under the unusual or faulty connections or conditions like as smoking, foul smell, unstable and malfunction, it could cause fire or accident. Cut the power supply immediately and contact to us. Do not try to repair the product yourself.

Working environments

- ⊘ In the humid or dewing environment, it could cause accident or damage because of moisture.
- ⊘ In the vibration, impulsion or pulsation environment, it could cause malfunction, some accident or damage.
- ⊘ Our products are NOT explosion-proof. Do not use in the dangerous environment with flammable, explosive, or corrosive gas.
- ⊘ Do not use outside. This product is only for inside.
- ❗ Installation in high temperature environment as near to heat instruments could cause some accident or damage as the heat instrument will led the temp rise inside the flow meter. Please use our product as instructed in the manual.

caution

Cables

- ⊘ Please do not put heavy objects on the cables or pull the cables from flow meter body, it could cause accident or damage.
- ❗ Please follow the Instructions for "wiring", "Output signal" other wise, it could cause accident or damages.

Working environments

- ⊘ Magnetic power, electromagnetic wave, radioactive ray or ultraviolet rays could cause accident or damage.
- ⊘ Electric corrosion or static electricity could cause accident or damages.
- ⊘ In electrically noisy environments as like around high-frequency power source could cause accident or damages.
- ❗ Install the filter upper flow/Inlet to clear some piece of metal or small objects if needed.
- ❗ Remove the bubbles in the fluid for accurate measurement of flow rate.

Packaging and carrying.

- ❗ Do not drop. Handle with care otherwise The flow meter could damage or cause malfunctioning.

Installations

- ❗ Mind your fingers while plumbing a sensor or you could get injured.

Maintenance

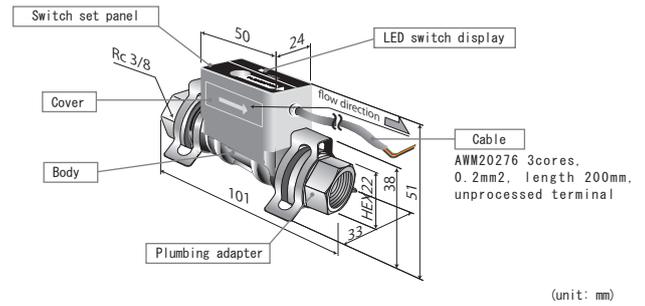
- ⊘ Contact us for overhauling, adjusting or repairing. Please make sure not to touch an electronic substrate inside of flow meter.
- ❗ Only a person who has technical knowledge and experiences could do plumbing, wiring, maintenance or overhauling.
- ❗ while installation or maintenance please shut off the power and water supply for your safety.

Others

- ⊘ Please contact us if you received damaged or deformed product.

Configuration and Dimensions

The electric circuit, substrate, is attached on a wetted part of the body which is covered with a cover. You find a rotary switch inside the cover, and a cables for interface on the side.



Specifications

This is the basic specification for JPSW. Please read them carefully for safe use.

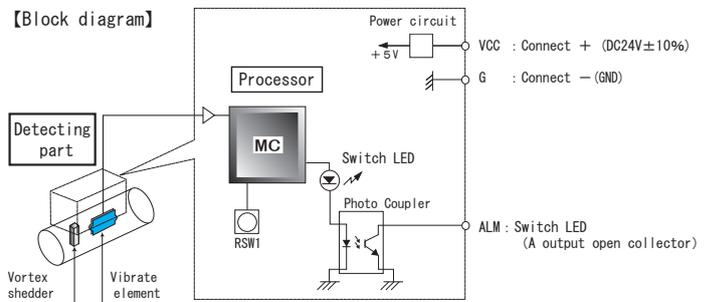
Models	JPSW-5L	JPSW-10L	JPSW-30L
Rated flow range	0.5~5.0L /min	1.5~10.0L /min	5.0~30.0L /min
Fluid	Industrial water, water		
Detecting method	Karman vortex		
Fluid temperature	0~90°C (No freezing, no dewing)		
Ambient temperature	0~50°C (No freezing, no dewing)		
Maximum working pressure	1.0MPa		
Withstanding pressure	1.5MPa (at 20°C)		
Pressure loss (at the maximum flow rate)	46kPa	60kPa	85kPa
Responsivity	Sampling 0.5s		
*1 power supply	DC24V±10%		
Current consumption	MAX 20mA		
*2 Switch output	Maximum load current	Max. DC 100mA	
	Maximum applied voltage	Max. DC 40V	
	Output mode	A output	
*3 Display	2colors LED		
Certification, regulation	RoHS		
Wetted material	Body PPS, FKM Adapter SUS304		
Adapter size	Rc3/8" Quick fitting		
Weight	155g		

*1 Voltage more than specified on the table will damage the product.

*2 Default setting of switch is 0 memory (0L/min) at the time of shipment. (Red LED will be on when there is no water flow)

*3 GRN: Flow rate > Set value RED: Flow rate < Set value

Wiring (interface)



[Cable functions]

Sign	Color	Name	Direction	Characteristic	Output selection	Operation and usage
VCC	Red	Connect+	←	DC24V±10%	/	Connect +side of power supply. Supply +24V to JPSW.
G	Black	Connect-	↔			Connect -side of power supply. It is GND(OV) of JPSW.
ALM	White	Switch output	←	Photo Coupler (A)		Alarming signal to equipment. (A) flow rate ≥ alarm value : ON Flow rate < alarm value : OFF

※When setting 0L/min, it will be OFF ON, not in the water flow in the water flow detection.

