

MICROWAVE FLOW SWITCH

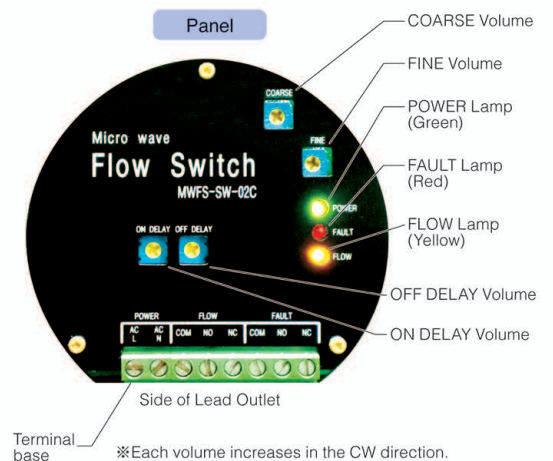
Microwave Flow Switch, applying the principle of Doppler Effect, is a flow detection sensor for bulk solid/powder. Very helpful for monitoring shutoff of facility, clogging of feeding line etc.



*High performance
in flow powder
detection*

Features

- Hardly influenced by adhesion or dust because of microwave system.
- Self-diagnosis function automatically detecting functional depression.
- Withstanding pressure ability up to $\pm 980\text{kPa}$ internal-pressure in pipe.
- The operational indication can be checked at a view without opening cover.
- Free voltage(AC90 - 230V) strong against power fluctuation and disturbance noise.
- Easily detachable without disconnecting.



※Each volume increases in the CW direction.

Specification

Model	MWFS-SW-02C
Power source	AC90~230V, 50/60Hz
Detecting principle	Flow detection by microwave system applying Doppler Effect
Detecting Range	Max. 1.5m(depends on size, speed, and reflectivity of target object)
Frequency	24GHz band
Oscillation power	7mW
Output (for control)	1C Output AC250V 3A (Actuation) Detection: ON at solid flow detection ON DELAY: ON after the setting time OFF DELAY: OFF after the setting time

Fault alarm (self-diagnosis)	1C Output AC250V 3A (Actuation) Diagnoses and outputs drop of the transmitted microwave. * At power off, the contact will be reset.
Timer	0.1~10sec.(Adjustable)(both ON DELAY and OFF DELAY)
Power consumption	Max. 5.5W
Allowable temp	-10~+55°C
Allowable pressure	-980kPa~+980kPa
Mounting	G1 screw(incl. lock-nut and packing)
Protection	IP65
Coating color	Munsell 7.5GY6/10
Mass	Approx 2.0kg

Dimension and Terminal connection

Dimensions:
 - Total length: 134.5mm
 - Mounting Boss: 58mm
 - Case: 46mm
 - Case depth: 104mm
 - Case diameter: 134mm
 - Case depth (to terminal): 104mm
 - Case diameter (to terminal): 104mm
 - Case depth (to blind plug): 5mm
 - Case diameter (to blind plug): 134mm
 - Case diameter (to transparent window): 104mm
 - Case depth (to transparent window): 26mm

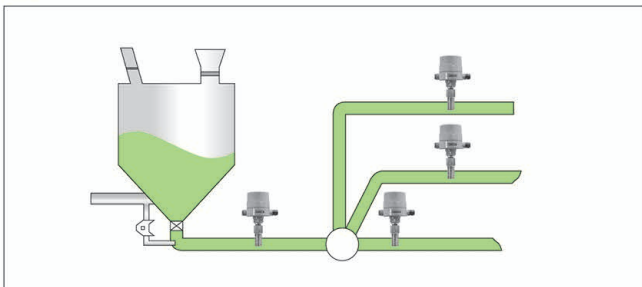
Terminal connection:
 - Power: AC AC90~230V 50/60Hz
 - Output: COM, NO, NC
 - Fault alarm: COM, NO, NC

Operation of Relay:

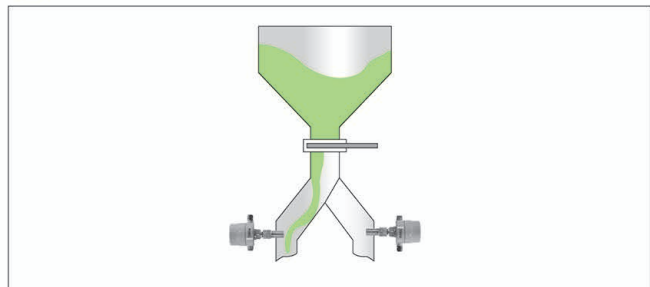
Condition of measurement	Switching status	
	Output	Fault alarm
Power OFF and NO-detection. (No-Flow)	COM NO NC	COM NO NC
Detection. (Flow)	COM NO NC	COM NO NC
Failure (Failure:When the micro wave is not transmitted)	COM NO NC	COM NO NC

Notes:
 *1 : Please apply a liquefied gasket to a screw part or a crevice, when attaching.
 *2 : Please tighten the Bolt and Nut when you install it.
 *3 : Please be sure to connect earth terminal.

Monitoring of pneumatic feeding line



Monitoring of discharge from silo



Specifications are subject to change without notice.
 All Rights Reserved Copyrights©2016, Matsushima Measuretech Co., Ltd.



Caution
 • Read the instructions to ensure correct and suitable application of products.
 • Contact our nearest sales office when using our products for any systems used in situations which may be life threatening.

Distributor



Matsushima Measure Tech Co., Ltd.

HEAD OFFICE
 1-8-18, NORIMATSU-HIGASHI, YAHATANISHI-KU, KITAKYUSHU, 807-0837 JAPAN
 Tel: +81-93-691-3731 FAX: +81-93-691-3735
 http://www.matsushima-m-tech.com E-mail: info@matsushima-m-tech.com

Pohang Representative Office
 Odyssey Bldg. 1F, 41, Jukdo-ro 28beon-gil, Buk-gu, Pohang-si, Gyeongsangbuk-do, 791-841, Korea
 Tel: +82-(0)54-274-3731 FAX: +82-(0)54-274-3731

Affiliated company
 Shanghai Dahong Matsushima Machinery Co., Ltd.
 70 Hengchang Road, Dahong, Malu, Jiading, Shanghai 201818, China
 Tel: +86-(0)21-5951-4138 FAX: +86-(0)21-5951-4139