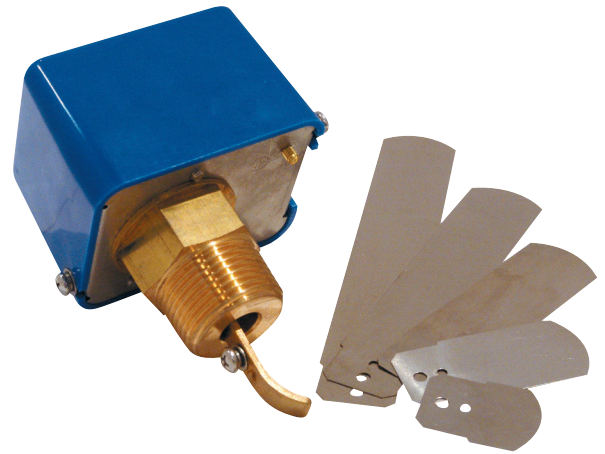


## Introduction

Heldon flow switches are used in liquid flow lines carrying water, ethylene glycol or any other fluid that is non-harmful to brass or phosphor bronze. They are used to sense the flow of liquid for the purpose of alarming or activating a lockout circuit should the flow stop for any reason. Commonly used in chillers or water sourced heat pumps they are responsible for shutting down the plant should the flow rate fall below a predetermined value and there is a risk of the fluid freezing in the evaporator heat exchanger.

Heldon flow switches are manufactured to withstand the rigors of being mounted directly to the pipe work, they consist of a solid brass body, a stainless steel frame and a splash proof plastic cover. The Omron® micro switch is completely sealed and isolated from the liquid by a copper alloy bellows. The paddle consists of five different length stainless steel segments that can be removed and trimmed for use in 1" to 6" diameter pipe. The maximum operating pressure is 980Kpa at an ambient of 80°C and with a maximum liquid temperature of 90°C.



## Features and Benefits

### Features

- Designed for accurate quick activation.
- Sealed Omron® switch.
- Solid brass/stainless steel body.
- Multi length paddles.
- Suitable for all non corrosive liquids.

### Benefits

- Reliable plant protection.
- Enhanced reliability.
- Stable platform for longer life.
- Suitable for a wide range of pipe sizes.
- Able to be installed in most applications.

Part #	Voltage	FLA	LRA	Max Ambient Temp	Max Liquid Temp
4200-1	AL 250V	2.5A	22A	80°	150°

## Flow Rate Adjustment Instructions

- Flow switch is set at minimum flow rate at factory setting
- To increase flow rate turn flow adjusting nut Clockwise
- To decrease flow rate turn flow adjusting nut counter-clockwise
- Check operation of micro switch with paddle working to prevent unstable operation for excessive counter-clockwise turning
- Do not touch the factory initial calibrating screw

## Typical Flow Rate m<sup>3</sup>/h at Different Line Pipe Sizes

Line Pipe Size (Inch)		¾"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"
Minimum	Flow Increase m <sup>3</sup> /h	1.11	1.36	2.22	2.89	4.27	5.51	6.82	9.02	13.33	17.99
Adjust	Flow Decrease m <sup>3</sup> /h	0.66	0.82	1.27	1.59	2.13	2.63	2.72	4.49	6.65	8.99
Maximum	Flow Increase m <sup>3</sup> /h	2.12	2.32	3.80	5.22	7.45	9.63	11.83	16.69	26.12	37.70
Adjust	Flow Decrease m <sup>3</sup> /h	1.82	2.09	3.41	4.43	5.45	8.51	10.47	14.58	20.89	27.94
Paddle size (trimmed to pipe size)		¾"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"