

F. OPERATION ADJUSTMENT RANGE TABLE

Piping	Paddle combination	Adjustment range		flow velocity of 2m/s	Note						
		MIN	MAX								
25A (1B)	1	18	45	72	<ul style="list-style-type: none"> This table is based on the operating point for decreasing flow. Decreasing flow setting value means the flow switch operates when the flow rate decreases. Increasing flow setting value means the flow switch operates when the flow rate increases. 						
32A (1 1/4 B)	1	43	100	120							
40A (1 1/2 B)	1	63	135	163							
50A (2B)	1+2	50	150	264	<ul style="list-style-type: none"> Differential value (difference between the decreasing flow operating value and the increasing flow operating value) is not determined specifically. The guideline value is as follows: <table style="margin-left: 20px;"> <tr> <td>Less than 50L/min:</td> <td>About 10L/min</td> </tr> <tr> <td>From 50L/min to less than 100L/min:</td> <td>About 15L/min</td> </tr> <tr> <td>100L/min or more:</td> <td>About 20% of the setting value</td> </tr> </table> This table is based on the condition when the depth screwed in the Tee joint is 12±1.2mm. Paddle size is in the following order: 1<2<3 When the setting value is not specified, the attached paddle 1 can be used for 40A or less, 1+2 for 65A or less and 1+2+3 for 80A or more. When more than two paddles is attached, you can change the flow rate adjustment range by removing the paddles one by one in order of the longer paddle first. To install the paddles, install the paddle 1 first then stack the paddle 2 and then the paddle 3. Please make a flow rate gap between operating point and normal flow rate so as to avoid hunting. Generally, we recommend operating point should be half of normal flow rate or less. 	Less than 50L/min:	About 10L/min	From 50L/min to less than 100L/min:	About 15L/min	100L/min or more:	About 20% of the setting value
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65A (2 1/2 B)	1	151	220	432							
	1+2	105	355								
80A (3B)	1+2+3	100	225	612							
	1+2	226	480								
	1	481	510								
100A (4B)	1+2+3	200	385	1044							
	1+2	386	820								
	1	821	870								
125A (5B)	1+2+3	350	594	1613							
	1+2	595	1265								
	1	1266	1342								
150A (6B)	1+2+3	530	836	2268							
	1+2	837	1780								
	1	1781	1890								

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No. QS01846
2018.8

To Customers Using Saginomiya's Products

CONSENT RELATED TO DISCLAIMERS

We, SAGINOMIYA SEISAKUSHO, INC., (hereinafter referred to as "Saginomiya"), truly appreciate your choosing Saginomiya's products. When this Product is used, this document as provided below shall be applicable except to the extent that there is anything to the contrary in any applicable estimate, agreement, catalogue, specification, etc.

• CONFIRMATION OF OPERATION

All customers using this Product (hereinafter referred to as "Customers") are requested to, after properly installing this Product, test the operation of this Product to confirm that all the systems in connection with this Product fully function. In order to prevent the occurrence of bodily injury, fire accidents, serious damage, etc., in connection with the Customers' machinery or equipment due to improper installation of this Product, Saginomiya kindly requests the Customers to take the necessary safety measures by preparing safe designs such as a fail-safe design (*1) and a fire spread prevention design, as well as to make the proper adjustments for product reliability necessary for fault-tolerance (*2).

(*1) Fail-safe design: Design to ensure safety in the event of any mechanical failure

(*2) Fault-tolerance: Utilization of redundancy technology

Periodic Inspection of this Product

Be sure to confirm the proper operation of this Product and keep records of such operation at least once a year.

Saginomiya shall be held harmless and be indemnified by the Customers from any damages incurred due to the Customers failing to conduct the above operational procedures, provided, however, that, this shall not apply if the damages which the Customers incurred due to the defect of this Product caused by Saginomiya.

• RESTRICTIONS OF USE

This Product is designed and manufactured for the purpose of using them for cooling and heating and refrigerating appliances and air conditioning equipment or various industrial equipment, but is not designed and manufactured for the purpose of using this Product for any instrument or system related to human life or health purposes.

Therefore, the use of this Product in fields related to items (1) through (3) below is not intended whatsoever.

Saginomiya shall be held harmless and be indemnified from any and all damages incurred by use of this Product under item (3).

- (1) In any field related to nuclear power and radiation;
- (2) In any field related to space or seafloor equipment;
- (3) In any equipment or device requiring a high degree of reliance on such equipment or device with respect to which it is reasonably foreseeable that failure or malfunction of the equipment or device would either directly or indirectly cause serious damage to human life, health or property;

Also, when using this Product under the fields related to items (1) through (9), (except for item (3), in relation to which this Product must never be used), please be sure to notify our Saginomiya's contact desk in charge of sales and obtain Saginomiya's prior written approval for such use.

Saginomiya shall be held harmless and be indemnified from any and all damages incurred by use of this Product in relation to these fields if the Customers do not notify Saginomiya's contact desk and obtain Saginomiya's prior written approval.

- (4) Transportation device (railroad, aviation, ship or vessel, vehicle equipment, etc.);
- (5) Disaster prevention or crime prevention device;
- (6) Facility or application directly related to medical equipment, burning appliances, electro thermal equipment, amusement rides and devices, facilities/applications associated directly with billing, or device using flammable fluid;
- (7) Equipment requiring high reliance on supply systems such as electricity, gas, water, etc., in large-scale communication system, or in transportation or air traffic control system;
- (8) Facilities that are to comply with regulations of governmental / public agencies or specific industries or
- (9) Other machineries or equipment equivalent to those set forth in the above items (4) to (8) which require for high reliability and safety.

It is recommended to replace this Product within 5 to 10 years of delivery if no other duration of use is provided in the applicable specifications or instruction manual because the conditions and environment of use also have an impact on this Product.

• SCOPE OF WARRANTY

SAGINOMIYA WILL PROVIDE THE CUSTOMERS WITH REPLACEMENT OR REPAIRED THIS PRODUCT DELIVERED, FREE OF COST, ONLY WITHIN ONE YEAR OF DELIVERY TO THE CUSTOMER, IF FAILURE OCCURS IN THE CUSTOMERS' EQUIPMENT USING THIS PRODUCT DUE TO A DEFECT OF THIS PRODUCT; PROVIDED, HOWEVER, THAT IN ANY EVENT THE RATIO OF THE AMOUNT THAT SAGINOMIYA BEARS FOR THE DAMAGES INCURRED BY THE FAILURE OF THIS PRODUCT OR CUSTOMERS' EQUIPMENT SHALL NOT EXCEED THE PRICE OF THIS PRODUCT WE DELIVERED. IN ADDITION, SAGINOMIYA SHALL BE HELD HARMLESS AND BE INDEMNIFIED FROM ANY AND ALL DAMAGES INCURRED WHEN THE FAILURE OF THE CUSTOMERS' EQUIPMENT OCCURRED DUE TO ANY CAUSE SET FORTH BELOW.

- (1) WHEN CAUSED BY INAPPROPRIATE HANDLING OR USE OF THIS PRODUCT BY THE CUSTOMERS (SUCH AS NOT COMPLYING WITH THE CONDITIONS, ENVIRONMENTAL SPECIFICATIONS OR CAUTIONS INDICATED IN ANY APPLICABLE CATALOGUE, SPECIFICATIONS, INSTRUCTION MANUAL, ETC.);
- (2) WHEN FAILURE OCCURRED DUE TO ANY REASON OTHER THAN THIS PRODUCT;
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PLEASE NOTE THAT THE CUSTOMERS WILL NOT BE ENTITLED TO ANY OF THE ABOVE WARRANTY IF THE CUSTOMERS PURCHASED THIS PRODUCT FROM INTERNET AUCTION, ETC.

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STF04001 Annex1a 2014.10

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