WATER SUPPLIES DEPARTMENT

STANDARD SPECIFICATION E-86-32

CALORIMETRIC TYPE NO-FLOW SWITCH

1. GENERAL

The no-flow switch shall be incorporated in water piping system for initiation of tripping or alarming at the preset value.

2. DESIGN

The no-flow switch shall operate on the calorimetric principle, which is a method of measuring the temperature difference due to motion of the water in the pipe based on the thermal energy dispersion principle. There should be no moving part in contact with the water being measured.

3. CONSTRUCTION

The no-flow switch can be either integrated type or separated type. The integrated type no-flow switch shall be in configuration of a flow sensor integrated with electronic controller. The separated type no-flow switch shall be in configuration of a flow sensor separated from the electronic controller, provided with a sensor cable connecting in between. The main characteristics are as follows:

Material of Sensor & Housing:	Stainless steel 316, Titanium or Halar Coated Stainless steel 316
Operating Voltage:	24V DC or otherwise specified in Particular Specification
Output Contact Rating:	2A 220V 50Hz changeover type
Controller's Setting Range:	0.03 m/s – 1.5 m/s or otherwise specified in the particular specification
Degree of Protection of Switch Enclosure:	Integrated Type: IP65 to IEC 60529 or better Separated Type: Sensor: IP65 to IEC 60529 or better Controller: IP20 to IEC 60529 or better

Pressure Rating of Sensor:	PN16 or otherwise specified in the particular specification
Mounting of Sensor:	Flange mounted for pump delivery system. Depth of insertion shall be not less than 12 mm and not greater than 100 mm from the inner wall of the pipe or the radius of the inner pipe, whichever is the less.
Mounting of Controller: (Separated Type)	DIN rail mounting

- End of this Specification -