

**ITEM NO. : 30**

**ITEM : FLOW SWITCHES PISTON TYPE**

**REF. OUR G. A. DRG. NO. RFSP-WP-2001-A/O (OR ) RFSF-WP-2007-A/O.**

**PRINCIPLE OF OPERATION :**

These flow switches operate on the principle of flow and they are piston operated. As the flow decreases i.e., less than the set value the contacts open or vice versa to operate an alarm or indicator or to the device.

When this level rises above the actuation point the float which buoys up along with the level rise actuates the magnetic switch which is kept inside the stem. The switches are completely isolated and they do not come in contact with liquid. The closure of the switch can operate a contactor or relay to indicate the level rise or decrease.

**FEATURES:**

1. REC flow switches are made out of SS or brass enclosure and the switching compartment is completely isolated from the process compartment.
2. The moving part is only one namely the piston.
3. There are no fulcrum or pins or hinges to wear or to produce unreliability.
4. The switches are completely sealed and they withstand vibration shock, moisture and prevent from entry of dust and corrosion.
5. Life of the unit is 100 million operations.
6. Adjustable for the entire flow range.
7. Materials in contact with your liquid service will be SS/brass housings teflon piston, Alnico magnets, SS spring, etc.,
8. Action will be sure, snappy and will prove maintenance free for long time.

**MATERIAL SPECIFICATIONS :**

- |    |  |   |  |
|----|--|---|--|
| 1. | Line Size                                | : | ½ " or ¾"                              |
| 2. | Service                                  | : | To Mention                             |
| 3. | Op. pressure Kg/Cm2g / temp. ° C /Sp.Gr. | : | To mention                             |
| 4. | Flow range in LPM / LPH / M3/Hr.         | : | To Mention                             |
| 5. | Max / Nor and set flow                   | : | To Mention                             |
| 6. | Differential                             | : | Closed and Fixed                       |
| 7. | Process connection                       | : | ½" or ¾" BSP (F) screwed or To Mention |
| 8. | All wetted parts material                | : | SS304 / SS316                          |

**ELECTRICAL :**

- |    |                 |   |   |
|----|-----------------|---|---|
| 1. | Contact rating  | : | 230 / 110 VAC 5 A Supplied with a powerpack |
| 2. | Field enclosure | : | Cast aluminium Weatherproof or Flameproof   |
| 3. | Cable Entry     | : | ¾" ET (F) STD.                              |
| 4. | Qty.            | : | To Mention                                  |

**BASIC SWITCH**

Basic switch used is hermetically sealed, inert gas filled magnetic switch with gold plated contacts of the following specifications.

- |    |                                  |   |  |
|----|----------------------------------|---|--|
| a. | Contact rating                   | : | 15 watts suitable to operate Jyoti 110 VAC RE 300 relays directly. |
| b. | Contact form                     | : | SPST   |
| c. | Max . Initial contact resistance | : | 150 milli Ohms   |
| d. | Min. Insulation resistance       | : | 10 <sup>11</sup> Ohms  |
| e. | Max. operate time                | : | 0.5 mili second  |
| f. | Life Expectancy                  | : | 100 million operations   |
| g. | Contact Form                     | : | SPST or SPDT   |

**DETAILS OF POWER PACK**

If the system output is to be connected to an Annunciator the contact rating is quite okay but if the final rating is needed of 230 VAC 5A we would supply a power pack.

This power pack can be fitted in the in the safe area and this is fabricated out of sheet metal. This is to be fed with 230 VAC 50 Hz as input. The field contacts from flow switch will also have to be connected to the power pack.

Final relay output will be 230 VAC 5 A with one changeover potential free contact.

**NOTE:**

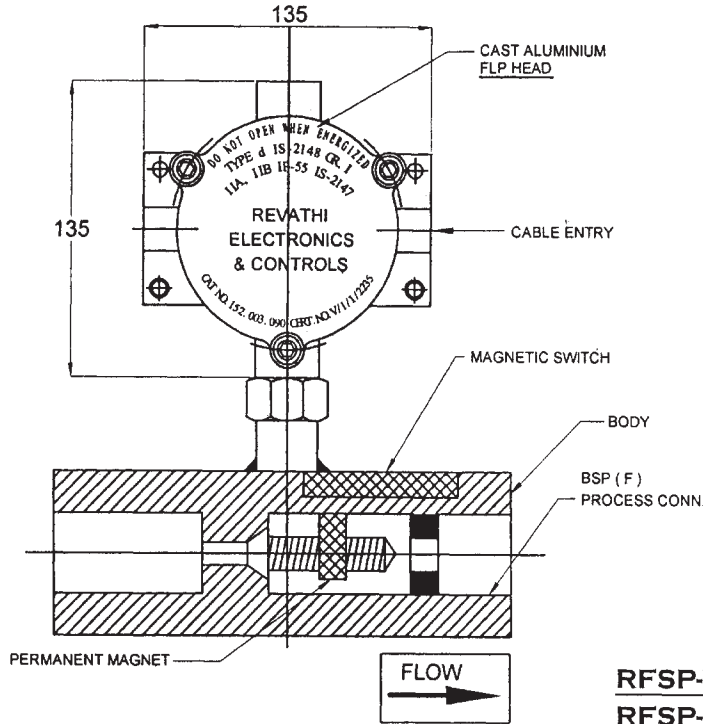
1. Flameproof enclosure is certified by CMRS Dhanbad for Groups IIA, IIB as per IS-2148-1981. The enclosure in addition is dust and vermin proof.
2. Flameproof enclosure for EEX -d-IIC T6 group also could be supplied for hazardous areas.

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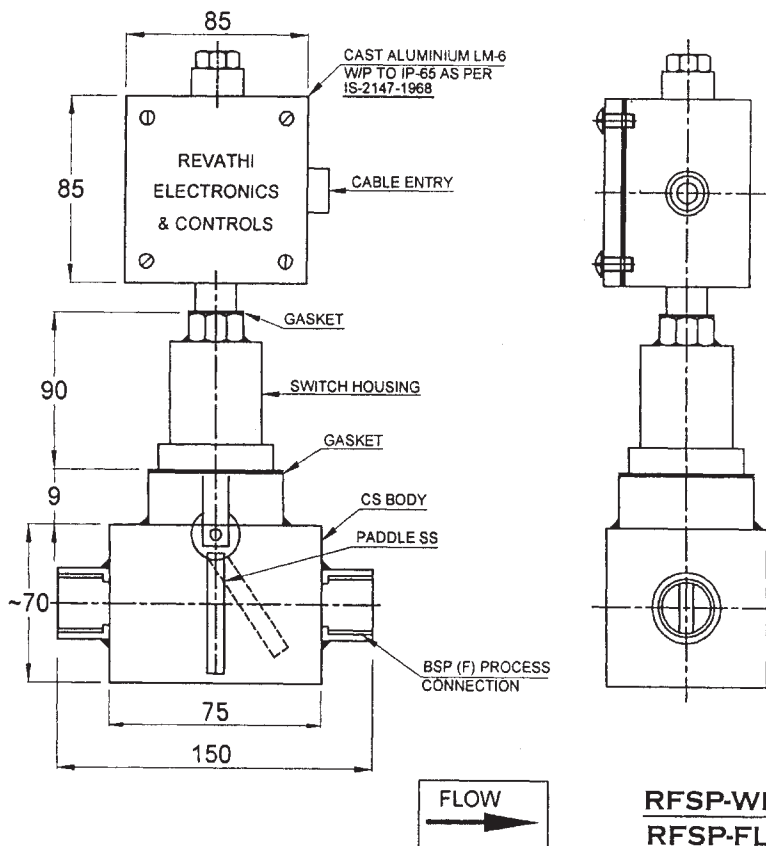
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***PISTON TYPE SCREWED CONNECTION FLOW SWITCH***



**RFSP-WP-2001-A/O**  
**RFSP-FLP-2001-A/O**

***PADDLE TYPE SCREWED CONNECTION FLOW SWITCH***



**RFSP-WP-2007-A/O**  
**RFSP-FLP-2007-A/O**