

**ITEM NO. : 31****ITEM : FLOW SWITCHES PADDLE / VANE TYPE****REF. OUR G. A. DRG. NO. RFS-WPF-2008-A/O (OR) RFS-WPS-2010-A/O.****PRINCIPLE OF OPERATION :**

Liquid flow in either direction deflects the paddle, which with a pivoting cam moves a permanent magnet equipped teflon shuttle along the unit stem. The magnet actuates the hermetically sealed switch within the stem to operate remote alarm or indicator.

REC Flow Switches are ruggedly built of carbon steel or SS valve base, SS paddle, Various other compatible materials are also supplied depending on service fluid. These are no stress points, enclosure or seals to wear or develop leakage under pressure. Maximum reliability is designed into these units for exceptional service life in the roughest industrial usage.

**MATERIAL SPECIFICATIONS :**

1.	Line Size	:	1" or Above
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	:	Screwed or flanged : To Mention
8.	All wetted parts material	:	CS / SS304 / SS316 : To Mention

**ELECTRICAL :**

1.	Contact rating	:	230 / 110 VAC 5 A Supplied with a power pack
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 milli 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 it 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.

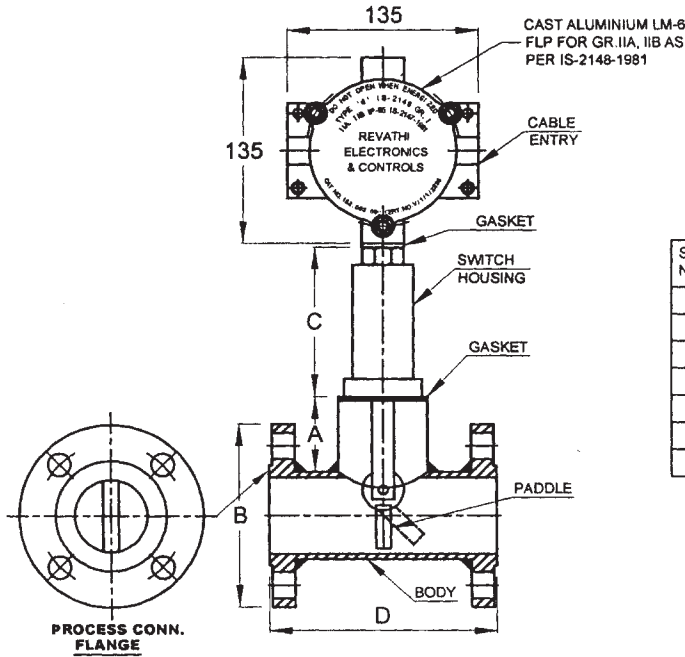
Final relay output will be 230 VAC 5 A with one changeover potential free contact.

**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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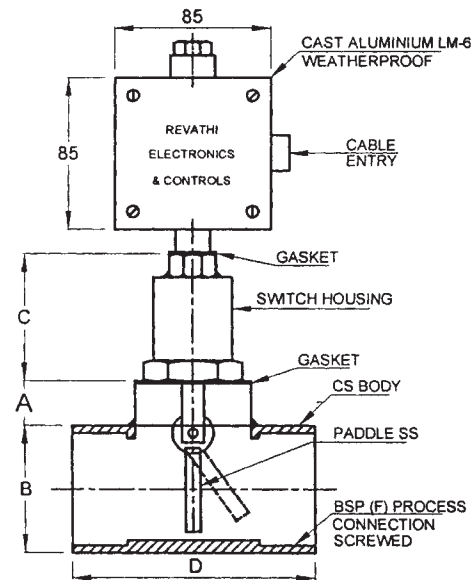
**PADDLE TYPE FLOW SWITCH WITH FLANGED CONNECTION**



SL. NO.	PROCESS CONNECTION	A ± 1/4"	B ± 1/4"	C ± 1/4"	D ± 1/4"
1	1" ANSI 150 # RF	22	108	90	150
2	1 1/4" ANSI 150 # RF	22	118	90	150
3	1 1/2" ANSI 150 # RF	22	127	90	150
4	2" ANSI 150 # RF	22	152	90	200
5	2 1/2" ANSI 150 # RF	22	178	90	200
6	3" ANSI 150 # RF	22	190	90	250
7	4" ANSI 150 # RF	22	229	90	250

**RFSP-WPF-2008-A/O  
FLANGED CONNECTION**

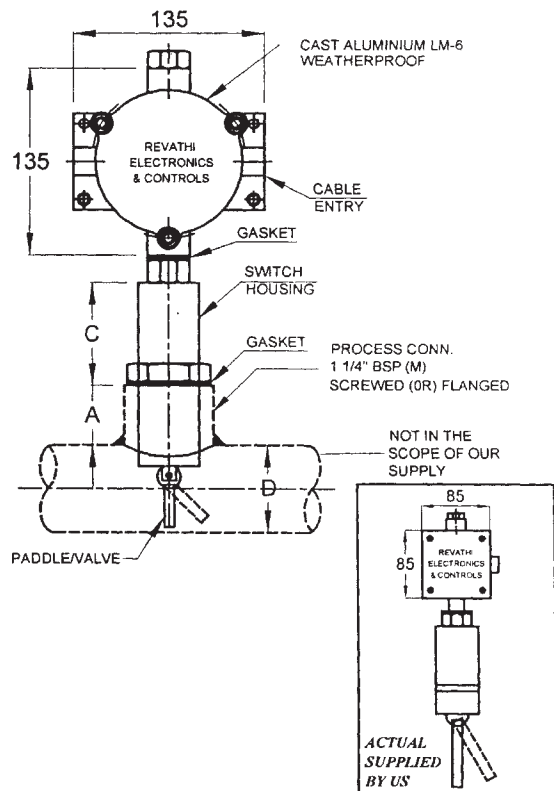
**PADDLE TYPE FLOW SWITCH WITH SCREWED CONNECTION**



SL. NO.	PROCESS CONNECTION	A ± 1/4"	B ± 1/4"	C ± 1/4"	D ± 1/4"
1	1" BSP (F)	22	33	75	150
2	1 1/4" BSP (F)	22	50	75	150
3	1 1/2" BSP (F)	22	60	75	150
4	2" BSP (F)	22	70	75	150
5	2 1/2" BSP (F)	22	80	75	150
6	3" BSP (F)	22	95	75	150
7	4" BSP (F)	22	110	75	150

**RFS-WPS-2010-OM-A/O  
SCREWED CONNECTION**

**PADDLE TYPE FLOW SWITCH WITH 1 1/4" BSP (M) TOP PROCESS CONNECTION**



**RFS-WPS-2010-A/O  
SCREWED CONNECTION**