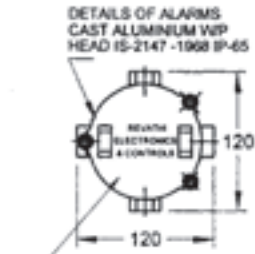
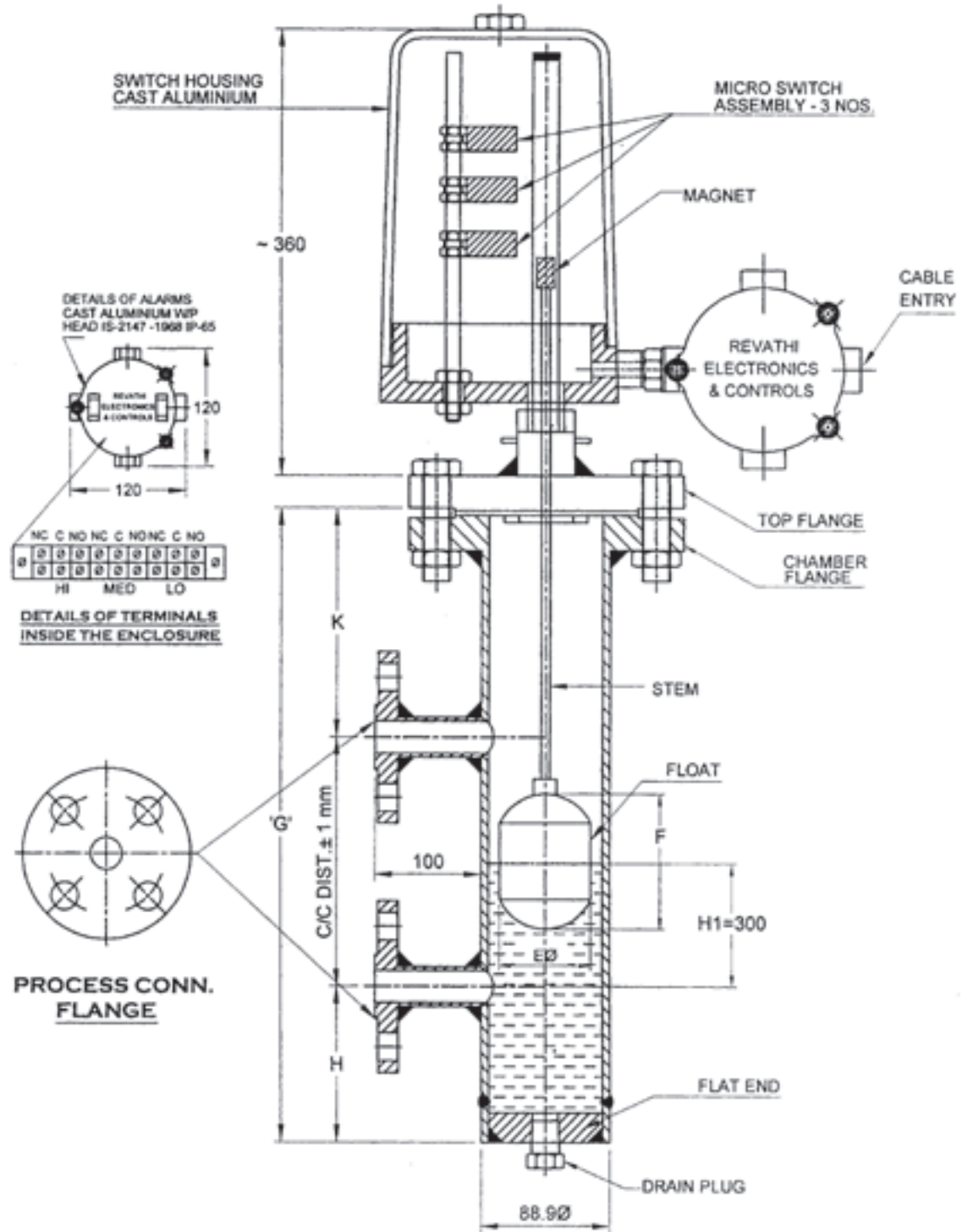


ITEM NO. : 12

ITEM : IBR APPROVED BOILER DRUM LEVEL SWITCHES WITH 2/3/4 POINTS SWITCHING ACTION. REFER OUR G. A. DRG. NO. RECSMLS-102-WPM-A/O.

EXTERNAL CAGE TYPE FLOAT OPERATED BOILER LEVEL SWITCH



E	F	G	H	K	C/C DISTANCE
63	150	750	150	150	450

RECSMLS-102-WPM-A/O

**ITEM NO. : 13**

**ITEM : SIDE MOUNTED MAGNETIC LEVEL INDICATOR WITH ROLLER TYPE INDICATION WITH & WITHOUT SWITCHES FOR ALL SERVICES LIKE LOW SP.GR.LIQUID, FULL VACUUM, HIGH PRESSURES UPTO 320 BARS, LOW AND HIGH TEMP, APPLICATIONS LIKE NH3, LPG & DOWTHEM ETC. REFER OUR GENERAL ARRANGEMENT DRG.NO.RSMLIRA-3000**

**PRINCIPLE OF OPERATION :**

SS float which is equipped with alnico magnet moves up or down alongwith level rise or decrease. This float magnets movement will be magnetically coupled to the colored roller outside the chamber with scale for indication.

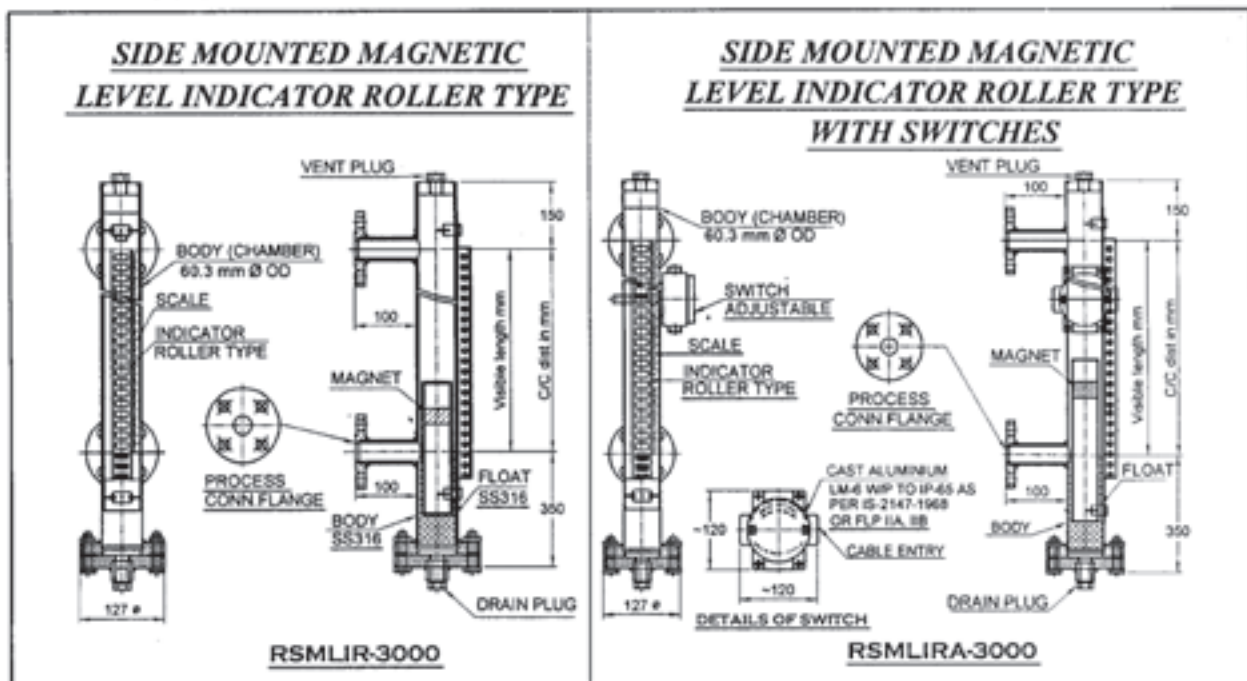
**MATERIAL SPECIFICATIONS :**

1. Type	:	Magnetic.
2. mounting	:	Vertical side-side
3. C / C distance	:	To mention
4. Visible length	:	Same as C/C distance
5. Service	:	To mention
6. Op.pressurekg/Cm2g/temp.° C /Sp.Gr.	:	To mention
7. Hydro test pressure	:	1.5 times of max. Op.pressure
8. Process connection size & rating	:	¼" ANSI 150 # RF flanged or to mention
9. Process flange material	:	To mention
10. Float Material	:	SS304/SS316/PP/PVC/HDPE/PVDF/PTFE
11. Wetted parts Material	:	SS304/SS316/PP/PVC/HDPE/PVDF/PTFE
12. Scale	:	Linear marking i.e. acrylic / SS white background with black marking in cms. lines are engraved @each 10mm
13. Vent & Drain	:	½" BSP (F) with plug
14. Indication	:	Local indication
15. Accuracy	:	± 10mm of the full scale
16. Gaskets	:	Will be Teflon
17. Bolts & Nuts	:	SS304
18. Alarms / Qty	:	If required will be provided as per our general arrangement DRG NO. RSMLIRA-3000
19. Enclosure / Cable entry	:	Weatherproof or flameproof / ½" ET (F)

**LIMIT SWITCHES FOR SWITCHES**

One or two or four limit switches may be provided externally to the indicator as shown in our drg.no.RSMLIRA-3000. and these switches will changeover their contacts as soon as the level sensed by the float increases or decreases above the set point.

Contact rating	:	230 VAC 5 A (surge) 60 W / VA . 1 NO. SPDT Contact for each level sensing.
No of switches	:	To Mention



ITEM NO. : 20

ITEM : TRANSPARENT TYPE LEVEL GAUGE

REFER OUR GENERAL ARRANGEMENT DRG.NO. RLGTS-1000.

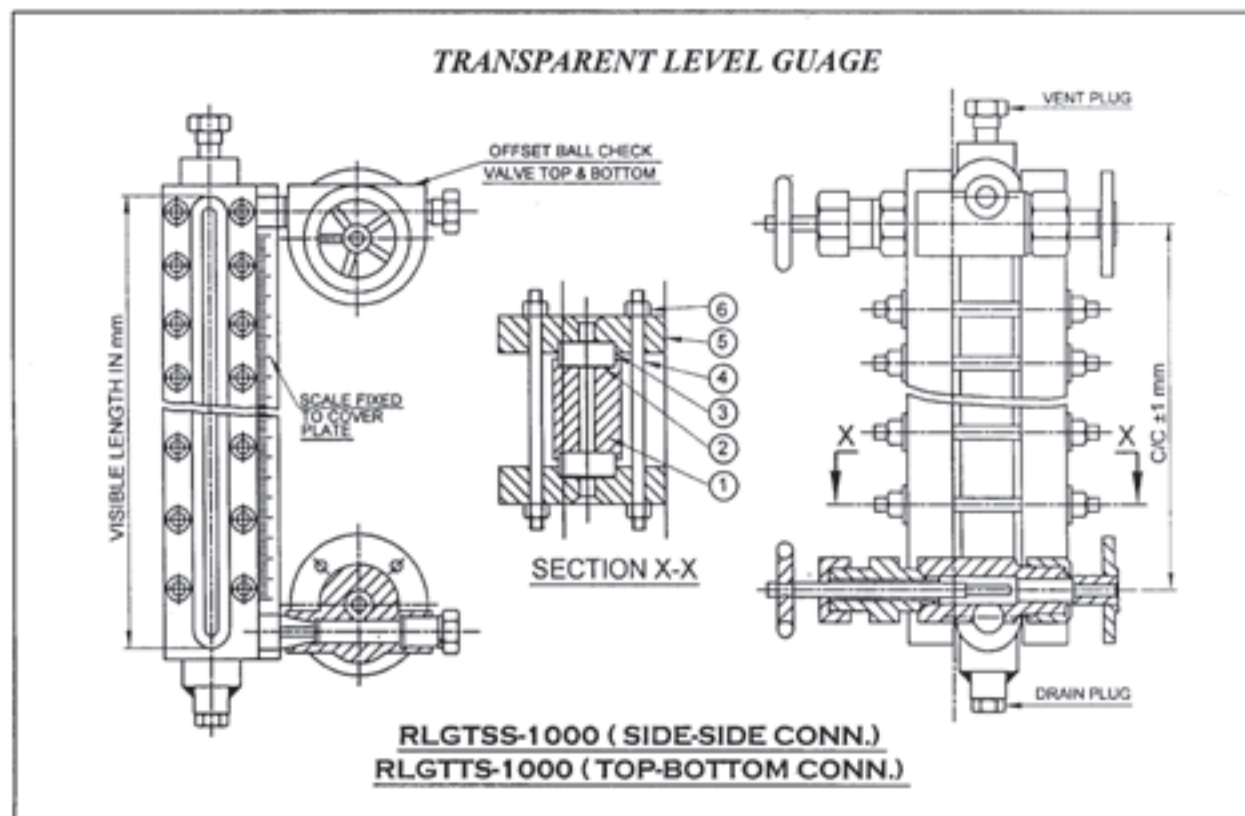
**PRINCIPLE OF OPERATION :**

The liquid is contained between the two sight glasses and under normal conditions the level of liquid is visible as it is through naked eye. The indication is very clear. An illuminator is mounted on the rear side of the gauge when required. Its light rays are deflected by a louvered screen upwards into the liquid column. Due to the provision of illuminator the light rays which impinge on the surface of the meniscus are reflected back to the eyes of the observer. Due to the above he sees in the gauge the illuminated surface of the liquid.

Colored media are easily observed. An illuminator helps to view in an error free manner in the case of water clear media or steam.

**MATERIAL SPECIFICATIONS :**

1. Type	:	Transparent
2. Mounting	:	Side-Side / Top-Bottom
3. C/C distance	:	To Mention
4. Visible length /No. of section	:	To Mention
5. Service	:	To Mention
6. Op. pressure Kg/Cm2g/ temp.* C/ Sp Gr.	:	To Mention
7. Hydro test Pressure Kg/Cm2g	:	1.5 times of Max. Pressure
8. Process Conn. Flange size & rating	:	To Mention
9. Process Conn. Flange Material	:	To Mention
10. Material of Glass	:	Toughened Borosilicate Imported Klinger / Maxos make
11. Material of Construction	:	CS/SS304/SS316/PP / PTFE
12. Material of Cover Plate	:	CS to ASTM A-105 (Non wetted parts )
13. Valve Type / Design	:	Ball check / Auto Shut- Off
14. Valve Body Material	:	CS/SS304/SS316/PP/ PTFE
15. Valve Trim Material	:	SS 316
16. Vent / Drain connection	:	1/2" NPT (F) with Plug (OR) To Mention
17. Material of bolts & nuts	:	ASTM A-193-B7 & ASTM-A-194-2H
18. Gaskets/seals	:	CAF / Teflon
19. Scale	:	Linear marking i.e. SS white background with black marking in cms. Lines are engraved @ each 10mm.
20. Qty	:	To Mention



**ITEM NO.: 21****ITEM : SIDE MOUNTED EXTERNAL CAGE TYPE MAGNETIC LEVEL INDICATOR  
ROLLER TYPE CUM TRANSMITTER WITH / WITHOUT SWITCHES  
REFER OUR G. A. DRG. NO. RSMLIRTA-2/3-3000-WPR / FLPR****PRINCIPLE OF OPERATION:**

SS float which is equipped with alnico magnet moves up or down alongwith level rise or decrease. This float magnet movement will be magnetically coupled to the coloured roller outside the chamber with scale for indication. By the side of the indicator the adjustable switches are provided. By the side of the above level indicator the SS transmitter sensor will be clamped. The magnet embedded float of the level indicator buoys up alongwith the level rise and it cuts in or cuts out a series of the resistors kept scaled outside the level indicator chamber. The output which is a current signal of 0-20 mA is transmitted to a remote area say pump room or control room.

**MATERIAL SPECIFICATIONS:**

- |   |   |   |
|---|---|---|
| 1. Type                                 | : | External cage type Float type Level Transmitter |
| 2. Mounting                             | : | Vertical Side-Side                              |
| 3. C/ C distance                        | : | To Mention                                      |
| 4. Visible length                       | : | To Mention                                      |
| 5. Service                              | : | To Mention                                      |
| 6. Op.pressureKg/Cm2g/temp. ° C /Sp.Gr. | : | To mention                                      |
| 7. Hydro test pressure Kg/Cm2g          | : | 1.5 times of max. Op. pressure                  |
| 8. Process conn. Flange size and rating | : | 1 " ANSI 150 # RF flanged or to mention         |
| 9. Process conn. Flange malt.           | : | SS 304 / SS 316 / PP/ PVDF / PTFE               |
| 10. All wetted parts malt.              | : | SS 304 / SS 316 / PP / PVDF / PTFE              |
| 11. Vent / Drain connection             | : | ½" BSP (F) with plug                            |
| 12. Indication                          | : | Local indicator roller type                     |
| 13. Gaskets                             | : | PTFE  |
| 14. Bolts & Nuts                        | : | SS304   |

**DETAILS OF LOCAL INDICATOR:**

- |                            |   |  |
|----------------------------|---|--|
| 1. Type                    | : | Side mounted magnetic level indicator with roller type bicolour level indication with remote level transmission.   |
| 2. Coloures of the rollers | : | Red & White. White colour indicates empty space & red colour indicates filled space. This will have yellow coloured rollers @ every 100 mm and blue coloured rollers @ every 500 mm. |
| 3. Indicator accuracy      | : | ± 10 mm of the total range   |
| 4. Indicating device       | : | Magnetic bicoloured rollers  |
| 5. Frame / Housing Malt.   | : | Aluminium supported transparent acrylic window for clear visibility from a distance.   |
| 6. Scale                   | : | Liner marking ie. SS / Acrylic white background with black marking in Cms. Lines are engraved @ each 10 mm   |

**DETAILS OF EXTERNALLY ADJUSTABLE W/P (OR) FLP SWITCHES :**

- |                             |   |   |
|-----------------------------|---|---|
| 7. No. of Alarms            | : | 1/2/3/4 Nos. (for HiHi, Hi,Lo & LoLo). These alarms are adjustable throughout the range externally. |
| 8. Type of switch           | : | Sealed magnetic switch  |
| 9. Contact Form & Rating    | : | 1 No. SPDT 230 VAC 5 A (SURGE) 60 W / VA for each level sensing.                                    |
| 10. Switch differential     | : | Fixed 20 mm approx.   |
| 11. Enclosure / cable entry | : | Cast aluminium W / P or FLP / ¾" ET (F)   |

**DETAILS OF TRANSMITTER ELECTRONIC UNIT :**

- |                             |   |  |
|-----------------------------|---|--|
| 12. Sensor type             | : | Float operated                                 |
| 13. Input supply            | : | 24 VDC or 230 / 110 VAC 50 Hz 1 ø              |
| 14. Output supply           | : | 4 -20 mA 2/3 wire type                         |
| 15. Accuracy                | : | ± 0.5% of the total range                      |
| 16. Indicator               | : | Will be 2 ½ " Dial analogue meter              |
| 17. Enclosure / cable entry | : | Will be cast Aluminium WP (or) FLP / ¾" ET (F) |