## JRU

## J R U HIGH FLOW ROTAMETER

# OPERATION AND MAINTENANACE INSTRUCTION MANUAL

## JRU CONTTROL PVT. LTD.

# 6, RAMAMOORTHY STREET, NEHRU NAGAR, CHROMPET, CHENNAI – 600 044, INDIA TELE FAX: 91 – 044- 2223 4642

E-mail: <u>jruconttrol@gmail.com</u> website:www.jruconttrol

### J R U HIGH FLOW ROTAMETER

## INSTRUCTION FOR INSTALLATION, OPERATION & MAINTENANCE

#### PRELIMINARY STEPS:

- 1. Unpack Carefully.
- 2. Record the Serial No. and other details for future reference
- 3. Remove Rotameter carefully and inspect for damage to Glass Tube or other parts

#### **INSTALLATION:**

Fig (1) shows a typical High Flow Rotameter and Fig (2) its exploded view.

Install the High Flow Rotameter as shown in Fig (1) and care to be taken while connecting the Inlet since the clearance between the Glass and Float is very small. Any High impact or vibration will break the taper Glass. Take care to see that the inlet of the Rotameter is connected to the downstream. All care to be taken to avoid any sort of bends near the inlet and outlet so that the flow is not restricted.

#### PRINCIPLE OF OPERATION:

When a fluid flows from below through a vertical tapered Metering Tube made of glass, a specially designed Float in it moves up and down freely. The Float will adjust its position in such a way, that the buoyancy forces and the weight of the Float are balanced. The flow is proportional to the position of the Float and can be read on a marked scale.

#### **MAINTENANCE**

This is a very rugged instrument and does not require much of maintenance. However, for fluids with particles or sludge, the Rotameter has to be cleaned periodically for getting proper accuracy.

For cleaning the Rotameter, the procedure is as follows:

- 1. Close the Isolating Valve both in the inlet and outlet
- 2. Remove the Rotameter Flange connection or unscrew the Rotameter in case of screwed connection.
- 3. Remove the Acrylic Sheets Nos. 13 in Fig (2) by unscrewing the screws No. 12 in Fig (2).
- 4. Loosen the Glass Rubber Washer No.3 in Fig (2) by unscrewing the bottom screws of Washer Plate No. 4 in Fig (2) gradually and carefully. Loosing the Rubber Washer Plate unevenly will definitely damage the Glass Tube due to stress at a particular point.
- 5. Loosen the Guide Plate Screws No. 14 in Fig (2) evenly.

- 6. Dismantle the Side Plate No. 10 in Fig (2) from the body of the Rotameter.
- 7. Carefully take the Glass Tube No. 8 in Fig (2) along with the Float No. 6 in Fig (2) and Guiding Rod No. 5 in Fig (2) and note the Glass Tube direction with respect to the Body No.2 in Fig (2).
- 8. Very carefully slip out the Float and note the direction with respect to the Glass Tube.
- 9. Clean the Glass Tube by compressed air and wiping with clean cloth.
- 10.Clean the Float Guide Rod by clean cloth and also clean the Float inner diameter
- 11. Reassemble in the reverse order.

NOTE: SINCE, CONSTANT WORLDWIDE ADVANCEMENT IN TECHNOLOGY WE KEEP OUR RIGHTS RESERVED TO MAKE CHANGES TIME TO TIME IN TECHNICAL SPECIFICATION, UPGRADATION /DELETION OF PRODUCTS AND DIMENSIONS WITHOUT ANY PRIOR NOTICE. JRU CONTTROL HAVE FULL RIGHTS TO THIS DOCUMENT AND SHALL NOT BE COPIED IN FULL OR PART WITHOUT ITS PRIOR INFORMATION.

#### M/S JRU CONTTROL PVT LTD

NO6, RAMAMOORTHY STREET, NEHRU NAGAR, CHROMPET, CHENNAI-600044. TN. INDIA. PH:+91-044-22234642 E-MAIL:jruconttrol@gmail.com <u>WWW.JRUCONTTROL.IN</u>



