

## JRU CONTTROL PVT LTD

(FORMERLY PLACKA INSTRUMENTS & CONTROLS PVT LTD)

# TYPE JHFR HIGH FLOW ROTAMETER

An 1SO 9001:2000 COMPANY



#### DESCRIPTION

The Type JHFR variable area flow meter is designed for measurement of high flow liquids & gases. The conical glass metering tube has a free rotating float. The flow is indicated by the top of the float and can be read from standard scale on metering tube or from a connected scale.

#### **FEATURES**

- Wide selection of measuring ranges
- High accuracy of the rotating float even at low flow rates
- Low pressure loss
- Non-powered local indication
- Optional Built-in needle valve
- Light weight and rugged
- Excellent long term stability

#### **APPLICATION**

The type JHFR is an ideal for any application that requires high flow measuring of either gas or liquid.

- Fine metering and gas chromatography
- On-line flow monitoring

## PRINCIPLE OF OPERATION

The type JHFR is made of annealed Borosilicate glass / salfone, transparent, continuously tapered tube. The outlet will be of larger diameter through inlet and the plummet / float is designed so that it occupies almost all the total tube area when it as at the small end of the tube. As the fluid is allowed into the tube, the float will be pushed up

until the differential pressure across the float results in a force under it that is just equal to the





effective weight of the float. The effective weight is equal to the weight of the float minus the buoyant force of the fluid being measured. For a given fluid and a particular plummet, the effective weight is constant. Since the effective weight is constant, the differential pressure across the plummet is constant. As the flow rate changes, the annular area must change to accommodate the various flow rates. Since the variable is area, the position of the float within the length of the tube can be used as a measure of the area for a given tube. Hence the float position can be used to determine flow.

### **STANDARD SPECIFICATION**

MAX. PRESSURE : 12 Kg/Sq.cm

INSTALLATION POSITION : Vertical, flow from bottom

ACCURACY : Category 2.5 (As per VDI / VDE 3513)

MAX. TEMPERATURE : 100° C

CONNECTION : 1/4" to 2" NPT (F) / G 1/4 female for PVDF Version

CONNECTION MATERIAL : Brass or Stainless Steel MEASURING TUBE : Borosilicate Glass / Sulfone

NEEDLE VALVE : Brass or stainless steel (STEM only SS)

GASKET / O RING : Nitrale / Neoprene / PTFE FRONT SHIELD : Clear Plastic / Polycarbonate

SIDE / BACK PLATE : Aluminium / SS 304 FLOAT MATERIAL : SS / GLASS / CERAMIC

SCALE LENGTH : >200 mm

	FF ANGE	NAME OF THE OWN (TAXALETER)	METER	
1.0000	FLANGE	MAX FLOW (WATER)	SIZE	
MODEL NO.	SIZE	LPM	SS	SCALE LENGTH
JHFR - H-25-50-5-S-F	1/2"	0.5 TO 5	25	200
JHFR - T-25-50-5-S-F	3/4"	0.5 TO 5	25	200
JHFR - O-25-50-5-S-F	1"	0.5 TO 5	25	200
JHFR - H-25-50-10-S-F	1/2"	1 TO 10	25	200
JHFR - T-25-50-10-S-F	3/4"	1 TO 10	25	200
JHFR - O-25-50-10-S-F	1"	1 TO 10	25	200
JHFR - H-25-50-12-S-F	1/2"	1.2 TO 12	25	200
JHFR - T-25-50-12-S-F	3/4"	1.2 TO 12	25	200
JHFR - O-25-50-12-S-F	1"	1.2 TO 12	25	200
JHFR - H-25-50-15-S-F	1/2"	1.5 TO 15	25	200
JHFR - T-25-50-15-S-F	3/4"	1.5 TO 15	25	200
JHFR - O-25-50-15-S-F	1"	1.5 TO 15	25	200
JHFR - H-28-50-18-S-F	1/2"	1.8 to 18	28	200
JHFR - T-28-50-18-S-F	3/4"	1.8 to 18	28	200
JHFR - O-28-50-18-S-F	1	1.8 to 18	28	200
JHFR - H-28-50-20-S-F	1/2"	2 to 20	28	200
JHFR - T-28-50-20-S-F	3/4"	2 to 20	28	200
JHFR - O-28-50-20-S-F	1"	2 to 20	28	200
JHFR - H-33-60-25-S-F	1/2"	2.5 TO 25	33	200
JHFR - T-33-60-25-S-F	3/4"	2.5 TO 25	33	200
JHFR - O-33-60-25-S-F	1"	2.5 TO 25	33	200
JHFR - H-33-60-30-S-F	1/2"	3 TO 30	33	200
JHFR - T-33-60-30-S-F	3/4"	3 TO 30	33	200
JHFR - O-33-60-30-S-F	1"	3 TO 30	33	200
JHFR - H-33-60-33-S-F	1/2"	3.3 TO 33	38	250
JHFR - T-33-60-33-S-F	3/4"	3.3 TO 33	38	250

	FLANGE	MAX FLOW (WATER)	METER SIZE	
MODEL NO.	SIZE	LPM	SS	SCALE LENGTH
JHFR - T-38-80-36-S-F	3/4"	3.6 TO 36	38	250
JHFR - O-38-80-36-S-F	1"	3.6 TO 36	38	250
JHFR - OH-38-80-36-S-F	1 1/2"	3.6 TO 36	38	250
JHFR - T-38-80-40-S-F	3/4"	4 TO 40	38	250
JHFR - O-38-80-40-S-F	1"	4 TO 40	38	250
JHFR - OH-38-80-40-S-F	1 1/2"	4 TO 40	38	250
JHFR - T-38-80-45-S-F	3/4"	4.5 TO 45	45	250
JHFR - O-38-80-45-S-F	1"	4.5 TO 45	45	250
JHFR - OH-38-80-45-S-F	1 1/2"	4.5 TO 45	45	250
JHFR - T-45-80-50-S-F	3/4"	5 TO 50	45	250
JHFR - O-45-80-50-S-F	1"	5 TO 50	45	250
JHFR - OH-45-80-50-S-F	1 1/2"	5 TO 50	45	250
JHFR - T-45-80-55-S-F	3/4"	5.5 TO 55	45	250
JHFR - O-45-80-55-S-F	1"	5.5 TO 55	45	250
JHFR - OH-45-80-55-S-F	1 1/2"	5.5 TO 55	45	250
JHFR - T-45-80-60-S-F	3/4"	6 TO 60	45	250
JHFR - O-45-80-60-S-F	1"	6 TO 60	45	250
JHFR - OH-45-80-60-S-F	1 1/2"	6 TO 60	45	250
JHFR - O-51-80-65-S-F	1"	6.5 TO 65	51	250
JHFR - OH-51-80-65-S-F	1 1/2"	6.5 TO 65	51	250
JHFR - TW-51-80-65-S-F	2"	6.5 TO 65	51	250
JHFR - O-51-80-70-S-F	1"	7 TO 70	51	250
JHFR - OH-51-80-70-S-F	1 1/2"	7 TO 70	51	250
JHFR - TW-51-80-70-S-F	2"	7 TO 70	51	250
JHFR - O-51-80-75-S-F	1"	7.5 TO 75	51	250
JHFR - OH-51-80-75-S-F	1 1/2"	7.5 TO 75	51	250
JHFR - TW-51-80-75-S-F	2"	7.5 TO 75	51	250
JHFR - O-51-80-80-S-F	1"	8 TO 80	51	250
JHFR - OH-51-80-80-S-F	1 1/2"	8 TO 80	51	250
JHFR - TW-51-80-80-S-F	2"	8 TO 80	51	250
JHFR - O-51-80-85-S-F	1"	8.5 TO 85	51	250
JHFR - OH-51-80-85-S-F	1 1/2"	8.5 TO 85	51	250
JHFR - TW-51-80-85-S-F	2"	8.5 TO 85	51	250
JHFR - O-51-80-90-S-F	1"	9 TO 90	51	250
JHFR - OH-51-80-90-S-F	1 1/2"	9 TO 90	51	250
JHFR - TW-51-80-90-S-F	2"	9 TO 90	51	250
JHFR - O-51-80-100-S-F	1"	10 TO 100	51	250
JHFR - OH-51-80-100-S-F	1 1/2"	10 TO 100	51	250
JHFR - TW-51-80-100-S-F	2"	10 TO 100	51	250

NOTE: PHFR IS THE OLD MODEL NO. OF JHFR

## **A BRIEF PROFILE:**

The company JRU CONTTROL (formerly placka instruments & control pvt ltd) was started in the year 1984. It is located 25 km from Chennai airport by the main grand trunk road. It has a land area of 2.5 acres with a built-up area of 10,000sq.ft. The products manufactured are Air Filter Regulator, Lubricator, Air Lock-up relay, Volume Booster, orifice plates, High Flow & Metel Tube Rotameters, Electronic & Pneumatic Level transmitters & Displacement Type Level transmitter. The Factory is equipped with all modern testing facilities for inspection, measuring and testing for quality control.. The products are approved by EIL, BHEL, DAE, ONGC, HPCL, BPCL, IPCL, CPCL, BALCO, NALCO, GSFC, NPCL AND many more. We are an ISO 9001:2000 company. We adhere to strict quality systems.

#### **OUR OTHER PRODUCTS**







MIDI AFR



**AIR VOLUME BOOSTER** 



FRL'S

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