

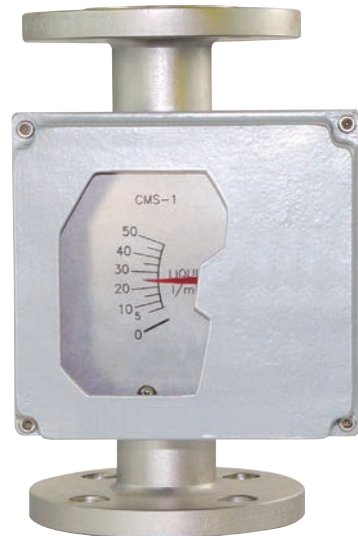
Metal tube flowmeter

Model : F821

Spec. sheet no. FD08-14

Description

Metal tube rotameter is basically a variable area flow meter. The differential pressure across the annulus area is constant and the flowrate is measured as a function of the position of annulus area created by float position. The position of the float is sensed by a magnet and indicated on the dial in terms of flowrate.



Specification

Alarm sensor

Reed switch

Power

DC 24 V

Contact output

High or low setpoint

Contact accuracy

±3.0 % of full scale

Contact type

1 SPDT, 2 SPDT

Output

4 ~ 20 mA.DC

Contact rating

AC 220 V 0.5 A

Operating temperature

Max. 300 °C

Wiring

2 wire

1. Base model**F821** Metal tube flowmeter**2. Flow direction type****D1** Bottom and top**3. Line size**

JIS	mm	ANSI	inch	DIN	mm
J015	15A	A001	½B	D015	15A
J020	20A	A002	¾B	D020	20A
J025	25A	A003	1B	D025	25A
J040	40A	A004	1½B	D040	40A
J050	50A	A005	2B	D050	50A
J065	65A	A006	2½B	D065	65A
J080	80A	A007	3B	D080	80A
J100	100A	A008	4B	D100	100A
XXXX	Other				

4. Flange rating and connection type

J010 JIS 10K
A010 ANSI 150 Lb
P010 PN10
TPTM PT male
TNTM NPT male
XXXX Other

5. Main material (See material table)

B Body material / 304SS
C Body material / 316SS
O Other

6. Indicator and contact

LC Local indicator
L1 Local indicator with 1-SPDT alarm
L2 Local indicator with 2-SPDT alarm
LS Local indicator with current output (4~20 mA.DC)
LP Local indicator with current output and pulse output
OH Other

7. Option

10 One point alarm
20 Two point alarm
NO None

1	2	3	4	5	6	7
F821	D1	J015	J010	B	LC	NO

Sample ordering code

Flow chart

Size		H ₂ O flow rate (m ³ /h)	Ranges		Pressure loss (mmH ₂ O)	Dimension L (mm)
			Liquid (m ³ /h)	Air (m ³ /h)		
15A	½B	0.1 ~ 1	0.03 ~ 0.3 0.15 ~ 1.5	0.3 ~ 3 2 ~ 20	500	250
20A	¾B	0.15 ~ 1.5	0.03 ~ 0.3 0.2 ~ 2	0.3 ~ 3 3 ~ 30	500	250
25A	1B	0.35 ~ 3.5	0.15 ~ 1.5 0.5 ~ 5	1.5 ~ 15 6 ~ 60	500	250
32A	1¼B	0.6 ~ 6	0.3 ~ 3 0.7 ~ 7	3 ~ 30 10 ~ 100	500	250
40A	1½B	0.1 ~ 10	0.4 ~ 4 1.5 ~ 15	1.5 ~ 45 15 ~ 150	700	250
50A	2B	1.5 ~ 15	1 ~ 10 2 ~ 20	5 ~ 50 20 ~ 200	500	250
65A	2½B	2.5 ~ 25	1.5 ~ 15 3 ~ 30	9 ~ 90 40 ~ 400	600	250
80A	3B	4.0 ~ 40	2 ~ 20 5 ~ 50	15 ~ 150 70 ~ 700	700	250
100A	4B	6.0 ~ 60	5 ~ 50 7 ~ 70	20 ~ 200 100 ~ 1,000	900	375

* When the size is larger than 65A, to be consulted with a maker

Material table

Part list	Material code	
	B	C
Body	304SS	316SS
Flange	304SS	316SS
Float	304SS	316SS
Taper tube	304SS	316SS
Magnet rod	304SS + Alnico	316SS + Alnico
Lower stopper	304SS	316SS
Guide	304SS	316SS
Indicator	AL	

Dimension

