

# Metal tube flowmeter

## Model : F827

Spec. sheet no. FD08-20

### Description

Metal tube rotameter with cooling pin is another design to protect it from a high temperature application as it loses magnetism on high temperature fluid (300°C).



### Specification

#### Process connection

Flanged

#### Pressure rating

STD. 10 kgf/cm<sup>2</sup>  
Max. 20 kgf/cm<sup>2</sup>

#### Size

15A ~ 200A

#### Temperature rating

STD. 200°C  
Max. 300°C

#### Material

304SS  
316SS  
316L SS

#### Accuracy

±2.0% of full scale

**1. Base model****F827** Metal tube flowmeter**2. Flow direction type**

**D2** Bottom and top side  
**D3** Bottom side and top side  
**D5** Side and side

**3. Line size**

JIS	mm	ANSI	inch	DIN	mm
<b>J015</b>	15A	<b>A001</b>	½B	<b>D015</b>	15A
<b>J020</b>	20A	<b>A002</b>	¾B	<b>D020</b>	20A
<b>J025</b>	25A	<b>A003</b>	1B	<b>D025</b>	25A
<b>J040</b>	40A	<b>A004</b>	1½B	<b>D040</b>	40A
<b>J050</b>	50A	<b>A005</b>	2B	<b>D050</b>	50A
<b>J065</b>	65A	<b>A006</b>	2½B	<b>D065</b>	65A
<b>J080</b>	80A	<b>A007</b>	3B	<b>D080</b>	80A
<b>J100</b>	100A	<b>A008</b>	4B	<b>D100</b>	100A
<b>J125</b>	125A	<b>A009</b>	5B	<b>D125</b>	125A
<b>J150</b>	150A	<b>A010</b>	6B	<b>D150</b>	150A
<b>J200</b>	200A	<b>A011</b>	8B	<b>D200</b>	200A
<b>XXXX</b>	Other				

**4. Flange rating and connection type**

**J010** JIS 10K  
**A010** ANSI 150 Lb  
**P010** PN10  
**XXXX** Other

**5. Main material (See material table)**

**B** Body material / 304SS  
**C** Body material / 316SS  
**D** Body material / 316L SS

**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****NO** None

1	2	3	4	5	6	7
<b>F827</b>	<b>D5</b>	<b>J080</b>	<b>J010</b>	<b>B</b>	<b>LC</b>	<b>NO</b>

Sample ordering code

## Flow chart

Size		H <sub>2</sub> O flow rate (m <sup>3</sup> /h)	Ranges		Pressure loss (mmH <sub>2</sub> O)	Dimension (mm)		
			Liquid (m <sup>3</sup> /h)	Gas (Nm <sup>3</sup> /h)		M	N	L
15A	½B	0.1 ~ 1	0.02 ~ 0.2 0.2 ~ 2	0.6 ~ 6 3 ~ 30	600	390	100	750
20A	¾B	0.2 ~ 2	0.08 ~ 0.8 0.35 ~ 3.5	1.6 ~ 16 5 ~ 50	600	390	100	750
25A	1B	0.4 ~ 4	0.1 ~ 1 0.6 ~ 6	2 ~ 20 9 ~ 90	600	390	100	770
32A	1¼B	0.6 ~ 6	0.1 ~ 1 1 ~ 10	2 ~ 20 15 ~ 150	600	410	100	770
40A	1½B	0.8 ~ 8	0.2 ~ 2 1.5 ~ 15	4 ~ 40 20 ~ 200	800	410	100	770
50A	2B	1.5 ~ 15	0.5 ~ 5 2.5 ~ 25	6 ~ 60 40 ~ 400	800	470	100	780
65A	2½B	2.5 ~ 25	0.8 ~ 8 4 ~ 40	10 ~ 100 60 ~ 600	800	490	150	880
80A	3B	4.0 ~ 40	1.2 ~ 12 5 ~ 50	12 ~ 120 80 ~ 800	800	540	150	920
100A	4B	6.0 ~ 60	2.5 ~ 25 9 ~ 90	25 ~ 250 120 ~ 1,200	1,000	590	150	940
125A	5B	10 ~ 100	4 ~ 40 15 ~ 150	40 ~ 400 200 ~ 2,000	1,100	640	250	960
150A	6B	14 ~ 140	6 ~ 60 20 ~ 200	60 ~ 600 300 ~ 3,000	1,200	690	250	1,070
200A	8B	20 ~ 200	10 ~ 100 28 ~ 280	100 ~ 1,000 400 ~ 4,000	1,500	740	250	1,150

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

## Material table

Part list	Material code		
	B	C	D
Body	304SS	316SS	316L SS
Flange	304SS	316SS	316L SS
Float	304SS	316SS	316L SS
Support	304SS	316SS	316L SS
Magnet rod	304SS + Alnico	316SS + Alnico	316L SS + Alnico
Stopper	304SS	316SS	316L SS
Taper tube	304SS	316SS	316L SS
Guide	304SS	316SS	316L SS
Cap	304SS		
Indicator	Aluminium		
Packing	NBR, Viton, Teflon		

## Dimension

