

# PULSE/ANALOG INPUT FLOW RATE/TOTALIZER CONTROLLER METER

MODEL  
MAFRT



## ■ FEATURES

- Accuracy 0.05% F.S.  $\pm 1$  digit
- Measuring and display rate(5 digits)/totalizer(10 digits)
- Display flow unit TON/M<sup>3</sup>/Liter/GAL/CC can be modified
- Programmable time base 1 or 60 or 3600 or 86400 second
- Math-rootextractor function,rootextractor contain 0.5/1.5/2.5
- Synchronize totalizer of pulse output function
- Correction (16 segments) for non-linearity function (optional)
- Four alarm function (optional)
- 16 bit DAC isolating analog output function (optional)
- Digit RS-485 interface function (optional)

## 1.MODEL:MAFRT- -

NO	Input Type	NO	Input Type	NO	Linearity function	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC1~5V & NPN/PNP Voltage pulse	O	SPECIFIED	N	None	0	None	N	None	N	None	A	AC/DC18~60V
B	DC4~20mA & NPN/PNP Voltage Pulse			Y	16 point(Correction for non-linearity)	2	Two(Relay)	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	DC1~5V & Magnetic pick-up					4	Four(Relay)	V	DC0~10V				
D	DC4~20mA & Magnetic pick-up					2E	Two(Transistor(NPN))	R	SPECIFIED				

## 2.SPECIFICATION

- Measuring accuracy : 0.05% F.S.  $\pm 1$  digit(Rate/Analog input) (23 $\pm 5^{\circ}$ C)
- Readout/compare range : 0~99999 digit(Rate)  
0~999999999 digit(Totalizer)
- Input type : DC4~20mA/DC1~5V(Analog)  
Current sourcing(NPN)/Current sinking(PNP)/  
Switch contact(Pulse)(inside jump selectable)
- Count input trigger levels : High level:  $V_{IH}$ =DC4~30V(Pulse)  
 $V_{IH}$ =AC30mV~30V(Magnetic pick-up)  
 $V_{IH}$ =Rmax.<500 ohm(Switch contact)  
Low level:  $V_{IL}$ =DC0~2V(Pulse)  
 $V_{IL}$ =AC0~20mV(Magnetic pick-up)  
 $V_{IL}$ =Rmax.>1K ohm(Switch contact)
- Max.count rates : <10KHz(50% duty cycle(Pulse))  
<1KHz(Magnetic pick-up)  
<100Hz(Switch contact)
- Alarm action : HI or Lo adjustable
- Relay contact output : AC 250V-5A, DC 30V-7A
- Analog output resolution : 16 bit DAC
- Response time : < 50ms(0~90%)
- Output drive capability : < 10mA for voltage mode  
< 10V for current mode
- Pulse output : Photo couple of open-collector(Max.DC30V/50mA)  
(Synchronize totalizer)(Max.100Hz)
- RS-485 address : "01"~"FF"(0~255)
- RS-485 baud rate : 38400/19200/9600/4800/2400 selective
- Temp. coefficient : 50ppm/ $^{\circ}$ C (0~50 $^{\circ}$ C)
- Display : Red high efficiency LEDs high 10.16mm(0.4")
- Memory mode : Non-volatile E<sup>2</sup> PROM memory
- Dielectric strength : 2KVac/1 min. (input/output/power)  
1600Vdc (input/output)
- Operating condition : 0~50 $^{\circ}$ C (20 to 90% RH non-condensed)
- Storage condition : 0~70 $^{\circ}$ C (20 to 90% RH non-condensed)
- CE EMC Certification : EN 55022:1998/A1:2000 Class A  
EN 61000-3-2:2000  
EN 61000-3-3:1995/A1:2001  
EN 55024:1998/A1:2001

## 3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

