

# DC Ammeter (Moving Coil Type) - FMK

## AMMETER

Max. Scale Value	Approx. Internal Resistance or Voltage Drop	Accessory	
	FMK-7C, 5C		
25μA	2.26kΩ	-	
50μA	1.3kΩ		
100μA	1.1kΩ		
200μA	550Ω		
500μA	81Ω		
1mA	12Ω		
2mA	9.8Ω		
5mA	12Ω		
10mA	2.6Ω		
20mA	2.2Ω		
50mA~30A	60mV		
30A~10kA <sup>(1)</sup>	60mV		Shunt <sup>(2)</sup>

Note:

<sup>(1)</sup> When 30A is exceeds, shunt will external to meter 60mV. Meter 50mV, 100mV also can be manufacture.

<sup>(2)</sup> Lead wire of shunt is not attached. Standard lead wire resistance is 0.07Ω (1.25mm<sup>2</sup>)

▶ Up until 1Ω will manufacture when 0.07Ω is exceeds, please specify.

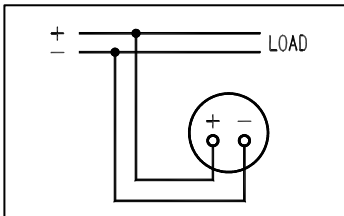
### Lead Wire Resistance value

Cross section (mm <sup>2</sup> )	Annealed Copper (Ω/m)	Remarks
1.25	0.0165	JIS C 3317 (HIV)
2.0	0.00924	JIS C 3307 (IV)
3.5	0.00520	Twist wire

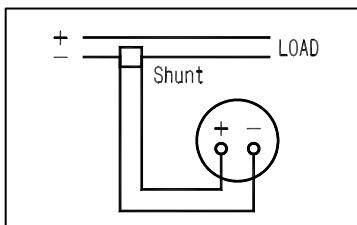
▶ Meter built-in adjustable resistor for external resistance corrective can be manufacture.

▶ Meter both deflection can be manufacture.

### Connection Diagram

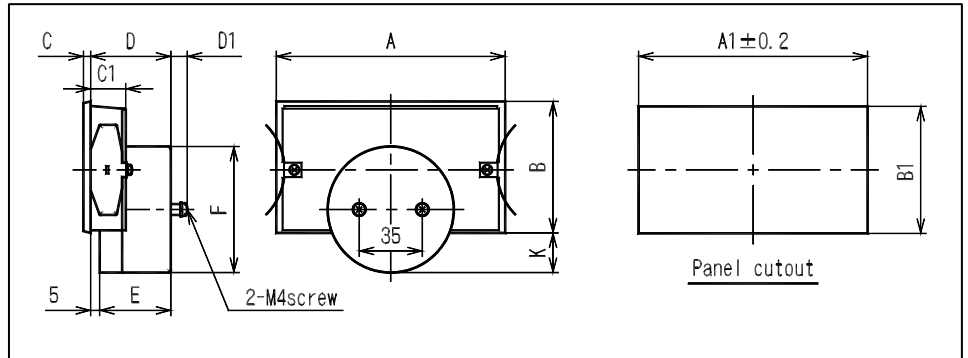


Ammeter



Ammeter external with Shunt

### Dimensions



Type	A	A1	B	B1	C	C1	D	D1	E	F	K	Weight (g)
FMK-7C	127	121	73	70.5 ± 0.2	4	19.5	45	10	40	70 Φ	22	320
FMK-5C	100	97	57	55 <sup>+0.2</sup> / <sub>-1.2</sub>	4	20	36	10	31	53 Φ	21.5	220

# DC Voltmeter (Moving Coil Type) - FMK

## VOLTMETER

Max. Scale Value	Approx. Internal Resistance or Voltage Drop	Accessory
	FMK-7C, 5C	
50mV~900mV	4mA	-
1V~300V <sup>(1)</sup>	1mA	
500V 600V <sup>(1)</sup>	1mA	
750V/1mA ~ 25V/1mA <sup>(2)</sup>	1mA	Series resistor

Note:

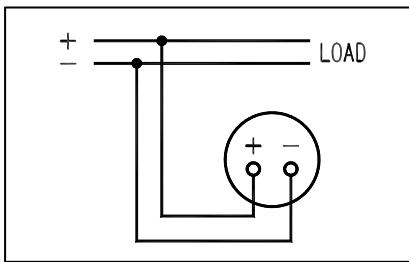
<sup>(1)</sup> Internal resistance up to 10kΩ/V will be manufacture when voltmeter 3V is exceeds.

<sup>(2)</sup> Series resistor will external to meter 1mA when 600V is exceeds.

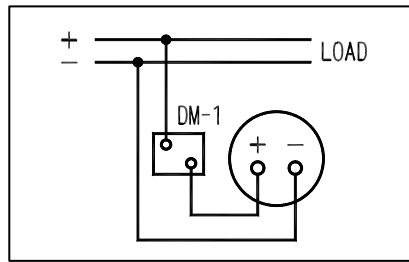
▶ Meter both deflection also can be manufacture.

▶ External overvoltage protection to voltmeter 500mV or more also can be manufacture.

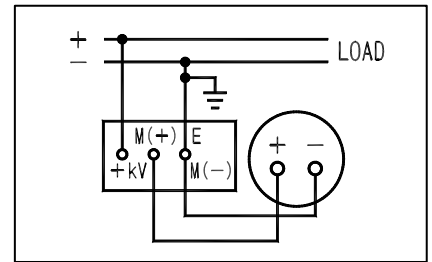
## Connection Diagram



Voltmeter

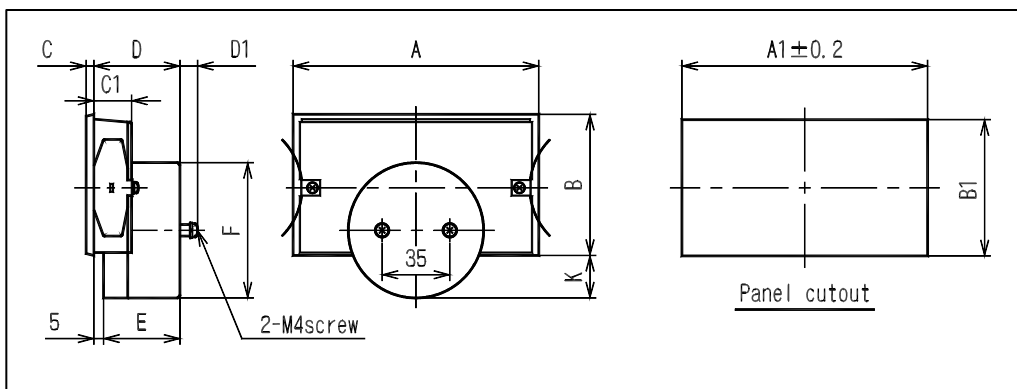


Voltmeter external with  
Series resistor (DM-1)



Voltmeter external with  
Series resistor (DM-2~25)

## Dimensions



Type	A	A1	B	B1	C	C1	D	D1	E	F	K	Weight (g)
FMK-7C	127	121	73	70.5 ±0.2	4	19.5	45	10	40	70 Φ	22	320
FMK-5C	100	97	57	55 <sup>+0.2</sup> / <sub>-1.2</sub>	4	20	36	10	31	53 Φ	21.5	220