



TUBE-TYPE MOVING-IRON INSTRUMENTS



79LA, 119LA, 79LV, 119LV,

For measuring AC current or voltage.

Technical data:

- Movement:** moving-iron movement with spring-type oil filled bearing, practically vibration free oil damping.
- Instrument case:** non-flammable plastic according to UL 94-V1.
- Scale length:** 103° resp. 60 mm (79L...) and 97 mm (119L...)

Permanent overloading: 1.2 -fold current resp. voltage.

Class of accuracy: 1.5

Frequency range: 15...50...100 Hz

Consumption: max. 3 VA for voltmeter;
max. 0.5 VA for ammeter

Protection: IP40 for instrument case;
IP00 for connection-pins (DIN 40050).

Connection: 4,8 x 8 mm faston (DIN 46247)

Weight: approx. 0.11 kg (79L...) ; 0.2 kg (119L...)

Instrument mounting: A. on the frontside of the assembly-board with frame
B. on the backside of the assembly-board with special frame
C. on the backside of the assembly-board without frame (see on next page)



AMMETERS	Type 79LA	Type 119LA
Frame dimensions	80x63 mm	120x90 mm
Measuring range	Cat. No. 1537-13-...	Cat. No. 1538-13-...
1 / 2 A	029	
1.5 / 3 A	031	
2.5 / 5 A	033	
4 / 8 A	035	
5 / 10 A	036	
* ... / 1 / 2 A	C03	
* ... / 5 / 10 A	C04	

* the datas of the current transformer are required

Order specification:

- Tube-type moving-iron ammeter.
- Frame size: 120x90 mm.
- Range: 5/10 A.
- Mounting: on front side with frame.

Ordering data:

- Tube-type moving-iron ammeter.
- Type: **119LA**
- Cat. No. **1538-13-036**
- Mounting: **Type A**

VOLTMETERS	Type 79LV	Type 119LV
Frame dimensions	80x63 mm	120x90 mm
Measuring range	Cat. No. 1537-13-...	Cat. No. 1538-13-...
6 V	058	
10 V	056	
15 V	054	
20 V	053	
25 V	052	
30 V	051	
40 V	050	
50 V	049	
60 V	048	
100 V	046	
150 V	043	
200 V	042	
250 V	041	
300 V	040	
400 V	039	
500 V	038	
600 V	037	
** ... / 100 V	C05	
** ... / 110 V	C06	

** the datas of the voltage transformer are required

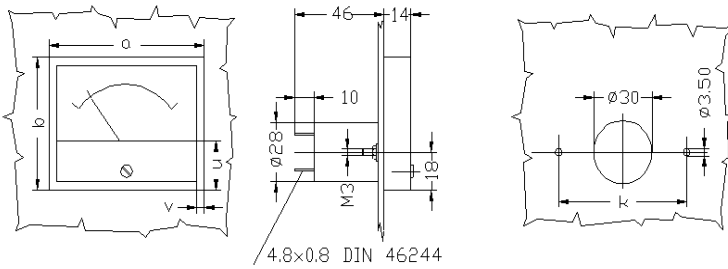
Note: On request types different from table are accepted.



TUBE-TYPE INSTRUMENTS MOUNTING

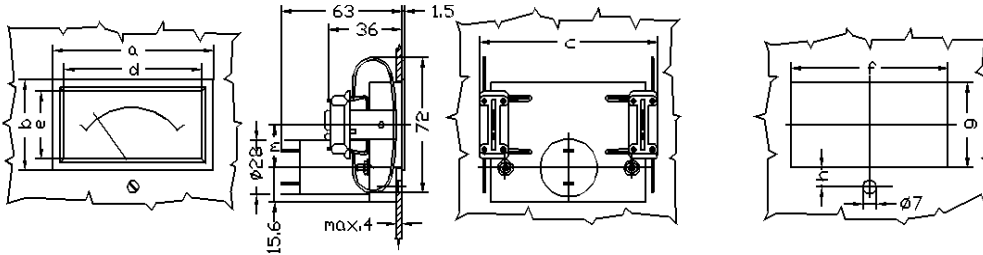


Mounting type: A



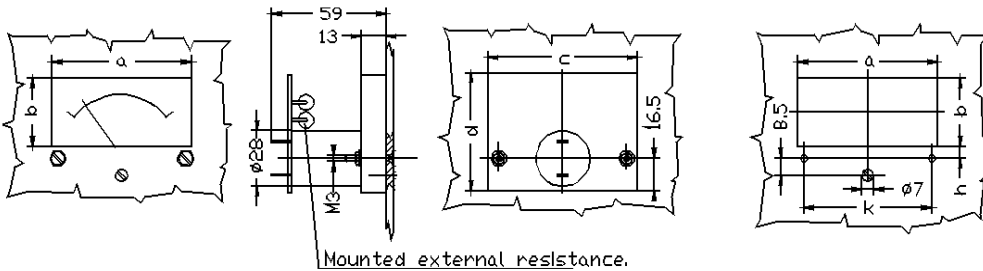
Type \ Dim (mm)	a	b	u	v	k
79...	80	63	23.5	4	66
119...	120	90	31	5	90

Mounting type: B



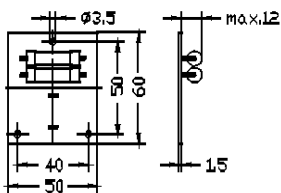
Type \ Dim (mm)	a	b	c	d	e	f	g	h	m
79...	84	47	93	72	35	82 ^{+0.4}	44.5 ^{+0.4}	9.8	23.5
119...	125	68	123	110	53	122 ^{+0.4}	64.5 ^{+0.4}	16.8	40.5

Mounting type: C



Type \ Dim (mm)	a	b	c	d	h	m
79...	72	35	77	60	6	66
119...	110	53	117	87	14	90

External resistance



Scales
M=1:1

