



## 72spDwA, 96spDwA, 144spDwA 72spDwV, 96spDwV, 144spDwV

For measuring AC current or voltage

### Technical data:

**Movement:** moving-coil  
with pivot spring-type bearing

**Instrument case:** steel plate

**Scale length:** 46mm (72sp); 62mm (96sp);  
103mm (144sp)

**Permanent overloading:** 1.2 -fold current res.  
voltage

**Class of accuracy:** 1.5

**Protection:** casing IP50; terminals IP00 in  
accordance with DIN 40050



**Weight:** approx. 0.2kg (72sp...); 0.5kg (96sp...); 0.8kg (144sp...)

**Fixing elements:** two spring-type fastening clips (DIN 43 835 "A") for 72sp and 96sp;  
and two screw-type fastening clips (DIN 43 835 "B") for 144sp

## AMMETERS

Measuring range	Frame dimensions					
	72x36 mm		96x48 mm		144x72 mm	
	72 spDwA Cat. No. 2317-12-...		96 spDwA Cat. No. 2318-12-...		144 spDwA Cat. No. 2319-12-...	
	...	Voltage drop or consumpt.	...	Voltage drop or consumpt.	...	Voltage drop or consumpt.
1 mA	001	max. 1.2 V	001	max. 1.2 V	001	max. 1.2 V
100mA	011	↓	011	↓	011	↓
500 mA	014		014		014	
1 A	016	max. 0.3 VA	016	max. 0.3 VA	016	max. 0.3 VA
1.5 A	017	↓	017	↓	017	↓
2.5 A	018		018		018	
4 A	019		019		019	
5 A	020		020		020	
* ... / 1 A	C01		C01		C01	
* ... / 5 A	C02		C02		C02	
** ... / 1 A	C03		C03		C03	
** ... / 5 A	C04		C04		C04	

\* with current transformer, the datas of the CT are required

\*\* with current transformer and 100%  $I_n$  overload scale

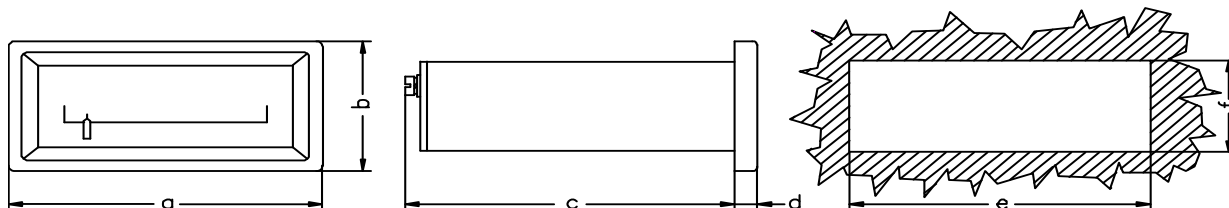
**Note:** on request types different from tables are accepted

## VOLTMETERS

Measuring range	Frame dimensions					
	72x36 mm		96x48 mm		144x72 mm	
	Type 72 spDwV Cat. No. 2317-12-...		Type 96 spDwV Cat. No. 2318-12-...		Type 144 spDwV Cat. No. 2319-12-...	
	...	Internal Resistance	...	Internal Resistance	...	Internal Resistance
6 V	101	1000 Ω/V	101	1000 Ω/V	101	1000 Ω/V
10 V	102	↓	102	↓	102	↓
15 V	103		103		103	
25 V	104		104		104	
30 V	114		114		114	
40 V	105		105		105	
60 V	106		106		106	
100 V	107		107		107	
150 V	108		108		108	
250 V	109		109		109	
300 V	115		115		115	
400 V	110		110		110	
500 V	111		111		111	
600 V	112		112		112	
*.../ 100 V	C05		C05		C05	
*.../ 110 V	C06		C06		C06	

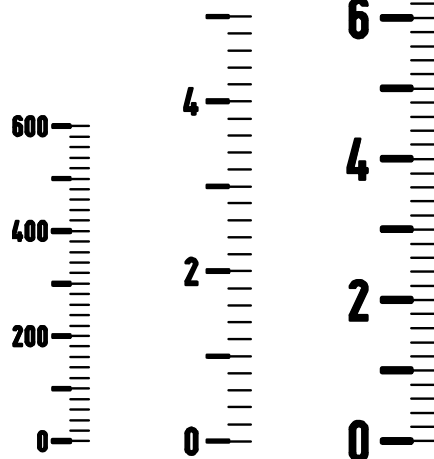
\* the datas of the voltage transformer are required

**Note:** on request types different from tables are accepted



Type\Dim. [mm]	a	b	c	d	e	f
72 spDwA 72 spDwV	72	36	105	5.5	68 <sup>+0.7</sup>	33 <sup>+0.7</sup>
96 spDwA 96 spDwV	96	48	125	7	92 <sup>+0.7</sup>	44 <sup>+0.7</sup>
144 spDwA 144 spDwV	144	72	170	8	138 <sup>+0.7</sup>	68 <sup>+0.7</sup>

Scales (M=1:1)



72spDw

96spDw

144spDw