



# FREQUENCY METERS



## 48P, 72P, 96P, 96PP, 144P, 144PP

For measuring frequency in sinusoidal AC circuits

### Technical data:

- Movement:** Vibrating-reed movement with reeds tuned to 1/2 Hz
- Instrument case:** steel-plate
- Scale:** 1/2 Hz subdivisions, (the smallest readable value is 1/4 Hz)
- Number of vibrating reeds:** 13 or 21 reeds depending on the measuring range
- Class of accuracy:** 0.5
- Consumption:** max. 1.5 VA
- Rated voltages:** 100...115 V, 230 V, 400 V, 500 V
- Protection:** casing IP50; adapter box IP20 and terminals IP00
- Weight:** 0.2 kg /48P; 0.35 kg /72P; 0.4 kg /96P; 0.5 kg /96PP; 0.7 kg /144P; 0.9 kg /144PP

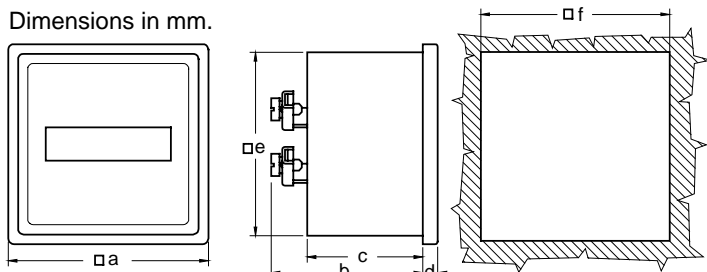


**Fixing elements:** with two screw-type fastening clips (DIN 43835 "B")

Measuring range	Rated voltage	Frame dimensions					
		48x48 mm	72x72 mm	96x96 mm	144x144 mm	96x96 mm	144x144 mm
		single movement				double movement	
		Type: 48P	Type: 72P	Type: 96P	Type: 144P	Type: 96P	Type: 144PP
47 ... 53 Hz (13 res. 2x13 vibration reeds)	110 ... 115 V	x	x	x	x	x	x
	230 V	x	x	x	x	x	x
	400 V	x	x	x	x	x	x
	500 V	----	x	x	x	x	x
45 ... 55 Hz (21 res. 2x21 vibration reeds)	100 ... 115 V	----	x	x	x	x	x
	230 V	----	x	x	x	x	x
	400 V	----	x	x	x	x	x
	500 V	----	x	x	x	x	x
57 ... 63 Hz (13 res. 2x13 vibration reeds)	100 ... 115 V	x	x	x	x	x	x
	230 V	x	x	x	x	x	x
	400 V	x	x	x	x	x	x
	500 V	----	x	x	x	x	x
55 ... 65 Hz 21 res. 2x21 vibration reeds)	100 ... 115 V	----	x	x	x	x	x
	230 V	----	x	x	x	x	x
	400 V	----	x	x	x	x	x
	500 V	----	x	x	x	x	x

### Outline drawing

Dimensions in mm.



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

Type	Dimensions (in mm.)					
	a	b	c	d	e	f
48P	48	62	47	5	44	45 <sup>+0,6</sup>
72P	72	60	48	6	66	68 <sup>+0,7</sup>
96P, 96PP	96	56	44	6	90	92 <sup>+0,8</sup>
144P, 144PP	144	75	65	8	136	138 <sup>+1</sup>

### Order specification:

- Vibrating reed frequency meter
- Frame dimension: 72x72 mm
- Measuring range: 47 ... 53 Hz
- Rated voltage: 100 - 115 V

### Ordering data:

- Vibrating reed frequency meter
- Type: **72P 47-53 Hz 100-115 V**