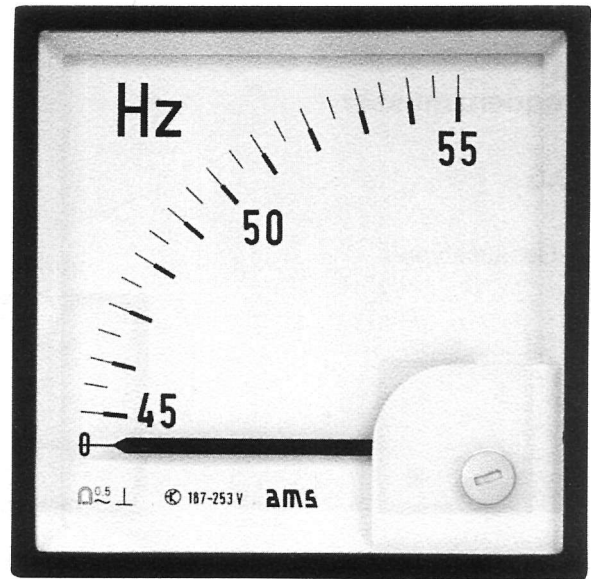
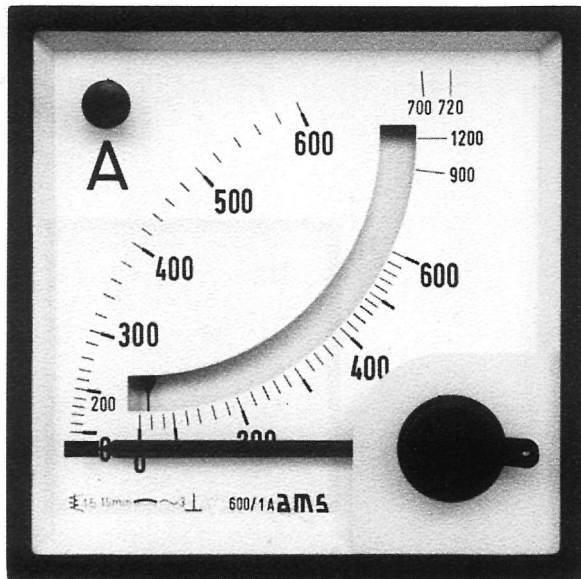


Square Panel Meters



Pointer Frequency Meter – Ratio-Serie Bimetal Meter – Ratio-Serie

- ☐ Meters with snap-in fixing
- ☐ Interchangeable scale by default
- ☐ Pointer frequency meter for $1\frac{2}{3}$, 50, 60, 400 Hz
- ☐ Bimetal meter with factor disc
- ☐ Bimetal meter time lag 15 minutes or 8 minutes
- ☐ Bimetal meter with wire sealable reset button

SQUARE PANEL METERS

Square Panel Meters

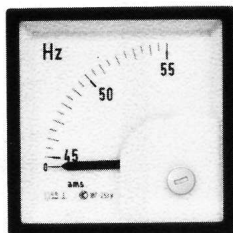
"Ratioserie"
pointer frequency meter
accuracy class 0.5

housing according to **DIN 43700**

Available housing types:



ZQ 48 DS



ZQ 72 DS



ZQ 96 DS

SQUARE PANEL METERS

	ZQ 48 DS	ZQ 72 DS	ZQ 96 DS
Front frame	48 x 48 mm	72 x 72 mm	96 x 96 mm
Scale length approx.	40 mm	62 mm	97 mm
Weight approx.	0.15 kg	0.2 kg	0.4 kg

Movement

Bearing

Pointer

Housing

Permissible

voltage fluctuation

Warm-up time

moving coil with core magnet and built-in transducer

pivots with spring mounted jewel

beam-type knife-edge pointer

polycarbonate casing, self-extinguishing and drip-proof

-15% ... +10%

approx. 5 min.

Measuring ranges

45 - 50 - 55 Hz

55 - 60 - 65 Hz

Nominal voltage

100, 230, 400 V *)

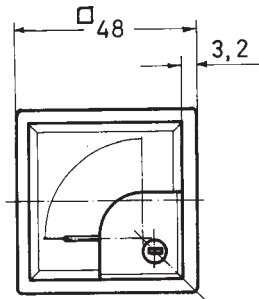
More measuring ranges on request.

Size 144 x 144 mm also available in steel-sheet housing.

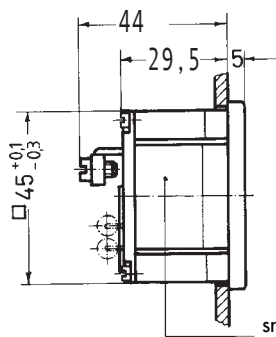
*) For 400 V fixing with angle bracket only.

Square Panel Meters

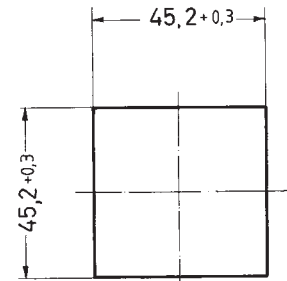
"Ratioserie"



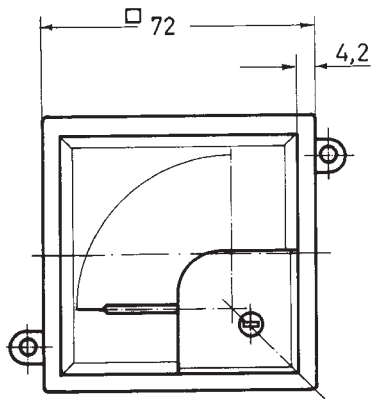
ZQ 48 DS



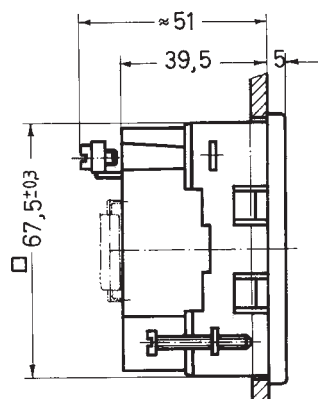
snap-in fixing for panel thickness up to 2.5 mm



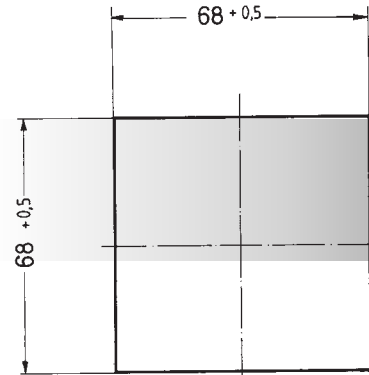
panel cut-out



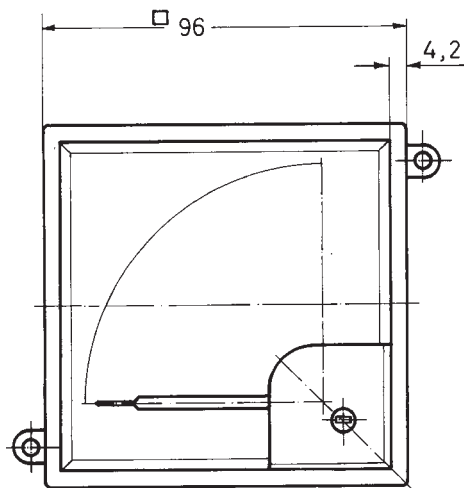
ZQ 72 DS



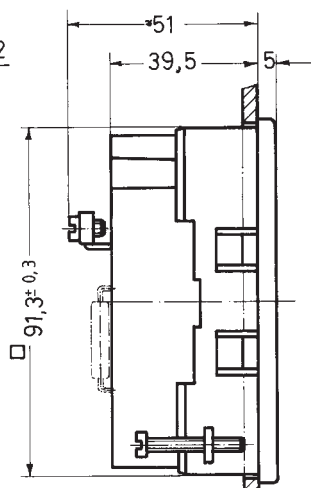
snap-in fixing for panel thickness up to 2.5 mm



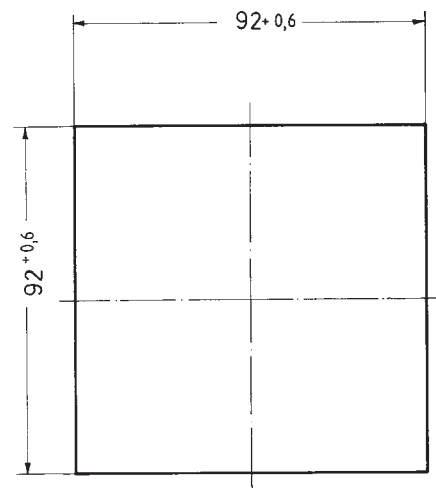
panel cut-out



ZQ 96 DS



snap-in fixing for panel thickness up to 2.5 mm



panel cut-out

Connections: M 4

The types ZQ 72 DS and ZQ 96 DS are also available with snap-in fixing.

Type ZQ 48 DS is available in a special version with screw fixing.

Protective covers for connection terminals acc. to VGB 4 optionally available.

SQUARE PANEL METERS

Square Panel Meters

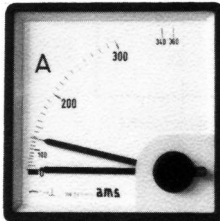
"Ratioiserie"

peak-current meter

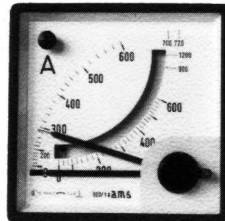
peak-current meter with instantaneous value

housing according to **DIN 43700**

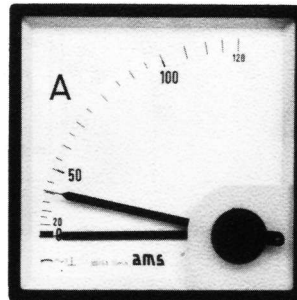
Available housing types:



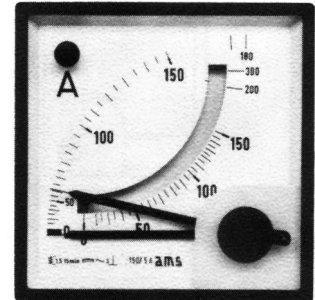
BiQ 72



BiMQ 72



BiQ 96



BiMQ 96

SQUARE PANEL METERS

	BiQ 72	BiMQ 72	BiQ 96	BiMQ 96
Front frame	72 x 72 mm	72 x 72 mm	96 x 96 mm	96 x 96 mm
Scale length approx.	60 mm	60 mm / 42 mm	97 mm	97 mm / 73 mm
Weight approx.	0.15 kg	0.18 kg	0.20 kg	0.25 kg

Movement	– BiQ	bimetal
	– BiMQ	bimetal + moving iron movement
Accuracy class	– BiQ	3
	– BiMQ	3/1.5
Pointer	– BiQ	black main pointer and red slave pointer
	– BiMQ	with additional black pointer for the moving iron movement

Pointer reset	the reset button of the red slave pointer is sealable	
Housing	polycarbonate casing, self-extinguishing and drip-proof	
Front frame colour	black, grey on request	
Time lag bimetal	standard 15 min; on request 8 min.	
Internal consumption	BiQ 5A, 15 min approx. 2.8 VA	
	BiMQ 5A, 15 min approx. 3.8 VA	

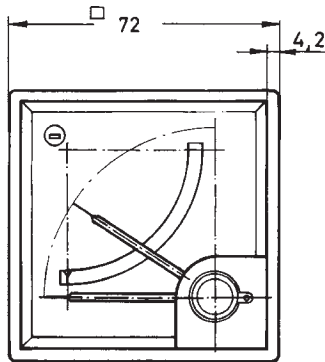
Overload	permanently 1.2-fold
	briefly 10-fold (1 sec.)

Measuring ranges		Bimetal / moving iron	Current transformer connection
Type	BiQ 72	0 - 1.2 A	n / 1 A
		0 - 6.0 A	n / 5 A
	BiMQ 72	0 - 1.2 A / 0 - 1/2 A	n / 1 A
		0 - 6.0 A / 0 - 5/10 A	n / 5 A
	BiQ 96	0 - 1.2 A	n / 1 A
		0 - 6.0 A	n / 5 A
	BiMQ 96	0 - 1.2 A / 0 - 1/2 A	n / 1 A
		0 - 6.0 A / 0 - 5/10 A	n / 5 A

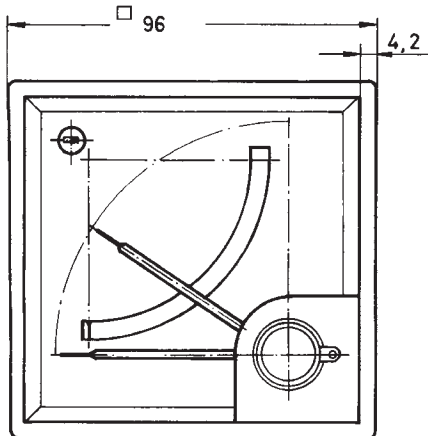
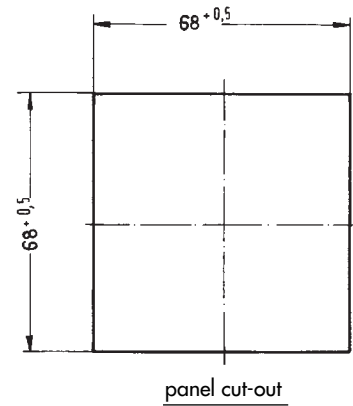
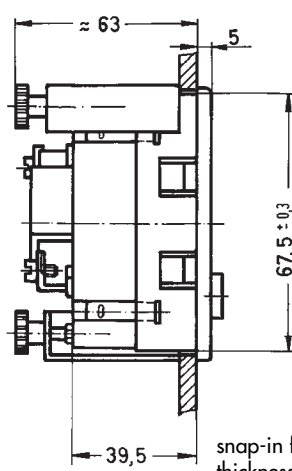
Scale divisions according to DIN standard

Square Panel Meters

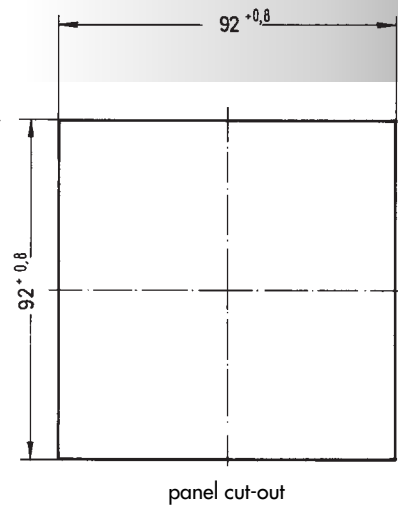
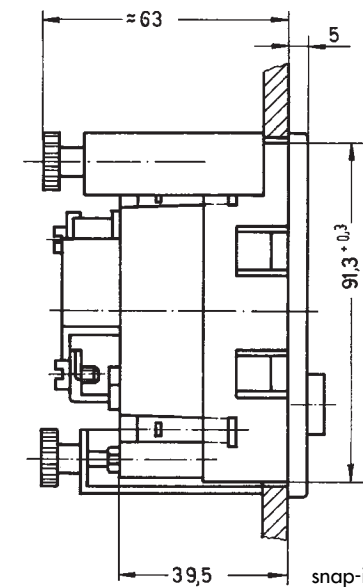
"Ratioserie"



BiQ 72 + BiMQ 72

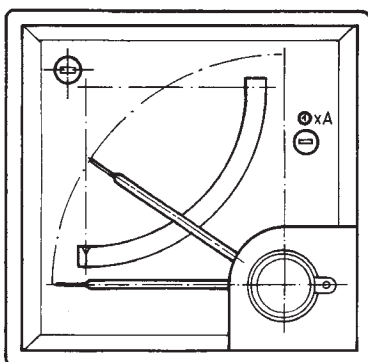


BiQ 96 + BiMQ 96

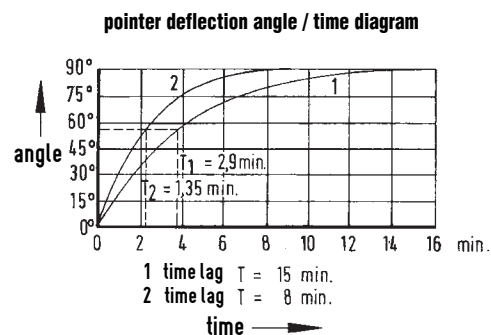


constants disc for

BiQ 72 + BiQ 96 u. BiMQ 72 + BiMQ 96



adjustable constants: 1-1.5-2-2.5-3-4-5-6-8-10



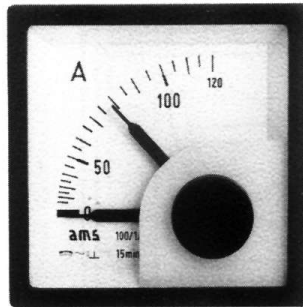
SQUARE PANEL METERS

Square Panel Meters

"Ratioserie"

**peak-current meter
with interchangeable scale**

housing according to **DIN 43700**



BIQ 48

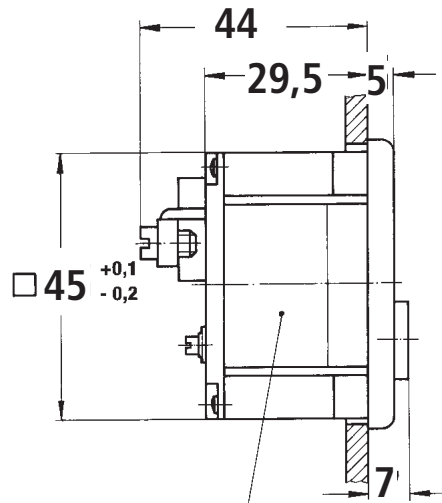
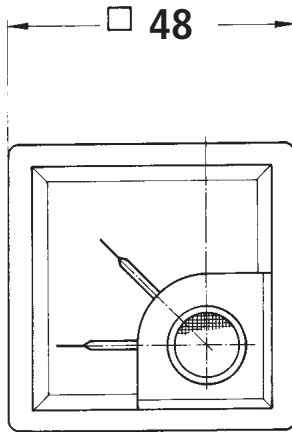
SQUARE PANEL METERS

Front frame	48 x 48 mm according to DIN 43718/s
Scale length approx.	38 mm
Weight approx.	0.15 kg
Movement	bimetal movement
Accuracy class	3
Pointer	black main pointer and red slave pointer
Pointer reset	the reset button of the red slave pointer is sealable
Housing	polycarbonate casing, self-extinguishing and drip-proof
Front frame colour	black, grey on request
Fixing	snap-in fixing, screw fixing optional
Time lag	standard 15 min; on request 8 min
Internal consumption	5A, 15 min approx. 2.5 VA 1A, 15 min approx. 1.5 VA
Overload	permanent $1.2 \times I_N$ briefly $10 \times I_N$ (1 sec.)
Measuring ranges	0 - 1.2 A for transformer n / 1 A or 0 - 6 A for transformer n / 5 A
Scale divisions	according to DIN standard for transformer connection

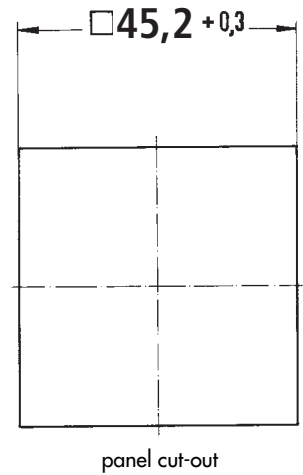
Square Panel Meters

"Ratioserie"

BiQ 48



snap-in fixing
also available with angle fastener



SQUARE PANEL METERS

Square Panel Meters

Special Designs

Square Pointer Frequency Meter

Square Bimetal Meter

Housing

Front frame colour

standard: black
special version: grey
other colours on request

Front glass

Splash protection

standard: silicate glass
standard: IP 52
special version: IP 54 (not for bimetal meters)
rubber sealing for Q 48, Q 72 and Q 96
(panel cutout approximately 1 mm bigger)
for pointer frequency meter ZQ 72 DS and ZQ 96 DS

Illumination

Scales

Coloured scales

scale background black, scale division and numbering white or yellow
other colours on request

Constants disc

coloured scale divisions or marks
types BiQ and BiMQ 72 and 96, with factors adjustable on the front:
1 - 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10

Movements

Pointer frequency meters

intermediate ranges on request