

**AQM - Analog Meters
for direct current**
48x48mm
72x72mm
96x96mm

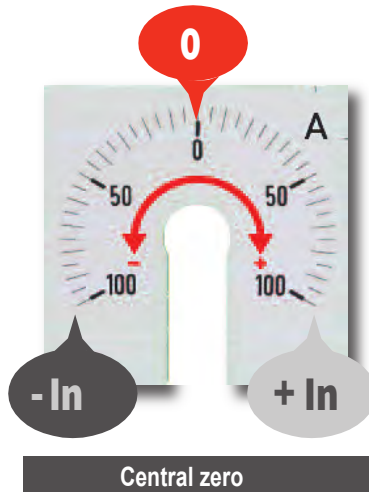
Direct indication of input current or
primary current of external shunt
Indication of any quantity,
directly proportional to signals
coming from transducers or sensors
Moving coil equipment
Direct connection 2...5A
Connection by external shunt
1A/60mV...6000A/60mV
Connection by transducers or sensors
1...600mA – 0...5/10/20 – 4...20mA
Lateral zero or central zero version
Live zero or mechanically suppressed
(4...20mA)
Scale length 240°
Accuracy cl.1,5



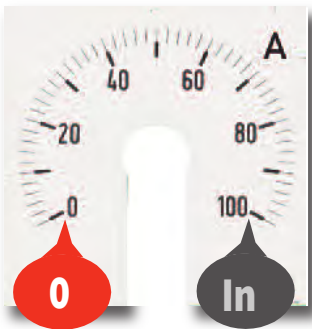
AQ72M - AQ96M
Standard terminal cover



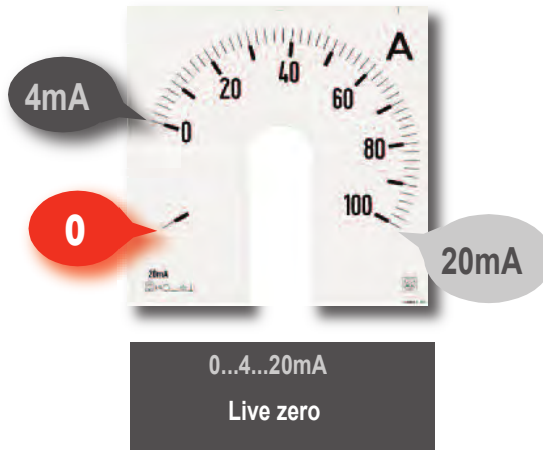
Interchange scales



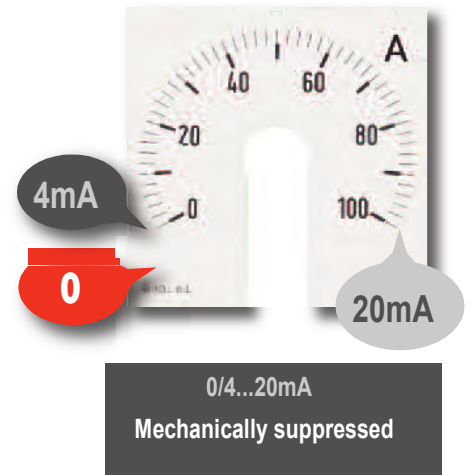
Central zero



Lateral zero



0...4...20mA
Live zero



0/4...20mA
Mechanically suppressed

Connection	0...In - on Shunt with 60mV c.d.t. Lateral Zero		
Model	AQ48M	AQ72M	AQ96M
Dimensions	48 x 48	72 x 72	96 x 96
Range	ORDERING CODE		
1A	AN560A1002	AN660A1002	AN760A1002
1,5A	AN560A1502	AN660A1502	AN760A1502
2A	AN560A2002	AN660A2002	AN760A2002
2,5A	AN560A2502	AN660A2502	AN760A2502
3A	AN560A3002	AN660A3002	AN760A3002
4A	AN560A4002	AN660A4002	AN760A4002
5A	AN560A5002	AN660A5002	AN760A5002
6A	AN560A6002	AN660A6002	AN760A6002
8A	AN560A8002	AN660A8002	AN760A8002
10A	AN560B1002	AN660B1002	AN760B1002
15A	AN560B1502	AN660B1502	AN760B1502
20A	AN560B2002	AN660B2002	AN760B2002
25A	AN560B2502	AN660B2502	AN760B2502
30A	AN560B3002	AN660B3002	AN760B3002
40A	AN560B4002	AN660B4002	AN760B4002
50A	AN560B5002	AN660B5002	AN760B5002
60A	AN560B6002	AN660B6002	AN760B6002
80A	AN560B8002	AN660B8002	AN760B8002
100A	AN560C1002	AN660C1002	AN760C1002
120A	AN560C1202	AN660C1202	AN760C1202
150A	AN560C1502	AN660C1502	AN760C1502
200A	AN560C2002	AN660C2002	AN760C2002
250A	AN560C2502	AN660C2502	AN760C2502
300A	AN560C3002	AN660C3002	AN760C3002
400A	AN560C4002	AN660C4002	AN760C4002
500A	AN560C5002	AN660C5002	AN760C5002
600A	AN560C6002	AN660C6002	AN760C6002
800A	AN560C8002	AN660C8002	AN760C8002
1000A	AN560D1002	AN660D1002	AN760D1002
1200A	AN560D1202	AN660D1202	AN760D1202
1500A	AN560D1502	AN660D1502	AN760D1502
2000A	AN560D2002	AN660D2002	AN760D2002
2500A	AN560D2502	AN660D2502	AN760D2502
3000A	AN560D3002	AN660D3002	AN760D3002
4000A	AN560D4002	AN660D4002	AN760D4002
5000A	AN560D5002	AN660D5002	AN760D5002
6000A	AN560D6002	AN660D6002	AN760D6002

Other executions available on all models:

Option	Suffix	Example
Central zero (-In...0...+In)	Replace the 5 digit of the code with "1"	AN00500000 ⇒ AN00100000

Connection	0...In - Direct, Lateral Zero		
Model	AQ48M	AQ72M	AQ96M
Dimensions	48 x 48	72 x 72	96 x 96
Range	ORDERING CODE		
2A	AN538A2002	AN638A2002	AN738A2002
2,5A	AN538A2502	AN638A2502	AN738A2502
5A	AN538A5002	AN638A5002	AN738A5002

Other executions available on all models:

Option	Suffix	Example
Central zero (-In...0...+In)	Replace the 5 digit of the code with "9"	AN00500000 ⇒ AN00900000

Connection	on shunt with 60mV c.d.t. displaced zero			Note
Model	AQ48M	AQ72M	AQ96M	
Dimensions	48 x 48	72 x 72	96 x 96	
Range	ORDERING CODE			
-...0...+60mV	AN56SB6001	AN66SB6001	AN76SB6001	A

Connection	from transducers or sensor with 4...20mA output			Note
Model	AQ48M	AQ72M	AQ96M	
Dimensions	48 x 48	72 x 72	96 x 96	
Range	ORDERING CODE			
4...20mA (mechanic. supp.)	AN534M0001	AN634M0001	AN734M0001	B
0...4...20mA (live zero)	AN535V0001	AN635V0001	AN735V0001	B

Connection	from transducers or sensor, lateral zero (0...In)			Note
Model	AQ48M	AQ72M	AQ96M	
Dimensions	48 x 48	72 x 72	96 x 96	
Range	ORDERING CODE			
1mA	AN532A1001	AN632A1001	AN732A1001	B
5mA	AN532A5001	AN632A5001	AN732A5001	B
10mA	AN532B1001	AN632B1001	AN732B1001	B
20mA	AN532B2001	AN632B2001	AN732B2001	B
other values 1...10mA	AN53222221	AN63222221	AN73222221	C
other values 10...600mA	AN53244441	AN63244441	AN73244441	C

Note: data to be shown in addition to ordering code




A = scale

B = scale corresponding to range

C = range and relevant scale

Other executions available on all models:

Option	Suffix	Example
Central zero (-In...0...+In)	Replace the 5 digit of the code with "3"	AN00 5 00000 ⇒ AN00 3 00000
Tropicalized	Add "1" at the end of standard code	AN00500000 ⇒ AN00300000 1
IP54 Front protection	Add "3" at the end of standard code	AN00500000 ⇒ AN00300000 3

Model	Scale for AQ48M	Scale for AQ72M	Scale for AQ96M
<i>Fictive scales</i>			
$\pm 0...I_n$	for d.c ammeters		
Range	ORDERING CODE		
Linear scale standard divisions	SC530L0000	SC630L0000	SC730L0000
Scale for instruments range 4...20mA mechanical suppression	SC534M0000	SC634M0000	SC734M0000
Live zero scale traced from 4...20mA for instruments range 0...4...20mA	SC535V0000	SC635V0000	SC735V0000

Note: to shown in addition to ordering code, beginning and full scale value

DISPLAY

Scale: interchangeable, easy-insertion to protect the pointer as well as relevant closing slip

Scale colour: white background, black divisions and numbering

Customized scales upon request

Option: reference red mark

Scale length: 240°

Scale marking:

	-In	0	In
Central zero	0°	120°	240°
Lateral zero	-	0°	240°

	0mA	4mA	20mA	Scale
Live zero	0°	48°	240°	48°(0...4mA) + 192°(4...20mA)
Mechanically suppressed	under zero	0°	240°	240°

Pointer colour: black

Option: (adjustable) reference red pointer to store the highest measured value

INPUT

Quantity: direct current

Connection: direct (S.250/126) or by external shunt (S.250/127)

Rating current In

Direct connection: 2...5A

Connection by external shunt: 1A/60mV...6000A/60mV

Connection by transducers or sensors: 1...600mA – 0...5/10/20mA – 4...20mA

Continuous overload: 1,2In

Instantaneous overload: 10In/5s

Accuracy (EN/IEC 60051): cl.1,5

Option: accuracy cl.1

Voltage drop: 60mV (10mA...5A)

INSULATION

(EN/IEC 61010-1)

Installation category: III

Pollution degree: 2

Insulation voltage rating: 600V (Phase - Neutral)

A.C. voltage test 4kV r.m.s. 50Hz/5s

Considered circuits: all circuits and earth

ENVIRONMENTAL CONDITIONS

Reference temperature: 23°C

Nominal range of use: 5...40°C

Operating range: -25...50°C

Limit range for storage and transport: -40...80°C

Vibration test: according to EN/IEC 60051-1 paragraph 7.6

Shock test: according to EN/IEC 60051-1 paragraph 7.6

HOUSING

Mounting: flush mounting

Panel cutout: see table

Front frame: see table

Depth: see table

Connections: screw terminal / fast-on 6,3 x 0,8mm
screw terminal M7 with rating current $I_n \geq 20A$

Housing material: self-extinguishing polycarbonate

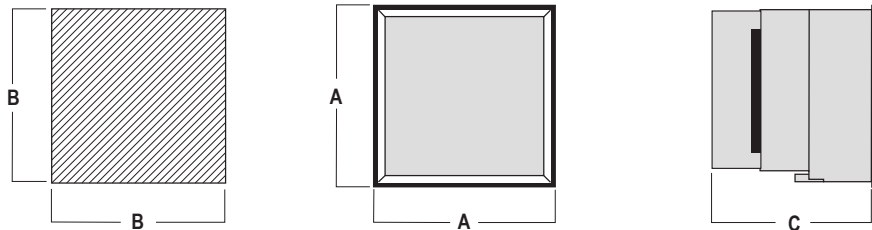
Protection degree (EN/IEC 60529): IP52 front frame, IP20 terminals (with protection)

Option: protection IP54 front frame

Weight: see table

Model	A	B	C	Weight
AQ48M	48x48	45	85,5	140 gr.
AQ72M	72x72	68x68	84	550 gr.
AQ96M	96x96	92x92	84	600 gr.

DIMENSIONS



WIRING DIAGRAMS

