

# Process indicators

Analogue indicator to measure a process signal



## Description

- Does not need an auxiliary power supply
- DIN boxes with dimensions: 48, 72, 96 and 144
- Precision class 1.5
- Measurement in DC of 0 ... 10 V, 0/4 ... 20 mA, .../60 mV
- Exchangeable scales for **BC48, BC72, BC96, BM 45**

## Application

For the measurement of the mean value of voltages and currents in direct current circuits, even of the pulsating type, in a vast margin of values.

## Features

	BC	BM	ZC
<b>Input circuit</b>			
Consumption	1 000Ω		V·A
Overloads	1.5 $U_n$ permanent 2 $U_n$ permanent 5 s		
<b>Class</b>	1.5 % FS		
<b>Ambient conditions</b>			
Operating temperature	+10 ... +30 °C		
Limit temperature	- 25 ... +40 °C		
Altitude	2000 m		
<b>Build features</b>			
Dimensions	See the following table		
Weight	See the following table		
Type of box	panel	DIN rail	panel
<b>Degree of protection:</b>			
Front panel	IP 52		IP 52
terminals	IP 00		IP 20
Insulation voltage	2 kV, during 1 min, between the mechanism and the box		
<b>Standards</b>	BS 89, EN 60051, IEC 144, UL 94, DIN 43780, IEC 51, UNE 21318		

# Process indicators


Analogue indicator to measure a process signal



## References


### BC: Process indicators 90°



Process indicators, 90°						
Type	BC 48	BC 72	BC 96	BC 144	BM 45	
Class	1,5					
Scale	90°, P1					
Dimensions (mm)						
	a	48	72	96	144	85
	b	48	72	96	144	52
	c	66,2	49,2	49,2	71,8	65
Weight (g)	75	170	210	420	110	
Scope						
0..0.10 V	M11813	M11823	M11833	M11843	M11853	
0...20 mA	M11812	M11822	M11832	M11842	M11852	
4...20 mA	M11811	M11821	M11831	M11841	M11851	
.../60 mV	-	-	-	-	-	

### ZC: Process indicators, 240°



Process indicators, 240°					
Type	ZC 48	ZC 72	ZC 96	ZC 144	
class	1,5				
Scale	240°, P1				
Dimensions (mm)					
	a	48	72	96	144
	b	4866,2	7249,2	9649,2	14471,8
	c				
Weight (g)	75	170	210	420	
Scope					
0..0.10 V	M12513	M12523	M12533	M12543	
0...20 mA	-	-	-	-	
4...20 mA	M12511	M12521	M12531	M12541	
.../60 mV	M12510	M12520	M12530	M12540	

### Exchangeable scales

Type	SIP 48	SIP 72	SIP 96	SIPM 45
Equipment	BC 48	BC 72	BC 96	BM 45
Scope				
0..0.10 V	M118Z3	M118Y3	M118X3	M118V3
0...20 mA	M118Z2	M118Y2	M118X2	M118V2
4...20 mA	M118Z1	M118Y1	M118X1	M118V1

## Coding table

M	1	X	X	X	X	0	0	X	X
Code						Internal Code		↑ ↑ ↑	
Setting						Standard		0	
						Central zero		1	
BC and ZC process indicators						Scale		1	
						5		2	
						10		3	
						15		4	
						20		5	
						25		6	
						30		7	
						40		8	
						50		9	
						60		A	
						75		B	
						100		C	
						125		D	
						150		E	
						200		F	
						250		G	
						300		H	
						400		J	
						500		K	
						600		L	
750		M							
800		N							
1000		P							
1200		Q							
1500		R							
2000		S							
2500		T							
3000		U							
4000		V							
5000		W							
						-		0	
						mA		1	
						A		2	
						kA		3	
						mV		4	
						V		8	
						kV		9	
						rpm		A	
						rpm x 1000		B	
						l (litres)		C	
						m		G	
						m <sup>2</sup>		H	
						m <sup>3</sup>		J	
						%		K	

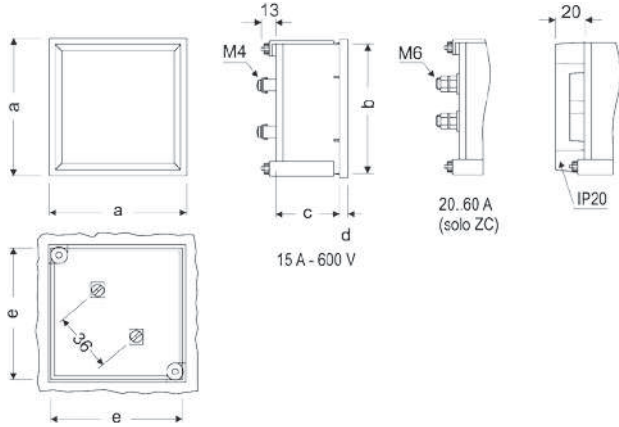
# Process indicators

Analogue indicator to measure a process signal



## Dimensions

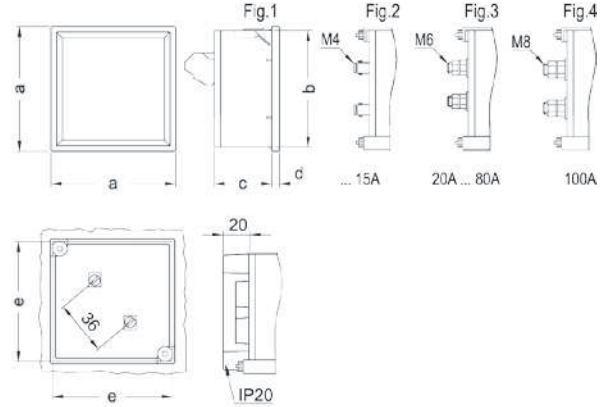
ZC



Type	Fig. ZC	a	b	c	d	e
48 mm	1	48	44,7	61	5,2	45
72 mm	1	72	67,2	43,5	5,7	68
96 mm	1	96	91	43,5	5,7	92
144 mm	1	144	137	64,5	7,3	138

Dimensiones (mm)

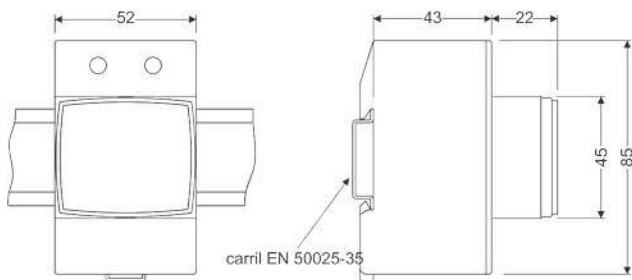
BC



Type	Fig. BC	a	b	c	d	e
48 mm	1-3	48	44,7	61	5,2	45
72 mm	2-3-4	72	67,2	43,5	5,7	68
96 mm	2-3-4	96	91	43,5	5,7	92
144 mm	2-3-4	144	137	64,5	7,3	138

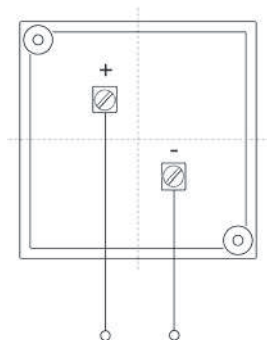
Dimensiones (mm)

BM



## Connections

BC / ZC



BM

