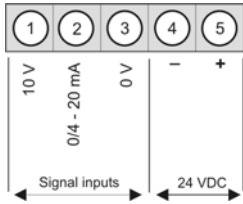




**MB1 – bargraph display in 96x24 mm (BxH)
Direct voltage / direct current signals
0-10 VDC, 0/4-20 mA**

- red display, optionally green, orange or blue
- 30 point bargraph display
- minimum installation depth: 60 mm without plug-in screw terminal
- adjustable via HEX switch and push-button
- pre-adjusted input for standard signals 0-10 V and 0/4-20 mA ex works
- free adjustment on the input signal
- 8 different display types adjustable as bar, dot/point or curtain
- free choice of direction and display of centre (e.g. bars starting from the middle of display)
- control of bightness level in stages
- protection class IP65
- plug-in terminal

• Direct current, direct voltage



Supply 24 VDC

horizontal

MB1-33RHO.0001.770AD

vertical

MB1-33RVO.0001.770AD

• Product key options

M	B	1-	3	3	R	3	H	O.	0	0	0	1.	7	7	0	A	D
M	B	1-	3	3	R	3	V	O.	0	0	0	1.	7	7	0	A	D

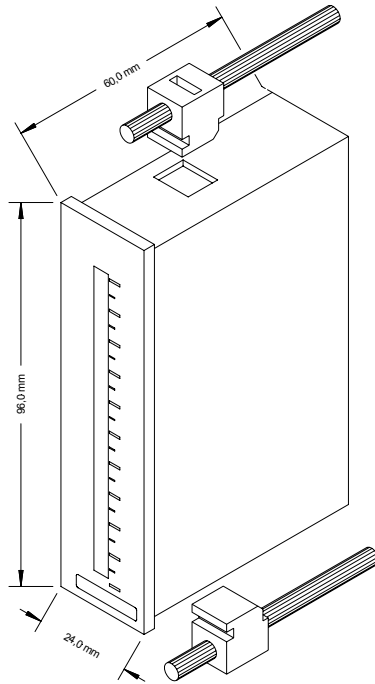
B	Blue bargraph display
G	Green bargraph display
Y	Orange bargraph display
X	Multi colour bargraph display

Please state physical unit in order, e.g. %.

• Technical data

Dimensions	Housing	B96 x H24 x D60 mm (D=69 mm incl. plug-in terminal)
	Panel cut-out	92.0 ^{+0.8} x 22.0 ^{+0.3} mm
	Fixing	screw elements for insulation thickness up to 3 mm
	Housing material	PC Polycarbonate; colour: black UL94V-0
	Sealing material	EPDM, 65 Shore
	Protection class	front IP65 standard, frontside IP00
	Weight	approx. 100 g
	Connection	plug-in terminal; line cross section up to 2.5 mm ²
Display	Bargraph	30 points
	Bargraph segment	4 mm
	Segment colour	red, optionally green, orange or blue
	Display range	30 point bargraph display
	Overflow	flashing of the two bargraph elements at the top
	Underflow	flashing of the two bargraph elements at the bottom
	Display time/ Measuring time	approx. 100 ms
Measuring input	Span	-12...12 V / -22 mA...24 mA
	Measuring range	0...10 V / 0/4...20 mA
	Input resistance	Ri at ~200 kΩ / Ri at ~100 Ω
	Measuring fault	0.5% of final value, +/-1 Digit / 0.5% of final value, +/-1 Digit
	Temperature drift	100 ppm/K
	Measuring time	approx. 100 ms
	Measuring principle	U/F-converter
	Resolution	approx. 14 Bit at 0.1 s measuring time
Power pack	Supply	24 VDC, +/-10 %, 2 VA
Memory	EEPROM	Data life ≥ 100 years at 25°C
Ambient conditions	Working temperature	0 to + 60°C
	Storing temperature	-20 to + 80°C
	Climatic density	relative humidity 0-85% on years average without dew
CE-sign	Conformity to directive 2004/108/EG	
EMV	EN 61326, EN 55011	
Safety standard	According to low voltage directive 2006/95/EG, EN 61010, EN 60664-1	

Housing:



• Ordering code

		M	B	1-	3	3	R	H	O.	0	0	0	1.	7	7	0	A	D		
Basic type M-Line																			Dimension	
Bargraph display	B																		D	physical unit
Installation depth																			Version	
69 mm (incl. plug-in terminal)	1																		A	A
Housing size																			Setpoints	
B96xH24xD60 mm	3																		0	no setpoints
Resolution																			Protection class	
30 points	3																		7	IP65 / plug-in terminal
Display colours																			Voltage supply	
Green	G																		7	24 VDC galv. insulated
Red	R																		Measuring input	
Orange	Y																		1	Standard signal 0/4-20 mA, 0-10 VDC
Blue	B																		Analog output	
Adjustment																			0	without
Horizontal	H																		Sensor supply	
Vertical	V																		0	without
Digital display																			Interface	
without	0																		0	without