

# M1 – 4-digit digital panel meter in 48x24 mm (BxH) Direct voltage Shunt 0-60 mV, 0-150 mV

- red display of -1999...9999 digits (optional green, orange or blue display)
- minimal installation depth: 27 mm without plug-in terminal
- adjustment via factory default or directly on the sensor signal
- min-/max-value recording
- 10 adjustable supporting points
- display flashing at threshold exceedance / undercut
- navigation keys for the recall of min/max values or for limit value corrections during operation
- tara-function
- programming interlock via access code
- protection class IP65 at the front
- plug-in terminal
- accessories: pc-based configuration-kit PM-TOOL with CD & USB adapter
- on demand: devices for working temperatures of -40°C... 80°C or of -25°C...60°C



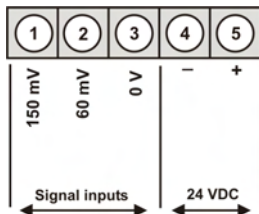
**ORDERING NUMBER**  
(without options)

**EUR**

## • Direct voltage (Shunt)

Supply 24 VDC

**M1-7VR4A.0002.770CD**



## • Product key options

M 1- 7 V R 4 A. 0 0 0 2. 7 7 0 C D

**EUR**

1	Without keypad, operation on the back
B	Blue
G	Green
Y	Orange

State physical unit in order, e.g. A.

## • Parameterisation software

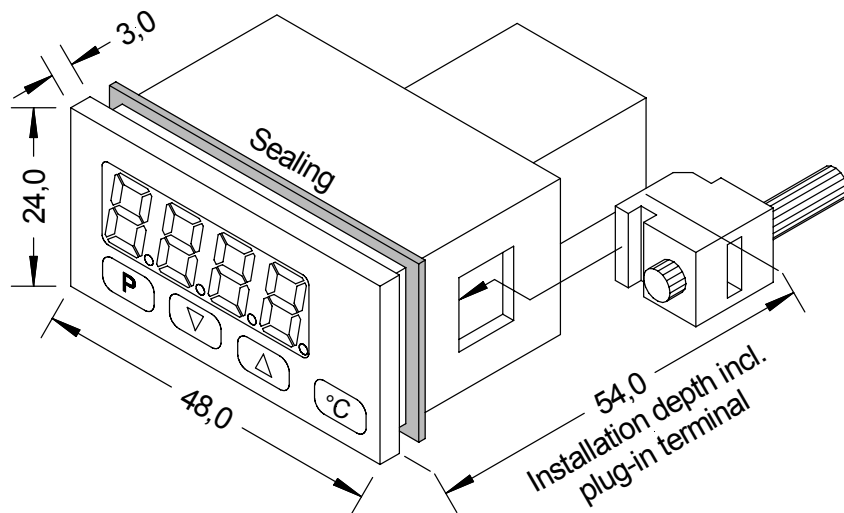
PC based configuration software PM-Tool for devices without keypad, for a simple adjustment of standard devices, incl. CD & USB-adapter. Programming is made via an interface on the back.

**PM-TOOL-MUSB12**

## • Technical data

<b>Dimension</b>	Housing	B48xH24xD27 mm (including plug-in terminal D= 54 mm)	
	Panel cut-out	45.0 <sup>+0.8</sup> x 22.2 <sup>+0.6</sup> mm	
	Fixing	screw elements for insulation thickness up to 3 mm	
	Housing material	PC Polycarbonate, black	
	Sealing material	EPDM, 65 Shore, black	
	Protection class	at the front IP65 standard, back side IP00	
	Weight	approx. 100 g	
Connection	plug-in terminal; line cross-section up to 2.5 mm <sup>2</sup>		
<b>Display</b>	Display	4-digit	
	Digit height	10 mm	
	Segment colour	red (standard), optional available in green, blue and orange	
	Display range	-1999 to 9999	
	Setpoints	optical display flashing	
	Overflow	horizontal bars at the top	
	Underflow	horizontal bars at the bottom	
	Display time/ Measuring time	0.1 to 10.0 seconds	
<b>Measuring input</b>	Span	-5...80 mV	/ -10...180 mV
	Measuring range	0...60 mV	/ 0...150 mV
	Input resistance	Ri at ~12 kΩ	/ Ri at ~30 Ω
	Measuring fault	0.2% of measuring range, ± 1 Digit / 0.2% of measuring range, ± 1 Digit	
	Temperature drift	100 ppm/K	
	Measuring time	0.1 ... 10.0 seconds	
	Measuring principle	U/F-conversion	
	Resolution	approx. 18 Bit at 1s measuring time	
<b>Power pack</b>	Supply	24 VDC +/- 10 %, galvanic insulated (max. 1 VA)	
<b>Memory</b>	EEPROM	Data life ≥ 100 years at 25°C	
<b>Ambient conditions</b>	Working temperature	0 to + 60 °C	
	Storing temperature	-20 to + 80°C	
	Climatic density	relative humidity 0-85% on years average without dew	
<b>CE-sign</b>	Conformity to directive 2004/108/EG		
<b>EMV</b>	EN 61326, EN 55011		
<b>Safety standard</b>	According to low voltage directive 2006/95/EG; EN 61010; EN 60664-1		

## Housing:



• Order key

	M	1-	7	V	R	4	A.	0	0	0	2.	7	7	0	C	D	
<b>Basic type M-Line</b>																	
<b>Installation depth</b> 54 mm, incl. plug-in terminal																	<b>Operation</b> physical unit
<b>Housing size</b> 48 x 24 x 27 mm (BxHxD)																	<b>Version</b> C
<b>Display type</b> mV																	<b>Switching points</b> no switching point
<b>Display colours</b> Blue Green Red Orange																	<b>Protection class</b> without keypad, operation on the back IP65 / plug-in terminal
<b>Number of digits</b> 4-digit																	<b>Supply voltage</b> 24 VDC galv. insulated
<b>Digit height</b> 10 mm																	<b>Measuring input</b> Shunt
<b>Digital input</b> without																	<b>Analog output</b> without
																	<b>Sensor supply</b> without