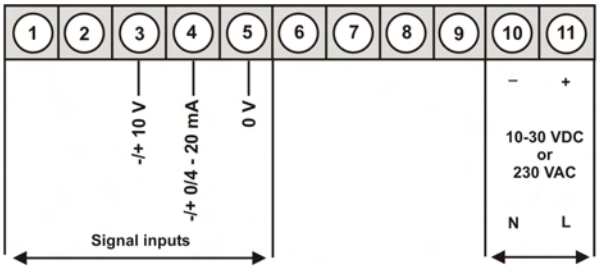
M2 – 5-digit digital panel meter in 96x48 mm (BxH) Standard signal 0/4-20 mA, 0-10 VDC

- red display of -19999…99999 digits (optional green, orange, blue or tricolour display)
- compact installation depth: 70 mm without plug-in terminal
- adjustment via factory default or directly on the sensor signal
- min-/max-memory with adjustable permanent display
- 30 additional adjustable supporting points
- display flashing at threshold value exceedance/undercut
- zero key for actuation of tara- /hold-function, display change, setpoint setting, alarm actuator
- flexible alarm system with adjustable delay times
- volume measurement (Totaliser)
- mathematical functions like reciprocal value, square root, square and rounding
- constant setting / respectively setpoint setting
- sliding averaging
- brightness control via parameters or front keys
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 2 relay outputs
- optional: sensor supply
- optional: 1 independently scalable analog output
- optional: galv. insulated digital input for the triggering of Tara, Hold, display change
- accessories: pc-based configuration-kit PM-TOOL with CD & USB adapter
- on demand: devices for working temperatures of -20°C…60°C or -40°C…70°C

ORDER NUMBER
(without options)

EUR

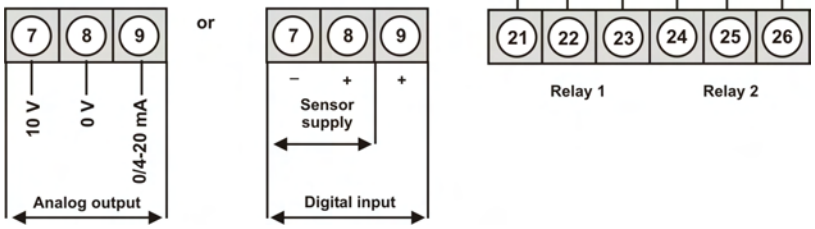
• Direct current, direct voltage



Supply 230 VAC — M2-1VR5B.0001.570CD

Supply 10-30 VDC — M2-1VR5B.0001.670CD

Options:



• Product key options:

M	2-	1	V	R	5	B.	0	0	0	1.	5	7	0	C	D
M	2-	1	V	R	5	B.	0	0	0	1.	6	7	0	C	D

EUR

2	2 relay outputs
1	Without keypad, operation on the back
4	Voltage supply 115 VAC
X	Analog output 0/4-20 mA, 0-10 VDC with 230 VAC
	Analog output 0/4-20 mA, 0-10 VDC with 10-30 VDC
2	Sensor supply 10 VDC / 20 mA incl. digital input with 230 VAC
	Sensor supply 10 VDC / 20 mA incl. digital input with 10-30 VDC
3	Sensor supply 24 VDC / 50 mA incl. digital input with 230 VAC
	Sensor supply 24 VDC / 50 mA incl. digital input with 10-30 VDC
I	Digital input galv. insulated
B	Blue
G	Greene
Y	Orange
T	Tricolour (Red-Green-Orange)*

*For devices with a 230 VAC voltage supply, there is only one option possible: relay outputs, analog output or sensor supply.

Please state physical unit on demand, e.g. min.

ORDER NUMBER

EUR

• Parameterisation software

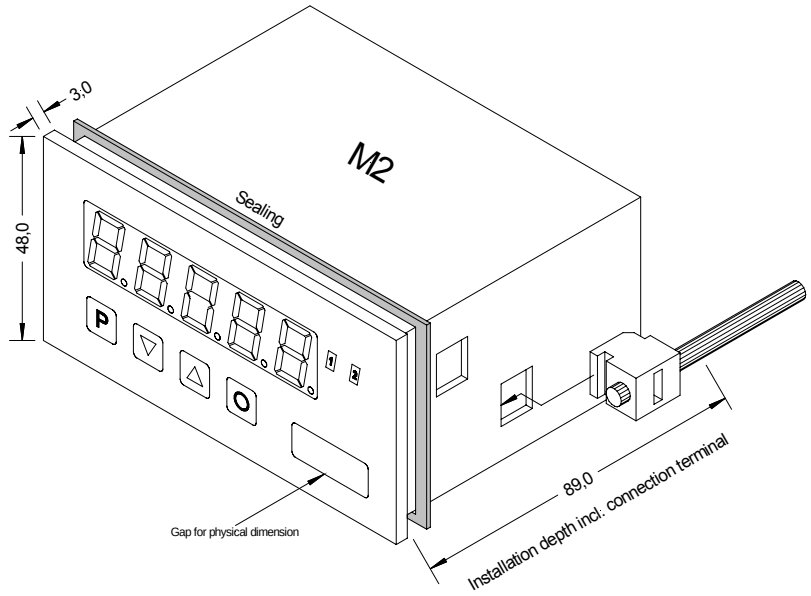
PC based configuration software PM-Tool for devices without keypad, for a simple adjustment of standard devices, incl. CD & USB-adapter. Programming is made via an interface on the back.

PM-TOOL-MUSB4

• Technical data

Dimension	Housing	B96 x H48 x D70 mm (including plug-in terminal D= 89 mm)	
	Panel cut-out	$92.0^{+0.8}$ x $45.0^{+0.6}$ 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. 250 g	
	Connection	plug-in terminal; line cross-section up to 2.5 mm^2	
Display	Display	5-digit	
	Digit height	14 mm	
	Segment colour	red (standard), optional available in green, blue, orange or tricolour (red/green/orange)	
	Display range	-19999 to 99999	
	Setpoints	optical display flashing	
	Overflow	horizontal bars at the top	
	Underflow	horizontal bars at the bottom	
	Display time	0.1 to 10.0 seconds	
Measuring input	Span	-12…12 V	/ -22…24 mA
	Measuring range	0-10 V	/ 0/4-20 mA
	Input resistance	Ri at ~200 kΩ	/ Ri at ~100 Ω
	Measuring fault	0.1% of measuring range, ± 1 Digit	/ 0.1% 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 1 second measuring time	
Output	Relay	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC	
	Switching cycle	30 * 10^3 at 5 AAC, 5 ADC ohm resistive burden 10 * 10^6 mechanically Separation in accordance with DIN EN 50178 / Specifications in accordance with DIN EN 60255	
	Analog output	0-10 VDC/ burden ≥ 10 kΩ, 0/4-20 mA burden ≤ 500 Ω, 16 Bit	
	Sensor supply	24 VDC / 50 mA 10 VDC / 20 mA	
Digital input	Input galv. insulated	< 2.4 OFF; > 10 V ON; max. 30 VDC, Ri at ~ 5 kΩ	
Power pack	Supply	230 VAC 50/60 Hz +/- 10 % (max. 10 VA) 10-30 VDC, galvanic insulated (max. 4 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:



- Order key

	M	2-	1	V	R	5	B.	0	0	0	1.	6	7	0	C	D	

Basic type M-Line

Installation depth

89 mm (incl. plug-in terminal) [2]

Housing size

96x48x70 mm (BxHxD) [1]

Display type

V, A [V]

Display colours

Blue [B]
Green [G]
Red [R]
Red/Green/Orange [T]
Orange [Y]

Number of digits

5-digit [5]

Digit height

14 mm [B]

Digital input

without [0]
1x digital input [I]

Dimension

[D] physical unit

Version

[C] C

Setpoints

[0] no setpoints
[2] 2 relay outputs

Protection class

[1] without keypad, operation on the back
[7] IP65 / plug-in terminal

Supply voltage

[4] 115 VAC
[5] 230 VAC
[6] 10-30 VDC galv. insulated

Measuring input

[1] Direct current, direct voltage

Analog output

[0] without
[X] 0-10 VDC, 0/4-20 mA

Sensor supply

[0] without
[2] 10 VD / 20 mA incl. digital input
[3] 24 VDC / 50 mA incl. digital input