



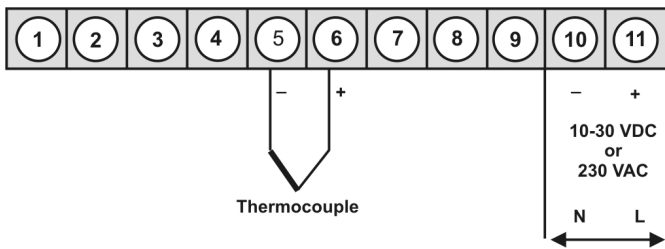
## **M2 – 5-digit digital panel meter in 96x48 mm (BxH) Thermocouple type L, J, K, B, S, N, E, T, R**

- 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
- display flashing at threshold value exceedance/undercut
- flexible alarm system with adjustable delay times
- 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: 1 independently scalable analog output
- accessories: pc-based configuration-kit PM-TOOL with USB adapter
- on request: devices for working temperatures of -20°C...60°C or -40°C...70°C

**ORDER NUMBER**  
(without options)

**EUR**

• **Thermocouple type L, J, K, B, S, N, E, T, R**



Supply 230 VAC

**M2-1TR5B.040X.570xD**

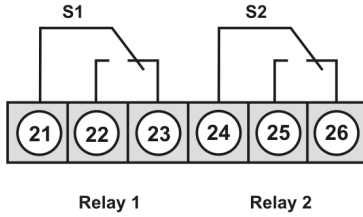
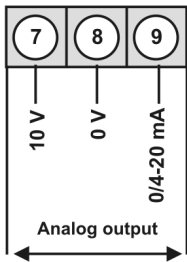
**206.50**

Supply 10-30 VDC

**M2-1TR5B.040X.670xD**

**254.20**

**Options:**



• **Product key options**

M	2-	1	T	R	5	B.	0	4	0	X.	5	7	0	x	D
M	2-	1	T	R	5	B.	0	4	0	X.	6	7	0	x	D

		EUR
D	Dimension/physical unit, customer-specific settings	35.00
2	2 relay outputs	35.00
1	Without keypad, operation via PC software PM-TOOL	10.60
4	Voltage supply 115 VAC	10.90
X	Analog output 0/4-20 mA, 0-10 VDC with 230 VAC	105.90
	Analog output 0/4-20 mA, 0-10 VDC with 10-30 VDC	137.70
B	Blue	46.60
G	Green	10.10
Y	Orange	10.10
T	Tricolour (Red-Green-Orange)*	31.80

\*Only one option available with 230 VAC voltage supply: relay outputs, analog output or sensor supply.

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

• **Parameterisation software**

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

**ORDER NUMBER**

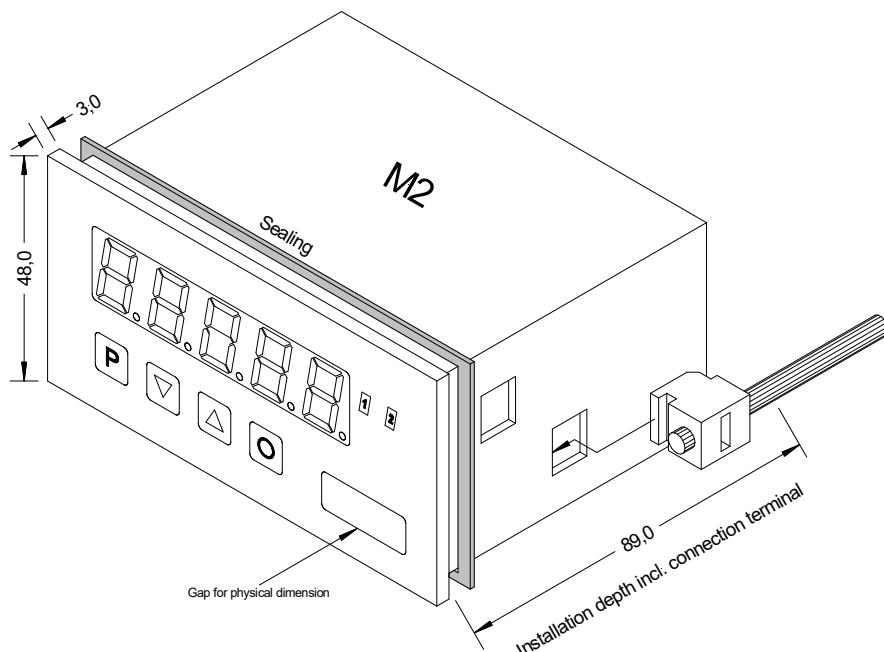
**EUR**

**PM-TOOL-MUSB4**

**94.30**

• **Technical data**

<b>Dimension</b>	Housing Panel cut-out Fixing Housing material Sealing material Protection class Weight Connection	B96 x H48 x D70 mm (including plug-in terminal D= 89 mm) 92.0 <sup>+0.8</sup> x 45.0 <sup>+0.6</sup> mm screw elements for insulation thickness up to 3 mm PC Polycarbonate, black EPDM, 65 Shore, black at the front IP65 standard, back side IP00 approx. 250 g plug-in terminal; line cross-section up to 2.5 mm <sup>2</sup>
<b>Display</b>	Display Digit height Segment colour Display range Setpoints Overflow Underflow Display time	5-digit 14 mm red (standard), optional available in green, blue, orange or tricolour (red/green/orange) -19999 to 99999 optical display flashing horizontal bars at the top horizontal bars at the bottom 0.1 to 10.0 seconds
<b>Measuring input</b>	Measuring range  Measuring fault Temperature drift Measuring time Measuring principle Resolution Characteristic curve fault Reference junction	Type L -200...900°C Type J -210...1200°C Type K -270...1372°C Type B 80...1820°C Type S -50...1768°C Type N -270...1300°C Type E -270...1000°C Type T -270...400°C Type R -50...1768°C  2 K, ± 1 Digit 100 ppm/K 0.1 ... 10.0 seconds U/F-conversion 0.1°C <± 1 K thermistor
<b>Output</b>	Relay Switching cycle  Analog output	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC 10 * 10 <sup>3</sup> at 5 AAC, 5 ADC ohm resistive burden, 10 * 10 <sup>6</sup> mechanically Separation in accordance with DIN EN 50178 / Specifications in accordance with DIN EN 60255  0-10 VDC/ burden ≥ 10 kΩ, 0/4-20 mA burden ≤ 500 Ω, 16 bit
<b>Power pack</b>	Supply	230 VAC 50/60 Hz ±10% (max. 10 VA) 10-30 VDC, galvanic isolated (max. 4 VA)
<b>Memory</b>	EEPROM	Data life ≥ 100 years at 25°C
<b>Ambient conditions</b>	Working temperature Storing temperature Climatic density	0 to +60°C -20 to +80°C relative humidity 0-85% on years average without dew
<b>CE-sign</b>	Conformity to directive 2014/30/EU	
<b>EMV</b>	EN 61326, EN 55011	
<b>Safety standard</b>	according to low voltage directive 2014/35/EU, EN 61010; EN 60664-1	
<b>Housing:</b>		



• Order key

	M	2-	1	T	R	5	B.	0	4	0	X.	6	7	0	x	D	
<b>Basic type M-Line</b>																	<b>Dimension</b>
																	<input type="checkbox"/> D physical unit
<b>Installation depth</b>																	<b>Version</b>
89 mm (incl. plug-in terminal)																	<input type="checkbox"/> x internal version
<b>Housing size</b>																	<b>Switching points</b>
96x48x70 mm (BxHxD)																	<input type="checkbox"/> 0 no switching point
																	<input type="checkbox"/> 2 2 relay outputs
<b>Display type</b>																	<b>Protection class</b>
Temperature																	<input type="checkbox"/> 1 without keypad, operation via PM-TOOL
																	<input type="checkbox"/> 7 IP65 / plug-in terminal
<b>Display colours</b>																	<b>Supply voltage</b>
Blue																	<input type="checkbox"/> 4 115 VAC
Green																	<input type="checkbox"/> 5 230 VAC
Red																	<input type="checkbox"/> 6 10-30 VDC galv. isolated
Red/Green/Orange																	
Orange																	
<b>Number of digits</b>																	<b>Measuring input</b>
5-digit																	<input type="checkbox"/> X Thermocouple type B, E, J, K, L, N, R, S, T
<b>Digit height</b>																	<b>Analog output</b>
14 mm																	<input type="checkbox"/> 0 without
																	<input type="checkbox"/> X 0-10 VDC, 0/4-20 mA
<b>Digital input</b>																	<b>Temperature devices</b>
without																	<input type="checkbox"/> 4 Thermocouple