



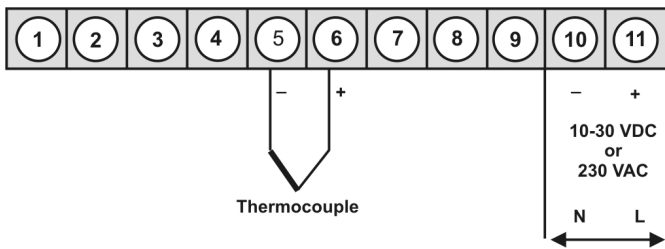
IM2 – 5-digit digital panel meter in 96x48 mm (BxH) Thermocouple type L, J, K, B, S, N, E, T, R

- 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 CD & 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

IM2-1TR5B.040X.570xD

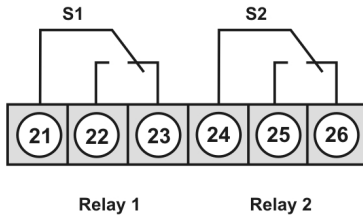
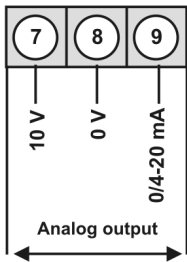
206.50

Supply 10-30 VDC

IM2-1TR5B.040X.670xD

254.20

Options:



• **Product key options**

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

		EUR
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. CD & USB-adapter. Programming happens via an interface on the back.

ORDER NUMBER

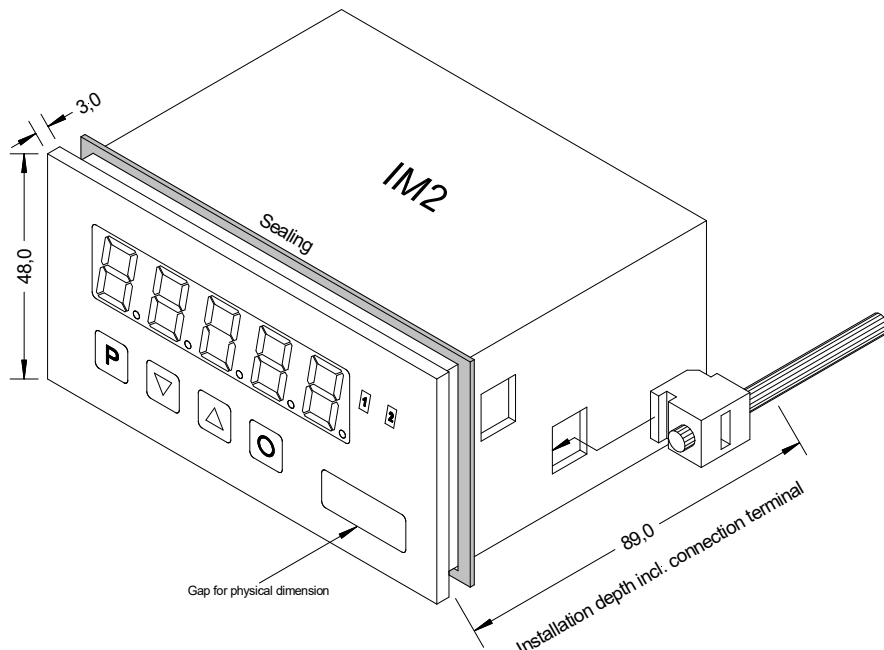
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PM-TOOL-MUSB4

94.30

• **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	Measuring range	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	
	Measuring fault	2 K, ± 1 Digit	
	Temperature drift	100 ppm/K	
	Measuring time	0.1 ... 10.0 seconds	
	Measuring principle	U/F-conversion	
	Resolution	0.1°C	
	Characteristic curve fault	<± 1 K	
	Reference junction	thermistor	
	Output	Relay	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC
		Switching cycle	10 * 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	
Power pack	Supply	230 VAC 50/60 Hz ±10% (max. 10 VA) 10-30 VDC, galvanic isolated (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 2014/30/EU		
EMV	EN 61326, EN 55011		
Safety standard	according to low voltage directive 2014/35/EU, EN 61010; EN 60664-1		
Housing:			



• Order key

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