



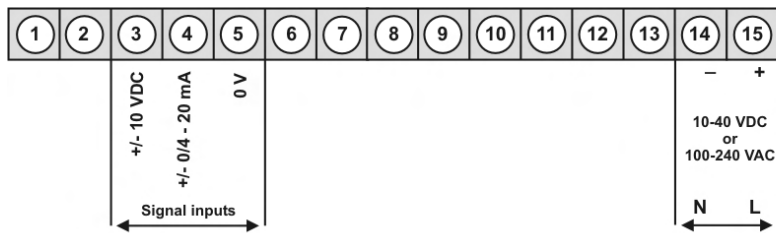
MB3 – 3-digit digital panel meter in 96x24 mm with bargraph Direct current/direct voltage signals 0/4-20 mA, 0-10 VDC

- red 3-digit digital display -199...999 Digits (optional green display)
- 30-points-bargraph tricolour
- adjustable bargraph or dot operation or operation with permanent display of the midpoint
- installation depth: 120 mm without plug-in screw terminal
- multi voltage power supply units 100-240 VAC, alternatively 10-40 VDC, galvanic isolated
- display adjustment via factory setting or directly via sensor signal
- min-/max-memory with adjustable permanent display
- 30 additional adjustable supporting points
- display flashing at threshold value exceedance/undercut
- zero key for the triggering of Hold, Tara, display change, setpoint setting, alarm actuation
- flexible alarm system with adjustable delay times
- volume metering (Totaliser)
- mathematic functions like reciprocal value, root extraction, squaring and rounding
- sliding averaging
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 1 or 2 relay outputs
- optional: sensor supply
- optional: 1 independently scalable analog output
- optional: galv. insulated digital input for the triggering of Tara, Hold or display change
- optional: interface RS232 or RS485
- accessories: PC-based configuration-kit PM-TOOL with CD & USB-adapter
- on demand: devices for working temperatures of -25°...60°C

ORDER NUMBER
(without options)

EUR

• **Direct current, direct voltage**



horizontal

vertical

MB3-3VT3HR.0001.S70AD

260,00

MB3-3VT3VR.0001.S70AD

260,00

Supply 100-240 VAC

horizontal

vertical

MB3-3VT3HR.0001.W70AD

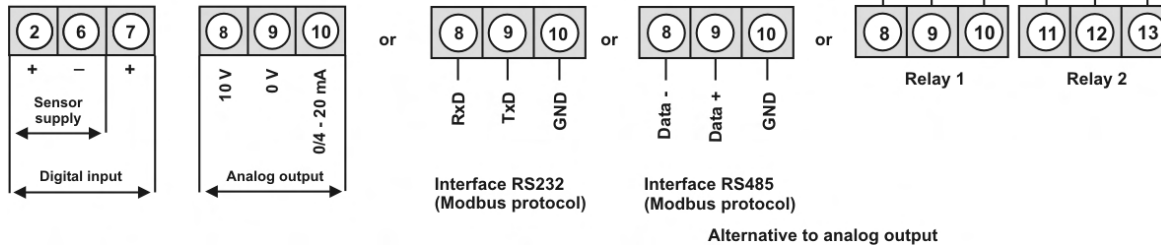
260,00

MB3-3VT3VR.0001.W70AD

260,00

Supply 10-40 VDC

Options:



• **Product key options**

M	B	3-	3	V	T	3	H	R.	0	0	0	1.	S	7	0	B	D
M	B	3-	3	V	T	3	V	R.	0	0	0	1.	S	7	0	B	D
M	B	3-	3	V	T	3	H	R.	0	0	0	1.	W	7	0	B	D
M	B	3-	3	V	T	3	V	R.	0	0	0	1.	W	7	0	B	D

Device with a supply of 100-240 VAC

EUR

Device with a supply of 10-30 VDC

1	1 relay output (only 1 switching output possible with option analog output)	20,00
2	2 relay outputs	30,00
X	Analog output 0/4-20 mA, 0-10 VDC	90,00
2	Sensor supply 10 VDC / 50 mA incl. digital input	35,00
3	Sensor supply 24 VDC / 50 mA incl. digital input	35,00
I	Digital input	10,00
3	Interface RS232 galv. isolated	65,00
4	Interface RS485 galv. isolated	65,00
G	Green display, 8 mm height	10,00

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

ORDER NUMBER

EUR

• **Parameterisation software**

Parameterisation 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.

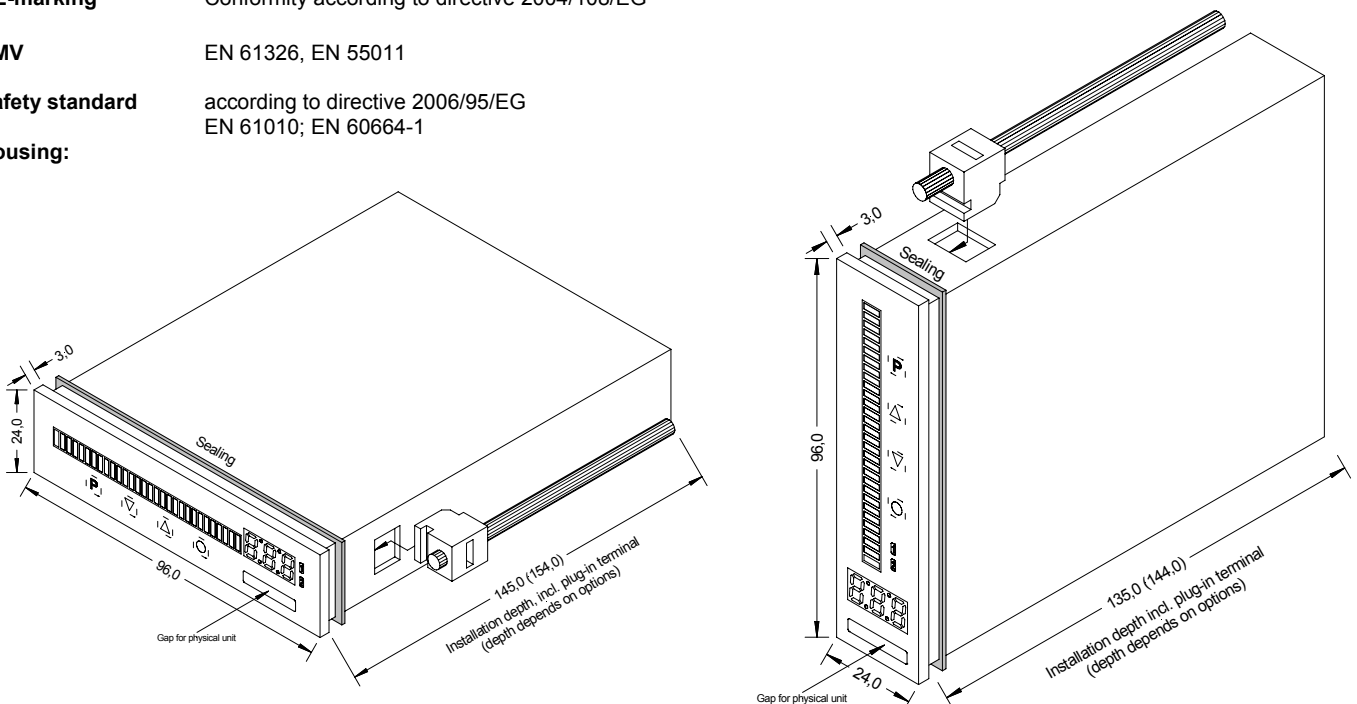
PM-Tool-MUSB4

89,00

• **Technical data**

Dimensions	Housing	B96 x H24 x T120 mm (T=144 mm incl. plug-in terminal)	
	Panel cut-out	92.0 ^{+0.8} x 22.0 ^{+0.3} mm	
	Fixing	screw elements for a wall thickness of up to 3 mm	
	Housing material	PC Polycarbonate, colour black UL94V-0	
	Sealing material	EPDM, 65 Shore	
	Protection class	IP65 standard at the front IP00 at the back	
	Weight	approx. 200 g	
	Connection	plug-in terminal; wire cross section up to 2.5 mm ²	
	Display	Display	3-digit, 8 mm high
		Display	-199...999
Bargraph		30 digit, tricolour	
Segment colour		red, optional green	
Overflow		flashing of the two upper bargraph elements	
Underflow		flashing of the two lower bargraph elements	
Display time	0.01...10.0 seconds		
Measuring input	Measuring span	-12...12 V / -22 mA...24 mA	
	Measuring range	0...10 V / 0/4...20 mA	
	Input resistance	R _i at ~200 kΩ / R _i at ~100 Ω	
	Measuring error	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-converter	
	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 load, 10 * 10 ⁶ mechanically Separation according to DIN EN50178 / Specific values according to 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 / 50 mA	
Digital input	Input	< 2.4 V OFF; >10 V ON; max. 30 VDC R _i ~ 5 kΩ	
Interface	Protocol	manufacturer-specific ASCII	
	RS232	9.600 baud, no parity, 8 dataBit, 1 stopBit	
	Wire length	max. 3 m	
	RS485	9.600 baud, no parity, 8 dataBit, 1 stopBit	
Wire length	max. 1000 m		
Power pack	Supply	100-240 VAC 50/60 Hz / DC +/- 10% (max. 10 VA) 10-40 VDC, galvanic insulated, 18-30 VAC 50/60Hz (max. 10 VA)	
Memory	EEPROM	Data life ≥ 100 years at 25°C	
Ambient conditions	Working temperature	0 to + 50 °C	
	Storing temperature	-20 to + 80 °C	
	Climatic density	relative humidity 0-85% on years average without dew	
CE-marking	Conformity according to directive 2004/108/EG		
EMV	EN 61326, EN 55011		
Safety standard	according to directive 2006/95/EG EN 61010; EN 60664-1		

Housing:



• Order key

	M	B	3-	3	V	T	3	H	R.	0	0	0	1.	W	7	2	B	D	
Standard type M-Line																			Dimension
																			<input type="checkbox"/> D physical unit (free choice)
Bargraph display	<input type="checkbox"/> B																		Version
Installation depth																			<input type="checkbox"/> B B
144 mm (incl. plug-in terminal)			<input type="checkbox"/> 3																Switching points
Housing size																			<input type="checkbox"/> 0 no switching point
B96xH24xD120 mm				<input type="checkbox"/> 3															<input type="checkbox"/> 1 1 switching point
Display type																			<input type="checkbox"/> 2 2 switching points
V, A		<input type="checkbox"/> V																	Protection class
Bargraph colours																			<input type="checkbox"/> 1 without keypad, operation on the back
Tricolour (red, green, orange)				<input type="checkbox"/> T															<input type="checkbox"/> 7 IP65 / plug-in terminal
Resolution																			Supply voltage
30 points					<input type="checkbox"/> 3														<input type="checkbox"/> S 100-240 VAC
Adjustment																			<input type="checkbox"/> W 10-40 VDC, galv. insulated
horizontal						<input type="checkbox"/> H													Measuring input
vertical						<input type="checkbox"/> V													<input type="checkbox"/> 1 Direct voltage, direct current
Digital display																			Analog output
3-digit, 8 mm, green																			<input type="checkbox"/> 0 none
3-digit, 8 mm, red																			<input type="checkbox"/> x 0-10 VDC, 0-20 mA, 4-20 mA
Digital input																			Sensor supply
none																			<input type="checkbox"/> 0 without
1x digital input																			<input type="checkbox"/> 2 10 VDC / 50 mA, incl. digital input
																			<input type="checkbox"/> 3 24 VDC / 50 mA, incl. digital input