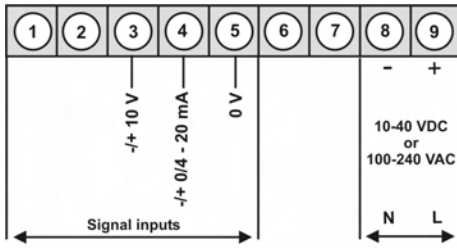




M3 – 5-digit digitales panel meter 96x48 (BxH) Standard signal 0/4-20 mA, 0-10 VDC

- red display of -19999...99999 digits (optional green, orange, blue or tricolour display)
- installation depth: 120 mm without plug-in screw terminal
- multi voltage power supply unit 100-240 VAC, alternatively 10-40 VDC
- adjustment via factory setting or directly on the sensor signal
- min-/max-memory with adjustable permanent display
- 30 additional adjustable support 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 measurement (Totaliser)
- mathematical functions like reciprocal value, square root, square and rounding
- constant setting / setpoint setting
- sliding averaging
- brightness control via parameter or front keys
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 2 or 4 relay outputs or 8 PhotoMos-outputs
- optional: sensor supply
- optional: 1 or 2 independently scalable analog outputs
- optional: galv. isolated digital input for the triggering Tara, Hold, 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 -20°C...60°C or -40°C...70°C

• **Direct current, direct voltage**



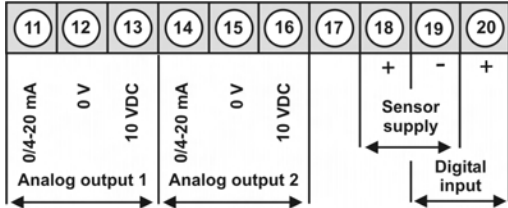
Supply 100-240 VAC, DC ± 10%

M3-1VR5B.0001.S70BD

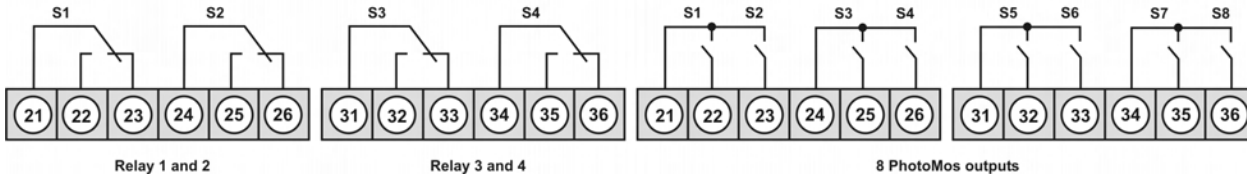
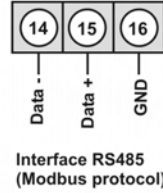
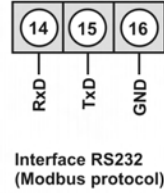
Supply 10-40 VDC, 18-30 VAC

M3-1VR5B.0001.W70BD

Options:



alternative for analog output 2



• **Order key options**

M	3-	1	V	R	5	B.	0	0	0	1.	S	7	0	B	D
M	3-	1	V	R	5	B.	0	0	0	1.	W	7	0	B	D

EUR

2	2 relay outputs
4	4 relay outputs
8	8 PhotoMos-outputs
1	without keypad, operation on the back
X	Analog output 0/4-20 mA, 0-10 VDC galv. isolated
Y	2 analog outputs galv. isolated
2	Sensor supply 10 VDC / 20 mA incl. digital input
3	Sensor supply 24 VDC / 50 mA incl. digital input
3	Interface RS232 galv. isolated
4	Interface RS485 galv. isolated
I	Digital input galv. isolated
B	Blue
G	Green
Y	Orange
T	Tricolour (Red-Green-Orange)

On demand state dimension unit on order, e.g. V.

• **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.

ORDER NUMBER

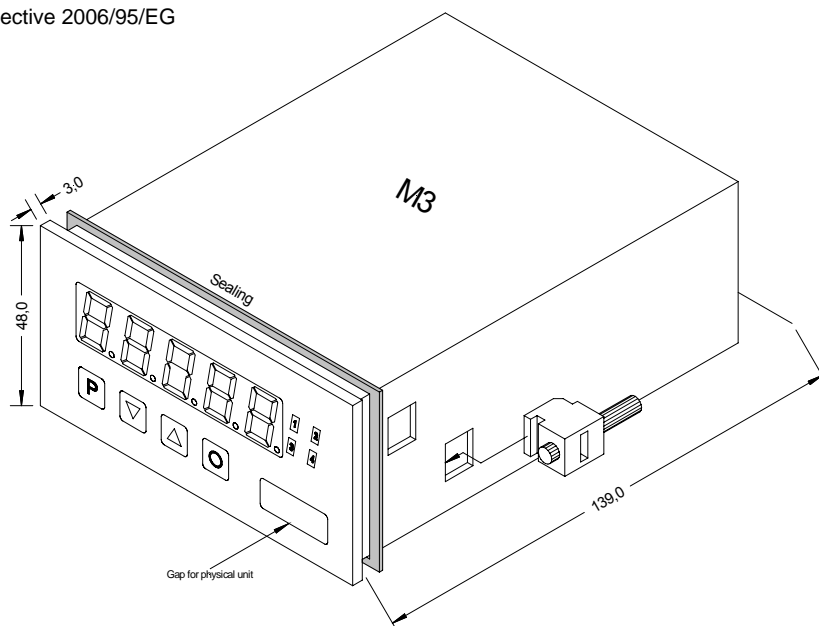
EUR

PM-TOOL-MUSB4

• **Technical data**

Dimensions	Housing Panel cut-out Fixing Housing material Sealing material Protection type Weight Connection	B96 x H48 x D120 mm, (incl. plug-in terminal D = 139 mm) 92.0 ^{+0.8} x 45.0 ^{+0.6} mm screw elements for insulation thickness up to 3 mm PC Polycarbonate, black EPDM, 65 Shore, black front side IP65 standard, back side IP00 approx. 350 g plug-in terminal; line cross-section up to 2.5 mm ²
Display	Display Digit height Segment colour Range of display Threshold 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
Measuring input	Span Measuring range Input resistance Measuring fault Temperature drift Measuring time Measuring principle Resolution	-12...12 V / -22...24 mA 0-10 VDC / 0/4-20 mA Ri at ~200 kΩ / Ri at ~100 Ω 0.1% of measuring range, ± 1 Digit / 0.1% of measuring range, ± 1 Digit 100 ppm/K 0.1 ... 10.0 seconds U/F- conversion approx. 18 Bit at 1s measuring time
Output	Relays Switching cycles PhotoMos output Analog output Sensor supply	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC 30 * 10 ⁵ at 5 AAC, 5 ADC contact rate, 10 * 10 ⁶ mechanically Separation in accordance with DIN EN50178 / Specifications in accordance with DIN EN 60255 NOC contacts: 30 VDC/AC, 4 A 0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 Bit 24 VDC / 50 mA 10 VDC / 20 mA
Digital input	Input galv. isolated	< 2.4 V OFF; >10 V ON; max. 30 VDC, Ri ~ 5 kΩ
Interface	Protocol RS232 RS485	manufacturer's specifics ASCII 9.600 Baud, no parity, 8 DataBit, 1 StopBit, wire length max. 3 m 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. 15 VA) 10-40 VDC, galvanic isolated, 18-30 VAC 50/60 Hz (max. 15 VA)
Memory	EEPROM	Data life ≥ 100 years at 25°C
Ambient conditions	Working temperature Storing temperature Climatic density	0 to + 60 °C -20 to + 80 °C 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	3-	1	V	R	5	B.	0	0	0	1.	S	7	0	B	D		
Basic type M-Line																		Dimension	
																		D physical unit (at buyer's option)	
Installation depth 139 mm (incl. plug-in terminal)																		Version	
																		B B	
Housing size 96x48x120 mm (BxHxD)																		Switching points	
																		0 no switching point	
																		2 2 relay outputs	
																		4 4 relay outputs	
																		8 8 PhotoMos-outputs	
Display type V, A, Ohm																		Protection class	
																		1 without keypad, via PM-TOOL	
																		7 IP65 / plug-in terminal	
Display colours																		Voltage supply	
Blue																		S 100-240 VAC	
Green																		W 10-40 VDC galv. isolated	
Red																			
Red/Green/Orange																			
Orange																			
Number of digits 5-digit																		Measuring input	
																		1 Direct voltage, direct current	
Digit height 14 mm																		Analog output	
																		0 without	
																		X 1x 0-10 VDC, 0/4-20 mA	
																		Y 2x 0-10 VDC, 0/4-20 mA	
Digital input																		Sensor supply	
without																		0 without	
1 digital input																		2 10 VDC / 20 mA (incl. digital input)	
Interface RS232																		3 24 VDC / 50 mA (incl. digital input)	
Interface RS485																			
Interface RS232																			
Interface RS485																			