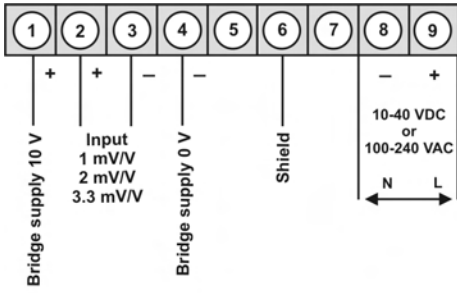




M3 – 5-digit digital panel meter in 96x48 mm (BxH) DMS-amplifier – weighing technology

- 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 or sensor alignment
- standard digital input for Hold, Tara or sensor alignment
- flexible alarm system with adjustable delay times
- mathematical functions like reciprocal value, square root, square and rounding
- 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: 1 or 2 independently scalable analog outputs
- 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

• Weighing technology



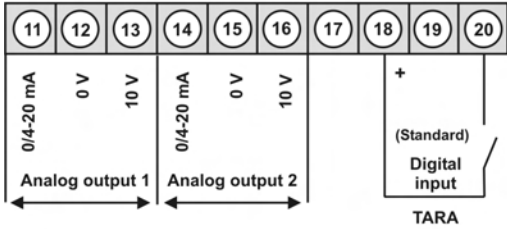
Supply 100-240 VAC, DC ± 10%

Supply 10-40 VDC, 18-30 VAC

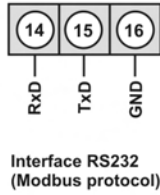
M3-1WR5B.020X.S70BD

M3-1WR5B.020X.W70BD

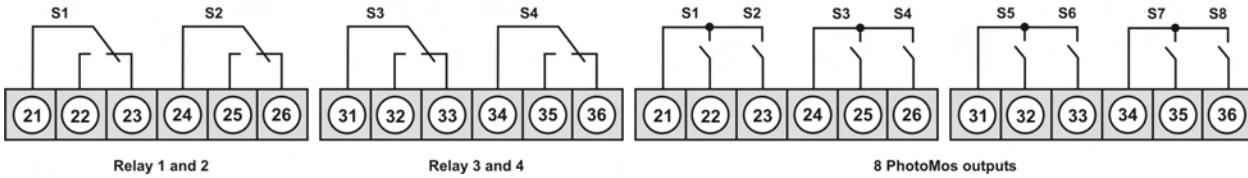
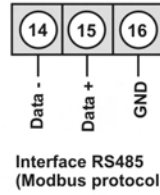
Options:



alternative to analog output 2



or



• Order key options

M	3-	1	W	R	5	B.	0	2	0	X.	S	7	0	B	D
M	3-	1	W	R	5	B.	0	2	0	X.	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. insulated
Y	2 analog outputs galv. insulated
3	Interface RS232 galv. insulated
4	Interface RS485 galv. insulated
B	Blue
G	Green
Y	Orange
T	Tricolour (Red-Green-Orange)

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

• 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.

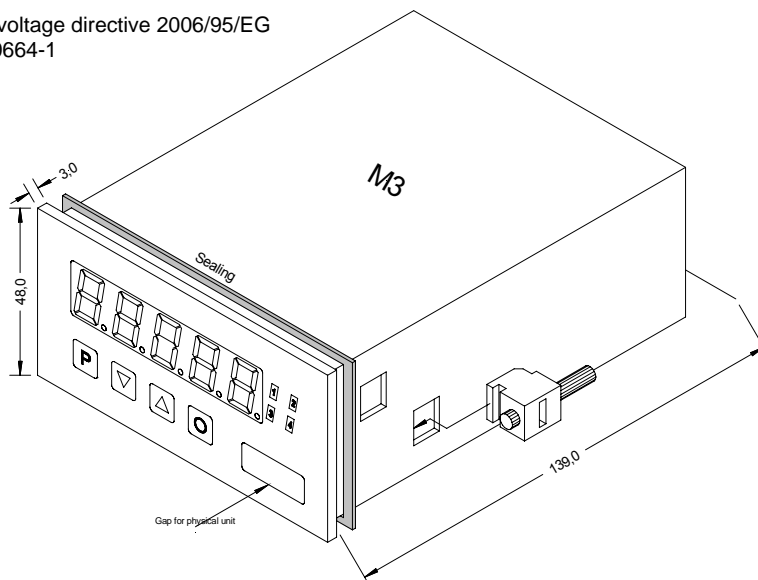
ORDER NUMBER

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	Sensor sensitivity Sensor alignment Measuring fault Drift of temperature Measuring time Measuring principle Resolution	1 mV/V, 2 mV/V, 3.3 mV/V, free to 4 mV/V with Tara always required 0.2% of measuring range in controlled electromagnetic environment 1 % of measuring range in industrial environment with a strong disturbing source 100 ppm/K 0.1 ... 10.0 seconds U/F-converter approx. 18 Bit at 1second measuring time, 3.3 mV/V of measuring range
Output	Relay Switching cycle PhotoMos output Analog output Bridge supply	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC 30 * 10 ³ at 5 AAC, 5 ADC ohm resistive burden, 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 10 VDC / 20-40 mA / 250-500 Ω
Digital input	Input galv. insulated	< 2.4 V OFF; >10 V ON; max. 30 VDC, R _i ~ 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 ± 10 % (max. 15 VA) 10-40 VDC, galvanic insulated, 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	W	R	5	B.	0	2	0	X.	S	7	0	B	D	
Basic type M-Line																	Dimension
																	<input type="checkbox"/> D physical unit (at buyer's option)
Installation depth 139 mm (incl. plug-in terminal)			<input type="checkbox"/> 3														Version
																	<input type="checkbox"/> B B
Housing size 96x48x120 mm (BxHxD)			<input type="checkbox"/> 1														Switching points
																	<input type="checkbox"/> 0 no switching point
																	<input type="checkbox"/> 2 2 relay outputs
																	<input type="checkbox"/> 4 4 relay outputs
																	<input type="checkbox"/> 8 8 PhotoMos-outputs
Display type Weighing technology				<input type="checkbox"/> W													Protection class
																	<input type="checkbox"/> 1 without keypad, via PM-TOOL
																	<input type="checkbox"/> 7 IP65 / plug-in terminal
Display colours																	Voltage supply
Blue				<input type="checkbox"/> B													<input type="checkbox"/> S 100-240 VAC
Green				<input type="checkbox"/> G													<input type="checkbox"/> W 10-40 VDC galv. insulated
Red				<input type="checkbox"/> R													
Red/Green/Orange				<input type="checkbox"/> T													
Orange				<input type="checkbox"/> Y													
Number of digits 5-digit																	Measuring input
																	<input type="checkbox"/> X 1.1 to 3.3 mV/V
Digit height 14 mm					<input type="checkbox"/> B												Analog output
																	<input type="checkbox"/> 0 without
																	<input type="checkbox"/> X 1x 0-10 VDC, 0/4-20 mA
																	<input type="checkbox"/> Y 2x 0-10 VDC, 0/4-20 mA
Digital input																	Bridge supply
without					<input type="checkbox"/> 0												<input type="checkbox"/> 2 10 VDC / 20-40 mA (incl. digital input)
Interface RS232					<input type="checkbox"/> 3	galv. insulated											
Interface RS485					<input type="checkbox"/> 4	galv. insulated											