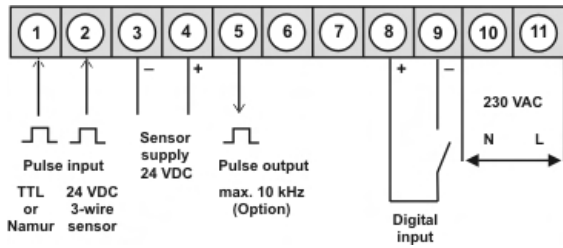




**M2 – 5-digit digital panel meter in 96x48 mm (BxH)
Frequency (0.01 Hz to 999.99 kHz) or
position survey via incremental encoder
with HTL- or TTL-output**

- 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
- 30 additional adjustable supporting points
- display flashing at threshold value exceedance/undercut
- Schmitt-Trigger-Input
- digital frequency filter for contact bounce suppression and interference suppression
- frequency filter with different pulse-duty factor
- zero key for actuation of tara- /hold-function, display change, setpoint setting, alarm actuator
- flexible alarm system with adjustable delay times
- volume measurement (Totaliser) for frequencies up to 1 kHz (pulse precisely)
- mathematical functions like reciprocal value, square root, squaring and rounding
- constant setting / respectively setpoint setting
- sliding averaging
- 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
- optional: galv. insulated digital input for the triggering of Tara, Hold, display change
- 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

• **Frequency (0.01 Hz to 999.99 kHz)**

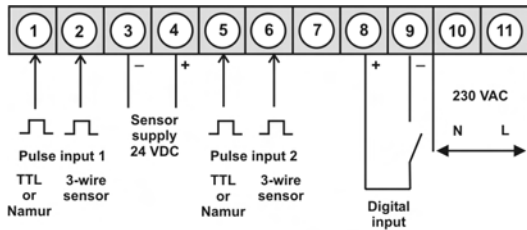


Supply 230 VAC

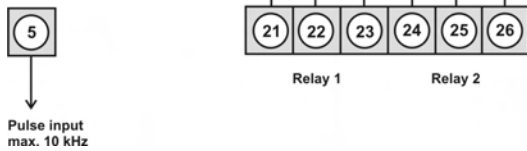
M2-1FR5B.0307.570CD

185,00

• **Frequency (0.01 Hz to 999.99 kHz) for incremental encoder S420**



Options:
alternative to pulse input 2



Advice:
Using Namur sensors with a nominal voltage of approx. 8 V, a sensor supply of 12 VDC needs to be provided.

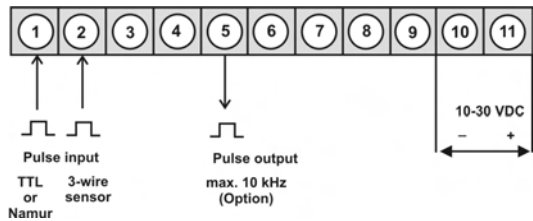
• **Product key options**

M	2-	1	F	R	5	B.	0	3	0	7.	5	7	0	C	D		EUR
																S420 pulse inputs for incremental encoder	40,00
																2 relay outputs	33,00
																1 Without keypad, operation on the back	10,00
																4 Voltage supply 115 VAC	10,25
																2 Sensor supply 10 VDC / 20 mA incl. digital input	15,35
																6 Sensor supply 12 VDC / 50 mA incl. digital input	15,35
																K Pulse output max. 10 kHz	10,00
																B Blue	44,00
																G Green	10,00
																Y Orange	4,00
																T Tricolour (Red-Green-Orange)*	30,00

* 230 VAC voltage supply is not available with relay outputs.

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

• Frequency (0.01 Hz to 999.99 kHz)

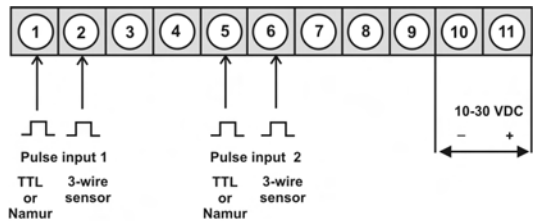


Supply 10-30 VDC

M2-1FR5B.0007.670CD

195,00

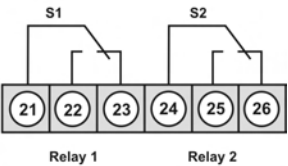
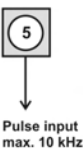
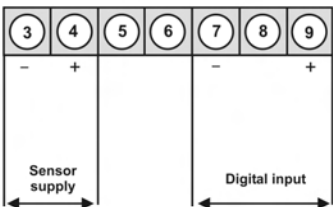
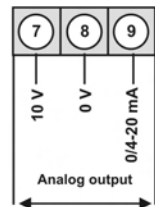
• Frequency (0.01 Hz to 999.99 kHz) for incremental encoder S420



Options:

alternative to analog output

alternative to pulse input 2



Advice:
Using Namur sensors with a nominal voltage of approx. 8 V, a sensor supply of 12 VDC needs to be provided.

• Product key options

M	2	1	F	R	5	B	0	0	0	7	6	7	0	C	D		EUR
																S420 Pulse inputs for incremental encoders	40,00
																2 2 relay outputs	33,00
																1 Without keypad, operation on the back	10,00
																X Analog output 0/4-20 mA, 0-10 VDC	120,00
																2 Sensor supply 10 VDC / 20 mA incl. digital input	55,00
																3 Sensor supply 24 VDC / 50 mA incl. digital input	55,00
																6 Sensor supply 12 VDC / 50 mA incl. digital input	55,00
																K Pulse output max. 10 kHz, incl. sensor supply 24 VDC / incl. digital input	65,00
																B Blue	44,00
																G Green	10,00
																Y Orange	4,00
																T Tricolour (Red-Green-Orange)*	30,00

* 230 VAC voltage supply is not available with relay outputs.

Please state physical unit on demand, e.g. U/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 is made via an interface on the back.

ORDER NUMBER

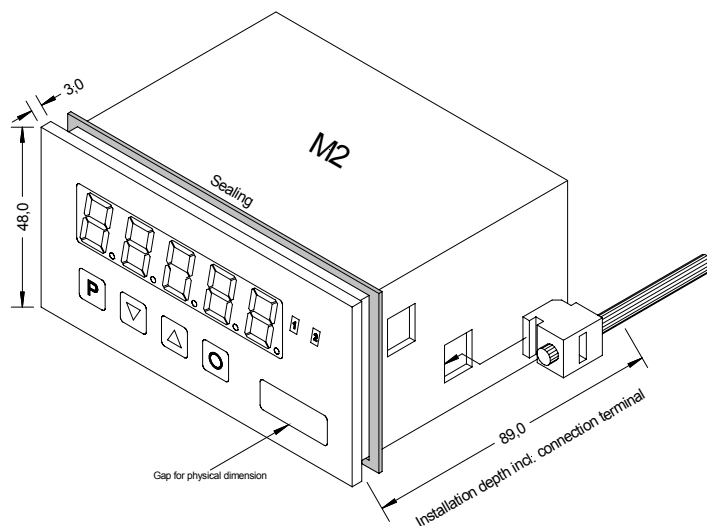
EUR

PM-TOOL-MUSB4

89,00

• 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	Signal	impulse input, TTL, Namur, 3-wire initiator PNP/NPN
	Input resistance	Ri at 24 V / 4 kΩ High/Low level >15 V / < 4 V High/Low TTL level >4.6 V / <1.9 V
	Input frequency	0.01 Hz...999.99 kHz, 0.01 Hz...9.9999 kHz with rev counter, 0...2.5000 kHz with position recording
	Measuring fault	0.05% of measuring range, ± 1 digit
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
	Pulse output	max. 10 kHz
	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 / 20 mA
Digital input	Input galv. insulated	< 2.4 OFF; > 10 V ON; max. 30 VDC, Ri at ~ 5 kΩ
Power pack	Supply	230 VAC 50/60 Hz +/- 10 % (max. 10 VA) 10-30 VDC, galvanic insulated (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 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	2-	1	F	R	5	B.	0	3	0	7.	6	7	0	C	D	