



PW5 – 5-digit digital panel meter in 96x48 mm (BxD) Strain gauge amplifier weighing technology for 350 Ω melt pressure sensors

- red display of -19999...99999 digits; 14 mm digit height
- installation depth: 120 mm without plug-in screw terminal
- DMS-6-wire measurement
- adjustable input amplification for 1 mV/V-, 2 mV/V- or 3.3 mV/V-sensors
- integrated bridge supply for standard 350 Ω (280-5.000 Ω) measuring bridges
- permanent wire breakage monitoring
- bipole input range for pressure and tractive forces
- integrated factory calibration for preset weighing cells
- auto-sensor recognition for 1 mV/V, 2 mV/V and 3.3 mV/V-sensors
- measuring rate with up to 100 measurements/s (measuring time is adjustable from 0.01s...10.00s)
- 24 bit transducer resolution, of which 19 bit are noiseless (500,000 / 0.0002% of measuring range)
- high long-term and temperature stability
- free selectable scaling and decimal point adjustment
- sensor alignment with 30 additional support points
- taring-function for manual and automatic control
- full automatic or semi-automatic calibration functions
- min/max-memory with adjustable permanent display
- display flashing at threshold exceedance / undercut
- flexible alarm system with adjustable delay times
- programming interlock via access code
- protection class IP65 at the front side
- plug-in screw terminal
- optional: 2 or 4 relay outputs
- optional: independently scalable analog output
- optional: interface RS232 or RS485
- accessories: PC-based configuration-kit PM-TOOL with USB-adapter

ORDERING NUMBER **EUR**
(without options)

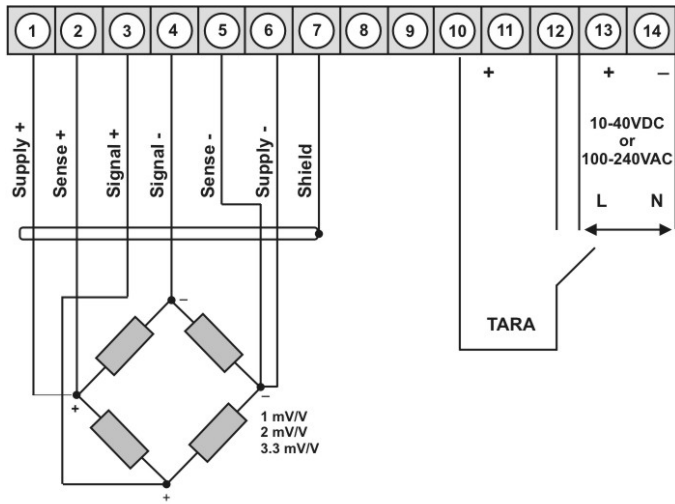
• **6-wire technology for strain gauge amplifier**

Supply 100-240 VAC / DC ±10%

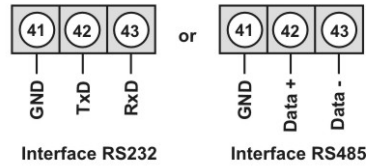
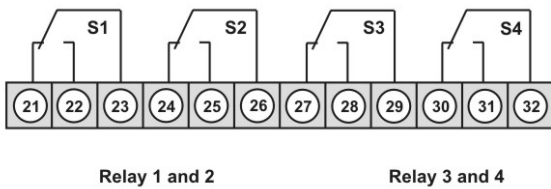
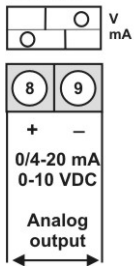
PW5.020X.1S70D **474.40**

Supply 10-40 VDC / 18-30 VAC

PW5.020X.1W70D **529.50**



Options:



• **Product key options**

P	W	5.	0	2	0	X.	1	S	7	0	D
P	W	5.	0	2	0	X.	1	W	7	0	D

		EUR
D	Dimension/physical unit, customer-specific settings	20.00
2	2 relay outputs	53.00
4	4 relay outputs	68.80
X	Analog output 0-10 VDC / 0/4-20 mA	127.10
3	Interface RS232 with galvanic isolation	63.50
4	Interface RS485 with galvanic isolation	63.50

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

• **Parameterisation software**

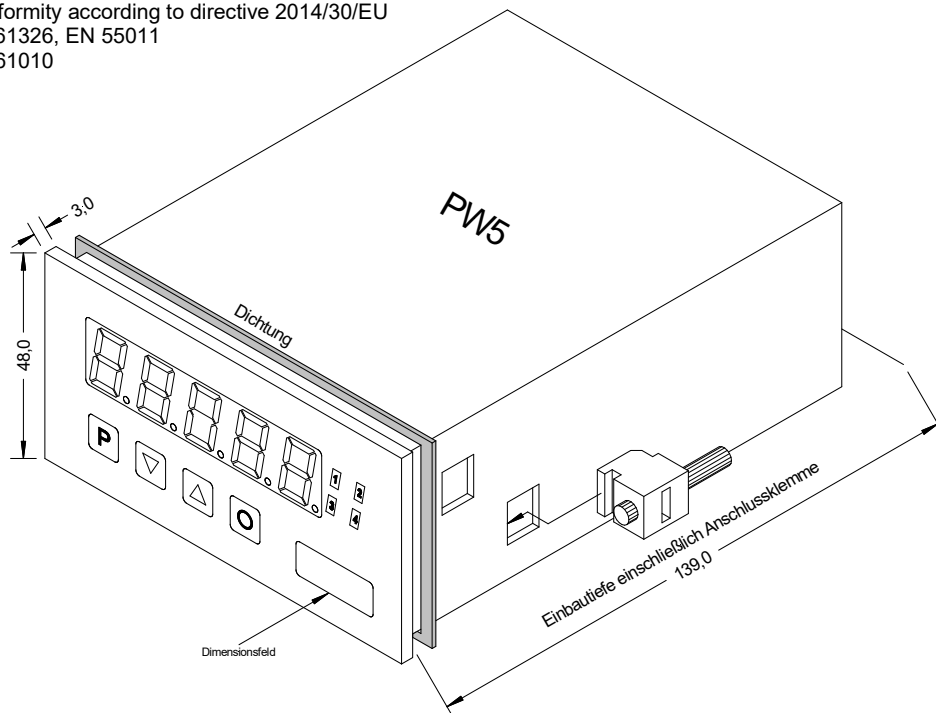
PC based configuration software PM-Tool for devices without keypad, for a simple adjustment of standard devices, incl. USB-adapter. Programming happens via an interface on the back.

PM-TOOL-MUSB4 **94.30**

• **Technical data**

Dimensions	Housing	B96 x H48 x D120 mm, including plug-in terminal D = 139mm	
	Panel cut-out	92.0 ^{+0.8} x 45.0 ^{+0.6} mm	
	Fixing	latchable screw element for a wall thickness up to 15 mm	
	Housing material	PC polycarbonate, black	
	Protection class	at the front IP65 standard, at the back IP00	
	Weight	approx. 350 g	
	Connection	plug-in terminal; wire cross-section up to 2.5 mm ²	
Display	Display	5-digit	
	Digit height	14 mm, segment colour: red	
	Display range	-9999 to 99999	
	Switching points	one LED per switching point	
	Overflow	horizontal bars at the top	
	Underflow	horizontal bars at the bottom	
	Display time	0.1 to 10.0 seconds	
Measuring input	Measuring range (adjustable)	± 6 mV/V ± 3.3 mV/V ± 2 mV/V ± 1 mV/V	
	Measuring accuracy (at 1s measuring time)	0.002% of measuring range – under laboratory conditions 0.1% of measuring range – in electromagnetic controlled surroundings 0.75% of measuring range – in industrial area	
	Measuring bridge	280 Ω...5000 Ω	
	Bridge supply	approx. 10 VDC	
	Input resistance signal	> 10 MΩ	
	Drift of temperature	20 ppm/K	
	Measuring principle	Sigma/Delta	
	Measuring rate	0.01s...10.00s	
	Resolution	24 bit, max. 19 bit RMS	
	Output	Relay	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC
		Switching cycles	30 * 10 ³ at 5 AAC, 5 ADC ohm resistive burden, 10 * 10 ⁶ mechanically Division according to DIN EN50178 / Characteristics according to DIN EN 60255
Analog output		0-10 VDC burden ≥ 10 kΩ, 0/4-20 mA burden ≤ 500 Ω, 16 bit	
Digital input	Input galv. isolated	<2.4 V OFF; >10 V ON; max. 30 VDC, R _i ~ 5 kΩ, respectively 15 V contact supply	
Interface	Protocol	ASCII manufacturer-specific	
	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. 15 VA) 10-40 VDC galv. isolated, 18-30 VAC 50/60 Hz (max. 15 VA)	
	Memory	EEPROM	Data life ≥ 100 years at 25°C
Ambient conditions	Working temperature	0 to +50°C	
	Storing temperature	-20 to +80°C	
	Weathering resistance	relative humidity 0-85% on years average without dew	
CE-sign	Conformity according to directive 2014/30/EU		
EMV	EN 61326, EN 55011		
Safety standard	EN 61010		

Housing:



• Ordering code

	P	W.	5	0	2	0	X.	1	S	7	0	D	
Processor device													Version <input type="checkbox"/> D Version D
Base 6-wire technology		<input checked="" type="checkbox"/> W											Setpoints <input type="checkbox"/> 0 no setpoint <input type="checkbox"/> 2 2 relay outputs <input type="checkbox"/> 4 4 relay outputs
Number of digits 5 digits			<input checked="" type="checkbox"/> 5										Mechanical options <input type="checkbox"/> 7 IP65, foil keyboard, plug-in terminal
Interface no interface RS232 (galv. isolated) RS485 (galv. isolated)									<input type="checkbox"/> 0 <input type="checkbox"/> 3 <input type="checkbox"/> 4				Power supply <input type="checkbox"/> S 100-240 VAC <input type="checkbox"/> W 10-40 VDC
Sensor supply Bridge supply 10 VDC											<input type="checkbox"/> 2		Size of housing <input type="checkbox"/> 1 96x48 mm (BxH)
Outputs no output 0-10 V, 0-20 mA, 4-20 mA											<input type="checkbox"/> 0 <input type="checkbox"/> X		Measuring input <input type="checkbox"/> X 1 mV/V, 2 mV/V, 3.3 mV/V