



Digital panel meter with processor based technology 5-digit

PVE5

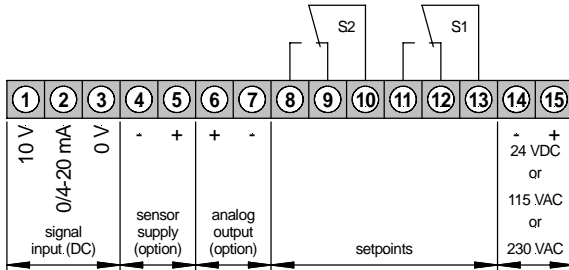
- Galvanic insulated
- 2 free scalable setpoints/hysteresis
- Analog output galvanic insulated
- Sensor supply galvanic insulated
- Min/max memory

Digital panel meter

- Direct voltage
- Direct current



• Direct voltage, direct current



Transmitter connection see page 22!

Power supply 230 VAC

ORDER NUMBER OF TYPE
(without options)

EUR

PVE 5.001.3522B 264,60

Power supply 115 VAC

PVE 5.001.3422B 276,40

Power supply 24 VDC (galv. insulated)

PVE 5.001.3722B 288,10

OPTIONS

Additional price

EUR

Green LED	x	
Protection IP54	x	7,10
Protection IP65	x	11,80
Plug-in terminal with protection IP40	x	16,50
Plug-in terminal with protection IP54	x	23,50
Plug-in terminal with protection IP65	x	28,20
Sensor supply 24 VDC/20 mA (supply voltage 230/115 VAC)*	x	28,20
Sensor supply 10 VDC/20 mA (supply voltage 230/115 VAC)*	x	28,20
Sensor supply 24 VDC/50 mA (supply voltage 24 VDC galv. insulated)	x	41,20
Sensor supply 10 VDC/20 mA (supply voltage 24 VDC galv. insulated)	x	41,20
<i>The sensor supply is galvanic insulated from the measuring input!</i>		
Analog output 0-10 VDC/12 bit (supply voltage 230/115 VAC)*	x	70,60
Analog output 0-20 mA/load 500 Ω/12 bit (supply voltage 230/115 VAC)*	x	88,20
Analog output 4-20 mA/load 500 Ω/12 bit (supply voltage 230/115 VAC)*	x	88,20
Analog output 0-10 VDC/12 bit (supply voltage 24 VDC galv. Insulated)	x	111,70
Analog output 0-20 mA/load 500 Ω/12 bit (supply voltage 24 VDC galv. Insulated)	x	117,60
Analog output 4-20 mA/load 500 Ω/12 bit (supply voltage 24 VDC galv. insulated)	x	117,60
<i>The analog output is galvanic insulated from the measuring input!</i>		
Measuring input 0-1 mA (S10)	x	17,60
Dimension strips selectable	x	
Other power supplies on demand!	x	

*Sensor supply and analog output cannot be used together!

Technical data

Dimension	Housing Assembly cut out Fastening Housing material Protective system	W 96 x H 24 x D 134 mm, including screw terminal (D = 148 mm, including plug-in terminal) 92.0 ^{+0.8} x 22.0 ^{+0.6} mm special quick plastic clamp proper to fix in wall thickness up to 50 mm PC/ABS-blend, colour black, UL94V-0 at the front IP40 connection IP00
	Weight	approx. 0.29 kg
	Connection	at the rear side via terminals up to 2.5 mm ²

Technical data

Measuring input

PVE5.001....
Direct voltage
Direct current

Measuring range 0-10 V, 0-20 mA - 4-20 mA – all ranges selectable via connection terminal
Input resistance Ri with 10 V = 100 K Ω 20 mA = ~100 Ω

Output

Relay output (Switching cycle) charge 240 VAC/0.25 A – 24 VDC/1 A, with ohm resistive burden
 $2 * 10^5$ at max. contact rate
 $10 * 10^6$ mechanically

Analog output 0-10 VDC (12 bit)
0-20 mA (12 bit) load max. 500 Ω
4-20 mA (12 bit) load max. 500 Ω

The analogue output is galvanic insulated from the measuring input.

Sensor supply
PVE5.001....

for 24 VDC/DC
for 115/230 VAC

(galvanic insulated from the measuring input)
24 VDC/50 mA – 10 VDC/20 mA (other sensor supplies/performances on demand)
24 VDC/20 mA – 10 VDC/20 mA (other sensor supplies/performances on demand)

Accuracy

Resolution -9999 up to 55000
Measuring fault +/-0.1% of measuring range, +/-2 digit
Temperature drift ~ 80 ppm/K

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Power unit

Supply voltage 230/115 VAC +/-10% (50-60 Hz), 24 VDC (+/-10%) galvanic insulated
Power consumption max. 5 VA

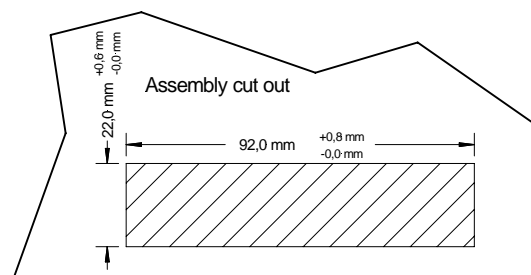
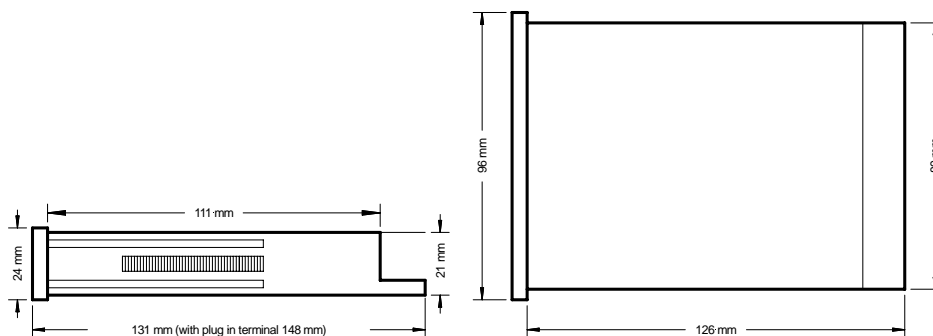
Indication

Display LED with 7 segments, 14 mm high, rot
Overflow Indication of 5 transversal bars
Indication time from 0.5 up to 10 seconds adjustable

Ambient conditions

Working temperature 0 up to +60°C
Storing temperature -20 up to +80°C

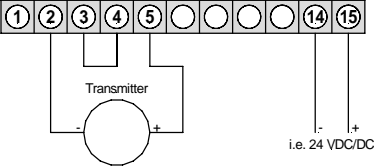
Housing:



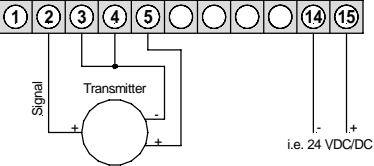
Connection diagrams

PVE instruments with voltage / current input

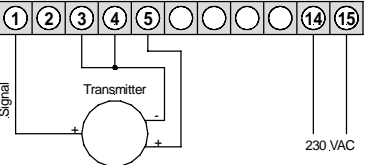
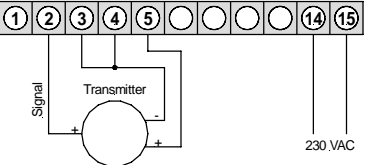
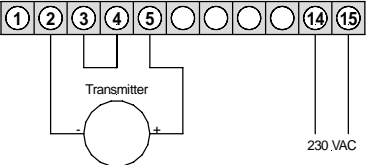
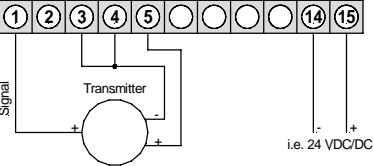
2-wire: 4-20 mA



3-wire: 0-20 mA



3-wire: 0-10 V / 0-5 V
0-1 V / 1-6 V



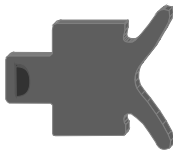
Ordering code PVE4, PTE4, PFE4, PFL4, PVE5

Digital panel meter with microprocessor based technology and 2 setpoints (standard)

P V E 4 0 0 1 3 5 2 2 B

Basic model		Internal Index	
Voltage metering	V	Setpoints (standard)	
Temperature metering	T	2	2 relay outputs
Frequency metering	F	Mechanical options	
Frequency range		1	Foil keyboard, protection IP65
Standard index	E	2	Foil keyboard, protection IP40
Frequency (0.001 Hz – 9999 Hz)	L	4	Foil keyboard, protection IP54
Number of digits		7	Plug-in terminal, foil keyboard, IP65
4 digits	4	8	Plug-in terminal, foil keyboard, IP40
5 digits	5	9	Plug-in terminal, foil keyboard, IP54
Sensor supply		Power supply	
No sensor supply	0	4	115 VAC
10 VDC	2	5	230 VAC
24 VDC	3	7	24 VDC (galvanic insulated)
Temperature device		Size of housing	
PT100 - 2 wire	2	3	96x24
PT100 - 3 wire	3	Measuring input	
PT100 - 4 wire	1	1	Direct voltage, direct current
PT1000 - 2 wire	6	2	Direct voltage, shunt measuring
Thermocouple	4	4	Alternating voltage, current
KTY	5	6	Resistance
Alternating voltage, current		7	Frequency
Standard	0	6	Range PT100 (600.0°C) – PTE device
True effective RMS	1	Thermocouple (PTE device)	
Outputs		x	Type L, J, K
no output	0	y	Type S, B, N
0-10 V	1	1	KTY81-1xx (PTE device) –50 to 150°C
0-20 mA	2	4	KTY84-1xx (PTE device) 0 to 300°C
4-20 mA	3		

Fastening clips



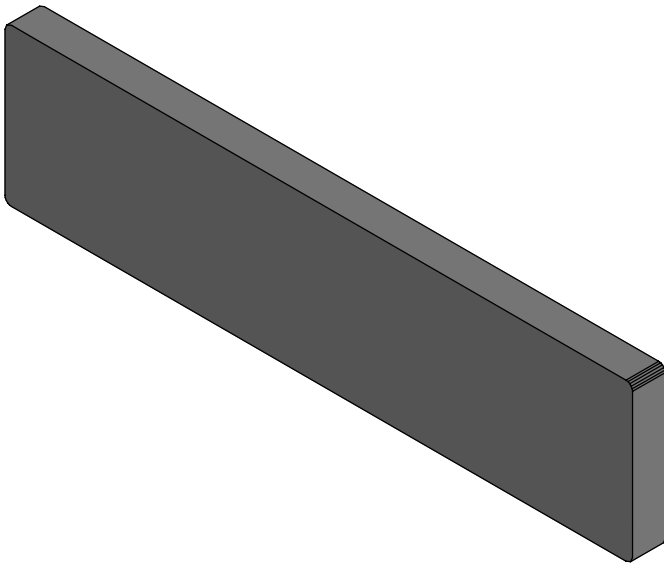
ORDER NUMBER OF TYPE EUR
ZU-KK2 0,50

Fixing screws



ZU-KS2 2,00

Blind covers with fastening clamps



GH022-07 5,10

Dimension strips

MONTWILL digital panel meter are equipped with an insertable dimension strip. Each dimension strip is bilateral printed with two different dimensions. The table below shows the available dimension strips which are attached to every panel meter. (free of charge)

ORDER NUMBER

GH014-48-XX

l/min	l/h	01	Gramm	MPa	22	mmWs	mm	43
l/s	K	02	pH	kPa	23	m	cm	44
mg	mg/l	03	Hz	kHz	24	m/h	m³	45
bar	psi	04	Pa	hPa	25	mm/s	m/s	46
mbar	bar abs	05	%Nm	%daN	26	s	min	47
kg	kg/h	06	O₂	mV	27	%	‰	48
Kp	% Vol	07	V	kV	28	h	%rel F	49
mNN	N	08	m³/h	l	29	VA	KVA	50
daN	Ω	09	Fl/h	ft/min	30	gal/h	gal/min	51
Nm	kN	10	Fl/min	Tabl/h	31	ppm	vpm	52
PS	Grad	11	tr/min	rpm	32	rpm	m/min	53
NO	kA	12	mS/cm	uS/cm	33	mWs	ml/ m³	54
NO₂	NO_x	13	cm³	cm/min	34			
°C	°F	14	N/m²	N/mm²	35			
CO	CO₂	15	%rH	g/m³	36			
min⁻¹	U/min	16	~	=	37			
l/min	mm/min	17	ml	ml/min	38			
mA	A	18	Ncm	MN	39			
W	kW	19	MW	Mp	40			
upm	yd/min	20	Var	Mvar	41			
t	t/h	21	km/h	m³/min	42			

(For substitute deliveries)

Price/pcs EUR 0,75