



**Digital panel meter  
3½-digit**

**DV, DT**

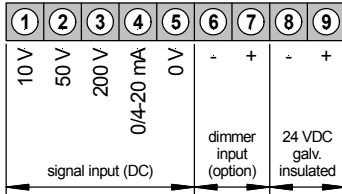
- Character height 14 mm
- Dimmer input optionally

# Digital panel meter

- Direct voltage
- Shunt
- Resistance
- PT100/PT1000
- Direct current
- Potentiometer
- Thermocouple

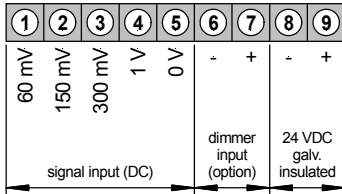


## • Direct voltage, direct current

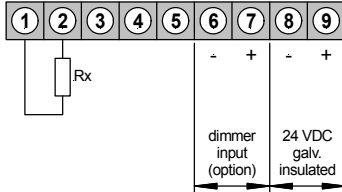


Transmitter connections see page 5

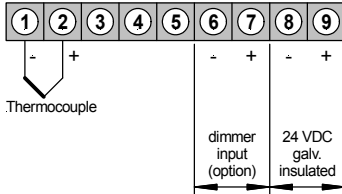
## • Direct current (Shunt)



## • Resistance, potentiometer



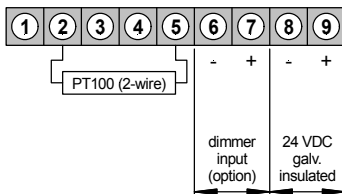
## • Thermocouple L, J or K



Typ L (FeCuNi - DIN) -50 up to +500°C  
 Typ J (FeCuNi - americ.) -50 up to +500°C  
 Typ K (NiCrNi) -100 up to +800°C

(fill in the desired type of thermocouple in the order number instead of x)

## • PT100 (2 wire)



ORDER NUMBER OF TYPE  
(without options)

Power supply 24 VDC (galv. insulated)

**DV 3.001.570B**

Power supply 24 VDC (galv. insulated)

**DV 3.002.570B**

Power supply 24 VDC  
(galv. Insulated)

Measuring range  $\leq 10K\Omega$   
 Measuring range  $\leq 100K\Omega$   
 Measuring range  $\leq 1M\Omega$

**DV 3.506.570B**  
**DV 3.606.570B**  
**DV 3.706.570B**

Power supply 24 VDC (galv. insulated)

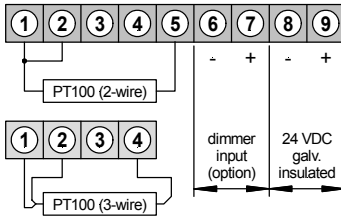
**DT 3.40x.570B**

Power supply 24 VDC  
(galv. insulated)

2 wire (199,9°C)  
 2 wire (600°C)

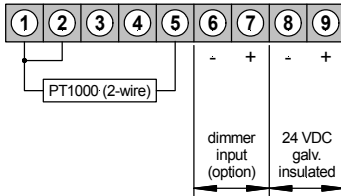
**DT 3.202.570B**  
**DT 3.206.570B**

• **PT100 (2+3 wire)**



Power supply 24 VDC 3+2 wire (199,9°C) **DT 3.302.570B**  
(galv. insulated) 3+2 wire (600°C) **DT 3.306.570B**

• **PT1000 (2 wire)**



Power supply 24 VDC 2 wire (199,9°C) **DT 3.602.776B**  
(galv. insulated)

Power supply 24 VDC 2 wire (600°C) **DT 3.606.776B**  
(galv. insulated)

## OPTIONS

	DV 3.001... Direct voltage	DV 3.002... Shunt	DV 3.006... Resistance	DT 3.40x... Thermocouple	DT 3.x02.../3.x06... PT100/0 (2 +3 wire)	Additional price
	EUR					
LED green on demand	X	X	X	X	X	
Plug in terminal	X	X	X			9,20
Protection IP54 at the front	X	X	X	X	X	6,15
Protection IP65 at the front (see following table)	X	X	X	X	X	28,10
Dimmer input	X	X	X	X	X	on demand
Other power supplies on demand	X	X	X	X	X	

• **Settings ex works with protective system IP65, adjustable on rear side**

Settings deviating from the standard settings must be indicated in the order description.	Standard	As desired	DV 3.001... Direct voltage	DV 3.002... Shunt	DV 3.006... Resistance	DT 3.40x... Thermocouple	DT 3.x02.../3.x06... PT100 (2 +3 wire)
	Blanking	no	yes	X	X	X	
Decimal point	100,0	without	X	X	X		
		10,00	X	X	X		

## Technical data

for all units of the DV3, DT3 series, if not indicated otherwise

<b>Dimension</b>	Housing Assembly cut out Fastening Housing material Protective system	B72 x H24 x T99 mm (T=115 mm, including plug in terminal) 68.0 <sup>+0.7</sup> x 22.2 <sup>+0.3</sup> mm special quick plastic clamp proper to fix in wall thickness up to 50 mm at the front IP40 connection IP00
<i>For all versions</i>	Weight Connection	approx. 110 g At the rear side via terminals up to 2.5 mm <sup>2</sup>
<b>Input</b> DV3.001... Direct voltage, direct current	Measuring range Input resistance	0-10 V, 50 V, 200 V, 0/4-20 mA – all ranges selectable via connection terminal Offset adjustment supported by offset potentiometer (-500 up to +500) Ri with 10 V = ~93 kΩ      200 V = ~2.2 MΩ 50 V = ~550 kΩ      20 mA = ~100 Ω

# Technical data

DV3.002.... Direct voltage (Shunt)	Measuring range	0-60 mV, 150 mV, 300 mV, 1 V – all ranges selectable via connection terminal Offset adjustment supported by offset potentiometer (-100 up to +100)
	Input resistance	R <sub>i</sub> with 60 mV = ~15 kΩ    300 mV = ~75 kΩ 150 mV = ~39 kΩ        1 V = ~220 kΩ

DV3.006.... Resistance	Measuring range	≤10 kΩ, ≤100 kΩ, ≤1 MΩ Offset adjustment supported by offset potentiometer (-100 up to +100)
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DT3.x02.... PT100	Sensor	2-wire, 3-wire
	Measuring range	-50.0 up to 199.9°C
	Sensor current	approx. 1 mA

DT3.x06.... PT100	Sensor	2-wire, 3-wire
	Measuring range	-100 up to + 600°C
	Sensor current	approx. 1 mA

DT3.602.... PT1000	Sensor	2-wire
	Measuring range	-50 up to + 199.9°C
	Sensor current	approx. 0.1 mA

DT3.606.... PT1000	Sensor	2-wire
	Measuring range	-100 up to + 600°C
	Sensor current	approx. 0.1 mA

DT3.40x.... Thermocouple	<u>L</u> FeCuNi (DIN)	-50 up to + 500°C
	<u>J</u> FeCuNi (amerik.)	-50 up to + 500°C
	<u>K</u> NiCrNi	-100 up to + 800°C

## Accuracy

<i>For all versions</i>	Measuring principle	Dual-Slope-Integration
DV3.001....	Temp. drift	~ 100 ppm/K
DV3.002....		~ 150 ppm/K
DV3.006....		~ 100 ppm/K
DT3.40x....		~ 100 ppm/K
DT3.x02....		~ 100 ppm/K
DT3.x06....		~ 100 ppm/K

<i>For all versions</i>	Measuring fault	+/-0.1% of measuring value, +/-1 digit
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DT3.x02....	Measuring fault	max. +/-0,5°C, +/-1 digit
DT3.x06....	Measuring fault	max. +/-1°C, +/-1 digit
DT3.60x....	Measuring fault	R <sub>L</sub> ≤ 10 Ω = +/-1K R <sub>L</sub> > 10 Ω ≤ 20 Ω = +/-2K
DT3.40x....	Measuring fault type J, L	max. 5°C
	Measuring fault type K	Range from -100°C up to -50°C max. 15°C Range > -50°C up to 600°C max 5°C Range > 600°C up to 800°C max 15°C

<i>For all versions</i>	Resolution	+/-1999 digit
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DT3.x02....		0,1°C
DT3.x06....		1°C
DT3.40x....		1°C

<b>Power unit</b>	Supply voltage	24 VDC (18-30 V), 24 VDC (+/-10%) galv. insulated
	Power consumption	max. 2 VA

<b>Indication</b>	Display	LED with 7 segments, 14 mm high, red 3½-digit = indication 1999
	Overflow	by showing „1“ on the fourth digit

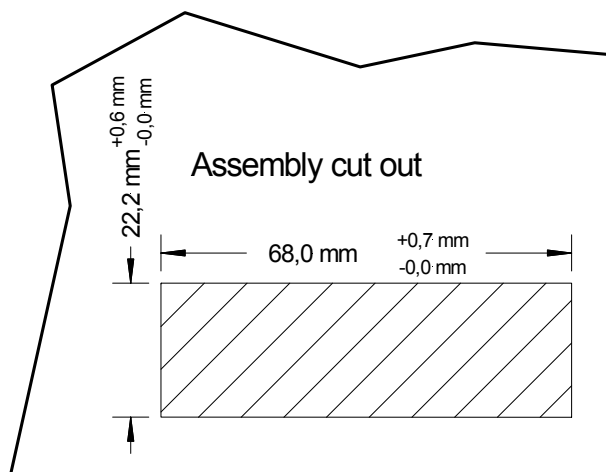
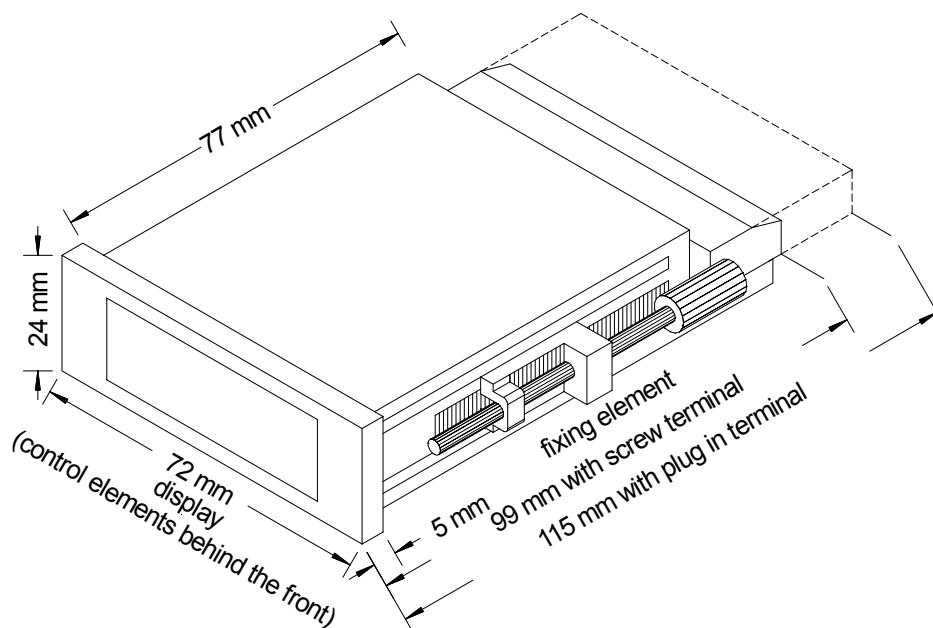
<i>For all versions</i>	Measuring time	1 sec.
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DV3.001.... DV3.002.... DV3.006....	Decimal point	Adjustable by bridging on front side
	Blanking	Blanking out of last digit (selectable by bridge on front side)

<b>Ambient conditions</b>	Working temperature	0 up to + 60 °C
	Storing temperature	-20 up to + 80°C

# Technical data

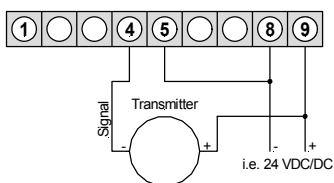
Housing:



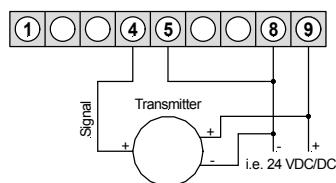
# Connection diagrams

DV3.001....

2-wire: 4-20 mA



3-wire: 0-20 mA  
4-20 mA



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

