



**Digital panel meter
3½-digit**

DV, DT

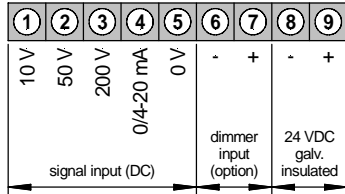
- Character height 14 mm
- Dimmer input optionally

Digital panel meter

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

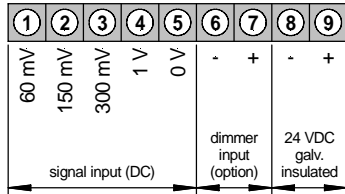


• Direct voltage, direct current

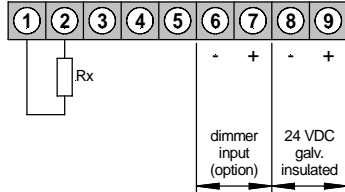


Transmitter connections see page 5

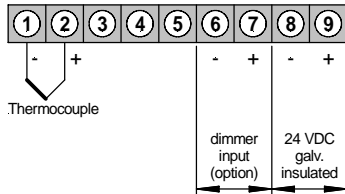
• Direct current (Shunt)



• Resistance, potentiometer



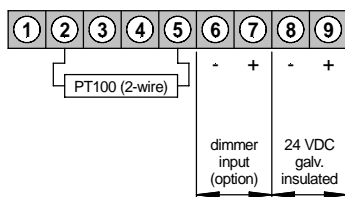
• Thermocouple L, J or K



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 EUR
(without options)

Power supply 24 VDC (galv. insulated)

DV 3.001.570B

170,00

Power supply 24 VDC (galv. insulated)

DV 3.002.570B

185,00

Power supply 24 VDC (galv. Insulated)

Measuring range ≤10KΩ

DV 3.506.570B

185,00

Measuring range ≤100KΩ

DV 3.606.570B

185,00

Measuring range ≤1MΩ

DV 3.706.570B

185,00

Power supply 24 VDC (galv. insulated)

DT 3.40x.570B

185,00

Power supply 24 VDC (galv. insulated)

2-wire (199.9°C)

DT 3.202.570B

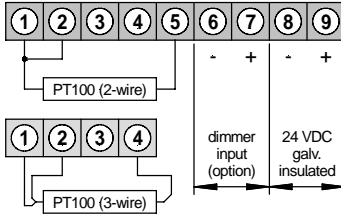
185,00

2-wire (600°C)

DT 3.206.570B

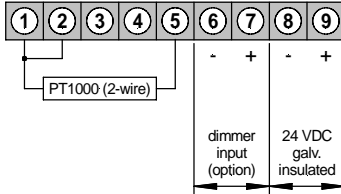
185,00

• **PT100 (2- + 3-wire)**



Power supply 24 VDC 3+2 wire (199.9°C)	DT 3.302.570B	185,00
(galv. insulated) 3+2 wire (600°C)	DT 3.306.570B	185,00

• **PT1000 (2-wire)**



Power supply 24 VDC 2-wire (199.9°C)	DT 3.602.776B	185,00
(galv. insulated)		
Power supply 24 VDC 2-wire (600°C)	DT 3.606.776B	185,00
(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					
Green LED 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 range, if not indicated otherwise

Dimension	Housing Assembly cut out Fastening Housing material Protective system	W 72 x H 24 x D 99 mm (D =115 mm, including plug-in terminal) 68.0 ^{+0.7} x 22.2 ^{+0.3} mm special quick plastic clamp proper to fix in wall thickness up to 50 mm PC/ABS-plastic blend, colour black, UL94V-0 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 ²

Input

DV3.001... Direct voltage, direct current	Measuring range	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)
	Input resistance	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 _i 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 (american)	-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 _L ≤ 10 Ω = +/-1K R _L > 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

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

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

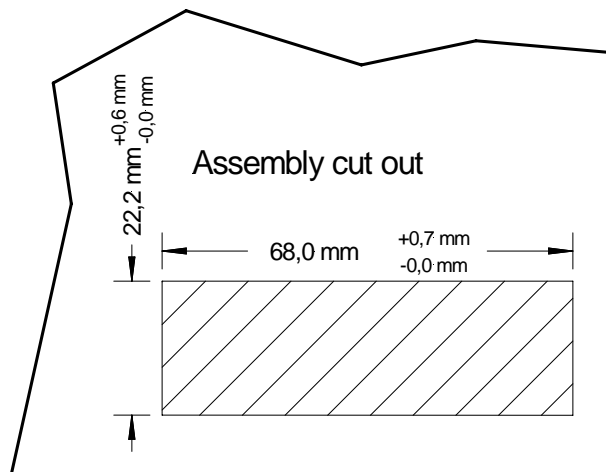
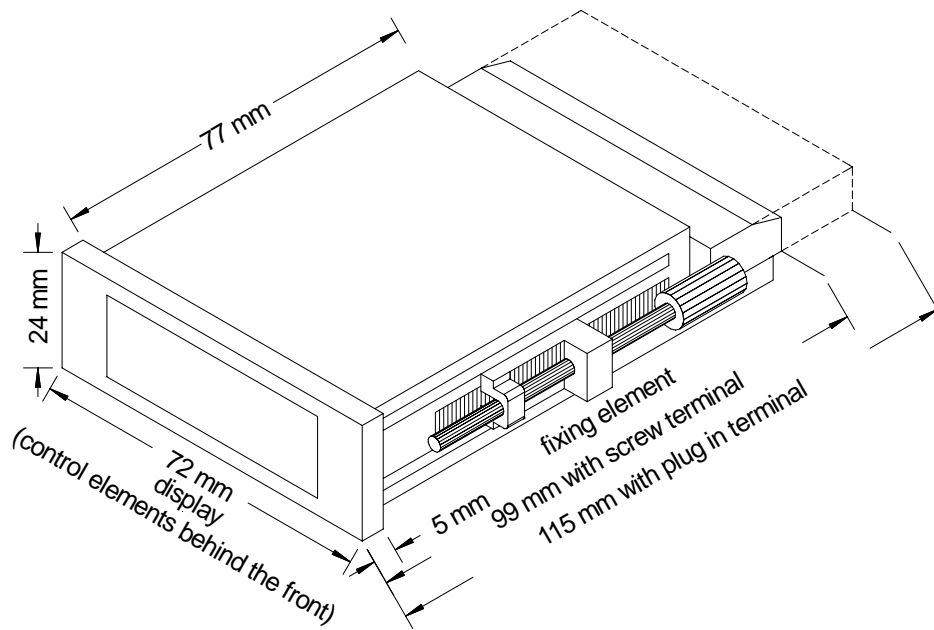
<i>For all versions</i>	Measuring time	1 second
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DV3.001.... DV3.002.... DV3.006....	Decimal point	Adjustable by bridging on front side
	Blanking	Blanking out of last digit (selectable by bridge on front side)

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

Technical data

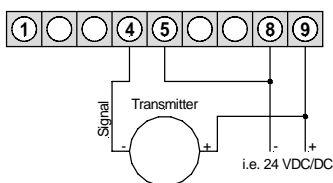
Housing:



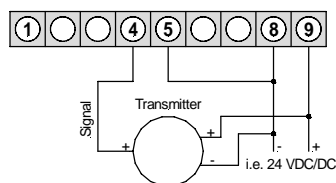
Connection diagrams

DV3.001....

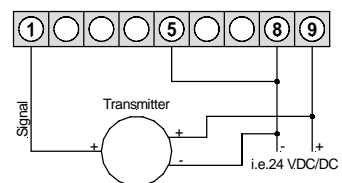
2-wire: 4-20 mA



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



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



Ordering code DV, DT

Digital panel meter

D V 3 0 0 1 5 7 0 B

Basic model		Internal index	
Voltage metering	V	Mechanical options	
Temperature metering	T	0	Protection IP40
		1	Protection IP65
		3	Protection IP54
Number of digits	3	5	Plug-in terminal, protection IP54
3½ digits		6	Plug-in terminal, protection IP40
		7	Plug-in terminal, protection IP65
Sensor supply		Power supply	
without	0	7	24 VDC (galvanic insulated)
Temperature device		Size of housing	
PT100-2 wire	2	5	72x24
PT100-3 wire	3		
PT1000-2 wire	6		
Thermocouple	4		
Resistance		Measuring input	
Measuring range up to 10 kΩ	5	1	Direct voltage, direct current
Measuring range up to 100 kΩ	6	2	Shunt
Measuring range up to 1 MΩ	7	6	Resistance
		2	Range PT100/1000 (200°C) – for DT
		6	Range PT100/1000 (600°C) – for DT
		L	Thermocouple type L – for DT
		J	Thermocouple type J – for DT
		K	Thermocouple type K – for DT
Outputs			
no output	0		