Digital panel meter
3½-digit

DV, DT

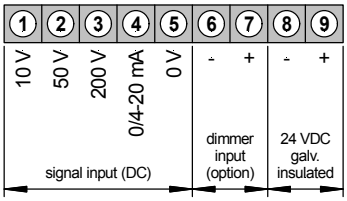
- Character height 14 mm
- Dimmer input optionally

Digital panel meter

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

ORDER NUMBER OF TYPE
(without options)

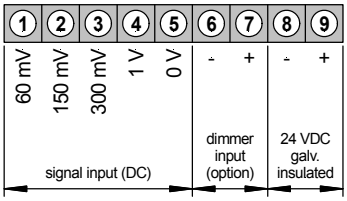
• *Direct voltage, direct current*



Power supply 24 VDC (galv. insulated) **DV 3.001.570B**

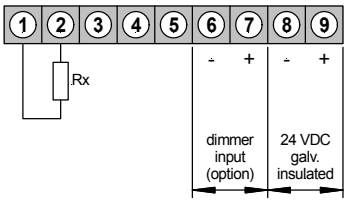
Transmitter connections see page 5

• *Direct current (Shunt)*



Power supply 24 VDC (galv. insulated) **DV 3.002.570B**

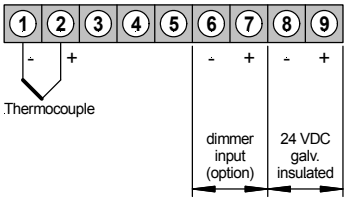
• *Resistance, potentiometer*



Power supply 24 VDC (galv. Insulated)

Measuring range ≤10KΩ **DV 3.506.570B**
Measuring range ≤100KΩ **DV 3.606.570B**
Measuring range ≤1MΩ **DV 3.706.570B**

• *Thermocouple L, J or K*

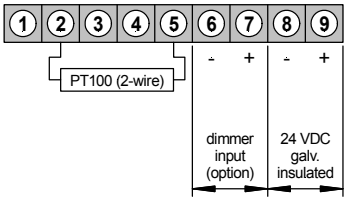


Power supply 24 VDC (galv. insulated) **DT 3.40x.570B**

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)*

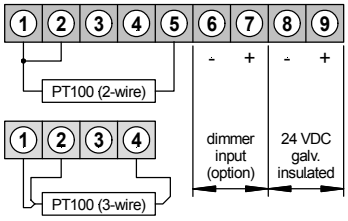


Power supply 24 VDC (galv. insulated)

2 wire (199,9°C) **DT 3.202.570B**
2 wire (600°C) **DT 3.206.570B**

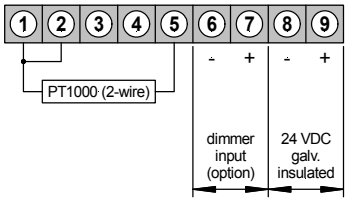
ORDER NUMBER OF TYPE (without options) **EUR**

- ***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 (galv. insulated)	2 wire	(199,9°C)	**DT 3.602.776B**
Power supply 24 VDC (galv. insulated)	2 wire	(600°C)	**DT 3.606.776B**

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)	
LED green on demand	x	x	x	x	x	
Plug in terminal	x	x	x			
Protection IP54 at the front	x	x	x	x	x	
Protection IP65 at the front *(see following table)*	x	x	x	x	x	
Dimmer input	x	x	x	x	x	
Other power supplies on demand	x	x	x	x	x	

- **Settings ex works with protective system *IP65, adjustable on rea rside***

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

Dimension	Housing	B72 x H24 x T99 mm (T=115 mm, including plug in terminal)
	Assembly cut out	$68.0^{+0.7}$ x $22.2^{+0.3}$ mm
	Fastening	special quick plastic clamp proper to fix in wall thickness up to 50 mm
	Housing material	PC/ABS-blend, colour black, UL94V-0
	Protective system	at the front IP40 connection IP00
	Weight	approx. 110 g
For all versions	Connection	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

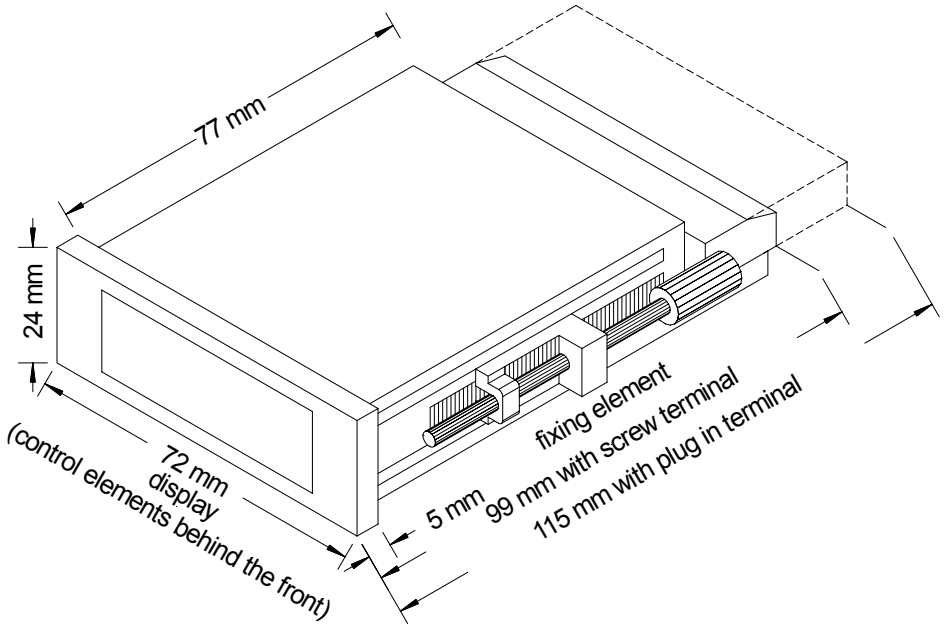
DV3.002....		
Direct voltage		
(Shunt)	Measuring range	0-60 mV, 150 mV, 300 mV, 1 V – all ranges selectable via connection terminal
		Offset adjustment supported by offset potentiometer (-100 up to +100)
	Input resistance	Ri with 60 mV = ~15 kΩ 300 mV = ~75 kΩ
		150 mV = ~39 kΩ 1 V = ~220 kΩ
DV3.006....		
Resistance	Measuring range	≤10 kΩ, ≤100 kΩ, ≤1 MΩ
		Offset adjustment supported by offset potentiometer (-100 up to +100)
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	**L** FeCuNi (DIN)	-50 up to + 500°C
	J FeCuNi (amerik.)	-50 up to + 500°C
	K NiCrNi	-100 up to + 800°C

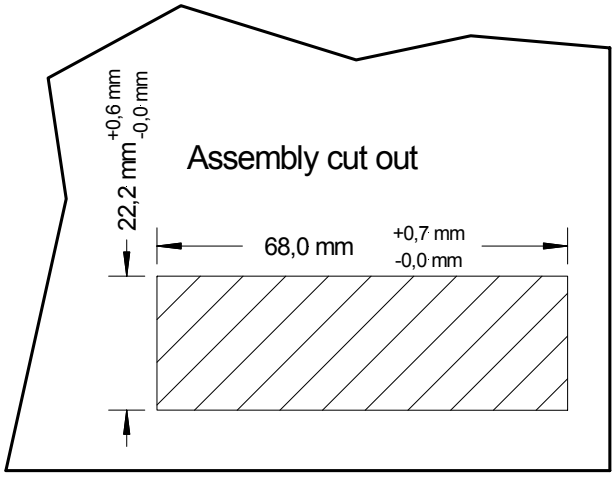
Accuracy

For all versions	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
For all versions	Measuring fault	+/-0.1% of measuring value, +/-1 digit
DT3.x02....	Measuring fault	max. +/-0,5°C, +/-1 digit
DT3.x06....	Measuring fault	max. +/-1°C, +/-1 digit
DT3.60x....	Measuring fault	$R_L \leq 10\ \Omega$ = +/-1K
		$R_L > 10\ \Omega \leq 20\ \Omega$ = +/-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
For all versions	Resolution	+/-1999 digit
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%) galv. 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
For all versions	Measuring time	1 sec.
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:

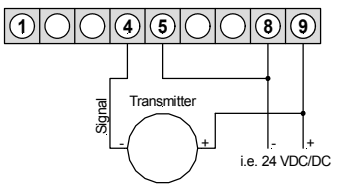




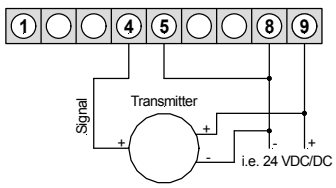
Connection diagrams

DV3.001....

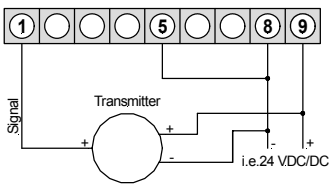
2-wire: 4-20 mA



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

Voltage metering V
Temperature metering T

Number of digits
3½ digits 3

Sensor supply
without 0

Temperature device
PT100-2 wire 2
PT100-3 wire 3
PT1000-2 wire 6
Thermocouple 4

Resistance
Measuring range up to 10 kΩ 5
Measuring range up to 100 kΩ 6
Measuring range up to 1 MΩ 7

Outputs
no output 0

Internal index

Mechanical options
0 Protection IP40
1 Protection IP65
3 Protection IP54
5 Plug in terminal, protection IP54
6 Plug in terminal, protection IP40
7 Plug in terminal, protection IP65

Power supply
7 24 VDC (galv. insulated)

Size of housing
5 72x24

Measuring input
1 Direct voltage, direct current
2 Shunt
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