

Terminals for temperature measuring circuits

Thermocouple terminals

WDU 2.5/TC

2.5 mm²

In hazardous area applications, the installation instructions and the rated data specifications for accessories given in the technical appendix must be followed.

Width/Length/height with TS35x7.5	mm
max. current / max. cond. cross-section	A/mm ²
Max. clamping range	mm ²

10.2 x 60 x 50.5
/ 2.5
0.13...2.5

Technical data

Rated data

Rated voltage	V
Rated current	A
Rated cross-section	mm ²
Rated impulse voltage / Pollution severity	kV/-
Gauge to IEC 60947-1 / UL94 Flammability class	
Approvals	

Clamped conductors (H05V/H07V)

solid / stranded	mm ²
flexible / Stranded wire with end ferrules	mm ²
Tightening torque range (clamping screw)	
Stripping length / Blade size	mm/-

2 conductors with same cross-section (H05V/H07V)

solid / stranded	mm ²
flexible / Stranded wire with end ferrules	mm ²

Note

Ordering data

Version

(NiCr - Ni) type K
(Cu - CuNi) type T
(Fe-CuNi) type J
(Pt 10% - Pt Rh/Pt 13% - Pt Rh) type SR
(Pt 10% Rh - Pt 6% Rh) type B
(NiCr - CuNi) type E
(NiSiI - Nicrosil) type N

Note

Accessories

End plate / partition

Dark beige Wemid
Dark beige Wemid

End bracket

Dark beige Wemid

Marking systems

(see assortment in catalogue 7)

Marking tags

For detailed information on other accessories and applications, refer to the „Accessories“ section

IEC 60947-7-1 / IEC 60584 Ex e ll  II 2 G D

IEC UL CSA EN 60079-7

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2.5 2.5

/ 3

A2 / V-0

 SIRA 02ATEX3153 U

Rated connection

0.5...2.5 / 1.5...2.5

0.5...2.5 / 0.5...2.5

0.4...0.6 Nm (M 2.5)

10 / 0.6 x 3.5 mm

0.5...1.5

0.5...1.5 / 0.5...1.5

Type Qty Order No.

WDU 2.5/TC TYP K 50 1024100000

WDU 2.5/TC TYP T 50 1024200000

WDU 2.5/TC TYP J 50 1024300000

WDU 2.5/TC TYP SR 50 1024400000

WDU 2.5/TC TYP B 50 1033700000

WDU 2.5/TC TYP E 50 1033300000

WDU 2.5/TC TYP N 50 1041500000

Type Width Qty Order No.

WAP 2.5-10 1.5 mm 50 1050000000

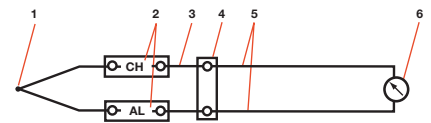
WAP 16+35 WTW 2.5-10 1.5 mm 20 1050100000

WEW 35/2 8 mm 100 1061200000

Weidmüller thermocouple terminals are specially designed for the transmission of very small voltages in temperature measuring circuits. Special current bars ensure that no false signals are transmitted within the terminal when temperature differences between the positive and negative paths exist. This high measuring precision is required, for example, in aircraft engine test rigs, complicated chemical processes, controllers, etc.

- Material of current bar corresponds to thermal and compensating conductors
- Clear thermocouple marking
- 2-pole blocks per thermocouple
- Modular width 10 mm

Configuration of a temperature measuring circuit









- | | |
|--------------------------|--------------------------------|
| 1 Thermocouple (sensor) | 4 Reference junction |
| 2 Thermocouple terminals | 5 Supply and return conductors |
| 3 Compensating conductor | 6 Measuring instrument |

The thermocouple terminals shown in this measuring circuit are used for the thermoelectrical transmission of the thermoelectric voltage from the thermocouple to the reference junction and the indicator unit via the compensating conductor. Thermocouple terminals are required for constructing a temperature measuring circuit.

Technical data

Thermocouples to IEC 584 (DIN 43 710)

	Current bar Cromel Alumel
	E-grade copper (ETP) / Constantan
	Iron Constantan
	E-copper/ A-grade copper
	S-grade copper (OFC) / E-copper
	Cromel- Constantan