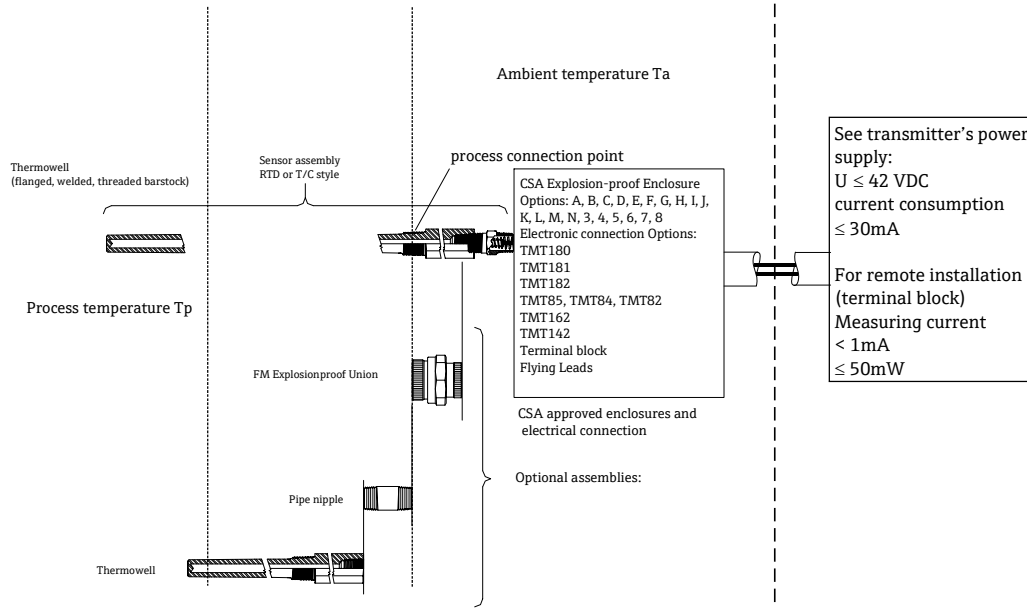


Hazardous (Classified) Location  
 Class I / Division 1 / Groups ABCD  
 Class II / Division 1 / Groups EFG  
 Class III

Nonhazardous Locations



### Installation Notes T13, T14, T53, T54

- CSA approved apparatus must be installed in accordance with manufacturer's instructions.
- Install per Canadian Electrical Code.
- Use supply wires suitable for 5°C above surroundings.
- Keep tight when circuits alive.
- Inserts TU111 (RTDs) and TU121 (TC) with Additional Option Code "2" (XP Spare Part) need to be used to ensure approved classification.



### EXPLOSION PROOF

**Class I / Div. 1 / Groups ABCD**  
**Class I / Div. 1 / Groups BCD**  
**Class I / Div. 1 / Groups ABCD**  
**Class II / Div. 1 / Groups EFG**  
**Class III**

### DUST IGNITION PROOF

- All conduits must be assembled with a minimum of five full threads engagement.
  - A seal shall be installed within 18" of the enclosure  
 Un scellement doit être installé à moins de 18" du boîtier.
  - The flameproof joints are not intended to be repaired.
  - For Class II Extension and/or Thermowell must be used to maintain CSA enclosure 4X rating.
  - Class II use a dust tight seal.
  - Enclosures must be CSA approved, for appropriate area classification.
  - Spring loaded temperature sensors must use a thermowell assembly.
- Refer to the marked maximum ratings for assembled temperature transmitter's supply.

It shall be verified, taking into account the worst case process and ambient temperatures, that the temperature of the enclosure at the process connection point does not exceed the ambient temperature range of the assembly.

CSA Explosion-proof approved temperature sensor assemblies and accessory hardware for the following locations:

Type	Hazardous location
T13/T53 and T14/T54 with enclosures C, D, E, F	Class I / Div. 1 / Groups BCD Class II / Div. 1 / Groups EFG Class III
T13/T53 and T14/T54 with enclosures A, B, G, H, I, J, K, L, M, N, 3, 4, 5, 6, 7, 8	Class I / Div. 1 / Groups ABCD Class II / Div. 1 / Groups EFG Class III

	Approved Pfanzelt	Date (yyyy-mm-dd) 2005-10-25	16 01 00 116	Dwg.rev. C	Revision no. W18N20	Revision date (yyyy-mm-dd) 2019-08-26	Name MP	Material 71473462 ZD00053R/09/EN/02.19	Endress+Hauser
Volume (mm³)	Designed Pfanzelt	Date (yyyy-mm-dd) 2005-10-24	Unit T13, T14, T53, T54	Scale 1:1	Title CONTROL DRAWING CSA Explosion-proof		Series		
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No.	Format A4	Objekt version	Sheet 1 of 2	Endress + Hauser Wetzler GmbH+Co. KG Nesselwang / Germany		

### Permitted ambient temperatures

Class I, Division 1, Groups A, B, C and D;

Class II, Div. 1 Groups E, F & G; Class III:

Type	assembled head transmitter	Temperature class/code	ambient temperature housing
T13, T14 T53, T54	TMT18x	T6/T85°C	-40°C ≤ Ta ≤ +65°C
	TMT8x	T5/T100°C	-40°C ≤ Ta ≤ +80°C
		T4/T135°C	-40°C ≤ Ta ≤ +85°C
	without electronic or with terminal block	T6/T85°C	-50°C ≤ Ta ≤ +70°C
		T5/T100°C	-50°C ≤ Ta ≤ +80°C
		T4/T135°C	-50°C ≤ Ta ≤ +120°C
		T3/T200°C	-50°C ≤ Ta ≤ +120°C
		T2/T300°C	-50°C ≤ Ta ≤ +120°C
		T1/T450°C	-50°C ≤ Ta ≤ +120°C


Type	assembled field transmitter	Temperature class/code	ambient temperature housing
T13, T14 T53, T54	TMT162, TMT142	T6/T85°C	-40°C ≤ Ta ≤ +55°C
		T5/T100°C	-40°C ≤ Ta ≤ +70°C
		T4/T110°C	-40°C ≤ Ta ≤ +85°C

### Permitted process temperatures

Type	Insert diameter	Temperature class/ Maximum surface	Process temperature range for assembled head transmitter TMT18x, TMT8x	Process temperature range for assembled field transmitter TMT162, TMT142
T13, T14 T53, T54	3mm, 3mm(dual), 6mm dual	T6 / T85°C	-50°C ≤ Tp ≤ +66°C	-50°C ≤ Tp ≤ +64°C
		T5 / T100°C	-50°C ≤ Tp ≤ +81°C	-50°C ≤ Tp ≤ +79°C
		T4 / T135°C	-50°C ≤ Tp ≤ +116°C	-50°C ≤ Tp ≤ +114°C
		T3 / T200°C	-50°C ≤ Tp ≤ +181°C	-50°C ≤ Tp ≤ +179°C
		T2 / T300°C	-50°C ≤ Tp ≤ +276°C	-50°C ≤ Tp ≤ +279°C
		T1 / T450°C	-50°C ≤ Tp ≤ +426°C	-50°C ≤ Tp ≤ +424°C
		T6 / T85°C	-50°C ≤ Tp ≤ +73°C	-50°C ≤ Tp ≤ +71°C
	6mm	T5 / T100°C	-50°C ≤ Tp ≤ +88°C	-50°C ≤ Tp ≤ +86°C
		T4 / T135°C	-50°C ≤ Tp ≤ +123°C	-50°C ≤ Tp ≤ +121°C
		T3 / T200°C	-50°C ≤ Tp ≤ +188°C	-50°C ≤ Tp ≤ +186°C
		T2 / T300°C	-50°C ≤ Tp ≤ +283°C	-50°C ≤ Tp ≤ +286°C
		T1 / T450°C	-50°C ≤ Tp ≤ +433°C	-50°C ≤ Tp ≤ +431°C

The dependency of the ambient and process temperatures upon the temperature class for assembly without transmitter (without electronic or with terminal block):

Insert diameter	Temperature class / Maximum surface	Process temperature range
		P ≤ 50 mW
3mm, 3mm (dual) or 6mm dual	T6 / T85°C	-50°C ≤ Tp ≤ +66°C
	T5 / T100°C	-50°C ≤ Tp ≤ +81°C
	T4 / T135°C	-50°C ≤ Tp ≤ +116°C
	T3 / T200°C	-50°C ≤ Tp ≤ +181°C
	T2 / T300°C	-50°C ≤ Tp ≤ +276°C
	T1 / T450°C	-50°C ≤ Tp ≤ +426°C
6mm	T6 / T85°C	-50°C ≤ Tp ≤ +73°C
	T5 / T100°C	-50°C ≤ Tp ≤ +88°C
	T4 / T135°C	-50°C ≤ Tp ≤ +123°C
	T3 / T200°C	-50°C ≤ Tp ≤ +188°C
	T2 / T300°C	-50°C ≤ Tp ≤ +283°C
	T1 / T450°C	-50°C ≤ Tp ≤ +433°C

	Approved Pfanzelt	Date (yyyy-mm-dd) 2005-10-25	16 01 00 116	Dwg.rev. C	Revision no. W18N20	Revision date (yyyy-mm-dd) 2019-08-26	Name MP	Material 71473462 ZD00053R/09/EN/02.19	Endress+Hauser 
Volume (mm³)	Designed Pfanzelt	Date (yyyy-mm-dd) 2005-10-24	Unit T13, T14, T53, T54	Scale 1:1	Title CONTROL DRAWING CSA Explosion-proof		Series		
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No.	Format A4	Objekt version	Sheet 2 of 2	Endress + Hauser Wetzler GmbH+Co. KG Nesselwang / Germany		