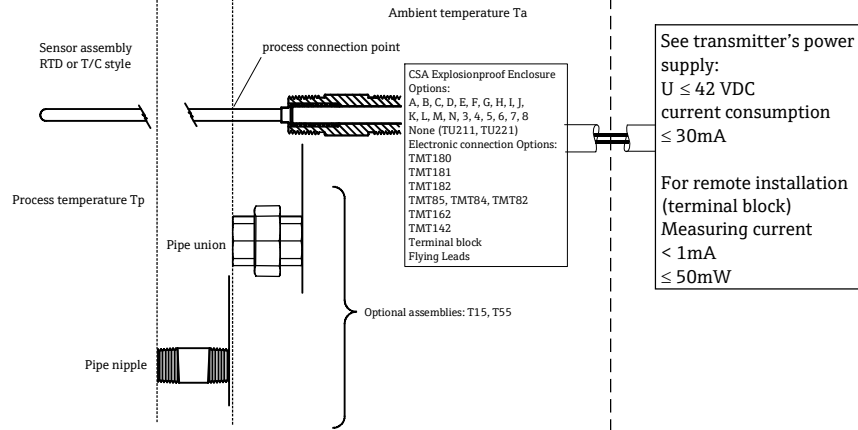




Hazardous (Classified) Location
 Class I / Division 1 / Groups BCD
 Class II / Division 1 / Groups EFG
 Class III

Nonhazardous Locations



Installation Notes T15, T55, TU221, TU211

- 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.

EXPLOSION PROOF DUST IGNITION PROOF

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

- 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.
- Following Sensor options shall be protected by a thermowell:
 T15- abcdefg...
 g Sensor Type:
 S 1 Pt100 TF StrongSens, 3 wire, class A, -50/500°C, vibration resistant until 60g
 T 1 Pt100 TF StrongSens, 4 wire, class A, -50/500°C, vibration resistant until 60g
 U 1 Pt100 TF StrongSens, 3 wire, class AA, -50/500°C, vibration resistant until 60g
 V 1 Pt100 TF StrongSens, 4 wire, class AA, -50/500°C, vibration resistant until 60g
- Enclosures must be CSA approved, for appropriate area classification (TU211, TU221).
- Class II use a dust tight seal.
- 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.

| | | | | | | | | | |
|---|------------------------------------|--|--------------------------------|---------------|---|--|--|--|----------------|
| | Approved Pfanzelt | Date (yyyy-mm-dd) 2005-10-25 | 16 01 00 115 | Dwg.rev. C | Revision no. W18N20 | Revision date (yyyy-mm-dd) 2019-08-26 | Name MP | Material 71473470 ZD00052R/09/EN/02.19 | Endress+Hauser |
| Volume (mm³) | Designed Pfanzelt | Date (yyyy-mm-dd) 2005-10-24 | Unit T15, T55, TU221, TU211 | 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 Wetzer GmbH+Co. KG Nesselwang / Germany | | |

Permitted ambient temperatures

Class I, Division 1, Groups B, C and D;
Class II, Div. 1 Groups E, F & G; Class III:

| Type | assembled head transmitter | Temperature class/code | ambient temperature housing |
|-------------|---|------------------------|-----------------------------|
| T15, T55 | 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 |
|-------------|-----------------------------|------------------------|-----------------------------|
| T15, T55 | 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 |
|-------------|--------------------------------|------------------------------------|--|--|
| T15, T55 | 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 |
| | 6mm | T6 / T85°C | -50°C ≤ Tp ≤ +73°C | -50°C ≤ Tp ≤ +71°C |
| | | 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 |

| | | | | | | | | | |
|---|------------------------------------|--|--------------------------------|---------------|---|--|----------------|--|--|
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| 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 |