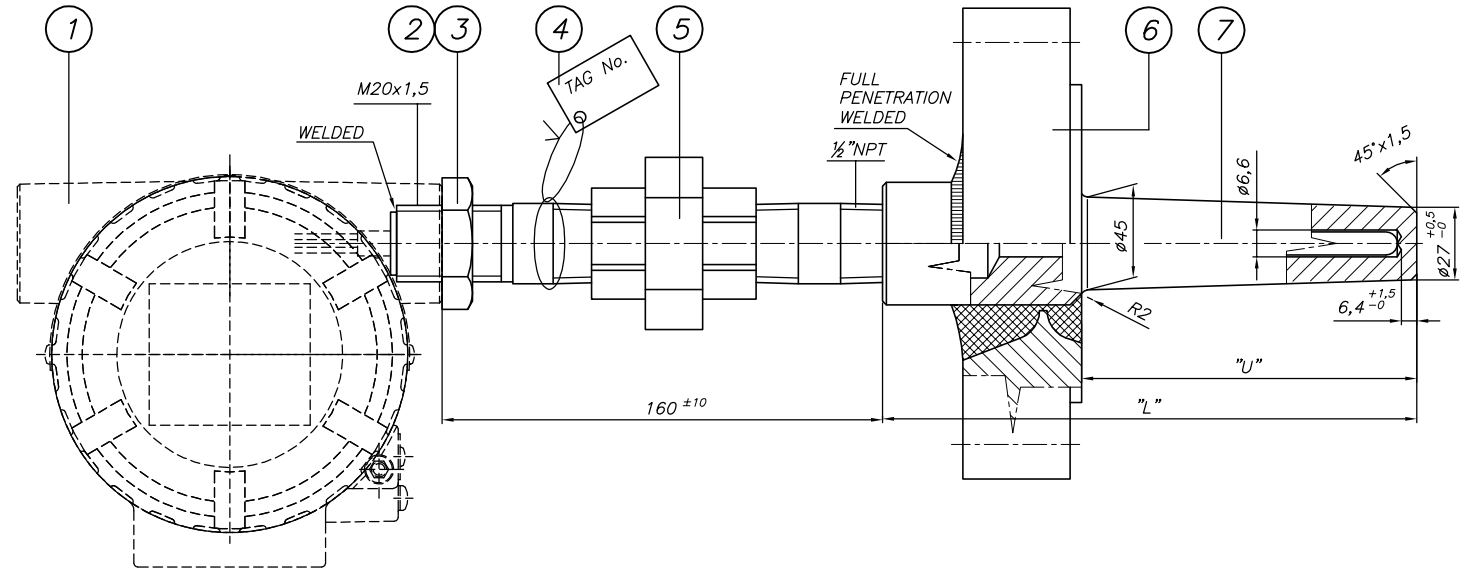
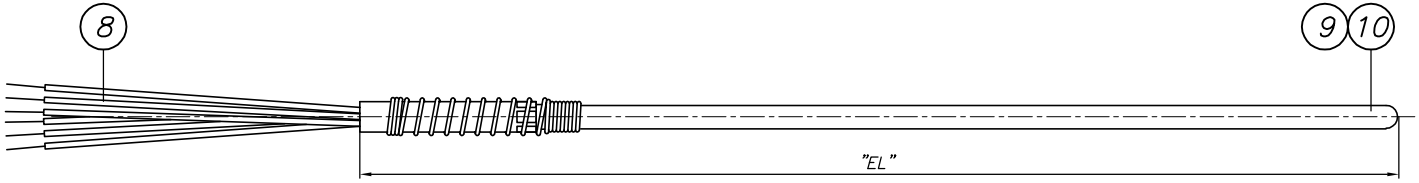
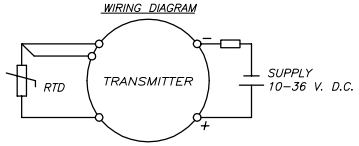
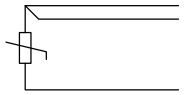




WIRING DIAGRAM



INPUT : Pt100 RESISTANCE VALUE AND TOLERANCES AS PER IEC.751 CLASS A
RANGE : 0–200°C
OUTPUT : 4–20 mA



Pt100 RESISTANCE VALUE AND TOLERANCES AS PER IEC.60751 CLASS A
3–WIRE SINGLE RANGE: −50/300 °C

10	2	---	PT100 ELEMENT
9	1	SHEATH MATERIAL: SS316	MI–CABLE
8	6	INSULATION TEFLON	WIRE TEX–22F–CU
7	1	SS316L	THERMOWELL
6	1	SS316L	FLANGE 2"150# RF
5	1	SS	NIPPLE – UNION – NIPPLE
4	1	SS	TAGPLATE
3	1	SS	LOCKNUT
2	1	SS	WASHER
1	1	---	TRANSMITTER 644 WITH DISPLAY
POS.	QTY.	MATERIAL	DESCRIPTION

TAG: 10-TT-8659
TAG: 10-TT-5567

ITEM	"U"	"L"	"EL"
2	330	380	559
1	380	430	609

THERMO ELECTRIC INSTRUMENTATION
WWW.TE-INSTRUMENTATION.COM
INFO@TE-INSTRUMENTATION.COM
TEL: +31(0)857607300

INDUSTRIAL RTD ASSEMBLY
II 2G Ex ia IIC T6 to T1 Gb
KEMA 03ATEX1245 X XPS2..

REV.	DESCRIPTION	DWN	APP	DATE
00		JB	BL	15-03-2017

DRAWING NO. 530220 Ex

ATEX Test drawings:
ATEX XPS1: 521062 Rev13
ATEX XPS2: 521061 Rev16
ATEX XPS3: 521064 Rev15
ATEX XPS4: 521840 Rev07
INSERT DRAWING: 524624–1 Rev11
INSERT DRAWING: 524624–2 Rev0

TOLERANCES OF FORM, ORIENTATION AND LOCATION ACC. TO NEN–ISO 1101
(#) SURFACE FINISH 1,6 Ra.
(#) = UNLESS OTHERWISE NOTED

(#) lmm. LENGTH: < 1500: ± 3; > 1500: ± 6; > 3000: ±15; > 6000: ±25; > 10000: ±50

(#) WIRE LENGTH: < 300: −0 / + 25; > 300: −0 / + 50; > 3000: −0 / +100

REFERENCE DRAWING: 529729
ALL DIMENSIONS ARE IN mm.
SCALE: 1:1

L:\thermo\Engineering\CAD-USER\T\00000004P.DWG

(#) 25 ±2	25,0 ±0,2	25,00 ±0,02
25 ±1	25,0 ±0,1	25,00 ±0,01
25 ±0,5	25,0 ±0,05	25,00 ±0,005

Installation, operation and maintenance manual

Version date: 28-03-2014
Revision: - July 2014

Author : B. Linse

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INDEX

GENERAL SAFETY INFORMATION

These operating instructions contain important information on handling the instrument. The installation of the thermocouples or RTD's should only be done by properly trained personnel. This personnel should have carefully read and understood these operation instructions before the installation is done.
The sensors provided are sensitive and they need to handled carefully. The sensors are are designed and manufacturing according our quality management system which is certified according the ISO9001: 2008 standard and the environmental standard ISO14001.

INTRODUCTION

2.1. Thermocouple / resistance thermometer

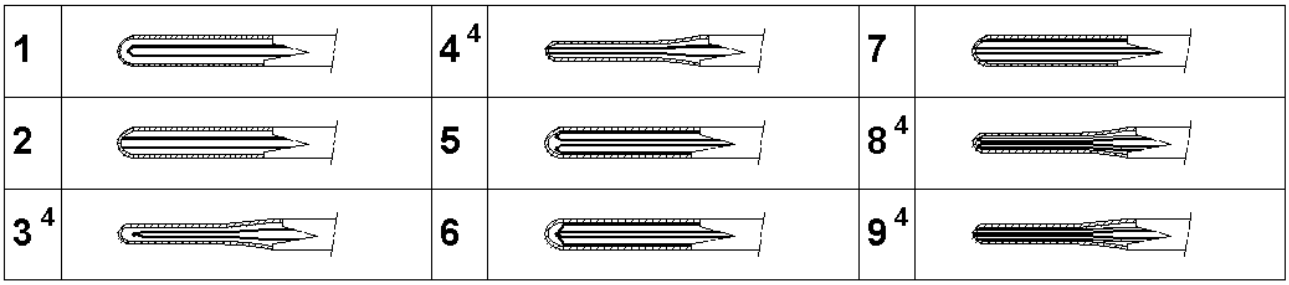
2.1.1 Thermocouple: all thermocouple's consists of two different thermocouple materials which are connected at the "warm-end". The principal of operation is based on the Seebeck effect. A temperature gradient along a conductor creates an electromotive force (EMF). The EMF is created between the open ends of the two conductors.

2.1.2 Resistance thermometers: consists of a resistance element which has a resistance value depending of temperature and type resistance element. The principle is based on variation of the electrical resistance of a metal and is called thermo resistance. Resistance thermometers offer a greater stability, accuracy and repeatability than thermocouples below the 500 °C. Most common resistance thermometers are made of platinum or nickel metals. The variation in the resistance thermometers are 2, 3 or 4 connection wires. When the element length is longer than 500 mm we advise to use 3 or 4 wire systems.

2.2. Measuring junctions thermocouples

Different kind of hot-junction can be made. Normally the junction is insulated but it is also available in different other kind of types.

Hot Junction



(4 reductions: 1,0→0,5 - 1,5→1,0 - 3,0→1,6 - 4,8→3,2 - 6,0→3,2)

fig. 1

1. Single insulated
2. Single grounded
3. Single insulated reduced tip
4. Single grounded reduced tip
5. Duplex individually insulated
6. Duplex common insulated
7. Duplex grounded
8. Duplex individually insulated reduced tip
9. Duplex grounded reduced tip

The last possible hot-junction is an exposed hot junction for a very short response time.

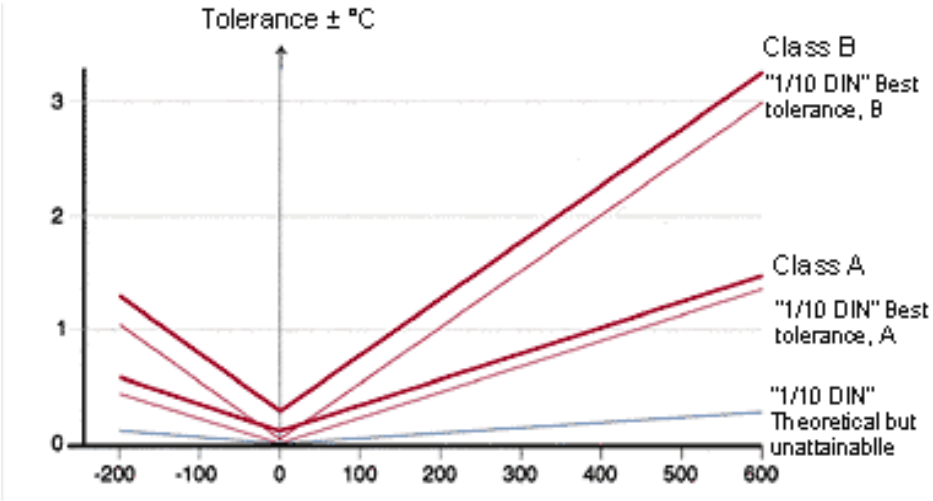
2.3. Thermocouple accuracy according IEC 60584.

TYPE	NAME	Range °C	Range °C	Acc. IEC 60584 Class 1	Acc. IEC 60584 Class 2	Acc. IEC 60584 Class 3
						Basic -200°C to +40°C
J	IRON-CONSTANTAN	-40	750	±1,5°C OR 0,4% t	±2,5°C OR 0,75% t	±2,5°C OR 0,15% t
K	CHROMEL-ALUMEL	-40	1200	±1,5°C OR 0,4% t	±2,5°C OR 0,75% t	±2,5°C OR 0,15% t
N	NICROSIL-NISIL	-40	1200	±1,5°C OR 0,4% t	±2,5°C OR 0,75% t	±2,5°C OR 015% t
E	CHROMEL-CONSTANTAN	-40	900	±1,5°C OR 0,4% t	±2,5°C OR 0,75% t	±2,5°C OR 015% t
T	COPPER-CONSTANTAN	-40	350	±0,5°C OR 0,4% t	±1,0°C OR 0,75% t	±1,0°C OR 0,15 t
R	PLATINUM 13%Rh-PLATINUM	0	1600	±1,0	±1,5°C OR 0,25% t	±4°C OR 0,5% t
S	PLATINUM 10%Rh-PLATINUM	0	1600	±1,0	±1,5°C OR 0,25% t	±4°C OR 0,5% t
B	PLATINUM 6%Rh-PLATINUM 30%Rh	600	1800	N.A.	±1,5°C OR 0,25% t	N.A.

TOLERANCE CLASSES FOR THERMOCOUPLES (REFERENCE JUNCTION AT 0°C)

2.4. Pt100 accuracy according IEC-60751(2008).

Temperature	Class A, ±°C	Class B, ±°C
-200°C	0,55°C	1,3°C
0°C	0,15°C	0,3°C
+100°C	0,35°C	0,8°C
+200°C	0,55°C	1,3°C
+300°C	0,75°C	1,8°C
+500°C	1,15°C	2,8°C
+700°C	-	3,8°C



Platinum grades are produced which exhibit a change of resistance of 0.385 ohms/°C. This is defined in IEC 60751:2008.
The American Fundamental Interval is 0.392 ohms/°C.
ANSI :alpha 0,00379 instead of 0,00385 IEC
JIS :alpha 0,003916 instead of 0,00385 IEC

2.5. Assembling

Usual assembling methods;

- Mounting thread
- Flange or gland
- Flange adjustable
- Flange fixed
- Adjustable mounting
- Welded to vessel
- Bayonet connection
- At the surface, by thread, welding, clamping
- The position of ceramic protection tube at low temp is free, at high temp only vertical
- Ceramic protection tube's protect to mechanical and temp-shock
- Always use the proper compensation-cable with thermocouple elements
- Always use copper extension-cable with resistance elements
- When mounting the element inside a thermowell, make sure the element is in spring-loaded condition, this can be done by changing the extension length
- When terminal blocks are used , certified acc. EN 60079-0;2006 / IEC 60079-7;2003. or see assembly drawing. When rail mounted terminals are used see IEC 60947-1/EN 60947-1 or see assembly drawing

2.6. Mounting

The sensor must be placed in the best possible contact with the medium to be measured. To avoid errors the depth should be approximately 7 times the protective tube diameter for liquids and approximately 13 times the protective tube diameter for gasses. It is often useful to install the sensor obliquely or to mount a bent of the pipe, in which case the protective tube must be aligned against the direction of flow of the medium.
When an assembly is mounted into the process it must be pressure-tight and safe.

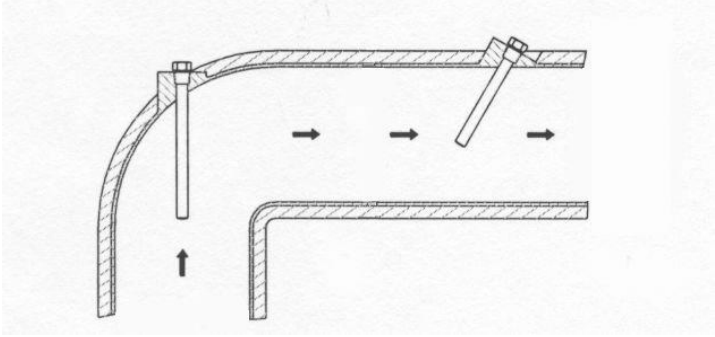


fig 2.

If the sensor assembly is influenced by the temperature of the process or other apparatus, it shall be verified that the surface temperature of the connection head, connection box, transition does not exceed the specified maximum ambient temperature. This is the responsibility of the end user to check this taking the "worst case" into consideration.

2.7. Compensation / Extension cable

All compensation/extension cable for thermocouples are identified by colour for polarity and type. It is important not to reverse the polarity. The compensation/extension cable must be insulated. The insulation of the lead wires will depend on environmental influences (dry, damp, chemically corrosive, hot). The sensor should be directly connected to the measuring devise with a compensation cable with as few junctions possible.

2.8. Main causes of errors in measuring with thermocouples

- When errors occur some possibilities must be checked:
- Open-loop
- Wrong thermocouple or resistance connection
- Isolation resistance
- Damage of protection tube
- Drift of thermocouple-element: presaging by chemicals
- Low insulation resistance by: moisture or dirt
- Reverse of polarity of compensation/extension-cable
- Mechanical damage
- Because a thermocouple generates a very low electrical signal in mV it can be easily disturbed. To avoid electrical noise from the environment or interference by earthing problems it is recommended to use an isolated hot junction.

2.9. Main causes of errors in measuring with resistance thermometers

- When errors occur some possibilities must be checked:
- Self-heating of the sensing element. The current may not exceed 1mA otherwise the element will heat itself up.
- Poor electrical insulation of the sensitive element.

PROTECTION METHODS

3.1 Ex i

(ATEX, IECEx) Acc. IEC/EN 60079-0 : 2011/2012 and Acc. IEC/EN 60079-11 : 2011/2012 (XPS2…. Type)

Any type of connection head can be used, only during installation the proper certified cable and cable gland should be used. Any type of extension can be used which insures a protection for the connection head of minimum IP20. Any type of insert can be used, the terminal-block must have Ex approved terminals. Any type of thermowell can be used. The process side of the assembly is for the responsibility of the user. The assembly should always be used in a closed system.

- Insert with RTD sensing elements
  Output circuits in type of protection intrinsic safety Ex ia IIC, only to be connected to a certified intrinsically safe circuit, with the following maximum values for each insert:
  Ui = 14V , Ii = 60 mA , Pi = 140 mW , Ci ≤60 nF, Li = 0 mH.
- Insert with thermocouple sensing elements
  Output circuits in type of protection intrinsic safety Ex ia IIC, only to be connected to a certified intrinsically safe circuit, with the following maximum values for each insert:
  Ui = 14V , Ii = 60 mA , Pi = 140 mW , Ci ≤60 nF, Li = 0 mH.
- Transmitters data: Ui =45 Vdc max., Ii = 50 mA max., Pi = 2,25 W max.
  In type of protection intrinsic safety Ex ia IIC or Ex ib IIC, only to be connected to a certified intrinsically safe circuit, with the maximum values according to the data listed in the certificate of the transmitter. The sensor input parameters of the transmitter shall comply with the parameters of the inserts.

Tagplates:

Thermal data

The maximum surface temperature due to process conditions (Tp) is the maximum surface temperature of any part of the assembly in contact with the explosive atmosphere.

The temperature class and the maximum surface temperature of the assembly depend on Tp and, when mounted, on the temperature class of the integrally mounted transmitter, as listed in the table below.

Tp [°C]	Temperature class transmitter	Temperature class of the assembly	Max. surface temperature of the assembly [°C]
75	T6	T6	85
90	T5	T5	100
125	T4	T4	135
190	T3	T3	200
290	T2	T2	300
440	T1	T1	450
> 440	T1	-	Tp + 10

Installation instructions

For installation see assembly drawing.
In order to prevent voltage and/or current addition, the output circuits of each insert shall be wired separately, in accordance with EN 60079-11 and EN 60079-14.
If a temperature transmitter is mounted, the data of the transmitter shall be taken from the instructions of the transmitter. The level of protection Ex ia IIC or Ex ib IIC of the assembly is determined by the level of protection of the transmitter. The equipment category is 2 G.
During installation the proper cable and cable gland should be used, mounted in the conduit (M20, ½", ¾" etc. see assembly drawing).

Special conditions for safe use

Ambient temperature range of sensor assembly with Teflon cable insulation: -40 °C to +75 °C, and for Silicon cable insulation: -25 °C to +75 °C.

For versions with an integrally mounted certified intrinsically safe transmitter:

- The highest minimum ambient temperature as mentioned above and as mentioned on the transmitter, is decisive. The maximum ambient temperature (Tamax) is +80 °C.
- The maximum ambient temperature of the assembly is +75 °C or the maximum ambient temperature as mentioned on the transmitter -10 K, which ever is the smaller.

When the process temperature range exceeds the specified ambient temperature range, it shall be verified by on-site temperature measurements, taking the worst case conditions into account, that the service temperature of the connection head and the connection box does not exceed the ambient temperature range. The measurement report with the conclusions shall be filed together with the certificate to prove that this condition is met.

From a safety point of view,

- the thermocouple inserts with a nominal tip diameter less than 3,0 mm,
- all inserts with a grounded thermocouple and
- the RTD inserts with a nominal tip diameter less than 4,8 mm

shall be considered to be connected to ground.
Min. and maximum wire temperature: Silicon -25/+160 °C, Teflon -40/+180 °C.
Maximum transition temperature: +80 °C.

3.2 Ex e
(ATEX, IECEx) Acc. IEC/EN 60079-0 : 2011/2012 and Acc. IEC/EN 60079-7 : 2006/2007 (XPS1…. Type)

Increased safety enclosure "e";
In type of explosion protection Ex e, the degree of protection of at least IP54 to EN 60529 is only achieved if certified Ex e cable entries are used that are suitable for the application and correctly installed.
The degree of protection of IP66 or IP67 to EN 60529 is only achieved if certified Ex e cable entries are used that are suitable for the application and correctly installed.
When connection head in fig 3. is used the cover will be locked with a lock screw.

Special conditions for safe use
Ambient temperature range of sensor assembly with Teflon cable insulation: -40 °C to +80 °C, and for Silicon cable insulation: -25 °C to +80 °C.

Service temperatures transition: -25 °C to +80 °C for silicon wire and -40 °C to +80 °C for Teflon wire.
Service temperatures wire: Silicon -25/+160 °C, Teflon -40/+180 °C.
Service temperatures connection box and head: -40 °C to +80 °C.
When the process temperature range exceeds the service temperature range of the transition part, the connection head, the connection box and the cable (the maximum ambient temperature (Tamax) is +80 °C), it shall be verified by on-site temperature measurements, taking the worst case conditions into account, that the service temperature of these parts does not exceed the range as listed above.
The measurement report with the conclusions shall be filed together with the certificate to prove that this condition is met.

The sensor assembly with connection head and extension part shall have a degree of protection of at least IP54, provided by the user with a thermowell or equivalent component at the process side of the assembly, or direct mounted sensor.

Electrical data

Thermocouple sensing element	5 Vdc, 10 mA
RTD sensing element	5 Vdc, 10 mA

Installation instructions
For installation see assembly drawing.
The degree of protection of at least IP 54 to EN 60529 is only achieved if certified Exe cable glands or conduit entry devices are used that are suitable for the application and correctly installed.

Unused openings shall be closed by suitable blanking elements.
Insert with a diameter smaller than 3mm and insert with not-armoured wire shall be protected against mechanical danger.

For an ambient temperature exceeding 80 °C, heat resistant cables and cable glands suitable for at least 85 °C shall be used.

During installation the proper certified cable and cable gland should be used, mounted in the conduit (M20, ½", ¾" etc. see assembly drawing).

For parameters see terminal block U-max: 5V, I-max: 10mA p/channel.

Torque values and wire size
For torque values end wire size for terminal blocks see Examination Certificate FTZU 04 ATEX 0003U and EN 60079-0:2012 and EN 60079-7:2007, for rail mounted terminals see IEC 60947-1/EN 60947-1 or see assembly drawing.

Tagplates:

Thermal data
The maximum surface temperature due to process conditions (Tp) is the maximum surface temperature of any part of the assembly in contact with the explosive atmosphere.

The temperature class and the maximum surface temperature of the assembly depend on Tp, as listed in the table below.

Tp [°C]	Temperature class of the assembly	Max. surface temperature of the assembly [°C]
80	T6	85
95	T5	100
130	T4	135
195	T3	200
295	T2	300
445	T1	450
> 445	-	Tp + 5

3.3 Ex d
(ATEX, IECEx) Acc. IEC/EN 60079-0 : 2011/2012 and Acc. IEC/EN 60079-1 : 2007 (XPS3…. Type)

The process side of the assembly is for the responsibility of the user. The assembly should always be used in a closed system.
No changes are allowed on the product.

Flameproof enclosure "d";
In type of explosion protection Ex d, certified cable entries shall be used that are suitable for the application and correctly installed.
The degree of protection of IP66 or IP67 to EN 60529 is only achieved if certified Ex d cable entries are used that are suitable for the application and correctly installed.
Only use Thermo Electric approved inserts.
For external earthing or bonding connection of the connection head a cable lug shall be used so that the conductor is secured against loosening and twisting and that contact pressure is permanently secured.

Electrical data

Thermocouple sensing element	5 Vdc, 10 mA
RTD sensing element	5 Vdc, 10 mA
Transmitter data	max. 45 Vdc, max 50 mA, max 1,9 W

For the electrical data of a sensor in combination with a transmitter, see electrical data of the transmitter.

Special conditions for safe use
Ambient temperature range of sensor assembly with Teflon cable insulation: -40 °C to +80 °C, and for Silicon cable insulation: -25 °C to +80 °C.

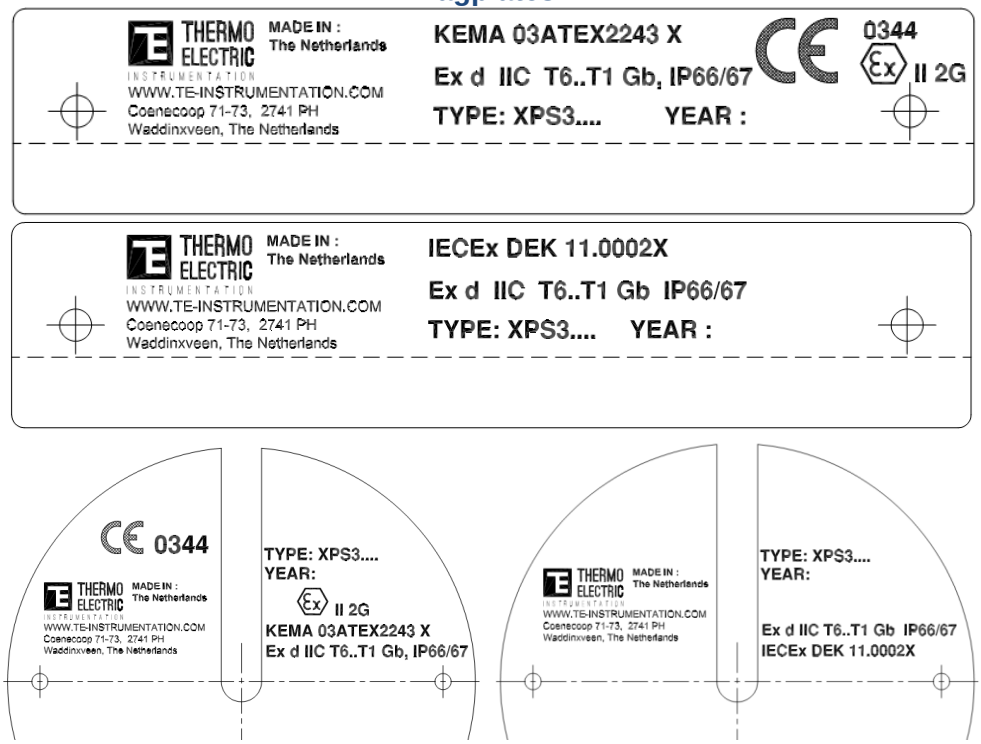
Service temperatures wire: Silicon -25/+160 °C, Teflon -40/+180 °C.
Service temperatures connection box and head: -40 °C to +80 °C, except for T6 maximum temperature is 70°C.
When the process temperature range exceeds the service temperature range of the connection head, the connection box and the cable (the maximum ambient temperature (Tamax) is +80 °C except for T6 (Tamax) is +70 °C), it shall be verified by on-site temperature measurements, taking the worst case conditions into account, that the service temperature of these parts does not exceed the range as listed above.
The measurement report with the conclusions shall be filed together with the certificate to prove that this condition is met. For installation see assembly drawing.
Unused openings shall be closed by suitable blanking elements.

For information about the dimensions of the flameproof joints contact the manufacturer.
When a flameproof nipple is used (ISSeP06ATEX042 U) use Loctite with connection to connection head or transmitter.
Insert with a diameter smaller than 3mm and insert with not-armoured wire shall be protected against mechanical danger.
For an ambient temperature exceeding 70 °C, heat resistant cables and cable glands suitable for at least 85 °C shall be used.
During installation the proper certified cable and cable gland should be used, mounted in the conduit (M20, ½", ¾" etc. see assembly drawing).

For parameters see transmitter or by terminal block U-max: 5V, I-max: 10mA p/channel. The insert should always be used with a mechanical protection.

Min. and maximum wire temperature: Silicon -25/+160°C, Teflon -40/+180°C. Maximum transition temperature: +80°C.

Tagplates:



Thermal data

The maximum surface temperature due to process conditions (Tp) is the maximum surface temperature of any part of the assembly in contact with the explosive atmosphere.

The temperature class and the maximum surface temperature of the assembly depend on Tp, as listed in the table below.

Tp [°C]	Temperature class of the assembly	Max. surface temperature of the assembly [°C]
80	T6	85
95	T5	100
130	T4	135
195	T3	200
295	T2	300
445	T1	450
> 445	-	Tp + 5

3.4 Ex nA
(ATEX, IECEx) Acc. IEC/EN 60079-0 : 2011/2012 IEC/EN and acc. 60079-15 : 2010 (XPS4…. Type)

During installation the proper certified cable and cable gland should be used. Any type of extension can be used which insures a protection for the connection head of minimum IP54. Any type of insert can be used, the terminal-block must have Ex approved terminals. Any type of thermowell can be used. The process side of the assembly is for the responsibility of the user.

Electrical data

Thermocouple sensing element	5 Vdc, 10 mA
RTD sensing element	5 Vdc, 10 mA
Transmitter data	max. 45 Vdc, max 50 mA, max 2,25 W

For the electrical data of a sensor in combination with a transmitter, see electrical data of the transmitter.

Special conditions for safe use

For installation see assembly drawing.
Ambient temperature range of sensor assembly with Teflon cable insulation: -40 °C to +75 °C, and for Silicon cable insulation: -25 °C to +75 °C.

For versions with an integrally mounted transmitter:

- The highest minimum ambient temperature as mentioned above and as mentioned on the transmitter is decisive.
- The maximum ambient temperature of the assembly is +75 °C or the maximum ambient temperature as mentioned on the transmitter -10 K, whichever is the smaller.

Service temperatures wire: Silicon -25/+160 °C, Teflon -40/+180 °C.
Service temperatures transition: -25 °C to +80 °C for silicon wire and -40 °C to +80 °C for Teflon wire.
Service temperatures connection box and head: -40 °C to +80 °C.

When the process temperature range exceeds the service temperature range of the transition part, the connection head, the connection box and the cable (the maximum ambient temperature (Tamax) is +75 °C.), it shall be verified by on-site temperature measurements, taking the worst case conditions into account, that the service temperature of these parts does not exceed the range as listed above.
The measurement report with the conclusions shall be filed together with the certificate to prove that this condition is met.

The sensor assembly with connection head and extension part shall have a degree of protection of at least IP54, provided by the user with a thermowell or equivalent component at the process side of the assembly.

Insert with a diameter smaller than 3mm and insert with not-armoured wire shall be protected against mechanical danger.
For an ambient temperature exceeding 70 °C, heat resistant cables and cable glands suitable for at least 85 °C shall be used.
Unused openings shall be closed by suitable blanking elements.

During installation the proper certified cable and cable gland should be used, mounted in the conduit (M20, ½", ¾" etc. see assembly drawing).
Min. and maximum wire temperature: Silicon -25/+160 °C, Teflon -40/+180 °C.
Maximum transition temperature: +80 °C.

Tagplates:

Thermal data

The maximum surface temperature due to process conditions (Tp) is the maximum surface temperature of any part of the assembly in contact with the explosive atmosphere.

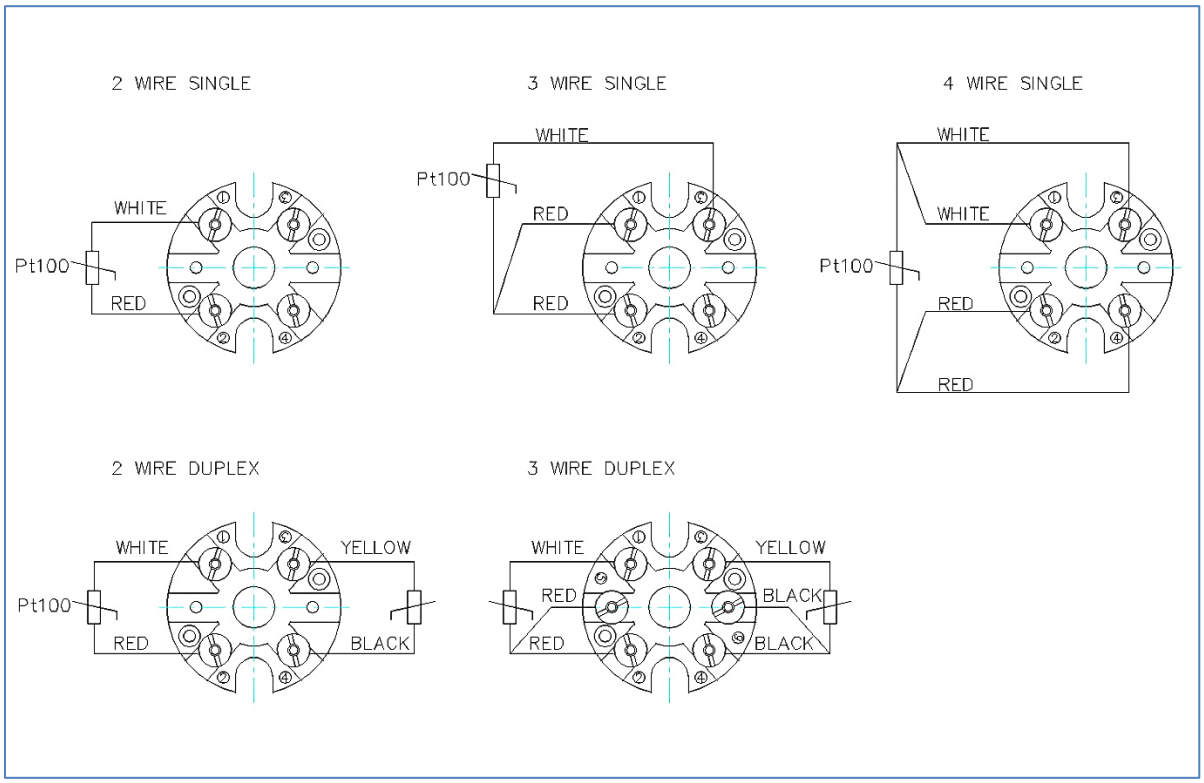
The temperature class and the maximum surface temperature of the assembly depend on Tp and, when mounted, on the temperature class of the integrally mounted transmitter, as listed in the table below.

Tp [°C]	Temperature class transmitter	Temperature class of the assembly	Max. surface temperature of the assembly [°C]
75	T6	T6	85
95	T5	T5	100
130	T4	T4	135
195	T3	T3	200
295	T2	T2	300
445	T1	T1	450
> 445	T1	-	Tp + 5

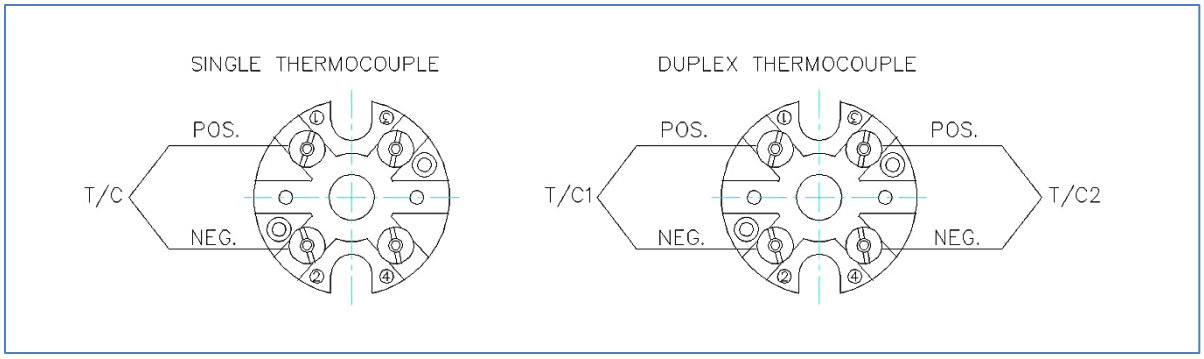
ELECTRICAL CONNECTION

For sensors provided with a terminal block.

RESISTANCE TEMPERATURE DETECTORS



THERMOCOUPLES



For connection details on transmitters, please refer to the applicable manual of the used transmitter.

MAINTENANCE

Temperature sensors and the entire temperature measuring circuit must be checked at regular intervals for:

- protective tube wear
- drifting of the measuring elements due to ageing or chemical attack
- reduction of the insulation resistance due to moisture and contamination
- Poor contact of the lead wire connections
- Mechanical and chemical damage to the sensors or lead wires

Thermocouple measuring circuits are tested by connecting an mV voltage of known magnitude to the measuring circuit in place of the thermocouple.
Resistance thermometer measuring circuits are tested by replacing the measuring with a known fixed resistor and thus simulating a defined temperature.
In both cases it is possible to determine the deviation from the nominal values and also to determine whether the thermometer or the instrumentation is the cause of functional errors.
The insulation resistance of the entire ungrounded measuring circuit (lead wires and thermometer) with respect to ground should be > 1MΩ (measured with = 100 V DC).

If the sensor assembly is influenced by the temperature of the process medium, it shall be verified that the surface temperature of the connection head, connection box, transition does not exceed the specified maximum ambient temperature. This is the responsibility of the end user to check this taking the “worst case” into consideration.

EU DECLARATION OF CONFORMITY (EU-COC-2016)

CE

Manufacturer : Thermo Electric Instrumentation B.V.
Coenecoop 71-73
2741 PH Waddinxveen
The Netherlands

Declare under our sole responsibility that the:
Models XPS1, XPS2, XPS3, and XPS4 temperature sensors are in conformity with the provisions of the Directive 2014/34/EU for use in potentially explosive atmospheres.

Harmonized Standards: EN 60079-0: 2012, EN 60079-7: 2007 for the XPS1
EN 60079-0: 2012, EN 60079-11: 2012 for the XPS2
EN 60079-0: 2012, EN 60079-1: 2007 for the XPS 3
EN 60079-0: 2012, EN 60079-15: 2010 for the XPS4

EC-Type examinations certificates: KEMA 03ATEX2244X
KEMA 03ATEX1245X
KEMA 03ATEX2243X
ISSeP 06ATEX042U

Type examinations certificates: KEMA 05ATEX1033X

Refer to the product specification sheets, drawings and marking on product for details pertaining to individual model numbers.

Production Quality Assurance Notification: DEKRA 11ATEXQ0103
Dekra Certification B.V. Identification number: 0344
Dekra Certification B.V., Meander 1051, 6825 MJ, Arnhem, The Netherlands.

I, the undersigned, hereby declare that the product specified above conform to the listed directive and standard:

B. Linse
Technical Manager
Date :21-12-2016

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