APPVL INST CMF SENSOR ATEX Zn 2 BVS13
EB- 20024683
Revision: AA
Number of Pages: 26
Comments:

THIS COMPONENT MUST COMPLY WITH REGULATORY AGENCY REQUIREMENTS. NO CHANGES ARE ALLOWED WITHOUT PRIOR AUTHORIZATION FROM APPROVALS ENGINEERING.

Originator: RCS 5/21/13

Approved: RCS 5/21/13

Rev	ECN	Description	Approval	Date
AA	1049085	Initial Release	RCS	5/21/13

Equipment type	**sensor type** **CMF*** *****(0, 1, J, U, K, L, M or N)*V********	
Manufactured and submitted for examination	**Micro Motion, Inc.**	
Address	**Boulder, Co. 80301, USA**	
Standard basis	EN 60079-0:2012 EN 60079-15:2010 EN 60079-31:2009	General requirements Non-Sparking/Limited Energy 'n' Dust Evaluation 't'
Code for type of protection	**II 3 G Ex nA IIC T1-T4/T5 Gc** **II 3 D Ex tc IIIC T*°C Dc** **IP66**	
EC Type Examination Certificate	**BVS 13 ATEX E 081 X**	

1. Subject and Type

Sensor types:

CMF*** *******V****

Instead of the *** letters and numerals will be inserted which characterize the following modifications:

C M F * * * * * * * * * * V * * * *

- Marking without influence to the type of protection
- Letter for conduit connections
- Letter for electronic interface
  0 = integral 2400
  1 = integral 2400 with extender
  J = integral 2200S
  U = integral 2200S with extender
  K = integral FMT with improved surface finish
  L = integral FMT with standard surface finish
  M = integrally welded FMT with standard surface finish
  N = integrally welded FMT with improved surface finish
- Marking without influence to the type of protection
- A = High Temp. Stainless Steel Tube 350°C
  B = High Temp. HY Tube 350°C
  C = High Temp. Stainless Steel Tube 427°C
  E = High Temp. HY Tube 427°C
  Y = Standard Version Duplex Tube
  Other marking without influence to the type of protection
- 3 numerals for type of sensor

2. Description

The flow sensor in combination with a transmitter is used for flow measurement.

The flow sensor, which consists of magnetically excited oscillating tubes, contains as electrical components coils, resistors, temperature sensors and terminals and connectors.

The sensor is designed for use in connection with a suitable transmitter, e.g. 24********L**** in accordance with BVS 05 E 116 X; only the assembly of the sensor and the transmitter guarantees the necessary degrees of protection.

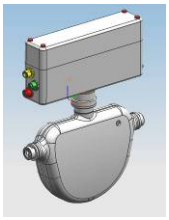
Alternatively a transmitter type 22********L**** in accordance with BVS 08 ATEX E 112 X can be used; only the assembly of the sensor and the transmitter guarantees the necessary degrees of protection. Additionally the 22********L**** may be additionally provided with the THUM Wireless HART adaptor.

Alternatively a transmitter type FMT*****L**** in accordance with BVS 10 ATEX E 115 X can be used; only the assembly of the sensor and the transmitter guarantees the necessary degrees of protection.

- When used with an integral transmitter type 2400S*********, the variation gets the denomination type *** *** *****(0 or 1)******.

- When used with an integral transmitter type 2200S*********, the variation gets the denomination type *** *** *****(J or U)******.

- When used with an integral transmitter type FMT**********, the variation gets the denomination type *** *** *****(K,L,M or N)******.



3. Parameters

3.1.1. Drive circuit (pin connections 7-8)

Voltage	30 VDC
Current	84 mA

3.1.2. Pick-off circuit (pin connections 3-4 and 5-6)

Voltage	30 VDC
Current	25 mA

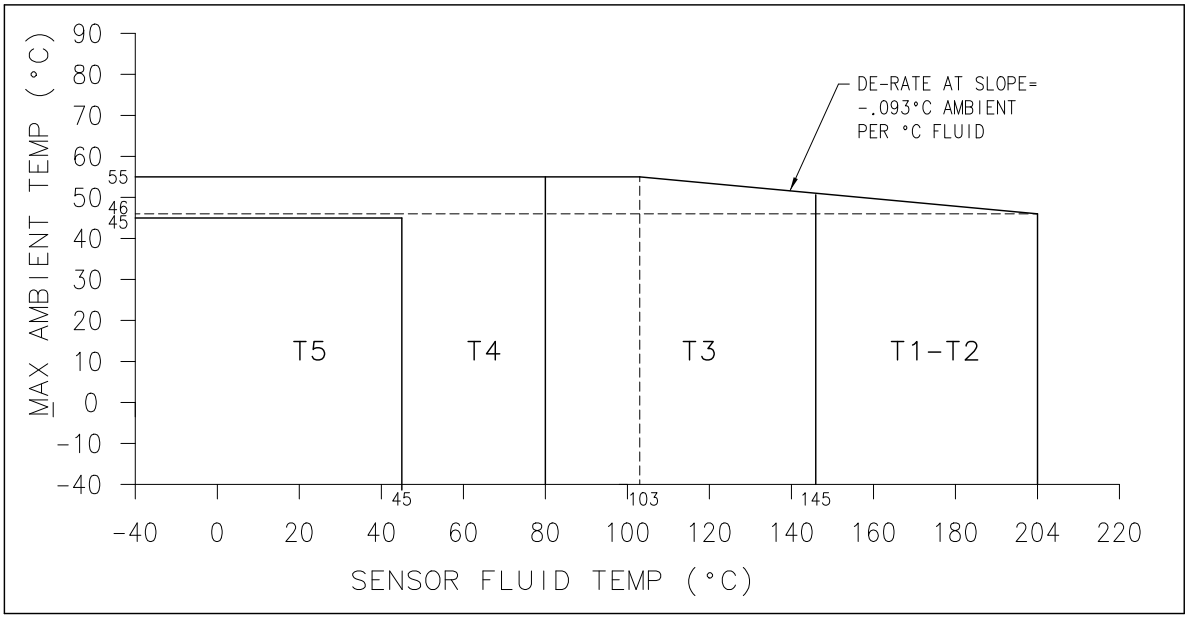
3.1.3. Temperature circuit (pin connections 1,2 and 9)

Voltage	30 VDC
Current	25 mA

3.1.4. Temperature class/maximum surface temperature T of CMF-sensors.
The classification into a temperature class/determination of the maximum surface temperature T depends on the temperature of the medium taking into account the maximum operating temperature of the sensor and is shown in the following graphs:

3.1.4.1. Excluding CMF***(A, B, C or E)****(0,1)*V****:

Sensor type			
With 2400S	CMF010*****(0,1)*V****	CMF025*****(0,1)*V****	CMF200*****(0,1)*V****
		CMF050*****(0,1)*V****	CMF300*****(0,1)*V****
		CMF100*****(0,1)*V****	

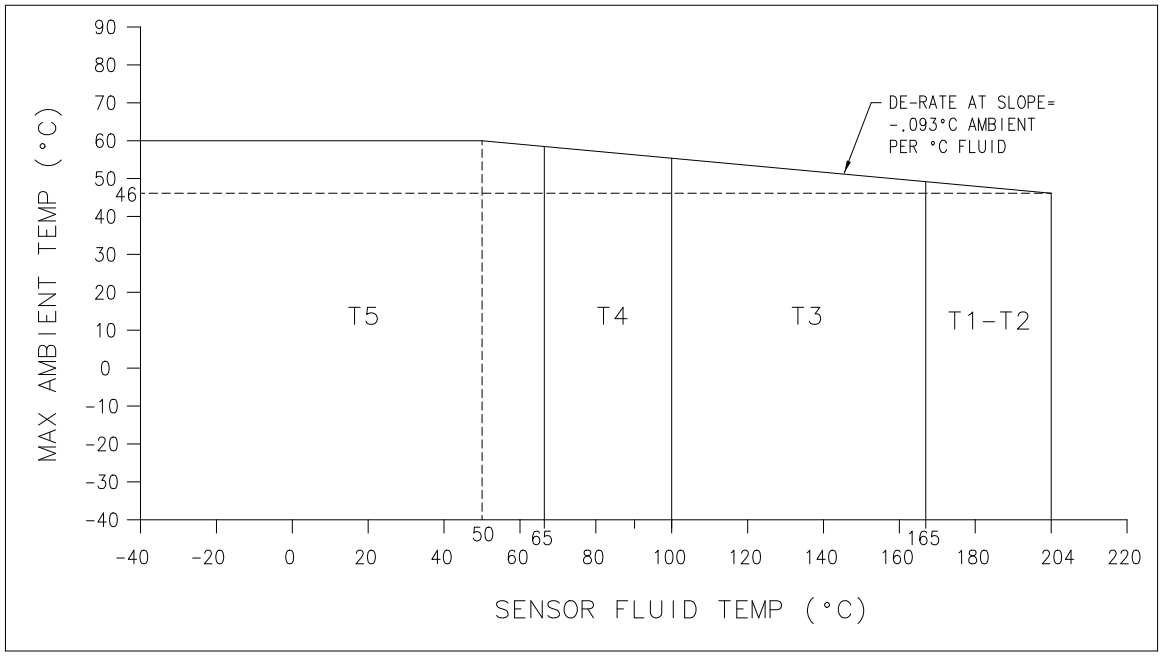


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 254°C

Ambient temperature range: Ta –40°C to + 55°C

3.1.4.2. Excluding CMF***(A, B, C or E)****(0,1)*V****:

Sensor type	
with 2400S	CMF350*****(0,1)*V****
	CMF400*****(0,1)*V****

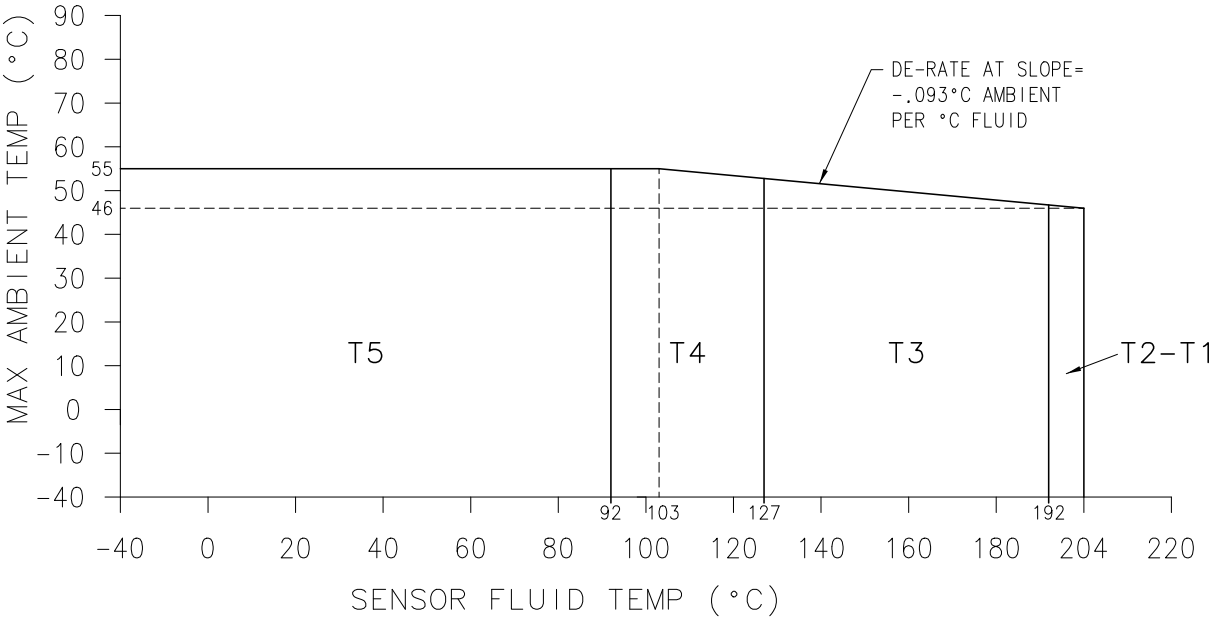


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 234°C.

Ambient temperature range: Ta –40°C to + 60°C

3.1.4.3. Excluding CMF***(A, B, C or E)****(0,1)*V****:

Sensor type	
With 2400S	CMFHC2*****(0,1)*V****
	CMFHC3*****(0,1)*V****
	CMFHC4*****(0,1)*V****

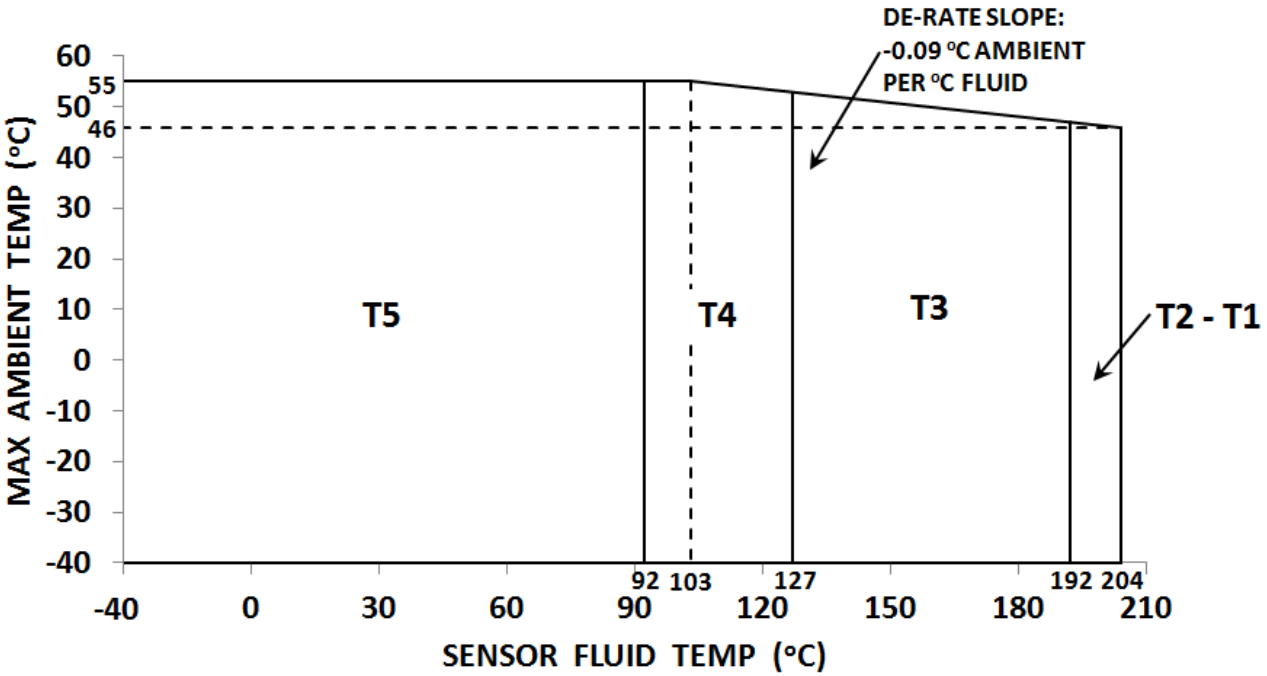


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 207°C.

Ambient temperature range: Ta –40°C to + 55°C

3.1.4.4. Excluding CMF***(A, B, C or E)****(0,1)*V****:

Sensor type	
With 2400S	CMFHC*Y****(0,1)*V****

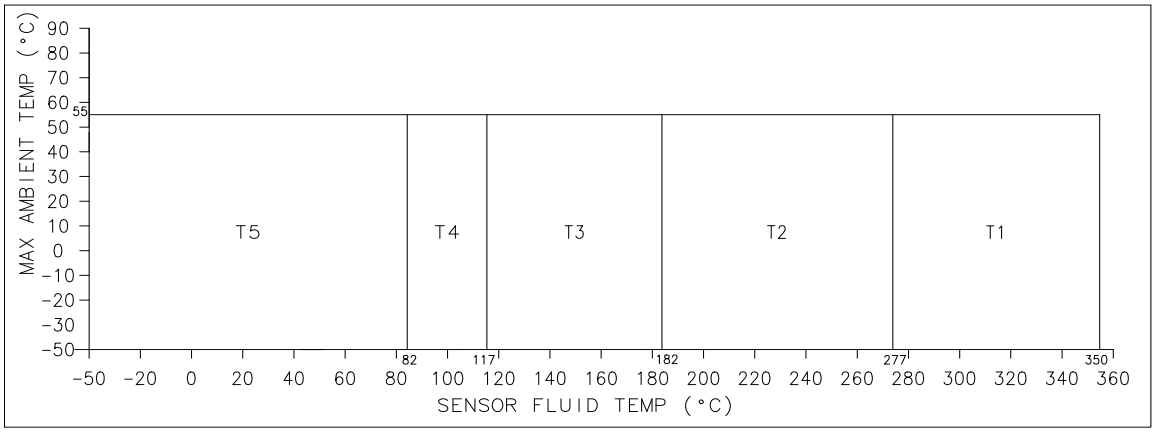


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 207°C.

Ambient temperature range: Ta –40°C to + 55°C

3.1.4.5.

Sensor type	
with 2400S	CMF200(A,B)****(0,1)*V****
	CMF300(A,B)****(0,1)*V****
	CMF350(A,B)****(0,1)*V****
	CMF400(A,B)****(0,1)*V****
	CMFHC2(A,B)****(0,1)*V****
	CMFHC3(A,B)****(0,1)*V****
	CMFHC4(A,B)****(0,1)*V****



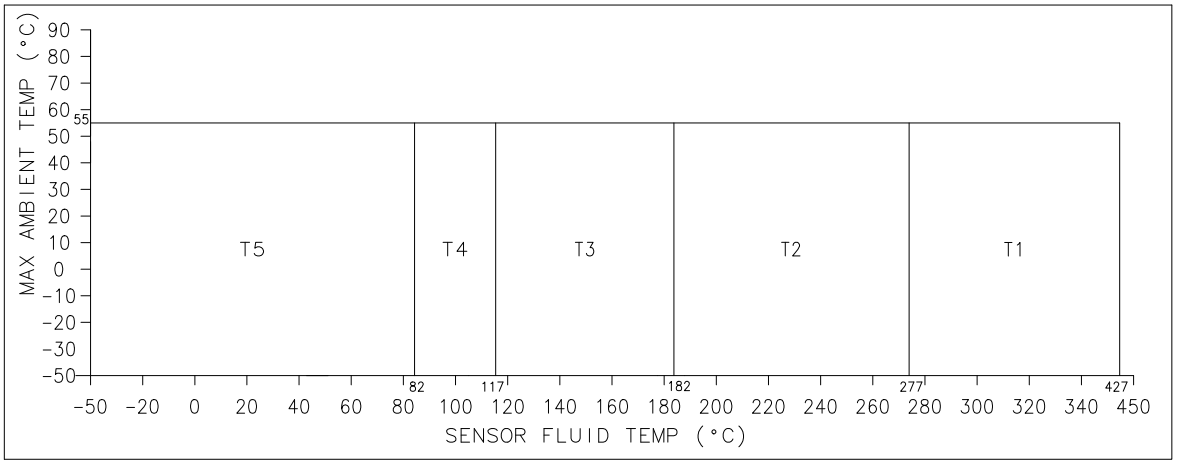
Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2:T 290°C, T1:T 363°C.
Note 3: The minimum ambient and process fluid temperature allowed for dust is -40°C.

Ambient temperature range: Ta –50°C to + 55°C

Since the electronics are mounted approx. 1 meter away from the sensor by means of a flexible stainless steel hose, the use of the sensor at an ambient temperature higher than +55°C is possible, provided that the ambient temperature does not exceed the maximum temperature of the medium taking into account the temperature classification and the maximum operating temperature of the sensor.

3.1.4.6.

Sensor type	
with 2400S	CMF200(C,E)****(0,1)*V****
	CMF300(C,E)****(0,1)*V****
	CMF350(C,E)****(0,1)*V****
	CMF400(C,E)****(0,1)*V****
	CMFHC2(C,E)****(0,1)*V****
	CMFHC3(C,E)****(0,1)*V****
	CMFHC4(C,E)****(0,1)*V****



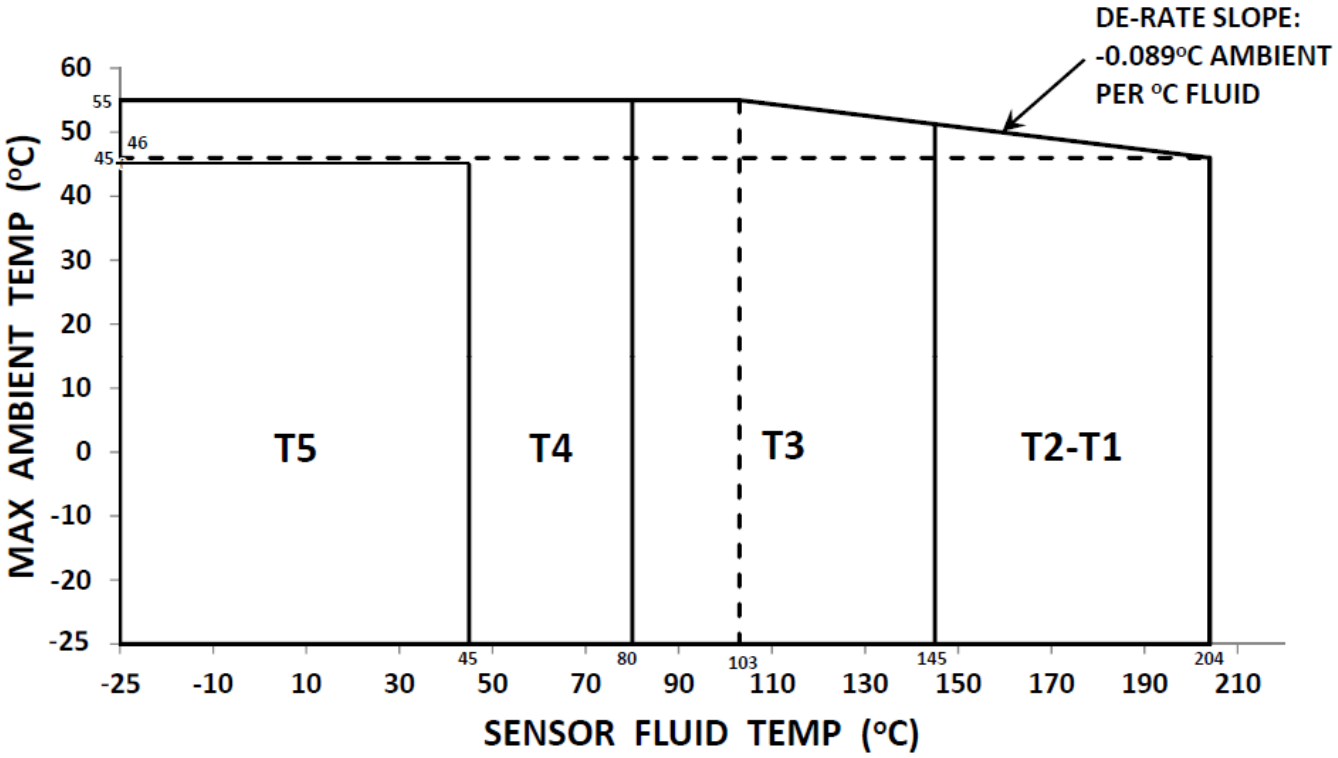
Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2:T 290°C, T1:T 440°C.
Note 3: The minimum ambient and process fluid temperature allowed for dust is -40°C.

Ambient temperature range: Ta –50°C to + 55°C

Since the electronics are mounted approx. 1 meter away from the sensor by means of a flexible stainless steel hose, the use of the sensor at an ambient temperature higher than +55°C is possible, provided that the ambient temperature does not exceed the maximum temperature of the medium taking into account the temperature classification and the maximum operating temperature of the sensor.

3.1.4.7. Excluding CMF***(A, B, C or E)****(K,L,M or N)*V****:

Sensor type			
With FMT	CMF010*****(K,L,M,N)*V****	CMF025*****(K,L,M,N)*V**** CMF050*****(K,L,M,N)*V**** CMF100*****(K,L,M,N)*V****	CMF200*****(K,L,M,N)*V**** CMF300*****(K,L,M,N)*V****

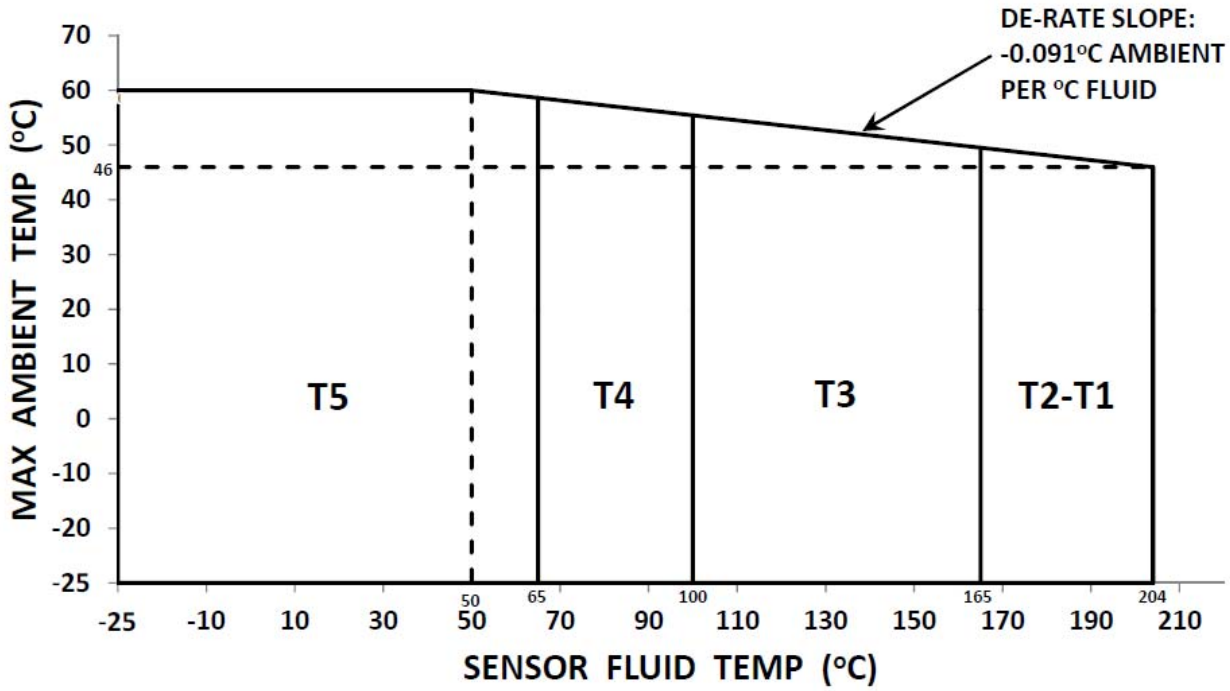


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4: T 130°C, T3:T 195°C, T2 to T1:T 254°C

Ambient temperature range: Ta –25°C to + 55°C

3.1.4.8. Excluding CMF***(A, B, C or E)****(K,L,M or N)*V****:

Sensor type	
with FMT	CMF350*****(K,L,M,N)*V****
	CMF400*****(K,L,M,N)*V****

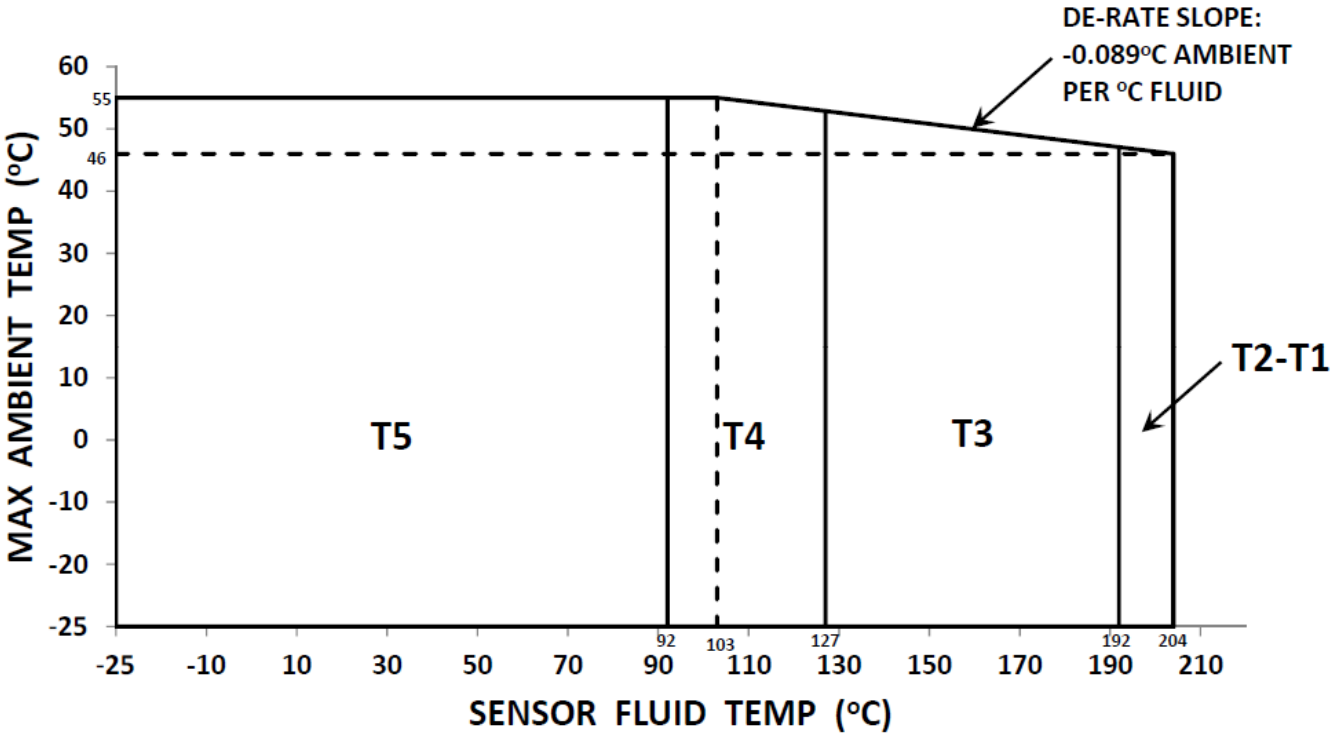


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4: T 130°C, T3:T 195°C, T2 to T1:T 234°C.

Ambient temperature range: Ta –25°C to + 60°C

3.1.4.9. Excluding CMF***(A, B, C or E)****(K,L,M or N)*V****:

Sensor type	
With FMT	CMFHC2*****(K,L,M,N)*V****
	CMFHC3*****(K,L,M,N)*V****
	CMFHC4*****(K,L,M,N)*V****

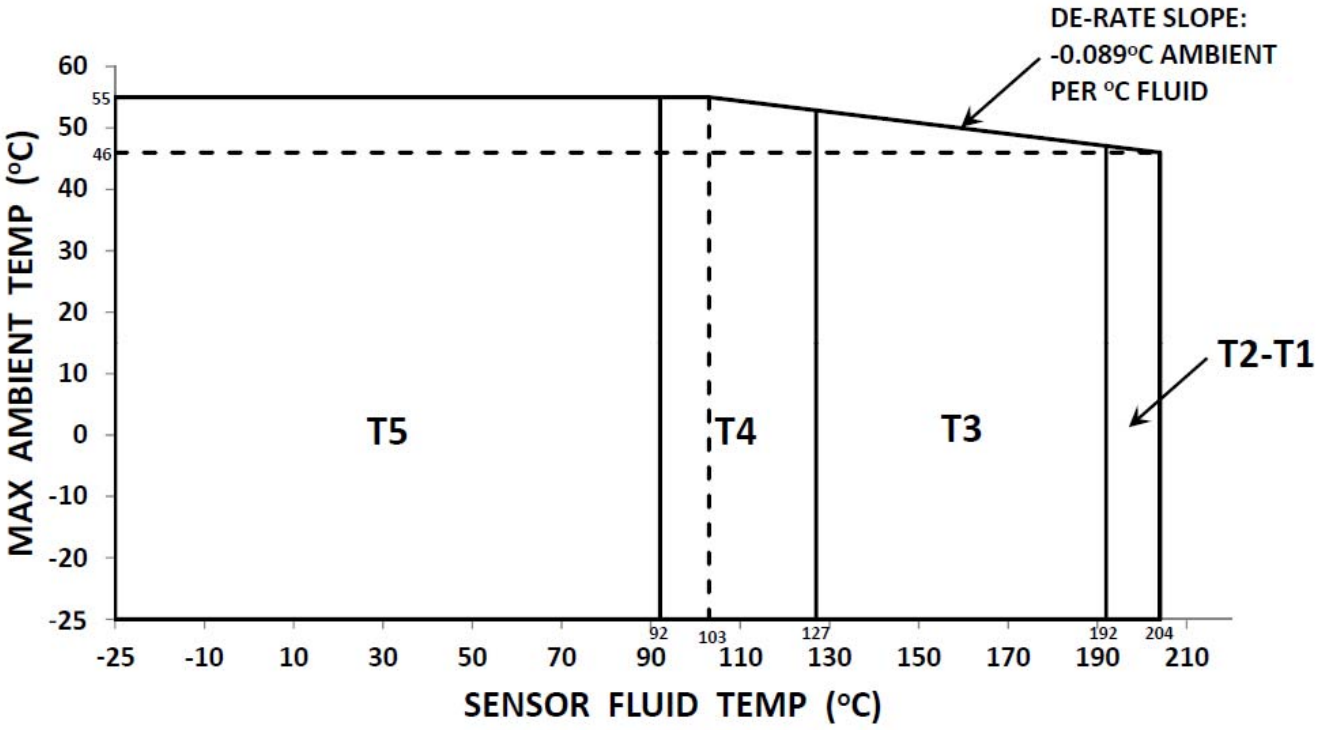


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 207°C.

Ambient temperature range: Ta –25°C to + 55°C

3.1.4.10. Excluding CMF***(A, B, C or E)****(K,L,M or N)*V****:

Sensor type	
With FMT	CMFHC*Y****(K,L,M,N)*V****

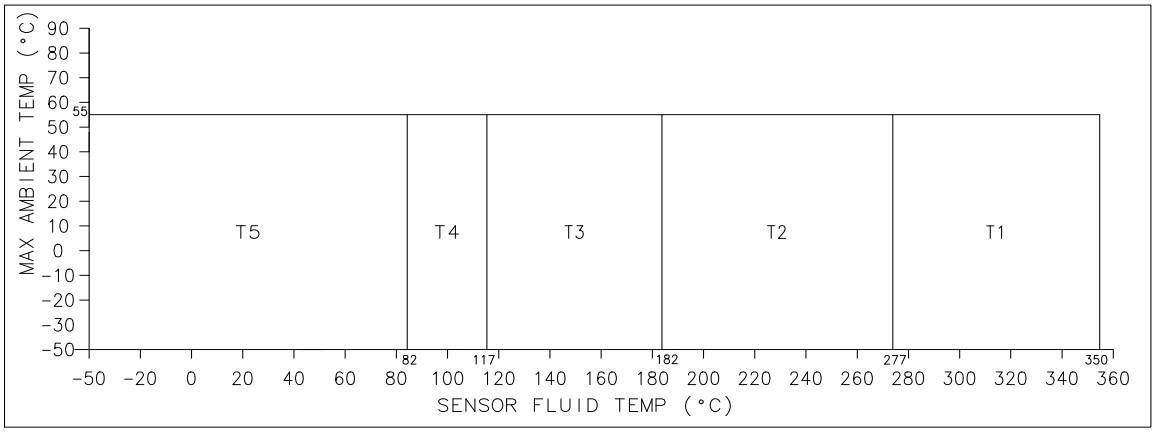


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 207°C.

Ambient temperature range: Ta –25°C to + 55°C

3.1.4.11.

Sensor type	
with FMT	CMF200(A,B)****(K,L,M,N)*V****
	CMF300(A,B)****(K,L,M,N)*V****
	CMF350(A,B)****(K,L,M,N)*V****
	CMF400(A,B)****(K,L,M,N)*V****
	CMFHC2(A,B)****(K,L,M,N)*V****
	CMFHC3(A,B)****(K,L,M,N)*V****
	CMFHC4(A,B)****(K,L,M,N)*V****



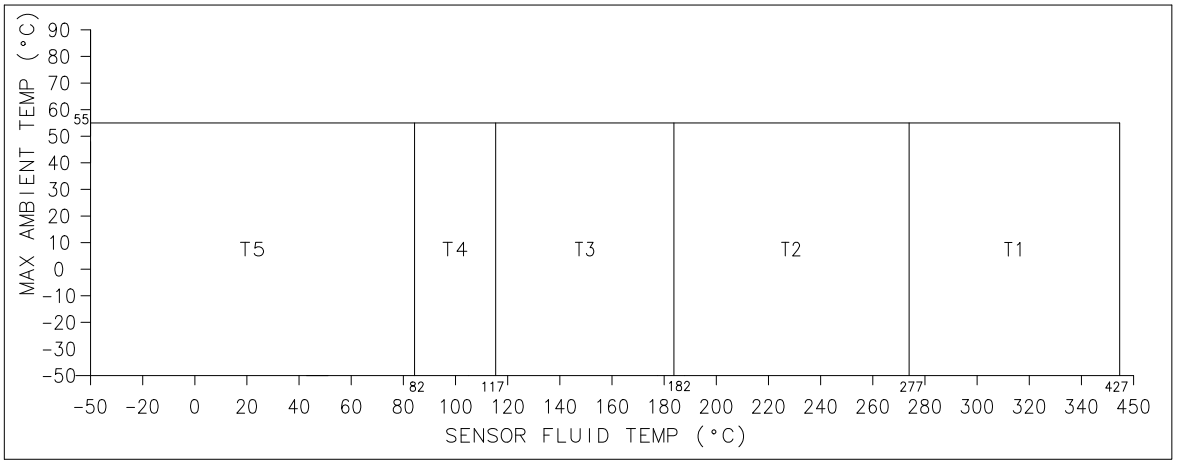
Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4: T 130°C, T3:T 195°C, T2:T 290°C, T1:T 363°C.
Note 3: The minimum ambient and process fluid temperature allowed for dust is -40°C.

Ambient temperature range: Ta –50°C to + 55°C

Since the electronics are mounted approx. 1 meter away from the sensor by means of a flexible stainless steel hose, the use of the sensor at an ambient temperature higher than +55°C is possible, provided that the ambient temperature does not exceed the maximum temperature of the medium taking into account the temperature classification and the maximum operating temperature of the sensor.

3.1.4.12.

Sensor type	
with FMT	CMF200(C,E)****(K,L,M,N)*V****
	CMF300(C,E)****(K,L,M,N)*V****
	CMF350(C,E)****(K,L,M,N)*V****
	CMF400(C,E)****(K,L,M,N)*V****
	CMFHC2(C,E)****(K,L,M,N)*V****
	CMFHC3(C,E)****(K,L,M,N)*V****
	CMFHC4(C,E)****(K,L,M,N)*V****



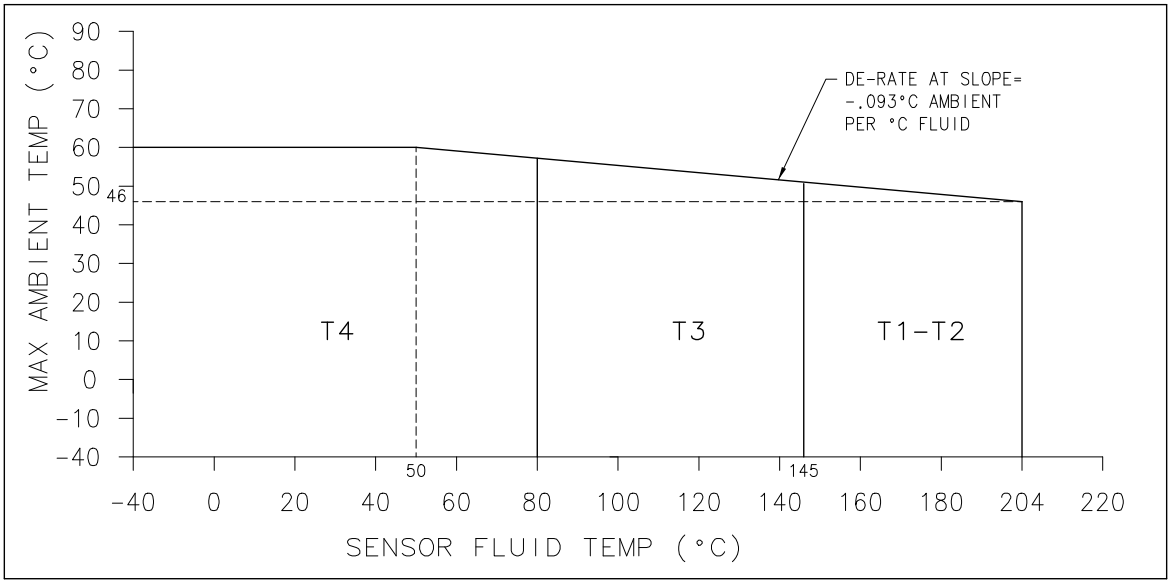
Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T5: T 95°C, T4:T 130°C, T3:T 195°C, T2:T 290°C, T1:T 440°C.
Note 3: The minimum ambient and process fluid temperature allowed for dust is -40°C.

Ambient temperature range: Ta –50°C to + 55°C

Since the electronics are mounted approx. 1 meter away from the sensor by means of a flexible stainless steel hose, the use of the sensor at an ambient temperature higher than +55°C is possible, provided that the ambient temperature does not exceed the maximum temperature of the medium taking into account the temperature classification and the maximum operating temperature of the sensor.

3.1.4.13. Excluding CMF***(A, B, C or E)****(J or U)*V****:

Sensor type			
With 2200S	CMF010*****(J,U)*V****	CMF025*****(J,U)*V****	CMF200*****(J,U)*V****
		CMF050*****(J,U)*V****	CMF300*****(J,U)*V****
		CMF100*****(J,U)*V****	

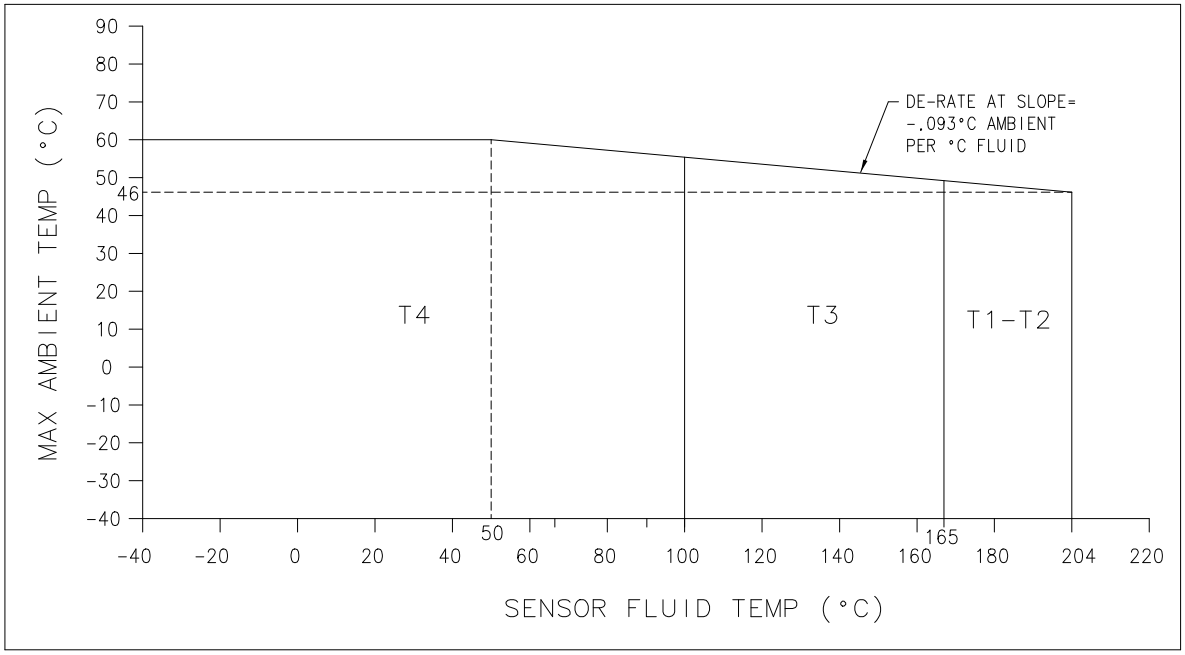


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T4: T 130°C, T3:T 195°C, T2 to T1:T 254°C.

Ambient temperature range: Ta –40°C to + 60°C

3.1.4.14. Excluding CMF***(A, B, C or E)****(J or U)*V****:

Sensor type	
with 2200S	CMF350*****(J,U)*V****
	CMF400*****(J,U)*V****

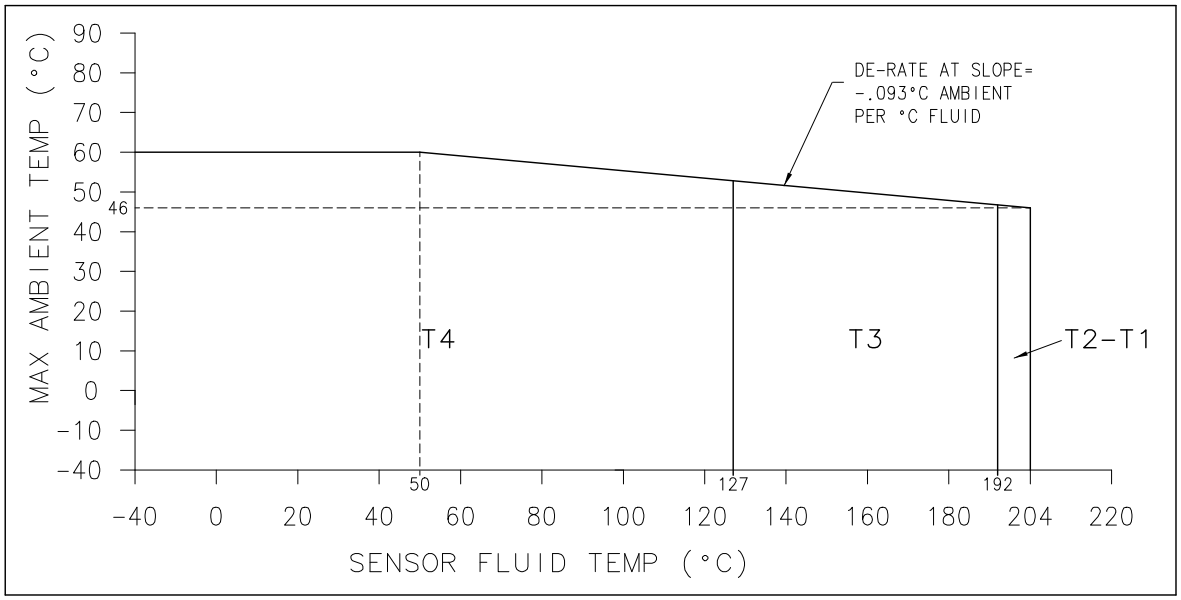


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T4: T 130°C, T3:T 195°C, T2 to T1:T 234°C.

Ambient temperature range: Ta –40°C to + 60°C

3.1.4.15. Excluding CMF***(A, B, C or E)****(J or U)*V****:

Sensor type	
with 2200S	CMFHC2*****(J,U)*V****
	CMFHC3*****(J,U)*V****
	CMFHC4*****(J,U)*V****

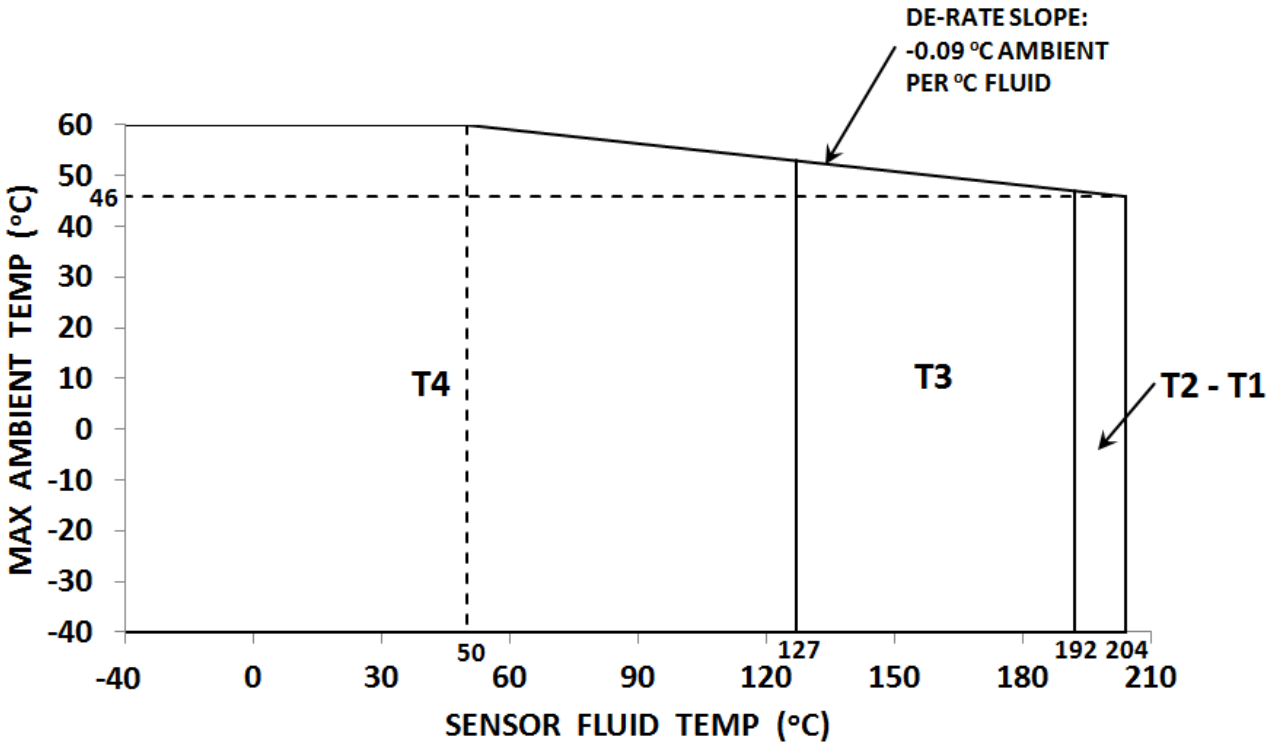


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T4: T 130°C, T3:T 195°C, T2 to T1:T 207°C.

Ambient temperature range: Ta –40°C to + 60°C

3.1.4.16. Excluding CMF***(A, B, C or E)****(J or U)*V****:

Sensor type	
with 2200S	CMFHC*Y****(J,U)*V****

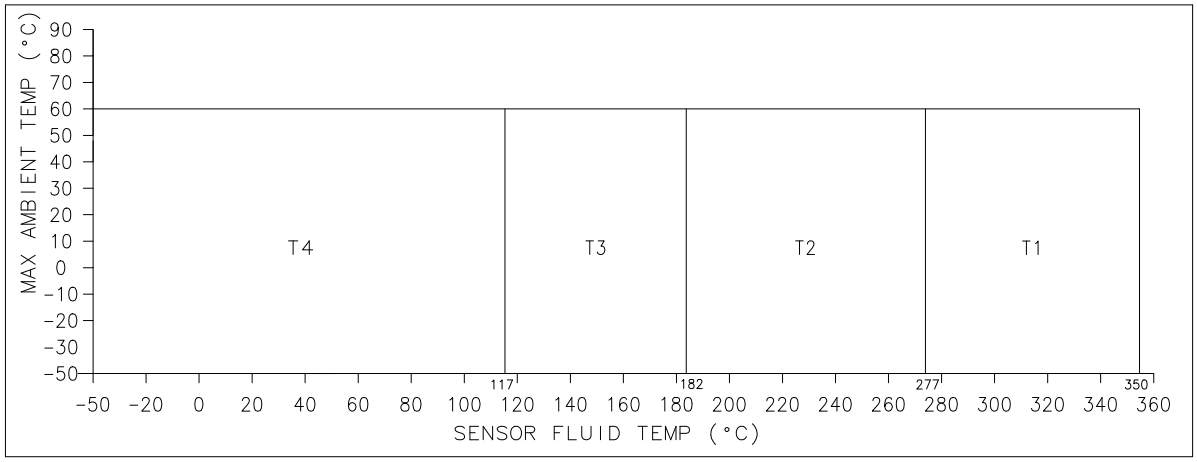


Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T4: T 130°C, T3:T 195°C, T2 to T1:T 207°C.

Ambient temperature range: Ta –40°C to + 60°C

3.1.4.17.

Sensor type	
with 2200S	CMF200(A,B)****(J,U)*V****
	CMF300(A,B)****(J,U)*V****
	CMF350(A,B)****(J,U)*V****
	CMF400(A,B)****(J,U)*V****
	CMFHC2(A,B)****(J,U)*V****
	CMFHC3(A,B)****(J,U)*V****
	CMFHC4(A,B)****(J,U)*V****



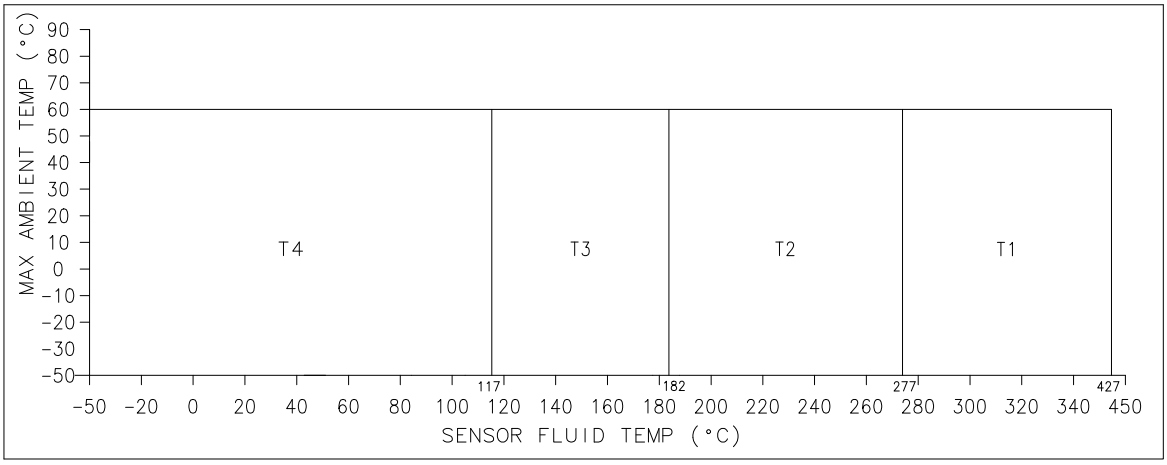
Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T4: T 130°C, T3:T 195°C, T2:T 290°C, T1:T 363°C.
Note 3: The minimum ambient and process fluid temperature allowed for dust is -40°C.

Ambient temperature range: Ta –50°C to + 60°C

Since the electronics are mounted approx. 1 meter away from the sensor by means of a flexible stainless steel hose, the use of the sensor at an ambient temperature higher than +60°C is possible, provided that the ambient temperature does not exceed the maximum temperature of the medium taking into account the temperature classification and the maximum operating temperature of the sensor.

3.1.4.18.

Sensor type	
with 2200S	CMF200(C,E)****(J,U)*V****
	CMF300(C,E)****(J,U)*V****
	CMF350(C,E)****(J,U)*V****
	CMF400(C,E)****(J,U)*V****
	CMFHC2(C,E)****(J,U)*V****
	CMFHC3(C,E)****(J,U)*V****
	CMFHC4(C,E)****(J,U)*V****



Note 1: Use the above graph to determine the temperature class for a given fluid and ambient temperature.
Note 2: The maximum surface temperature for dust is as follows: T4: T 130°C, T3:T 195°C, T2:T 290°C, T1:T 440°C.
Note 3: The minimum ambient and process fluid temperature allowed for dust is -40°C.

Ambient temperature range: Ta –50°C to + 60°C

Since the electronics are mounted approx. 1 meter away from the sensor by means of a flexible stainless steel hose, the use of the sensor at an ambient temperature higher than +60°C is possible, provided that the ambient temperature does not exceed the maximum temperature of the medium taking into account the temperature classification and the maximum operating temperature of the sensor.

3.1.5. Marking;

The marking shall include following:

II 3G with additional marking required by the standards mentioned in the following tables:
II 3D Ex tc IIIC T [1)] °C Dc IP 66

Type	Type of protection	Ambient / Fluid temperature range[2)]
CMF010*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMF025*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMF050*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMF100*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMF200*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMF300*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMFHC2*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMFHC3*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMFHC4*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +55 °C
CMF010*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMF025*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMF050*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMF100*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMF200*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMF300*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMFHC2*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMFHC3*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMFHC4*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +55 °C
CMF350*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF400*****(0, 1)*V****	Ex nA IIC T1-T5 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF350*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +60 °C
CMF400*****(K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 25°C ≤ Ta ≤ +60 °C
CMF010*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF025*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF050*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF100*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF200*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF300*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60°C
CMF350*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60°C
CMF400*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60°C
CMFHC2*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMFHC3*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMFHC4*****(J or U)*V****	Ex nA IIC T1-T4 Gc	- 40°C ≤ Ta ≤ +60 °C
CMF200(A, B, C or E)****(0, K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 50°C ≤ Ta ≤ +55 °C
CMF300(A, B, C or E)****(0, K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 50°C ≤ Ta ≤ +55 °C
CMF350(A, B, C or E)****(0, K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 50°C ≤ Ta ≤ +55 °C
CMF400(A, B, C or E)****(0, K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 50°C ≤ Ta ≤ +55 °C
CMFHC2(A, B, C or E)****(0, K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 50°C ≤ Ta ≤ +55 °C
CMFHC3(A, B, C or E)****(0, K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 50°C ≤ Ta ≤ +55 °C
CMFHC4(A, B, C or E)****(0, K, L, M or N)*V****	Ex nA IIC T1-T5 Gc	- 50°C ≤ Ta ≤ +55 °C
CMF200(A, B, C or E)****J*V****	Ex nA IIC T1-T4 Gc	- 50°C ≤ Ta ≤ +60 °C
CMF300(A, B, C or E)****J*V****	Ex nA IIC T1-T4 Gc	- 50°C ≤ Ta ≤ +60 °C
CMF350(A, B, C or E)****J*V****	Ex nA IIC T1-T4 Gc	- 50°C ≤ Ta ≤ +60 °C
CMF400(A, B, C or E)****J*V****	Ex nA IIC T1-T4 Gc	- 50°C ≤ Ta ≤ +60 °C
CMFHC2 (A, B, C or E)****J*V****	Ex nA IIC T1-T4 Gc	- 50°C ≤ Ta ≤ +60 °C
CMFHC3(A, B, C or E)****J*V****	Ex nA IIC T1-T4 Gc	- 50°C ≤ Ta ≤ +60 °C
CMFHC4(A, B, C or E)****J*V****	Ex nA IIC T1-T4 Gc	- 50°C ≤ Ta ≤ +60 °C

[1] – FOR DUST TEMP RATINGS SEE TEMPERATURE GRAPHS
[2] – Maximum surface temperature T for dust, see temperature graphs and manufacturer's instructions. Minimum ambient and process temperature for dust is -40 °C.

4. Special conditions for safe use / Installation instructions

5.1 The sensor without Junction box is designed for use in connection with a suitable transmitter, e.g. 24********L**** in accordance with BVS 05 E 116 X; only the assembly of the sensor and the transmitter guarantees the necessary degrees of protection.

5.2 The sensor without Junction box is designed for use in connection with a suitable transmitter, e.g. 22********L**** in accordance with BVS 08 ATEX E 112 X; only the assembly of the sensor and the transmitter guarantees the necessary degrees of protection.

5.3 The sensor without Junction box is designed for use in connection with a suitable transmitter, e.g. FMT*****L**** in accordance with BVS 10 ATEX E 115 X, only the assembly of the sensor and the transmitter guarantees the necessary degrees of protection.