

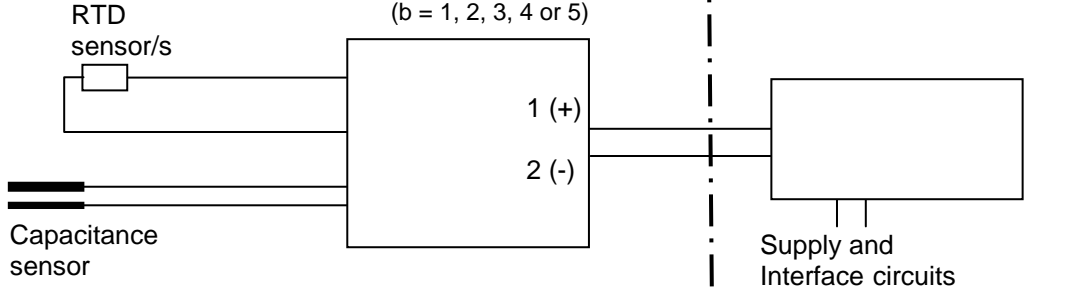
**For use in US**

Hazardous (Classified) Location

IS (Entity) Class I, Division 1, Groups C, D  
 or Class I, Zone 0, AEx ia IIB T2,T3,T4 or T6/T3, T4 or T6 Ga  
 or NI Class I, Division 2, Groups C, D

Nonhazardous Location

Endress+Hauser Yamanashi Co.,Ltd.  
 NMT539-7b.... (FMus)  
 (b = 1, 2, 3, 4 or 5)



Entity and Nonincendive Field Wiring Parameters for terminals 1 (+), 2 (-)  
prothermo NMT539-7bcdefghij

$U_i = V_{max} = 30 \text{ V}$   
 $I_i = I_{max} = 120 \text{ mA}$   
 $P_i = P_{max} = 1 \text{ W}$   
 $C_i = 6.6 \text{ nF}$   
 $L_i = 48 \mu\text{H}$

$U_o = V_{oc} \leq 30 \text{ V}$   
 $I_o = I_{sc} \leq 120 \text{ mA}$   
 $P_o = P_{max} \leq 1 \text{ W}$   
 $C_a \geq 6.6 \text{ nF} + C_{cable}$   
 $L_a \geq 48 \mu\text{H} + L_{cable}$

Ambient temperature range - 40 °C to +60 or +85 °C (electronics)

The relation between the ambient temperature, the process temperature and the temperature class is shown in the following table:

Temperature class	Ambient temperature	Process temperature (sensor)	
		Temperature measurement only	Temperature measurement and water level or water level only
T6	≤ 60 °C	≤ 60 °C	≤ 60 °C
T4	≤ 85 °C	≤ 100 °C	≤ 100 °C
T3	≤ 85 °C	≤ 175 °C	≤ 125 °C
T2	≤ 85 °C	≤ 235 °C	---

Notes

- The nonintrinsically safe terminals (supply and interface circuit) must not be connected to any device that uses or generates more than 250 V rms or dc unless it has been determined that the voltage has been adequately isolated.
- The installation must be in accordance with the National Electrical Code ANSI/NFPA 70 article 504 and ANSI/NFPA RP 12.6
- FM Entity approved associated apparatus necessary. Used in a configuration where associated apparatus  $U_o$  does not exceed  $U_i$  of the prothermo NMT539-7... and associated apparatus  $I_o$  does not exceed  $I_i$  of the prothermo NMT539-7...  $C_i$  of the prothermo NMT539-7... plus capacitance of interconnecting wiring may not exceed associated apparatus  $C_o$ .  $L_i$  of the prothermo NMT539-7... plus inductance of interconnecting wiring may not exceed associated apparatus  $L_o$ .
- For use in Class I, Division 2 location, rigid metal conduit is required if not installed in accordance with the nonincendive field wiring principles outlined with the National Electrical Code ANSI/NFPA 70 article 501 and ANSI/NFPA RP 12.6.

Warning:

- Substitution of components may impair intrinsic safety. For installation, maintenance or operation instructions see Instruction Manual.
- Don't modify parts and circuits of this instrument.
- Avoid electrostatic charge at the capacitance sensor.

REV	DATE	CONTENTS	REVISED	基 .PPROVED	SCALE	ESTABLISH DATE		
				/	/	22 Feb. 2007		
						APPROVED	CHECK	DESIGN
2	25 Jan. 17	Add "For use in US", etc.	H.Mizokuni			基	/	/
1	01 Jan. 08	Company name change	H.Mizokuni		PAGE	/	/	
Endress+Hauser		TITLE			1			
Endress+Hauser Yamanashi Co.,Ltd.		Control drawing for NMT539-7.... (FMus) (Temp., WB, Temp.+WB version)			1			
					基	NO	Ex461-850	Rev. 2