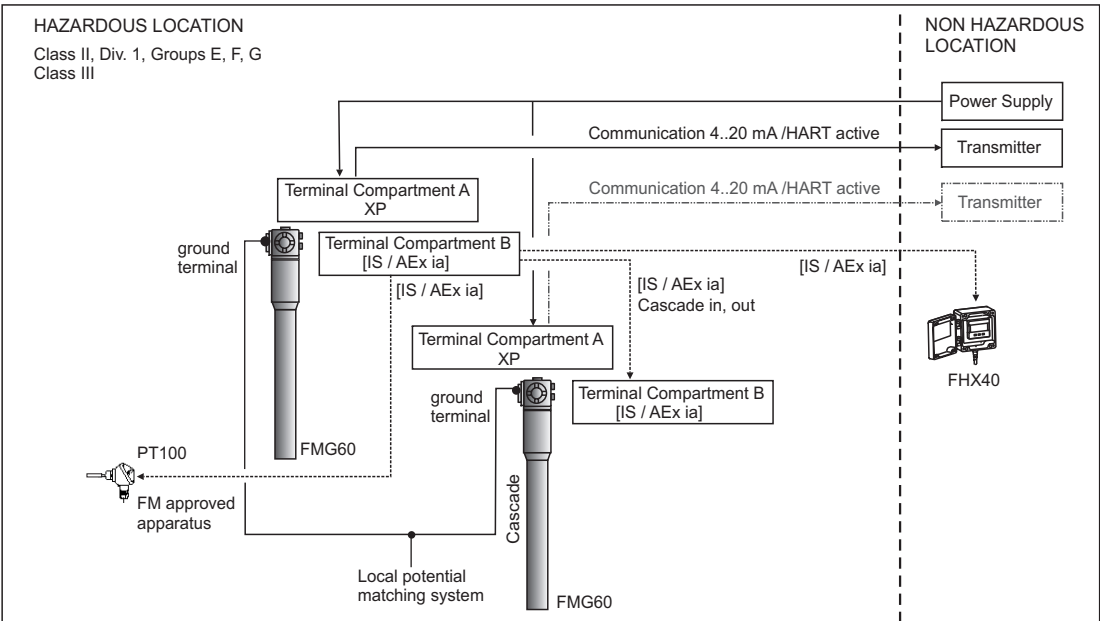
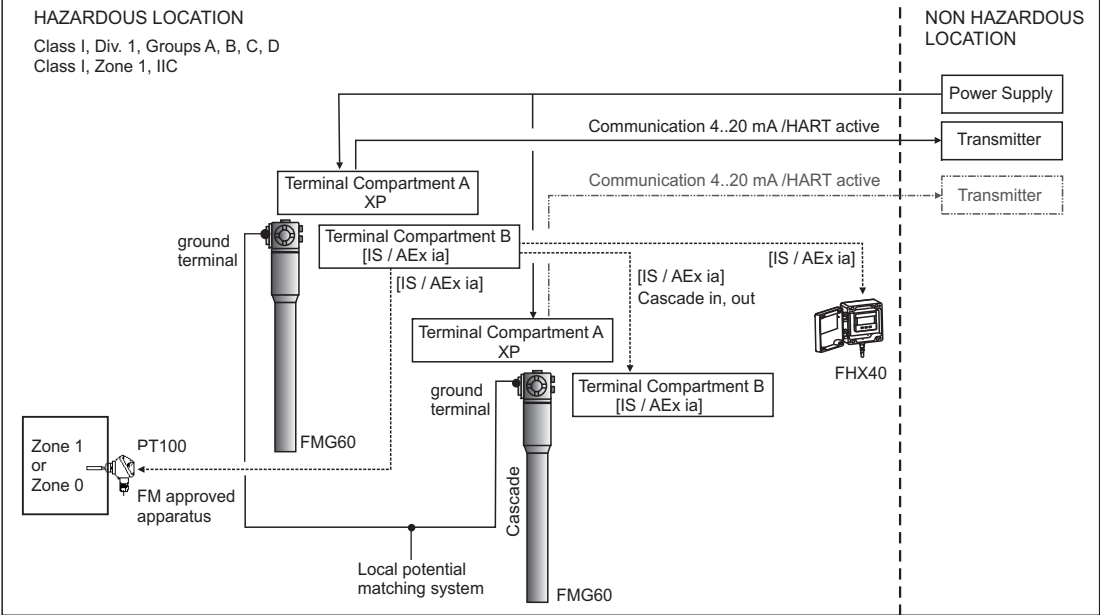
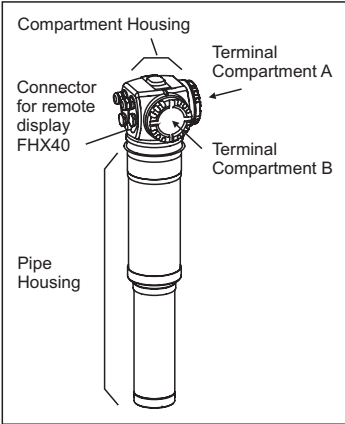
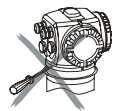
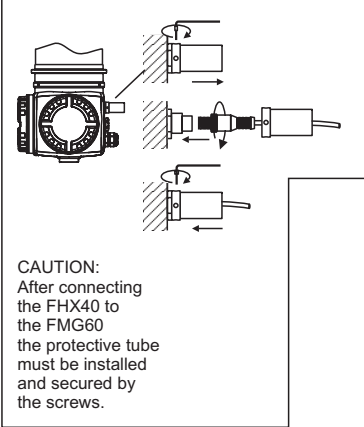




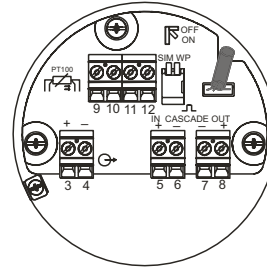
CAUTION:
The screws at the pipe housing must not be loosened!



For previous connection depicted below refer to installation drawing: 960007340 A



TERMINAL COMPARTMENT B



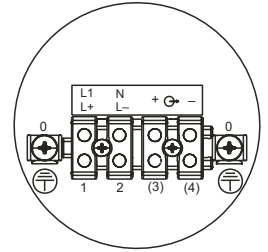
Intrinsically safe circuits Entity Parameters		Group A, B (IIC)	Group C, D (IIA, IIB)
Signal output 	not connected		
PT100 	Voc = 8.4 V Isc = 8.3 mA Po = 17.5 mW Ri = 1012 Ω	Ca = 5.2 μF La = 400 mH	Ca = 43 μF La = 400 mH
Cascade out 	Voc = 8.4 V Isc = 19.2 mA Po = 40.3 mW Ri = 439 Ω	Ca = 5.1 μF La = 69 mH	Ca = 42 μF La = 199 mH
Cascade in 	Vmax = 8.4 V Imax = 19.2 mA Pi = 40.3 mW Ci = 0 Li = 67 μH		
Connection for FHX40 	Voc = 4.7 V Isc = 37.7 mA Po = 44.3 mW	For connection to the FM approved intrinsically safe Endress+Hauser display FHX40 with associated cable. Observe Installation Drawing 960411-1006. This circuit may also be connected to the FM approved Endress+Hauser Service Interface Commubox FXA193 with associated connection cable for ToF instruments. Observe Installation Drawing FES 0072.	

INTRINSICALLY SAFE (Entity)

Class I, Div. 1, Groups A, B, C, D or Zone 1, IIC

- FM approved apparatus must be installed acc. to manufacturer instructions.
- The installation shall be in accordance with the National Electrical Code ANSI / NFPA 70 and ANSI / ISA-RP 12.06.01.
- WARNING:** Substitution of components may impair intrinsic safety.
- Control room equipment must not use or generate over 250 V.
- Wiring: Use cables not subject to short circuiting.
Use wires suitable for 5 K above surrounding ambient.
- The maximum permissible values of voltage and current as well as the maximum permissible external capacitance and inductance are shown in the table above.
Ca ≥ Ci + Ccable; La ≥ Li + Lcable.
- Do not operate a temperature sensor with "ib" circuit in Zone 0!

TERMINAL COMPARTMENT A



Supply Circuit		
	Terminal	Supply Voltage
AC type	L1 N	90...250 VAC, 50/60 Hz
DC type	L+ L-	18...36 VDC
Signal Circuit		
Type: FMG60-**D1****		4...20 mA/HART (active) The detector ensures galvanic isolation up to a maximum of 250 VAC between the signal circuit and any other circuit.

EXPLOSION PROOF

Class I, Div. 1, Groups A, B, C, D or Zone 1, IIC

- Install per National Electrical Code (NEC).
- Control room equipment must not use or generate over 250 V.
- Supply wires shall be installed in conduit in accordance with the NEC.
- Do not open the terminal compartment A if the supply voltage is switched on and a combustible atmosphere is present.
If a combustible atmosphere is present, wait 3 minutes after switching off the supply voltage, before opening the cover.
- Use supply wires suitable for 5 K above surrounding ambient.
- Sealing plugs of the terminal compartment A must not be exchanged with those of the terminal compartment B.
- Types with stainless steel terminal housing (FMG60-*****1***, FMG60-*****2****)
Seal not required (apparatus was tested with 15 feet conduit).
- Types with aluminium terminal housing (FMG60-*****3***, FMG60-*****4****)
Seal required at enclosure wall!

Class II, Div. 1, Groups E, F, G, Class III

- Installation shall be in accordance with NEC using threaded conduits or other wiring methods in accordance with Article 500 through Article 510.
- Use a dust tight seal at the conduit entry in Class II or an III locations.
- Do not open the terminal compartment A if the supply voltage is switched on and a combustible atmosphere is present.
If a combustible atmosphere is present, wait 3 minutes after switching off the supply voltage, before opening the cover.
- Use supply wires suitable for 5 K above surrounding ambient.

	Permissible ambient temperature	Temperature class
Detector without water cooling or Detector with water cooling out of operation	• Detector with NaI crystal scintillator: -40°C...+60°C • Detector with plastic scintillator: -40°C...+60°C	T6
Detector with water cooling in operation	At the pipe housing (inside the water cooling): • Detector with NaI crystal scintillator: -40°C...+60°C • Detector with plastic scintillator: -40°C...+60°C At the compartment housing: -40°C...+75°C	T6

ZD202F-C/00/EN/10.09
CCS/FM6.0
FM/08.07.08

FM Installation Drawing 960007340 C

Gammapiot M
FMG60
4-20 mA/HART (non IS)

Endress+Hauser

People for Process Automation



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