ZD042E-G/00/en/01.09
CCS/FM6.0
CSA/G 00.05.08
71089363

CSA Control Drawing 960392-2060 G

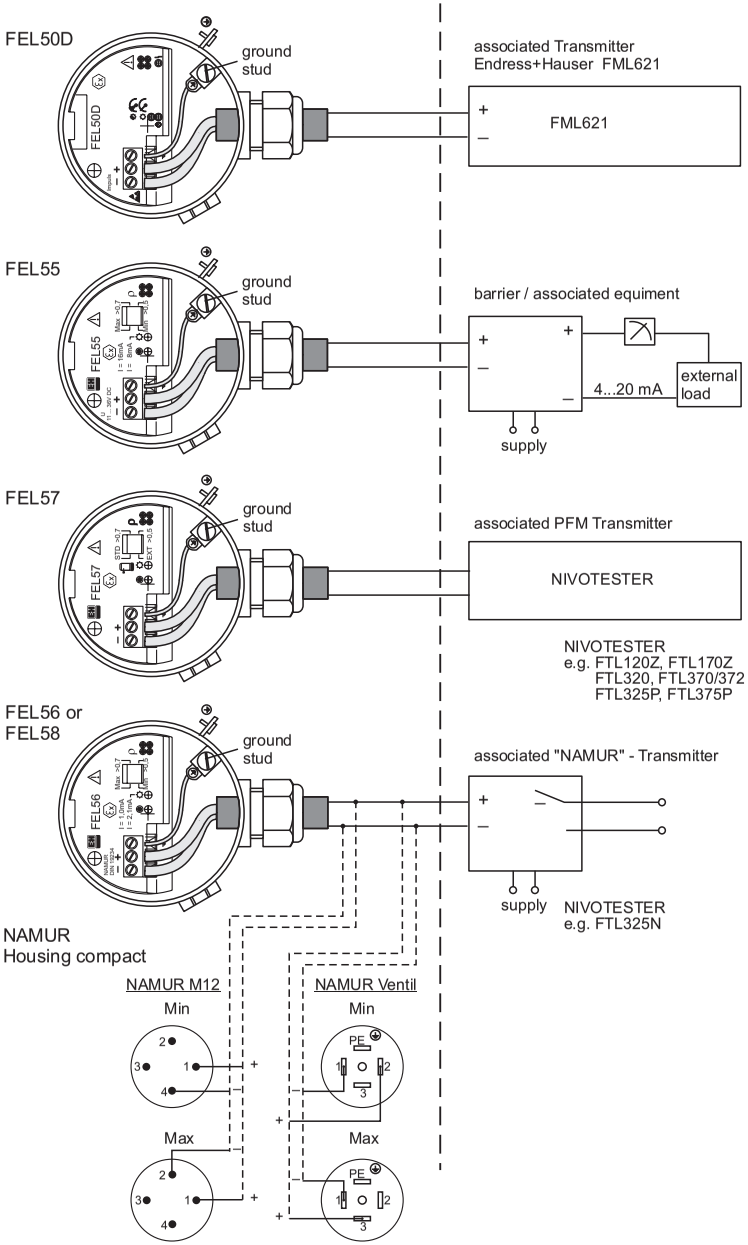
Liquiphant M, Liquiphant S
(cCSAus / IS)

Endress+Hauser
People for Process Automation

Hazardous location

Class I, Div. 1, Groups A, B, C, D
Ex ia IIC T6
Class II, Div. 1, Groups E, F, G
Class III

Non hazardous location



FEL50D insert
Entity Parameters:
Ui / Vmax. ≤ 27.6 V
Ii / Imax. ≤ 93 mA
P_i = 640 mW
C_i = 2 nF
L_i = 0.133 mH
System Parameters:
Endress+Hauser
associated equipment FML621

FEL55 insert
Entity Parameters:
Ui / Vmax. ≤ 36 V
Ii / Imax. ≤ 100 mA
P_i = 1 W
C_i = 0
L_i = 0
System Parameters:
a) 28 V / 300 Ω + ground or
b) 28 V / 300 Ω + 28 V / diode or
c) 28 V / 300 Ω + 10 V / 50 Ω

FEL57 insert
Entity Parameters:
Ui / Vmax. = 16.7 V
Ii / Imax. = 150 mA
P_i = 1 W
C_i = 0
L_i = 0
System Parameters:
Endress+Hauser PFM
associated equipment

FEL56/FEL58 insert +
NAMUR housing compact
Entity Parameters:
Ui / Vmax. = 16 V
Ii / Imax. = 52 mA
P_i = 169 mW
C_i = 0
L_i = 0

Intrinsically safe (Ex ia),
Cl. I, Div. 1, Groups A, B, C, D, Cl. II, Div. 1, Groups E, F, G, Cl. III; Ex ia IIC T6
Hazardous Location Installations

Division 1 Installation:

1. Control room equipment may not use or generate over 250 V.
2. Install per the Canadian Electrical Code (CEC) resp. National Electrical Code NFPA 70 (NEC).
3. For entity installations: Use CSA certified intrinsic safety barrier or other associated equipment that satisfy the following conditions:
   Voc ≤ Vmax, Isc ≤ Imax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable
   Uo/Voc ≤ Ui /Vmax, Io/Isc ≤ Ii/Imax.
4. For System Installation use CSA certified intrinsic safety barriers or associated equipment.
5. Warning: Substitution of components may impair intrinsic safety.
   Avertissement: La substitution de composants peut compromettre la sécurité intrinsèque.
6. Intrinsic safety barrier manufacturer's installation drawing must be followed, when installing this equipment:
   The configuration of the intrinsic safety barrier(s) must be CSA approved.
7. Use supply wires suitable for 5°C above surrounding.
   Utiliser de fils d'alimentation qui convennient à une température de 5°C au-dessus de la température ambiante.
8. Note: Type of protection for FTL5.(H)-...E4. and FTL51C-...E4. and FTL7.-...E4: Intrinsically safe (Ex ia),
   Cl. I, Div. 1, Groups A, B, C, D, Cl. II, Div. 1, Groups G + Coal dust, Cl. III;
   Ex ia IIC T6.
9. Vibration forks installed in pressure vessels consist of homogeneous stainless steal with a wall thickness > 1 mm and are designed to meet the same pressure requirements of the original pressure vessel.
   Hence, secondary seals are not required.

Suitable for Cl. I, Div. 2, Groups A, B, C, D, Cl. II, Div. 2, Groups E, F, G, Cl. III
Hazardous Location Installation

1. Install per Canadian Electrical Code (CEC) resp. National Electrical Code NFPA 70 (NEC) using threaded metal conduit.
   Intrinsic safety barrier not required;
   max. supply voltage 45 VDC.
2. Warning: Explosion Hazard – Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.
   Avertissement: Risque d'explosion – avant de déconnecter l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux.
   Warning: Open circuit before removing cover.
   Avertissement: Ouvrir le circuit avant d'enlever le couvercle.
   Warning: Substitution of components may impair suitability for Cl. I, Div. 2.
   Avertissement: La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Cl. I, Div. 2.
3. Note: FTL5.-...E4. and FTL7.-...E4 (Plastic enclosure) is not suitable for Cl. II, Div. 1 applications.

Temperature code	Permissible ambient temperature electronic compartment	Device
T6	–50°C...+60°C	FEL50D
	–50°C...+70°C	FEL5x without FEL50D
T5, T4, T3	–50°C...+70°C	all electronic inserts FEL5x