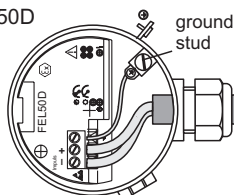


Hazardous classified location

Class I, Div. 2, Groups A, B, C, D
Class II, Div. 2, Groups F, G
Class III

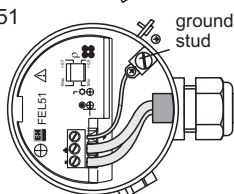
Non hazardous location

FEL50D



Endress+Hauser
Transmitter FML621
 $U_{nom} = 21...26$ VDC

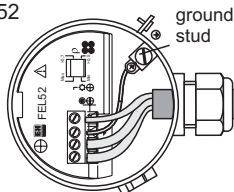
FEL51



L1 Power supply
19...250 VAC
 $I_{max} = 350$ mA

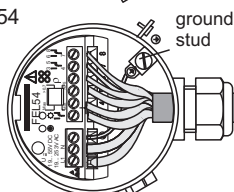
external
load

FEL52



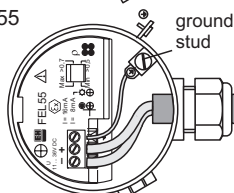
Power supply
10...55 DC
 $I_{max} = 350$ mA

FEL54



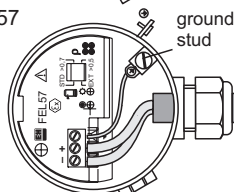
Power supply
19...250 VAC or
19...55 VDC

FEL55



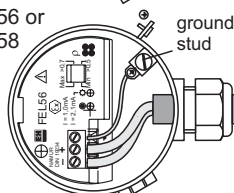
Power supply
 $U_{nom} = 11...36$ VDC
 $I_{nom} = 4...20$ mA

FEL57



Endress+Hauser
PFM-Transmitter
e.g. FTL325P, FTL375P
 $U_{nom} = 11...16.7$ VDC
 $I_{nom} = 11...14$ mA

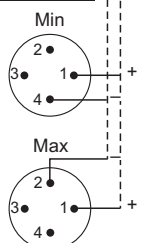
FEL56 or
FEL58



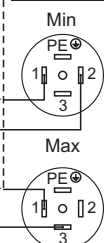
Endress+Hauser
NAMUR Transmitter
e.g. FTL325N, FTL375N
 $U_{nom} = 4...16$ VDC
 $I_{nom} = 0.4...52$ mA

NAMUR
Housing compact

NAMUR M12



NAMUR Ventil



Nonincendive Class I, Div. 2, Groups A, B, C, D
and suitable for Class II and III, Div. 2, Groups F, G
Hazardous location installation

- 1) Installation shall be in accordance with NEC using metal threaded conduit or other wiring methods in accordance with articles 500 to 510. Intrinsic safety barrier not required.
- 2) Nonincendive field wiring installation.
The nonincendive field wiring circuit concept allows interconnection of nonincendive field wiring apparatus with associated nonincendive field wiring apparatus or associated apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when
 $V_{max} \geq V_{oc}$ or V_t , $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$.
Transmitter parameters are as follows:

FEL50D insert (voltage controlled circuit)

NIFW Parameters:

$V_{max} \leq 27.6$ V

$I_{max} =$ see note 3

$C_i \leq 2$ nF

$L_i \leq 0.133$ mH

FEL55 insert (current controlled circuit)

NIFW Parameters:

$V_{max} \leq 36$ V

$I_{max} =$ see note 3

$C_i \approx 0$

$L_i \approx 0$

FEL57 insert (voltage controlled circuit)

NIFW Parameters:

$V_{max} \leq 16.7$ V

$I_{max} =$ see note 3

$C_i \approx 0$

$L_i \approx 0$

FEL56/FEL58 insert (voltage controlled circuit)

+ NAMUR housing compact

NIFW Parameters:

$V_{max} \leq 16$ V

$I_{max} =$ see note 3

$C_i \approx 0$

$L_i \approx 0$

- 3) For these current and voltage controlled circuits, the parameter I_{max} is not required and need not to be aligned with parameters I_{sc} and I_L of the associated nonincendive field wiring or associated apparatus.
- 4) A dust tight seal must be used at the conduit entry when the transmitter is used in a Class II & III location.
- 5) WARNING:
Explosion hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.
Explosion hazard - Substitution of components may impair suitability for Class I, Division 2 or Class I, Zone 2.

Class II, III installation (without barrier)

- 6) Installation of transmitter circuit wiring according to NEC using threaded conduit or other wiring methods in accordance with articles 500 to 510.

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

ZD043F-C/00/EN/10.09
CCS/FM6.0
FM/C 23.03.09

FM Control Drawing
960392-1066 C

Liquiphant M/S (NI)
FTL50(H), FTL51(H), FTL51C, FTL70, FTL71



71105523

Endress+Hauser



People for Process Automation