

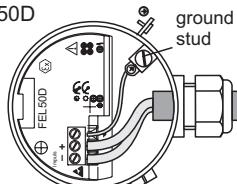
Hazardous classified location

Class I, Div. 2, Groups A, B, C, D

Class II, Div. 2, Groups F, G

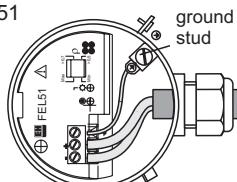
Class III

FEL50D



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

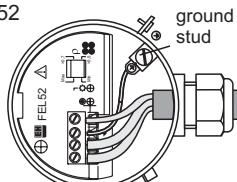
FEL51



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

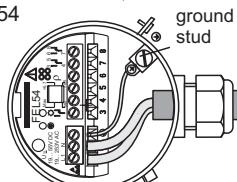
Non hazardous location

FEL52



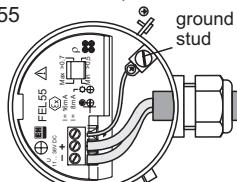
+ Power supply
10...55 DC
- I_{max} = 350 mA

FEL54



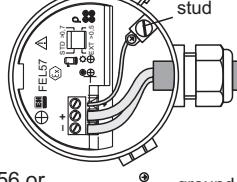
+ Power supply
19...250 VAC or
19...55 VDC
P_{max} = 1.5 W
Contact ratings:
250 VAC/6 A/1500 VA (cos φ = 1)
250 VDC/6 A/200 W

FEL55



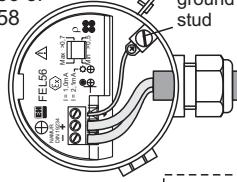
+ Power supply
U_{nom} = 11...36 VDC
I_{nom} = 4...20 mA

FEL57



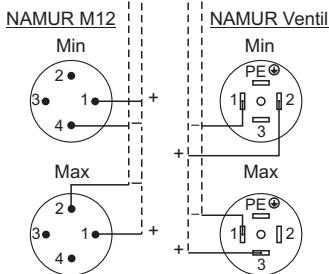
+ Endress+Hauser
PFM-Transmitter
e.g. FTL325P, FTL375P
U_{nom} = 11...16.7 VDC
I_{nom} = 11...14 mA

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



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_t 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.

6) NEC, cl. 50 70-394: "Flammable fluid seals" classification according ANSI/ISA 12.27.01.

Single seal device; Gas tight conduit seal not required.

Class II, III installation (without barrier)

7) 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

XAA00614F-D/00/EN/13.11
CCS/FM6.0
FM/D 16.12.10

FM Control Drawing 960392-1066 D

Liquiphant M/S
FTL50(H), FTL51(H), FTL51C, FTL70/71
(NI)



71145361

Endress+Hauser

People for Process Automation