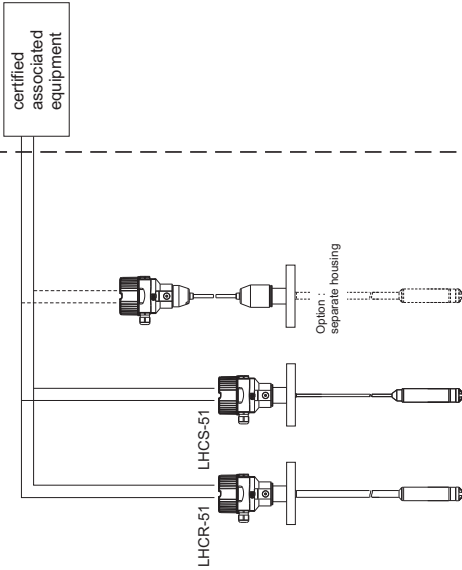


Non hazardous location

Hazardous location

Class I, Div. 1, 2, Groups A, B, C, D
Class 1, Zone 0, IIC
ATEX Ia IIC T6
Class II, Div. 1, 2, Groups E, F, G
Class III

Any FM approved barrier / associated equipment



Entity parameter:
Vmax = 30 VDC
Imax = 300 mA
Pmax = 1 W
Ci ≤ 10 nF
Li = 0

Areas of application
The compact instruments are suitable for use in areas subject to explosion caused by gases, vapours or mists.

Table: Permissible ambient temperature and temperature code:

Temperature code	Permissible ambient temperature, electronic compartment
T6	-40...40 °C
T4	-40...70 °C

option for Ta min: -50 °C

Intrinsically safe installation
Intrinsically safe (entity), Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G
Hazardous Location Installation

- Control room equipment may not use or generate over 250 V.
- Use Factory Mutual Entity-approved intrinsic safety barrier with Voc or Vi ≤ Vmax, Isc or It ≤ Imax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.
Barrier must be incapable of delivering more than 1 Watt to a matched load.
Transmitter entity parameters are as follows:
Vmax = 30 VDC
Imax = 300 mA
Ci ≤ 10 nF
Li = 0
For T-code see table
- Installation should be in accordance with ANS/ISA RP-12.06.01 "Installation of intrinsically safe systems for hazardous (classified) locations and the National Electrical Code (ANSI/NFPA 70).
- Warning: Substitution of Components may impair intrinsic safety.
- Intrinsic safety barrier manufacturer's installation drawing must be followed, when installing this equipment. The configuration of the intrinsic safety barrier(s) must be FMRC-approved.
- Use supply wires suitable for 5 °C above surrounding ambient.

Division 2 and Zone 2 installation
Nonincendive Class I, Div. 2, Groups A, B, C, D
Hazardous Location Installation (not for LHCS-51 and separate housing)

- Installation shall be in accordance with NEC using threaded conduits or other wiring methods in accordance with articles 500 to 510.
intrinsic safety barrier not required
max. supply voltage 45 VDC.
Max. ambient temperature: 70 °C
- Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.
- 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 Vmax ≥ Voc or Vi, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.
Transmitter parameters are as follows: Vmax = 45 VDC; Ci ≤ 10 nF; Li = 0;
Imax = see note 10
Max. ambient temperature: 70 °C
- For the current controlled circuit, the parameter Imax is not required and need not to be aligned with parameter Isc and It of the associated nonincendive field wiring apparatus or associated apparatus.
Warning: Substitution of Components may impair suitability for Ci, I, Div. 2.

Class II, III Installation

DIP for Class II, III, Div. 1, Groups E, F, G
Hazardous Location Installation (not for LHCS-51 and separate housing)

- Installation of transmitter wiring according to NEC using threaded conduits or other wiring methods in accordance with articles 500 to 510.
- Use a dust tight seal at the conduit entry.

Functional ratings:

These ratings do not supersede Hazardous Location values.

Uncom ≤ 45 VDC
Incom = 4...20 mA (max. 25 mA)

FM Control Drawing no. 116-0390

Dieses Dokument enthält sicherheitsrelevante Angaben. Es darf nicht ohne Absprache mit dem Normenfachmann (NE Ex) geändert werden! This document contains safety-relevant information. It must not be altered without the authorization of the norm expert (NE Ex)!	
CONFIDENTIAL acc. to ISO 16016	Only valid as long as released in EDM or with a valid production documentation!
PF PEPPERL+FUCHS P+F Global	Control Drawing - FM LHCR-51, LHCS-51 4...20mA HART
	16-990FM-12A sheet 2 of 4

116-0390

LHCR-51, LHCS-51 4 ... 20 mA HART
FM control drawing



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